

2018



# Comprehensive Plan



REGGIE

# Kent County Comprehensive Plan 2018

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Tyler Anaya

Jason Berry, AICP  
Danielle Lamborn  
Nancy Thompson  
Mary Ellen Gray, AICP

Elizabeth Caufield  
Jill Johns  
Alan Tyson  
Mike Ward

*Special thanks to Alan Tyson for all of the original artwork included throughout the Plan.*

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# Introduction

## Vision Statement

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To preserve the rural and community character of Kent County by encouraging the most appropriate use of land, water, and other resources that protects the County's natural, historic, and cultural resources, allows for economic opportunity, preserves farmland, manages growth, and provides a safe sustainable environment in which all citizens may live, work, shop, learn, and play.

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The Comprehensive Plan tells the story of Kent County. It begins with a discussion of where we are today and proceeds to describe the County and community we want to be 30 years from now. The story is not just about land use and zoning but how the County can best serve its population in all areas including parks and recreation, infrastructure investment, protection of natural resources, sustaining our rural character, and public safety. It is a strategic plan designed to identify goals and challenges throughout the County and offer solutions.

Comprehensive Plans often develop around a theme and in 2018 the overarching theme is sustainable economic growth and job creation. The policies and implementation actions discussed in this Plan are intended to guide development and investment in the County to support economic growth and enhance quality of life for all residents. Economic growth whether in the County or its municipalities that respects the character of the area will serve all citizens.

In addition, the policies and implementation actions discussed throughout are designed to foster the creation of sustainable communities and the preservation of natural resources as well as the County's rural character. There is an emphasis on providing adequate infrastructure as well as a variety of nonresidential services, both public and private, for existing, planned, and anticipated development within growth areas. There is also an emphasis on further refining the County's growth boundaries to serve two primary purposes: (1) efficiently direct public investments in infrastructure of all types and (2) protect the County's agricultural industry and natural resources from encroaching development.

The comprehensive planning effort has been a community-wide endeavor encompassing surveys, public workshops, social media, and public hearings. Three online surveys were distributed to the community in an effort to identify and refine areas of concern and priorities. The first survey was available from August 2017 to January 2017, resulted in 579 responses, and is included as Appendix A. The second survey was available from January 2017 through July 2017, yielded 579 responses, and is included as Appendix B. The third and final survey was available through March and April 2018, yielded 168 results, and is included as Appendix D.

While participants in the process often have differing opinions or interests, articulating a plan reflecting the interests of the public at large is an exercise in vision and compromise. The resulting policies and recommendations should be used not just in land use decisions but also in capital planning and investment to benefit those who live and work in Kent County.

# Chapter 1

## Population & Demographics



### Overview

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The foundation of comprehensive planning is the people within a community and how they interact with the built and natural environment. To adequately plan, one must have an understanding of the population and their needs with respect to housing, employment, and services whether public or private. Examining the evolution of Kent County and how it has affected current conditions is essential in developing a plan for the future. There are a number of factors that affect the population in any given area including birth/death rates, in/out migration, and presence of adequate housing and jobs. Past and current trends are analyzed to project what the makeup and subsequent needs of the County will be in the future.

The data used in the Plan were taken from multiple sources. Primary among them is the US Census Bureau which provides much of the data within this chapter both from the 2010 Census and their intercensal projections. In addition, the Delaware Population Consortium (DPC) is charged with projecting population and household data throughout the State of Delaware. The DPC is staffed by the Center for Applied Demography and Survey Research (CADSR) at the University of Delaware. More information about the Center and their projection methods can be found at [www.cadsr.udel.edu](http://www.cadsr.udel.edu). The DPC released single and five year population and household projections through 2050 in October of 2016 which are used throughout the Plan.

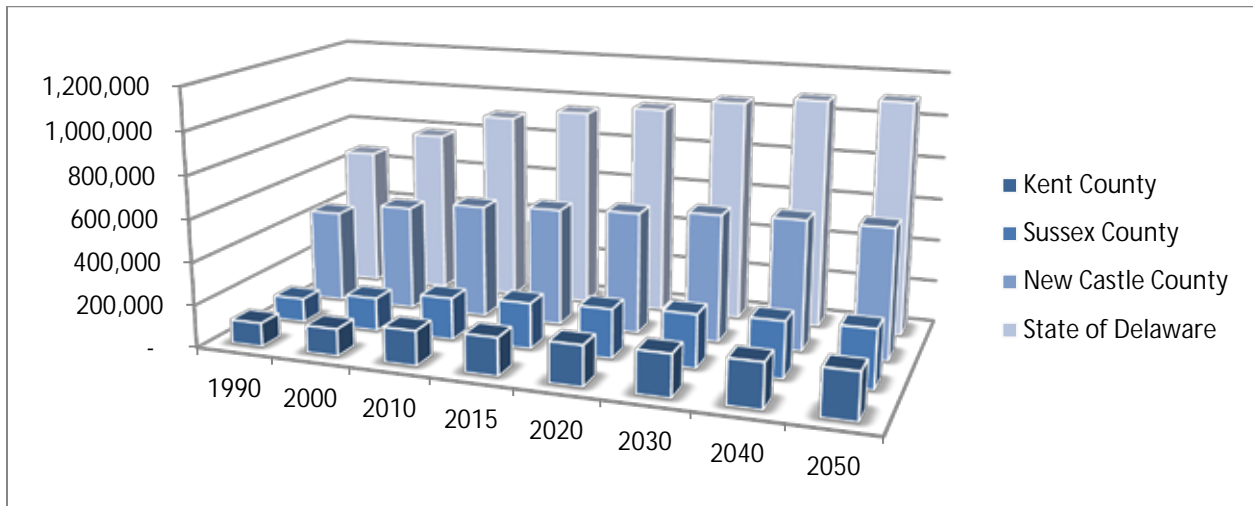
## Population Growth

Kent County is projected to remain the smallest county in Delaware, but the growth rate is expected to remain steady due largely to in-migration.

### Population Projections

	1990	2000	2010	2015	2020	2030	2040	2050
Kent County	110,993	126,697	162,978	176,716	187,920	196,219	206,861	215,279
Sussex County	113,229	156,638	197,888	215,622	230,338	249,292	261,426	270,421
New Castle County	441,946	500,265	538,912	556,999	574,407	600,076	610,460	609,921
State of Delaware	666,168	783,600	899,778	949,337	989,665	1,045,587	1,078,927	1,095,621

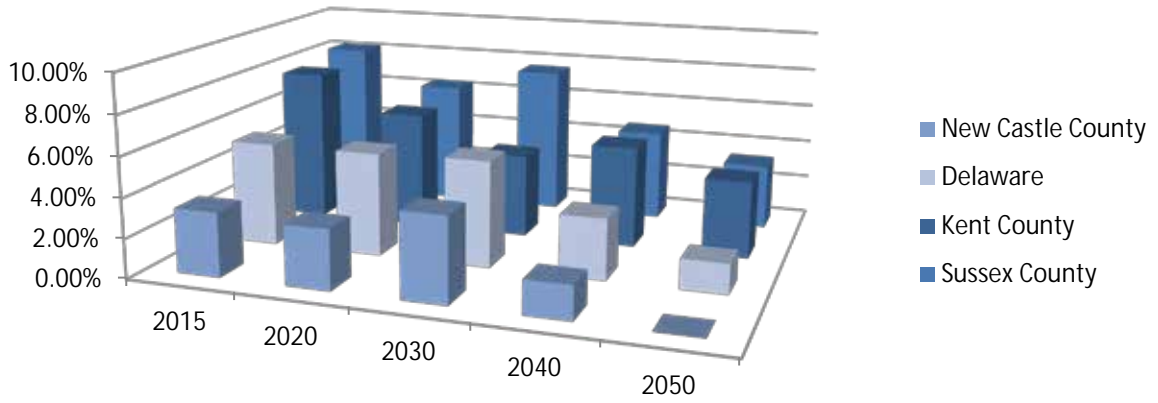
Sources: US Census Bureau and Delaware Population Consortium 2017 Annual Projections



### Growth Rate

	2015	2020	2030	2040	2050
Kent County	7.77%	5.96%	4.23%	5.14%	3.91%
Sussex County	8.22%	6.39%	7.60%	4.64%	3.33%
New Castle County	3.25%	3.03%	4.28%	1.70%	-0.09%
Delaware	5.22%	5.22%	5.35%	3.09%	1.52%

Source: Delaware Population Consortium Annual Estimates 2017

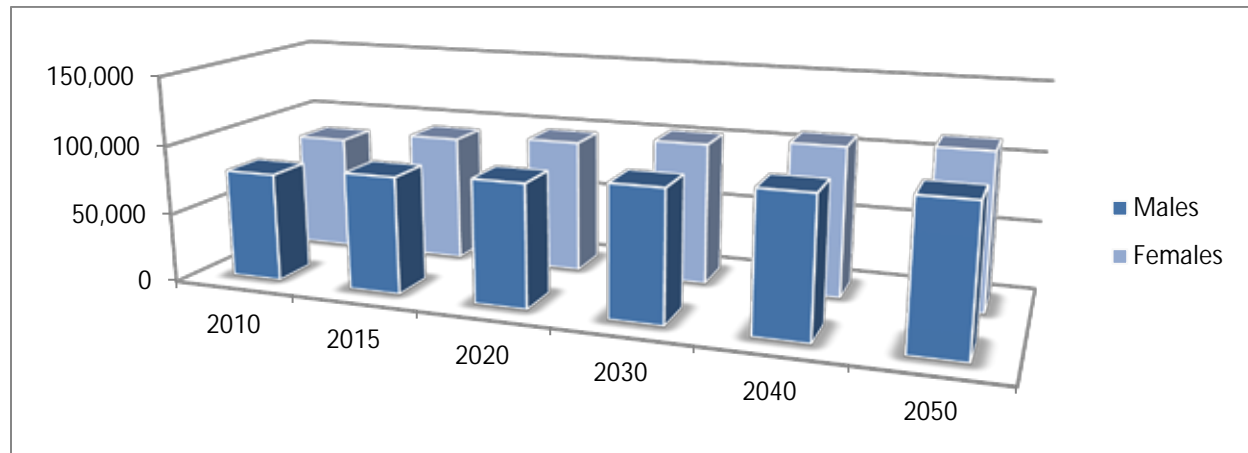


## Gender Distribution

Women continue to outnumber men and are estimated to comprise just over 52% of the population in 2050.

	2010	2015	2020	2030	2040	2050
Male	78,407	84,587	88,513	93,856	98,840	102,874
Female	84,571	92,129	96,407	102,363	108,021	112,405

Source: Delaware Population Consortium 2016 Annual Projections



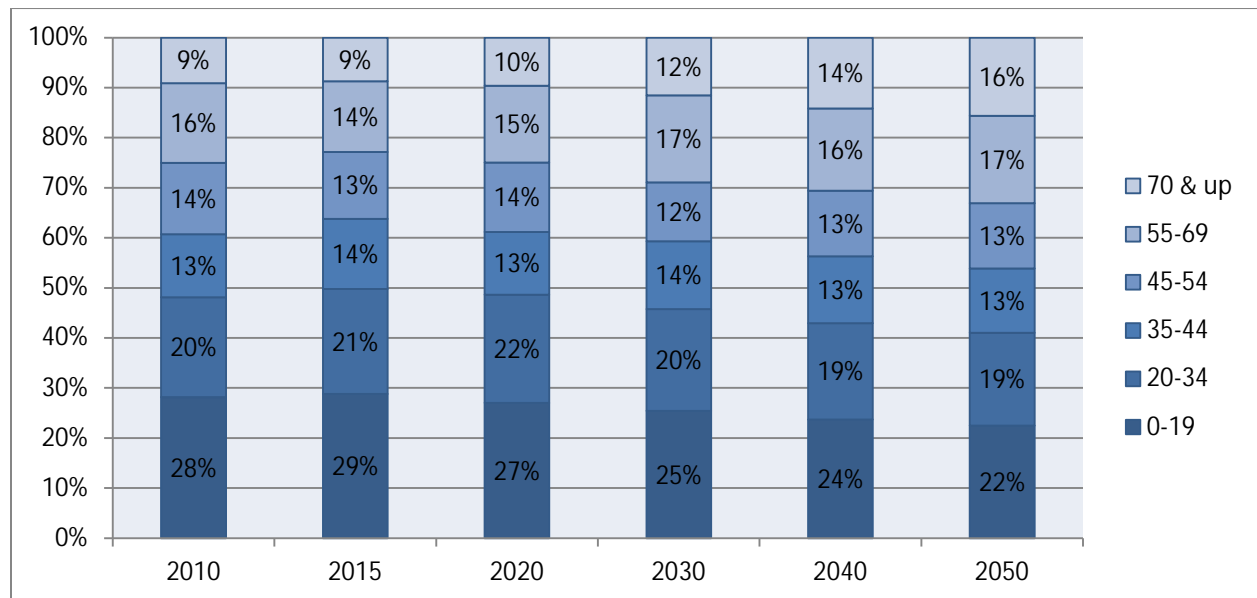
## Age Distribution

The population is aging which brings about specific economic and service concerns. As driving becomes a challenge, alternative modes of transportation and proximity to medical providers, shopping, and recreation become priorities. Alternative housing options such as smaller lots, multi-family units, and in-law suites (accessory apartments) can become attractive for empty nesters. In addition, the ability to age in place and retrofit existing housing to address mobility challenges should be an option for residents. These are elements that should be considered as new development, both residential and commercial, is designed as well as when investment is made in new infrastructure ranging from roads to parks.

At the same time, economic development and job growth remain priorities in order to attract more working age adults to the County as well as encourage graduates to stay and make a life here. Community design and amenities are also no small part of what can attract young people to the County.

	2010	2015	2020	2030	2040	2050
0-19	45,924	50,919	49,958	49,907	49,086	48,367
20-34	32,458	37,001	39,991	39,903	39,802	39,883
35-44	20,566	24,823	23,116	26,584	27,530	27,768
45-54	23,227	23,533	25,646	23,106	27,178	28,059
55-69	25,941	24,990	28,369	34,034	34,030	37,579
70 & UP	14,862	15,450	17,840	22,685	29,235	33,623
<b>TOTALS:</b>	<b>162,978</b>	<b>176,716</b>	<b>184,920</b>	<b>196,219</b>	<b>206,861</b>	<b>215,279</b>

Source: Delaware Population Consortium 2017 Annual Projections



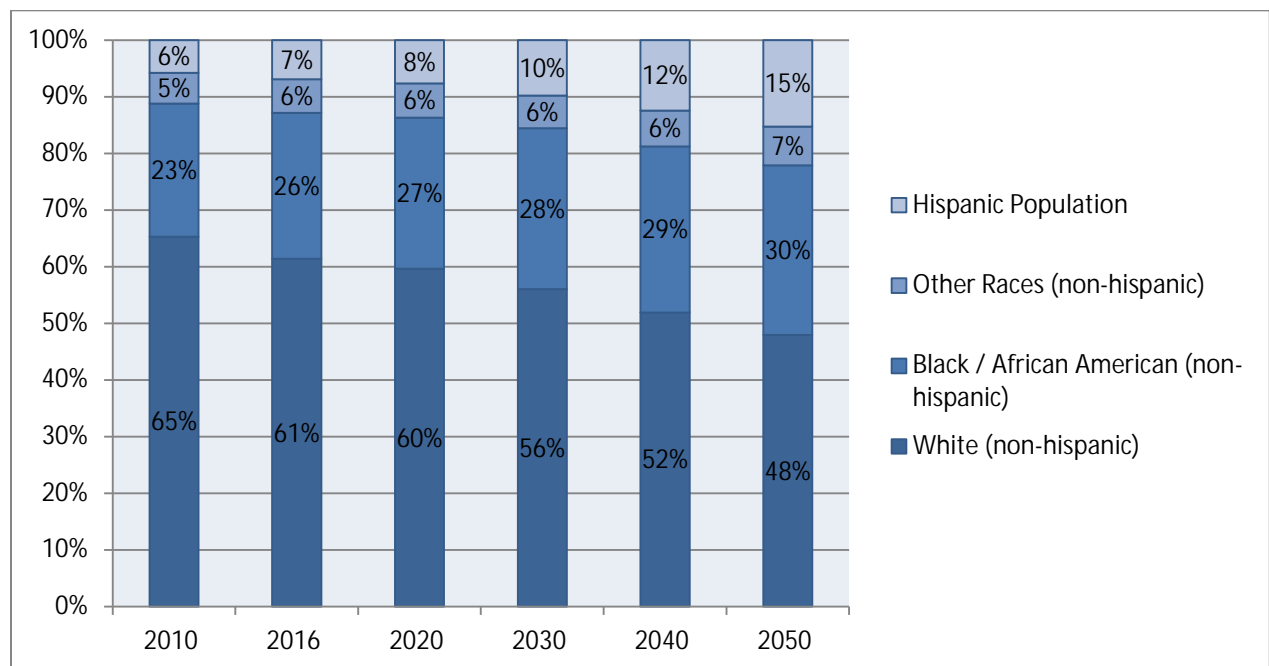


## Race & Ethnicity

Much like the national trend, Kent County is diversifying. The greatest increase is projected in the Hispanic community (274% between 2010 and 2050). In addition, the White (non-Hispanic) population is projected to decrease by 4% between 2010 and 2050. The County currently has a Language Access Plan (LAP) but must be mindful to keep it updated and be prepared to provide services to citizens for whom English is a second language.

	2010	2016	2020	2030	2040	2050
White (non-hispanic)	106,435	109,964	110,268	109,974	107,392	103,207
Black / African-American (non-hispanic)	38,246	46,105	49,319	55,701	60,616	64,435
Other Races (non-hispanic)	8,881	10,559	11,229	11,266	13,145	14,748
Hispanic Population	9,416	12,437	14,104	19,278	25,708	32,889
<b>Total</b>	<b>162,978</b>	<b>179,065</b>	<b>184,920</b>	<b>196,219</b>	<b>206,861</b>	<b>215,279</b>

Source: Delaware Population Consortium 2017 Annual Projections



# Chapter 2

## Economic Development

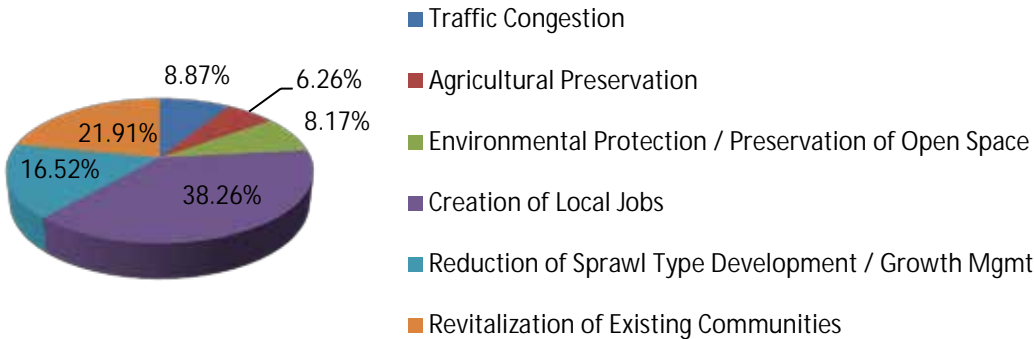


### Overview

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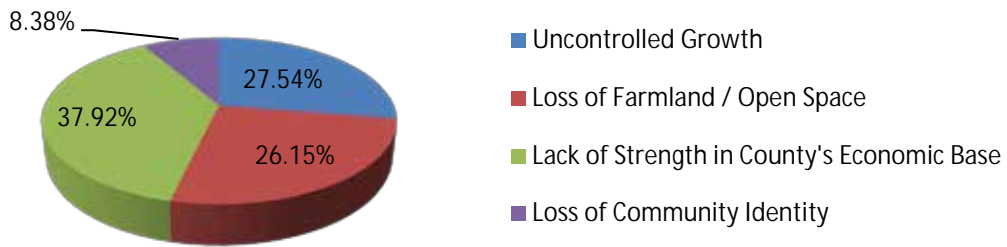
Public outreach revealed economic development and job creation as clear top priorities. Public outreach also revealed a community interest in investing in and strengthening existing communities as well as utilizing existing resources and infrastructure rather than expanding outward or building new.

### What is the biggest issue facing Kent County?



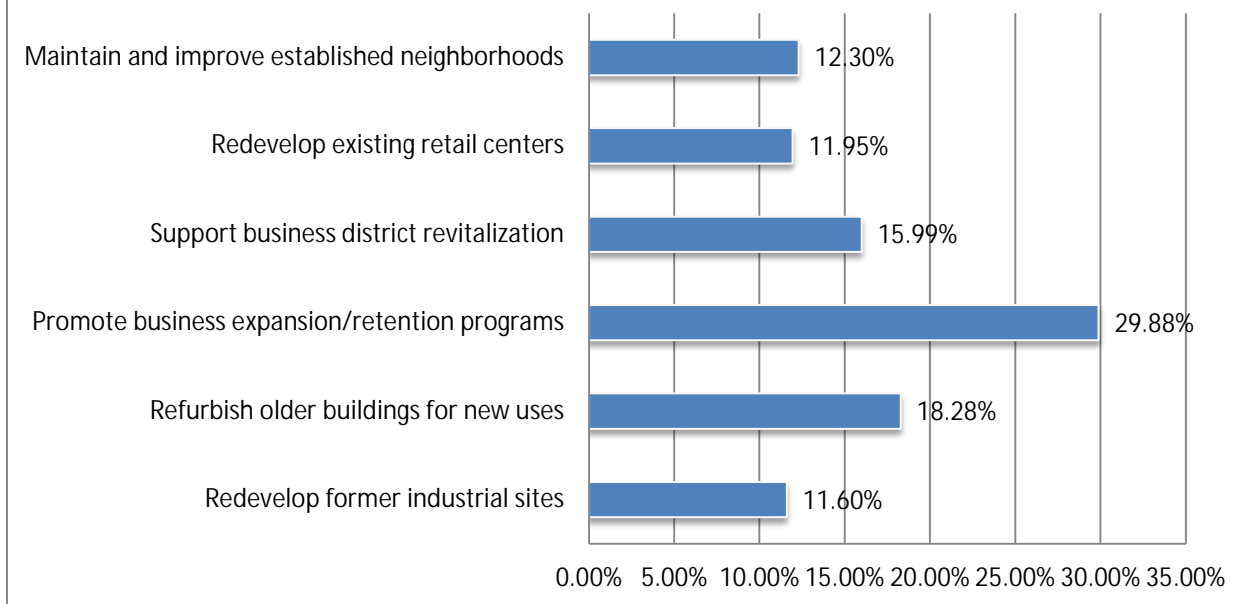
Source: Survey 2

## What do you consider the biggest threat to Kent County?



Source: Survey 1

## What should be the County's top priority in economic development?



Source: Survey 2

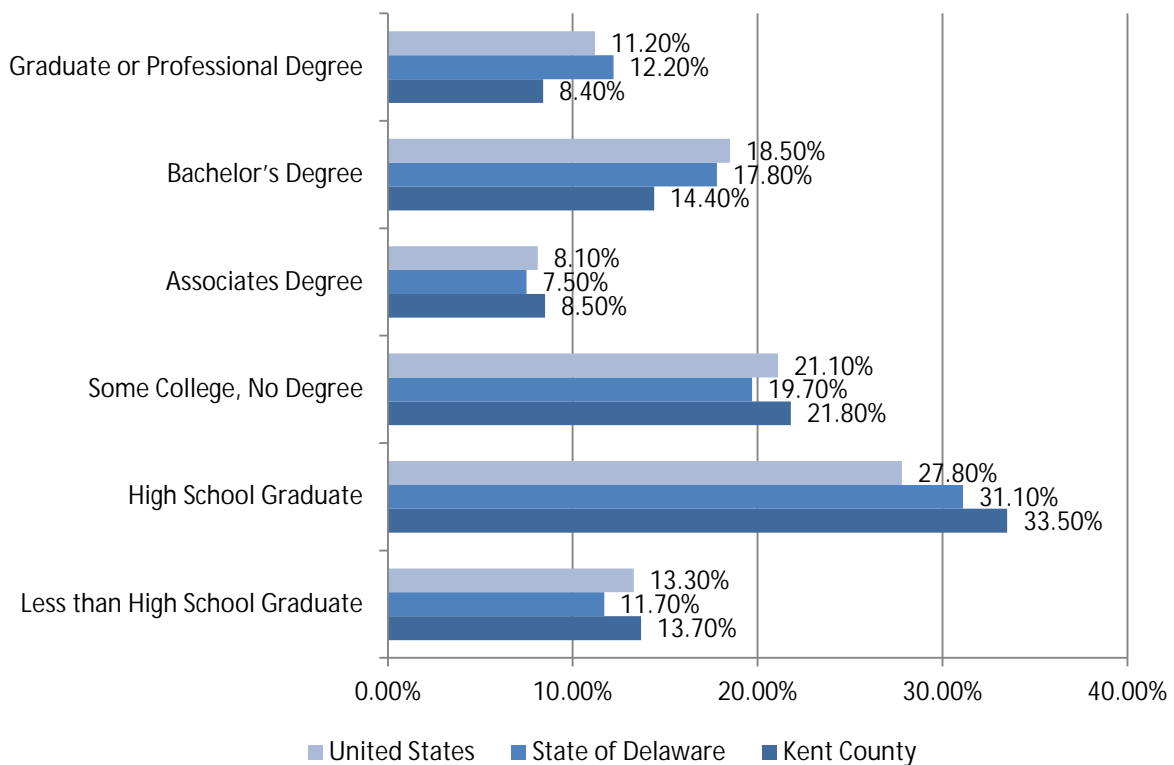
The Kent Economic Partnership has identified 3 key economic strategic initiatives: (1) Business Retention, (2) Business Expansion, and (3) Business Recruitment and Development. Some key elements of the strategy include support for the Downtown Development District program, support and expansion of the agricultural industry through development of the Food Innovation District, continual improvement of the permitting process, and successful marketing of Kent County's strengths.

Economic development is more than simply supporting business in the County; it is also the creation of well-paying jobs. An economic development strategy must balance many important interests such as preserving small-town charm and rural character, promoting the industry of agriculture, preserving historic resources, providing educational opportunity, maintaining infrastructure, investing in community facilities, and offering employment for a diverse and qualified workforce. There are myriad tools discussed throughout the Comprehensive Plan that the County can use to create an environment conducive to economic development including investment in infrastructure and community facilities, updated zoning ordinances, zoning classifications, and predictability in the land use process overall.

## Income and Education

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### Educational Attainment



Source: 2015 American Community Survey 1-Year Estimates

An educated and highly skilled workforce is essential to economic development and business growth. Kent County is on par with the State and country with regard to citizens with a high school diploma or greater (86.6%, 88.3%, and 86.7% respectively). However, only 22.8% of County residents have a Bachelor's degree or higher as opposed to 30% of State residents, and 29.7% of residents nationwide.

While 13.7% of the County population has not achieved a high school diploma, the percentage is lower than the 20.6% reflected in the 2008 Comprehensive Plan.

Since 2010, Kent County's median income has grown by 3.37%, which falls behind the State and neighboring counties' growth rates by 2%.

	Kent County	New Castle County	Sussex County	State of Delaware
2010	\$53,183	\$62,474	\$51,046	\$57,599
2015	\$54,976	\$65,476	\$53,751	\$60,509
Growth in \$	\$1,793	\$3,002	\$2,705	\$2,910
Growth %	3.3%	5%	5%	5%

*Source: 2015 ACS 1-Year Estimates, 2010 ACS 1-Year Estimates*

According to the 2015 ACS 1-Year Estimates, 13.5% of Kent County's population is considered to be living in poverty, a 2.3% increase since 2010. The percentage of households receiving Supplemental Nutrition Assistance increased from 12.3% in 2010 to 16.4% in 2015.

## Employment

With respect to employment trends, the County has seen moderate increases in the public administration, arts & entertainment, education, and health care professions. The most substantial increase has been in the relatively lower paid retail trade. There continue to be losses in the construction sector even with the recovery of the real estate market after the recession. Other industries have seen small losses since 2010.

It is also notable that unemployment in Kent County exceeds both the national and State rates although not by a substantial margin.

Unemployment Rate as of November 2017	
Sussex County	4.5%
Kent County	4.3%
New Castle	4%
State of Delaware	4.1%
United States	4.1%

*DE Department of Labor & U.S. Department of Labor*

On a positive note, there have been more than 200 approvals of home-based businesses over the last ten years. Those include home occupations such as family daycares, professional offices, and home-based contractor establishments. These are uses that are designed to have no impact on the surrounding area and offer citizens an opportunity to engage in business with lower start-up and operational costs.

These small businesses are often successful enough to enable opportunities for growth as they expand from neighborhoods into commercial areas. Given the makeup of Kent County, small and medium sized businesses provide the most growth potential which strengthens the overall local economy.

While larger businesses in the County tend to get the most attention and have generally been stable, the stability and growth of small and mid-sized businesses is encouraging as well. There is fluctuation among businesses with fewer than 20 employees, but in the aggregate the number of businesses is growing and it is entirely likely that some of those businesses continued to grow and enter into the categories with more employees. Ultimately, if small business creation and growth is the backbone of a healthy diverse economy, the County, Kent Economic Partnership, and Greater Kent Committee should include them in strategic planning, outreach, and support efforts.

Employment Size of Establishment	Number of Establishments			Change
	2008	2012	2015	
1 to 4 employees	1,674	1,615	1,756	5%
5 to 9 employees	658	639	632	-4%
10 to 19 employees	460	424	432	-6%
1 to 19 employees (combined)	2,792	2,678	2,820	1%
20 to 49 employees	298	289	339	12%
50 to 99 employees	87	84	94	7%
100 to 249 employees	57	49	50	-14%
250 to 499 employees	12	10	11	-9%
500 to 999 employees	5	5	5	0%
1,000 employees or more	3	4	4	25%

Source: U.S. Census Bureau, 2015 County Business Patterns

## Economic Development Opportunities

### Business Incubator

Business incubators are designed to be proactive, supportive environments that promote business opportunity, job creation, and economic prosperity. They seek to provide economies of scale by locating several early stage businesses within affordable shared space under one roof. This allows multiple businesses to develop new ventures by lowering startup costs, conserving cash, and reducing potentially high service fees associated with single business startups. Typically, incubators provide multiple advantages including leases at or below market level rents, low costs for shared general services (security, meeting rooms, telephones, WIFI, copiers, cleaning services, reception areas), managerial consulting, business plan development, and mentor relationships.

In an effort to support small business, Kent County is planning to utilize vacant office space in the Administrative Complex to create the Emerging Enterprise Development Center (EEDC). In addition to offering low cost space, the County is partnering with the University of Delaware’s Small Business Development Center to provide onsite business training and consultation services for tenants of the EEDC.

## **Downtown Development Districts**

The County has a long history of recognizing the essential role strong towns play in strengthening the economic outlook of the County. Given that infrastructure is key to supporting economic growth, municipalities are well placed to accommodate new development. Supporting our towns works to support all of Kent County and care should be taken to avoid making land use decisions that compete with the municipalities.

Smyrna, Dover, Harrington, and Milford have designated Downtown Development Districts (DDD) enabling property and business owners to leverage both State and County funds for improvements and expansion. The DDD program is a State designation and rebate program toward which the County is leveraging funds for projects meeting the State's criteria.

Since the inception of the DDD program, the County has invested just over \$98,000 to support 11 commercial and residential projects in the Districts. Continued support of the DDD program benefits the entire County.



## **Broadband Expansion**

Kent County remains largely rural and low density in nature which presents specific challenges to economic development. One way to support existing businesses and potentially attract new technology-dependent business is through expansion of high speed broadband. According to a 2014 study completed by the Center for Urban and Regional Affairs at the University of Minnesota entitled, *Findings on the Economic Benefits of Broadband Expansion to Rural and Remote Areas*, small communities and surrounding rural areas with access to high speed broadband realize short and long term economic benefits including:

### ✓ **Economic Growth**

- Ø Employment growth
- Ø Establishment of new businesses
- Ø Existing business growth
- Ø Increased housing rents
- Ø Higher average incomes
- Ø Increased population growth

### ✓ **Education and Labor Market Advantage**

- Ø Rural areas can be attractive to business because of lower property and labor costs but there is often a shortage of skilled labor.
- Ø High speed broadband offers opportunities for web based education and job training.

## **Food Innovation District**

Agriculture remains the largest industry in Kent County and both the State and County have made a significant investment in preserving farmland. The development of the Food Innovation District is an effort to capitalize on and expand opportunities for the agricultural industry. The vision for the District is as follows:

*Create a thriving economy, a sense of place and sustainability for Kent County, the country, and the planet through food systems rooted in this region and centered on food that is healthy, green, fair and affordable.*

The project includes five objectives:

1. Foster collaboration and partnering between stakeholders.
2. Provide innovative research, resources and solutions.
3. Aid in profitability of Agricultural and Food Industries.
4. Enable food business incubation and expansion.
5. Stimulate and support sustainable economic growth.

## **Opportunities for Collaboration**

There are a number of organizations outside of county and municipal governments working to advance economic development and community revitalization efforts. Three such organizations include the Central Delaware Chamber of Commerce, Greater Kent Committee (GKC), and the Kent Economic Partnership (KEP). The GKC is a non-profit membership organization created in the late 1980's by CEOs and top business executives in Central Delaware with a mission to:

- Recognize community, social & economic opportunities
- Assist in resolving these issues and fulfilling any opportunities
- Find broad and sound solutions

The KEP is a non-profit organization created to help support and expand business interests throughout central Delaware. The Partnership is supported by a team of business leaders from all over Kent County whose mission is to create a business environment supportive of the entrepreneurial spirit. The Chamber of Commerce, GKC, and KEP work collaboratively with the County and increasingly with municipalities.

The Greater Kent Committee recently commissioned Rockport Analytics to complete an economic development analysis and strategic plan for the County. They reviewed key economic data and interviewed businesses within the County as well as business leaders in surrounding states. Their research revealed specific economic sectors the County should target that would support existing businesses currently importing such services:



1. Business and Legal Services (Computer design & programming, Scientific, R&D Services, Employment/HR Services, Advertising/PR, Legal Services, Accounting Services, Building Services;
2. Distribution, Warehousing, Logistics (Wholesale Trade, Logistics & Trucking, Warehousing & Storage); and
3. Health Care (Offices of Physicians, Outpatient Care Facilities, Nursing & Community Care, Medical & Diagnostic Labs).

Rockport Analytics also identified specific challenges to attracting business to Kent County including:

1. Workforce attraction, development;
2. Quality of life (cultural, arts, recreations, shopping, health care);
3. Evolving broadband infrastructure;
4. Access to travel infrastructure; and
5. Need to change the traditional post-secondary curriculum for targeted workforce.

In response to those challenges, two additional economic sectors were identified as targets:

1. Education & Skills Development (Computer & Management Training/Technical Schools, Educational Support Services, Elementary & Secondary Education, Scientific Research & Development Services, Child Day Care Services); and
2. Quality of Life (Restaurants & Catering, Underserved Retail, Arts/Cultural/Recreation, Non-Gaming Entertainment).

In summary, economic development is community development and all of the other elements discussed in this Comprehensive Plan are essential to support a successful economic development effort.

Ultimately, the Food Innovation District can serve the County by both expanding opportunities for local growers, creating opportunities for new food related business ventures, and expand access to healthy food for the community.

## **Existing Resources**

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In order to inform statewide planning and economic development efforts, the Office of State Planning Coordination (OSPC) began a project in February of 2017 to identify and map vacant and available commercial and industrial land and buildings<sup>1</sup>. Kent County was chosen as a pilot for this effort and the project to date has involved a GIS analysis of vacant and underutilized commercial and industrial land in

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<sup>1</sup> Disclaimer: This is a pilot project that was completed by the OSPC. The data presented represent a snapshot in time, with the vacant lands being completed in February 2017 and the for-sale/lease building square footage completed in April of 2017. Due to the lack of a definitive real estate data source, this project relied upon an analysis of many different data sources as well as field verification. As such, this data should be used with caution, understanding that this analysis represents an overall indication of the quality and location of these lands and buildings but it is not a completely accurate or definitive source. Some lands and buildings were probably not captured in the analysis due to limitations in the data sources, the age of the aerials, the time available to field verify, and human error.

the Route 13 / Route 1 corridor from Smyrna to Milford. In addition, vacant commercial and industrial buildings for sale or lease throughout Kent County were identified and mapped.

Because no definitive real estate data source exists for this information, OSPC collected GIS data on commercial and industrial zoning, reviewed aerial photos from 2012, and reviewed various commercial real estate sources from the internet and local realtors. An OSPC staff person field-verified many of the for-sale and for-lease properties. Their preliminary findings reveal:

**Vacant Commercial / Industrial Lands:** The GIS analysis focused only on the Route 13 / Route 1 corridor from Smyrna to Milford, including all of Route 13 in Dover. Within this corridor, the analysis identified 1,882 acres of vacant commercially or industrially zoned land. In addition, there were 593 acres of commercially or industrially zoned land that were only partially built-out, and thus capable of additional future development. For perspective, consider that in this corridor all currently constructed commercial and industrial facilities are on 1,749 acres of land. The greatest amount of the vacant or partially built-out lands were in the Kent County jurisdiction, followed by Milford, Dover and Smyrna.

The City of Milford specifically has 386 +/- acres of underutilized or vacant commercial land available for development, of which 256 +/- acres are located along the Route 1 corridor. For comparison purposes, the City only has 304 +/- acres of commercial land currently developed.

**For Sale and For Lease Building Space:** The project area was the entire County, including the municipalities. The analysis identified 2,915,000 square feet of existing building space for sale or for lease. More than half of this space was in Dover, with Kent County and Smyrna also having a noteworthy amount of available building space. For perspective, consider that the Christiana Mall (the enclosed portion) is 1.2 million square feet in size.



In addition, there are numerous industrial and business parks throughout the County, many of which have available space and supporting infrastructure. (see Map 2B)

## Existing Resources

Office/Industrial Park	Description of Opportunity for Supporting Economic Development	Target Industries
Duck Creek Professional Campus	Proposed project (~200 acres) located just off of SR 1, just north of Kent/New Castle line focused on upscale office and light manufacturing operations. This is an ideal location to begin attracting college-educated talent down from central New Castle County toward Kent County.	New Tech. Manufacturing/ Financial Service Back Office/ Professional Services/ Publishing
Smyrna Health & Wellness Center	Under construction in downtown Smyrna with 108,000 SF of space for medical offices.	Professional Services
Smyrna Industrial Park	Park nearly full with one offering of a 30,000 SF 'build to suit' building.	Traditional Mfg./New Tech. Mfg./ Financial Service Back Office/ Professional Services/Publishing/ Warehousing Operations
Central Delaware Industrial Park	Older park with variety of traditional manufacturing operations with some room for expansion.	6 lots available
McKee Industrial Park	Former Playtex (older building) warehouse being subdivided. Currently up to 425,000 SF of space is available for warehousing or light manufacturing.	Traditional Manufacturing
Former Sara Lee Building	Former Sara Lee site (older building) on 40 acres of land and a rail siting. Facility currently being subdivided with ~100,000 SF available.	Traditional Manufacturing/ Warehousing Operations
Enterprise Industrial Park	Existing complex (portion was utilized by Client Logic). Currently up to 100,000 SF of space is available.	Traditional Manufacturing/ Financial Service Back Office/ Publishing/ Warehousing Operations
West Side Development Project	Encompasses a 10-acre site, Lincoln Park Center, which is targeted for office and light industrial. Approximately 1/3 of the area has been acquired by the Downtown Dover Development Corp.	Traditional Manufacturing/ New Tech. Manufacturing/ Financial Service Back Office/ Professional Services/Publishing
Eden Hill Farm	Proposed project that will include different residential options as well as professional offices (~150,000 SF) at the front of the property – primarily for medical office use.	Professional Services
Creekside Center	Under construction multiple building office complex with 120,000 SF for medical and professional offices.	Professional Services
Blue Hen Corporate Office Park	Former mall property converted to office 485,000 SF office complex. There are 200,000+ SF available including the 79,000 SF Bank of America customer service center.	Financial Service Back Office/ Professional Services
Garrison Oaks	385 acre farm adjacent to SR 1 and White Oak Road purchased by the City of Dover for office and technology company attraction.	New Tech. Manufacturing/ Professional Services
Kent County Aeropark	Existing industrial park with multiple tenants. Monster Racing building plus 40 acres are available for industrial operation. Potential to subdivide building and interior is predominantly open space. Additional land parcels available nearby (e.g., Lafferty Lane).	Traditional Manufacturing/ New Tech. Manufacturing/ Publishing/ Warehousing Operations
Milford Industrial Park	Existing industrial park with multiple industrial/commercial tenants.	1.4 acre parcel available
Independence Commons	Existing industrial park with multiple industrial/commercial tenants.	six (1) acre lots, one (11) acre lot and one (3) acre lot available

## Tourism

Tourism is an emerging industry within the County and can target a wide range of interests including arts and culture, history and heritage, sports and gaming, outdoor recreation, shopping and leisure, and agri-tourism. In an effort to promote the tourism opportunities in our small towns, the Kent County Tourism Corporation recently launched their Quaint Villages campaign. Some of the tourism opportunities highlighted by their efforts include:

### Tourism Opportunities

Arts & Culture	History & Heritage	Sports & Gaming	Outdoor Recreation	Shopping & Leisure	Agri-tourism
Biggs Museum of American Art	Barratt's Chapel Museum	Harrington Raceway	DE National Estuarine Research Reserve	Byler's Store-Harrington	Delaware Agricultural Museum and Village
Parke Green Galleries	Harrington Historical Society Museum	Harrington Raceway & Casino	Bombay Hook Nat'l Wildlife Refuge	DE Visitor Center & Galleries	Messick Agriculture Museum
Smyrna Opera House	Smyrna Museum	Dover International Speedway	Killens Pond State Park	Shady Lane Selections	Fifer Country Store and Orchards
Milford Art Stroll	Woodburn, The Governor's House	Garrison's Lake Golf Course	Corks Point Outdoors	Spence's Bazaar & Auction	Bobola Farm & Florist
Delaware Ballet	Capital Square/ Legislative Mall	Dover Downs Hotel & Casino	Captain's Lady-Bowers	Bel Boutique	Wicked R Western Production
The Dover Art League	DE Archaeology Museum	All About the Swing	Loblolly Acres	Country Expressions	Shady Lane Selections
Kent County Theater Guild	John Dickinson Plantation	First State BMX	Scenic Biplane Rides	Bluvintage	Rose Valley Greenhouse
Delaware by Hand	Museum of Small Town Life	Dover Par 3 Driving & Range	Lister Acres	Beyond Dimensions Gift Shop	Cowgills Corner Sheep and Wool Farm Bed & Breakfast

Source: Delaware Economic Development Office, Office of Tourism <http://www.visitdelaware.com/index.htm>

In addition to the tourism opportunities mentioned above, Kent County has a wealth of opportunity for ecotourism. Ecotourism is a form of tourism that appeals to ecologically and socially conscious individuals. Generally speaking, ecotourism focuses on volunteering, personal growth, and learning new ways to live on the planet; typically involving travel to destinations where flora, fauna, and cultural heritage are the primary attractions. Within Kent County visitors can visit the following:

#### *The Delaware Birding Trail*

A collaboration of the Delaware Audubon, Delmarva Ornithological Society, the Delaware Department of Natural Resources and Environmental Control and the U.S. Fish & Wildlife Service featuring 27 birding hotspots throughout Delaware.

### ***Bombay Hook National Wildlife Refuge***

This 16,000 acre haven along the Delaware Bay coast east of Smyrna, consists of salt marshes, ponds, fields, and forests. Visitors can see the variety of migratory shorebirds and waterfowl that stop to feed at the refuge, an important feeding stop on the Atlantic Flyway. The facility was established in 1937 and offers walking and auto tours, birdwatching, nature programs, and a visitor center with a gift shop. Refuge staff also conduct programs about the unique horseshoe crab and shorebird connection each spring on Central Delaware's bay beaches.

### ***Milford Neck Wildlife Area***

This area consists of 2,801 acres of undeveloped beaches and dunes, tidal marshlands, swamp and upland forests, and a patchwork of agricultural lands offering an abundance of natural beauty and biological diversity. This is where more than a million migratory shorebirds arrive each spring to feed on eggs laid by horseshoe crabs converging on Delaware Bay beaches. These annual visitors add to an already impressive array of natural inhabitants, which includes rare plants, amphibians, waterfowl, wading birds, small mammals, reptiles and fish. With the only remaining forested area greater than 1,000 acres on the entire coast of Delaware, Milford Neck provides crucial habitat for numerous bird species requiring large blocks of lands and waters for successful migration and breeding.

The above is only a small sampling of the activities available to visitors of Kent County. The County in conjunction with the State of Delaware, the Central Delaware Economic Development Council, and municipalities should actively promote tourism as an industry and enable expansion of existing and creation of new tourism opportunities.

### **Commercial/Retail**

Despite the fact that the retail industry is one of the County's largest employment sectors, many older retail spaces suffer from years of neglect and are losing tenants to new shopping centers. One of the negative impacts of these newer retail areas is that the existing areas in some cases are not redeveloped and become a detriment to the community that they once served. Promoting reuse and redevelopment of existing sites is a priority of the County to prevent sprawling nonresidential spaces and maintain attractive existing communities. In addition, strategic placement of large and neighborhood scale retail establishments is an element of enabling the creation and strengthening of communities within the County.

While the retail and service segment is critical to a success of a local economy, it is not the *most* economically beneficial aspect. Over time, these businesses alone cannot maintain a successful local economy without also expanding the industrial and office space segments. These segments offer larger benefits by typically creating a larger number of higher paying jobs which give a boost to the economic strength of the area in which they are located.

## Land Use Strategy

One of the primary responsibilities of Kent County in supporting economic development is ensuring adequate land is available for new commercial and industrial development. While there are existing resources available for development, there are additional areas with access to infrastructure, especially rail, that are prime candidates for industrial development, as well as opportunities for expansion of existing industrial and commercial areas. There are also areas with opportunities for infill development and smaller areas where neighborhood commercial uses could support existing residential development.

In addition, Employment Centers have been identified in key areas where infrastructure exists or is planned for the purpose of enabling larger scale employers. The Centers are not intended for development of retail or service uses but rather for uses that create jobs – offices of all types and light industrial development are the types of uses contemplated. Master plans should be developed for each of the identified Employment Centers.

Map 2A reflects all of the proposed industrial, employment centers, and commercial areas. The purpose of the map is to offer guidance when locating a business as well as support for rezoning in these areas as demand arises. Many of the proposed areas are further described below:

### Proposed Industrial Areas & Employment Centers

Designated Area	Total Acreage	Acreage Currently Used	Vacant Acreage	Explanation
Hanover Foods Area (W. Clayton)	145	18	127	Access to water, sewer, fiber optic, and rail; existing industrial use on site; large undeveloped land available; identified by Central DE Chamber of Commerce
Cheswold Airport Area (W. Cheswold)	592	540	52	Airfield access; fiber optic, water and sewer available; large tracts of existing industrial zoning; rail access not adjacent but close; more land available with consolidation and redevelopment of smaller lots; identified by Central DE Chamber of Commerce
Dow Reichold Area (N. Dover)	289	235	54	Access to rail, highway, fiber optic, water, and sewer; industrial uses and vacant industrial zoning currently exist; more land available with consolidation and redevelopment of smaller lots; identified by Central DE Chamber of Commerce
ILC Area (W. Frederica)	69	29	40	Access to fiber optic, water and sewer; industrial use exists, large vacant farm adjacent to existing industrial; identified by Central DE Chamber of Commerce
South Felton	448	101	347	Access to water, sewer, highway, and rail; large vacant undeveloped tracts with minimal new residential development adjacent; identified by Central DE Chamber of Commerce

Baltimore Air Coil Area (West Milford)	338	132	206	Access to rail, fiber optic, water, and sewer; existing industrial use in area
State Fair Area (S. Harrington)	725	521	204	Access to rail, highway, water, and sewer; State Fair is all zoned industrially and compatible uses could be located on adjacent property; limited residential land use in the area, substantial highway improvements completed to accommodate truck traffic; identified by Central DE Chamber of Commerce to satisfy need for parcels of substantial size with access to infrastructure especially rail
ESE Area (S.Farmington)	324	127	197	Access to rail, highway, and sewer; area is currently transitioning to industrial uses; minimal new residential development would be affected by new industry
Employment Center (Smyrna/Cheswold)	747	559	188	In addition, Employment Centers have been identified in key areas where infrastructure exists or is planned for the purpose of enabling larger scale employers. The Centers are not intended for development of retail or service uses but rather for uses that create jobs – offices of all types and light industrial development are the types of uses contemplated. Master plans should be developed for each of the identified Employment Centers.
Employment Center (Kent Aero Park)	332	100	232	
Employment Center (Little Heaven)	431	85	346	
<b>TOTALS:</b>	<b>4441</b>	<b>2447</b>	<b>1813</b>	

## Policy Emphasis

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To encourage a strong economy with sustainable economic growth and pursue a balanced economic development strategy that includes attracting new technology and other knowledge-based companies, to provide an influx of higher paying jobs that will keep the community competitive and help retain its young professionals, and support the economic development and redevelopment efforts of the towns by:

1. Maintaining and attracting a diverse business and industrial base in Kent County;
2. Supporting the economic development efforts of municipalities including downtown revitalization efforts;
3. Focusing economic development as a whole toward areas where infrastructure exists or is planned for the immediate future;
4. Supporting redevelopment of existing underutilized shopping centers and hotels;
5. Maintaining and fostering the development of a workforce with the resources to maintain high-paying jobs;
6. Ensuring that economic development activities respect those characteristics that make Kent County a unique place to live and work;



7. Seeking to provide Kent County residents with access to a safe and affordable housing market;
8. Seeking to bring public and private stakeholders together for work on economic development opportunities; and
9. Providing Kent County with adequate infrastructure and transportation resources to support economic development opportunities.

## **Recommendations**

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1. Create economic centers of business and commerce around existing infrastructure and identify areas designated for industrial and business parks, large scale commercial uses, and neighborhood commercial uses. Modify an existing zoning district or create a new zoning district to enable development of Employment Centers. Zoning and land development standards should emphasize the use of master planning for the designated areas. The areas designated for commercial and industrial development would meet the existing requirements for rezoning provided the infrastructure is planned for or in place.
2. Code Revisions
  - a. To promote development of mixed-use centers in targeted locations including Town Areas as identified on Map 7C;
  - b. To create a site plan exemption for small expansions of existing businesses;
  - c. To establish an administrative site plan review process to encourage adaptive reuse of existing developed sites;
  - d. Exempt nonresidential development application from the Adequate Public Facilities Ordinance;
  - e. Develop alternatives for expedited and/or administrative review for projects resulting in substantial economic impact (e.g. jobs creates, median wage, limited impact on infrastructure);
  - f. To review and update industrial, commercial, and office uses in each zoning district;
  - g. Examine altering the conditional use process to require review only by the Regional Planning Commission;
  - h. To further support creation of home-based businesses with no discernable impact on neighboring properties; and
  - i. To provide density incentives within targeted locations within the Growth Zone, especially within the areas identified for Transportation Improvement District Plan.
3. Continue investment in the Downtown Development District grant program.



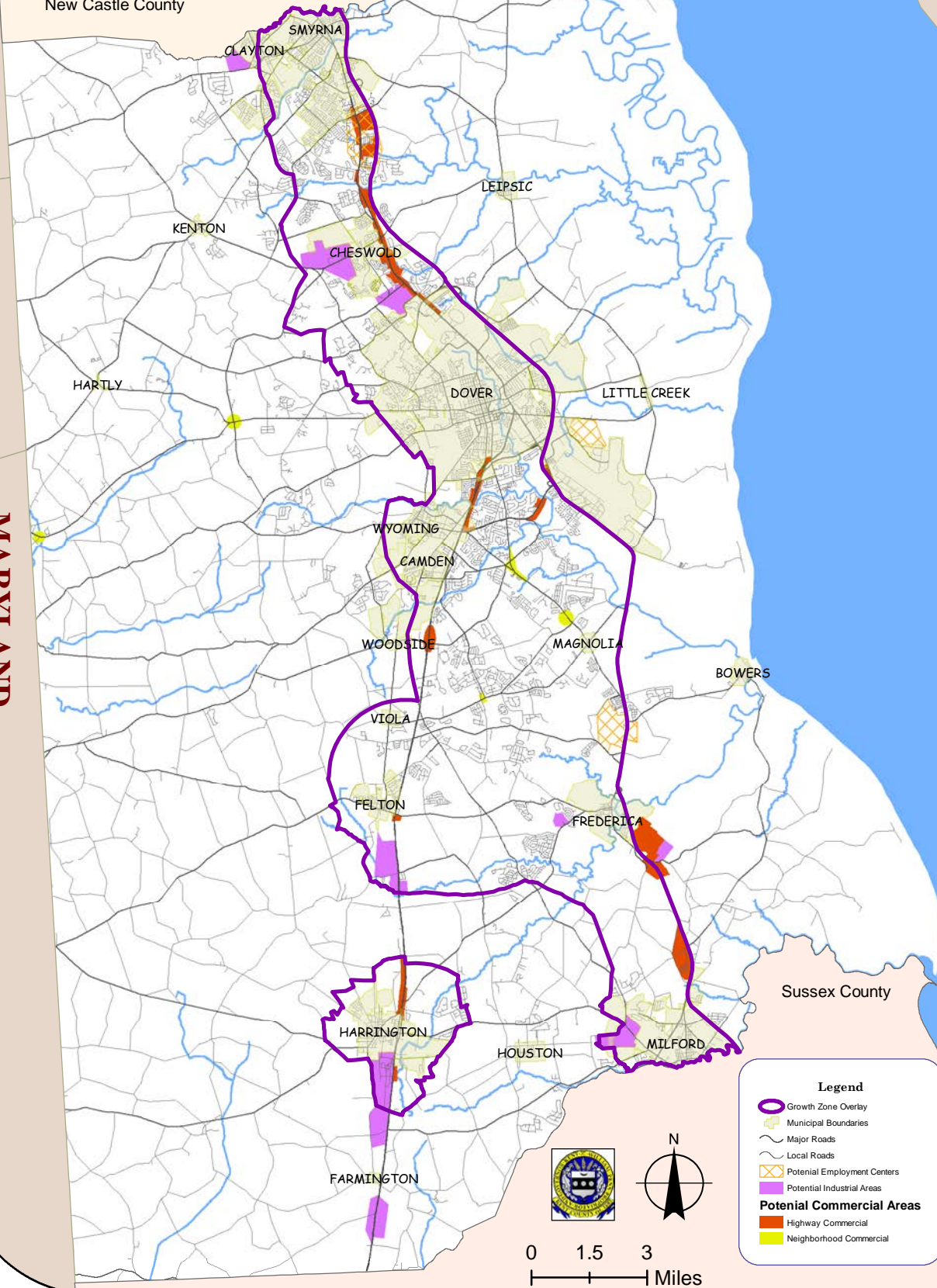
4. Explore opportunities to partner with utilities providing high speed broadband in an effort to expand access throughout the County.
5. Using GIS web-based tools, update the portfolios for each of the identified industrial areas including information about existing and planned infrastructure, access to transportation (rail and/or highway) surrounding land uses, and applicable zoning and land development requirements for easy distribution to interested businesses.
6. Continue development of the Emerging Enterprise Development Center and expand partnerships to offer support and training services to tenants.
7. Continue to protect and promote agriculture and diversity in agriculture within Kent County including coordination with the Department of Agriculture to develop and promote farm markets and other agri-business opportunities in the County. Continue pursuing opportunities in the Food Innovation District program.
8. Develop a marketing strategy in partnership with the towns as appropriate to effectively advertise the benefits of locating in Kent County.
9. Understanding that business retention is a fundamental component of economic development in Kent County, pursue opportunities to support existing business (both large and small scale) and encourage growth. Develop a comprehensive business retention, expansion, and attraction incentive program that would include financial, regulatory, review, and zoning incentives that target high wage manufacturing and technology jobs as well as the agricultural industry including the continuance of Chapter 191, Article VI, *Real Estate Tax Exemption for Industries*, of the Kent County Code.
10. Continue the positive working relationship between the County and the Dover Air Force Base and maintain zoning requirements that protect the base from incompatible land uses.

# Economic Development Areas

New Castle County

NEW JERSEY

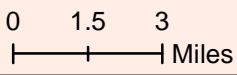
MARYLAND



Sussex County

**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Potential Employment Centers
- Potential Industrial Areas
- Potential Commercial Areas**
  - Highway Commercial
  - Neighborhood Commercial

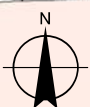
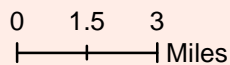
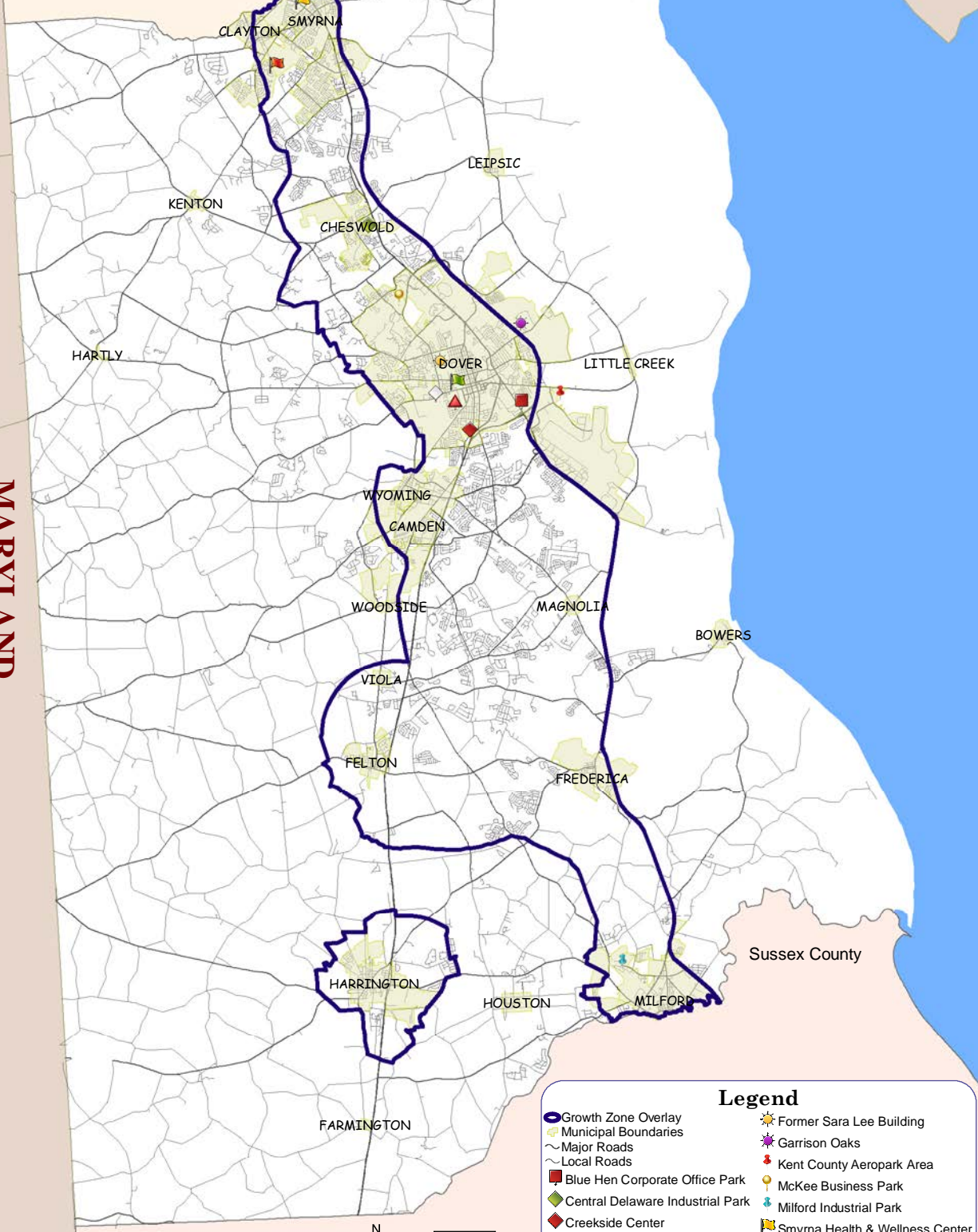


# Industrial and Business Parks

New Castle County

NEW JERSEY

MARYLAND



## Legend

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Blue Hen Corporate Office Park
- Central Delaware Industrial Park
- Creekside Center
- Duck Creek Professional Campus
- Eden Hill Farm
- Enterprise Business Park
- Former Sara Lee Building
- Garrison Oaks
- Kent County Aeropark Area
- McKee Business Park
- Milford Industrial Park
- Smyrna Health & Wellness Center
- Smyrna Industrial Park
- West Side Development Project



# Chapter 3

## Housing



### Overview

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Every citizen has the right to safe, decent, and affordable housing. Kent County's policy objective is to enable and encourage well-designed, diverse, attractive, affordable, and convenient housing that meets the needs of all of its residents. Providing adequate housing for County residents serves not only the readily apparent humanitarian purpose but also is linked to economic development and social diversity as the community develops. Availability of diverse housing types for the labor force is a significant consideration in attracting entrepreneurs to locate and expand in Kent County. In addition, it is important to note that housing policy in the County is inextricably linked to the balance of land use policies in the Plan in that appropriate housing types must be developed in relation to existing and planned infrastructure, employment centers, environmental constraints, open space preservation, and community character.

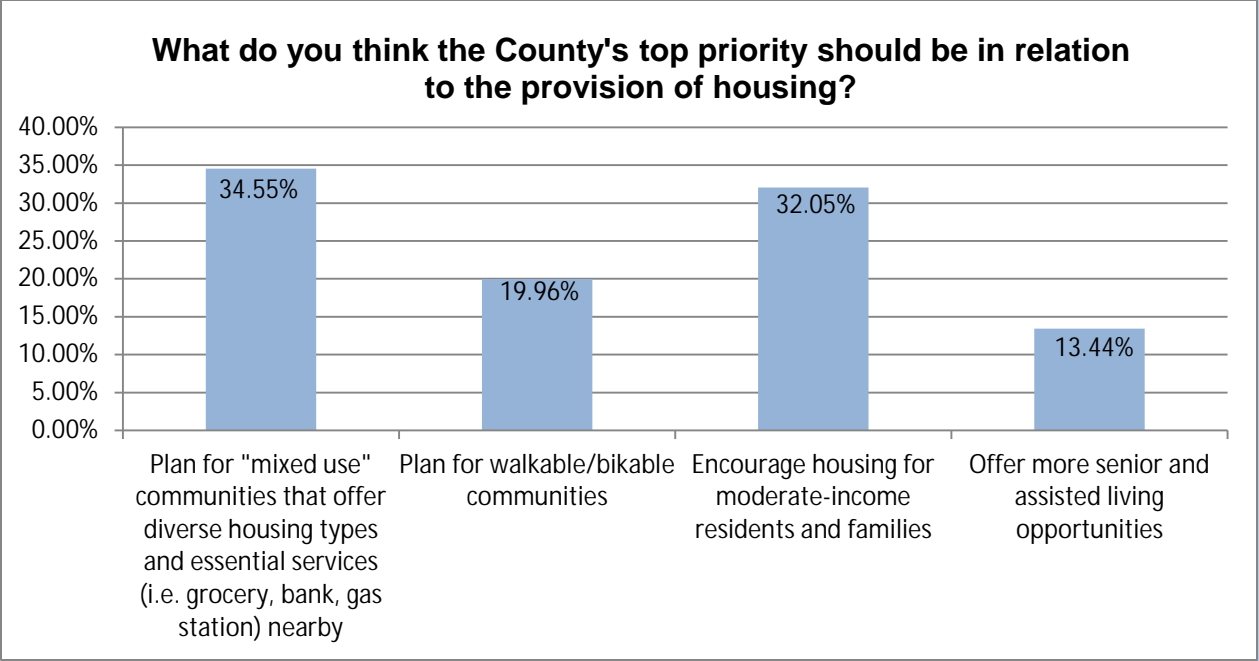
### Survey Results

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What do you think the County's priorities should be related to the provision of housing?  
(choose up to three)

<i>Answer Choices</i>	<i>Responses</i>	
Encourage more diverse housing options	26.75%	107
<b>Plan for walkable/bikeable communities</b>	<b>49.50%</b>	<b>198</b>
Promote affordable housing opportunities, particularly for low-income residents and families	27.25%	109
Provide more age-restricted communities	17.50%	70
Offer more senior and assisted living opportunities	29.25%	117
<b>Encourage housing for moderate-income residents and families</b>	<b>44.50%</b>	<b>178</b>
<b>Plan for "mixed-use" communities that offer diverse housing types and essential services (e.g. grocery, bank, gas stations) nearby</b>	<b>52.50%</b>	<b>210</b>
Plan for "integrated mixed-use" communities where housing is above retail/employment	21.50%	86

Source: Survey 1



*Source: Survey 2*

**Policy Emphasis**

To enable and encourage well-designed, diverse, attractive, affordable, and convenient housing community choices for people and families in all stages of life and all income ranges throughout the County by:

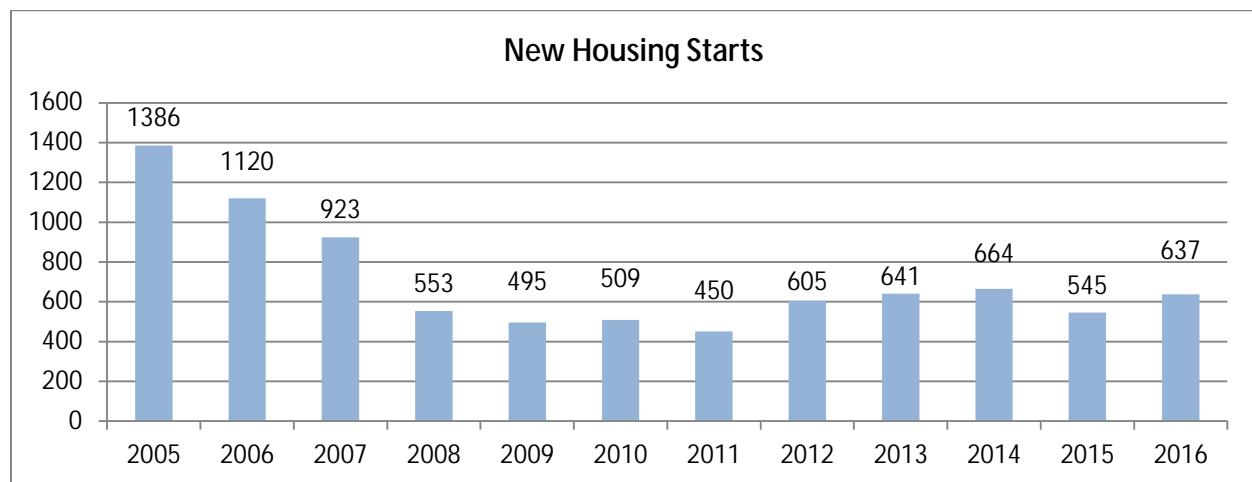
1. Ensuring sufficient land for more compact mixed-use development with an emphasis on creating communities comprised of a range of housing options such as apartments, townhouses, duplexes, and single-family detached dwellings, as well as easy access to goods and services rather than stand-alone subdivisions;
2. Fostering multi-modal and transit options enabling those without easy access to automobiles to interact meaningfully within their communities;
3. Encouraging an expansion of housing types, such as apartments, townhouses, duplexes, and single-family detached dwellings, to serve a diverse population;
4. Providing homeownership opportunities for those of low to moderate income as well as those at or above the median family income;
5. Coordinating with the State and Federal Governments to provide opportunities to increase the supply of rental housing affordable to extremely low income County residents; and
6. Maintaining or improving the condition of the housing stock throughout the County without causing displacement.

## Housing Stock

	2000	2010	2015
Total Housing Units	50,481	65,338	68,693
Occupied	93.5%	83.8%	91%
Vacant	6.5%	16.2%	9%
Average household size of owner occupied units	2.66	2.66	2.75
Average household size of renter occupied units	2.49	2.52	2.58
Householder living alone	10,840	14,224	14,994
Householder living alone (over 65)	3,962	5,350	6,560

Source: 2000 & 2010 US Census; ACS 2015 1-Year Estimates

There was a dramatic increase in housing units between the 2000 and 2010 census as a general result of the housing boom in the early 2000s. Since the recession of 2008, new housing starts declined dramatically although they have begun climbing at a slow but steady pace in the past few years.



While the number of new housing starts has leveled off since the recession, the number of new lots created has not rebounded partly because of substantial existing inventory and partly because of tighter lending restrictions.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Major Subdivisions	34	8	3	3	7	1	1	5	--	--	1
Number of Lots	5234	402	384	170	896	428	35	475	--	--	105

With regard to demand for housing, the Delaware Population Consortium projects an increase in households commensurate with the projected population growth.

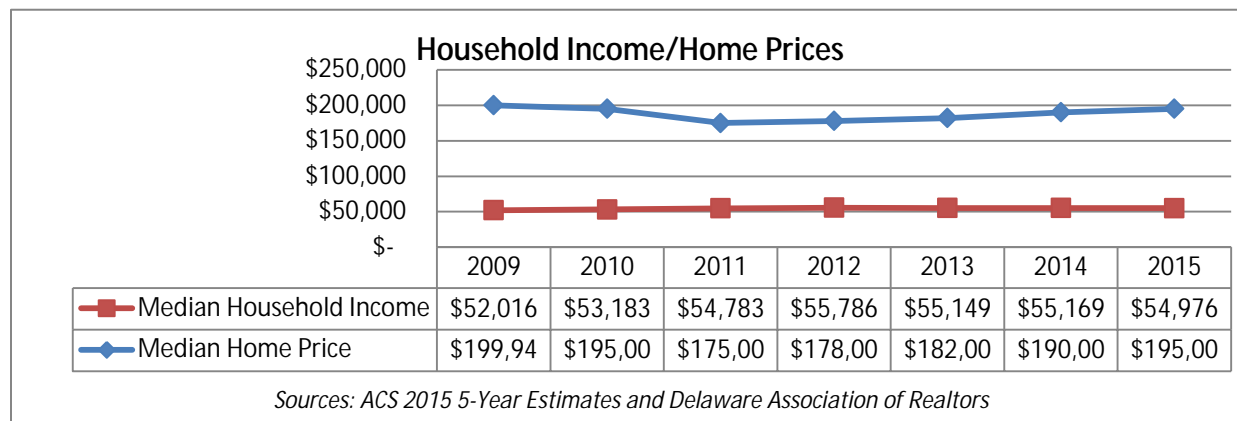
	2015	2020	2030	2040	2050
Households	62,477	67,529	75,320	81,023	85,129

Source: Delaware Population Consortium 2017 Population Projections

There are approximately 8,800 vacant lots within major subdivisions while just over 4,400 lots have been expunged because construction did not commence. If market demand for single family lots of 10,000 sq. ft. remains the same and the average number of new housing starts remains at roughly 650 per year, the current inventory will be sufficient for more than a decade. At the same time, the County must be mindful that market demands for smaller lots and alternate housing types can change as demographics and lifestyles change and it is quite possible that existing recorded subdivisions will be revised to satisfy that demand.

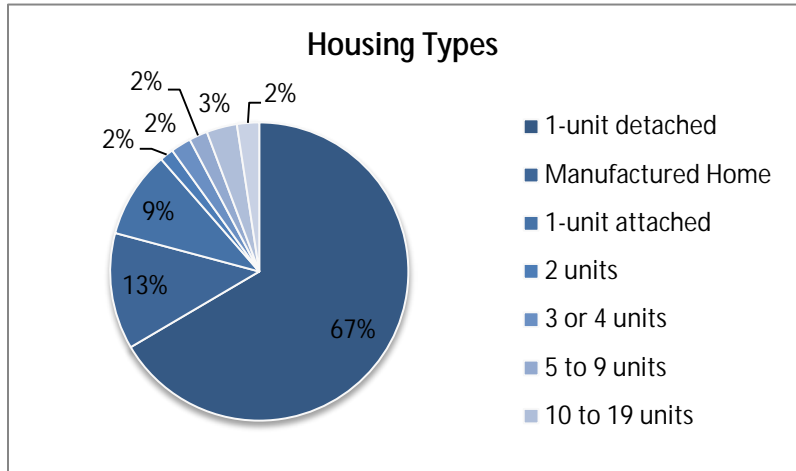
Kent County's housing vacancy rate has improved from 16.2% in 2010 to 9% in 2015 as the slow housing recovery has progressed. The median value of owner occupied units has increased from \$206,200 in 2010 to \$215,200 in 2015 which is encouraging for the housing market overall but presents a challenge in affordable housing.

Also encouraging is the percentage of cost-burdened owner-occupied units (paying more than 30% of income toward housing expenses) has decreased from 40.6% in 2010 to 28.6% in 2015. Unfortunately, the percentage of cost burdened rental households has remained steady at 52% which points to a need for additional affordable rental housing in the County.



While housing prices have been rebounding since the recession ended, household incomes are relatively stagnant. If housing prices continue to rise but incomes do not, affordability becomes an even greater concern.

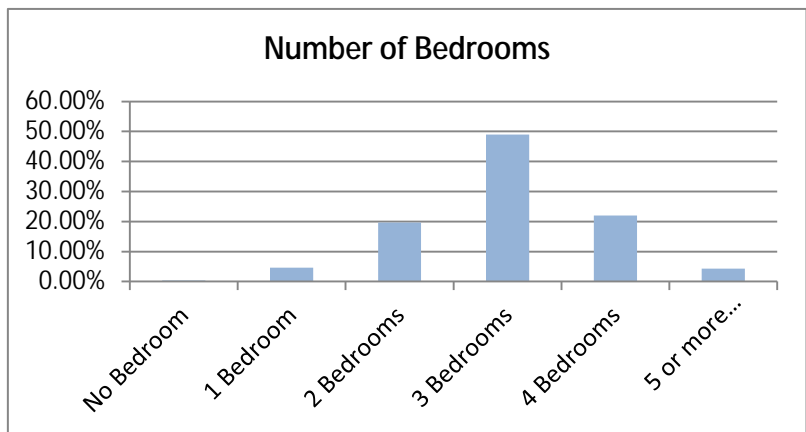
The vast majority of housing units are single-family detached with manufactured homes making up 12.6% of the housing stock. Only 21% of housing units are attached or multi-family, much of which is located within municipalities. The lack of balance in housing stock contributes to the shortage of housing choice and affordable housing.



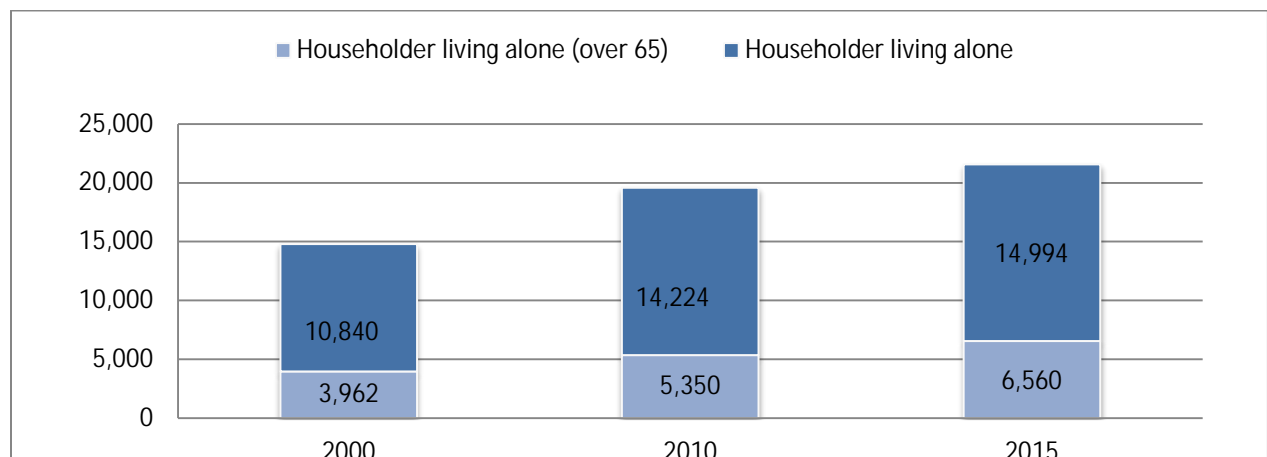
Source: 2015 ACS 5-Year Estimates

The housing stock is also dominated by 3-bedroom units contributing to a lack of options for people wishing to downsize or people just starting out in the housing market.

The number of single-person households has increased steadily over time and a substantial percentage are people over 65. The data suggest that alternative housing types are likely to be in demand as people age and household sizes decrease. There are also potential public health implications of older residents living alone.



Source: 2015 ACS 5-Year Estimates



Source: 2000 & 2010 Census and 2015 ACS 1-Year Estimates



In general as the County's population ages, there are specific housing considerations:

- The members of this age cohort are more likely to be homeowners, but may struggle with upkeep of their homes.
- Due to strong desire among this group to age-in-place, as they become physically disabled, they may need modifications such as bathroom grab-bars, roll-in showers, ramps, etc. to support their ability to live there.
- Many elderly may be house-rich and cash-poor. There may be an interest in modifying their homes with accessory apartments where they may rent out a room to earn income. This space could meet the housing needs of millennials and boomerangs.
- The lack of diversity in housing types (e.g. smaller single family detached, attached, and multi-family) reduces options for homeowners wishing to downsize.

## **Delaware Housing Needs Assessment**

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The Delaware State Housing Authority published their Housing Needs Assessment 2015-2020 in September 2014. Some of their key findings include:

1. Delaware is a fast growing state compared to national averages, particularly for states in the mid-Atlantic region. Much of the growth is attributable to new retirees moving into Delaware from out of state attracted by lower taxes.
2. Demographic changes will influence the size, type, and location of new housing. For one, households are getting smaller.
3. Overall, the State has lower poverty rates and fewer minorities than national average. Yet, there are pockets of concentrated poverty and minority households within Wilmington, Dover, and poor rural areas.
4. Some of Delaware's strongest industries – particularly health care, tourism, and retail – have many low and moderate wage workers, creating a significant demand for workforce housing.
5. There are an estimated 2,636 substandard housing units in Kent County (734 rentals and 1,903 homeowner occupied).
6. There are an estimated 913 overcrowded units and 127 severely overcrowded units in Kent County.
7. Government does not have adequate financial resources to address all housing issues. Therefore, development that leverages public funds with private investment will increase the number of affordable units available.

Some of the recommended strategies include:

1. In areas of high value, supporting affordable housing opportunities and fair housing initiatives will be most needed.
2. In areas showing initial signs of decline, supporting neighborhood identity, rehabilitating existing housing stock, and supporting homeownership will be important.
3. In distressed neighborhoods, pursuing strategic development projects through public/private partnerships, preserving quality housing stock, focusing development in and around neighborhood anchors, and encouraging socioeconomic diversity will help to foster market interest.
4. In highly distressed areas, partnerships with neighborhood organizations, supporting social services, demolishing blight, and providing greater housing and job opportunities for existing residents will foster long-term benefits.

## **Affordable Housing & Fair Housing**

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Each year in conjunction with our Community Development Block Grant Funding, the County resolves to Affirmatively Further Fair Housing (AFFH) in accordance with the Federal Fair Housing Act. In short, AFFH calls for jurisdictions to take meaningful action to:

- Overcome patterns of segregation and foster inclusive communities;
- Address significant disparities in housing needs and in access to opportunity;
- Transform racial and ethnic areas of poverty into areas of opportunity; and
- Foster and maintain compliance with civil rights and fair housing laws.

Removing barriers to diverse and affordable housing types, supporting Downtown Development Districts - particularly efforts to revitalize downtown Dover - and continuing the housing rehabilitation program are some of the most meaningful actions the County can take in implementing AFFH.



## **Housing & Community Development**

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For thirty years the County has managed a housing rehabilitation program for low and moderate income residents using a combination of grant funds from US Housing and Urban Development and USDA-Rural Development. The program serves the entire County with the exception of the City of Dover. While the funds are used primarily for housing rehabilitation, it has also been used for municipal infrastructure projects and to offset the cost of sewer connections associated with Public Works remediation projects.

Approximately 100 houses and manufactured homes benefit from the program in a year but the waiting list is several years long. In the future, the County could create a housing trust fund to supplement the federal funding for rehabilitation. The fund could also be used in the form of grants to housing agencies and nonprofits that provide affordable housing and/or services to the homeless. Revenue sources used by other counties include recordation fees, fees in lieu of providing affordable housing in development projects, or a surcharge on building permits.

## **Homelessness**

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Based upon the January 25, 2017 Point in Time (PIT) count conducted by Housing Alliance Delaware, homelessness in Kent County has been steadily increasing. The total number of people homeless on the night of the PIT was 1,015, including adults and children. It is estimated that approximately 3,000 people experienced homelessness in Delaware at some point during 2016. Of the people who were homeless on the night of the PIT count, 22% were in Kent County. In 2016, 20% of the homeless population was in Kent County, and in 2015 the total was 16%.

With respect to shelter resources, there are 683 Emergency Shelter beds, 568 Transitional Housing beds, 216 Rapid Re-Housing beds, 671 Permanent Supportive Housing (PSH) beds, and 101 Other Permanent Housing beds in Delaware's Homeless Response System in 2017. Of the 671 PSH beds in Delaware, 471 (70%) are dedicated to providing housing to the chronically homeless population. Of the 1,251 temporary beds, 68% are in New Castle County, 21% are in Kent County, and 11% are in Sussex County.

## **Recommendations**

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1. Promote infill and mixed use development in existing developed areas to optimize existing infrastructure investment.
2. Participate in the City of Dover's taskforce established to address homelessness.
3. Focus the provision of affordable housing in areas where reasonable access to goods and services exists or is planned with an emphasis on multi-modal and transit options by identifying areas and sites where a special effort will be made through rezoning, incentives, or other means to provide affordable housing.

4. Maintain the partnership with the Diamond State Community Land Trust to ensure longterm affordable homeownership opportunities and preserve investment permanently as units remain affordable from one buyer to another over time.
5. Establish an affordable housing trust fund potentially funded through a percentage of the “in-lieu” fees paid by developers as part of an inclusionary zoning ordinance or through a building permit surcharge.
6. Explore the creation of a land bank potentially in partnership with one or more municipalities to offset the impacts of vacant and blighted properties and provide affordable housing opportunities.
7. Continue contributions to housing-related nonprofits and the Delaware State Housing Authority as the budget permits.
8. Coordinate with Housing Alliance Delaware to convene a Kent Housing Committee consisting of housing advocates, builders, architects, and individuals with knowledge regarding underwriting housing financing and available funding sources, to advise and assist in implementing the recommendations of this chapter, as well as develop additional incentives that encourage affordable housing.
9. Review all County impact fees and determine the effect of reducing or waiving them for developers and nonprofits seeking to build affordable housing.
10. Work with community associations to identify neighborhoods that would benefit from concentrated Property Maintenance Code enforcement and seek state and federal funds to support the effort.
11. Identify opportunities for staff, appointed and elected officials to attend Fair Housing training;
12. Review the Zoning and Subdivision & Land Development Ordinances to identify barriers to both diverse and affordable housing options.
13. Participate in the state’s Assessment of Fair Housing and ensure that the County is fulfilling its obligation to affirmatively further fair housing.

# Chapter 4

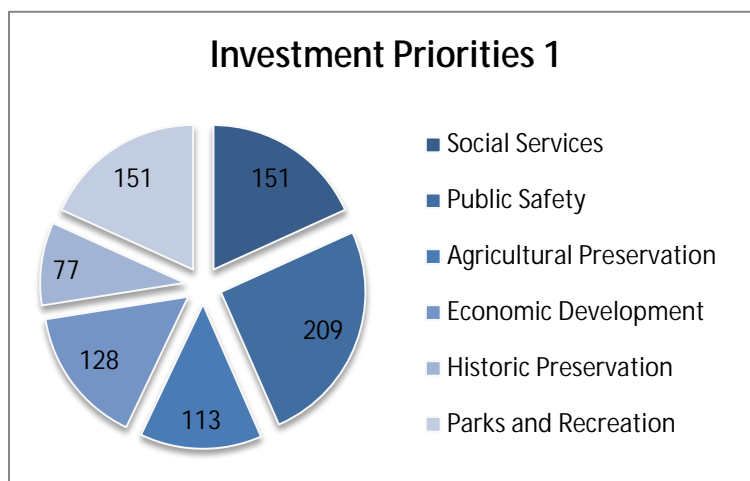
## Community Facilities



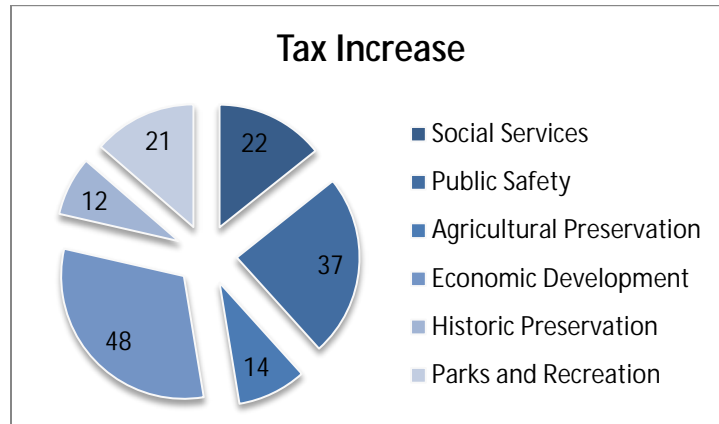
### Overview

Community facilities and public services are those minimum facilities and services provided for the public good. In Kent County, such services are provided by a combination of public and private agencies. Public facilities include land, buildings, equipment and whole systems of activity provided on behalf of the public. Some facilities, such as clean drinking water and adequate sewerage treatment and disposal are necessities; while others, such as libraries and parks, are highly desirable for cultural and educational enrichment. The quality of public facilities contributes to the quality of life in the County. Indeed, such facilities are essential in creating functional, sustainable communities.

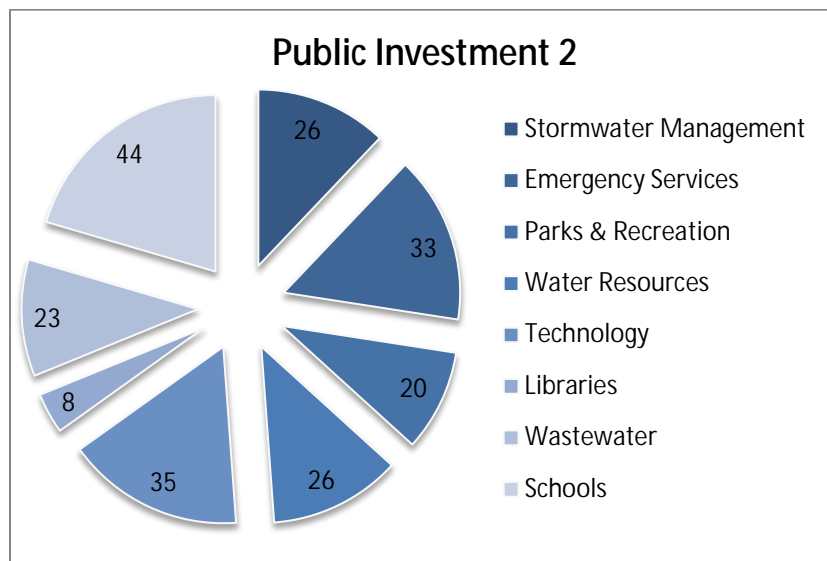
At each of the public workshops and through two online surveys, members of the public were asked to prioritize investments in public services and infrastructure. In the first round of workshops and subsequent survey, public safety was a top priority followed by social services and parks and recreation.



Participants were also asked if they would accept a moderate tax increase and, if so, where would they invest the additional funds. Economic development rose as the top priority followed by emergency services.



In the second round of workshops and subsequent survey, participants were given options related to the elements of the Community Facilities Chapter. Investment in schools, technology, and public safety were the top investment priorities. Given that a well trained workforce and technology infrastructure are key to economic development and job creation, the financial exercise appears to support the community's interest in investing in the County's economic growth.



## Existing Community Facilities & Services

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### **Educational Facilities**

Public schools in Delaware are administered through a system of school districts in accordance with Delaware Law and the policies, rules, and regulations of the State Board of Education. School districts are delineated independently from County boundary lines, leaving three of the seven Kent County districts partly in the other two Delaware counties. The Smyrna School District includes areas of Kent and New Castle Counties, and the Milford School District includes areas of Kent and Sussex Counties. Only a small portion of the Woodbridge School District is in Kent County and none of the Woodbridge District schools are located within the County.

Overall, there are nearly 80 public and private schools within the County (see Map 4A).

**Smyrna School District** is made up of 4 elementary schools, 2 intermediate schools, 1 middle school, and 1 high school. There is also an intensive learning center and 2 private, religion-based schools in this District. The District has added 1 school since the 2007 Comprehensive Plan and the population growth in the District may necessitate planning for additional schools over the next decade. In the unincorporated area alone, there were 2,242 homes built in this time and over 2,000 vacant lots remain to be constructed upon.

**Capital School District** is comprised of 7 elementary schools, 2 middle schools (one upper and one lower), and a high school. There is also an alternative school and a community school in downtown Dover. There are 12 private schools within the District, with 11 of these being religion-based schools. The remaining school is a private kindergarten. No additional schools have been built since the previous comprehensive plan, but the District has built a brand new high school complex on the west side of Dover. The previous school site off Walker Road has been demolished and only the athletic fields remain. This District has seen less growth than others but still added 1,679 new homes and has almost 1,600 unbuilt lots. Close coordination with the City of Dover is important since much of the new growth may occur within the City limits.

The **Caesar Rodney School District** has 1 early childhood school, 6 elementary schools, 3 middle schools, and 1 high school. There is also an alternative school for special needs and 3 intensive learning centers. The District has 7 private schools which all appear to be religiously based. There have been no additional schools constructed in this District since the last comprehensive plan, but there have been early discussions on locating a new elementary school near Magnolia. There has been large scale growth in the District in the last 10 years with 3,618 new homes built since 2008 and 2,024 lots still unbuilt, so there may be a need in the future for more than one additional school.

**Lake Forest School District** includes 1 high school, 1 middle school, and 4 elementary schools. There is also 1 intensive learning center and 1 early childhood center. This District only includes 1 private school. Since adoption of the 2007 Comprehensive Plan, the District has consolidated its middle schools but has added one additional elementary school. With 2,455 homes built since 2008 this is another of our



quickly growing areas. They could see substantial residential growth in the future since 2,574 lots remain to be built in committed developments, and plans for additional facilities should be discussed.

**Milford School District** has 1 early childhood center, 1 intensive learning center, 3 elementary schools, 1 middle school, and 1 high school. This District covers areas in both Kent and Sussex counties. There are 5 private schools in the District with 1 of them located in Kent County. This District has added 1 elementary school since the last Comprehensive Plan. The County has seen only minor growth in this district with 799 new homes since 2008 and 344 remaining unbuilt lots. The majority of residential growth in this District is occurring in the City of Milford and Sussex County, so there will have to be cross jurisdictional communication to plan for potential school growth.

The majority of the **Woodbridge School District** rests in Sussex County and no schools are located in Kent County. There have been 187 new homes built since 2008, but there is only 1 development with 8 unbuilt lots located in the Kent County part of the District. With little potential for residential growth in this rural part of the County, it is not likely for a new school in this District to be located in Kent County.

**Polytech** is the County-wide technical school serving grades 9 through 12. The school accepts admission applications from students regardless of gender, race, socio-economic status, educational needs, district of residence, extra-curricular participation, or any other applicant characteristic. The school has expanded its onsite facilities over the last 10 years to accommodate student growth. With more land available on this property, there does not appear to be a need to plan for a new location for this school.

Recognizing that new development adds demand for local public schools, the Levy Court instituted an Education Surcharge in 2006 that is collected as a percentage of each building permit. Since 2008, more than \$12 million has been collected through the surcharge.

Fiscal Year	Smyrna School District	Capitol School District	Caesar Rodney School District	Lake Forest School District	Woodbridge School District	Milford School District	Polytech School District	Total
FY2008	744,058.62	347,139.41	969,292.17	518,616.08	28,494.90	147,397.39	213,749.89	2,968,748.46
FY2009	284,472.44	131,689.75	294,838.12	176,691.97	13,421.92	70,595.57	75,391.30	1,047,101.07
FY2010	374,897.95	101,437.25	245,204.00	171,105.56	9,604.06	43,913.67	73,409.17	1,019,571.66
FY2011	268,007.08	103,666.60	269,063.02	89,588.61	19,866.84	48,109.92	61,937.23	860,239.30
FY2012	151,155.55	75,921.86	342,497.93	137,289.54	5,928.77	35,381.28	58,153.66	806,328.59
FY2013	261,601.24	126,085.04	411,842.35	127,167.23	4,574.63	53,524.28	76,365.20	1,061,159.97
FY2014	283,471.72	111,361.24	434,309.74	148,824.73	10,846.68	51,907.70	80,744.19	1,121,466.00
FY2015	223,850.09	164,167.45	425,074.18	173,810.22	9,781.64	89,463.58	84,272.92	1,170,420.08
FY2016	232,038.60	118,750.98	281,354.21	196,546.04	8,478.45	75,035.74	70,775.80	982,979.82
FY2017	245,649.49	125,481.10	427,422.76	192,714.25	41,558.68	91,500.61	87,242.82	1,211,569.71
<b>Total</b>	<b>3,069,202.78</b>	<b>1,405,700.68</b>	<b>4,100,898.48</b>	<b>1,932,354.23</b>	<b>152,556.57</b>	<b>706,829.74</b>	<b>882,042.18</b>	<b>12,249,584.66</b>

The County also adopted an Adequate Public Facilities Ordinance in 2007 that measures school capacity and provides for mitigation payments when a district is over capacity. Given existing capacity and committed development, each of the districts is over capacity. Because the ordinance was adopted as the real estate market was slowing, it has been rarely used to date.



Kent County also has 4 institutions of higher learning at 5 locations in the Dover area. These are located within the City of Dover but serve all of Kent County and beyond.

**Delaware State University** is located on Route 13, just 1.5 miles north of downtown Dover. DSU is a fully accredited, four-year, comprehensive public institution. They offer 42 undergraduate degree programs, 16 master's degree programs and five doctoral degree programs. There are 221 faculty members and 4,560 students enrolled. Half of the students are from out-of-state and 54% live on campus.

**Wesley College** is a private institution located in the heart of historic Dover and founded in 1873. It's fully accredited through the Middle States Commission on Higher Education, and operates as an independent liberal arts and sciences college affiliated with the United Methodist Church. The school has approximately 1,500 students and offers more than 30 areas of study. Over 60% of full-time students live in a variety of college housing and hail from 21 states and 5 countries. 98% of full-time students receive financial aid.

**Delaware Technical and Community College Terry Campus** is fully accredited by the Commission on Higher Education, Middle States Association of Colleges and Schools. This campus opened in 1972 after the school first opened branches in Sussex and New Castle counties. It is conveniently located on Route 13 at the Salisbury Road exit from Route 1. This campus offers more than 50 degrees, diplomas, and certificates. In 2016, they added their first Bachelor's program; a Bachelor of Science in Nursing. There are no numbers available for students enrolled at this campus, but across the system there are 14,471 students with 5,223 of them being full-time (2016-17 common data set).

**Wilmington College** is a private, non-sectarian university that is accredited by the Middle States Commission on Higher Education. There are two campuses in Kent County. One is located on Route 13 in North Dover, just south of the Salisbury Road entrance to Route 1. This campus offers 9 certificates, 1 Associate's degree, 19 Bachelor's degrees, 10 Master's degrees, and 1 Doctorate program. More than 1,600 students take classes at this location. The second location is on the Dover Air Force Base and offers 1 certificate, 1 Master's, and 10 Bachelor's programs. About 400 students attend classes here.

The County conducted outreach sessions at two of the local colleges in March of 2017. The students identified what they liked about the area, what may keep them here after graduation, and their preference on certain community amenities. These results found that students look to settle in places near their friends or family and a place that has arts or culture.

A survey received over 120 responses and showed that only 25% of respondents were staying in Dover after graduation, but we saw on the comment boards that many would stay if there were jobs available in their field and there were more activities or amenities. Interestingly, almost 60% of the respondents said they could find a job in their field locally, so the lack of activities for young adults may be where the County needs to focus its efforts to keep these graduates local. Some of the things the students do like about the area are the quiet, the proximity to major cities, low taxes, and the small town feel.

## Parks & Recreation

Parks and recreation facilities provide myriad community benefits including public health, environmental protection, solitude in natural settings, and public gathering spaces. With respect to public health, parks provide opportunities for exercise and function to “mitigate climate, air, and water pollution impacts on public health.”<sup>1</sup> Regarding environmental protection, a coordinated and connected system of parks can “help preserve essential ecological functions and (to) protect biodiversity...can help shape urban form and buffer incompatible land uses...[and] reduce public costs for stormwater management, flood control, transportation, and other forms of built infrastructure.”<sup>2</sup>

Finally, public parks afford citizens the opportunity to connect not only with nature but also with each other, whether it be neighbors at a nearby playground or the larger community at a larger municipal or regional park for a special event. The design standards, setting, and overall distribution of public parks should reflect both an intention to convey a sense of place in the greater landscape and provide facilities suitable for a wide range of recreation and leisure activities.

In order to achieve the maximum benefit in a community, a wide variety of park and recreation opportunities must be available. Differently sized parks serve different populations and provide differing services as illustrated below:

### Varieties of Parks<sup>3</sup>

Type of Park	Function	Space, Design, & Service Area	Examples
Sub-Neighborhood Common Space	Especially important in high density areas; provide visual relief and aesthetic qualities; accommodate informal activities of an active and passive nature such as reading, gardening, children’s play, meeting area for small groups, walking, jogging, and dog walking	Must be visually accessible; varies from 500 square feet to 2 acres; designed to be as flexible as possible; will serve an area of 100 yards to ¼ mile radius	Vacant lots, cul-de-sacs, boulevards, green belts, walkways, trails, play lots, rest areas, pocket parks
Neighborhood Space	Should accommodate neighborhood interest preferences; may include sports areas for minor leagues, outdoor skating rinks, water play; special events, and informal passive activities	Space should be associated with an elementary school; varies from 4 to 20 acres; will serve 5,000 people within an area of ¼ to ½ mile radius	Neighborhood parks or park-school combinations; play fields for baseball, soccer and football; playgrounds, wading pools, neighborhood centers

<sup>1</sup> “How Cities Use Parks to Improve Public Health”. *Issue 07 City Parks Forum Briefing Papers*. American Planning Association. Chicago, IL. 2003. 1

<sup>2</sup> “How Cities Use Parks for Green Infrastructure”. *Issue 05 City Parks Forum Briefing Papers*. American Planning Association, Chicago, IL. 2003. 1

<sup>3</sup> Ministry of Culture and Recreation. “Guidelines for Developing Public Recreation Facility Standards”. Lifestyle Information Network. <http://www.lin.ca/lin/resource/html/>

<b>Community Space</b>	Should accommodate social, cultural, educational and physical activities of particular interest to the community; multi-purpose, year round, day/night activities; low level competitive sports with limited spectator space	Space should be associated with a secondary school; varies from 15 to 20 acres; will serve several neighborhoods or 15,000 to 25,000 people within a radius of ½ to 1 ½ miles; accessible by walking cycling, and public transit	Community park or park-school combinations; facilities for playgrounds, recreation center, meeting rooms and libraries; track and field areas, sports fields, arena, and swimming pools
<b>City-wide or Urban Space</b>	Should provide specialized facilities for the use of a wide segment of populations; will accommodate the preservation of unique historical, cultural, or natural areas	Parks can be 25 to 200 acres; accessible to all residents by private and public transportation; should not exceed ½ hour driving time; should be linked to other open space	Major city parks and areas left in their natural state; beaches, trails, and picnic areas; fair grounds, civic centers, and major sports facilities
<b>Regional Space</b>	Specialized areas for conservation and preservation of natural resources; usually involves more time-consuming activities, i.e. day-long picnics and family camping	Up to 500 acres or more, serving two or more municipalities; if possible, accessible by public transportation; within 20 miles or 1 hour driving of high density areas	Conservation areas, botanical gardens, regional and state parks; wildlife sanctuaries and naturalized reserves; scenic highways and waterway systems; zoos and museums

It is interesting to note the interdependence of school and park facilities within a community; the combination of resources allowing for efficient use of public funds as well as easy access to a variety of community services within an area. Schools, particularly elementary schools, are natural community centers. Unfortunately, because of liability and security concerns, school grounds are typically restricted use areas.

The Delaware Department of Natural Resources and Environmental Control conducted a telephone survey as part of the update to the State Comprehensive Outdoor Recreation Plan. Sixty-eight percent of Kent County respondents indicated that outdoor recreation is important to them personally and 74% indicated it was important for the State to invest in land for parks, trails, and natural areas. Walking or jogging, swimming, visiting historic sites, fishing, and picnicking were among the most popular activities. These results comport with the County's survey findings during the public outreach efforts which suggest strong support for walking and bicycle trails particularly connected to other recreation offerings.



Kent County currently offers a wide variety of public parks and recreation opportunities as illustrated below (See Map 4B):

### **Big Oak Park**

Located south of the town of Smyrna, this 89-acre park is our most conveniently located park being close to a major transportation network. Adjacent to Route 1 and minutes from the south Smyrna exit, this park is a great stop for light recreation between Dover and Smyrna. Recreational improvements include:

- 2 playground areas (ages 2-5 and 5-12)
- Climbing Boulder (ages 4-12)
- 3 softball fields
- Covered picnic pavilion with grills
- Up to 8 acres of multi-purpose fields
- Over 1.2 miles of ADA compliant paths that include a loop-around park, a self-guided nature education trail, and an elevated boardwalk near the wetlands

### **Brecknock Park**

Brecknock Park comprises 86± acres and is situated between the City of Dover and the Town of Camden just off of Route 13 and the new POW-MIA Parkway. Recreational improvements include:

- Large playground area (ages 2-12)
- 2 youth softball fields
- 2 sand volleyball courts
- 16 horseshoe pits
- Life course equipment
- Over 4 acres of multi-purpose fields
- Over 2 miles of natural dirt trail that includes a loop-around park and connections to Caesar Rodney High School, WB Simpson Elementary School, and two surrounding neighborhoods. Future plans have this trail linked over Isaac's Branch with a bridge to the Kesselring Park.

Other features in the park include:

- 2 covered picnic pavilions
- Rain Garden
- Howell Mill - Nature Center and Millpond
- Historic Home and Tenant House

### **Kent County Recreation Center/Kesselring Park**

The newest County-owned recreational facility is located at the former Kesselring property on New Burton Road. This site will be easily accessible to the POW-MIA Parkway and is conveniently located between Camden and Dover. The 75,000 square foot facility is a partnership between the County and the Greater Dover Boys & Girls Club. The Boys & Girls Club facility houses classrooms for educational

activities. The Kent County Recreation Center has 30,000 square feet of various indoor courts and an outdoor field for recreational activities. A loop trail is also being constructed, and a trail connection to Brecknock Park is planned.

### **Browns Branch Park**

This 78-acre park serves the southern portion of the county. It's located east of Harrington and west of Milford, so it's easy driving distance for many of those residents. This park is located not far from Killens Pond State Park, and since they are not located on a major roadway, a stop at each park would be a nice day trip to enjoy the rural parts of Kent County. Recreation improvements include:

- 2 playground areas (ages 2-5 and 5-12)
- 3 softball fields
- 2 sand volleyball courts
- 8 horseshoe pits
- Football field
- Over 6.5 acres of multi-purpose fields
- Approximately 1.75 miles of trails - most of which is natural dirt, but a portion in the woods is a wetland boardwalk
- 3 outdoor picnic areas with tables and grills
- A pitch and putt was planned in 2007 but has not yet been installed.

The landscape of this park is intended to provide a public site for recreation and leisure services more typical of regional parks. Along with active recreation, Browns Branch was designed to support the quiet, passive recreation and conservation elements of regional recreation pursuits such as hiking, birding, and personal solitude.

The prominent natural feature in the area is the stream corridor located along the northern boundary line of the park land. It is recognized on maps as Browns Branch and is a tributary of the Murderkill River. Along Browns Branch, historic maps show several mill locations including McColleys (McCauleys) Pond and 'Thistlewoods' Mill. Browns Branch was named for Daniel Brown who received early patents for land in this area from William Penn in the late 1600s.

### **Hunn Nature Park**

At 172 acres, this park is the largest in the Kent County system. It's comprised of uplands, wetlands, restored landfill meadows, and subaqueous lands. Trail construction and tree plantings were completed with assistance from volunteers and are helping the County preserve native plant and wildlife communities. This park is conveniently located off of Route 10 south of Dover and is easily accessible from Route 1. Its proximity to these roads and the Air Force Base, and its connection to both the St. Jones Greenway and Lebanon Landing, make it a wonderful park to explore on its own or as part of a recreational day out. Features of the park include:

- Approximately 1.3 miles of trails, most of which is hard packed stone. An additional 0.6 miles is planned to connect directly to the multi-modal path on Route 10, out to a waterway overlook and a bridge crossing to create a loop on the east end of the park.
- The home and historical site, known as Wildcat, is currently not accessible to the public. The Hunn family settled this site in the 1700's and operated a sawmill for many years. In the 1800's, the family became active abolitionists and this site became part of the Underground Railroad. This site is also known to have Native American burial grounds.

### **Lebanon Landing**

This park is a 5-acre area used as a boat launch and fishing pier, and has a picnic area. Located just to the south of the Hunn Nature Park, this is a convenient place to fish or launch your small boat onto the St. Jones River.

### **Tidbury Creek Park**

This 18-acre park hidden behind suburban residential development is just a few miles south of Dover. The park was created from an old sand and gravel excavation site and includes 2 man-made ponds for fishing. Walking trails use the steep sides of this old site to add an uphill/downhill difficulty to the hikes. Park improvements include:

- Playground area (ages 5-12).
- Stocked fishing ponds and boat launch
- Creekside fishing pier
- Approximately 1.3 miles of trails - most of which are natural dirt
- Picnic pavilion with tables and grill
- 1.0± acre dog park with separate areas for small and large dogs, and drinking water stations

### **St. Jones Greenway**

This greenway is a planned 14-mile, riverside pathway linking the Greater Dover, Central Kent County area to the Delaware Bay. The 3-mile Isaac's Branch section was completed in 2007 linking the DeIDOT complex with Route 10. In 2014, the Capital City Trail section was completed which links the north end of Isaac's Branch to downtown Dover on Silver Lake Park. To the south, the path crosses Route 13 and the St. Jones River on the new dedicated non-motorized bridge. This will link into the Hunn Nature Park. Plans are still being developed on where the path will go, but the ultimate goal is to reach the John Dickinson Plantation and the St. Jones Reserve east of Route 9.

### **Accessibility**

Research continues to support that the more children are challenged to be creative, the more successful they will be as an adult. Additionally, there is a significant difference between being ADA compliant and being inclusive. Approximately 5.7% of Kent County's total population under the age of 18 has a disability, which encompasses difficulties with hearing, vision, cognitive, ambulatory activities, and self-care. Currently, Kent County offers wheelchair accessible recreation at Killens Pond State Park, the Mispillion River Greenway, the Milford Can-Do Park, and Big Oak County Park.



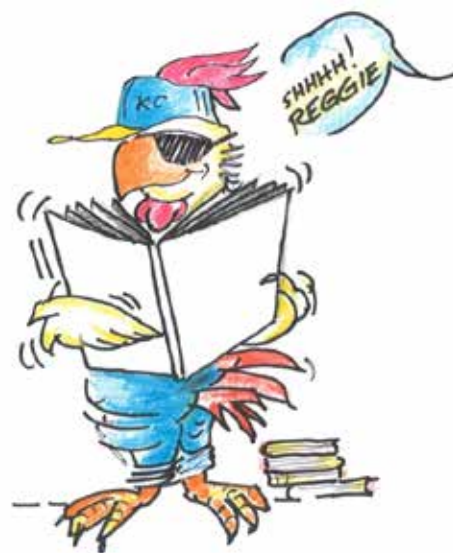
With the increase in inclusion and accessibility throughout so many avenues of life, including health care, education and emergency services, the integration of inclusive recreational activities and increased accessibility is crucial for improving the quality of life for those with a disability and their peers. By establishing a standard of inclusive recreation, residents of Kent County can establish and maintain a true feeling of community and connectedness with all play created equal.

## **Libraries**

Libraries provide far more than books. They are community centers providing educational opportunities and employment resources. The more access residents have to educational materials, the more opportunities they can expect to see. Libraries provide low cost computer time for people who can't afford it at home, training classes and cultural programs, free reference materials that help educate any person regardless of age, and the enjoyment that books, CD's, or DVD's can provide to a family. Public libraries are a resource that must be supported to encourage vibrant and sustainable communities.

In addition to the Kent County Library, located south of Camden in the Longacre Village shopping center, there are three other municipal libraries (Smyrna, Dover, Harrington) located in the County. There are also 3 college libraries (Wesley College, Delaware Tech, Delaware State University) and 6 special libraries:

- **Barratts Chapel** - This research library emphasizes Methodist history and the archives of the Peninsula-Delaware Annual Conference.
- **Biggs Museum of American Art**
- **Delaware Division of Historic & Cultural Affairs Library** - They disseminate accurate historical information through historic research, archaeological and architectural analysis.
- **Delaware Library Access Services (DLAS)** - Since 1971, Delaware Library Access Services (formerly, the Delaware Library for the Blind and Physically Handicapped) has provided books in braille and audio books in accessible formats for the blind and physically handicapped residents of Delaware.
- **Delaware Public Archives** – Created by the General Assembly in 1905, this is one of the oldest public archives programs in the country, housing over 800,000 photographs and more than 95,000 cubic feet of government records and historical documents.
- **Legislative Hall Library** - As the purpose of this library is to provide reference materials to the legislature, the library collection will include any resource that may be of value to legislators and their staff.



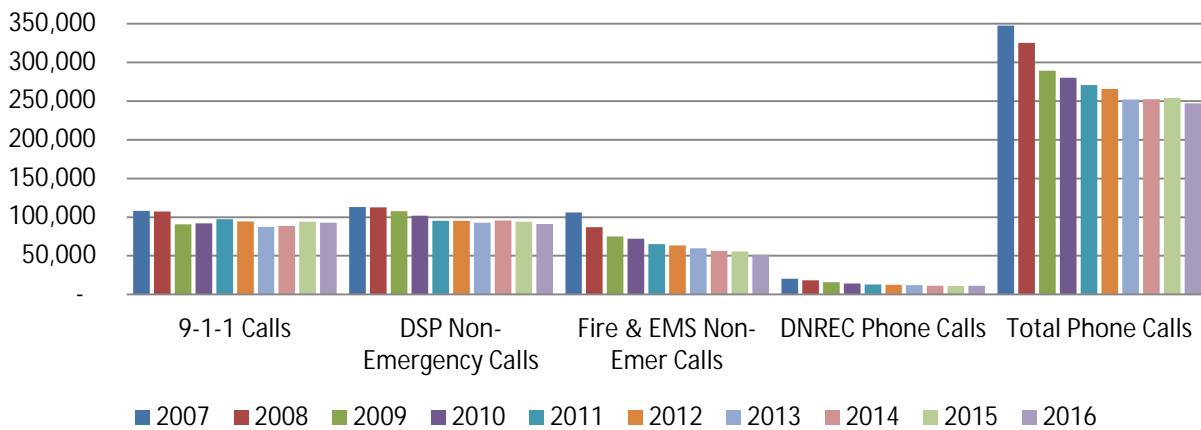
The Delaware Division of Libraries operates the SERSI automated catalog which is an intra-library request system throughout the entire State of Delaware. The catalog provides patrons access to all of the resources available and allows for delivery of that item to the library of choice within a few days.

## Emergency Services

Emergency services including fire, emergency medical, and police services are an essential element of creating a positive living environment. These agencies having the staff and tools they need to serve the entire County population in a safe and efficient manner is paramount to maintaining and improving the quality of life in Kent County. The myriad agencies serving these functions are represented on Map 4C.

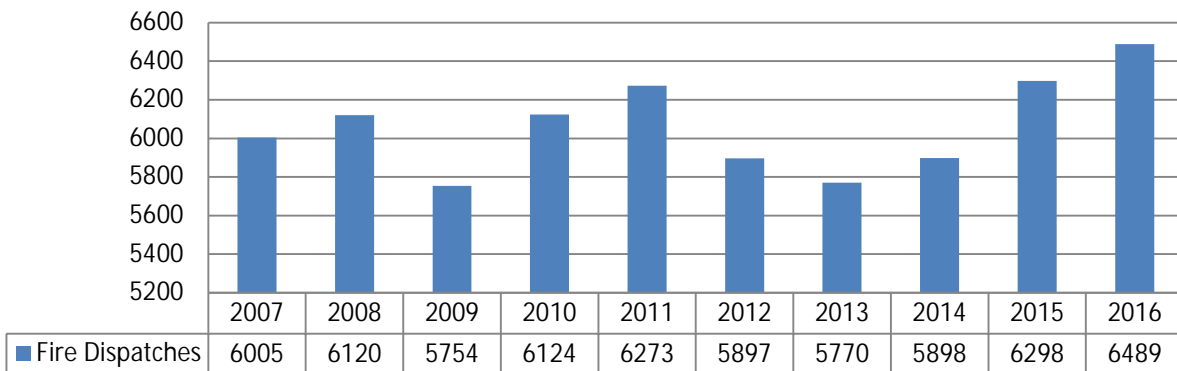
While total calls to the County’s Emergency Management Center have declined since 2007, emergency 911 calls have remained steady.

### 911 Calls



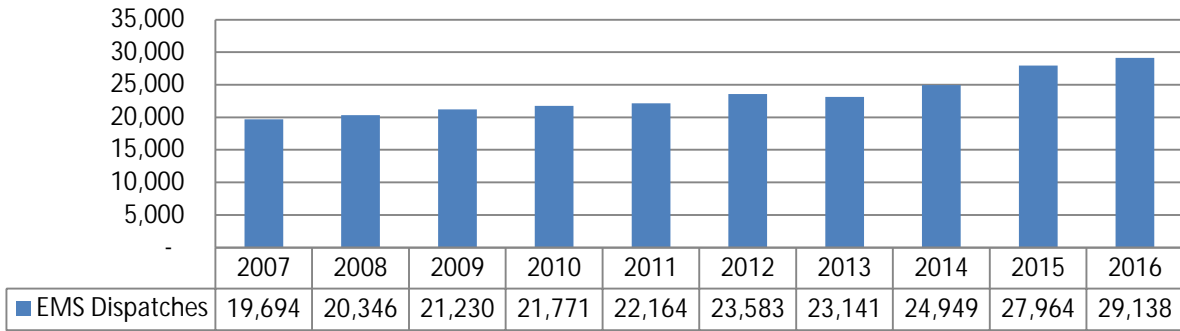
Dispatches for both fire and medical emergencies have generally remained level with slight increases in recent years.

### Fire Dispatches





### EMS Dispatches



Demand for services will only increase as the population grows and medical services are likely to increase as the population ages.

### Fire and Rescue

Kent County is served by 18 fire districts encompassing 19 fire houses. Fire districts are delineated by fire company agreements, and are meant to provide adequate fire protection for all areas. The fire district boundaries describe general areas of service for each company, but there is mutual aid between and among companies in fighting fires.

All of the fire companies are managed and staffed by volunteers with the exception of some emergency medical technician positions. Like many volunteer fire companies throughout the country, the companies have experienced difficulty in attracting a sufficient number of volunteers, particularly during working hours.

In an effort to offset the effect of new development, in 2006 the Levy Court instituted a building permit surcharge dedicated to funding the volunteer fire companies. Since 2008, nearly \$2.9M was collected across the County:

American Legion (Ambulance)	\$ 54,190.28	Robbins Hose / Dover	\$ 138,386.81	Houston	\$ 143,275.95
Bowers	\$ 125,519.56	Farmington	\$ 134,785.79	Leipsic	\$ 120,505.96
Camden/ Wyoming	\$ 252,370.18	Felton	\$ 178,174.24	Little Creek	\$ 120,869.94
Carlisle	\$ 131,618.10	Frederica	\$ 154,201.97	Magnolia	\$ 228,663.74
Cheswold	\$ 196,330.71	Harrington	\$ 149,313.44	Marydel	\$ 128,729.24
Citizens Hose / Smyrna	\$ 198,173.29	Hartly	\$ 138,732.75	South Bowers	\$ 120,457.56
Clayton	\$ 175,860.41				

## **Police**

There are 12 police facilities in Kent County. The majority of these are within the 10 towns operating their own police force. The Town of Frederica is the newest of these forces and is the sole agency addition since the last comprehensive plan update. The remainder of the County is served by the State Police. They have a new complex on South State Street near Magnolia known as Troop 3 as well as the barracks located in Dover on Route 13. The northern part of the County is also served by Troop 9 out of Odessa.

Police protection is generally considered to be adequate. However, increased development has resulted in greater demand for State and municipal police services. The projected population increase of roughly 36,000 residents by 2050 will certainly translate into an increased demand for State Police services to be addressed either by an expansion of the Troop 3 facilities or creation of a satellite office. The County and the Department of Public Safety should work closely to monitor where growth is occurring within the County to better identify where additional police coverage is needed.

## **Emergency Medical Services**

Emergency Medical Services in Kent County are provided by both volunteers and career personnel. Basic Life Support and ambulance transportation is provided generally by volunteer fire companies in addition to the American Legion in Smyrna, a private contractor in Dover, and the Dover Air Force Base. Advanced Life Support services are provided by the Kent County Department of Public Safety. The County maintains 4 paramedic stations in Smyrna, Dover, Harrington, and Frederica. In addition, the Department operates the 9-1-1 Call Center for all of Kent County, except Dover. As the population grows and demand for paramedic services increases, additional paramedic units will be needed. The Public Safety Strategic Plan should be updated and capacity of the existing units reviewed regularly. It is likely that some additional demand can be met through the use of power units scheduled for times of peak demand. As the Public Safety Department expands, the existing buildings will need to be expanded and possibly additional facilities acquired. The Capital Improvement Plan should create a separate fund to be built over time for land acquisition and facility upgrade.

In an effort to offset the increased demand for emergency medical services, the Levy Court adopted an impact fee on new development through the Adequate Public Facilities Ordinance dedicated to EMS in 2006 which became effective in May 2007. The Ordinance only affects subdivisions approved after the adoption date, so has captured few new housing units. The County perhaps should consider a building permit surcharge in addition to or in lieu of the existing provisions.

While the responsibilities of Public Safety are often thought to be reactive in response to emergency, there are opportunities for both emergency medical and dispatch personnel to play a more integrated and proactive role in healthcare. As County citizens are aging and an increasing number of our elderly residents are living alone, the County should investigate the opportunity for Public Safety to establish a check-in program. Such a program could entail regular calls to registered residents or a schedule for participants to contact the call center to check in.

There is also an overall trend in healthcare for the varied service entities, including hospitals, physician groups, nurses, mental health & social service providers, and nursing homes, to merge into an integrated healthcare delivery system. Emergency medical services also have an opportunity to participate in such an integrated system. The National Association of Emergency Medical Technicians (NAEMT) defines Mobile Integrated Healthcare – Community Paramedicine (MIH-CP) as the provision of healthcare using patient-centered, mobile resources in the out-of-hospital environment. MIH is provided by a wide array of healthcare entities and practitioners that are administratively or clinically integrated with EMS agencies, while CP is one or more services provided by EMS agencies and practitioners that are administratively or clinically integrated with other healthcare entities. MIH-CP may include, but is not limited to, services such as:

- Increasing access to care in underserved areas ;
- Providing telephone advice to 9-1-1 callers instead of resource dispatch;
- Using community paramedics or other specially trained EMS practitioners for management of high healthcare system utilizers or patients at risk for hospital admission or readmission, chronic disease management, preventive care or post-discharge follow-up visits; and
- Transporting or referring patients to a broad spectrum of appropriate care, not limited to hospital emergency departments.

According to the NAEMT, the goal is to lower costs, improve care, and enable EMS practitioners – including EMTs, Paramedics and Community Paramedics – to use their skills and resources to help solve the problems facing healthcare systems and communities. Kent County's Department of Public Safety has endorsed MIH-CP as a strategy, although it is recognized that additional staff resources would be required. The County should pursue discussions with potential service provider partners and identify potential funding sources to support an expanded community EMS mission.

## **Water Resources**

An adequate supply of water is vital for economic development, industry, energy use, population growth and distribution, agriculture, fish and wildlife, transportation, and waste disposal. Population growth depends upon the availability and quality of local water sources. The ability of the County's aquifers to accept recharge from infiltration and subsequently discharge this water to streams and supply water to pumping wells, determines the location and quantity of water available for use.

Kent County has minimal control over the approval and locations of the water supply for drinking with the exception of the required conditional use site plan review for public utilities (primarily treatment and storage facilities). The approval of wells and their locations is monitored by DNREC and reported to the County prior to construction. DNREC does have regulations that provide for the protection of drinking water sources for individual lots that include, but are not limited to, the separation of underground wastewater disposal areas from well sites.

Additionally, the environmental impacts of protecting water resources become important when discussing plant and animal life and habitats, recreation and tourism, and the County's impact on

waterbodies and communities outside of its boundaries. The County's land use regulations play a significant role in protecting these resources. Impervious cover limits and buffers are just two tools used to protect our most important water resources.

Although Kent County can impose regulations to protect water resources, water quality is monitored by DNREC to detect and assess contamination of water supply sources and by the Department of Health and Social Services' Division of Public Health to detect contamination of public water supplies. These State agencies represent the regulatory authority responsible for ensuring healthy water supplies.

### **Drinking Water**

Ground water is the basic source of water for residents of Kent County. The primary aquifers are the Rancocas, Piney Point, Cheswold, and Frederica aquifers with minor aquifers found in the Miocene deposits in the southern part of the County above and below the Frederica aquifer. It should be noted that aquifers that are categorized as "confined" in the southern portion of the County are not confined in the northern section of the County where they outcrop. Outcrop means there is no confining layer between them and the surficial aquifer. This is where they recharge and are as susceptible to contamination as an unconfined aquifer.

The abundance of water from shallow aquifers makes it easy and relatively inexpensive to obtain water. This has enabled the dispersion of residential units across the County. Despite the ease of obtaining water, problems and inconveniences are associated with individual systems including lack of treatment, high mineral content, inadequate system maintenance, and occasional infiltration of pollutants (chemical spills, leaking underground storage tanks, agricultural practices, and leachate from septic tanks).

In contrast to the shallow aquifer extraction favored by individual on-lot well operators, municipal systems have sought to tap deeper aquifers, principally because of expected high yields, inherently high water quality, and assurance against contamination from ground-level sources. With the exception of the coastal region, water supplies underlying the County are generally plentiful. However, there are limitations on obtaining sufficient quantities where local extraction rates are high. The extensive tapping of the Piney Point aquifer, for example, by the City of Dover, the Dover Air Force Base, and the Camden-Wyoming Sewer and Water Authority, has meant the near complete utilization of this source. Other deep aquifers or shallower aquifers will yield water supplies that will likely need some form of water treatment.

### **Source Water**

Title 7, Delaware Code, Chapter 60, Subchapter 6, Source Water Protection requires Kent County to implement measures to protect the quality and quantity of public water supplies within excellent groundwater recharge areas and wellhead protection areas.

#### ***Wellhead Protection***

Wellhead protection areas are those surface and subsurface areas surrounding a well or wellfield supplying a public water system most vulnerable to contaminants that could move

toward and reach such well or wellfield. Development within these areas should be avoided to prevent additional contaminants to the public water system than what would occur naturally.

Kent County currently requires a 150 foot buffer around public wells in keeping with DNREC's standard. Of particular concern are public wellfields drawing from unconfined aquifers, although there are few such fields in Kent County. Most are outside of the Growth Zone Overlay District where development standards are more stringent and the demand for development in the area is minimal. There is one substantial wellfield within the Growth Zone, but it is primarily within the town limits of Smyrna in an area that is largely developed.

There are some concerns regarding potential industrial or hazardous uses in proximity to public wells in unconfined aquifers. Kent County should work with DNREC to identify specific uses such as borrow pits and develop relevant restrictions specific to the uses.

### ***Excellent Recharge Areas***

Excellent Recharge Areas are delineated as places where the water transmitting properties of the sediments in the interval between land surface and 20 feet below land surface are the greatest. The Delaware Geological Survey has produced a map that delineates 4 different drainage potential categories within Kent County<sup>4</sup>. Those areas with excellent water transmitting properties can determine the amount of water that recharges Delaware's aquifers and how susceptible the aquifers are to surface pollutants. The protection of these areas is a key component to preserving the quantity and quality of water in the County's aquifers. As these areas become covered with increased amounts of impervious surfaces, there will be less water infiltrating into these underground aquifers to replenish the County's water supply. Additionally, the water coming from these areas may contain non-point source pollutants that may infiltrate through the sediment and contaminate the groundwater.

For the most part, Excellent Recharge Areas are located outside of the Growth Zone Overlay District and/or within areas of the Growth Zone that have remained largely rural. In addition, the County's impervious coverage limits for residential development are generally less than or equal to the impervious cover limits in most local Source Water Protection ordinances.

### ***Water Service***

The distribution of central water service is considered a public utility in Kent County, but the County does not provide this utility. Beyond the municipalities that serve water within their respective boundaries, central water service is provided mainly by two private companies, Artesian and Tidewater. (see Map 4D) Kent County Code provides that any residential development over 10 lots must be provided with central water. Because central water service is considered a public utility, any water storage and treatment facility is required to receive conditional use approval for the use. This approval is to give the County an opportunity to review the structure to be constructed and its location to decide if it is appropriate in the area proposed. Kent County does not decide what provider a development can use. Additionally, the

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<sup>4</sup> Delaware Geological Survey Report of Investigations No. 66.

County has no control on where each provider can extend service. Central water franchise areas are managed and awarded by the Public Service Commission. Because the resulting Certificates of Public Convenience and Necessity are granted on a site by site basis, the water provider can change on each adjacent site. Multiple facilities are being constructed in an area where one larger facility would be adequate if only one provider were assigned to that district.

Further growth of both residential and non-residential development in accordance with the Land Use Plan will necessitate the extension of public water facilities to serve this growth. The intent of the Land Use Plan is to concentrate growth near areas of existing infrastructure. This would allow for the new developments to utilize the existing infrastructure to not put a strain on areas that have yet to extensively tap the aquifers. Individual well systems will still be required in rural areas. However, the problems and inconveniences associated with the individual wells provide adequate justification for planned development of public water systems where urban densities are planned. The need to minimize the impact on shallow aquifers underscores the need for sound land use planning and controls to protect wellfields and aquifer recharge areas from potential contamination.

## **Wastewater**

### **Existing Public Wastewater System**

The principal mission of a central wastewater system is to efficiently and effectively collect and treat wastewater from residential, commercial and industrial customers within an established sewage disposal district.

The Kent County Department of Public Works is responsible for the planning, administration, operation and maintenance of sewer collection and transmission, 102 pump stations, and the wastewater treatment plant located just south of Frederica. The County's sewer infrastructure is comprised of a series of gravity sewer pipes, pumping stations, force mains, and the main treatment plant in which the treated wastewater is discharged into the Murderkill River. The sewer plant currently treats an average of 13.5 million gallons of wastewater on a daily basis.

Currently, the County manages the collection, conveyance, and treatment of wastewater through the sanitary sewer district, encompassing a combination of smaller municipalities that either lack their own sewer authorities or had no collection and treatment facilities prior to the initiation of the county system, and major residential subdivisions in the unincorporated areas of the County. Contract users of the system include the municipalities of Smyrna, Clayton, Dover, Camden-Wyoming, Harrington and Milford, and independent industrial, institutional, and residential manufactured home park users.

The Kent County Regional Resource Recovery Facility is a secondary wastewater treatment facility that receives wastewater from Kent County, southern portions of New Castle County and northern portions of Sussex County. The treated wastewater is then discharged to a tributary of the Murderkill River. The Kent County regional wastewater treatment plant operates under a NPDES permit for discharge of

treated wastewater in the Murderkill River issued by DNREC in accordance with the Federal Clean Water Act. At its inception, the treatment facility could receive and treat an average daily flow of 10 million gallons per day. Through subsequent upgrades the capacity of the treatment facility was increased to 20 million gallons per day.

Significant capital improvements to the wastewater system planned over the next five years include:

- Regional Resource Facility improvements to provide energy efficiency and meet environmental standards, such as adding bio-solids drying capacity project, the air blower optimization project and the plant-wide power generator project
- Conveyance system capacity improvements (Pipeline Condition Assessment System)
- Sanitary Sewer District expansions Double Run (Hilltop and Paris Villa/London Village) and Milford Neck
- Pump Station Upgrades (pump and emergency power generator replacements) and build pre-treatment system with septage screening located at West Denney's Rd

With the exception of septic remediation projects, the planned capital improvements are related to improving performance of the conveyance and treatment systems rather than expansion. Primary sources of funding include USDA loans and grants, SRF Delaware Funding loans and grants, Main System Capital Improvements Fees (County-wide impact fees), District Expansion Fees and Operating Revenue.

With respect to plant capacity over the planning horizon, the permitted capacity is 20 million gallons per day and current treatment averages 13.5 million gallons per day. As discussed in Chapter 3, the Delaware Population Consortium estimates an additional 22,600 households by 2050. Using a household rate of 200 gallons per day, the anticipated households would generate an additional 4.5 million gallons per day totaling roughly 18 million gallons per day. In short, there is ample plant capacity for new residential and nonresidential growth. Future improvements to the treatment plant will more likely be associated with environmental standards than increased demand.

### **Sanitary Sewer District**

Present County policy is to provide sewer service in areas of the Growth Zone wherever technically and economically feasible. Areas outside the Growth Zone are considered for service when there are environmental and health concerns for existing development. The procedure for consideration involves a petition or an application, a detailed technical feasibility study, extension of the sanitary sewer district through a public hearing process involving the Sewer Advisory Board and the Levy Court, and the planning, design, and construction of the system. Map 4E depicts Kent County Sewage Disposal District No. 1 showing which areas within the County have wastewater service governed by the County as of December 2017. The majority of the sewer district is located within the Growth Zone as adopted in the 1996 Comprehensive Plan.

Following construction of the infrastructure improvements which are paid for by the developer, that infrastructure is dedicated to Kent County who operates and maintains it in perpetuity. Improvements to existing pump stations or the construction of new ones, improvements to the existing treatment



facility, and annual operation and maintenance costs, make the provision, and extension of wastewater treatment service a costly endeavor.

### **Individual Onsite and Community Septic Systems**

Areas not served by public sewer utilize either individual on-site or community wastewater treatment and disposal systems. The Delaware Department of Natural Resources and Environmental Control (DNREC) is the permitting authority for both individual and community systems. Fiscal oversight is provided by the Public Service Commission (PSC) for community wastewater systems serviced by private utilities. The design and performance of residential on-site systems is dependent on soil types and operating conditions. Individual on-site septic systems can be a cost effective long-term alternative for meeting public health and water quality needs in less populated, low density areas. However, proper system installation and regular maintenance are also necessary to ensure proper functioning and to prevent groundwater contamination.

The County previously allowed development at 1 unit per acre outside the Growth Zone on community wastewater systems until the practice was prohibited in 2008. There are 2 remaining projects that fall under this provision.

### **Stormwater Management**

Stormwater management is the process and technology that is used to engineer land development to safely treat and convey stormwater without detrimental impacts. As agricultural land is converted to development, less water is able to reenter our critical groundwater recharge areas as it is diverted to surface water sources. This increase in surface water discharge increases the potential for downstream flooding, soil erosion, and drainage problems.

Stormwater management is regulated through a combined effort of the Delaware Department of Natural Resources and Environmental Control, Kent Conservation District, and Kent County. Most of the statewide and local stormwater management regulations to date have focused on regulating new development. However, many stormwater runoff problems within Kent County are associated with existing developments that were built prior to the adoption of the Delaware Sediment and Stormwater Regulations. In addition, there is a growing awareness that other land use activities such as row crop agriculture can also contribute to both water quality degradation and increased flooding. Awareness of these issues and requirements of the Clean Water Act, particularly Total Maximum Daily Loads (TMDL), have prompted the exploration of methods for addressing stormwater quality and quantity controls in all areas of Kent County.

Traditional stormwater management technologies attempt to reduce the impact of runoff to water bodies by using large structural facilities and end-of-pipe treatment practices such as stormwater ponds. The problem with these facilities is that the natural hydrology of a site is significantly altered. Low Impact Development (LID) minimizes site alterations as much as possible by incorporating natural landscaping design techniques to control runoff both during and after development. The natural landscape is used not only to reduce runoff from the site, but also to treat and filter the runoff that is discharged from the site.



Routine maintenance of stormwater management systems ensures that they continue to work as designed and protects communities from damage from major rain events. Historically, there has not been dedicated funding to this maintenance, with adequate funds available on a year-to-year basis for the clean-out of streams, basins and other conveyance systems.

In order to support neighborhoods in managing their physical improvements, the County has instituted a Stormwater Maintenance District Program. This program allows Kent County and KCD to perform minor maintenance activities which typically occur annually or every two or three years for more infrequent major maintenance tasks. The program was adopted in March 2014 and as of June 2017, 21 communities encompassing roughly 2,000 lots have joined the program. Residential communities pay \$28 per lot annually to be part of this program and commercial projects pay a rate that varies based on their size.

### **Tax Ditches**

Adequate drainage and the proper maintenance of drainage systems countywide is vital to agriculture, existing and proposed development, and the overall quality of life within Kent County. Along with tax ditches that have an established right-of-way, are a network of private ditches within the Tax Ditch Organizations without right-of-way that convey surface water to existing tax ditches. Well organized and maintained tax ditches provide the drainage conveyance framework that enables the area to have productive farmland and desirable residences. The drainage within the proposed Growth Zone is primarily private drainage, maintained by the landowner, along with drainage under the management of homeowners associations. The drainage of approximately 124,800 acres within the County is provided through 751 miles of tax ditches managed by 78 Tax Ditch Organizations. Tax ditches are prevalent in western Kent County with the vast majority located outside of the designated Growth Zone.

### **Technology**

Technology is an essential element of any community ranging from high speed internet access to affordable energy. Providing for adequate services can be one of the items that potential businesses will look for when locating in a new area. In addition, to attract younger professional residents, showing access to high speed internet and wireless cellular coverage is a must.

### **Internet**

Broadband internet service, either traditional lines or by satellite, covers most of the County. Only areas along the coast and in the southwest part of the County remain inaccessible to this essential service. Showing that residents, and more importantly businesses and community facilities, have access to reliable high speed internet is a crucial factor in recruiting new companies and young educated workers into the area.

95.7% of the County has access to broadband speeds higher than 100 mbps, but only 38.6% of that is the most reliable fiber optic coverage and no area has access to 1 GB data service. Community Anchor Institutions are areas that the federal government has decided to highlight as locations crucial to facilitating greater use of broadband by vulnerable populations, including low-income, the unemployed, and the aged. This allows us to empower under-represented populations that don't have access to

internet. Map 4F shows our CAI's and the area covered by fiber optic internet service. There appears to be a wide range of institutions that could benefit from higher speed coverage. The expansion of high speed internet access is an opportunity for the County to support economic development.

### **Electric**

Electric service is provided in Kent County through 5 providers, 2 private and 3 municipal. Delaware Electric Co-op is by far the largest provider. They cover 44% of all properties in Kent County. The other private company, Delmarva Power, serves 26% of the County. The remaining 30% of the County is provided electric from Dover, Smyrna-Clayton, or Milford.

### **Wireless Coverage**

Since the last Comprehensive Plan, the County has approved 15 new telecommunication towers. This does not include any towers approved in the city limits. The expansion of service has been along the County's major routes for the purposes of filling gaps in coverage.

Kent County is covered by a number of wireless telephone providers. AT&T and Verizon Wireless cover the entire County. Sprint covers much of the County, but there are pockets without coverage. You find T-Mobile service mainly around Dover/Camden and along the water. These all offer speeds ranging from 1.5 to 25 mbps depending on location and service.

Four satellite providers also cover portions of the County. Via-Sat, Starband, and Skycasters cover the entire County and Hughes Network Systems is available only southwest of Dover and south of Houston.

### **Television**

Most internet providers are also offering broadband television service. Comcast and Verizon are the largest providers and offer traditional wired broadband TV. Satellite services providers include Windstream, Dish Network, and DirectTV.

Although less important to potential stakeholders in a community, television service is still a vital part of contemporary life. The uncovered areas would need to rely on traditional antenna service or online TV like Atlantic Broadband located in the northwest part of the County.

## **Capital Improvement Planning**

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Adopting and implementing a capital improvement program for public improvements in keeping with the policies and guidelines of the Comprehensive Plan is essential for implementation of the Plan. To that end, Kent County annually adopts a 5-year Capital Improvements Program (CIP) as part of its budget process. The Capital Improvement Plan adopted as part of the FY 19 budget is included as Appendix E. It is important to note, however, that the CIP is itself a planning tool, and funding for each of the projects is not necessarily guaranteed. Following is a brief discussion of the projects contemplated in the CIP:

## Wastewater

Major capital improvements to the wastewater system over the next five years include:

1. Wastewater plant improvements to meet environmental standards, and provide adequate emergency power generation capability;
2. Conveyance system capacity improvements;
3. Conveyance system improvements (pump replacements and emergency power generation capability); and
4. Potential Sanitary Sewer District expansions to service: Lebanon Area, Houston, Canterbury / Viola Area, Woodside, Rising Sun.

Some of the specific projects include:

1. Treatment plant improvements – Remove and replace the 23 year old geo-membrane liner in the north aeration basin.
2. Treatment plant improvements – Install plant-wide emergency power generator, aeration blower efficiency upgrade, bio solids dewatering and dryer replacement.
3. Collection system improvements – Construct a Central Septage Receiving and Pretreatment facility. The facility will replace the two septage receiving sites with one centrally located with the receiving capacity of both sites. The facility will screen and remove grit from the septage and treat it with air to make it less corrosive and detrimental to the transmission system.
4. Collection system improvements – Pump Station #1 wet well expansion and screening upgrade.
5. Collection system improvements – Pump Station #3 wet well expansion and isolation valve project.
6. Pipeline condition assessment project and the respective repair/replacement projects that come out of it.
7. Murderkill River crossing parallel conveyance line - An emergency and maintenance bypass line is proposed.
8. Hilltop Area Phase 2 – planning, design & construction. This project is to provide a sewer collection and conveyance system where the area has environmental issues due to failing septic systems. This area will service 48 EDU's. The project is scheduled to start in fiscal year 2018 and be completed in fiscal year 2019.
9. Paris Villa – planning, design & construction. This project is to provide a sewer collection and conveyance system where the area has environmental issues due to failing septic systems. Paris Villa is in the Double Run area and will serve 114 properties. The project was started in fiscal year 2019 and is anticipated to be completed in fiscal year 2020.
10. London Village - planning, design & construction. This project is to provide a sewer collection and conveyance system where the area has environmental issues due to failing septic systems.

London Village is in the Double Run area and will serve 94 properties. The project was started in fiscal year 2019 and is anticipated to be completed in fiscal year 2020.

11. Construct anaerobic digestion facility at the treatment plant for primary and waste activated sludge and possible food waste. The process will generate methane for electricity generation and reduce the amount of bio solid waste generated.

## **Policy Emphasis**

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1. Meet the public facilities needs of existing development as a first priority;
2. Promote and invest in infrastructure to support economic development efforts and increased access for citizens;
3. Plan for the efficient location of schools, libraries, health and medical facilities, and other public services;
4. Assure that public facilities and institutions are maintained in an efficient manner;
5. Where possible, increase public services as additions to existing systems;
6. Plan capital improvements consistent with a realistic rate of growth in County areas where development is encouraged to locate (i.e. Growth Zone Overlay);
7. Limit the provision of facilities and services in rural County areas;
8. Require developers to pay for or provide the added public facilities necessary to support their developments when normal County facilities programming will not result in the timely provision of the services that will support the proposed development, including, but not limited to, schools, parks, roads and wastewater; and
9. Connect access to schools, parks, libraries and other community centers as part of subdivision and land development design.

## **Recommendations**

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### **Schools**

1. The County, School Districts, and the Department of Education should work together in identifying future school sites as part of a School Facilities Master Plan in recognition of areas where development is encouraged. Caesar Rodney, Smyrna, and Lake Forest are the districts in the greatest need of site location. Schools should be located near population concentrations to shorten bus trips and encourage community investment in that facility.
2. Recognizing that schools are more than educational institutions and also serve as community spaces, Kent County and the School Districts should establish agreements for use of school facilities by the public for outdoor recreation fields and playgrounds, interior gym time, or

community meeting spaces. Increased cooperation can improve the efficient use of limited recreation areas.

3. Review the School Surcharge and Adequate Public Facility requirements to ensure goals are met and revise as warranted.
4. Promote investment by students of the local colleges to connect with the local community. These students could see job opportunities, mentors, activities, or housing choices they may not have found otherwise and could keep them in the County after graduation.

### **Parks and Recreation**

1. Review and update the Parks and Recreation Strategic Plan.
2. Identify additional parkland area in locations of greatest need. These include southwest of Smyrna, northwest of Dover, the "Heart of Delaware" west of Magnolia, and Marydel. Build a capital fund to enable land acquisition and development of additional parks.
3. Provide path and trail linkages between parks and residential communities to minimize automobile usage and encourage increased activity.
4. Coordinate with other agencies to continue the St. Jones Greenway Trail.
5. Explore opportunities to develop a trail connecting the Hunn Nature Park, Lebanon Landing, and Tidbury Creek Park properties.
6. Support State efforts to create a trail along the disused rail line running from Smyrna/Clayton through Marydel to Maryland in order to provide a recreation opportunity in the western portion of the County.
7. Expand options and facilities in existing parks to support handicap accessibility and inclusion for all persons.

### **Libraries**

1. To ensure that new libraries are accessible and located near existing resources, any new facility should be located within the Growth Zone Overlay District. Continue use of the bookmobile and explore partnerships to expand access to the library system.
2. Assess if the current library tax is meeting the needs of the facilities and residents.
3. Continue coordinating with the Parks & Recreation Division to create programming for youth and adults in the community.
4. Leverage technology to provide seamless access.

## **Public Safety**

1. Update the Public Safety Strategic Plan.
2. Monitor the need for additional paramedic units specifically in the Smyrna, Dover, and Magnolia areas.
3. Design and implement a Public Safety check-in program for elderly and possibly disabled residents. Such a program could entail regular calls to registered residents or a schedule for participants to contact the call center to check in.
4. Evaluate the existing Adequate Public Facilities Ordinance for effectiveness and investigate the use of a building permit surcharge to capture development not impacted by the APFO.
5. Pursue discussions with potential service provider partners and identify potential funding sources to support an expanded community EMS mission including:
  - Increasing access to care in underserved areas;
  - Providing telephone advice to 9-1-1 callers instead of resource dispatch;
  - Using community paramedics or other specially trained EMS practitioners for management of high healthcare system utilizers or patients at risk for hospital admission or readmission, chronic disease management, preventive care or post-discharge follow-up visits; and
  - Transporting or referring patients to a broad spectrum of appropriate care, not limited to hospital emergency departments.
6. Incentivize and promote development inside the Growth Zone Overlay District and locate paramedic stations in areas of higher demand in order to manage response times.

## **Water Resources**

1. Work with the State of Delaware and the Public Service Commission to examine methods of planning for water service expansion through regional facilities to ensure public water is available to areas identified for development and infrastructure is not duplicated.
2. Work with DNREC to identify specific uses such as borrow pits that could negatively impact public water supplies and develop relevant restrictions specific to the uses.
3. Coordinate with the Department of Natural Resources and Environmental Control to review development and permitting standards including infiltration practices and impervious cover limitations to prevent the depletion of groundwater resources.
4. Continue to coordinate site plan approval for water treatment and storage facilities with site plan approval for subdivision and land development.

## **Wastewater**

1. Recognizing that a public agency is the most efficient, effective, and environmentally sensitive method of treating and disposing of wastewater, continue to provide efficient and cost effective

sanitary sewer service in the existing sewer district and to new users through expansion of the sewer district in areas identified for development.

2. Complete a wastewater master plan for use in capital planning.
3. Provide sewer service within the Growth Zone Overlay District that may facilitate infill development within existing developed areas and the redevelopment of brownfields, abandoned and underutilized properties.
4. Pursue an ongoing program of enhancements to the County's Geographic Information System.
5. Continue efforts to improve the efficiency of the administration and operation of the sanitary sewer system in order to minimize the expense to the sewer customers.
6. Maintain and continually upgrade the existing sanitary sewer conveyance system of pipes, manholes, pump stations, and the wastewater treatment facility to help ensure trouble-free operation, including a funding strategy implementing a routine infrastructure replacement program while exploring new technologies and techniques of wastewater treatment, disposal, and re-use, and maintaining superior environmental standards.
7. Improve the efficiency of the existing sewer system by increasing the capacity through reduction of infiltration and inflow of stormwater and illicit discharges into the sewer network.
8. Continue and expand remediation programs to assist communities with high percentages of failing septic systems to connect to the public sewer system.
9. Limit expansions of the sanitary sewer district system to areas adjacent to the existing district to ensure an orderly growth of the system.

### **Stormwater Management**

1. Continue coordination efforts with State agencies (Kent Conservation District and DNREC) to limit and manage stormwater runoff in the most efficient and effective manner while respecting natural features and constraints.
2. Continue participation in the Stormwater Regulatory Advisory Committee and Clean Water Council to develop a watershed approach to stormwater that assesses design in context of broader stormwater conveyance limitations within the watershed and better identifies and addresses the effect any land development has on the community by making provisions for incorporating future watershed studies and/or TMDL requirements.
3. Continue to expand participation in the Stormwater Maintenance District Program.
4. Encourage the use of Low Impact Design particularly for projects within the more rural areas of the Growth Zone and areas outside of the Growth Zone.
5. Establish a permitting process for land grading, similar to the building permit process, to enable efficient and effective inspection and enforcement action.



## Technology

1. Facilitate the dissemination of high speed internet service to as many residential properties as possible and, more importantly, all CAIs. The County can help this effort by allowing the base infrastructure to be placed on or through government properties.
2. To allow existing businesses to thrive and to attract new businesses, the County must invest in the ability to provide the best most reliable broadband internet service. Partnering with the private sector and other government agencies to support and expand fiber optic internet services will be crucial to the modernization and growth of the County.
3. Require that all utility easements required for a subdivision be shown on the record plan fully dimensioned and identified as to which utility is served by the easement. All utility companies should be contacted by the applicant concerning the need or desire for said utility and approvals of utility locations provided from each utility. If a particular service will not be installed at the time of construction, but is planned for the future, then adequate easements should be provided on the record plan with the written approval of the easement locations from the utility company providing service.
4. Require all electrical, telephone, water, sewer, gas, or other utilities requiring a centralized facility and providing services to multiple development parcels either within or outside the subdivision be provided on separate, private parcels owned in fee simple or by easement by the proprietary utility company and not included within the open space calculation for that or any community so served.

# Schools

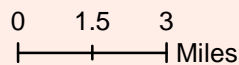
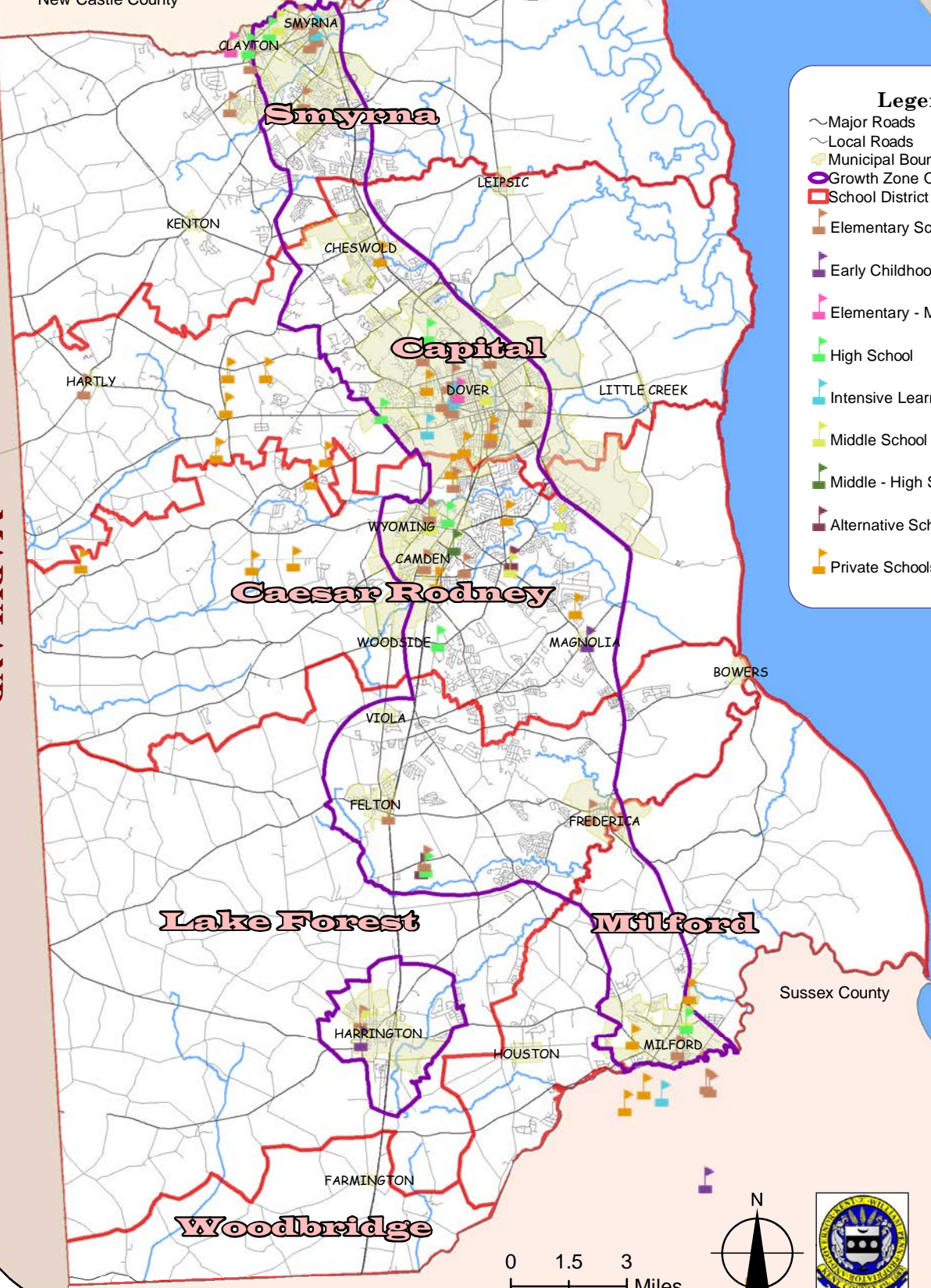
NEW JERSEY

New Castle County

MARYLAND

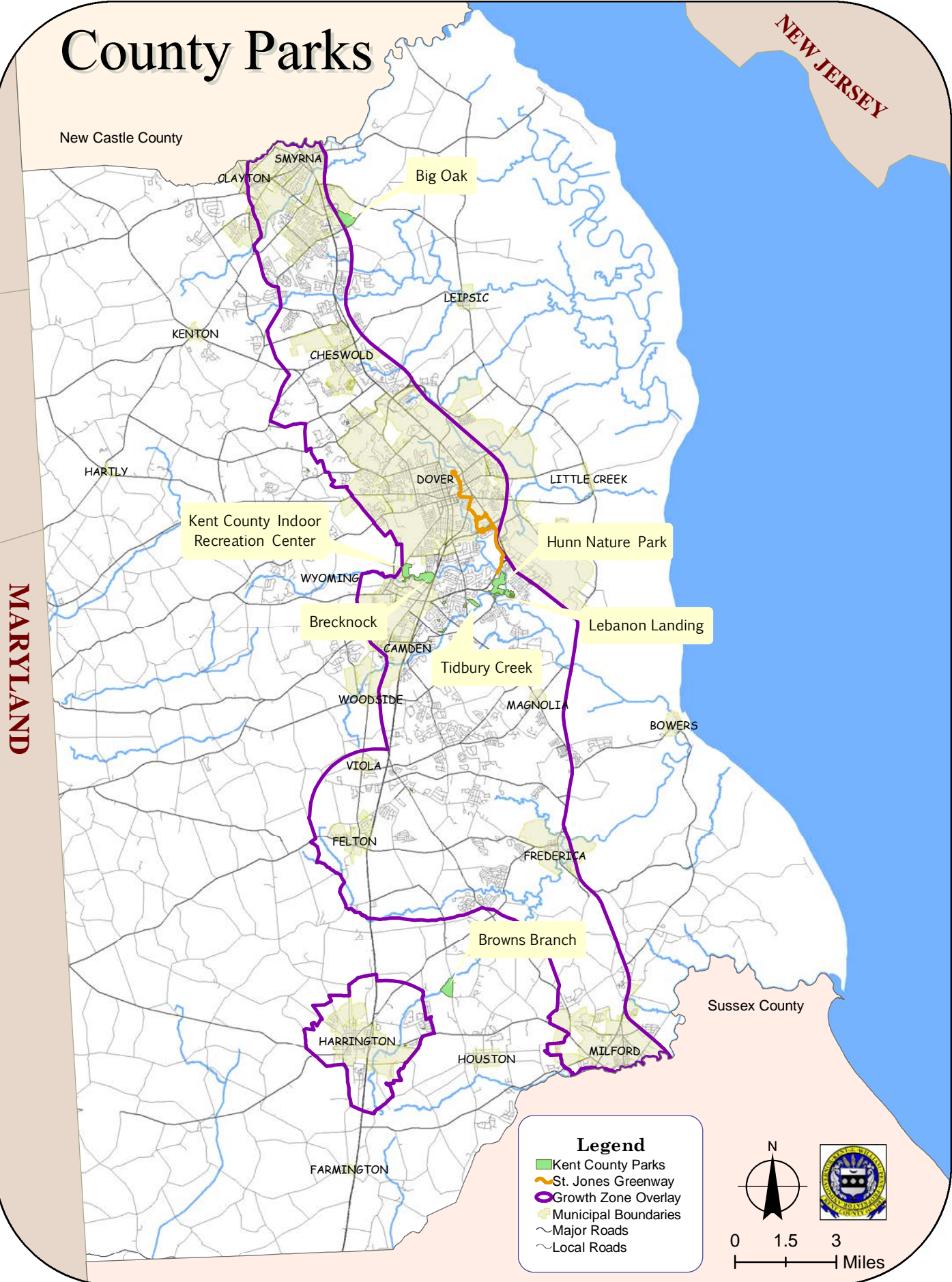
**Legend**

- ~ Major Roads
- ~ Local Roads
- ▭ Municipal Boundaries
- Growth Zone Overlay
- ▭ School District Boundaries
- ▭ Elementary School
- ▭ Early Childhood Center
- ▭ Elementary - Middle School
- ▭ High School
- ▭ Intensive Learning Center
- ▭ Middle School
- ▭ Middle - High School
- ▭ Alternative Schools
- ▭ Private Schools





# County Parks



**Legend**

- Kent County Parks
- St. Jones Greenway
- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads

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Miles

# Emergency Medical Services

NEW JERSEY

New Castle County

MARYLAND

**Legend**

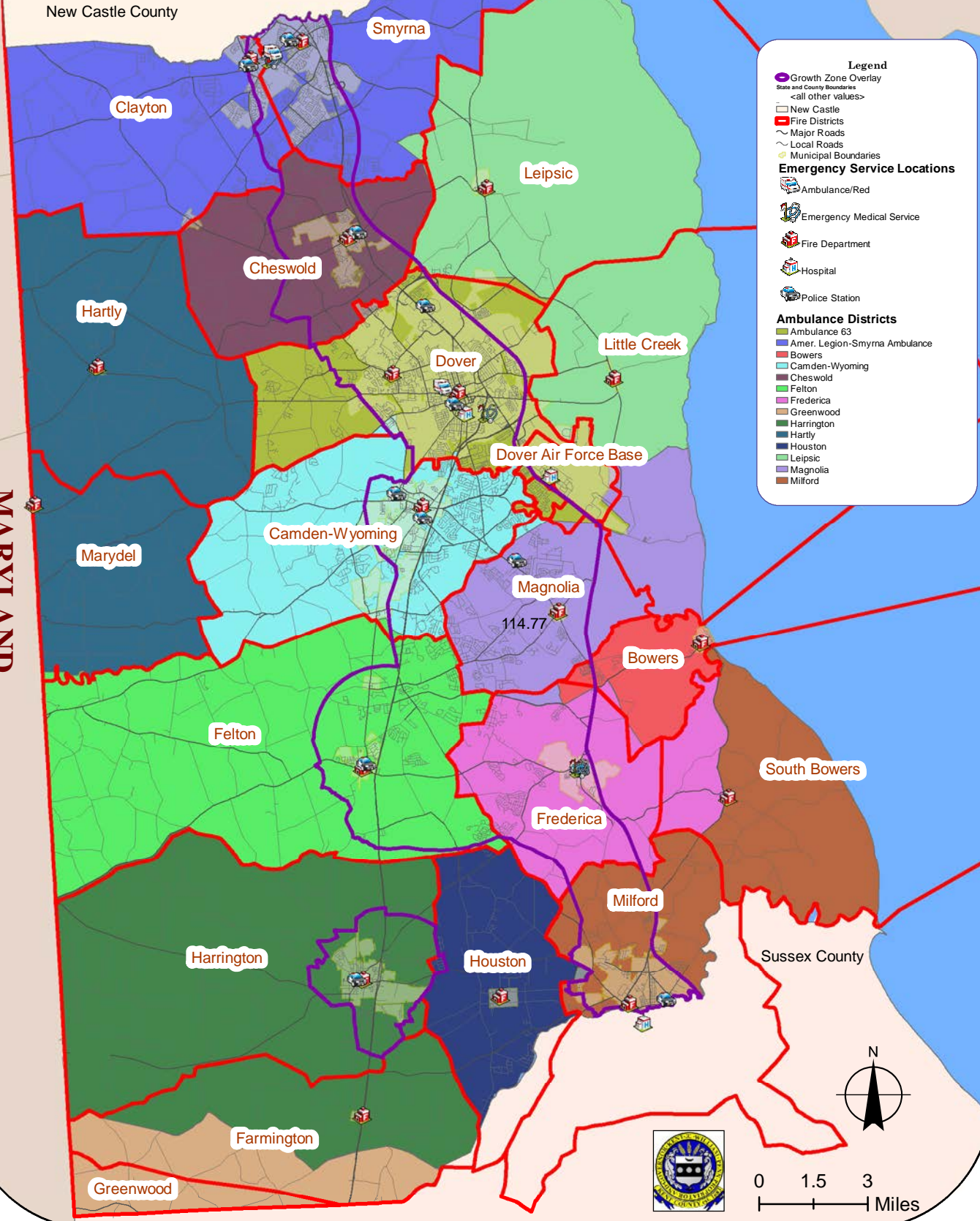
- Growth Zone Overlay
- State and County Boundaries <call other values>
- New Castle
- Fire Districts
- Major Roads
- Local Roads
- Municipal Boundaries

**Emergency Service Locations**

- Ambulance/Red
- Emergency Medical Service
- Fire Department
- Hospital
- Police Station

**Ambulance Districts**

- Ambulance 63
- Amer. Legion-Smyrna Ambulance
- Bowers
- Camden-Wyoming
- Cheswold
- Felton
- Frederica
- Greenwood
- Harrington
- Hartly
- Houston
- Leipsic
- Magnolia
- Milford



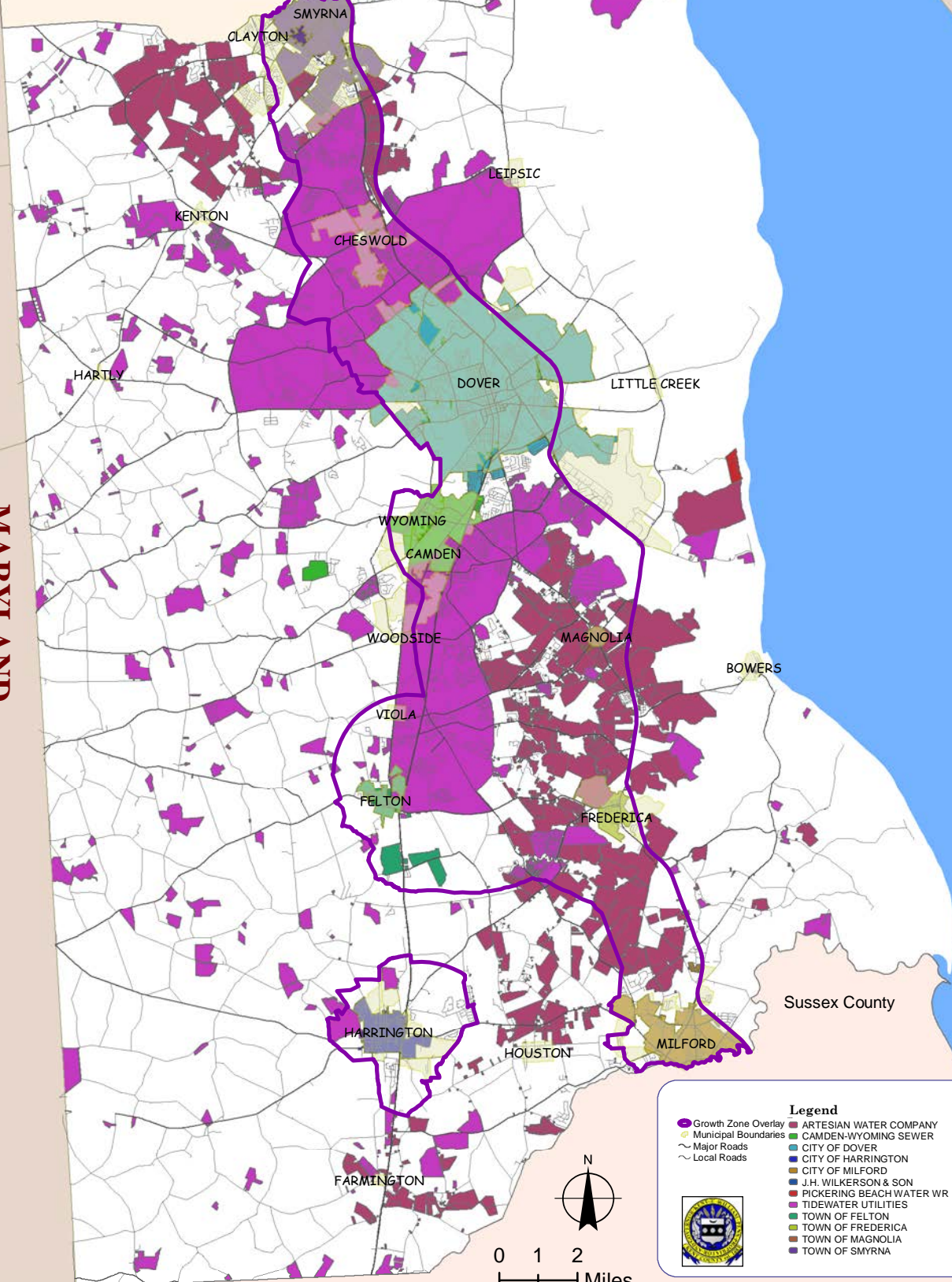


# Water Service Providers

New Castle County

NEW JERSEY

MARYLAND



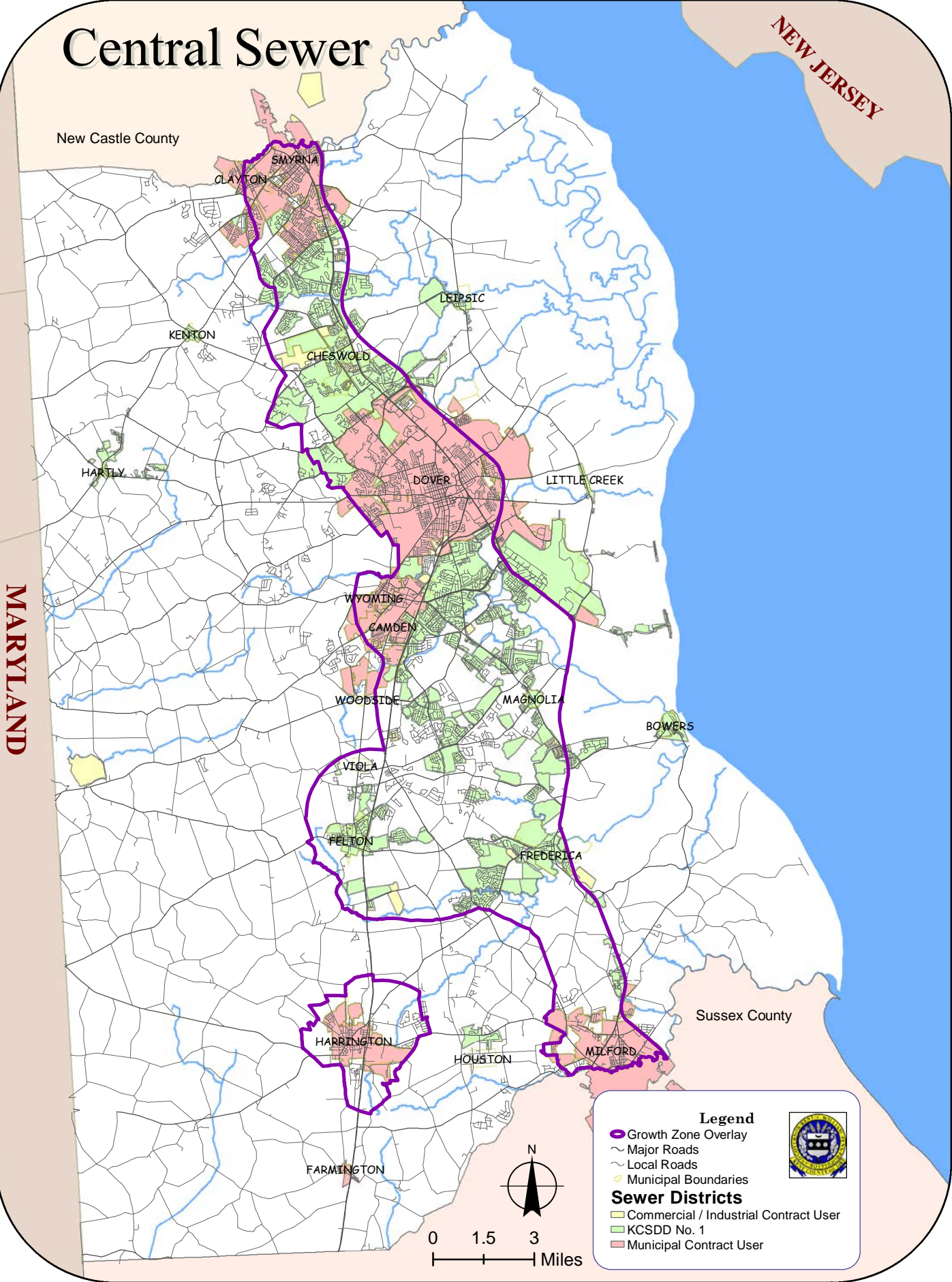
### Legend

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- ARTESIAN WATER COMPANY
- CAMDEN-WYOMING SEWER
- CITY OF DOVER
- CITY OF HARRINGTON
- CITY OF MILFORD
- J. H. WILKERSON & SON
- PICKERING BEACH WATER WR
- TIDEWATER UTILITIES
- TOWN OF FELTON
- TOWN OF FREDERICA
- TOWN OF MAGNOLIA
- TOWN OF SMYRNA



0 1 2  
Miles

# Central Sewer



MARYLAND

NEW JERSEY

New Castle County


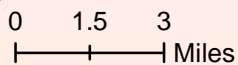
Sussex County

**Legend**

- Growth Zone Overlay
- Major Roads
- Local Roads
- Municipal Boundaries

**Sewer Districts**

- Commercial / Industrial Contract User
- KCSDD No. 1
- Municipal Contract User

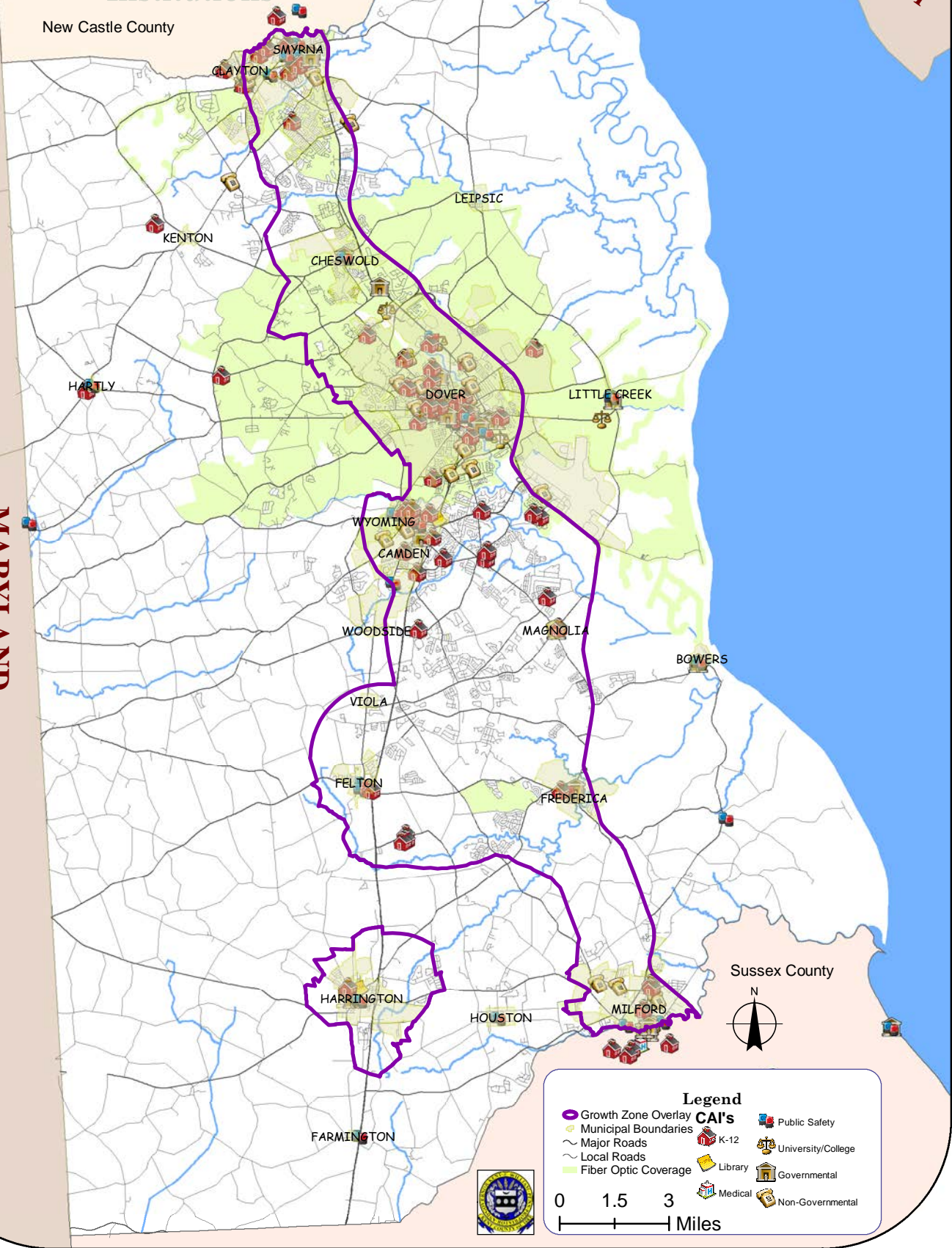


# Fiber Optic Coverage and Community Anchor Institutions

New Castle County

NEW JERSEY

MARYLAND



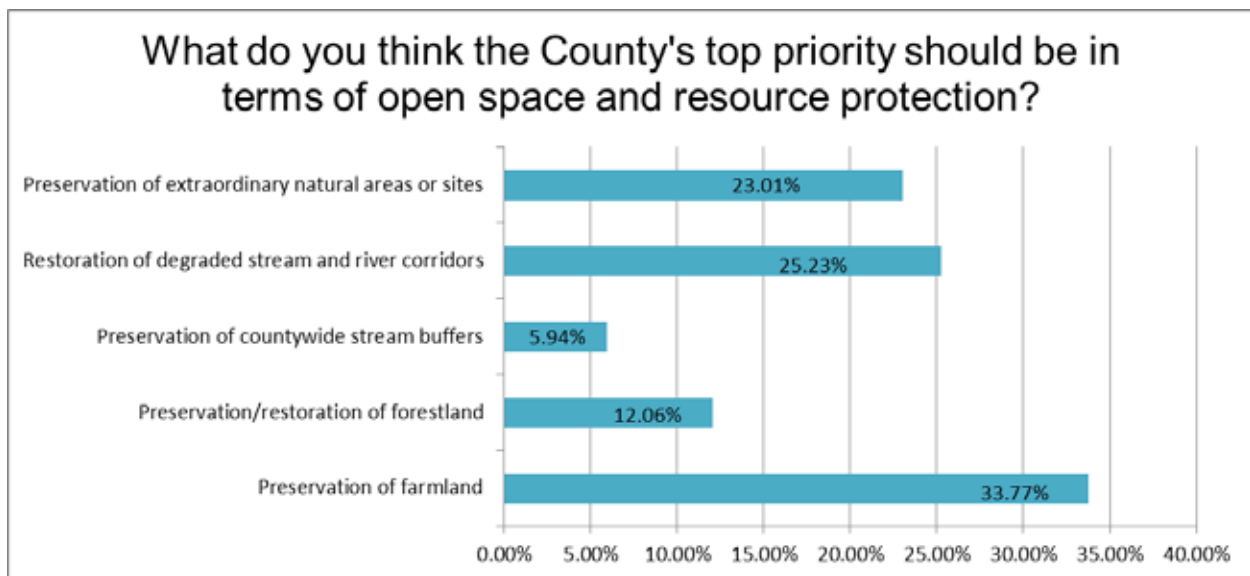


# Chapter 5

## Conservation



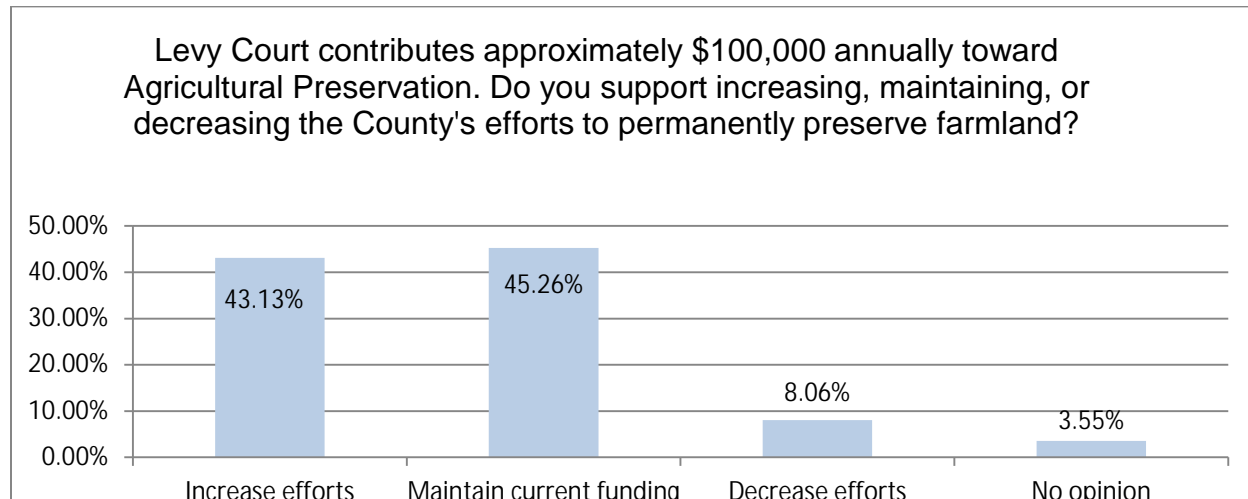
### Overview



Source: Survey 2

Kent County possesses a wealth of natural resources including wetlands, woodlands, floodplains, coastal areas, waterways, underground aquifers, open space, and the animals and plants that inhabit these spaces. The viability of these resources is directly linked to the overall health and high quality of life that Kent County citizens currently enjoy. As development encroaches on these resources, their integrity is compromised. However, it is possible through the use of planning techniques such as infrastructure planning and site design requirements, to protect the County's natural resources while also respecting the rights of property owners wishing to develop. In fact, as the County continues to develop, it is in the best interest of current and future residents to place a high value on protecting such resources as they ultimately serve to protect residents. By way of example, protection of an underground aquifer provides

clean and safe potable water, wetlands and floodplain serve to protect residents from the effect of storms, and protection of the coastal areas preserves both the environmental and economic interests of the County. If the County's goal is to enable the creation of communities, the effort cannot be considered complete without also integrating natural resources in the design.



*Source: Survey 1*

Agricultural preservation is not simply an issue of preserving open spaces or the rural character of Kent County; rather it is an issue of protecting a major economic force in both the County and the State. According to the Delaware Department of Agriculture, the agricultural industry in Delaware provides more jobs and impacts the State's economy more than any other sector. Kent County has traditionally been an agrarian community and agriculture is tightly woven into the quality of life within the County. Establishing policies and procedures to encourage the retention of quality farmland in viable farms is a worthy public objective of voters and taxpayers. Therefore, the County seeks to facilitate the promotion and preservation of the agricultural industry. One technique cannot address all of the challenges of farming; rather Kent County will utilize a combination of incentive based strategies and regulatory tools within its police powers and regulatory purview to protect and enhance the sustainability of the agricultural industry in Kent County.

## **Preserved Lands**

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Protected lands in Kent County include those owned and/or managed by some federal and state agencies, as well as private land conservancies (see Map 5A). In addition, many landowners choose to sell their development rights and establish forestry or agricultural conservation easements. Many also choose to have their land placed in an agricultural preservation district or forestry preservation area where it is preserved for a period of time. Other lands that have restrictions from development include tidal wetlands and flood hazard zones. This section outlines the protected lands and natural resources of Kent County.

## **Water Resources**

Kent County's water resources are an essential component to a healthy and productive society in the present as well as the future. We all depend on a clean and abundant water supply for drinking water and activities such as swimming, boating and fishing, agricultural production, manufacturing, and tourism. In addition, healthy fish and wildlife habitat, which are important features for the recreational and economic components of Kent County, depend on water quality that will sustain these uses. While DNREC has some core responsibilities to protect Kent County's water resources, Kent County has the primary responsibility to regulate land use activities that will protect our State's ground waters and surface waters.

### **Surface Waters**

Kent County has an extensive network of waterways in addition to the Delaware Bay Coastline (see Map 5B). Major streams and their corresponding watersheds in Kent County include Silver Lake, St. Jones River, Killens Pond, and Murderkill River. The majority of the waterbodies in Kent County are impaired and not meeting water quality standards.

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 (TMDLs) to restore their beneficial uses. A TMDL defines the amount of a given pollutant that may be discharged to a waterbody from point, nonpoint, and natural background sources and still allows attainment or maintenance of the applicable narrative and numerical water quality standards. A Pollution Control Strategy (PCS) specifies voluntary actions necessary to systematically achieve pollutant load reductions specified by a Total Maximum Daily Load for a given waterbody to reduce pollutants to levels specified by State Water Quality Standards.

Kent County is located within the greater Delaware River and Bay and Chesapeake Bay drainage basins. Within the combined area of the two drainages are ten individual watersheds. These 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. In addition, a Watershed Improvement Plan has been developed for all watersheds in the Chesapeake drainage basin and identifies specific pollution reduction practices and programs to reduce nitrogen, phosphorus, and sediment from a variety of sources in Delaware's portion of the basin. The majority of the basin located in Kent County is outside of the Growth Zone Overlay District and generally not subject to development pressure.

Achievement of TMDL targets is in large part predicated on where growth occurs and the management of the water pollutants that accompany growth. Land uses that impact the achievement of TMDLs include community and individual wastewater management as well as stormwater management. The current Kent County Subdivision and Land Development Code addresses TMDLs regarding wastewater treatment limits and setbacks from waterways. For watersheds with an established TMDL, §187-53 (D) (7) requires individual and community septic systems to meet the nutrient load reductions prescribed by the TMDL either through system design or best management practices, and §187-78 (C) requires a 100' riparian buffer.

## **Groundwater**

Groundwater is the sole source of public drinking water for Kent County. Since groundwater originates as rainwater, land use activities and practices affect the quality of groundwater. Groundwater is regulated by DNREC under the terms of the Delaware Environmental Protection Act (7 Delaware Code, Chapter 60, Subchapter 6). The responsibility for regulating public water supplies is shared among DNREC, the Department of Health and Social Services' Division of Public Health, and the Public Service Commission.

The Delaware Legislature adopted Title 7, Delaware Code, Chapter 60, Subchapter VI (Source Water Protection Law) in June 2001. This law requires county governments and municipalities with populations of 2,000 or more to protect the areas delineated as source water protection areas including surface water supply watersheds, wellhead protection areas, and excellent groundwater recharge potential areas (see Map 5C).

In January 2011, Levy Court adopted a wellhead protection ordinance prohibiting development within 150 feet of a public well. The ordinance further requires that between 150 and 300 feet from a public well and stormwater from new development shall be treated using water quality best management practices. There are some public water supply wells in unconfined aquifers that could require protection in addition to the existing 150' buffer. However, they are largely in already developed areas such as the Town of Smyrna or outside the Growth Zone and not subject to development pressure. It is understood that some industrial uses, primarily hazardous uses, could be a threat to these wellfields. The County will work with DNREC to identify potential hazardous uses and develop use specific conditions to protect the wellfields.

With respect to Excellent Recharge Areas, they are located largely outside of the Growth Zone Overlay District or in the more rural areas of the Growth Zone and away from development pressure. In addition, Kent County limits impervious cover for residential development outside of the Growth Zone to 23% and within the Growth Zone to 35%. When subdivision and land development applications are located within Excellent Recharge Areas, DNREC is specifically invited to provide advisory comments to the Regional Planning Commission for consideration. The County should also consider an ordinance requiring a groundwater impact assessment for subdivision and land development applications located within DNREC identified source water assessment areas, excellent recharge areas, and wellhead protection areas. These standards in addition to the County's other efforts to protect natural areas effectively protect the resource.

## **Wetlands**

Wetlands are areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are characterized by one of three parameters: certain soil types, aquatic plants, and hydrology. An immense variety of species of microbes, plants, insects, amphibians, reptiles, birds, fish, and mammals can be part of a wetland ecosystem. Physical and chemical features such as climate, landscape shape (topography), geology, and the movement and abundance of water help to determine the plants and animals that inhabit each

wetland. In addition, wetlands provide great volumes of food that attract many animal species, benefit air and water quality, provide flood protection, prevent shoreline erosion, and provide recreation and open space opportunities.

Tidal and non-tidal wetlands are regulated under Section 404 of the Federal Clean Water Act by the United States Army Corps of Engineers (USACE). The State of Delaware also regulates activities, primarily in, tidal wetlands in accordance with The Wetland Act (7 Del. C. Chap. 66) and the State's Wetlands Regulations (7 DE Admin. Code 7502). Title 7 Chapter 72 refers to the Subaqueous Lands Act that authorizes the regulation of activities in the streams, lakes, ponds, rivers, and bays throughout the State. Collectively, the Army Corps and DNREC have overlapping jurisdiction in tidal wetlands as well as possible overlapping jurisdiction in waterways, and the Army Corps has additional jurisdiction in non-tidal wetlands.

There are approximately 121,600 acres of wetlands and/or potential wetlands in Kent County (See Map 5D). In an effort to protect wetlands, Kent County currently prohibits subdivision of wetlands and requires a minimum buffer of 25 feet. In the interest of improving water quality as well as protection of the various species dependent upon wetlands and protection of people and property from flooding, the County should consider implementing an increased buffering and replanting standard.

### **Floodplain**

Due to its extensive network of waterways and coastline, Kent County has a significant amount of floodplain (see Map 5E). A floodplain is a land area adjacent to a waterbody that is susceptible to being inundated by water from the base flood. Floodplains are designated on the Flood Insurance Rate Maps (FIRMs) prepared by the Federal Emergency Management Agency (FEMA). Kent County has participated in the National Flood Insurance Program since 1978. The most recent FIRM update became effective July 7, 2014 and additional revisions are scheduled to become effective June 20, 2018. Protection of floodplains protects home owners from water damage to persons and properties, lowers insurance rates, reduces stress on community services, protects habitats and water quality and minimizes flooding. Currently, Kent County prohibits the subdivision of established floodplains and requires that construction on existing lots within the floodplain be elevated to 18 inches above base flood elevation.

### **Coastal Zone**

In Kent County, the Coastal Zone as defined by DNREC, is all lands and waters just east of State Route 9 to U.S. Route 113 (south of Dover Air Force Base) to State Route 1 (north of Milford). A significant portion of the County's tidal wetlands: all of the beaches; four State Wildlife Areas (Woodland Beach, Little Creek, Ted Harvey, and Milford Neck); the Bombay Hook National Wildlife Refuge; fish and shellfish spawning and nursery areas; a substantial number of historic and archaeological sites; and significant natural areas initially identified by the Delaware Nature Society and included in Delaware's Natural Areas Inventory, are



located in the Coastal Zone. In addition to the significant flora and fauna that this area supports, the Coastal Zone also supports human activities that include agriculture, recreation, tourism, and fishing.

Within the State defined Coastal Zone, new industrial and heavy manufacturing uses are prohibited<sup>1</sup>. However, residential and commercial uses are not addressed. Land uses in this area need to be protective of the habitat, natural features and human activities that depend on a healthy and functioning Coastal Zone. The Growth Zone Overlay District established in 1996 works to protect these resources by directing growth toward the core infrastructure of the County rather than the outlying areas.

Further descriptions of the components of the Coastal Zone's beaches, shorelines and coastal waters are incorporated below.

### **Beaches & Shoreline**

Barrier beaches are narrow strips of land made up of unconsolidated material extending parallel to the coast and often separated from the mainland by a body of fresh, brackish, or saltwater, or a marsh. Some of the beaches occur on Pleistocene age highlands, which outcrop along the coast; such beaches exist at Bowers. The County's sandy beaches occur intermittently from Woodland Beach to Bowers and continuously from there along the Bay to the Sussex County boundary. These beaches are high-energy systems, with constantly shifting equilibriums that are subject to landward migration of the shoreline and coastal storm events. Beaches provide protection to buildings and infrastructure during damaging storms as well as offer a variety of recreational opportunities.

A number of the Bay communities are subject to storm surge and elevated water levels from coastal storm events, shoreline erosion, and sea-level rise leading to flood damage. On November 23, 2016, the U.S. Army Corps of Engineers in conjunction with the Delaware Department of Natural Resources released a Feasibility Report and Integrated Environmental Assessment for the Beneficial Use of Dredged Material for the Delaware River. The tentatively selected plan consists of dune and berm construction at dredged material placement at eight locations along the Delaware Bay including Pickering Beach, Kitts Hummock, Bowers Beach, South Bowers Beach, and Big Stone Beach. Implementing the tentatively selected plan will increase coastal resilience, reduce storm impacts to people and property, and enhance tourism opportunities along the coast. In addition, nourishing beaches helps provide greater resilience of natural habitats and may ensure the continued existence of beach habitat in areas where development precludes inland migration of the beach. Therefore, Kent County is in support of the findings of the Feasibility Study.

### **Coastal Waters**

Most of Delaware is near coastal waters, and no part of the State is further than eight miles from tidal water. Delaware coastal waters include part of the Delaware Bay Sub-basin, one of the more productive fisheries in North America. Delaware coastal waters support approximately 138 species of fish and provide spawning and nursery grounds for more than 60 of these species. Kent County contains six

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<sup>1</sup> With the exception of the fuel facility east of Little Creek on Port Mahon Road as a result of the Coastal Zone Conversion Permit Act signed in 2017.



estuary basin watersheds that support 19 commercially important fin fish and provide spawning and nursery grounds for approximately 40 fish species. In addition, nearly all of Delaware's oysters and 50% of blue crabs are landed in Kent County.

Maritime commerce in the Delaware Bay is substantial. According to the University of Delaware Sea Grant Program, an estimated 3,000 vessels transit the Delaware Estuary annually and the cargo ranges from petroleum to fruit to automobiles. Shipping activity continues to thrive in the Delaware River and Bay due to the presence of deep-water ports in Wilmington, DE and Philadelphia, PA. With the ongoing main channel deepening of the Delaware River navigation channel from 40 to 45 feet, an increase in the volume and relative size of ship traffic is expected in the future.

The extent of recreational use of coastal waters indicates still another significant feature of this resource, namely its aesthetics. Indeed, the natural beauty of the coastal waters was noted more often by early explorers and settlers than its utilitarian values.

## Air

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Clean air is important for the health and wellbeing of Kent County citizens and is essential for continued growth and prosperity. However, growth and prosperity can actually exacerbate air quality problems. Increased population and sprawl development can result in increased air pollution from cars, energy generating facilities, lawn mowers, boats, leaf blowers and other fossil fuel emitting devices. Attainment of the ozone standard will require that ozone generation is minimized.

According to the Dover/Kent County Metropolitan Planning Organization 2017 Metropolitan Transportation Plan:

*Kent County is part of the Philadelphia-Wilmington-Trenton nonattainment area, though it is currently considered to be in attainment based on recent air quality data. The MPO region, however, includes the portion of Smyrna in New Castle County and the portion of Milford in Sussex County, both of which are considered nonattainment counties.*

However, the MPO's Plan also states that transportation emissions for nitrogen oxides and volatile organic compounds are forecast to be reduced by approximately 52% by 2040 as compared to 2012 emissions. The introduction of cleaner fuels and more fuel efficient vehicles play a significant role in reducing emissions. In addition, DNREC is administering the Delaware Clean Transportation Incentive program to "promote deployment, wider use and acceptance of clean alternative fuel vehicles, and to boost investment in clean transportation fuel infrastructure." The County should explore opportunities to incorporate alternative fuel vehicles into its fleet of vehicles used for various field operations and add electric vehicle supply equipment and charging in common areas where feasible. In addition, recommendations included throughout this Plan such as expansion of the bicycle & pedestrian network, mixed use development, and tree preservation are associated with air quality benefits.



## Woodlands & Wildlife Habitat

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Woodlands are a crucial component of the environment providing oxygen and reducing carbon dioxide in the atmosphere. They aid in soil stabilization and provide shade and cooling when they are present. Woodlands are extremely important as plant and wildlife habitat. Of Delaware's native plant species, 54% are forest dependent and 40% of the rare bird species in the State are forest dependent. Woodland areas provide an important physical, aesthetic and psychological balance to the built environment (see Map 5F).

Forestland provides a wide range of benefits, including cleaner water, enhanced oxygen, carbon sequestration, recreational opportunities, and wildlife habitat. In addition, Kent County woodlands yield wood products, which support the agricultural economy. On average, approximately 1,000 acres of timber are harvested annually in Kent County. Furthermore, forestlands also provide both excellent water recharge and an opportunity for application of treated public wastewater.

According to DNREC's Wildlife Action Plan, the Delaware Forest Service (DFS) (2010) reported that between 2002 and 2009, nearly 16,000 acres of Delaware's remaining 217,000 acres of unprotected forest (privately owned without a permanent conservation easement) were included within areas approved for development. It has been estimated that by 2050, 43% of Delaware's forestland will be converted to urban areas. Fragmentation subdivides large contiguous areas of natural land into smaller patches, resulting in each patch having more edge habitat and less interior. Thus fragmentation can lead to an overall deterioration of ecological quality and integrity. Some species of wildlife require larger blocks of habitat than others and can be negatively impacted by activities that fragment habitat.

Kent County currently limits the amount of woodland clearing permitted as part of a subdivision or land development approval. The regulations are more permissive inside the designated Growth Zone Overlay District, where clearing is dependent upon density, than outside of the Growth Zone where clearing is limited to 30%. As the County develops, such regulations should be further refined to focus on creating interconnected networks of open spaces to support habitat as well as maintaining riparian buffers to preserve water quality. In addition, the existing Transfer of Development Rights (TDR) program could be revised to offer density bonuses in sending and/or receiving areas for additional woodland and wildlife protection.

## Climate Change

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The earth's climate is warming causing changes worldwide and in Kent County. One of the largest impacts of climate change in the County is sea level rise. Sea level rise is caused by a combination of factors including thermal expansion of ocean waters and the melting of land based glaciers. While sea level rise and the movement of the shoreline westward is a normal phenomenon, it is exacerbated by climate change. Potential impacts of climate change include:

- ✓ Average temperature increase
    - Ø Annual and seasonal temperatures in Delaware have already increased by 2°F since 1900.
    - Ø Average temperatures are expected to increase another 2.5°F to 4.5°F by 2050 and by as much as 8°F by 2100.
    - Ø May increase risk of illness such as heat stroke, especially for vulnerable populations (children, the elderly, people with asthma or heart disease, and people with limited access to air conditioning and healthcare).
    - Ø May worsen air quality.
    - Ø Could heighten peak demand for energy.
    - Ø Could lead to greater heat stress for poultry and other livestock and lead to higher energy costs for farmers.
    - Ø Combined with changes in rainfall could bring crop losses, reduced yields, and impaired pollination and seed development.
  - ✓ Temperature extremes to become more frequent
    - Ø Higher summer temperatures (days over 95°F) and longer growing seasons are already being recorded.
    - Ø The number of very hot days (over 95°F) is expected to increase.
    - Ø Heat waves are projected to become longer and more frequent.
  - ✓ More frequent extreme rainfall
    - Ø Average precipitation is expected to increase by about 10% by 2100.
    - Ø Heavy rainstorms are expected to become more frequent and more intense with an increasing number of very wet days with 2 inches or more of rainfall.
    - Ø Could increase exposure to allergens, tick & mosquito borne illnesses, and diseases common in warmer climates.
    - Ø Combined with sea level rise may lead to failure of septic systems as groundwater levels rise.
    - Ø May cause rapid erosion and flood damage to buildings, roads, bridges, and culverts.
    - Ø May cause flooding that hinders movement of crops or livestock, prevents deliveries, or damages farm facilities.
    - Ø May overwhelm stormwater and wastewater systems, increasing risk of contaminated flood waters.
    - Ø Could affect water-based recreation such as fishing, boating, and swimming by worsening water quality in streams, rivers, and ponds.
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- Ø Combined with sea level rise may increase tidal flooding, leading to greater erosion and reduced water quality.

✓ Sea Level Rise

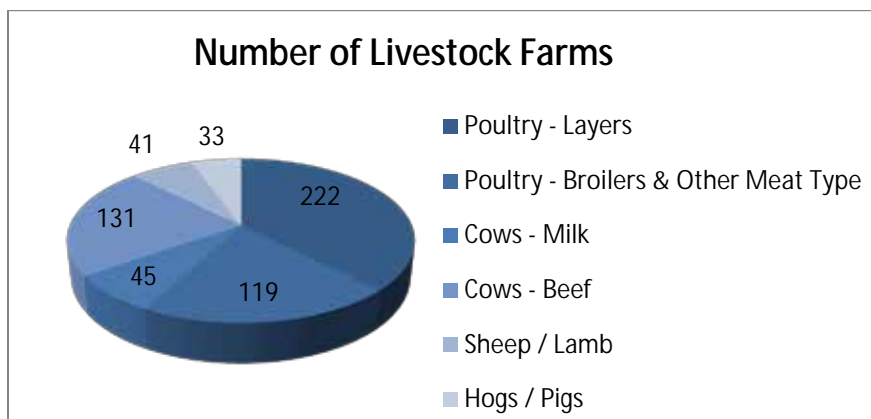
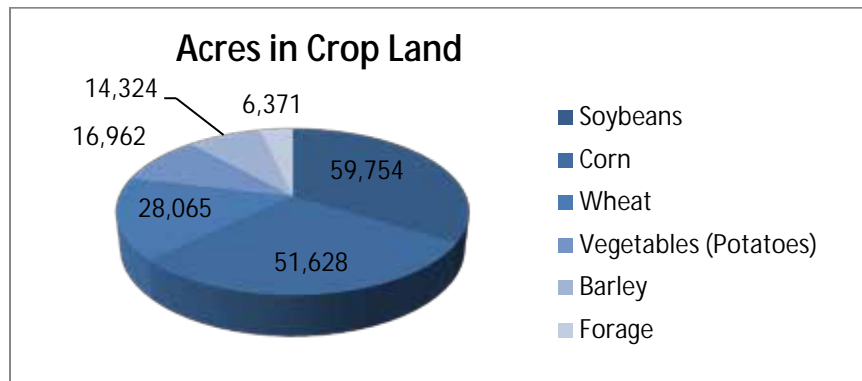
- Ø Likely to affect the condition of roads and bridges including access and evacuation routes to beaches and low lying areas.

- Ø May harm soil and groundwater quality in coastal regions and along rivers and streams, reducing agricultural productivity in tidal areas.

In order to offset the impacts of climate change, the County should maintain existing environmental standards (wetland protection, floodplain standards, stream buffers, impervious cover limitations) to protect people, property, and the environment and carefully weigh the costs and benefits of infrastructure investment in areas anticipated to be inundated by sea level rise (See Map 5G).

### Agricultural Preservation

According to the 2012 Census of Agriculture, there were 863 farms totaling 172,251 acres of land in Kent County. The 2012 Census of Agriculture further reveals that the Kent County market value of farm production is \$277,727,000. The average per farm net cash farm income of operation in 2012 was \$91,196. As illustrated in the charts below, soybeans and corn are the two most significant harvest crops, while poultry comprises the majority of livestock raised.



In addition to the agricultural uses described above, Kent County has some less mainstream uses, including orchards and nurseries. In looking at the character of agriculture in the County, it is interesting to note that the average size farm is 200 acres, but the median is only 40 acres. The large percent of relatively small, family-owned farms contributes greatly to the quality of life and feeling of community for all residents of the County. However, this type of farm is often more susceptible to the vagaries of weather, crop prices, costs of planting and harvesting, and pressures from residential development.

Productive agricultural land is a finite and indispensable natural resource in Kent County. Economic opportunity, ensuring food security, environmental protection, community infrastructure, and quality of life are among the most compelling reasons to save farmland. As farmland is converted for development, the agricultural infrastructure of the County is compromised, thereby making it more difficult for the remaining farms to succeed. In addition, there are inherent conflicts between the agricultural industry and suburban development. Ultimately, farmland protection is part of a larger set of policy challenges involving how the citizens of Kent County make choices in the use of our natural resources that fundamentally affect our future quality of life.

### Land Use Trends in Agriculture

Over the years, there has been a steady decline of the number of farms and acreage in production in our State. However, in the decade between 2002 and 2012, the number of farms in Kent County increased by 16.45%, from 721 to 863 farms. It is interesting to note, however, that the number of acres being utilized by those farms decreased from 185,329 in 2002, or an average of 257 acres per farm, to 172,251 in 2012, or an average of 200 acres per farm. This resulted in more farms, but smaller in size.

Nationwide, there is also a trend of younger first generation farmers emerging especially in community supported agriculture (CSA) operations where farmers sell their products locally to individual customers and to institutions such as schools, hospitals, and nursing homes. (Source: *2012 Census of Agriculture Reveals Farming Trends*, Dr. Rosmann, Farm & Ranch Guide). While the 2012 Census of Agriculture reveals the fastest growing group of farmers and ranchers is 65 and older, the second fastest growing group is young farmers and ranchers who are under 35.



According to a National Young Farmers' Coalition report, the vast majority of young farmers (78%) did not grow up on a farm. For most of these first-generation farmers, securing land is a daunting obstacle. According to the NYFC survey, 70% of farmers under 30 rent farmland, compared to 37% of farmers over 30. In response to that challenge, the State of Delaware established the Young Farmers Loan Program in 2011. The program is designed to provide young farmers with capital needed to purchase land while also preserving the land. As of October 2017, the Department of Agriculture has settled 32 loans for a total of 2,497 acres.

Also notable is the number of women in agriculture nationwide and in Delaware. According to the 2012 Census of Agriculture, nearly 18% of Delaware’s farms have a woman as the principal operator. According to the U.S. Department of Agriculture, there are 1,207 female farmers in Delaware (32% of all farmers) managing 129,300 acres resulting in a \$99.8 million economic impact.<sup>2</sup>

Another trend in agriculture, as with nearly all businesses, is an increased reliance on internet access. In Delaware the number of farms with internet access rose more than 40% between 2007 and 2012 (250 and 359 respectively). The total percentage of farms with internet access is still relatively low at 15%. As the County explores expansion of high speed internet access as discussed in the Community Facilities Chapter, it should be mindful of the benefits to the agricultural community as well.

### Progress in Agricultural Preservation

The Delaware Agricultural Lands Preservation Act signed into law on July 8, 1991, established a long term program for preserving agricultural lands within the State. As illustrated below, Kent County leads both Sussex and New Castle County in farmland and forestland preservation. Map 5H illustrates the lands currently preserved.

County	Agricultural Preservation Districts			Agricultural Easements		Forestland Preservation	
	Districts/Expansions	Farms	Acres	Farms	Acres	Farms	Acres
New Castle	108	123	18,999	94	13,808	1	43
Kent	543	644	94,127	429	63,625	16	963
Sussex	494	625	73,613	335	43,866	18	1,619

The Levy Court has contributed more than \$2.5 million toward the State’s agricultural preservation program and dedicated at least \$100,000 in each annual budget. A total of 88 farms encompassing over 6,000 acres have been placed in permanent preservation. As shown at the beginning of this chapter a clear majority of survey respondents support maintaining or even increasing the level of funding for preservation. Supporting the agricultural industry and rural character of the County are very much a community priority.

## Policy Emphasis

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Provide for protection of all of the natural resources of the County, while allowing for development by:

1. Further promoting the conservation of the full array of natural resources found within Kent County (water, land, flora, fauna, and habitats);
2. Ensuring that land use activities are conducted in such a way as to minimize the impact on and reduce the risk of contamination to excellent groundwater recharge areas and wellhead protection areas which are a source of drinking water systems throughout the County; and

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<sup>2</sup> Source: Delaware Agricultural Lands Preservation Current Situation Report October 18, 2017

3. Seeking to preserve and enhance wildlife habitat.

Promote the preservation of the agricultural industry utilizing a combination of incentive based strategies and regulatory tools within its police powers and regulatory purview to protect and enhance the sustainability of the agricultural industry in Kent County by:

1. Promoting the retention of farms and farmland within Kent County;
2. Seeking to strengthen the agricultural sector of Kent County;
3. Developing regulations that will direct development to areas where infrastructure exists or is planned in order to encourage agriculture and maintain the current quality of life for the residents of the County; and
4. Seeking to promote and develop less mainstream agricultural uses such as organic farming, wineries, sod farms, and aquaculture.

## **Recommendations**

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1. Maintain existing environmental standards (wetland protection, floodplain standards, stream buffers, impervious cover limitations) to protect people, property, and the environment.
2. Carefully weigh the costs and benefits of infrastructure investment in areas anticipated to be inundated by sea level rise.
3. Increase the width of non-disturbance areas surrounding wetlands, waterbodies and conveyance systems, including tax ditches, to an average of 100 feet for 80% of the area, to be buffered with a minimum width buffer of 50 feet and, if previously cleared of vegetation, require such riparian buffer be replanted with native species prevalent in riparian areas. Where the slope along a waterbody exceeds 15%, the buffer measurement should commence from the top of the bank. Required buffers should be designated as unsubdivided open space.
4. Utilize the passive open space provisions of the Subdivision and Land Development ordinance to require reintroduction of wildlife habitats and upland forests.
5. Help to reduce individual automobile trips through the promotion of shared or high occupancy vehicles. This could be done through the redesign of parking requirements for commercial uses and the continued promotion of mass transit bus stops throughout the County.
6. Promote more compact patterns of development and mixed use development to reduce travel demand and to encourage the expansion of the public transit system.
7. Seek to reduce ozone emissions by directing growth into areas that are immediately adjacent to employment and services.
8. Explore opportunities to incorporate alternative fuel vehicles into the County's fleet of vehicles used for various field operations.

9. Review existing ordinances for efficacy in meeting federally required Total Maximum Daily Load (TMDL) requirements and make changes where appropriate.
10. Utilize the Wildlife Action Plan, Green Infrastructure, and Source Water Protection maps produced by DNREC in conjunction with Land Evaluation Site Assessment (LESA) scores in ranking properties for County agricultural land preservation funding.
11. Establish incentives such as reduction of impact fees, building permit fees, or density bonuses for environmentally sensitive design practices such as Leadership in Energy and Environmental Design (LEED) certification, Energy Star, or green technology best management practices.
12. Continue dedicating funds toward the Agricultural Land Preservation Program as finances permit.
13. Coordinate with the Delaware Department of Agriculture and the Kent County Farm Bureau to develop an outreach and education program to better inform neighbors to agriculture about the realities of living near active farming (e.g. noise, dust, slow moving traffic).
14. Revise regulations for cluster subdivisions to ensure enough critical mass of open land for continued agriculture use and limit the intrusion of suburban development into vital agricultural areas.
15. Continue developing the Food Innovation District program.
16. Review existing zoning requirements for poultry houses and consider implementing buffering and ventilation standards that are becoming more common throughout the industry.
17. Review and revise the permitted uses in the Agricultural Conservation and Agricultural Residential zoning districts to better reflect current agricultural practices and businesses.
18. Establish additional incentives for the Transfer of Development Rights program in an effort to provide equity to land owners in areas designated for low density development and provide additional protection for areas such as upland forest and those containing endangered or threatened species.
19. Consider requiring groundwater impact assessments for subdivision and land development projects located in source water assessment areas, excellent recharge areas, and wellhead protection areas and ensure such projects are forwarded to DNREC for advice and comment.
20. Consider establishing a Resource Protection Area Technical Advisory Committee that would provide for the review of subdivision and land development applications in source water assessment areas, excellent recharge areas, and wellhead protection areas as well as groundwater impact assessments.

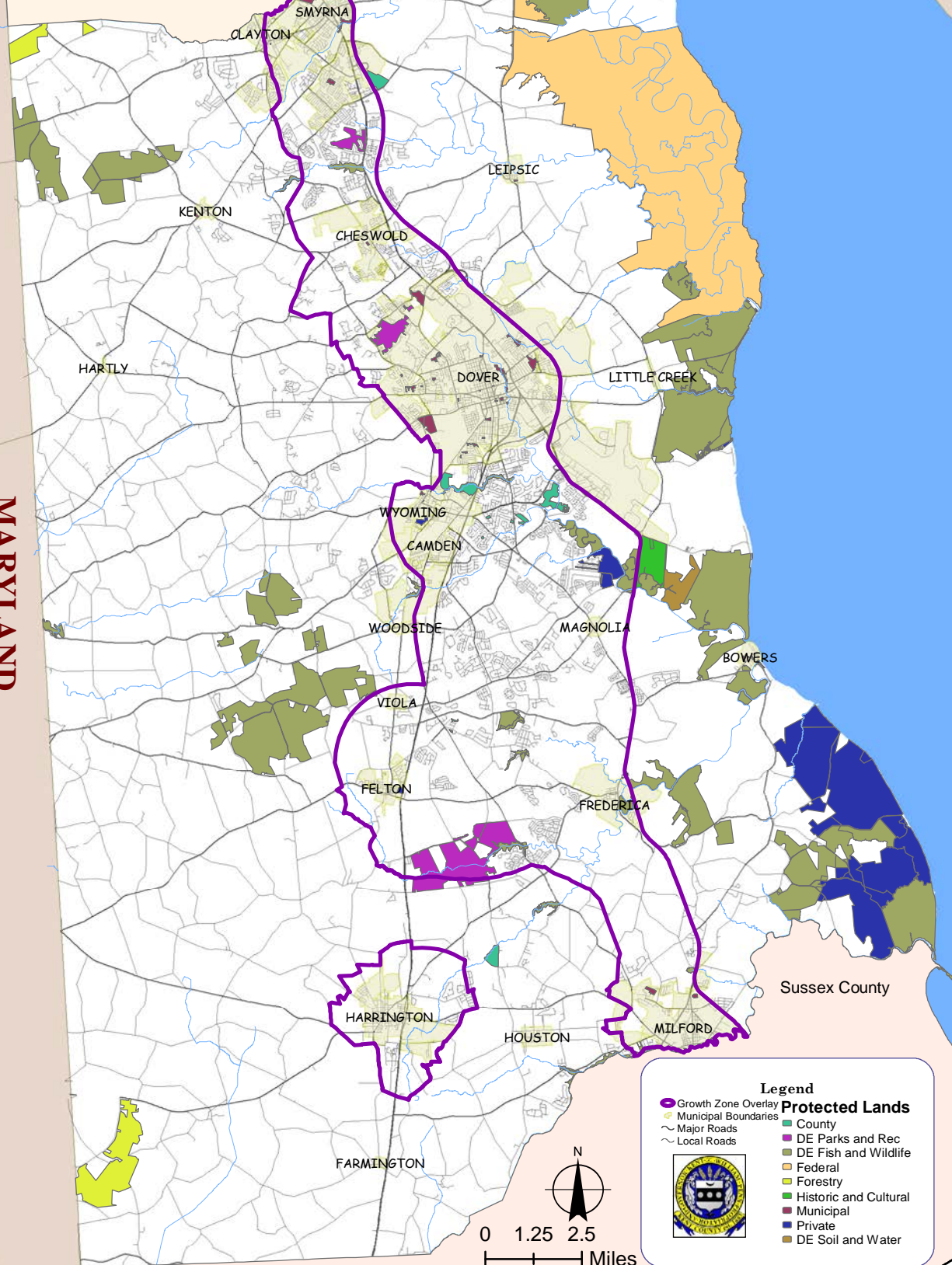


# Protected Lands

MARYLAND

NEW JERSEY

New Castle County



Sussex County

**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads

**Protected Lands**

- County
- DE Parks and Rec
- DE Fish and Wildlife
- Federal
- Forestry
- Historic and Cultural
- Municipal
- Private
- DE Soil and Water

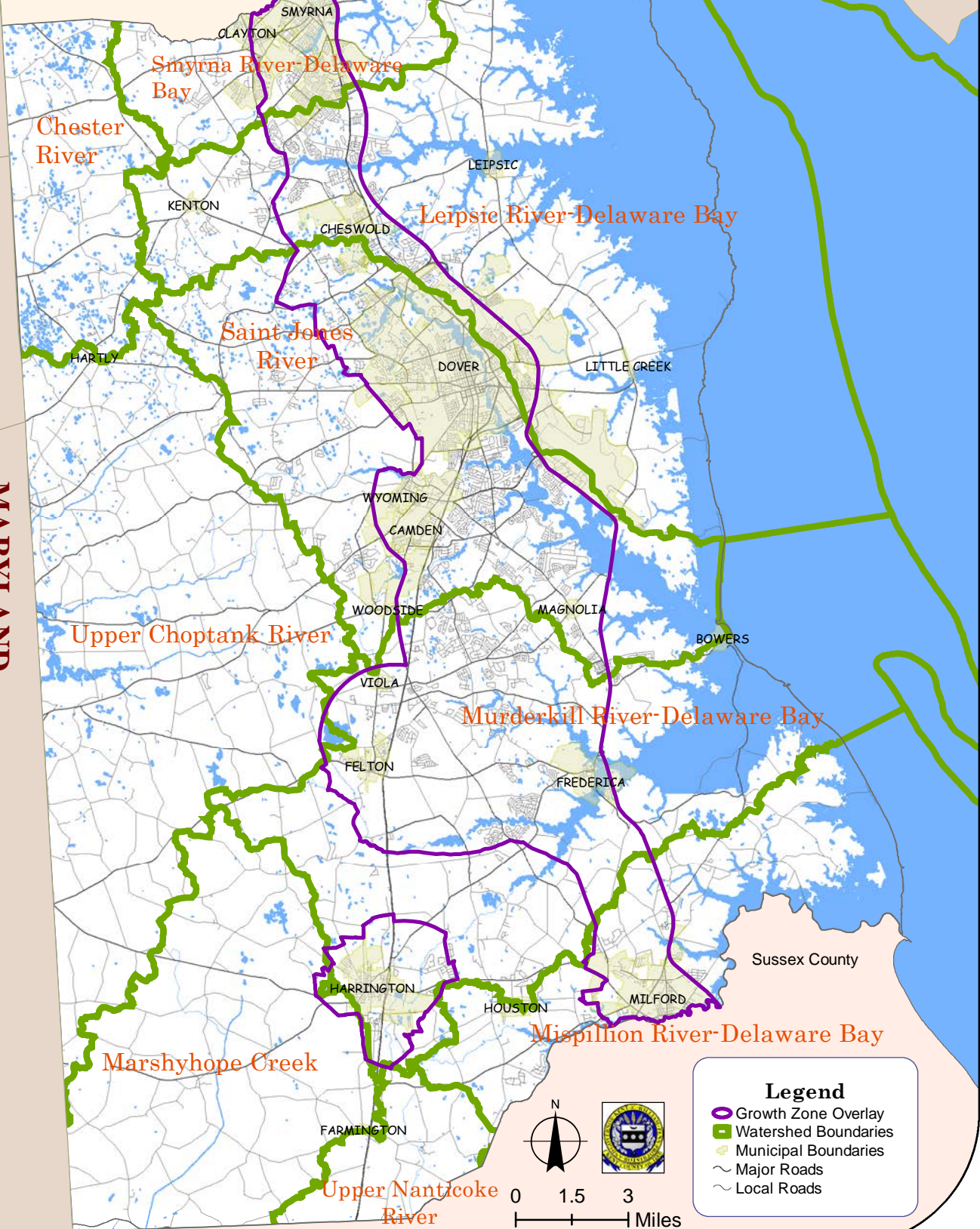



# Waterways & Watersheds

New Castle County

NEW JERSEY

MARYLAND



**Smyrna River-Delaware Bay**

**Chester River**

**Leipsic River-Delaware Bay**

**Saint Jones River**

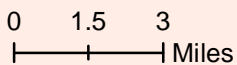
**Upper Choptank River**

**Murderkill River-Delaware Bay**

**Marshyhope Creek**

**Mispillion River-Delaware Bay**

**Upper Nanticoke River**

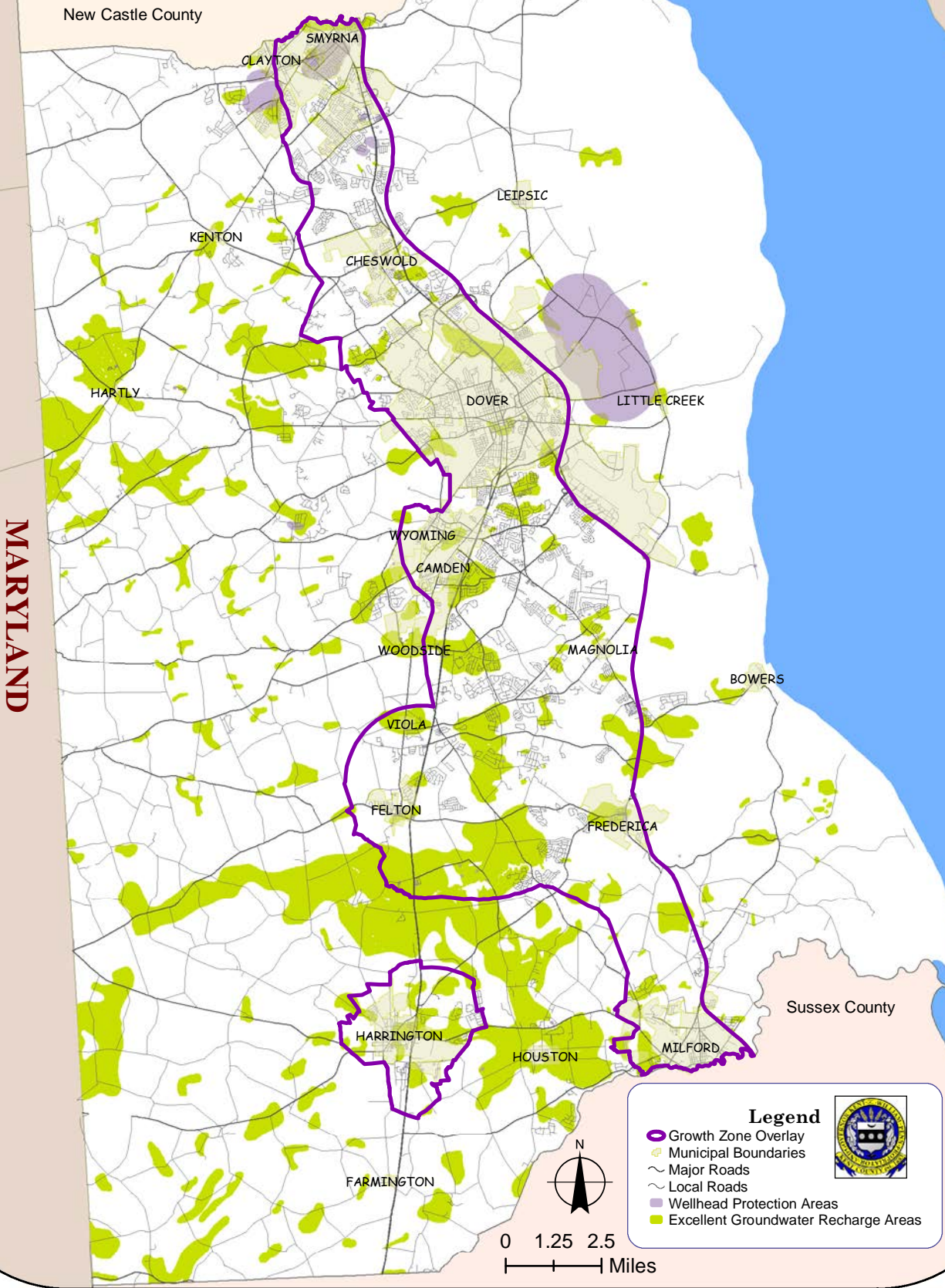


**Legend**

- Growth Zone Overlay
- Watershed Boundaries
- Municipal Boundaries
- Major Roads
- Local Roads


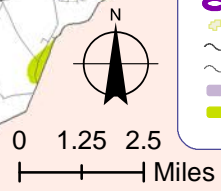


# Areas for Groundwater Protection



**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Wellhead Protection Areas
- Excellent Groundwater Recharge Areas

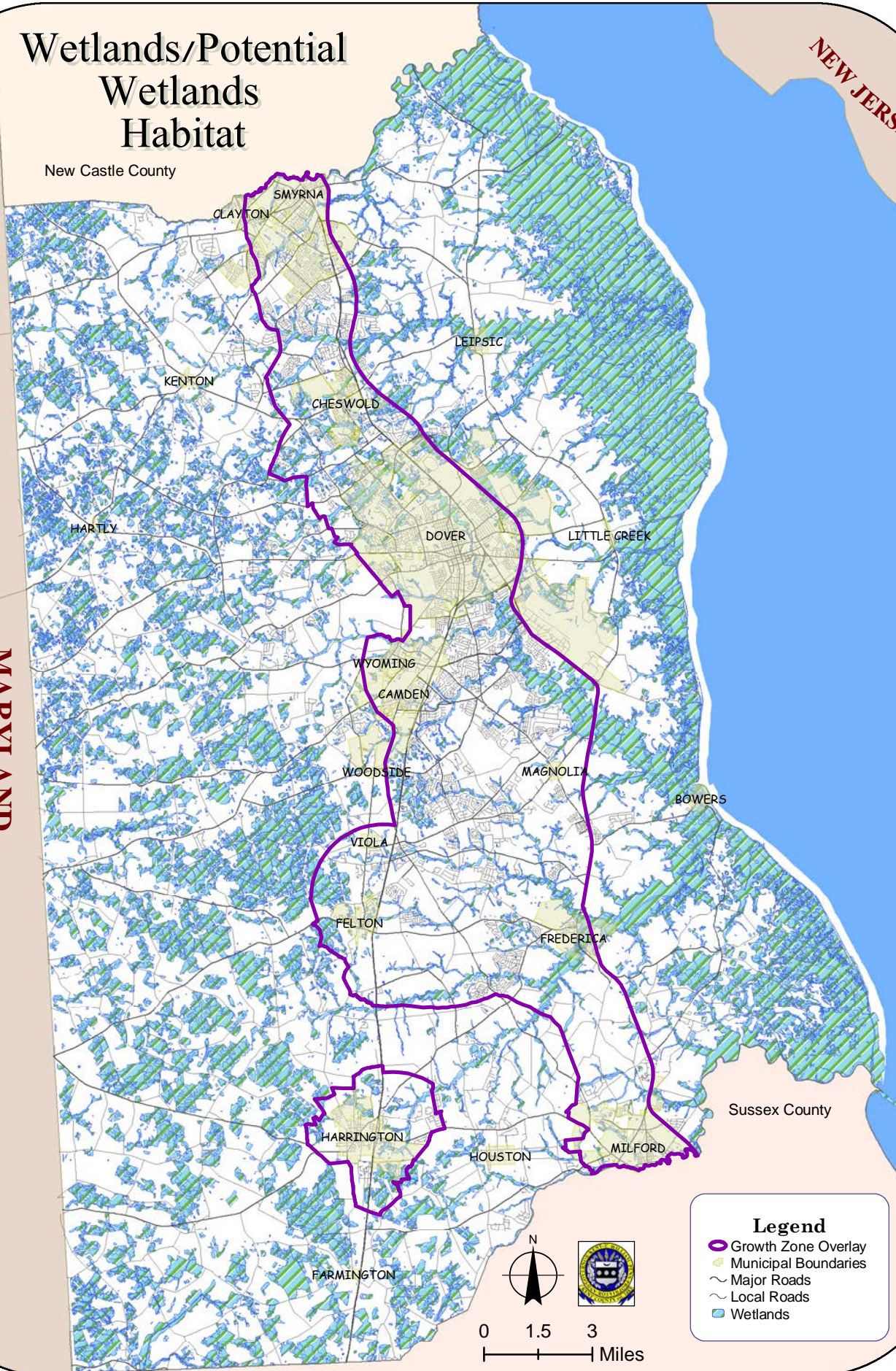


# Wetlands/Potential Wetlands Habitat

New Castle County

NEW JERSEY

MARYLAND



**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Wetlands

0 1.5 3  
Miles

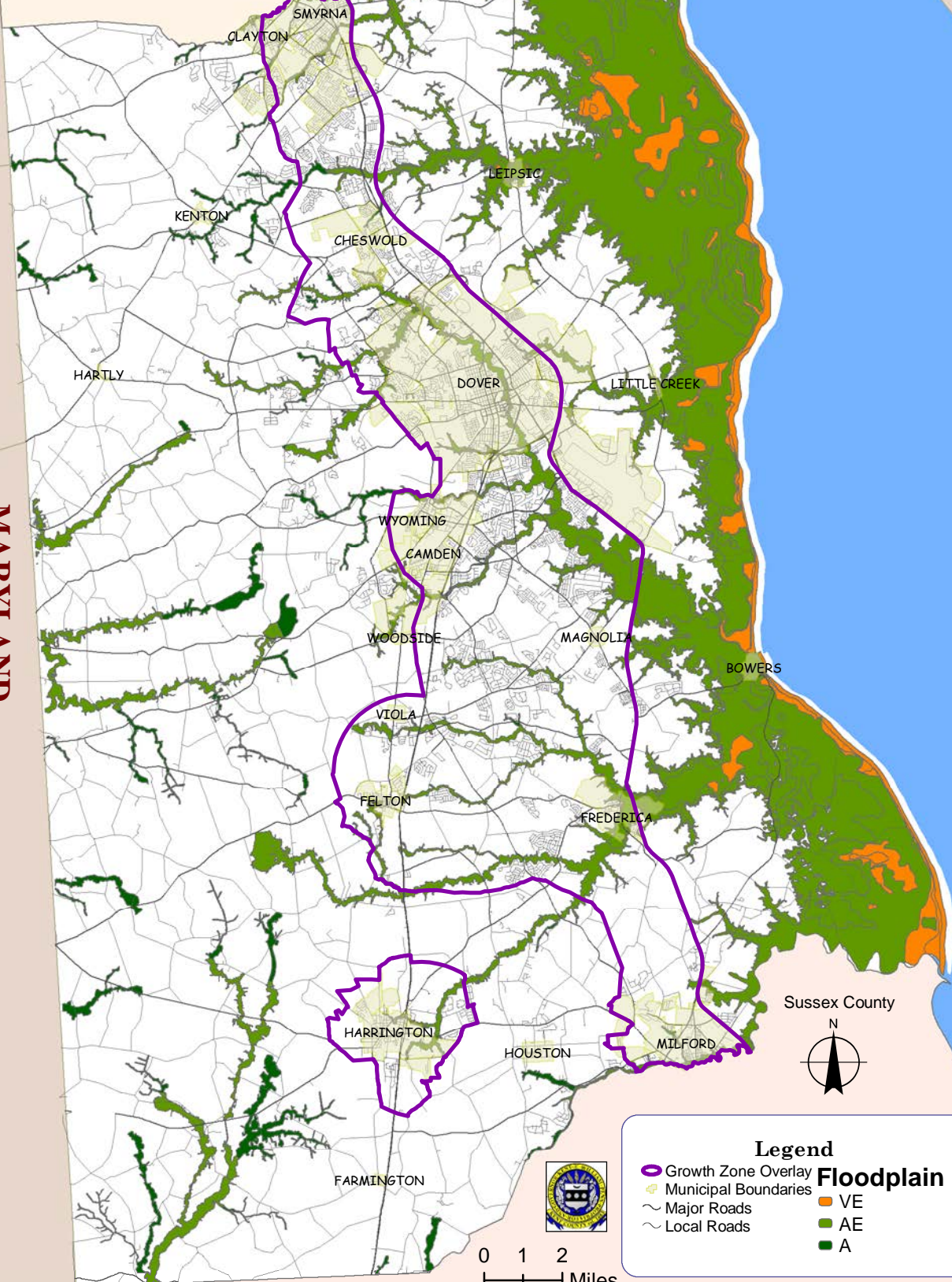


# Floodplain

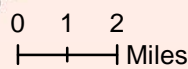
New Castle County

NEW JERSEY

MARYLAND



Sussex County



**Legend**

Growth Zone Overlay	VE
Municipal Boundaries	AE
Major Roads	A
Local Roads	

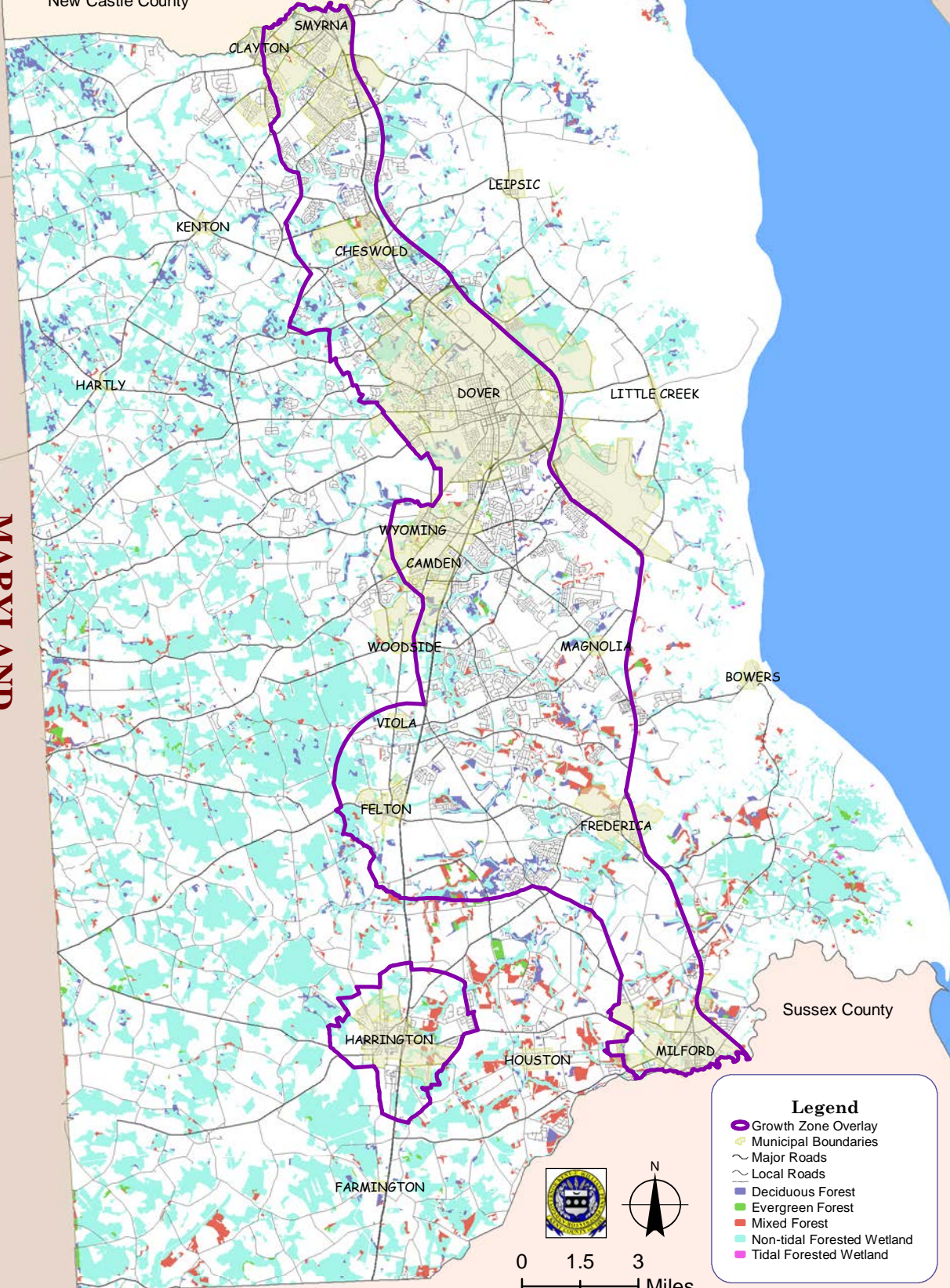


# Woodlands

New Castle County

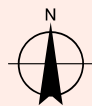
NEW JERSEY

MARYLAND



### Legend

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Non-tidal Forested Wetland
- Tidal Forested Wetland



0 1.5 3  
Miles

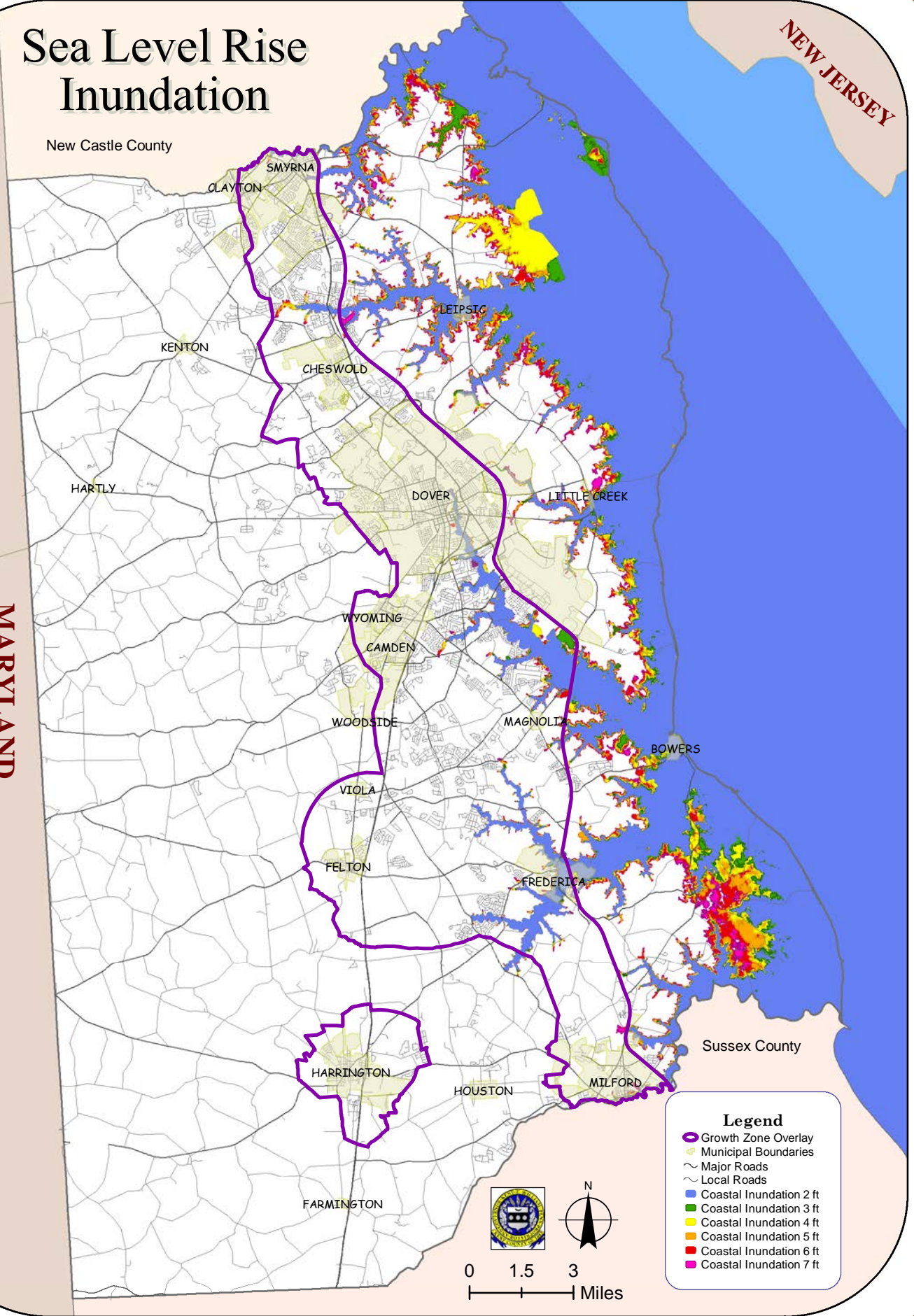


# Sea Level Rise Inundation

New Castle County



NEW JERSEY

MARYLAND



**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Coastal Inundation 2 ft
- Coastal Inundation 3 ft
- Coastal Inundation 4 ft
- Coastal Inundation 5 ft
- Coastal Inundation 6 ft
- Coastal Inundation 7 ft

0 1.5 3  
Miles

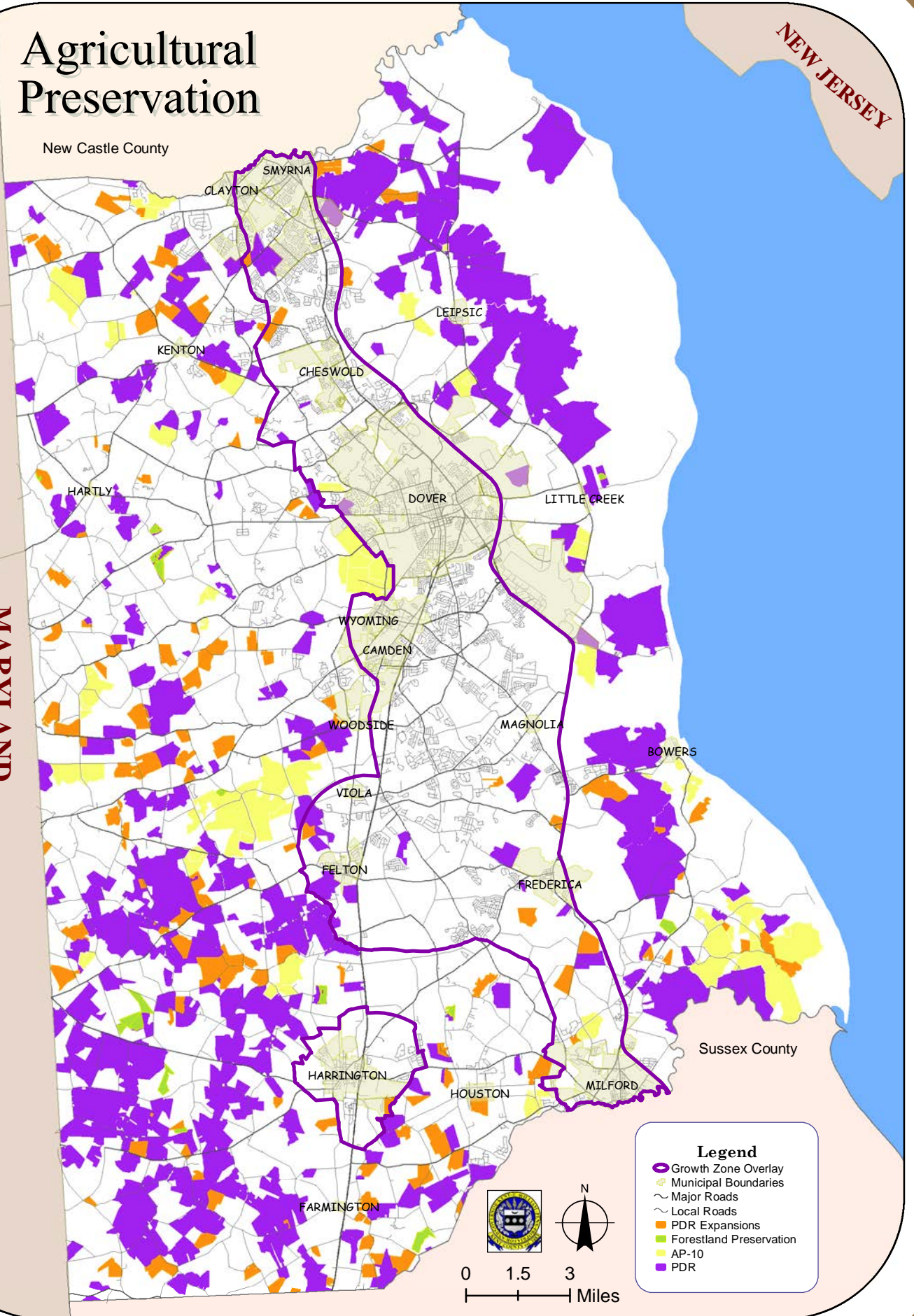


# Agricultural Preservation

New Castle County

NEW JERSEY

MARYLAND



**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- PDR Expansions
- Forestland Preservation
- AP-10
- PDR



0 1.5 3  
Miles

# Chapter 6

## Historic Preservation



### Overview

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Kent County contains a variety of cultural and historical resources, both archaeological and architectural, which serve as a record of the County's past. These resources directly relate to those individuals who lived in, worked in, and developed the County. The topography and natural resources of the region as well as social and political climates of the times influenced that development.

Delaware's proximity to the Delaware Bay and location on the Delmarva Peninsula within the Coastal Plain allows for a very distinct topography. This location and the presence of numerous natural resources such as waterways, wetlands, and woodlands clearly guided the earliest development of the County. The Lenni Lenape and the Nanticoke were the early inhabitants of the land and lived by a combination of hunting, fishing, and farming (Munroe, *History of Delaware*; 14). When settlement began, the early towns appeared along the navigable waterways and as overland transportation routes developed, settlement began moving west. Many of these western lands proved fertile for farming and agriculture began to play a significant role in the development of the County. Construction of railroads during the mid to late 1800's further affected settlement patterns as towns developed and grew along the railroad lines. These railroads moved not only people, but also the many crops grown in fields and orchards of Kent County.

Politics also played a role in the growth and development of Kent County. On June 15, 1776, Delaware officially separated from Pennsylvania thereby declaring its independence from Britain. The town of New Castle in New Castle County served as the early seat of government or meeting place of the General Assembly. As it became increasingly dangerous during the years of the Revolutionary War to hold government proceedings in the coastal town of New Castle, the General Assembly began meeting throughout Delaware. Due to its central location, Dover became the permanent State Capital in October of 1781.

Delaware's status as a slave-holding border state during the Civil War provided for a complicated cultural and political history. There were both Northern and Southern sympathizers throughout the state. As the central county and location of the state capital in Dover, Kent County was the home of much political debate regarding the issue of slavery. Its location between the Chesapeake and Delaware Bays, proximity to the border state of Maryland, proximity to the free states of Pennsylvania and New Jersey, its populations of Methodists, Quakers, Abolitionists, and of free African-Americans made it one of the major routes for the Underground Railroad.

The built environment or landscape of Kent County is a reflection of this history. The coastal towns contain many of the old homes, lighthouses, and maritime processing facilities. Evidence of the importance of transportation in the development of Kent County is evident at the many crossroad communities that still exist. These communities typically contain not only houses, but also central meeting spaces, such as churches and community halls. The larger towns located along the railroad lines also contain town halls, post offices, and in many cases evidence of large commercial or industrial enterprises, such as general or mercantile stores, mills, and canneries. The agricultural landscape is comprised not only of open fields and orchards, but of the domestic and agricultural outbuildings needed to store, shelter, and process the crops produced and animals raised on these farms. It is, therefore, a mixed landscape of rural and urban resources. These resources vary in size, shape, and form, as much as they vary in construction materials.

This landscape is forever changing to meet the demands of this growth and development. The primary mode of transportation changed from railcars to automobiles, adding to the landscape the highway system. The focus of agriculture has changed over the years with many of the livestock, fruit and grain producing farms shifting to the production of poultry and specialized crops such as soybeans and corn. The building of industrial enterprises has slowed over the years with a shift from heavy industry to more service-oriented industries. Many industrial parks are being replaced by or retrofitted as corporate centers. Where fields and pastures once covered the landscape, subdivisions and commercial centers now occupy the space. All of these changes have an impact on the built environment. The once primarily rural landscape of Kent County is changing to a mix of suburban and rural space.

The changes to the landscape due to a shift in economic focus, growth, and development have threatened many of the historical resources in Kent County. These resources include not only buildings, but lighthouses, schooners, and archaeological sites as well. Preservation of resources can happen many ways. One way is through the physical preservation of resources such as the restoration or rehabilitation of a building. Developing incentives and ordinances which encourage the incorporation of these historic structures into modern development when possible is an important element of the planning process.

Another manner of physically preserving these resources is shifting the lands from private to publicly held property. The Hunn Property and Brecknock Park are examples of Kent County owned properties containing historic buildings and archaeological resources.



In cases where resources cannot be preserved, documentation through photographs, measured drawings, and surveys can preserve many of these threatened resources on paper for future generations to see.

## **Identification, Evaluation, & Recordation**

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Kent County utilizes a three-part system to preserve its historic resources through documentation: identification, evaluation, and recordation or registration. Historic properties are identified as those properties over 50 years old. As resources age they are added to the Delaware Cultural Resource Survey (CRS), a systematic inventory of Delaware's buildings, structures, sites, and objects over 50 years old. Each property is assigned a Cultural Resource number and survey forms are completed for the property and all historic buildings on it. The Delaware State Historic Preservation Office/Delaware Division of Historical and Cultural Affairs maintains the Cultural Resource Survey.

The next step is the evaluation of these historic resources. All historic properties are evaluated using the National Register of Historic Places criteria. Not all historic resources over 50 years old are eligible to be listed on the National Register of Historic Places, however all buildings are important as a record of Kent County history. The Cultural Resource Survey is a crucial part of the preservation process because it includes recording all buildings over 50 years old and in many cases it is the only record we have of the many historical resources which have been lost to demolition and neglect.

If the resources are considered eligible, they must go through the process of being nominated to the National Register of Historic Places, which includes approvals by the State Review Board for Historic Preservation, the State Historic Preservation Officer, and the Keeper of the National Register of Historic Places.



## Resources

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Myriad historic resources are located throughout Kent County and include:

- 130 Listed Buildings / Building Complexes
- 17 Listed Archaeological Sites
- 30 Listed Boundary Markers
- 2 National Historic Landmarks
- Harriet Tubman Underground Railroad Byway
- Delaware Bayshore Byway
- 18 National Register Districts

Bannister Hall & Bayard House	Byfield Historic District	Camden Historic District
Coombe Historic District	Dover Green Historic District	Duck Creek Village Historic District
Felton Historic District	Frederica Historic District	J. H. Wilkerson & Son Brickworks
Kenton Historic District	Little Creek Hundred Rural District	Lower St. Jones Neck Historic District
North Milford Historic District	Raymond Neck Historic District	Smyrna Historic District
St. Joseph's Industrial School	Victorian Dover Historic District	Wyoming Historic District

With the exception of archaeological sites, all of the resources listed above are represented on Map 6A.

## Threats to Historic Preservation

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In Kent County, four individual National Register Properties and 165 buildings within established National Register Districts have been demolished. With the recent losses of the Jehu Reed House, Thomas England House, and Durham Shores House, threats to historic resources have become more apparent in our community. There are two primary threats to historic resources in Kent County:

- New Development - As Kent County's population increases and the landscape continues to evolve, development pressure often leads to the demolition of historic buildings, such as historic farm complexes or properties located along the highway in commercial areas.
- Demolition by Neglect - Often historic buildings are more expensive to maintain or property owners do not have the knowledge of how to maintain an historic house properly. As historic houses fall under disrepair, demolition due to lack of maintenance is often times an outcome.

## **Policy Emphasis**

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Seek to preserve Kent County's rich cultural and historical resources by:

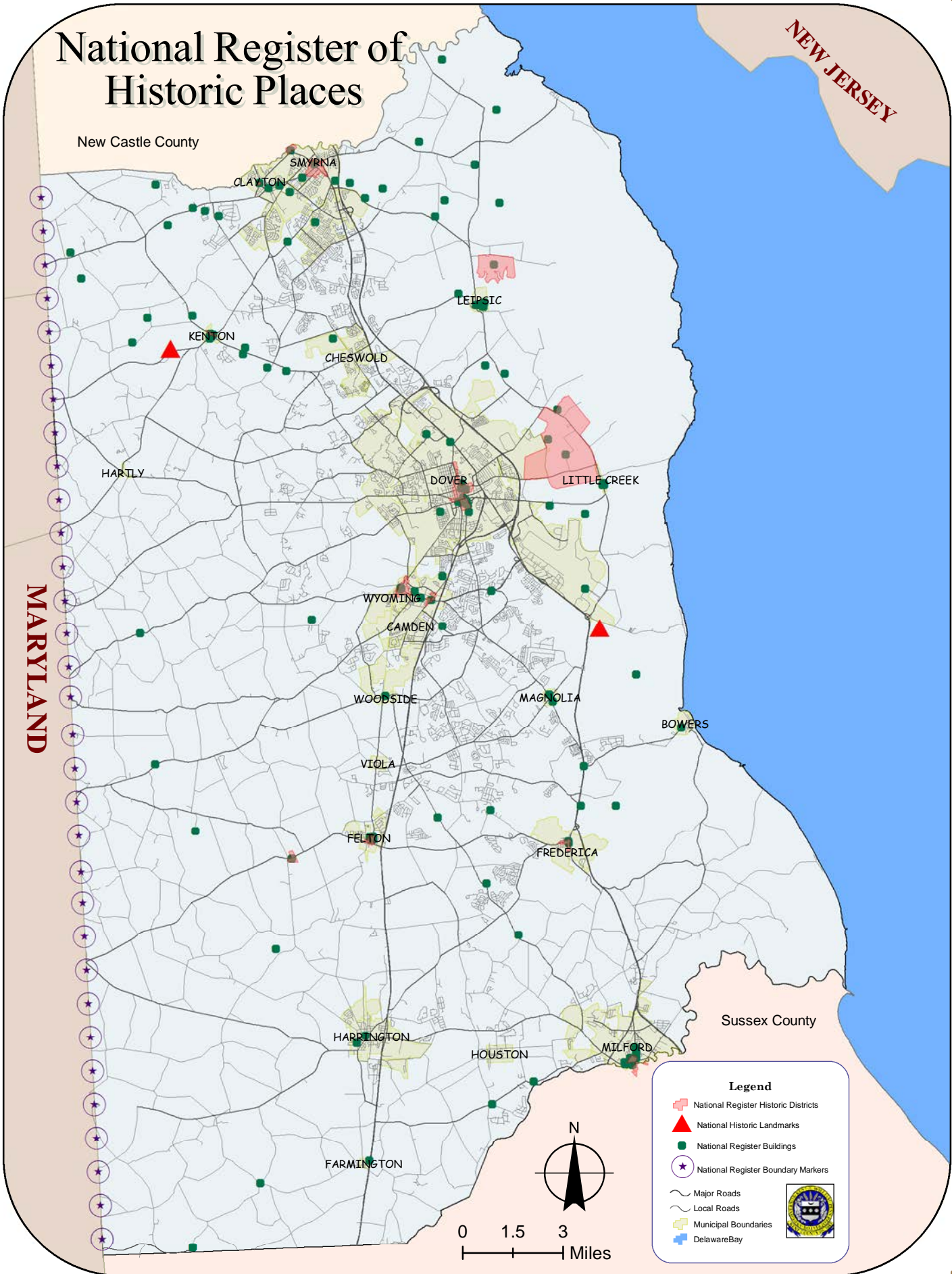
1. Strengthening Kent County's Historic Preservation Program to ensure that Kent County's historic and cultural legacy will continue to help shape and define the unique character of the County; and
2. Promoting the value and significance of Kent County's historic and cultural resources.

## **Recommendations**

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1. Explore incentives to incorporate historic structures into new development.
2. Through partnerships with state and nongovernmental agencies, design education and outreach materials to help property owners maintain their historic structures.
3. Continue capital contributions for maintenance and rehabilitation of County-owned historic resources.
4. Continue to identify, evaluate, and update cultural resource surveys and provide survey data in a variety of formats including digital mapping and through the Kent County website.
5. Enact ordinances that require the documentation, protection and/or preservation of important cultural and historic resources within the County.

# National Register of Historic Places





# Chapter 7

## Land Use

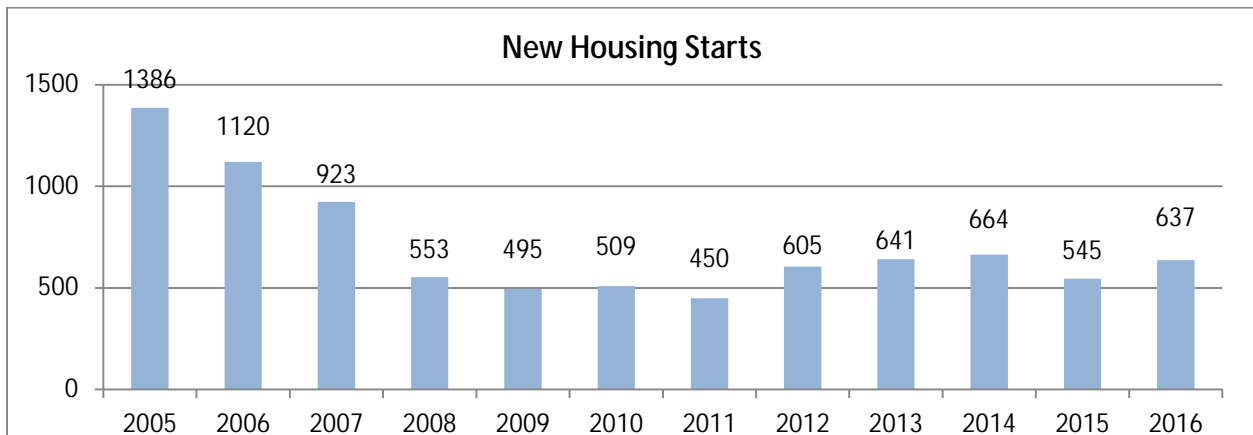


### Overview

The overall theme of the Comprehensive Plan is the creation of communities, providing adequate infrastructure to those communities, enabling and encouraging economic development, and preserving the rural character and agricultural industry of the County. The Plan in general and the Land Use element in particular are designed not only to direct development but also to direct investment of public resources in infrastructure and land preservation.

### Historical Trends & Current Conditions

The housing market, rate of development, and land use patterns have changed markedly since the 2008 Plan was adopted. The recession resulted in a depressed housing market, notable decline of new housing starts, and an effective end to speculative subdivision.



While the number of new housing starts has rebounded and leveled off since the recession, the number of new lots created has not rebounded partly because of substantial existing inventory and partly because of tighter lending restrictions.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Major Subdivisions	34	8	3	3	7	1	1	5	--	--	1
Number of Lots	5234	402	384	170	896	428	35	475	--	--	105

There are approximately 8,800 vacant lots within major subdivisions while just over 4,400 lots have been expunged because construction did not commence. If market demand for single family lots of 10,000 sq. ft. remains the same and the average number of new housing starts remains at roughly 650 per year, the current inventory will be sufficient for more than a decade. At the same time, the County must be mindful that market demands can change and it is quite possible that existing recorded subdivisions will be revised to satisfy that demand. (see Map 7D)

While there has been some commercial development in the unincorporated area over the past ten years, the trend continues to be that of large scale commercial and industrial development occurring within municipalities where infrastructure is available. While it is appropriate that large scale retail development and employment centers are often better suited to municipalities, the result is that much of the residential development in the unincorporated area has little access to neighborhood commercial uses, employment centers, and recreation opportunities nearby. (see Map 7A Existing Land Use)

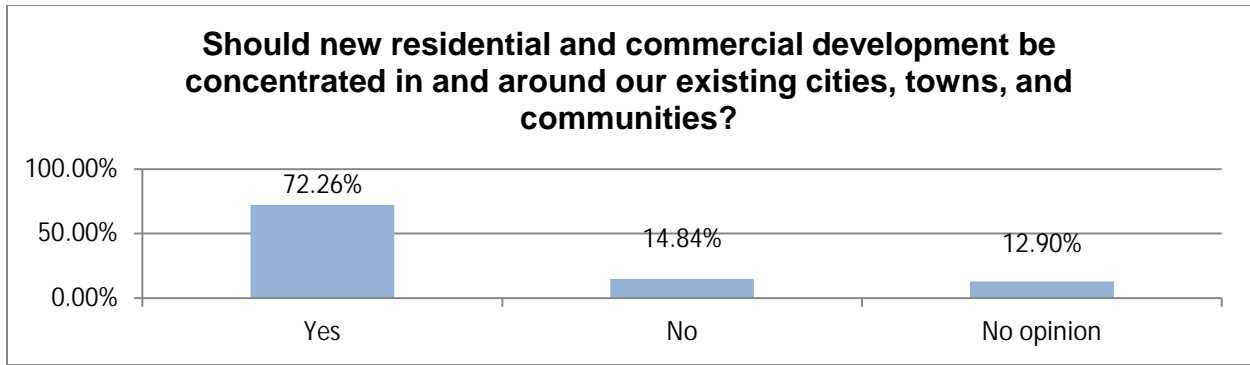
Since the creation of the Growth Zone Overlay District in 1996, the County's established growth strategy has been to direct development toward areas where supporting infrastructure exists or is planned. Map 7D showing developing density demonstrates the strategy has been largely successful.

There are roughly 30,000 acres in the unincorporated area of the Growth Zone Overlay District available for development. However, Map 7D clearly illustrates greater demand in the northern portion of the County. Consequently, while adequate land is available for development within the Growth Zone, an expansion to the west in the northern portion of the County would not be unreasonable over the planning horizon. Any parcels added to the Growth Zone should be contiguous to the existing boundary.

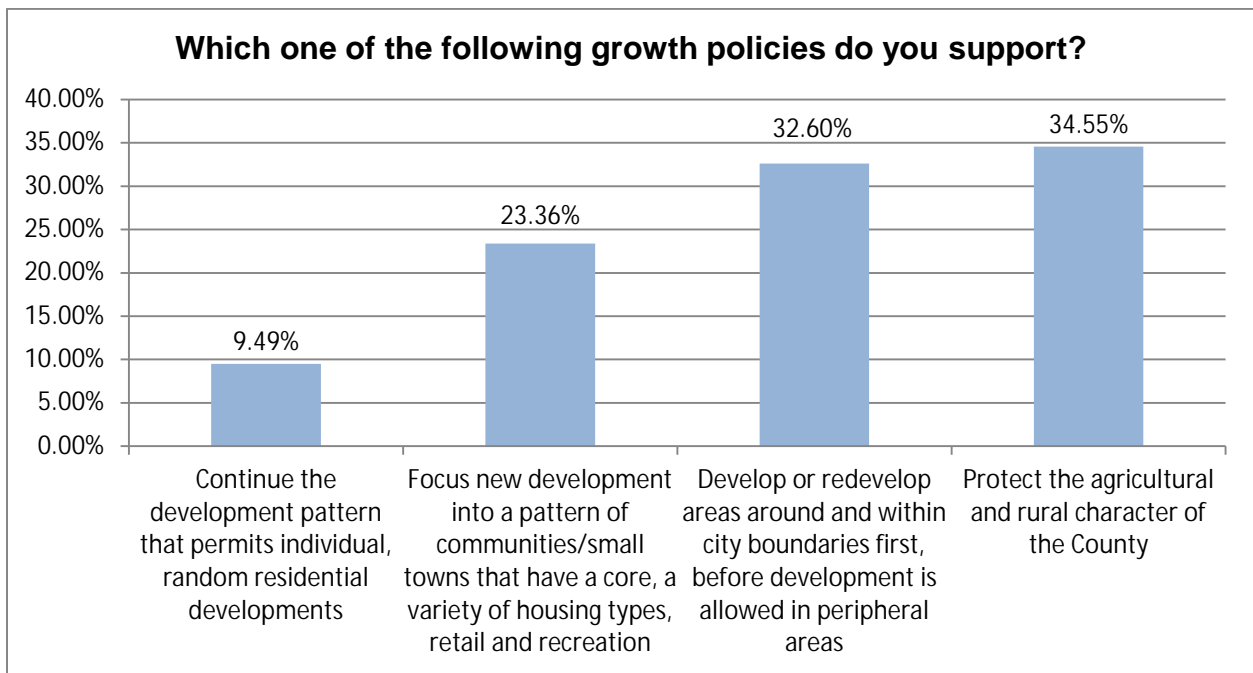
## Goals for the Future

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Feedback following the initial community outreach reveals support for the County's existing growth strategy of encouraging growth in existing developed areas.



*Source: Survey 1*



*Source: Survey 1*

Based upon feedback from community outreach, available data, and emerging land use patterns the goals articulated in the 2008 Plan remain relevant:

**Building on Community Centers**

A central location enables greater access to employment, services, and recreation with a reduced dependence on the automobile, greater efficiencies in delivery of public services, and corresponding cost savings to the taxpayers of Kent County.

**Adequate Infrastructure and Public Services**

There remain areas of residential development with inadequate facilities and services. One of the County’s primary objectives continues to be facilitating the provision of adequate infrastructure and services for new developments paid for by those who benefit from the development. Another objective

is to identify alternatives for upgrading services in areas where development has already been approved without benefit of the County's Adequate Public Facilities Ordinance. Specifically, with regard to land use designations, the County Code permits public services and institutional uses either by right or through conditional use in nearly all zoning districts, including Agricultural Residential and Agricultural Conservation which are the most common districts.

### **Preservation of Areas for Economic Development**

As stated previously, while Kent County has experienced a significant amount of residential development, commercial and industrial development in the unincorporated area have been lagging. A priority of this Plan is to preserve areas appropriate for economic development where adequate infrastructure is available or can reasonably be provided. Throughout the Plan, areas designated for future industrial, commercial, and smaller scale neighborhood development have been designated.

### **Protection of Natural Resources**

As Kent County changes and grows, opportunities to carefully integrate development with natural features such as streams and the coastal areas will arise. Ensuring that development is responsive to Kent County's natural amenities will help to keep Kent County beautiful, vibrant, and desirable.

### **Protection of Rural Character**

Kent County's economy has been agrarian-based for a major part of its history, since the early Swedes, Dutch and English first started arriving in Kent County in the late 1600's. As of today, 49% of the land is dedicated to agriculture with an annual production value of \$120 million<sup>1</sup>. Protection of the rural character of Kent County is dependent on our ability to encourage and protect agricultural uses. A majority of the participants in the Comprehensive Plan public workshops indicated this issue as a major priority.

Even within designated growth areas, open space and elements of the County's rural character need not be sacrificed. Open space is either privately or publicly owned land that is vacant and provides recreational opportunities for its citizens, as well as habitat for Kent County's wildlife. Open space contributes to the local economy as well as the quality of life. In addition, open space between land use areas helps provide a sense of place by providing a visual distinction between areas.

### **Protection of Historic Places**

Kent County has a rich history. This history is part of what makes Kent County such a desirable place to live. Preservation of remnants of this history, including buildings, landscapes, and archeological sites, is an integral component of this Comprehensive Plan.

### **Encouraging Mixed Uses Where Appropriate**

Broadly defined, mixed uses incorporate, in a mutually supportive manner, more than one land use, density or type of housing, or development character. This Comprehensive Plan encourages the mixing of uses at a community scale with a variety of uses within a comparatively short travel distance of each

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<sup>1</sup> 2002 Census of Agriculture, USDA

other. Mixed uses can include the development of projects that mingle different housing densities or types; single buildings with both employment and residential areas; and areas of different uses that are coordinated and linked with transportation features including transit, architectural characteristics, or other unifying features. It is the intent of this Plan to support a broad definition of mixed use where appropriate without mandating specific details which may quickly become outdated.

Mixed use projects are supportive of more efficient transportation, encourage a wide variety of housing types to meet the broad range of residential needs, reduce costs of living, and provide an interesting built environment. A key component of mixed used projects includes the establishment and enforcement of architectural and site design standards.

### **Discourage Sprawl Development**

The opposite of creating communities is enabling sprawl. Since the Growth Zone Overlay District was established in 1996, the County has attempted to discourage sprawling development in favor of focusing new development where infrastructure can be efficiently and cost effectively provided. Sprawl development is characterized by:

- Low density residential development in a rural area that is not contiguous with or in proximity to existing infrastructure such as schools, shopping, institutions, local police protection and emergency services;
- Land use conversion/land consumption;
- Segregation of land uses and housing types; and
- Dependence on the automobile to fulfill daily needs.

The negative impacts of sprawl development include:

- Traffic congestion, severe during peak hours.
- Fragmentation of wildlife habitat: Wildlife relies on contiguous and connected habitat and a network of ecological features to survive.
- Loss of productive farmland.
- Loss of rural character.
- Increased costs to provide essential services.
- Degradation of water quality: Developments in rural areas rely on individual and community on-site septic systems. If not properly maintained, sewage can pollute ground-water and surface water.
- An increase of impervious surface which threatens water quality: Recent studies have indicated that water quality is degraded once a watershed exceeds 10% imperviousness.<sup>2</sup>
- Fragmentation of farmland which impedes agricultural uses, discourages existing and expanded agricultural uses, and increases conflict between farm equipment and increased residential traffic on rural roads.
- Degradation of air quality through increased emissions from individual vehicles.

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<sup>2</sup> Holland, H.K. & Schuler, T.,R. (2000). *The Practice of Watershed Protection*, pp. 7-18, 145-161.

- Threatens ability of the State and local government to provide services such as roads, transit, schools, and emergency services.

## Future Land Use

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Map 7B reflects the County's Future Land Use Map and immediate proactive comprehensive rezoning is not contemplated. The table below illustrates the types of land uses contemplated for each of the land use categories:

Land Use Designation	Applicable Zoning District(s)	Sample of Permitted Land Uses
Low Density Residential	Agricultural Conservation; Agricultural Residential	Agriculture and supporting uses, single family detached residential, home based businesses; limited commercial uses
Medium Density Residential	Single-Family Residential; Medium Family Residential; Residential Manufactured Home	Single-family detached and attached; manufactured home parks; home occupations; limited nonresidential uses
High Density Residential	Multi-family Residential; Neighborhood Business; Highway Commercial	Single-family attached and multi-family; home occupations; expanded nonresidential uses
Neighborhood Commercial	Neighborhood Business; Office Complex	Smaller scale nonresidential uses such as general retail shopping and personal services, compatible with residential uses; office space
Highway Commercial	General Business	Broad range of commercial activities and a variety of large retail stores and related activities occupying prime retail land and serving a regional community
Industrial	Limited Industrial; Industrial	Light to moderate intensity industrial, office, warehouse, wholesale and research establishments, which could be compatible with residential uses; Variety of industrial uses, including hazardous uses located away from residential uses

## Land Use Strategy

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Map 7C, however, reflects a long term development strategy where specific mixed use, higher density, commercial, industrial, and employment center development could be supported, provided it is in keeping with the character of the area and adequate infrastructure is in place or planned to serve it. Specific areas are designated for higher density residential, mixed use, neighborhood & highway commercial, industrial, and employment center development. Rezoning applications in keeping with the descriptions of these areas would be considered compliant with the Comprehensive Plan and should be supported. Master planning efforts specifically within the Town, Village, and Employment Centers would be beneficial.

While the Regional Planning Commission and Levy Court should use Map 7C as a guide in evaluating applications for rezoning, the standards included in the Zoning Ordinance regarding compatibility with surrounding land uses and availability of infrastructure remain in effect and should have equal weight in rezoning property. Specifically, in evaluating any rezoning request, the Department of Planning Services, Regional Planning Commission, and Levy Court should use the following criteria:

1. There was a mistake in the Zoning Map or the character of the surrounding area has changed to such an extent that the Zoning Map should be changed;
2. The new zoning classification conforms to the Comprehensive Plan in relation to land use, number of dwelling units, or type and intensity of nonresidential buildings and location;
3. Transportation facilities, water and sewerage systems, storm drainage systems, schools, and fire suppression facilities adequate to serve the proposed use are either in existence or programmed for construction; and
4. There is compatibility between the uses of the property as reclassified and the surrounding land uses so as to promote the health, safety, and welfare of present and future residents of the County.

The timing of rezoning is important to consider as well, particularly with respect to item number 3 above. In some cases, adequate public facilities are not currently in place to support commercial or industrial development although they are anticipated to be available within the planning horizon of 25 to 30 years.

Specifically, Map 7C reflects the following:

### **Town Areas**

#### **Description**

Development in unincorporated areas in close proximity to cities and towns should be similar in nature and respect the existing development patterns of the municipalities. Higher density residential uses and a variety of nonresidential uses should be encouraged as well as provide for a full suite of public services, including adequate roads, water, wastewater, parks and recreation, and fire and emergency

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medical services. Medium to high densities would be considered appropriate for properties near cities and towns provided the development density and design are in keeping with the character of the surrounding area.

The approach in these areas is to recognize and protect the essential land use and aesthetic character of the cities and towns and the values they foster. Protection will require close cooperation between Kent County and the towns concerning land use planning review of development proposals, extension of services and annexation. In addition, by encouraging development in and around municipalities, the Comprehensive Plan intends to reduce development pressure in other areas of the County. Development in this area is encouraged because it is contiguous with current development where it can be most effectively serviced by infrastructure including public water, sewer, and roads.

Concentrated and mixed use development along with interconnectivity and multi-modal transportation options are encouraged in areas proximate to municipalities. This development can include residential, employment, services, commercial, industrial, institutional, and shopping. Concentrated and mixed use development makes the most cost-effective use of public infrastructure. This development form may reduce the number of vehicular trips and trip lengths needed. These factors combine to lower the per capita cost of infrastructure, reduce the traffic impacts of development and cost to build, improve, and maintain roads. If not already designated as Receiving Areas as part of the County's Transfer of Development Rights (TDR) program, designation as Primary Receiving Areas could be appropriate.

### **Land Uses**

Development should be mixed use, compact, and in keeping with land use patterns and characteristics in the municipalities. Mixed use projects should be performance-based and reviewed according to certain performance criteria. Performance criteria should be based on achieving the characteristics of nearby municipalities. Appropriate housing types include single-family, two-family, townhouses, and multiplex and multifamily. Residential use may also be permitted on upper floors of structures with first floor commercial.

A wide range of commercial uses should be considered in areas proximate to municipalities including wholesale and retail sales, personal and business services, civic uses and office space. Large shopping centers over 100,000 square feet should be located in proximity to principal arterial and major collectors. Neighborhood commercial uses should be located near or within residential areas. Light and heavy industrial uses including non-manufacturing and manufacturing should be located in areas appropriate to their intensity and infrastructure requirements.



The purpose of commercial development in these areas is to create a sense of place and destination for existing and new neighborhoods while complementing the existing commercial development in the adjacent towns. This development will serve an agglomeration of adjacent and nearby neighborhoods, the adjacent town, and the larger community. Commercial development in these areas should function as transitional passages between the towns and larger regional-scaled communities. Small blocks and frequent intersections with connecting streets and sidewalks connect residents to regional transportation, commercial services and an active streetscape. Commercial development will be typically between 0.5 and 1.5 miles in length and will be located along roadways classified as minor arterials and major collectors. While this development will be accessed by automobile, the design should appeal to the pedestrian scale. Design elements need to serve both pedestrian and vehicular traffic also with public transit opportunities in mind. Types of uses include restaurants, specialty shops, services, grocery and civic uses (i.e. libraries and fire stations).

## **Village Areas**

### **Description**

There are areas within the unincorporated areas of the County and within the Growth Zone Overlay District where a concentration of existing approved residential development exists. The emphasis in these areas is to encourage needed infrastructure and services in order to create community centers to serve the pockets of residential development. Future development in these areas should consist of low to medium density residential and neighborhood commercial uses as well as significant investment in infrastructure. The overarching goal, however, is to equitably address the infrastructure concerns of the residential growth that occurred over the last five years and retrofit adequate facilities and infrastructure. The intent is to enable the creation of communities rather than only single-use residential subdivisions.

While this Comprehensive Plan is unable to address residential development that is already approved, it can address land uses in specific areas in an effort to create a more livable and quality community. Ideally, residential neighborhoods should have a sense of place where people enjoy living. Qualities that foster this environment include<sup>3</sup>:

- Quality of the public space;
- Variety of uses and building types;
- Connections to people and to daily needs; and
- Places to walk and ride bicycles.

Development should be focused on providing needed infrastructure and public services. Low to medium density zoning classifications would be considered appropriate in these areas provided development density and design is in keeping with the character of the surrounding area. If not already designated as

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<sup>3</sup> *Better Models for Development in Delaware, Ideas for Creating More Livable and Prosperous Communities.* Edward T. McMahon with Shelly S. Mastran and Blaine Phillips, Jr., The Conservation Fund in partnership with Livable Delaware Advisory Council Community Design Subcommittee and Office of State Planning Coordination. March 2004, Pg 52

Receiving Areas as part of the County's Transfer of Development Rights (TDR) program, designation as Secondary Receiving Areas could be appropriate.

Limited Neighborhood Commercial development should create a center that is well integrated to existing and planned neighborhood fabric, respects existing residences, and provides needed infrastructure. Neighborhood commercial centers are meant to be places of more intensive urban uses within a neighborhood. These centers should provide the most localized availability of goods and services needed daily by area residents, as well as a social and operational focus of the area. Providing needed services, these centers play an important role toward creating a sense of place for the residents. The size of neighborhood commercial centers should be scaled according to the population the center is targeted to serve. Some centers will be developed to serve the needs of the immediate neighborhood, while other centers will serve the needs of the area and still others will serve the needs of the region.

### **Land Uses**

Appropriate housing types include single-family, two-family, townhouses, multiplex designed to resemble single-family units, and manufactured housing. Two-family, and multiplex dwellings should be designed to resemble single family dwellings in an effort to preserve the character of the area. Townhouses should be limited to TDR Receiving Areas and be of an appropriate scale and design to complement the character of the area and existing and proposed single-family development. Appropriate commercial uses include neighborhood commercial, retail sales, personal and business services, and office space. Examples of these uses can include:

- Retail: grocery, books/music/videos, culinary, flowers, gifts, clothes, art/office supply
- Professional office: medical and financial
- Personal services: salon/barber, counseling
- Mini-storage
- Eating and drinking establishments
- Entertainment and culture
- Winery and microbreweries
- Public facilities: elementary schools, branch library, fire/police stations, branch and post office
- Religious facilities

Light industrial uses include non-manufacturing and manufacturing, and may be located in areas appropriate to their intensity and infrastructure requirements.

## **Remaining Areas Within the Growth Zone Overlay District**

### **Description**

There are areas even within the Growth Zone Overlay District which are removed from the County's cities and towns as well as existing and planned infrastructure. Development within these areas should seek to preserve the rural character of the County by utilizing buffers along the road frontage and cluster design while at the same time permitting low density development. In addition, these areas can

serve to provide a break in the more intensively built environment permitted by the Primary and Secondary TDR Receiving Areas.

### **Land Uses**

Primarily, single-family detached and single-family semi-detached dwellings are contemplated in these areas. These areas are contemplated to not be eligible for receiving TDR credits. In addition, sight design requirements such as substantial buffering and landscaping are encouraged in order to maintain the rural character of the area. Low density zoning classifications should be considered appropriate in these areas and development design should be in keeping with the surrounding area.

## **Areas Outside the Growth Zone Overlay District**

### **Description**

The predominant land use outside the Growth Zone Overlay District is agriculture, the most significant industry in Kent County. In addition, many properties include sensitive environmental features, such as wetlands, woodlands, and critical habitat. The County's primary interest outside the Growth Zone Overlay District is to preserve agricultural land and rural infrastructure, protect environmentally sensitive areas, and protect the water quality of the Delaware Bay and Chesapeake Bay Watersheds.

### **Land Uses**

Agriculture and agriculture related uses should be the dominant land uses in areas outside the Growth Zone Overlay District. Large scale residential development is not encouraged in areas outside the Growth Zone. Should large scale residential development occur in these areas, single-family detached dwellings at very low densities are contemplated. In addition, Map 7B shows limited areas where neighborhood commercial uses could be considered appropriate to support the existing small towns and residential communities.

It should be noted, however, that while residential development outside of the Growth Zone is discouraged, it does exist both in major subdivision and individual lots created through minor subdivision. Lands used for agriculture and lands developed for residential purposes share the same zoning district and zoning restrictions that do not always appear applicable across all lot types and sizes. While more stringent zoning restrictions (e.g. number of domestic animals or size of accessory structures) are reasonable for suburban style development, more relaxed standards might be appropriate for larger more rural properties. Consequently, the County should consider creating an Agriculture Zoning District potentially with a substantial minimum lot size as an option for property owners in rural areas outside of the Growth Zone Overlay District.

## **Designation of Nonresidential Land Uses**

Map 7C designates areas for future Industrial, Highway Commercial, Neighborhood Commercial, and Employment Centers throughout the County. They have been identified based upon existing land uses in the area, as well as the availability of supporting infrastructure. The areas designated are not parcel specific but general locations where such uses could be considered reasonable. The Industrial Areas are concentrated in locations where supporting transportation infrastructure exists and/or around existing

industrial development. The Highway Commercial Areas are generally located in and around areas of existing larger scale commercial development and along major roadways. Neighborhood Commercial Areas are located in and around existing residential communities that lack smaller scale retail and service amenities. Employment Centers are located in areas where infrastructure, particularly highway access and public sewer, exists or is planned and are intended for uses that create jobs – offices of all types and light industrial development are the types of uses contemplated. A new zoning district should be created to enable development of the Employment Centers. Master plans should be developed for the designated Employment Centers as discussed in Chapter 2 as well as for larger scale commercial areas such as the area south of Frederica to generally illustrate the contemplated land use pattern and attendant infrastructure. In the Little Heaven Employment Center and in the Frederica Town and Commercial Areas, rezoning applications will not be considered until their respective master plans are completed.

### **Transfer of Development Rights**

A Transfer of Development Rights (TDR) program is simply the conveyance of the ability to develop residential lots from one property to another. The existing Kent County TDR program identifies sending areas outside of the Growth Zone Overlay District and receiving areas within the Growth Zone Overlay District (see Map 7E) resulting in the ability of landowners outside the Growth Zone to sell their right to develop to land owners within the Growth Zone. The monetary value of a development right is determined by the free market just as the monetary value of land is determined by the free market. In addition, the existing TDR program is considered voluntary and the base development density is still relatively high as compared to the transfer density. As an example, Primary Sending Areas in the existing program may transfer at a rate of 1.5 acres to 1 (1.5 sending credits per acre) but alternatively may develop for residential purposes at a rate of 1 unit per acre. Likewise, a Secondary Receiving Area may develop at up to 5 units per acre depending upon the number of development rights purchased, but alternatively may still develop at a rate of 3 units per acre without the use of TDRs. Since the inception of the program approximately 208 acres have been preserved through the purchase of 218 sending area credits.

This Plan promotes the continued and expanded use of the TDR program in order to achieve the land use patterns and densities contemplated. Incentives, in addition to TDR density bonuses, are contemplated in order to make the program more attractive to developers within the Growth Zone Overlay District and encourage an active market for transfer credits. Possible incentives include:

1. Revising the review process for TDR projects to include Sketch Plan review by the Regional Planning Commission rather than the Levy Court;
2. Revise the review process for conventional subdivisions to require Preliminary Plan hearings in front of the RPC and the Levy Court;
3. Requiring Sketch Plan submission for both TDR and conventional projects for public hearing before the Regional Planning Commission. In addition, require that both the Sketch Plans and



Preliminary Plans for conventional subdivisions be subject to public hearing in front of the Regional Planning Commission;

4. Providing TDR projects as first priority on Regional Planning Commission agendas<sup>4</sup>;
5. Eliminating the Regional Planning Commission and Levy Court Final Plan review for TDR projects and instead permitting administrative review and approval; and
6. Considering additional sending credits for protection of environmental features not currently protected (e.g. upland forest, rare/endangered species).

## **Policy Emphasis**

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Enable the creation of communities, create economic development opportunities, ensure adequate infrastructure to serve those communities, and preserve the rural character and agricultural industry of the County by directing development and public investments to areas designated for growth and creating development alternatives for properties outside of growth areas.

## **Recommendations**

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1. Create a zoning classification for Employment Centers. Permitted uses should include those that result in job creation as opposed to retail and service uses permitted in the Commercial Zoning Districts. Uses that support the County's Food Innovation District should be included as well.
2. Update and expand the uses permitted in the Agricultural Conservation and Agricultural Residential Zoning Districts to support the modern agricultural industry and the County's Food Innovation District.
3. Create a zoning classification or development option within existing districts to permit and encourage mixed use development particularly in the Town and Village Areas.
4. Create a new Agricultural Zoning District available to properties outside of the Growth Zone Overlay District in order to permit by-right uses that support agriculture and are reasonable and expected in rural areas.
5. Preserve areas for economic development opportunities by focusing on growth in Employment Centers, Commercial Areas, and Industrial Areas.
6. Develop in areas with adequate infrastructure and public services while protecting the natural resources and rural character of the County.

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<sup>4</sup> Ordinance 07-02 adopted January 16, 2007 established a limit of three residential major subdivision applications for Regional Planning Commission public hearing and consideration in any one month.

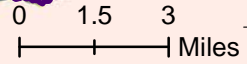
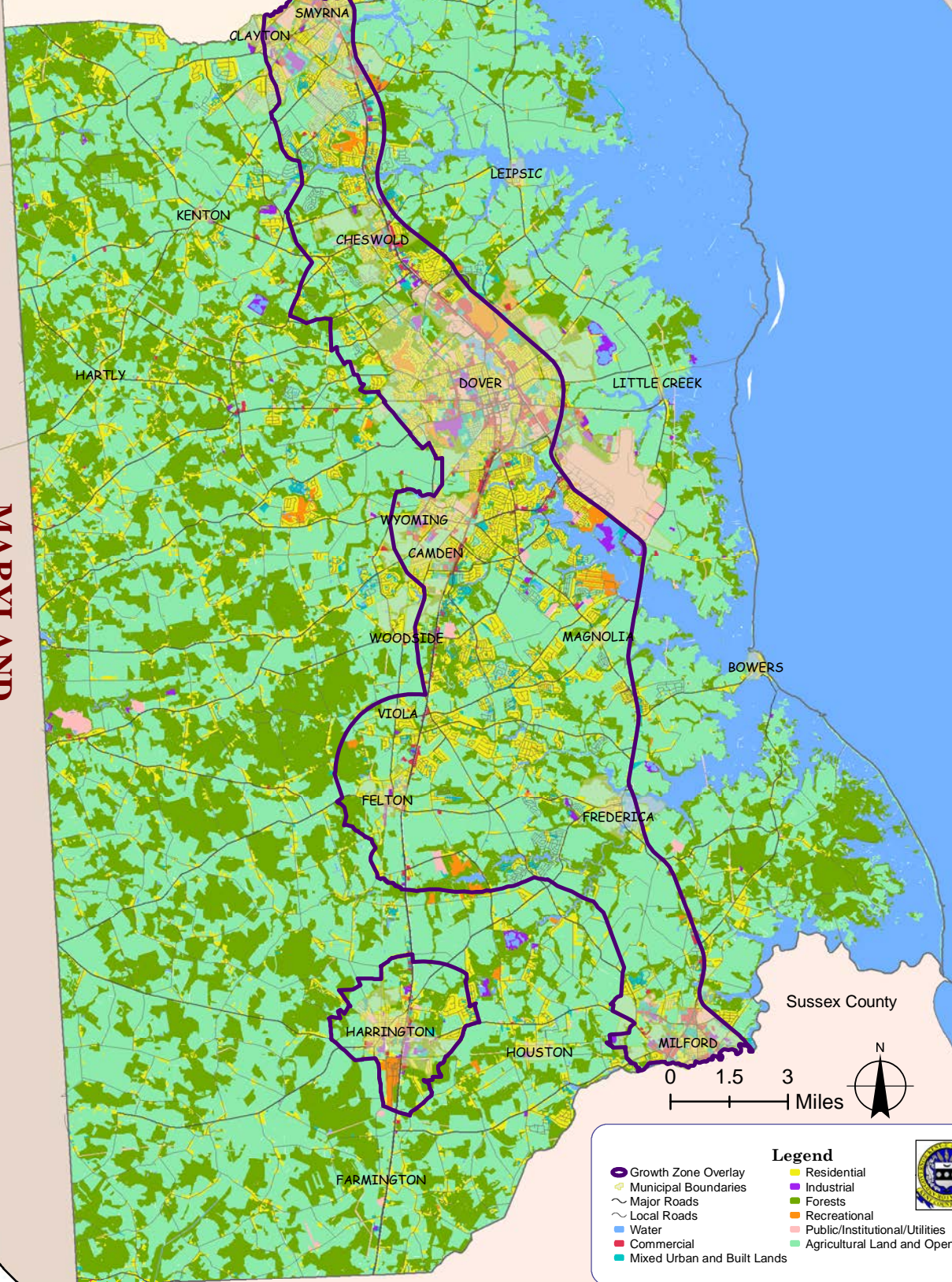
7. Conduct a complete review of Chapter 205 *Zoning* to update zoning districts and permitted uses to more modern standards.
8. Portions of the Growth Zone Overlay District boundary do not follow natural or man-made boundaries. In many cases, the boundary actually bisects individual properties creating a challenge in accurately locating the boundary. In addition, moderate expansion of the Growth Zone to the west between Dover and Smyrna over the planning horizon may be reasonable as developable land in the area becomes scarce. Any revisions to the boundary will require a zoning map amendment with all associated public notice and posting requirements. Individual property owners may apply to revise the boundary through the zoning map revision process although the Levy Court may also proactively alter the Growth Zone boundary. Any expansion of the Growth Zone should be contiguous to the existing boundary.

# Existing Land Uses

New Castle County


NEW JERSEY

MARYLAND



**Legend**

Growth Zone Overlay	Residential
Municipal Boundaries	Forests
Major Roads	Recreational
Local Roads	Public/Institutional/Utilities
Water	Agricultural Land and Open Space
Commercial	Mixed Urban and Built Lands



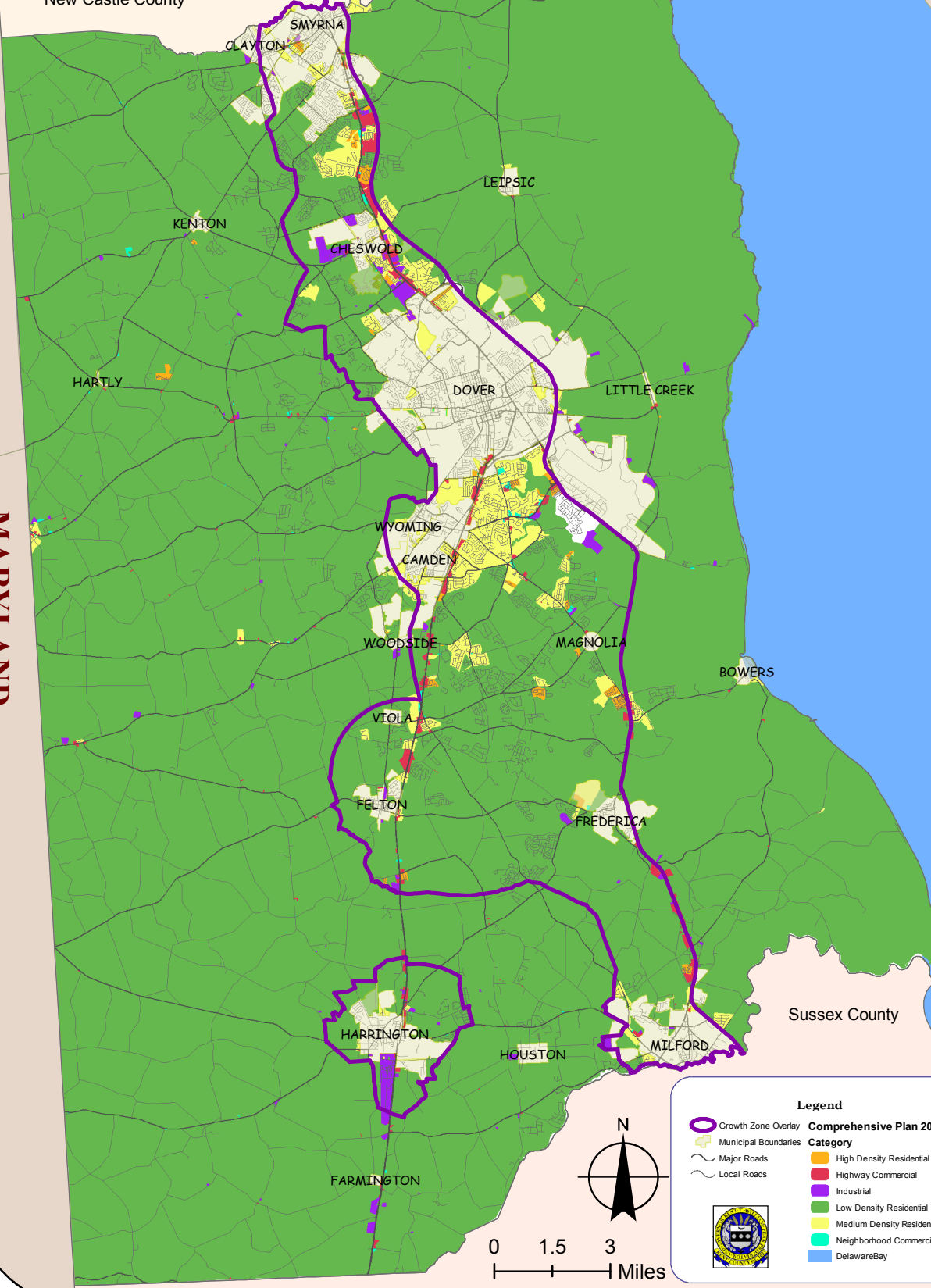


# Future Land Use Map

New Castle County

NEW JERSEY

MARYLAND



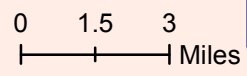
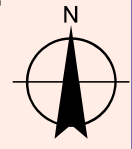
Sussex County

**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads

**Comprehensive Plan 2018 Category**

- High Density Residential
- Highway Commercial
- Industrial
- Low Density Residential
- Medium Density Residential
- Neighborhood Commercial
- Delaware Bay

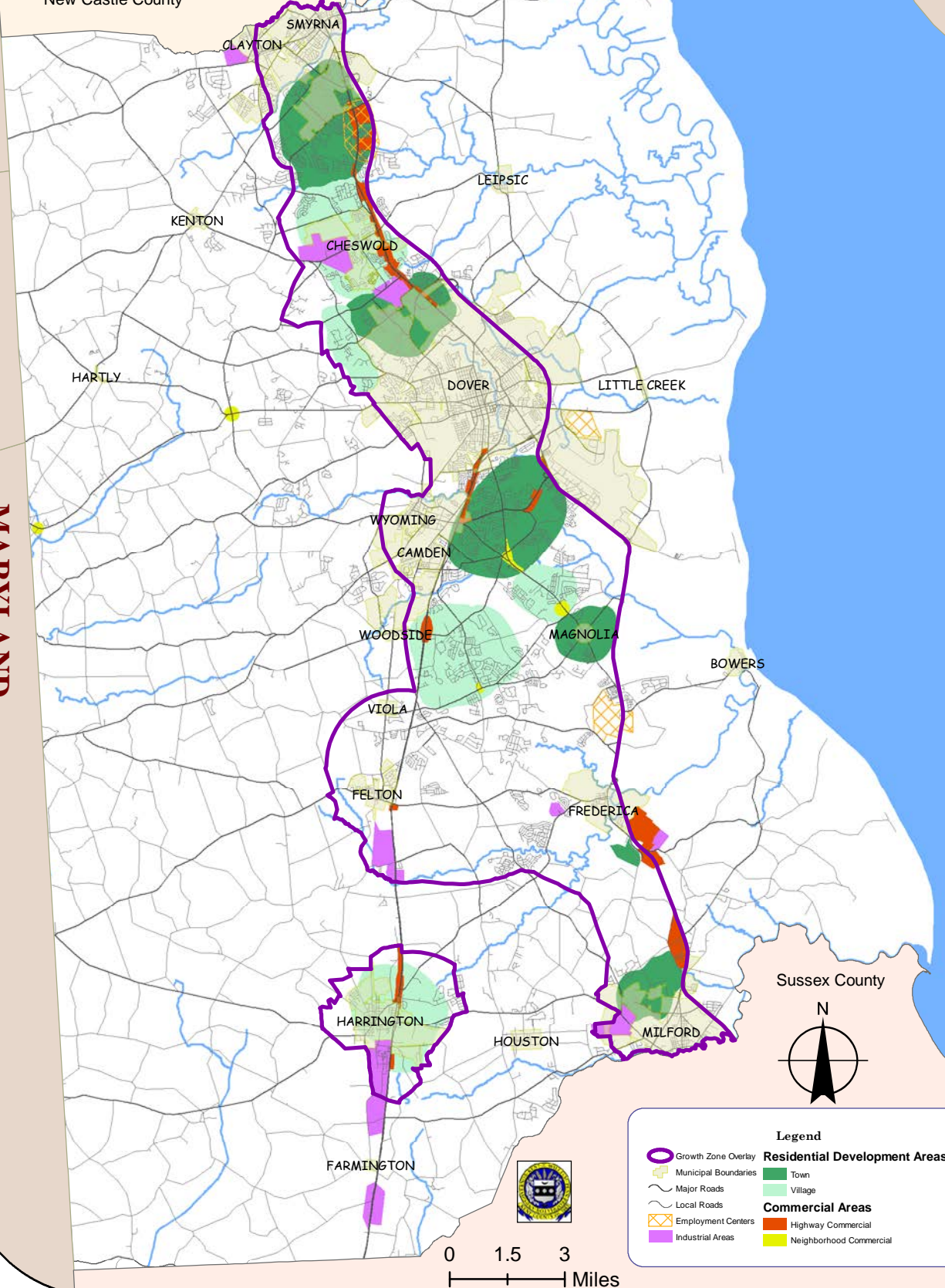



# Land Use Strategies

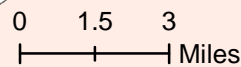
New Castle County

NEW JERSEY

MARYLAND



Sussex County



**Legend**

Growth Zone Overlay	<b>Residential Development Areas</b> Town
Municipal Boundaries	Village
Major Roads	<b>Commercial Areas</b> Highway Commercial
Local Roads	Neighborhood Commercial
Employment Centers	
Industrial Areas	



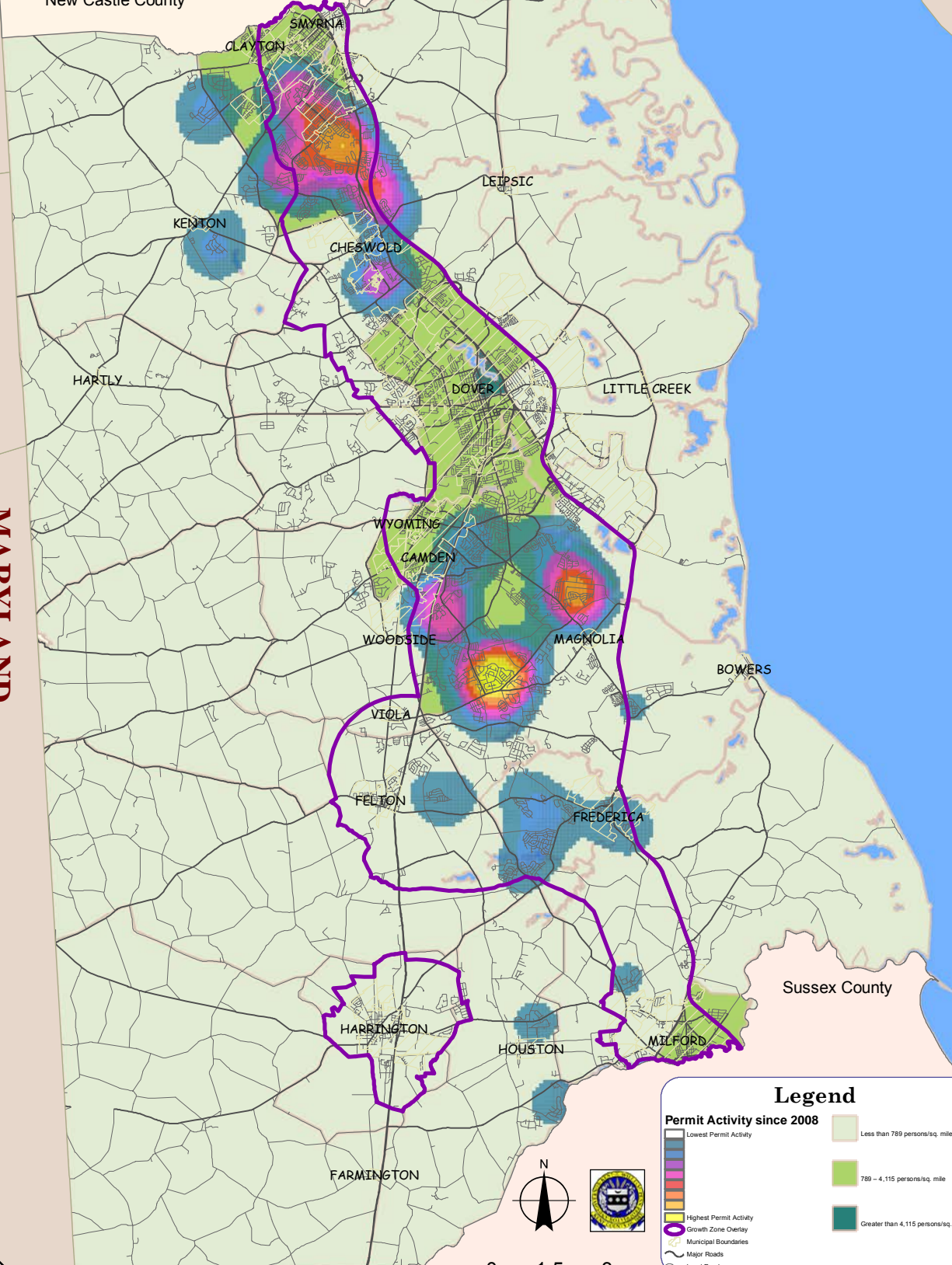
# Population and Permit Densities

New Castle County

NEW JERSEY

MARYLAND

Sussex County

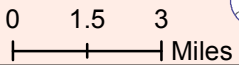


**Legend**

**Permit Activity since 2008**

- Lowest Permit Activity
- Highest Permit Activity
- Growth Zone Overlay
- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads

- Less than 789 persons/sq. mile
- 789 - 4,115 persons/sq. mile
- Greater than 4,115 persons/sq. mile



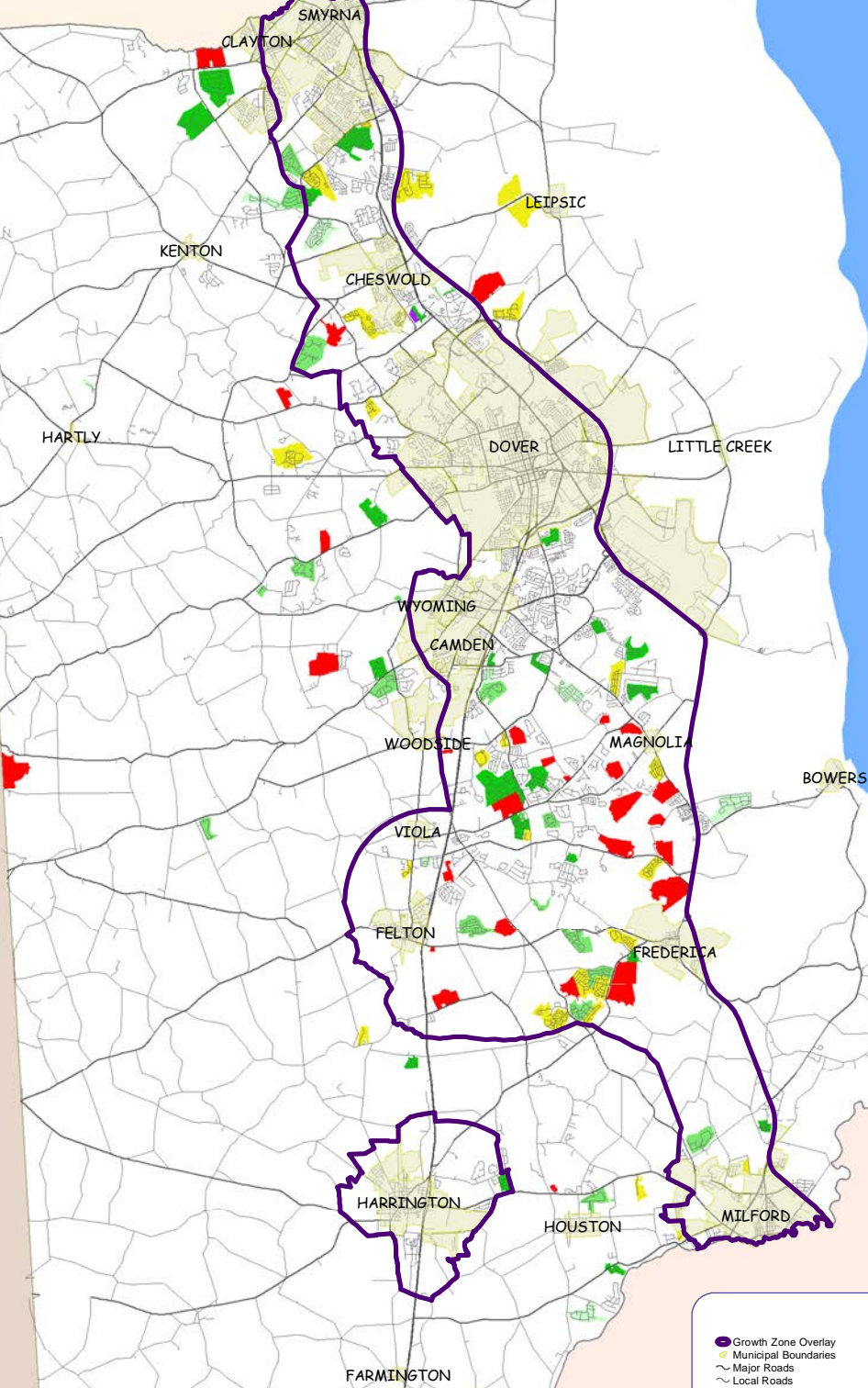
Esri, US Census Bureau, Inc.

# Subdivision Activity

New Castle County

NEW JERSEY

MARYLAND



**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Pending Subdivisions - 105 lots
- Expunged Subdivisions - 4,622 lots
- Subdivisions that have no homes built - 4,100 lots

**Subdivisions under construction - 4,095 vacant lots remain**

**Percent Built Out**

- less than 25%
- 25% - 50%
- 50% - 80%

0 1.5 3  
Miles

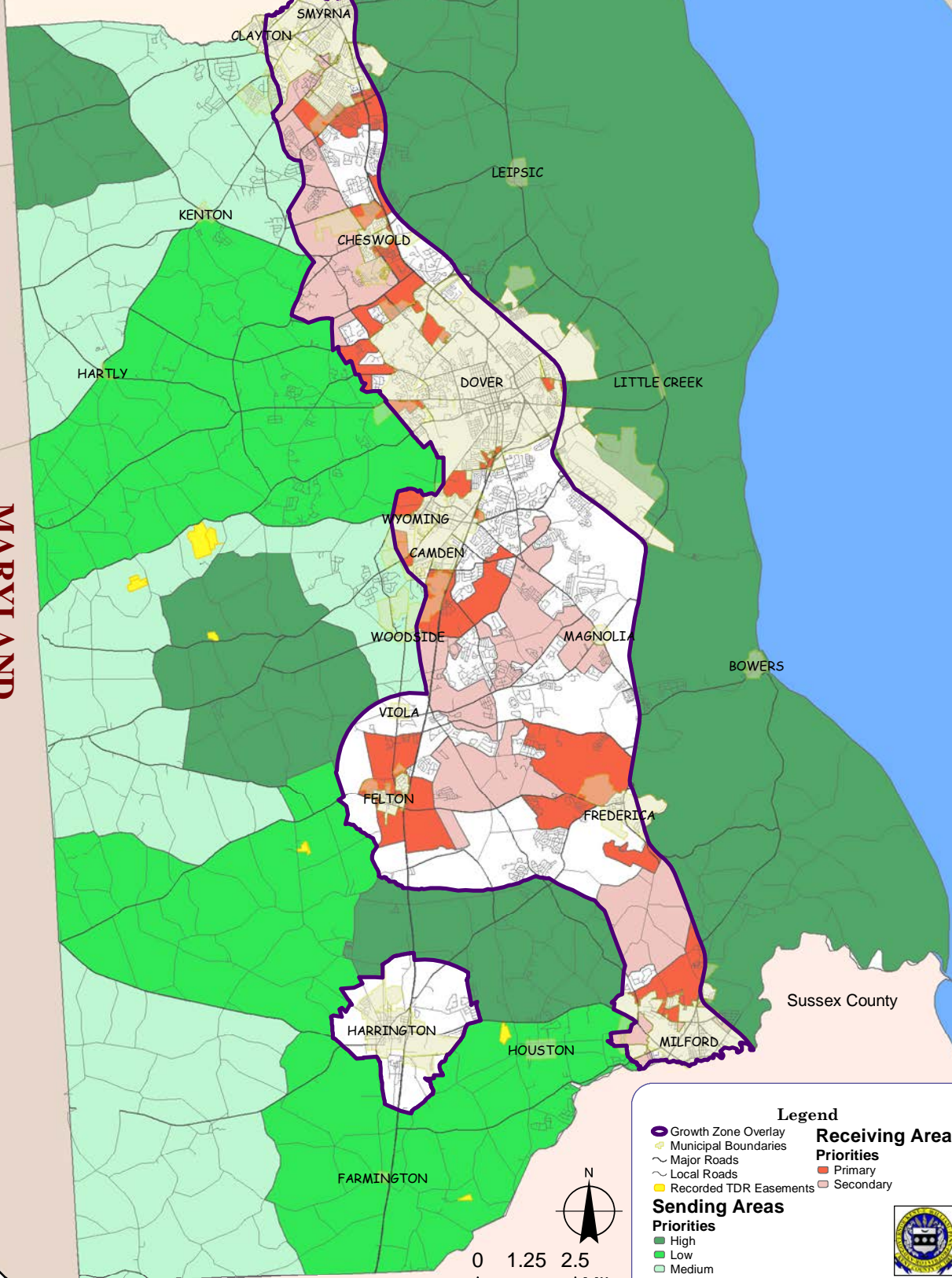


# Transfer of Development Rights (TDR) Areas

New Castle County

NEW JERSEY

MARYLAND



# Chapter 8

## Transportation



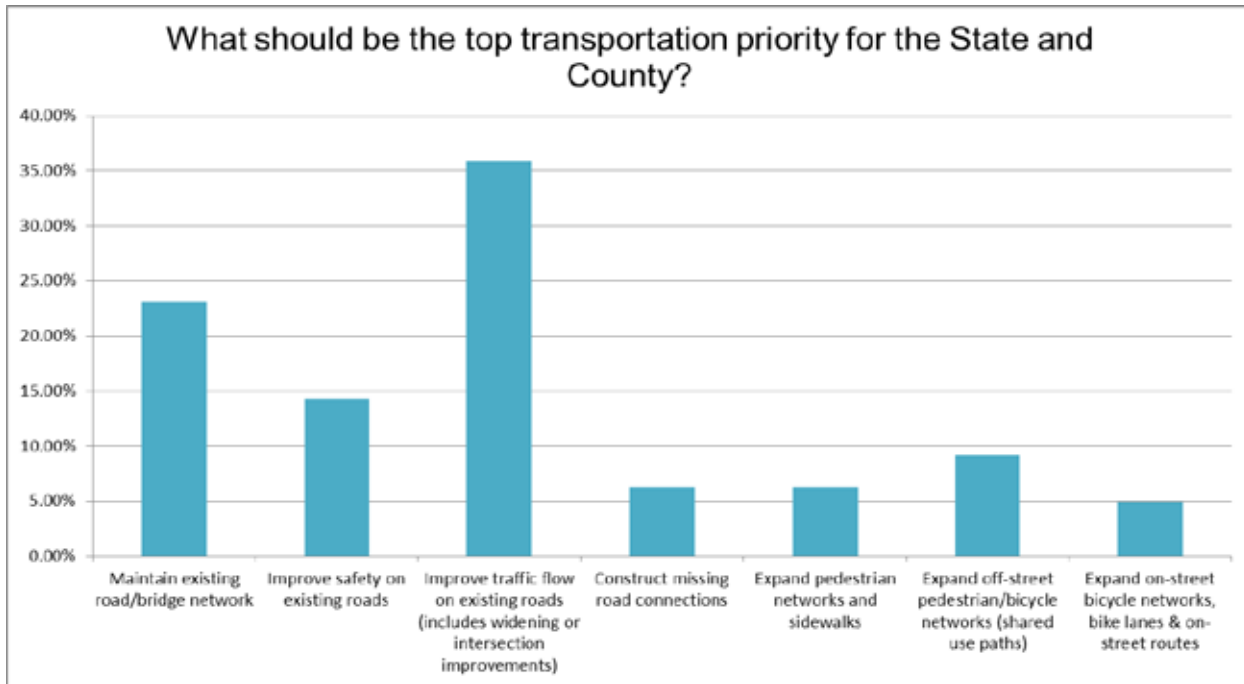
### Overview

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Land use, growth management, and transportation planning are inextricably linked and have to evolve and grow together. Despite the fact that Kent County is not responsible for maintenance of public roads, it is responsible for land use policy and the ultimate demands on those roads. Transportation systems affect most significant aspects of human society including:

- Settlement patterns;
- Land development and land use;
- Economic activity;
- Goods movement and trade;
- Jobs and wages;
- Energy and resource allocation;
- Access to places of work, education, health care, social life, and commerce;
- General social equity;
- Environmental quality; and
- Overall livability of communities.

Community outreach revealed that maintaining existing infrastructure, improving traffic flow, and improving safety are clear priorities. Given the wide reaching impacts of transportation systems, how well they function in turn affects the quality of the built and natural environment as well as the quality of life of citizens. A quality transportation system is also an essential element of attracting economic development. When developing a transportation plan, the overall net benefit with respect to environmental quality, growth management, land use, housing affordability, social equity, urban design, and economic development must be considered.



Source: Survey 2

Transportation systems encompass a wide variety of modes including automobiles, bus transit, bicycle, pedestrian, airplanes, trucks, rails, and boats. These modes are not necessarily mutually exclusive and, in fact, should be considered complementary. Walking is the most basic form of transportation and when road improvements for vehicular traffic are contemplated, multi-modal paths for bike and pedestrian traffic should be included in the design. System improvements and expansion are expensive and complicated undertakings that are designed, constructed, and maintained through a combination of public and private funding. Given the impact and expense of these improvements, it is essential that system improvements support the County’s direction for growth management articulated in this Plan.

## Existing Conditions

### Vehicle Miles Traveled

Functional Classification	Miles	Daily Vehicle Miles Traveled
Arterials (includes Freeways)	175 (11.8%)	3.2 Million (70.1%)
Collectors	307 (20.7%)	0.8 Million (18.5%)
Local	1,002 (67.5%)	0.5 Million (11.4%)
Total	1,484 Miles	4.5 Million Miles/Day

Source: DelDOT 2014 Highway Performance Monitoring System (Dover/Kent MPO 2040 Metropolitan Transportation Plan)

Arterial roads account for only about 12% of the roadway miles in Kent County but accommodate 70% of vehicle miles traveled. According to the 2014 Highway Performance Monitoring System, 91% of Kent County roads are rated as being in good condition while only 1% is rated as poor.



## **Functional Classification**

Each road in Kent County is classified according to the Functional Classification System developed by the Federal Highway Administration (see Map 8A). Each classification carries with it standard construction specifications:

### ***Freeways and Expressways***

Highways with full control of access intended to provide for high levels of safety and efficiency in the movement of large volumes of traffic at high speeds. These are the largest type of principal arterials that serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel. They have 11 to 12 ft. travel lanes, shoulders from 6 to 12 ft. both inside and outside of travel lanes, and a minimum AADT of 4,000 cars. Examples: SR 1 and the Puncheon Run Connector to US 13.

### ***Other Principal Arterials***

These roads connect all or nearly all Urbanized Areas and a large majority of Urban Clusters with 25,000 and over population, and provide an integrated network of continuous routes without stub connections (dead ends). They have 11 to 12 ft. travel lanes, shoulders from 8 to 12 ft., and a minimum AADT of 2,000 cars. Examples: US 13, US 113, and SR 1.

### ***Minor Arterials***

Highways and streets that link towns by distributing trips to smaller areas; serve higher classification roads by providing access to and from less developed areas. These are spaced at intervals consistent with population density, so that all developed areas within the State are within a reasonable distance of an Arterial roadway. They provide service to corridors with trip lengths and travel density greater than those served by Rural Collectors and Local Roads and with relatively high travel speeds and minimum interference to through movement. They have 10 to 12 ft. travel lanes, shoulders from 4 to 8 ft., and a minimum AADT of 1,500 cars. Examples: US 13, SR 8, SR 15, and US 13A.

### ***Collectors***

Roads that enable moderate quantities of traffic to move between arterials and local roads; provide access to adjacent properties.

Major Collectors provide service to any county seat not on an Arterial route, to the larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance, such as consolidated schools, shipping points, county parks and important mining and agricultural areas. They have 10 to 12 ft. travel lanes, shoulders from 1 to 6 ft., and a minimum AADT of 300 cars.

Minor Collectors provide service to travel over short distances as compared to higher classification categories. They have 10 to 11 ft. travel lanes, shoulders from 1 to 4 ft., and a minimum AADT of 150 cars. In Kent County, these are the remaining roadways that are the most heavily traveled and generally link the higher level roadways. Examples: Majority of State Routes in the County.

### ***Local***

Roads with a principal function of providing direct access to adjoining properties. Local roads have evolved over time in Kent County and in some cases were originally unimproved farm roads. They have 8 to 10 ft. travel lanes, shoulders from 0 to 2 ft., and a minimum AADT of 15 cars and a maximum of 400. Examples: Majority of County Roads.

### **Investment Priorities**

Many of the roads located within the Growth Zone Overlay District have not been improved to existing design standards for their functional classification and certainly cannot safely support additional development. Many road segments lack adequate lane widths, shoulders, and multimodal improvements. The County addressed future development by adopting adequate public facility provisions for roads. However, improving the roads to serve existing and approved development remains a challenge.

Going forward, the County must first work with the Delaware Department of Transportation (DelDOT) and the Dover/Kent County Metropolitan Planning Organization (MPO) to establish a schedule for improving the road network to meet current design standards; then time the development of existing and future projects with infrastructure improvements; and once the roads are upgraded to meet current design standards, identify any improvements needed to serve additional development for implementation concurrent with that development.

Specific priorities for both vehicular and bicycle/pedestrian improvements include:

### **Road Location Improvements**

- State Street Extended: Sorghum Mill to Magnolia
- Kenton Road: College to Route 42
- Canterbury Road: Andrews Lake to Route 13 and Upper King crossing
- Walnut Shade: Peachtree to Woodside
- Brenford Road: Route 13 to Route 42
- Irish Hill Road: Route 13 to South State Street Extended
- Intersection of Irish Hill Road and Woodleytown Road

### **Bicycle/Pedestrian Improvements**

- Bike Lane added between DE 10 and the Hunn Property (1.65 miles)
- Bike Lane/connector from Camden-Wyoming Ave in Camden to North Street in Dover
- Route 10 trail from the Gateway South Shopping Center to Brecknock Park
- Smyrna – Big Oak Park Connection between Smyrna and Big Oak Park

## Modes of Transportation

The majority of trips within Kent County are made via automobile as would be expected in a largely rural and suburban County. Interestingly, the percentage of commuting trips by single-occupancy vehicles has been increasing while use of carpooling, transit, bicycling, and walking has decreased.

### Journey to Work

	2011-2013	2013-2016
Single-occupancy vehicle	78.3%	82.8%
Multi-occupant vehicle	17.6%	13.9%
Walked	2.7%	2.3%
Public bus	1.1%	0.9%
Bicycle	0.4%	0.1%

*Source: DelDOT 2016 Fact Book*

### Public Transit

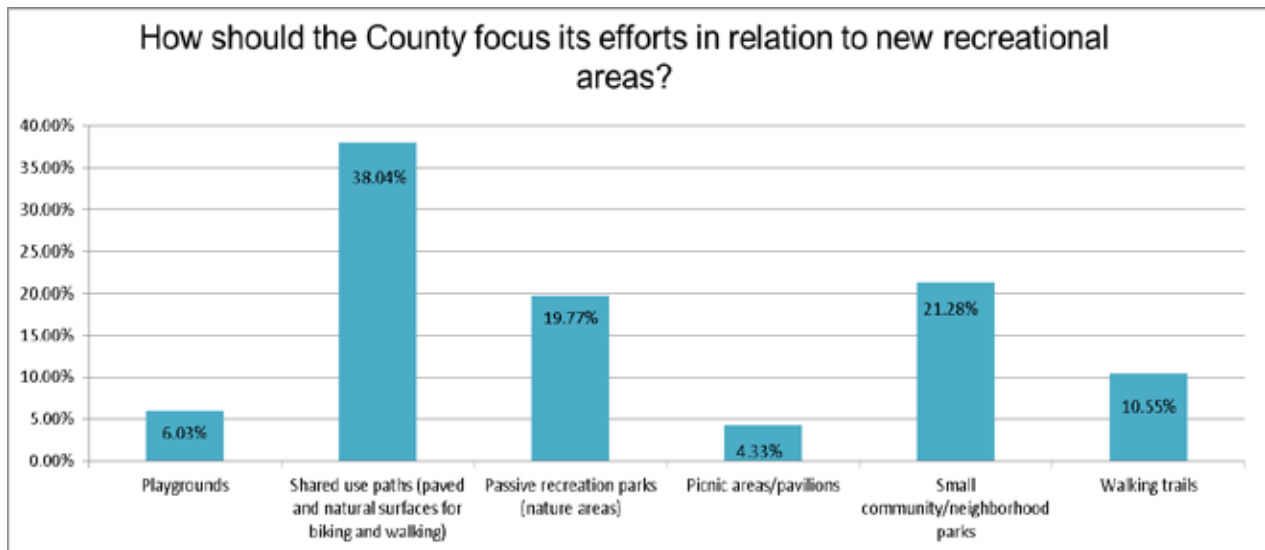
Public transit in Kent County includes local fixed route and inter-county bus service, as well as paratransit provided by the Delaware Transit Corporation (DTC) operating at DART First State. Local fixed route public transit is only available in the Dover area with some intercity services between Dover and points to the north and southeast. Paratransit and special transit demand-response services are available for elderly and disabled residents. According to the Dover/Kent County MPO 2017 Metropolitan Transportation Plan, overall fixed route transit ridership actually fell by 20% between 2013 and 2016.

While public transportation is likely to always require subsidy by the State, its relative success is dependent upon enough people living in close proximity to support it and must be considered when contemplating future development patterns. Densities to support fixed route public transportation are most likely to be achieved in and around municipalities.

### Bicycle & Pedestrian

Walking and biking are both popular for recreation and can become more attractive modes of transportation as systems are connected. Several facilities accommodate bicycling and walking as a travel mode behind the curb or off the road, such as the path along Scarborough Road. Bicycle facilities on shared rights-of-way include bike lanes, paved shoulders, wide curb lanes, and shared roadways while bike routes are provided on separate rights-of-way.

According to mode choice studies, the average distance thresholds include  $\frac{1}{4}$  to  $\frac{1}{2}$  mile for walking and  $\frac{5}{8}$  mile for biking. These thresholds are the average distance that people consider when deciding to use a particular mode for recreation, work, or school. Walking and biking are becoming more important to people for physical health as well as for economic reasons. When asked what focus the County should have in developing new recreational opportunities, walking and biking were fairly clear public priorities.



Source: Survey 2

The bikeways in Kent County are predominantly paved shoulder roadways and are not necessarily shared-use signed as bike routes. Bicycles are also considered vehicles in Delaware and have the right to use nearly every roadway. Sidewalks are common within urbanized areas but less so in outlying unincorporated areas. Overall, the State, County, and larger municipalities have continued to expand opportunities for bicycling and walking with an emphasis on lower stress routes that are safe for all ages and comfort levels.

The County supports the recommendations included in the *2017 Dover/Kent County Regional Bike Plan* and the overall visions to "create a bicycle system where people feel comfortable riding bicycles, whether for commuting, errand trips, physical fitness or recreation." Specific projects located in the unincorporated area include:

***St. Jones Greenway Trail, Phase 2***

This proposed new trail would connect the bicycle facilities on Route 10 to Route 9, providing a safe, off-road north-south route from central Dover to the southern end of the city. It is the proposed southern extension of the St. Jones Greenway Trail. It would connect the downtown Dover historical attractions with the Dickinson Mansion, AMC Museum, Ted Harvey Conservation Area, and the St. Jones National Estuarine Reserve.

***Hunn Property Connector***

A shared-use path (800 feet) would connect the Hunn Property to the St. Jones Greenway Trail along Route 10.

***Chestnut Grove Road***

Chestnut Grove Road is a main connector route used by automobiles, bicycles, and horse-and-buggies from west of Dover to the northern US 13 commercial areas via Kenton Road. With the

exception of a very short stretch, the road has no bike facilities, no shoulders, and fast, moderate volume auto traffic.

#### ***Route 8 Dover to Little Creek***

Route 8 is one of the main routes between Dover and Little Creek. Shoulders exist between US 13 and Route 1, but not east of Route 1.

#### ***Brenford Road***

This project is part of a larger route with Sunnyside Road and Rabbit Chase Road, linking the developing area to Smyrna. This bike path would also provide non-motorized access from a rapidly growing area to Big Oak Park and provide increased connectivity from the residential areas on the west side of US 13 to the commercial uses along US 13.

#### ***Clayton, DE to Easton, MD Rail Trail***

The Clayton to Easton recreational rail trail would include over 27 miles of shared-use path in Delaware connecting Marydel, Hartley and Clayton with Greensboro, Goldsboro and Easton, Maryland. The State of Maryland owns the rail right-of-way along the abandoned rail line in Delaware.

#### ***Smyrna to Bombay Hook NWR***

A marked bicycle route between Smyrna and Bombay Hook NWR could increase tourist and resident non-motorized visitation to Bombay Hook.

#### ***Route 15 (Moose Lodge & Dundee Road)***

This segment of Route 15, part of Delaware Bike Route 1, is the major north-south bicycling route for the state. Along Moose Lodge and Dundee Roads there are no bicycle facilities, no shoulders and fast, moderate volume auto traffic.

#### ***Peachtree Run***

Peachtree Run connects developments East of US 13 with the commercial areas on US 13. It is not a safe route for bicyclists because a vast majority of the road has no continuous shoulder. Providing a bicycle lane along Peachtree Run will help to better accommodate bicyclists traveling from Canterbury through Woodside and into South Dover.

With respect to land use, it is essential to consider not only providing alternate modes of transportation, but also locating various residential, commercial, and public uses in close enough proximity to each other. Kent County continues to require the installation of sidewalks or multi-modal paths along all major collectors and many local streets as part of subdivision and land development approval. The Department of Community Services also continues to expand the trail network associated with the County's park system.

### **Railroads**

Kent County has 56 miles of active freight railroad lines which are operated by Norfolk Southern. These lines include the *Delmarva Secondary Line* and *Indian River Secondary Line*. Rail lines must be considered when contemplating future land uses and economic development as they offer significant benefit for

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industrial development. Consequently, many of the proposed Industrial and Commerce Areas are located along the rail line. Aesthetic, noise, and safety buffers should be employed in cases where residential development is contemplated in close proximity to the rail line.

### **Aviation**

Kent County has seven aviation facilities available for public use, primary of which is the Dover Air Force Base Civil Air Terminal. Other facilities include the Smyrna Airport, Chandelle Estates Airport, Delaware Airpark, Jenkins Airport, Chorman Airport, and the DelDOT Helistop. DelDOT is undertaking significant improvements to Delaware Airpark which will improve travel and enable development of aviation related industry and business.

### **Marine**

Rivers, ports, bays, and estuaries are all used for movement of people, goods and services, and can also serve as recreation destinations and uses. In Kent County, the Delaware Bay, Leipsic River, St. Jones River, Murderkill River, and other waterways provide avenues for recreation as well as the movement of people and goods. Most of the bay coastline in Kent County is marsh and forms the Bombay Hook National Wildlife Refuge and other important wildlife areas. Therefore, most of the water access in the County is in small-scale recreational use. The commercial and recreational fishing facilities in Bowers Beach are the most significant docking facilities. However, smaller operations can also be found in Leipsic.

### **Level of Service (LOS)**

The Delaware Department of Transportation has completed a level of service (LOS) analysis for Kent County as part of the Comprehensive Plan. These maps will evaluate the existing LOS in 2017 and then the estimated LOS in 2040. They have included only the three lowest grades of service, D, E and F. It should be noted that the Level of Service designations are intended to convey how a road operates or is projected to operate during a specific peak hour condition. Level of Service is not a characteristic inherent to the roads or a label assigned beyond the context of peak hour travel.

"D" describes conditions when traffic on a roadway is approaching unstable flow. Freedom to maneuver within the traffic stream is much more limited and driver comfort levels decrease. Examples are a busy shopping corridor in the middle of a weekday or a functional urban highway during commuting hours. It is a common goal for urban streets during peak hours, as attaining LOS "C" would require prohibitive cost and societal impact in bypass roads and lane additions. In addition, for urban and suburban conditions, the breakpoint between LOS D and E tends to be where drivers consider changing their travel behavior. Thus in developed areas, it becomes not only an issue of cost and societal impact but can sometimes be impossible to achieve LOS C during peak periods.

"E" describes conditions when traffic is at an an unstable flow operating at capacity. Flow becomes irregular and speed varies rapidly because there are virtually no usable gaps to maneuver in the traffic stream and speeds rarely reach the posted limit. Any incident will create serious delays. Drivers' level of comfort becomes poor.

"F" describes conditions when traffic is at a forced or breakdown flow. Every vehicle moves in lockstep with the vehicle in front of it, with frequent slowing required. Travel time cannot be predicted, with generally more demand than capacity. A road in a constant traffic jam is at this LOS, because LOS is an average or typical service rather than a constant state. These are the roads that DeIDOT, the MPO, and the County should focus most of their efforts.

Map 8B shows what the level of service will be in just over 20 years if only the current road projects are completed. Most major routes through Kent County are proposed to have a decreased or stagnant level of service including portions of Rt. 1 and most of Rt. 13. We must work to implement the most effective transportation projects, as well as work with a defined and effective growth strategy to minimize the impact on the road systems.

The goal of the Adequate Public Facility Ordinance was to ensure that new development does not negatively impact the transportation system. In adopting the Adequate Public Facilities Ordinance for roads, Kent County established a minimum LOS "C" for all roads outside the Growth Zone Overlay District and "D" inside the District in an effort to ensure adequate road capacity is maintained for new development. It is worth noting, however, that as designated growth areas develop, an increase in congestion is to be expected. Maintaining an LOS "D" during peak hours is not necessarily practical in heavily developed areas. In limited highly developed areas, LOS "E" might be practical provided carrying capacity can be adequately managed.

Balancing safe and efficient transportation with the land use and economic development priorities of the County are essential. It is important to ensure that the measures used to evaluate level of service for transportation do not inadvertently inhibit economic development efforts. It could be useful to work with DeIDOT and the Dover/Kent County MPO to examine alternative metrics such as travel time to measure traffic impact in a more meaningful way.

## **Corridor Preservation**

The State's Corridor Capacity Preservation Program is designed to maintain the regional importance and preserve the intended function and capacity of existing designated transportation routes. The program is intended to: (1) prevent the need to build an entirely new road on a new alignment; (2) minimize the transportation impacts of increased economic growth; (3) maintain an existing road's ability to handle traffic efficiently and safely; and (4) sort local and through traffic. Routes are included in the program through a nomination process as part of DeIDOT's Statewide Long Range Transportation Plan. Within Kent County SR 1 (Dover AFB south to Nassau), US 13 (from Route 10 in Camden south to the Maryland State line), and US 113 (Milford south to the Maryland State line) are included in the program. The goals of the program are accomplished through preventing unnecessary new entrances and driveways, minimizing the need for traffic signals, and providing for local service roads. Purchase of access rights, purchase of development rights, purchase of easements, and fee simple acquisition are methods of implementation.

In addition, as the County develops, consideration should be given to designating additional routes as part of the Corridor Capacity Preservation Program. All of the routes currently included are north-south while east-west routes are important not only to serve citizens but also truck traffic for business. Routes 6, 8, 10, 12, 300, and 15 should be considered for inclusion in the program.

## Delaware Byways

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A Scenic and Historic Highway is a transportation route which is adjacent to or travels through an area that has particular intrinsic scenic, historic, natural, cultural, recreational or archeological qualities. It is a road corridor that offers an alternative travel route to our major highways while telling a story about Delaware's heritage, recreational activities or beauty. It is a route that is managed in order to protect its special intrinsic qualities and to encourage appreciation and/or development of tourism and recreational resources. There are two such byways partially located in Kent County<sup>1</sup>:

1. **Harriet Tubman Underground Railroad Byway** is approximately 95 miles in length and begins where the Maryland Harriet Tubman Underground Railroad Byway ends on Willow Grove Road, Kent County. The route traverses known Underground Railroad sites in Camden and Dover, continues north on US 13, passing through Smyrna, then continues on Route 15 to Middletown and Odessa. It then follows Route 9 along the Delaware River to Wilmington, where it weaves through 13 Underground Railroad sites. Then it follows Kennett Pike and ends at the Delaware-Pennsylvania State Line.
2. **Delaware's Bayshore Byway** is approximately 100 miles in length and is a scenic two-lane road that follows roads and views along the Delaware River and Bay Estuary. From New Castle to the beach resorts just outside Lewes, the byway corridor offers visitors and locals an intimate experience with the largest preserved coastal marshlands and historic river towns along the east coast. The byway covers much of the state geographically and is approximately 100 miles of travel depending on your route selection. See all sorts of wildlife and understand the importance of bird migratory flyway zones & resting areas. Most of all, discover the small natural beaches and tranquil open vistas.

## Transportation Improvement Districts

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Currently, developers bear the responsibility for completing road improvements associated with their development. Those improvements are generally identified through the traffic impact study process for larger projects. Unfortunately, smaller projects and early projects have not necessarily triggered required improvements through this process resulting in an inequitable distribution of responsibility. In addition, there have been instances where rather than requiring improvements to the road serving a proposed subdivision, with the exception of safety improvements, DelDOT has instead required

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<sup>1</sup> Source: DelDOT (<https://deldot.gov/Programs/byways/index.shtml?dc=route9>)

contributions to larger projects associated with SR 1 with an assurance that the State will construct the improvements to the local roads. Ultimately, improvements are required on a case by case basis rather than a community-wide basis.

Transportation Improvement Districts (TIDs) are areas where rather than relying upon individual traffic impact studies, the County, DeIDOT, the MPO, and the community will develop a more complete plan addressing a larger area for transportation improvements including road upgrades, interconnection of local roads, and bicycle and pedestrian facilities. These areas support the nodal concept of land development in that the intent is to develop a transportation network where residents can rely upon interconnected local roads for everyday needs whether work, school or recreation.

Creating such Districts will change the subdivision and land development approval process in these areas in that the roadway infrastructure is identified ahead of the land use application. The existing standard of requiring Traffic Impact Studies for individual developments should be replaced by the TID master plan, although the responsibility for funding the required improvements would remain with project developers based upon the traffic their project will create. In addition, to further ensure that infrastructure improvements are keeping pace with new residential and commercial development, building permits should be linked to completion of road improvements.

Map 8C identifies the two areas for Transportation Improvement District plans which were identified based upon existing and planned development. The boundaries of the Districts may be refined as the plans are developed. The development of the TID plans as a follow-up to the Comprehensive Planning effort is essential.

In addition to the areas designated for TIDs, there are specific corridors including Brenford Road and South State Street from Rising Sun to Dover that are largely developed or planned for development but suffer from poor level of service at peak hours. While the corridors are not necessarily fitting for a TID, they would benefit from additional study to identify specific alternatives to improve traffic flow, multi-modal improvements and connectivity. The County should coordinate with the Dover/Kent County MPO to complete corridor studies for both Brenford Road and South State Street.

## **Policy Emphasis**

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Create and maintain a transportation system within Kent County that is safe, supports economic development, allows easy access and mobility for people and goods to reach their destination, and serves the public's needs while reinforcing the unique character and quality of life of each community and preserving the region and natural resources.

## Recommendations

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1. Integrate land use with transportation by improving coordination between land use and transportation planning and project development in order to establish and maintain a transportation network that supports anticipated needs within the Growth Zone Overlay District.
2. Coordinate with DeIDOT and the MPO to develop Transportation Improvement Districts, and pursue corridor studies for Brenford Road and South State Street.
3. Support healthy lifestyles, choices and opportunities, as well as reduce air, water and noise pollution by requiring facilities such as sidewalks, transit facilities, multi-use paths and bikeways as part of both transportation and land development projects.
4. Coordinate with DeIDOT, DNREC, and the Dover/Kent County MPO to continue developing the trail system within and among the County parks as well as improve bicycle and pedestrian access to the parks.
5. Continue to apply access management techniques preserving and improving the operating condition of corridors by regulating the number, spacing and design of access points.
6. Preserve and allow for expansion of existing rail facilities for both freight and passenger service, as well as a new intermodal freight yard.
7. Provide aesthetic value by incorporating aesthetic and non-vehicular improvements in transportation investments.
8. Permit a mix of residential and nonresidential development at densities high enough to support bicycle and pedestrian access, as well as transit in the Growth Zone Overlay District, particularly in areas near municipalities.



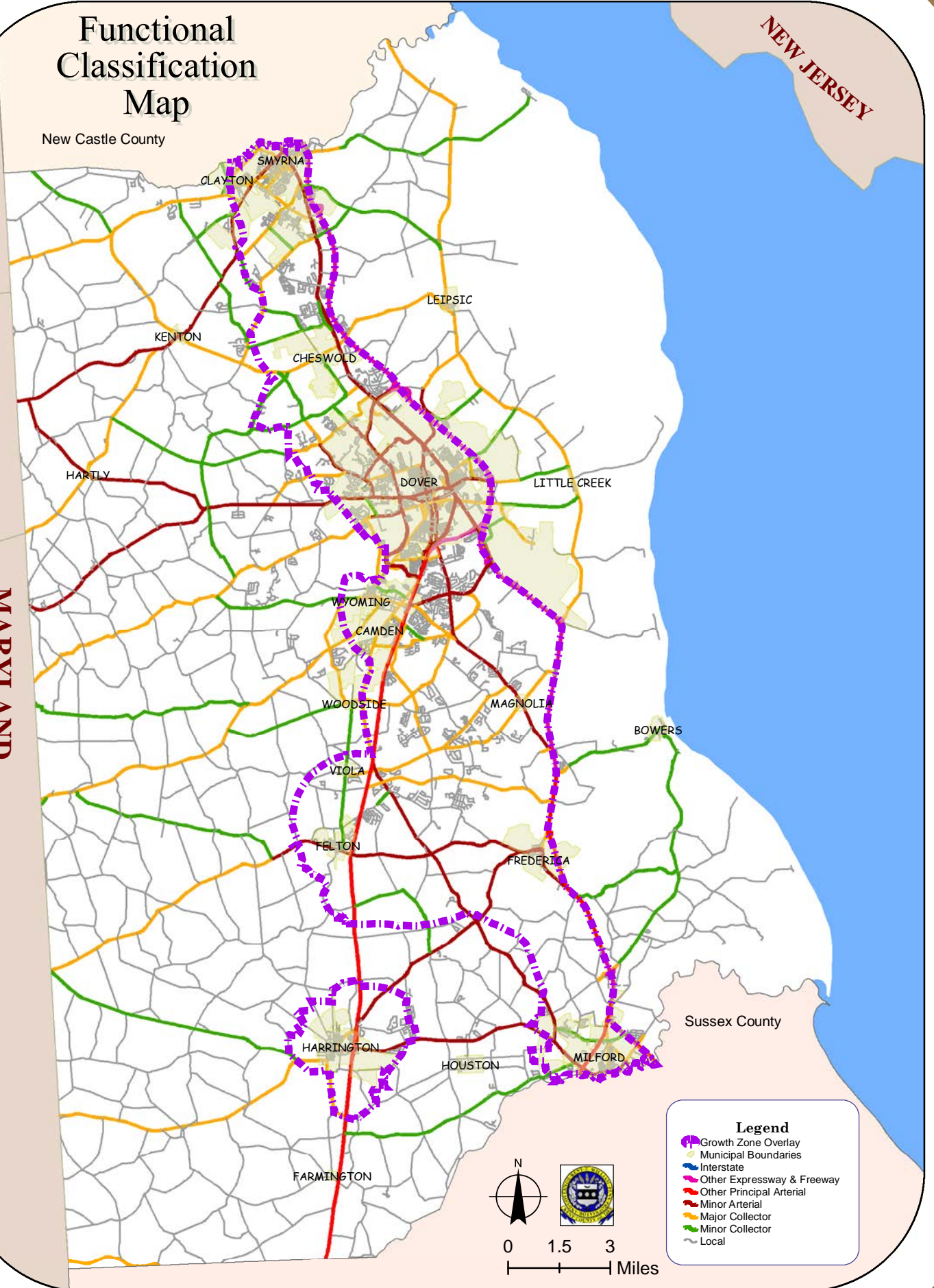


# Functional Classification Map

New Castle County

NEW JERSEY

MARYLAND



**Legend**

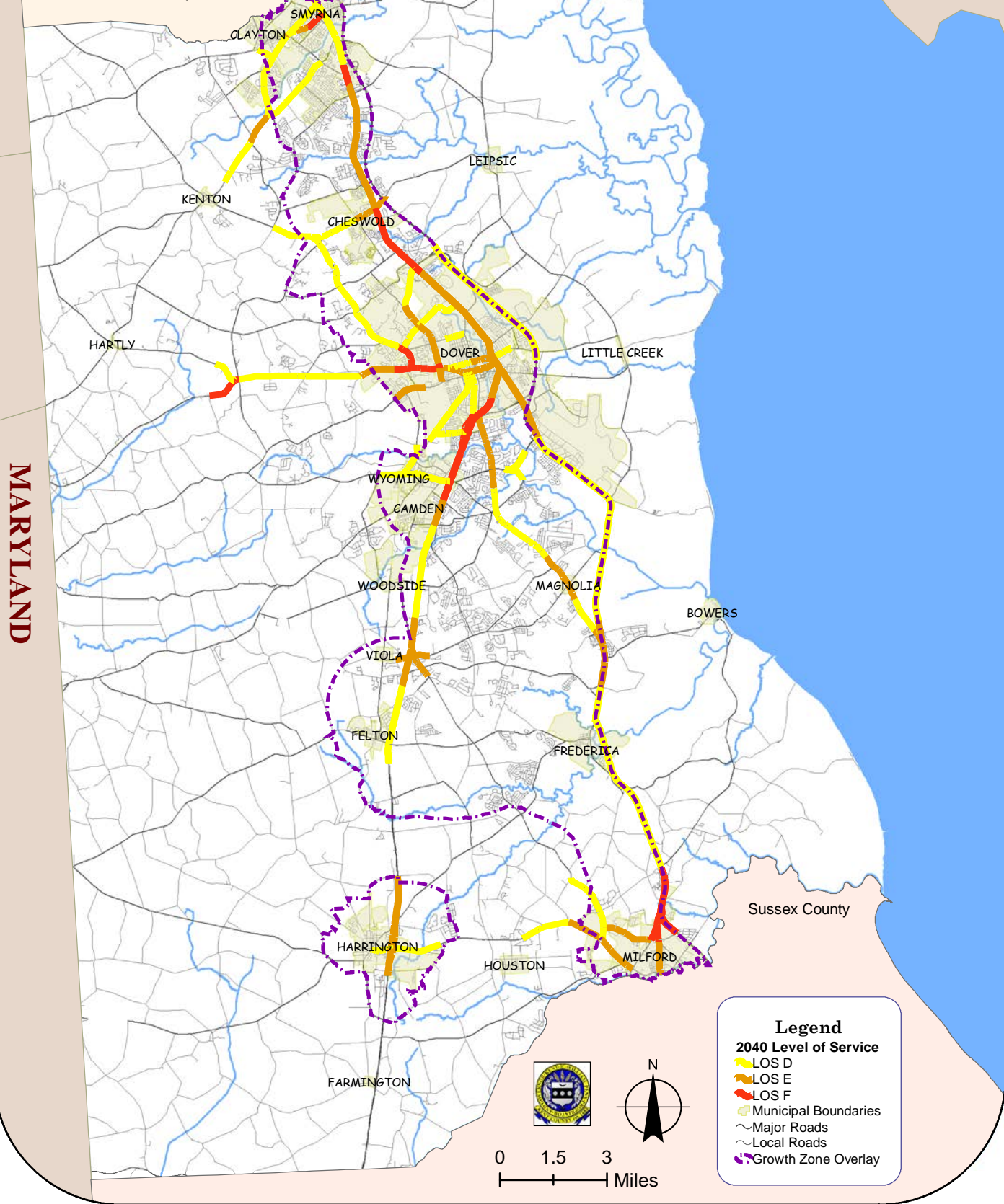
- Growth Zone Overlay
- Municipal Boundaries
- Interstate
- Other Expressway & Freeway
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

N

0 1.5 3  
Miles

# Average Peak Traffic Congestion - Future Estimated Conditions 2040

New Castle County



MARYLAND

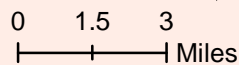
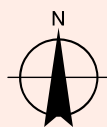
NEW JERSEY

Sussex County

**Legend**

**2040 Level of Service**

- LOS D
- LOS E
- LOS F
- Municipal Boundaries
- Major Roads
- Local Roads
- Growth Zone Overlay



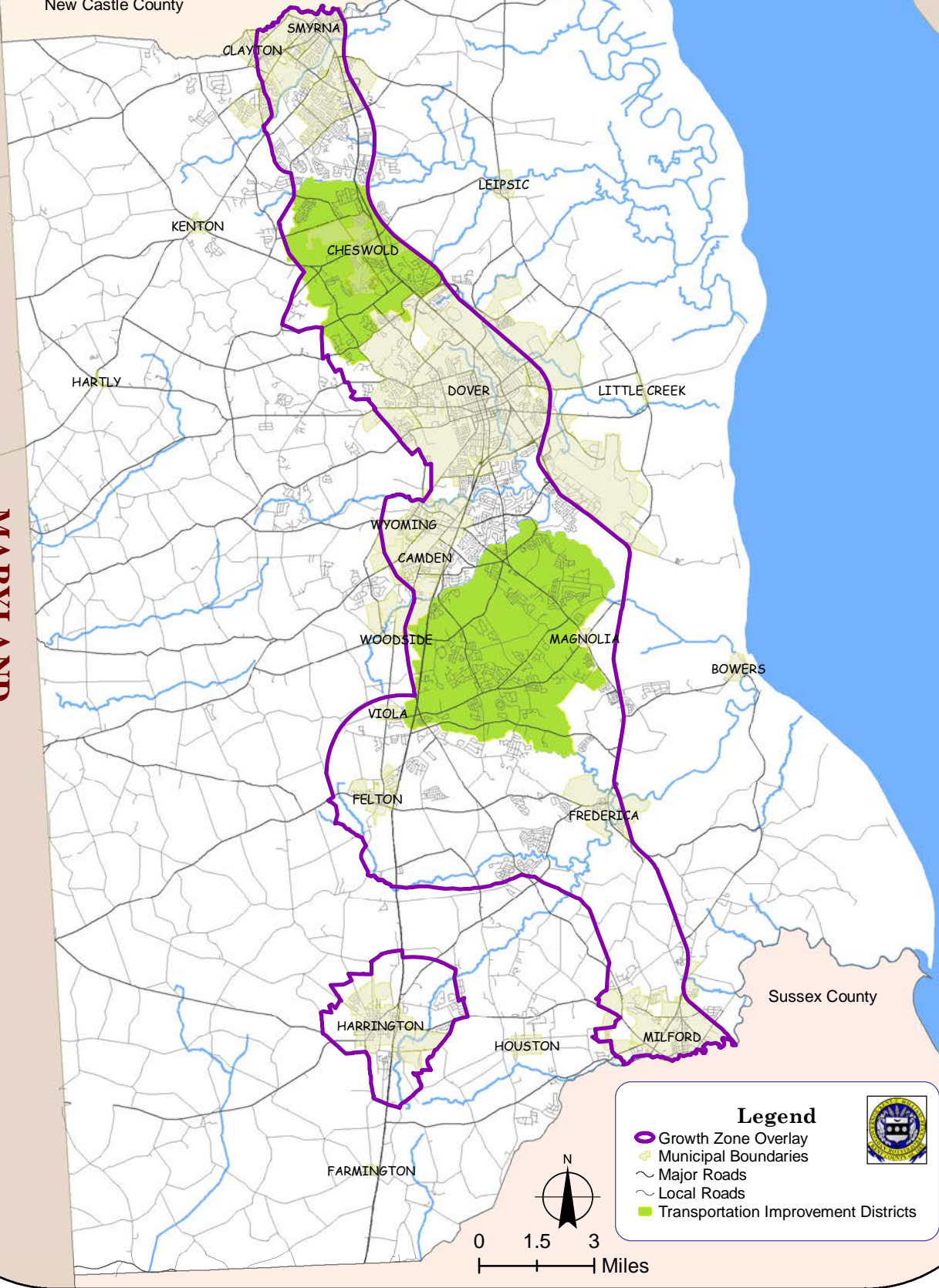


# Transportation Improvement Districts

New Castle County


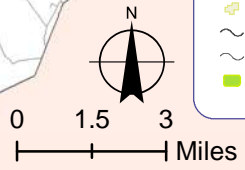
MARYLAND

NEW JERSEY



**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads
- Transportation Improvement Districts

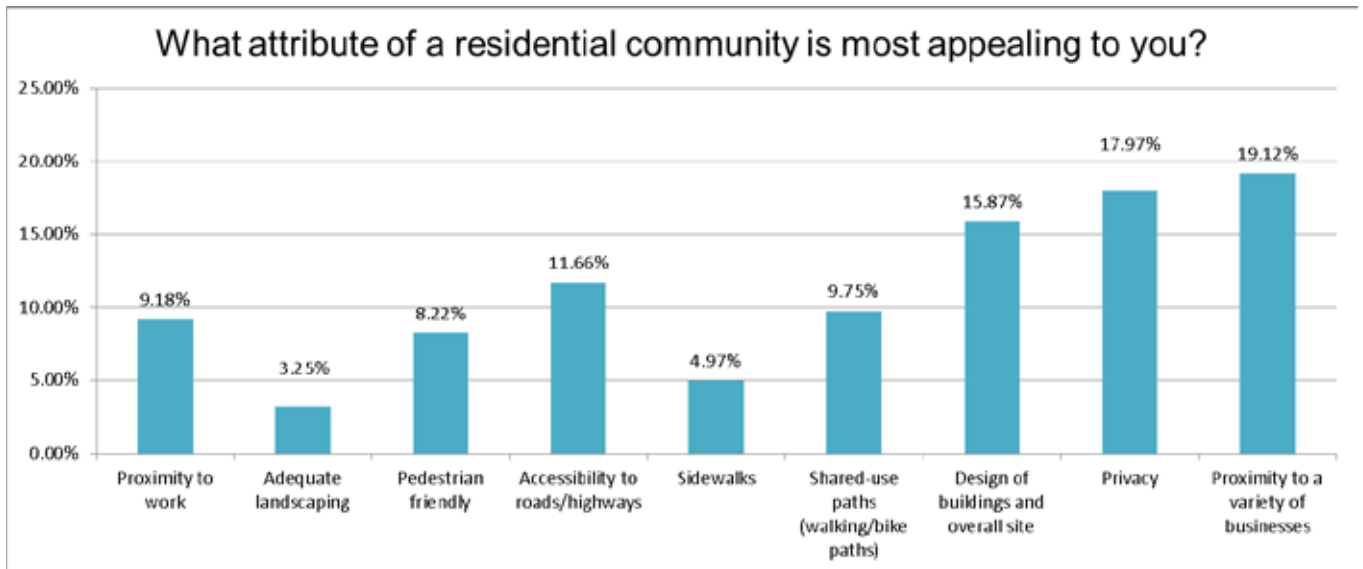
# Chapter 9

## Community Design

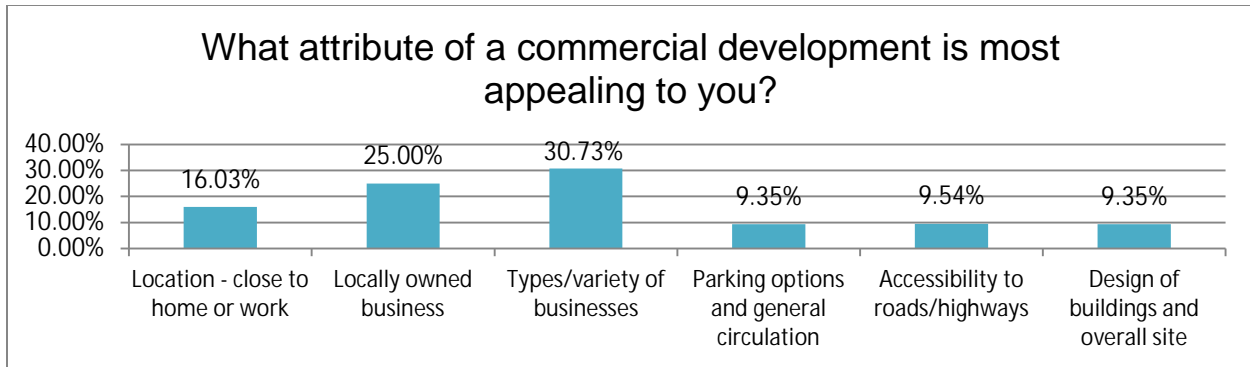


### Overview

Growth and density do not have to result in degraded surroundings. Growth in Kent County should preserve and enhance its beauty, history and livability. From a Comprehensive Plan perspective, this can be achieved by envisioning superior patterns of development, its location, arrangement, and appearance.



Source: Survey 2



*Source: Survey 2*

Public outreach revealed an interest in good design, accessibility, convenience, and variety of choices when discussing community design. Outreach further revealed that 43% of people would rather reside in a residential development with larger lots and more open space, while 57% would rather live in a mixed-use community with smaller lots, landscaped streets, and sidewalks. With regard to nonresidential development, public outreach revealed that 89% of participants preferred development that incorporated higher design standards rather than typical big box retail with large parking lots and minimal landscaping. See Appendix C for survey results.

Poorly designed development has a significant impact on cultural and natural resources in our County. It is important to accommodate new growth, but without losing what makes it special; scenic viewscapes, historic buildings and sites, and the agricultural and rural landscape. In addition, maintaining an attractive community plays an important role in economic development.

## **Policy Emphasis**

The goal of the Community Design Chapter is to support the quality development concepts discussed in the Land Use Chapter through promoting quality design. The focus of this Chapter is to build upon the objective of the Land Use element by developing quality design concepts. These design concepts are centered on the approach that development should be guided by site constraints and respect for the local character. These design concepts include:

- Protect rural character;
- Encourage mixed use development;
- Protect environmental features;
- Achieve improved public health outcomes;
- Protect historic places;
- Respect local character in new construction; and
- Preserve a sense of place.

Subdivision and land development plans should incorporate the design principles discussed below and look to this chapter for guidance at the beginning of the site design process.



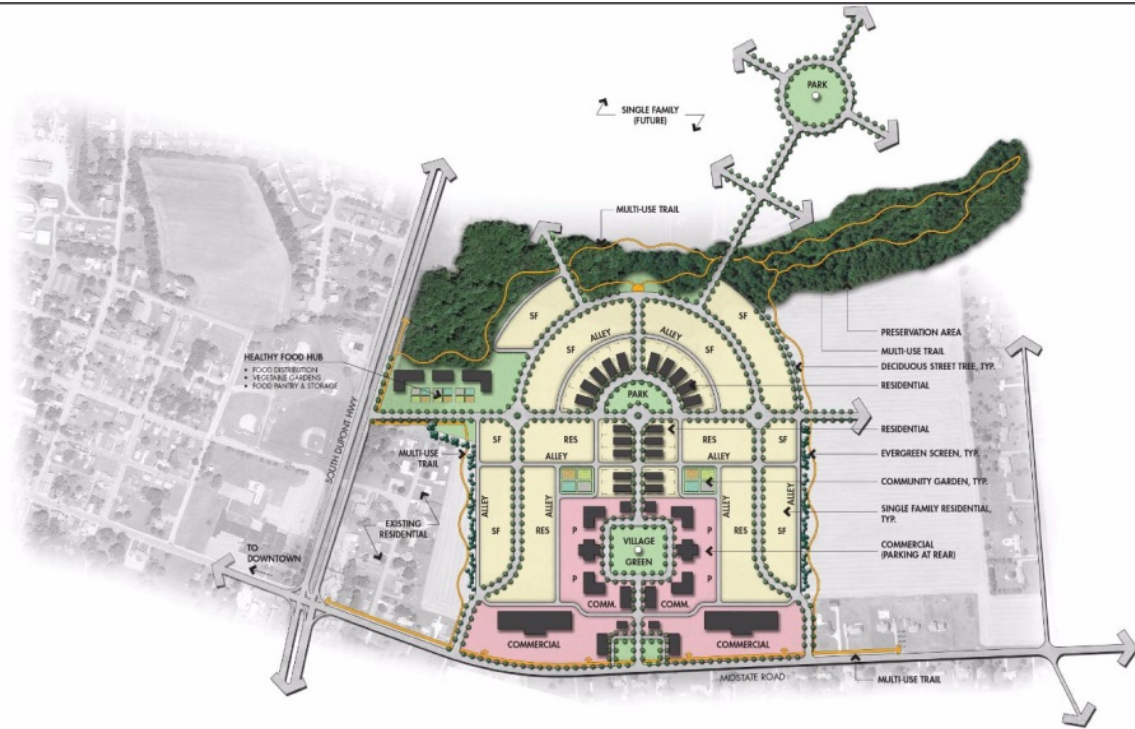
## Benefits of a Successfully Designed Community

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The built environment and the manner in which communities are designed have larger impacts on communities than simply aesthetics. Here is a list of some of the other outcomes from good community design:

- Creates an environment to foster economic development.
- Reduces the cost of infrastructure.
- Provides for additional housing options that are underrepresented.
- Addresses the needs of a diverse community.
- Protects natural resources.
- Reduces stress on the road networks by placing pedestrian and multi-modal options into designs.
- Landscaping, buffering, and other natural features being added into a design makes for more "curbside" appeal and promotes more investment into the area.
- Incorporating amenities into design makes the site more attractive to new residents, potential customers, and to new businesses looking to open nearby.
- Providing non-vehicle amenities not only makes neighborhoods safer but also healthier. See below for the details of a local initiative to make Kent County healthier through design.

The Delaware Plan4Health initiative is an ongoing effort to encourage improvements in land use, design, and policy to combat two key detriments of chronic disease - lack of physical activity and access to nutritional foods. Below are renderings developed through a series of community meetings that represent the design philosophy articulated above: a mix of commercial and residential uses, multi-modal transportation facilities, diverse housing types, and open space preservation.



FELTON EAST- Conceptual Master Plan  
 Kent County, DE December 31, 2016

0 100' 200' 400' 1000'



FELTON EAST- Bird's Eye Perspective  
 Kent County, DE December 31, 2016

Source: Rendering created as part of a Plan4Health conceptual planning exercise to design a healthy community

## Architectural Design Characteristics

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With respect to architectural design, both residential and nonresidential buildings should incorporate the following:

- The principal building facade of proposed buildings should be oriented toward the primary street frontage and in the same direction as the majority of existing buildings on the frontage street. Proposed buildings on corner properties should reflect a public facade on both street frontages.
- In designing new buildings, consideration should be given to the dominant architectural features of existing buildings in the immediate vicinity, as applicable. However, strict adherence to existing architectural styles is not the predominant goal. Existing architecture should be utilized as a frame of reference for proposed architecture, but should not be the sole design template in every instance.
- Large expanses of blank walls are to be avoided. The public facade should incorporate windows and primary doorway entrances along the street frontage, as well as projecting elements such as eaves, cornices, canopies, projecting bays, shadow lines and overhangs.
- Consideration should be given to proportional attributes including overall height-to-width ratios of existing building facades, doors, windows, projecting canopies, and other architectural features found in adjacent existing buildings.
- Facades of new buildings should incorporate but not mimic the sense of lightness or weight exhibited in the architecture of existing buildings on neighboring properties and should incorporate similar proportions of solids (i.e., siding, blank walls, etc.) to voids (i.e., windows, door openings, etc.).
- Durable exterior surface materials complementary with the color, texture, size, and scale of exterior materials reflected on existing buildings in the immediate vicinity should be incorporated.
- The general roof shape, ridge and eave heights, and material characteristics proposed should be visually compatible with these same attributes expressed in existing buildings along the subject street or in the immediate vicinity.
- Variation in exterior architectural materials (siding, roofing) should be required as well as vertical and horizontal relief in buildings (roof lines, eaves, bump outs), variation in house styles/types, and inclusion of front porches, projecting bays, and vestibules.

## Site Design Characteristics

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### Town Areas & Village Areas

- Sidewalks should be provided on both sides of all subdivision streets and multi-modal paths installed along collector and arterial streets. New development should be oriented toward pedestrian and bicycle circulation rather than focus solely on the automobile.



- Street trees should be included in landscape plans to eventually provide a canopy of shade over streets and sidewalks.
- Overly wide residential streets and intersections should be avoided to discourage speeding and provide pedestrian safety.
- Streets should be on a grid system where feasible, and connectivity within and among neighborhoods is essential. In addition, connectivity (both vehicular and pedestrian) between residential and nearby nonresidential uses should be provided.
- Wherever practical, parking should be located to the rear or side of buildings, so front yards can be landscaped and serve essentially as privately owned community space. Ideally, parking and garages would be placed to the rear of lots, with access using alleys in small lot, higher density neighborhoods. This design option avoids conflicts between sidewalks and vehicles backing into the street, and allows the entire curbside to be available for on-street parking. In cases where alleys are not practical, garages should be side-loaded or set back from the front of the house to diminish their prominence in the streetscape.
- Reduced bulk and area requirements should be established to permit buildings to be placed close to the street with front or side porches to encourage interaction among neighbors. In addition, reduced area requirements would permit smaller single-family detached dwellings in lieu of attached housing.

- Mixed-use development should be concentrated in areas contiguous to existing population centers and public facilities. The most intense uses should be located adjacent to principal arterial and major collectors.
- Buildings that have a combination of commercial and residential uses are encouraged.
- Structures of historical significance should be protected to the extent possible.
- The rear of houses should not face public roads, or should be buffered to effectively screen the houses from the road.
- Intentional public gathering opportunities through elements such as planned open space including medium sized parks, plazas, courtyards, and squares or widened sidewalks should be incorporated.
- Site design should respect and incorporate the site's natural features, consider local vernacular, and seek to be compatible with the surrounding landscape.

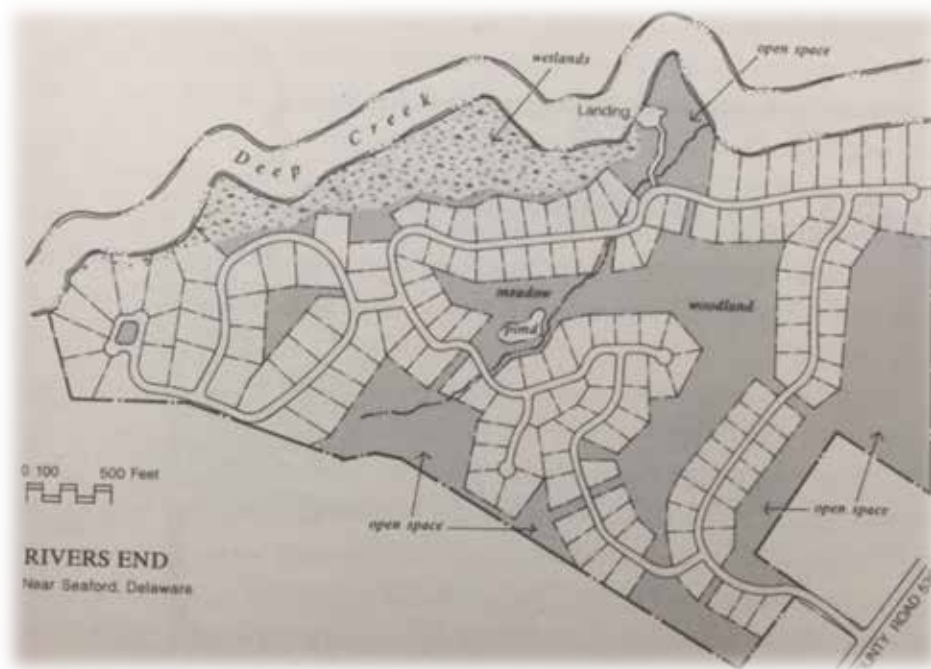




## Rural Areas

In general, development in the rural areas of the Growth Zone Overlay District and outside of the Growth Zone Overlay District should incorporate the following:

- Development should respect and protect sensitive and critical resource areas by identifying them as open space before designing roads and lots;
- Development should be set back from roads with a substantial planted and spatial buffer that screens development from the road and preserves the rural viewscape;
- Cluster design is appropriate in order to preserve open space;
- Design should consider local vernacular and seek to be compatible with the rural landscape; and
- Existing woodlands should be preserved.



## Nonresidential

- Parking for nonresidential uses should be placed behind the principal structure to the extent possible. Off-street parking areas and surface and parking structures should be located to the side and rear of buildings. For uses that have parking adjacent to a road, it should be well set back with a substantial buffer between the structures and the road.
- Landscaping should be integrated into the building design concept.
- Architectural or urban design elements which link adjacent structures together, such as plazas, walkways, colonnades, or similar features should be utilized.
- Buildings that have a combination of commercial, office and residential uses should be encouraged.
- Opportunity for intentional public gathering should be provided through elements such as planned open space, including medium sized parks, plazas, courtyards, and squares or widened sidewalks.
- The corridor elevation of a building should contain architectural elements traditionally associated with the front of a building. Blank walls without functioning windows should be avoided along the corridor and windows should be incorporated into the overall design concept of the corridor elevation. In addition, the corridor elevation should contain primary entrance doors and a primary entrance feature such as a porch, awning, entrance walk, or similar feature.
- Architectural relief, such as vertical and horizontal off-sets in exterior wall elevations, band courses, lintels and sill courses, cornices and the like should be used to create shadow lines.
- Elements such as service bays, loading docks and platforms, rooftop utilities, satellite dishes, dumpsters, and storage areas should be screened from view.
- Adjacent commercial properties should have a common entrance and be permitted to share parking facilities.
- All shopping centers should be designed or screened with vegetation to avoid negative visual impacts on the surrounding land use.
- Chain stores, fast-food restaurants, gas stations and convenience stores, and big-box retailers must design buildings that match the character of the area.
- Buildings should be between one and five floors in height, and offer provisions for multifamily residential development above businesses. Building display windows and entries should be oriented toward sidewalks.
- Where feasible, commercial areas should be incorporated into planned and existing residential development.

- Vehicular and pedestrian connections to other commercial areas and residential areas should be provided. Pedestrian-friendly features, such as sidewalks, indirect lighting and landscaping are essential.
- Commercial areas over 25,000 square feet should use red or light brick, simulated brick, grey sandstone, native stone, cultured stone or wood on at least 30 percent of the main façade. Earth tones should be used for facades instead of jarring colors. Monotonous building facades should be broken up with interesting roof lines and architectural details.



*Existing Nonresidential Design*



*Proposed Nonresidential Design*

## Recommendations

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Revise the Zoning and Subdivision & Land Development Ordinances to incorporate performance standards addressing site design and architectural elements as described above rather than rely exclusively on prescriptive requirements.

1. Incorporate an architectural review requirement in the Regional Planning Commission review and approval process including the submission of proposed building elevations.
2. Revise the Zoning and Subdivision & Land Development ordinances to expand the existing Transfer of Development Rights development design criteria to other development types within the County.
3. Chain stores, fast-food restaurants, gas stations and convenience stores, and big-box retailers must design buildings that match the character of the area.
4. Revise the Cluster Development standards to include additional specific standards for natural resource protection, buffering, and preservation of viewscapes, as well as ensure that proposed cluster developments do not result in any greater impact than a conventional development.
5. Revise the sign standards within the Zoning Ordinance to ensure signage is compatible with the area and remains unobtrusive while still conveying a message.
6. Review and revise the County's parking requirements to ensure that sufficient but not excessive parking is provided for commercial sites, and permit flexibility in design.
7. Require the submission of pattern books in conjunction with higher density and mixed use major subdivision applications within the Growth Zone Overlay District.
8. Ensure that subdivision and street design meet the needs of emergency vehicles while at the same time respecting the pedestrian scale of development.



# Chapter 10

## Intergovernmental Coordination



### Overview

Planning, whether land use, environmental, or infrastructure, is most successful when contemplated and implemented on a regional scale. Particularly in Kent County where jurisdiction over the components of effective planning is shared among or split between several agencies, coordination and cooperation are essential. In addition, the County has articulated a direction for growth that guides development toward existing municipalities necessitating coordination among local governments to ensure complementary development of objectives and standards.

Throughout the comprehensive planning process the County has attempted to include as many stakeholders as possible, including those from state agencies such as the Office of State Planning Coordination, the Department of Transportation, the Housing Authority, the Department of Agriculture, and the Department of Natural Resources and Environmental Control. These agencies share a similar mission as the County but have in many cases permitting authority while the County has land use authority. To not coordinate our efforts results in development that cannot be supported by infrastructure, development patterns inconsistent with the preservation goals of DNREC and the Department of Agriculture, or an unbalanced mix of housing types contrary to the mission of the Housing Authority.

In addition, the County has been participating in various local comprehensive planning efforts and invited municipalities to participate in ours. It is essential that the County's planning and development work support rather than compete with local efforts. The County's land use strategies and overall policies are designed to complement those of municipalities. Ultimately successful towns are essential for the long term economic health of the County.



## Current Efforts

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With respect to coordination with municipal governments, the County has existing agreements with jurisdictions to administer the building permitting and inspection functions. The County has also assumed the responsibility for enforcement of floodplain ordinances for a number of towns, and in the case of Viola and Little Creek, has agreed to administer the towns' zoning and land development ordinances in addition to the Building Code. These agreements are particularly important because the majority of municipalities within the County are not able to employ professional Planners or building inspectors whereas the County has already made the investment in staff and equipment to serve such functions. As the smaller municipalities experience increased development pressure, the County should consider entering into additional agreements for administration as well as drafting or review of ordinances at a municipality's request. There are also opportunities to use the County's GIS capabilities to support smaller towns.

With regard to development review, the County provides notice of application and site plan information to nearby towns, fire companies, and school districts for each land use application subject to Regional Planning Commission review. All comments are incorporated into the staff's recommendation and made part of the record. Both the Commission and the Levy Court welcome and encourage municipal participation in the plan review process.

Kent County has consistently worked to improve coordination with various State agencies. This process has been facilitated by the Office of State Planning Coordination and the County is a regular participant in the State's Preliminary Land Use Service (PLUS) process for subdivision and land development. The County regularly solicits comments from such agencies as DeIDOT, the Dover/Kent County Metropolitan Planning Organization, various divisions of DNREC, the Kent Conservation District, and the State Fire Marshall, and County Planning staff has developed very good working relationships with these agencies. In addition, the County has been working very closely with DeIDOT in the implementation of the Adequate Public Facilities Ordinance – Roads and continues to work with the Conservation District in developing improved methods of administering stormwater regulations and standards. As the County continues to take a more active role in infrastructure planning in support of land use planning, cultivating relationships with the agencies permitting and in some cases funding infrastructure must be a priority.



With respect to the Comprehensive Plan in particular, several State agencies and nongovernmental organizations have been invited to participate in developing the Plan. In addition, the County provided the first draft of the Plan to each of the municipalities as well as Sussex County and New Castle County. Staff met individually with a number of municipalities in order to ensure the planning objectives in the

various municipal plans and the County Plan complement each other. Many of the Town Areas designated in the Land Use Chapter overlay annexation areas or areas of concern identified in municipal comprehensive plans as well as the northern Transportation Improvement District identified in the Transportation Chapter. Those areas in particular are an opportunity to coordinate among jurisdictions on sub area plans.

With respect to the two counties, both generally identify the areas adjacent to Kent County as rural and/or low density which is in keeping with this Plan. The exception is in the Milford areas where Sussex County plans for additional development. New Castle County, on the other hand, does not appear to designate the areas near Smyrna or Clayton for additional development.

## **State Strategies for Policies and Spending**

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While Delaware local governments have authority over land use planning, the state government is responsible for much of the infrastructure necessary to support development. The Delaware Strategies for Policies and Spending is updated every five years and adopted by the Governor in an effort to coordinate land use planning, development activity, and state investment in infrastructure. The associated map is developed using both existing local land use plans and analysis of development trends. As shown on Map 10A, four investment levels are identified:

- Levels 1–3 are the areas wherein State policies will support growth and economic development activities, with Levels 1 and 2 being the primary focus. In these areas, the State would like to see local government land-use policies that promote higher densities and mixed-use type development in appropriate areas such that complete communities can be developed—places where people could live, play, work, and shop.
- Level 4 is where State policies will support agriculture, protection of natural resources, and open-space activities including the promotion of agriculture industry support activities. In these areas, the State would like to see local government land-use policies that are rural in nature and that would support agribusiness activities where appropriate in addition to natural resource protection and restoration.
- Out-of-Play Areas are lands that are not available for development or for redevelopment. These include publicly owned lands, private conservation lands, lands for which serious legal constraints on development are identified, and lands in some form of permanent open-space protection (such as Agriculture Preservation or open-space conservation easements).<sup>1</sup>

Areas within Kent County's Growth Zone Overlay District are identified as levels 1-3 while the area outside are identified as level 4. As reflected in the Economic Development and Land Use Chapters, there are some areas outside of the Growth Zone identified for future industrial development (near Harrington and Clayton). Those areas have been identified because of their access to infrastructure and

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<sup>1</sup> 2015 Delaware Strategies for State Policies and Spending (p. 19)

proximity to existing industrial development. Both towns have been consulted and the limits of the industrial areas reduced to better complement the towns' comprehensive plans.

## **Policy Emphasis**

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Further facilitate intergovernmental coordination in order to ensure continuity in the planning process across jurisdictional boundaries, to improve the quality of life of the citizens of Kent County, promote orderly growth, and create sustainable economic development within the County by:

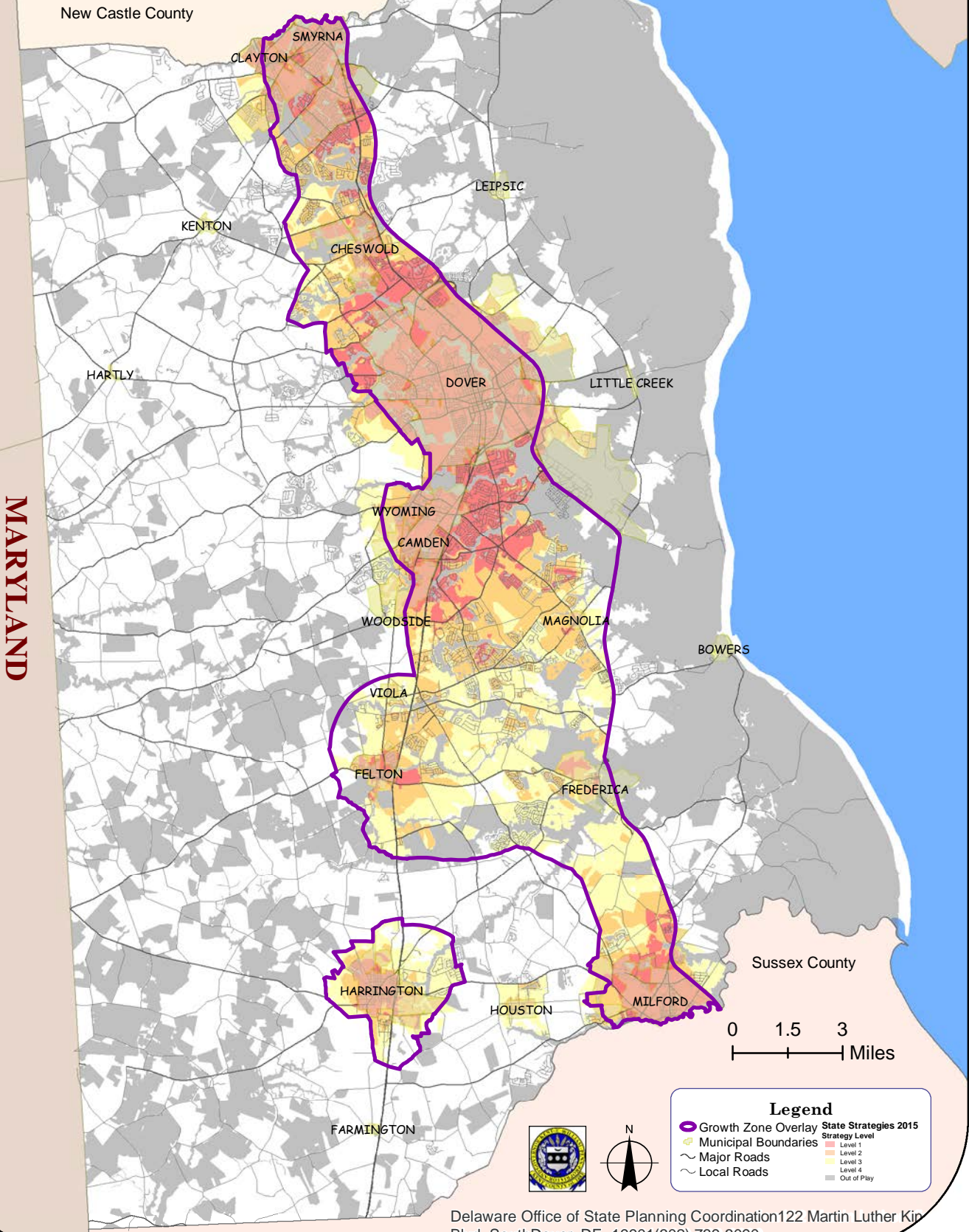
1. Improving coordination at all governmental levels so that obstacles to development may be minimized or avoided and quality of life for County citizens may be maximized; and
2. Increasing efforts to coordinate with other governmental and nongovernmental agencies to simplify and increase the efficiency of land use project review.

## **Recommendations**

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1. Continue providing permitting and inspection services as well as zoning and subdivision ordinance administration as requested by municipalities.
2. Serve as a resource and participate in municipal comprehensive planning efforts.
3. The County supports municipal annexation that is consistent with the municipality's certified comprehensive plan when the municipality has the ability to provide public services. In cases where a property owner intends to develop property that is within the municipal annexation area and contiguous to the municipality, the County should refer that property owner to the municipality.
4. Coordinate with the Department of Transportation, Dover/Kent MPO, towns, and community members in the development of Transportation Improvement Districts and master planning efforts.
5. Continue coordination with the Department of Transportation and Dover/Kent County MPO in administration of the APFO – Roads as well as implementation of Transportation Improvement Districts.
6. Continue coordination with applicable municipalities, state agencies, and nongovernmental organizations as the recommendations throughout the Comprehensive Plan are implemented particularly as the Sub-Area/Transportation Improvement District plans are developed.

# Strategies for State Policy and Spending



MARYLAND

NEW JERSEY

New Castle County

Sussex County

0 1.5 3 Miles

**Legend**

- Growth Zone Overlay
- Municipal Boundaries
- Major Roads
- Local Roads

**State Strategies 2015**

- Level 1
- Level 2
- Level 3
- Level 4
- Out of Play



Delaware Office of State Planning Coordination 122 Martin Luther King Blvd, SouthDover, DE 19901(302) 739-3090



# Chapter 11

## Implementation Strategy

Throughout the Comprehensive Plan, specific recommendations for implementing its policies and guidelines are detailed. A Comprehensive Plan is only a useful tool if it is implemented. Some of the recommendations are specific ordinance revisions or planning efforts while others are more continuous in nature. Below is a compilation of the implementation actions of the Plan as well as an estimated time-line for completion. Items identified for short term completion are anticipated within the first 18 to 24 months following adoption of the Plan. Those identified as intermediate should follow in the next 18 to 24 months. The timelines established are estimates and project priorities as well as completion dates may change depending upon available resources.

Recommendation	Relevant Plan Chapter	Time-line for Completion
Create economic centers of business and commerce around existing infrastructure and identify areas designated for industrial and business parks, large scale commercial uses, and neighborhood commercial uses. The areas designated for commercial and industrial development would meet the existing requirements for rezoning provided the infrastructure is planned for or in place.	2, 7	Short term
Modify an existing zoning district or create a new zoning district to enable development of Employment Centers. Zoning and land development standards should emphasize the use of master planning for the designated areas.	2, 7	Short term
Establish an administrative site plan review process to encourage adaptive reuse of existing developed sites	2, 7	Short term
Exempt nonresidential development application from the Adequate Public Facilities Ordinance	2, 7	Short term
Develop alternatives for expedited and/or administrative review for projects resulting in substantial economic impact (e.g. jobs creates, median wage, limited impact on infrastructure)	2, 7	Short term



Examine altering the conditional use process to require review only by the Regional Planning Commission	2, 7	Short term
Promote infill projects & development of mixed-use centers in targeted locations; Promote more compact patterns of development and mixed use development to reduce travel demand and to encourage the expansion of the public transit system	2, 3, 5, 7, 8	Ongoing
Create a site plan exemption for small expansions of existing businesses	2	Short term
Review and update industrial, commercial, and office uses in each zoning district	2, 7	Short term
Further support creation of home-based businesses with no discernable impact on neighboring properties	2	Intermediate
Provide density incentives within targeted locations within the Growth Zone, especially within the areas identified for Transportation Improvement District Plan	2, 5, 7, 8	Intermediate
Continue investment in the Downtown Development District grant program	2, 10	Ongoing
Explore opportunities to partner with utilities providing high speed broadband in an effort to expand access throughout the County	2, 4	Short term/Intermediate
Using GIS web-based tools, update the portfolios for each of the identified industrial areas including information about existing and planned infrastructure, access to transportation (rail and/or highway) surrounding land uses, and applicable zoning and land development requirements for easy distribution to interested businesses	2	Short term
Continue development of the Emerging Enterprise Development Center and expand partnerships to offer support and training services to tenants	2	Ongoing
Continue to protect and promote agriculture and diversity in agriculture within Kent County including coordination with the Department of Agriculture to develop and promote farm markets and other agri-business opportunities in the County. Continue pursuing opportunities in the Food Innovation District program	2, 5, 7	Ongoing

Develop a marketing strategy in partnership with the towns as appropriate to effectively advertise the benefits of locating in Kent County	2, 10	Intermediate
Understanding that business retention is a fundamental component of economic development in Kent County, pursue opportunities to support existing business (both large and small scale) and encourage growth. Develop a comprehensive business retention, expansion, and attraction incentive program that would include financial, regulatory, review, and zoning incentives that target high wage manufacturing and technology jobs as well as the agricultural industry including the continuance of Chapter 191, Article VI, <i>Real Estate Tax Exemption for Industries</i> , of the Kent County Code	2	Intermediate
Continue the positive working relationship between the County and the Dover Air Force Base and maintain zoning requirements that protect the base from incompatible land uses	2, 10	Ongoing
Participate in the City of Dover's taskforce established to address homelessness	3, 10	Ongoing
Focus the provision of affordable housing in areas where reasonable access to goods and services exists or is planned with an emphasis on multi-modal and transit options by identifying areas and sites where a special effort will be made through rezoning, incentives, or other means to provide affordable housing	2, 3, 7, 8	Ongoing
Maintain the partnership with the Diamond State Community Land Trust to ensure long-term affordable homeownership opportunities and preserve investment permanently as units remain affordable from one buyer to another over time	3	Ongoing
Establish an affordable housing trust fund potentially funded through a percentage of the "in-lieu" fees paid by developers as part of an inclusionary zoning ordinance or through a building permit surcharge	3, 7	Long term
Explore the creation of a land bank potentially in partnership with one or more municipalities to offset the impacts of vacant and blighted properties and provide affordable housing opportunities	2, 3, 7, 10	Long term

Continue contributions to housing-related nonprofits and the Delaware State Housing Authority as the budget permits	3	Ongoing
Coordinate with Housing Alliance Delaware to convene a Kent Housing Committee consisting of housing advocates, builders, architects, and individuals with knowledge regarding underwriting housing financing and available funding sources, to advise and assist in implementing the recommendations of this chapter, as well as develop additional incentives that encourage affordable housing	2, 3, 7, 10	Intermediate
Review all County impact fees and determine the effect of reducing or waiving them for developers and nonprofits seeking to build affordable housing	3	Intermediate
Work with community associations to identify neighborhoods that would benefit from concentrated Property Maintenance Code enforcement and seek state and federal funds to support the effort	3	Ongoing
Identify opportunities for staff, appointed and elected officials to attend Fair Housing training	3	Ongoing
Review the Zoning and Subdivision & Land Development Ordinances to identify barriers to both diverse and affordable housing options	2, 3, 7, 8	Short term
Participate in the state's Assessment of Fair Housing and ensure that the County is fulfilling its obligation to affirmatively further fair housing	3, 10	Ongoing
The County, School Districts, and the Department of Education should work together in identifying future school sites as part of a School Facilities Master Plan in recognition of areas where development is encouraged. Caesar Rodney, Smyrna, and Lake Forest are the districts in the greatest need of site location. Schools should be located near population concentrations to shorten bus trips and encourage community investment in that facility	4	Ongoing
Recognizing that schools are more than educational institutions and also serve as community spaces, Kent County and the School Districts should establish agreements for use of school facilities by the public for outdoor recreation fields and playgrounds, interior gym time, or community meeting spaces. Increased cooperation can improve the efficient use of limited recreation areas.	4	Ongoing

Review the School Surcharge and Adequate Public Facility requirements to ensure goals are met and revise as warranted	4	Ongoing
Promote investment by students of the local colleges to connect with the local community. These students could see job opportunities, mentors, activities, or housing choices they may not have found otherwise and could keep them in the County after graduation	4	Ongoing
Review and update the Parks and Recreation Strategic Plan	4	Intermediate
Identify additional parkland area in locations of greatest need. These include southwest of Smyrna, northwest of Dover, the "Heart of Delaware", and Marydel; Build a capital fund to enable land acquisition and development of additional parks.	4	Intermediate
Provide path and trail linkages between parks and residential communities to minimize automobile usage and encourage increased activity	4, 7, 8	Ongoing
Coordinate with other agencies to continue the St. Jones Greenway Trail	4	Ongoing
Explore opportunities to develop a trail connecting the Hunn Nature Park, Lebanon Landing, and Tidbury Creek Park properties	4	Long term
Support State efforts to create a trail along the disused rail line running from Smyrna/Clayton through Marydel to Maryland in order to provide a recreation opportunity in the western portion of the County	4	Long term
Expand options and facilities in existing parks to support handicap accessibility and inclusion for all persons	4	Ongoing
To ensure that new libraries are accessible and located near existing resources, any new facility should be located within the Growth Zone Overlay District; Continue use of the bookmobile and explore partnerships to expand access to the library system	4, 7	Ongoing
Assess if the current library tax is meeting the needs of the facilities and residents	4	Ongoing
Continue coordinating with the Parks & Recreation Division to create programming for youth and adults in the community	4	Ongoing

Leverage technology to provide seamless access	4	Ongoing
Update the Public Safety Strategic Plan	4	Intermediate
Monitor the need for additional paramedic units specifically in the Smyrna, Dover, and Magnolia areas	4	Ongoing
Design and implement a Public Safety check-in program for elderly and possibly disabled residents. Such a program could entail regular calls to registered residents or a schedule for participants to contact the call center to check in	4	Intermediate
Evaluate the existing Adequate Public Facilities Ordinance for effectiveness and investigate the use of a building permit surcharge to capture development not impacted by the APFO	4	Ongoing
<p>Pursue discussions with potential service provider partners and identify potential funding sources to support an expanded community EMS mission including:</p> <ul style="list-style-type: none"> <li>Increasing access to care in underserved areas;</li> <li>Providing telephone advice to 9-1-1 callers instead of resource dispatch;</li> <li>Using community paramedics or other specially trained EMS practitioners for management of high healthcare system utilizers or patients at risk for hospital admission or readmission, chronic disease management, preventive care or post-discharge follow-up visits; and</li> <li>Transporting or referring patients to a broad spectrum of appropriate care, not limited to hospital emergency departments.</li> </ul>	4	Intermediate
Incentivize and promote development inside the Growth Zone Overlay District and locate paramedic stations in areas of higher demand in order to manage response times	4	Ongoing
Work with the State of Delaware and the Public Service Commission to examine methods of planning for water service expansion through regional facilities to ensure public water is available to areas identified for development and infrastructure is not duplicated	4	Ongoing



Work with DNREC to identify specific uses such as borrow pits that could negatively impact public water supplies and develop relevant restrictions specific to the uses	4	Intermediate
Coordinate with the Department of Natural Resources and Environmental Control to review development and permitting standards including infiltration practices and impervious cover limitations to prevent the depletion of groundwater resources	4	Intermediate
Continue to coordinate site plan approval for water treatment and storage facilities with site plan approval for subdivision and land development	4	Ongoing
Recognizing that a public agency is the most efficient, effective, and environmentally sensitive method of treating and disposing of wastewater, continue to provide efficient and cost effective sanitary sewer service in the existing Sewer District and to new users through expansion of the Sewer District in areas identified for development	4	Ongoing
Provide sewer service within the Growth Zone Overlay District that may facilitate infill development within existing developed areas and the redevelopment of brownfields, abandoned and underutilized properties	4, 7	Ongoing
Pursue an ongoing program of enhancements to the County's Geographic Information System	4, 7, 10	Ongoing
Continue efforts to improve the efficiency of the administration and operation of the sanitary sewer system in order to minimize the expense to the sewer customers	4	Ongoing
Maintain and continually upgrade the existing sanitary sewer conveyance system of pipes, manholes, pump stations, and the wastewater treatment facility to help ensure trouble-free operation including a funding strategy implementing a routine infrastructure replacement program while exploring new technologies and techniques of wastewater treatment, disposal, and re-use and maintaining superior environmental standards	4	Ongoing
Improve the efficiency of the existing sewer system by increasing the capacity through reduction of infiltration and inflow of stormwater and illicit discharges into the sewer network	4	Ongoing

Continue and expand remediation programs to assist communities with high percentages of failing septic systems to connect to the public sewer system	4	Ongoing
Limit expansions of the Sanitary Sewer District system to areas adjacent to the existing district to ensure an orderly growth of the system	4, 7	Ongoing
Continue coordination efforts with State agencies (Kent Conservation District and DNREC) to limit and manage stormwater runoff in the most efficient and effective manner while respecting natural features and constraints	4, 10	Ongoing
Continue participation in the Stormwater Regulatory Advisory Committee and Clean Water Council to develop a watershed approach to stormwater that assesses design in context of broader stormwater conveyance limitations within the watershed and better identifies and addresses the effect any land development has on the community by making provisions for incorporating future watershed studies and/or TMDL requirements	4, 10	Ongoing
Continue to expand participation in the Stormwater Maintenance District Program	4	Ongoing
Encourage the use of Low Impact Design particularly for projects within the more rural areas of the Growth Zone and areas outside of the Growth Zone	4, 5, 7	Intermediate
Establish a permitting process for land grading, similar to the building permit process, to enable efficient and effective inspection and enforcement action		Intermediate
Facilitate the dissemination of high speed internet service to as many residential properties as possible and, more importantly, all CAIs. The County can help this effort by allowing the base infrastructure to be placed on or through government properties  To allow existing businesses to thrive and to attract new businesses, the County must invest in the ability to provide the best most reliable broadband internet service. Partnering with the private sector and other government agencies to support and expand fiber optic internet services will be crucial to the modernization and growth of the County	2, 4, 10	Intermediate/Ongoing

Require that all utility easements required for the subdivision be shown on the record plan fully dimensioned and identified as to which utility is served by the easement. All utility companies shall be contacted by the applicant concerning the need or desire for said utility and approvals of utility locations provided from each utility. If a particular service will not be installed at the time of construction, but is planned for the future, then adequate easements shall be provided on the record plan with the written approval of the easement locations from the utility company providing service	4	Ongoing
Require all electrical, telephone, water, sewer, gas, or other utilities requiring a centralized facility and providing services to multiple development parcels either within or outside the subdivision be provided on separate, private parcels owned in fee simple or by easement by the proprietary utility company and not included within the open space calculation for that or any community so served	4	Ongoing
Maintain existing environmental standards (wetland protection, floodplain standards, stream buffers, impervious cover limitations) to protect people, property, and the environment	5, 7	Ongoing
Carefully weigh the costs and benefits of infrastructure investment in areas anticipated to be inundated by sea level rise	4, 5	Ongoing
Increase the width of non-disturbance areas surrounding wetlands, waterbodies and conveyance systems, including tax ditches, to an average of 100 feet for 80% of the area, to be buffered with a minimum width buffer of 50 feet and, if previously cleared of vegetation, require such riparian buffer be replanted with native species prevalent in riparian areas. Where the slope along a waterbody exceeds 15%, the buffer measurement should commence from the top of bank. Required buffers should be designated as un-subdivided open space	5, 7	Intermediate
Utilize the passive open space provisions of the Subdivision and Land Development ordinance to require re-introduction of wildlife habitats and upland forests	5, 7	Ongoing

Help to reduce individual automobile trips through the promotion of shared or high occupancy vehicles. This could be done through the redesign of parking requirements for commercial uses and the continued promotion of mass transit bus stops throughout the County	5, 7, 8	Intermediate
Seek to reduce ozone emissions by directing growth into areas that are immediately adjacent to employment and services	5, 7, 8	Ongoing
Explore opportunities to incorporate alternative fuel vehicles into the County's fleet of vehicles used for various field operations	5	Intermediate
Review existing ordinances for efficacy in meeting Federally required Total Maximum Daily Load (TMDL) requirements and make changes where appropriate	5	Intermediate
Utilize the Wildlife Action Plan, Green Infrastructure, and Source Water Protection maps produced by DNREC in conjunction with Land Evaluation Site Assessment (LESA) scores in ranking properties for County agricultural land preservation funding	5	Ongoing
Establish incentives such as reduction of impact fees, building permit fees, or density bonuses for environmentally sensitive design practices such as Leadership in Energy and Environmental Design (LEED) certification, Energy Star, or green technology best management practices	5	Intermediate
Continue dedicating funds toward the Agricultural Land Preservation Program as finances permit	2, 5, 7	Ongoing
Revise regulations for cluster subdivisions to ensure enough critical mass of open land for continued agriculture use and limit the intrusion of suburban development into vital agricultural areas	5, 7	Intermediate
Continue developing the Food Innovation District program	2, 5	Ongoing
Coordinate with the Delaware Department of Agriculture and the Kent County Farm Bureau to develop an outreach and education program to better inform neighbors to agriculture about the realities of living near active farming (e.g. noise, dust, slow moving traffic).	5	Ongoing

Review existing zoning requirements for poultry houses and consider including buffering and ventilation standards that are becoming more common throughout the industry	5, 7	Intermediate
Review and revise the permitted uses in the Agricultural Conservation and Agricultural Residential zoning districts to better reflect current agricultural practices and businesses	5, 7	Short term
Establish additional incentives for the Transfer of Development Rights program in an effort to provide equity to land owners in areas designated for low density development and provide additional protection for areas such as upland forest and those containing endangered or threatened species.	5, 7	Long term
Explore incentives to incorporate historic structures into new development	5	Intermediate
Consider requiring groundwater impact assessments for subdivision and land development projects located in excellent recharge areas and ensure such projects are forwarded to DNREC for advice and comment	5	Intermediate
Through partnerships with state and nongovernmental agencies, design education and outreach materials to help property owners maintain their historic structures	6	Intermediate
Continue to identify, evaluate, and update cultural resource surveys and provide survey data in a variety of formats including digital mapping and through the Kent County website	6	Ongoing
Continue capital contributions for maintenance and rehabilitation of County owned historic resources		Ongoing
Enact ordinances that require the documentation, protection and/or preservation of important cultural and historic resources within the County	6	Short term
Create a zoning classification for Employment Centers. Permitted uses should include those that result in job creation as opposed to retail and service uses permitted in the Commercial Zoning Districts. Uses that support the County's Food Innovation District should be included as well	2, 5, 7	Short term



Update and expand the uses permitted in the Agricultural Conservation and Agricultural Residential Zoning Districts to support the modern agricultural industry and the County's Food Innovation District	2, 5, 7	Short term
Create a zoning classification or development option within existing districts to permit and encourage mixed use development particularly in the Town and Village Areas	2, 3, 5, 7, 8	Short term
Create a new Agricultural Zoning District available to properties outside of the Growth Zone Overlay in order to permit by-right uses that support agriculture and are reasonable and expected in rural areas	2, 5, 7	Short term
Preserve areas for economic development opportunities by focusing on growth in Employment Centers, Commercial Areas, and Industrial Areas	2, 7	Ongoing
Develop in areas with adequate infrastructure and public services while protecting the natural resources and rural character of the County	2, 3, 4, 5, 7, 8	Ongoing
Conduct a complete review of Chapter 205 <i>Zoning</i> to update zoning districts and permitted uses to more modern standards	2, 3, 7	Short term
Portions of the Growth Zone Overlay District boundary do not follow natural or man-made boundaries. In many cases, the boundary actually bisects individual properties creating a challenge in accurately locating the boundary. In addition, moderate expansion of the Growth Zone to the west between Dover and Smyrna over the planning horizon may be reasonable as developable land in the area becomes scarce. Any revisions to the boundary will require a zoning map amendment with all associated public notice and posting requirements. Individual property owners may apply to revise the boundary through the zoning map revision process although the Levy Court may also proactively alter the Growth Zone boundary. Any expansion of the Growth Zone should be contiguous to the existing boundary.	2	Ongoing
Create a Mixed Use Development Option - For use in the Town and Village Areas. Perhaps utilize form based code standards	2, 3, 4, 7, 8	Short term

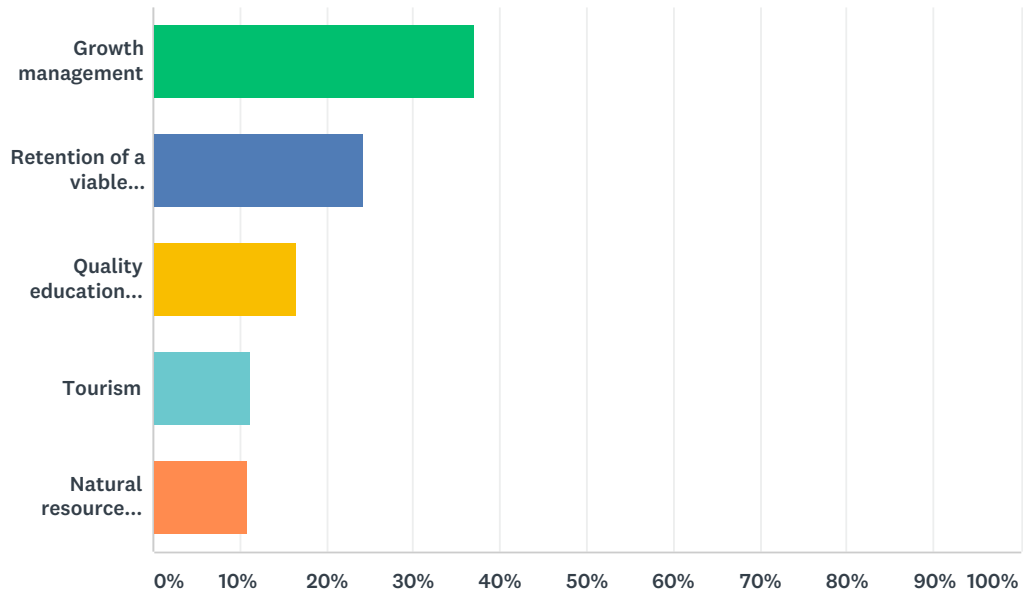
Integrate land use with transportation by improving coordination between land use and transportation planning and project development in order to establish and maintain a transportation network that supports anticipated needs within the Growth Zone Overlay	7, 8	Ongoing
Coordinate with DeIDOT and the MPO to develop Transportation Improvement Districts, and pursue corridor studies for Brenford Road and South State Street	7, 8, 10	Short term
Support healthy lifestyles, choices and opportunities, as well as reduce air, water and noise pollution by requiring facilities such as sidewalks, transit facilities, multi-use paths and bikeways as part of both transportation and land development projects	2, 3, 7, 8, 10	Ongoing
Coordinate with DeIDOT, DNREC, and the Dover/Kent County MPO to continue developing the trail system within and among the County parks as well as improve bicycle and pedestrian access to the parks	2, 4, 5, 7, 8, 10	Ongoing
Continue to apply access management techniques preserving and improving the operating condition of corridors by regulating the number, spacing and design of access points	8	Ongoing
Preserve and allow for expansion of existing rail facilities for both freight and passenger service, as well as a new intermodal freight yard	2, 8	Ongoing
Provide aesthetic value by incorporating aesthetic and non-vehicular improvements in transportation investments	2, 8, 9	Ongoing
Permit a mix of residential and nonresidential development at densities high enough to support bicycle & pedestrian access, as well as transit in the Growth Zone Overlay, particularly in areas near municipalities	2, 3, 5, 7, 8	Ongoing
Incorporate an architectural review requirement in the Regional Planning Commission review and approval process including the submission of proposed building elevations	2, 7, 9	Intermediate
Revise the Zoning and Subdivision & Land Development ordinances to expand the existing Transfer of Development Rights development design criteria to other development types within the County	7, 9	Intermediate

Chain stores, fast-food restaurants, gas stations and convenience stores, and big-box retailers must design buildings that match the character of the area	2, 7, 9	Ongoing
Revise the Cluster Development standards to include additional specific standards for natural resource protection, buffering, and preservation of viewscales, as well as ensure that proposed cluster developments do not result in any greater impact than a conventional development.	5, 7, 9	Intermediate
Revise the sign standards within the Zoning Ordinance to ensure signage is compatible with the area and remains unobtrusive while still conveying a message	7, 9	Intermediate
Review and revise the County's parking requirements to ensure that sufficient but not excessive parking is provided for commercial sites, and permit flexibility in design	7, 9	Intermediate
Require the submission of pattern books in conjunction with higher density and mixed use major subdivision applications within the Growth Zone Overlay District	7, 9	Intermediate
Ensure that subdivision and street design meet the needs of emergency vehicles while at the same time respecting the pedestrian scale of development	7, 8, 9	Ongoing
Continue providing permitting and inspection services as well as zoning and subdivision ordinance administration as requested by municipalities	10	Ongoing
Serve as a resource and participate in municipal comprehensive planning efforts	10	Ongoing
The County supports municipal annexation that is consistent with the municipality's certified comprehensive plan when the municipality has the ability to provide public services. In cases where a property owner intends to develop property that is within the municipal annexation area and contiguous to the municipality, the County should refer that property owner to the municipality	2, 10	Ongoing
Coordinate with the Department of Transportation, Dover/Kent MPO, towns, and community members in the development of Transportation Improvement Districts and master planning efforts	2, 8, 10	Short term

Continue coordination with the Department of Transportation and Dover/Kent County MPO in administration of the APFO – Roads as well as implementation of Transportation Improvement Districts	7, 8, 10	Ongoing
Continue coordination with applicable municipalities, state agencies, and nongovernmental organizations as the recommendations throughout the Comprehensive Plan are implemented particularly as the Sub-Area/Transportation Improvement District plans are developed	2, 7, 8, 10	Ongoing

# Q1 What do you see as the biggest opportunity for Kent County?

Answered: 496 Skipped: 40

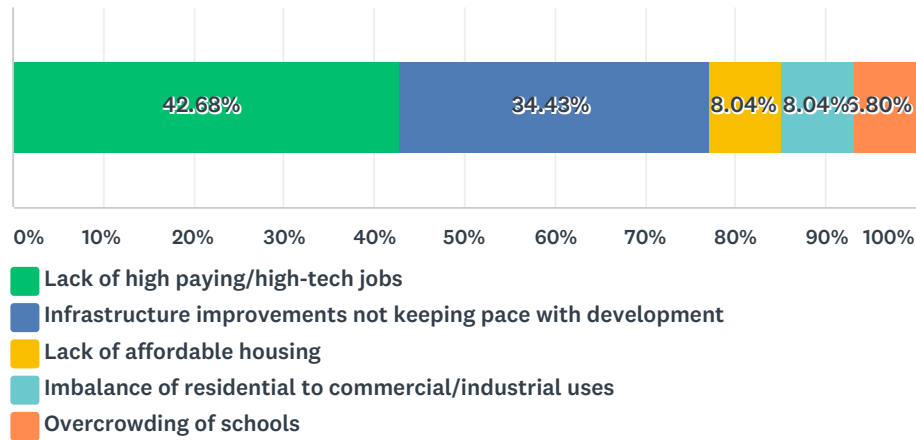


ANSWER CHOICES	RESPONSES	
Growth management	37.10%	184
Retention of a viable agricultural industry	24.19%	120
Quality education facilities - public, private & higher education	16.53%	82
Tourism	11.29%	56
Natural resource management	10.89%	54
<b>TOTAL</b>		<b>496</b>



## Q2 What do you consider to be the County's biggest challenge?

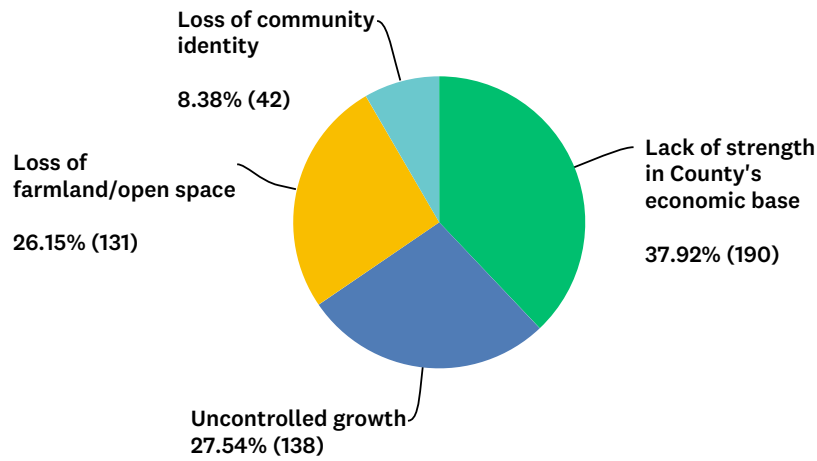
Answered: 485 Skipped: 51



ANSWER CHOICES	RESPONSES	
Lack of high paying/high-tech jobs	42.68%	207
Infrastructure improvements not keeping pace with development	34.43%	167
Lack of affordable housing	8.04%	39
Imbalance of residential to commercial/industrial uses	8.04%	39
Overcrowding of schools	6.80%	33
<b>TOTAL</b>		<b>485</b>

### Q3 What do you consider the biggest threat to Kent County?

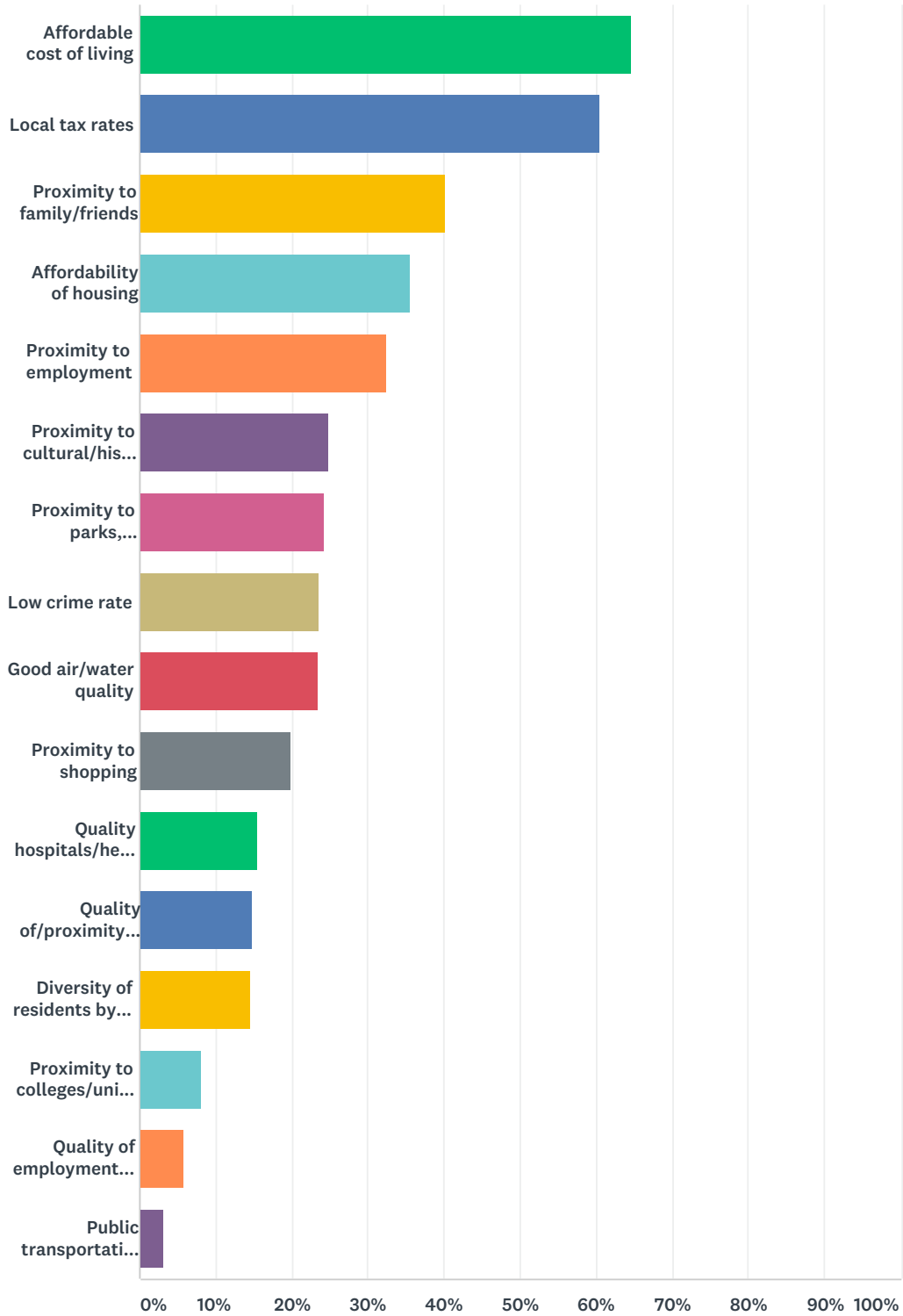
Answered: 501 Skipped: 35



ANSWER CHOICES	RESPONSES	
Lack of strength in County's economic base	37.92%	190
Uncontrolled growth	27.54%	138
Loss of farmland/open space	26.15%	131
Loss of community identity	8.38%	42
<b>TOTAL</b>		<b>501</b>

### Q4 What attracts you to Kent County? (check all that apply)

Answered: 482 Skipped: 54



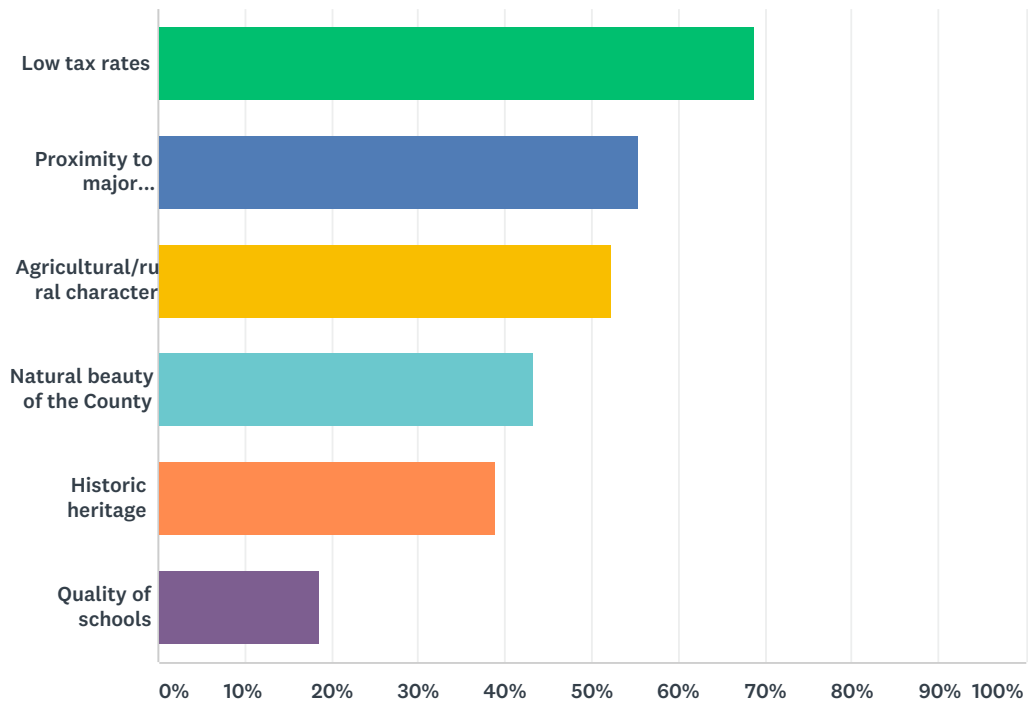
ANSWER CHOICES	RESPONSES
Affordable cost of living	64.73% 312

## 2018 Comprehensive Plan Survey

Local tax rates	60.37%	291
Proximity to family/friends	40.25%	194
Affordability of housing	35.48%	171
Proximity to employment	32.37%	156
Proximity to cultural/historical activities/entertainment	24.90%	120
Proximity to parks, playgrounds, or trails	24.27%	117
Low crime rate	23.65%	114
Good air/water quality	23.44%	113
Proximity to shopping	19.92%	96
Quality hospitals/health services	15.56%	75
Quality of/proximity to schools (pre-K through 12)	14.94%	72
Diversity of residents by age, race, culture, or income	14.73%	71
Proximity to colleges/universities	8.09%	39
Quality of employment opportunities	5.81%	28
Public transportation availability	3.11%	15
Total Respondents: 482		

### Q5 What do you consider to be the County's biggest strengths/assets? (check all that apply)

Answered: 499 Skipped: 37

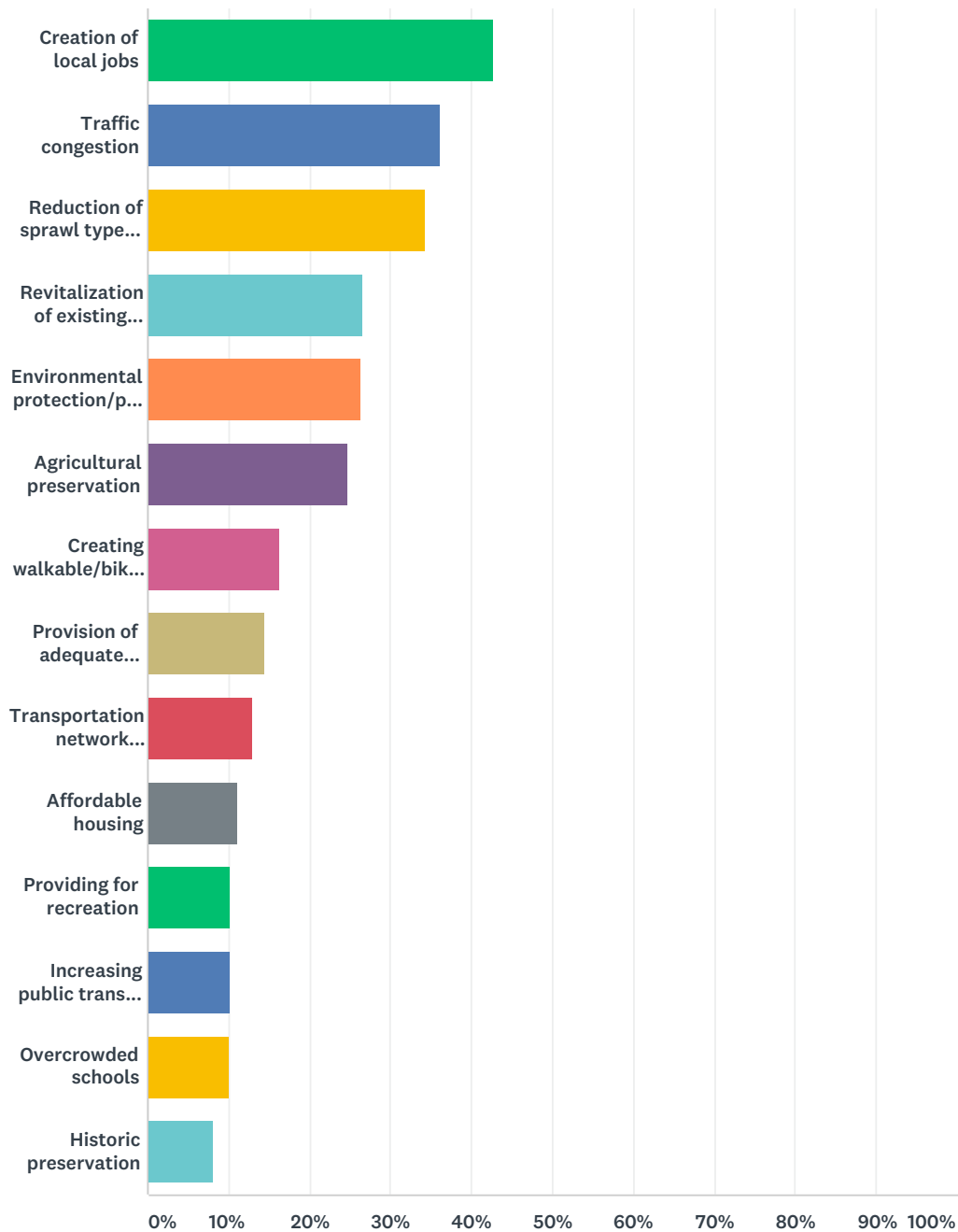


ANSWER CHOICES	RESPONSES	
Low tax rates	68.74%	343
Proximity to major metropolitan areas (Philadelphia, New York, Washington)	55.51%	277
Agricultural/rural character	52.30%	261
Natural beauty of the County	43.29%	216
Historic heritage	38.88%	194
Quality of schools	18.64%	93
Total Respondents: 499		



## Q6 What are the three most important issues facing Kent County? (check three only)

Answered: 505 Skipped: 31



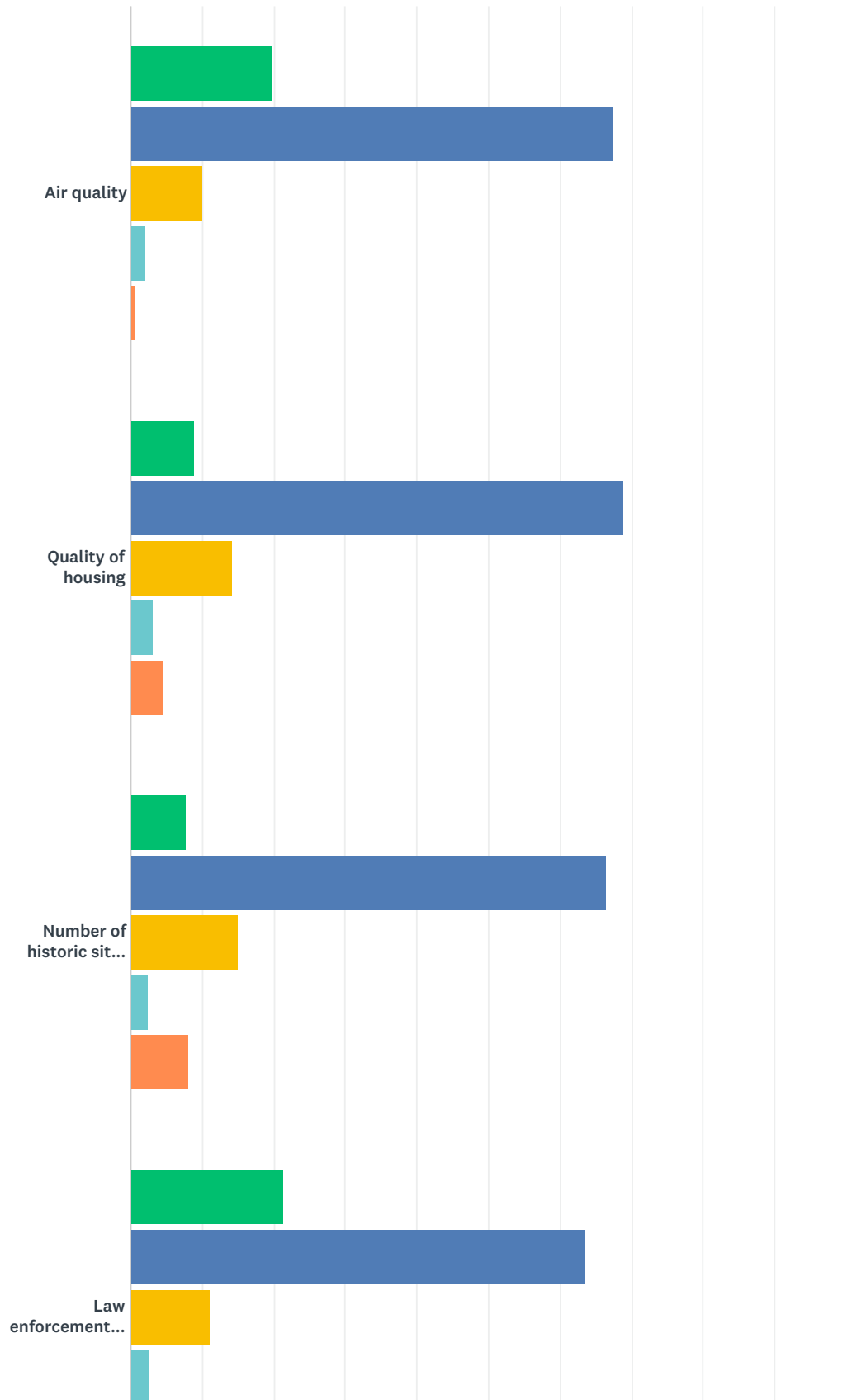
ANSWER CHOICES	RESPONSES	
Creation of local jobs	42.57%	215
Traffic congestion	36.24%	183
Reduction of sprawl type development/growth management	34.26%	173
Revitalization of existing communities	26.53%	134

## 2018 Comprehensive Plan Survey

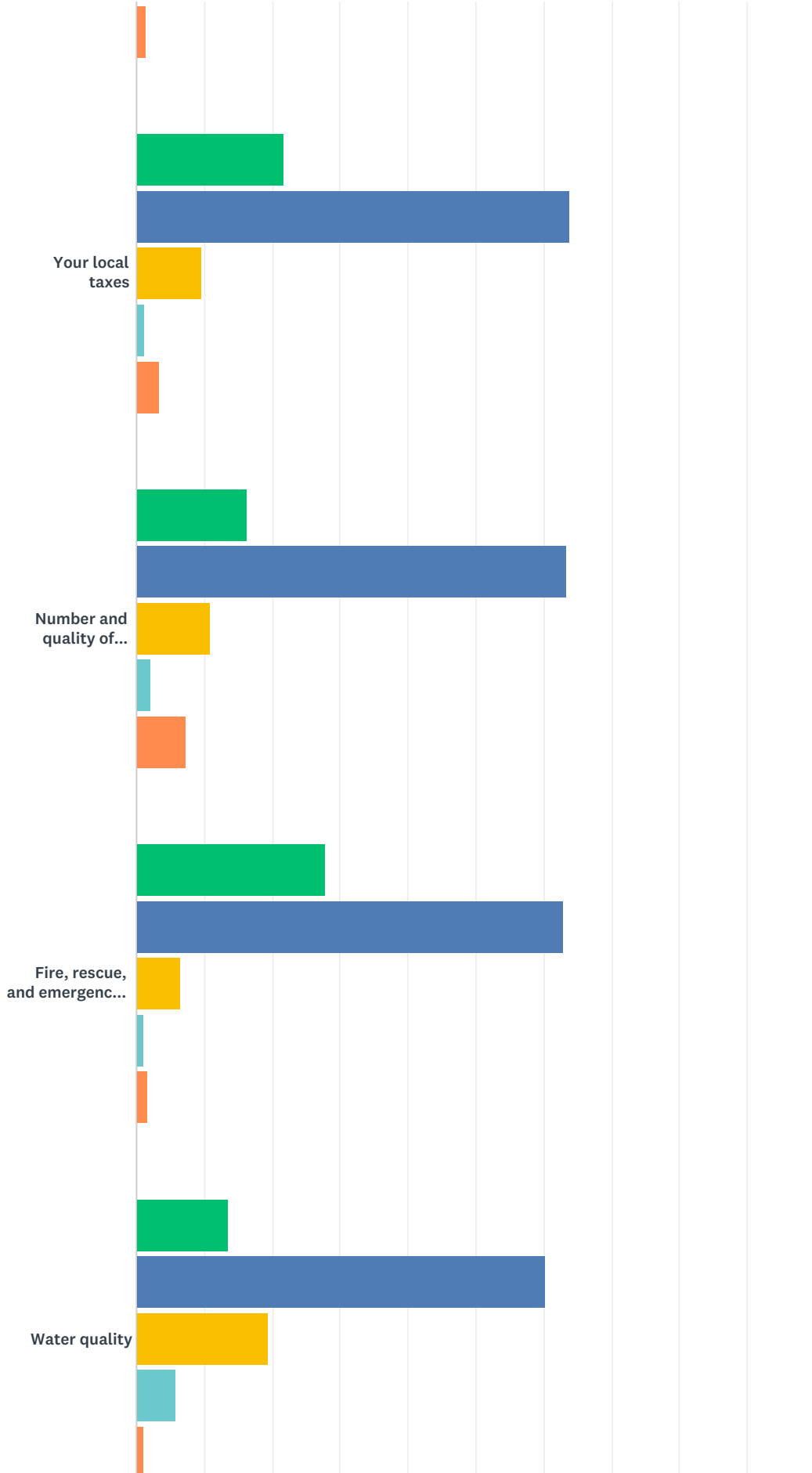
Environmental protection/preservation of open space	26.34%	133
Agricultural preservation	24.75%	125
Creating walkable/bikeable communities	16.24%	82
Provision of adequate sewer/water service infrastructure	14.46%	73
Transportation network improvements	13.07%	66
Affordable housing	11.09%	56
Providing for recreation	10.30%	52
Increasing public transit options	10.30%	52
Overcrowded schools	10.10%	51
Historic preservation	8.12%	41
Total Respondents: 505		

# Q7 How satisfied are you with the following in Kent County?

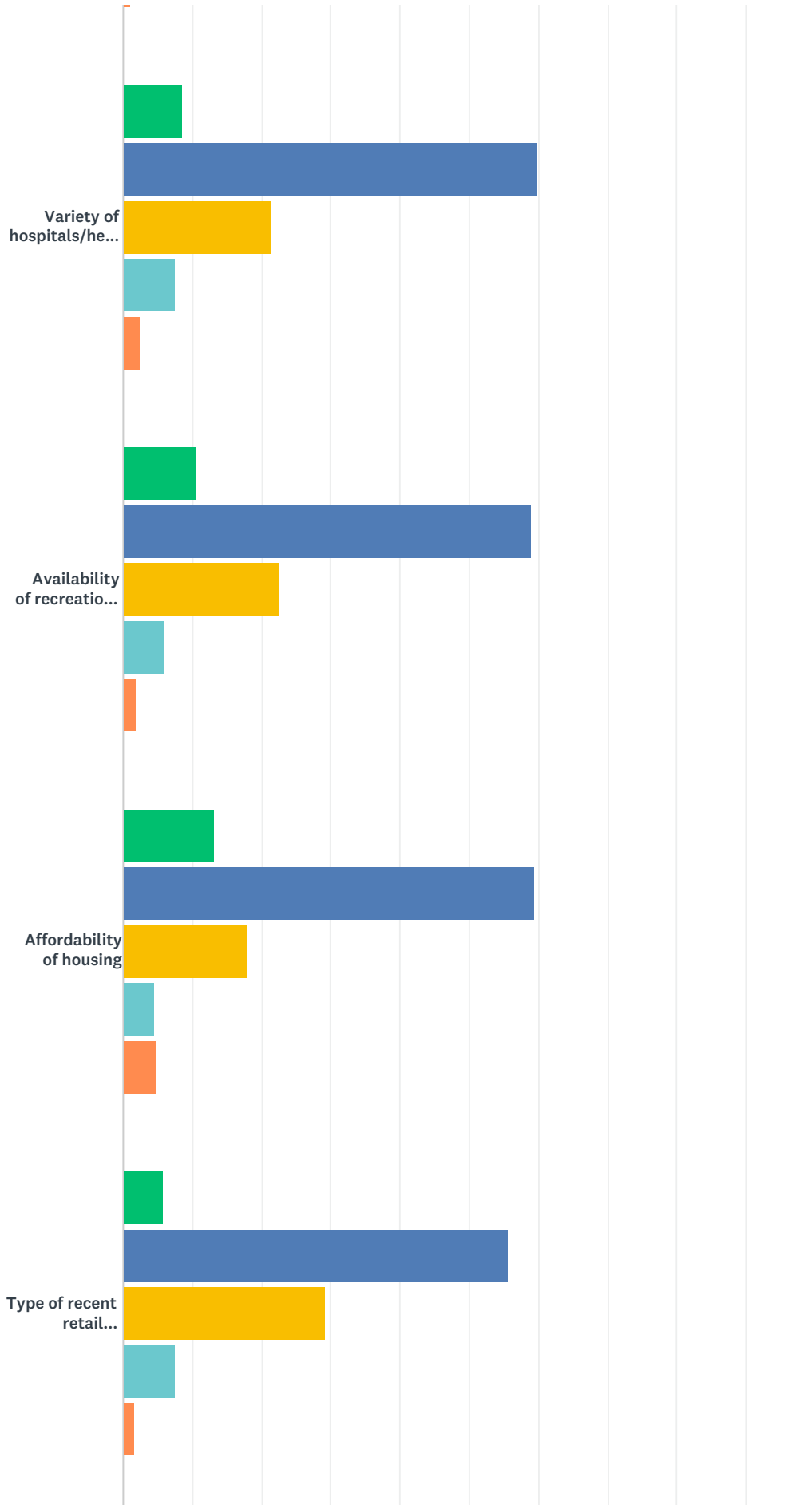
Answered: 487 Skipped: 49



2018 Comprehensive Plan Survey

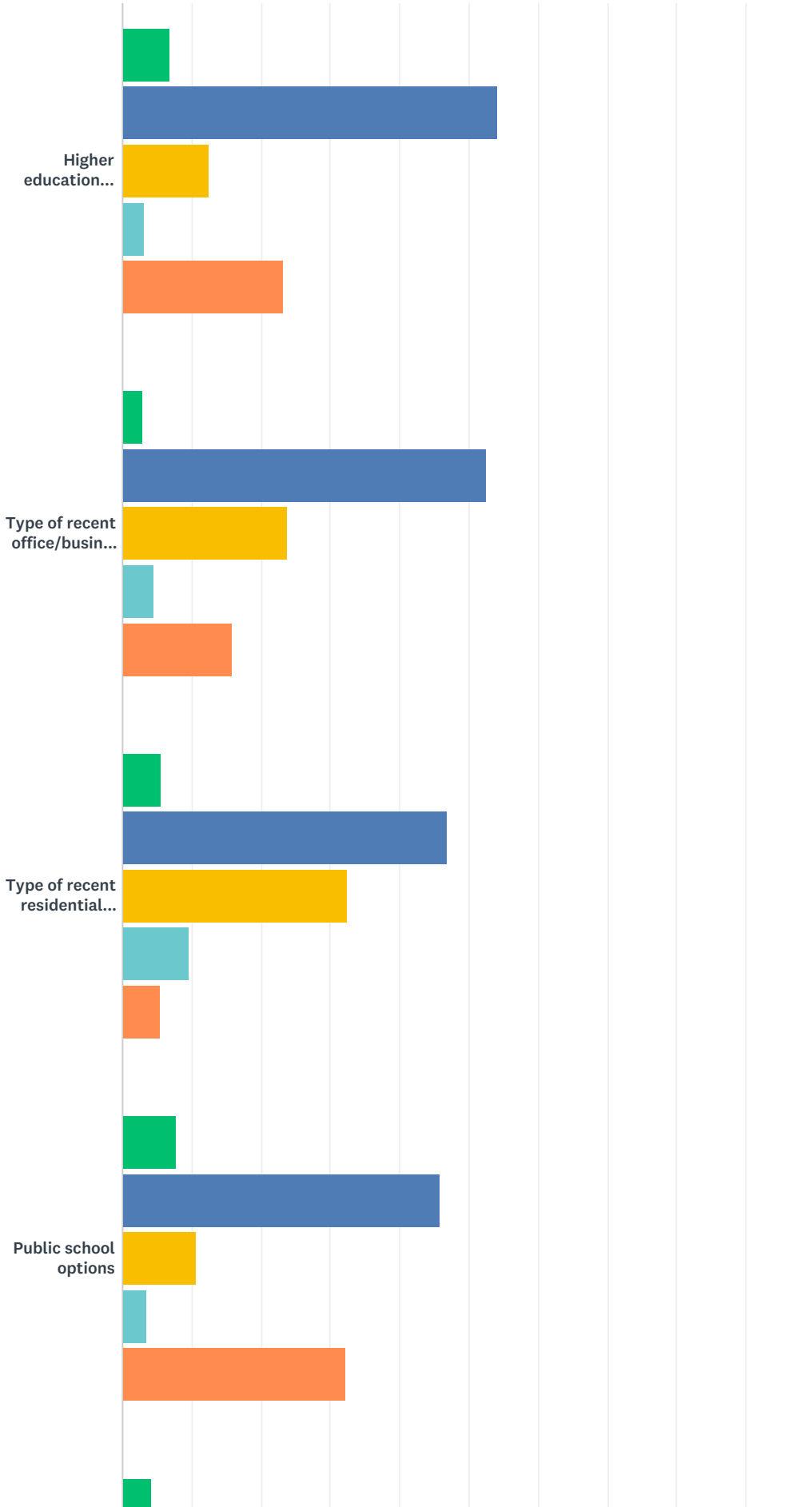


2018 Comprehensive Plan Survey

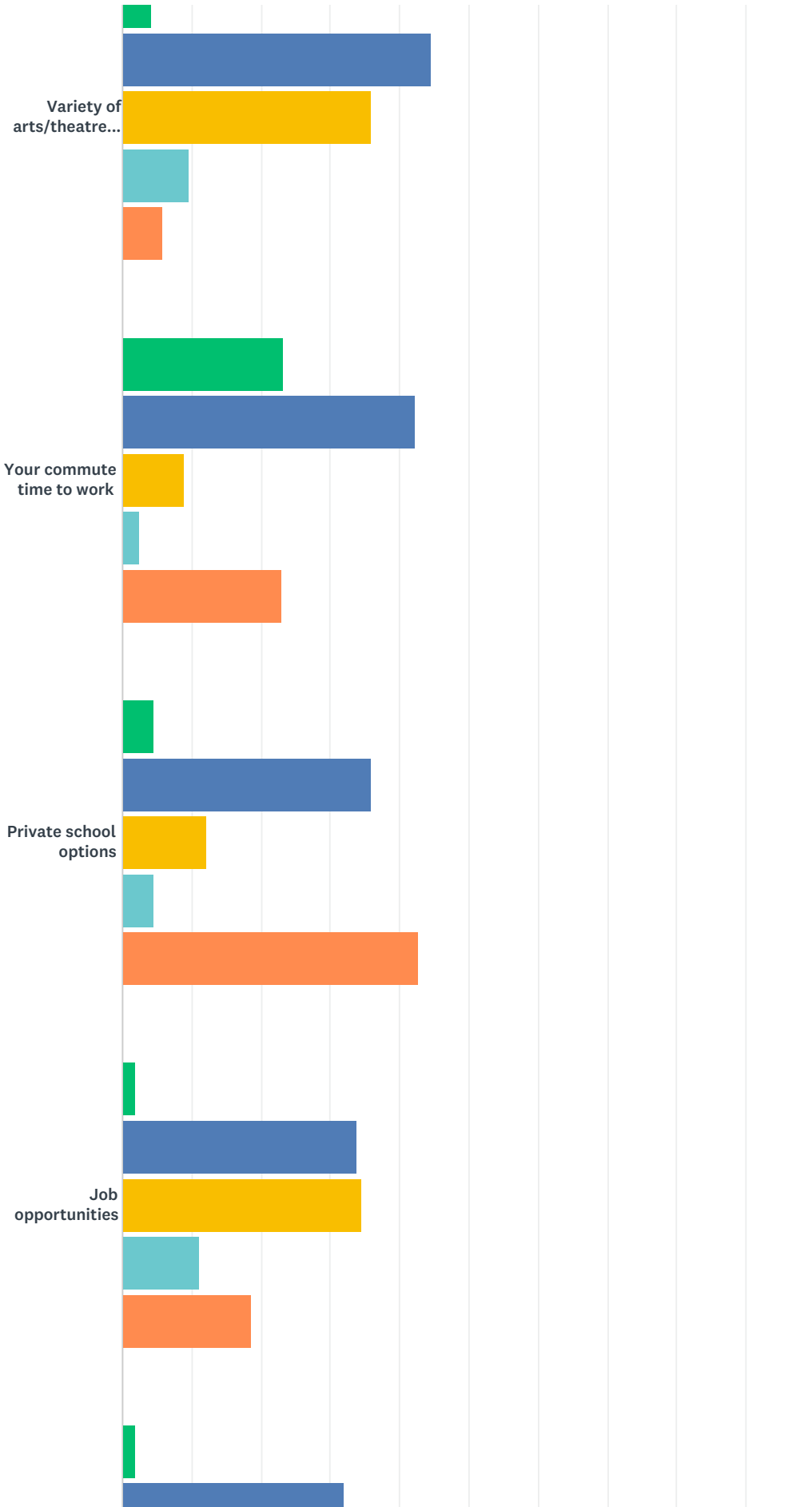




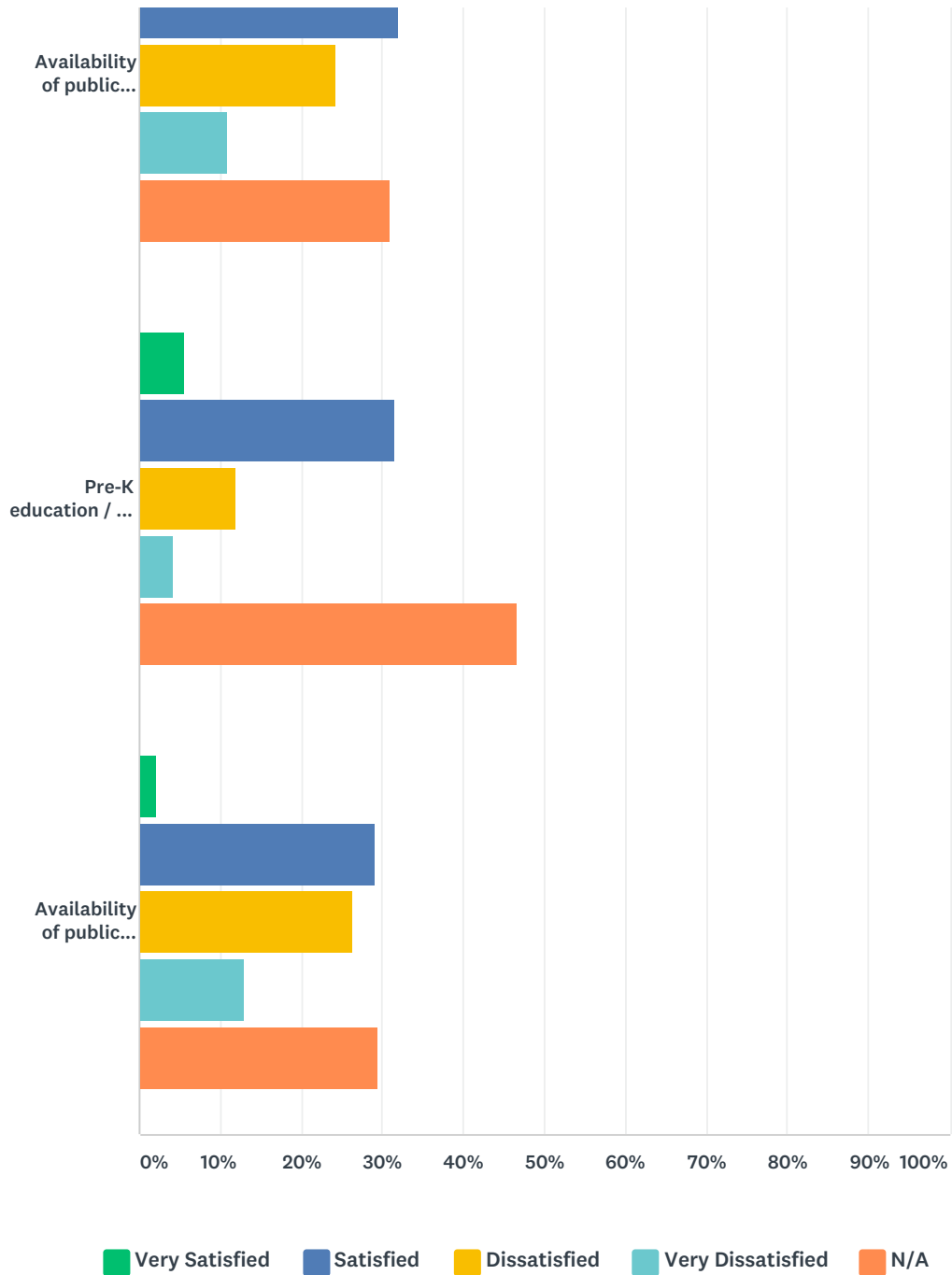
# 2018 Comprehensive Plan Survey



# 2018 Comprehensive Plan Survey



## 2018 Comprehensive Plan Survey



	VERY SATISFIED	SATISFIED	DISSATISFIED	VERY DISSATISFIED	N/A	TOTAL	WEIGHTED AVERAGE
Air quality	19.79% 96	67.42% 327	10.10% 49	2.06% 10	0.62% 3	485	1.94
Quality of housing	9.05% 43	68.84% 327	14.32% 68	3.16% 15	4.63% 22	475	2.12
Number of historic sites being preserved	7.72% 37	66.60% 319	15.03% 72	2.51% 12	8.14% 39	479	2.13
Law enforcement services	21.25% 102	63.54% 305	11.04% 53	2.71% 13	1.46% 7	480	1.95
Your local taxes	21.85% 104	63.87% 304	9.66% 46	1.26% 6	3.36% 16	476	1.90

## 2018 Comprehensive Plan Survey

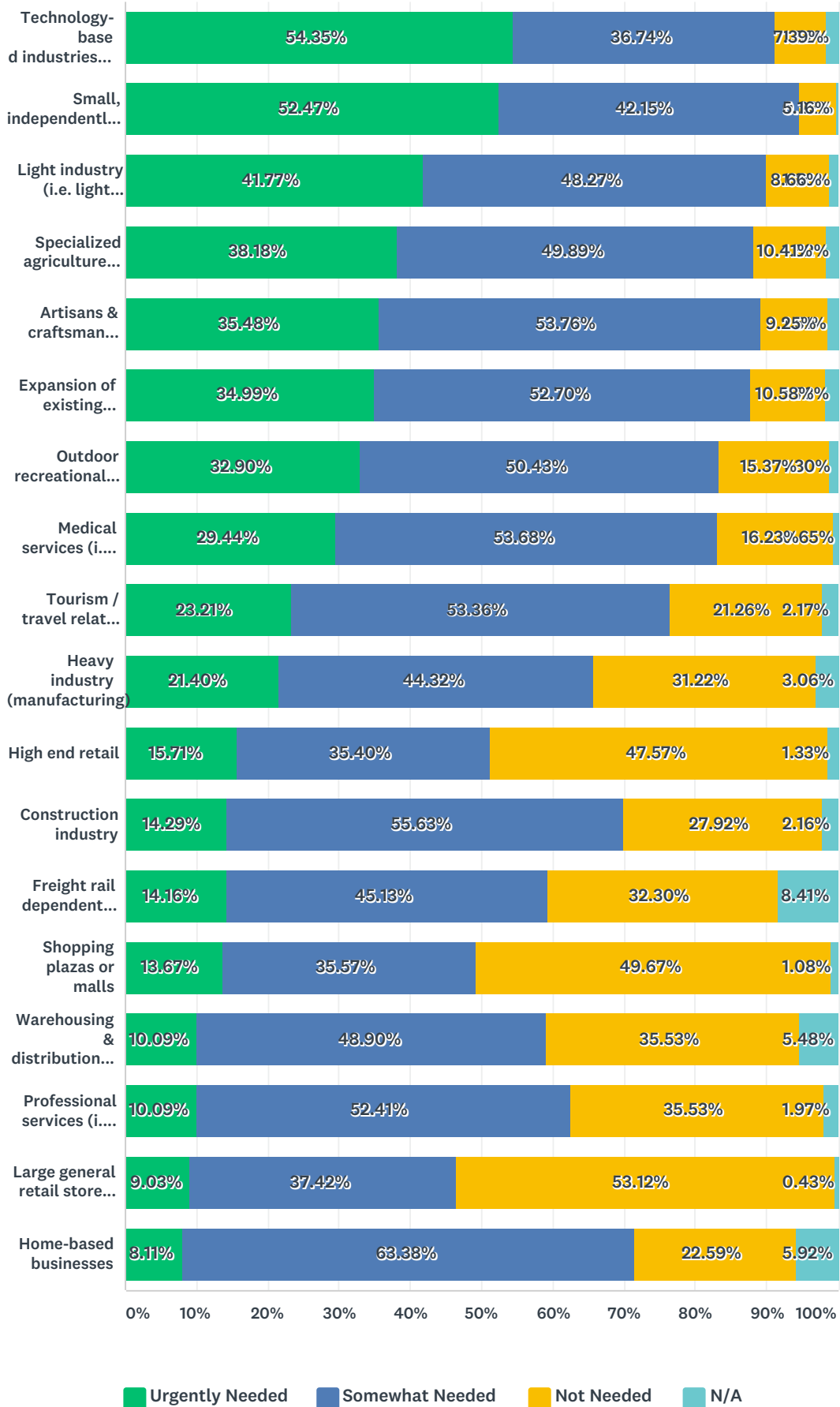
Number and quality of public libraries	16.28% 78	63.47% 304	10.86% 52	2.09% 10	7.31% 35	479	1.99
Fire, rescue, and emergency medical services	27.86% 134	62.99% 303	6.44% 31	1.04% 5	1.66% 8	481	1.80
Water quality	13.61% 66	60.21% 292	19.38% 94	5.77% 28	1.03% 5	485	2.17
Variety of hospitals/health services	8.58% 41	59.83% 286	21.55% 103	7.53% 36	2.51% 12	478	2.29
Availability of recreational opportunities	10.63% 51	58.96% 283	22.50% 108	6.04% 29	1.88% 9	480	2.24
Affordability of housing	13.26% 63	59.37% 282	17.89% 85	4.63% 22	4.84% 23	475	2.15
Type of recent retail development	5.85% 28	55.74% 267	29.23% 140	7.52% 36	1.67% 8	479	2.39
Higher education options	6.82% 32	54.16% 254	12.58% 59	3.20% 15	23.24% 109	469	2.16
Type of recent office/business park development	2.98% 14	52.55% 247	23.83% 112	4.68% 22	15.96% 75	470	2.36
Type of recent residential development	5.72% 27	46.82% 221	32.42% 153	9.53% 45	5.51% 26	472	2.48
Public school options	7.77% 37	45.80% 218	10.71% 51	3.57% 17	32.14% 153	476	2.15
Variety of arts/theatre/cultural/entertainment	4.18% 20	44.47% 213	35.91% 172	9.60% 46	5.85% 28	479	2.54
Your commute time to work	23.24% 112	42.32% 204	8.92% 43	2.49% 12	23.03% 111	482	1.88
Private school options	4.65% 22	35.94% 170	12.05% 57	4.65% 22	42.71% 202	473	2.29
Job opportunities	1.88% 9	33.96% 163	34.58% 166	11.04% 53	18.54% 89	480	2.67
Availability of public transportation (local)	1.89% 9	31.93% 152	24.37% 116	10.92% 52	30.88% 147	476	2.64
Pre-K education / day care options	5.71% 27	31.50% 149	11.84% 56	4.23% 20	46.72% 221	473	2.27
Availability of public transportation (regional)	2.09% 10	29.08% 139	26.36% 126	12.97% 62	29.50% 141	478	2.71

**Q8 ECONOMIC DEVELOPMENT: What types of economic development do you think Kent County should encourage? (check the column based on how much you think the item is needed in the County)**

Answered: 469 Skipped: 67



## 2018 Comprehensive Plan Survey

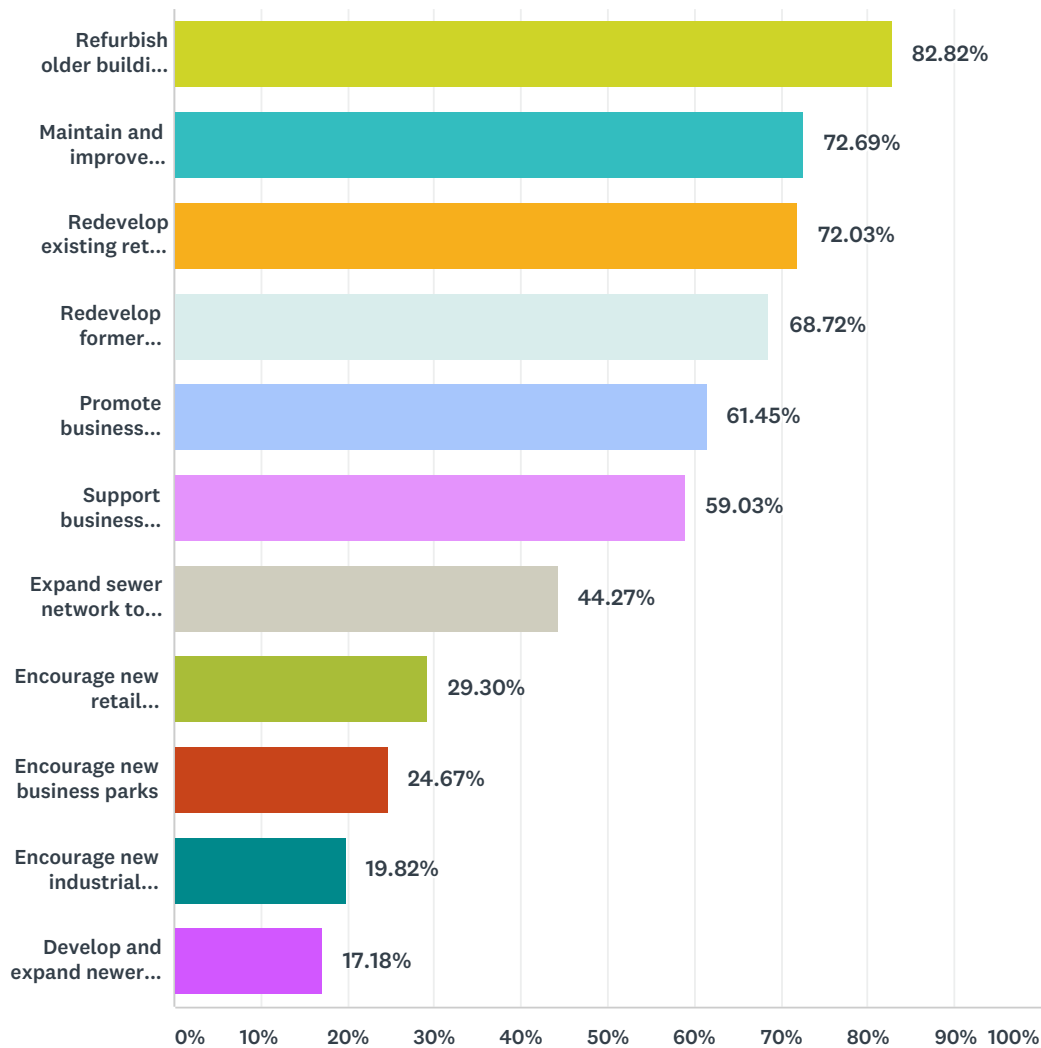


## 2018 Comprehensive Plan Survey

	URGENTLY NEEDED	SOMEWHAT NEEDED	NOT NEEDED	N/A	TOTAL	WEIGHTED AVERAGE
Technology-based industries (i.e. biotechnology)	54.35% 250	36.74% 169	7.39% 34	1.52% 7	460	1.52
Small, independently owned shops	52.47% 244	42.15% 196	5.16% 24	0.22% 1	465	1.53
Light industry (i.e. light assembly, research, nonpolluting)	41.77% 193	48.27% 223	8.66% 40	1.30% 6	462	1.66
Specialized agriculture (i.e. nurseries, farm stands, organic foods, farmers markets)	38.18% 176	49.89% 230	10.41% 48	1.52% 7	461	1.72
Artisans & craftsman businesses	35.48% 165	53.76% 250	9.25% 43	1.51% 7	465	1.73
Expansion of existing industries & businesses	34.99% 162	52.70% 244	10.58% 49	1.73% 8	463	1.75
Outdoor recreational businesses (i.e. golf courses, driving ranges, paintball, batting cages, go-carts, boat rentals)	32.90% 152	50.43% 233	15.37% 71	1.30% 6	462	1.82
Medical services (i.e. dental, physicians, medical labs)	29.44% 136	53.68% 248	16.23% 75	0.65% 3	462	1.87
Tourism / travel related businesses	23.21% 107	53.36% 246	21.26% 98	2.17% 10	461	1.98
Heavy industry (manufacturing)	21.40% 98	44.32% 203	31.22% 143	3.06% 14	458	2.10
High end retail	15.71% 71	35.40% 160	47.57% 215	1.33% 6	452	2.32
Construction industry	14.29% 66	55.63% 257	27.92% 129	2.16% 10	462	2.14
Freight rail dependent businesses	14.16% 64	45.13% 204	32.30% 146	8.41% 38	452	2.20
Shopping plazas or malls	13.67% 63	35.57% 164	49.67% 229	1.08% 5	461	2.36
Warehousing & distribution (truck-based)	10.09% 46	48.90% 223	35.53% 162	5.48% 25	456	2.27
Professional services (i.e. tax prep, attorney, insurance)	10.09% 46	52.41% 239	35.53% 162	1.97% 9	456	2.26
Large general retail stores (e.g. Target, Wal-Mart)	9.03% 42	37.42% 174	53.12% 247	0.43% 2	465	2.44
Home-based businesses	8.11% 37	63.38% 289	22.59% 103	5.92% 27	456	2.15

## Q9 ECONOMIC DEVELOPMENT: How do you think the County should focus its economic development efforts? (check all that apply)

Answered: 454 Skipped: 82



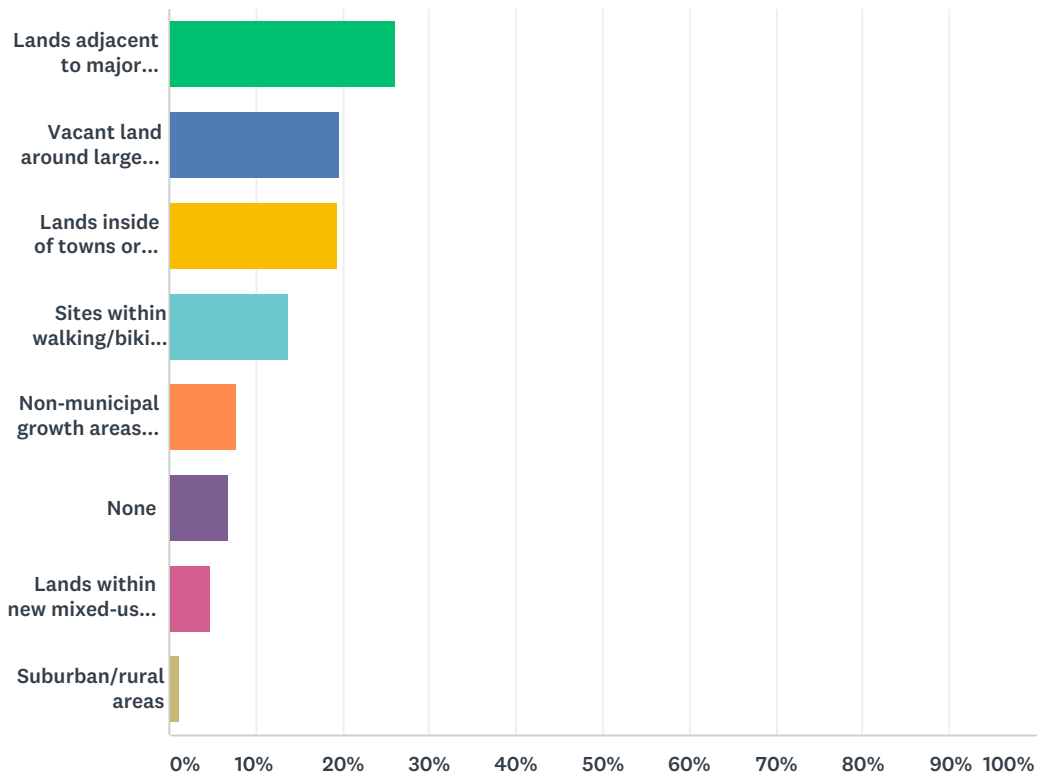
ANSWER CHOICES	RESPONSES	
Refurbish older buildings for new uses	82.82%	376
Maintain and improve established neighborhoods	72.69%	330
Redevelop existing retail centers	72.03%	327
Redevelop former industrial sites	68.72%	312
Promote business expansion/retention programs	61.45%	279
Support business district revitalization	59.03%	268
Expand sewer network to areas not currently served	44.27%	201
Encourage new retail development	29.30%	133
Encourage new business parks	24.67%	112

## 2018 Comprehensive Plan Survey

Encourage new industrial parks	19.82%	90
Develop and expand newer communities	17.18%	78
Total Respondents: 454		

## Q10 ECONOMIC DEVELOPMENT: What area do you think would be most appropriate for new commercial development in the County?

Answered: 448 Skipped: 88

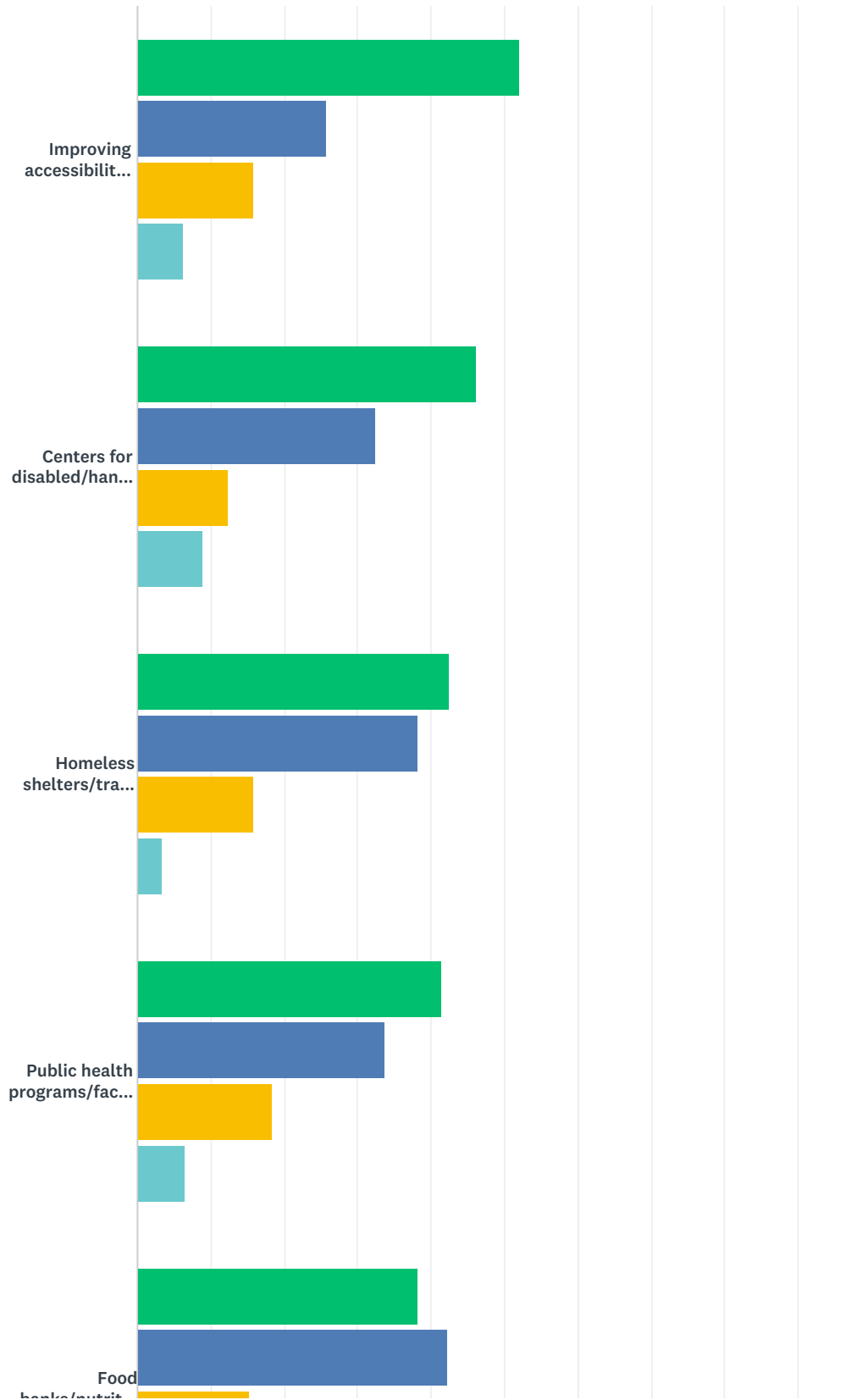


ANSWER CHOICES	RESPONSES	
Lands adjacent to major highways	26.12%	117
Vacant land around larger cities of Dover, Smyrna, Milford, Harrington	19.64%	88
Lands inside of towns or cities	19.42%	87
Sites within walking/biking distance of existing/planned neighborhoods	13.84%	62
Non-municipal growth areas (i.e. inside of County's growth zone)	7.81%	35
None	6.92%	31
Lands within new mixed-use developments	4.91%	22
Suburban/rural areas	1.34%	6
<b>TOTAL</b>		<b>448</b>

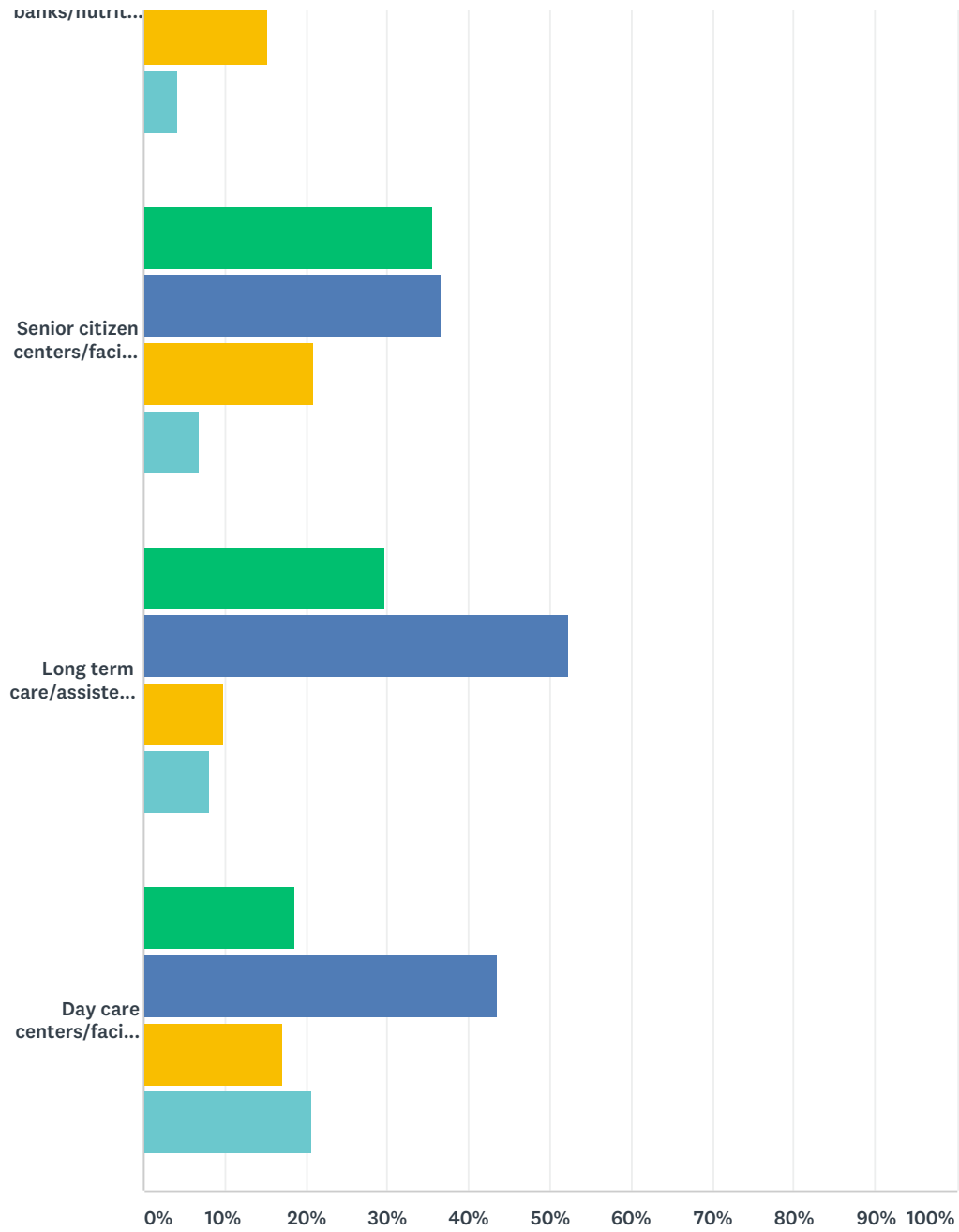


# Q11 COMMUNITY SERVICES: What do you think the priorities should be related to the provision of community services? (check all that apply)

Answered: 445 Skipped: 91



## 2018 Comprehensive Plan Survey



■ Need More, Public Should Fund    
 ■ Need More, Should be Privately Funded  
■ Do Not Need More    
 ■ N/A

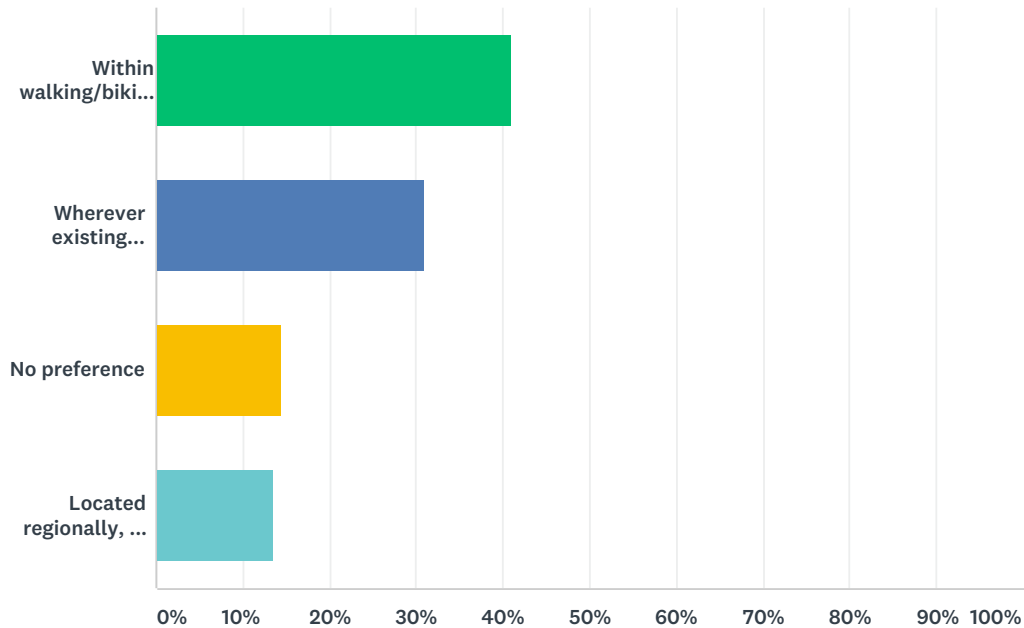
	NEED MORE, PUBLIC SHOULD FUND	NEED MORE, SHOULD BE PRIVATELY FUNDED	DO NOT NEED MORE	N/A	TOTAL	WEIGHTED AVERAGE
Improving accessibility for the disabled	52.12% 221	25.71% 109	15.80% 67	6.37% 27	424	1.61
Centers for disabled/handicapped/special needs	46.21% 195	32.46% 137	12.32% 52	9.00% 38	422	1.63
Homeless shelters/transitional housing	42.52% 182	38.32% 164	15.89% 68	3.27% 14	428	1.72

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Public health programs/facilities	41.41% 176	33.65% 143	18.35% 78	6.59% 28	425	1.75
Food banks/nutritional services	38.21% 162	42.22% 179	15.33% 65	4.25% 18	424	1.76
Senior citizen centers/facilities	35.50% 153	36.66% 158	20.88% 90	6.96% 30	431	1.84
Long term care/assisted living facilities	29.77% 128	52.33% 225	9.77% 42	8.14% 35	430	1.78
Day care centers/facilities for children	18.69% 80	43.46% 186	17.06% 73	20.79% 89	428	1.98

### Q12 COMMUNITY SERVICES: Where should the County focus new public facility construction (recreation, libraries, government centers)? (check one)

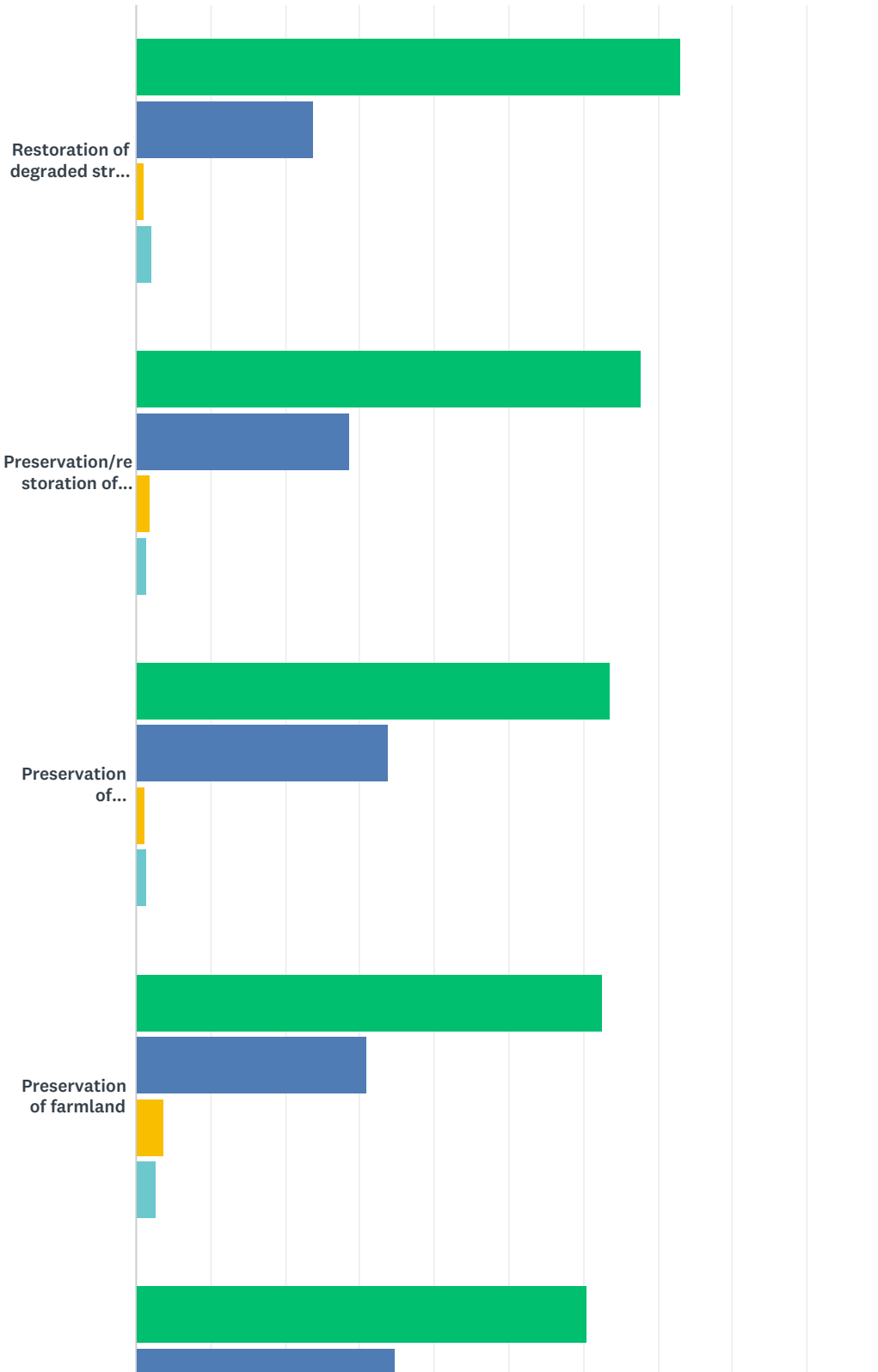
Answered: 435 Skipped: 101



ANSWER CHOICES	RESPONSES	
Within walking/biking distance to the population served by the facility	40.92%	178
Wherever existing infrastructure is available (i.e. water, sewer, highways)	31.03%	135
No preference	14.48%	63
Located regionally, in rural/suburban areas when necessary	13.56%	59
TOTAL		435

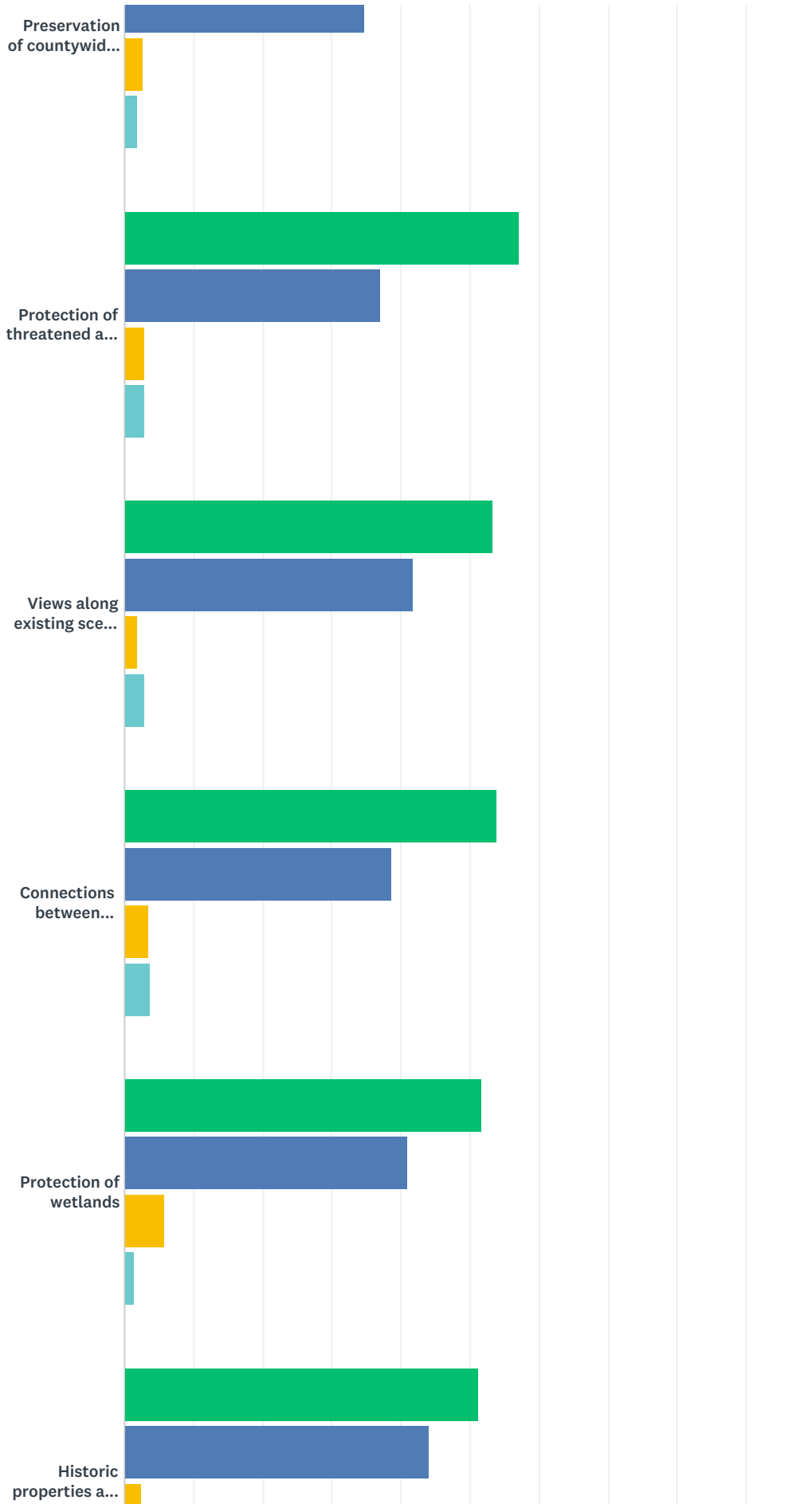
# Q13 OPEN SPACE & RESOURCE PROTECTION: What do you think the County's priorities should be related to open space and resource protection?

Answered: 422 Skipped: 114

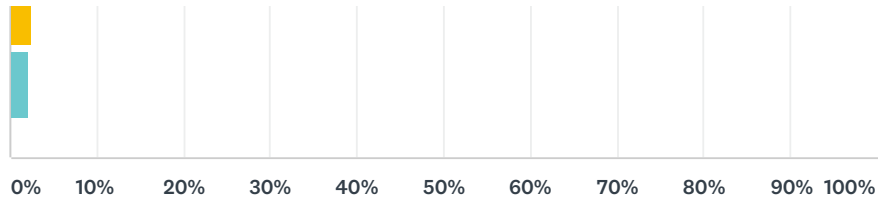




# 2018 Comprehensive Plan Survey



## 2018 Comprehensive Plan Survey

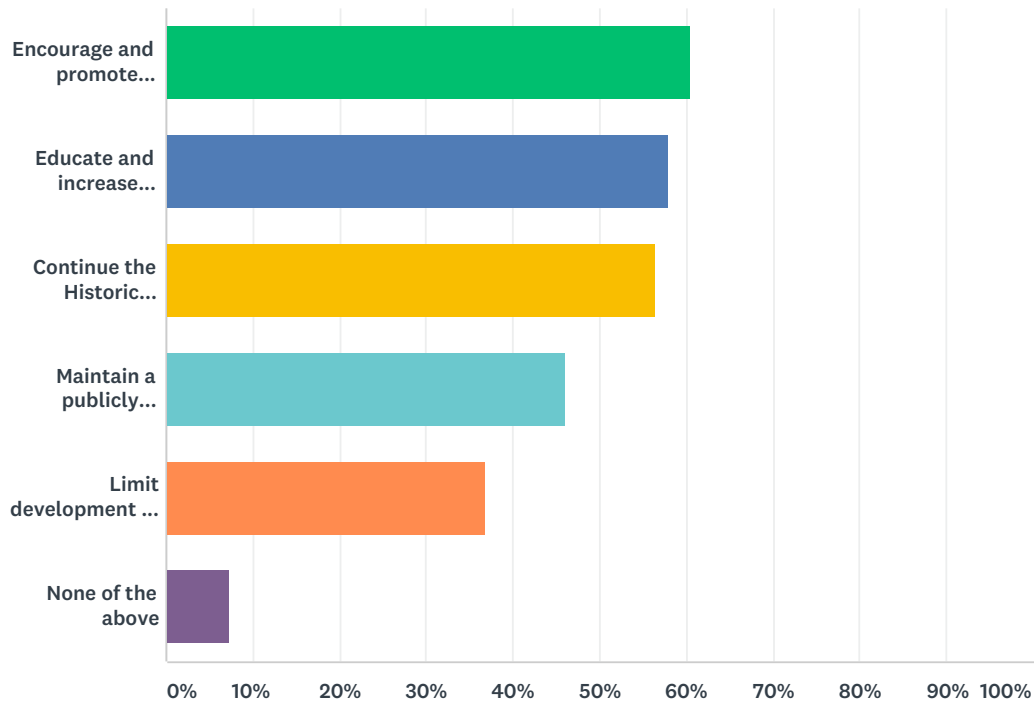


■ Needs most protection   
 ■ Adequately protected   
 ■ Needs less protection  
■ Does not need any protection

	NEEDS MOST PROTECTION	ADEQUATELY PROTECTED	NEEDS LESS PROTECTION	DOES NOT NEED ANY PROTECTION	TOTAL	WEIGHTED AVERAGE
Restoration of degraded stream and river corridors	73.06% 301	23.79% 98	0.97% 4	2.18% 9	412	1.59
Preservation/restoration of forestland	67.88% 279	28.71% 118	1.95% 8	1.46% 6	411	1.69
Preservation of extraordinary natural areas or sites	63.53% 263	33.82% 140	1.21% 5	1.45% 6	414	1.77
Preservation of farmland	62.59% 261	30.94% 129	3.84% 16	2.64% 11	417	1.84
Preservation of countywide stream buffers	60.54% 247	34.80% 142	2.70% 11	1.96% 8	408	1.86
Protection of threatened and endangered plant and animal species	57.21% 238	37.02% 154	2.88% 12	2.88% 12	416	1.94
Views along existing scenic byways	53.28% 219	41.85% 172	1.95% 8	2.92% 12	411	2.01
Connections between existing open spaces	54.00% 216	38.75% 155	3.50% 14	3.75% 15	400	2.03
Protection of wetlands	51.70% 213	41.02% 169	5.83% 24	1.46% 6	412	2.05
Historic properties and structures	51.33% 212	44.07% 182	2.42% 10	2.18% 9	413	2.04

Q14 Kent County contains a variety of cultural and historical resources, both archaeological and architectural. In which of the following ways would you support protection of our historic resources? (check all that apply)

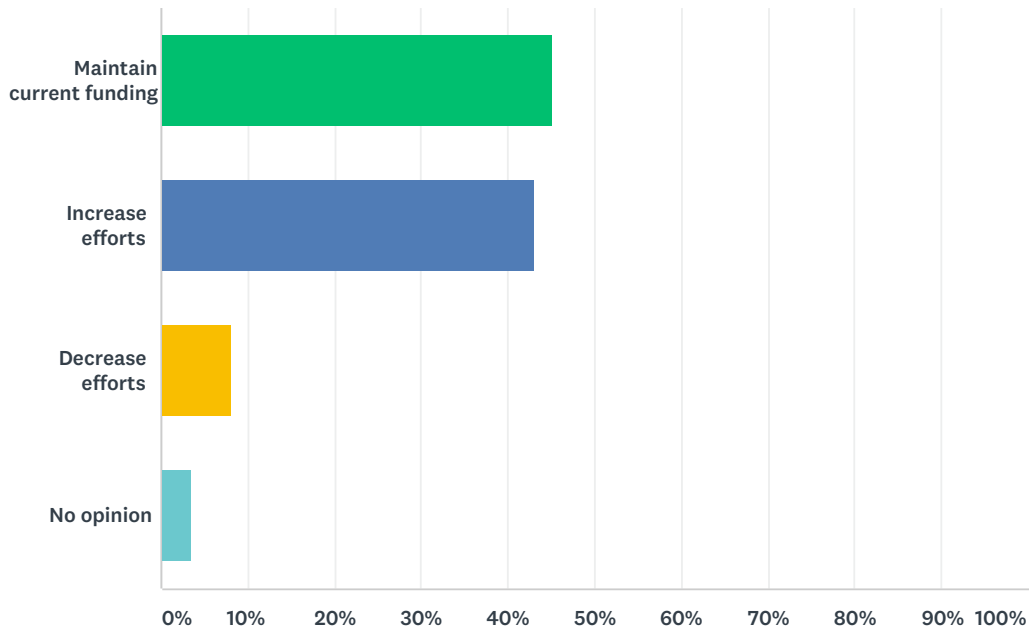
Answered: 420 Skipped: 116



ANSWER CHOICES	RESPONSES	
Encourage and promote heritage tourism	60.48%	254
Educate and increase outreach to promote the value of historic resources and opportunities for restoration	57.86%	243
Continue the Historic Properties Tax Credit Program	56.43%	237
Maintain a publicly available inventory of historic properties	45.95%	193
Limit development of listed historic properties through increased zoning restrictions	36.90%	155
None of the above	7.38%	31
Total Respondents: 420		

**Q15 Levy Court contributes approximately \$100,000 annually toward the State's Agricultural Preservation Program to purchase development rights and permanently protect farmland. Do you support increasing, maintaining, or decreasing the County's efforts to permanently preserve farmland from development?**

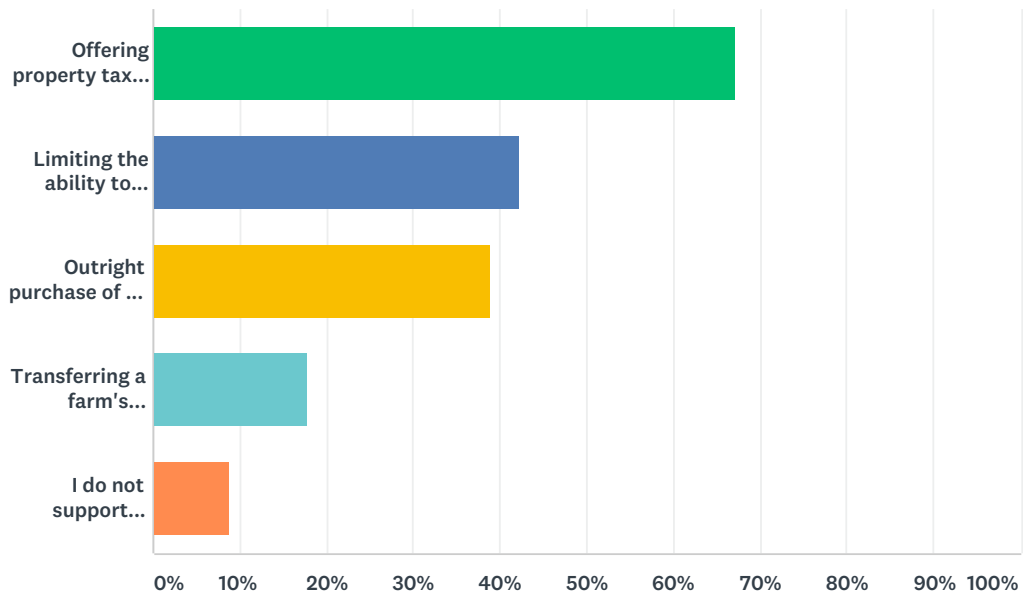
Answered: 422 Skipped: 114



ANSWER CHOICES	RESPONSES	
Maintain current funding	45.26%	191
Increase efforts	43.13%	182
Decrease efforts	8.06%	34
No opinion	3.55%	15
<b>TOTAL</b>		<b>422</b>

### Q16 What incentives and funding mechanisms would you support to permanently preserve farmland in Kent County? (check all that apply)

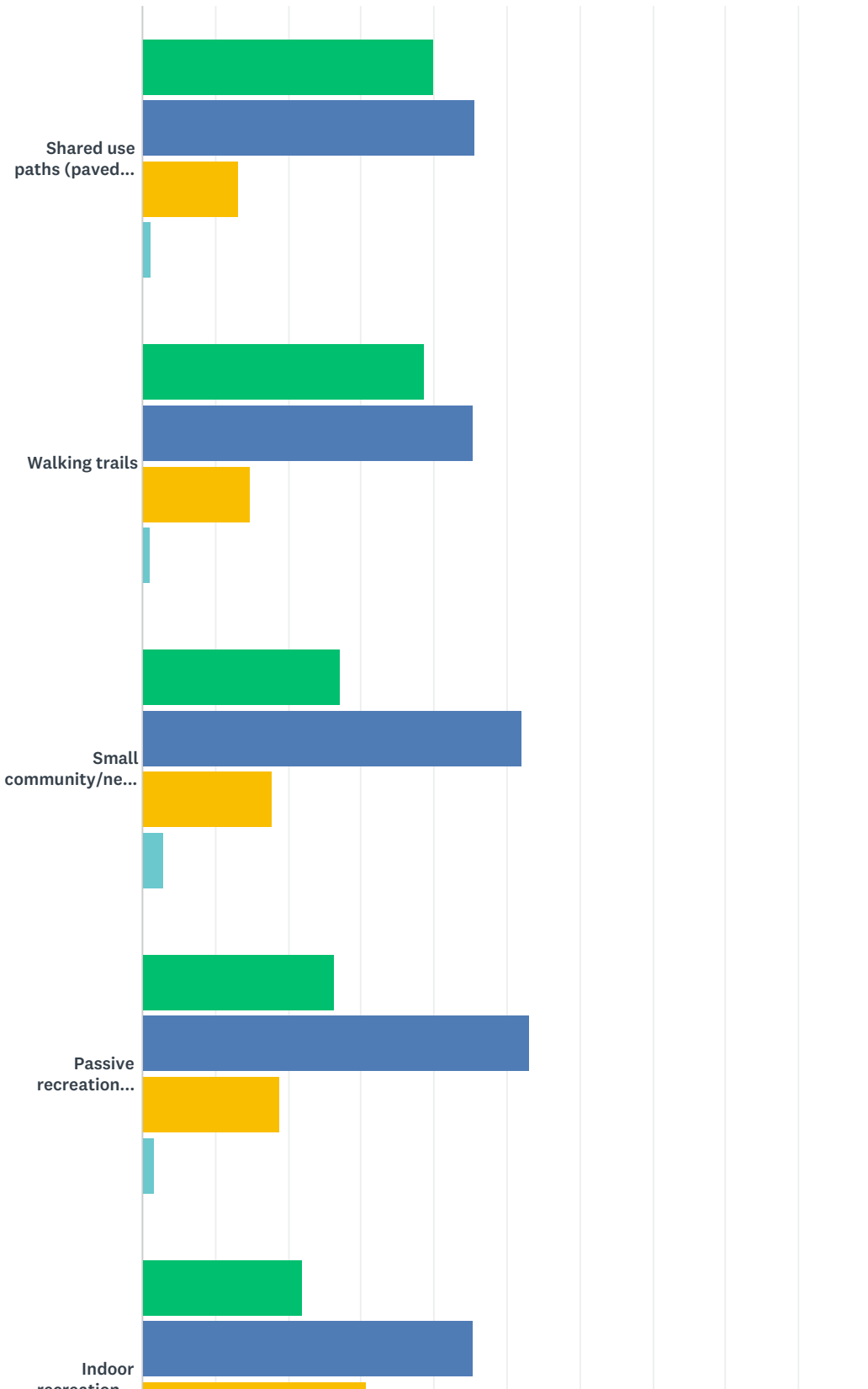
Answered: 418 Skipped: 118



ANSWER CHOICES	RESPONSES	
Offering property tax credits to landowners that enter a preservation program	67.22%	281
Limiting the ability to develop through increased zoning restrictions	42.34%	177
Outright purchase of the landowners' development rights (Delaware Agricultural Preservation Program)	39.00%	163
Transferring a farm's development rights to a property inside the growth zone (resulting in more dense development)	17.70%	74
I do not support incentives or funding for the preservation of farmland	8.85%	37
Total Respondents: 418		

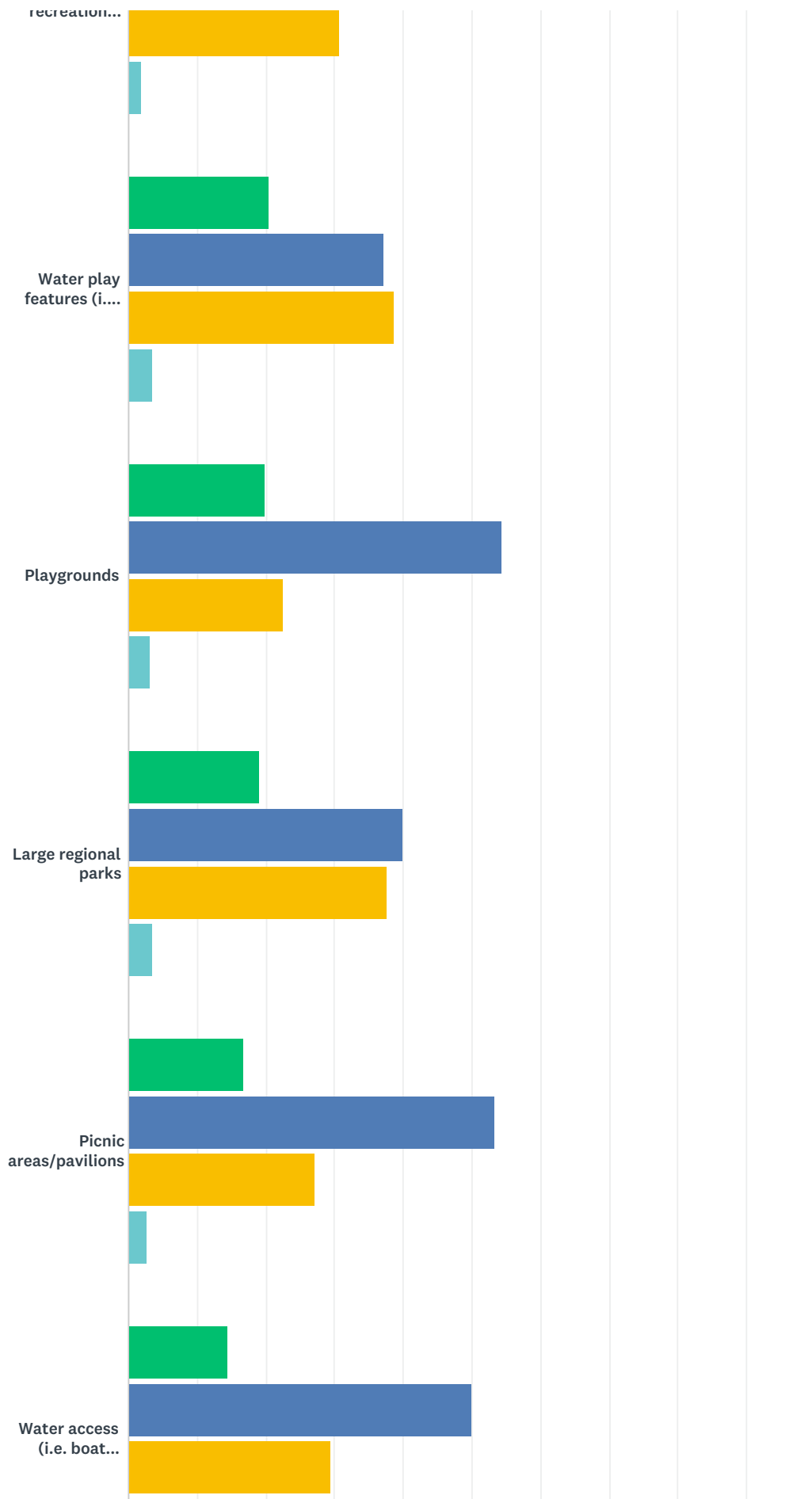
# Q17 RECREATIONAL RESOURCES: What types of new recreational areas should Kent County encourage?

Answered: 424 Skipped: 112

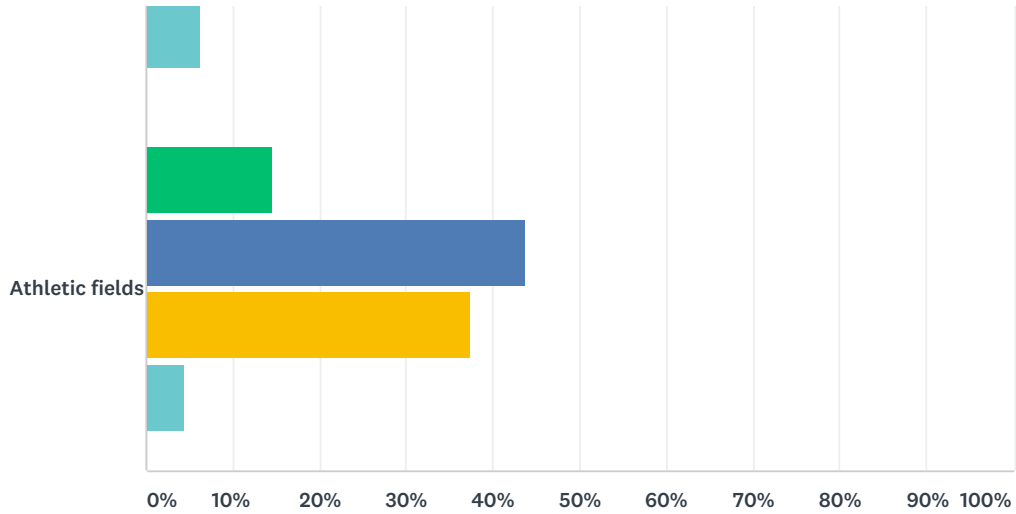




# 2018 Comprehensive Plan Survey



## 2018 Comprehensive Plan Survey

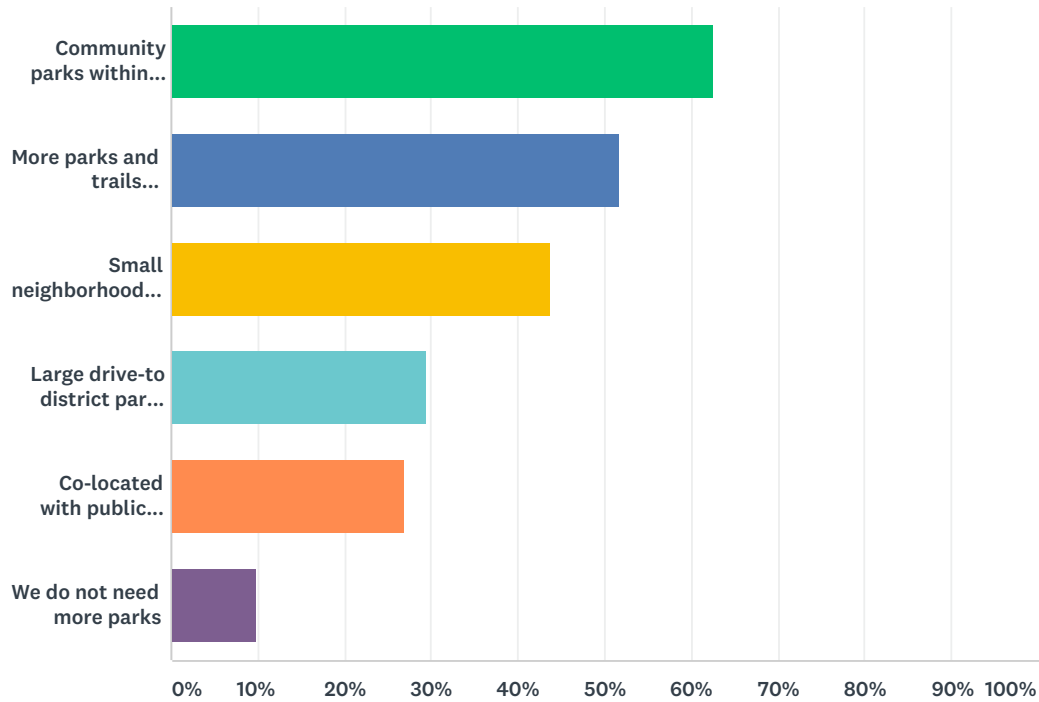


■ Urgently Needed   
 ■ Somewhat Needed   
 ■ Not Needed   
 ■ N/A

	URGENTLY NEEDED	SOMEWHAT NEEDED	NOT NEEDED	N/A	TOTAL	WEIGHTED AVERAGE
Shared use paths (paved and natural surfaces for biking and walking)	40.00% 166	45.54% 189	13.25% 55	1.20% 5	415	1.73
Walking trails	38.78% 159	45.37% 186	14.88% 61	0.98% 4	410	1.76
Small community/neighborhood parks	27.18% 109	52.12% 209	17.71% 71	2.99% 12	401	1.90
Passive recreation parks (nature areas)	26.42% 107	53.09% 215	18.77% 76	1.73% 7	405	1.92
Indoor recreation centers	22.03% 89	45.30% 183	30.69% 124	1.98% 8	404	2.09
Water play features (i.e. spray parks, pools)	20.60% 83	37.22% 150	38.71% 156	3.47% 14	403	2.19
Playgrounds	19.90% 81	54.30% 221	22.60% 92	3.19% 13	407	2.03
Large regional parks	18.94% 75	39.90% 158	37.63% 149	3.54% 14	396	2.19
Picnic areas/pavilions	16.71% 67	53.37% 214	27.18% 109	2.74% 11	401	2.11
Water access (i.e. boat ramps)	14.36% 58	50.00% 202	29.46% 119	6.19% 25	404	2.16
Athletic fields	14.54% 57	43.62% 171	37.50% 147	4.34% 17	392	2.24

## Q18 Where should new recreational resources be located? (check all that apply)

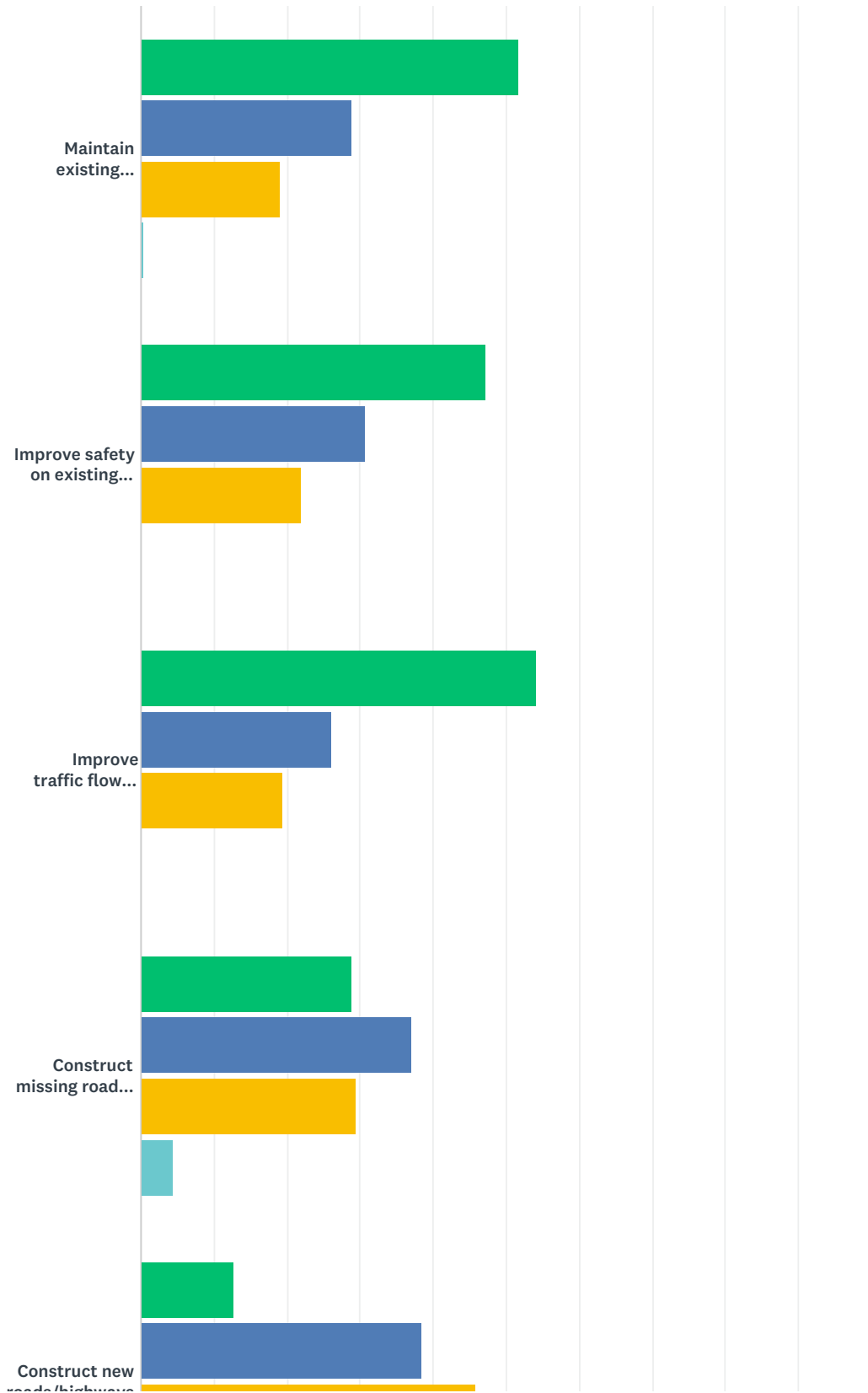
Answered: 416 Skipped: 120



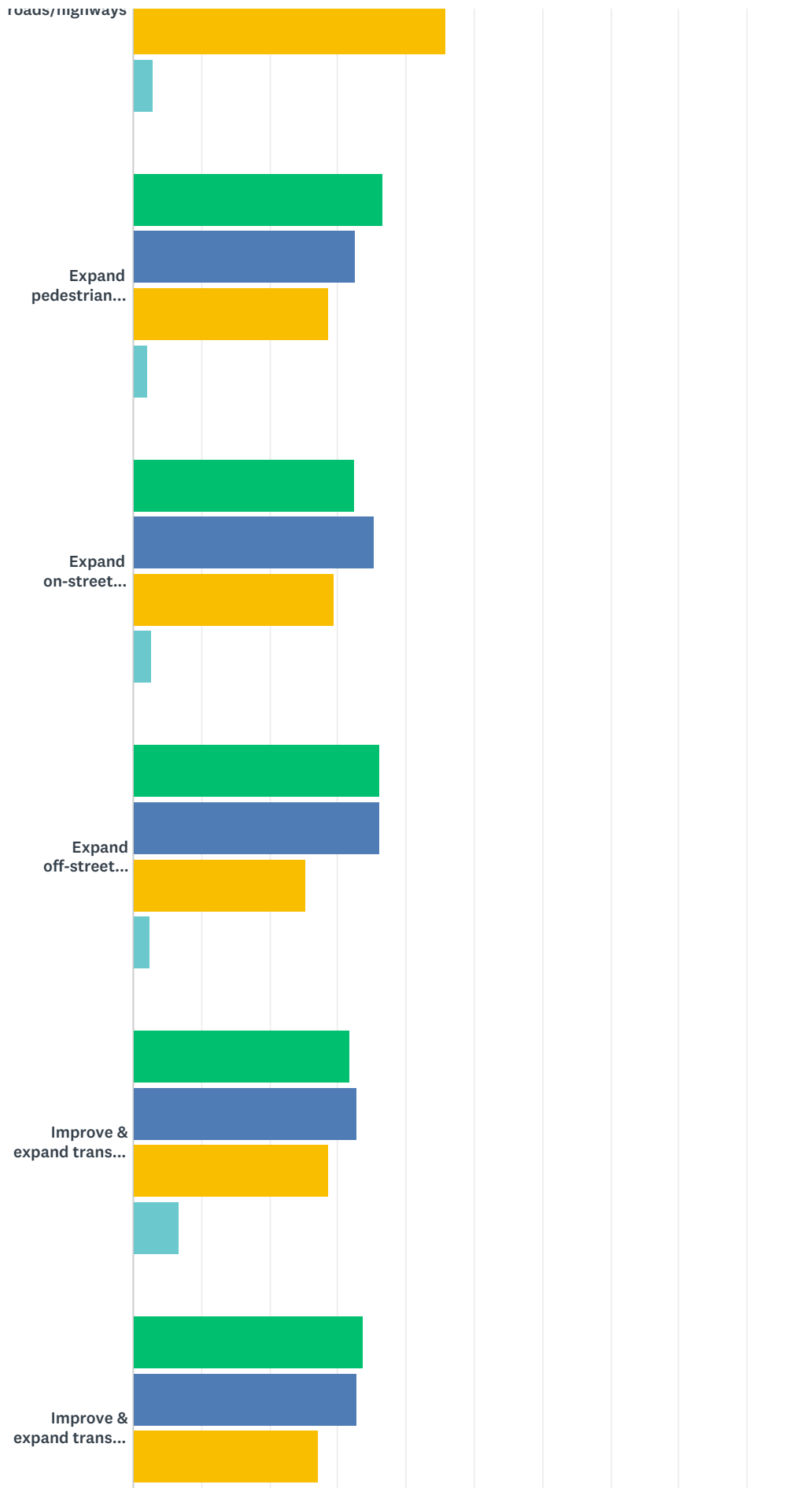
ANSWER CHOICES	RESPONSES
Community parks within walking/biking distance of local County residents, with a moderate selection of recreational facilities	62.50% 260
More parks and trails connecting communities, existing parks and/or open space	51.68% 215
Small neighborhood parks within walking/biking distance of local County residents with limited recreational facilities	43.75% 182
Large drive-to district parks with a full range of recreational facilities	29.57% 123
Co-located with public school facilities	26.92% 112
We do not need more parks	9.86% 41
Total Respondents: 416	

# Q19 TRANSPORTATION: Please rank the need for the following transportation improvements.

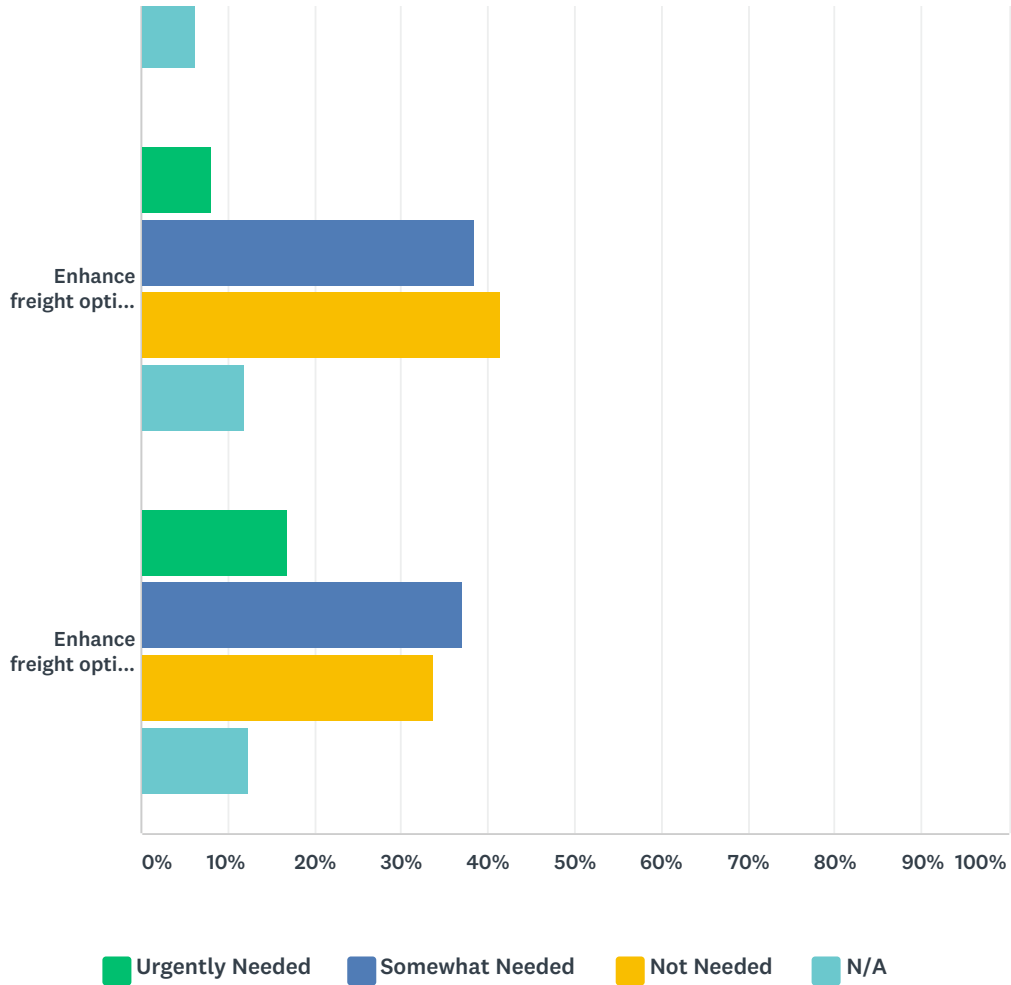
Answered: 421 Skipped: 115



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	URGENTLY NEEDED	SOMEWHAT NEEDED	NOT NEEDED	N/A	TOTAL	WEIGHTED AVERAGE
Maintain existing road/bridge network	51.72% 210	28.82% 117	18.97% 77	0.49% 2	406	2.06
Improve safety on existing roads	47.22% 195	30.75% 127	22.03% 91	0.00% 0	413	2.14
Improve traffic flow on existing roads (includes widening or intersection improvements)	54.13% 223	26.21% 108	19.42% 80	0.24% 1	412	1.98
Construct missing road connections	28.86% 116	37.06% 149	29.60% 119	4.48% 18	402	2.47
Construct new roads/highways	12.72% 51	38.40% 154	45.89% 184	2.99% 12	401	2.66
Expand pedestrian networks and sidewalks	36.56% 151	32.69% 135	28.57% 118	2.18% 9	413	2.29
Expand on-street bicycle networks, bike lanes & on-street routes	32.43% 131	35.40% 143	29.46% 119	2.72% 11	404	2.39
Expand off-street pedestrian/bicycle networks (shared use paths)	36.10% 148	36.10% 148	25.37% 104	2.44% 10	410	2.37
Improve & expand transit options (local)	31.85% 129	32.84% 133	28.64% 116	6.67% 27	405	2.36
Improve & expand transit options (regional)	33.66% 136	32.92% 133	27.23% 110	6.19% 25	404	2.34



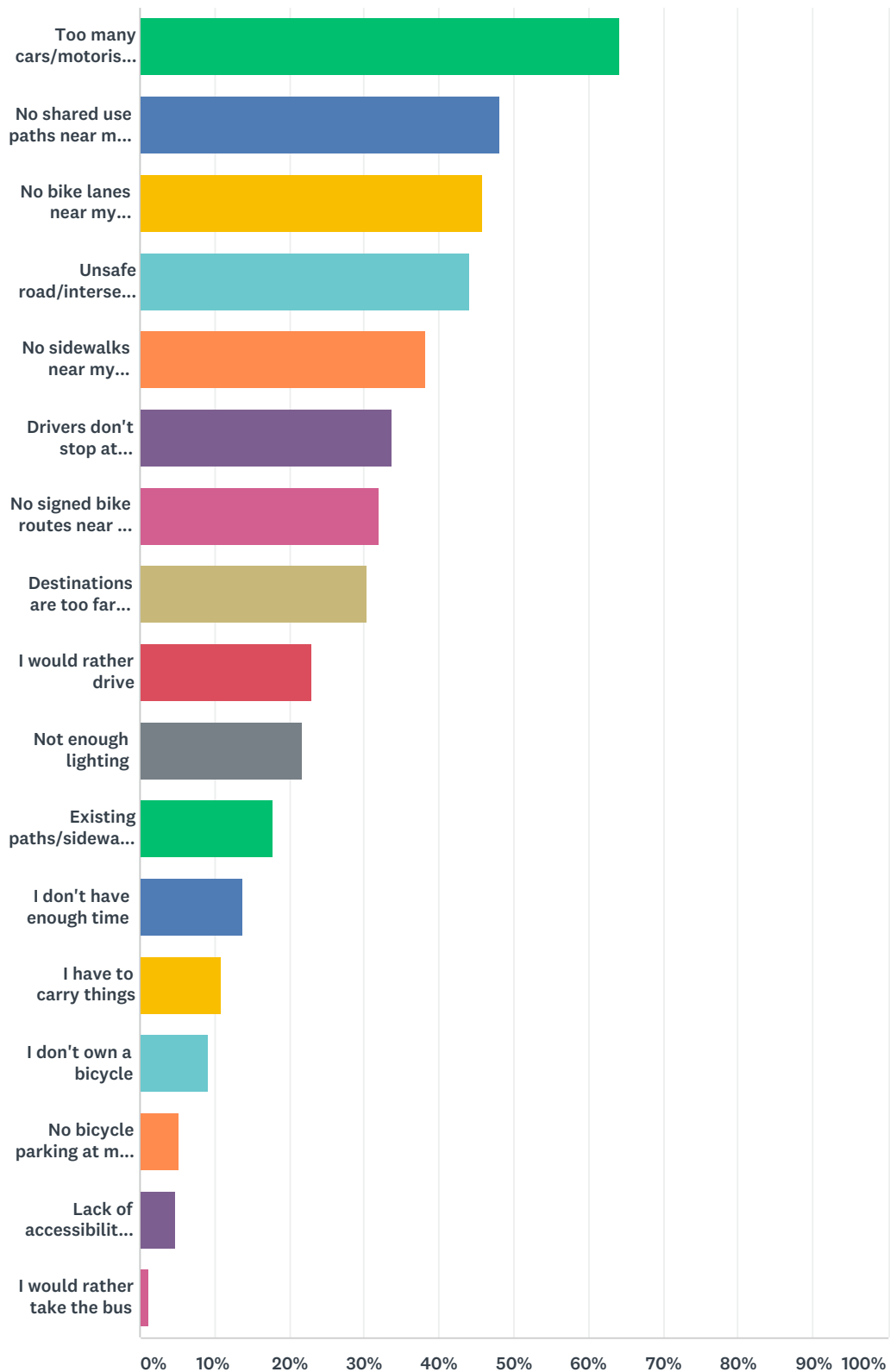
## 2018 Comprehensive Plan Survey

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Enhance freight options (Truck)	8.10%	38.48%	41.52%	11.90%		
	32	152	164	47	395	2.78
<hr/>						
Enhance freight options (Rails)	16.96%	36.96%	33.67%	12.41%		
	67	146	133	49	395	2.65

# Q20 What prevents you from walking or biking more often? (check all that apply)

Answered: 403 Skipped: 133

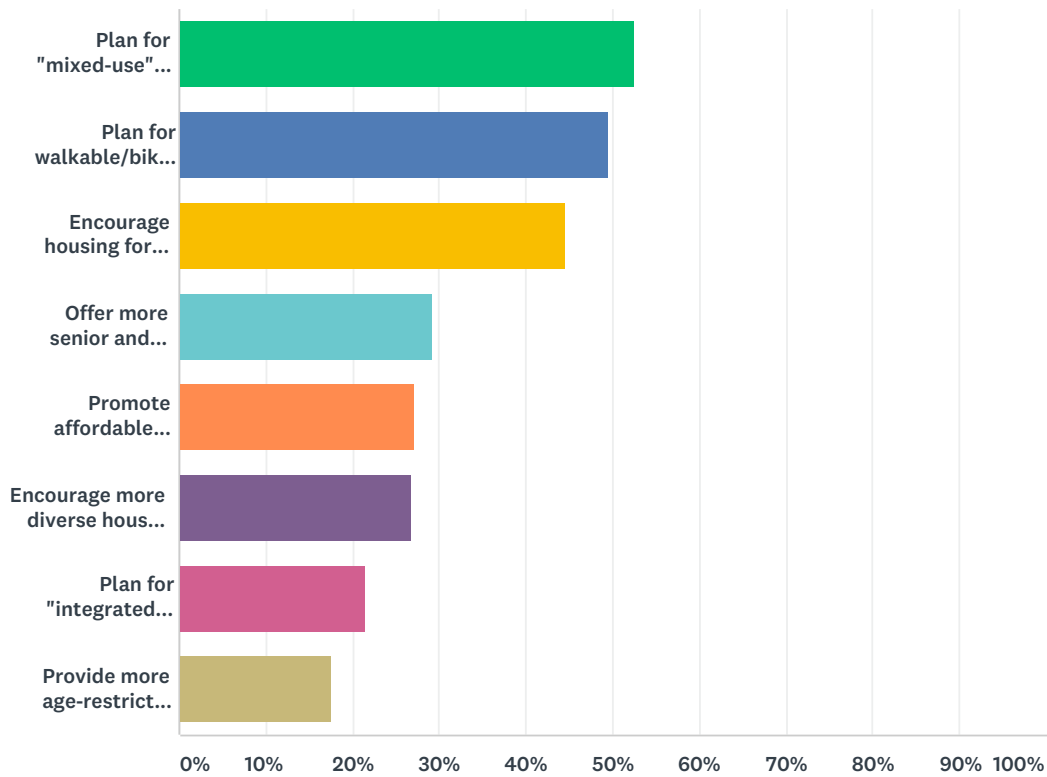


## 2018 Comprehensive Plan Survey

ANSWER CHOICES	RESPONSES	
Too many cars/motorists drive too fast	64.27%	259
No shared use paths near my residence	48.14%	194
No bike lanes near my residence	45.91%	185
Unsafe road/intersection crossing conditions (lack of signals, signs, crosswalks)	44.17%	178
No sidewalks near my residence	38.21%	154
Drivers don't stop at crosswalks	33.75%	136
No signed bike routes near my residence	32.01%	129
Destinations are too far away	30.27%	122
I would rather drive	23.08%	93
Not enough lighting	21.84%	88
Existing paths/sidewalks are in poor condition or incomplete	17.87%	72
I don't have enough time	13.90%	56
I have to carry things	10.92%	44
I don't own a bicycle	9.18%	37
No bicycle parking at my destination	5.21%	21
Lack of accessibility (based on Americans with Disabilities Act design)	4.71%	19
I would rather take the bus	1.24%	5
Total Respondents: 403		

## Q21 HOUSING: What do you think the County's priorities should be related to the provision of housing? (choose up to three)

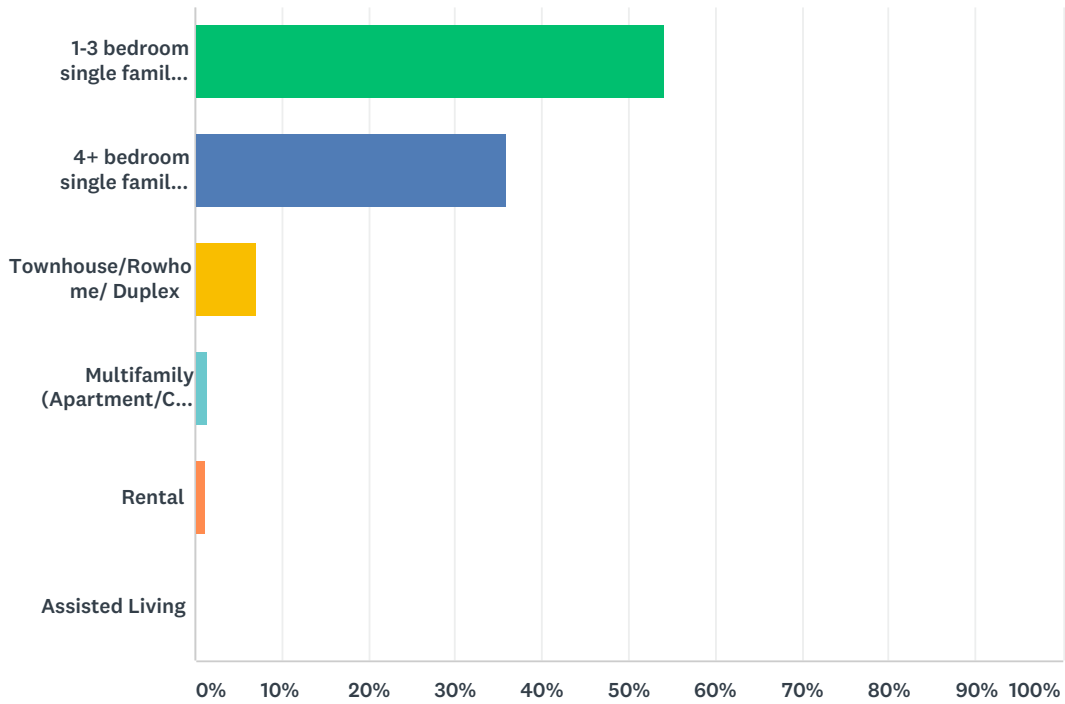
Answered: 400 Skipped: 136



ANSWER CHOICES	RESPONSES
Plan for "mixed-use" communities that offer diverse housing types and essential services (e.g. grocery, bank, gas stations) nearby	52.50% 210
Plan for walkable/bikeable communities	49.50% 198
Encourage housing for moderate-income residents and families	44.50% 178
Offer more senior and assisted living opportunities	29.25% 117
Promote affordable housing opportunities, particularly for low-income residents and families	27.25% 109
Encourage more diverse housing options	26.75% 107
Plan for "integrated mixed-use" communities where housing is above retail/employment	21.50% 86
Provide more age-restricted communities	17.50% 70
Total Respondents: 400	

## Q22 What type of housing do you currently live in?

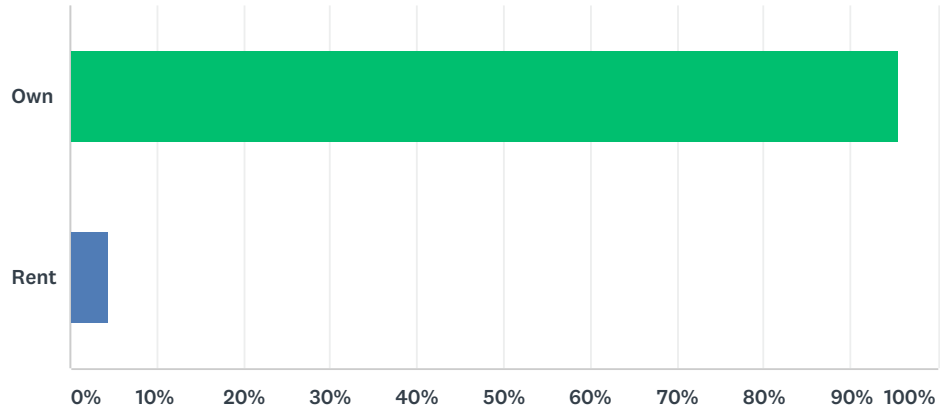
Answered: 416 Skipped: 120



ANSWER CHOICES	RESPONSES	
1-3 bedroom single family detached house	54.09%	225
4+ bedroom single family detached house	36.06%	150
Townhouse/Rowhome/ Duplex	7.21%	30
Multifamily (Apartment/Condo)	1.44%	6
Rental	1.20%	5
Assisted Living	0.00%	0
<b>TOTAL</b>		<b>416</b>

## Q23 Do you rent or own your home?

Answered: 412 Skipped: 124

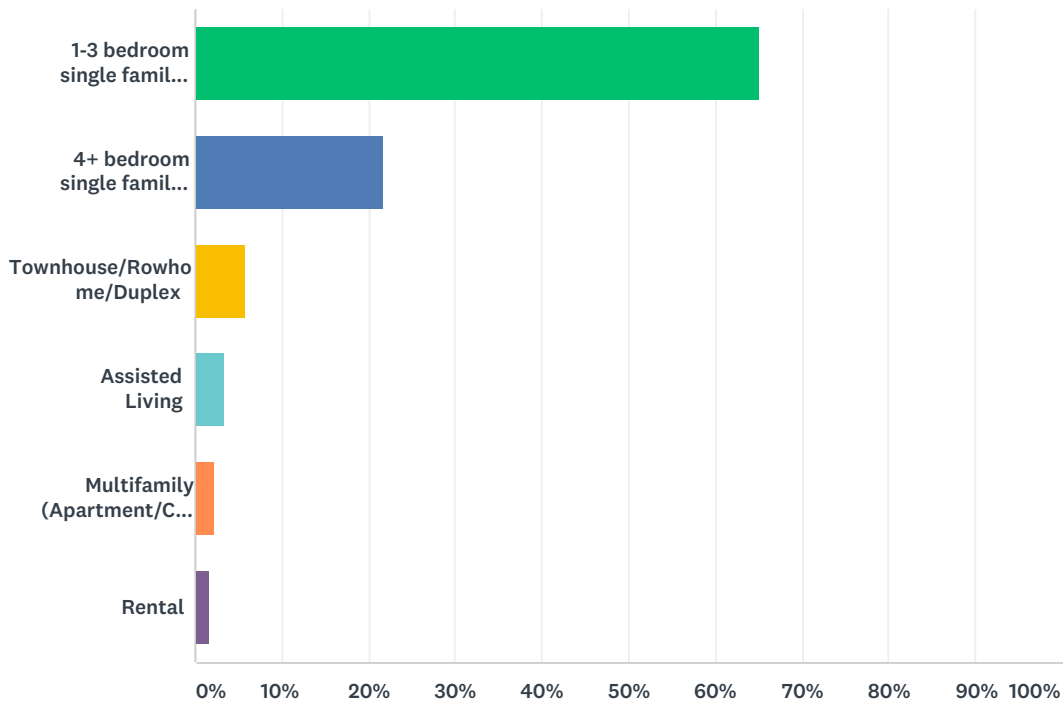


ANSWER CHOICES	RESPONSES	
Own	95.63%	394
Rent	4.37%	18
TOTAL		412



## Q24 If you were to consider moving soon, what type of housing would you likely choose?

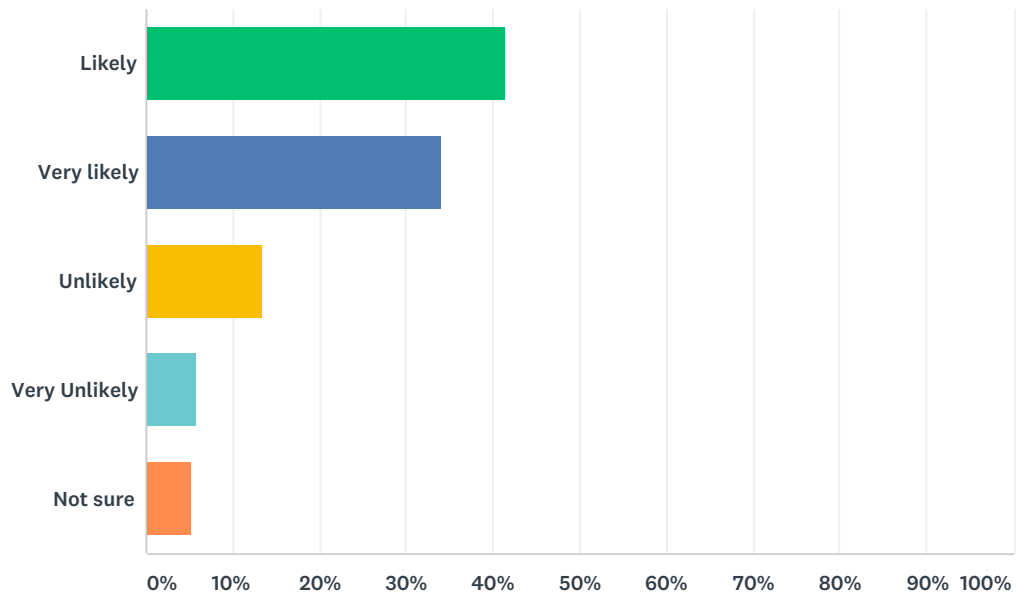
Answered: 399 Skipped: 137



ANSWER CHOICES	RESPONSES	
1-3 bedroom single family detached house	65.16%	260
4+ bedroom single family detached house	21.80%	87
Townhouse/Rowhome/Duplex	5.76%	23
Assisted Living	3.26%	13
Multifamily (Apartment/Condo)	2.26%	9
Rental	1.75%	7
<b>TOTAL</b>		<b>399</b>

## Q25 How likely would it be to find your preferred housing type in your price range in Kent County?

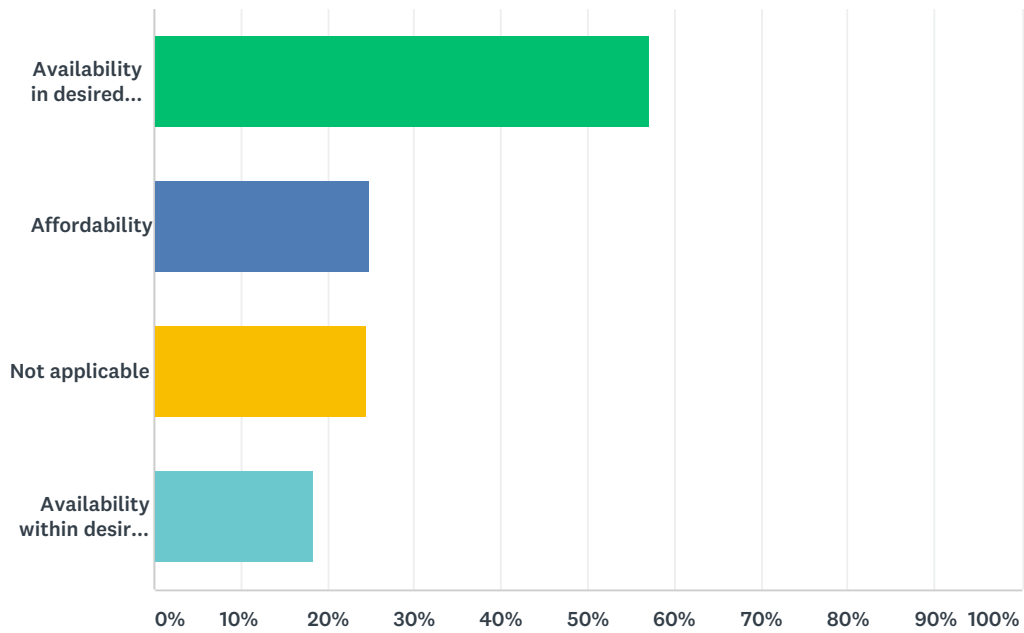
Answered: 416 Skipped: 120



ANSWER CHOICES	RESPONSES	
Likely	41.35%	172
Very likely	34.13%	142
Unlikely	13.46%	56
Very Unlikely	5.77%	24
Not sure	5.29%	22
<b>TOTAL</b>		<b>416</b>

## Q26 What do you see as barriers to finding your preferred housing type in your price range in Kent County? (check all that apply)

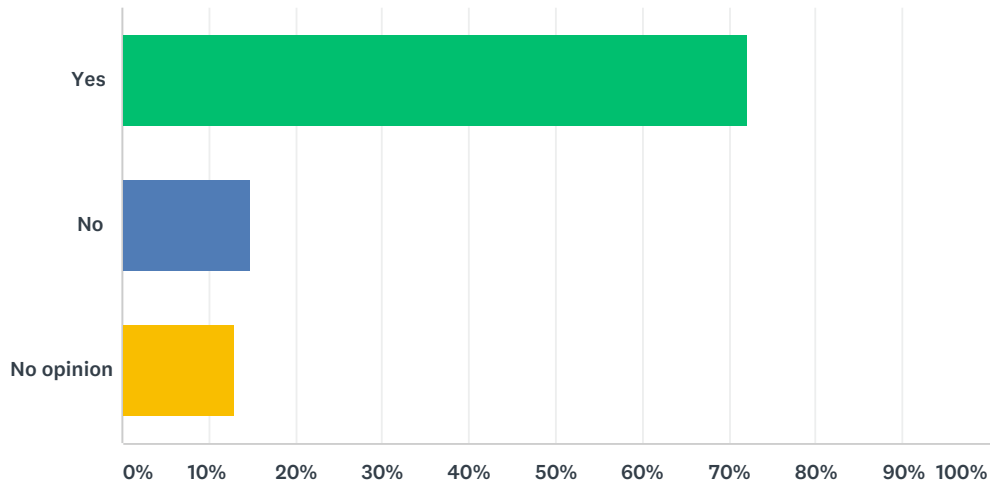
Answered: 402 Skipped: 134



ANSWER CHOICES	RESPONSES	
Availability in desired location	57.21%	230
Affordability	24.88%	100
Not applicable	24.38%	98
Availability within desired neighborhood type (i.e. apartment complexes, subdivision)	18.41%	74
Total Respondents: 402		

## Q27 LAND USE & GROWTH MANAGEMENT: Should new residential and commercial development be concentrated in and around our existing cities, towns, and communities?

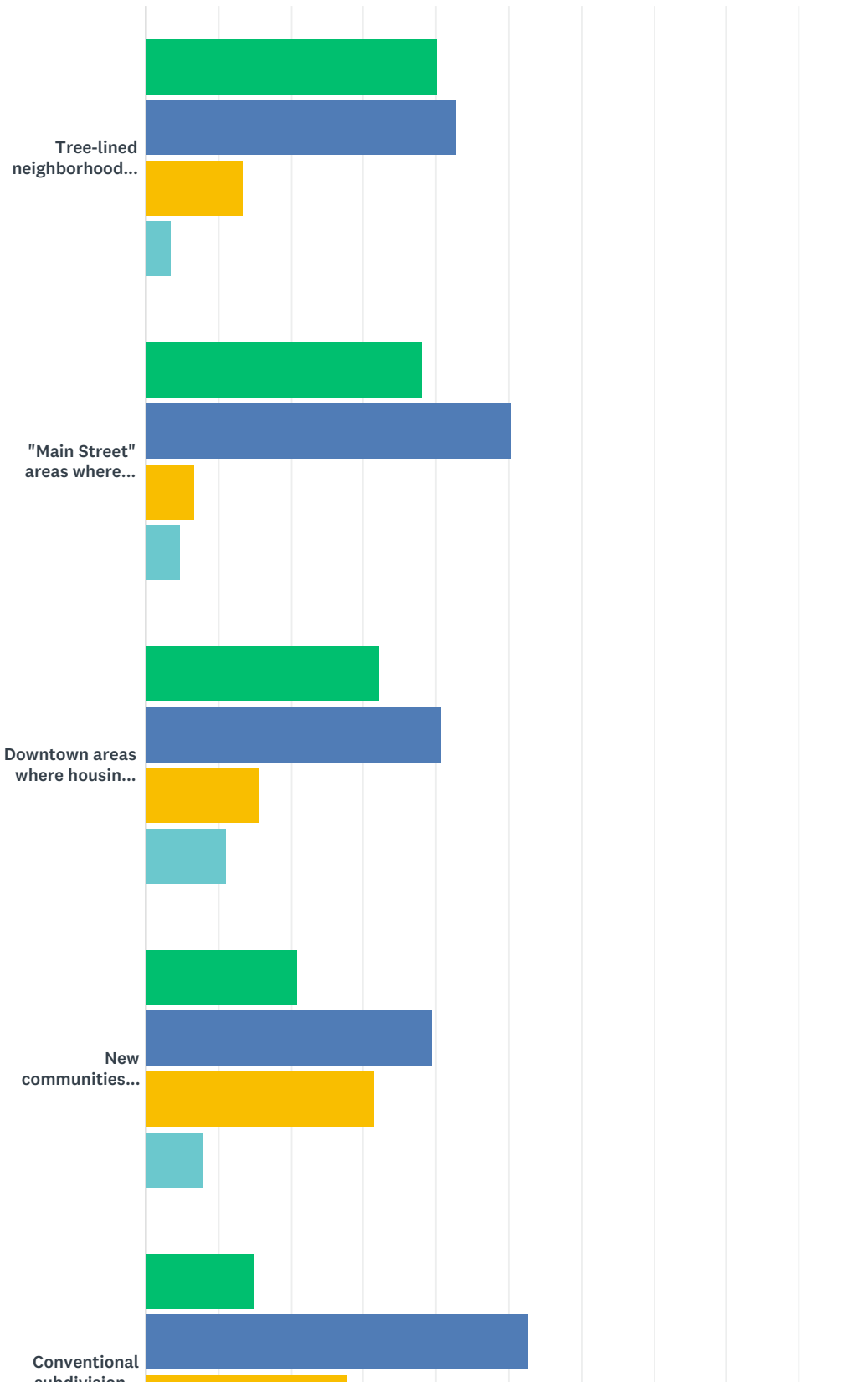
Answered: 411 Skipped: 125



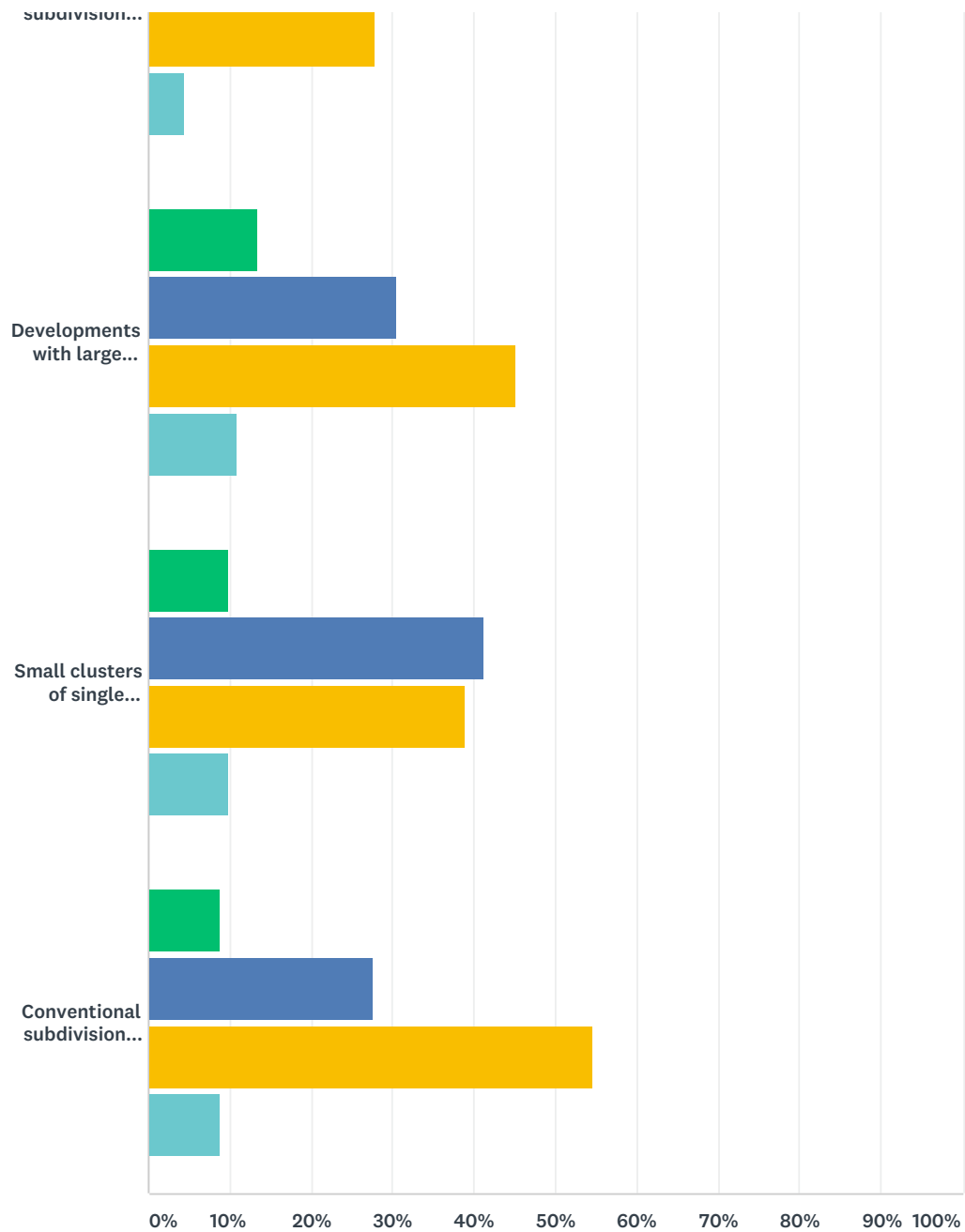
ANSWER CHOICES	RESPONSES	
Yes	72.26%	297
No	14.84%	61
No opinion	12.90%	53
TOTAL		411

# Q28 As new residential development occurs, what types of communities do you feel should be planned?

Answered: 414 Skipped: 122



## 2018 Comprehensive Plan Survey



■ Strongly Support   
 ■ Support   
 ■ Do Not Support   
 ■ No Opinion

	STRONGLY SUPPORT	SUPPORT	DO NOT SUPPORT	NO OPINION	TOTAL	WEIGHTED AVERAGE
Tree-lined neighborhoods on a street grid with alley access that are within a short walk to downtown or retail/services	40.15% 159	42.93% 170	13.38% 53	3.54% 14	396	1.80
"Main Street" areas where diverse housing types are within a short walk to retail/services	38.07% 150	50.51% 199	6.60% 26	4.82% 19	394	1.78
Downtown areas where housing and retail are present in the same building	32.23% 127	40.86% 161	15.74% 62	11.17% 44	394	2.06
New communities built by a single developer that include a mix of residential, commercial, and recreational uses	20.92% 82	39.54% 155	31.63% 124	7.91% 31	392	2.27



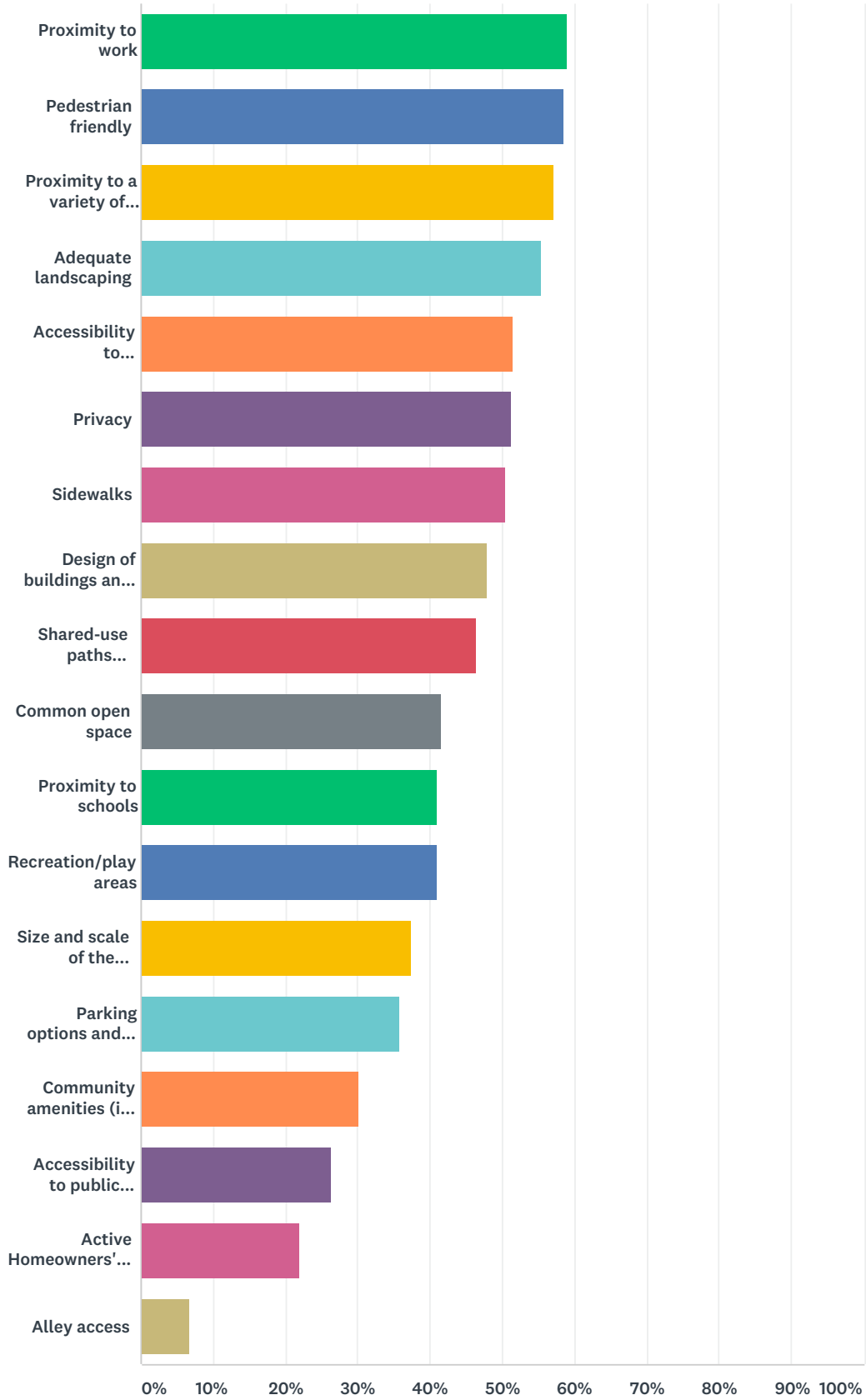
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Conventional subdivision developments of single family homes within a 5-10 minute drive to retail/services	15.17% 59	52.70% 205	27.76% 108	4.37% 17	389	2.21
Developments with large homes on large lots	13.44% 52	30.49% 118	45.22% 175	10.85% 42	387	2.53
Small clusters of single family homes in rural areas	9.87% 38	41.30% 159	38.96% 150	9.87% 38	385	2.49
Conventional subdivision developments in the more rural areas of the County	8.85% 34	27.60% 106	54.69% 210	8.85% 34	384	2.64

**Q29 What attributes make a residential community appealing to you?  
(check all that apply)**

Answered: 417 Skipped: 119

## 2018 Comprehensive Plan Survey



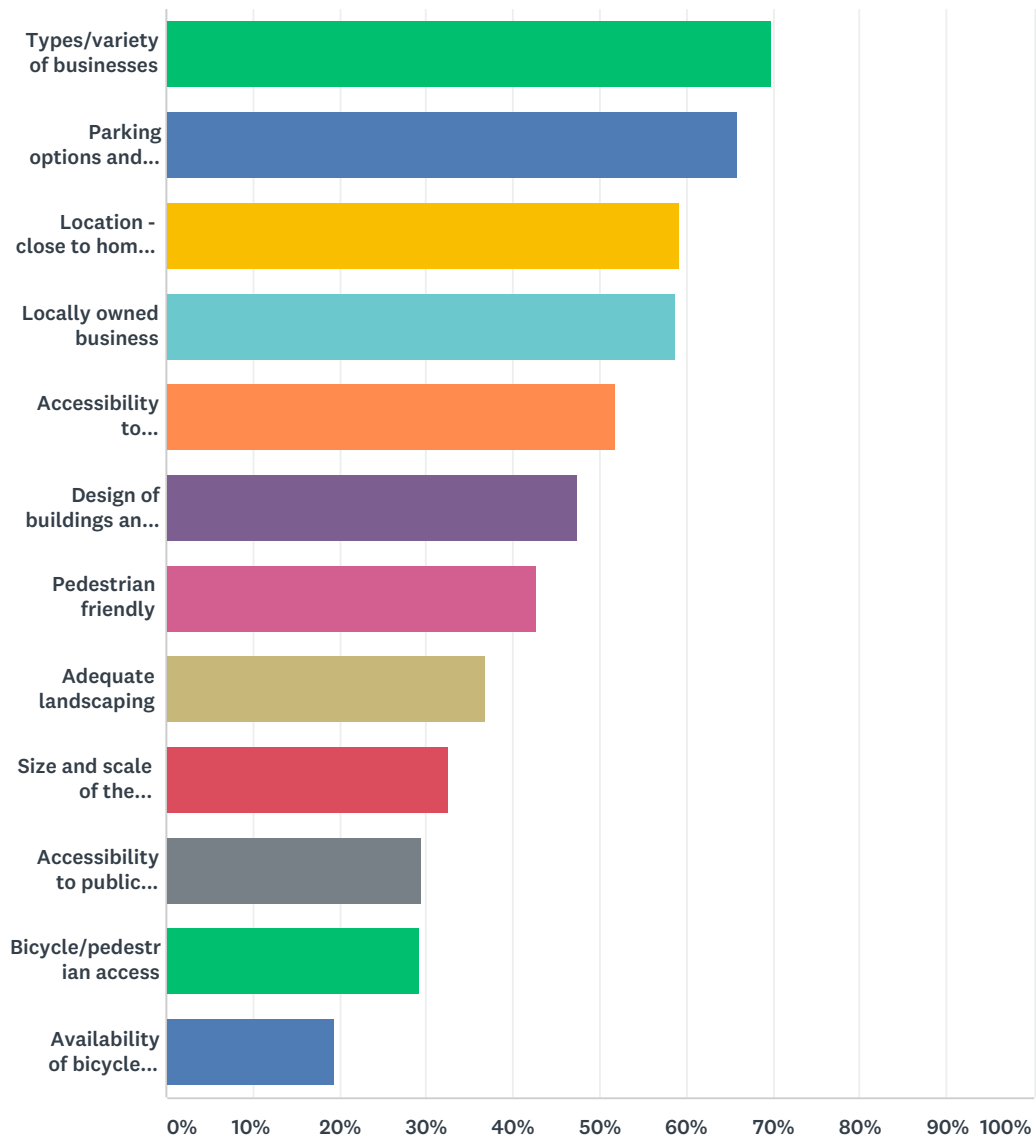
ANSWER CHOICES	RESPONSES
Proximity to work	58.99% <span style="float: right;">246</span>

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Pedestrian friendly	58.51%	244
Proximity to a variety of businesses	57.07%	238
Adequate landscaping	55.40%	231
Accessibility to roads/highways	51.56%	215
Privacy	51.32%	214
Sidewalks	50.36%	210
Design of buildings and overall site	47.96%	200
Shared-use paths (walking/bike paths)	46.52%	194
Common open space	41.73%	174
Proximity to schools	41.01%	171
Recreation/play areas	41.01%	171
Size and scale of the buildings	37.41%	156
Parking options and general circulation	35.73%	149
Community amenities (i.e. pools, clubhouses)	30.22%	126
Accessibility to public transportation	26.38%	110
Active Homeowners' Association	22.06%	92
Alley access	6.71%	28
Total Respondents: 417		

### Q30 What attributes make a commercial development appealing to you? (check all that apply)

Answered: 407 Skipped: 129



ANSWER CHOICES	RESPONSES	
Types/variety of businesses	69.78%	284
Parking options and general circulation	65.85%	268
Location - close to home or work	59.21%	241
Locally owned business	58.72%	239
Accessibility to roads/highways	51.84%	211
Design of buildings and overall site	47.42%	193
Pedestrian friendly	42.75%	174

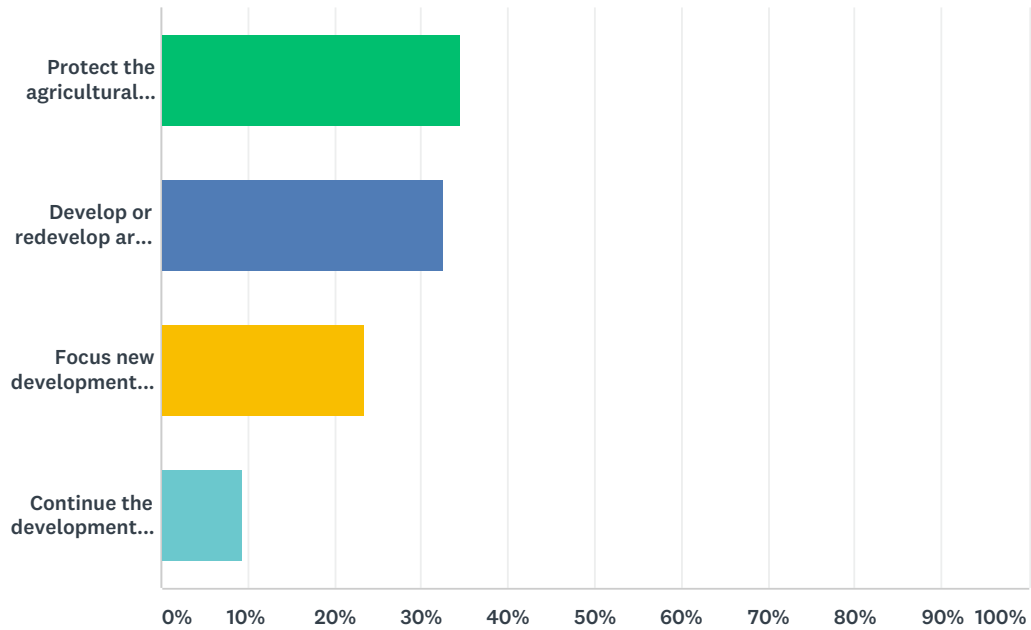
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Adequate landscaping	36.86%	150
Size and scale of the buildings	32.68%	133
Accessibility to public transportation	29.48%	120
Bicycle/pedestrian access	29.24%	119
Availability of bicycle parking areas	19.41%	79
Total Respondents: 407		



### Q31 Which one of the following growth policies do you support?

Answered: 411 Skipped: 125



ANSWER CHOICES	RESPONSES
Protect the agricultural and rural character of the County	34.55% 142
Develop or redevelop areas around and within city boundaries first, before development is allowed in peripheral areas	32.60% 134
Focus new development into a pattern of communities/small towns that have a core, a variety of housing types, retail and recreation	23.36% 96
Continue the development pattern that permits individual, random residential developments	9.49% 39
TOTAL	411

## Q32 How do you envision Kent County 30 years from now?

Answered: 294 Skipped: 242

## Q33 What is your home zip code?

Answered: 397 Skipped: 139

## Q34 What is your work zip code?

Answered: 362 Skipped: 174

## Q32 How do you envision Kent County 30 years from now?

Answered: 294 Skipped: 242

#	RESPONSES	DATE
1	If sprawl is not contained, an unending pattern of cookie cutter housing developments and strip malls radiating out as suburbs of Dover.	1/5/2017 11:36 AM
2	Somewhat more developed but not fundamentally different from how it is now.	1/3/2017 1:50 PM
3	Keep the open farmlands. More trees and lots ponds Don't overdevelop	1/2/2017 10:37 PM
4	the roads will suck	12/30/2016 11:49 AM
5	Hopefully vibrant with high quality of life for residents of all incomes and all stages of life.	12/28/2016 2:02 PM
6	I seriously doubt that my answers to this survey will have any impact on rampant and haphazard growth in the county, and I see the natural beauty and farmland disappearing before my eyes. In 30 years, ugly.	12/22/2016 8:36 AM
7	Over crowded, filled with people from out of state that don't share our values	12/21/2016 10:17 PM
8	Nicer homes and newer schools. Closer access to shopping and more high end shopping with "open" malls. More offices and businesses for professionals outside of blue collar work. Better access to regional rail line. Not having to drive to Wilmington or Newark to get on train to major cities. Need a stop in Kent.	12/21/2016 7:02 PM
9	Overpopulated	12/21/2016 3:50 PM
10	Wililmington	12/21/2016 3:29 PM
11	More parks, public transportation options, more entertainment indoor outdoor recreation, affordable taxes and housing controlled growth	12/21/2016 1:57 PM
12	Crowded	12/21/2016 1:32 PM
13	Unfortunately, I see Kent County as becoming over crowded and very "city-like" in the future. Traffic is already extremely heavy and getting worse, so hopefully within 30 years that will be alleviated.	12/21/2016 9:12 AM
14	Kent county will certainly grow significantly in its population. Something must be done to drive entrepreneurial efforts or encourage young energetic creative people (technology and the arts) to come to Kent county. They will come if the infrastructure is here. With DSU, DTCC, Wilmington U, and Wesley here, there must be something we can do to drive entrepreneurial- coworking space, artists lofts, etc.	12/20/2016 11:35 AM
15	overpopulated	12/20/2016 10:36 AM
16	Kent County attracts a large number of retirees from neighboring states who are attracted to the low taxes, relatively affordable housing, and the proximity to the beaches. This provides a burden on middle-age professionals and young families who are starting out and are competing for housing options and other services. The older demographic will not be here in 30 years but the younger demographic will. An equal focus on the young professionals and families now means that they will still be here in 30 years and the county will continue to thrive.	12/20/2016 10:00 AM
17	Preserve the historic buildings, structures, and areas.	12/20/2016 9:19 AM
18	A strong manufacturing hub.	12/19/2016 3:33 PM
19	A wasteland as the tax base flees	12/19/2016 12:23 PM
20	well maintained	12/19/2016 9:37 AM
21	I'd like to see a good balance of open land with some more retail options. NOT a bunch of new neighborhoods smothered together with increased traffic. And NO low income housing developments unless you want increased crime rates and break ins. People move to Kent co to get away from traffic and crime.	12/16/2016 12:23 PM
22	One giant neighborhood	12/15/2016 8:47 PM

## 2018 Comprehensive Plan Survey

23	over crowded and like the lower New Castle County became	12/15/2016 8:06 PM
24	Like New Castle county	12/15/2016 7:57 PM
25	Over development!	12/15/2016 7:49 PM
26	Proud of it's farmland. Think of new shopping centers that don't feature loaded parking lots as your first sight. Buildings in front (residences on 2nd floor) and parking in side and back.	12/15/2016 7:02 PM
27	More restaurants and business	12/15/2016 6:37 PM
28	What do I want? By my answers you could probably guess that I would like the clock turned back 30 years. What do I suspect will happen in 30 years? I think Kent County will be much more of a sea of houses than it is today.	12/15/2016 5:21 PM
29	Growth of manufacturing and health care for higher paying jobs and service to the elderly. DE is becoming a retirement mecca.	12/1/2016 1:36 PM
30	Probably from a burial plot in the veterans cemetery.	11/30/2016 10:57 PM
31	If we do not change our current ways of thinking and working together we will be in one big mess. Cohesive planning and working together is the only way to make the county prosper as a whole.	11/30/2016 2:09 PM
32	Older, more diversified, could be a great place to call home.	11/30/2016 7:54 AM
33	It can go two different ways: One would be deteriorating/one could be vibrant. It all depends on the leadership.	11/28/2016 3:11 PM
34	Positive	11/28/2016 10:46 AM
35	If nothing changes, the same as it is now. In-appealing to residents and businesses due to low median household income and lack of middle class population.	11/23/2016 10:01 AM
36	Hopefully it will still have a small town feel. It will be bigger but lets hope development is well planned and infrastructure supports the development to keep Kent County a nice place to live.	11/23/2016 9:09 AM
37	Redeveloped all vacant properties with expanded roadways with pedestrian crossovers for safety.	11/23/2016 8:49 AM
38	Growth center of the state	11/23/2016 8:26 AM
39	better community	11/23/2016 7:47 AM
40	Replication of Newcastle county with business structure to support local economy so that it does not become the next suburb to fail and cause a landslide in equity positions during the next downturn.	11/22/2016 9:35 PM
41	Diversified with retirement, military, government but also retaining and expanding manufacturing. Don't let special interest groups make decisions for all of us..,	11/22/2016 8:58 PM
42	More commercial establishments to visit and enjoy	11/22/2016 7:10 PM
43	unless new employment opportunities are developed, it will lag behind New Castle and Sussex	11/22/2016 5:03 PM
44	Overpopulated, congested, crime-ridden & filled with decaying strip malls - in other words go look at the Rt.40 corridor from Wilmington Manor to the MD line or look at Kirkwood Hwy. - unfortunately that's what it will look like because the state lets developers do whatever they want.	11/20/2016 4:08 PM
45	open country side with farms and forests and wetlands protected by the county. Homes clustered around cities and towns and businesses just outside of the towns.	11/19/2016 3:37 PM
46	more people; more diverse	11/19/2016 10:11 AM
47	Over populated	11/18/2016 10:30 AM
48	A wonderful place to live.	11/18/2016 9:35 AM
49	Larger population of elderly, better healthcare	11/17/2016 10:00 PM
50	Older population.	11/17/2016 8:07 PM
51	I anticipate that the community demographically will be older. Hopefully infrastructure improvements will increase the options for various modes of transportation especially walking and public transit. School sites need to become a provider of/or open as community amenities for more than just school age children. Agriculture and natural areas will continue to be a significant aspect of the County.	11/17/2016 5:11 PM



## 2018 Comprehensive Plan Survey

52	Highly populated with less agricultural areas; probab;y more congested as to traffis and school overcrowding.	11/16/2016 6:50 PM
53	more parks	11/16/2016 4:49 PM
54	Hopefully still a nice quiet county with the charm it has now.	11/16/2016 4:33 PM
55	I would like to see a county that has become more walk, bicycle and ADA friendly. Public transportation should be frequent and free-flowing to the point that people feel comfortable using it as a regular, reliable source of transportation that has no stigma. This means buses and possibly in-town trolley or similar services. I would like for sprawl to be curtailed. There should be a variety of things for people to do in their free time that appeal to different interests, which could also make the area competitive when businesses are looking for places to locate. I know it's expensive, tricky to undertake, and unpopular right now, but finding a way to have all of Delaware back in the passenger train network would be great.	11/16/2016 4:30 PM
56	I envision Kent County as a well developed area full of many businesses and communities while still keeping it's farm land and hopefully headed toward a more progressive era in energy and other things of that nature.	11/16/2016 1:46 PM
57	Grown, residential, commercial, industrial, & institutional.	11/16/2016 8:25 AM
58	I hope it grows but at a slower pace than Middletown and other larger populated cities have. I still see working farms and better public transportation. I would like to see public schools offer Preschool and Pre K levels open to all who wish to enroll. I see a more environmentally friendly county.	11/15/2016 11:05 PM
59	Well developed tourist destination for people from the large cities in this region. Level of tourist infrastructure similar to Cape Cod. Focus on natural and historical attractions and slow residential development to maintain quaint vibe.	11/15/2016 7:06 PM
60	At the current rate of growth, SPRAWL!	11/15/2016 5:30 PM
61	Hopefully a more diverse housing type with better downtowns to serve county residents along with better recreational options. Also nicer communities with less emphasis on low income housing.	11/15/2016 5:18 PM
62	I see it as an aging community that does not attract young professionals to stay unless something changes.	11/15/2016 9:58 AM
63	Overcrowded and with less of the "charm" that exists now. The Amish, for example, are considered to be a positive attribute for the county. Everyone loves the Amish -- their culture, lifestyle, trades, etc. But, we're pushing them out of Delaware as fast as possible, instead of working with them to maintain their communities here. When Route 8 was "improved" several years ago, there was no consideration for the Amish. They desperately need dedicated paths or road lanes for their carriages, and we had an ideal opportunity to provide that, but we didn't. That's just one small example of wasting an opportunity to preserve our current character. Even today, with the New Burton Road overpass and connecting roads, is there ANY consideration for the Amish or for bicycling?	11/15/2016 8:54 AM
64	Unfortunately it will no longer be a rural community. It will look much like New Castle County looks now. Crowded and choked with traffic.	11/15/2016 8:29 AM
65	Crime laden because of low income housing and development, several neighbors put their homes on the market due to low income and business developmental plans, and many of my other neighbors plan to sell their homes next Spring/Summer.	11/14/2016 9:22 PM
66	Rural. I moved from a big city to Kent County for the wide open spaces. Would hate to see that disappear.	11/14/2016 4:42 PM
67	a county that still has some integrity and is viable for peaceful living with natural resources at a level that will not be in jeopardy of depletion due to the over development of the area.	11/14/2016 12:40 PM
68	suburban SPRAWL	11/14/2016 10:46 AM
69	A sad example of missed opportunities if immediate zoning and planning amendments are not made to protect from ill-conceived sprawl that will benefit a few opportunistic developers.	11/14/2016 10:15 AM
70	Still rural and beautiful but major shopping centers in proximity to route13.	11/14/2016 9:55 AM
71	Still with open farm land and not lined with neighborhood after neighborhood.	11/14/2016 9:51 AM
72	crowded	11/14/2016 9:35 AM

## 2018 Comprehensive Plan Survey

73	Unfortunately, it will look and feel just like Middletown, DE. congestion, bad traffic, so many lights, confusing large shopping areas, no beauty, no landscaping, no areas to meet and visit with people, no areas to gather for community fairs, etc.	11/14/2016 8:43 AM
74	Overcrowded with low income people and a high crime rate	11/12/2016 6:50 AM
75	I hope the rural areas remain, but I really don't know.	11/7/2016 12:26 PM
76	A thriving and vibrant county that capitalizes on its natural and historic resources to connect its citizens and communities with recreational, commercial, and business amenities.	11/4/2016 1:48 PM
77	Be able to see that the County has grown with planned thought & management. And minimum spiral & clutter.	11/4/2016 10:58 AM
78	if no improvements made - somewhat lower class	11/4/2016 10:15 AM
79	A vital and thriving county meeting the health, social and economic needs of residents through the continued investment of money and other resources for its growth and development. A growth in tourism as we use unique ways to promote and draw visitors to Dover, (State's capital) various entertainment attractions and historical sites. Transportation system will be affordable and easily accessible. Established bike paths/routes and Bikeshare program (used in several major cities) will be in place so people can rent bikes to ride around the town/city instead of driving. Recreational parks where people feel safe to go to with family. An overall increase in the salary income compared with other states. Homelessness and hunger no longer a major issue as it is now as we will have the facilities and resources to meet the needs.	11/4/2016 9:16 AM
80	As a well-populated area with a thriving downtown Dover at its heart and great retail and commercial developments in addition to lush recreational environments.	10/31/2016 11:28 AM
81	I would hope its character stays as is today!!!	10/31/2016 9:03 AM
82	Like Middletown. We would be there now if it weren't for the recession. Neither the county nor the Levy Court has the balls to stand up for making Kent county a beautiful, clean, desirable place to live. TMDLs should be based regionally and should control development. No new developments should be permitted in rural areas without making the developer fix the infrastructure ( this is being done, somewhat). Water quality and flooding due to impervious surfaces should be monitored more closely and regionally. some things, such as building too close to a blue line stream should NOT be waived by any governing body.	10/28/2016 4:11 AM
83	Embracing the historic centers and government entities while creating manufacturing jobs to keep Kent Countians in Kent County.	10/25/2016 6:45 PM
84	With focused/planned growth and a strong and thriving rural community. I suppose that the population is going to skyrocket, much like Middletown/Townsend/Odessa. It's important to plan now for future growth.	10/25/2016 1:50 PM
85	Better roads and landscape Managed housing development Quality builders only	10/24/2016 8:29 PM
86	with much the same mix (proportion) of land uses as it now has	10/22/2016 11:08 AM
87	enlarged small rural towns, building upward in the major towns, more upscale commercial development with more medical facilities and new sports complex	10/17/2016 9:47 AM
88	MORE JOBS AND LESS REGULATIONS OVER regulated	10/14/2016 2:26 PM
89	Vibrant, progressive, productive and prosperous community with country charm. We will increase our County revenues from tourism ie, historical, sports,entertainment, ecotourism, festivals, dining. However, we must improve the branding and marketing of our county. I am a marketing professional and I have ideas. I will submit to the county office.	10/13/2016 7:53 PM
90	More commercial and residential development along rt 1 and 13 corridors	10/13/2016 5:56 PM
91	too populated	10/13/2016 8:48 AM
92	Definitely with more people, mostly retirees. Also probably also students of higher education, traveling from nearby states to study in Kent County. More roads = more cars.	10/12/2016 3:18 PM
93	not sure. Would like to see it keep its country feel and appearance but be able to attract retail business that we now must drive 40-60 minutes to get to.	10/12/2016 1:16 PM
94	In trouble with no services and residences for middle income seniors and a very poor health system.	10/12/2016 10:38 AM

## 2018 Comprehensive Plan Survey

95	Plenty of high paying jobs with excellent public schools. A plethora of entertainment, retail and recreational venues. Municipalities that are beautifully landscaped with a mix of mid and highrise buildings. The people of Kent County will not feel the need to constantly travel to cities throughout the Northeast Corridor to escape their boredom...	10/12/2016 12:12 AM
96	I envision a county where our families are safe, where labor pays, where prosperity is great, where property rights are respected, and where all citizens Are able to afford housing. I want business to grow. I want farms to prosper. I see all people respected.	10/9/2016 8:25 PM
97	Probably more congested in the future given the poor development of the bypass on New Burton Rd and Wyoming Mill Rd that did not make use of existing roadways. The town water from the tap will likely be browner as more development occurs on an already taxed infrastructure without new sewer and water being paid for by the developers that taxed the system.	10/8/2016 10:02 PM
98	Sadly much underwater	10/8/2016 8:15 PM
99	Less rural, unfortunately.	10/7/2016 11:27 AM
100	Having maintained its rural character with development near established towns and cities	10/6/2016 11:06 AM
101	More build up.	10/4/2016 7:49 PM
102	Overpopulated	9/29/2016 12:52 PM
103	more like New Castle	9/29/2016 8:08 AM
104	Overcrowded with too many cars on Route 13 and too many cluster developments	9/27/2016 3:37 PM
105	Hopefully continuing to grow in a planned, measured fashion balancing the need to revitalize and develop our county where necessary with the need to preserve it's rural community flavor.	9/26/2016 5:08 PM
106	I envision Kent County as a well planned county with locally owned businesses as well as large companies providing the backbone for the economy while still preserving the agriculture and natural resources Kent County has to offer. We must attract well paying jobs in order for the locally owned businesses to survive. We cannot continue to rely on government and a few manufacturing companies to support the growth of the county. There is ample vacant space to fill without the need to expand infrastructure.	9/26/2016 2:35 PM
107	Overgrown	9/22/2016 9:31 PM
108	Sadly there will most likely be too many housing developments and not enough varieties of businesses to support the population	9/22/2016 7:24 PM
109	With no changes, over populated, traffic issues and many new developments in small lots taking away the "country" feel of Rural Kent county.	9/22/2016 6:18 PM
110	Very similar to what it is now with slow and steady growth/redevelopment to maintain the quality of life here which explains why many people enjoy living here in the first place.	9/22/2016 1:56 PM
111	Not good. Unfortunately :( Higher crime and way over populated !	9/22/2016 11:03 AM
112	Growing to large	9/22/2016 10:01 AM
113	Diverse mix of retail, family homes, increased public & private school options	9/22/2016 9:18 AM
114	Small rural communities with local resources and most development and residences focused around existing municipalities. Expansive foot and bike travel networks connecting communities and recreation, shopping, etc. Want to still be able to drive 5 minutes from Dover center and see farm land and woods.	9/22/2016 9:13 AM
115	More hometown like. Communities coming together.	9/22/2016 8:10 AM
116	Unfortunately, just another over crowded state.	9/22/2016 7:58 AM
117	If we don't start getting rid of the lower class in our area then it will be a poor place that will drive the higher tax people out. Stop worrying about getting re elected and do what needs to be done.	9/22/2016 7:37 AM
118	A dump if Section-8 housing and rental properties are not controlled. In addition, crime has to be reduced, and rail needs to become part of the transportation and freight needs of the businesses and commuters.	9/21/2016 4:22 PM
119	Desireable area to move to/retire if growth is kept in pace with transportation, educational, economic/jobs.. if not, then it will be overcrowded, with accident riddled roadways	9/21/2016 1:41 PM

## 2018 Comprehensive Plan Survey

120	more densely-populated towns and cities, agricultural uses outside towns and cities, larger highways moving people rapidly through Kent County to other destinations	9/20/2016 9:30 AM
121	Southern Kent, especially southwestern Kent, I see largely unchanged; there is little market for development there. Northern Kent I see being occupied by people who can't afford to live in Middletown.	9/20/2016 6:41 AM
122	Population doubled, still a bass-through County to the beaches, overcrowded schools and roads, Full of retirees on fixed incomes.	9/19/2016 6:07 PM
123	I picture strong communities that are walkable to jobs and businesses with well maintained infrastructure. I would like to see condensed development surrounded by protected farmland and open space with preserved green hubs and corridors for wildlife. Clean water, air and soil must be protected for everyone.	9/19/2016 10:31 AM
124	How do I WANT it to be OR how I think it will actually be? What I want is that it remains a rural county with vibrant small towns offering mixed residential and non-polluting business and employment opportunities. What I think it will actually be is a mass of ugly sprawl with no open vistas and only tiny pockets of farms clinging to existence.	9/18/2016 7:53 AM
125	homes everywhere with inadequate roads	9/17/2016 5:51 PM
126	A county that has curved development and retained the beautiful areas that make this county what it is. A county that has improved traffic issues.	9/17/2016 2:14 PM
127	Not a fortune teller can't see into the future	9/15/2016 7:20 PM
128	Hopefully about the same, providing opportunity for families and businesses to grow and thrive in a great all around environment.	9/15/2016 11:02 AM
129	Hopefully not New Castle County Today	9/14/2016 2:39 PM
130	A discount mecca. Too sad	9/14/2016 10:13 AM
131	Much more like New Castle County	9/14/2016 10:02 AM
132	Mostly urbanized	9/13/2016 11:55 PM
133	a retirement destination for people from northern states such as NJ, NY and PA.	9/13/2016 2:24 PM
134	With the leadership of the County now, It will continue to grow with many challenges and deliver outstanding service to the residents of Kent County.	9/13/2016 12:19 PM
135	Farmland and forests preserved with businesses and homes around cities	9/13/2016 11:02 AM
136	70% less automobiles, 10% less land mass, more pedestrians and bikers, more agricultural land in use, more localized economy.	9/12/2016 8:01 PM
137	More development with no better access to roads and infrastructure fixed only after a serious problem apparent.	9/12/2016 1:57 PM
138	largely rural, with quaint and charming small towns and cities. Less traffic because people walk and bike and because people live near the places they work, shop and recreate. Clean air, clean water. Diverse population. Caring and friendly people.	9/12/2016 1:17 PM
139	A complete mish mash of housing business and whatever else any developer wants to build. I don't think the area will look good.	9/12/2016 1:00 PM
140	Rate of growth for Kent County hasn't historically been high enough to warrant major growth changes. I do not envision much change from current as maintenance of new construction in long term is lacking. New buildings today will be dilapidated later. However, I hope there to be more young adult friendly attractions and updated housing. As well as better traffic flow with light change timing.	9/12/2016 11:57 AM
141	More subdivisions in rural areas.	9/12/2016 11:52 AM
142	More developed, but rather than destroying the old/historic parts of the county, re-build, re-develop, re-construct old buildings. Keep the historic charm and architecture in the heart of the cities, but begin to develop more neighborhoods adjacent to the bigger cities, but keep local farms and local industry alive.	9/12/2016 8:45 AM
143	suffering from the legacy of strip development, both commercial and residential.	9/12/2016 8:31 AM
144	too many people with more crime	9/12/2016 8:26 AM

## 2018 Comprehensive Plan Survey

145	A lot more traffic and congestion	9/11/2016 6:44 PM
146	In bad shape because of uncontrolled growth	9/11/2016 5:29 PM
147	Kent county needs more jobs for middle class families! We need to diversify the industries that are located in our county and the economic development office needs to be more aggressive with targeting new businesses. He city of Dover is a hidden gem and needs to be redeveloped! Also, as a biker and runner- the lack of adequate sidewalks and bike paths is very sad.	9/11/2016 2:44 PM
148	I would love to see a county that has wisely utilized its assets- -Promoted agri-tourism to expand upon current wineries and breweries to include artisanal cheese making (goat farms, etc.), farm-themed Bed & Breakfasts, to create a niche market for tourist dollars not found in the other two counties - Promoted the historical nature of the county with programs such as Dover's Heritage Park in smaller towns. -Utilized the higher educational resources in the county to attract employers- retain, attract younger, higher wage earners -Developed Arts communities like Arden to attract artists to central Delaware and develop another facet of the tourist industry -Improved the quality of education with more Immersion programs, Stem opportunities, Summer enrichment programs	9/11/2016 2:28 PM
149	Cannot say.	9/11/2016 2:18 PM
150	Would like to see better planning from del dot to plan ahead for expected growth. More development and business.	9/11/2016 11:36 AM
151	Like lower new castle now	9/11/2016 11:31 AM
152	More small retail and restaurant options. More tourism activities	9/11/2016 10:45 AM
153	JUST LIKE IT IS NOW, only because I can't turn the clock back 15 years before the huge housing boom of the early 2000's.	9/11/2016 8:48 AM
154	Revitalized downtowns, mixed use communities, viable ag industry healthy and mixed commercial manufacturing and tech business	9/11/2016 7:11 AM
155	About the same only more people	9/11/2016 6:57 AM
156	Like to see the county's "beach areas" refined with more public access, dining, etc. love to see greater efforts in downtown Dover, amilford snd Smyrna.	9/11/2016 6:24 AM
157	Overgrown and still not enough public transportation. I will never understand why there is a perfect School (polytech) for adults to get HS diploma/ GED and not one local bus goes there from Dover. It takes 3 buses to go from Little Creek Rd to Polytech and it is the Harrington bus that takes you there!	9/10/2016 6:48 PM
158	More ethnically and economicly diverse w affluent local businesses.	9/10/2016 4:57 PM
159	Unless things change I picture to be very low income with service industry jobs only. That will provide higher crime, more low income housing, and and make it even more undesirable.	9/10/2016 8:57 AM
160	Status quo or shabbier.	9/9/2016 4:01 PM
161	Much more developed today and loss of open space due to increased human population.	9/9/2016 1:29 PM
162	Hopefully growth is controlled or limited to areas that are already somewhat developed so open space and natural areas remain.	9/9/2016 1:13 PM
163	As Kent County is growing, I would like to see controlled growth while preserving the character of the county. Second I propose a county owned road system as other states have. This would lessen the burden on the state. Third, if you want growth, make a proposal to have Route 1 designated an Interstate Highway (Such as having it named I-995).	9/9/2016 1:09 PM
164	I hope 30 years from now Kent County still contains a vast amount of open agricultural land. If the agricultural land left as of now and the slim amount of agricultural character that still exists today is gone is 30 years, not only Kent County but the State of Delaware as a whole will be in very bad shape.	9/9/2016 12:51 PM
165	Traffic problems, crowded and run the same way it has been for the last 30 years!!!!	9/9/2016 12:44 PM
166	Without new industry or manufacturing jobs it will continue to become more of a bedroom community dominated with service and medical industry jobs.	9/9/2016 10:32 AM
167	A place whereby people feel safe to live, work, shop, and play.	9/9/2016 9:35 AM



## 2018 Comprehensive Plan Survey

168	Over developed and mostly single family or townhouse construction feeding increasingly congested roads and schools.	9/8/2016 11:42 PM
169	oasis of livable, walkable, historic areas where young couples can come to live and raise a family	9/8/2016 9:48 PM
170	I would love to see the county tap into the vast resources and talents of the surrounding agricultural community and local artisans and promote these things and bring them to the citizens. Farm to table, handcrafted foods/furniture/etc., street markets, etc. I hope the county creates more small green spaces in urban areas and promotes the areas with historical significance. I hope this creates a better sense of community and happier residents. If the county allows unbridled growth/sprawl and all of the traffic, noise, and crowding that goes with it, it would be stressful and I'd move somewhere else.	9/8/2016 11:01 AM
171	I think Kent County is the best county in Delaware. I am confident that our County Leaders will continue to evolve the area in a positive manner.	9/7/2016 2:03 PM
172	Not what it is today. Much busier, much more crowded and much less friendly to live in.	9/6/2016 6:21 PM
173	I believe that there will continue to be sprawl development, based on the large number of approved but unbuilt subdivision lots.	9/6/2016 2:13 PM
174	A beautiful place to live and raise a family	9/6/2016 12:15 PM
175	Unfortunately... the way we are currently building it will look like one big series of subdivisions with too many cars and no agriculture...	9/6/2016 10:32 AM
176	A preserved county with several parks areas and natural areas to getaway but towards the city a center for tourism and economic development with mixed use development and a complex community build type.	9/6/2016 8:09 AM
177	Small neighborhood feel with close knit community relationships concentrating on being self sustaining and using ecologically friendly energy resources. We will be friendly and inviting to ALL that choose us to be their hometown and Will be a shining example for the country of a county that is kind and friendly to all who seek to live within its jurisdiction.	9/5/2016 10:18 PM
178	Continued smart development that takes into account the need for continued economic growth, not just environmental concerns.	9/5/2016 2:45 PM
179	overcrowded,	9/4/2016 12:14 PM
180	growing with focus on community, safety and job creation	9/4/2016 8:39 AM
181	Over crowded	9/3/2016 7:53 PM
182	nothing	9/2/2016 3:59 PM
183	Overcrowded, unless crime isn't controlled. Not crowded if crime still an issue.	9/2/2016 11:59 AM
184	Hopefully not more populated	9/2/2016 9:26 AM
185	Exactly as it is today or shabbier. It's always status quo here.	9/2/2016 8:39 AM
186	See Stapleton, Colorado outside of Denver.	9/2/2016 1:29 AM
187	Hopefully there is still the rural appeal with smart development near towns - appealing appearance with nearby business. "That old time coziness"	9/1/2016 1:34 PM
188	Crowded - many 'beach-vacation' homes, because the area in Sussex has no more space to build!	9/1/2016 12:44 PM
189	crowded	9/1/2016 9:41 AM
190	Rural in nature	9/1/2016 9:01 AM
191	maintained ag/rural character with thriving communities that have diverse and appealing businesses	9/1/2016 8:31 AM
192	A small town feel with steady commercial and residential growth. Hopefully still preserving open land and natural environment	9/1/2016 8:13 AM
193	Very crowded	8/31/2016 10:41 PM
194	Triple in population and residential and commercial growth	8/31/2016 6:15 PM
195	More housing, busy highways, lack of parks and open space.	8/31/2016 6:15 PM
196	still growing	8/31/2016 2:07 PM



## 2018 Comprehensive Plan Survey

197	As a bedroom community for employment opportunities elsewhere.	8/31/2016 12:18 PM
198	Being a destination point; a pleasant place with lots of trees and nice landscaping, lakes, sidewalks, theaters, a variety of healthy eating places serving a variety of ethnic choices	8/31/2016 11:59 AM
199	Urban Sprawl	8/31/2016 10:11 AM
200	Sprawl	8/31/2016 8:00 AM
201	Communities that have public transportation, business, retail, and recreational availability within safe biking/walking (sidewalks/shoulders) of homes.	8/31/2016 5:29 AM
202	with walkable and bike able communities	8/31/2016 4:46 AM
203	Wall to wall houses.	8/30/2016 9:53 PM
204	I hope we still have lots of farms and, open space. That is doesn't turn into cookie cutter developments everywhere. I would like to see more local restaurants and, small shops in our towns.	8/30/2016 7:45 PM
205	Hell hole do to government intervention	8/30/2016 6:14 PM
206	mixture of rural development & affordable housing. New infrastructure & development, but not losing protected land, farmland/agriculture.	8/30/2016 3:50 PM
207	Safe, clean, accessible, diverse	8/30/2016 2:15 PM
208	A place that promotes healthy lifestyles through complete communities that provide a range of dwelling types for all incomes where all can work, shop, play and pray together, while protecting the rural character of the county and protecting the environment.	8/30/2016 1:49 PM
209	Busy	8/30/2016 1:49 PM
210	Over populated and one big mess ok rowhomes.	8/30/2016 1:27 PM
211	Too congested for MY tastes!	8/30/2016 1:20 PM
212	As a collection of small towns, based on neighborhood communities with retail and small stores and parks.	8/30/2016 1:19 PM
213	at the rate its going it will be the next Wilmington. There isn't anything recreational for the locals to do besides go to a restaurant. There needs to be more family friendly activities that aren't crazy overpriced. Even the local park (silver lake) isn't safe and fun for my family. There are too many ex cons there for my family to be safe. As a family of a law enforcement officer (corrections) it just isn't a safe environment. It would be wonderful to see a local park in a different area other than downtown were most of the high crime and issues are.	8/30/2016 12:51 PM
214	Crowded	8/30/2016 12:30 PM
215	?	8/30/2016 11:22 AM
216	Overpopulated	8/30/2016 11:10 AM
217	Vibrant small cities and towns; preserved agricultural and natural resource areas;	8/30/2016 10:54 AM
218	Keeping it small town w/o using land outside of town. tear down or remodel before building outside of town.	8/30/2016 10:53 AM
219	If building is kept under control and new development being all inclusive, it will be a nice place to live. If building is allowed to happen anywhere, it will be a metropolis just like any other small city.	8/30/2016 10:52 AM
220	More imports from PA, NJ and NY with less people caring about Delaware	8/30/2016 9:45 AM
221	ocean front and crowded	8/30/2016 8:45 AM
222	some expansion, but current vacant buildings with new life	8/30/2016 8:25 AM
223	I envision that the county will no longer have open space. The only undeveloped land will be in State/Federal/County forests/parks/protected wetlands, the Dover Air Force Base will close, continued erosion of middle class/high paying jobs. We will have cheaply made cookie cutter houses that will not last 50 years. We will blame the developers instead of those that thought it was a good thing to chase the dollar in allowing unregulated sprawl.	8/30/2016 8:20 AM
224	Overgrown.	8/30/2016 8:08 AM
225	over crowded and lack of school still	8/30/2016 7:47 AM

## 2018 Comprehensive Plan Survey

226	Hopefully, transportation by train will be available and not just used for cargo; would be nice to travel through different counties by train. Just keep existing sidewalks, parks, open areas, etc. regularly clean. Thank you.	8/30/2016 7:43 AM
227	Unless a change occurs, I envision downtown Dover with a high crime rate, low income housing and a depressed economy. The County will not be as bad, but will reflect many of Dover's attributes.	8/30/2016 7:13 AM
228	Steady growth, more job opportunities beyond industrial. Main street America design. Business friendly, revitalization of older outdated portions of towns. Help to smaller towns, gain access to public water and sewer.	8/30/2016 7:04 AM
229	Rural/suburban	8/30/2016 7:00 AM
230	Hopefully growing, attractive, with more recreational and housing options.	8/30/2016 6:59 AM
231	over developed	8/30/2016 6:48 AM
232	?	8/30/2016 6:42 AM
233	Hopefully a rural agricultural area with preserved historical character.	8/30/2016 6:31 AM
234	growing	8/30/2016 5:47 AM
235	Unless there is continued monitoring of county funds and reduction of costs to the taxpayer, the County will have to increase taxes and could become a less desirable area of the East Coast.	8/30/2016 5:42 AM
236	Suburbia	8/29/2016 9:13 PM
237	Hopefully just as much farm land as thier is now	8/29/2016 8:47 PM
238	Crowded and congested	8/29/2016 8:38 PM
239	Covered by new home development West of RT1. Open space Eadt of Rt1 look like central NJ	8/29/2016 8:26 PM
240	Small City	8/29/2016 6:52 PM
241	Liveable: Walkable communities, with diverse businesses, diverse residents (age,gender, race, thnicity), with lots of trees and respect for the environment.	8/29/2016 6:42 PM
242	Primary rural, minor urban influences	8/29/2016 5:51 PM
243	Destination, walkable, small clean industries, expand retail choices	8/29/2016 5:29 PM
244	I hope to see more businesses and more developments around the businesses where people can walk to the market or to their neighbors	8/29/2016 2:54 PM
245	A bedroom community for those who work in Philadelphia and Wilmington	8/29/2016 8:35 AM
246	busy...busy...busy	8/29/2016 7:34 AM
247	Crowded, over-populated. Still trying to keep up with the big city and still failing. Late adopters for technology, trying to rely on manufacturing. Roads and infrastructure always barely keeping up.	8/28/2016 6:12 PM
248	Crowded	8/28/2016 4:50 PM
249	too much developments	8/27/2016 3:06 PM
250	Bustling small city that has a historic feel with diversity and multicultural feel.	8/27/2016 7:06 AM
251	Crowded	8/26/2016 4:00 PM
252	More folks are moving into Kent County and find the environment very pleasing. Many of these new residents are from surrounding states,	8/26/2016 3:33 PM
253	If things do not change significantly there will be more loss of open space and more concentrations of economically similar families that will detract from the quality of life of our county residents. HOAs are a burden on all citizens. Developments which require such organizations must be discouraged. We need to work within the framework of towns & villages.	8/26/2016 11:15 AM
254	Kent County will become the new Middletown. Housing will surge and agriculture will shrink.	8/26/2016 10:54 AM
255	Busy	8/26/2016 10:23 AM
256	Lower crime	8/26/2016 10:22 AM

## 2018 Comprehensive Plan Survey

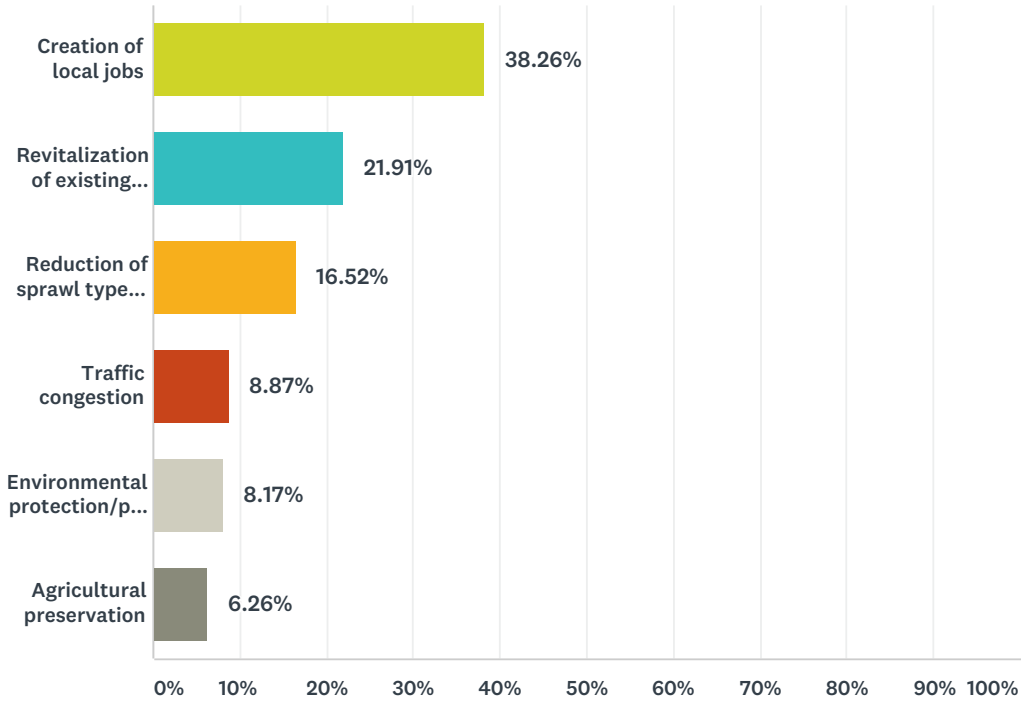
257	Hopefully, control of development will allow Kent County to maintain its small town feel, with agriculture and wetland areas being as predominant as they are now.	8/26/2016 9:38 AM
258	Hopefully not over population. Preserved the farm land.	8/26/2016 9:22 AM
259	30 years ago I thought Smyrna & Dover would grow together. Its slowly starting to happen now. I look for continued residential & commercial growth between south Dover, Magnolia, Frederica & Milford. Western part of Kent will look much the same.	8/26/2016 8:57 AM
260	very congested	8/26/2016 7:31 AM
261	Decreased population with poor housing.	8/26/2016 7:14 AM
262	Mostly the same. The County does an overall good job; however, to many decisions appear to be made by people with limited long term vision or a desire to materially change.	8/26/2016 5:40 AM
263	like thr upper end of new castle county	8/25/2016 7:52 PM
264	Very congested.	8/25/2016 7:02 PM
265	poorer areas getting larger. Crime increasing. residential Sprawl with wealthier communities out of town.	8/25/2016 5:56 PM
266	Congested	8/25/2016 5:36 PM
267	Heavily congested if U.S. Route 13 is not significantly improved (like SR1) with many fewer or no traffic lights - otherwise about the same as now. I do not believe any more traffic lights should be installed on Kent County roadways, but don't like roundabouts either.	8/25/2016 5:35 PM
268	10	8/25/2016 5:06 PM
269	Over crowded with poor traffic management.	8/25/2016 4:55 PM
270	I wish I knew	8/25/2016 4:21 PM
271	Hopefully better than it is now!!	8/25/2016 3:43 PM
272	Much busier with more jobs and a higher activity level.	8/25/2016 3:26 PM
273	More restaurants and retail close to residential communities along with more medical options such as doctors offices and larger higher rated hospitals, as well as, surgical and outpatient facilities.	8/25/2016 2:53 PM
274	Don't know	8/25/2016 2:42 PM
275	more efficient in terms of land and natural resource use and housing accessible to all	8/25/2016 1:53 PM
276	Screwed up. I don't plan to still live here	8/25/2016 1:31 PM
277	35% growth in population and business development always having a strong position on "quality of life"	8/25/2016 12:56 PM
278	Over crowded	8/25/2016 10:50 AM
279	Much like New Castle County is now, over crowded, killings every day or week, poorly controlled and managed.	8/25/2016 8:45 AM
280	I would like to see all roads improved, existing farmland preserved, existing empty commercial properties used, & existing housing restored or renovated.	8/25/2016 8:11 AM
281	Very hard to say. I think it will be very busy and over crowded and unfortunately alot of low income and crime ridden neighborhoods	8/25/2016 8:04 AM
282	An awesome place to live. Hopefully not overcrowded.	8/25/2016 7:47 AM
283	Hopefully we start rebuilding the our infrastructure to match the growth that happened over the last 25 years. Then promote existing communities and business districts.	8/25/2016 7:39 AM
284	With more options of things do with an organized focus. Shops, resteraunts, parks with a main street focus with homes near by. Similar to Newark De	8/24/2016 8:07 PM
285	It will always be low and moderate income with greater need for senior services. Unless new and lucrative business is attracted, economic well being will be challenged	8/24/2016 6:27 PM
286	Major retirement center for northeastern states	8/24/2016 5:52 PM
287	better and positive	8/24/2016 5:40 PM

## 2018 Comprehensive Plan Survey

288	Growing but right now the city worries me more than the rural areas, old folks dying off and now new life in kent county, this is becoming a retiree state	8/24/2016 4:10 PM
289	a kid/family bikeable roadways	8/24/2016 3:00 PM
290	A mix of residential, commercial and light industrial uses	8/24/2016 2:44 PM
291	In my mind, how else do you envision?	8/24/2016 2:25 PM
292	Looking and costing like NJ and PA.	8/24/2016 2:15 PM
293	Hopefully the same way as it is today.	8/24/2016 1:54 PM
294	No answer	8/24/2016 12:01 PM

# Q1 What is the most important issue currently facing Kent County?

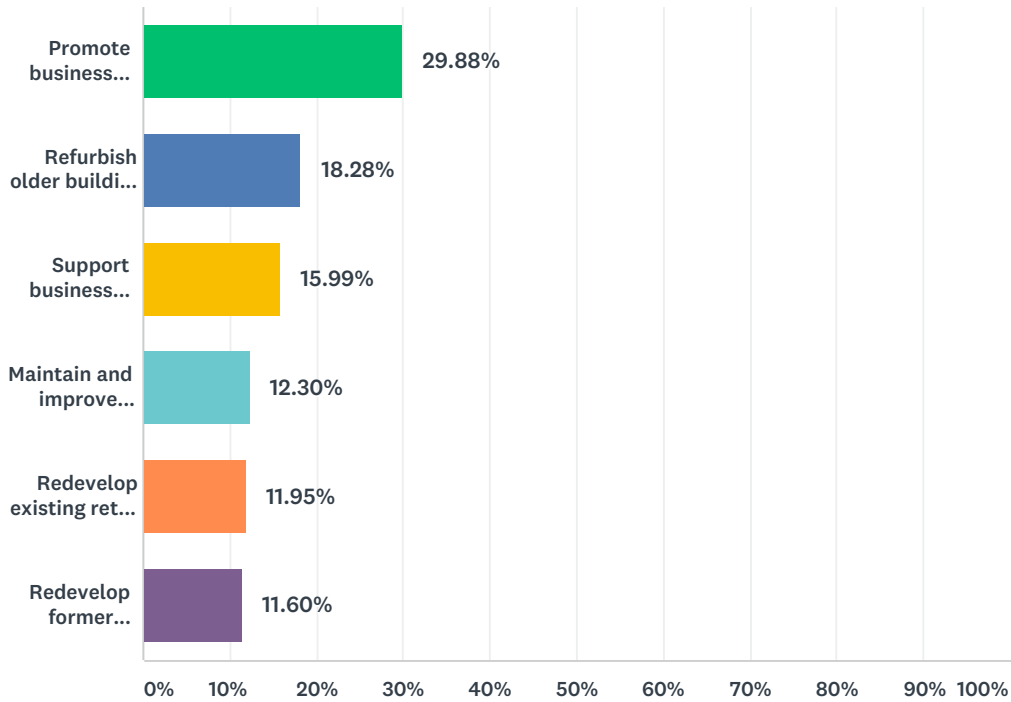
Answered: 575 Skipped: 4



ANSWER CHOICES	RESPONSES	
Creation of local jobs	38.26%	220
Revitalization of existing communities	21.91%	126
Reduction of sprawl type development/growth management	16.52%	95
Traffic congestion	8.87%	51
Environmental protection/preservation of open space	8.17%	47
Agricultural preservation	6.26%	36
<b>TOTAL</b>		<b>575</b>

## Q2 ECONOMIC DEVELOPMENT: What should the County's top priority be in regard to its economic development efforts?

Answered: 569 Skipped: 10

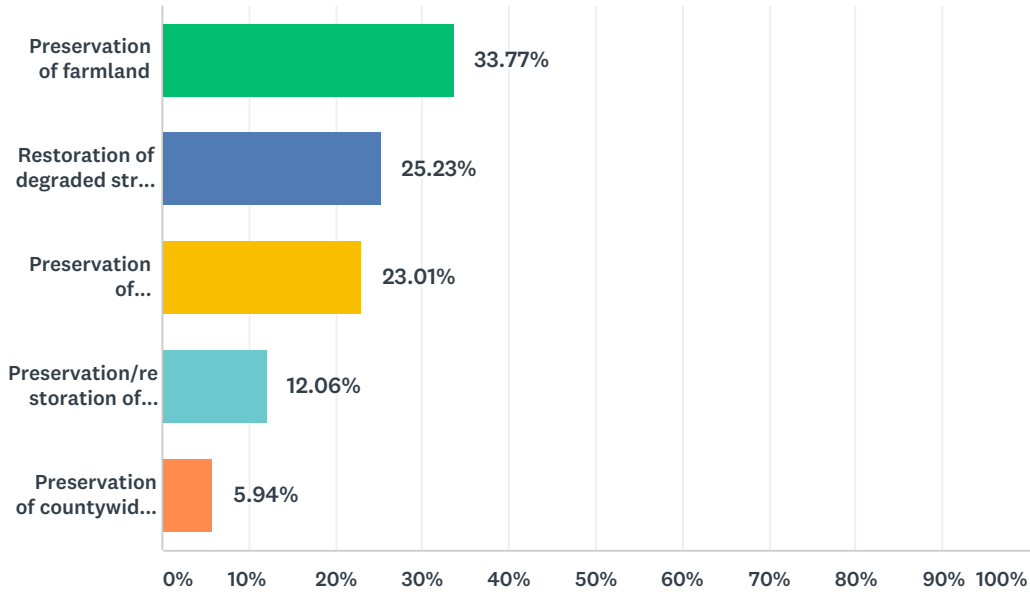


ANSWER CHOICES	RESPONSES	
Promote business expansion/retention programs	29.88%	170
Refurbish older buildings for new uses	18.28%	104
Support business district revitalization	15.99%	91
Maintain and improve established neighborhoods	12.30%	70
Redevelop existing retail centers	11.95%	68
Redevelop former industrial sites	11.60%	66
<b>TOTAL</b>		<b>569</b>



### Q3 OPEN SPACE & RESOURCE PROTECTION: What do you think the County's top priority should be in terms of open space and resource protection?

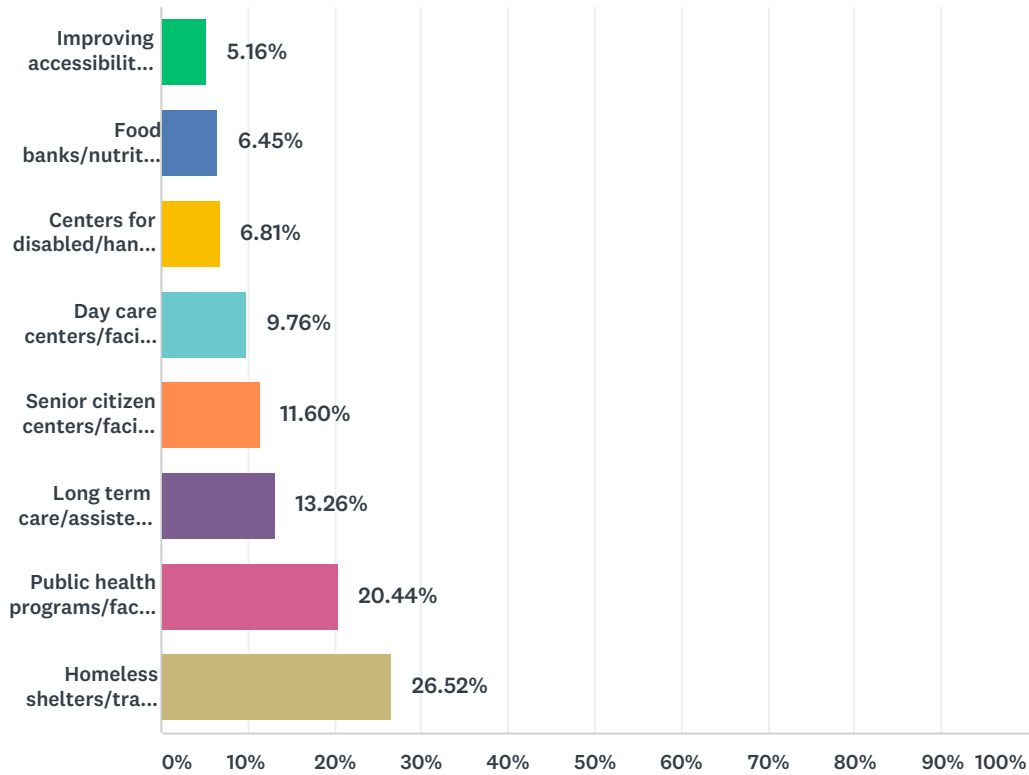
Answered: 539 Skipped: 40



ANSWER CHOICES	RESPONSES	
Preservation of farmland	33.77%	182
Restoration of degraded stream and river corridors	25.23%	136
Preservation of extraordinary natural areas or sites	23.01%	124
Preservation/restoration of forestland	12.06%	65
Preservation of countywide stream buffers	5.94%	32
<b>TOTAL</b>		<b>539</b>

## Q4 COMMUNITY SERVICES: What do you think the biggest priority should be in relation to the provision of community services?

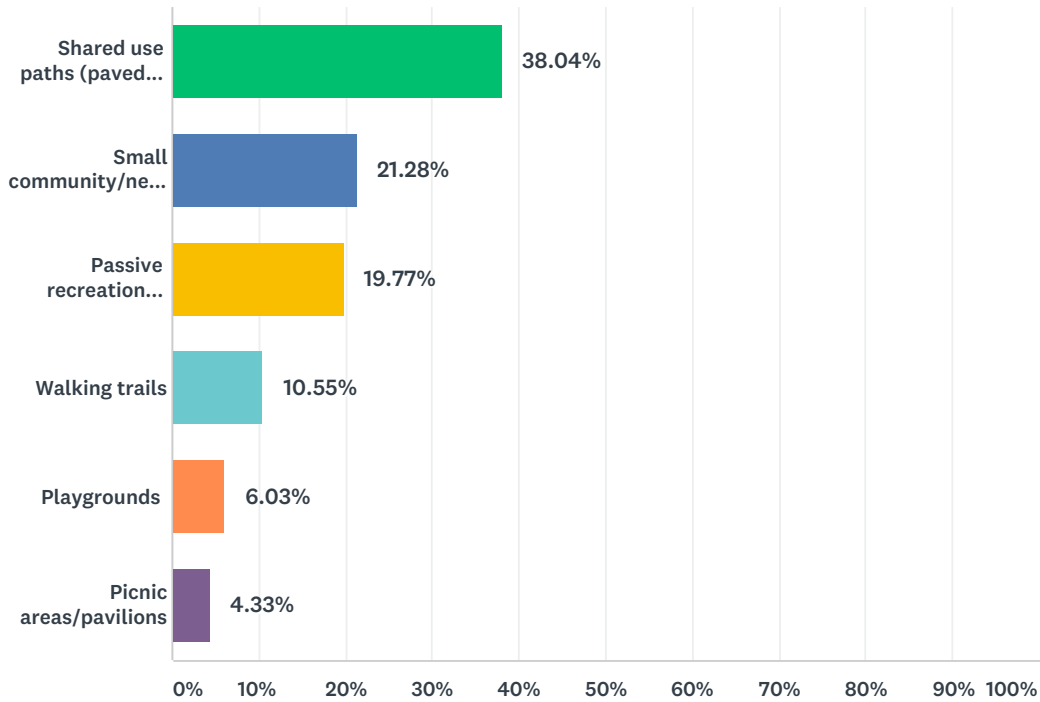
Answered: 543 Skipped: 36



ANSWER CHOICES	RESPONSES	
Improving accessibility for the disabled	5.16%	28
Food banks/nutritional services	6.45%	35
Centers for disabled/handicapped/special needs	6.81%	37
Day care centers/facilities for children	9.76%	53
Senior citizen centers/facilities	11.60%	63
Long term care/assisted living facilities	13.26%	72
Public health programs/facilities	20.44%	111
Homeless shelters/transitional housing	26.52%	144
<b>TOTAL</b>		<b>543</b>

## Q5 RECREATIONAL RESOURCES: How should the County focus its efforts in relation to new recreational areas?

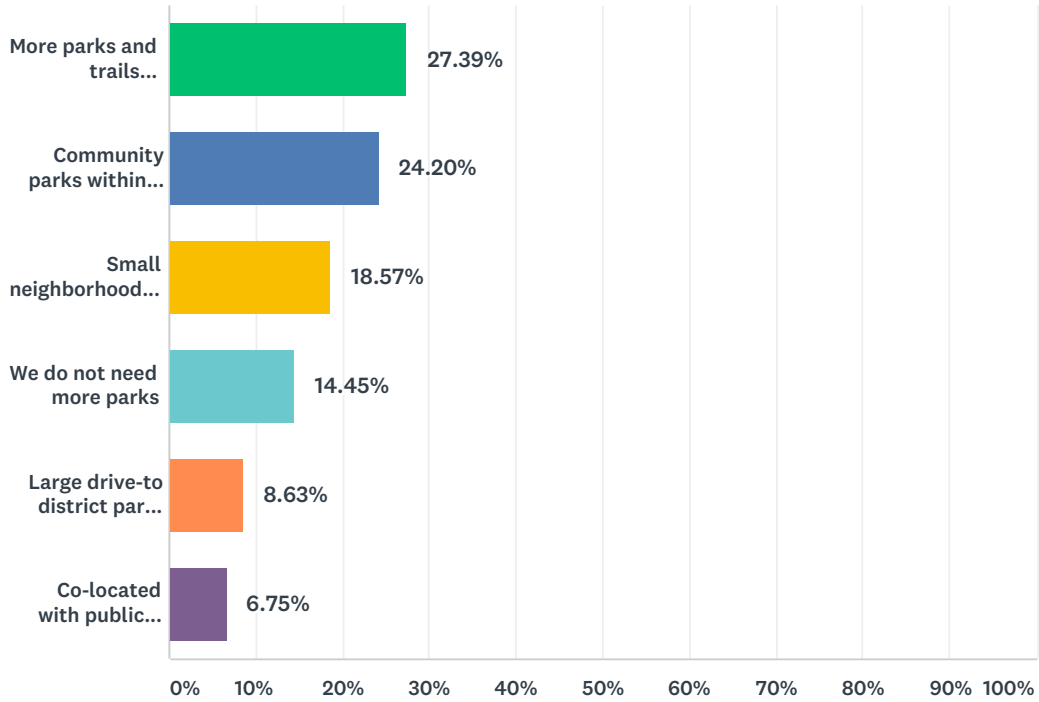
Answered: 531 Skipped: 48



ANSWER CHOICES	RESPONSES	
Shared use paths (paved and natural surfaces for biking and walking)	38.04%	202
Small community/neighborhood parks	21.28%	113
Passive recreation parks (nature areas)	19.77%	105
Walking trails	10.55%	56
Playgrounds	6.03%	32
Picnic areas/pavilions	4.33%	23
<b>TOTAL</b>		<b>531</b>

## Q6 Where should new recreational resources be located?

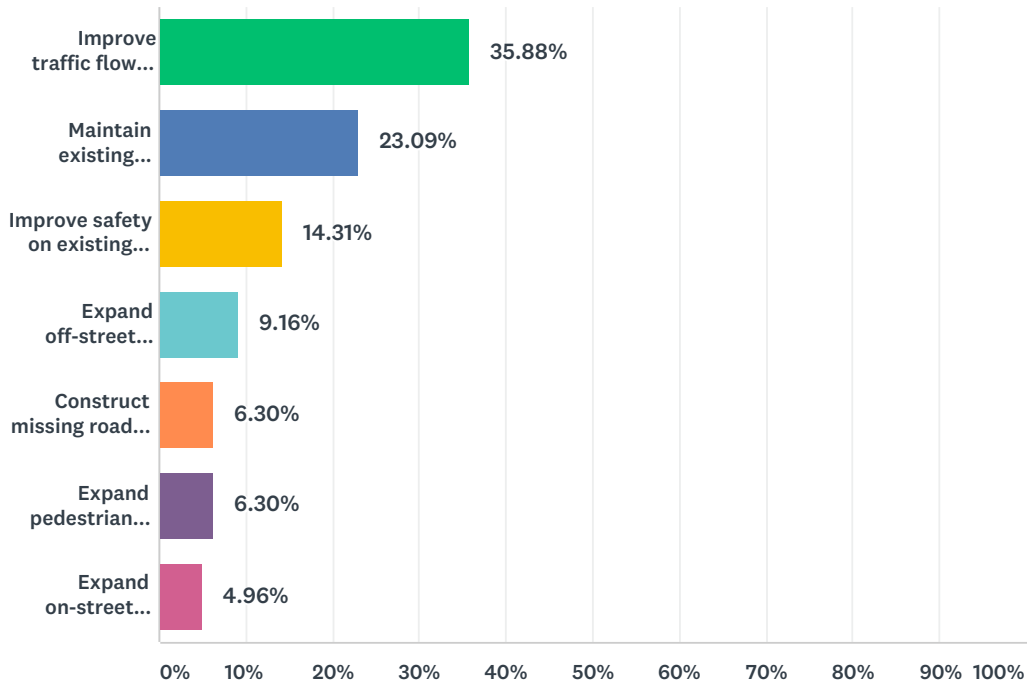
Answered: 533 Skipped: 46



ANSWER CHOICES	RESPONSES	
More parks and trails connecting communities, existing parks and/or open space	27.39%	146
Community parks within walking/biking distance of local County residents, with a moderate selection of recreational facilities	24.20%	129
Small neighborhood parks within walking/biking distance of local County residents with limited recreational facilities	18.57%	99
We do not need more parks	14.45%	77
Large drive-to district parks with a full range of recreational facilities	8.63%	46
Co-located with public school facilities	6.75%	36
<b>TOTAL</b>		<b>533</b>

## Q7 TRANSPORTATION: What should be the top transportation priority for the State and County?

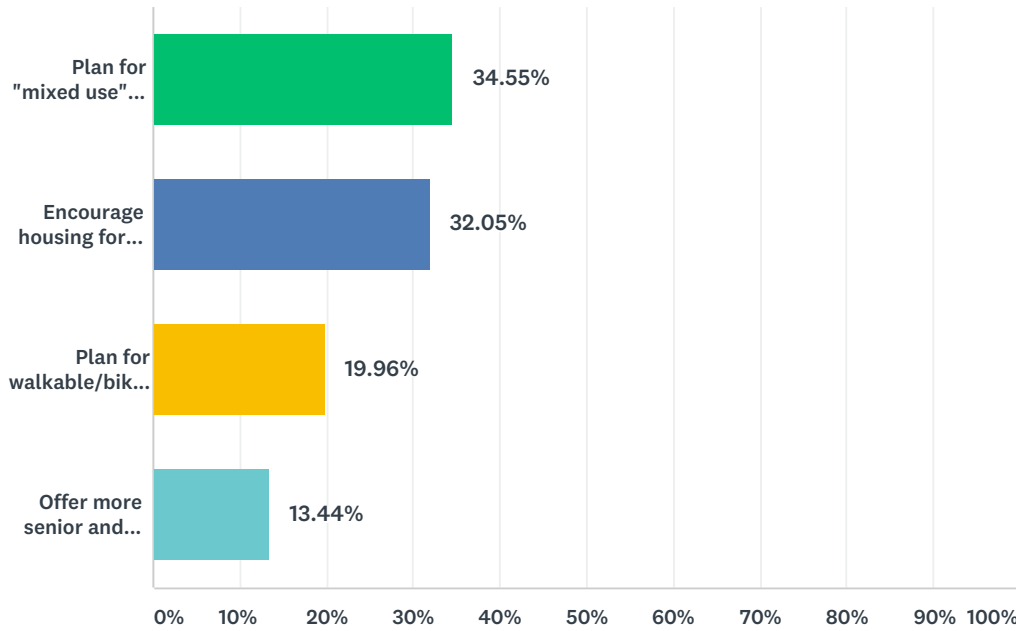
Answered: 524 Skipped: 55



ANSWER CHOICES	RESPONSES	
Improve traffic flow on existing roads (includes widening or intersection improvements)	35.88%	188
Maintain existing road/bridge network	23.09%	121
Improve safety on existing roads	14.31%	75
Expand off-street pedestrian/bicycle networks (shared use paths)	9.16%	48
Construct missing road connections	6.30%	33
Expand pedestrian networks and sidewalks	6.30%	33
Expand on-street bicycle networks, bike lanes & on-street routes	4.96%	26
<b>TOTAL</b>		<b>524</b>

## Q8 HOUSING: What do you think the County's top priority should be in relation to the provision of housing?

Answered: 521 Skipped: 58

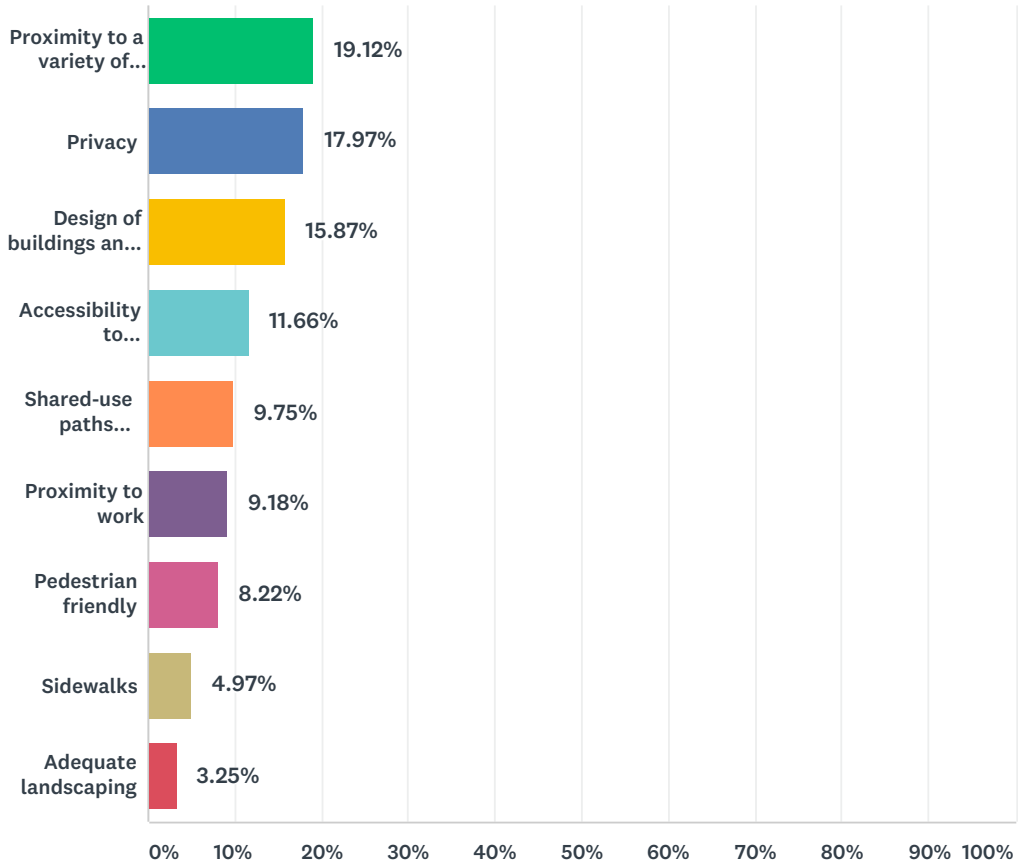


ANSWER CHOICES	RESPONSES
Plan for "mixed use" communities that offer diverse housing types and essential services (i.e. grocery, bank, gas station) nearby	34.55% 180
Encourage housing for moderate-income residents and families	32.05% 167
Plan for walkable/bikable communities	19.96% 104
Offer more senior and assisted living opportunities	13.44% 70
<b>TOTAL</b>	<b>521</b>



## Q9 What attribute of a residential community is most appealing to you?

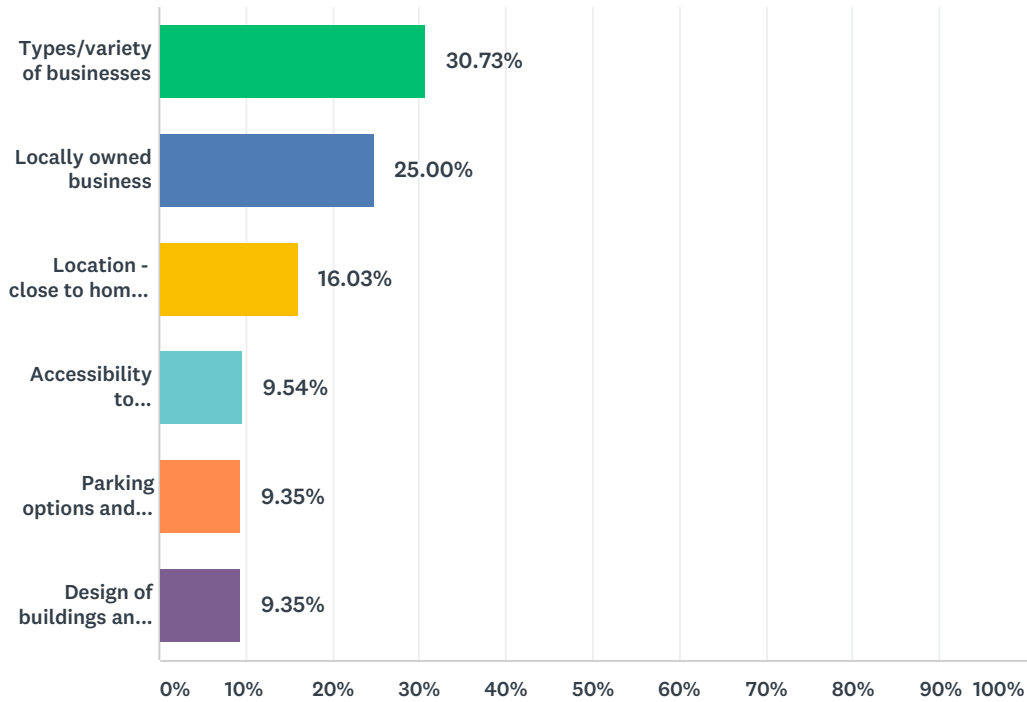
Answered: 523 Skipped: 56



ANSWER CHOICES	RESPONSES	
Proximity to a variety of businesses	19.12%	100
Privacy	17.97%	94
Design of buildings and overall site	15.87%	83
Accessibility to roads/highways	11.66%	61
Shared-use paths (walking/bike paths)	9.75%	51
Proximity to work	9.18%	48
Pedestrian friendly	8.22%	43
Sidewalks	4.97%	26
Adequate landscaping	3.25%	17
<b>TOTAL</b>		<b>523</b>

# Q10 What attribute of a commercial development is most appealing to you?

Answered: 524 Skipped: 55



ANSWER CHOICES	RESPONSES	
Types/variety of businesses	30.73%	161
Locally owned business	25.00%	131
Location - close to home or work	16.03%	84
Accessibility to roads/highways	9.54%	50
Parking options and general circulation	9.35%	49
Design of buildings and overall site	9.35%	49
<b>TOTAL</b>		<b>524</b>

## Q11 What is your home zip code?

Answered: 499 Skipped: 80

## Q12 What is your work zip code?

Answered: 471 Skipped: 108

# Appendix C

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## Option A



Commercial uses mixed with a subdivision that contains many housing types



Sidewalks, streetlights, tree-lined streets



Alleyways in rear of homes, street parking in front of



Curbed streets

## Option B



Larger lots



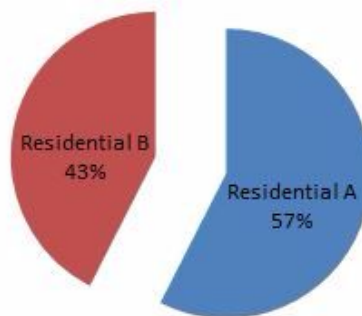
Houses set far off road



## How do YOU want Kent County to grow?

Above are examples of subdivisions in Kent County. Where would you want to live?

### What design does the public prefer?



# How do YOU want Kent County to grow?

Below are two examples of commercial development within Delaware. In this exercise, we are asking you to choose what type of development *you* think should be in Kent County. Place a sticker next to your choice!

Pedestrian Oriented



Automobile Oriented



Planned development with mixed uses

Large signage visible from road



Green Space for recreation



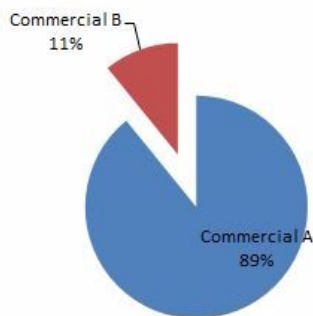
Strip development along major highway



Option A

Option B

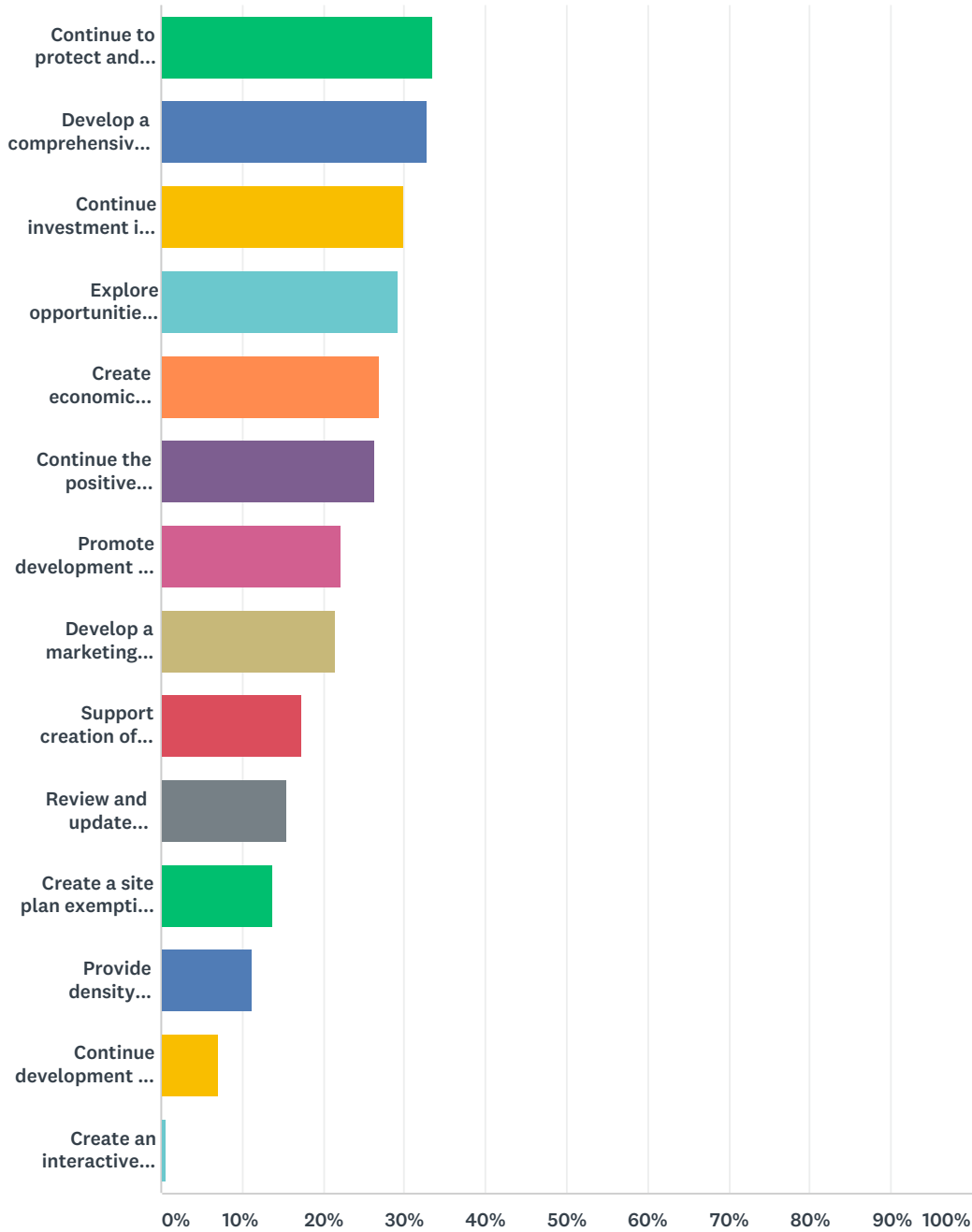
## What design does the public prefer?





## Q1 Please choose your top 3 Economic Development priorities

Answered: 167 Skipped: 1



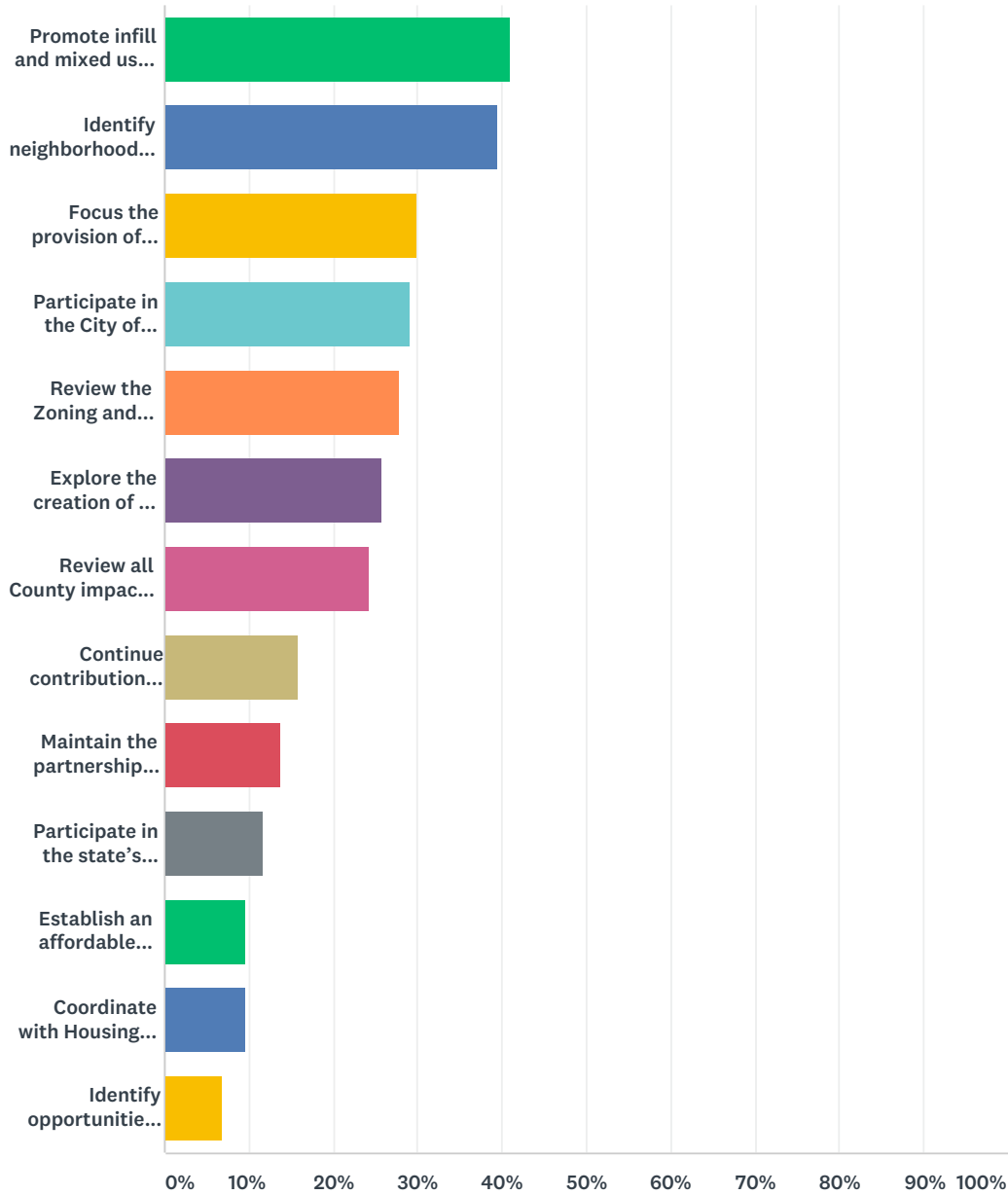
ANSWER CHOICES	RESPONSES	
Continue to protect and promote agriculture pursuing opportunities in the Food Innovation District program.	33.53%	56
Develop a comprehensive business retention, expansion, and attraction incentive program.	32.93%	55
Continue investment in the Downtown Development District grant program.	29.94%	50
Explore opportunities to partner with utilities providing high speed broadband.	29.34%	49
Create economic centers of business and commerce around existing infrastructure.	26.95%	45

2018 Comprehensive Plan: Action Items The first draft of Kent County's 2018 Comprehensive Plan is available for review. Below is a series of questions about the action items in the Plan. Your responses will help determine the County's top priorities.

Continue the positive working relationship between the County and the Dover Air Force Base and maintain zoning requirements that protect the Base from incompatible land uses.	26.35%	44
Promote development of mixed-use centers in targeted locations.	22.16%	37
Develop a marketing strategy in partnership with the towns to advertise the benefits of locating in Kent County.	21.56%	36
Support creation of home-based businesses with no discernible impact on neighboring properties.	17.37%	29
Review and update industrial, commercial, and office uses in each zoning district.	15.57%	26
Create a site plan exemption for small expansions of existing businesses.	13.77%	23
Provide density incentives within targeted locations within the Growth Zone.	11.38%	19
Continue development of the small business incubator at the Kent County Complex.	7.19%	12
Create an interactive tool to promote each of the proposed industrial areas.	0.60%	1
Total Respondents: 167		

## Q2 Please choose your top 3 Housing priorities

Answered: 144 Skipped: 24



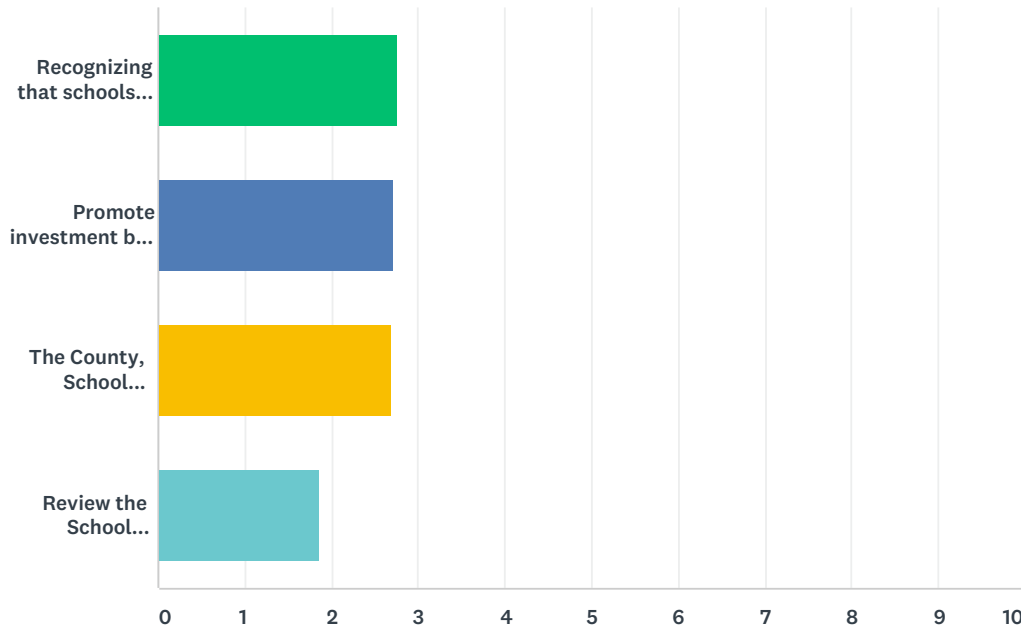
ANSWER CHOICES	RESPONSES	
Promote infill and mixed use development in existing developed areas to optimize existing infrastructure investment.	40.97%	59
Identify neighborhoods that would benefit from concentrated Property Maintenance Code enforcement and seek state and federal funds to support the effort.	39.58%	57
Focus the provision of affordable housing in areas where reasonable access to goods and services exists or is planned.	29.86%	43
Participate in the City of Dover's taskforce established to address homelessness.	29.17%	42
Review the Zoning and Subdivision & Land Development Ordinances to identify barriers to both diverse and affordable housing options.	27.78%	40

2018 Comprehensive Plan: Action Items The first draft of Kent County's 2018 Comprehensive Plan is available for review. Below is a series of questions about the action items in the Plan. Your responses will help determine the County's top priorities.

Explore the creation of a land bank potentially in partnership with one or more municipalities to offset the impacts of vacant and blighted properties and provide affordable housing opportunities.	25.69%	37
Review all County impact fees and determine the effect of reducing or waiving them for developers and nonprofits seeking to build affordable housing.	24.31%	35
Continue contributions to housing-related nonprofits and the Delaware State Housing Authority as the budget permits.	15.97%	23
Maintain the partnership with the Diamond State Community Land Trust to ensure long-term affordable home ownership opportunities.	13.89%	20
Participate in the state's Assessment of Fair Housing and ensure that the County is fulfilling its obligation to affirmatively further fair housing.	11.81%	17
Establish an affordable housing trust fund.	9.72%	14
Coordinate with Housing Alliance Delaware to convene a Kent Housing Committee to advise and assist in implementing the recommendations of this chapter and develop additional incentives that encourage affordable housing.	9.72%	14
Identify opportunities for staff, appointed and elected officials to attend Fair Housing training.	6.94%	10
Total Respondents: 144		

### Q3 Please rank the following recommended actions for schools

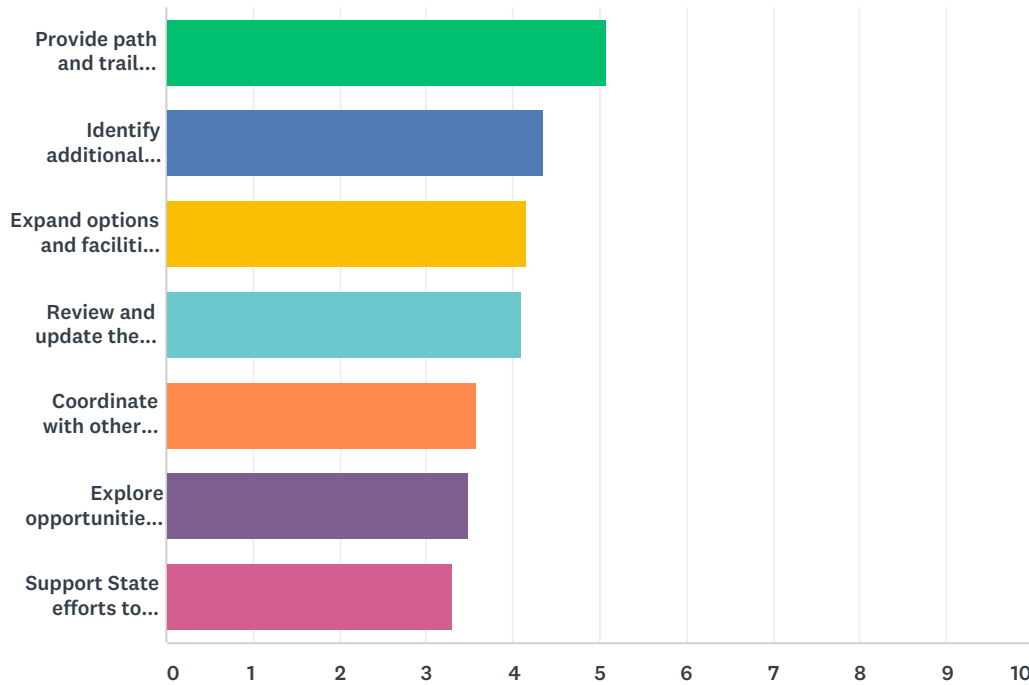
Answered: 112 Skipped: 56



	1	2	3	4	TOTAL	SCORE
Recognizing that schools are more than educational institutions and also serve as community spaces, Kent County and the School Districts should establish agreements for use of school facilities by the public for outdoor recreation fields and playgrounds, interior gym time, or community meeting spaces. Increased cooperation can improve the efficient use of limited recreation areas.	34.26% 37	23.15% 25	26.85% 29	15.74% 17	108	2.76
Promote investment by students of the local colleges to connect with the local community. These students could see job opportunities, mentors, activities, or housing choices they may not have found otherwise that could keep them in the County after graduation.	27.52% 30	32.11% 35	24.77% 27	15.60% 17	109	2.72
The County, School Districts, and the Department of Education should work together in identifying future school sites as part of a School Facilities Master Plan in recognition of areas where development is encouraged.	32.71% 35	22.43% 24	26.17% 28	18.69% 20	107	2.69
Review the School Surcharge and Adequate Public Facility requirements to ensure goals are met and revise as warranted.	5.50% 6	23.85% 26	22.94% 25	47.71% 52	109	1.87

## Q4 Please rank the following Parks & Recreation recommendations

Answered: 110 Skipped: 58

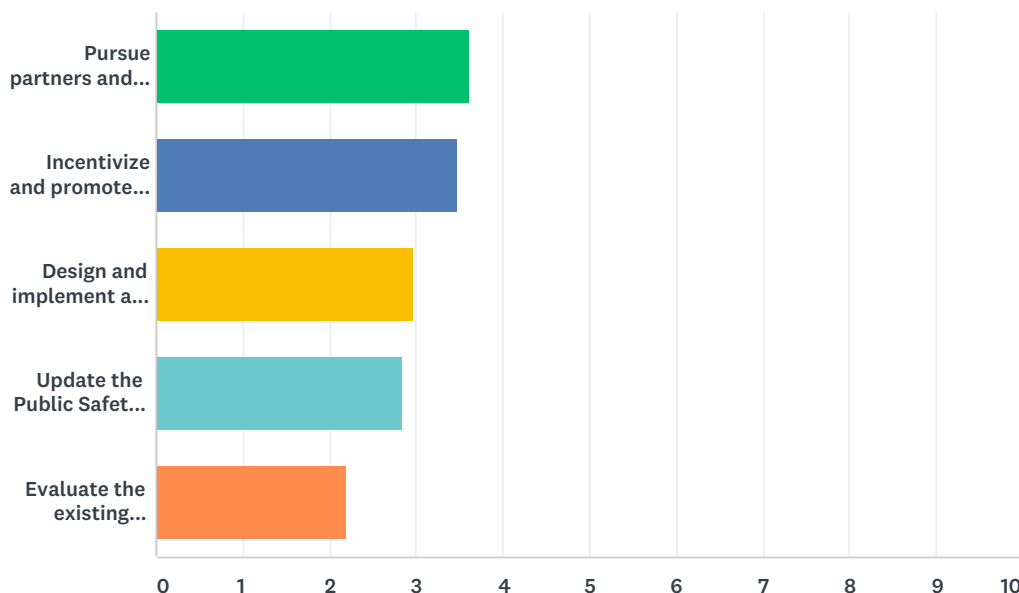


	1	2	3	4	5	6	7	TOTAL	SCORE
Provide path and trail linkages between parks and residential communities to minimize automobile usage and encourage increased activity.	19.05% 20	29.52% 31	18.10% 19	18.10% 19	8.57% 9	1.90% 2	4.76% 5	105	5.08
Identify additional parkland area in locations of greatest need.	20.75% 22	16.04% 17	14.15% 15	11.32% 12	12.26% 13	16.04% 17	9.43% 10	106	4.36
Expand options and facilities in existing parks to support handicap accessibility and inclusion for all persons.	17.14% 18	16.19% 17	14.29% 15	10.48% 11	18.10% 19	8.57% 9	15.24% 16	105	4.17
Review and update the Parks and Recreation Strategic Plan.	24.76% 26	8.57% 9	12.38% 13	14.29% 15	6.67% 7	11.43% 12	21.90% 23	105	4.09
Coordinate with other agencies to continue the St. Jones Greenway Trail.	6.73% 7	8.65% 9	12.50% 13	15.38% 16	26.92% 28	24.04% 25	5.77% 6	104	3.58
Explore opportunities to develop a trail connecting the Hunn Nature Park, Lebanon Landing, and Tidbury Creek Park properties.	6.86% 7	8.82% 9	13.73% 14	16.67% 17	19.61% 20	19.61% 20	14.71% 15	102	3.49
Support State efforts to create a trail along the disused rail line running from Smyrna/Clayton through Marydel to Maryland.	5.83% 6	10.68% 11	16.50% 17	13.59% 14	8.74% 9	17.48% 18	27.18% 28	103	3.30



## Q5 Please rank the following Public Safety recommendations

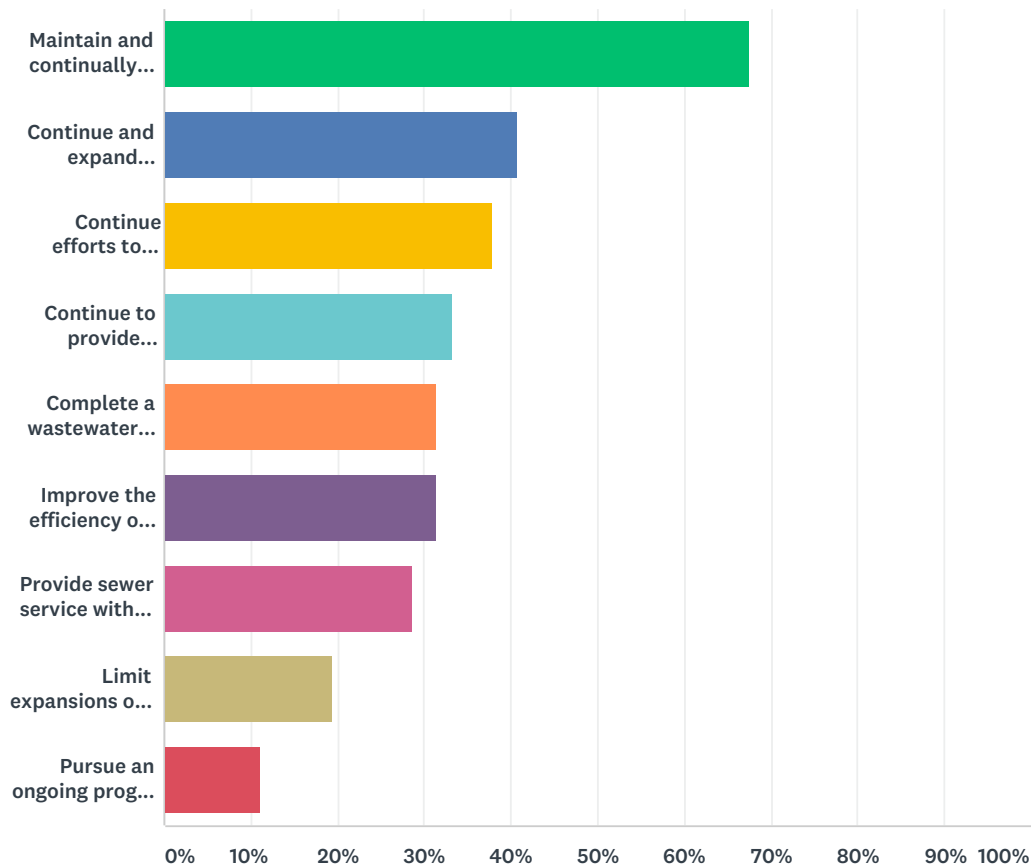
Answered: 113 Skipped: 55



	1	2	3	4	5	TOTAL	SCORE
Pursue partners and identify potential funding sources to support an expanded community EMS mission including increasing access to care in underserved areas; providing telephone advice to 9-1-1 callers instead of resource dispatch; using community paramedics or other specially trained EMS practitioners for management of high healthcare system utilizers or patients at risk for hospital admission or readmission, chronic disease management, preventive care or post-discharge follow-up visits; and transporting or referring patients to a broad spectrum of appropriate care, not limited to hospital emergency departments.	31.48% 34	30.56% 33	17.59% 19	8.33% 9	12.04% 13	108	3.61
Incentivize and promote development inside the Growth Zone Overlay District and locate paramedic stations in areas of higher demand in order to manage response times.	26.42% 28	27.36% 29	20.75% 22	17.92% 19	7.55% 8	106	3.47
Design and implement a Public Safety check-in program for elderly and possibly disabled residents.	15.89% 17	22.43% 24	23.36% 25	20.56% 22	17.76% 19	107	2.98
Update the Public Safety Strategic Plan.	21.15% 22	11.54% 12	21.15% 22	22.12% 23	24.04% 25	104	2.84
Evaluate the existing Adequate Public Facilities Ordinance for effectiveness and investigate the use of a building permit surcharge.	5.61% 6	10.28% 11	19.63% 21	27.10% 29	37.38% 40	107	2.20

## Q6 Please choose the top 3 recommendations regarding Public Sewer Service

Answered: 108 Skipped: 60



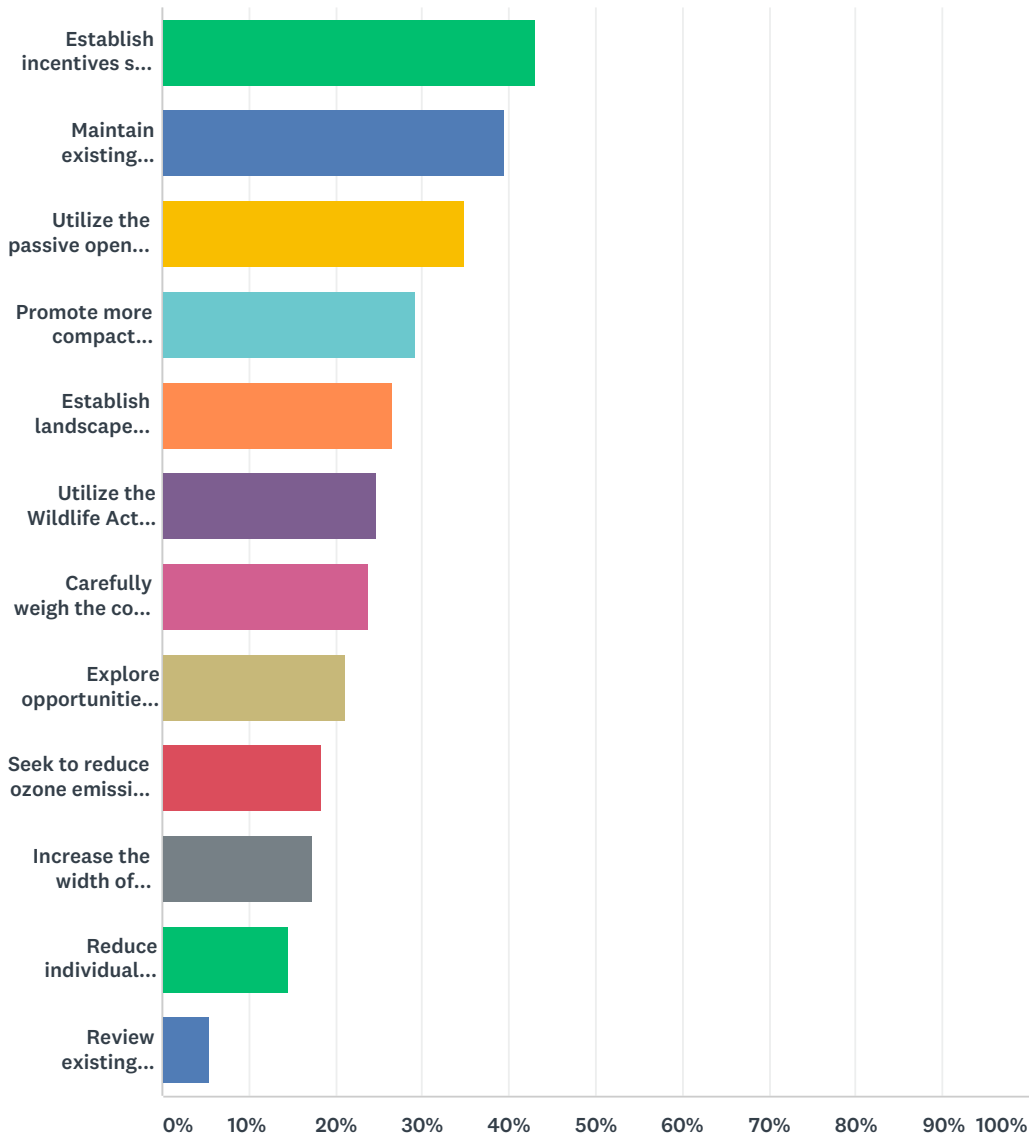
ANSWER CHOICES	RESPONSES	
Maintain and continually upgrade the existing sanitary sewer conveyance system and the wastewater treatment facility & explore new technologies and techniques of wastewater treatment, disposal, and re-use.	67.59%	73
Continue and expand remediation programs to assist communities with high percentages of failing septic systems to connect to the public sewer system.	40.74%	44
Continue efforts to improve the efficiency of the administration and operation of the sanitary sewer system in order to minimize the expense to the sewer customers.	37.96%	41
Continue to provide efficient and cost effective sanitary sewer service in the existing sewer district and to new users through expansion of the sewer district in areas identified for development.	33.33%	36
Complete a wastewater master plan for use in capital planning.	31.48%	34
Improve the efficiency of the existing system through reduction of infiltration and inflow of stormwater into the sewer network.	31.48%	34
Provide sewer service within the Growth Zone Overlay that may facilitate infill development within existing developed areas and the redevelopment of brownfields, abandoned and underutilized properties.	28.70%	31
Limit expansions of the sanitary sewer district system to areas adjacent to the existing district to ensure an orderly growth of the system.	19.44%	21
Pursue an ongoing program of enhancements to the County's Geographic Information System.	11.11%	12

2018 Comprehensive Plan: Action Items The first draft of Kent County's 2018 Comprehensive Plan is available for review. Below is a series of questions about the action items in the Plan. Your responses will help determine the County's top priorities.

Total Respondents: 108

## Q7 Please choose your top 3 Conservation recommendations

Answered: 109 Skipped: 59



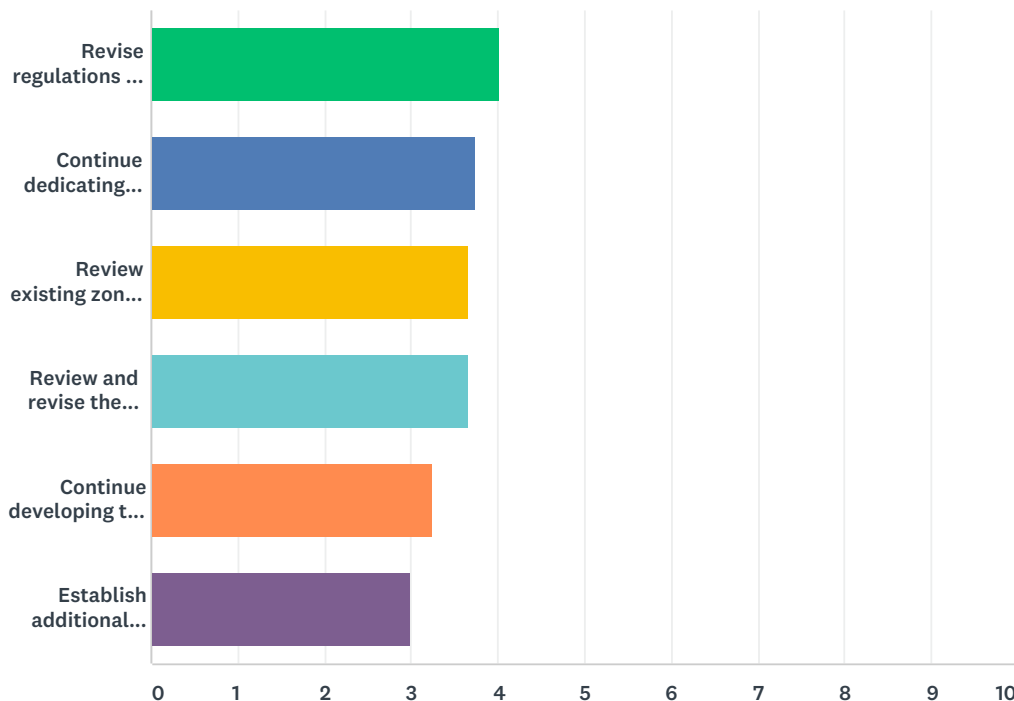
ANSWER CHOICES	RESPONSES
Establish incentives such as reduction of impact fees, building permit fees, or density bonuses for environmentally sensitive design practices.	43.12% 47
Maintain existing environmental standards (wetland protection, floodplain standards, stream buffers, impervious cover limitations).	39.45% 43
Utilize the passive open space provisions of the Subdivision and Land Development ordinance to require reintroduction of wildlife habitats and upland forests.	34.86% 38
Promote more compact patterns of development and mixed use development.	29.36% 32
Establish landscape buffers along tax ditches in order to reduce erosion along ditch banks, reduce maintenance requirements, and improve water quality.	26.61% 29

2018 Comprehensive Plan: Action Items The first draft of Kent County's 2018 Comprehensive Plan is available for review. Below is a series of questions about the action items in the Plan. Your responses will help determine the County's top priorities.

Utilize the Wildlife Action Plan, Green Infrastructure, and Source Water Protection maps produced by DNREC in conjunction with Land Evaluation Site Assessment scores in ranking properties for County agricultural land preservation funding.	24.77%	27
Carefully weigh the costs and benefits of infrastructure investment in areas anticipated to be inundated by sea level rise.	23.85%	26
Explore opportunities to incorporate alternative fuel vehicles into the County's fleet of vehicles used for various field operations.	21.10%	23
Seek to reduce ozone emissions by directing growth into areas that are immediately adjacent to employment and services.	18.35%	20
Increase the width of non-disturbance areas surrounding wetlands, waterbodies and conveyance systems, including tax ditches.	17.43%	19
Reduce individual automobile trips through the promotion of shared or high occupancy vehicles.	14.68%	16
Review existing ordinances for efficacy in meeting federally required Total Maximum Daily Load requirements.	5.50%	6
Total Respondents: 109		

## Q8 Please rank the following Agricultural Preservation recommendations

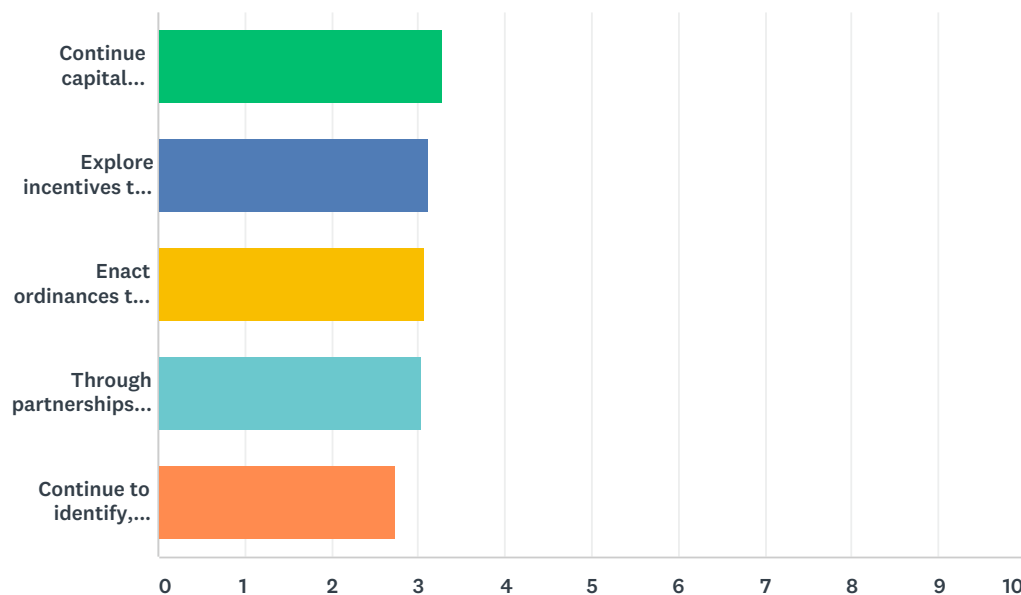
Answered: 107 Skipped: 61



	1	2	3	4	5	6	TOTAL	SCORE
Revise regulations for cluster subdivisions to ensure enough critical mass of open land for continued agriculture use and limit the intrusion of suburban development into vital agricultural areas.	22.68% 22	24.74% 24	16.49% 16	13.40% 13	13.40% 13	9.28% 9	97	4.02
Continue dedicating funds toward the Agricultural Land Preservation Program as finances permit.	28.87% 28	12.37% 12	12.37% 12	14.43% 14	14.43% 14	17.53% 17	97	3.74
Review existing zoning requirements for poultry houses and consider implementing buffering and ventilation standards that are becoming more common throughout the industry.	17.00% 17	22.00% 22	19.00% 19	11.00% 11	15.00% 15	16.00% 16	100	3.67
Review and revise the permitted uses in the Agricultural Conservation and Agricultural Residential zoning districts to better reflect current agricultural practices and businesses.	11.46% 11	26.04% 25	15.63% 15	20.83% 20	16.67% 16	9.38% 9	96	3.67
Continue developing the Food Innovation District program.	15.31% 15	7.14% 7	19.39% 19	19.39% 19	22.45% 22	16.33% 16	98	3.24
Establish additional incentives for the Transfer of Development Rights program in an effort to provide equity to land owners in areas designated for low density development.	10.00% 10	11.00% 11	17.00% 17	18.00% 18	18.00% 18	26.00% 26	100	2.99

## Q9 Please rank the following Historic Preservation recommendations

Answered: 106 Skipped: 62

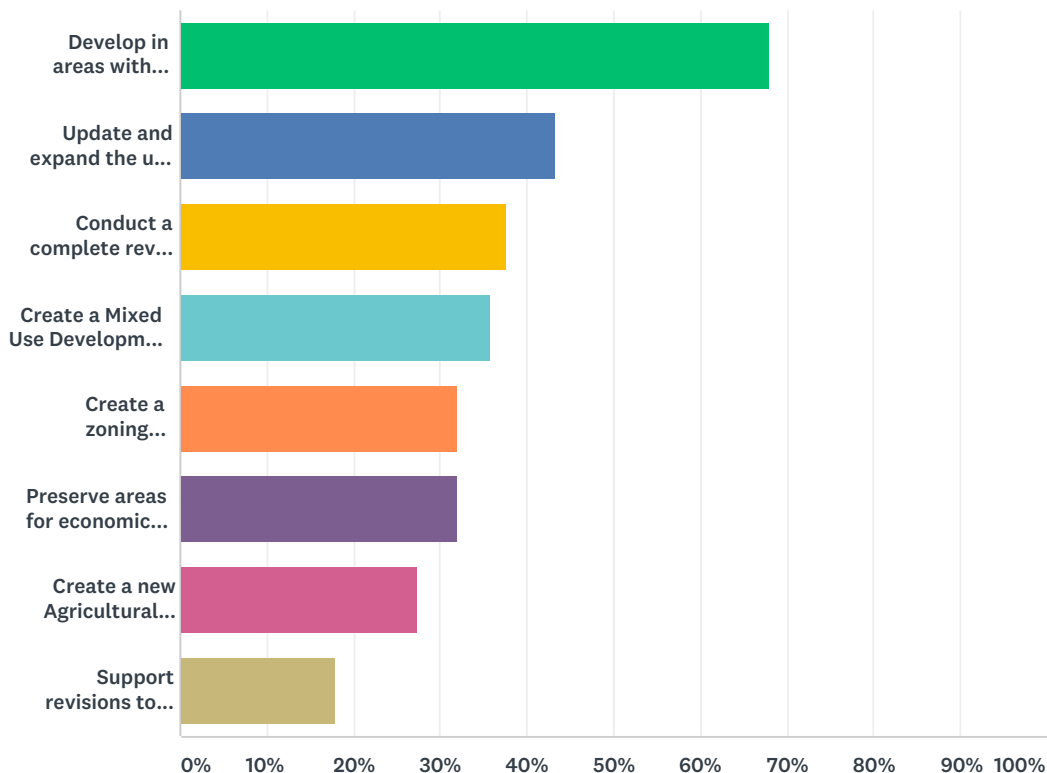


	1	2	3	4	5	TOTAL	SCORE
Continue capital contributions for maintenance and rehabilitation of County owned historic resources.	26.80% 26	18.56% 18	21.65% 21	21.65% 21	11.34% 11	97	3.28
Explore incentives to incorporate historic structures into new development.	28.00% 28	20.00% 20	13.00% 13	13.00% 13	26.00% 26	100	3.11
Enact ordinances that support the documentation, protection and/or preservation of important cultural and historic resources within the County.	21.05% 20	22.11% 21	20.00% 19	16.84% 16	20.00% 19	95	3.07
Through partnerships with state and nongovernmental agencies, design education and outreach materials to help property owners maintain their historic structures.	15.79% 15	25.26% 24	18.95% 18	26.32% 25	13.68% 13	95	3.03
Continue to identify, evaluate, and update cultural resource surveys and provide survey data in a variety of formats including digital mapping and through the Kent County website.	14.13% 13	15.22% 14	28.26% 26	16.30% 15	26.09% 24	92	2.75



## Q10 Please choose your top 3 Land Use priorities

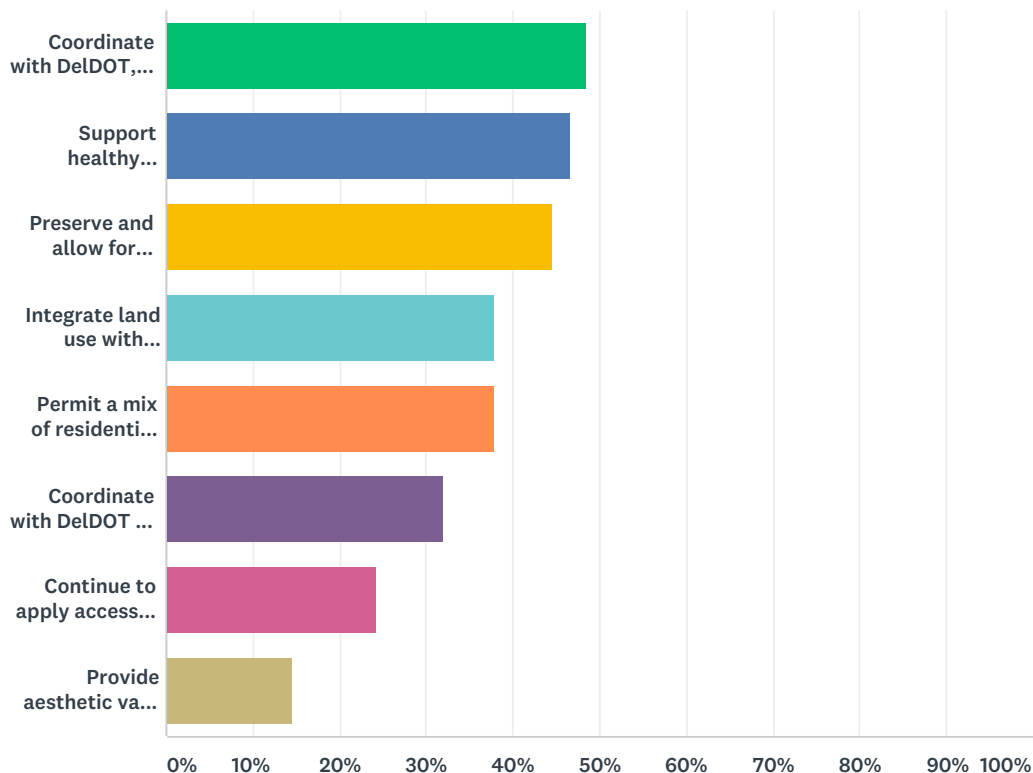
Answered: 106 Skipped: 62



ANSWER CHOICES	RESPONSES	
Develop in areas with adequate infrastructure and public services while protecting the natural resources and rural character of the County.	67.92%	72
Update and expand the uses permitted in the Agricultural Conservation and Agricultural Residential zoning districts to support the modern agricultural industry and the County's Food Innovation District.	43.40%	46
Conduct a complete review of Chapter 205 Zoning to update zoning districts and permitted uses to more modern standards.	37.74%	40
Create a Mixed Use Development Option for use in the Town and Village Areas.	35.85%	38
Create a zoning classification for Employment Centers with an emphasis on job creation rather than service & retail.	32.08%	34
Preserve areas for economic development by focusing on growth in Employment Centers, Commercial Areas, and Industrial Areas.	32.08%	34
Create a new Agricultural zoning district available to properties outside of the Growth Zone in order to permit by-right uses that support agriculture and are reasonable and expected in rural areas.	27.36%	29
Support revisions to the Growth Zone that follow natural boundaries and reduce properties currently split by the District.	17.92%	19
Total Respondents: 106		

## Q11 Please choose your top 3 Transportation priorities

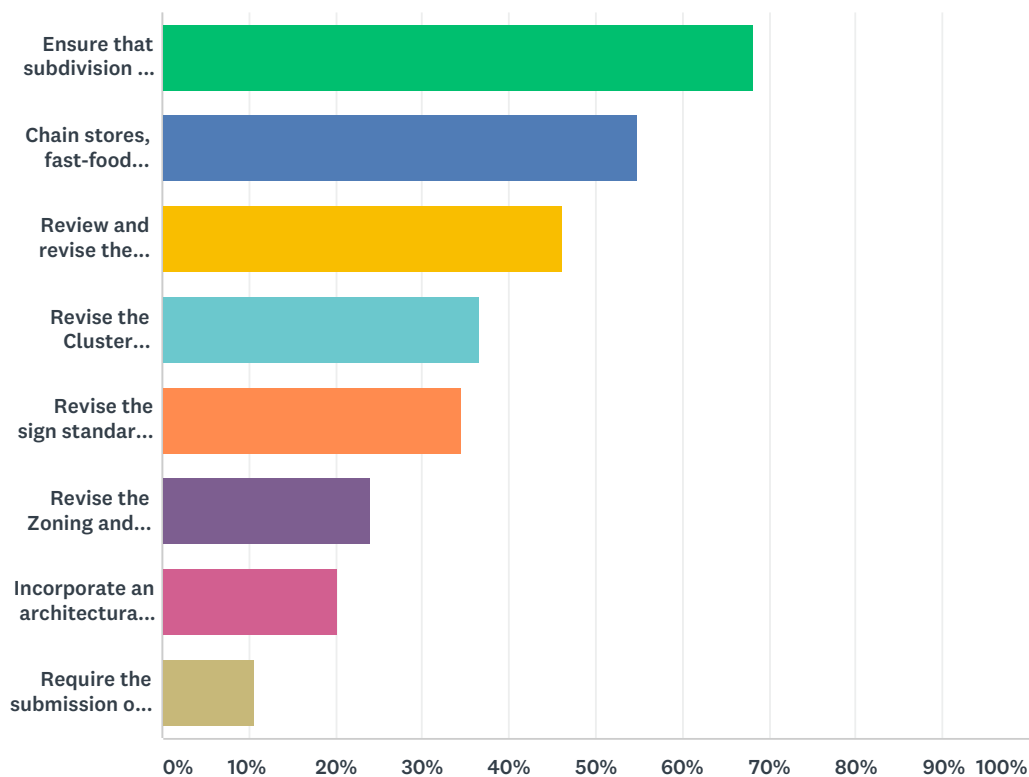
Answered: 103 Skipped: 65



ANSWER CHOICES	RESPONSES	
Coordinate with DeIDOT, DNREC, and the Dover/Kent County MPO to continue developing the trail system within and among the County parks as well as improve bicycle and pedestrian access to the parks.	48.54%	50
Support healthy lifestyles, choices and opportunities, as well as reduce air, water and noise pollution by requiring facilities such as sidewalks, transit facilities, multi-use paths and bikeways as part of both transportation and land development projects.	46.60%	48
Preserve and allow for expansion of existing rail facilities for both freight and passenger service, as well as a new intermodal freight yard.	44.66%	46
Integrate land use with transportation by improving coordination and maintaining a transportation network that supports anticipated needs within the Growth Zone Overlay District.	37.86%	39
Permit a mix of residential and nonresidential development at densities high enough to support bicycle & pedestrian access particularly in areas near municipalities.	37.86%	39
Coordinate with DeIDOT and the MPO to develop Transportation Improvement Districts, and pursue corridor studies for Brenford Road and South State Street.	32.04%	33
Continue to apply access management techniques preserving and improving the operating condition of corridors by regulating the number, spacing and design of access points.	24.27%	25
Provide aesthetic value by incorporating aesthetic and non-vehicular improvements in transportation investments.	14.56%	15
Total Respondents: 103		

## Q12 Please choose your top 3 Community Design priorities

Answered: 104 Skipped: 64



ANSWER CHOICES	RESPONSES	
Ensure that subdivision and street design meet the needs of emergency vehicles while at the same time respecting the pedestrian scale of development.	68.27%	71
Chain stores, fast-food restaurants, gas stations and convenience stores, and big-box retailers must design buildings that match the character of the area.	54.81%	57
Review and revise the County's parking requirements to ensure that sufficient but not excessive parking is provided for commercial sites, and permit flexibility in design.	46.15%	48
Revise the Cluster Development standards to include additional specific standards for natural resource protection, buffering, and preservation of viewscapes.	36.54%	38
Revise the sign standards within the Zoning Ordinance to ensure signage is compatible with the area and remains unobtrusive while still conveying a message.	34.62%	36
Revise the Zoning and Subdivision & Land Development ordinances to expand the existing Transfer of Development Rights development design criteria to other development types within the County.	24.04%	25
Incorporate an architectural review requirement in the review and approval process including the submission of proposed building elevations.	20.19%	21
Require the submission of pattern books in conjunction with higher density and mixed use major subdivision applications within the Growth Zone.	10.58%	11
Total Respondents: 104		

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## Q13 Are there other recommendations you think should be included in the Plan?

Answered: 33 Skipped: 135

**General Fund Capital Project Fund**

Capital Projects Fund Index

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Fiscal Year 2019 General Fund Capital Projects									
Department and Project Description	Funding Sources								
	FY 2019 Estimated Costs	General Fund Contribution	Reserve Transfer - General Fund Contribution	Reserve Transfer - General Fund RETT	Realty Transfer Tax	Fees	Grant Funding	Capital Projects Fund Reserves (RETT)	Total
<b>Administration - Information Technology</b>									
<b>Disaster Recovery Plan, Equipment, Testing</b>	75,000	75,000							75,000
Create an offsite location to handle redundancy (backup) of data to restore the County back to normal functionality in a short period of time in case of a disaster. Project includes virtualization of servers.									
<b>Server/Hardware/Software Replacement</b>	77,000	77,000							77,000
For replacements due to unexpected hardware/software failures. Project includes AS 400 Machine									
<b>IT Future Capital Outlays</b>	20,000	20,000							20,000
Provide for unforeseen but necessary technology-related items to maintain the County's technology infrastructure.									
<b>Microsoft Upgrades</b>	75,000	75,000							75,000
Upgrade to Microsoft Window 10 and Microsoft Office 16									
<b>Department Upgrades</b>	34,500	34,500							34,500
Replacement of outdated workstations. Review and recommend new computer hardware and software.									
<b>Audio Visual Replacement Fund</b>	300,000		300,000						300,000
This project allows for replacement of Audio Visual equipment on an ongoing basis.									
<b>IT Enterprise Solutions</b>	1,000,000		1,000,000						1,000,000
To provide a county-wide Master Information Technology Plan allowing departments to work together and offer customers online solutions.									
<b>Electronic Code Enforcement and Plan Review HW/SW</b>	40,000		40,000						40,000
Purchase HW/SW necessary to implement new leased software									
<b>Imaging Computer Replacement Fund - Deeds</b>	30,000					30,000			30,000
To provide funding for replacement computer hardware / software for the Recorder of Deeds Office on an ongoing basis.									
<b>Administration - Information Technology</b>	1,651,500	281,500	1,340,000	-	-	30,000	-	-	1,651,500

Fiscal Year 2019 General Fund Capital Projects		Funding Sources							
Department and Project Description	FY 2019 Estimated Costs	General Fund Contribution	Reserve Transfer - General Fund Contribution	Reserve Transfer - General Fund RETT	Realty Transfer Tax	Fees	Grant Funding	Capital Projects Fund Reserves (RETT)	Total
<b>Community Services - Parks</b>									
<b>Big Oak Park - Ballfield Restrooms and Storage</b>	25,000	25,000							25,000
New restroom and storage facility to be located on the north side of park in the ballfield complex. FY2019 funding represents fifth installment in a series of proposed annual funding amounts.									
<b>Brecknock Park - Historic Structure Improvement Fund</b>	10,000	10,000							10,000
This project allows for rehabilitation of the Goggin Manor House on an ongoing basis.									
<b>Browns Branch Park</b>	40,000	40,000							40,000
Project will allow a sports field irrigation system Funding is over three years									
<b>Hunn Property - Wildcat Manor Historic Improvement Fund</b>	10,000	10,000							10,000
To provide for assessment and rehabilitation of Wildcat Manor on an ongoing basis.									
<b>Kesselring Property</b>	75,000	75,000							75,000
Begin funding to provide park development									
<b>Parks Equipment</b>	9,000	9,000							9,000
Begin funding for Utility Vehicle with Infield Groomer (Browns Branch) Funded over two years									
<b>Parks Pavilions</b>	30,000	30,000							30,000
To provide additional pavilions at County owned parks									
<b>Parks Sealcoating - Restriping</b>	50,000	20,000					30,000		50,000
To provide funding for necessary sealcoating and restriping at County owned parks. Continues funding for future needs									
<b>Community Services - Library</b>									
<b>Library Window Treatment</b>	15,000	15,000							15,000
Provide Window Treatment necessary to block the sunlight									
<b>Total Community Services</b>	264,000	234,000	-	-	-	-	30,000	-	264,000



Fiscal Year 2019 General Fund Capital Projects									
Department and Project Description	FY 2019 Estimated Costs	Funding Sources							Total
		General Fund Contribution	Reserve Transfer - General Fund Contribution	Reserve Transfer - General Fund RETT	Realty Transfer Tax	Fees	Grant Funding	Capital Projects Fund Reserves (RETT)	
<b>Public Safety - Emergency Communications Division</b>									
<b>Consoles Replacement</b>	85,000				85,000				85,000
Replacement of twelve dispatch consoles purchased in 2006. These are the 12 consoles down the main corridor of the dispatch center.									
<b>Fire/EMS Paging System Replacement</b>	15,000				15,000				15,000
Replacement of Fire/EMS paging transmitters. Third installment of total to be funded over four years.									
<b>Fabric Replacement on Dispatch Walls</b>	20,000				20,000				20,000
Replace fabric due to aging. Funded over two years									
<b>Public Safety - Emergency Medical Division</b>									
<b>Cardiac Monitors</b>	25,000				19,000		6,000		25,000
This project supplements existing inventory of multi-functional cardiac monitor/pacemaker/defibrillator									
<b>Radio Replacement</b>	13,000				9,900		3,100		13,000
Replace seventh set of three of twenty six portable radios due to rebanding									
<b>Vehicle/Conversion - Emergency Response Unit Replacement</b>	85,000				64,600		20,400		85,000
Replace emergency response vehicle, includes conversion of vehicle to emergency medical response unit									
<b>Pole Building</b>	30,000				30,000				30,000
Building to be used to cover medical and response equipment. Fourth installment of amount to be funded over several years.									
<b>Public Safety Headquarters</b>									
<b>Building Generator</b>	35,000				35,000				35,000
Building Generator for Public Safety building									
<b>Total Public Safety</b>	<b>308,000</b>				<b>278,500</b>		<b>29,500</b>		<b>308,000</b>

Fiscal Year 2019 General Fund Capital Projects									
		Funding Sources							
Department and Project Description	FY 2019 Estimated Costs	General Fund Contribution	Reserve Transfer - General Fund Contribution	Reserve Transfer - General Fund RETT	Realty Transfer Tax	Fees	Grant Funding	Capital Projects Fund Reserves (RETT)	Total
<b>Administration Facilities Management</b>									
LED Outside Lighting for Administration Building	8,500	8,500							8,500
Update outside lighting due to age and energy savings									
<b>Total Administration - Facilities Management</b>	<b>8,500</b>	<b>8,500</b>	-	-	-	-	-	-	<b>8,500</b>

Fiscal Year 2019 General Fund Capital Projects									
Department and Project Description	FY 2019 Estimated Costs	Funding Sources							Total
		General Fund Contribution	Reserve Transfer - General Fund Contribution	Reserve Transfer - General Fund RETT	Realty Transfer Tax	Fees	Grant Funding	Capital Projects Fund Reserves (RETT)	
<b>Special Projects</b>									
<b>Community Projects Assistance Fund (Policy 30)</b>	50,000		50,000						50,000
Funding source to be used at the discretion of Kent County Levy Court to provide limited capital financing assistance to non-County owned Capital Projects that Kent County Levy Court, by majority vote, has determined to be of significant public benefit and importance to the citizens of Kent County.									
<b>Economic Development - Downtown Development Districts</b>	100,000				100,000				100,000
To increase funding available for matching grants in designated areas									
<b>Economic Development - Land Acquisition &amp; Construction</b>	100,000			100,000					100,000
To increase land acquisition and construction funding									
<b>Economic Development - Strategic Development</b>	500,000			500,000					500,000
To increase strategic development funding									
<b>Equipment and Vehicles</b>	32,000	32,000							32,000
This project allows for replacement of County vehicles and equipment on an ongoing basis.									
<b>Facilities</b>	50,000	50,000							50,000
Provide upgrades, repairs, furniture, and equipment for the County Complex, Emergency Services Building, the Library and Wheatley's Pond Road office and substation.									
<b>Total Special Projects</b>	832,000	82,000	50,000	600,000	100,000	-	-	-	832,000
<b>Total</b>	<b>3,064,000</b>	<b>606,000</b>	<b>1,390,000</b>	<b>600,000</b>	<b>378,500</b>	<b>30,000</b>	<b>59,500</b>	<b>-</b>	<b>3,064,000</b>

CAPITAL PROJECTS FUND - FISCAL YEAR 2019

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>ADMINISTRATION</b>								
<b>INFORMATION TECHNOLOGY</b>								
<b>Project Costs</b>								
Disaster Recovery	108,100	25,000	75,000	25,000	25,000	25,000	25,000	308,100
Disaster Recovery: Virtualization of Servers	108,400							108,400
<b>Subtotal Disaster Recovery</b>	<b>216,500</b>	<b>25,000</b>	<b>75,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>	<b>416,500</b>
Server / Hardware / Software Replacement	87,900	45,000	45,000	45,000	45,000	45,000	45,000	357,900
AS 400 Machine			32,000					32,000
<b>Subtotal Server/Hardware/Software Replacement</b>	<b>87,900</b>	<b>45,000</b>	<b>77,000</b>	<b>45,000</b>	<b>45,000</b>	<b>45,000</b>	<b>45,000</b>	<b>389,900</b>
IT Future Capital Outlays	306,800	20,000	20,000	20,000	20,000	20,000	20,000	426,800
Microsoft Upgrades (FY 15)	4,300		75,000	75,000				154,300
Department Upgrades		32,700	34,500	35,000	30,000	30,000	30,000	192,200
Audio Visual Replacement Fund (FY13-FY17)	100,700	28,700	300,000	20,000	20,000	20,000	20,000	509,400
Phone Replacement - County Administration Building (FY15 - FY17)	40,200	13,400						53,600
IT Enterprise Solutions (FY17 )	214,200	40,000	1,000,000	100,000	100,000	100,000	100,000	1,654,200
Appraisal Software (CAMA) Replacement (FY 15 - FY16)	528,600							528,600
County Website (FY 17 )	15,000	30,000						45,000
Electronic Code Enforcement and Plan Review HW/SW			40,000					40,000
IT - Projects Department Specific								
Deeds Imaging Computer HW/SW Replacement (FY12 - FY17)	174,800	30,000	30,000	30,000	30,000	30,000	30,000	354,800
<b>TOTAL PROJECT COSTS</b>	<b>1,689,000</b>	<b>264,800</b>	<b>1,651,500</b>	<b>350,000</b>	<b>270,000</b>	<b>270,000</b>	<b>270,000</b>	<b>4,765,300</b>
<b>Source of Funds:</b>								
Capital Projects Fund Reserves (General Fund Contribution)	172,600							172,600
General Fund Contribution	1,117,400	234,800	281,500	320,000	240,000	240,000	240,000	2,673,700
Reserve Transfer -- General Fund	200,000		1,340,000					1,540,000
Capital Projects Fund Reserves (Deed Fees)	119,800							119,800
Capital Projects Fund Reserves (Sheriff Fees)	24,200							24,200
Deeds Fees	55,000	30,000	30,000	30,000	30,000	30,000	30,000	235,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>1,689,000</b>	<b>264,800</b>	<b>1,651,500</b>	<b>350,000</b>	<b>270,000</b>	<b>270,000</b>	<b>270,000</b>	<b>4,765,300</b>
<b>TOTAL ADMINISTRATION</b>	<b>1,689,000</b>	<b>264,800</b>	<b>1,651,500</b>	<b>350,000</b>	<b>270,000</b>	<b>270,000</b>	<b>270,000</b>	<b>4,765,300</b>

CAPITAL PROJECTS FUND - FISCAL YEAR 2019

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>COMMUNITY SERVICES</b>								
<b>PARKS</b>								
<b>BIG OAK COUNTY PARK</b>								
<u>Project Costs:</u>								
Ball Field Restrooms and Storage (FY15 -FY17)	45,000	39,500	25,000	10,500				120,000
Ball Field Lights				125,000	125,000	125,000	125,000	500,000
Splash Pad Water Amenity (Child Play Area)					50,000	50,000	50,000	150,000
<b>TOTAL PROJECT COSTS</b>	<b>45,000</b>	<b>39,500</b>	<b>25,000</b>	<b>135,500</b>	<b>175,000</b>	<b>175,000</b>	<b>175,000</b>	<b>770,000</b>
<u>Source of Funds:</u>								
General Fund Contribution	45,000	10,000	25,000	135,500	175,000	175,000	175,000	740,500
Cash-in-Lieu of Recreation Area		29,500						29,500
<b>TOTAL SOURCE OF FUNDS</b>	<b>45,000</b>	<b>39,500</b>	<b>25,000</b>	<b>135,500</b>	<b>175,000</b>	<b>175,000</b>	<b>175,000</b>	<b>770,000</b>
<b>BRECKNOCK PARK</b>								
<u>Project Costs:</u>								
Historic Structure Improvement Fund (FY14-FY17)	32,200	10,000	10,000	10,000	10,000	10,000	10,000	92,200
<b>TOTAL PROJECT COSTS</b>	<b>32,200</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>92,200</b>
<u>Source of Funds:</u>								
General Fund Contribution	32,200	10,000	10,000	10,000	10,000	10,000	10,000	92,200
<b>TOTAL SOURCE OF FUNDS</b>	<b>32,200</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>92,200</b>



**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>COMMUNITY SERVICES (continued)</b>								
<b>PARKS</b>								
<b>KESSELING PROPERTY</b>								
<u>Project Costs:</u>								
Turf Restoration		15,800						15,800
Loop Trail Construction		25,000						25,000
Park Development			75,000	100,000	100,000	100,000	100,000	475,000
Wetland Bridge (FY13)	60,000	65,200 (4)						125,200
<b>TOTAL PROJECT COSTS</b>	<b>60,000</b>	<b>106,000</b>	<b>75,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>641,000</b>
<u>Source of Funds:</u>								
Capital Projects Fund Reserves (General Fund Contribution)		40,800						40,800
Capital Projects Fund Reserves (Realty Transfer Tax)	60,000	15,200 (4)						75,200
General Fund Contribution			75,000	100,000	100,000	100,000	100,000	475,000
DNREC - Outdoor Recreation, Parks and Trails Grant (Wetland Bridge)		50,000 (4)						50,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>60,000</b>	<b>106,000</b>	<b>75,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>641,000</b>
(4) In FY 2018 Grant award of \$50,000. County Portion from Capital Project Reserves RETT								
<b>KESSELING PROPERTY - RECREATION CENTER</b>								
<u>Project Costs:</u>								
Recreation Center	10,800,000							10,800,000
<b>TOTAL PROJECT COSTS</b>	<b>10,800,000</b>							<b>10,800,000</b>
<u>Source of Funds:</u>								
Capital Projects Fund Reserves (Realty Transfer Tax)	100,000							100,000
Loan	5,000,000							5,000,000
Realty Transfer Tax	485,000							485,000
Reserve Transfer - General Fund	5,215,000							5,215,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>10,800,000</b>							<b>10,800,000</b>



CAPITAL PROJECTS FUND - FISCAL YEAR 2019

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>COMMUNITY SERVICES (continued)</b>								
<b>PARKS</b>								
<b>PARKS EQUIPMENT</b>								
<u>Project Costs:</u>								
Utility Vehicle with Infield Groomer (Browns Branch)			9,000	9,000				18,000
<b>TOTAL PROJECT COSTS</b>			9,000	9,000				18,000
<u>Source of Funds:</u>								
General Fund Contribution			9,000	9,000				18,000
<b>TOTAL SOURCE OF FUNDS</b>			9,000	9,000				18,000
<b>PARKS - OTHER PROJECTS</b>								
<u>Project Costs:</u>								
Parks Pavilions	500		30,000	30,000	30,000	5,000	5,000	100,500
Sealcoating - Restriping (FY 17)	45,000		50,000	40,000	30,000	10,000	10,000	185,000
<b>TOTAL PROJECT COSTS</b>	45,500		80,000	70,000	60,000	15,000	15,000	285,500
<u>Source of Funds:</u>								
General Fund Contribution	500		50,000	30,000	30,000	15,000	15,000	140,500
State of Delaware Grant - DelDOT	45,000		30,000	40,000	30,000			145,000
<b>TOTAL SOURCE OF FUNDS</b>	45,500		80,000	70,000	60,000	15,000	15,000	285,500

**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>COMMUNITY SERVICES (continued)</b>								
<b>PARKS</b>								
<b>ST. JONES RIVER GREENWAY DEVELOPMENT</b>								
<u>Project Costs:</u>								
Phase III - Design, Engineering, Construction (FY05-FY08)		216,400						216,400
<b>TOTAL PROJECT COSTS</b>		<b>216,400</b>						<b>216,400</b>
<u>Source of Funds:</u>								
Capital Projects Fund Reserves (General Fund Contribution)		26,400						26,400
Realty Transfer Tax		125,000						125,000
Reserve Transfer - General Fund		35,200						35,200
State of DE Grant – DE Land & Water Conservation Trust Fund		29,800						29,800
<b>TOTAL SOURCE OF FUNDS</b>		<b>216,400</b>						<b>216,400</b>
<b>TIDBURY PARK</b>								
<u>Project Costs:</u>								
Sign (FY13)		5,000						5,000
<b>TOTAL PROJECT COSTS</b>		<b>5,000</b>						<b>5,000</b>
<u>Source of Funds:</u>								
Capital Projects Fund Reserves (General Fund Contribution)		5,000						5,000
<b>TOTAL SOURCE OF FUNDS</b>		<b>5,000</b>						<b>5,000</b>

CAPITAL PROJECTS FUND - FISCAL YEAR 2019

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>COMMUNITY SERVICES (continued)</b>								
<b>RECREATION</b>								
<u>Project Costs:</u>								
Van 15 Passenger (FY13-FY16)	40,000							40,000
Recreation Software		25,000						25,000
<b>TOTAL PROJECT COSTS</b>	<b>40,000</b>	<b>25,000</b>						<b>65,000</b>
<u>Source of Funds:</u>								
General Fund Contribution	40,000							40,000
Capital Projects Fund Reserves (General Fund Contribution)		25,000						25,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>40,000</b>	<b>25,000</b>						<b>65,000</b>
<b>Library</b>								
<u>Project Costs:</u>								
Window Treatments			15,000					15,000
<b>TOTAL PROJECT COSTS</b>			<b>15,000</b>					<b>15,000</b>
<u>Source of Funds:</u>								
General Fund Contribution			15,000					15,000
<b>TOTAL SOURCE OF FUNDS</b>			<b>15,000</b>					<b>15,000</b>
<b>TOTAL COMMUNITY SERVICES</b>	<b>11,595,400</b>	<b>240,500</b>	<b>264,000</b>	<b>374,500</b>	<b>395,000</b>	<b>310,000</b>	<b>310,000</b>	<b>13,489,400</b>

**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>PLANNING</b>								
<b>PLANNING - INSPECTIONS &amp; ENFORCEMENT</b>								
<b>Project Costs:</b>								
Vehicle Replacement				20,000		20,000		40,000
<b>TOTAL PROJECT COSTS</b>				20,000		20,000		40,000
<b>Source of Funds:</b>								
General Fund Contribution				20,000		20,000		40,000
<b>TOTAL SOURCE OF FUNDS</b>				20,000		20,000		40,000
<b>TOTAL PLANNING</b>								
				20,000		20,000		40,000

CAPITAL PROJECTS FUND - FISCAL YEAR 2019

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>PUBLIC SAFETY</b>								
<b>EMERGENCY COMMUNICATIONS</b>								
<b>Project Costs:</b>								
Consoles Replacement		85,000	85,000	85,000	85,000			340,000
Fire / EMS Paging System Replacement (FY 17)	15,000	15,000	15,000	15,000				60,000
RF Control Station Replacement Radios (FY 17)	24,000							24,000
Replace Fabric on Dispatch Walls			20,000	20,000				40,000
<b>TOTAL PROJECT COSTS</b>	<b>39,000</b>	<b>100,000</b>	<b>120,000</b>	<b>120,000</b>	<b>85,000</b>			<b>464,000</b>
<b>Source of Funds:</b>								
Realty Transfer Tax	39,000	15,000	120,000	120,000	85,000			379,000
Capital Projects Fund Reserves (RETT)		85,000						85,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>39,000</b>	<b>100,000</b>	<b>120,000</b>	<b>120,000</b>	<b>85,000</b>			<b>464,000</b>
<b>EMERGENCY MEDICAL SERVICES</b>								
<b>Project Costs:</b>								
Cardiac Monitors/Pacemakers/Defibrillators		25,000	25,000	25,000	25,000	25,000	25,000	150,000
Radio Replacement		13,000	13,000	13,000	13,000	13,000	13,000	78,000
Vehicle / Conversion - Emergency Response Unit		76,000	85,000	76,000	76,000	76,000	76,000	465,000
Pole Building (FY 16 - FY17)	55,000	15,000	30,000	50,000	50,000 (1)			200,000
Surveillance/Security System Upgrade - Wheatley Pond Location		10,000						10,000
<b>TOTAL PROJECT COSTS</b>	<b>55,000</b>	<b>139,000</b>	<b>153,000</b>	<b>164,000</b>	<b>164,000</b>	<b>114,000</b>	<b>114,000</b>	<b>903,000</b>
<b>Source of Funds:</b>								
Realty Transfer Tax	55,000	109,200	123,500	136,700	88,600	86,700	86,700	686,400
State of Delaware Grant -- Paramedic (24%)		29,800	29,500	27,300	75,400 (1)	27,300	27,300	216,600
<b>TOTAL SOURCE OF FUNDS</b>	<b>55,000</b>	<b>139,000</b>	<b>153,000</b>	<b>164,000</b>	<b>164,000</b>	<b>114,000</b>	<b>114,000</b>	<b>903,000</b>

Note (1) Sources of funds for the Pole Building are County RETT of \$152,000 from FY 16 - FY21 and \$48,000 from State of DE Paramedic Grant in FY 21, for a total of \$200,000.

CAPITAL PROJECTS FUND - FISCAL YEAR 2019

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>PUBLIC SAFETY HEADQUARTERS</b>								
Generator Replacement		15,000	35,000	50,000	(2)			100,000
<b>TOTAL PROJECT COSTS</b>		15,000	35,000	50,000				100,000
<u>Source of Funds:</u>								
Realty Transfer Tax		15,000	35,000	26,000				76,000
State of Delaware Grant -- Paramedic (24%)				24,000	(2)			24,000
<b>TOTAL SOURCE OF FUNDS</b>		15,000	35,000	50,000				100,000
Note (2) Sources of funds for the Generator are County RETT of \$76,000 from FY 18 - FY20 and \$24,000 from State of DE Paramedic Grant in FY 20.								
<b>TOTAL PUBLIC SAFETY</b>	<b>94,000</b>	<b>254,000</b>	<b>308,000</b>	<b>334,000</b>	<b>249,000</b>	<b>114,000</b>	<b>114,000</b>	<b>1,467,000</b>

**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>ADMINISTRATION - FACILITIES MANAGEMENT</b>								
<u>Project Costs:</u>								
Admin Complex Convert Outside Lighting to LED			8,500					8,500
Admin Complex Security System NVR Upgrade		22,300						22,300
<b>TOTAL PROJECT COSTS</b>		22,300	8,500					30,800
<u>Source of Funds:</u>								
General Fund Contribution		22,300	8,500					30,800
<b>TOTAL SOURCE OF FUNDS</b>		22,300	8,500					30,800
<b>TOTAL ADMINISTRATION - FACILITIES MANAGEMENT</b>								
		22,300	8,500					30,800



**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>SHERIFF'S OFFICE</b>								
<u>Project Costs:</u>								
Vehicle Replacement		18,000 (3)		19,000	19,000	19,000	19,000	94,000
<b>TOTAL PROJECT COSTS</b>		18,000		19,000	19,000	19,000	19,000	94,000
<u>Source of Funds:</u>								
Fees - Sheriff		18,000		19,000	19,000	19,000	19,000	94,000
<b>TOTAL SOURCE OF FUNDS</b>		18,000		19,000	19,000	19,000	19,000	94,000
(3) Vehicle Funding from FY 18 is available in FY 19								
<b>TOTAL ROW OFFICES</b>		18,000		19,000	19,000	19,000	19,000	94,000

**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>SPECIAL PROJECTS</b>								
<b>CONTRIBUTIONS AND GRANTS</b>								
<u>Project Costs:</u>								
Community Projects Assistance Fund, Policy 30 (FY15 - FY 17 )	531,800	50,000	50,000					631,800
U.S. Route 13 Landscape Beautification (DeIDOT CTF / Greater Kent Committee) (FY15)	180,000							180,000
<b>TOTAL PROJECT COSTS</b>	<b>711,800</b>	<b>50,000</b>	<b>50,000</b>					<b>811,800</b>
<u>Source of Funds:</u>								
State of Delaware Grant -- DeIDOT	180,000							180,000
Reserve Transfer - General Fund	531,800	50,000	50,000					631,800
<b>TOTAL SOURCE OF FUNDS</b>	<b>711,800</b>	<b>50,000</b>	<b>50,000</b>					<b>811,800</b>
<b>ECONOMIC DEVELOPMENT</b>								
<u>Project Costs:</u>								
Downtown Development Districts (FY15 )	200,000	200,000	100,000					500,000
Land Acquisition & Construction (FY07)	227,100	25,000	100,000	100,000	100,000	100,000	100,000	752,100
Strategic Development (FY16-FY17)	90,800		500,000	50,000	50,000	50,000	50,000	790,800
<b>TOTAL PROJECT COSTS</b>	<b>517,900</b>	<b>225,000</b>	<b>700,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>2,042,900</b>
<u>Source of Funds:</u>								
Realty Transfer Tax	317,900	25,000	100,000	150,000	150,000	150,000	150,000	1,042,900
Reserve Transfer - Realty Transfer Tax	200,000	200,000	600,000					1,000,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>517,900</b>	<b>225,000</b>	<b>700,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>2,042,900</b>

**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>SPECIAL PROJECTS (continued)</b>								
<b>EQUIPMENT AND VEHICLES</b>								
<u>Project Costs:</u>								
County Vehicle and Equipment Replacement (FY16 - FY17)	37,500	32,000	32,000	32,000	32,000	32,000	32,000	229,500
<b>TOTAL PROJECT COSTS</b>	<b>37,500</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>229,500</b>
<u>Source of Funds:</u>								
General Fund Contribution	37,500	32,000	32,000	32,000	32,000	32,000	32,000	229,500
<b>TOTAL SOURCE OF FUNDS</b>	<b>37,500</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>32,000</b>	<b>229,500</b>
<b>FACILITIES</b>								
<u>Project Costs:</u>								
Facilities Upgrades, Repairs, Furnishings and Equipment	62,000	50,000	50,000	50,000	50,000	50,000	50,000	362,000
<b>TOTAL PROJECT COSTS</b>	<b>62,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>362,000</b>
<u>Source of Funds:</u>								
General Fund Contribution	62,000	50,000	50,000	50,000	50,000	50,000	50,000	362,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>62,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>362,000</b>
<b>TOTAL SPECIAL PROJECTS</b>	<b>1,329,200</b>	<b>357,000</b>	<b>832,000</b>	<b>232,000</b>	<b>232,000</b>	<b>232,000</b>	<b>232,000</b>	<b>3,446,200</b>

**CAPITAL PROJECTS FUND - FISCAL YEAR 2019**

	Prior Open Projects	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>SUMMARY</b>								
<b>Project Costs:</b>								
Administration	1,689,000	264,800	1,651,500	350,000	270,000	270,000	270,000	4,765,300
Community Services	11,595,400	240,500	264,000	374,500	395,000	310,000	310,000	13,489,400
Planning				20,000		20,000		40,000
Public Safety	94,000	254,000	308,000	334,000	249,000	114,000	114,000	1,467,000
Facilities Management	-	22,300	8,500	-	-	-	-	30,800
Row Offices	-	18,000	-	19,000	19,000	19,000	19,000	94,000
Special Projects	1,329,200	357,000	832,000	232,000	232,000	232,000	232,000	3,446,200
<b>Total Project Costs</b>	<b>14,707,600</b>	<b>1,156,600</b>	<b>3,064,000</b>	<b>1,329,500</b>	<b>1,165,000</b>	<b>965,000</b>	<b>945,000</b>	<b>23,332,700</b>
<b>Source of Funds:</b>								
Capital Projects Fund Reserves (Deed Fees)	119,800							119,800
Capital Projects Fund Reserves (Sheriff Fees)	24,200							24,200
Capital Projects Fund Reserves (General Fund Contribution)	204,000	65,800						269,800
Capital Projects Fund Reserves (Realty Transfer Tax)	184,900	100,200						285,100
Cash-in-Lieu of Recreation Area		29,500						29,500
Fees - Deeds	55,000	30,000	30,000	30,000	30,000	30,000	30,000	235,000
Fees - Sheriff		18,000		19,000	19,000	19,000	19,000	94,000
General Fund Contribution	1,371,200	369,100	606,000	756,500	687,000	652,000	632,000	5,073,800
Loan	5,000,000							5,000,000
Realty Transfer Tax	1,311,700	164,200	378,500	432,700	323,600	236,700	236,700	3,084,100
Reserve Transfer -- General Fund	5,982,000	50,000	1,390,000					7,422,000
Reserve Transfer -- Realty Transfer Tax	200,000	200,000	600,000					1,000,000
State of DE Grant -- DE Land and Water Conservation Trust Fund	29,800							29,800
DNREC - Outdoor Recreation, Parks and Trails Grant (Wetland Bridge)		100,000						100,000
State of Delaware Grant -- DelDOT	225,000		30,000	40,000	30,000			325,000
State of Delaware Grant -- Paramedic (24%)		29,800	29,500	51,300	75,400	27,300	27,300	240,600
<b>Total Source of Funds</b>	<b>14,707,600</b>	<b>1,156,600</b>	<b>3,064,000</b>	<b>1,329,500</b>	<b>1,165,000</b>	<b>965,000</b>	<b>945,000</b>	<b>23,332,700</b>

## Capital Projects

The Capital Projects budget is used to identify major system expansion or renovation projects. Capital costs directly associated with Public Works divisions are budgeted for in the operating budget.

Major capital improvements to the wastewater system over the next five years include:

- Regional Resource Facility improvements to increase capacity, provide energy efficiency and meet environmental standards, such as, adding bio-solids drying capacity project, the air blower optimization project and the plant-wide power generator project
- Conveyance system capacity improvements (Pipeline Condition Assessment System)
- Sanitary Sewer District expansions Double Run (Hilltop and Paris Villa/London Village) and Milford Neck.
- Pump Station Upgrades (pump and emergency power generator replacements) and build pre-treatment system with septage screening located at West Denney's Rd

Major source of funding for the projects will be USDA loans and grants, SRF Delaware Funding loans and grants, Main System Capital Improvements Fees (County-wide impact fees), District Expansion Fees and Operating Revenue.

### Project Highlights – Fiscal Year 2019

The Capital Projects budget includes a "Prior Budget Year" column. Major infrastructure projects show funding prior to Fiscal Year 2018. This allows the total project costs to be reported in the "Total" column. Also, a more complete project description is included. The descriptions and other notes follow the capital projects listing and a reference number is provided to allow easy referral.



Fiscal Year 2019		Prior							TOTAL
		Budget Years	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	
<b>Treatment Plant Upgrades:</b>									
<b>Project Costs:</b>									
T9	Site Lighting Replacement	77,000	-	-	-	-	-	-	77,000
	Operating Revenue	77,000	-	-	-	-	-	-	77,000
T12	Clarifier Improvement Sludge Blanket Detectors for 4 Units	73,100	-	-	-	-	-	-	73,100
	Working Capital Reserve	73,100	-	-	-	-	-	-	73,100
T13	Clarifier Improvement Floor Rehabilitation - 2 units	62,000	-	-	-	-	-	-	62,000
	Working Capital Reserve	62,000	-	-	-	-	-	-	62,000
T14	Replace Influent Bar Rake#2 (Influent Building)	-	155,000	-	-	-	-	-	155,000
	Working Capital Reserve	-	155,000	-	-	-	-	-	155,000
T15A	South Aeration Basin Diffusers Replacement	-	190,000	-	-	-	-	-	190,000
	Working Capital Reserve	-	190,000	-	-	-	-	-	190,000
T15B	South Aeration Basin Liner Replacement	770,000	-	-	-	-	-	-	770,000
	Working Capital Reserve	770,000	-	-	-	-	-	-	770,000
T16	Site Improvements - Replace Paved Surfaces	-	200,000	200,000	-	-	-	-	400,000
	Working Capital Reserve	-	200,000	200,000	-	-	-	-	400,000
T17	Sandfilter Covers For Cells & Cascade	-	50,000	-	143,000	143,000	-	-	336,000
	Operating Revenue	-	50,000	-	143,000	143,000	-	-	336,000
T18	Clarifier Improvement - Weir Covers	-	-	-	60,000	120,000	-	-	180,000
	Operating Revenue	-	-	-	60,000	120,000	-	-	180,000
T19	Solids Handling Building Roof	120,000	-	-	-	-	-	-	120,000
	Working Capital Reserve	120,000	-	-	-	-	-	-	120,000



Fiscal Year 2019		Prior							
		Budget	Amended	Adopted	Proposed	Proposed	Proposed	Proposed	TOTAL
		Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
<b>Treatment Plant Upgrades:</b>									
T20A	<b>Project Costs:</b>								
	North Aeration Diffusers Replacement	190,000							190,000
	Working Capital Reserves	190,000	-				-	-	190,000
T20B	North Aeration Basin Liner and Venting Replacement			180,000	180,000	180,000			540,000
	Operating Revenue	-	-	180,000	180,000	180,000	-	-	540,000
T21	Aeration Basin Diffuser Replacement Maintenance	-	-	-	-	-	75,000	75,000	150,000
	Operating Revenue	-	-	-	-	-	75,000	75,000	150,000
T22	Clarifier 3 & 4 Mechanism Replacement	-	-	-	-	-	400,000	400,000	800,000
	Operating Revenue	-	-	-	-	-	400,000	400,000	800,000
<b>Total Treatment Plant Upgrades</b>		<b>14,863,100</b>	<b>6,928,500</b>	<b>1,065,000</b>	<b>1,068,000</b>	<b>1,103,000</b>	<b>1,135,000</b>	<b>875,000</b>	<b>27,037,600</b>
<b>Conveyance System Expansion and Upgrades</b>									
CS4	<b>Project Costs:</b>								
	Pipeline Condition Assessment	100,000	-	100,000	-	-	-	-	200,000
	Operating Revenue	50,000	-	50,000	-	-	-	-	100,000
	DE State Revolving Fund Planning Grant	50,000	-	50,000	-	-	-	-	100,000
<b>Total Conveyance System Expansion and Upgrades</b>		<b>100,000</b>	<b>-</b>	<b>100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>200,000</b>



Fiscal Year 2019		Prior							TOTAL
		Budget Years	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	
<b>Treatment Plant Upgrades:</b>									
<b>Project Costs:</b>									
<b>Pump Station Upgrades:</b>									
<b>Project Costs:</b>									
<b>Pump Station 1 - Smyrna</b>									
P1	Lag Pump Replacement (No Control Upgrade Required)	-	-	-	50,000	50,000	-	-	100,000
	Operating Revenues	-	-	-	50,000	50,000	-	-	100,000
<b>Pump Station 3 - Dover:</b>									
P2B	New Pump - Position 3	175,000	-	-	-	-	-	-	175,000
	Operating Revenues	175,000	-	-	-	-	-	-	175,000
P2C	Wetwell Capacity Improvements -	500,000	500,000	-	-	-	-	-	1,000,000
	Main System Capital Improvement Fees, Transmission	500,000	500,000	-	-	-	-	-	1,000,000
P2E	Wetwell Isolation Valve	-	-	65,000	-	-	-	-	65,000
	Operating Revenues	-	-	65,000	-	-	-	-	65,000
<b>Pump Station 4 - Rising Sun:</b>									
P3	Pump Replacement	-	50,000	-	-	-	-	-	50,000
	Operating Revenues	-	50,000	-	-	-	-	-	50,000
P3B	Suction Valve Replacement	-	-	85,000	-	-	-	-	85,000
	Operating Revenues	-	-	85,000	-	-	-	-	85,000
<b>Pump Station 7 - Milford:</b>									
P4	Lead Pump Replacement	-	90,000	-	-	-	-	-	90,000
	Operating Revenues	-	90,000	-	-	-	-	-	90,000
<b>Pump Station 14 - Isaacs:</b>									
P5	Lead Pump Replacement	-	-	-	90,000	-	-	-	90,000
	Operating Revenues	-	-	-	90,000	-	-	-	90,000
<b>Pump Station Various</b>									

Fiscal Year 2019		Prior							TOTAL
		Budget Years	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	
Treatment Plant Upgrades:									
Project Costs:									
Pump Station Upgrades:									
Project Costs:									
Pump Station 1 - Smyrna									
P8	Replace Emergency Power Generation for Various Pump Stations		20,000	35,000	50,000	50,000	50,000	50,000	255,000
	Operating Revenues	-	20,000	35,000	50,000	50,000	50,000	50,000	255,000
P9	Purchase Pumps for Various Pump Stations		35,000	50,000	50,000	50,000	50,000	50,000	285,000
	Operating Revenues		35,000	50,000	50,000	50,000	50,000	50,000	285,000
P10	Relocate Control & Transfer Switches for Various Pump Stations	20,000	20,000	20,000	20,000	-	-	-	80,000
	Operating Revenues	20,000	20,000	20,000	20,000	-	-	-	80,000
Pump Station									
P11	Relocate Septage Screen and Build Pre-Treatment System (W Denneys Road)	1,600,000	-	-	-	-	-	-	1,600,000
	Septage Loan	1,600,000	-	-	-	-	-	-	1,600,000
Pump Station #2 -									
P12	Pump Station #2 Pump 3 Replacement	-	-	-	-	-	75,000	-	75,000
	Operating Revenues	-	-	-	-	-	75,000	-	75,000
<b>Total Pump Stations Upgrades</b>		<b>2,295,000</b>	<b>715,000</b>	<b>255,000</b>	<b>260,000</b>	<b>150,000</b>	<b>175,000</b>	<b>100,000</b>	<b>3,950,000</b>

Fiscal Year 2019		Prior							TOTAL
		Budget Years	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	
Treatment Plant Upgrades:									
Project Costs:									
Equipment Project Costs:									
E1	Loader	-	-	200,000	-	-	-	-	200,000
E3	Pumper Truck	75,000	75,000	-	-	-	-	-	150,000
E4	Farm Tractor	-	-	-	-	100,000	-	-	100,000
E5	Dump Truck	-	-	75,000	100,000	-	-	-	175,000
E6	Portable Pumps	-	-	-	100,000	100,000	-	-	200,000
E7	Flatbed Dump Truck	-	-	50,000	50,000	-	-	-	100,000
<b>Operating Revenues</b>		<b>75,000</b>	<b>75,000</b>	<b>325,000</b>	<b>250,000</b>	<b>200,000</b>	<b>-</b>	<b>-</b>	<b>925,000</b>
<b>Total Equipment Projects Costs</b>		<b>75,000</b>	<b>75,000</b>	<b>325,000</b>	<b>250,000</b>	<b>200,000</b>	<b>-</b>	<b>-</b>	<b>925,000</b>

Fiscal Year 2019	Prior	Budget Years	Amended FY 2018	Adopted FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023	TOTAL
<b>Treatment Plant Upgrades:</b>									
<b>Project Costs:</b>									
<b>SUMMARY</b>									
<b>Grand Total Projects Costs</b>		<b>23,105,100</b>	<b>7,718,500</b>	<b>1,745,000</b>	<b>1,578,000</b>	<b>1,453,000</b>	<b>1,310,000</b>	<b>975,000</b>	<b>37,884,600</b>
<b>Total Funding Sources:</b>									
Operating Revenues		457,000	365,000	835,000	918,000	793,000	650,000	575,000	4,593,000
Working Capital Reserve		1,215,100	2,270,000	200,000	-	-	-	-	3,685,100
Capital Projects Reserves		500,000	-	-	-	-	-	-	500,000
DE State Revolving Fund Delaware Stimulus Funding (ARRA) Loan		-	-	-	-	-	-	-	-
DE State Revolving Fund/RZED Bond		1,402,550	-	-	-	-	-	-	1,402,550
DE State Revolving Fund Planning Grant		100,000	-	50,000	-	-	-	-	150,000
State Revolving Fund Loan		-	2,298,500	-	-	-	-	-	2,298,500
Main System Impact Fees		-	1,725,000	100,000	100,000	100,000	100,000	-	2,125,000
USDA Loan		5,376,450	-	-	-	-	-	-	5,376,450
USDA Grant		4,132,000	-	-	-	-	-	-	4,132,000
Main System Capital Improvement Fees, Treatment portion		7,822,000	560,000	560,000	560,000	560,000	560,000	400,000	11,022,000
Main System Capital Improvement Fees, Transmission portion		500,000	500,000	-	-	-	-	-	1,000,000
Septage Loan		1,600,000	-	-	-	-	-	-	1,600,000
<b>Total Funding Sources</b>		<b>23,105,100</b>	<b>7,718,500</b>	<b>1,745,000</b>	<b>1,578,000</b>	<b>1,453,000</b>	<b>1,310,000</b>	<b>975,000</b>	<b>37,884,600</b>

**Treatment Plant Upgrades****T1. TMDL Study for Support of Site-Specific Water Quality Standards (FY 08 – FY 22)**

This project is a continuation of discussions with DNREC to develop site-specific water quality standards for the section of the Murderkill River which receives the treated discharge from the Regional Resource Recovery Facility (RRRF). The data collection ran through December 2008. The analysis concluded December 2009 followed by model calibration concluding with the development of scientifically based, site specific numeric water quality standards. Ongoing work is being performed by the University of Delaware in conjunction with the United States Geological Survey. The funding source is Main System Capital Improvement Fees, Treatment Portion.

**T3. TMDL Offsite Nutrient Reduction Project – Additional Site – (FY 19 – FY22)**

This will construct a nutrient reduction project which may be reforestation, created wetlands or other applicable projects within the Murderkill Watershed. Funding source is Main System Impact Fees.

**T5. Land Acquisition & Permitting to Extend Effluent Flow Limitations Beyond Stream Discharge (FY 09 – FY 23)**

This project will acquire additional land for the expanding buffers and land conservation measures for nutrient reduction credits and/or land for disposal of treated wastewater biosolids to meet projected loads. The funding source is Main System Capital Improvement Fees - Treatment Portion.

**T6. Replace Pumps and Valves at Recycle Pump Stations 1 & 2 (FY 18 – FY 20)**

This project will replace the pumps and valves in the recycle pump stations at the RRRF. The units were installed in 2002 and have a life expectancy of about ten (10) years. The funding source is Operating Revenues.

**T7A. Plant-wide Power Generator (FY 13 – FY 17)**

This is the purchase and installation of a Plant-wide Power Generator which will serve as a power backup. The RRRF will participate in Delaware's Electric's load control program, allowing compensation, for reducing the RRRF's electric load during peak periods. Thus funding sources are Operating Revenue, Capital Projects Reserves, State of Delaware Revolving Fund Planning Grant, State of Delaware Revolving Fund/RZED and USDA Loans.

**T7B. Air Blower System Optimization (FY 17 – FY18)**

This project includes the study of the RRRF's air supply expansion and blower replacement options and design of the preferred alternative. The funding sources are USDA Loan and State of Delaware Revolving Fund Loan.



**Treatment Plant Upgrades Continued****T8C. Biosolids Capacity Expansion with Waste Activated Sludge Screens (FY 18)**

This project considers the options available for biosolids capacity expansion including construction of additional passive solar drying chambers and/or replacement of the gas dryers and associated processing equipment at the RRRF. Replacement of the gas dryers is the preferred method for production of Class A biosolids. Screens will be required to remove debris and undesirable materials. The project will include design and construction. The funding sources are Working Capital Reserves and Main System Impact Fees.

**T9. Site Lighting Replacement (FY 17)**

The current street lights are high energy consumption and at the end of their useful life. The new style is a low energy LED with high lumen output for better visibility. The funding source is Operating Revenue.

**T12. Clarifier Improvements: Sludge Blanket Detectors for 4 units (FY 17)**

This project brings new technology for the sludge blanket detectors. The new technology produces accurate results for depth readings while reducing dangerous conditions for staff during storms. The funding source is Working Capital Reserves.

**T13. Clarifier Improvements: Floor Rehabilitation of 2 units (FY 17)**

The concrete skim coat on the bottom of two clarifiers is peeling off, entering the waste stream and causing maintenance issues. The floors of the two clarifiers need to be recoated with an epoxy to prevent additional peeling. The funding source is Working Capital Reserves.

**T14. Replace Influent Bar Rake#2 (Influent Building (FY 18)**

This project will replace the old bar screen with a new bar screen of a modern and robust design with 6mm openings which requires very little maintenance and captures more trash and debris. The old screen is approx. 14 to 15 years old and the cost to repair it is almost as much as the cost of a new machine. The funding source is Working Capital Reserves.

**T15A. South Aeration Basin Diffusers Replacement (FY 18)**

Replacement and rehabilitation of the south aeration basin diffusers is required. The diffuser sheaths have inefficient oxygen transfer as they are at the end of their life cycle. Sheath replacement will increase O2 transfer and efficiency thereby saving on electricity. The cost is based on the North Aeration Basin replacement & rehabilitation project completed in July 2017. The replacement schedule for diffuser sheath membranes is 5 to 7 years. The funding source is Working Capital Reserves.

**T15B. South Aeration Basin Liner Replacement (FY17)**

The project will replace the liner and venting system of the South Aeration Basin with a polyurea liner. The Funding Source is Working Capital Reserve.

**Treatment Plant Upgrades Continued****T16. Site Improvements – Replace Paved Surfaces (FY 18 – FY 19)**

This project involves the milling of existing roadways and excludes new pavement installed during the Capacity Expansion and Nutrient Removal project. The area of concern is the entire front half of the Regional Resource Recovery Facility. The funding source is Working Capital Reserves.

**T17. Sandfilter Covers For Cells & Cascade (FY 18 – FY 21)**

This project requires a removable/retractable cover over all filter cells to prevent sunlight from causing uncontrolled algae growth. The funding source is Operating Revenue.

**T18. Clarifier Improvement – Weir Covers (FY 20 – FY 21)**

The project will provide covers over the weirs of the clarifiers to prevent algal growth by preventing sunlight contact in these areas. Algal growth within the clarifiers causes maintenance problems in the sand filter and the ultra-violet disinfection system. The covers will reduce maintenance of the clarifiers and downstream infrastructure. The funding source is Operating Revenue.

**T19. Solids Handling Building Roof (FY17)**

The project will replace the roof of Building I which was the original solids processing building with digesters. The funding source is Working Capital Reserve.

**T20A. North Aeration Basin Diffuser Replacement (FY 17)**

The project refurbished and/or replaced diffusers in the North Aeration Basin. The basin contains 26 lines with 18 diffusers. Each diffuser has 5 sheaths/sleeves. All diffuser sheaths/sleeves were replaced. The replacement schedule for diffuser sheath membranes is 5 to 7 years. The funding source is Working Capital Reserves. The project was completed in July 2017.

**T20B. North Aeration Basin Liner and Venting (FY 19 – FY 21)**

The project will replace the geotextile liner and venting in the North Aeration Basin with a polyurea liner. The original geotextile liner was installed in 1994. The NAB liner was partially replaced with new material at the bottom and 3 feet up the sides in 2005. The life expectancy of the existing liner material is 15 to 20 years with a warranty during the first 10 years. Portions of the existing liner are now over 20 years old. The funding source is Operating Revenue.

**T21. Aeration Basin Diffuser Replacement (FY 22 – FY 23)**

The project will allow the diffusers to be maintained by refurbishing and/or replacing diffusers. Each basin contains 26 lines with 18 diffusers. Each diffuser has 5 sheaths/sleeves. The replacement schedule for diffuser sheath membranes is 5 to 7 years. The funding source is Operating Revenue.

**T22. Clarifiers 3 & 4 Mechanism Replacement (FY22 – FY 23)**

The project will replace the mechanical equipment at Clarifiers 3 & 4. The funding source is Operating Revenue.

**Conveyance System Expansion and Upgrades****CS4. Pipeline Condition Assessment (FY 17 – FY 19)**

The Pipeline Condition Assessment project will evaluate the condition of sanitary sewer transmission system for all pipes, 12 inches in diameter and greater. The results of the assessment may lead to a rehabilitation phase. The funding for the assessment is Operating Revenue and DE State Revolving Planning Grant.

**Sanitary Sewer Districts****SSD2B. Double Run Area: Hilltop Area Sanitary Sewer Expansion – Phase 2 (FY 16)**

This project will provide a sewer collection and conveyance system in an area that has environmental issues due to failing septic systems. The Phase 2 expansion will serve 46 existing units. The funding sources are USDA Loan and a USDA Grant.

**SSD3. Milford Neck Area Sanitary Sewer Expansion (FY15 – FY16)**

This project includes planning, design and construction of a sanitary sewer collection and conveyance system due to failing septic systems and environmental concerns. This area will service approximately 38 equivalent dwelling units (EDU). The funding sources are a USDA Loan and a USDA Grant.

**SSD4A. Double Run Area: Paris Villa/London Village Sanitary Sewer Expansion -Phase 1 (FY 15)**

This project includes planning, design and construction of a sanitary sewer collection and conveyance system due to failing septic systems and environmental concerns. Phase 1 will address Paris Villa to serve 157 EDUs. The funding sources are a USDA Loan and a USDA Grant.

**SSD4B. Double Run Area: Paris Villa/London Village Sanitary Sewer Expansion - Phase 2 (FY 16)**

This project includes planning, design and construction of a sanitary sewer collection and conveyance system due to failing septic systems and environmental concerns. Phase 2 will address London Village to serve approximately 90 EDUs. The funding sources are a USDA Loan and a USDA Grant.

**Pump Station Upgrades****P1. Pump Station 1 (Smyrna) Lag Pump Replacement (FY 20 – FY 21)**

This project involves the purchase and installation of a new pump in Fiscal Year 2021. No control upgrade is required. This unit typically has a five (5) year replacement cycle schedule. Replacement previously scheduled for Fiscal Year 2018 has been delayed until Fiscal Year 2021 based on pump condition. The condition will be re-evaluated during the Fiscal Year 2019 budget cycle. The funding source is Operating Revenue.

**P2B. Pump Station 3 (Dover) New Pump for Position 3 (FY 16)**

This project is a purchase of new pump for position 3. The funding source is Operating Revenue. The project was not pursued in Fiscal Year 2016 and funding was reallocated to the Odor Control Project for Pump Station 3 and Pump Station 4.

**P2C. Pump Station 3 (Dover) Wetwell Capacity Improvements (FY17 – FY 18)**

There has been ongoing concern that the wet well capacity at this pump station is reaching its limit, due to increased flows. In order to eliminate sanitary sewer overflows (SSOs) and increase pump cycle times, the County is investigating 3 options: pump size increases, wet well capacity increase and/or addition of an equalization tank. Any one or all three items may be required to be accomplish the goal of reducing or eliminating SSOs which occur during heavy rains and high flows. The funding source is Main System Capital Improvement Fees, Transmission.

**P2E. Pump Station 3 (Dover) Wet Well Isolation Valve (FY 19)**

This project, scheduled for Fiscal Year 2021, is for the purchase and installation of a 36 inch isolation valve on the influent line to wet well at Pump Station 3. The valve's purpose is to stop flow into the wet well for maintenance. In the past, staff has attempted to utilize inflatable plugs but they are not rated for the pressure and a failure could be life threatening to staff. Funding is Operating Revenue.

**P3. Pump Station 4 (Rising Sun) Pump Replacement (FY 18)**

This is a high efficiency unit that runs all the time and usually has a five (5) year replacement. However given the condition of the current pump, replacement has been moved out to Fiscal Year 2019. The funding source is Operating Revenue.

**P3B. Pump Station 4 (Rising Sun) Suction Valve Replacement (FY 19)**

The funding source is Operating Revenue.

**P4. Pump Station 7 (Milford) Lead Pump Replacement (FY 18)**

This project, scheduled for Fiscal Year 2018, will replace the lead pump at Pump Station 7 that was installed in Fiscal Year 2013. The funding source is Operating Revenue.

**Pump Station Upgrades Continued****P5. Pump Station 14 (Isaacs) Lead Pump Replacement (FY 20)**

This project, scheduled for Fiscal Year 2020, will replace the lead pump at Pump Station 14 that was installed in Fiscal Year 2013. Typical replacement is 5 years, but the pump is in good condition. The funding source is Operating Revenue.

**P8. Replace Emergency Power Generator for Various Pump Stations (FY18 – FY 23)**

There are a combined total of 101 pump stations and lift stations. Replacement of generator equipment is continuous. The funding source is Operating Revenue.

**P9. Purchase Spare Pumps for Various Pump Stations (FY 18 – FY 23)**

This is a continuous project which will provide spare pumps for various pump stations as the need dictates. The funding source is Operating Revenue.

**P10. Relocate Control and Transfer Switches (FY 17 – FY 20)**

A few stations still have their controls below ground and this project will relocate the controls above the surface. The funding source is operating revenue.

**P11. Relocate Septage Screen and Build Pre-Treatment System (W. Denneys Road) (FY13 – FY 16)**

A new screening unit will be placed at the W. Denneys Road site along with a pre-treatment system. The use of the existing units will be discontinued at the PS1 and PS8 locations. The funding source is Septage Loan.

**P12. Pump Station 2 Pump #3 Replacement (FY 22)**

This project, scheduled for Fiscal Year 2022, the Pump in the #3 position is an original pump from the 1970's is in need of replacement with new, properly sized more efficient model. With the future completion of the Route 13 Force Main Slip lining project, this replacement would give us a useful backup pump with the proper design for the new conditions. The funding source is Operating Revenue.

**Equipment**E1. Loader (FY 19)

This project will replace an existing piece of equipment. The funding source is Operating Revenue.

E3. Pumper Truck (FY 17 – FY 18)

This project will replace an existing piece of equipment utilized in maintenance operation. The funding source is Operating Revenue.

E4. Farm Tractor (FY 21)

This project will replace an existing piece of equipment utilized in maintenance operation. The funding source is Operating Revenue.

E5. Dump Truck (FY 19 – FY 20)

This project will replace an existing piece of equipment utilized in maintenance operation. The funding source is Operating Revenue.

E6. Portable Pumps (FY 20 – FY 21)

This project is the purchase portable pumps. Purchase of 4" diameter and 6" diameter pumps allows more versatility to meet field conditions for flow and adequate head. The funding source is Operating Revenue.

E7. Flatbed Dump Truck (FY 19 – FY 20)

This project will replace an existing piece of equipment utilized in maintenance operation. The funding source is Operating Revenue.



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION

April 20, 2018

Sarah Keifer, AICP  
Kent County  
Department of Planning Services  
555 Bay Road  
Dover, DE 19901

RE: PLUS review 2018-03-02; Kent County Comprehensive Plan

Dear Sarah:

Thank you for meeting with State agency planners on March 28, 2018 to discuss the Kent County comprehensive plan. State agencies have reviewed the documents submitted and offer the following comments. Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting.

**Office of State Planning Coordination – Contact: David Edgell 739-3090**

Congratulations on completing the draft of the Kent County Comp Plan. It is clear the county staff put a lot of time and effort into the plan. The County's outreach efforts included using ArcGIS story maps, online surveys and social media, which are innovative ways to collect and share information. We commend the County for retaining the growth zone, which is foundation of growth management in Kent County. The *Strategies for State Policies and Spending* for the Kent County area is based in part on this concept. We support the land use strategy that includes Map 7B Future Land Use, Map 7C Land Use Strategies and Map 2A Economic Development Areas.

The certification comments in this letter are based on a review by OSPC and agency staff which was guided by the county comprehensive plan requirements as embodied in the "Quality of Life Act" (9 Del. C § 4956). Comprehensive plans are complex documents that are developed to meet the unique needs and vision of each local jurisdiction. When responding to these comments, it is acceptable to point out applicable plan sections that the reviewer may have missed, or plan text or maps from multiple chapters that can address the Del. C. requirements.



There have already been some very productive discussions between OSPC and County Planning staff, as well as between the County and the State Agencies through the PLUS meeting. We look forward to continuing to work closely with Kent County through the comprehensive plan revision, adoption and certification process to address any questions or comments that may arise.

General Comments:

- From the Department of Transportation: Presently, there are two current and approved State Scenic and Historic Byways traversing Kent County: the Harriet Tubman Underground Railroad Byway and the Delaware Bayshore Byway. While they are mentioned in a list of historic resources in Chapter 6, Historic Preservation (page 6-4), DelDOT points out that byways are not so much historic resources as a means to link resources.

Therefore DelDOT recommends that the County address the two byways and potential planning measures relating thereto, in several other parts of the Plan, in addition to page 6-4. In Chapter 2, Economic Development, they are relevant to the Tourism section, which begins on page 2-10. In Chapter 4, Community Facilities, they could be mentioned in the Parks and Recreation section, which begins on page 4-4. In Chapter 5, Conservation, the Delaware Bayshore Byway could be mentioned in the Coastal Zone section, which begins on page 5-5. Chapter 8, Transportation, may be the best place for a detailed treatment of the two byways and the program under which they were created. If, as some jurisdictions, have done, the County wishes to set site design characteristics for the byway corridors, Chapter 9, Community Design, would be the place to address that. Finally, DelDOT recommends that the County include recommendations specific to the two byways in Chapter 11, the Implementation Strategy.

For information and assistance in more fully incorporating the byways into the Plan, DelDOT recommends that the County contact Mr. Michael Hahn, Byways Coordinator, in DelDOT's Local Systems Improvement Section. Mr. Hahn may be reached at (302) 760-2131 or at [MichaelC.Hahn@state.de.us](mailto:MichaelC.Hahn@state.de.us). A smart map of all of Delaware's byways, including these two, is available at <http://deldot.maps.arcgis.com/apps/webappviewer/index.html?id=03d5049bc49041658cfecad5fd6ba8b9>.

- From the State Historic Preservation Office: The State Historic Preservation Office appreciated Kent County for including a section and information about Historic Preservation in their Comprehensive Plan. Kent County is the only county in the state without a Preservation Planner. The county has had numerous losses of historic buildings and the public has expressed concerns about the losses. Having staff specifically dedicated to review projects and permits to provide guidance on historic preservation issues would be beneficial to the county's constituents, as would establishing a preservation advisory board or commission. Our office strongly recommends the county include in their comprehensive plan a commitment to consider taking such steps.

- From the Delaware State housing Authority: Kent County critically examined the breadth of issues facing their community and developed a meaningful cross-sector response that when implemented will significantly expand the housing options throughout the County – regardless of a person’s income or stage of life. Their policies and recommendations are substantial and while we support them all, we highlight the following:
  - The Comprehensive Plan recognizes the County’s responsibility to affirmatively further fair housing and is evident in the policies incorporated throughout the plan, particularly in the housing, land use, and economic development chapters. Collectively, they support a move away from traditional suburban development and toward mixed-use compact development, which takes advantage of existing infrastructure, services and amenities. This type of development enables a variety of housing types in close proximity to jobs, education, open space and resources that help households succeed.
  - The Economic Development chapter proposes continued support of Downtown Development Districts, which directs investment toward distressed urban where existing infrastructure, amenities and a range of housing types exist. Continued support of these areas will help revitalize businesses but also elevate the quality of life of families currently living in these areas.
  - The Transportation, Housing and Conservation chapters support density incentives in targeted locations within the Growth Zone, especially with the areas identified for Transportation Improvement District. Specifically, areas and sites for multi-modal emphasis and transit will be identified where a special effort will be made through rezoning, incentives, or other means to provide affordable housing.
  - The Housing chapter proposes establishing an affordable housing trust fund potentially funded through a percentage of the “in lieu” fees paid by developers as part of an inclusionary zoning ordinance or through a building permit surcharge. This is a critical recommendation as federal resources for housing continue to diminish and housing need continues to rise.
  - The Housing chapter recommends reviewing all County impact fees to determine the effect of reducing or waiving them for developers or non-profits who build affordable housing.
  - The Community Facilities chapter seeks to connect access to schools, parks and other community centers as part of subdivision and land development design. This includes providing path and trail linkages between parks and residential communities as well as expand options and facilities to support handicap accessibility and inclusion for all persons.
  - The Land Use chapter defines a strategy where mixed-use, higher density, commercial, industrial, and employment center development could be supported provided it keeps the character of the area and adequate infrastructure is in place or planned.
  - The Community Design chapter promotes site design characteristics based on the intensity, type and location of development that will enhance the livability of the built environment for its residents.
- From the Department of Natural Resources and Environmental Control: as a statutory requirement, DNREC Water Supply Section, Ground-Water Protection Branch has reviewed Kent County’s Comprehensive Plan and the portions of the online Kent County Code. The

text of the Plan cites Title 7, Delaware Code, Chapter 60, Subchapter VI and acknowledges that it requires county governments and municipalities with populations of 2,000 or more to protect the areas delineated as source water protection areas including surface water supply watersheds, wellhead protection areas, and excellent groundwater recharge potential areas.

In addition, the Plan discusses the County's adoption of a wellhead protection ordinance that limits impervious cover within 150 feet of a public well adding it is in keeping with DNREC's well permitting standard. The ordinance also requires treatment of stormwater by best management practices between 150 to 300 feet from a public well. The text also acknowledges that there are public water supply wells in unconfined aquifers that could require protection greater than the 150-foot buffer but dismisses any need to develop protective ordinances as the areas are already developed.

- The Plan notes that excellent Recharge Areas are located outside the Growth Zone Overlay and away from development pressure. It further notes that Kent County limits impervious cover to 23% outside the Growth Zone and within the Growth Zone to 35%, regardless of the presence or absence of a source water area. Adding that the County finds these standards to be protective of the resource.
- Section 187-79.1 of Kent County's Code, affords protection of a 150 – foot buffer around each public well from development and stormwater. The area from 150 feet to 300 feet requires treatment of stormwater by best management practices. In addition, it acknowledges the source water maps delineated by DNREC and cites 7 Del.C. § 6082(b) and makes them available in the Office of the Kent County Planning.
- Title 7 Del.C. § 6082(b) states: 'The counties and municipalities with populations of 2,000 persons or more, with the assistance of the Department, shall adopt as part of the update and implementation of the 2007 Comprehensive Land Use Plans, the overlay maps delineating, as critical areas, source water assessment, wellhead protection and excellent ground-water recharge potential areas. Furthermore, the counties and municipalities shall adopt, by December 31, 2007, regulations governing the use of land within those critical areas designed to protect those critical areas from activities and substances that may harm water quality and subtract from overall water quantity'.
- Title 7 Del.C. § 6082(f) states: 'Counties and municipalities with populations of 2,000 persons or more shall update their overlay maps in accordance with changes made by the Department with respect to source water assessment, wellhead protection and excellent ground-water recharge potential areas'.
- The County has not adopted the DNREC overlay maps delineating, as critical areas, wellhead protection areas. While the 150 and 300 foot buffers may afford protection for low withdrawal and confined wells, it does not provide protection for unconfined wells withdrawing large volumes of water and therefore having a larger contributory source water area.
- In summary, the existing County Code specifies county-wide impervious coverage limits, and best management practices for stormwater, both of which are beneficial to the water

resources, but it does not differentiate between source water protection areas and non-source water areas for those practices. The existing 150 foot set back from a public well for impervious coverage is consistent with the 150-foot fixed radius source water protection areas for low-yield public wells and confined aquifer wells, and may provide recharge quantity protection for those smaller wells, but does not address water quality concerns.

- Currently, the Department's Source Water Program is working with the County's staff to evaluate potential source water protection measures and/or processes during conditional use approval reviews for industrial and commercial projects that may warrant additional considerations.

***Certification Comments:*** These comments must be addressed in order for our office to consider the plan update consistent with the requirements of Title 22, § 702 and Title 29, § 9103 of the Del. Code.

### **Certification Issues by chapter**

#### **Chapter 2 – Economic Development**

- Page 2-6 – We are very pleased that the County is supporting the Downtown Development District Program. Please expand this explanation to make it clear that the DDD program is a State level designation and rebate program, and that Kent County is leveraging this program to provide support to projects that meet the State criteria. As written it appears that this is only a County program.
- Page 2-12– Hanover Foods area is designated for economic development. This is outside of the growth zone, and not consistent with the Clayton Comprehensive Plan. The Clayton plan calls for residential development. See the 2008 Clayton Comp Plan, page 64. Please document that the County has worked with the Town of Clayton to develop a common vision for the future of this area. Either the Kent Comp Plan should be amended, or Clayton should agree to amend their plan as a part of their ongoing comprehensive plan update.
- Page 2-13 – The economic development area west and south of the State Fair is outside of the growth zone. The Harrington Comp Plan identifies a portion of this area for annexation as “mixed commercial.” See Harrington 2013 Comp Plan, Map 15. However, Kent County's proposed “potential industrial area” is much larger than anticipated by Harrington's plan. Please document that the County has worked with the City of Harrington to develop a common vision for the future of this area. Either the Kent Comp Plan should be amended, or Harrington should agree to amend their plan as appropriate if annexation is considered.
- Please provide (or identify what is intended to be) the “general area redevelopment component consisting of **plans, criteria and programs for** community redevelopment, including reuse of housing sites, business sites, industrial sites, central business districts, public building sites, recreational facilities and other locations.”

#### Chapter 4 – Community Facilities

- “A capital improvements plan covering at least a 5-year period shall be developed in accordance with the adoption of, and be consistent with, the comprehensive plan. . .” This chapter describes some capital improvements for the sewer system, but does not contain any fiscal information or appear to include the entire capital improvements plan. Please provide the County’s five year capital improvements plan, including fiscal information. Please add text to clarify how the CIP is consistent with the comprehensive plan.
- The plan should indicate “the extent provisions of the Capital Improvements Plan anticipate State financial assistance. . .” Please indicate what, if any, financial assistance the County anticipates through the CIP or annual budget.
- The water and sewer element must contain a statement of “problems and needs” and describe proposed solutions to those “problems and needs.”
  - As a part of this, it would be helpful if the plan discussed future growth and housing projections as it relates to the anticipated need for additional wastewater treatment capacity. At what point will capital upgrades to the Frederica plant be needed? Are there any discussions of an additional treatment plant, or a change in treatment method i.e. spray irrigation in lieu of direct discharge?
- A list of capital projects for the wastewater system is found on 4-20 and 21.
  - Clarify which of these projects are planned and budgeted vs. proposed.
  - Clarify which projects are for system maintenance and repair vs. expansion to accommodate future growth.
- The water and sewer element must be revised to include a discussion of “fiscal considerations.”
- Describe how the water and sewer elements are consistent with “approved area-wide wastewater treatment plans.”

#### Chapter 6 – Historic Preservation

- This chapter is informational in nature. There is no “Policy Emphasis” as in other chapters. The recommendations are very general. It is hard to ascertain if there are “plans and programs for structures and lands having historical, archaeological, architectural or similar significance.” Please clarify and expand as necessary.

#### Chapter 7 – Land Use

- Please identify where and how the land use plan addresses “public buildings and grounds, and public facilities,” including anticipated requirements for future public facilities.
- Please clarify what “measurable objectives” are proposed for the land use plan.
- Please clarify how the plan has reviewed data and addressed “the amount of land required to accommodate anticipated growth, the projected population of the area, the character of the undeveloped land and the availability of public services.”

- Population projections are discussed in Chapter 1, but it is not clear how or if this was translated into an analysis of lands needed to accommodate expected population growth.
- Similarly, public utilities and services are discussed in Chapter 4 but it is not clear how or if this was translated into an analysis of public utilities and services needed to accommodate expected population growth.

### Chapter 10 – Intergovernmental Coordination

The intergovernmental coordination element contains good policy language, but is too general in nature to meet the requirements of Del. C. This section does not appear to “include a specific policy statement or coordinated mapping element indicating the relationship of the proposed development of the area to the comprehensive plans of the municipalities within the county, adjacent counties and applicable state regulations and policy as the case may be.” Some detailed changes to address this should include:

- Mapping of municipal annexation areas and documentation / discussion of compatibility between County and municipal comp plan. Any discrepancies should be identified and addressed in consultation with the relevant municipality. Two such examples already mentioned in Chapter 2 are the economic development areas west of Clayton and south of Harrington.
- Include a section about the Strategies for State Policies and Spending, including the map. The plan text should describe how the comp plan is consistent with this statewide spending policy. Any areas where it is not consistent should be detailed, and the reason for the proposed land use change should be articulated. The large economic development area south of Harrington is an example.
- Review and analyze the other two county plans, and include a section about the compatibility of the comp plan with those other planning documents. This section could and should discuss municipal planning efforts in Smyrna/Clayton and its relationship to New Castle County’s comp plan, as well as Milford’s plan and its relationship to Sussex County’s comp plan.
- Please provide some more detail on the procedures and process for ensuring continued coordination with municipalities and their planning efforts. It would be good to touch upon how the County intends to work with municipalities which have identified “areas of concern” in the county jurisdiction.

***Recommendations:*** Our office strongly recommends that the Town consider these recommendations from the various State agencies as you review your plan for final approval.

### **Recommendations by chapter**

#### Chapter 2 – Economic Development

- The activities of the Kent Economic Partnership and the Greater Kent Committee are mentioned in the plan text. It would be helpful for readers if these groups and their mission and activities were described in more detail and placed in to the context of their ongoing role supporting economic development in Kent County.
- Pages 2-12; 2-13; Map 2A – Map 2A shows “Employment Centers” between Smyrna and Cheswold, in the vicinity of the Kent Aero Park, and in the vicinity of Little Heaven. These employment centers are not listed on the tables on pages 2-12 & 13. It is recommended that these employment centers be added to the table along with an explanation of what is expected in these centers.
- Page 2-8 – section on “Existing Resources” references an OSPC GIS research project from Feb. 2017. Please add the following disclaimer in the text so readers will know that these figures represent a point in time:
  - **“Disclaimer:** This is a pilot project that was completed by the OSPC. The data presented represent a snapshot in time, with the vacant lands being completed in February 2017 and the for-sale / lease building square footage completed in April of 2017. Due to the lack of a definitive real estate data source, this project relied upon an analysis of many different data sources as well as field verification. As such, this data should be used with caution, understanding that this analysis represents an overall indication of the quantity and location of these lands and buildings but it is not a completely accurate or definitive source. Some lands and buildings were probably not captured in our analysis due to limitations in the data sources, the age of the aerials, the time available to field verify, and human error.”
- The Department of Agriculture would like to compliment the county on a well-written Comprehensive Plan update. Specifically, on page 2-14 (7) – The department appreciates and supports the county’s commitment to agriculture and agri-business.

### Chapter 3 – Housing

- DSHA does caution a careful approach to the housing recommendation to identify neighborhoods that would benefit from concentrated Property Maintenance Code enforcement. In 2015, the Supreme Court upheld the application of citing disparate impact in housing discrimination cases in Texas Dept. of Housing & Community Affairs v. The Inclusive Communities Project, Inc. In light of this decision, Kent County may want to make sure the data used for determining code enforcement shows there is no discrimination in policing code compliance.

In summary, the County has outlined excellent steps to provide a mix of housing options in connected multi-modal communities that enable all persons and households to thrive. Most of all this enables opportunities for affordable housing to be seamlessly integrated throughout the county. DSHA is very enthusiastic about the 2018 Comprehensive Plan and its implementation.



## Chapter 4 – Community Facilities

### **Water Quality: TMDLs.**

- Page 4-13, Water Resources: Buffers and impervious surface cover limitations are identified as tools to protect water resources. Later in the Draft Plan, it is acknowledged that water is degraded when impervious surfaces in a watershed exceeds 10%. However, the county allows impervious cover of 23% outside the Growth Zone and 35% within the growth zone. We recommend decreasing the allowable limits to impervious surfaces.

### **Parks and Recreation.**

- DNREC recommends the incorporation of results from the Statewide Comprehensive Outdoor Recreation Plan (SCORP) in the Community Facilities section, to supplement activities undertaken by the County's Parks & Recreation Department. The survey's findings support many of the vision and goals of Comprehensive Plan focused on connectivity, multi-modal transportation. The County may wish to use this information in other sections of the plan to provide further documentation of community needs and desires. The County makes up the entire planning Region 3 of the SCORP.  
<http://www.dnrec.delaware.gov/parks/Information/Pages/2013Scorp.aspx>.

## Chapter 5 – Conservation

From the Department of Agriculture: Pages 5-1 and 5.3 -The Department appreciates the discussion of preserving farmland. The county may also want to mention (and take credit for) that they have provided financial assistance to the program for several years in a row now (approx. \$100k annually) that has helped preserve a number of farms in Kent County. If the county would like a list the farms it has helped permanently preserve, and /or a map showing same, the department would be glad to help.

From the Department of Natural Resources and Environmental Control:

### **Wetlands.**

- Section 5-4 Wetlands: The text of the Draft Plan recognizes that state and federal laws provide protection for wetlands, but the text does not indicate the lack of regulatory protections for isolated freshwater wetlands. Isolated freshwater wetlands (i.e. forested wetlands/swamps and Coastal Plain Seasonal Ponds) are plentiful in Kent County and perform many of the same environmental functions as other wetlands, including filtering pollutants, recharging streams and aquifers, storing flood waters, and providing habitat for an array of plant and animal species.
  - DNREC suggests that the Plan make reference to the fact that tidal and non-tidal wetlands are regulated under section 404 of the Federal Clean Water Act by the United States Army Corps of Engineers (USACE). Tidal wetlands regulation and protection, however, are administered under Title 7 (Chapter 72) of the Delaware Code by the Division of Water Subaqueous Land section. That is, the State of Delaware has assumed administration of the 404 program for tidal wetlands, while the USACE regulates the protection of non-tidal wetlands in the State.

- Kent County indicates they require a minimum buffer of 25 feet surrounding wetlands.
  - It is unclear which wetlands types are afforded this minimum buffer protection by the county. We recommend that all wetland types, including those that are not protected by state and federal law (e.g. isolated freshwater wetlands), are afforded a buffer protection.
  - In general a 25 ft. buffer is insufficient to protect the water and habitat quality of wetlands. We recommend the county increase this buffer requirement to 100 feet surrounding all wetland types, where they exist.
  - It is unclear if the county allows any kind of activity or infrastructure inside these upland buffers surrounding wetlands. We recommend that these buffers are left intact (or expanded if native vegetation is not already present). Lot lines, roadways, and infrastructure should not be placed within this buffer zone.

### **Section 5.5 Coastal Zone**

- Pages 5-5 and 5-6 should be updated to reflect the provisions of the Coastal Zone Conversion Permit Act. This act, signed by Governor Carney in August 2017, allows new industrial development and bulk product transfer on 14 sites in the Coastal Zone. Thirteen of the sites are in New Castle County; the remaining site is the fuel facility east of Little Creek on Port Mahon Road. While limited, this bill could have some economic development and environmental affects in eastern Kent County.

### **Climate Change**

- Kent County has taken an important step forward in recognizing the significant impacts that climate change will have on its economy, resources and citizens by including a climate change section in its Comprehensive Development Plan.

The first introductory paragraph could be improved, we offer the following:

“The earth is warming and this is causing changes worldwide and in Kent County. One of the largest impacts of a warming planet to Kent County is sea level rise. Sea level rise is caused by a combination of factors including thermal expansion of ocean waters and the melting of land based glaciers. Potential impacts of climate change include:”

- The Delaware Geological Survey has reviewed recent scientific literature and assessments of sea-level change in Delaware and identified appropriate scenarios to use for planning purposes throughout the state which support findings of the International Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) in 2013 and the NOAA National Climate Assessment, which indicate that the rate of sea level rise is likely to increase. The new 2017 inundation maps along Delaware's coast correspond to these identified projections. <http://www.dgs.udel.edu/slr>

- Page 5-3, Surface Waters: We suggest that the Plan mention the fact that the Pollution Control Strategies (PCS) developed for the watersheds within Kent County are entirely voluntary in nature (this includes all watersheds in the County where a PCS has been developed) and do not provide for regulatory authority for enforcement. PCSs have been developed for three watersheds (e.g., Mispillion, Murderkill, and St Jones) in the Delaware Bay and drainage basin; while the other three watersheds (e.g., Smyrna River, Leipsic River and Little Creek) in the same drainage basin have not been targeted for PCS development.
- Page 5-13, Recommendations: We recommend that Kent County be more proactive in implementing specific “actionable” strategies to attain the TMDL nutrient and bacteria reductions necessary for restoring water quality and “beneficial uses” (e.g., fishing, swimming, & drinking water) to waters of the Delaware River Drainage.

Additionally, we recommend identifying of the Watershed Implementation Plan (WIP), by reference, in the Kent County Plan. The WIP has been developed for all watersheds in the Chesapeake drainage basin; the TMDL for the watersheds in this drainage basin (i.e., 60 percent reduction requirement for nitrogen, phosphorus, and sediment from baseline conditions) is considerably more stringent than the TMDL required in the Delaware River and Bay watersheds. The WIP (mandated and directed by EPA) requires the State of Delaware to identify specific-pollution-reduction practices and programs to reduce nitrogen, phosphorus, and sediment from a variety of sources in Delaware’s portion of the Chesapeake Bay drainage.

[http://www.wr.dnrec.delaware.gov/Information/Pages/Chesapeake\\_WIP.aspx](http://www.wr.dnrec.delaware.gov/Information/Pages/Chesapeake_WIP.aspx).

- There are regulatory gaps at the state and federal level for protecting isolated freshwater wetlands; however county and municipal governments can provide protections; given the large number of freshwater wetlands in Kent County, the county is encouraged to consider ordinances that would protect freshwater wetlands from inappropriate development activities and to ensure that buffer provisions apply to these special sites. Please consider increased protections in the form of:
  - Improve protection of freshwater wetlands where regulatory gaps exist (i.e., isolated wetlands and headwater wetlands).
  - Develop an impervious surface mitigation plan which incentivizes the use of pervious paving materials where feasible.
  - Prohibit development on hydric soil.
  - Promote “green-technology” stormwater management in lieu of “open-water” stormwater management ponds whenever practicable.
  - Utilize the Department’s TMDL nutrient loading budget protocol and promote the use of approved best management practices to meet the required TMDLs within an affected watershed.

- It is strongly recommended that the County adopt an Open-Space ordinance that specifically prohibits the inclusion of structural best management practices such as community wastewater treatment areas and open-water storm water treatment structures, and/or regulated wetlands from consideration as open space.
- Municipal Separate Storm Sewer Systems (MS4): In order to account for possible future permits or regulatory obligations under the MS4 Permit program, DNREC recommends that the County consider additional stormwater programs. There currently are multiple Phase II MS4 communities in Kent County which may impact the County's planning. These municipalities may also look to the County for future partnerships or projects. <http://www.dnrec.delaware.gov/wr/information/swdinfo/pages/ms4.aspx>

### **Air Quality.**

- Page 5-7, DNREC was pleased to see that the "Conservation" portion of Kent County's Comprehensive Plan addressed air quality impacts in the county and list improved air quality and air pollution mitigation as a transportation goal for the County (page 5-7). We are supportive of incorporating alternative fuel vehicles into the County's fleet, "for various field operations."
- page 5-13, DNREC recommends the Plan highlight the air quality benefits associated with these recommendations, which reduce potential sources of air pollution:
  - Encouraging compact, mixed-use development where applicable,
  - Allowing opportunities for the increased use of public transit,
  - Expansion of the current bicycle and pedestrian network,
  - Increasing economic development and by extension, the number of people using alternative transportation modes,
  - Ordinances that would involve the planting of trees for development projects and efforts to continue the preservation of trees in the County which help to clear the air of pollutants.
- As an added component to address air quality concerns in the area, Kent County is encouraged to add electric vehicle supply equipment (EVSE) and charging where feasible in common areas to accommodate cleaner vehicular transportation through the area. For more information about the various electric charging options and state programs that can provide financial and technical assistance, please see our website. [www.de.gov/cleantransportation](http://www.de.gov/cleantransportation).

### **Fish and Wildlife.**

- Woodland and Wildlife Habitat: Kent County acknowledges the importance of woodlands for environmental health factors and for ecological value, as well as the pitfalls of fragmentation. Kent County indicates that they limit woodland clearing in subdivisions outside the Growth Zone Overlay District to 30%. The County also acknowledges that regulations should be refined to minimize fragmentation and to retain

riparian buffers, which we support. The county can offer further protections by incorporating the following recommendations into, to be implemented both within and outside of the Growth Zone Overlay District:

### Comments and Suggestions

- Chapter 5 Conservation (Page 5-13):
  - Recommendation #1: Identifying and creating Mature Forest Protection Areas— Mature forests have high ecological value and their protection should be prioritized. In cases where forested areas are to be disturbed by construction activity, a survey should be completed to identify and delineate mature forests within the project boundaries. The county should then consider creating incentives to protect mature forest to 100% (e.g., by allowing increased net density and smaller lot sizes).
    - We recommend that Kent County adopt the methodology to identify mature forests that has been developed by DNREC’s Species Conservation and Research Program. This systematic methodology is defensible and verifiable and its use will ensure that mature forest survey data are collected and assessed in a consistent manner.
  - Recommendation #1: Avoiding fragmentation of forest corridors and protecting forest Interior – the forest interior or “core” is of high ecological value and many species of wildlife are dependent on forest interior habitat for their survival. Additionally, forested corridors provide critical wildlife migration pathways. Incursions into forest interior habitat and fragmentation of forested corridors should be avoided where feasible and incentives for protection of these resources should be offered.
  - Recommendation #2: Kent County is encouraged to conduct a county-wide infrastructure vulnerability assessment and plan to help ensure wise infrastructure investments. Funding for such studies may be available from DNREC.
  - Recommendation #3 – As discussed above, the buffer and non-disturbance areas from waterbodies and wetlands should include all wetlands, not just those under the regulatory jurisdiction of the US Army Corps of Engineers or State of Delaware.
  - Recommendation #3: Requiring Natural Resource Surveys – In cases where wetlands or forests are to be disturbed, a natural resource survey should be required to describe and delineate their boundaries. Information gained from the survey should be used to inform the project design by county planners (e.g. ensure that Kent County is able to retain the environmental health benefits and ecological services provided by these natural resources for the benefit of the public and for future generations).

DNREC stands ready to provide technical assistance for many of these efforts.

- Page 5-12, Policy Emphasis #2: Please remove references to “State Resource Areas (SRA)” in the Plan. Legislation passed recently eliminated these maps and they are no longer maintained by DNREC. Consider referring to the Delaware Wildlife Action Plan. <http://www.dnrec.delaware.gov/fw/dwap/Pages/default.aspx>

## Chapter 7 – Land Use

- It is recommended that the Land Use Chapter contain a summary of what is intended in each land use category on Map 7B.
- Our understanding is that Map 7B Future Land Use Map will guide land use and support the existing zoning. Map 7C Land Use Strategies will guide future rezonings, and any rezoning application consistent with the strategies in 7C will be considered to be in compliance with the comprehensive plan. Please clarify that we understand the County’s land use approach as described above. Provided that this is accurate we recommend:
  - Please articulate and clarify this land use approach more clearly in the beginning of the chapter; and
  - Move the “criteria for rezoning” on page 7-10 to a more general section to guide all rezoning evaluations based on Map 7C. The list of criteria for considering rezoning on page Page 7-10 is placed in section for “Designation of Non-Residential Land Uses.” These criteria appear more general as if they should apply to any rezoning requested based on Map 7C.
- It is recommended that the County prepare master plans for selected areas within Map 7C. This would involve extensive public and property owner engagement, infrastructure planning, urban design, environmental planning etc. Master plans could be a plan implementation step following plan adoption. Areas that might be good places to start include:
  - TID Areas
  - Employment Centers
  - Town and Village Areas.

From the Department of Agriculture:

Page 7-10 Transfer of Development Rights (TDR) – The department supports the County’s plan for a viable TDR program. It is the Department’s understanding that the County has already preserved some farmland in the past through a TDR type exchange. If this is correct, the Department suggests it be mentioned in the text, and the farmland preserved be shown on Map 5H.

Page 7-12 – The department supports the county’s initiative to create and Agricultural Zoning District.

## Chapter 8 – Transportation

- Pages 8-9-10, Transportation Improvement Districts – It is recommended that master plans be prepared for the TID areas prior to developing the TID. Master plans will allow for more detailed land use classifications and thus more accurate trip generation calculations. This will be particularly important if those land uses are intended to reflect future rezonings in accordance with the land use strategies depicted on Map 7C.
- DelDOT has several comments regarding the Functional Classification section that begins on page 8-3:
  - SR 1 is listed as an example of both an Expressway and an Other Principal Arterial. Similarly, US 13 is listed as an example of both a Principal Arterial and a Minor Arterial. For clarity, consider specifying parts of these roads that fit those classifications.
  - Other than Freeways and Expressways, the descriptions of each functional classification refers to shoulders “on one side of the road.” DelDOT’s design standards include shoulders on both sides. The descriptions also refer to various lane and shoulder widths which may exist but are substandard. DelDOT’s minimum standard, for local roads, is 11-foot lanes and 6-foot shoulders and the widths increase from there. As necessary, please see Figures 3.2.5-b and 3.2.5-c in the Development Coordination Manual ([https://www.deldot.gov/Business/subdivisions/pdfs/changes/Development\\_Coordination\\_Manual-Chapter\\_3.pdf?041116](https://www.deldot.gov/Business/subdivisions/pdfs/changes/Development_Coordination_Manual-Chapter_3.pdf?041116)) for more information on DelDOT’s standards for the various classifications.
  - DelDOT has three interrelated comments of the last two paragraphs of this section:
    - The paragraphs are indented as though they pertain exclusively to Local roads but in reading them, it appears that the paragraphs apply to all roads within the Growth Zone Overlay and they should not be indented.
    - The limitation of these paragraphs to the roads in the Growth Zone Overlay is important. DelDOT is willing to work with the County on prioritizing local roads in the Growth Zone Overlay over local roads outside it but, absent a separate source of funding, such as a Transportation Improvement District provides, DelDOT will concentrate most of its capital improvement efforts on collector and arterial roads.
    - While DelDOT is committed to improving all of the roads it maintains to meet standards one day, for the foreseeable future most of DelDOT’s work on the local road system is, and will continue to be, maintenance and problem-oriented safety improvements.



- On Map 8A, Functional Classification Map, consider using a different line symbol, perhaps one that is wider and somewhat transparent, to show the growth zone boundaries. As presently drawn, the boundaries resemble roads and in some places the boundaries follow roads.
- Regarding the discussion of Level of Service on pages 8-7 and 8-8, there are references to “D’ roadways,” “E’ roadways,” and “F’ roadways. DelDOT suggests clarifying that these letters convey how a road operates, or is projected to operate, during a specific peak hour traffic condition. Level of service is not a characteristic inherent to the roads or a label that is assigned beyond a specific context. It might be better to say, for example, “D’ describes conditions when traffic on a roadway is approaching unstable flow.”
- Further to the last sentence of the paragraph regarding Level of Service D at the top of page 8-8, it should be pointed out that for urban and suburban conditions, the breakpoint between LOS D and E tends to be where drivers consider changing their travel behavior, meaning their route, the time of their trip or their mode of travel. Thus, in developed areas, it becomes not only impactive but sometimes impossible to achieve LOS C during peak periods.

#### Chapter 9 – Community Design

- How is this chapter going to be used? Will it be consulted when new developments are proposed? This seems like the most obvious and impactful use. It is recommended that the text be amended to clarify how this chapter is to be used.
- There is no “Policy Emphasis” as in other chapters. It is recommended that a policy emphasis be added for this chapter.
- Please add a caption below the “Felton East” rendering to clarify that this was a conceptual planning exercise to design a healthy community.

#### Chapter 11 – Implementation Strategy

- It is recommended that the County develop a work plan based on the implementation items. What are the first three projects or objectives the County wishes to complete in the short term to implement the plan? After that, what are the next three? When you evaluate the implementation items in terms of a work plan of projects that can be programmed and completed some of the priority and order may shift.
- It is recommended that the county define short term, intermediate, long term and ongoing. What are the general timeframes for these categories? This will help the County measure progress towards objectives.
- From the Department of Agriculture: The Department will continue to support and partner with the county on agribusiness opportunities.

**Links to State Resources:**

Strategies for State Policies and Spending: <http://stateplanning.delaware.gov/strategies/>

FY18 State Operating Budget: <https://legis.delaware.gov/BillDetail?LegislationId=26205>

FY18 Bond and Capital Improvement Act:

<https://legis.delaware.gov/BillDetail?LegislationId=26195>

List of active State capital projects (non-transportation) in Kent County. See FY18 Bond and Capital Improvement Act for budget narrative.

- Delaware State Police Troop 3
- Duck Creek Library construction
- Harrington Public Library construction
- Caesar Rodney school renovation projects:
  - Caesar Rodney High School
  - Fred Fifer III Middle School (MS)
  - F. Neil Postlethwait MS
  - Allen Frear Elementary School (ES)
  - WB Simpson ES
  - Star Hill ES
  - Nellie Hughes Stokes ES
  - W. Reily Brown ES
- Caesar Rodney- construction of new 600 student ES

FY18 Grant-in-Aid Bill: <https://legis.delaware.gov/BillDetail?LegislationId=26140>

FY19 Governor's Recommended Operating Budget:

<https://legis.delaware.gov/BillDetail?legislationId=26298>

FY19 Governor's Recommended Bond and Capital Improvements Budget:

<https://legis.delaware.gov/BillDetail?legislationId=26299>

Delaware Code: <http://delcode.delaware.gov/>

Delaware Administrative Code: <http://regulations.delaware.gov/AdminCode/>

Delaware Department of Transportation Capital Transportation Program (CTP) for FY 18-23:

<https://deldot.gov/Publications/reports/CTP/pdfs/archived/ctp18-23/CTPFY18-FY23Complete.pdf>

Delaware Department of Natural Resources and Environmental Control:

<https://dnrec.alpha.delaware.gov/>

For all of the above referenced State Agencies, please see a list of contact below:

- Department of Transportation – Contact: Bill Brockenbrough (302) 760-2109
- State Historic Preservation Office – Contact: Terrence Burns (302) 736-7404
- Department of Agriculture – Contact: Scott Blaier (302) 698-4532
- The Department of Natural Resources and Environmental Control – Contact: Michael Tholstrup (302) 739-9071
- State Housing Authority – Contact: Karen Horton (302) 739-4263

***Approval Procedures:***

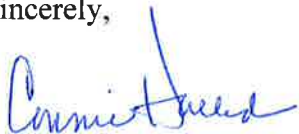
- Once all edits, changes and corrections have been made to the Plan, please submit the completed document (text and maps) to our office for review. **Your PLUS response letter should accompany this submission.** Also include documentation about the public review process. In addition, please include documentation that the plan has been sent to other jurisdictions for review and comment, and include any comments received and your response to them. Substantial changes to this draft could warrant another PLUS review.
- Our office will require a maximum of 20 working days to complete this review.
  - If our review determines that the revisions have adequately addressed all certification items (if applicable), we will forward you a letter to this effect.
  - If there are outstanding items we will document them in a letter, and ask the town to resubmit the plan once the items are addressed. Once all items are addressed, we will send you the letter as described above.
- The Office of State Planning Coordination shall submit a final comprehensive plan report and recommendation to the Cabinet Committee on State Planning Issues for its consideration;
- Within 45 days of the receipt of the report the Cabinet Committee shall issue its findings and recommendations and shall submit the plan or amendment to the Governor or designee for certification.
  - Within this timeframe, the Committee, at its discretion, may conduct a public hearing on the proposed plan or amendment, except that no hearing shall be held if the proposed plan or amendment is found to be consistent with state goals, policies and strategies and not in conflict with plans of other jurisdictions;
- Within 20 days of receipt of the findings and recommendations from the Committee, the Governor shall accept the plan for certification or return it to the local jurisdiction for revision. The local jurisdiction shall have the right to accept or reject any or all of the recommendations as the final decision on the adoption of the plan is up to the local jurisdiction *(It should be noted the State shall not be obligated to provide state financial assistance or infrastructure improvements to support land use or development actions by the local jurisdiction where the*

*adopted comprehensive plan or portions thereof are determined to be substantially inconsistent with State development policies);*

- Provided no additional changes are made, the jurisdiction shall adopt the plan as final, pending certification
- The jurisdiction shall send a copy of the adopted plan to the Office of State Planning Coordination.
- The Governor shall issue a certification letter to the County. The certification date shall be the date of official adoption by the County.

Thank you for the opportunity to review this Comprehensive Plan. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in blue ink, appearing to read "Constance C. Holland".

Constance C. Holland, AICP  
Director, Office of State Planning Coordination



# Kent County

## Department of Planning Services Division of Planning

SARAH E. KEIFER, AICP  
Director of Planning Services

KRISTOPHER S. CONNELLY, AICP  
Assistant Director

Phone: 302/744-2471  
FAX: 302/736-2128

May 29, 2018

Ms. Constance C. Holland, AICP  
Director  
Delaware Office of State Planning Coordination  
122 William Penn Street  
Dover, DE 19901

RE: PLUS review – 2018-03-02; Kent County Comprehensive Plan

Dear Ms. Holland:

Thank you very much for providing the State agency comments via the PLUS review letter dated April 20, 2018. I appreciate the effort that went into organizing all of the comments. Below, please find Kent County's response to each of the State's review comments:

### General Comments:

- We have included information regarding Delaware Byways in the Transportation Chapter.
- We understand SHPO's concern regarding having a preservation planner on staff. While that is not currently a financial possibility, the County is committed to preserving historic resources to the greatest extent practicable. At this point the Plan recommends at least requiring documentation prior to demolition.
- We appreciate DSHA's support of the Plan and their assistance in developing the Housing Chapter.
- We understand DNREC's concerns regarding source water protections and have added language regarding possible steps to further protect the resource. Specifically we have included language that we will include DNREC in the plan review process and will specifically ask for advice and comment for projects located in excellent recharge areas and wellhead protection areas.

### Certification Comments:

- Economic Development
  - We have added text clarifying that Downtown Development Districts are a State program.
  - We have revised the map to match the designation requested by the Town of Clayton.
  - We have revised the map to match the designation requested by the City of Harrington.

- Chapter 2 discussed support for Downtown Development Districts, industrial areas available for redevelopment, and creation of a digital tool highlighting available industrial and commercial areas; the Housing chapter addresses housing rehabilitation and coordination with neighborhoods.
- Community Facilities
  - The Capital Improvement Plan (included potential funding sources) adopted as part of the FY 19 budget has been included as an appendix.
  - A discussion of growth projections and sewer capacity was included. In short, there appears to be available capacity but plant improvements in particular are likely to be driven by environmental regulations. With the exception of septic remediation projects, planned projects are related to replacing and/or improving both the conveyance system and treatment plant.
  - The CIP shows projects that are funded. The nature of planned projects is discussed above and within the chapter.
  - There is no existing wastewater treatment plan. Development of such a plan is anticipated following adoption of the Comprehensive Plan.
- Historic Preservation
  - A Policy Emphasis section has been added.
  - The most notable plans for structures having historical significance are continued rehabilitation of the Hunn and Goggin Manor Houses and the creation of an ordinance requiring formal documentation of historic structures prior to demolition. Our current project review process also account for historic structures and archaeological resources and we work with SHPO to ensure they are preserved and/or documented.
- Land Use
  - Future public facilities are discussed in the Community Facilities Chapter. In addition, the Comprehensive Plan will be followed by updated strategic plans for Public Safety and Community Services which will include more specific recommendations. Development of a strategic plan for waste water is also recommended by this Plan.
  - The specific recommendations should be considered “measurable objectives”. Adoption of the ordinances described will enable the policies and goals of the Plan to be implemented. Reviewing development patterns over time will also reveal if the land use strategy is successful just as development trends currently reveal that the Growth Zone has been successful over time.
  - Language regarding available land within the Growth Zone as well as permit trends has been added. Because Census and Population Consortium data include incorporated areas, it is more reliable to examine new household creation. Given the roughly 30,000 acres available for development within the Growth Zone and the 8,800 vacant lots, there is more than adequate capacity for future development. The County continues to incentivize development within the Growth Zone where there is better access to public services and the proposed Town and Village Areas in the Land Use Strategy with take that effort a step farther.
  - Language has been added and there is additional discussion in the Housing Chapter. Overall, an analysis of the vacant lands in the Growth Zone indicates ample supply. In addition a discussion of expanding the Growth Zone to the west in the northern part of the County to accommodate demand in the area has been added.
  - As mentioned above, the bulk of this discussion is in Community Facilities and specific

plans will follow completion of the Comprehensive Plan. With respect to public sewer specifically, the County allows for expansion of the sewer system within the Growth Zone as development demands and capacity of the treatment plan can accommodate expected future development. A wastewater strategic plan will delve more deeply into the matter.

- Intergovernmental Coordination
  - The land use maps have been revised in accordance with Town comments.
  - A discussion of State Strategies and the map have been added
  - A discussion of the other county plans has been included. In general the land use strategies of the three counties are complementary.
  - A discussion of how municipalities are included in the planning process as well as the development review process has been included.

Recommendations:

- Economic Development
  - Language regarding KEP and GKC has been added.
  - They have been added to the tables
  - We have added the requested disclaimer
- Housing
  - We have clarified the language to indicate we will work with established neighborhood groups who request property maintenance assistance; both enforcement and community clean-up funds.
- Community Facilities
  - The County believes existing impervious cover limits are reasonable.
  - We have included recommendations from the SCORP survey.
- Conservation
  - We have added information regarding acreages preserved and the funding provided by the Levy Court.
  - We have added the requested reference regarding regulation of wetlands
  - The County's wetland regulations do not specify categories of wetlands protected, the regulations may be waived based on a state or federal permit.
  - The Chapter includes a recommendation to increase the width of non-disturbance areas surrounding wetlands, waterbodies and conveyance systems, including tax ditches, to an average of 100 feet for 80% of the area, to be buffered with a minimum width buffer of 50 feet and, if previously cleared of vegetation, require such riparian buffer be replanted with native species prevalent in riparian areas. Where the slope along a waterbody exceeds 15%, the buffer measurement should commence from the top of bank. Required buffers should be designated as un-subdivided open space.
  - The existing Code prohibits the subdivision of wetlands and floodplains.
  - We have added language note referencing the Coastal Zone Conversion Permit Act.
  - We have revised the introductory Climate Change language.
  - We have incorporates the new inundation maps.
  - We have clarified that Pollution Control Strategies are voluntary.



- We have included a discussion of the Chesapeake Bay WIP.
- We believe existing regulations and recommended actions in the Plan work together to better protect isolated freshwater wetlands.
- There is not minimum passive opens pace requirement; such structures are routinely and reasonably identified as open space because they are in common ownership.
- We are happy to work with the towns in implementing MS4 programs
- We have added a statement regarding the air quality benefits of the various land use and transportation recommendations in the Plan.
- We have added language regarding location of an EVSE.
- We have added a recommendation that upland forests be counted toward an increased density bonus as part of the TDR program.
- The existing Code discourages fragmentation of existing forest.
- The Plan includes recommendations to consider vulnerability when planning and designing infrastructure projects.
- The regulation of wetlands is addressed above.
- The County will consider requiring Natural Resource Surveys; however, DNREC does have the opportunity to recommend such surveys as part of the ordinary plan review process.
- The reference to State Resource Areas has been removed.
  
- Land Use
  - The summary of land use categories and illustrative uses has been included.
  - Additional explanation of Map 7C and the Land Use Strategies has been included and the criteria for rezoning section has been relocated.
  - Master Plans are discussed throughout the Plan especially in relation to TIDs and an coordination with towns interested in annexation.
  - The TDR easements have been added to Map 5H.
  
- Transportation
  - The construction standards for road classifications has been updated.
  - The Plan has been revised to include specific road segments within the Growth Zone that the County considers a priority for improvement.
  - The Functional Classification Map has been revised.
  - Additional explanation regarding Level of Service has been included.
  
- Community Design
  - Text specifying that this Chapter should be a guide in all site development has been added.
  - A Policy Emphasis section has been added.
  - The origin of the Felton East concept drawing has been added.
  
- Implementation Strategy
  - The County will consider a revised structure for the implementation actions while keeping in mind that local priorities regularly shift.

Thank you again for providing State agency comments regarding the Kent County Comprehensive Plan. Please do not hesitate to contact me if you would like to discuss the final draft or the County's PLUS response.

Sincerely,

Sarah E. Keifer, AICP  
Director