

June 2008

Sussex County

D e l a w a r e

Comprehensive Plan Update





State of Delaware
Office of the Governor

Ruth Ann Minner
Governor

October 27, 2008

Mr. David Baker
Sussex County Administrator
Sussex County Administrative Office Building
P.O. Box 589
Georgetown, DE 19947

RE: Certification of Comprehensive Plan

Dear Mr. Baker:

After reviewing the recommendations of the Office of State Planning and the Governors Advisory Council on Planning Coordination, I have found that the adopted plan does meet the minimum criteria for certification as listed in Delaware Code and I hereby certify the Sussex County comprehensive plan provided the following recommendations are addressed:

1. Sussex County shall immediately begin working to adopt the 23 ordinances listed in the plan.
2. The County shall consider the newly adopted Pollution Control Strategies for the Inland Bays Watershed as you move forward with the implementation of your plan.
3. The County shall comply with Title 9, §6958 (c) of the Delaware Code which states that the County provide a written report to the Governors Advisory Council on Planning Coordination every 12 months on the status of the comprehensive plan and its implementation.

Certification of Comprehensive Plan
October 27, 2008
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4. Within 18 months of the date of adoption, the County shall amend its official zoning map(s) to rezone all lands in accordance with the uses and intensities of the uses provided in the future land use element for the County. In the event that the comprehensive plan includes provisions governing the rate of growth of particular planning districts or sub-areas of the County, the County's zoning district regulations shall be amended to reflect the timing elements of the comprehensive plan.

Congratulations on your certification.

Sincerely,

A handwritten signature in black ink that reads "Ruth Ann Minner". The signature is written in a cursive style with a large initial "R".

Ruth Ann Minner
Governor

Sussex County Comprehensive Plan Update

Final Document

Adopted June 24, 2008

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PREFACE

A Summary Overview of Sussex County's Growth and Preservation Strategy

Growth and Preservation Goals

Sussex County's is the fastest growing area in Delaware because of its popularity as a primary home and second home destination. The Delaware Population Consortium projects that the County's 2020 population will be 25% higher than its estimated July 2006 population of 180,275. According to demographic forecasts, almost all of this growth is likely to result from in-migration, as opposed to an increase in births over deaths among people who already live in the County today. Much of this in migration will continue to be in and around the coastal communities and nearby inland bays.

Sussex County government deals with growth and preservation issues on a daily basis. The County devotes extensive time, money and other resources to reviewing proposed developments, enforcing its land development regulations, planning infrastructure expansions, and coordinating with numerous public and private sector entities concerned with the future of the area. These ongoing experiences and the spirit of the State's Livable Delaware initiative are the basis for the following Sussex County future growth and preservation goals:

- Direct development to areas with or near community services
- Conserve the County's agricultural economy and the value of its farmland
- Protect critical natural resources
- Encourage tourism and other responsible job providers
- Expand affordable housing opportunities
- Ensure new developments incorporate usable open space and best design practices

This Comprehensive Plan identifies many different inter-related strategies for implementing the goals noted above. These include coordinated strategies for:

- Guiding growth
- Preserving the rural environment
- Conserving more open space
- Dealing with the impacts of growth

These strategies are designed to be implemented in concert with each other. They represent the component parts of Sussex County's coordinated approach to future growth and preservation.

Strategies For Guiding Growth (The Future Land Use Plan)

The Future Land Use Plan described in this Comprehensive Plan Update divides Sussex County into Growth Areas and Rural Areas.

Growth Areas

Sussex County's primary Growth Areas will continue to be centered around its 25 municipalities. These Growth Areas are where allowable residential densities will remain highest and where most commerce will continue to be directed. These Growth Areas are where the State can anticipate demand will be highest for schools, emergency services, transportation improvements, economic development and related infrastructure. Sussex County determined its Growth Area boundaries based on current zoning and on State-certified comprehensive plans adopted by the County's 25 incorporated municipalities. The County's will continue to use its existing density bonuses program and develop new incentives such as a Transfer of Development Rights (TDR) program to direct as much of its growth as possible to these Growth Areas.

Growth Areas described in this Comprehensive Plan Update include the following subtypes in addition to incorporated municipalities:

- *Town Centers* - In these areas, medium to high density housing should be permitted ranging from 4 to 12 homes per acre. Compatible commerce should also be allowed. The County also hopes to adopt two additional incentives that will direct future growth to Town Centers:
 - An increase in maximum density from 4 units per acre to 6 units per acre for cluster developments locating in Town Center areas. This incentive would be available provided that: a) the applicant contributes additional open space fees commensurate with the density bonus received; and b) the applicant secures conditional use approval.
 - An increase in the maximum building height and an increase in permitted density to 12 units per acre for mixed use developments locating in Town Center Areas. This incentive would be available provided that: a) the applicant received certification under a County-adopted LEED-type program that rewards the use of green building techniques; and b) the applicant secures conditional use approval.
- *Developing Areas* - In these areas, base density should be 2 units per acre with the option to go to four units per acre under Sussex County's Density Bonus Program. A wide variety of business uses should be allowed.
- *Environmentally Sensitive Growth Areas* - These are areas around the inland bays, where 2 units per acre should be the base density with the option to go to four units per acre using the Density Bonus/Open Space program noted above. Sussex County is now examining the following ways to provide extra protection for the water quality and ecology of the inland bays area:

- Establish a maximum allowable impervious surface regulation.
- Stipulate that no density can be “transferred in” under any future TDR program. Establish a separate but related TDR program that would govern TDRs where the sending and receiving tracts are each located within the Environmentally Sensitive Development Area.
- Tighten the definition of what land can count as required minimum open space.
- Delete wetland areas from the site acreage calculations used to determine density.
- In addition to these initiatives, Sussex County is working closely with the Center for Inland Bays initially on a trial basis to develop effective buffer incentives that will separate new development in Environmentally Sensitive Growth Areas from tidal wetlands, non-tidal wetlands and waterways. The current model now under discussion calls for:
 - a) Providing incentives, such as expedited County and State review where such buffers are proposed that are 80' to 150' wide and incorporate native vegetation; and
 - b) Providing these same incentives plus a certain density bonus where such buffers are proposed that are greater than 150' in width.

While specific final details may vary from these examples, the County hopes to soon adopt a buffer ordinance that directly incorporates these concepts.

- *Other Growth Area Subtypes* – These include Mixed Residential Areas, Highway Commercial Areas, and Planned Industrial Areas.

Rural Areas

This Comprehensive Plan Update calls for recognizing the following three types of Rural Areas:

- *Protected Lands* – These are lands “out of play” due to government ownership or easements that will keep the property in open space or farming.
- *Agricultural Preservation Districts* – This category includes land owners who have enrolled in a State Agricultural Preservation District, which is a prerequisite for selling farm development rights to the State. Sussex County is also considering establishing an Agricultural Zoning District. Applicable regulations contain provisions that permit residential development at only very low densities in exchange for regulations that make it easier to operate livestock, poultry and agricultural processing operations.
- *Low Density Areas* – This refers to property zoned AR-1, which is the majority of land in Sussex County. Current regulations allow single-family detached home on 2 units per acre if connected to central sewers or 2 units per acre with septic if authorized by the State.

Most of Sussex County’s farmland is in this area. The Sussex County Council is committed to preserving development rights in this area at densities permitted under current zoning. However, the County recognizes the fundamental value of maintaining its overall rural environment. In addition to considering the Agricultural Zoning concept noted above, Sussex County hopes to sustain its rural character by using the following strategies.

Strategies for Preserving the Rural Environment

- Develop a voluntary Transfer of Development Rights (TDR) program to augment the County’s Density Bonus Program described above. Under a TDR program, developers pay the owner of a tract located in a “sending area” to preserve that tract. In return, the developer is allowed to build more homes than otherwise permitted, provided the developer’s land is in a designated “receiving area”. All or almost all of the AR-1 zoning district would be a sending area, thereby helping to preserve rural character. A maximum would be set on how far apart the sending area and receiving area can be located to prevent a major density shift from west to east.
- Continue the County’s aggressive approach to funding farmland preservation easements. Sussex County has spent nearly \$2.1 million collaborating with the State to permanently protect 2,471 farmland acres. Sussex County was the first to participate in this farmland preservation program and has spent more funds on it than either of Delaware’s other two counties.
- Consider establishing a voluntary agricultural preservation district within which landowners would be permitted only very low development densities in exchange for protection in law against nuisance complaints related to farm operations.
- Sussex County committed itself by ordinance five years ago to donate, for open space preservation purposes, 10% of the amount by which Sussex County’s total net annual revenues exceed annual expenditures. These funds have become an important funding source for acquiring and preserving open space in the County.

Strategies For Conserving More Open Space

In concert with implementing its Future Land Use Plan and preserving its rural character, Sussex County is striving to preserve open space. The County will use fees that it collects from developers under the County’s density bonus program to buy and permanently preserve undeveloped lands. The County is advised on where to make these purchases by the Sussex County Land Trust, a non-profit group dedicated to establishing a future “Green Ribbon” network of interconnected trails and open lands.

The County has many regulations in place that help protecting sensitive natural areas and other open lands in new developments. Sussex County hopes to intensify its conservation efforts in the future by adopting the following additional regulations designed to conserve more open space.

- A non-tidal wetlands buffer ordinance.
- Stream setback regulation for the Inland Bays area and elsewhere.
- More “green” stormwater management regulations.
- Regulations to help protect wildlife habitat.
- A wellhead protection and excellent water recharge area ordinance.
- Regulations to help implement TMDL limits, which are State water quality objectives.
- In the Environmentally Sensitive Area, delete both tidal and non-tidal wetlands from density calculations.
- Building coverage regulations to promote on-site water recharge.
- Forested buffer requirements to better separate new residential subdivisions and adjacent farms.
- Requirements for residential developers to provide recreation facilities or trails.
- Strengthened ordinance definitions regarding what can count (and not count) as allowable open space in new developments.
- More incentives to promote environmentally-friendly green architecture, green site design, and green stormwater management techniques.
- Requirements for more street trees and more shade trees in parking lots.
- Buffer incentives that will separate new development in Environmentally Sensitive Growth Areas from tidal wetlands, non-tidal wetlands and waterways.

In addition to the above, in new developments, wetlands, streams, and other natural areas that are deeded to homeowners associations could be protected by a) an easement requiring maintenance of the area in its natural state, and b) demarcation of the area and small signs posted identifying this as a natural environmental area.

Strategies For Dealing with Growth Impacts

Sussex County is aware that strong local growth is likely to continue in the foreseeable future. The County recognizes that this growth has impacts on roads, demand for schools, wastewater treatment capabilities and other local infrastructure. The Future Land Use Plan included in this Comprehensive Plan Update was drafted to specifically coordinate with the existing and future service capabilities of each of the County’s 18 sewer planning areas.

Sussex County government has invested heavily in providing public services to its residents. For example, Sussex County recently invested \$16 million to expand its South Coastal Regional Wastewater Treatment Plant in Bethany Beach. Between 2002 and 2007 Sussex County built sewer facilities that replaced nearly 3,000 on-lot septic systems. Sewer projects now under construction or recently approved will replace over 4,600 septic systems. County wastewater service has expanded from less than 3,000 connections in 1978 to over 55,000 connections currently. This has provided a major improvement to efforts to preserve water quality in the Inland Bays.

Sussex County continues to plan for future infrastructure needs. The County's adopted 5-Year Capital Improvement Program describes sewer projects, more airport improvements, library upgrades and other infrastructure enhancements that Sussex County is committed to building. The following are additional initiatives the County is pursuing or evaluating as means of serving new residents and businesses:

- Use powers available under State law to limit private sewer service providers from operating within designated County sewer service areas.
- Continue expanding County sewer service, in a pre-planned manner according to officially adopted wastewater service area plans.
- Address traffic capacity on north-south routes while planning for a north-south limited access highway on existing or new alignments.
- Regarding east-west mobility, make interim improvements to major routes, study the feasibility of bypasses around towns and consider long run links between north-south limited access roads.
- Implement recommendations of the 1990 Evacuation Route Study and related plans.
- Establish a planning and information exchange process aimed at improving coordinated public transportation services, including bus, rail transit, ride sharing, bicycling and walking.
- Examine the County's obligation under federal air quality regulations that promote air quality credits to offset emissions from new transportation projects.
- Create special development districts to help fund improvements to offsite infrastructure, such as roads and intersections. County Council has voted to request that the State Legislature grant the necessary enabling legislation to Sussex County.
- Prepare sub-area plans for selected parts of the County. These sub-area plans would examine inter-related matters such as land use planning, environmental conservation, and road improvement needs. The following vicinities, among others, are being considered as potential locations for sub-area planning:

- Milton

- Bridgeville-Seaford/Blades-Laurel-Delmar
- Western Delmar
- Millville-Ocean View
- Greenwood

The above listed strategies for guiding growth, preserving the rural environment, conserving more open space and dealing with growth impacts are the major component parts of Sussex County's overall coordinated growth and preservation strategy.

INTRODUCTION

INTRODUCTION

The Sussex County Landscape

Sussex County has the largest land area of Delaware's three counties and has long been the State's leading agricultural producer. In addition to its large farming regions, Sussex County's diverse landscape also encompasses small towns, growing population centers, and renowned ocean-side vacation areas. Transportation routes in Sussex County range from country roads to major highways. Nearly all public roads in Sussex County are administered by the Delaware Department of Transportation (DelDOT).



Today, Sussex is the fastest growing county in Delaware because of its popularity as a primary and second home destination. This new development, in combination with agriculture and a booming tourism industry, continues to generate substantial economic activity. The County's active economy and cost-conscious public sector management continue to permit the favorable real tax rates for which Sussex County is also noted.



Sussex County's varied geography and diverse population mean that government officials, business leaders and other residents will continue to consider many inter-related issues in planning for the future. Sussex County will continue to develop. The question for local decision makers is how to make room for growth and still conserve the assets that make Sussex County a unique place to live, work and visit.

Comprehensive Plan Update

Sussex County published its last Comprehensive Plan in January 2003. Delaware law requires County Council to update the plan every five years. This newest updated plan addresses opportunities and challenges the County continues to face in the following areas:

- Land Use
- Housing
- Community Design
- Economic Development
- Transportation
- Water and Wastewater
- Conservation
- Recreation and Open Space
- Historic Preservation
- Intergovernmental Cooperation

Sussex County’s newest Comprehensive Plan focuses on each of these topics in a separate chapter. The highlight is on how trends in these areas are likely to impact future growth and preservation. Each chapter also identifies how Sussex County government should respond to these emerging trends, and influence their direction, where appropriate.

The Sussex County Government’s Approach

Because this Plan is an update, the focus is on refining, not reinventing, the County’s approach to planning. Sussex County encourages appropriate types of development in compatible locations at suitable densities. The County also emphasizes quality of life and promotes conservation in community design. The Sussex County government encourages economic growth, strongly respects private property rights, and is committed to maintaining a viable climate for preserving agriculture.

Big Picture Trends

Sussex County will maintain its roles as Delaware’s agricultural leader, Delaware’s tourism center and the State’s major growth center for the foreseeable future. New full-time residents, second home growth and seasonal tourism will continue to drive the local economy, and test the capacity of certain local infrastructure. More racial diversity and continued “greying” of the County’s population will continue to be local facts of life. The statistics that follow highlight these trends.

Recent Population Patterns

As of July 2006, Sussex County was home to 180,275 residents, according to recent estimates by the Delaware Population Consortium. The County added population steadily throughout the 1970’s and 1980’s. During the next decade growth accelerated and County population increased by 38%. Sussex County grew by 15% between the 2000 U.S. Census and July 2006. This recent pace is more moderate than County growth in the 1990’s but is still the highest growth rate among Delaware’s three counties.

U. S. Census population statistics do not provide a full picture of County growth because the Census Bureau does not count seasonal residents. This is particularly important in Sussex County, which had 24,906 seasonal housing units in 2000, according to the Census. At an average of 2.5 persons per household, these seasonal homes could be accommodating over 62,000 additional people in prime vacation season.

Sussex County welcomes seasonal visitors and other tourists. Tourism is an indispensable part of the local economy. At the same time, growth management policies in Sussex County consider how tourists impact the County’s housing supply, roads, utilities, and natural environment. As prime coastal areas have become more developed, both the benefits and costs of growth have spread to the County’s inland bay areas and into parts of central and western Sussex.

Table 1
Sussex Remains Delaware’s Most Rural County Despite Strong Growth

Area	July 2006 Population	1990-2006 Percent Change	July 2006 Persons Per Square Mile
Kent County	147675	33	250
New Castle County	527027	19	1237
Sussex County	180275	59	192
Delaware Total	854977	34	438

Table 2
Sussex County Population Rates

Year	Population	Percent Change
1970	80356	--
1980	98004	22
1990	113229	16
2000	156638	38
July 2006 Estimate	180275	15

Population Projections

The Delaware Population Consortium projects that Sussex County will continue developing but at a somewhat slower rate in the future. The Consortium predicts County population will grow by 24% between 2000 and 2010, compared to the 38% gain experienced during the 1990's. The Consortium forecasts that Sussex County growth rates will then continue to moderate in each of the next two decades following 2010.

Natural increase (births minus deaths) and migration are the two components of population growth. The Consortium expects migration to account for a growing share of Delaware’s new residents between now and 2020, particularly in Sussex County. Migration creates a greater immediate impact than gaining population via natural increase. Most migrants to an area arrive as people who need housing and municipal services right away.

Table 3
State Predicts Slowing County Growth Rate

Year	Population	Percent Change
2000	156638	--
2010	194422	24
2020	226758	17
2030	253226	12

Composition of County Residents

Growth is bringing greater diversity to Sussex County. The U.S. Census reports that the County’s white population and black population each grew at rates similar to the County’s overall population between 1990 and 2000. During this same period, the number of Hispanic residents and residents from other racial backgrounds (such as Asian) grew at several times the overall County rate. According to the Consortium, Delaware’s Hispanic population grew almost three-fold between 1980 and 1996, with half of these persons settling in Sussex County.

Table 4
Sussex County Is Becoming More Diverse

	1990 Population	2000 Population	1990-2000 Percent Change
White	92395	125857	36
Black	18995	23319	23
Others	1839	7462	300
Hispanic of Any Race	1221	6915	466

Sussex County’s age profile is also changing. Sussex County’s lower tax rates, natural environment, quality of life and housing opportunities are attracting retirees, owners of second homes, and other older householders in great numbers. Many persons buy a second home with the intent that it will become their regular retirement home. A number of new housing developments are specifically limited to persons age 55 and older. Between 1990 and 2000, the fastest growing age groups in the County were the 45 to 64 year olds, which increased by 67%, and people 65 years and older which grew by 53%. During the 1990's, each of the other age groups shown on Table 5 grew at rates less than the County’s overall 38% population increase.

People 65 years and older made up 19% of all Sussex County residents in 2000, according to the Census. By comparison, this same age group comprised only 12% of Kent County’s total population and 12% of all people in New Castle County according to the 2000 Census. Sussex County’s median age in 2000 (41.1 years) compared to median age in Kent County (34.4 years) and New Castle County (35.0 years) also illustrates Sussex County’s older age profile.

The Delaware Department of Labor’s Office of Labor Management forecasts that a growing proportion of Sussex County’s new residents will be people 65 years and older, with potential implications for the following services, among others:

- Health care
- Eldercare
- Transportation
- Social services
- Lifelong learning
- Job retraining

**Table 5
Sussex County Population is Getting Older**

	1990	2000	1990-2000 Percent Change
Under 18	27088	35305	30
18 - 24	9569	10950	14
25 - 44	33590	41236	23
45 - 64	24051	40125	67
65 and Older	18931	29022	53

Implications of Population Growth

The previous sections of this chapter quantify current population trends and describe the Delaware Population Consortium's population projections for Sussex County. Patterns such as continued growth in seasonal housing, more racial diversity, the "greying" of the population base, and ongoing pressure on community services and infrastructure are noted. This section takes a closer look at the components and implications of population growth.

The second half of the 20th century saw a great migration from Delaware's urban areas to regions in the State that were once largely farms and forests. The American Farmland Trust has noted that while 50% of Delaware's population lived in Wilmington in 1920, only 9% lived there by 2000. These growth patterns and land consumption trends created a strong demand for public infrastructure such as roads, schools, and public water and sewer facilities. In turn, this demand caused state spending and the state's bonded indebtedness to skyrocket (even after adjusting for annual inflation).

Sussex County has been the state's fastest growing area and is forecasted to remain in that position for the foreseeable future. In-migration, rather the increase of births over deaths is responsible for almost all of this growth. To grasp what continued "in-migration" means for Sussex County, local officials, business persons, full-time residents, and seasonal visitors need to understand potential impacts. While growth has significant positive effects on the local businesses, public impacts are also likely to include the following:

- ***The need for more new schools and school expansions.*** While the State has traditionally footed most of this bill, State financial resources are currently under great strain. Furthermore, the provision of these resources by area is subject to State policies associated with Level 1 through Level 4 designations regarding the expenditure of State funds on infrastructure. Much of Sussex County's undeveloped land slated for possible growth is now designated as Level 4, the areas the State views as least appropriate for State capital spending. The State desires better coordination with Sussex County on matching County land use policies with the State's infrastructure spending plans. Among other actions, Sussex County will need to coordinate with the State in possibly updating some Level 1 through Level 4 designations once this Comprehensive Plan Update is officially adopted by Sussex County Council.

Fortunately for Sussex County schools and for the State's school funding situation, many new Sussex County residents are retirees or other older people without school-age children. Despite Sussex County's rapid overall population growth, the County's public school enrollment grew by only 7.7% between 1997 and 2007. During this same period, school property tax revenues increased by a disproportionate 122%.

- ***The need for more central water and sewer services.*** More growth, increased density, and a heightened concern for surface and groundwater quality means that individual wells and on-site septic systems will be less prevalent in the future. Through studies in several areas of the County, Sussex County Council and staff have been actively examining who should

fund central water and sewer facilities, where should they be constructed, and under whose oversight. Between 2002 and 2007 Sussex County built sewer facilities that replaced nearly 3,000 on-lot septic systems. Sewer projects now under construction will replace an additional 2,130 septic systems. New sewer projects approved in 2007 will replace 2,482 more septic systems. As Sussex County's population continues to grow, this work will continue, as scheduled in Sussex County's Five Year Capital Improvement Program.

- ***More traffic congestion.*** Traffic follows growth, particularly growth in low density areas that depends entirely on automobiles. Daily commuting to Sussex County's job centers is also on the increase, including cars with one-person driving alone. The County and DelDOT have coordinated on studying the busiest part of the SR 1 corridor, US 113, and other locations. More locally-focused, sub-area planning will be done to anticipate the future road and intersection improvements needed most to preserve both north-south mobility and east-west mobility. Such plans can also examine what road and intersection improvements could potentially be funded by developers, either in part or in full. The County's request for enabling legislation to authorize special development districts is another example of how Sussex County is dealing with growth-related traffic issues.
- ***More demand for health, social, and para-transit services.*** As median age continues to increase in Sussex County, more health services will be needed, affecting both hospitals and other health care providers. Sussex County's large poultry producers and its growing seasonal tourism sector provide many lower paying jobs. More lower income households create more demand for publicly-funded social services and non-traditional para-transit services. County grants have helped fund human services, a senior center and para-transit programs. However, the County will need to do more follow up on these and similar needs, as identified in the Sussex County Coordinated Human Services Transportation Plan.
- ***Demand for affordable housing.*** Prices for recently built Sussex County homes and apartments have been at or near all-time highs. This reflects the County's popularity as a first home and second home destination. Over the long-term, housing cost increases will continue to price certain low and moderate households out of the market. This in turn will further exacerbate the area's affordable housing shortage, particularly in the County's job centers. In response to its growing population, Sussex County must continue and expand its recent successful efforts aimed at encouraging construction of more affordable housing.

The County will continue to solicit bids for a new round of its Moderately Priced Housing Unit (MPHU) program. This will augment the contracts to provide affordable housing the County now has with developers who have received County approval to construct development that will include affordable units.

- ***Demand for more wastewater treatment.*** Statistics provided elsewhere in this comprehensive plan describe the funding and other resources Sussex County has devoted to providing central sewer service to: a) serve new growth; and b) replace failing on-site septic systems. These large increases in central sewer connections demonstrate the County's serious commitment to dealing with the infrastructure demands created by growth. The County's 2008-2012 capital improvements schedules shows the County's official commitment to ongoing expansion of central sewer service in the future.

Public Involvement

Using the following techniques, Sussex County reached out for meaningful public involvement in preparing this Comprehensive Plan revision:

- The County introduced and described the purpose of the plan on its website. Public comments were sought and received on the County website throughout the process. Recordings of all public meetings were posted on the website shortly after these meetings were held.
- The County held an opening round of public meetings at five different locations during January and February 2007. Meetings were held in Greenwood, Lewes, Seaford, Selbyville, and Bethany Beach. The purposes of the meetings were to describe the planning process, identify topics the plan would be covering, and hear what the public perceived to be the important development and preservation issues facing Sussex County.
- County staff members and the County's planning consultant met in one-on-one interviews and small focus group sessions with key persons representing many different points of view on the future of Sussex County. These persons included realtors, developers, utility companies, conservationists, farmers, manufactured housing representatives, and concerned citizen committees, among others.
- The County hosted two public meetings in September 2007: one in Rehoboth Beach and one in Laurel. At these meetings, County staff members and the planning consultant summarized the draft plan's key findings, overall strategies, and specific recommendations. Public discussion featuring a question and answer period then followed.
- County staff members hosted similar meetings to further describe the draft Plan to the incorporated municipalities located in each of Sussex County's five councilmatic districts. Officials from Sussex County's 25 incorporated municipalities were directly invited to attend one of five joint municipal meetings held between October and December 2007. Special contacts were also made to obtain input from the officials of certain municipalities who were unable to attend the officially scheduled meeting in their region.

Most public meetings were well-attended. The public meetings and the smaller group sessions each featured lively discussions about growth trends and future prospects in Sussex County. Different strains of thought were aired at these forums. Several people expressed their belief that Sussex County needs to focus more on controlling growth, reducing traffic congestion, and better preserving the natural environment. A large contingent of participants expressly rejected the notion of regulations or policies that would further constrain private property rights, particularly with regard to the future development potential of farmland.

Regarding State initiatives, the meaning, implementation and implications of Delaware's State Resource Area (SRA) legislation were much discussed. Future protection of the inlands bays, affordable housing concerns, community design principles, and infrastructure planning were among the other topics most frequently mentioned by people who attended meetings, wrote letters, sent e-mails, or otherwise communicated with the County about this comprehensive plan update.

The County's meetings with officials from the individual municipalities focused primarily on coordinating County growth zone boundaries with each jurisdiction's plans for internal growth and future annexation intentions. Some of this discussion revolved around the implications of future growth on private, municipal, and County-owned water and sewer facilities. The County emphasized how each municipality's adopted comprehensive plan was reviewed and taken into account in preparing the County's draft Future Land Use Plan, including the draft Future Land Use Plan map.

Sussex County gave genuine consideration to points of view expressed during the public participation process. The issues raised during that process are addressed in detail in the various individual chapters of this plan. Each chapter contains recommended strategies for addressing one or more of these topics and other closely related subjects.

Supporting the County's Growth and Preservation Strategy

The section of this Comprehensive Plan Update entitled A Summary Overview of Sussex County's Growth and Preservation Strategy explains how the County's future Land Use Plan interrelates with the County's strategies for preserving the rural environment, conserving more open space, and dealing with the impacts of growth. The County's intention to do more comprehensive sub-area planning and the County's updated policy of better controlling the expansion of private sewer providers in County sewer service areas are two additional examples, among others, of how policies identified in the various elements of this Comprehensive Plan Update are intended to work hand-in-hand with the County's Future Land Use strategy. Together all of these policies are part of the County's multi-pronged approach to steering appropriate types of growth to appropriate locations at appropriate densities.

Sussex County recognizes that implementing a growth management strategy requires more than well-intended policies. Often a specific County ordinance is key to providing the "teeth" needed to support a particular County policy. The following list itemizes the recommendations made in the various chapters of this Comprehensive Plan Update that call for the County to adopt a specific new or revised ordinance. It is not possible to guarantee with certainty that each and every one of these ordinance will be adopted into law in the future. Changes in local conditions, the public review process, staff review and further consideration by County Council may ultimately cause the County to follow other courses of action. However, each ordinance on this list will receive meaningful evaluation.

Ordinances To Be Considered:

1. Agricultural Zoning District
2. Remove Barriers to Manufactured Housing
3. Definition of “Superior Design” for purposes of cluster subdivisions in the AR-1 zoning district
4. Density Bonus for Cluster Development
5. Revised Community Design Standards
6. Revised Definition of Allowable Open Space with a specific method of calculating open space acreage
7. Locally Formulated TDR
8. Green Stormwater Management
9. Wildlife Habitat Protection
10. Added Environmental Protection for the ES-1 Zoning District
11. Revised Forest Buffers
12. Requirement for Recreation Facilities and/or Trails in Larger Developments
13. Wellhead Protection
14. Public Sewer Providers in Designated County Sewer Service Areas
15. Reauthorize and Revise Moderately Priced Housing Unit Program
16. Agribusiness Zone
17. Demolition of Historic Structures
18. Traditional Neighborhood Development
19. Development Standards Re: Maximum Building Setbacks, Buffering and Landscaping Green Site Design
20. Strengthened Cluster Development Regulations
21. Sign Controls
22. Incentives to meet Center for Inland Bays buffer recommendations
23. Incentives in developing areas for green communities, LEED certification and ENERGY STAR compliance

FUTURE LAND USE ELEMENT

FUTURE LAND USE ELEMENT

Existing Land Use

Sussex County includes nearly half (48%) of the land area in Delaware. Most commercial activity and the majority of the County's population reside near three major roadway corridors. Each of these routes extend from the County's northern border with Kent County to its southern boundary with Maryland. State Route 1 runs along the Atlantic coastline through or near the County's major resort towns. U.S. 113 extends through the center of Sussex County from Milford to Georgetown and south to Selbyville. U.S. 13 connects the Town of Greenwood in the northern portion of the County to several western Sussex County towns and to Salisbury, MD. U.S. 13 also parallels a Norfolk Southern rail line and is located close to the Nanticoke River.



Incorporated Municipalities

Sussex County contains 25 incorporated municipalities. The beach resorts along the Atlantic coast are the most populous and highly developed of these towns. However, other incorporated towns and cities and the areas immediately adjacent to them serve as population and commerce centers in locations throughout the County.



The Sussex County government strives to work closely with the incorporated municipalities, especially on annexation and utility services. But in the end, each incorporated town makes its own land use planning and other policy decisions. The incorporated towns in Sussex County include the following:

- Bethany Beach
- Bethel
- Blades
- Bridgeville
- Dagsboro
- Delmar
- Dewey Beach
- Ellendale
- Fenwick Island
- Frankford
- Georgetown
- Greenwood
- Henlopen Acres
- Laurel
- Lewes
- Milford
- Millsboro
- Millville
- Milton
- Ocean View
- Rehoboth Beach
- Seaford
- Selbyville
- Slaughter Beach
- South Bethany

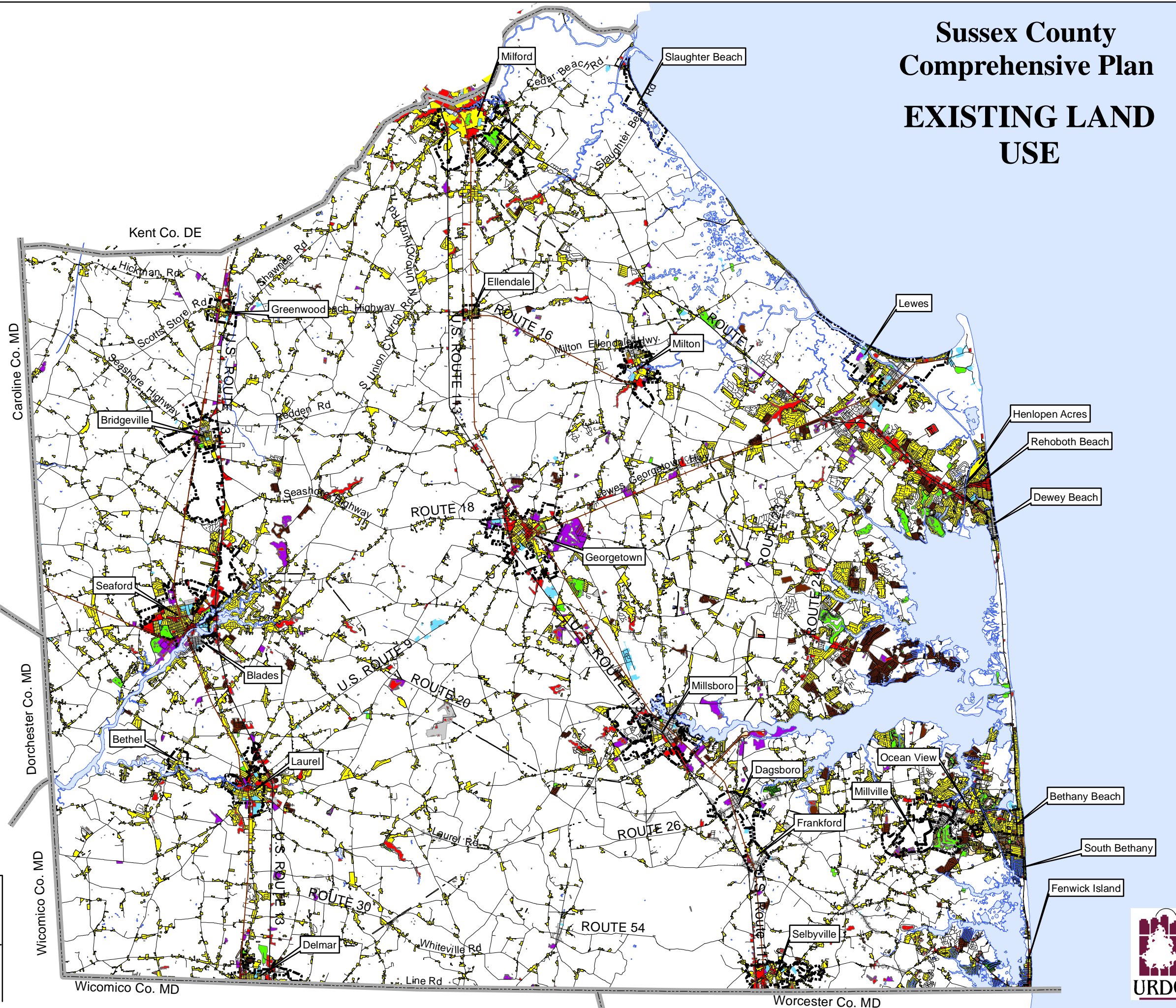
The coastal and inland bay areas are Sussex County’s busiest regions in terms of tourism, new construction and seasonal traffic. The most serious traffic congestion problems occur during warm weather weekends, particularly along major east-west roads. Sussex County’s central and western sectors are less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

Existing Land Use Mapping

The *Existing Land Use* map on the next page depicts the incorporated municipalities, farming areas and prevailing development patterns in Sussex County. A second map, entitled *Developed and Protected Lands* then shows developed areas compared with lands already preserved and the location of major developments proposed in recent years.

Sussex County Comprehensive Plan EXISTING LAND USE

- Single-Family Dwellings
- Multi-Family Dwellings
- Mobile Home Parks/Courts
- Commercial
- Industrial
- Institutional
- Mixed Use
- Agricultural & Undeveloped Lands
- Recreation
- Utilities



0 9,000 18,000 36,000
 Feet
 1 inch equals 18,000 feet



Base Map Provided By:
 Sussex County
 Mapping Department

Sources:
 DNREC
 DE Office of State Planning Coordination
 Sussex County Mapping Department



Pace of Development

The Sussex County Planning and Zoning Department reviews new development proposals in areas outside of incorporated towns and cities. The following table shows how the number of proposed residential developments reviewed and the total number of proposed lots involved dropped in 2006 relative to 2005.



Nationwide, the housing market slumped in late 2006. This trend has affected Sussex County. However, the County has a backlog of housing approved but not yet constructed. Sussex County records show that through 2006, a total of 26,233 residential lots have been recorded but not yet developed. That number includes approvals that may have expired under the County’s five-year sunset period for approved but undeveloped parcels. That number also includes both incorporated and unincorporated areas. A large number of additional lots were in the development review and approval process, but had not yet been recorded.

**Table 6
New Development Proposals Peaked in 2005**

	2004	2005	2006
Proposed Developments Reviewed	61	100	76
Total Lots	4609	12027	4213

Location of Development

While many large developments are proposed in the central and western parts of the County, the majority of the new home construction continues to occur in the areas closest to the inland bays and the coastal communities. Four Sussex County tax assessment districts in particular accounted for 51% of all residential building permits issued from 2003 through 2006. As shown on the accompanying *Assessment Districts* map, these assessment districts are all in eastern Sussex County.

From January 2003 to December 2006, building permits were issued for 13,706 new housing units. Of this total, 3,035 were manufactured (“mobile”) homes that were built under Federal manufactured home standards (as opposed to standard building codes).

Section 99-40 of the Sussex County Subdivision Ordinance stipulates that any “major subdivision” approval granted by the County is null and void unless substantial construction is underway within five years from the date the subdivision is approved.

A “major subdivision” is a subdivision proposing a new street or extension of an existing street. “Substantial construction” means that:

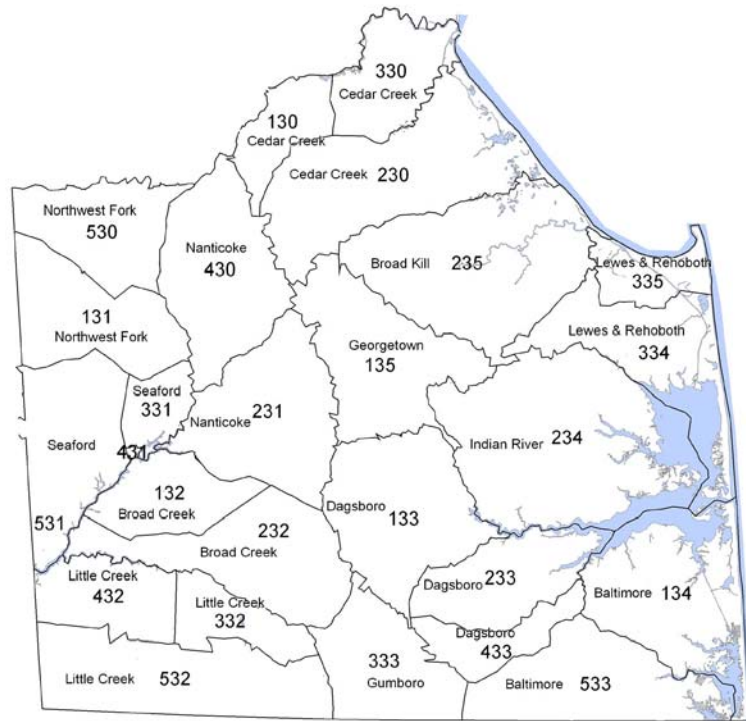
- right-of-way has been cleared;
- the roadway has been rough graded;
- drainage / stormwater facilities have been rough graded; and
- erosion control measures are in place and being actively maintained.

Table 7
Strongest Growth in Construction of New
Housing Units is in Eastern Areas of Sussex County

Assessment District	Building Permits Issued 2003 – 2006	Assessment District	Building Permits Issued 2003 – 2006
130	112	432	142
230	469	532	202
330	205	133	398
430	364	233	173
530	103	333	48
131	99	433	10
231	240	533	1,230
331	196	134	1,182
431	0	234	2,501
531	134	334	1,628
132	251	135	187
232	192	235	761
332	95	335	387
TOTAL			11,309

Note: Data is for unincorporated area only.

Tax Assessment Districts



Importance of the Future Land Use Plan

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

Goals and Purposes of the Future Land Use Plan

Sussex County's future land use policies are based on the following important goals:

- Direct development to areas that have community services or can secure them cost effectively.
- Conserve the County's agricultural economy by promoting farming and preserving agricultural land values.
- Protect critical natural resources, such as the inland bays and others, by guarding against over-development and permanently preserving selected lands.

- Encourage tourism and other responsible commercial and industrial job providers to locate and invest in the County.
- Expand affordable housing opportunities, particularly in areas near job centers.
- Ensure that new developments incorporate preserved usable open space and other best practices in subdivision design.
- Make Sussex County’s growth and conservation policies clear to relevant Delaware State agencies, neighboring counties and Sussex County’s incorporated municipalities.

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

The Future Land Use Plan and Zoning

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

The Structure of the Future Land Use Plan

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

Growth Areas:

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

Rural Areas:

- Low Density Areas
- Protected Lands

- Agricultural Preservation Districts Under the State Program (which would be considered Low Density Areas if the landowners would withdraw from the program).

The following descriptions explain each of these planning areas.

Growth Areas

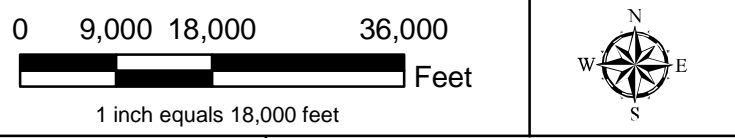
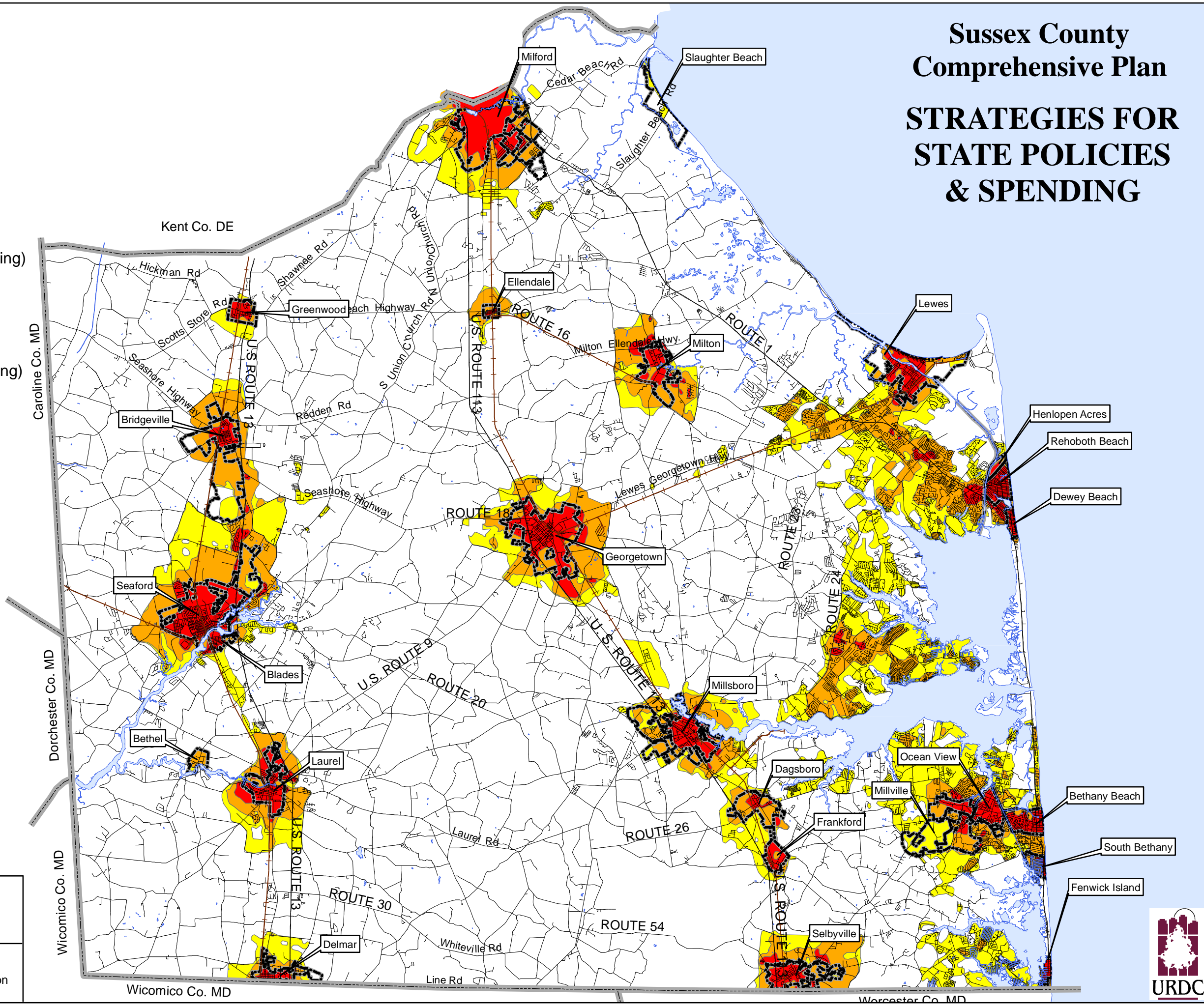
This Plan seeks to direct the County’s most concentrated forms of new development to Growth Areas, including most higher density residential development and most business development. The County used the following guidelines to help determine where Growth Areas should be located:

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

In designating Growth Areas, Sussex County applied these guidelines broadly. The County views these guidelines as important but not absolute. The guidelines are helpful criteria but they are not meant to be inflexible standards that all growth areas must fully meet. In particular cases, the County is signaling that selected new growth areas may be needed to accommodate future development in places the State does not currently view as growth centers. Following the *Annexation Areas* map on the next page, there is the *State Funding Priorities* map as it applies to Sussex County. An explanation is then provided about the “Delaware Strategies for State Policies and Spending” document.

Sussex County Comprehensive Plan STRATEGIES FOR STATE POLICIES & SPENDING

- Level 1 - (Highest Priority for Funding)
- Level 2
- Level 3
- Level 4 - (Lowest Priority for Funding)



Base Map Provided By:
Sussex County
Mapping Department

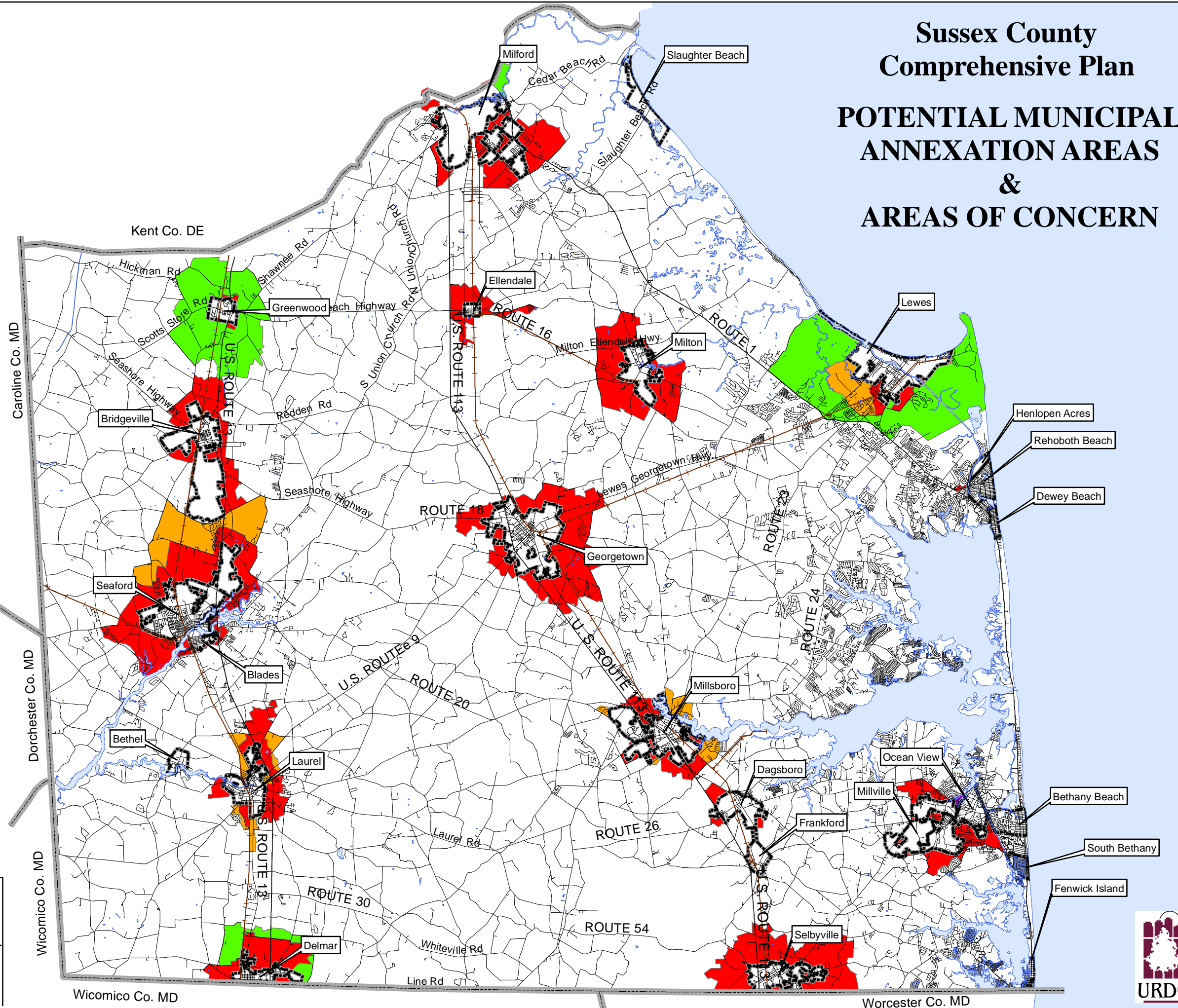
Sources:
DNREC
DE Office of State Planning Coordination
Sussex County Mapping Department



Sussex County Comprehensive Plan

POTENTIAL MUNICIPAL ANNEXATION AREAS & AREAS OF CONCERN

- Short Term Annexation Area
- Long Term Annexation Area
- Joint Annexation Area
(Being Considered by Two Different Towns)
- Area of Concern



0 9,000 18,000 36,000
Feet
1 inch equals 18,000 feet



Sources:
 DNREC
 DE Office of State Planning Coordination
 Sussex County Mapping Department

Base Map Provided By:
 Sussex County
 Mapping Department



Delaware Strategies for State Policies and Spending

The purpose of the “Delaware Strategies for State Policies and Spending” document prepared by the State in 2004 is to help coordinate local land use decision making with State decisions made about funding infrastructure, such as the schools and roads needed to support appropriate development. By updating this document every five years, the State strives to ensure that:

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

The State’s Strategies for State Policies and Spending map classifies land areas as being part of Investment Level 1, Investment Level 2, Investment Level 3, or Investment Level 4. These four levels clarify the State’s policies and priorities for the expenditure of State funds on infrastructure.

The following synopsis descriptions are excerpted from the FY 2004 “Delaware Strategies for State Policies and Spending” document.

Investment Level 1

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

Investment Level 2

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

Investment Level 3

It is the State’s intent is to acknowledge that while development in Investment Level 3 Areas may be appropriate, there are significant considerations regarding the timing, phasing, site characteristics, or Agency programs that should be weighed when considering growth and development in these areas. Some lands designated Investment Level 3 are longer term growth areas, and are not necessary to accommodate expected population, household, and employment growth in the next five years (or more). In these areas there are likely to be other competing priorities for State resources during this planning period.

Other areas designated as Investment Level 3 represent lands in the midst of rapidly growing areas designated Investment Levels 1 or 2 that are somehow impacted by natural resource, agricultural preservation, or other infrastructure issues. Development of these areas in the near term future may be appropriate, as long as State Agencies and local governments with land use

authority investigate and accommodate the relevant issues on the sites and in the surrounding areas.

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

Investment Level 4

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

Seven Types of Growth Areas

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

1. Municipalities

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

This Plan seeks that the municipalities consider participating in the County’s programs of using density bonuses for developments that result in the preservation of land elsewhere in the County (as described later in this chapter).

2. Town Centers

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

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

- Permitted Uses – A range of housing types are appropriate in Town Centers, including single-family homes, townhouses and multi-family units. Commercial uses should serve the daily needs of residents, workers and visitors. Retail and office uses compatible with adjacent areas are appropriate. However, large intense shopping centers are encouraged in Highway Commercial areas. Some smaller scale, low-impact industrial operations may be appropriate, but larger industrial uses are proposed to be directed to General Industrial areas. Appropriate mixtures of residential, institution and light commercial uses should be allowed.
- Densities – Medium to high density residential development is encouraged. This should range from 4 to 12 homes per acre. Compatible commerce should also be allowed. A clustering option permitting smaller lots and additional flexibility in dimensional standards should continue to be provided on tracts of a certain minimum size, provided significant permanent common open space is preserved and the development is connected to central water and sewer service. Specific regulations governing cluster developments need to be designated by zoning district.

The County also hopes to adopt two additional incentives that will direct future growth to Town Centers:

- An increase in maximum density from 4 units per acre to 6 units per acre for cluster developments locating in Town Center areas. This incentive would be available provided that: a) the applicant contributes additional open space fees commensurate with the density bonus received; and b) the applicant secures conditional use approval.
- An increase in the maximum building height and an increase in permitted density to 12 units per acre for mixed use developments locating in Town Center Areas. This incentive would be available provided that: a) the applicant received certification under a County-adopted LEED-type program that rewards the use of green building techniques; and b) the applicant secures conditional use approval.
- Infrastructure – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, densities should be limited to 2 units per acre.

3. *Developing Areas*

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

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

- Permitted Uses – A range of housing types are appropriate in most Developing Areas, including single family homes, townhouses and multi-family units. In selected areas, commercial uses should be allowed. A variety of office uses would be appropriate in many areas. Portions of the Developing Areas with good road access and few nearby homes should allow for business and industrial parks. Careful mixtures of homes with light commercial and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home.
- Densities – The County envisions base density in these areas to be 2 units per acre, with the option to go to 4 units per acre if the developer uses optional density bonuses. Those optional bonuses may involve payment of fees that fund permanent land preservation elsewhere in the County, or other options. In addition, consideration should be given to possible density bonuses if a developer funds a major road improvement that otherwise would not be required. That type of bonus may require conditional use approval by County Council and may not be allowed in the Environmentally Sensitive Developing Area. Smaller lots and flexibility in dimensional standards should be allowed if the developer uses a cluster option that results in permanent preservation of a substantial percentage of the tract.
- Infrastructure – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, permitted densities should be limited to 2 units per acre. The Developing Areas are largely based upon areas where public sewage service is already available or where the County plans upon providing public sewage service within five years.

4. *Environmentally Sensitive Developing Areas*

Sussex County has designated large areas around Rehoboth Bay, Indian River Bay, and Little Assawoman Bay (the inland bays) as Environmentally Sensitive Developing Areas. This designation recognizes two characteristics of these areas. First, these regions are among the most desirable locations in Sussex County for new housing, as reflected in new construction data and real estate prices. Second, these regions contain ecologically important wetlands and other coastal lands that help absorb floodwaters and provide extensive habitat for native flora and fauna. These areas also have great impacts upon the water quality of the bays and inlets and upon natural habitats.

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

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

- Permitted Uses – Environmentally Sensitive Developing Areas are areas that can accommodate development provided special environmental concerns are addressed. A range of housing types should be permitted in Environmentally Sensitive Areas, including single-family homes, townhouses and multi-family units. Retail and office uses are appropriate but larger shopping centers and office parks should be confined to selected locations with access to arterial roads. Careful mixtures of homes with light commercial and institutional uses can be appropriate to provide for convenient services and to allow people to work close to home. Major new industrial uses are not proposed in these areas. Industrial zones are regulated by the Delaware Coastal Zone Act, which restrict heavy industry and bulk transfer.
- Densities – The Environmentally Sensitive Developing Areas function as an “overlay” area to several underlying zoning districts. It may be advisable for legal reasons to convert this overlay area into regular zoning districts, while maintaining the current standards. Most of the Environmental Sensitive Developing Areas should continue to allow 2 homes per acre. The option should exist to go up to 4 units per acre if the developer uses optional density bonuses. Smaller lots and flexibility in dimensional standards should be allowed if the developer uses a cluster option that results in permanent preservation of a substantial percentage of the tract.

The County may also consider an additional layer of protection in the Environmentally Sensitive Developing Areas. Tidal wetland area could be subtracted from the total tract size so that “net” tract size is used as the basis for calculating how much development is allowed.

All applicants for developments of a minimum size (as specified in zoning) should continue to be required to provide information that analyzes the development’s potential environmental impacts, including effects on stormwater runoff, nitrogen and phosphorous loading, wetlands, woodlands, wastewater treatment, water systems, and other matters that affect the ecological sensitivity of the inland bays.

- Infrastructure – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, permitted densities should be limited to 2 units per acre.

5. *Mixed Residential Areas*

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

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

- Permitted Uses – The full range of housing types are appropriate in these residential areas, including single-family homes, townhouses and multi-family units. Non-residential development is not encouraged.
- Densities – The current densities in these areas range from a maximum of 4 homes per acre for single-family detached housing to a maximum of 12 dwellings units per acre for multi-family housing.
- Infrastructure – Central water and sewer facilities are strongly encouraged. If central utilities are not possible, densities should be limited to 2 units per acre.

6. *Highway Commercial Areas*

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

7. *Planned Industrial Areas*

Planned Industrial Areas are lands devoted to concentrations of larger industrial uses including heavier industry, light industry, warehousing, and flex space. Appropriate development in these areas could take the form of conventional industrial parks or planned business parks with a unified design that incorporate a combination of light industry and other business uses. Large, more intensive stand-alone industrial uses should also be directed to these areas.

Rural Areas

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

Three Types of Rural Areas

1. *Low Density Areas*

All lands designated in this Plan as Low Density Areas are currently zoned AR-1. Under that zoning designation, single family detached homes are permitted at 2 homes per acre on lots containing a minimum of ½ acre if the tract connects to central sewers. Where on-site septic systems are used, single-family detached homes are permitted on minimum 3/4-acre lots. AR-1 zoning regulations also permit an average of 2 homes per acre where a cluster-style site plan is used and 30% of the tract is preserved in permanent open space. Using these zoning regulations and additional incentives discussed in the next section of this Future Land Use chapter, Sussex County hopes to retain the rural environment of Low Density Areas and set aside significant open space.

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

- The County strongly supports voluntary farmland preservation and has worked jointly with the State to facilitate the acquisition of development rights to agricultural land.
- The County uses zoning to mandate that a certain portion of a residential subdivision must be permanently preserved in common open space.
- The County provides density bonuses, under certain conditions, to developers who agree to pay into a fund that Sussex County uses to acquire open space.
- The County requires developers to plant landscaped buffers to physically separate new development from the surrounding countryside.
- As described later in this chapter, the County also desires to explore techniques such as Transfer of Development Rights (TDR), which gives developers the right to build at higher densities in other, more suitable locations if they agree to permanently preserve certain rural lands.

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

- Permitted Uses – The primary uses envisioned in Low Density Areas are agricultural activities and single family detached homes. Business development should be largely confined to businesses addressing the needs of these two uses. Industrial uses that support or depend on agriculture should be permitted. The focus of retail and office uses in Low Density Areas should be providing convenience goods and services to nearby residents. Commercial uses may require conditional use approval from County Council. The types of commercial uses in these residential areas should be

limited in their location, size and hours of operation. More intense commercial uses, such as auto repair and gasoline sales, should be avoided in these areas.

- Densities – Base densities in Low Density Areas should be unchanged from the current zoning provisions. The minimum lot size should be $\frac{3}{4}$ acre for lots served by on-lot septic systems and $\frac{1}{2}$ acre for lots with central sewers. The cluster option permitted in Low Density Areas should continue to permit overall site densities of up to 2 units per acre, provided significant open space is set aside and the tract connects to public sewers.
- Infrastructure – Development where lots are no smaller than $\frac{3}{4}$ acre can be accommodated in this planning area without central sewers. Other development should require central sewer service.

2. *Protected Lands*

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

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

3. *Agricultural Preservation Districts Under the State Program*

Farmland owners who want to sell their development rights to the State must first enroll in an Agricultural Preservation District. Under State rules, Agricultural Preservation Districts have to be a minimum of 200 contiguous acres, but allow smaller parcels within a three-mile radius to join. In exchange for real estate tax breaks and protection against nuisance complaints, participating land owners cannot develop their property for at least ten years except for agricultural uses and a certain very limited number of homes. The landowners voluntarily agree to enter into the program, and can leave or renew their participation when the agreements expire. Therefore, these areas can be considered temporarily but not permanently preserved.

The County should consider establishing an Agricultural zoning district within portions of these State Agricultural Preservation Districts. The intent is that landowners would voluntarily ask to be within this zoning district. The zoning provisions could mirror or cross-reference the existing State provisions. This district could include some incentives, such as more permissive provisions for livestock, poultry and agricultural processing activities.

The Future Land Use Map

The *Future Land Use* map on the following page shows the locations of the Growth Areas and the Rural Areas described above. The starting point for this map was the Future Land Use map included in the 2003 Sussex County Comprehensive Plan. This latest version of the map includes some changes in the classification of certain areas to reflect the following:

- Lands added to the annexation areas of certain incorporated municipalities, as shown in comprehensive plans adopted by these municipalities and certified by the State.
- Zoning map changes approved by Sussex County Council since the previous plan was completed.
- A few selected new “Developing Areas” that are intended to provide locations where density might be increased from the current zoning if the developer uses density bonus options.

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

**Table 8
Recommended Densities and Uses**

Comprehensive Plan Use	Applicable Zoning Districts
<p>Low Density Agricultural / Residential Area Allowable units based on three-quarter acre lot size Clustering allowed to 1/2-acre lot size</p>	<p>Agricultural Preservation Districts and Preservation Easements Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Bio-Tech Industry Agriculturally Related Industries Commercial-Residential District (CR-1)</p>
<p>Low to Medium Density Environmentally Sensitive Developing Area Density is based on underlying zone</p>	<p>Agricultural Preservation Districts and Preservation Easements Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Medium Density Residential District (M-R) General Residential District (GR) Commercial-Residential District (CR-1) Marine District (M) Limited Industrial District LI-1) Light Industrial District (LI-2)</p>
<p>Medium Density Developing Areas Four dwelling units/acre base density. (Higher densities may be permitted if area is adjacent to Town Center or other High Density Developed Areas)</p>	<p>Agricultural Preservation Districts and Preservation Easements Agricultural Residential District (AR-1) Neighborhood Business District (B-1) Medium Density Residential District (MR) General Residential District (GR) High Density Residential District (HR-1 & HR-2) Commercial-Residential District (CR-1) Marine District (M) Limited Industrial District (LI-1) Light Industrial District (LI-2) Heavy Industrial District (HI-1) New Commercial District</p>
<p>High Density Town Center Four to twelve dwelling units/acre gross density. (Or highest density allowed in adjacent municipality)</p>	<p>Neighborhood Business District (B-1) Medium Density Residential District (MR) General Residential District (GR) High Density Residential District (HR-1 & HR-2) Commercial-Residential District (CR-1) Marine District (M) Limited Industrial District (LI-1) Urban Business District (UB) New Commercial District</p>
<p>Commercial District</p>	<p>Neighborhood Business District (B-1) Commercial-Residential District (CR-1) New Commercial District</p>
<p>Industrial District</p>	<p>Limited Industrial District (LI-1) Light Industrial District (LI-2) Heavy Industrial District (HI-1)</p>

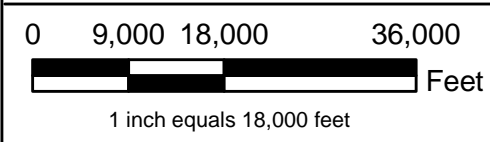
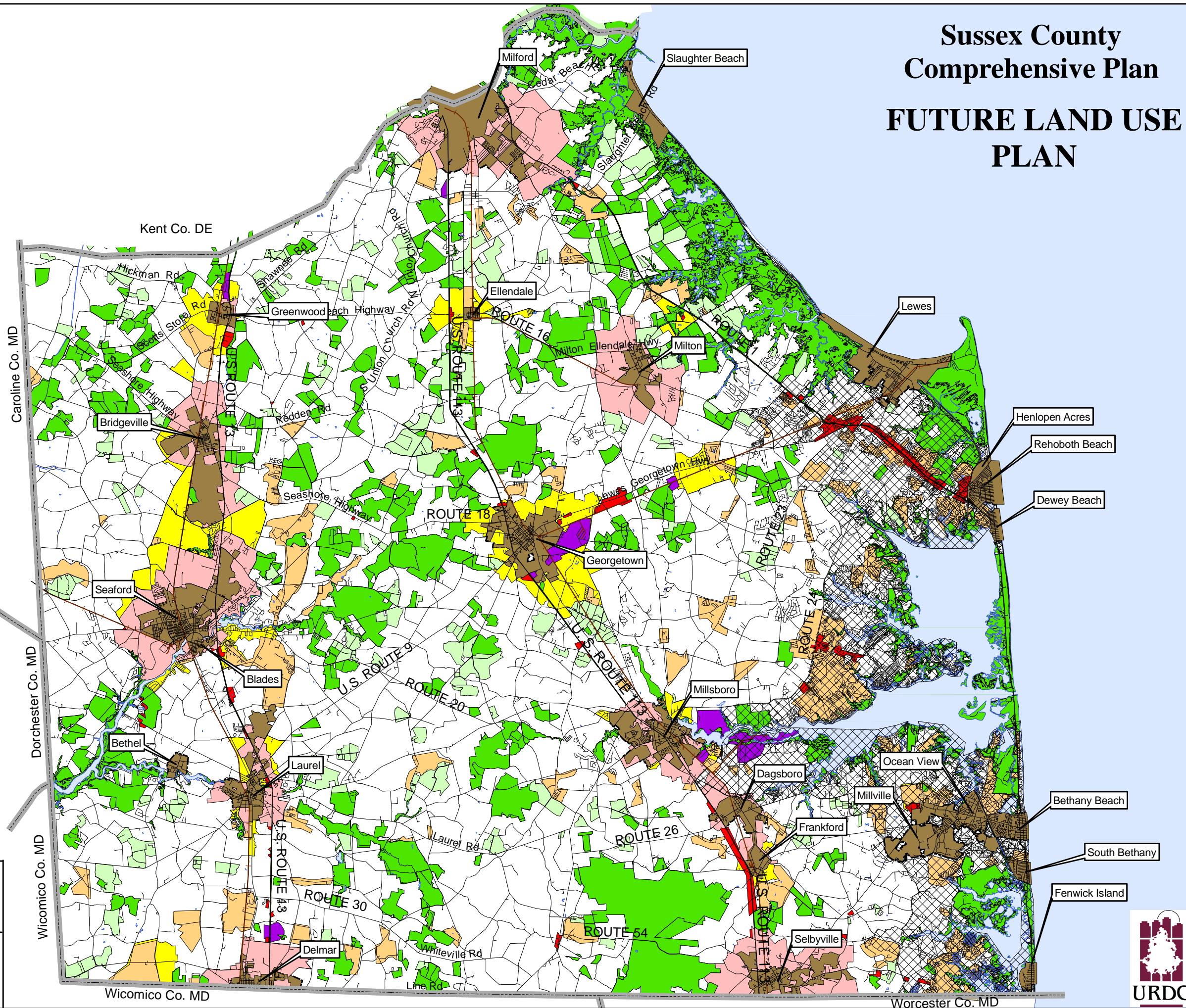
Sussex County Comprehensive Plan FUTURE LAND USE PLAN

Growth Areas

- Municipality
- Town Center
- Developing Area
- Environmentally Sensitive Developing Area
- Mixed Residential Areas
- Highway Commercial Areas
- Planned Industrial Areas

Rural Areas

- Low Density Area
- Protected Lands
(All Federal lands, State lands, agricultural easements, private conservancy lands, major wetlands and lands preserved by other conservation easements)
- Agricultural Preservation Districts Under the State Program
(A voluntary program. Only a very limited number of homes allowed on a tract under State regulations during the time of an agreement. Participating landowners are eligible to sell development rights to the State.)



Base Map Provided By:
Sussex County
Mapping Department

Sources:
DNREC
DE Office of State Planning Coordination
DE Office of Transportation
United States Geological Survey



Other Important Land Use Topics

The following land use planning topics, among others, continue to generate special interest throughout Delaware:

- Transfer of Development Rights (TDR)
- Agricultural Preservation
- Resource Protection Programs
- Manufactured Housing
- Community Design Guidelines
- Eligible Open Space

Sussex County’s perspective on these issues is highlighted below.

Transfer of Development Rights (TDR)

TDR is a method that can use dollars paid by developers to permanently preserve land. It is a completely optional program that works through incentives. Under TDR, a developer pays the owner of a rural property to permanently preserve that property. In return, that developer can “transfer” the number of homes that would have been allowed on the preserved tract to the developer’s own tract so that the developer can build more homes than would otherwise be permitted on that tract. The developer and the rural landowner negotiate how much the developer must pay to purchase the rural landowner’s density rights. Under TDR, private sector market forces dictate the related cost. This helps landowners obtain full value for preserving their property and is an alternative to the below-market values offered to landowners under the State’s agricultural easement program.

New Castle and Kent Counties have each established new TDR programs. Successful TDR programs are also in place in several counties in Maryland, as well as parts of Pennsylvania and New Jersey. The Delaware Office of State Planning Coordination supports this technique and has been active in promoting it throughout the State as part of the Livable Delaware initiative. Potential exists in Sussex County to establish a voluntary TDR program that will help preserve land and sustain agriculture by re-directing some new development from rural areas to designated “receiving areas” that have the roads, schools and utilities to better accommodate growth.

Sussex County has a variation of TDR in place. If a developer of a tract situated in a designated Growth Area pays a fee into an open space fund, the County permits the developer to build additional density on that tract. The County uses the money collected in this fund to preserve land in other parts of the County. Under the Sussex County system, the price per additional house is fixed by ordinance, not negotiated. The County (with guidance from the Sussex County Land Trust) selects the properties to be preserved. Sussex County will retain this incentive and continue to refine how and where it applies in the County. Any TDR program established in Sussex County would augment the current density bonus option, not replace it.

Guidelines for Considering TDR in Sussex County

Sussex County would need to amend its zoning ordinance to implement TDR. The specific language in that zoning amendment would spell out all the terms and condition about how TDR would operate in the County. The following are generalized guidelines for developing a voluntary TDR program and establishing effective procedures to govern its operation:

- The “sending areas” would be areas where land owners are allowed to sell their development rights. That should include all or almost all of the AR-1 zoning district.
- The receiving areas are areas where additional density could be possible under TDR. The receiving areas would include areas shown on the Future Land Use Plan as Developing Areas and Town Center Areas.
 - It is recommended that the TDR option not be allowed to increase densities in the Environmentally Sensitive Developing Areas. This would recognize that area’s fragile environment.
 - A second option could establish a limit stating that the sending tract and the receiving tract cannot be more than a maximum number of miles apart, such as eight miles. This refinement would help address the potential concern that under TDR, the schools, roads, utilities, and neighborhoods in the eastern section of the County could be overloaded from having to support growth pressure that originate in the western section where open land is more plentiful and less costly.
- A yield plan should be required for TDR developments to show how many homes are actually possible on the sending tract (the property to be preserved) under existing conventional zoning. The yield plan would govern how much density can be transferred from the sending tract to the receiving tract. Several jurisdictions give density bonuses to encourage developers to participate in TDR. Otherwise, developers may conclude that they can accomplish their yield objectives by relying on existing underlying zoning without becoming involved in TDR.
- Some jurisdictions, such as Kent County and others, offer density bonuses as part of their TDR programs if high priority farms or natural areas are being preserved. With the proper definitions in place, this option could help Sussex County preserve contiguous blocks of farmland, lands of extraordinary environmental importance and/or lands clearly vital to recharging groundwater supplies.
- Intergovernmental agreements and amendments to municipal zoning ordinances could be enacted that would allow development rights to be transferred from areas outside incorporated municipalities to areas inside incorporated municipalities, if the specific municipality is amenable.

Farmland Preservation

The Sussex County Council strongly supports efforts by the State, conservation organizations, and local landowners to preserve farmland through voluntary purchase of development rights. The State's Agricultural Land Preservation Program is the primary mechanism for permanently protecting farmland in Delaware. Landowners who wish to participate in this voluntary program and sell their development rights to the State must first be enrolled in an Agricultural Preservation District.

Agricultural Preservation Districts must consist of at least 200 contiguous acres devoted to farming and related uses, with provisions available to also include smaller parcels within a three-mile radius. Regulations prohibit participating landowners from developing their property for at least ten years except for agriculture, related uses, and certain very limited numbers of homes. In return, the landowners receive real estate tax benefits and "right-to-farm" protection against certain nuisance complaints.

The State and Sussex County fund the purchase of farmland development rights. Several factors influence decisions about where to spend these funds. Soil quality, the environmental significance of the site and opportunities to expand blocks of preserved land into contiguous locations are among the primary criteria.

The Sussex County Council has funded over \$2 million towards the purchase of farmland preservation easements on approximately 2,471 acres in Sussex County. The County determines which farmland preservation easements to purchase based on recommendations from the Sussex County Land Trust. The Sussex County Land Trust recommendations are based on inclusion of the properties within the grand preservation loop (see following map), amongst other factors. The goal is to provide a loop of contiguous properties that are preserved as open space in the County.

As of January 2007, the Delaware Agricultural Lands Preservation Foundation had acquired the development rights to 171 Sussex County farms that totaled 26,766 acres. At that time, the acquisition of development rights were pending for an additional 36 Sussex County farms comprising 5,754 acres. A total of 249 Sussex County farms containing 49,744 acres were enrolled in Agricultural Preservation Districts as of January 2007. District locations are shown on the *Future Land Use Map*. Sussex County is second to Kent County in both farmland acres preserved and farmland acres enrolled in Agricultural Preservation Districts. The Sussex County Council views the voluntary sale of farmland development rights to the Delaware Agricultural Lands Preservation Foundation as an important tool for preserving the County's rural environment. The description of Low Density planning areas included earlier in this chapter describes additional strategies Sussex County now uses to help preserve the County's agricultural heritage.

Resource Protection Programs

Sussex County residents should also be aware of a number of Federal State, County and private sector programs that facilitate the voluntary preservation of eligible natural lands. These are summarized below from information Sussex County makes readily available in brochure form to interested parties.

USDA Natural Resource Conservation Service

Wetlands Reserve Program – Controls wetland losses nationwide through permanent and 30-year easements; 10-year minimum restoration cost-shares available.

Farm and Ranch Lands Protection Program – Purchase of agricultural conservation easements. Lands must be threatened and hold agricultural significance.

- Other easements through grassland and healthy forest preservation programs.

Delaware Agricultural Lands Preservation Foundation
(Delaware Department of Agriculture)

Preservation Districts – Agricultural easements include farmlands, historic structures and wildlife habitats.

- Exemptions from real estate transfer fees, county and school taxes.
- Protection from nuisance complaints.

Delaware Wild Lands, Inc.

- Dedicated conservation and preservation of natural, strategic parcels; fee-simple and donated acquisitions.
- Tracts concentrated near Great Cypress Swamp are most desirable. Currently, lands comprise 10,000 acres of sustainable forest under routine stewardship.
- Timber management supports commercial logging and enhances traditional recreational activities.
- Works through private, government partnerships.

Sussex County Land Trust

- Programs to purchase property and protective easements.
- Parcel donations accepted.
- Aims to create “Grand Preservation Loop” to provide connectivity to other preserved parcels, open tracts (see accompanying map).
- Partnership through Sussex County Council and the Sussex County Land Trust provides funding from both private and public contributions for preservation, protection of open space.

US Fish and Wildlife (Service Partners for Fish and Wildlife)

- Wetlands and estuary habitat management for minimum 10 years.
- Includes financial assistance to landowner.

Delaware Forest Land Preservation Program (Delaware Forest Service)

- Perpetual conservation easements prohibit development but protect working forests.
- Minimum 10 acres and 10-year contract required.
- Right-to-farm provision and substantial compensation for preservation.
- Cost-shares for tree planting and timber stand improvement.

Ducks Unlimited Conservation Easement Program

Habitat Stewardship Program – 90% cost-share for wetlands restoration and management, agreement restricts type and amount of development. Land owner retains ownership.

Wetlands American Trust – Accepts donated easements in perpetuity.

Sussex Conservation District

Agricultural Cost-Share – Incentives for numerous programs, including field wetlands, erosion and animal waste.

- Up to 75% payments and 15-year contracts.

Tax Ditch Maintenance – 50% cost-share for one-time service and equipment provisions.

The Nature Conservancy (For the Delaware Bay Watershed)

- Accepts donations of land and conservation easements in public-private partnerships.
- Provides natural lands management services.

US Forest Service Forest Legacy Program

- Assists states in securing conservation easements for threatened lands.
- Minimum 75% forest cover required.
- Land is protected as working forest.



Sussex County's GRAND PRESERVATION LOOP

preserving sussex county's special places

Legend

 PUBLIC OPEN SPACE

 PRIVATE OPEN SPACE

 AGRICULTURAL PRESERVATION



*Prime Hook
National Wildlife Refuge*

*Redden
State Forest*

*Cape Henlopen
State Park*

*Delaware Seashore
State Park*

*Nanticoke
Wildlife Area*

*Assawoman
Wildlife Area*

*Fenwick Island
State Park*

*Trap Pond
State Park*

D E L A W A R E
M A R Y L A N D

Atlantic Ocean

Delaware Bay

Rehoboth Bay

Indian River Bay

Manufactured Homes

Manufactured homes continue to be a popular alternative to site-built housing in Sussex County. County zoning regulations delineate where these homes are allowed. However, the County's jurisdiction is limited in two main ways:

- Federal law effectively states that the County must allow manufactured homes wherever conventionally built single-family detached homes are permitted.
- Federal law governs the construction details and related specifications to which manufactured homes must be built.

Within these limitations, Sussex County encourages using manufactured housing as one way to help provide affordable housing, especially in residential areas close to job centers. County Council is keenly aware that many jobs in Sussex County do not pay enough for workers to afford the average priced home now available to buy in Sussex County, especially in the eastern part of the County. In addition to continuing to provide density bonuses to developers who build certain affordable housing, the County supports manufactured housing as an effective way to help meet the needs of moderate income people trying to become home owners. Sussex County will closely examine potential revisions to County regulations governing the following topics when the County begins its zoning and subdivision code updates following adoption of this Comprehensive Plan Update:

- The use of single-wide homes.
- The effective lot size needed to place a manufactured home.
- Prohibitions against relocating or placing manufactured homes built more than five years ago.

This Plan urges local town officials to ensure incorporated municipalities are not unduly restricting manufactured housing. The County also looks forward to hearing from large private sector employers and manufactured housing advocates about how companies might consider participating in manufactured housing projects that would help provide work force housing for interested employees.

Community Design Criteria

The County Zoning Ordinance requires that cluster developments be of “superior design”. The following guidelines provide updated criteria for helping the County evaluate the design merits of plans submitted as cluster developments.

- Homes should be clustered on the most suitable portions of a site, and important natural areas should be singled out for preservation before lot lines are engineered.

- Through a County-approved density bonus, the number of homes possible on a tract under clustering should be 15 to 20 percent higher than would be allowed on the same tract in a conventional development with 3/4-acre lots. This is because the minimum lot size would be lower. This modest density bonus will encourage developers to preserve the open space.
- Make sure cluster development is not misused to generate a dramatic increase in the number of homes allowed on a tract. A "Yield Plan" should be required that accurately shows the number of homes that would actually be possible on the same tract under conventional development regulations.
- Make sure the proposed open space can benefit the residents of the development, instead of being fragments of "leftover" lands with little development or recreation value.
- Direct buildings away from steep slopes, wetlands, waterways and other important natural features.
- Require thick natural vegetation to be preserved along creeks. This is essential to help filter out eroded soil and other pollutants from stormwater runoff before it enters the creek. This vegetation along creeks is also important to maintain high quality fishing habitats.
- Require that homes be placed on portions of the tract that are most environmentally suitable for development—as opposed to being evenly spread across the land.
- Preserve scenic features so that homes can be placed on less visible portions of a tract, while maintaining scenic views. For example, some ordinances mandate that developers set back homes from main through-roads and limit placement of homes on major ridgelines.
- Poor and natural drainage areas should be located early in the design process to save time and money by minimizing future design issues, protecting natural resources and reducing future drainage and flooding problems during and after construction.
- The following four-step process is recommended in the design of new development in order to emphasize land conservation principles.

1. Identify Lands that Should Be Preserved.

The mapping should not only consider the area proposed for development, but also any future phases of development, plus the areas that are immediately adjacent to the development site on other lots.

First, the areas that are most worthy of preservation should be mapped, including wetlands, flood-prone areas, creek valleys, and very steeply sloped lands. Then, other features that are important for conservation should be mapped, such as woodlands, tree lines, scenic views, historic buildings, and prime farmland. The areas with the fewest important natural, scenic and historic features should be considered the "Potential Development Area."

2. *Locate Home Sites.*

Next, the most appropriate locations for homes should be chosen. Zoning regulations should establish maximum overall density for the site, but should not include overly strict lot requirements that may prevent flexibility in the site layout. Home sites should be chosen to avoid the important features mapped in the first step. Home sites should also take advantage of scenic views within the tract.

3. *Locate Roads and Trails.*

After the home sites are selected, then a road system should be designed that serves those homes. A trail system could also be provided that links homes to destinations outside of the tract.

4. *Draw in the Lot Lines.*

The last sketch plan step is to draw in lot lines. In conventional development, with strict standardized minimum lot requirements, this is often the first step and done before any consideration of natural features of the site.

Eligible Open Space

Sussex County is interested in establishing standards to ensure preserved open space is well-located and serves a public function. In many cases, mature woods, steep slopes and creek valleys should be preserved in their natural state. In other cases, the open spaces may be intended for active recreation. In still other cases, trees should be planted in the open spaces and trails should be installed. The key is to avoid “open space” that is simply the land left over after the most economical layout of lots and roads is completed.

Valid public purposes for open space include:

- To preserve land for agriculture, hayfields, orchards and tree farms.
- To preserve environmentally sensitive areas.
- To manage stormwater in a more attractive and naturalistic manner that protects water quality, as opposed to engineered channels and traditional fenced-in detention basins.
- To provide usable recreation area or important links in a trail system.
- To preserve large contiguous swaths of open space in visible locations that maintain a feeling of open space and that provide a visual relief between developments. At best, some open space would be preserved along exterior roads.

The following are useful criteria for assessing the value of open space areas proposed as part of a new development:

- In most cases, at least half of the required open space should be in one contiguous area.
- With the exception of tax ditches, isolated areas (such as less than one acre) and narrow areas of land (such as less than 75 feet wide) should not be counted as open space. However, more narrow stretches may be suitable for trail use.
- Detention basins should not be considered open space unless they are designed as a major scenic asset (such as a natural appearing pond) or are clearly suitable for recreation.
- Roads and parking should not count as open space, except for small parking areas that are necessary to serve non-commercial recreation uses.
- It may be appropriate to establish a maximum percentage of open space that can be covered by impervious surfaces.
- If not intended for active recreation, open space should be landscaped in trees, shrubs and other attractive vegetation, including native vegetation.
- Most types of commercial recreation, other than a golf course, should not count as common open space.
- Buildings should not count as open space, except for buildings that only serve recreational purposes.
- If appropriate and if possible, open space could be interconnected with common open space areas and/or trail areas on abutting parcels.

CONSERVATION ELEMENT

CONSERVATION ELEMENT

Focusing on Conservation

The unbuilt environment in Sussex County includes wetlands, waterways, beaches, upland forests, farmland, meadows and other open areas that support a wide variety of plant and wildlife species. These undeveloped areas are a major part of Sussex County's unique physical character, scenic appeal, and quality of life.

A range of public and private parties strive to preserve Sussex County's natural environment. Lands already protected, on-going efforts to protect the area's ecology, and additional conservation measures Sussex County and others should consider undertaking are the topics addressed in this chapter of the Sussex County Comprehensive Plan.

Protected Lands

The Developed and Protected Lands Map in the Future Land Use element of this Comprehensive Plan Update shows the location of all land in Sussex County permanently protected from further development. These lands include property owned and managed by the federal government, the state government, and private land conservancies. Lands preserved by easement and wetlands whose future development are severely limited by state and federal regulations are also included. The Land Preservation Office of DNREC's Division of Parks and Recreation estimated in 2006 that 21% of Sussex County is permanently protected against further development.

Federal Land

The Prime Hook National Wildlife Refuge is located approximately 10 miles north of Lewes. It contains over 10,000 acres devoted to habitat and protection for waterfowl, migratory birds and other endangered species. The U.S. Fish and Wildlife Service manages this site as part of the National Wildlife Refuge System, which encompasses over 94 million acres.

State Land

DNREC's Division of Fish and Wildlife oversees State wildlife areas, ponds, and other open spaces that comprise over 18,000 acres in Sussex County. The Delaware Department of Agriculture's Forest Service is responsible for Redden State Forest which is primarily north of Georgetown. The Redden State Forest at 9,500 acres is the largest of Delaware's three state forests and the only one in Sussex County.

Private Preserved Land and Land Under Conservation Easements

Permanently preserved private land in Sussex County also includes property owned in fee simple by private non-profit conservation entities such as the Sussex County Land Trust, Delaware Wild Lands, Inc., Ducks Unlimited, and the Nature Conservancy, among others.

Instead of selling to a land conservancy, many property owners retain title to their land and place it under a legally binding easement that prohibits or severely restricts future development. Different types of conservation easements exist. Many of these easements are held by the conservation groups noted directly above. Agricultural conservation, easements under which farmland owners sell their development rights to the State are also a prominent type of conservation easement in Sussex County. As of January 2007, the Delaware Agricultural Lands Preservation Foundation had acquired the development rights to 171 Sussex County farms totaling 26,766 acres. In addition, DNREC holds 17 conservation easements protecting 338 acres.

Regulated Wetlands

DNREC's 2006 estimate that 21% of Sussex County is protected land includes tidal wetlands because of State and federal laws that make it difficult to convert these areas to any other use. The Developed and Protected Lands Map shows tidal wetlands but also includes non-tidal wetlands in the Protected Lands category because of Army Corps of Engineers regulations that may regulate construction activity in these areas.

DNREC wetlands publications summarize the following scientifically-supported rationale for protecting wetlands:

- *Flood Control* – Fresh water wetlands act as slow-release reservoirs that reduce the impact of flooding.
- *Water Quality* – Freshwater wetlands help remove impurities and trap sediment before they enter other ponds, streams and coastal waters.
- *Habitat* – A variety of wetland types provide invaluable habitat for plant life and many species of waterfowl, water birds, fishes, reptiles, amphibians, and mammals, including rare threatened and endangered species.
- *Shoreline Stabilization* – The root networks formed by wetland vegetation can help hold shorelines in place by buffering against erosion.
- *Water Supply* – Freshwater wetlands help recharge rainfall into the aquifers many people depend on for potable water supplies.
- *Recreation* – Canoeing, hiking, birding, nature photography, and environmental education are very popular leisure time activities in and around wetlands.

However, recent court decisions have severely limited the Corps' jurisdiction over "isolated" wetlands.

Both tidal and non-tidal wetlands have extensive resource values. The location of these areas must be accurately determined by qualified professionals prior to any site plan reviews or before any County permits may be used. Wetlands protection is much more effective under state and federal laws if qualified professionals are involved in site design at the earliest possible stage. Qualified professionals should be informed on the status of relevant court cases and the regulations associated with state and federal programs—including but not limited to: The State of Delaware Subaqueous Lands Act, Delaware Wetlands Act, Water Quality Certification, and Coastal Zone Consistency.

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the construction or alteration of navigable waters of the United States without a permit from the Corps of Engineers.
- Section 404 of the Clean Water Act (33 U.S.C. 1334). Section 301 of this Act prohibits the discharge of dredged or fill materials into waters of the United States without a permit from the Corps of Engineers.
- Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. 1414) authorizes the Corps of Engineers to issue permits for the transportation of dredged material for the purpose of dumping it into ocean waters.

Other law may also affect the processing of applications for Corps of Engineers permits. Among these are the National Environmental Policy Act, the Coastal Zone Management Act, the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act, the Deepwater Port Act, the Federal Power Act, the Marine Mammal Protection Act, the Wild and Scenic Rivers Act, and the National Fishing Enhancement Act of 1984.

Major Conservation Initiatives Underway

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

Delaware Bay Estuary Project

The U.S. Fish and Wildlife Service is collaborating with other federal agencies, non-profit conservation groups, and the states of Delaware, Pennsylvania, Maryland, Virginia and New Jersey to protect and restore the ecological integrity of wildlife resources in the Delaware River and Delmarva Peninsula. While the project involves extensive research and mapping of natural resources, technical and financial assistance is also available to eligible landowners who wish to restore habitat on their property.

Prime Hook Wildlife Refuge Comprehensive Conservation Plan

The U.S. Fish and Wildlife Service began preparing a Comprehensive Conservation Plan for the Prime Hook Wildlife Refuge in 2005. When finished in 2008, the plan will: a) identify how the refuge can best address its resource conservation and management priorities; and b) recommend how to synchronize these conservation priorities with the refuge's obligation to provide area for hunting, fishing, hiking, canoeing, environmental education and related public recreation activities.

Livable Delaware and Related State Initiatives

Among broader land use planning goals, the State's wide-ranging Livable Delaware initiative calls for protecting Delaware's critical environmental resources. In support of this goal and other State objectives, State agencies have endeavored to identify and help preserve Delaware's "green infrastructure", which DNREC describes as a network of natural areas, parks, conservation areas, and working lands with conservation value that contribute to the health and quality of life in Delaware. Several separate and overlapping state programs and strategies help carry out this broad conservation mandate.

- *The Delaware Open Space Program* – The 1990 Delaware Land Protection Act led to the Delaware Open Space Program. The State uses funding from this program to acquire lands the State identifies as environmentally important. Once purchased, these lands are managed by the appropriate state agency as public open space to protect natural features, conserve cultural resources, and provide recreation opportunities where appropriate.
- *Agricultural Land Preservation* – Participation by Sussex County landowners in the Delaware's Agricultural Land Preservation Program is described in the Future Land Use Element of this plan. These preserved farms are mapped on the Developed and Protected Lands map. Sussex County also makes major annual financial contributions towards acquiring these easements.
- *Forest Conservation* – The Delaware Department of Agriculture's Forest Service oversees the State's forest management activities. In addition to acquiring conservation easements, the Forest Service manages a host of programs that assist local communities and private landowners to re-forest, manage and/or enhance their woodland resources. Sussex County is home to two of Delaware's four Forest Legacy Areas: Redden/Ellendale and Cypress Swamp. Forest Legacy Areas are specially designated concentrations of forest land, within which the State can use certain federal funds to acquire forest conservation easements.

Forest Legacy Areas in Sussex County



- *Soil Conservation and Farmland Management* – In cooperation with the State, the three County Conservation Districts in Delaware each offer cost sharing incentives for landowners willing to initiate best management practices for: a) controlling erosion and sedimentation; b) managing animal waste; c) restricting cattle access to streams; and d) related conservation activities on working farms.
- *Wildlife Conservation* – Sussex County’s coastal marine waters, marshes, freshwater streams, wetlands, upland forests and meadows are among the 125 different habitat types identified in Delaware by the State Wildlife Action Plan. This plan prepared under the supervision of DNREC’s Division of Fish and Wildlife, recommends a wide range of conservation strategies affecting nearly 90 different conservation issues and concerns. In support of this plan and related wildlife conservation goals, DNREC’s Division of Fish and Wildlife provides technical assistance and financial incentives to landowners interested in establishing, restoring, and/or enhancing wildlife habitat to benefit species of concern.
- *Wetlands Conservation* – As noted earlier, state and federal regulations provide extensive protection to wetlands when wetlands are mapped accurately and wetland regulations are actively enforced (and provided these regulation continue to pass legal scrutiny). Recognizing that wetlands throughout Delaware have disappeared due to development, DNREC and others offer both technical assistance and financial help to landowners who wish to restore wetlands, establish permanent wetlands on their property, or permanently conserve existing wetlands through conservation easements. In addition, DNREC’s Ecological Restoration and Protection Team has used federal, state, and private funds, along with volunteer labor, to oversee projects in each of the three Delaware counties to improve degraded wetlands, stabilize eroding streambanks and restore other sensitive ecological areas.

Inland Bays Preservation

The Center for the Inland Bays (CIB) is a private non-profit organization dedicated to preserving the ecology of the Delaware Inland Bays: Rehoboth Bay, Indian River Bay and Little Assawoman Bay. The Delaware Inland Bays estuary is one of 28 federally-designated “estuaries of national significance.” CIB’s major concerns include the following:

- Sustaining and restoring water quality and marine life in the bays.
- Combating invasive species and algae blooms in the bays.
- Protecting the shoreline and dune system along the bays.
- Preserving wetlands and other habitat for critical plant and wildlife in the bay areas.
- Promoting best management practices for agricultural uses in the Inland Bays watershed.
- Supporting land use planning, land use ordinances, and stormwater management practices that minimize impacts of development on the bays.

These goals, specific strategies for implementing these goals, and the results of numerous technical monitoring studies on the bays’ ecology are incorporated in *A Comprehensive Conservation and Management Plan for Delaware’s Inland Bays*, which CIB completed in 1995. Recently, CIB reviewed Sussex County’s 2002 Comprehensive Plan and analyzed what specific progress the County has made towards accomplishing that plan’s conservation objectives. CIB also provided detailed input on how Sussex County’s 2007 Comprehensive Plan update can promote policies critical to the inland bays in the following areas:

- Nutrient reduction
- Wetlands protection
- Open space preservation
- Growth management
- Community design

CIB works in concert with the Little Assawoman Bay Conservancy, the Nature Conservancy, officials at all levels of government (including the Sussex County Council), and several other conservation groups to promote the health of the inland bays and educate people about public policy issues relevant to the bays’ future. The Inland Bays region is, and will continue to be, a major population growth center. While public awareness has been raised and technical improvements have been made, stormwater runoff from this development and the region’s agriculture continue to threaten the Inland Bays’ complex and fragile ecology.

Watershed Pollution Control In Sussex County

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

A TMDL is the sum of the individual Waste Load Applications (WLAs) for point sources and Load Allocations (Las) for non-point sources and natural background sources of pollution. A TMDL may include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality. A TMDL matches the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate the pollutant without adverse impact.

A Pollution Control Strategy (PCS) specifies actions necessary to systematically achieve pollutant load reductions specified by a Total Maximum Daily Load for a given water body and must reduce pollutants to level specified by State Water Quality Standards.

Sussex County is located within the greater Delaware River and Basin drainage, Chesapeake Bay drainage, and the Inland Bays / Atlantic Ocean drainage. Within the combined area of all three of these basins are 19 individual watersheds. All 19 of these watersheds are subject to pollution reduction targets because they are impaired. The individual watersheds are assigned specific nutrient (nitrogen and phosphorus) and bacterial TMDL load reduction rates that must be met in order to comply with the State Water Quality Standards. The following table is a listing of nutrient and bacteria reduction requirements established for the 19 Sussex County watersheds.

**Table 9
TMDL Reduction Targets for Sussex County Watersheds**

Delaware River and Bay Drainage		Nitrogen	Phosphorus	Bacteria
1	Misphillion River	57%, 88% in Kings Causeway Branch	57%, 88% in Kings Causeway Branch	87%
2	Cedar Creek	45%	45%	96%
3	Broadkill	40%	40%	75%
Chesapeake Bay Drainage		Nitrogen	Phosphorus	Bacteria
4	Marshyhope	20%	25%	21%
5	Nanticoke	30%	50%	2%
6	Gum Branch			
7	Gravelly Branch			
8	Deep Creek			
9	Broad Creek			
10	Wicomico	NL	NL	NL
11	Pocomoke	55%	55%	28%

Chesapeake Bay Drainage		Nitrogen	Phosphorus	Bacteria
Inland Bays / Atlantic Ocean Drainage		Nitrogen	Phosphorus	Bacteria
12	Lewes / Rehoboth Canal	40% low reduction area, 85% high reduction area	40% low reduction area, 65% high reduction area	40% Fresh, 17% Marine
13	Rehoboth Bay			
14	Indian River	40% low reduction area, 85% high reduction area	40% low reduction area, 65% high reduction area	40% Fresh, 17% Marine
15	Iron Branch			
16	Indian River Bay			
17	Buntings Branch	31%	19%	
18	Assawoman	NL	NL	
19	Little Assawoman	40%	40%	

Source: DNREC.

The Sussex County Land Trust

The Sussex County Land Trust is a private non-profit organization that works closely with Sussex County Council, state government and other conservation groups to preserve open space by acquiring easements and acquiring title to undeveloped land. The Land Trust advises County Council on how to allocate County funds available for open space preservation. Sussex County provides financial support to the Sussex County Land Trust from the County’s general fund and from fees land developers pay the County for the right to build in designated growth areas at higher densities than otherwise permitted.

In addition to acquiring and administering easements on smaller tracts, the Sussex County Land Trust has been successful in using its funds to leverage State dollars, donations from the Nature Conservancy, federal monies and other support towards large open space purchases. Examples include acquisition of the 908-acre Ponders tract near Milton which is a forested property now managed by the Nature Conservancy, and 43 acres secured as part of a 600-acre acquisition to link the Great Marsh area near Lewes with the Prime Hook National Wildlife Refuge.

Sussex County Regulations

In addition to the standard regulations that counties and municipalities use to govern permitted uses, lot size, density, yard size and similar matters, Sussex County’s Zoning Ordinance and Subdivision Code contain numerous special regulations designed to protect environmental resources. Examples include the following:

- The Environmentally Sensitive Development Overlay Zone District, where an environmental assessment must be prepared in conjunction with development applications.

- Subdivision regulations that require forested buffers, minimum common open space, and a special design review by a County-appointed Technical Advisory Committee.
- Regulations mandating construction setbacks from primary coastal dunes.
- Regulations restricting building activity within the 100-year floodplain.
- Regulations that mandate building setbacks from tidal waters and tidal wetlands.
- A Combined Highway Corridor Overlay Zoning District where building setbacks, landscaping and other regulations are enforced to enhance roadside aesthetics.

Sussex County Council recognizes that rapid growth creates extraordinary environmental pressures, particularly in complex and sensitive coastal ecosystems. To augment current regulations, Sussex County Council is now evaluating alternative approaches to protecting non-tidal wetlands and groundwater recharge areas, among other critical natural features.

Conservation Strategies

The following strategies identify ways Sussex County can: a) continue its participation in conserving more land in the County; b) help ensure that the County's environmental resources are better protected; and c) encourage more farmland preservation. Sussex County government can carry out some of these initiatives on its own. In other cases, cooperative efforts will be needed. Many of these actions are helpful techniques for protecting specific natural features. However, to be most effective, they will need to be implemented in association with the more comprehensive growth management strategies outlined in the Future Land Use Element (Chapter 2) of this plan.

Land Preservation Strategies

- Continue working with the State to identify opportunities for the State to acquire additional lands in Sussex County designated as Natural Areas.
- Encourage more interested farmers to enroll in Agricultural Preservation Districts as a prerequisite for having the State purchase farmland development rights.
- Continue working with the Sussex County Land Trust to use funds collected from local developers and funds leveraged from other sources to preserve more land through conservation easements and fee simple acquisitions.
- Adopt a locally-formulated Transfer of Development Rights (TDR) program so that private sector developers can take a larger role in funding the permanent preservation of open space.

- Strengthen County development regulations to ensure that open space dedicated by developers contains enough contiguous legitimate open space to facilitate environmental protection and /or passive recreation.
- Establish future public sewer service areas that will help preserve open space by promoting orderly growth rather than unplanned sprawl.

Resource Protection Strategies

- Adopt zoning regulations that mandate an appropriate buffer distance between non-tidal wetlands and development.
- Support the Center for the Inland Bays and other conservation groups in their efforts to educate more people about the necessity of protecting wetlands.
- Encourage the State and tributary action teams to finish formulating pollution control strategies for the Inland Bays, the Nanticoke River, and the Broadkill Creek – and to focus on implementing these strategies.
- Continue to assess the potential value of including stream setback regulation in water pollution control plans for the Inland Bays and other local water bodies.
- Amend appropriate sections of Sussex County’s zoning and subdivision codes to encourage more “green” stormwater management techniques as an alternative to traditional detention basins.
- Amend appropriate sections of Sussex County’s zoning and subdivision codes to add regulations that will help protect critical wildlife habitat.
- Raise landowners’ awareness about the myriad of financial incentives the State offers to protect and better manage forest land, wetlands, wildlife habitat and farmland.
- Adopt a wellhead protection ordinance with commonly accepted setback standards for protecting groundwater recharge areas.
- Prioritize the provision of public sewers to areas with concentration of failed or potentially failing septic systems in order to better protect surface water and groundwater.
- Provide more public education about how to properly construct and operate on-site septic systems.
- In the Environmentally Sensitive Developing Area, delete all wetland areas from the gross lot size calculation used as the basis for determining allowable site density.

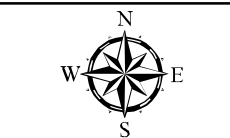
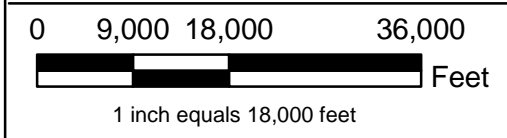
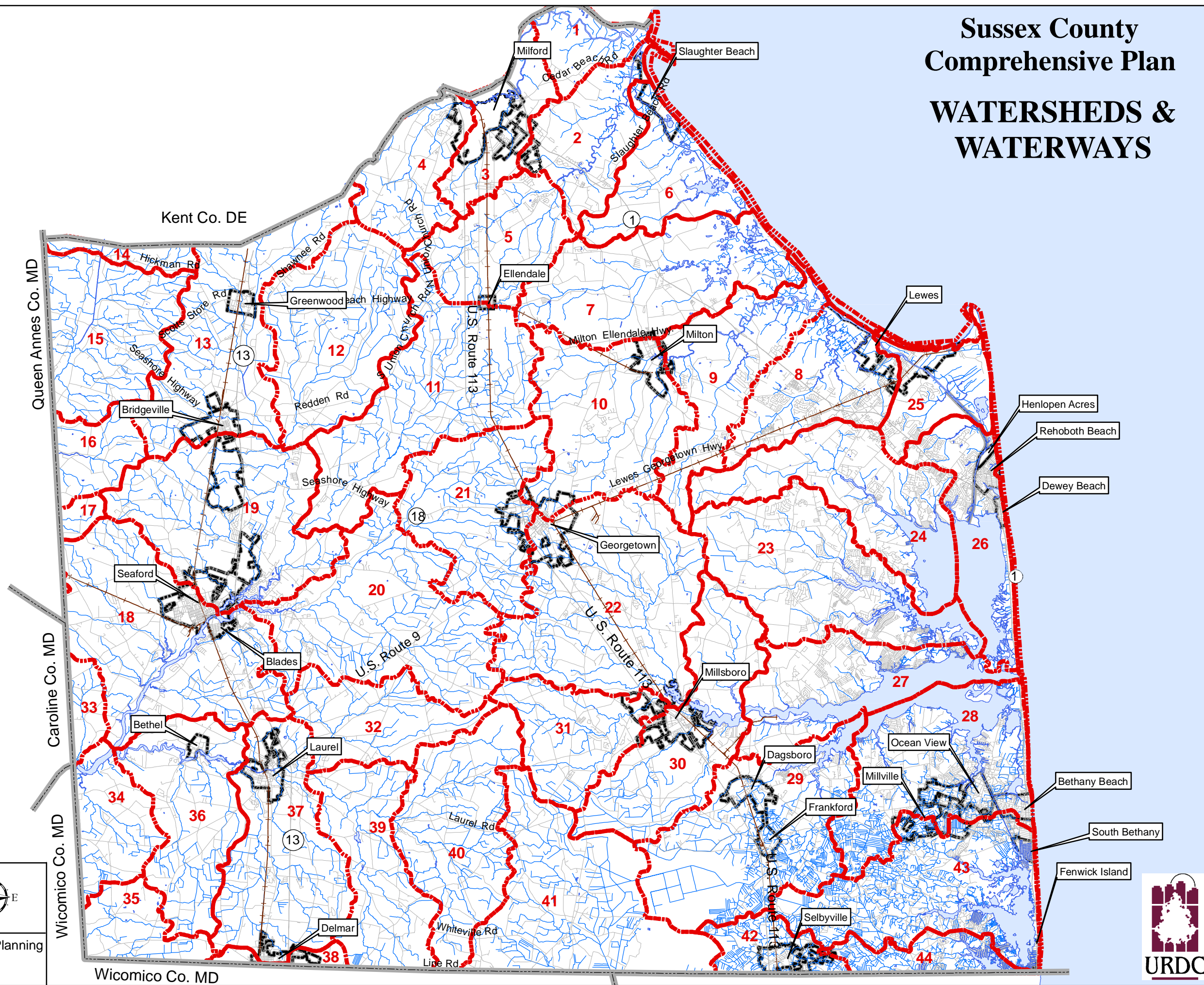
- Evaluate the County’s development regulations to ensure that maximum building coverage regulations reflect appropriate concern for reducing stormwater and promoting on-site recharge.
- Encourage better nutrient management techniques, improved erosion control techniques, the installation of fences to keep livestock out of waterways, and other best management practices on local farms.
- Strengthen County development regulations that mandate forested buffers between new residential uses and contiguous agricultural uses.
- Continue working with the State and local land owners to help sustain and protect well managed working forest lands through the Forest Legacy Program and related initiatives. The County understands that working forests have been (or will be) harvested to some degree, and that working forests are not necessarily managed for biodiversity or protection of critical natural habitat. Nonetheless, Sussex County recognizes the value of conserving these areas in accordance with approved wood lot management practices.

Sussex County Comprehensive Plan WATERSHEDS & WATERWAYS

— Rivers and Streams

▭ Watersheds



1. Lower Mispillion River
2. Cedar Creek below Ponds
3. Mispillion River below Ponds
4. Haven-Silver Lake
5. Cedar Creek above Swiggetts Pond
6. Slaughter Creek
7. Prime Hook Creek
8. Red Mill Creek
9. Round Pole Bridge
10. Wagamons Pond
11. Gravelly Branch
12. Gum Branch
13. Upper Nanticoke
14. Prospect Branch
15. Smithville Ditch
16. Houston Branch
17. Tanyard Branch
18. Lower Nanticoke
19. Hearn's Pond
20. Deep Creek-Fleetwood Pond
21. Deep Creek
22. Cowbridge-Millsboro Pond
23. Herring Creek
24. Love Creek
25. North Rehoboth Bay
26. S. Lewes-Reheboth Canal
27. Indian River to Bay
28. Whites Creek
29. Vines-Pepper Creek
30. Indian River below Ponds
31. Shoal Branch
32. Mirey Branch-Records Pond
33. Gales Creek
34. Nanticoke below Broad Creek
35. Mockingbird Creek
36. Tussocky
37. Broad Creek below Ponds
38. Wicomico River Head
39. James Branch
40. Trap Pond
41. Upper Pocomoke River
42. Isle of Wright Bay
43. Dirickson-Little
44. Assawoman Bay

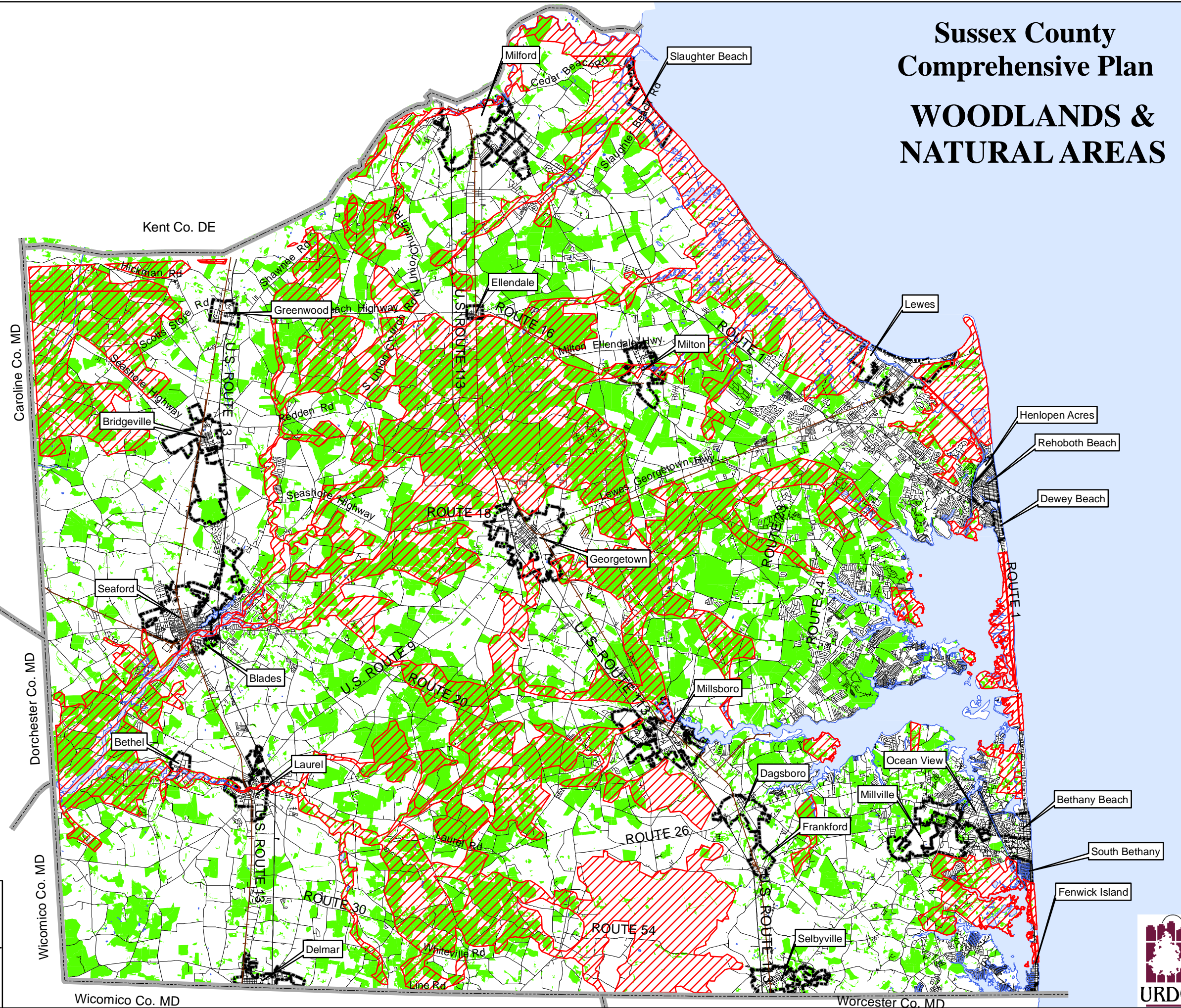


Base Map Provided By: **Source:**DNREC; DE Office of Planning
Sussex County Mapping Department
Sussex Co. Mapping Dept.




Sussex County Comprehensive Plan WOODLANDS & NATURAL AREAS

-  **Woodlands**
-  **Natural Areas**



0 9,000 18,000 36,000
 Feet
 1 inch equals 18,000 feet

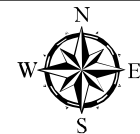
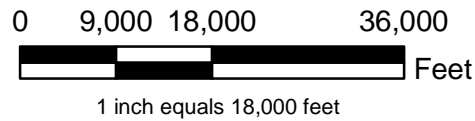
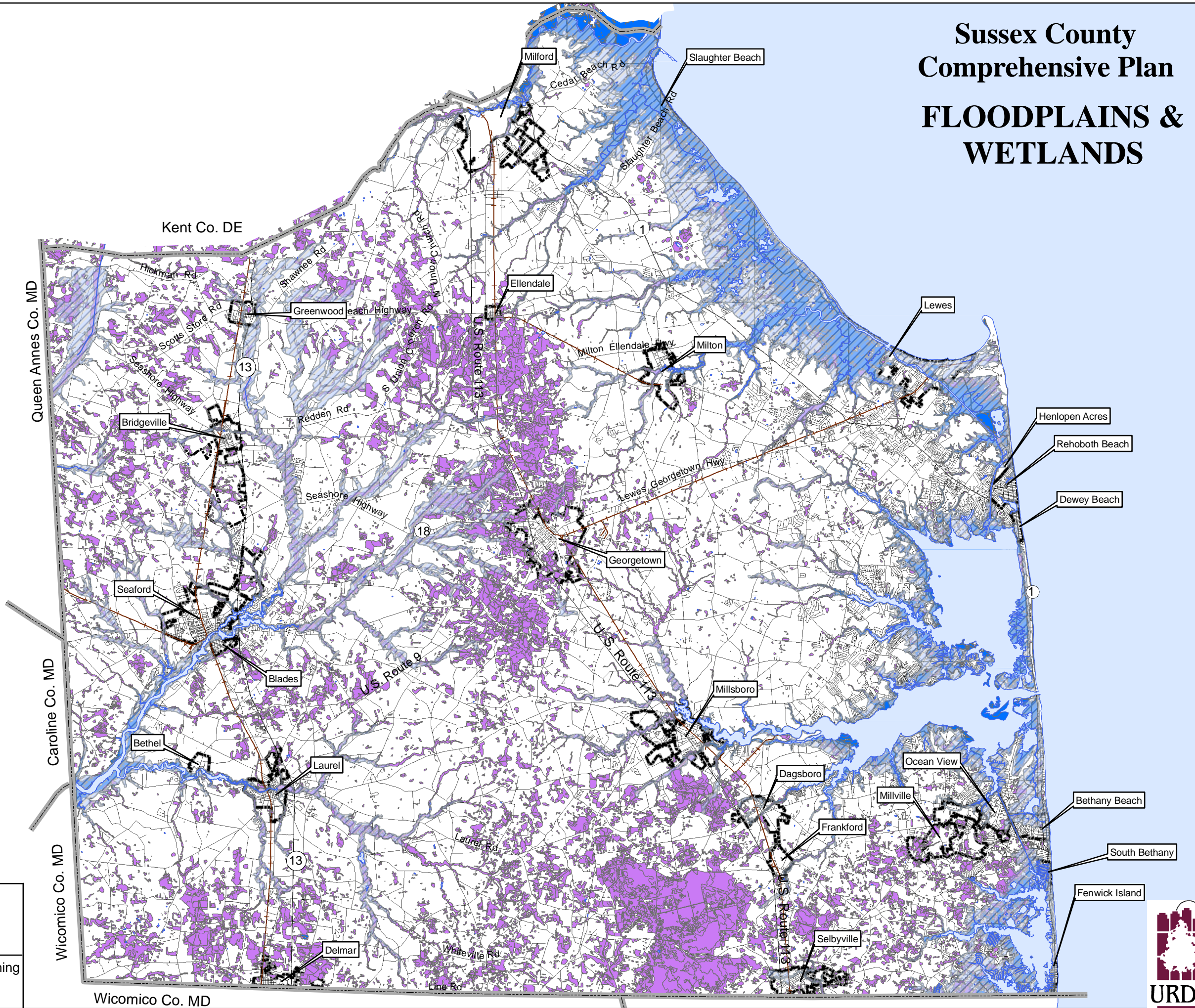


Base Map Provided By: Sussex County Mapping Department
 Sources: DNREC, Sussex County Mapping Department



Sussex County Comprehensive Plan FLOODPLAINS & WETLANDS

-  100 Year Floodplains
-  Tidal Wetlands
-  Non-tidal Wetlands



Base Map Provided By: **Source:**DNREC; DE Office of Planning
Sussex County Mapping Department
Sussex Co. Mapping Dept.



**PARKS AND RECREATION
ELEMENT**

PARKS AND RECREATION ELEMENT

Overview of Parks and Recreation Opportunities

Sussex County residents and visitors have many choices on how to spend their outdoor leisure time. The County is famous for its renowned public beaches. Innumerable docks, marinas, boat launches and landings provide access to the Atlantic Ocean, the Inland Bays and the County's rivers and creeks. State parks, state forests, municipal parks, and multi-use greenways offer a diverse variety of public recreation opportunities. This chapter of the Sussex County Comprehensive Plan Update looks at these opportunities and outlines strategies for sustaining and expanding public recreation choices in Sussex County.

State Parks and Forests

DNREC's Division of Parks and Recreation manages three Administrative Units in Sussex County, which include five state parks, seven nature preserves, and other recreation lands for a total of 14,265 acres. The State parks include:

- Cape Henlopen
- Delaware Seashore
- Fenwick Island
- Holts Landing
- Trap Pond

DNREC's Division of Fish & Wildlife oversees State wildlife areas, ponds and other open spaces in Sussex County. The Delaware Department of Agriculture's Forest Service is responsible for Redden State Forest, which is primarily north of Georgetown. The Redden State Forest, at 9,500 acres, is the largest of Delaware's three state forests and the only one in Sussex County. Sussex County recently contributed \$1.5 million towards expanding the boundaries of this State holding by 327 acres.

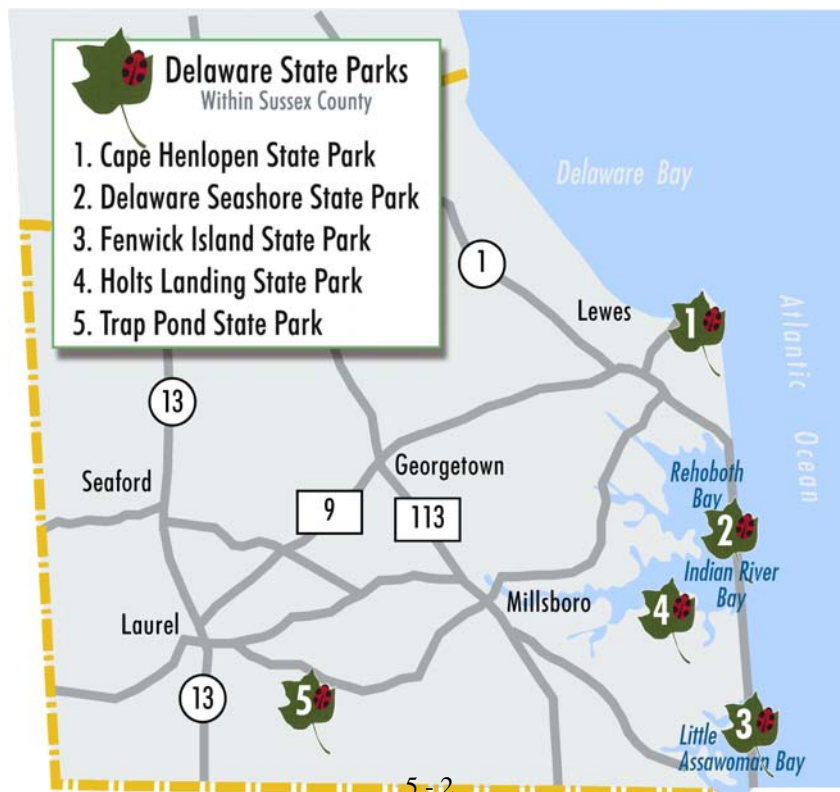
Fishing, camping, boating, hunting, swimming, and hiking are among the primary activities offered at the state parks in Sussex County.

- *Cape Henlopen State Park* is in Lewes, where the Atlantic Ocean meets the Delaware Bay. The park features public beaches, a nature trail, a World War II observation tower, family campgrounds, and an 18-hole disc golf course. There is also a quarter-mile fishing pier onto the Delaware Bay. Winter hunting is permitted in some areas.
- *Delaware Seashore State Park* is located between Dewey Beach and Bethany Beach. It has six miles of ocean and bay shoreline for fishing, swimming and sunbathing. The park features a 250-slip marina and a boat ramp. Seasonal hunting is permitted in some areas of the park.

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

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

- *Redden State Forest* is in central Sussex County north of Georgetown. It offers over 44 miles of trails, some primitive camping sites, and a catch and release fishing pond. Redden also has a nature center and camping lodge. At 9,500 acres (distributed over 16 tracts), it is the largest of Delaware’s three state forests. Currently DNREC is examining opportunities to add to Redden’s land holdings. Sussex County contributed \$1.5 million towards adding 327 acres to this state forest in 2007.



Greenways and Trails

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

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

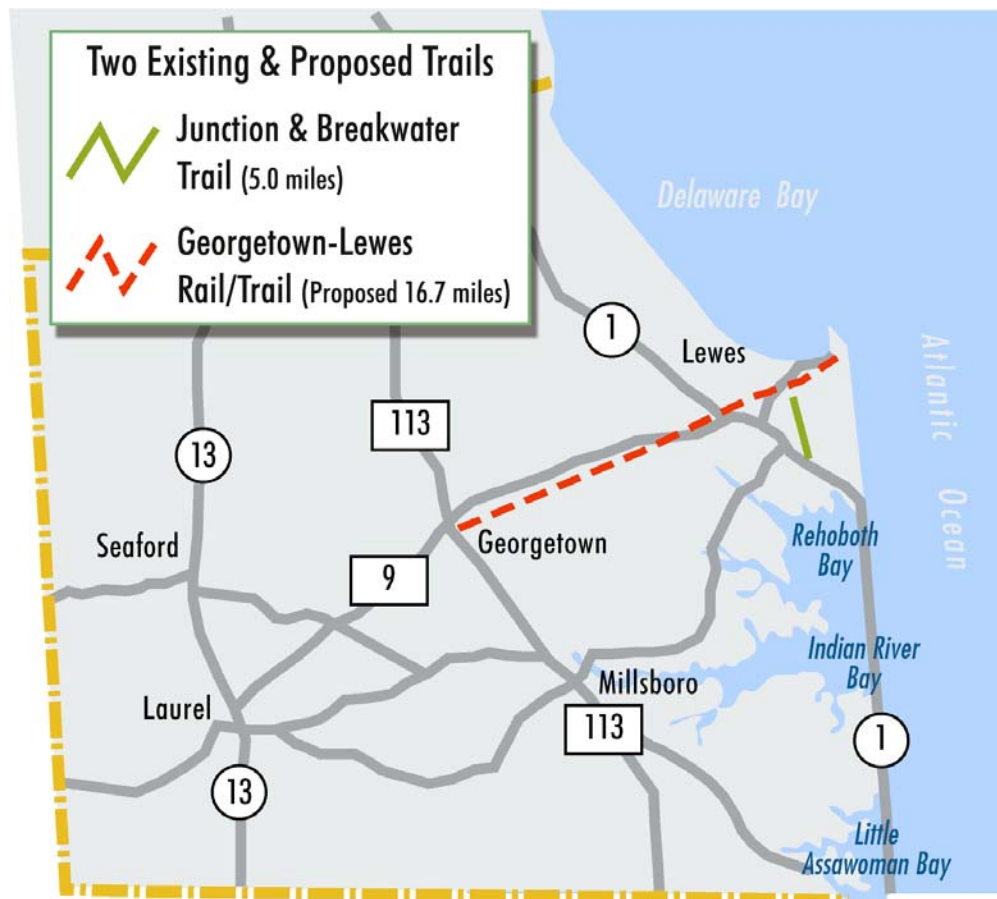
The Delaware Council on Greenways & Trails, is appointed by the General Assembly to preserve, protect and link the State's green open spaces. The Council encourages local communities, counties, and State agencies to work together toward greenway goals. The Council also works closely with other public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

Several existing and proposed greenways and trails are located entirely within, or pass through, Sussex County. Some are clearly defined recreation corridors already in use. At this point, others are planned routes or initial concepts that require further study, design and implementation.

- *American Discovery Trail* is a continuous hiking path proposed to extend across the United States from coast to coast. Cape Henlopen State Park is identified as the eastern trail head. The trail is proposed to travel 45 miles through Sussex County, primarily on road shoulders and sidewalks.
- *East Coast Greenway* is proposed as a city-to-city multi-use trail system through the densely populated eastern seaboard. Planners anticipate that this will be an urban alternative to the Appalachian Trail, 80% of which will be off-road. Several routes are being analyzed for bringing this trail through Delaware, including Sussex County.
- *Coastal Heritage Greenway* celebrates the diverse history of Delaware's waterfront from colonial settlement to 20th century industrialization. The greenway is a corridor that spans the coast for 90 miles from Fox Point State Park north of Wilmington to the state line at Fenwick Island. It is designed as a 27-stop auto tour with various side trips for hiking, biking, sight-seeing, and other activities. From Dover to Dewey Beach, the greenway lies east of Route 1. From Dewey Beach to Fenwick Island, Route 1 is the center of the greenway. Recommended Sussex County stops include Mispillion Lighthouse, Prime Hook National Wildlife Refuge, Beach Plum Island Nature Preserve, Lewes, and other points south.
- *The Junction and Breakwater Trail* takes its name from the former Penn Central Rail Line that ran between Lewes and Rehoboth in the mid 1800's. It is a 6-mile crushed stone rail/trail that connects in the southwestern side of Cape Henlopen State Park at Wolfe Neck with Rehoboth Beach. The northern trailhead, located at the historic Wolfe House, includes

a 56-car parking lot, an information center and a bike rack. The Junction & Breakwater Trail is the longest of Delaware’s three rail/trails. The trail includes a reconstructed 80-foot railroad bridge across Holland Glade. Planning is now underway to extend the trail further into Lewes.

- *Georgetown-Lewes Rail/Trail* was the subject of a feasibility study DelDOT recently completed. The trail would be built alongside a 16.7-mile stretch of the Delaware Coast Line Railroad between South Railroad Avenue in Georgetown and Cape Henlopen State Park. The trail would be constructed within a 60-foot wide, State-owned right of way paralleling the tracks. According to DelDOT, the rail line is only used between one and two times per week. The trail would be separated from the tracks by distances ranging from 10 feet to 25 feet. DelDOT has identified the future Lewes & Rehoboth Canal crossing as the biggest design challenge for this trail, with the Freeman Highway Bridge as a possible solution.
- *Ellendale-Lewes Rail Trail* is identified for further analysis in both the Greater Ellendale Area Comprehensive Plan and DelDOT’s Statewide Rails-to-Trails/ Rail-with-Trail System Master Plan. This trail would connect Ellendale with Milton along the State-owned Ellendale -Milton Industrial Track. The trail would then extend to Lewes along the Queen Anne’s Railway corridor.



In addition to trails that link two or more towns, several Sussex County municipalities are operating, constructing or planning their own greenways. Notable examples include the following:

- Mispillion Riverwalk in the City of Milford
- Governors Walk along the Broadkill River in the Town of Milton
- Riverwalk along Broad Creek in the Town of Laurel
- Town of Lewes greenway network

County and Municipal Involvement

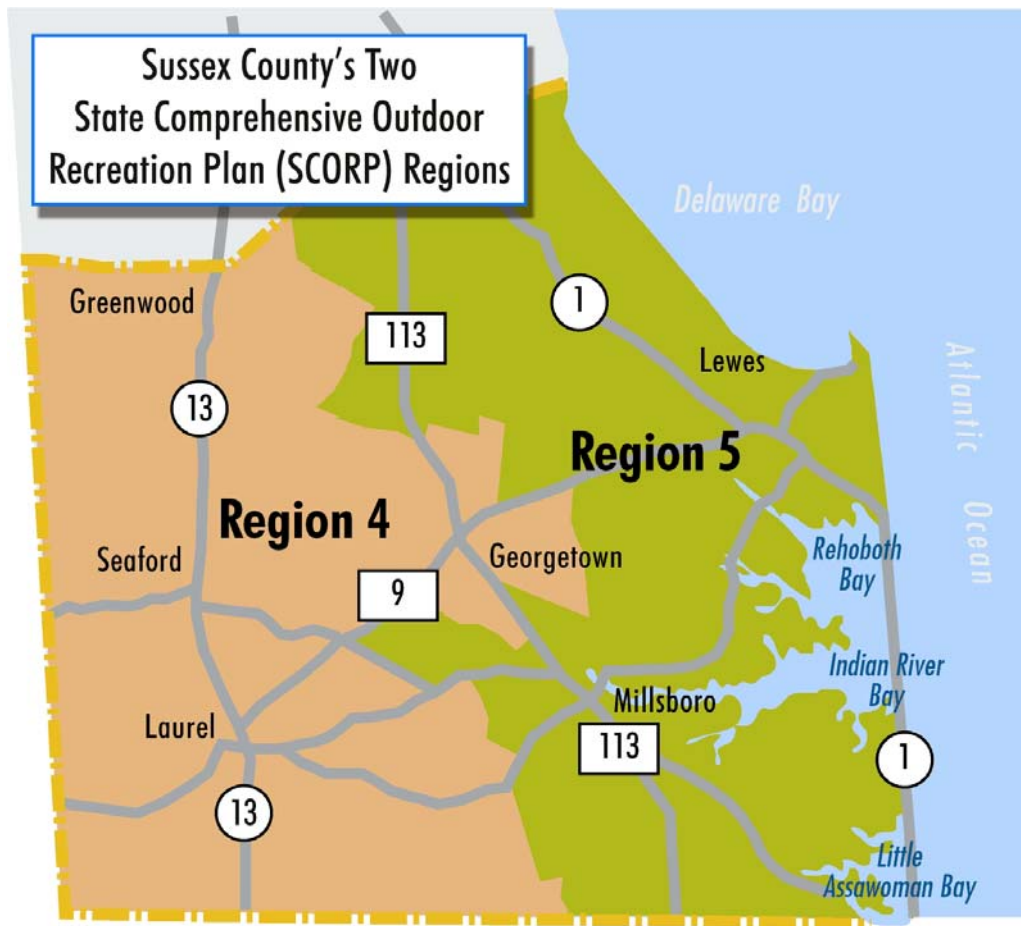
As noted in the previous chapter of this plan, Sussex County Council is very active in helping to finance open space preservation, using both dollars collected from developers and general revenue funds. Typically, the tracts preserved are administered by a conservation group if they were bought outright. They remain in private hands if they were preserved by easement. In addition to funding open space preservation, Sussex County makes donations to various recreation-related community groups. However, Sussex County does not provide recreation programming. Nor does the County own or operate its own parks or trails. In Sussex County, the incorporated municipalities and private non-profit entities have been the prime parties responsible for the construction and maintenance of local public parks and trails. The municipalities and assorted private groups, such as youth athletic organizations and others, provide most recreation programming.

Delaware State Comprehensive Outdoor Recreation Plan (SCORP)

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

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

Sussex County includes two of the SCORP's five planning areas: Region 4 in western Sussex and Region 5 in eastern Sussex. According to the 2003 SCORP, Region 4 had 7,239 acres of public recreation land and 45.4 miles of hiking trails. Region 5 had 33,143 acres of public park land and 29.3 miles of hiking trails.



Among other findings, the 2003 SCORP reported the following public survey and research results for Sussex County:

- 51% of Region 4 respondents and 70% of Region 5 respondents reported that outdoor recreation is “very important” to them.
- Top four recreation activities engaged in by respondents’ households:
 - Region 4 respondents: Walking/jogging (79%), Picnicking (77%), Swimming (67%), and Visiting historic sites (66%).
 - Region 5 respondents: Walking/jogging (89%), Swimming (83%), Picnicking (79%), and Visiting historic sites (75%).
- Top four most visited areas:
 - Region 4 respondents: Trap Pond State Park, Killens Pond State Park, Cape Henlopen State Park, and Rehoboth Public Beach.

- Region 5 respondents: Cape Henlopen State Park, Rehoboth Public Beach, Killens Pond State Park, and Trap Pond State Park.
- High Priority Recreation Needs:
 - Region 4: Walking/jogging paths, Picnic Areas, Bike Paths, Fishing Areas.
 - Region 5: Walking/jogging paths, Bike Paths, Fishing Areas.

Parks and Recreation Strategies

The following strategies address: a) Sussex County’s specific role in providing more parks and trails; and b) policies the County should pursue in support of creating more parks and recreation opportunities for Sussex County residents.

- Regarding Sussex County’s specific future involvement in parks and recreation, the County should:
 - Continue to facilitate the preservation of more undeveloped land. This should include recognition of the Sussex County Land Trust’s long-range vision to gradually create a “green ribbon” of connected open spaces throughout the County. This “green ribbon” concept should be referenced in formulating the County’s open space preservation priorities and strategies.
 - Keep providing selected grant assistance to selected non-profit recreation providers that help meet high priority public recreation needs.
 - Periodically re-evaluate the possibility of becoming an active financial partner in establishing a public park, building an indoor recreation complex, or constructing a related recreation endeavor, such as a greenway trail. Council should evaluate these opportunities on a case-by case basis as they may arise in the future.
 - Adopt zoning and/or subdivision code amendments that would require developers of larger residential projects to provide recreation facilities or multi-use trails to serve their future residents. The County should pursue these amendments in conjunction with its efforts to strengthen ordinance definitions regarding the types of land that should be considered acceptable as dedicated public open space in new developments.
 - Continue working with DNREC and other state agencies to ensure the State continues to add to the supply of active and passive recreation land and facilities in Sussex County.

- Require that recreation lands in new developments that are open to the public be protected by covenants.
- Delaware’s 2003 State Comprehensive Outdoor Recreation Plan (SCORP) contains many recommendation on what elected officials and other public policy makers can do to: a) direct more investment toward public recreation; and b) promote healthier and more active lifestyles. The Sussex County Council endorses these state recommendations, the essence of which are highlighted below in summary form:

Health

- Encourage more physical activity by promoting fitness challenges and similar recreation events.
- Encourage employers to offer more opportunities for moderate physical activity during the workday.
- Support developments that promote walking and biking as an alternative to transportation by car.

Linear Facilities

- Encourage municipalities to incorporate trails into their comprehensive plans and trail requirements into their development ordinances.
- Look for ways to retrofit greenway and trail corridors into existing neighborhoods.

Access

- Work with DelDOT to improve road sharing opportunities and make intersections safer for walkers and bikers.
- Ensure all recreation projects consider the special needs of physically challenged persons.

Park Maintenance and Operations

- Support public-private use sharing partnerships to make the most efficient use of existing recreation facilities, such as school facilities and YMCAs.
- Support appropriate park rehab and renovation projects not just the construction of new recreation sites.

**WATER AND WASTEWATER
ELEMENT**

WATER AND WASTEWATER ELEMENT

Water Supplies and Wastewater Planning

This chapter is an overview of how water supplies and wastewater treatment are provided in Sussex County. Both public utilities and private providers are described. Policy recommendations are included on how the County and others can improve and expand these vital services in the future.

Water Supply Overview

Sussex County depends completely on groundwater supplies and wells for its water supplies. Therefore, it is critical to protect the quality of groundwater and to promote the recharge of water into the underground water table. DNREC regulates all water treatment facilities and water withdrawals.

Water Supply Providers

The accompanying County Water Service Areas Map shows the areas in Sussex County now served by central water systems. These central systems provide water to most areas of concentrated population in Sussex County. Most homes and businesses in the County's more rural vicinities get their potable water from individual on-site wells.

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



Other large private water companies operating in Sussex County include the Broadkill Beach Water Co. (which serves Broadkill Beach and Primehook), Long Neck Water (which serves almost all of Long Neck), Sussex Shores Water (which serves areas north of Bethany Beach), and Slaughter Beach Water Co. (which serves the town of Slaughter Beach).

Dewey Beach is the only area in the County served by the water system that is owned and operated by Sussex County.

Municipal water systems are provided by Bethany Beach, Blades, Bridgeville, Dagsboro, Delmar, Frankford, Georgetown, Greenwood, Laurel, Lewes, Milford, Millsboro, Milton, Rehoboth, Seaford, and Selbyville. In many cases, these water systems extend outside of the municipality’s borders. To meet growing needs, many municipal water suppliers are seeking new well sites to provide additional capacity. For example, Millsboro is constructing new deep wells to address contamination problems with two existing wells. In addition to the municipal systems in operation today, the Town of Ellendale is also considering constructing its own central water system.

There also are many scattered private water systems, such as systems serving scattered mobile home parks, campgrounds and industries.

**Table 10
Estimated Projected Water Demand for Sussex County
from Public Water Supplies to be as Follows:**

AREA	Current GPD	2025 GPD
Ellendale SSD	89,550	215,600
Ellendale Planning Area	37,500	90,000
Town of Greenwood	94,000	225,700
Greenwood Planning Area	120,000	289,000
City of Seaford	900,000	2,162,600
Seaford Planning Area	490,000	1,180,000
Blades SSD	133,900	322,000
Blades Planning Area	502,000	855,350
Town of Bethel	22,500	38,300
Delmar	TBA	TBA
Laurel	TBA	TBA
Bridgeville	148,000	355,800
Bridgeville Planning Area	161,000	388,250
West Rehoboth	4,551,300	10,953,000
Goslee Creek	397,200	955,900
Angola	1,018,500	2,451,150
Herring Creek	267,900	644,700
Long Neck	1,831,200	4,407,000
Oak Orchard	649,800	1,563,800
Dagsboro	585,600	1,409,300
Frankford	186,600	449,000
Bethany Beach	1,221,300	2,939,200

AREA	Current GPD	2025 GPD
North Bethany	332,400	799,900
South Bethany	1,629,000	3,920,000
Fenwick Island	1,533,900	3,691,500
Ocean View	293,100	705,400
Holts Landing	230,700	555,200
Cedar Neck	507,600	1,221,600
South Ocean View	90,000	216,600
Miller Creek	150,600	362,400
Millville	536,400	1,290,900
Bayard	51,900	124,900
West Fenwick	165,300	397,800

Source: Sussex County Engineering Department

Table 11
Sussex County Aquifers

TOWN / SUBDIVISION	AQUIFER
Angola	Columbia
Rehoboth / Lewes	Columbia / Manokin
Bethany Bay	Columbia / Pocomoke
Bridgeville	Frederica
The Meadows	Columbia
Sussex Shores	Pocomoke
Town of Bethany Beach	Pocomoke / Manokin
Sea Colony	Manokin
Fenwick Island	Pocomoke
South Bethany	Pocomoke

Source: Sussex County Engineering Department

Table 12
Number of Wells by Type in the
Inland Bays / Atlantic Ocean Basin

WELL TYPE	TOTAL
Soil Borings Standard	235
Geothermal	319
Fire Protection Standard	26
Aquifer Storage & Recovery Std	1
Industrial Standard	237
Agricultural Within CPCN	1,263
Irrigation Standard	2,273
Well Construction Standard	8
Public Standard	1,629
Other Standard	578
Geothermal Closed Loop	665
Remediation Recovery	7
Monitor Zone of Interest	38
Public Miscellaneous	819
Agricultural Standard	3,910
Dewater Standard	938
Observation Standard	4,246
Geothermal Recharge	605
Monitor Direct Push	296
Monitor Standard	1,997
Domestic Standard	37,100
Remediation I Injection	39
<i>* There are approximately 626 allocated wells in Sussex County.</i>	

Source: Sussex County Engineering Department

Table 13
Community Water Systems (Over 500 Connections)

SYSTEM NAME	SERVICE CONNECTIONS
Angola Beach	606
Angola By the Bay w/TW c/o Tidewater Utilities	796
Bethany Beach Water Department	3,032
Bridgeville Water Department	1,173
Delmar Water Department	1,617
Dewey Beach Water Department	2,983
Georgetown Water Department	1,861
Laurel Water Department	TBA
Lewes Water Department	2,633
Lewes District c/o Tidewater Utilities	5,192
Long Neck Water District	4,939
Millsboro Water Department	1,877
Millsboro District c/o Tidewater Utilities	3,099
Millville District c/o Tidewater Utilities	817
Milton Water Department	1,290
Oak Orchard Public Water	TBA
Ocean View District c/o Tidewater Utilities	1,658
Rehoboth Beach Water Department	4,631
Rehoboth Yacht & Country Club c/o Tidewater Utilities	548
Rehoboth District c/o Tidewater Utilities	4,120
Sea Colony	1,318
Seaford Water Department	2,500
Selbyville District c/o Tidewater Utilities	592
Selbyville Water Department	1,309
Sussex Shores Water Company	1,738
Swann Keys Civic Association	580

Source: Sussex County Engineering Department

Water Supply Protection

DNREC oversees the state's Source Water Assessment Program (SWAP), which is primarily aimed at protecting water supplies from contamination. Central well protection areas and "excellent" groundwater recharge areas have been designated by DNREC. Sussex County is currently working on an ordinance that would regulate groundwater protection areas. That ordinance is being prepared to meet a requirement of the State Source Water Protection Law of 2001. The ordinance is primarily designed to minimize the threats to major water supply wells from pollution.



Under DNREC regulations, assessments have been completed of the vulnerability from contamination of each water system.

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

The ideal type of land use around water supply wells is preserved open space, or low density residential development. Ideally, the amount of impervious coverage around major water supply wells would be minimized to allow the groundwater to be recharged. Agricultural uses promote recharge, but may result in high nitrate levels in the water. Persons who operate agricultural, livestock or poultry uses near water supply wells should be urged to cooperate with the Conservation District to use proper nutrient management and other measures to minimize water pollution.

Agricultural uses are beneficial for groundwater recharge, because the water used for irrigation returns to the ground. However, if there is not proper management, this can result in high nitrate levels in water supplies, a potential health hazard for young children and pregnant women.

Fire Protection

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



Water Supply Strategies

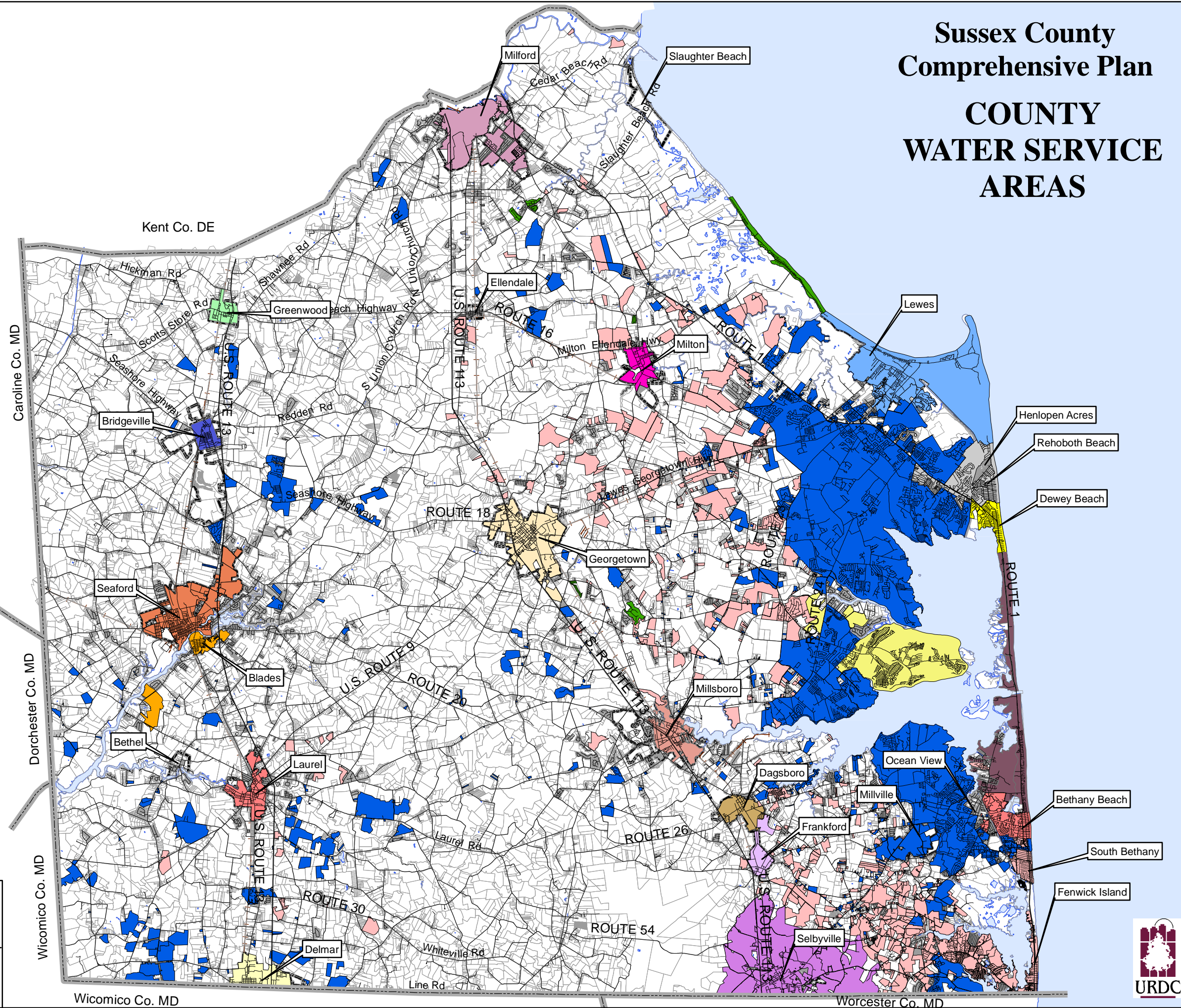
The following strategies will aid in ensuring more safe water supplies are available in those areas of Sussex County served by central water systems.

- More effective ordinances need to be adopted and enforced by Sussex County and the incorporated municipalities to minimize hazards to public water supply wells.
- Water supply planning needs to be more closely coordinated with sewage treatment and land use planning.
- Great care should be used in allowing intensive development in areas that are likely to be needed in the future for additional groundwater supplies.
- Water systems should have a back-up source, such as an additional well that is not needed for normal demand or an emergency interconnection with another water supplier that has surplus capacity. This is important to ensure water supplies are available without interruption in case one well becomes contaminated.
- The quality of groundwater should be more extensively monitored to identify contaminants before these contaminants reach public water supply wells, and to measure movement of known contaminants.

Sussex County Comprehensive Plan COUNTY WATER SERVICE AREAS

Water Providers

- Unknown
- Artesian Water Company
- Bethany Beach
- Blades
- Bridgeville
- Dagsboro
- Delmar
- Frankford
- Georgetown
- Greenwood
- J.H. Wilkerson & Son
- Laurel
- Lewes
- Long Neck Water Co.
- Milford
- Millsboro
- Milton
- Rehoboth
- Seaford
- Selbyville
- Sussex County Council
- Sussex Shores Water Co.
- Tidewater Utilities



0 9,000 18,000 36,000
Feet

1 inch equals 18,000 feet



Base Map Provided By:
Sussex County
Mapping Department










Sources:
DNREC
Sussex County Mapping Department



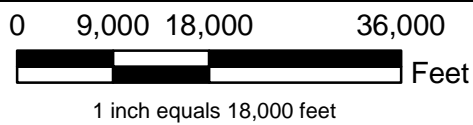
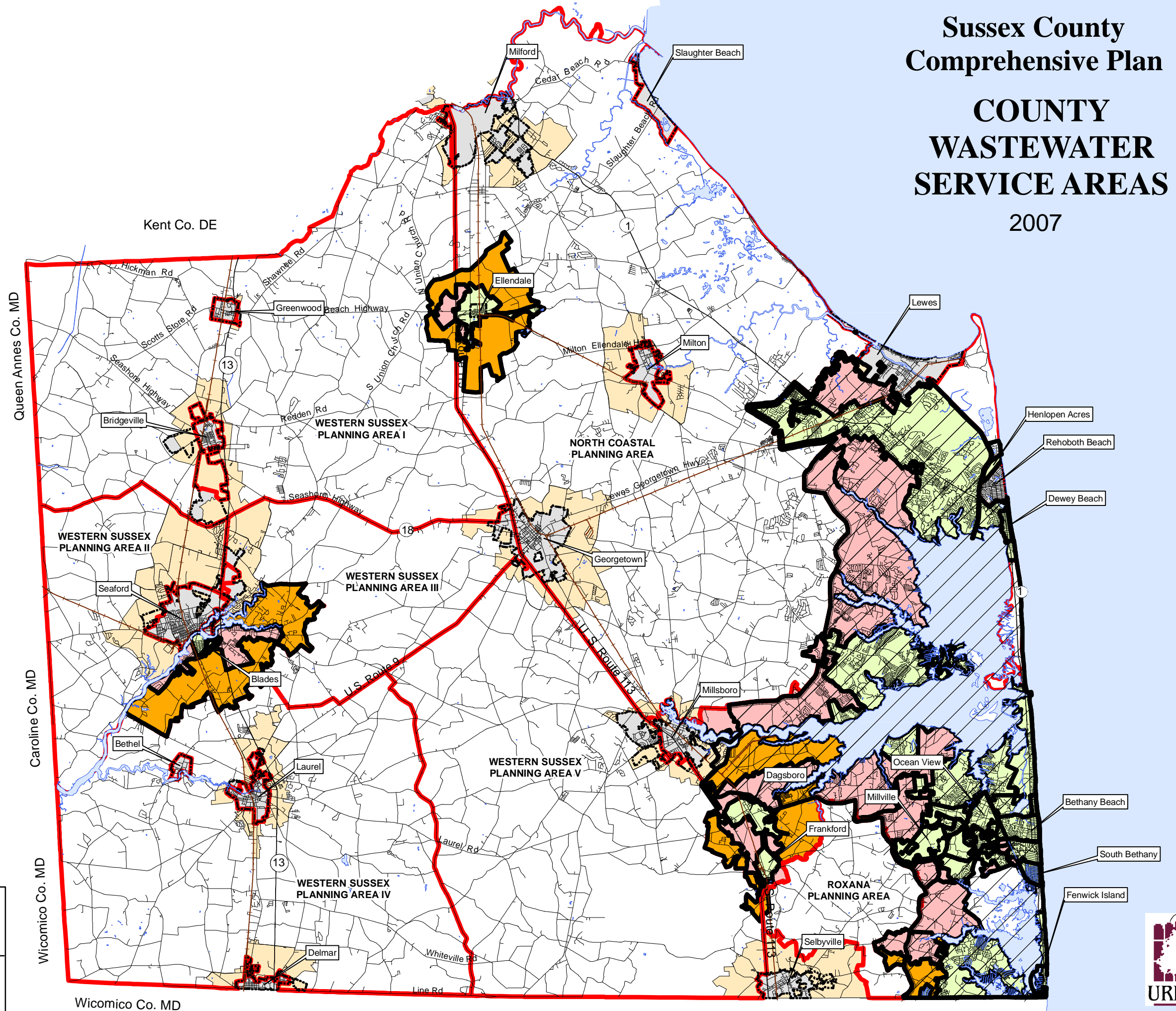
Sussex County Comprehensive Plan

COUNTY WASTEWATER SERVICE AREAS

2007

-  Environmentally Sensitive Development Area (ESDA)
-  Roads
-  Boundaries of Sewer Planning Areas
-  Existing County Sewer Districts
-  Primary County Service Areas
-  Secondary County Service Areas
-  Unclassified Service Areas
-  Town/City Potential Annexation Areas (intended to be eventually served by Town/City in most cases.)
-  Municipal Boundaries

Please see text for planning area and service area definitions.



Base Map Provided By: **Sources:**
Sussex County Engineering Department
Mapping Department



Wastewater Treatment Overview

Public wastewater planning in Sussex County is overseen by the Sussex County Engineering Department. The entire County has been divided into Planning Areas, as seen on the accompanying County Wastewater Service Areas Map. The County has completed detailed sewer treatment plans for several parts of Sussex County where the County provides sewer treatment now or may do so in the future. The accompanying map entitled “County Wastewater Service Areas” shows the following types of areas:

- **Existing Sewer Districts** – Areas where service is provided through the statutory authority granted to Sussex County through the Delaware Code, which may include serving specific users through contractual agreements. Private wastewater service providers are regulated in these areas.
- **Primary Service Areas** – Areas where the County has conducted planning activities to eliminate septic systems and/or serve future development and growth. Primary service areas are areas with immediate needs and are designated either as developing areas or areas that have a significant amount of existing development with wastewater needs. These areas are considered to be near term service areas, which will receive wastewater service within 5 years. Private wastewater service providers are regulated in Primary Service Areas.
- **Secondary Service Areas** – Areas where septic systems shall be reduced, growth is expected and special environmental needs may exist, but service is not expected within the next 5 years. The County may have conducted planning activities in these areas to eliminate septic systems and/or serve future development and growth. Private wastewater service providers may be permitted to operate in Secondary Service Areas on an interim basis, until County service is provided.
- **Unclassified Service Areas** – Areas where County facilities are not currently planned. Private wastewater providers may be permitted to operate in these areas.

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

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

County Wastewater Treatment Services

The following information mainly addresses sewer services provided by the County. Information on the sewer services provided by the town/cities is provided within individual municipal comprehensive plans.

Inland Bays Region

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

- The County-operated Inland Bays Regional Wastewater Facility serves the Long Neck and Oak Orchard sewer districts and has been in operation since December 31, 1995. The facility and its spray fields are located on County-owned lands on the east side of Townsend Road, north of Inland Bay Road. Existing or planned spray fields surround the facility on all sides, with the largest areas to the west. The facility currently serves the Long Neck and Oak Orchard areas and is proposed to serve Angola, Goslee Creek, and Herring Creek in the future.
- The County-operated Wolfe Neck Regional Wastewater Facility serves the West Rehoboth district. The West Rehoboth district includes a high percentage of the intense new development in Sussex, including areas along both sides of the Route 1 corridor. The Wolfe Neck system uses County-owned land at the eastern end of Wolfe Neck Road (west of the Lewes and Rehoboth Canal) for treatment and both State and County land for application of treated effluent.
- The City of Rehoboth Beach Wastewater Facility serves the Dewey Beach and Henlopen Acres districts (as well as Rehoboth, which is not in the Inland Bays Planning Area).

The Inland Bays wastewater study projected the following build-out design equivalent dwelling units (EDUs) for the following areas, including both existing and projected development:

- | | |
|--|--------|
| – West Rehoboth Existing District
(Areas on both sides of Route 1, including land on Route 9 west of Route 1, and lands along Old Landing Road and Bald Eagle Road; approximately 17,000 of these EDUs are already connected to the sewage system.) | 39,989 |
| – Long Neck Existing District
(Areas north and south of Long Neck Road, most of which are east of Route 24, including the Pot-Nets developments; approximately 7,000 of these EDUs are already connected to the sewage system.) | 15,204 |
| – Northern West Rehoboth Expansion Study Area
(Northwest of the intersection of Routes 1 and 9, southwest of Lewes) | 1,823 |

– Goslee Creek Study Area (Areas north of Love Creek, and south of the current sewage service area, including areas on both sides of Route 24, such as areas along Camp Arrowhead Road)	9,095
– Angola Existing Sewer District (Areas south of Love Creek and north of Herring Creek, most of which are east of Route 24. That includes the Woods on Herring Creek and Angola By the Bay, which each have community sewage systems.)	15,444
– Herring Creek Study Area (Areas south of Herring Creek, most of which are east of Route 24)	5,756
– Oak Orchard Existing District (Areas along Oak Orchard Road, north of Indian River; approximately 900 of these EDUs are already connected to the sewage system.)	1,663
– Oak Orchard Expansion Study Area (Areas north of the Indian River, most of which are south of Route 24, east of the Mountaire Chicken Plant, and along Oak Orchard Road)	10,236

Sewer extensions to serve most of Angola Neck will be designed and built by the County. The next phase of that extension will serve approximately 1,360 existing homes and businesses.

The Inland Bays wastewater study projected that \$175 million of improvements are needed to serve the Long Neck, Northern West Rehoboth Expansion, Goslee Creek, Angola Neck, Herring Creek and Oak Orchard Expansions. The study found that 5 existing sewer lines and 14 existing pump stations are already at capacity. Additional lines and pumping stations will need improvements to handle flows by 2015. The study projected that \$35 million is needed to address the priorities in collection and conveyance.

The study projected that the 117,308 total EDUs are allowed in the Inland Bays Planning Area under current zoning, including approximately 25,000 existing EDUs that are already connected to the system. The build-out design is for 99,210 EDUs, considering that not every unit is occupied at all times and assuming 20 percent of the land remains in open space. That build-out design is projected to generate total wastewater flows in the peak summer month of 26.7 million gallons per day (mgd).

Of this 26.7 mgd design total, 13.7 million gallons would be part of the Wolfe Neck Treatment Facility service area. The Wolfe Neck treatment plant was designed for a peak summer capacity of 4.0 mgd but the effective capacity is reported to be lower. The Wolfe Neck system is intended to have a disposal capacity of 11.0 mgd, including a practical capacity of 2.0 mgd on existing fields, a planned 1.0 mgd field expansion and eventually 8.0 mgd using spray irrigation. The existing Wolfe Neck spray fields use 319 acres. The 1.0 mgd of field expansion assumes the County would be able to use additional State-owned lands west and southeast of the plant. The study foresees substantial shortfalls in disposal capacity for Wolfe Neck of up to 2.7 mgd in the

future, even with the proposed disposal expansions. Spray irrigation at the Inland Bays Facility is an option under consideration for this future flow.

The Inland Bays Facility needs a treatment plant expansion. The treatment system has a design capacity of 1.46 mgd in summer months, but the practical limit is reported to be 1.3 mgd. The study suggests diverting some flows from West Rehoboth to the Inland Bays facility as part of the Inland Bays facility expansion, because the Inland Bays facility is less constrained in land. The Inland Bays Facility has disposal capacity of 1.5 mgd for spray irrigation. In 2004, Sussex County purchased 2,000 acres near the existing facility for spray expansion. The report estimates that the existing and new fields could provide capacity for 13.1 mgd, which is consistent with the build-out peak summer design flow of 13.0 mgd. Recent sewer expansions at Angola and Oak Orchard will add to this demand.

The study also states that disposal capacity could be increased by converting spray irrigation sites to rapid infiltration basins, if DNREC approves.

South Coastal Region

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

Service is scheduled for the following new sanitary sewer districts:

- Millville Expansion of Bethany Beach (Part of North Central Service Area, including areas south of the Indian River Bay and areas north and south of Millville).
- Miller Creek (Part of Central Service Area, which includes lands along Central Avenue and north of Old Cemetery Church Road).
- South Ocean View (Part of Central Service Area, which includes areas south of Ocean View).
- Portions of the Beaver Dam Area (Part of Central Service Area, including areas west and southwest of Millville, northwest of Central Avenue and east of Powell Farm Road).
- Johnson's Corner (Part of South Service Area, which is south of Zion Church Road and northwest of Bunting Road). This is an established district. Improvements should be completed by 2111.

Future sewer service is anticipated for the following proposed sanitary sewer districts:

- Bayard (which is generally east of Bayard Road, north of Dirickson Creek and west of Assawoman Wildlife Refuge).
- West Fenwick (which is generally east of Dickerson Road and north of Route 54).
- Vines Creek (which is generally north of Route 26, south of the Indian River, west of Blackwater Creek).

The study found that the total build-out for the South Coastal area under current zoning would be 87,180 EDUs, including existing development.

In 2007, service was extended to several parts of the Miller’s Creek Sanitary Sewer District, north of Assawoman Bay. The new service area includes areas along Beaver Dam Road, Parker House Road, Double Bridges Road and Plantation Park. The project cost \$11 million.

The current sewer improvements to serve Millville and areas to the north are projected to cost \$35 million. The current County project to extend sewer service to areas south of Ocean View is projected to cost \$8 million.

In 2007, a referendum was passed to establish the Johnson’s Corner Sanitary Sewer District. Approximately \$14 million of improvements are proposed.

All of the South Coastal cost estimates were provided in 2005 dollars. The study estimated that \$163 million in conveyance and collection expenses would be needed to serve the proposed sewer districts, not including treatment costs. Within existing districts, conveyance improvements are projected to cost \$9.2 million. Many additional costs have not yet been determined in the study.

The South Coastal facility’s treatment capacity was recently expanded to 9.0 mgd at a cost of \$15 million. The study recommends eventually expanding the treatment capacity at the existing South Coastal facility to 24 mgd. The flows are also being affected by the replacement of smaller homes with larger homes with higher numbers of bedrooms and often more occupants. The treatment facility is located on Beaver Dam Road.

Dagsboro/Frankford Region

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

facility only has capacity for 200,000 gallons per day and would need an expansion to handle significant growth. There currently are approximately 987 EDUs connected to the treatment plant. The study found that the build-out design would be 25,761 EDUs based upon current zoning. The study projected that there would be 6,136 EDUs connected to the system by 2025.

Blades Area Region

The following is based upon the November 2006 draft Plan for the Blades Sewer Planning Area. The current Blades Sanitary Sewer District uses a County-owned collection system. The effluent is then conveyed to Seaford's treatment plant, which is along north side of the Nanticoke River at southwest corner of the City. Existing flows from Blades are approximately 100,000 gallons per day.

There are 360 acres in Blades' Annexation Area, which was established in the Town's 2002 Comprehensive Plan. That annexation area includes areas close to the town's borders along the south side of the Nanticoke River. The 1998 County Sewer Plan suggested that a new sewer plant be constructed to handle growth in the Blades area.

The Blades Planning Area Study considered a potential service area of 14,800 acres. This was divided into Study Area I, which includes large areas southwest, south and east of Blades, and Study Area II, which includes areas south and east of Study Area I. Part of Study Area II is adjacent to the northern edge of the Annexation Area for the Town of Laurel. If the Annexation Area and Study Area I would be built out, based upon current zoning and if public water and sewer services would be provided, the study projects that the sewer flow would be equal to 7,242 total equivalent dwelling units by 2030, based upon the study's estimated growth rates. The study estimated that such growth would result in sewer flows of 2.2 million gallons per day. If that same land area would become completely built out, the study projects that up to 16,288 EDU would be possible.

If Study Area II would be served by public water and sewer services and be completely built out sometime in the future, the study projects that could result in an additional 15,529 equivalent dwelling units. If Study Area I and II would be completely built-out, that could eventually result in a total of 35,778 equivalent dwelling units.

The County Wastewater Services Areas Map shows the areas immediately surrounding Blades as a primary service area, meaning it is intended to be served within five years. Blades Study Area I is shown as a Secondary Service Area, meaning any service is likely to be more than five years away. Study Area II is not currently shown as a County sewer service area.

Sewer Service by Municipalities

Most of Sussex County's cities and towns operate their own sewer systems, including Seaford, Georgetown, Rehoboth, Laurel, Lewes, Millsboro, Bridgeville, Delmar, Greenwood, Milton and

Selbyville. Milford is connected to a system owned by Kent County that has its treatment plant a few miles north of Milford, east of Route 113/1.

Many of these municipalities need to invest millions of dollars in their sewer systems to expand treatment and provide additional spray fields. For example, Milton is building a new treatment facility south of the town, and Georgetown is seeking additional spray fields and planning an expansion of their treatment capacity. The Millsboro plant is proposed to be expanded in phases. Phase I is under construction. An expansion of the Lewes treatment plant is being completed that will double the city's treatment capacity. In many cases, a large portion of these costs are being funded by new developments, including connection fees, as well as low interest loans and grants from State and Federal agencies.

Studies are currently underway to consider whether any of the sewer systems along the Route 13 corridor in the western part of the County should be consolidated, and a larger sewer service area be established. That could possibly involve a new regional treatment plant that could serve Blades, Bethel, Greenwood, part of Seaford and surrounding areas.

Sewer from Ellendale is currently being conveyed to Georgetown for treatment and disposal, but a treatment plant for Ellendale is being considered. A sewer system is also operated by the County at the Sussex County Airport.

As described above in the Inland Bays section, there is a proposal for a joint Sussex County / Rehoboth discharge of treated effluent at a point over one mile out into the ocean.

Private Sewer Providers

Private sewer providers are considered utility providers and are regulated by the Public Service Commission (PSC). They must obtain a Certificate of Public Convenience and Necessity (CPCN) from the PSC to serve a designated area. Private sewer providers are considered a viable option for wastewater treatment in areas where County or Municipal services are non-existent or unplanned. Wastewater from new development should be directed to County or Municipal wastewater systems where available.

Artesian Wastewater Management and Tidewater Environmental Services currently mainly provide sewer services for individual developments that are along Route 9 east of Georgetown or along the Routes 5, 24 and 26 corridors in the eastern part of the County. Each company is also planning on serving many new developments. In addition, Tidewater is proposing to serve the large Blackwater Creek development west of Delmar and also serves a development southeast of Laurel.

In addition to Artesian and Tidewater, other private providers of sewer service include: the Bass Property, Chapel Green, the Excel Property, Moore Grant, Oak Crest and YMG Corporation. There also are wastewater treatment facilities serving major industries, such as Allen Family Foods in Harbeson, Perdue in Georgetown, Mountaire east of Millsboro, and Mountaire in Selbyville.

On-Lot Septic Systems

Many scattered buildings throughout the County use on-lot septic systems, usually with a drain field. DNREC regulates holding tanks and requires annual inspections be performed which include a review of pump-out records.

A number of properties along the Inland Bays use holding tanks, which are only intended to be temporary and which require regular pumping.

Private Sewer Treatment Service In Public Sewer Districts

Tidewater Environmental Services and Artesian Wastewater Management have been regularly expanding sewer and water services in Sussex County, as new developments are proposed and built. Service areas of private companies are mainly under the oversight of State Public Service Commission (PSC). The PSC issues Certificates of Public Convenience and Necessity (CPCN) to private providers. These certificates are typically applied for after a majority of affected property owners in a specific area sign or the owner of a large subdividable petition asking a private company to provide service to that area or parcel. Sussex County works closely with private providers to connect private systems to public treatment plants, where possible.

A controversy can arise when a private sewer treatment provider company seeks to serve an area that is also in an area planned for service by a city, town or county system. In many cases, a private developer is seeking service as soon as possible to connect with his/her new development. In many cases, the public system intends to serve the area, but no immediate connection point is available. In some cases, the project may install infrastructure to make that connection.

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

The primary concern for Sussex County is to ensure that its own County-operated sewer treatment services can be efficiently provided to existing development suffering from inadequate existing community sewer facilities and/or failing on-site septic systems. The County has taken on tens of millions of dollars of debt to extend County-operated service to these areas. The County's efforts are extremely important to protect the water quality of the inland bays and other waterways. The County and municipalities have also been burdened with high costs to meet State mandates to avoid or eliminate discharges of treated effluent into the inland bays and many other waterways. These mandates have required large expenditures to establish land application systems for the effluent disposal after effluent has passed through a treatment plant.

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

Wastewater Treatment Strategies

The following strategies address public-private sewer treatment service area conflicts and other issues raised in the above discussion.

- Regarding private sewer treatment providers in officially-designated public sewer service areas:

One option would be for Sussex County to control whether private or public providers will serve areas planned for new sewer service within County-designated sewer service areas. To address the highest priority situations, Sussex County could limit this policy to primary service areas (those planned for County sewer service in the immediate future). Alternatively, this policy could be extended to areas intended for longer-term service too.

In some cases, the County may end up determining that a private provider can most efficiently serve a particular area. In other cases, the County might determine that service by the County is appropriate, in which case the County could contract with a private service provider to construct and/or operate this new County-owned system.

In some cases, the County could deny private providers the right to provide service in an area where County or municipal service is planned and needed to cost-effectively solve a public health problem. These types of decisions would be subject to a process before the County Engineering Department and County Council. This process could require consideration of cost issues, health concerns, proposed construction timing and other relevant considerations before any decision is made to establish, expand or delay service by a private sewer treatment provider.

The intent would be to have any authority apply only within the County's officially-designated sewer service areas. County approval of which providers serve areas outside of the sewer service areas is not contemplated. Most of the land area in the County is not within official sewer service areas. The County would like to retain the authority to comment on proposed private service outside County and sewer service areas.

- Other Wastewater Treatment Strategies:

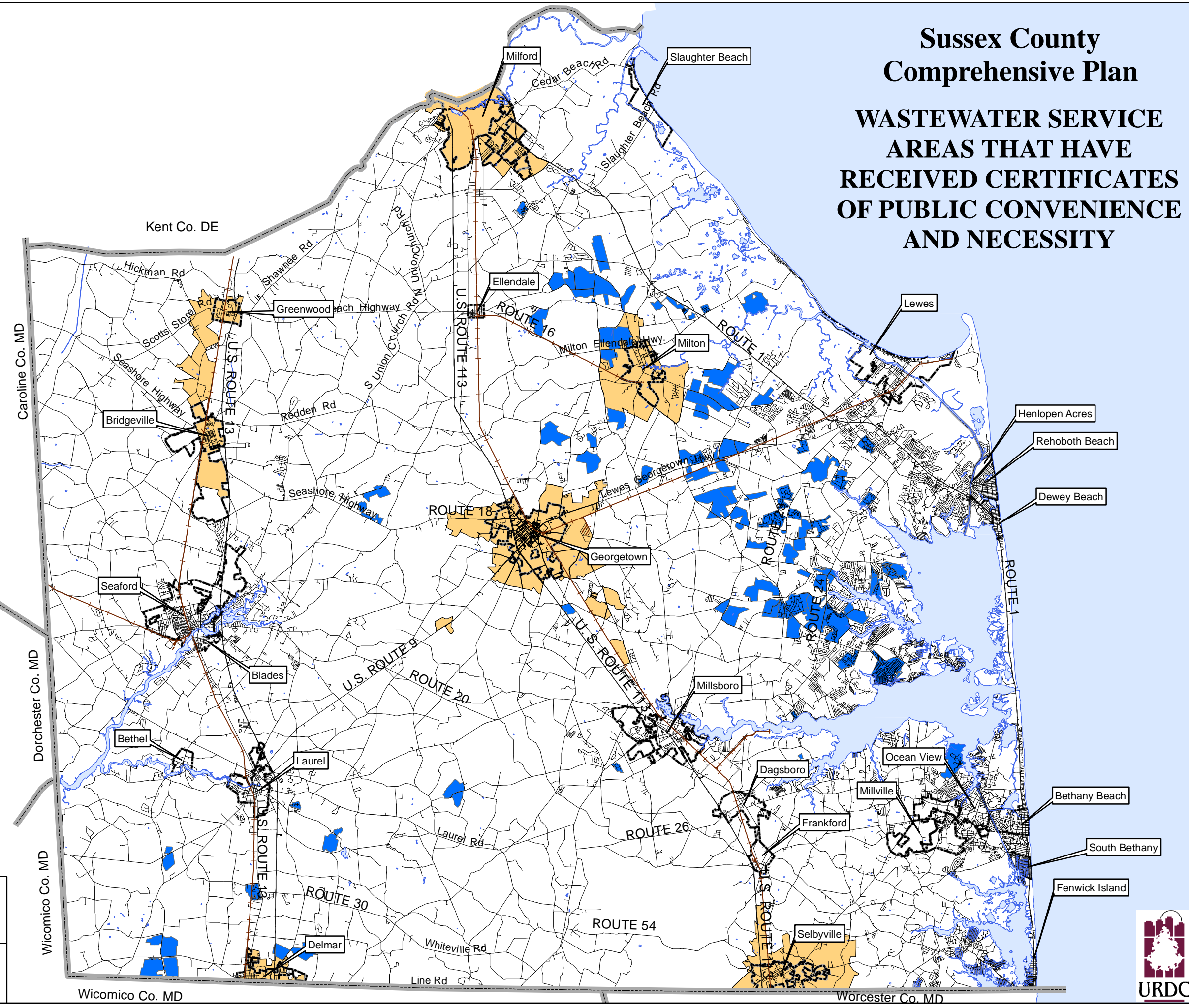
- Sanitary sewer service needs to be coordinated with land use planning and zoning. Most major public sewer improvements should help to direct growth to areas adjacent to or within cities and towns.
- Sussex County should emphasize providing public sewer service to areas of existing development where there are public health concerns or where central sewer is needed to protect the water quality of the inland bays. Care is needed to avoid large public sewer extensions in undeveloped areas that promote dense new developments in areas with important natural features.
- In cooperation with DNREC, the County and municipalities should investigate use of Rapid Infiltration Basin (RIB) systems. The cost of acquiring land for large spray irrigation fields has greatly increased, because of higher land values. Land can be leased, but then there is not a guarantee of long-term availability. RIB systems can allow the same effluent to be disposed on one-tenth the land conventional spray fields require. However, it would be necessary to address nutrient loadings, and nutrient fate and transport issues. Also, care would be needed to meet TMDL limits established for local waterways. If not properly operated and maintained, RIB systems have a greater threat of groundwater pollution than spray irrigation.

Sussex County Comprehensive Plan

WASTEWATER SERVICE AREAS THAT HAVE RECEIVED CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

- Public Wastewater Service Areas**
- Private Wastewater Service Areas**

- NOTES:**
1. This map shows areas that have been granted Certificates of Public Convenience and Necessity for Centralized Wastewater Systems by the Delaware Public Service Commission, as of Decemeber 2007.
 2. Many of these areas are not currently served by central sewer systems, but are approved for service in the future.
 3. Please also see County Wastewater Service Areas Map.



<p>0 9,000 18,000 36,000</p> <p>1 inch equals 18,000 feet</p>	
<p>Base Map Provided By: Sussex County Mapping Department</p>	<p>Sources: DNREC Sussex County Mapping Department</p>



HOUSING ELEMENT

HOUSING ELEMENT

Both full-time and seasonal residents continue flocking to Sussex County to take advantage of the area’s outdoor attractions, low real estate taxes, and high quality of life. This influx has fueled prosperity in the County’s real estate market, hospitality industry, and related economic sectors. While the County strives to accommodate the housing needs, it is also committed to preserving agricultural lands and open space. Limited by Federal, State and County resources, Sussex County’s Community Development and Housing Division works diligently to satisfy the housing expectations of the State and the housing needs of its residents.

An overview of Sussex County’s present housing situation:

Table 14
Summary of 2006 Sussex County Housing Statistics

	NUMBER	PERCENT
<u>Total Housing Units</u>	111,606	–
Occupied Units	73,397	66.0
Vacant Units	38,209	34.0
Owner-Occupied	59,422	81.0
Renter-Occupied	13,975	19.0
<u>Age of Housing Units</u>		
2005 or later	5,106	4.6
2000 to 2004	19,704	17.6
1990 to 1999	21,654	19.4
1980 to 1989	23,073	20.7
1970 to 1979	16,963	15.2
1960 to 1969	7,434	6.7
1950 to 1959	7,132	6.4
1940 or earlier	10,540	9.4
<u>Housing Units by Structure</u>		
Single-Family Detached	66,138	59.3
Single-Family Attached	5,321	4.8
2–4 Units	3,833	3.4
5+ Units	9,640	8.6
Mobile Homes	26,674	23.9

Source: U. S. Census Bureau, 2006 American Community Survey

Note: Vacant units include both unsold and unused structures.

Housing Affordability

On the down side, the County’s strong housing market has driven up home prices and apartment rentals to new highs. Sussex County’s low to moderate income working households are hit hardest by these cost increases because their incomes typically do not keep pace with the cost of living, especially the cost of housing.

Some statistics and other facts illustrate this situation:

- To avoid spending more than 30% of their income on the current average priced 2-bedroom apartment in Sussex County, a full-time worker needs to make \$12.71 per hour (\$24,660 per year). This pay rate is nearly twice Delaware’s minimum wage. It requires 1.9 minimum wage jobs to afford the average priced apartment in Sussex County.

Table 15
Monthly Housing Costs as Percentage of
Household Income in the Past 12 Months

Subject	Occupied Housing Units	Owner-Occupied Housing Units	Renter-Occupied Housing Units
Less than \$20,000	18.1%	15.9%	27.4%
Less than 20 percent	3.5%	4.0%	1.6%
20 to 29 percent	3.0%	3.2%	2.1%
30 percent or more	11.6%	8.7%	23.6%
\$20,000 to \$34,999	18.7%	19.0%	17.3%
Less than 20 percent	6.4%	7.5%	1.9%
20 to 29 percent	3.9%	3.9%	3.8%
30 percent or more	8.4%	7.6%	11.6%
\$35,000 to \$49,999	15.7%	14.9%	19.1%
Less than 20 percent	7.2%	7.4%	6.2%
20 to 29 percent	3.9%	3.4%	6.4%
30 percent or more	4.5%	4.1%	6.4%
\$50,000 to \$74,999	18.6%	19.7%	13.6%
Less than 20 percent	9.3%	10.0%	6.7%
20 to 29 percent	6.1%	6.1%	5.8%
30 percent or more	3.2%	3.7%	1.1%
\$75,000 or more	27.1%	30.2%	13.8%
Less than 20 percent	21.0%	22.8%	13.1%
20 to 29 percent	5.0%	6.0%	0.7%
20 percent or more	1.2%	1.5%	0.0%
Zero or negative income	0.2%	0.2%	0.3%
No cash rent	1.6%	(X)	8.6%

Source: U.S. Census Bureau, 2006 American Community Survey

- 59% of workers in Sussex County have an income that makes a two-bedroom apartment in the County unaffordable to rent.

Table 16
Affordable Housing Surplus / Gap – 2007

	AFFORDABLE HOUSING THRESHOLDS		FAIR MARKET RENT (FMR) & MEDIAN HOME PRICE (MHP)		SURPLUS OR (GAP)
2007 HUD MFI Median income for a Sussex County family of four: \$ 53,800	Affordable Rent (One-third of monthly income for rent)	\$ 1,345	1 Bedroom FMR, 2007	\$ 595	\$ 750
			2 Bedroom FMR, 2007	\$ 661	\$ 684
			3 Bedroom FMR, 2007	\$ 904	\$ 441
	Affordable Home Price (Qualifying Mortgage Amount)	\$152,662	MHP, 1 st Quarter, 2007	\$260,000	(\$107,338)

Source: Mullin & Lonergan Associates, Inc.; Delaware Statewide Needs Assessment

- The median home price in Sussex County was \$260,000 in 2007. This is an increase of 99% over the 2000 median, the largest increase among Delaware’s three counties.
- Between 2003 and 2005, the two fastest growing job providers in Sussex County were Leisure & Hospitality (with an average annual wage of \$15,000) and Wholesale & Retail Trade (with an average annual wage of \$25,000).
- 2007 data from the Delaware Statewide Needs Assessment classifies the following homebuyers of Sussex County for qualifying mortgage amounts:
 - Low-income homebuyers: \$25,000 to \$58,870
 - First-time homebuyers: \$58,870 to \$178,944
 - Affordable homebuyers: \$58,870 to \$178,944

Table 17
Delaware Homeowner Demand Forecast, 2008–2012

	TOTAL	Unit Types			Household Income Category				
		Existing Homes	New Construction	Manufactured Housing	First Time	Affordable	Move-Up	High Income	Elderly
DELAWARE	47,881	33,510	13,385	986	3,423	2,909	17,658	15,336	8,555
Sussex County	14,766	9,521	4,887	358	1,134	1,447	5,271	886	6,028

Source: Mullin & Lonergan Associates, Inc.; Delaware Statewide Needs Assessment

- According to the 2000 Census, 7.7% of Sussex County’s population was living in households with annual incomes below the federally-established poverty level. The equivalent figure statewide was 6.5%.
- 2005 data from the Delaware Department of Labor classified 52% of the jobs in Sussex County as “low paying” (less than \$11/hour). The equivalent figures were 29% in Kent County and 18% in New Castle County.
- According to the 2005 American Community Survey, Sussex County’s cost-burdened renter households have increased by 5.4% since 2000.

- 2006 data from the American Community Survey states that Sussex County's rising Hispanic population is 10,988, 6.1% of the total population.
- According to the 2007 Delaware Statewide Needs Assessment, the elderly population of Sussex County will rise 52.6% between 2005 and 2015. It is expected that this group will be the majority of home buyers in the County through 2012.
- The Delaware Population Consortium predicts that Sussex County's population will increase by 15% from 183,798 in 2007 to 211,120 in 2015.

Manufactured Housing

Manufactured homes can create affordable housing opportunities. According to CFED, a national non-profit organization, the average cost per square foot of manufactured homes is less than half that of site built homes. CFED reports that in 2005 manufactured homeowners had a median household income that was only three-quarters of the national median. Yet despite sometimes disparaging stereotypes, properly built and well managed manufactured home communities grow in value and can be community assets.

Manufactured housing issues are important in Sussex County. The County has a strong market for these units considering the problems many local workforce members have affording local home prices. In addition, there is a demand for manufactured housing as affordable vacation homes in the eastern area of the County. The U.S. census reported that Sussex County had 23,817 manufactured homes in 2000 (counting both occupied and vacant units). This represented 25.6% of all homes in the County, compared to 18.6% in Kent County and 11.2% in New Castle County. In 2000, 36,086 Sussex County residents lived in manufactured homes, 23% of the County's total population.

In 2007, the Delaware Statewide Needs Assessment reported that manufactured homes represent 24.5% of all homes, housing 20% of the population. There are approximately 110 manufactured home communities in Sussex County today. In the past, the majority of manufactured homes resided on leased land, which titled the home as a motor vehicle. This ultimately leads to difficulties with financing and insecure tenure. For example, the Delaware Manufactured Home Owners Association calculates land rent to range from \$4000 to \$21,900 each year. The Assessment also states that although many people still live in leased-land communities, it is now uncommon for the creation of a new leased-land community.

In order to facilitate the ownership of a manufactured home on owned land, the County now allows double-wide manufactured homes to reside on $\frac{3}{4}$ -acre lots. Previously, manufactured homes were restricted to 5-acre lots, which negated the affordability of the home because of the high price of land. Due to the improvements in the durability and quality in manufactured homes, and the newly adjusted minimum lot size, manufactured housing is now more feasible and affordable in Sussex County.

In Sussex County and throughout the U.S., the housing market cooled in 2006 and 2007. Nonetheless, the shortage of affordable housing remains a very real problem to low to moderate income households in Sussex County, including many with full-time, year-round jobs.

Housing Conditions

In addition to affordable housing issues, Sussex County faces challenges concerning the quality and condition of its housing stock. Despite the surge of new housing recently built in the County, many Sussex County communities have a backlog of housing units that need rehabilitation. In 2007, the Delaware Statewide Housing Needs Assessment defined substandard housing as those units deficient in at least two structural systems and in need of substantial rehabilitation in order to make them structurally sound, safe, and habitable. The same report estimated that in 2007, there were 2,926 substandard units in Sussex County (5.3% of all units) that would require \$30,000 or more to bring up to code. That study also classified 3,398 households “at-risk” due to their inability to pay average rents or afford, on the average, the repairs needed to rehabilitate a typical substandard home. There is currently a waiting list of 750+ persons for housing rehabilitation funding made available by Sussex County.

Sussex County Housing Initiatives

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

Housing Rehabilitation and Related Assistance

The Sussex County Department of Community Development and Housing oversees County funding of housing rehabilitation and small public works projects that serve low to moderate income residents. The Department’s budget calls for managing over \$1.8 million in housing assistance, funded by U.S. Department of Housing and Urban Development (HUD), Delaware State Housing Authority (DSHA), and Sussex County Council. Over the last five years, the following sources have contributed to hundreds of renovations to preserve affordable housing stock in Sussex County:

- \$7,000,000 - Community Development Block Grant
 - 624 homeowner-occupied units renovated during the last five years
- \$125,000 - Housing Preservation Grant
 - 32 homeowner-occupied units renovated during the last five years
- \$920,000 - Delaware State Home Loan Program
 - 14 homeowner-occupied units renovated during the last five years
 - 32 investor rental units renovated during the last five years
- \$400,000 - Sussex County Council
 - 50 homeowner-occupied units renovated during the last five years
- \$944, 176 – Sussex County Administration Costs

According to the 2007 Delaware Statewide Needs Assessment, Sussex County’s rehabilitation and demolition efforts have kept up with the slippage rate, so there has been no significant increase in the number of substandard units in the County since 2003.

The Moderately Priced Housing Unit Program

In January 2006, Sussex County Council introduced the Moderately Priced Housing Unit (MPHU) Program. This initiative is a tangible step towards creating more moderately priced housing by providing incentives for developers to build these types of units. The program also envisions the use of deed restrictions to guarantee the re-sale prices of these homes remain affordable for a 20-year period.

The MPHU Program offers expedited review and density bonuses to developers who build homes affordable to people within 80% and 125% of the area's median income, established yearly by HUD. Depending on the specific income level targeted, developers of approved projects can build between 20% and 30% more units than otherwise allowed. The projects must be: a) owner-occupied housing; b) located in a town center, developing area or environmentally sensitive developing area, or land that is designated on a town's comprehensive plan as lying within the town's growth and future annexation area; c) have a minimum of 35 units and submit 15% of the total units to the program; and d) connect with public water and sewer facilities. Home buyers must live and work in Sussex County for at least one year and be income-eligible to participate. The County will partner with the Delaware State Housing Authority for first-time homeowner assistance with down payment and settlement costs.

The MPHU Program is voluntary and individual projects subject to County approval. To date, Sussex County has received five development applications for a total of 541 affordable units. These applications are now under review. The County wants this program to meet the needs of low to moderate income people in Sussex County, but also to entice young professionals to stay in Sussex County. With increased housing options for the rising professional sectors, we hope to see more employment opportunities in such fields. In addition to credit for addressing housing costs, the MPHU Program has received praise for its potential to create housing close to work, thereby contributing to reduced commuter costs and less traffic. Sussex County views MPHU as a pilot program that the County will evaluate for possible refinements at the end of a two-year trial period.

Cooperation with Non-Profit Housing Entities

In November 2006, Sussex County Council approved a \$50,000 Community Investment Grant to the Diamond State Community Land Trust (DSCLT). This non-profit corporation partners with the State, local governments, housing advocates and others to expand home-ownership opportunities for Delaware's low to moderate income households. Among other activities, DSCLT undertakes several types of projects on behalf of existing and prospective low to moderate income home buyers. Since January 2006, the County has given a total of \$37,500 to the West Rehoboth Land Trust.

Both DSCLT and the West Rehoboth Land Trust advocate community land trust homes as an effective way to expand the permanent supply of affordable housing. Under their model, low to moderate income buyers own their home but lease the underlying land for a nominal fee from the community land trust. At resale, the homeowners keep only a certain portion of the appreciation. The remainder stays "with the home" in order to make that home affordable to the next buyer.

The Sussex County Council has authorized grants over the past five years to several other non-profit agencies in the County to assist with housing programs. The County has contributed \$40,000 to NCALL Research, Inc., \$52,500 to Interfaith Mission, \$149,357 to First State Community Action, \$35,000 to First State RC&D, \$1000 to Milford Housing Development Corporation, and \$121,500 to Sussex County Habitat for Humanity. In addition, Sussex County donated homes to Habitat for Humanity that were purchased through the Airport Expansion Project. Sussex County provides administrative space for Habitat for Humanity operations near Lewes.

Housing Goals, Objectives, and Strategies

Goal

Facilitate decent, safe, and sanitary housing for low and moderate income people throughout Sussex County.

Objective 1

Provide affordable housing options to the County's workforce earning 80% to 125% of HUD's Area Median Income.

Strategy: Support and evaluate Sussex County's new Moderately Priced Housing Unit (MPHU) Program. The program's pre-established two-year initial trial period ends in January 2008 and any alterations to the program will be determined at that time. For example, the Diamond State Community Land Trust suggests making the MPHU Program mandatory and modifying its rules and regulations to ensure MPHU homes are permanently priced at affordable housing levels. Also, modifying the program to include existing new developments in the program will be considered. These developments may not receive the benefit of expedited review or bonus density, but may be included in the MPHU program on a voluntary basis. The appropriateness of these and other potential changes to the MPHU Ordinance can be fully assessed at that time.

Objective 2

Encourage manufactured homes as an affordable housing tool.

Strategy: Sussex County will continue to support manufactured homeownership throughout the County as an affordable housing alternative. Based on their vote to lower the minimum lot size requirements (5 acres to $\frac{3}{4}$ acre), County Council will continue to evaluate the benefits of such changes toward manufactured home restrictions. The County understands the advantage of spending less on the purchase of acreage, in order to make homeownership a possibility. In addition, by comprehensively reviewing Sussex County's Zoning Ordinance, Subdivision Code and other relevant County regulations, provisions could be revised that may unduly constrain the development of well-designed

manufactured housing communities. The County will encourage local municipalities to review these codes as well.

Objective 3

Encourage private for-profit developers to undertake affordable housing projects.

Strategy: In 2006, Capstone Homes cooperated with Sussex County Council to formulate a workforce housing project. In this case, workforce housing discounts were offered on a first-come-first-served basis. While the homes involved are not aimed at low to moderate income buyers, the project is one example of what private developers can do to help stabilize the price of market rate housing in Sussex County. Capstone homes is also in discussions to build cooperative relationships with certain major Sussex County employers to offer discounts on housing prices in a range of \$5,000 to \$10,000 to that employer's workforce in exchange for that employer providing marketing assistance to Capstone Homes. There is a significant gain to be seen if private developers assist Sussex County Council and non-profit housing advocates to provide affordable housing options. In addition to their ability to stabilize market rate housing prices, these projects will help to attract more highly-skilled professional workers to Sussex County. Sussex County Council will continue to expand relationships with private developers to promote the concept.

Objective 4

Decrease substandard housing and preserve the affordable housing stock in Sussex County.

Strategy: Since 2003 Sussex County's Community Development and Housing Division has worked hard to keep up with the rehabilitation and demolition necessary to prevent an increase in the number of substandard homes in the County. The Department utilizes its Federal, State, and County funding as efficiently as possible to try and satisfy the 700+ names on their waiting list. For the upcoming fiscal year, the Department has applied for \$2,700,000 in competitive grant funding from the Delaware State Housing Authority. The Department applies for funding on behalf of local municipalities who request assistance from the County. Pending the approval of funding, the following towns will see financial assistance towards rehabilitating and demolishing substandard housing: Blades; Bridgeville; Georgetown; Greenwood; Laurel; Milford; Ocean View; Selbyville; Coverdale Crossroads; Rural Lincoln; Rural Millsboro / Dagsboro; and Rural Selbyville/Polly Branch. Sussex County Council and the local shares, will commit to \$588,000 as a match to the State's CDBG funds.

Objective 5

Create a Moderately Priced Rental Unit Program to support the growing rental demand throughout Sussex County.

Strategy: Presently Sussex County's Community Development and Housing Division is focusing on its pilot Moderately Priced Housing Unit Program. Pending the evaluation at the end of the test period for the MPHU Program, the Department will determine the best

method to satisfy the rental needs of the County's low to moderate income citizens. Sussex County recognizes the increase in "at-risk" households and cost-burdened households that need assistance. In the meantime, the Department will continue to utilize the Housing Rehabilitation Loan Program funded by the State, to preserve and rehabilitate affordable rental housing throughout the County. The County will work closely with non-profit organizations, local municipalities, and private developers to see that a Moderately Priced Rental Unit Program is developed within the next two to three years.

Sussex County will continue to expand its relationship with non-profit housing advocacy organizations. The County recognizes the efforts of these organizations to provide the low to moderate income people of Sussex County with affordable housing options, and will continue to financially support these efforts. The County's Fiscal 2008 Budget includes a \$25,000 grant to Habitat for Humanity, a \$5,000 grant to West Rehoboth Land Trust, a \$10,000 grant to InterFaith Mission, and a \$10,000 grant to First State Community Action for housing assistance programs. Housing advocacy groups impart a great deal of wisdom in regards to affordable housing and the County will work closely with them in the establishment of an affordable rental program. The County also wants to encourage more limited home equity projects, under which the buyers owns the home and non-profits (i.e., community land trusts) own the land. In a time where escalating land prices makes buying an affordable home difficult, removing land price from the equation would significantly lower home prices.

In the last 5 years, Sussex County has seen an escalation in the Hispanic and elderly populations. The County's Community Development and Housing Department will continue to use its funding to rehabilitate the homes of the elderly. However, these two groups do not always fit into the requirements of the County's assistance programs. In those cases, the County will partner with USDA Rural Development, State Housing Authority, local municipalities, and non-profits organizations to ensure that their housing needs are fulfilled as well.

**ECONOMIC DEVELOPMENT
ELEMENT**

ECONOMIC DEVELOPMENT ELEMENT

Economic Overview

Historically, farming has been the dominant force in Sussex County's economy. The County ranked 27th in the U.S. in market value of its farm products in 2002, according to the latest national data available. The County is most famous for its poultry farming. The County produces more broiler chickens (over 200 million per year) than any other county in the United States - nearly twice as many as the second leading county, Cullman County, Alabama.

Sussex County is also the largest soybean producing county east of the Appalachian Mountains. The 2002 U.S. Census of Agriculture classified over 70% of the farms in Sussex County as poultry or soybean/grain farms. Vegetable and melon farms were third most numerous.

Sussex County is by far the foremost agricultural area in Delaware. Sussex farms accounted for 75% of Delaware's farm product value in 2002. However, farmland acres in the County continue to decrease. Sussex County lost 30,147 acres of farmland to other uses between 1997 and 2002, a decrease of nearly 10%. During that same five-year period, the number of farms in Sussex County dropped by 11%, from 1,481 to 1,312. These trends result from both development of farmland and the consolidation of smaller family farms into larger farm holdings.

Sussex County's location, geography and quality of life has led to a rapidly growing economy overall. In July 2007, the County's unemployment rate was 2.9%, compared with 3.4% in Delaware and 4.6% nationally. The number of jobs grew at a faster rate in Sussex County between 1995 and 2005 than they did in either Delaware or the United States. Tourism has been the strongest factor driving this job growth. The Leisure & Hospitality sector and the Wholesale & Retail Trade sector added the most jobs during that ten-year span. The down side is that these two



economic sectors include more low paying jobs than most other areas of business. Analysis by the Delaware Department of Labor concluded that the average annual wage of Sussex County's non-farm workers was \$30,100 in 2005. This was third among Delaware's three counties and only two-thirds of the Statewide average (\$44,600).

Table 18
Sussex County – Largest Employers
(listed alphabetically)

<u>Business Name</u>	<u>Business Type</u>	<u>Location by School District</u>
Allen’s Family Foods	Poultry processing and marketing	Cape Henlopen
Allen’s Hatchery Inc.	Agricultural production	Seaford
Bayhealth Medical Center - Milford Memorial Hospital	Hospital	Milford
Beebe Medical Center	Hospital	Cape Henlopen
Caulk Dentsply	Dental product manufacturer	Milford
Delaware Electric Cooperative Inc.	Electric utility	Woodbridge
Delaware Technical & Community College	Higher education	Indian River
Delmarva Power	Electric utility	
Eastern Shore Poultry	Poultry processing	Indian River
Food Lion Inc.	Grocery	
Grotto Pizza Inc.	Pizza marketing service	Cape Henlopen
Indian River School District	Schools and education	Indian River
Intervet America Inc.	Poultry chemicals	Indian River
Invista	Textile-nylon mill	Seaford
M&T Bank	Banking services	Indian River
Mountaire of Delmarva Inc.	Poultry processing	Indian River
Mountaire of Delaware	Poultry processing	Indian River
Nanticoke Health Services	Hospital	Seaford
Pats Aircraft LLC	Airplane fuel tank refurbishing	Indian River
Perdue Inc.	Poultry processing	Indian River
Pinnacle Foods Inc.	Pickles and food processing	Indian River
Rusty Rudder Restaurant	Restaurant	Cape Henlopen
Sea Watch International Inc.	Food processing	Milford
State of Delaware	State government	
Sussex County	County government	
Wal-Mart	Department store	Indian River
Wal-Mart Supercenter	Department store	Seaford
Wilmington Trust Company	Banking services	Indian River

***Non-Farm Employment By Sector
July 2007 (in thousands)***

	<u>State of Delaware</u>		<u>Sussex County</u>	
	Number of Jobs	Percent of Jobs	Number of Jobs	Percent of Jobs
Natural Resource, Mining & Construction	30.3	6.8	5.9	7.6
Manufacturing	32.2	7.3	12.4	15.9
Wholesale Trade	15.4	3.5	1.6	2.1
Retail Trade	55.1	12.4	12.4	16.0
Transportation, Warehousing & Utilities	13.1	3.0	2.4	3.1
Information	6.8	1.5	0.5	0.6
Finance, Insurance & Real Estate	43.5	9.8	4.9	6.3
Education & Health Services	58.0	13.1	9.2	11.8
Leisure & Hospitality Services	46.5	10.5	13.4	17.2
Business & Professional Services	63.5	14.3	4.2	5.4
Other Services	20.6	4.6	3.3	4.2
Government	58.7	13.2	7.6	9.8
Total	443.7	100.0	77.8	100.0

Economic Development Agencies

The Sussex County Economic Development Office leads Sussex County’s efforts to promote the location and development of business in the County. The Economic Development office also strives to:

- Diversify and expand the local job base.
- Recruit new businesses to industrial/business parks located in Sussex County.
- Respond to requests for demographic, labor force and other information.
- Link business persons who are interested in locating in Sussex County with funding assistance potentially available from the State, the federal government or others.
- Help existing or prospective employers find out about continuing education, professional development, and job training opportunities for their employees.

The Sussex County Economic Development Office cooperates with several economic development entities, including the following among others:

- Delaware Small Business Center - low cost counseling and education.
- Delaware Economic Development Office - help obtaining financing and worker training.
- Delaware Manufacturing Extension Partnership - manufacturing support and expertise.
- Delaware Department of Labor - links to qualified job seekers.
- Delaware Division of Corporations - incorporation information.
- Service Corps of Retired Executives - business counseling by successful retirees.
- Small Business Development Center - education, counseling, and research assistance.
- Southern Delaware Tourism - a tourism and convention bureau.
- The several local Chambers of Commerce operating in Sussex County.



Industrial/Business Parks

There are four industrial/business parks in Sussex County.

Sussex County Industrial Airpark

This 350-acre property site near Georgetown is a former U.S. Navy site. Today, Sussex County owns it and operates it as an airport and an industrial park. The complex contains 17 businesses, which employ more than 1,100 people. An airplane outfitter and a poultry processing company are the largest businesses located there. In 2007, Sussex County Council appointed a full-time Director of Airport and Airpark Operations for this site, which is now nearly fully developed.



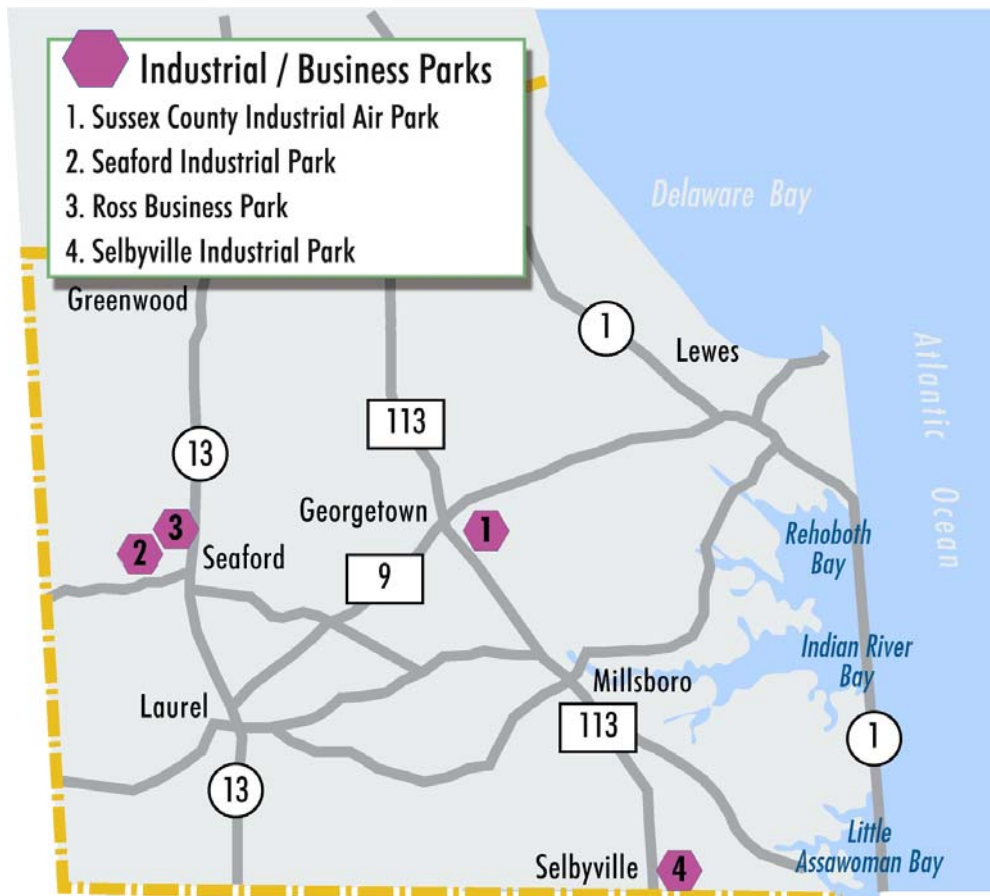
Sussex County uses the airpark as both a transportation center and a catalyst for economic development. In 2005, the County leased five 1/2-acre pads sites to private companies for the construction of 10,000 square foot private hangars. Those leases were the latest in a multi-year, multi-million-dollar effort by Sussex County to improve amenities and safety at the site. Sussex County Airport hosts aircraft ranging from single-engine planes to larger cargo and corporate jets. Over 50,000 landings and takeoffs occur there each year.

Other improvements either planned, in progress, or completed at the airport:

- Extending the main 5,000-foot-long runway at the airport by 1,000 feet, as well as realigning nearby Park Avenue. This project will cost approximately \$20 million, with the Federal Aviation Administration paying for 95 percent of the project. The State and Sussex County will split the rest. While these improvements will not be under construction until at least 2010, engineering and land acquisition are underway.
- Rehabilitating an abandoned runway to use as a secondary crosswind runway for smaller aircraft. Demolition of the old runway is complete. Construction on the new one will begin shortly. Total cost will be \$7 million, with the federal government again funding 92 percent.
- Installing a precision approach path lighting system.
- Adopting a stormwater management plan to support airport and park development.

- Erecting a 145-foot airport beacon, making the airport easier for pilots to find.
- Building a perimeter fence surrounding the airport to improve security.
- Creating five hangar pad sites for lease, with improvements to an adjoining apron, taxiway and service road.
- The construction of a \$1.2 million terminal building, finished in 2002, which includes a restaurant and the airport operator.
- Improving water supply to meet fire protection needs.

In a related effort, Sussex County is cooperating with PATS Aircraft and Delaware Technical & Community College to create an FAA-approved training program for airplane mechanics. This program will be the first of its kind in Delaware. It will focus on training certified airframe mechanics, the specialists who work on all parts of an airplane other than the engine, propeller, and instruments. The County will supply space at the airport for this training, with PATS Aircraft providing technical expertise, and Delaware Tech formulating the curriculum. Sussex County purchased a hangar at the airport and is renovating it for this purpose.



Selbyville Industrial Park

The 35-acre Selbyville Industrial Park is in the Town of Selbyville at Route 113 and the Maryland line. The Town recently sold the last lots it owned at that site. Sixteen businesses are located there, including manufacturers and other firms. The Town is now looking for land to establish a business park but has not yet identified the right site at the right price.

Seaford Industrial Park

Seaford Industrial Park is a 128-acre tract on the north side of the City of Seaford, one mile from Route 13. The park houses approximately 15 manufacturing firms and other businesses. The City of Seaford has now subdivided and sold all of the lots at this location.

Ross Business Park

The City of Seaford also owns Ross Business Park, which is on the Market Street extension in Seaford. The City has subdivided and sold almost all the lots at this site. Planning has begun for a second phase that will add 150 acres nearby to the park.

Keeping Agriculture Viable

The Existing Land Use map included in the Future Land Use Element of this comprehensive plan shows clearly that Agricultural and Undeveloped Lands account for much more acreage in Sussex County than any other type of use. As stated in this Economic Development element, Sussex County is Delaware's leading agricultural producer, by far. Historically, Sussex County was shaped by agriculture. Farming and farmland are still major, character-defining aspects of Sussex County's landscape and economy today.

Sussex County's role in funding the preservation of farmland and open space is detailed elsewhere in this Comprehensive Plan. The County's other existing and proposed land preservation initiatives, such as the density bonus program, transfer of development rights, and new environmental protection ordinances are also identified in the Land Use and Conservation elements. To augment those efforts, Sussex County hopes to establish two types of voluntary overlay zoning districts to help preserve farmland and keep the County's agricultural economy viable. These two districts would be voluntary in the sense that only willing land owners would be so zoned. These districts would be overlays in that they could occur anywhere in the unincorporated portions of the County where certain conditions are met. No specific sites for these zones would be immediately designated on Sussex County's zoning map.

Agricultural Preservation Overlay

The Future Land Use map shows numerous small concentrations of properties that have voluntarily joined the State's agricultural preservation district. Under Delaware law, enlisting in

this type of district is a prerequisite for selling your land's development rights to the State. Land owners in this district are essentially on a "waiting list" until enough funds become available from the State and/or the County to acquire the development rights to their farmland. Landowners on this waiting list sign up for a ten-year period. If the State has not bought their development rights by the end of ten years, the land owner can opt out of the program. During the time they are on the waiting list, landowners agree not to develop their farms, with the exception of a very limited amount of residential use at a very low overall density and designed primarily to serve the needs of farm families and on-site farm workers.

The County would like to establish a zoning overlay to afford more permanent protection under zoning to land owners who are now part of the State agricultural preservation districts and others who may wish to be participate. Regulations within this zoning district would remain in place as long as the land is so zoned, rather than the regulations elapsing at the end of ten years. Hopefully, clusters of farmland owners will become interested so that urban development does not grow up between these farms—development that would fragment what is now a largely farmland area. This type of fragmentation can make it difficult to sustain normal farming operations because the new neighbors sometimes object to slow moving tractors on the road, tractors operating at night, farmland odors and other aspects of farming.

Incentives for a landowner to join a district of this type would include:

- Reassessment so that the participating land owner's real estate tax bill is based on the value of the property for agricultural use, not full-value development potential.
- Requirement that developers of new subdivisions nearby must attach a statement to each deed that puts new homeowners on notice regarding the likely presence of odor, noise and other conditions associated with normal farm operations.
- Genuine interest in preserving farmland and maintaining an agricultural environment compatible with farm operations in their immediate proximity.

Agricultural Industry Overlay

Zoning in Sussex County can easily accommodate roadside produce stands, fruit & vegetable patches, pony rides, processing of products on-site, and other forms of smaller scale farm-related businesses. These farm-based uses should be permitted in all agricultural zoning districts, provided the product or service offered is mostly home grown on-site. In addition, farm-based businesses, such as knife sharpening, small blacksmith operations, etc. can be allowed as permitted accessory uses.

A more specialized zoning district is needed to encourage and deal with large scale agricultural operations, such as feed mills, animal slaughter houses, and the like. Sussex County proposes to establish an Agricultural Industry Overlay District where appropriate parcels can be designated for these types of uses. To ensure these uses are located in suitable places, associated regulations would establish large minimum tract sizes, large setback requirements, the need to have convenient highway access and other stipulations suited to these intensive industrial activities. Within these overlay districts, residential uses would not be permitted in order to avoid potential

conflicts between homes and industry. However, certain commercial uses would be allowed, including feed stores, yard ornament sales, retail dairy sales, and other activities directly compatible with agriculture.

Economic Development Strategies

- Maintain land use, zoning and conservation policies and regulations that keep agriculture economically viable in Sussex County.
- Ensure zoning regulations accommodate environmentally safe agribusiness uses in appropriate locations, including businesses that promote new uses for agricultural products and byproducts.
- Complete long term capital improvements planned for Sussex County’s airport.
- In the longer range future, consider different ways to access the airport site from the west, south and north.
- Intensify efforts to diversify the local economy by recruiting employers with year-round, higher paying jobs. This will help balance the on-going growth of seasonal, lower paying jobs associated with tourism and other service sectors.
- Continue establishing more job training and professional development partnerships with local employers and educational institutions.
- Coordinate water and sewer facilities planning with the need to bring these utilities to areas zoned for business uses.
- Continue coordinating with DelDOT to provide safe and convenient road access to areas zoned for business uses. To help protect the strongest driving force in the County’s economy, all levels of government must focus on ways to relieve traffic congestion to and from the beaches and the Route 1 beach towns.
- Continue working with local governments, local chambers of commerce, non-profit business centers and relevant state agencies to assist existing and prospective employers with financing, labor force and job training needs.
- Fund a professional target market analysis by a specialized economic development consulting firm. A study of this type will identify:
 - What business types are the best match for Sussex County’s assets and constraints, including location, geography, labor force, educational resources, industrial and office sites, and transportation network, among other considerations.

- How the County and its partner economic development entities could better implement a coordinated business recruitment strategy.

In essence, this type of study would clearly define: a) what types of businesses are likely to find Sussex County most appealing; and b) how the County, and others, should go about targeting these businesses.

- Actively encourage and participate in a broad-based Sussex County committee whose goal will be to improve the economy here by fostering the creation of more higher paying jobs. A related goal of this committee will be to diversify our economic base so that the County is better able to withstand and accommodate future economic change. This committee will include representatives from various local chambers of commerce, the incorporated towns, the Delaware Economic Development Office, and Sussex County staff.

Sussex County CEDS

The Economic Development Strategies identified above are consistent with the following items contained in the Sussex County Action Plan component in the State of Delaware Comprehensive Economic Development Strategy (CEDS).

- Maintain agriculture but diversify within the sector toward more value added products to cushion against potential disruptions in the dominate poultry segment.
- Maintain and enhance where possible the resort / visitor industry in the Beaches.
 - Market natural resources and quality of life and unique culture.
- Identify and plan for future growth industries:
 - Focus on less land use intensive industries.
 - Promote and foster entrepreneurship through education and entrepreneurial ventures that tap into and capitalize on the intellectual capacity of executive retiree population.
 - Focus on industries conducting research and development and other high value, knowledge-based business activities.
- Provide for the development of the necessary infrastructure to provide a competitive business environment.
 - Ensure accessibility to and expansion of transportation, utility and information-technology services serving businesses.
 - Provide for the development of affordable workforce housing and live near your work approaches.
 - Emphasize infrastructure holistically and not focus solely on business parks.

- Identify regional strengths and opportunities with Kent County, the Maryland Eastern Shore and Virginia.
- Provide for the development of a sustainable, high quality workforce.

**HISTORIC PRESERVATION
ELEMENT**

HISTORIC PRESERVATION ELEMENT

Brief History of Sussex County

Native Americans first inhabited Delaware sometime around 14,000 years ago. They lived and hunted along the many tributaries and bays in the county. In 1631, the Dutch established a trading post in present-day Lewes.

For most of the eighteenth century, Sussex County remained heavily wooded. In 1728, Reverend William Beckett reported that there were 1,750 inhabitants in the county. Delaware became the first state to ratify the U. S. Constitution in 1787. In 1791, the Sussex County legislature voted to move the county seat from Lewes to Georgetown.

The Delaware Railroad reached Seaford in 1856, and Delmar by 1859. The Delaware, Maryland, and Virginia Railroad ran from Harrington to Milford, to Georgetown in 1869. A third line, the Junction and Breakwater Railroad, was constructed between 1859 and 1868 to Lewes; a spur line eventually connected Rehoboth in 1878. These railroads stimulated changes in agriculture and industry, and the growth of new towns.

Soon improved transportation made Sussex County's coastal towns more accessible to the people from Philadelphia, Baltimore and elsewhere. From the 1890's through the Golden Age of the 1920's, Americans discovered the beach. From that time on, steamboats regularly carried travelers to Sussex County's shores.

Sussex County has always been the most important agricultural region in Delaware. In 1880, corn was the dominant cash crop. In 1900, Sussex was the leading strawberry producer in the nation. By the early 1960s, orchard crops had been supplanted by more lucrative agricultural products. At the start of the twentieth century, the lumber industry was a significant source of income for Sussex County. The people of Sussex also worked the surrounding waters. The County's Menhaden fishing was one of the biggest fishing industries in the U.S. During its peak in the 1950s, Lewes was the epicenter of that industry.

In 1923, Mrs. Wilmer Steele, a farmer in Ocean View, raised broiling, frying, and roasting chickens for sale in urban markets. Originating with Mrs. Steele's success, Sussex County is now the leading broiler producer in the United States.

In 1939, DuPont acquired land near Seaford for a nylon production plant, which went into production in 1939. Bulked continuous filament nylon, a standard in the carpet industry, was developed at the Seaford plant in 1958.

Throughout the County's development, Sussex has maintained its rural character and small town charm. The rich history of Sussex can still be seen through the area's streetscapes, waterfront, and farms.

Why Preserve History?

Historic buildings and landscapes in Sussex County are visible reminders of the area’s heritage. In towns, in the countryside and in maritime settings, historic places illustrate the lives of people who lived and worked here before us. The Delaware State Historic Preservation Office 2001 Plan entitled “The Future of Our Past” states that:

“Our pride in where we live rests in part on our understanding and appreciation of the past inherent in the surviving historic buildings, structures, landscapes, streetscapes and archaeological sites that surround us.”

Besides providing perspective about days gone by, historic buildings and artifacts have contemporary economic value. Historic sites draw tourists, create jobs and generate commercial revenues. Campaigns to revitalize older downtowns usually depend heavily on re-establishing the traditional, small town, “Main Street” settings that many people find more appealing than highway commercial strips and shopping malls.



Historic preservation emphasizes reuse, quality of life, and sustainable economic growth. Historic preservation also contributes to all five principles underlying the State’s Livable Delaware initiative, including the following:

- Guide growth to areas that are most prepared to accept it in terms of infrastructure and thoughtful planning.
- Preserve farmland and open space.
- Promote infill and redevelopment.
- Facilitate attractive, affordable housing.
- Protect our quality of life while slowing sprawl.

Delaware Department of State Division of Historic and Cultural Affairs

Historic preservation is a deliberate effort to maintain, restore and protect buildings and surroundings that tell the story of the past. Successful historic preservation takes foresight, organization and adequate funding. Government, non-profit advocates, local historical societies, and private citizens all play a role in preserving and promoting Delaware’s heritage, including the unique character of Sussex County.

The Division of Historic and Cultural Affairs is the State's historic preservation agency. The Division's main responsibilities:

- Operating the eight State-owned museums in Delaware and over 90 other historic state-owned properties, including two historic homes that serve as conference centers.
- Conserving the State's collection of historic documents, fine arts, and other memorabilia.
- Preparing and participating in exhibits, special events and educational programs.
- Identifying, studying and preserving historic buildings, districts, and landscapes, including archaeological sites and their contents.
- Providing information on tax credits and other funding incentives available for rehabilitating officially designated historic buildings.
- Working with others to administer state and federal regulation that protect officially designated historic places.

The Director of the Division is Delaware's State Historic Preservation Officer (SHPO), designated in accordance with federal regulations. The SHPO, with advice from the State Review Board and State staff, is responsible for:

- Evaluating the historic significance of properties nominated for the National Register of Historic Places (the list of officially designated historic locations).
- Deciding who will receive federal Historic Preservation Fund monies awarded to Delaware.
- Administering local compliance with federal regulations that require an assessment of potential effects whenever federal money is to be spent on a project located near a site listed on the National Register of Historic Places.
- Administering Delaware's Tax Credit Program, under which people can earn tax credits for preserving buildings listed on the National Register. The amount of the tax credit is equal to a percentage of the rehabilitation cost. Federal tax credits worth 20% of total cost are available provided the building is an income producing structure. State income tax credits equal 20% for income producing buildings, 30% for owner-occupied homes, and an additional 10% for low-income housing.



Zwaanendael Museum in Lewes - one of eight museums owned and operated by the State of Delaware

Preservation Delaware, Inc.

Preservation Delaware, Inc. is a State-wide, non-profit organization devoted to preserving Delaware's historic and architecturally significant buildings. Their motto is "*Protecting the Irreplacable in the First State*". This group works with State agencies, local governments, educational institutions and others to:

- Provide technical support, advocacy, and mediation for local efforts to find alternatives to demolition.
- Acquire easements on buildings of interest.
- Provide education and training on historic preservation matters.
- Administer their Delaware Preservation Fund, which offers: a) loans to people rehabilitating structures who do not qualify for conventional loans; or b) loans with lower interest rates to encourage rehabilitation. Loan proceeds are reinvested as part of a revolving loan fund.
- Acquire endangered historic buildings using monies from their Delaware Preservation Fund. Preservation Delaware, Inc. sells these buildings (and buildings acquired by donation) to people who will preserve them. Sale proceeds help replenish the Fund.

The National Register of Historic Places

The National Register of Historic Places is the official inventory of America's historic sites. It is administered by the U.S. Department of Interior's National Park Service. The National Register features over 80,000 sites. In addition to federal properties with historic importance, the National Register includes properties across the country that were nominated by governments, organizations, and individuals because of the importance to the nation, a state, or a community. The inventory includes buildings, districts, sites, and structures significant to history, architecture, archaeology, engineering and culture. Most properties on the National Register are at least 50 years old.

The benefits of listing on the National Register:

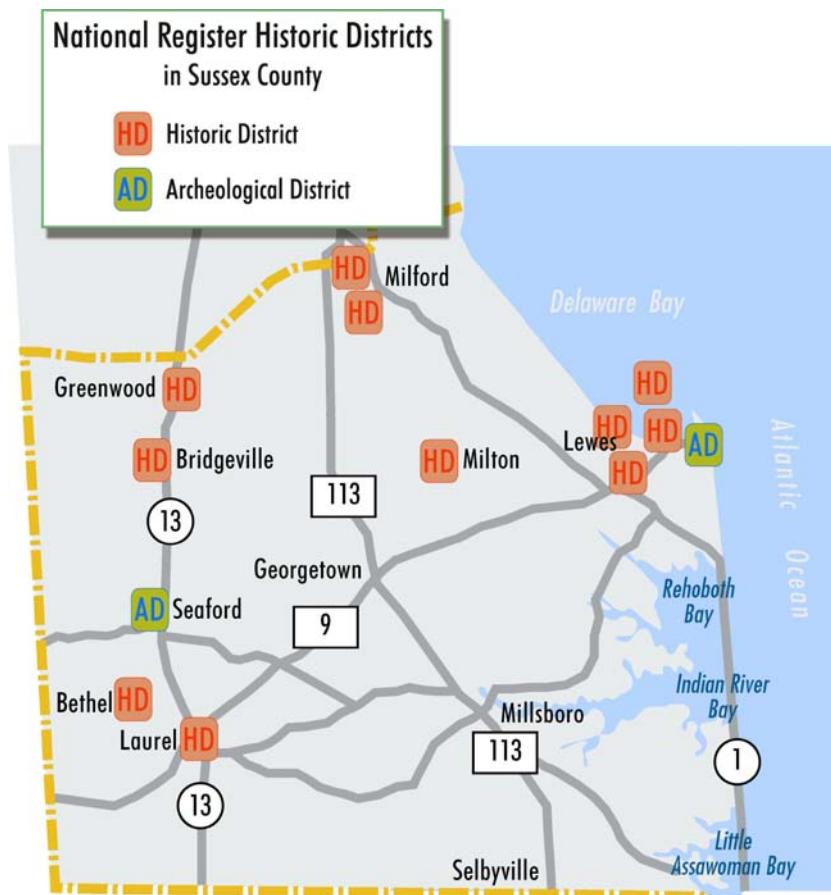
- Official recognition that the property is significant.
- Qualification for certain federal funds when these very limited funds are available.
- Eligibility for state and federal historic rehabilitation tax credits.

- Mandatory consideration of potential impacts when projects using federal funds are proposed nearby.

Local Historic Districts

Groups of closely located properties are often listed together on the National Register as historic districts. These districts should not be confused with the historic districts that local municipalities establish and regulate through their zoning ordinances or through separate special purpose ordinances.

National Register sites may or may not be part of locally-created historic districts. National Register sites outside of local historic districts are not subject to any of the restrictions on renovation and demolition that local municipalities often attach to properties within their local historic districts. National Register status by itself does not legally prevent property owners from doing whatever they want to their properties, including demolition.



Several Sussex County municipalities established historic districts to regulate renovation and demolition of structures within these districts. These include Bethel, Bridgeville, Georgetown, Laurel, Lewes, Milford and Milton. Millsboro is currently assessing its resources for a possible ordinance in the future.

**Table 19
Sussex County Sites on the
National Register of Historic Places**

Resource Name	Address	City	Year Listed
Abbott's Mill	SW of Milford	Milford	1972
Abbott's Mill (Boundary increase)	Rd. 620 W of DE 36	Milford	1979
Adams, Joseph T., House	12 E Pine St.	Georgetown	1998
All Saints' Episcopal Church	18 Olive Ave., Lewes and Rehoboth Hundred	Rehoboth Beach	1991
Avery's Rest Site	Address Restricted	Rehoboth Beach	1978
Baltimore Mills Historic Archaeological Site	Address Restricted	Omar	1997
Barnes Woods Archaeological District	Address Restricted	Seaford	1996
Bethel Historic District	0.4 mi. W of Laurel	Bethel	1975
Blackwater Presbyterian Church	W of Clarksville on DE 54	Clarksville	1976
Brick Hotel	The Circle	Georgetown	1979
Bridgeville Historic District	Roughly bounded by Market, Main and Edgewood Sts., School House Ln., Maple Alley and the Penn Central RR tracks	Bridgeville	1994
Bridgeville Public Library	210 Market St.	Bridgeville	1990
Building at 200-202A High St.	200-202A High St.	Seaford	1987
Building at 218 High Street	218 High Street	Seaford	1987
Building at High and Cannon Sts.	SE corner of High and Cannon Sts.	Seaford	1987
Burton Hardware Store	High St. and Spring Alley	Seaford	1978
Cannon's Ferry	Across the Nanticoke River	Woodland	1973
Cape Henlopen Archaeological District	Address Restricted	Lewes	1978
Carey's Camp Meeting Ground	W of Millsboro off DE 24	Millsboro	1973
Carlisle House	205 S. Front St.	Milford	1982
Chandler, Capt. Ebe, House	Main and Reed Sts.	Frankford	1979

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Resource Name	Address	City	Year Listed
Chipman Potato House	Jct. Of DE 465 and DE 465A	Laurel	1990
Chipman's Mill	E of Laurel on SR 465	Laurel	1978
Coleman House	422 Kings Hwy.	Lewes	1977
Collins Potato House	Jct. of DE 509 and DE 510A	Laurel	1990
Cool Spring Presbyterian Church	W of Lewes on SR 247	Lewes	1982
Cox, J. W., Dry Goods Store	214 High Street	Seaford	1987
Dagworthy, Gen. John, Mansion Site	Address Restricted	Dagsboro	1979
Davis, Robert, Farmhouse	S of Rt. 24	Millsboro	1979
Dawson Dr., House	200 SE Front Street	Milford	1983
De Vries Palisade	Address Restricted	Lewes	1972
Deep Creek Furnace Site	Address Restricted	Middleford	1977
Delaware Boundary Markers	State boundary lines between DE-MD / DE-PA	Not Applicable	1975
Delaware Breakwater and Lewes Harbor	E of Lewes at Cape Henlopen	Lewes	1976
Dickerson Potato House	Jct. of DE 494 and DE 498	Delmar	1990
Dodd Homestead	W of Rehoboth Beach on DE 1	Rehoboth Beach	1982
Draper House	200 Lakeview Avenue	Milford	1982
Draper-Adkins House	204 Federal Street	Milton	1973
Egglinton Hall	700 SE 2 nd Street	Milford	1983
Ellendale State Forest Picnic Facility	US 113, ½ mi. S of DE 16, Georgetown Hundred	Ellendale	1991
Eratt House	W of Bridgeville on DE 572	Bridgeville	1983
Faucett, Peter S., House	W. Laurel Street	Georgetown	1985
Fenwick Island Lighthouse Station	Off DE 54	Fenwick Island	1979
First Broiler House	University of Delaware Experimental Station	Georgetown	1974
First National Bank of Seaford	118 Pine Street	Seaford	1987
Fisher Homestead	W of Lewes	Lewes	1980
Fisher's Paradise	624 Pilottown Road	Lewes	1972
Fort Miles Historic District	At the confluence of the Atlantic Ocean and Delaware Bay	Lewes	2004

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Resource Name	Address	City	Year Listed
Georgetown Coal Gasification Plant	N. Railroad Avenue	Georgetown	1985
Grier House	301 Lakeview Avenue	Milford	1983
Gyles, Stella Pepper, House	SW of Georgetown	Georgetown	1979
Hall, Col. David, House	107 King's Highway	Lewes	1976
Harmon School	S of jct. of Rt. 24 and CR 297	Millsboro	1979
Harmon, Isaac, Farmhouse	CR 312A	Millsboro	1979
Harmony Church	Rt. 24, E of CR 313	Millsboro	1979
Hazzard House	327 Union Street	Milton	1973
Hearn and Rawlins Mill	N of Seaford on U.S. 13A	Seaford	1978
Hearn Potato House	.6 mi. N of jct. of DE 74 and DE 62	Laurel	1990
Hells Neck	Address Restricted	Lewes	1976
Highball Signal	City park, near Penn-Central RR	Delmar	1973
Hitch, E.L., Potato House	Jct. of DE 460 and DE 489	Laurel	1990
Hitchens, Ames, Chicken Farm	N of Rt. 24	Millsboro	1979
Hopkins' Covered Bridge Farm	N side Rd. 262, E of jct. with Rd. 286, Lewes and Rehoboth Hundred	Lewes	1991
Hopkins House	NW of Oyster Rocks Road	Milton	1979
Indian Mission Church	Jct. of Rt. 5 and CR 48	Millsboro	1979
Indian Mission School	Rt. 24 between CR 312A and 313A	Millsboro	1979
Indian River Archaeological Complex	Address Restricted	Millsboro	1978
Indian River Life Saving Service Station	N of Bethany Beach on DE 14	Bethany Beach	1976
Johnson School	Rt. 24 between CR 309 and 310	Millsboro	1979
Judge's House and Law Office	100 and 104 W. Market Street	Georgetown	1979
Laurel Historic District	West St. To Rossakatum Creek to 10 th St.	Laurel	1988
Lawrence	N of Seaford on U.S. 13A	Seaford	1978
Lewes Historic District	Shipcarpenter, Front, Savannah, 2 nd , 3 rd and 4 th Streets	Lewes	1977
Lewes Historic District (Boundary Increase)	Roughly bounded by Front St., Savannah Rd., McFee St. and the Penn-Central RR tracks, Lewes and Rehoboth Hundred	Lewes	1992

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Resource Name	Address	City	Year Listed
Lewes Presbyterian Church	100 Kings Highway	Lewes	1977
Lightship WLV 539	Lewes-Rehoboth Canal between Shipcarpenter and Mulberry Streets	Lewes	1989
Marsh, Peter, House	10 Dodd's Lane	Rehoboth Beach	1977
Maston House	3 mi. N of Seaford on Seaford-Atlanta Road	Seaford	1975
Mauil House	542 Pilottown Road	Lewes	1970
Mauil, Thomas, House (Boundary Increase)	542 Pilottown Road	Lewes	1978
Melson House	N of Atlanta on SR 30	Atlanta	1978
Messick, Dr. John W., House and Office	144 E. Market Street	Georgetown	1987
Milford Railroad Station	DE 36	Milford	1983
Milford Shipyard Area Historic District	Roughly bounded by Mispillion River, Franklin, Front and Marshall Streets	Milford	1983
Milton Historic District	DE 5	Milton	1982
Mispillion Lighthouse and Beacon Tower	NE end of CR 203	Milford	1987
Mispillion Site	Address Restricted	Milford	1976
Moore Potato House	SE of jct. of DE 72 and DE 463	Laurel	1990
National Harbor of Refuge and Delaware Breakwater Harbor Historic District	Mouth of Delaware Bay at Cape Henlopen	Lewes	1989
Norwood House	SW of Lewes on DE 9	Lewes	1982
Old Bridgeville Fire House	102 William Street	Bridgeville	1984
Old Christ Church	SE of Laurel at jct. of SR 465 and 465A	Laurel	1972
Old Sussex County Courthouse	S. Bedford Street	Georgetown	1971
Pagan Creek Dike	Pagan Creek near New Road	Lewes	1973
Pepper, Carlton, David, Farm	S of Georgetown on SR 469	Georgetown	1979
Perry-Shockley House	219 Washington Street	Millsboro	1985
Phillips Potato House	SW of jct. of DE 492 and DE 492A	Laurel	1990
Pine Grove Furnace Site	Address Restricted	Concord	1978
Ponder, Gov. James, House	416 Federal Street	Milton	1973
Poplar Thicket	Address Restricted	Bethany Beach	1978

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Resource Name	Address	City	Year Listed
Portsville Lighthouse	N side of CR 493	Portsville	1987
Prince George's Chapel	E of Dagsboro on DE 26	Dagsboro	1971
Ralph Potato House	SE of jct. of DE 493 and DE 494	Laurel	1990
Redden Forest Lodge, Forester's House and Stable	Redden State Forest	Georgetown	1980
Richards House - Linden Hall	E of Bridgeville on US 13	Bridgeville	1982
Richards Historic District	County Rd. 34	Greenwood	1983
Richards Mansion	N. Bedford St. and The Circle	Georgetown	1979
Rider Potato House	SE of jct. of DE 506 and DE 505	Laurel	1990
Robinson, Jesse, House	High Street	Seaford	1982
Roosevelt Inlet Shipwreck	Address Restricted	Lewes	2006
Ross Point School	CR 448 near jct. with Rt. 62	Laurel	2001
Ross, Edgar and Rachel, House	413 High Street	Seaford	1997
Ross, Gov. William H., House	N of Seaford on Market Street	Seaford	1977
Russell, William, House	410 Pilot Town Road	Lewes	1977
Scott's Store	NW of Bridgeville on DE 404	Bridgeville	1983
Seaford Station Complex	Nanticoke River at Delaware Railroad Bridge	Seaford	1978
Short Homestead	W of Georgetown at DE 526 and DE 529	Georgetown	1982
Sipple, Thomas, House	N. Bedford and New Streets	Georgetown	1985
Slaughter Creek Complex	Address Restricted	Milton	1976
South Milford Historic District	Roughly bounded by Mispillion River, Maple Ave., Church and Washington Sts.	Milford	1983
Spring Banke	NE of Clarksville on DE 26 and Irons Ln.	Clarksville	1976
Spring Garden	NE of Laurel on Delaware Avenue	Laurel	1982
St. George's Chapel	9 mi. SW of Lewes on DE 5	Lewes	1973
St. John's Methodist Church	Springfield Crossroads, jct. of SR 30 and Co. Rd. 47	Georgetown	1990
St. Luke's Protestant Episcopal Church	Front Street	Seaford	1977
St. Paul's Episcopal Church	E. Pine Street	Georgetown	1979
Stanley Potato House	N of jct. of DE 68 and DE 451	Laurel	1990

Resource Name	Address	City	Year Listed
Sudler House	N. Main Street	Bridgeville	1974
Sussex County Courthouse and The Circle	The Circle	Georgetown	1973
Sussex National Bank of Seaford	130 High Street	Seaford	1987
Teddy’s Tavern	E side of Du Pont Blvd., 0.6 mi. N of jct. with DE 16, Cedar Creek Hundred	Ellendale	1991
Thompson’s Island Site (Boundary Increase)	Address Restricted	Rehoboth Beach	1997
Thompson’s Loss and Gain Site	Address Restricted	Rehoboth Beach	1978
Thompson’s Island Site	Address Restricted	Rehoboth Beach	1978
Townsend Site	Address Restricted	Lewes	1978
Trinity Methodist Episcopal Church	NW of Bridgeville on DE 31	Bridgeville	1978
Warren’s Mill	NW of Millsboro on DE 326	Millsboro	1978
Warrington Site	Address Restricted	Rehoboth Beach	1977
West Potato House	US 13 N of jct. with DE 454A	Delmar	1990
White House	White House Farm	Millsboro	1978
White, Benjamin, House	Jct. Of DE 258 and DE 264	Milton	1979
Wilgus Site	Address Restricted	Bethany Beach	1978
Wolfe’s Neck Site	Address Restricted	Lewes	1978
Wright Potato House	SW of jct. of DE 24 and DE 510	Laurel	1990
Wright, Gardiner, Mansion	228 S. Front Street	Georgetown	1979
Wright, Warren T., Farmhouse Site	Address Restricted	Millsboro	1979

Historic Preservation Strategies

- Continue partnering with the State, Preservation Delaware, Inc., local municipalities and private property owners to:
 - Encourage more nominations from Sussex County to the National Register of Historic Places.
 - Share more information about the benefits of historic preservation with local officials and the general public.

- Promote economically viable alternatives to demolition, such as more adaptive reuse, which involves the renovation and reuse of older structures for uses other than their original use.
- Prepare a model ordinance regulating demolition of historic structures and some forms of large scale exterior renovations to historic structures. Send Sussex County staff to the local towns to promote and encourage adoption of these types of regulations. Towns can adopt these types of regulations by applying them to a district or adopting them as an overlay ordinance that applies to buildings meeting certain specific criteria regardless of their location within the town. In presentations to the towns, the County should emphasize regulations on demolition first and promote additional historic preservation regulations as a second priority.
- The County’s first historic preservation priority should be to adopt an ordinance regulating demolition of historic structures. This could be part of a more general demolition permit process that applies to all structures and is specified in the County’s Zoning Ordinance. Among other things, a demolition permit process would help ensure that buildings to be razed are disconnected from all utilities and that the debris is disposed of in accordance with State and federal regulations. It would also give the County the opportunity to review proposed demolitions for historic significance.
- Integrate historic preservation criteria into the County’s development review process. Require information about a site’s historic status to be included as part of the application. Establish historic character as one of the criteria used in variance and conditional use decisions made by the County.

**INTERGOVERNMENTAL
COORDINATION
ELEMENT**

INTERGOVERNMENTAL COORDINATION ELEMENT

Mutual Impacts and Inter-Relationships

Sussex County devotes considerable effort to coordinating with government agencies at several different levels. The County also maintains active working relationships with many non-profit entities that focus on issues of importance to local growth and conservation. This includes direct grants by the County to support many local initiatives and programs. This chapter contains a summary of how Sussex County works with others. Priorities for future intergovernmental efforts are identified. Other ways the County intends to implement this plan are also described.



Other Counties

Within Delaware, Sussex County is adjacent to Kent County in Delaware and the Maryland counties of Caroline, Dorchester, Wicomico, and Worcester. Major development and conservation trends in these nearby jurisdictions influence Sussex County. In turn, significant growth and preservation activities in Sussex County affect traffic volumes, land use patterns, economic development, environmental conditions and other aspects of life in neighboring areas. The Sussex County Council recognizes the importance of these inter-relationships. Sussex County is a member of the Delaware Association of Counties and the National Association of Counties.

Sussex County Municipalities and School Districts

Mutual impacts are a fact of life on a more immediate level between Sussex County and its 25 incorporated municipalities. Decisions the individual towns and cities make about zoning, annexation, development applications, utility services and related topics directly affect nearby unincorporated areas under County jurisdiction. Similarly, many County-level policies regarding these same types of issues impact the incorporated areas. Sussex County works closely with its cities and towns through these municipalities' governing bodies, local chambers of commerce, and the Sussex County Association of Towns (SCAT). In formulating this Comprehensive Plan Update, Sussex County considered the comprehensive plans, annexation intentions, and utility service policies of the local towns and cities. Sussex County is a member of the Delaware League of Local Governments.

Sussex County also has a working relationship with the County's seven school districts and one Countywide district. The County has funded certain special needs projects within these districts.

- Cape Henlopen School District
- Delmar School District
- Indian River School District
- Laurel School District
- Milford School District
- Seaford School District
- Sussex County Technical School District
- Woodbridge School District

State Agencies

In addition to county and municipal influences, activities at the State-level have important implications for Sussex County. The Governor’s initiatives, such as “Livable Delaware” and the policies and regulations administered by Delaware’s State agencies play an important role in the development and preservation of Sussex County. Regarding the matters covered in this comprehensive plan, the following State agencies have a particularly important influence on the County’s policy formulation and decision making:

- Delaware Office of State Planning Coordination
- Delaware Department of Transportation (DelDOT)
- Delaware Department of Natural Resources and Environmental Control (DNREC)
- Delaware Department of Labor
- Delaware Department of Community Development and Housing
- Delaware Department of Agriculture

Sussex County has a special agreement with the State under which the County funds 50% of the costs required to station 36 State Police officers in Sussex County, in addition to those the State funds on its own.

In accordance with Chapter 92 of the Delaware Code, the Office of State Planning Coordination and Sussex County Council co-signed a Memorandum of Understanding in 2003 concerning State review of certain County land use decisions. This agreement recognizes that some County land use decisions can: a) have far-reaching implications; and b) effectively commit resources at all levels of government.

In accordance with this agreement, the following Sussex County land use planning, zoning and development activities require review under the State’s Preliminary Land Use Service (PLUS) system:

- Any Residential Planned Community.
- Major residential subdivisions containing more than 50 dwelling units.
- Any non-residential subdivision or site plan involving the expansion of an existing structure by 25 percent with a total floor area exceeding 75,000 square feet or new construction involving structures or buildings with a total floor area exceeding 75,000 square feet.

- Any rezoning within the Environmentally Sensitive Development District that would increase intensity or residential density.
- Applications for rezoning that are inconsistent with the Sussex County's Comprehensive Plan.
- Any local land use regulation, ordinance or requirement referred to the Office of State Planning Coordination by Sussex County for the purpose of providing the County with advisory comments. These include the modifications to the County's zoning and subdivision ordinances.
- Any amendment, modification or update to the Sussex County Comprehensive Plan.

The County coordinates with State agencies regarding many additional issues:

- The County has entered into three agreements with the Delaware State Police to currently provide 36 additional State Police in Sussex County. The County has budgeted \$1.6-million dollars during fiscal 2008 for this project.
- The County has paid the State of Delaware \$2.1-million dollars toward the purchase of 2,471-acres of development rights from Sussex farmers. Sussex County is the only government to partner every year with the State since 2003.
- The County works closely with DNREC to provide central wastewater service and remove existing septic systems. The County is currently working with DNREC and the City of Rehoboth in reviewing options for a regional wastewater solution which would end Rehoboth's practice of discharging into the Lewes/Rehoboth canal. The County has actively participated in many DNREC meetings regarding the State's proposed pollution control strategy.
- The County works closely with DelDOT in recommending capital road projects in Sussex. The County is requesting authority to issue special development district bonds to fund offsite improvements, such as roads.
- The County works with the Delaware Housing Agency to coordinate efforts such as moderately priced housing and housing rehabilitation programs.
- In 2004 the County contributed \$1.1-million dollars towards a State-owned public safety facility at Bridgeville. More recently, the County agreed to provide \$1.2-million dollars towards the costs of purchasing and renovating an airport hanger for Delaware Technical Community College for a new airframe mechanics training program. Normally, the State of Delaware provides capital funding for Del Tech.
- As part of its open space program, the County also contributed \$1.5-million dollars towards the purchase of 327-acres to be added to the Redden State Forest.

- County staff meets regularly with State agencies on many topics. For example: quarterly meetings with Economic Development office staff, regular meetings with Housing Authority representatives, annual meeting with the State Farm Land Preservation representative, County participation and/or membership on State committees such as Delaware Geographic Information Systems, Emergency Management, Storm Water, Pollution Control Strategy, DelDOT Capital Transportation Program, Clean Water Advisory Council, PLUS, etc.

Future Coordination With the State

In addition to continuing its on-going coordination with the State, Sussex County intends to expand its working relationship with the State in two particular areas:

- The County will review DelDOT planning efforts that address long-term transportation needs in the Sussex County. The establishment of long-term plans for transportation will enable DelDOT to purchase land and easements for future road improvements now while these acquisitions are still available. Long-term plans will also enable DelDOT to work more effectively with new developers to provide funds for planned improvements. The County would like to see property purchases for new roads made in a timely fashion after the location is determined.
- The County intends to solicit advice from DNREC and other relevant State agencies in preparing and reviewing the specific ordinances needed to implement this Comprehensive Plan.

Federal Agencies

Most State agencies also have working relationships with federal entities, such as the U.S. Department of Transportation, the U.S. Department of Housing and Urban Development, the U.S. Fish and Wildlife Service, the U.S. Census Bureau, the Army Corps of Engineers, the Federal Aviation Authority, the Environmental Protection Agency, the U.S. Department of Agriculture, and many others. An important part of many of these relationships involves allocating federal funds to Delaware jurisdictions, including Sussex County, and then monitoring how the local recipients use these funds. The U.S. Fish and Wildlife Service is also a large landowner in the County.

Private Non-Profits

In addition to cooperation with government entities, Sussex County devotes considerable time to coordinating its activities with private non-profit organizations. These organizations typically devote their efforts to a single subject area. In and around the County, the following private non-profits, among many others, have working relationships with Sussex County:

- Sussex County Land Trust
- Sussex County Farm Bureau

- Delaware Farm Bureau
- Delaware Agricultural Lands Preservation Foundation
- Center For the Inland Bays
- Little Assawoman Bay Conservancy
- The Nature Conservancy
- Diamond State Community Land Trust
- Preservation Delaware, Inc.
- First State Manufactured Housing Alliance
- Small Business Development Center
- Service Corps of Retired Executives
- Southern Delaware Tourism
- Various watershed associations
- Youth athletic associations and other recreation providers
- Local trail organizations
- Fire, ambulance and rescue companies
- Local chambers of commerce
- Local historic preservation organizations
- First State Community Action Agency
- Habitat for Humanity

Intergovernmental Coordination Used in Preparing This Plan

The previous parts of this chapter identify the numerous areas where Sussex County coordinates with other levels of government on an on-going basis, including the State, federal agencies, the other Delaware counties, Sussex County municipalities, Sussex County school districts, and relevant private non-profits. As the following text indicates, Sussex County also included intergovernmental coordination in the preparation of this Comprehensive Plan Update, particularly consultation with the County's incorporated municipalities and with relevant Delaware state agencies.

Coordination with the Incorporated Municipalities

As a first step to updating its Future Land Use Plan and Map, Sussex County reviewed the existing or proposed comprehensive plan for each of the County's 25 incorporated municipalities. In preparing its growth and preservation strategy, the County also consulted maps of each municipality's Short-Range Annexation Area, Long-Range Annexation Area, and Area of Interest. Once the Comprehensive Plan Update was prepared in draft form, the County met with representatives of all 25 municipalities to describe the draft plan and talk about any related concerns the municipalities wished to raise. These concerns were then considered before finalizing this Comprehensive Plan Update. As part of the comprehensive planning process, Sussex County also met with the Sussex County Association of Towns (SCAT).

Coordination with the State

As part of preparing its growth and preservation policies, Sussex County reviewed relevant State strategies, particularly those designed to help implement the State's Livable Delaware initiative. The County is fully aware of the State's key role in providing many of the essential services required to serve growth, such as schools, roads, and police protection in unincorporated areas. In preparing this Comprehensive Plan Update, Sussex County coordinated with the State in the following ways:

- Most of the demographic data in this plan is information from the Delaware Population Consortium.
- Most maps in this plan stem from digital base map files or other digital mapping provided by DNREC.
- One to two staff members from the State Office of Planning Coordination attended each of the public meetings Sussex County held in connection with this plan — and actively participated in these meetings. One to two State personnel also participated in each of the meetings Sussex County held with the incorporated municipalities.
- DelDOT authored the Transportation chapter included in this plan.
- In draft form, this plan was reviewed through the State's formal PLUS review process where written comments about the draft plan were prepared by several State departments. A meeting was then held by the State to review these comments with the County.
- The County presented this plan in draft form and described related County policies and accomplishments at a formal meeting of the Livable Delaware Advisory Council.
- Subsequent to the two formal meetings noted directly above, Sussex County staff members and the County's planning consultant met in workshop formats with representatives of the Office of State Planning Coordination, DNREC, DelDOT and the Governor's Office. These meetings focused on revisions the draft plan needed to: a) qualify for State certification; and b) conform more closely with State objectives on growth, open space, farmland preservation, infrastructure, and related topics. Sussex County then made several changes to its draft plan based on the discussions held at these workshop meetings.

Sussex County prepared its recent Source Water Protection ordinance in close coordination with DNREC staff members. Sussex County hopes in the future to continue coordinating with the State on growth management matters, particularly as the County drafts the ordinances needed to implement this plan, such as a Transfer of Development Rights (TDR) ordinance, among many others.

Intergovernmental Coordination Strategies

- Expand coordination with the County's 25 towns and cities, with particular focus on annexation, municipal zoning, future utility service areas, road improvements, large development applications, and historic preservation.
- Work closely with the Delaware Office of State Planning Coordination on the following matters that Sussex County views as critical:
 - Updating of the County Zoning Ordinance (which will include additional community design standards) to better coordinate County and State perspectives on developments reviewed through the PLUS system.
 - Establishment of an effective, County-sponsored Transfer of Development Rights (TDR) system in Sussex County.
 - Confirmation that the future boundaries of State Priority Spending Areas (Levels I through IV) match the growth area delineations described in this Comprehensive Plan Update.
- Coordinate with DelDOT in completing current and future traffic studies, in prioritizing the implementation of the road improvements recommended in those studies, and in new ways to fund road improvements.
- Work with the Delaware Department of Agriculture Department to preserve more Sussex County farms through agricultural preservation easements and maximize the value of the compensation paid to the landowners.
- Cooperate with DNREC and relevant non-profits to formulate stronger, yet locally acceptable, regulations for better protecting groundwater, waterways, sensitive habitat areas and other critical natural lands in Sussex County.
- Work with DNREC and the Delaware Department of Agriculture to continue adding appropriate properties to the inventory of State-owned lands in Sussex County, particularly to link together existing State-owned forests.
- Seek guidance from the Delaware Department of Community Development and Housing, and relevant non-profits on how best to continue expanding Sussex County's response to local affordable housing problems.

- Work with all of the relevant state agencies and non-profit services to attract more higher-paying and diverse businesses to locate in Sussex County.
- Expand the number of State Police officers stationed in Sussex County by continuing to fund 50% of new officers above and beyond the County's base allocation from the State.
- Continue seeking advice from, and providing County financial support to, appropriate non-profit organizations that serve Sussex County in an exemplary way.

Plan Implementation Priorities

The intergovernmental coordination strategies enumerated above will be key in implementing this Comprehensive Plan Update. Selected updates to the County's Zoning Ordinance and the County's Subdivision Code will also be critical to ensure that appropriate recommendations in this plan are translated into enforceable regulations.

The Zoning Ordinance

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

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

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

Subdivision Code

The County's Subdivision Code mainly regulates the creation of new lots, the construction of new streets by developers, and related improvements associated with new development. Updates to the Subdivision Code could include innovative ways to manage stormwater in a more environmentally friendly manner through use of "best management practices (BMPs). This includes greater use of measures to promote infiltration into the groundwater and to filter pollutants out of runoff. This Comprehensive Plan Update will lead promptly to the revision of selected regulations in Sussex County's Subdivision Code.

Funding Sources

Beyond intergovernmental coordination and regulatory revisions, funding sources will be critical to implementing this Plan. This means adequate allocations to County departments and others from Sussex County's annual operating budget. For larger endeavors, Sussex County will also depend on its capital improvements programming. State and federal funds will continue to be absolutely essential to carrying out this plan.

Sussex County Capital Improvement Program 2008–2012

Sussex County Council adopted its most recent budget on June 19, 2007. In addition to describing operating costs and revenues for Fiscal Year 2008, a Capital Project Program is included for FY 2008 through FY 2012. This Capital Projects Program divides anticipated capital projects into two types: a) Non-Sewer and Water Projects; and b) Sewer and Water Projects.

As the name implies Non-Sewer and Water Projects include capital projects the County will undertake that are not related to public sewer or public water improvements. For example, the County is committed to investing over \$20 million dollars in the Sussex County Industrial Airpark to continue adding jobs and benefitting the County's economy. The largest employer at the airpark has grown from 50 jobs in 1997 to over 600 in February 2008. Extending the airport runway from 5,000 to 6,000 feet will help provide additional jobs there.

The County's capital improvement program reflects population growth in the County. Projects are planned to expand libraries, build a larger emergency operation center, and construct additional County administration office space. Sussex County funds Non-Sewer and Water capital improvements from general revenues.

Sewer and Water Projects are capital improvements that Sussex County will undertake to protect environmental conditions in its 18 sewer and water districts. These projects are designed primarily to extend County wastewater conveyance and treatment services into areas that currently use on-site septic systems. Sewer and Water projects also include expansions and upgrades to the four wastewater treatment plants that Sussex County owns and operates. The County funds its capital Sewer and Water Projects through two types of user fees: assessment charges to recover the costs of bond funds borrowed for specific projects, and one-time fees that new customers must pay for connecting to the County's system.

The following table shows the costs of capital improvements Sussex County now plans for FY 2008 through FY 2012. The revenue sources the County anticipates using to pay for these projects are also shown.

Table 20
Sussex County Council – Capital Project Program for Fiscal 2008–2012

Project	Total for Fiscal 2008 Thru Fiscal 2012	2008	2009	2010	2011	2012
NON-SEWER AND WATER PROJECTS:						
Airport – Runway 10-28	4,410,000	4,410,000				
Airport – Tie Down Ramps	50,000	50,000				
Airport – Extend Runway 4-22	16,545,000	745,000	800,000	8,000,000	7,000,000	
Airport – Perimeter Fence Upgrade	120,000	120,000				
Airport – Clear Zone	4,736,000	2,900,000	1,836,000			
Airport / Industrial Park – Street Lighting System	35,000	35,000				
Airport – Stormwater Improvements	100,000	100,000				
Airport – Wetlands Mitigation Phase 2 Design	250,000		250,000			
Airport / Industrial Park – New Guard House	32,000	32,000				
Airport / Industrial Park – Water System	2,500,000	2,500,000				
Industrial Park Expansion	1,000,000					1,000,000
County Administration Building – Roof Repair	750,000	750,000				
Administrative Building	22,000,000	2,000,000	10,000,000	10,000,000		
County Administration Record Storage	100,000	100,000				
Library – Greenwood Library	2,300,000	224,000	1,038,000	1,038,000		
Library – South Coastal Building Expansion	6,500,000	4,000,000	2,500,000			
Library – Milton Second Floor	641,000	641,000				
Suburban Street Projects	1,885,000	685,000	300,000	300,000	300,000	300,000
Landfill Postclosure Costs	2,692,794	1,492,794	300,000	300,000	300,000	300,000

Project	Total for Fiscal 2008 Thru Fiscal 2012	2008	2009	2010	2011	2012
Communication Building	1,500,000		1,000,000	500,000		
Airport – RW I-18 Parallel	300,000					300,000
WATER AND SEWER DISTRICT PROJECTS:						
Angola Sewer District	35,600,000	1,000,000	17,300,000	17,300,000		
Holt’s Landing Sewer – Mallard Creek Expansion	1,700,000	850,000	850,000			
Oak Orchard Expansion	13,986,000	500,000	500,000	8,500,000	4,486,000	
Dewey Water – Office Trailer	24,030	24,030				
Dewey Water – Generator P.S. 1	32,000	32,000				
Dewey Sewer – Spare Pump	20,000	20,000				
Dewey Sewer – 2 Generators – 2 & 4	62,000	62,000				
Bethany Sewer – Spare Pump	10,000	10,000				
South Bethany Sewer – Manhole Restoration	20,000	20,000				
South Bethany Sewer – Spare Pump	10,000	10,000				
South Bethany Sewer – Replace Control Cabinet	23,000	23,000				
Blades Sewer – Spare Pump	10,000	10,000				
Blades Sewer – Generator	36,000	36,000				
Blades Sewer – Expand Collection / Transmission	16,000,000		1,000,000	7,500,000	7,500,000	
Dags. Frankford Sewer – Replace Pump St. 8	35,000	35,000				
Dags. Frankford Sewer – Spare Pump	10,000	10,000				
Dags. Frankford – Collection / Transmission	8,440,000	640,000	2,600,000	2,600,000	2,600,000	
Piney Neck Expansion – Additional Treatment	10,200,000	600,000	4,800,000	4,800,000		
Dags. Frankford Sewer – Delaware Avenue Extension	373,308	373,308				

Project	Total for Fiscal 2008 Thru Fiscal 2012	2008	2009	2010	2011	2012
Dags. Frankford Sewer – Prince George’s Acr	800,000	800,000				
Fenwick – Spare Pump	10,000	10,000				
Fenwick – Rt. 54 Transmission Upgrade	1,900,000		1,900,000			
Holt’s Landing Sewer – Spare Pump	10,000	10,000				
IBRWF – Pump for Washdown Station	10,000	10,000				
IBRWF – Rebuild Irrigation Pump	25,000	25,000				
IBRWF – 2 Aerator Motors	20,000	20,000				
IBRWF – Utility Truck with 3,200 lb. Hoist	57,000	57,000				
IBRWF – Expansion	26,000,000	500,000	12,750,000	12,750,000		
Johnson Corner	13,700,000	800,000	6,450,000	6,450,000		
Long Neck – 3 5HP Pumps	20,000	20,000				
Long Neck – Generator P.S. 71	37,000	37,000				
Long Neck – Rebuilt 4 Pump Stations	87,500	87,500				
Long Neck – Replace Pumps at 74 & 78	30,000	30,000				
Miller Creek Sewer District	10,000,000	4,750,000	4,750,000	500,000		
Oak Orchard Sewer District	750,000	750,000				
Millville Sewer	29,579,000	14,779,000	12,000,000	2,800,000		
SCRWF – Cleaning / Maintenance of Force Main	100,000	100,000				
SCRWF – Close 5 Bays of Pole Barn	38,000	38,000				
SCRWF – Pump Station 30 Design for Expansion	13,245,000	345,000	6,450,000	6,450,000		
SCRWF – VFD’S – 3 Stations	20,000	20,000				
SCRWF – Rewind Primary Transformer	21,000	21,000				

Project	Total for Fiscal 2008 Thru Fiscal 2012	2008	2009	2010	2011	2012
SCRWF – Pump for Filter Pump Station	12,000	12,000				
SCRWF – Administration Maintenance Building	1,775,117	1,775,117				
SCRWF – Expansion and Upgrade	1,000,000	1,000,000				
SCUDA – SCADA and Tower Upgrades	552,500	552,500				
SCUDA – Tools and Work Equipment	41,600	41,600				
SCUDA – Office and Computer Equipment	31,590	31,590				
SCUDA – Transportation Equipment	257,700	257,700				
Pump Station Upgrades	500,000					500,000
Western Sussex Sewer District	20,000,000	750,000	750,000	9,250,000	9,250,000	
West Reh. Sewer – 3 – 5HP Pumps	20,000	20,000				
West Reh. Sewer – Lower Manholes on Rt. 270	40,000	40,000				
West Reh. Sewer – Upgrade Controls at 5 Stations	20,000	20,000				
West Reh. Sewer – Replace Pumps at 5 Stations	23,500	23,500				
West Reh. Sewer – Rebuild PS. 201	12,000	12,000				
West Reh. Sewer – Paving	10,000	10,000				
West Reh. Sewer – Replace Heating and Air System	42,000	42,000				
West Reh. Sewer – Aerator Rebuilds	10,000	10,000				
West Reh. Sewer – Kjelda Digestion System	12,200	12,200				
West Reh. Sewer – Pinetown Extension	568,700	568,700				
West Reh. Sewer – Treatment Expansion	22,000,000	500,000	1,000,000	10,000,000	9,000,000	1,500,000
TOTAL	298,426,539	53,928,539	91,124,000	109,038,000	40,436,000	3,900,000

Project	Total for Fiscal 2008 Thru Fiscal 2012	2008	2009	2010	2011	2012
FUNDING:						
GENERAL FUND	43,219,694	16,077,044	12,941,150	11,819,000	775,000	1,607,500
WATER & SEWER	25,532,737	4,982,737	4,350,000	9,200,000	5,000,000	2,000,000
FEDERAL GRANTS	35,222,621	5,497,721	3,521,700	16,268,200	9,650,000	285,000
STATE GRANTS	9,166,900	4,904,250	3,361,150	719,000	175,000	7,500
BONDS (STATE, RD & COUNTY)	170,884,587	10,966,787	64,050,000	71,031,800	24,836,000	
OTHER	14,400,000	11,500,000	2,900,000			
TOTAL	298,426,539	53,928,539	91,124,000	109,038,000	40,436,000	3,900,000

**COMMUNITY DESIGN
ELEMENT**

COMMUNITY DESIGN ELEMENT

Better Community Design Through County Regulations and Incentives

At one time, Sussex County consisted mainly of small towns surrounded by rural countryside. The towns were characterized by compact neighborhoods, small-town “Main Street” business areas, and a mix of traditional architectural styles. The rural areas featured working family farms, crossroads villages and extensive woodlands, all connected by country roads.

Sussex County is still an attractive place, with many towns having elements of their traditional character and style. Much of the rural countryside remains picturesque farmland. Many new developments have included well-designed open spaces and carefully designed buildings and amenities. However, crowded highways, strip commercial development, cookie cutter subdivisions, nondescript construction, and other aspects of suburban sprawl now exist in some areas. In certain areas of the County’s eastern sector and along some higher volume state roads, there little physical distinction between the town and the country.

The key is to design modern land uses in a manner that adds to the character of the community, instead of intruding into it. Some of these changes have expanded economic opportunities, brought commercial services, provided new housing opportunities and created convenient road connections. Yet, too often new construction has occurred with little thought towards design, causing parts of Sussex County to have the same overly-standardized appearance as many other parts of the country.

This Plan recognizes that change is inevitable. At the same time, the County is looking for the best ways to direct the location, appearance and function of new development. This chapter discusses how to use zoning, subdivision regulations and other means to produce development that is based on rational site planning, and forward-thinking design. Many of the techniques discussed illustrate how to incorporate open space and traditional design elements into new settings, an attempt to draw from the best of the old and the best of the new.

It also is important to maintain an attractive environment for economic development reasons. Visitors and new residents come to Sussex County for an attractive setting, where they can enjoy waterways, beaches and other natural areas. If Sussex County becomes unattractive, with garish signs, excessive numbers of billboards, destruction of natural features, and monotonous construction, it will harm economic growth.

Promoting Traditional Patterns of Development

Traditional Neighborhood Development – Better design through “Traditional neighborhood development” involves: a) making sure new development fits into the character of existing older neighborhoods and b) encouraging new development that incorporates the best features of older development. This involves extending the best features of the older areas into new neighborhoods.

This Plan encourages this concept. Traditional neighborhood development primarily involves the following:

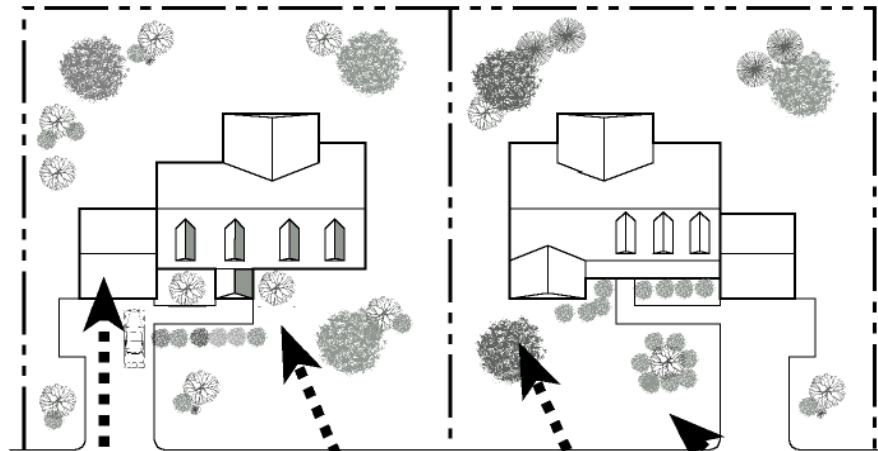
- Street trees should be planted to eventually provide a canopy of shade over streets. Studies show that mature street trees can increase the value of homes up to 10 percent. If it is not appropriate to have shade trees in the right-of-way, they can be required immediately outside of the right-of-way.
- New street lights should meet a design standard that is similar to older styles of street lights.
- Sidewalks should be provided (or asphalt paths along main roads in rural areas). There should be an orientation to pedestrians, with an ability to walk or bicycle to stores, schools and parks. Overly wide residential streets and intersections should be avoided to discourage speeding and to make it easier for pedestrians to cross the street.
- A modest density should be encouraged that is similar to the typical development that occurred during the 1930s through 1940s. This density (such as 5 to 10 homes per acre) should make best use of available land, while avoiding overly dense development and parking problems.
- Whenever practical, parking should be located to the rear or side of buildings, so that the front yard can be landscaped. At best, parking and garages would be placed to the rear of lots, with access using alleys. This design avoids conflicts between sidewalks and vehicles backing into the street, and allows the entire curbside to be available for on-street parking.
 - If rear access to garages is not practical, then garages should enter onto the side of homes whenever possible, particularly on corner lots. If a front-entrance garage is proposed, it should be designed so that it is not an overly prominent part of the street. For example, a one lane driveway can pass along the side of a house and then widen to enter a two-car garage that is setback from the front of the house. "Snout" houses should be avoided that have a front entrance garage as the home's most prominent feature.
- Buildings should be placed relatively close to the street, with front or side porches, to encourage interaction among neighbors. On a corner lot, a side porch can have the same effect. If residents spend time on their front porch, they can help oversee the neighborhood and report suspicious activity to the police.

The County could provide incentives to promote these features, such as a density bonus and reduced dimensional requirements. Traditional neighborhood development can be particularly attractive to developers by allowing single family lots that are more narrow than would otherwise be allowed. This reduction in lot width can result in dramatic reductions in the average costs of improvements per housing unit. Allowing relatively narrow single family detached lots can also provide an alternative to building townhouses - at a similar density.

- Many of the traditional neighborhood development ideas can be incorporated through the current Residential Planned Community option, which is described later in this chapter.

Suburban vs. Neotraditional Design

Suburban Design

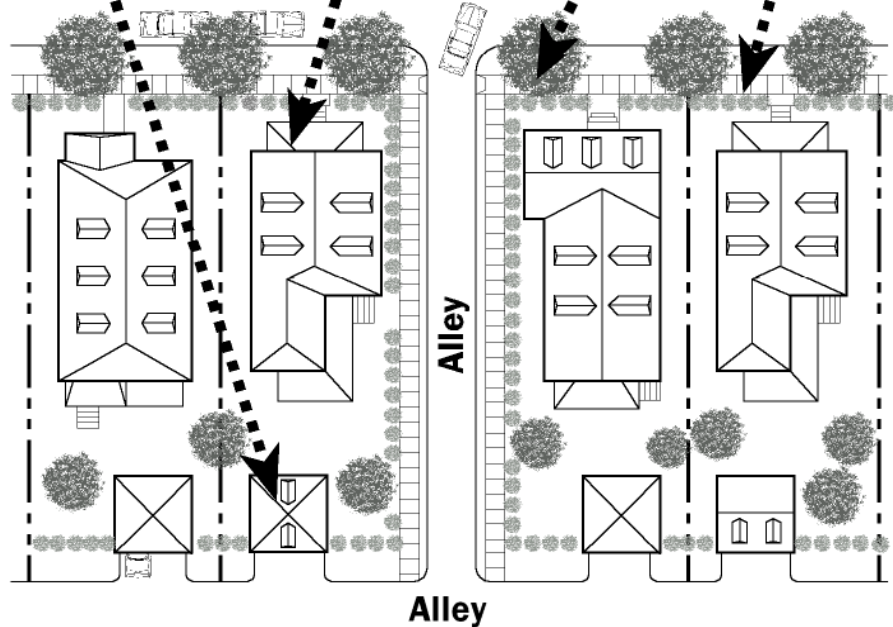


Garages forward
Garages on alleys

Deep front yards
Shallow yards, porches

Trees in yards
Trees along street

No Sidewalks
Sidewalks



Alley

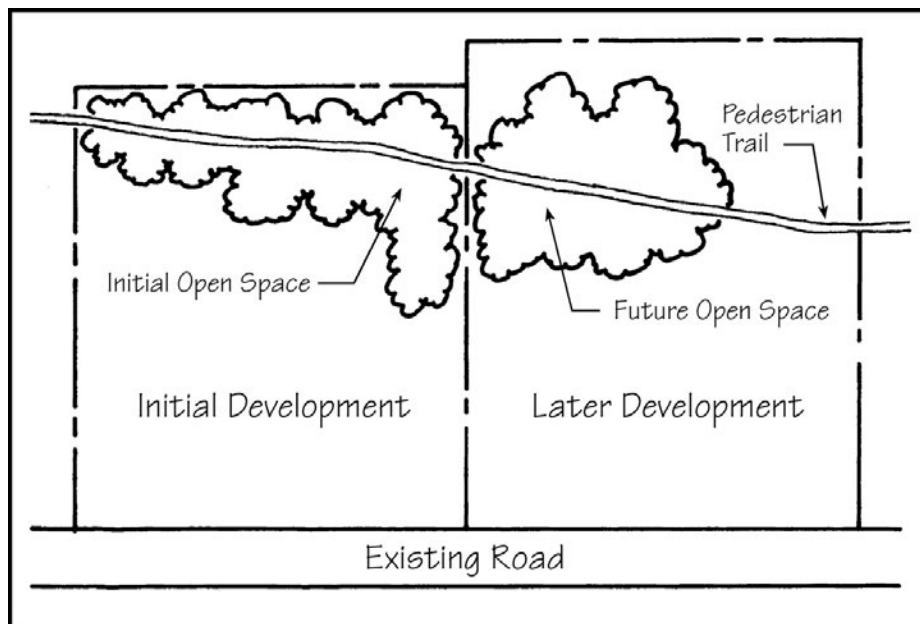
Neotraditional Design

Design Standards

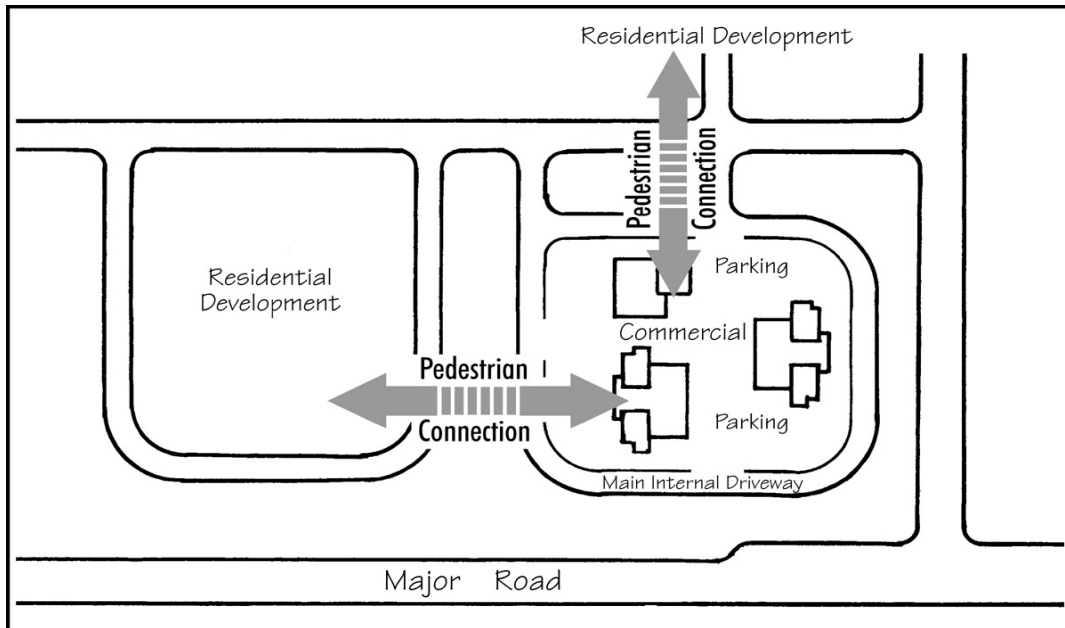
The following design standards should be considered in new development.



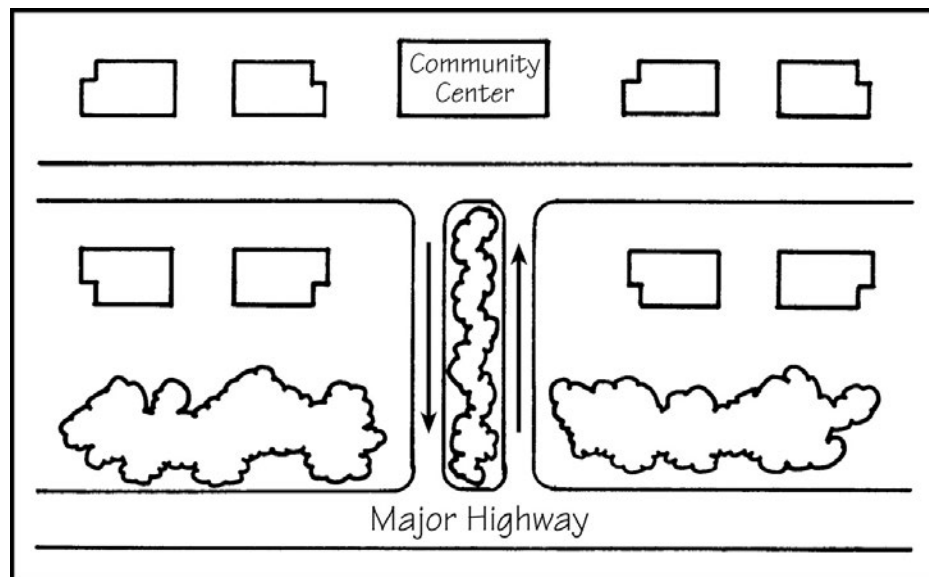
Pitched roofs, varied rooflines and architectural details can add visual interest, even for chain stores.



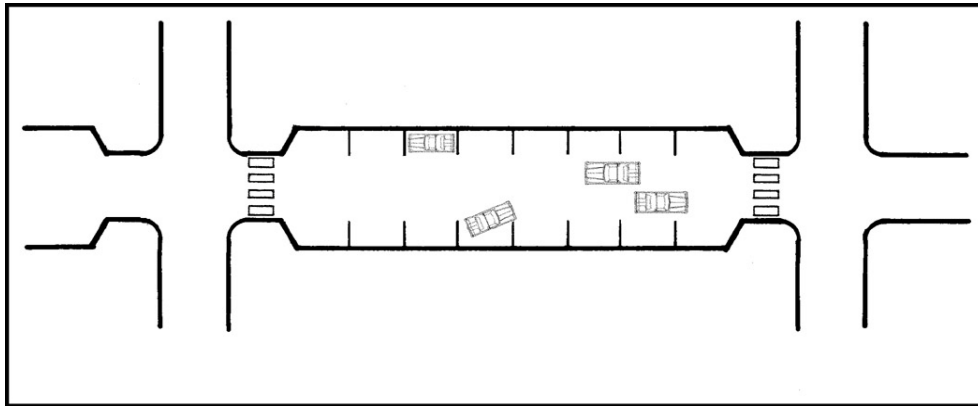
Open spaces and trails should be coordinated across various developments. When considering open space and trail locations in a current proposed development, future linkages on adjacent future development tracts should be considered.



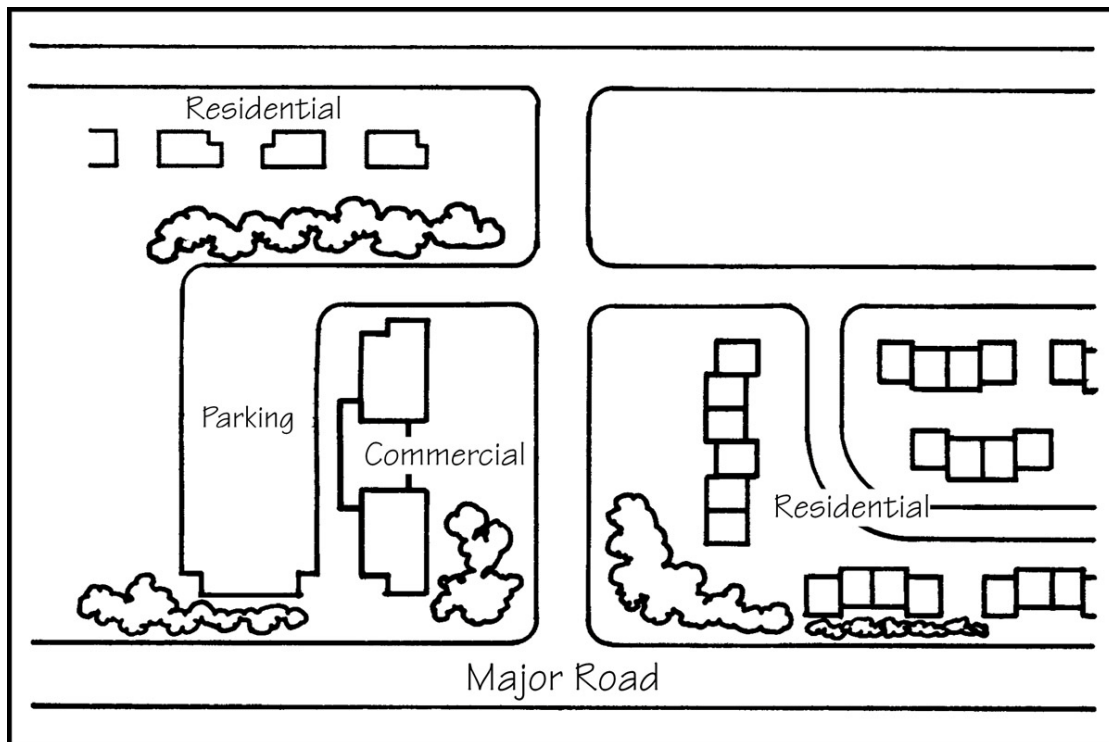
Pedestrian and bicycle connections should be provided between various developments. Where a road does not provide a connection, a hard-surfaced pedestrian easement should be provided. In larger commercial developments, most vehicle traffic should be directed to routes that do not conflict with the main pedestrian entrances from parking lots.



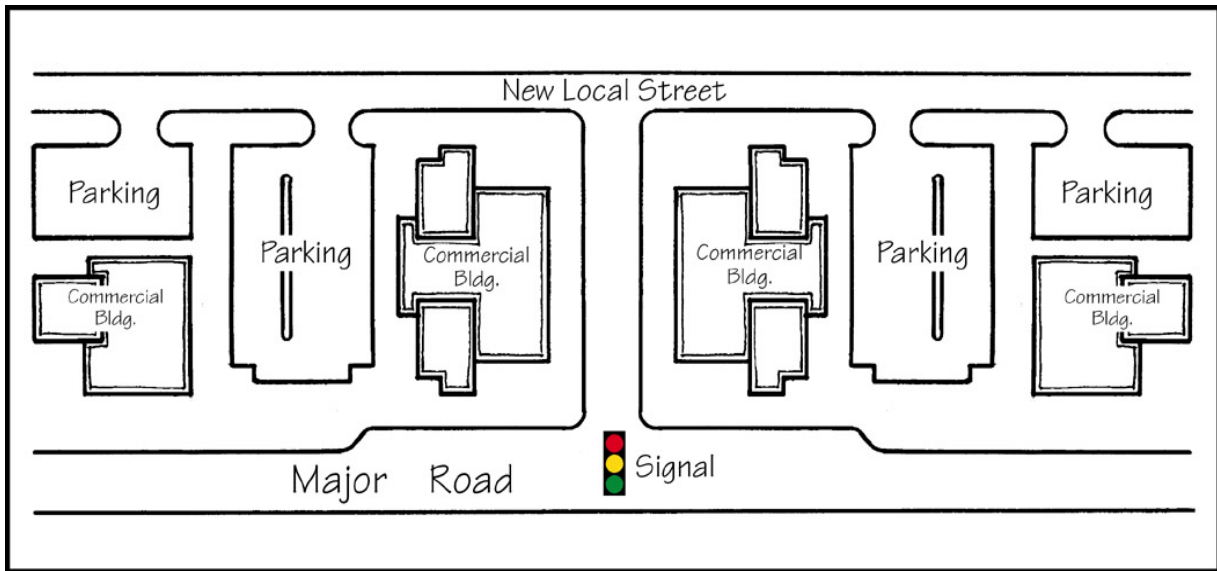
A well landscaped boulevard-style entrance can provide a great first impression. Along major roads, reverse frontage lots should be used to minimize the number of driveways entering onto major roads. When rear yards face onto a major road, they should be separated by landscaping, with any fencing on the inside of the landscaping. Open space should be provided along major roads to maintain some of the rural character and to reduce noise conflicts between homes and traffic.



On residential and some downtown streets, curbs should be extended outward at intersections so there is less width of street that needs to be crossed by pedestrians. The street can then be widened where on-street parking spaces are provided. By reducing the street width where there is not a need for parking, it reduces the amount of pavement and runoff and reduces construction and maintenance costs.



In larger residential developments, an area of neighborhood-oriented stores and services is desirable to serve local needs. Well-distributed commercial areas throughout the County can reduce the lengths of driving trips for everyday needs. The commercial area should be well-buffered from homes by landscaping.



Commercial buildings should be encouraged to be placed relatively close to the road, provided they still allow proper sight distance and room for future road widening. Most vehicle parking should be placed to the rear or side of buildings. At best, a new street or alley or interconnected parking aisles should be provided parallel to the major road so that most traffic can access the main road at a traffic signal.

Development Standards

Residential Planned Community (RPC) – There should continue to be RPC provisions in the County’s Zoning Ordinance to allow flexibility in the standards for larger developments, in return for a higher quality of site design. An applicant may ask the County to add this option to their property as an option to the regular zoning provisions. Similar provisions are in place in many of the towns, and should be further encouraged.

- These provisions usually allow a mix of housing types, including singles, townhouses and apartments.
- The density for a RPC should be slightly higher than the density that is possible without use of the RPC provisions, in order to provide an incentive.
- A RPC should continue to allow a percentage of the tract (such as up to 15 percent) to be developed in neighborhood-oriented commercial uses that are highly compatible with homes. A specific list of allowed uses and maximum sizes for businesses would be appropriate. Moreover, first floor commercial uses should be allowed with apartments on upper stories.
- The RPC provisions give the County the authority to modify zoning requirements, such as setbacks, within a RPC development. The County should also be able to reduce street widths.
- A set of design standards should be promoted. Use of alleys should be encouraged to allow rear driveways and rear garages.

- A minimum percentage of the tract should be required to be preserved in open space. There currently is no minimum open space requirement. Greater attention is needed to the design of the open space to make sure it serves a valuable public purpose and is inter-connected. The amount of open space can vary with the allowed density, based upon the underlying zoning district.

Maximum Building Setbacks and Limits on Front Yard Parking – In key older areas of the County (including parts of the towns and cities), it may be appropriate to specifically establish a maximum building setback. The goal is to have new construction be consistent with prevailing setbacks along a block of older buildings. The code can also limit new parking in the front yard in older areas. The goal is to encourage front yard setbacks that are relatively small, but well-landscaped. Front porches should be encouraged. Where an alley is available or could be feasibly extended, a developer could be required to have driveways and garages access that alley, as opposed to having a front garage door. Garage doors and driveways can also be promoted to use the less heavily traveled street on a corner lot.

Buffering and Landscaping – A much greater emphasis is needed on buffering and landscaping. A high impervious coverage can still be attractive with the proper landscaping. Street trees and shade in parking lots should also be required. Buffering is particularly important between new businesses and residential neighborhoods. A buffer yard in some cases can be strengthened with a berm. To minimize the amount of land that is consumed by a berm, a retaining wall could be used on the business side of the berm. The County should also have the authority to require fencing when needed on the business side of buffer yard landscaping.

Preserved Open Space Within New Developments

Cluster development or “open space development” involves providing incentives for the permanent preservation of a substantial percentage of the land within a new development. In a cluster development, the land is typically owned and maintained by a homeowner association, although other methods of ownership are possible. The homes are allowed to be placed on smaller lots than would normally be required, or different types of housing types are allowed, to offset the land used as open space. The County offers greater flexibility in lot sizes and dimensions in return for the open space. The open space is permanently preserved by a conservation easement, that prevents future subdivision or building on the open space.

In comparison, conventional subdivisions usually result in little or no preserved open space (except wetlands) because the entire tract is subdivided into building lots. Often, most of the building lots in a conventional subdivision are virtually the same size and shape—hence the nickname “Cookie Cutter Subdivisions.”

The preserved open space should be used to help to maintain the scenic character of the County by preserving landscaped open areas along major roads and to maintain forested buffers between developments. Forested buffers should also be required between new residential developments and adjacent farmland.

Preserved open space can often increase values of adjacent homes. Open space development can also help retain more naturalistic stormwater patterns, which promotes groundwater recharge and protects water quality. This is because stormwater swales can be wider and vegetated, as opposed to having stormwater piped or constrained within narrow channels to avoid losing density.

Cluster development also permits the developer to reduce road lengths, amounts of grading and lengths of utility lines - each of which saves on construction and maintenance costs.

Sussex County has promoted use of cluster development. The cluster option has been very widely used in recent years, particularly in the AR-1 zoning district, which covers most of the undeveloped land areas in the County. The cluster option has made it more economical to develop central water and sewage systems in rural locations. However, there have been insufficient controls on the types of lands that are allowed to be counted as open space.

In cluster development, the applicant should need to show that the development has been carefully located to protect important natural areas, including mature forests and waterways. Open spaces should be required to be linked together, as opposed to being smaller fragmented areas. Narrow areas should not count as open space. Land areas should not be allowed to be counted towards the required open space unless they serve the residents of a community. Consideration should be given to whether wetlands should not count as open space. Stormwater ponds should only count as open space if they are designed to resemble a natural pond or are suitable for a recreational purpose. Careful attention should be focused upon what types of water and sewage facilities should be allowed to count as open space. Generally, spray irrigation fields and well sites should be able to count as open space, but other treatment facilities should not. Also, golf courses can be suitable for open space, as long as there also is a recreation area that is available for use by all residents.

Trees should be planted in open space areas where appropriate. Landscape tree specimens should be planted in active open space areas where appropriate, particularly around playgrounds.

It may be desirable to allow a reduction in the amount of active open space if the developer provides substantial recreation facilities. However, if a pool, recreation center, or community center are built, significant forethought must be put into determining how these facilities will be operated, maintained, and funded.

It is important to make sure that clustering would not dramatically increase the total number of homes built in the County, unless it is offset by funding the preservation of land on other sites.

Several alternatives exist for long term maintenance of the preserved open space, including ownership by a legally-binding homeowners association, the County, or a land trust. The areas needing the least maintenance would be areas preserved in forests or wetlands. In some cases, the open space could remain in one large agricultural use or a horse farm, with pedestrian trails around the edge of the farm for use by the residents.

Wherever feasible, open space should be provided in locations that can connect to existing public or semi-public open spaces or preserve land along a waterway. Required open spaces should be

required to include pedestrian trails that are accessible by the residents, and preferably by the public. The trails should connect to other neighborhoods, nearby commercial areas and public lands.

Water Features

As described in the Natural Features Element, wetlands and uplands along waterways should be preserved as passive open space. Existing native vegetation should be retained and additional native plantings should be considered in areas where natural vegetation is sparse.

To the extent possible, trails should be constructed on upland areas. If a wetland must be crossed, the wetland crossing should be the shortest distance possible and the walkway should be elevated. In tidal wetlands, the boardwalk should be elevated to allow vegetation to grow under the boardwalk.

Green Architecture and Green Site Design

“Green Architecture” involves types of construction that is designed to be environmentally friendly, healthy for its occupants, and very energy-efficient. It often involves use of solar energy, which may simply involve “passive” solar heating and maximum use of natural sunlight for internal lighting. An emphasis is placed upon minimizing the amount of fossil fuels that must be used for heating, air conditioning and ventilation.

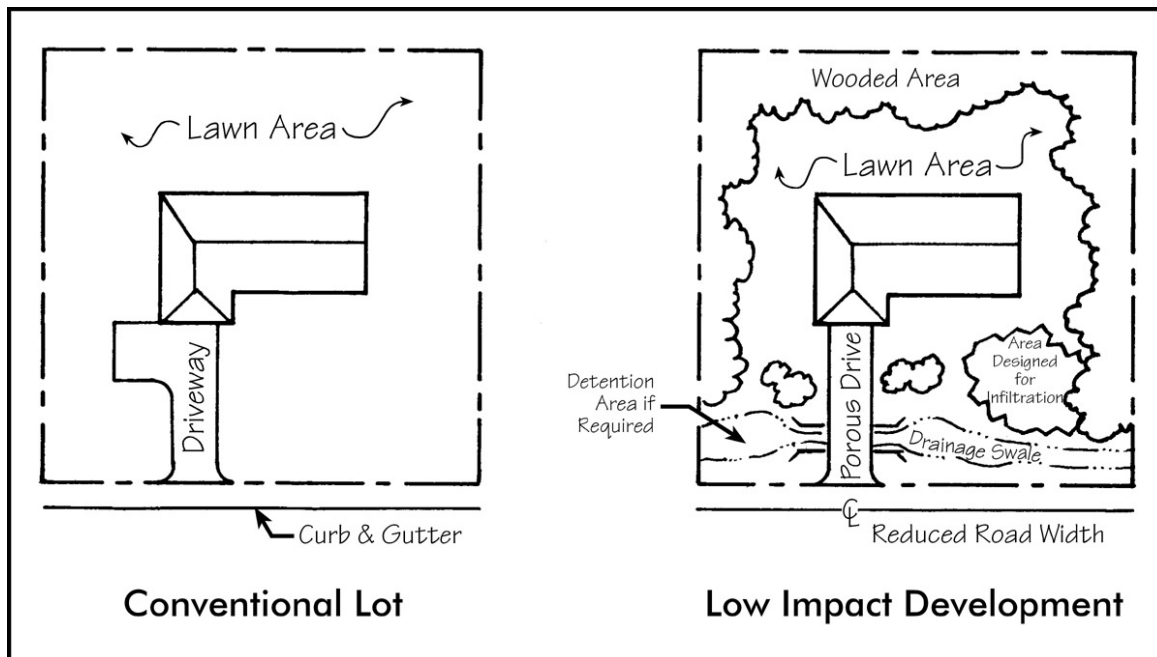
A simple principle is to locate buildings to maximize southern exposure to the sun. This involves placing large number of windows on the south side of a building, to allow natural heating and lighting. Deciduous trees should then be planted along the south side of the building, to avoid excessive heat during the Summer, while allowing the sun through in the winter. Evergreen trees should be planted on the north and west sides of a building to block winter winds and provide shade. If buildings in a development are constructed to use solar energy, there should be deed restrictions to avoid future obstructions on adjacent lots.

Green construction also seeks to promote recharge of stormwater into the ground. This can be accomplished through rain gardens (which are landscaped depressions on a site), infiltration trenches (which are filled with stones above a geotextile), long and wide vegetated swales, and other methods.

When stormwater is directed to long relatively flat swales or vegetated filter strips, it not only promotes recharge, but also filters out eroded soil and certain other pollutants before they reach waterways.

Sussex County hopes to establish three new incentives to encourage green design:

- A possible partial building permit rebate for projects in developing areas that receive federal Energy Star certification.
- Possible expedited review at the County and State levels for projects within the environmentally sensitive developing areas that incorporate an approved checklist of green design features.
- A possible increase in maximum building height and density for mixed use developments in Town Centers for up to twelve units per acre provided: a) the development receives a County-adopted LEED-type certification which rewards green design and construction techniques; and b) the development receives conditional use approval.



The sketches above compares a lot that is mostly grass with stormwater directed into the gutter of a street, to a lot with much lower environmental impacts. The low impact lot involves directing some runoff into an area to recharge into the ground, and using drainage swales that filter out some pollutants before the water reaches a waterway. The low impact lot also maximizes the amount of the lot covered by trees.

To minimize environmental impact, there should be efforts to minimize the total land areas that are covered by surfaces that are “impervious” to water. This involves clustering homes on portions of a site, which reduces the amount of pavement per home. Excessive widths of streets should be avoided. Green construction also promotes use of pervious pavement. This can involve porous concrete or pervious asphalt. In both cases, the mix does not include fines, so that some runoff can pass through the pavement. A stone base is used and then a geotextile to filter the runoff underground. Pervious pavement is particularly useful in portions of parking areas that are not used on a daily basis and in pedestrian areas. Less used parking areas can also be constructed with grass that is grown within a grid material.

Whenever practical, the turnaround of a cul-de-sac street should include a landscaped island. This island improves the appearance and reduces runoff.

Natural drainage flow paths should be maintained. Drainage from rooftops should be directed into vegetated areas on each lot, as opposed to be directed to large stormwater systems. The amount of land area that is disturbed at various times during construction should be minimized. Plantings of many open space areas should be encouraged to result in their eventual re-forestation. Streets and parking lots should be periodically mechanically swept to collect pollutants before they reach waterways.

Infiltration measures need to be carefully designed and maintained in order to function properly. Otherwise, they can become clogged with sediment. Many measures are described in the report entitled “Green Technology: The Delaware Urban Runoff Management Approach,” which is available for free on the DNREC website.

Stormwater ponds ideally would be designed to hold water for several hours or more to allow pollutants to separate from runoff. However, if the ponds retain water for more than 24 hours, aeration is desirable to avoid breeding of mosquitos.



An example of a green roof, with vegetation over vehicle garages in an apartment complex.

A “flag lot” is a lot that has a narrow land area connecting the main part of the lot to a road. The narrow stretch includes the driveway. Flag lots should be controlled so they are not overly used. However, one or two flag lots within a development can be beneficial at the end of a road to allow a greatly reduced length of road.

The LEED Certification process is available to recognize buildings that best comply with these principles. The LEED certification was originally designed for very large commercial and public buildings, but is not being expanded to other types of construction. The National Association of Homebuilders also has prepared a set of Green Building Principles. It may be appropriate for the County's Zoning Ordinance to provide incentives for buildings that meet a national certification process.

For example, a green certified building could be allowed to have a higher percentage of the lot covered by buildings and/or paving, or a taller height.

Signs

The sizes and heights of signs should be controlled to maintain the attractiveness of the County. In particular, billboards should be limited in their sizes (such as 300 square feet), their locations, and the minimum distances between billboards. Electronically changing signs should be limited in how often they can change to avoid distractions to motorists. Flashing and animated signs should be prohibited.

MOBILITY ELEMENT

MOBILITY ELEMENT

Transportation Plan Update

This Sussex County Mobility Element coordinates transportation planning to support future land use changes anticipated in the county by the year 2030.

A long-range, strategic approach is imperative in light of the challenges Sussex County faces. Land development practices have shaped an auto-dependent environment, contributing to congestion and unacceptable air quality. Development has also consumed a large amount of open space, eliminating farmland, animal habitat, and threatening the character and quality of life enjoyed by residents and visitors. In contrast, by coordinating land use and transportation, quality of life can be preserved for current and future generations.

Linking transportation and land use is challenging because different entities are responsible for transportation improvements and land use approvals. DelDOT is responsible for 86 percent of the roads in Sussex County across all functional classifications and has statutory responsibility to plan, construct, and maintain the state highway system and to approve all access to it.

Sussex County Council is responsible for all land use decisions in the unincorporated areas of the County, while 25 separate municipalities are responsible for land use decisions within incorporated municipal limits. These land use and planning entities are responsible for comprehensive land use planning and enacting ordinances to support the land use plans. The County and municipalities review, approve, or deny site plans, subdivisions, and other zoning changes. Land use decisions made without understanding their full impact to the transportation system can lead to costly unintended consequences. As the rural County becomes more urbanized, the land use and transportation linkage becomes even more important.

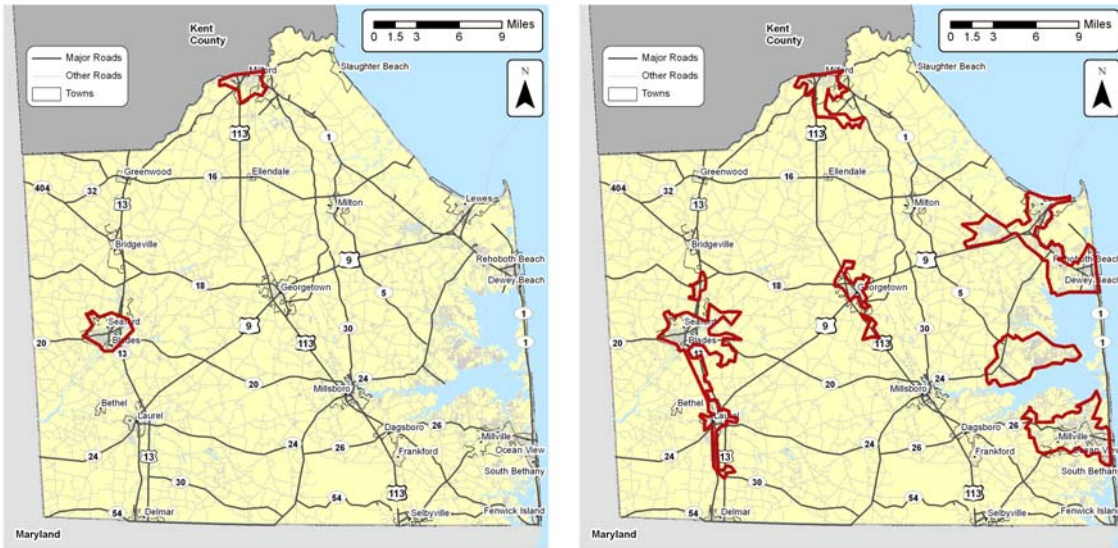
Coordinated land use and transportation planning requires the participation of all stakeholders. Sussex County, its 25 municipalities, DelDOT, and the State of Delaware are all committed to growth in a coordinated manner. These entities need to work together so that land development complies with state land use policies and investment strategies and reflects local goals and objectives

The comprehensive land use plans of the County and several municipalities reflect the importance and intent to coordinate with DelDOT in planning future developments. However, many of those plans lack a coordinated regional approach to planning and evaluating impacts to other communities or developments. The cumulative effect of development on the regional transportation system needs to be better defined when many different planning jurisdictions are involved. Understanding the transportation-land use connection in a local, multi-municipal, and county-wide context is critical in determining the extent to which DelDOT will be able to provide future transportation facilities and services to ensure mobility and economic viability.

Urbanized Areas

1990

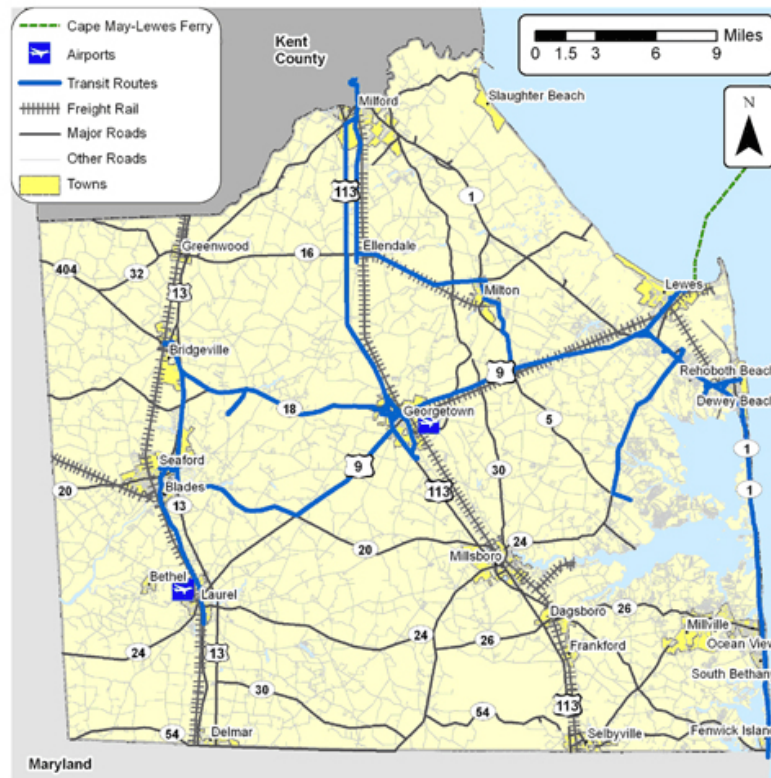
2006



Transportation System Overview

The Sussex County transportation system is comprised of roads, bridges, public transit, bicycle and pedestrian facilities, rail freight lines, airports, and ferries.

Sussex County's Transportation Network



Source: DeIDOT, 2007

Roads, Highways, and Local Roads

The Delaware Department of Transportation (DelDOT) has traditionally classified highways according to their function and the character of the traffic they serve. The functional classification system contains designations identified by DelDOT according to federal guidelines and approved by the FHWA. The system serves as a guide for both planning and funding purposes and is summarized below. Note that not all of these roadway types exist in Sussex County.

Interstates – Routes designated as the Dwight D. Eisenhower National System of Interstate and Defense Highways. These are primary travel routes with the longest trip lengths and which connect metropolitan areas, cities, and industrial centers. These roadways do not provide direct access to adjacent uses and interconnect primarily with other high classification routes.

Other Freeways/Expressways – This classification is only present within urbanized areas, where interstate-type routes primarily serve metropolitan cities and industrial areas. They do not provide land access and they interconnect primarily with other high classification routes.

Other Principal Arterials – These roads provide an integrated network of routes that serve major activity and urban centers. They are the highest traffic volume corridors with typically long trip lengths and provide a link between the higher and lower classification roadways. Land access is not prohibited.

Minor Arterials – These routes interconnect other principal arterials and provide access to smaller developed areas; they also link cities and towns. More emphasis is placed on land access via minor arterials than via other principal arterials.

Major Collectors – These routes are typically referred to simply as “collectors” in urban areas. These are routes that provide service to important travel generators (i.e., county seats, towns, schools, recreational, and agricultural areas) that are not served by higher classification roadways. They typically provide land access while also collecting traffic from lower classifications and channeling vehicles to higher classification roadways.

Minor Collectors – These roads are only present in rural areas, where they service local traffic generators and smaller towns and communities, providing land access and linking traffic from local roads to the higher classifications.

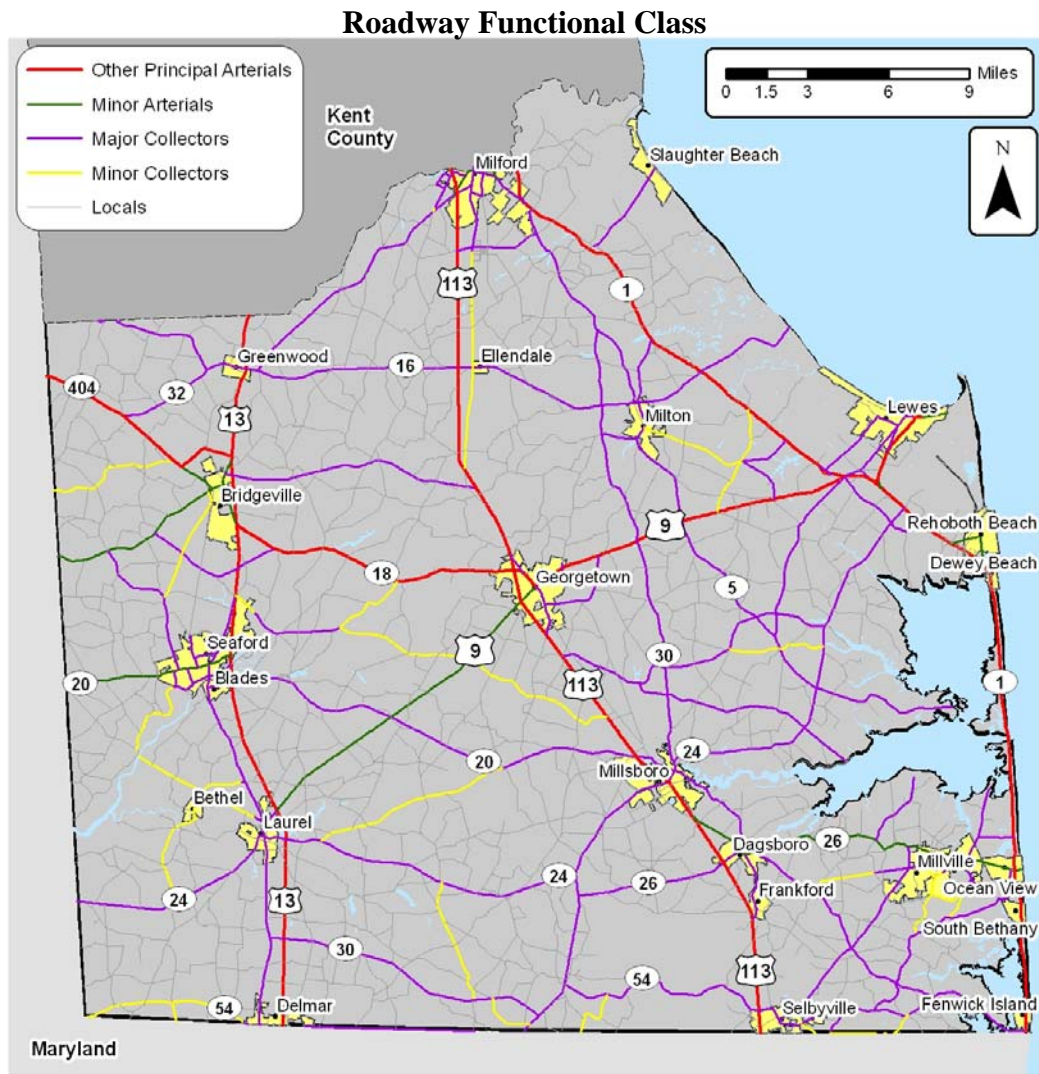
Local Roads – These roads provide direct access to land and linkages to higher classification routes. Local roads carry the lowest volumes of traffic and relatively short trip lengths, and encompass all roads not designated at higher classifications.

Regardless of function, all of these roads in Sussex County provide access to the developer or Home Owners’ Association (HOA) maintained private roads.

Roadway Mileage by Usage and Type

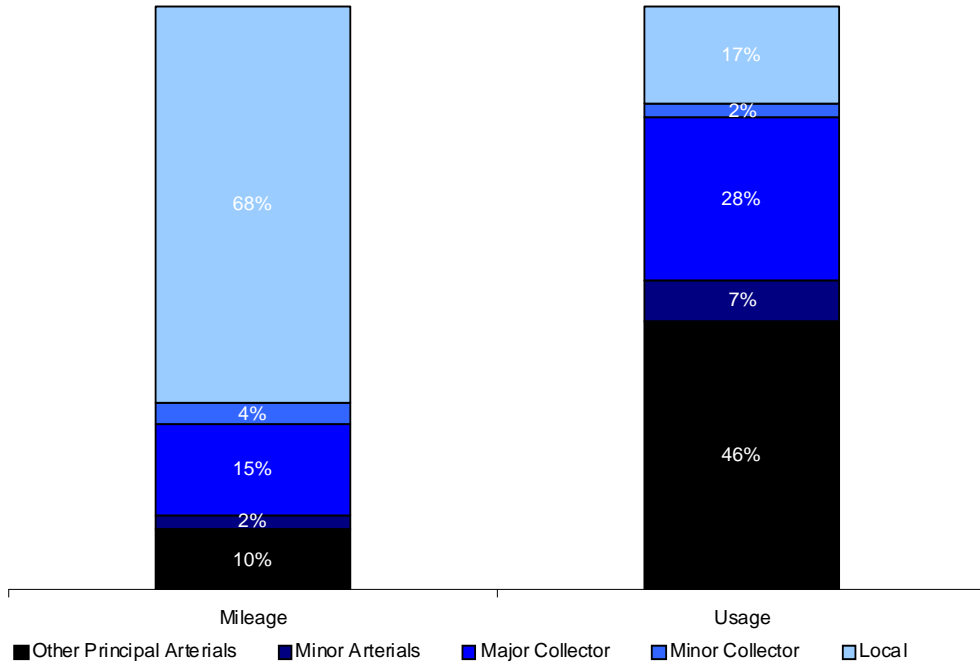
Sussex County does not have any interstates, expressways, or freeways. Most of the lane miles in the county (68 percent), as shown on the Roadway Functional Class map, are local roads. Major collectors comprise the next largest group of roadways at 15 percent. Other principal arterials represent 10 percent of the lane miles. Finally, only two percent of the roadway lane miles are minor arterials.

With respect to miles traveled by type, other principal arterials carry the most volume of traffic (46 percent). Local roads, while providing the most lane miles, carry only 17 percent of the county’s traffic. Other principal arterials, including Route 1, portions of 9, 13, and 113, carry the greatest share of the county’s traffic.



Source: DelDOT, 2005

Roadway Mileage by Type and Usage

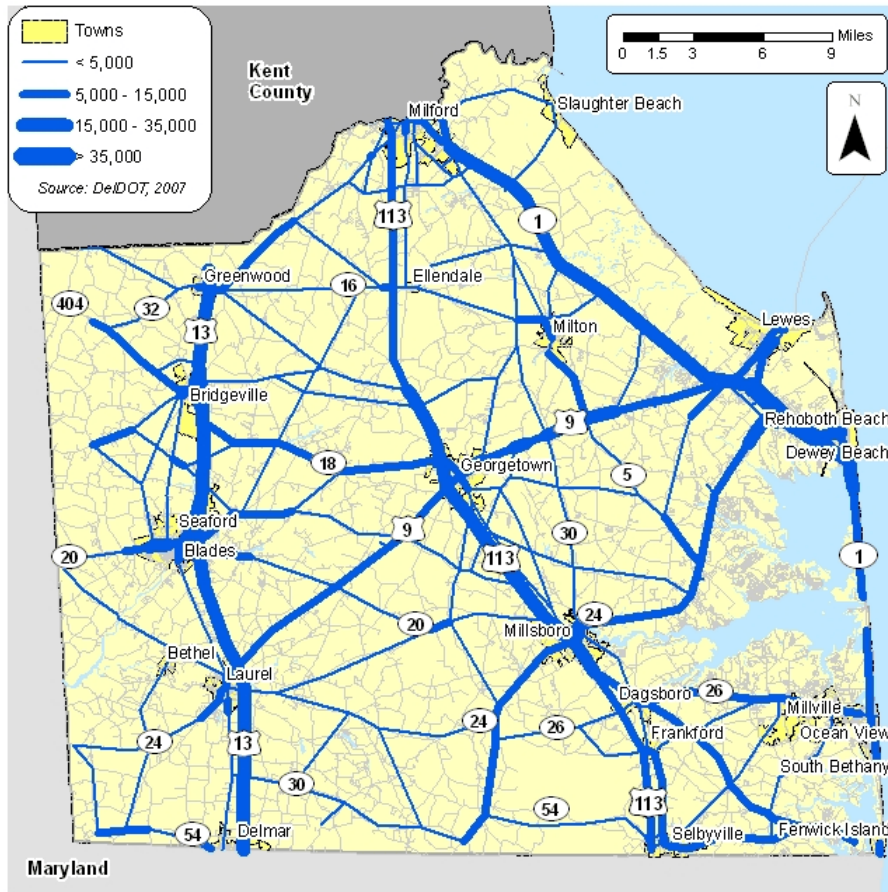


Source: DelDOT, HPMS, 2005

Average Annual Daily Traffic

The map entitled AADT by Roadway 2005 shows average annual daily traffic (AADT) on key roadways in Sussex County based on the DeIDOT travel demand model output results. Actual traffic counts from 2005 show that US-13 and SR-1 were the heaviest traveled routes in the county, each carrying more than 30,000¹ vehicles daily on its busiest segments. US-113 is the next heaviest north-south route with more than 24,000 vehicles daily. The key east-west routes in the county are US-9, SR-18/SR-404, and SR-24.

AADT by Roadway 2005



Source: DeIDOT, 2007

¹ http://www.deldot.gov/static/pubs_forms/traffic_counts/2006/rpt_pgs1_38_rev.pdf

Significant Highways and Roadways

The table below contains an inventory of selected roadways that serve Sussex County.

**Table 21
Selected Key Sussex County Roadway Characteristics**

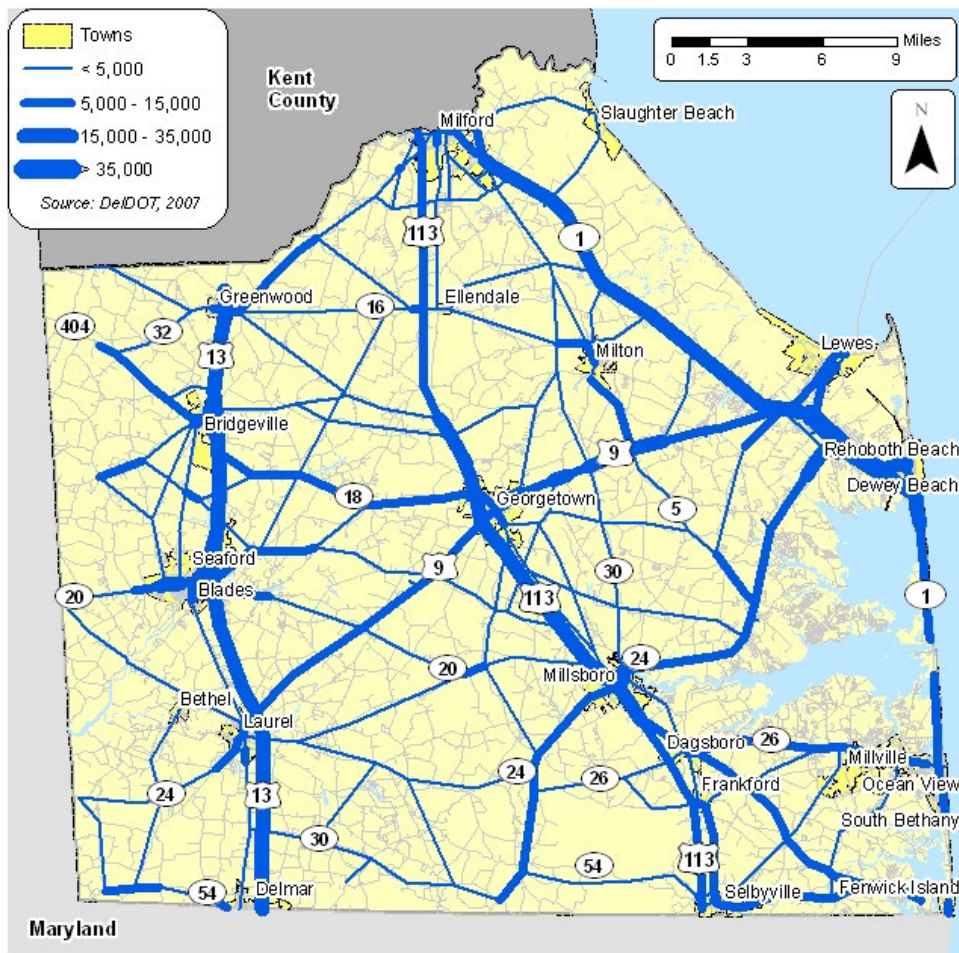
HIGHWAY OR ROADWAY	FUNCTIONAL CLASSIFICATION(S)	KEY FEATURES
1	Other Principal Arterial	<ul style="list-style-type: none"> One of the heaviest used roadways in the county, carrying 60,000 daily travelers (AADT) around the Rehoboth Beach area based on 2005 counts. In addition to being a key north-south route, it also provides access to the beach areas.
13	Other Principal Arterial	<ul style="list-style-type: none"> Heavily used north-south route with up to 30,000 vehicles carried daily in the Seaford area based on 2004 counts.
113	Other Principal Arterial	<ul style="list-style-type: none"> Another busy north-south route carrying more than 24,000 vehicles daily on its busiest segment in Millsboro based on 2004 counts.
404	Other Principal Arterial	<ul style="list-style-type: none"> Key east-west corridor that experiences significant truck traffic and carried over 26,000 vehicles in the Bridgeville area in 2005.
9	Major Arterial, Minor Arterial	<ul style="list-style-type: none"> AADT of almost 16,000 in 2005.

Source: DelDOT, Traffic Summary 2006, http://www.deldot.gov/static/pubs_forms/traffic_counts/2006/index.shtml

Traffic Growth

The daily traffic volumes are expected to grow significantly throughout the state between 2005 and 2030. The statewide travel demand model shows that most of the growth is expected to occur around US-113 with AADT more than doubling around the Millsboro, Georgetown, and Selbyville areas. Seasonal traffic volume increases will also add more volume to the beach areas of the county.

AADT Growth between 2005 and 2030 by Roadway



Source: DeIDOT, Statewide Travel Demand Model, 2007

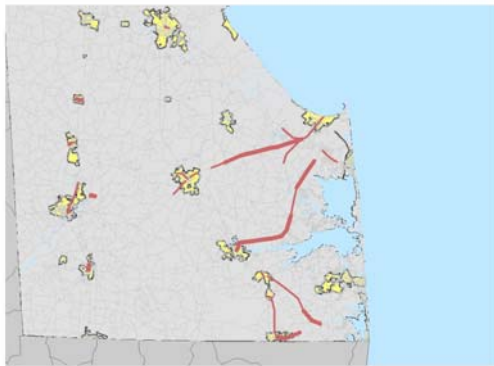
Seasonal Travel Behavior

Sussex County's proximity to the Atlantic Ocean brings a tremendous number of visitors from all over the mid-Atlantic region to the resort areas in Delaware such as Rehoboth and Bethany Beaches. Vacationers also travel through Sussex County to get to Maryland beaches, particularly

Ocean City. Many year-round residents cite these visitors as the cause of the majority of the traffic woes in the county. Weekends during the summer, and increasingly in the off-season, are known for their high traffic volumes along east-west through routes such as Routes 9, 404, 20, 24, 26, as well as north-south routes such as US 113 and SR 1. Conflicts with local traffic often occur, especially with farm equipment on rural roads and local traffic on small town streets. In addition, large volumes of visitors travel within the resorts, moving to and from hotels, vacation homes, outlet stores, boardwalk areas, and beaches up and down the coast.

The following maps compare year-round congestion on the County's roadway system in 2000 versus 2030 assuming that no projects other than the ones that are currently planned are undertaken. Thicker red lines represent more congested corridors. If no new projects are completed, a lot more congestion will occur on the east-west routes as well as on Route US-13. The lower two maps provide the same comparison but only during the summer months. As expected, without new projects, the congestion during the summer is expected to be significantly worse than during year-round.

2000 and 2030 Year-Round Congestion (Volume to Capacity Ratio > 0.85)



2000 and 2030 Summer Congestion (Volume to Capacity Ratio > 0.85)



As there is almost no transit service to the resorts from any of the major population centers in the Mid-Atlantic, virtually all seasonal travel is by automobile. Within the resort areas, there are successful examples of non-automobile travel, including the Jolly Trolley in Rehoboth and the bus system within Ocean City, MD. Specifically, DART First State resort service uses the

Rehoboth Park-and-Ride lot as its hub and serves Rehoboth Beach, Lewes, Georgetown, Long Neck, Pot-Nets, and Ocean City. There are six seasonal-only routes and Route 206 service has extended operating hours during the peak season. However, most of the shopping areas along SR-1 in Rehoboth are strictly auto-oriented. Furthermore, the number of cars tourists bring, and the frequency with which they are used within resort areas, are believed to be increasing, though no hard data has been collected on tourist travel habits.

Trucking

The dominant means of goods movement in Sussex County is by truck. Trucks carry food products, consumer goods, raw materials, and commercial supplies into Delaware and they carry finished products out of Delaware. US-13 and US-113 are major north-south truck routes. Trucks are critical to Delaware's economy and without them many businesses would leave Delaware for other states. The focus on "just in time" goods delivery is part of the reason for the continuing increase in truck traffic both in Sussex County and nationwide.

While trucks play a crucial role in commerce, it is widely held that the dominance of trucks for goods movement has several negative affects, including perceived increased safety hazards to other motorists and increased highway congestion and pollution. Truck traffic is of particularly concern to traditional activity centers such as Georgetown, Lewes, Milton, and Laurel. Large trucks can impede the smooth flow of traffic through towns, and threaten the residential viability and small-town character of these areas.

Sussex County's four business parks, in Seaford, Georgetown, and Selbyville, have had an important economic impact to the county.

Bridges

Because bridges are essential structural facilities for crossing waterways, other travel routes, railroads, and for the avoidance of other hazards, they are classified independently from other transportation facilities. DelDOT monitors and documents bridge conditions through regular inspections and scheduled maintenance, noting bridges that require upgrade, repair, or replacement. Bridges in need of repair or replacement are categorized by DelDOT as either structurally deficient or functionally obsolete according to guidelines established by the Federal Highway Administration.

Structurally deficient bridges are defined as those that have some level of deterioration and are thus restricted to light vehicles, require immediate rehabilitation to remain open, or are closed. Functionally obsolete bridges are those with deck geometry (e.g., lane width), load carrying capacity, clearance, or approach roadway alignment that no longer meets the criteria for the system of which the bridge is a part.

DelDOT continues to make strong progress in improving bridge conditions. In Sussex County, the percentage of bridges considered structurally deficient or functionally obsolete has decreased from 12.8 percent in 2000 to 7.7 percent in 2006. Overall, Delaware is fifth best nationwide in

percent of structurally deficient or functionally obsolete bridges and a leader in the small percent of structurally deficient bridge surface area.

Table 22
Bridge Conditions in Sussex County and the State of Delaware

YEAR	SUSSEX COUNTY			STATE OF DELAWARE		
	Total Bridges	Structurally Deficient	Functionally Obsolete	Total Bridges	Structurally Deficient	Functionally Obsolete
2000	366	19	28	1,347	71	152
2001	368	22	28	1,357	72	152
2002	371	20	28	1,359	65	151
2003	373	18	25	1,373	65	145
2004	375	22	23	1,379	68	140
2005	375	20	21	1,382	58	145
2006	379	8	21	1,429	33	175

Source: DelDOT, 2007

Transit

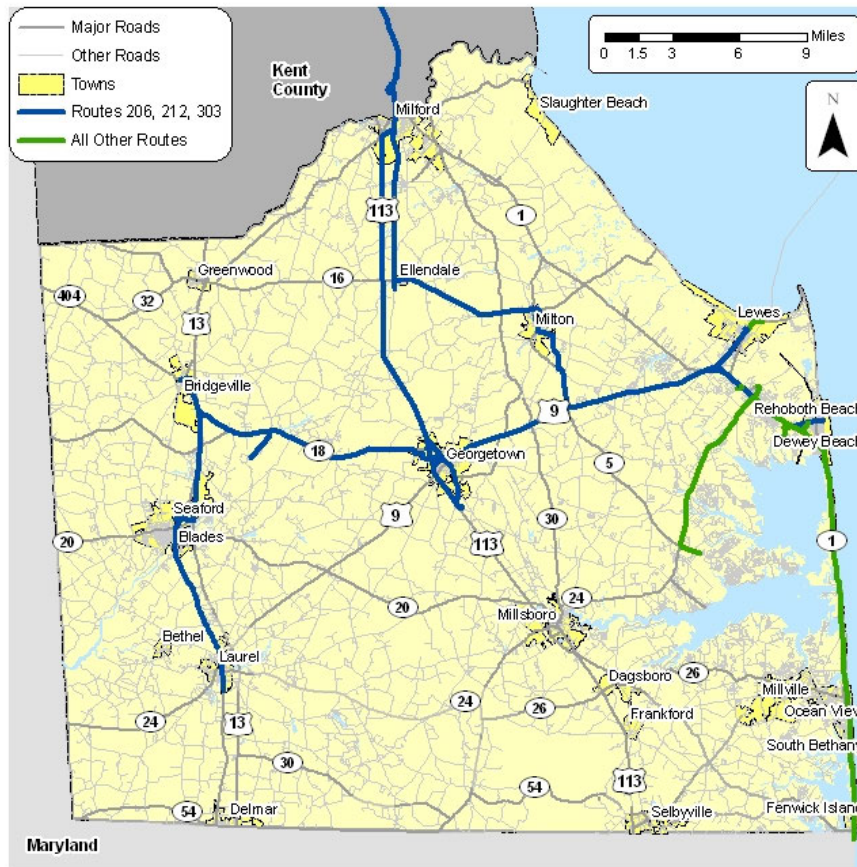
Fixed Route Bus Services

The Delaware Transit Corporation (DTC) operates DART First State (DART) fixed route transit service for the general public and para-transit services for the elderly and disabled in Sussex County. Year-round fixed route service provides service to many municipalities, connecting low income neighborhoods to employment opportunities on the eastern part of the county along the SR-1 corridor and areas along US-113 and US-13. In addition to year-round transit service, DART provides a summer season operation supplementing transit service from Memorial Day through Labor Day. The seasonal service originates out of the park & ride lot located on Country Club Drive in Rehoboth. All routes traverse through the park & ride lot and offer service to Ocean City, Maryland, the Rehoboth Boardwalk, Lewes, Georgetown, and Long Neck.

The Rehoboth Park & Ride Lot can accommodate 500 cars and provides an average of 400 trips per day into the Rehoboth Boardwalk—a significant mitigation to auto traffic during peak weekends and holidays.

The following map shows the regular and seasonal fixed route services operated by DART.

DART Fixed Route Services



Source: DART First State, 2007

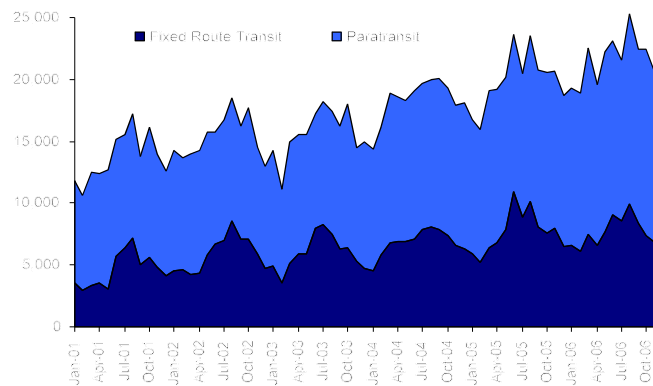
Paratransit Services

On demand, door-to-door paratransit services operated by DART are available for senior citizens and persons with disabilities Monday through Saturday from 6 a.m. until 9 p.m. Trip requests can be submitted by phone or using an online registration form. Requests by phone must be made 24 hours prior to requested pick-up time; online requests must be made two business days in advance of the scheduled trip. While paratransit service can be accommodated between any two locations, they must be within the State of Delaware. Paratransit trips on state holidays are restricted.

Paratransit trips within Sussex County account for more than 50 percent of all daily transit trips, excluding seasonal fixed route trips made between May and September. Furthermore, while both fixed route and paratransit trips have increased from 2001 to 2006, the number of paratransit trips significantly outpaces those provided by fixed route services. This is of significant concern to DART as providing a paratransit trip is much more expensive than providing a fixed route trip.

The DART Fixed Route Services map highlights paratransit tripmaking versus fixed route tripmaking.

Transit Tripmaking by Type, Sussex County 2001-2006



Source: DART First State, 2007

In addition to DTC, numerous social service agencies provide human services transportation within Sussex County. These agencies serve a variety of clients including, but not limited to, the elderly and disabled. DelDOT supports these organizations either by providing vehicles or by providing some level of financial support, either directly or through reimbursement. Department of Health and Social Services and Division of Developmental Disabilities Services are two of the main providers engaged in the provision of transportation services for their clients or qualified individuals.

Other paratransit trips are accommodated by private, non-profit operators throughout the county. The primary operators are Sussex Senior Services (CHEER) and other senior centers in the county. They mainly provide trips for senior citizens to the senior centers, medical appointments, and shopping. A portion of the operating expenses of these non-profit service providers is funded by the State or Sussex County Council. Each of these agencies has its own area of focus and client base, but works to coordinate efforts and share information through the Sussex County Mobility Consortium, an organization of participating non-profit human services transportation providers in Sussex County.

In addition, a number of private (for profit) transportation service providers and taxis serve the elderly and disabled with Medicaid-eligible trips, as well as transporting the general public.

As part of the Sussex County Transportation Plan Update, a coordinated public transit-human service transportation plan (Coordinated Transit Plan) has been developed through a process that includes representatives of public, private, and non-profit transit providers. The Coordinated Transit Plan is required by the Federal Transit Administration (FTA) for new funding available under the “New Freedom Program” for new programs providing transit service for work trips currently not served. The Coordinated Transit Plan contains an assessment of needs and available transit services, and offers strategies to address gaps in service.

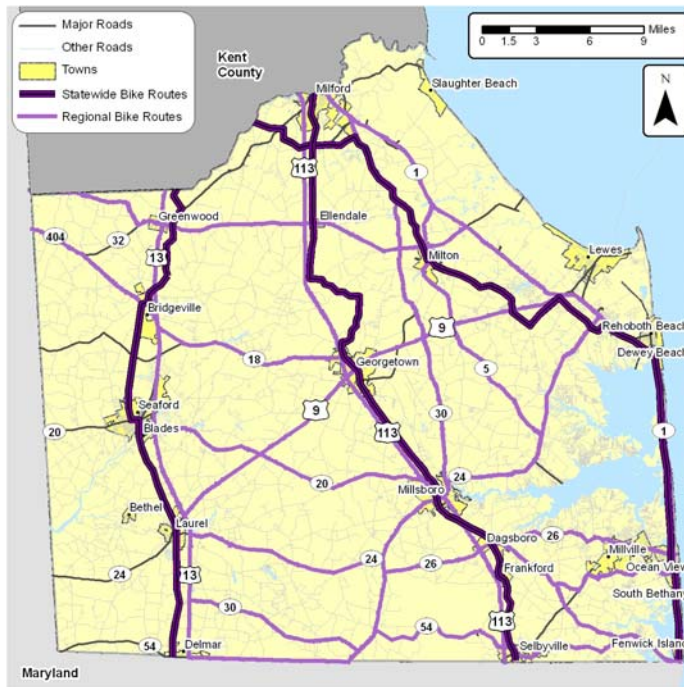
Bicycle and Pedestrian

In 2005, the Bicycle Facility Master Plan was developed to define and implement a statewide system of designated on-road bicycle routes to improve bicycle travel options. Implementation of the plan seeks to achieve the following goals:

1. Integrate existing bicycle routes and trails into a larger, statewide bicycle network, and
2. Establish bicycle routes connecting municipalities, activity centers, and recreational areas throughout the state.

The following map represents the proposed bicycle route map for Sussex County:

Proposed Bicycle Facilities in Sussex County



Source: DeIDOT, 2007

Other bicycle and pedestrian initiatives include:

- **Statewide Pedestrian Action Plan** – In March 2006 Governor Minner issued Executive Order Number 83, creating an Advisory Council on Walkability and Pedestrian Awareness. Council members represent local governments, citizens with disabilities, the DeIDOT Department of Planning, the Delaware Department of Natural Resources, the Delaware Department of Safety, the Wilmington Metropolitan Area Planning Council, and other entities. The purpose of the council is to assist DeIDOT in developing a Statewide Pedestrian Action Plan to:

- Ensure that paths and sidewalks are continuous and interconnected where feasible;
 - Develop consistent design standards for crosswalks, sidewalks, and pathways;
 - Clarify maintenance responsibility for sidewalks;
 - Review traffic rules and driver behavior to help support a safer pedestrian environment; and
 - Promote land use and traffic patterns that encourage walking and reduce air pollution.
- **The Statewide Rails-to-Trails/Rail-with-Trail System Master Plan** – The Statewide Rails-to-Trails/Rail-with-Trail System Master Plan, completed in 2006, identifies all abandoned or underutilized rail lines in the state. It prioritizes them for possible future development based on opportunities for connections to other bicycle and pedestrian facilities and their overall condition.

Within Sussex County three rail lines have been recommended for more advanced evaluations and planning studies, for inclusion in the Capital Improvements Program of the Statewide Long-Range Transportation Plan.

These rail lines include:

- Georgetown-Lewes Running Track (16.7 miles)
- Completion of the Junction & Breakwater Trail (1.7 miles)
- Ellendale-Milton Industrial Track (6.8 miles)

Of these corridors the Georgetown-Lewes Running Track has been advanced into a planning study to determine feasibility of the corridor and prioritization of segment development. The Junction/Breakwater is currently being expanded through development to provide direct connection to Lewes and to the Georgetown-Lewes Running Track.

- **Transportation Enhancement Program** – DelDOT manages the Transportation Enhancements program, which directs federal funds to surface transportation-related projects that will strengthen the cultural, aesthetic, and environmental facets of the host communities. Participation in this program is primarily community driven. The Transportation Enhancements program helps finance a variety of non-traditional projects, with examples ranging from the restoration of historic transportation facilities, to bike and pedestrian facilities, to landscaping and scenic beautification, to the mitigation of water pollution from highway runoff.

Transportation Enhancement projects financed through DelDOT in Sussex County between 2001 and 2007 include:

- Laurel Train Station Phase II
- Town of Dagsboro Streetscape Improvements
- Town of Delmar Streetscape Improvements
- Fenwick Island Median Improvements

- Town of Milton Rail to Trail
 - York Street Construction, South Bethany
 - Lewes Canal Waterfront
 - Trap Pond Pedestrian and Bicycle Trail
 - Huling Cove Sidewalks
 - Greenwood Sidewalk Improvements
 - Dagsboro Sidewalk Improvements
 - Rehoboth Beach Streetscape
 - Mulberry Street Drainage and Sidewalk Improvements
 - Mispillion River Greenway Phase 12
 - Georgetown Circle Renovations
- **Safe Routes to School Program** – Safe Routes to School is a 100 percent federally funded program through SAFETEA-LU that encourages and enables safe walking and/or bicycling to school. These funds can be applied to a variety of uses such as better signage, sidewalk improvements, and other projects within two miles of an elementary or middle school. Total statewide annual funding is approximately \$1 million, available for elementary and middle school projects and program administration. Similar to the Transportation Enhancement program, this program is also community driven.

Public schools or charter schools recognized by the Department of Education may participate in the Safe Routes to School program, provided that the request is supported by the school principal or a district-level administrator. Funding is available to the organization or agency that is administering the program; this may be the participating school or organization acting on behalf of the participating school. Eligible funding recipients include state, regional, or local agencies, including nonprofit organizations, and schools or school districts. Funding is available on a reimbursement basis.

Schools must have identified projects and activities through a community planning process and must include projects and activities in five areas: education, encouragement, enforcement, engineering, and evaluation. Planning assistance is available.

Currently, four schools are participating in the program, and are in various phases of the planning process. Although no schools in Sussex County are currently participating, the Safe Route to School program is partnering with Nemours Health and Prevention Services to encourage schools in Sussex County to participate. Approximately \$700,000 in infrastructure funds will be available in the next year for Sussex County participants once they have developed Safe Routes to School plans. This funding will be in the form of construction services administered by DelDOT.

- **State Scenic and Historic Highways Program** – A Scenic and Historic Highway, also known as a scenic byway, is a route that travels through an area that has intrinsic scenic, historic, natural, cultural, recreational, or archaeological qualities. During the 2000 legislative session, the General Assembly passed Senate Bill 320, authorizing DelDOT to develop the State Scenic and Historic Highways Program (SSHH Program). The purpose of the program is to identify, preserve, and enhance roadways in Delaware that possess outstanding visual qualities.

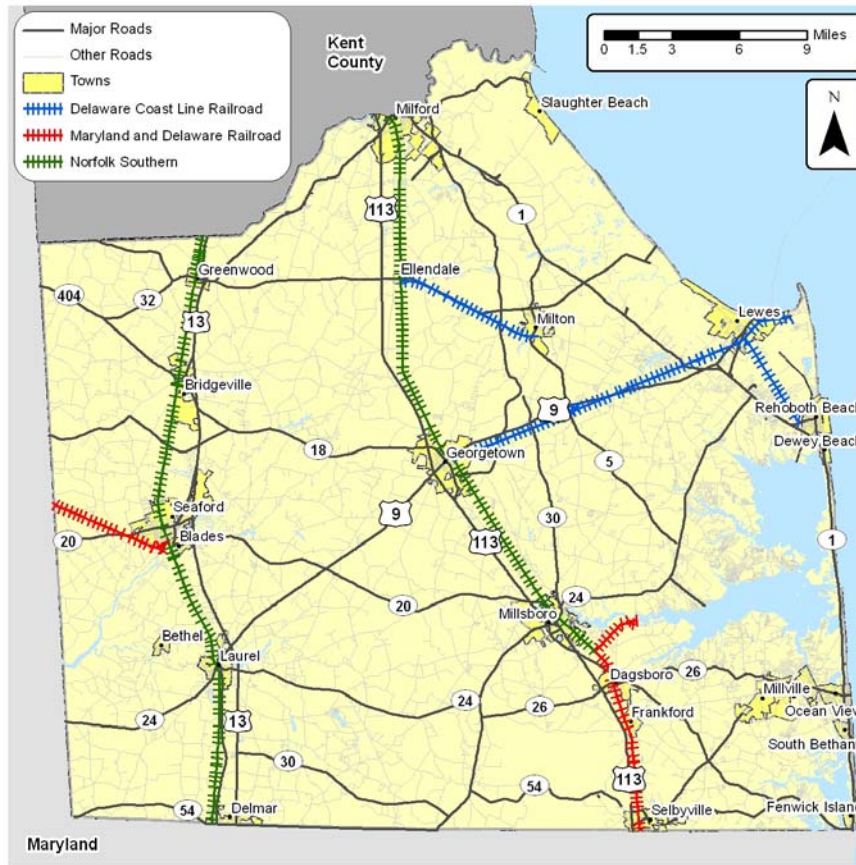
To date, DelDOT has designated three State Scenic and Historic Highways: the Brandywine Valley Scenic Byway in New Castle County, the Red Clay Valley Scenic Byway in New Castle County, and the Route 9 Coastal Heritage Scenic Byway in New Castle and Kent Counties. DelDOT has undertaken several outreach efforts in Sussex County and is working with local governments and other organizations to identify candidate corridors. In order to get this designation, a roadway must be nominated by any interested party, which could be an individual; groups of individuals, local governments; state or federal agencies; or non-profit agencies. After the designation, it is required that a Corridor Management Plan be developed to outline strategies to preserve and enhance the roadway. There are funding opportunities from the Federal Highway Administration (FHWA) to develop and implement the plan. DelDOT is currently working with groups in Laurel and Seaford to prepare a nomination for roads in western Sussex County, Seaford, Bethel and Laurel through the Nanticoke area.

Rail Freight

There are three principal rail freight service providers in Sussex County, with Norfolk Southern providing a link to the national railroad system. Norfolk Southern's two lines through Sussex County split at Harrington to serve the east and west sides of the county. The Delmarva Secondary Track traverses Greenwood, Bridgeville, Seaford, Laurel, and Delmar, continuing into Maryland. The other branch, also known as the Indian River Secondary Line, runs through Milford, Ellendale, Georgetown, Millsboro, and Frankford. The Maryland and Delaware Railroad (MDDE) switches cars with Norfolk Southern at Frankford and supplies points south in Maryland. MDDE also delivers freight to the Eastern Shore of Maryland via Seaford. The Delaware Coast Line railroad serves points from Georgetown to Gravel Hill and Lewes on a state-owned line. Major commodities transported by rail include coal, grains, and rock aggregate. Most rail cargoes are inbound, with little product being exported via rail.

The Sussex County Freight Lines map depicts the rail freight lines within Sussex County.

Sussex County Rail Freight Lines



Source: DeIDOT, 2007

Airports

There are two public-use airports within Sussex County and many private-use airports authorized as a conditional use by the county. The two public-use airports are licensed by the state and are inspected on a regular basis for safety and security. These airports are closely monitored for encroaching development or obstructions that would negatively affect safe aviation activities. The surrounding land use should be compatible to airport operations. Residential development is not a compatible land use. Residential usage negates the long term economic value of this land.

Sussex County is the only publicly owned airport in the county. As such, it is eligible for funding from the Federal Aviation Administration (FAA) for expansion and safety improvements. The state and the county provide the match funds for all eligible FAA projects. Sussex County Airport is currently planning a runway extension to accommodate larger planes that will support the business operations at the Sussex County Aero Park. As part of the runway expansion and realignment of Park Avenue, the County and the State should upgrade all of Park Avenue to accommodate the increase in truck traffic to the Aero Park and to improve access to the airport terminal.

Laurel Airport is privately-owned, but open to the public for aviation activities. The Laurel Airport is not eligible for FAA funds but the state provides limited funding for safety improvements. The primary operations out of this airport are sky diving and aerial application for mosquito control and agricultural purposes.

Both airports have a significant economic impact in the county and have capacity to expand operations.

The private-use airports are only regulated by the Federal Aviation Administration (FAA). There are currently no state regulations for privately-owned airports within Delaware.

There are several commercial service airports serving Sussex County residents. They are Baltimore/Washington International Airport, Philadelphia International Airport, and the Salisbury-Ocean City-Wicomico Regional Airport in Salisbury, MD. The largest commercial service airports near Sussex County are Baltimore/Washington International Airport and Philadelphia International Airport located 96 miles and 106 miles from Georgetown, respectively. The closest scheduled service airport is the Salisbury-Ocean City-Wicomico Regional Airport, located approximately 30 miles south of Georgetown.

The following map shows the county's two airports.

Sussex County's Airports



Source: DeIDOT, 2007

The county is also home to PATS Aircraft, with two locations in Georgetown. Their two facilities are used to retrofit airplanes and have had an important economic impact on the county. Furthermore, the Sussex County Airport Business Plan completed in June 2006 recommends an expansion of its runway as well as attraction of additional corporate aviation and the expansion of the DeCrane manufacturing base—all crucial to improving the economic development of the county.²

Ferries

Lewes is on the southern end of the 17-mile Cape May/Lewes Ferry Route operated by the Delaware River and Bay Authority (DRBA). The ferry operates daily, year round, depending on weather conditions. Each ferry is equipped to hold approximately 100 vehicles and 800 passengers. According to the current schedule, the ferry makes the 80-minute one-way trip 13 times daily during the summer season (end of June through September) and six to seven trips daily for the remainder of the year.

The annual Cape May/Lewes Ferry ridership has a significant economic and transportation impact in Sussex County. Approximately 351,188 vehicles passed through the ferry terminal in Lewes in 2006, and the ferry carried almost 1.188 million passengers in 2006. Many of those passengers are foot passengers traveling to Lewes and the resort area for tourist attractions, including recreation, shopping, and dining that they can access by local transit services. Many of the other passengers traveling by car use the ferry as part of the transportation system of Sussex County, connecting them to destinations outside of the county. The ferry plays an important role in the Sussex County transportation system and should be strongly supported.

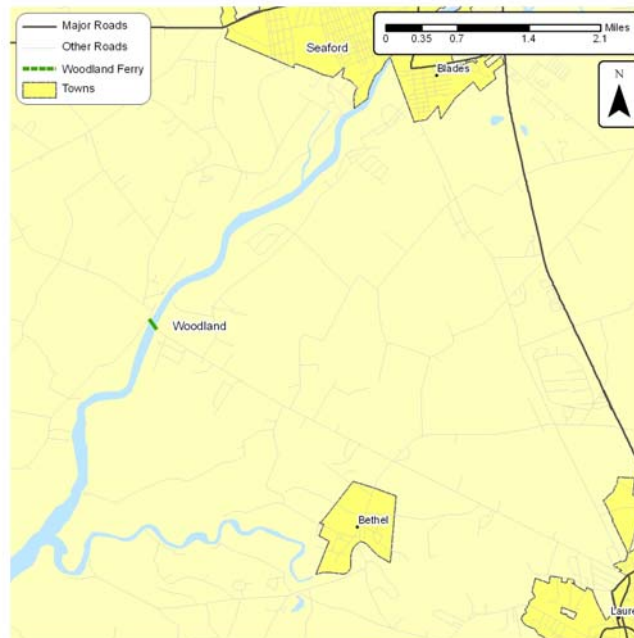
During the summer season, the DRBA provides shuttle buses to take foot passengers to downtown Lewes, the Rehoboth Outlets and to the Rehoboth Park & Ride lot connecting to DART transit services.

² Sussex County Airport Business Plan, Technical Report, June 2006

Cape May-Lewes Ferry



Woodland Ferry



DeIDOT operates a free, small ferry across the Nanticoke River at Woodland, Seaford connecting to the Laurel side of the river. The ferry service has been operating since 1793; DeIDOT took over the operation in 1935. It is a tourist attraction and carries approximately 75,000 vehicles per year. The ferry operates from dawn to dusk and currently carries three vehicles per trip. However, the ferry vessel will be upgraded to carry six vehicles in the near future.

During Summer 2007, the Woodland Ferry was closed for 2.5 weeks (but operational on weekends) to allow DelDOT to conduct necessary pre-construction work. The newly built Woodland Ferry and new docks, pilings, and bulkheads are scheduled to be completed in late 2008.

Evacuation Routes

Sussex County is susceptible to flooding and coastal storm damage, with approximately 48 percent of the County's housing units identified as "vulnerable" during a Category 4 storm.³ This figure jumps to 82 percent when only seasonal homes are considered.⁴ As a primary contributor to Delaware's tourism industry, traffic congestion frequently impedes travel to and within these areas. DelDOT has expended considerable effort to develop plans that allow for safe and efficient evacuation from the resort areas when they are affected by storms or other events requiring mass departure.

Evacuation routes statewide are determined by Transportation Management Teams (TMTs). TMTs are part of DelDOT's transportation management program known as DelTrac. TMTs bring together personnel and resources from police, fire, rescue, emergency management, transportation, communications, environmental protection, public works and other agencies to improve safety and reduce delays during incidents, events and emergencies that impact Delaware's transportation system. In Sussex County, coordination with officials in Maryland and Virginia frequently occurs to focus on routes and demand and make real-time adjustments to coordinate the evacuation of the entire Delmarva Peninsula when necessary.

The composition of a TMT depends on the nature of the event or incident. They also work to prevent secondary incidents triggered by the original incident. There are six TMTs in Delaware, with three located in Sussex County, divided into US-13, US-113, and SR-1/beaches. Each TMT has developed a Traffic Control Plan for incidents that close sections of the state's major road network. The TMTs have also developed detailed traffic control plans to be used in conjunction with evacuation plans. The plans for each county are being integrated into one statewide plan which is in turn being integrated with the plans from neighboring states.

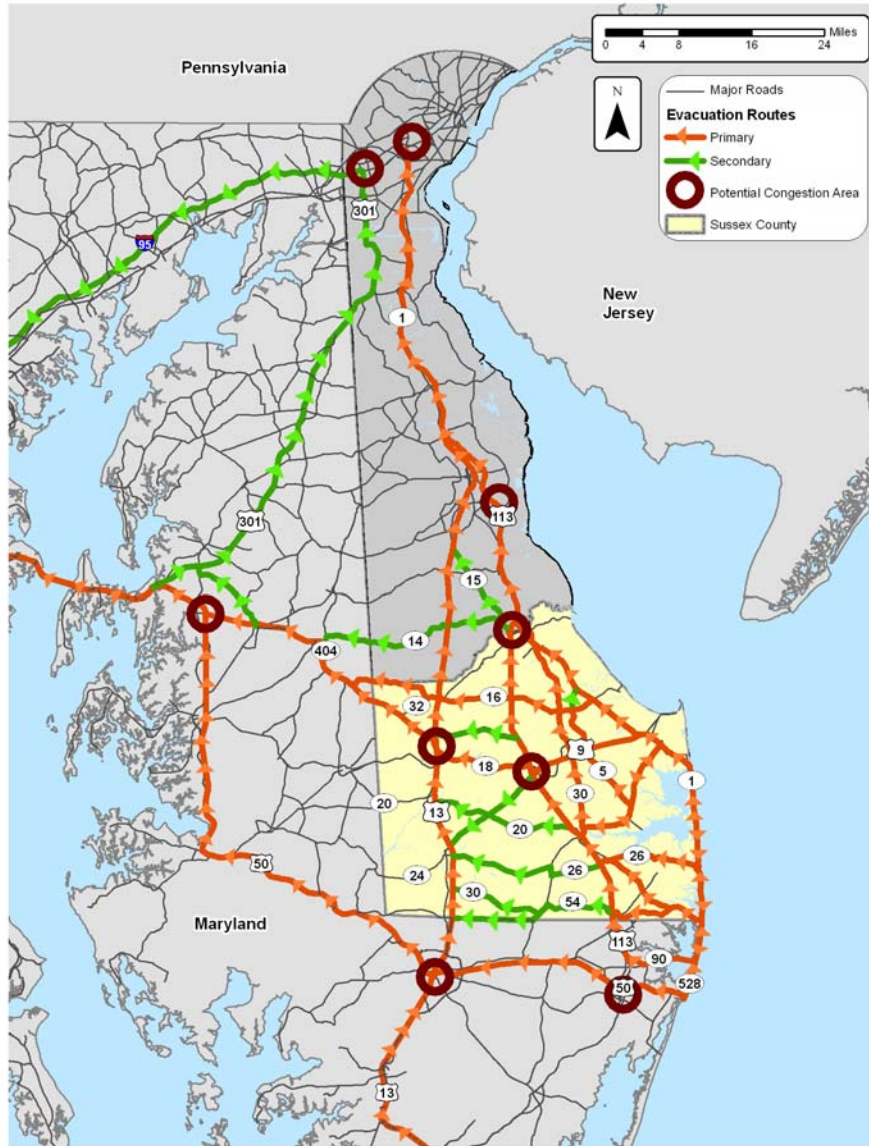
TMTs respond to planned events such as sporting events, fairs and shows, anticipated heavy volumes such as summer weekend beach traffic and other planned events. TMTs are also ready to respond to unplanned incidents and events such as hurricanes, floods, snowstorms, serious or hazardous materials accidents, natural gas leaks, major fires, a nuclear event or terrorist attack.

Primary and secondary evacuation routes are identified based on Army Corp of Engineers tidal inundation maps that show areas prone to flooding during severe storms. Secondary routes are used to direct local residents to primary evacuation routes or used to reroute traffic if a primary evacuation route becomes impassable. Currently traffic management and control is provided at 39 critical intersections in the County.

³ Statewide Evacuation Plan Presentation, September 27, 2006

⁴ Ibid.

Evacuation Routes

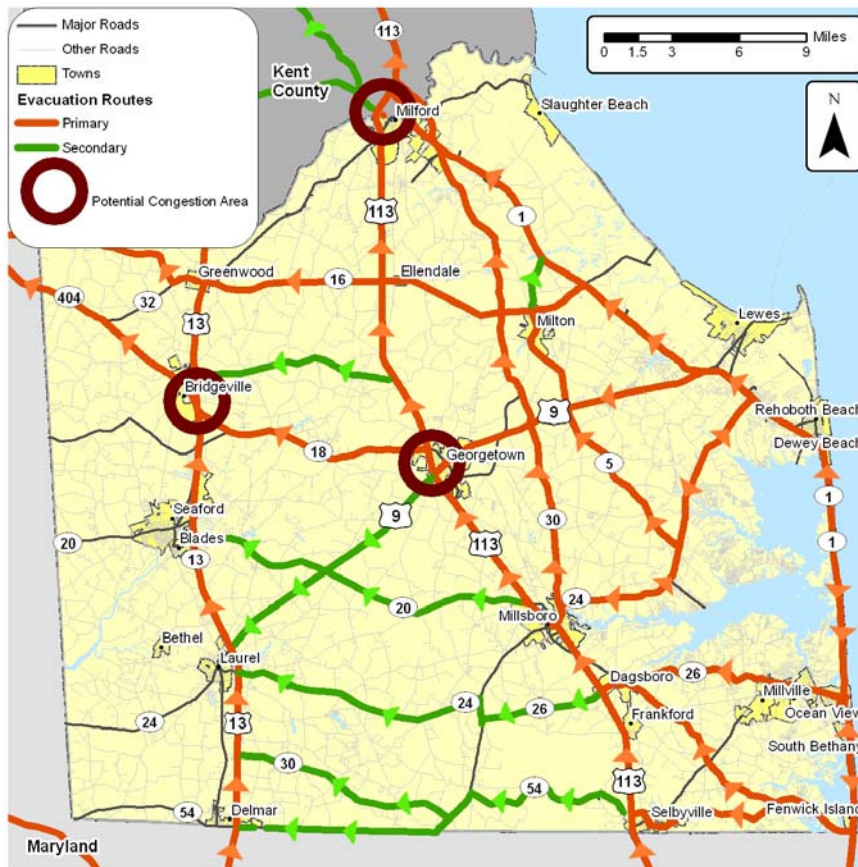


The All Hazards Evacuation Annex, the Transportation Incident and Event Management Plan for Sussex County was released in May 2006. The annex primarily focuses on tidal inundation incidents and events that may impact Sussex County including hurricanes, nor'easters, coastal storms, tidal or storm surges, and heavy rains. It may also be applied to other events that may require mass evacuation such as chemical spills or terrorist actions. The plan outlines the activities that are to take place between the TMC and Sussex County TMT to manage the transportation system and protect life and property during an incident or event that threatens Sussex County. All decisions are based on complete evacuation by the time 40MPH sustained winds reach land. It is estimated that it would take 24-36 hours to evacuate the coastal areas, however the start of an evacuation is not based on the eye of the storm, but the arrival of heavy rain bands surrounding it. DelTrac's goal is to evacuate before the heavy rain bands arrive and

cause flooding. Fortunately, during the summer season a majority of the coastal population are visitors that would be evacuating back to their primary residence, not relocating them.

In 2004, DeIDOT released the DeIDOT Transportation Incident and Event Management Plan. Its purpose was to define the communication, response, and responsibility procedures in the event of statewide emergencies. The following map represents evacuation routes through Sussex County. Recommendations from the plan are still being implemented.

Sussex County Evacuation Routes



Source: DeIDOT, 2007

Air Quality

The Clean Air Act of 1970 and the Clean Air Act Amendments of 1990 both have significant implications for the planning of transportation programs and facilities. The Clean Air Act is the comprehensive federal law that regulates emissions from sources such as cars, trucks, buses, farm equipment, and factories.

Sussex County is located in the Environmental Protection Agency's air quality monitoring region III, which includes the mid-Atlantic states.⁵ This essentially means that transportation planning cannot and should not worsen environmental goals and policies to ensure clean air.

Recent modifications in federal legislation made the issue of air quality for Sussex County more important, in that, if one of the counties, Kent or New Castle County became a "non-attainment area" then Sussex County would automatically be considered non-attainment and therefore Delaware's federal highway funding would be in jeopardy.

A contributing factor to air pollution in Sussex County is the average age of vehicles. Older vehicles do not have the more fuel-efficient systems that are found in newer models. Stricter emission testing will probably be required in Sussex County within five years of this plan implementation. New emission testing will bring Sussex County in line with emission standards and testing in other two counties, Kent and New Castle, as well as other counties along the East Coast. The equipment and testing infrastructure are already in place in the vehicle inspection station in Georgetown.

Vision Statement

The long-range vision for this Mobility Element is similar to that presented previously. This Mobility Element continues to use this vision to help identify the transportation system improvements that are necessary to achieve the county's desired future. Two new vision statements have been added to reflect recent areas of new focus.

The following vision statements describe how growth and improvements to Sussex County's transportation system are to be managed:

1. Sussex County will continue to enhance its emergency evacuation program.
2. A corridor preservation program will be enhanced with necessary access controls to maintain highway capacity.
3. A greater emphasis will be placed on managing existing roads rather than building new roads, and on widening roads only when necessary.
4. Special development zones, with appropriate infrastructure to support growth, will be created in selected areas to promote industrial and commercial expansion. Industrial

⁵ <http://www.epa.gov/region03/about.htm>

- districts will be located close to major transportation infrastructure, including both highways and rail lines.
5. Accessibility of the transportation system will continue to be improved through accommodations that support senior citizens and help the County remain an attractive place for retirees.
 6. The public transportation system will be improved and expanded to provide greater access to job opportunities, education, services, and recreation for residents.
 7. A greenway system connecting wildlife and rural areas will be created, protected by regulation, and will include paths for bicycling and walking.
 8. There will be a variety of transportation means for tourists to travel to and within resort areas.
 9. Economic development, including tourism and job creation, will be given high priority in transportation decision-making.
 10. Local road improvements will be given high priority to benefit residents and businesses.
 11. Better coordination between and among municipalities, and county, state, and local government agencies will take place to help facilitate sub-area planning efforts.
 12. Air quality will receive increased attention, particularly to address non-attainment issues and emission testing requirements.

Mobility Strategies

An analysis of the key trends and their implications continues to show that the majority of issues identified in the 2001 Plan are still valid. Congestion on major north-south and east-west routes continues to grow, and the need for alternatives to a single-occupant vehicle is still a major concern of Sussex County residents and visitors. The six issues and strategies identified in the previous plan were revisited and modified to reflect current and identified future needs. These activities are labeled as *Issues with related Strategies and Actions*. Two additional issues are included in this plan: **air quality and sub-area planning**. These two areas have increased in significance over the past six years, and addressing them as part of this Mobility Element is critical to providing the transportation facilities needed to support growth and development.

- **North-South Movement**

Issue

There is a continuing need to accommodate significant through and regional traffic while preserving mobility for local residents and access to local businesses.

Strategy

Preserve and increase capacity on existing major north-south routes while pursuing plans for a north-south limited access highway on existing or new alignments. Focus on sub-area plans for US-13 corridor (see Sub-Area Planning Issue).

Actions

1. Continue to support implementation of improvements designed to preserve and increase capacity on US-13, US-113 and SR-1 in cooperation with DelTrac.
2. Continue working with DelDOT on the recommended improvements to US-113 identified in the US-113 North/South Study from north of Milford through Selbyville to the Maryland line.

3. Work with DelDOT to implement recommendations of the SR-1 Land Use and Transportation study, such as:
 - a. Five Points Interchange
 - b. Future Local Transportation Connector
 - c. Sidewalks along SR-1 in Rehoboth/Lewes area
 - d. Wescoats Corner Improvements
 - e. Additional Park & Ride location
4. Work with DelDOT to implement improvements to on the SR-1 / SR-16 interchange.
5. Support construction of Indian River Inlet Bridge.
6. Support DelDOT in the implementation of variable message signs on key north-south roadways for the purpose of redirecting traffic.

- **East-West Movement**

Issue

There is a need to accommodate significant cross county traffic between towns, education and health care facilities and other essential services while preserving mobility for local residents and access to local businesses. In recent years, as the attraction of the coast has grown and residential communities expand, improvement to east-west movement has become a key priority.

Strategy

Complete recommended interim improvements to major east-west connector routes, consider bypasses for towns most affected by tourist or heavy truck traffic, and determine areas and roads suitable for an alternative local road network. For the long term, conduct a planning study for east-west links from the north-south limited access highway.

Actions

1. Support DelDOT in completing intersection improvements, shoulder widening, and alignment improvements recommended in east-west corridor study.
2. Support DelDOT in undertaking / completing bypass studies for Georgetown, Bridgeville, Laurel, and other communities affected by tourist or heavy truck traffic.
3. Work with DelDOT to review current and future growth areas to determine adequate roadway capacity.

4. Encourage DelDOT to conduct a planning study to determine needed connections to the east and west from the proposed north-south limited access highway.
5. Pursue local road network improvements in conjunction with DelDOT.
6. Request that DelDOT implement variable message signs on key east-west roadways.
7. Coordinate with DelDOT and Maryland on the widening of US-404.
8. Work with DelDOT on sub-area plans to accommodate local traffic.

- **Evacuation Routes**

Issue

Many residents are unaware of existing evacuation plans. The perception exists that current evacuation routes become congested easily and are prone to flooding in severe storms.

Strategy

Continue to provide safe and efficient evacuation routes by implementing the recommendations of the Evacuation Route Study (1990), and the operations concepts identified in the All Hazards Evacuation Annex of the Transportation Incident and Event Management Plan for Sussex County (2006).

Actions

1. Coordinate with DelDOT to enhance current evacuation routes.
2. Help determine ways to address flooding on SR-1 and SR-26.
3. Work with DelDOT to identify other local routes that could serve as alternative evacuation routes.
4. Continue working with DelDOT, Maryland State Highway Administration (MSHA), and Maryland counties in designation of evacuation routes between Maryland and Delaware.
5. Work with DelDOT's implementation of a comprehensive information system for motorists using signs, radio, and other means, to identify and promote preferred routes.
6. Work with DelDOT in planning for specific evacuation routes and in developing plans for each resort city. Assist in the distribution of these plans when complete.
7. Support DelDOT in addressing the evacuations of persons with "atypical" needs, including their pets, as part of plans' completion in 2008.
8. Support DelDOT in the completion and implementation of a debris management plan due in 2008.
9. Work with DelDOT in focusing on specific routes of concern:
 - Route 24
 - SR-1 Dewey Beach to SR-16
 - SR-26
10. Support DelDOT in the continued implementation of DelTrac, with specific improvements to include:

- 44 additional signals on computerized system.
 - Expanding WTMC AM 1380 radio coverage in the county.
 - Performing roadway and intersection improvements:
 - SR-1: adding third lane from Bay Vista Road to Shuttle Road
 - SR-1 and SR-5: adding left turn lanes
 - US-113 and SR-9: changing from split phase to concurrent left turns
 - SR-24 and Rd 275: providing for two through lanes east and westbound
 - Completing improvements to the Traveler Information Systems through 31 additional closed-circuit televisions and 18 additional variable message signs.
 - Continuing expansion of traffic detection system.
 - Implementing additional roadway weather monitoring sites.
 - Continuing enhancements to DelDOT's real time travel information web site.
11. Urge DelDOT to perform pre-engineering for installing Monitoring and Detection Devices.

- **Coordinated Public Transportation Services**

Issue

Sussex County is the largest in Delaware in terms of land area but the smallest in terms of population. Because of sprawling development patterns there only a few fixed public transportation routes and many residents rely on paratransit services that provide transit to low income, disabled, elderly, and other transit dependent populations. Matching multiple origins and destinations requires coordination among Sussex County's multiple transportation providers. A number of barriers to efficient transit service have been identified in the county, including a lack of centralized information, coordination of resources, adequate funding, weekend and evening service, and accessible taxis. The cost of providing a door-to-door paratransit type service to residents has become a financial challenge to the state. The increasing concern of funding transit service in Sussex County coupled with the fact that over 30 percent of the population will be over the age of 65 by 2030, will present a challenge in moving people to jobs, health care, recreation and other related activities.

Strategies

DelDOT and Delaware Transit Corporation has started to conduct a service coordination planning process to exchange information on travel demand and supply, minimizing the cost of supplying transportation and maximizing the coverage and quality of transit service in the county. The goal of this effort is to create a mechanism that will enable providers and other stakeholders to exchange information on a regular basis and to work together where appropriate to minimize resources needed to provide an improved level of mobility for human services transportation users and maximize the quality and quantity of transportation options available.

Actions

1. Urge DTC to convene a Mobility Board composed of transportation providers, providers of human services, and members of the public (e.g., individuals with disabilities, older adults, and low income individuals) who can provide insight into local transportation needs.
2. Help DTC identify a ‘Mobility Manager,’ who will serve as the county’s chief point of contact on issues related to Coordinated Human Services Transportation Planning.
3. Work with DTC to develop an updated competitive grant application process for FTA Section 5310, FTA Section 5316, and FTA Section 5317 to ensure compliance with FTA rules and regulations.
4. Recommend that DTC examine best practices in other states and regions to help inform Sussex County’s process.
5. Work with DTC to develop a rational, equitable, and objective method for evaluating candidate proposals and apportioning the available funds.
6. Support DTC in conducting public outreach.
7. Work with DTC to identify performance measures and reporting requirements that allow comparisons among providers in terms of efficiency and effectiveness.

- **Travel Alternatives**

Issue

The basic mobility for residents in Sussex County is walking, but there continues to be a lack of adequate pedestrian facilities throughout the county. Many people, including students, persons with disabilities, the elderly, and those with low incomes, have limited access to cars and therefore find travel difficult. Infrastructure for alternative transportation modes such as transit, pedestrian, and bicycle facilities are becoming increasingly important; giving residents and seasonal visitors alternative means of travel to work, shopping, and public facilities. Lack of mobility also poses a significant problem for employers and creates demand for social services.

Strategy

Expand travel alternatives beyond the automobile, where feasible and appropriate, to provide a comprehensive, interconnected transportation system throughout Sussex County, which includes bus and rail transit, ride sharing, bicycling and walking.

Actions

1. Urge DTC to provide expanded transit services incorporating the use of non-traditional equipment (small buses, vans, and taxis) and innovative technology (real-time schedule information) to improve mobility/access. Encourage exploration of public/ private partnerships to initiate and/or help provide such services and technologies.
2. Advocate that seasonal bus transit services be targeted to provide travel alternatives in times of heavy congestion in coastal areas.
3. Partner with DeIDOT and others to reserve heavily used rail corridors and encourage greater rail use for movement of goods.
4. Encourage DeIDOT to make use of under-utilized rail lines for bicycle and pedestrian trails.
5. Support DeIDOT and DTC in providing safe bicycle and pedestrian mobility, access, and connections between modes.
6. Recommend the installation of infrastructure that supports travel alternatives such as passenger shelters, sidewalks, signs, crosswalks and bike racks.
7. Support DTC and DeIDOT in the development of educational, promotional, and marketing materials and messages that identify and encourage the use of alternative forms of transportation.
8. Support DeIDOT in the continued use of bicycle safety check points to provide educational information regarding the safe use of bicycles.
9. Work with DeIDOT to continue to plan, design, and construct additional off road multi-use trail facilities.
10. Encourage that bicycle facilities are designed to match the needs of their users—commuting or recreational.
11. Develop a policy with DeIDOT to ensure that a sufficient pedestrian network is developed within the areas designated for growth to complement proposed land use policies.
12. Work with DeIDOT to implement and monitor the preliminary recommendations developed in the Delaware Statewide Pedestrian Action Plan, including related outreach in Sussex County.
13. Identify the roles of the State, Municipalities and DeIDOT for maintaining current and future pedestrian facilities.
14. Support DeIDOT in developing strategies that will increase participation in the Safe Routes to School program by emphasizing the importance and benefits of walking for children.
15. Work with DeIDOT to encourage groups to pursue Scenic and Historic Byways designation.
16. Encourage expansion of the Sussex County Airport as noted in their Business Plan.
17. Work to encourage the concentration of development at locations and densities that will support transit services.

- **Intergovernmental Coordination**

Issue

Appropriate transportation facilities and sound transportation investments will not happen without ongoing coordination and cooperation between different levels of government. Furthermore, transportation planning and land use decision-making, economic development strategies, agricultural land preservation, and environmental resource protection must be pursued in an integrated, coordinated fashion or else they will tend to undercut rather than enhance each other. To best realize the cumulative effects of development, planning in Sussex County must be coordinated to maintain a regional perspective on the goals and challenges of growth.

Strategy

Strengthen communication and coordination at State, County and local level in order to maintain an efficient transportation infrastructure necessary for interconnectivity, responsible land development, and economic vitality.

Actions

1. Work closely with DelDOT and municipal entities to understand the impacts of transportation facility and service decisions on land use patterns and land use decisions on the transportation system.
2. Develop sub-area plans with DelDOT and municipalities to better plan for future growth and required infrastructure.
3. Support DelDOT in maintaining consistency between transportation improvements and state spending strategies.
4. Help ensure that transportation plans and strategies are coordinated with applicable state and federal priorities and mandates including the Safe, Accountable, Flexible, Efficient Transportation Equity Act; the Clean Air Act; and Livable Delaware Initiatives.
5. Work with DelDOT's Secretary of Transportation and County Council to jointly establish a formal, funded, ongoing review and advisory group, similar to a Metropolitan Planning Organization (MPO), comprising municipal, county, and state government representatives, to address and make recommendations regarding transportation, land use, and related infrastructure issues in consultation with other public and private parties.
6. Partner with DelDOT to demonstrate stewardship of public funding through efficiency in all aspects of transportation development, management, operation and maintenance.

- **Air Quality**

Issue

Before 2004, Sussex County occupied a marginal status relative to air quality and as such was not subject to the more restrictive federal rules and controls affecting the northern two counties. However, new federal regulations have incorporated all three of Delaware's Counties into a single ozone non-attainment area subject to the same rules and restrictions. Additionally each county must periodically prove that planned transportation projects will not adversely affect the state's air quality as a whole. Should any County fail to meet these federal air quality rules the entire state will become subject to severe restrictions concerning the availability of federal transportation construction funding. Sussex County will need to find ways of generating air quality credits to offset increased emissions from new transportation projects.

Strategy

Currently, emissions testing in Kent and New Castle Counties include a feature called On Board Diagnostics (OBD). New legislation could require that vehicles in Sussex County undergo periodic emission testing using the OBD procedure. The OBD test procedure is a much more accurate and complete evaluation of the vehicle's operating parameters and produces a much more precise measure of actual emissions. This more precise testing methodology will generate emissions credits that may be used to allow construction of much needed congestion management and expansion projects throughout the County. The County should consider the following actions to improve its air quality and prepare itself to submit to mandatory OBD testing:

Actions

1. Support DelDOT in the preparation of air quality analysis to determine exact emission reduction (emission credit) that can be reached through the adoption of countywide OBD Inspection and Maintenance (I/M) test procedure.
2. Work with State Legislators, DelDOT and municipal officials to prepare a prioritized list of likely congested management expansion projects agreeable to all parties.
3. Urge DelDOT to prepare itemized estimate of financial cost of converting existing testing facilities to OBD I/M capability, as well as additional personnel required to operate the new procedure.
4. Support DelDOT in the development of a marketing plan to sell conversion to OBD I/M testing as green light for long awaited project work on SR-24, 26, 54, and others.

- **Sub-Area Planning**

Issue

Development patterns due to increased population have left their mark on Sussex County, resulting in increased traffic congestion along major north/south and east/west corridors, loss of farmland and open spaces, air pollution, dependence on single-occupant vehicle transportation, and governments struggling to provide needed public services to these growing areas. This growth pattern has left some communities in Sussex County struggling with how to provide for the infrastructure to support this development. As development continues, the State, County and municipal governments should be looking at the coordination of land use and transportation decisions, better planning of local roads, connectivity between developments, and transportation alternatives to provide mobility for future generations.

Strategy

Sub regional plans are used by state, county and local governments as well as by private partners to evaluate the impacts of future growth on a smaller area, such as a district or watershed within a county. To better prepare for these impacts and to strengthen inter-governmental coordination, Sussex County proposes to prepare sub regional plans beginning in the areas noted below.

These areas have varying issues and concerns which, as development occurs over time, will require additional services and resources to address. County staff in cooperation with the state, local jurisdictions and private partners will further define these geographic regions, evaluate future growth trends, review existing services, identify needed improvements to existing services, further define and evaluate growth impacts, prioritize lands for possible preservation and create new funding sources for improvements. This planning process will incorporate significant public opinion to understand local needs. The sub regional plans also will include new Future Land Use Maps that will serve as amendments to the current Sussex County Comprehensive Plan.

Actions

1. Partner with DelDOT and respective municipalities to develop sub-area plans for the following areas or development districts:
 - Delmar Area
 - Milton Area
 - Seaford, Blades and Laurel Area
 - Millville-Ocean View Area
 - Greenwood / Bridgeville Area

2. Require greater coordination of plans made by all levels of government – e.g., county plans consistent with local plans, sub-area plans with county plans, and state policies with sub-area plans.
3. Work with communities to form joint or sub-area planning commissions, and work with DelDOT to encourage participation in county and sub-area planning efforts.
4. Ensure that the planning process includes opportunities for public participation to maintain the input and trust of local officials and the public, including notification of zoning or master plan decisions in neighboring communities.