

# Delaware Outdoors

2009-2011

*Delaware State Comprehensive Outdoor Recreation Plan*



**The State of Delaware**  
**Statewide Comprehensive Outdoor Recreation Plan**  
**2009-2011**

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Letter from Governor Jack Markell

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## Park Resource Office

Susan Moerschel, Program Manager  
Robert Ehemann, Grants Coordinator  
Kendall Sommers, Outdoor Recreation Planner

## Division of Parks and Recreation

Charles A. Salkin, Director  
Matthew Chesser, Administrator, Planning, Preservation and Development Section

## Department of Natural Resources and Environmental Control

Collin O'Mara, Secretary



This plan was prepared by the Park Resource Office, Division of Parks and Recreation, Department of Natural Resources and Environmental Control. It was financed in part by a planning grant from the National Park Service, US Department of Interior, under the Land and Water Conservation Fund Program.



## Acknowledgements

The research, writing, and management of the 2009 State Comprehensive Outdoor Recreation Plan has been administered by the Park Resource Office, Division of Parks and Recreation, Department of Natural Resources and Environmental Control. Kendall Sommers, Division Planner, conducted the research and is the primary author of this plan. Robert Ehemann, Division Grants Coordinator, began the development of the 2009 SCORP and provided assistance throughout the SCORP development process. Michael Krumrine, Geographic Information Specialist, provided assistance with the mapping portion of this document. Susan Moerschel, Manager of the Parks Resource Office, provided direction and editorial functions for this project.

We respectfully thank Nemours Health and Prevention Services who provided financial assistance to oversample the five municipalities. We are grateful for the input from the Nemours Health and Prevention Services Built Environment Team with enhancing the 2008 Outdoor Recreation Participation and Trends Survey.

Marina Kaplan, Senior Scientist	Nemours Health and Prevention Services
Patti Miller, Program and Policy Analyst	Nemours Health and Prevention Services
Gregory Benjamin, Evaluation Scientist	Nemours Health and Prevention Services

We are grateful to the park professionals who provided input for the development of this plan. This group includes representatives from county and local governments, the healthcare and recreation sectors.

Romain Alexander	City of Wilmington
David Baker	Sussex County Council
David Bartoo	Delaware Division of Parks and Recreation
Ron Breeding	Nemours Health and Prevention Services
Zachery Carter	City of Dover
Charles Emerson	City of Newark
Gary Emory	City of Milford
Hal Godwin	Sussex County
Conway Gregory	Town of Ocean View
Jonathan Husband	New Castle County
Michaelina Jones	Delaware Recreation and Parks Society
Marina Kaplan	Nemours Health and Prevention Services
Paul Nicholson	Delaware Division of Parks and Recreation
Charles Salkin	Delaware Division of Parks and Recreation
Carl Solberg	Kent County
Wayne Voshell	City of Dover
Mary Voshell	Delaware Division of Parks and Recreation

We thank the 2,179 citizens from around the state who responded thoughtfully to research questions from the 2008 Outdoor Recreation Participation and Trends Telephone Survey. Public participation was a core component of this plan.

Responsive Management, Inc. was contracted by the Division of Parks and Recreation to conduct the 2002 phone survey and report. Mark Damian Duda, Executive Director, and his staff provided thoughtful direction in the designing the survey and insightful guidance to Division staff in developing the SCORP.



STATE OF DELAWARE  
**OFFICE OF THE GOVERNOR**  
TATNALL BUILDING, SECOND FLOOR  
WILLIAM PENN STREET, DOVER, DE 19901

JACK A. MARKELL  
GOVERNOR

PHONE: 302-744-4101  
FAX: 302-739-2775

August 3, 2009

Mr. Jack Howard  
National Park Service  
Recreation and Conservation Grants Assistance  
200 Chestnut Street  
Philadelphia, Pennsylvania 19106

Dear Mr. Howard:

Delaware is home to more than 150,000 acres of parks, wildlife areas, open spaces, and natural and historic resources that provide limitless opportunities to enjoy our state. These resources are protected today because of a large partnership of state, federal, local and county agencies and private land protection associates committed to preserving our intrinsically valuable land. In a time when health concerns such as heart disease, overweight and obesity remain an increasing epidemic, we must not ignore the many health benefits parks and recreation areas provide the citizens of our state. Parks and recreational areas play a key role in healthy lifestyles by providing places for people to walk, hike, bicycle, boat, play, swim and be active.

I am proud to present you with our 2009-2011 Interim State Comprehensive Outdoor Recreation Plan (SCORP). Our SCORP assesses the public need for outdoor recreation proposing investments that will meet public outdoor recreational needs. The 2009 State Comprehensive Outdoor Recreation Plan is an interim two-year plan that will guide outdoor recreation facility investments into 2011. I am pleased to endorse this Plan that had widespread public involvement from the citizens of Delaware.

As the Governor of Delaware, I recognize the positive impact of parks, open space, and outdoor recreation opportunities have on creating a healthier state and a better place to live. As our state grows, it is vital to encourage recreation opportunities that are safe, accessible and beneficial to our long term health. I believe this plan will serve as an important guide for achieving Delaware's vision for outdoor recreation facilities, parks and conservation resources now and in the near future.

Sincerely,

A handwritten signature in blue ink that reads "Jack A. Markell".

Jack A. Markell  
Governor

cc: Charles A. Salkin, State Liaison Officer

## Introduction

People enjoy the outdoors in a variety of ways; from an organized sporting event, enjoying a playground, bird watching in a park, or a brisk walk around the neighborhood. People get outdoors to reconnect with the world around them, for their physical and mental well being, and to simply relax. Though our land mass is finite, we as a society, continue to expand. This incessant growth not only leaves less open areas for each of us to enjoy, but also stresses the environment in which we live. In his book *The Quiet Crisis*, former United States Secretary of the Interior, Stewart Udall, may have said it best, ‘We stand today poised on a pinnacle of wealth and power, yet we live in a land of vanishing beauty, of increasing ugliness, of shrinking open space and of an overall environment that is diminished daily by pollution and noise and blight. This, in brief, is the quiet conservation crisis.’ Udall’s supportive attitude for open space and the environment instigated a proposal of a fund for federal land acquisition to the Outdoor Recreation Resources Review Commission in 1961. This proposal would later turn into the Federal Land and Water Conservation Trust Fund Program.<sup>1</sup> (Setting Priorities for Land Conservation)

### *Federal Land and Water Conservation Fund Program (LWCF)*

The Federal Land and Water Conservation Fund (LWCF) (Public Law 88-578) was established by congress in 1964 to provide assistance to state, local and federal agencies in creating parks and open spaces, protecting wilderness, wetlands, wildlife habitat and refuges, and enhancing recreational opportunities. Congress clearly indicated that the LWCF Program should have a lasting effect on the supply of recreation sites and facilities by requiring that the sites assisted be added permanently to the national recreation estate. As a result, Section 6(f)(3) of the LWCF Act states unequivocally that grant-assisted areas are to remain forever available for “public outdoor recreation use”.

The LWCF, a National Park Service program that is administered by the State Division of Parks and Recreation, is comprised of a ‘trust fund’ that accumulates revenues from federal outdoor recreation user fees, the federal motorboat fuel tax, and surplus property sales. To supplement these sources, the fund accumulates revenues from off-shore oil and gas leases- thus recycling an important natural resource back to public use through park and conservation lands and recreational facilities. Current funding levels for the LWCF program are at an all time low. During the past decade, the Outer Continental Shelf revenues have accounted for almost 100% of the funding source.

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<sup>1</sup> Committee on Scientific and Technical Criteria for Federal Acquisition of Lands for Conservation, National Research Council. *Setting Priorities for Land Conservation* (1993)

Table 1.1

## LWCF Project Summary in Delaware

<b>Project Types</b>	<b>Number</b>
Planning	10
Acquisition	81
Development	99
Combination (acquisition and development)	14
<b>Total</b>	<b>204</b>
<b>LWCF Dollars</b>	<b>Dollars</b>
Acquisition	\$17,933,052
Development	\$16,414,154
<b>Total</b>	<b>\$34,347,206</b>

### *Delaware Land and Water Conservation Trust Fund (DTF)*

In 1986, the state enacted the Delaware Land and Water Conservation Trust Fund Act (DTF), a law that mirrors the federal LWCF program. The DTF is a matching grant program administered by the State Division of Parks and Recreation that assists County and municipal governments and park districts with park land acquisition and outdoor recreation facility development. The \$1.5 million in trust-generated interest is divided equally between Park and Greenway projects. DTF assistance is available for parkland, open space or greenway acquisition, planning and outdoor recreation facility development projects. Up to 50% funding is available for local projects and a source of match from the sponsor's budget, other grants, in-kind sources or donations is required. Sponsoring agencies must agree to dedicate the project site to public outdoor recreation use in perpetuity and assume responsibility for continuing operation and maintenance of the area. To date, the DTF has assisted with nearly 300 completed projects and has leveraged \$27 million. More than three quarters of the projects have been for park development, while the rest have been for planning and the acquisition of land. The number of LWCF and DTF projects and the funding associated with them are highlighted in Tables 1.1 and 1.2.

Table 1.2

## DTF Project Summary in Delaware

<b>Project Types</b>	<b>Number</b>
Planning	25
Acquisition	48
Development	223
Total	296
<b>DTF Dollars</b>	<b>Dollars</b>
Acquisition	5,899,312
Development	12,969,402
Planning	1,086,800
Total	19,955,514

## Statewide Comprehensive Outdoor Recreation Plan

Delaware Outdoors is a planning and policy document that identifies needs in outdoor recreation throughout the state of Delaware. Identification of these needs guide the investment of funding for outdoor recreation through both the federal Land and Water Conservation Fund, the Delaware Land and Water Conservation Trust Fund, the Recreational Trails Program as well as other public and private funds.

In order to remain eligible to receive LWCF grants, states are required by the Department of Interior, National Park Service, to develop a SCORP every five years. The SCORP not only maintains Delaware's eligibility to receive federal Land and Water Conservation Fund grants, but is required by the Delaware Land and Water Conservation Fund (DTF) Act.

### *Interim SCORP*

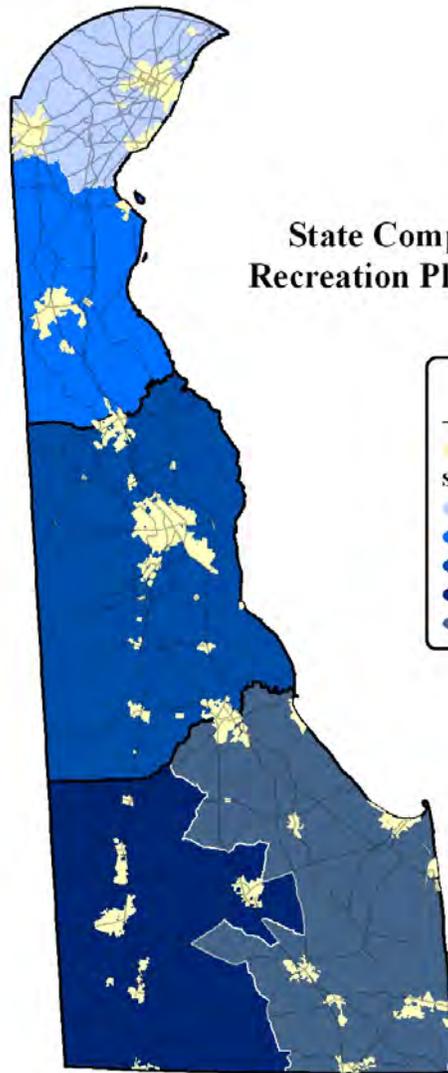
Delaware has three counties and fifty-seven incorporated municipalities. State law (22 Delaware Code §702) require every county and municipality with populations greater than 2000 to produce Comprehensive Land Use Plans every five years. All three counties currently have plans that were certified in 2007 and 2008 by the State Office of Planning Coordination. Next generation land use plans are due to the State Office of Planning Coordination in 2012 and 2013. Comprehensive plans are required to address open space and recreation by analyzing existing park and recreation facilities available to the community and addressing recreation needs expansion, policies and goals. SCORP-based data and findings are integral in meeting comprehensive land use plan requirements.

As the required Comprehensive Land Use Plans are being developed, information is provided from the Delaware Outdoors-SCORP. Local governments have expressed the need for and requested more up to date trends, patterns and needs data. In an effort to provide accurate and up to date SCORP data and findings for the comprehensive planning process, the Division of

Parks and Recreation determined that it would develop an abbreviated Delaware Outdoors document covering 2009-2011. Timed with the production of county land use plans, and most municipal plans, an in depth SCORP covering the period 2011-2016 will be produced and published making timely information available to the counties.

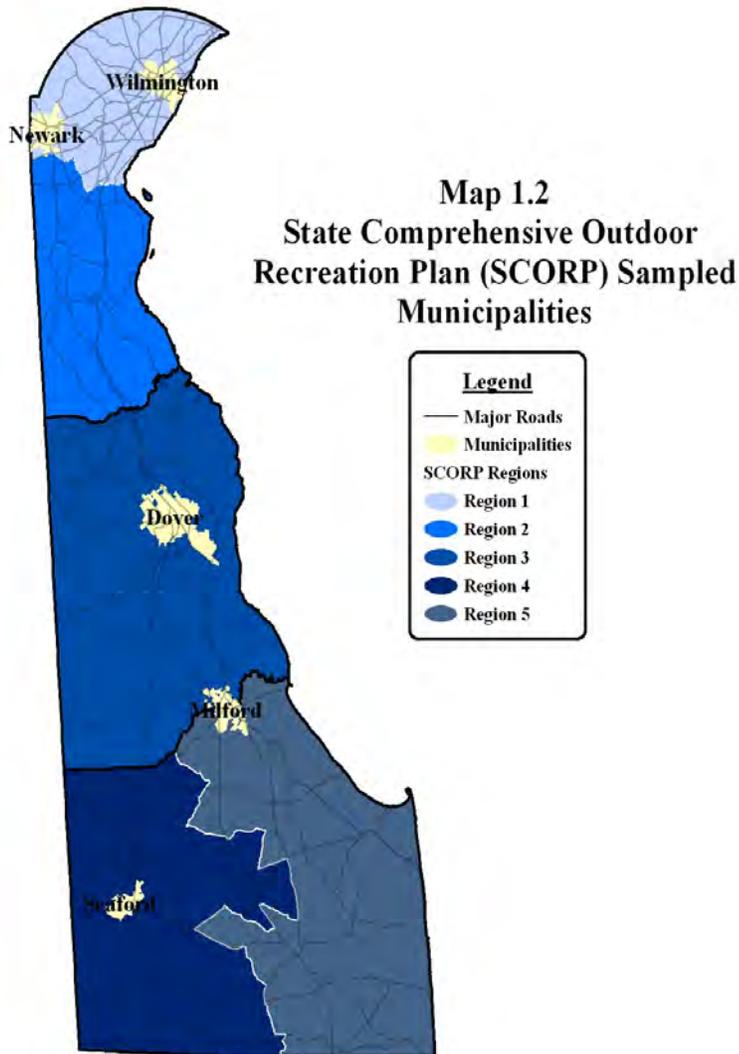
## Planning Regions

For the purpose of refining data and research findings, Delaware has been divided into five planning regions. Development patterns, population and census tracts were initially used to formulate the regional boundaries. These regions were outlined in the 2002-2008 Delaware SCORP. These planning regions were first adopted in 2002 for the purpose of presenting outdoor recreation demand and need data. In an effort to track trends, the same boundaries have been used for this SCORP. Map 1.1 shows the planning regions selected for this analysis. Regions 1 and 2 in densely populated New Castle County; Region 3 which includes all of the rapidly growing Kent County; and Regions 4 and 5 in Sussex County, the state's largest and southern most county.



**Map 1.1**  
**State Comprehensive Outdoor**  
**Recreation Plan (SCORP) Planning**  
**Regions**





## Municipalities

Research findings are presented for the state as a whole, as well as by the five planning regions shown on the preceding map. Additionally, a separate analysis was conducted based on five of Delaware's municipalities: Wilmington, Newark, Dover, Milford, and Seaford. To gain a better understanding of outdoor recreation patterns and demands in a smaller geographical area, these municipalities were selected because they have staffed park and recreation departments. Map 1.2 depicts the geographical location of the selected municipalities.

## Population Trends

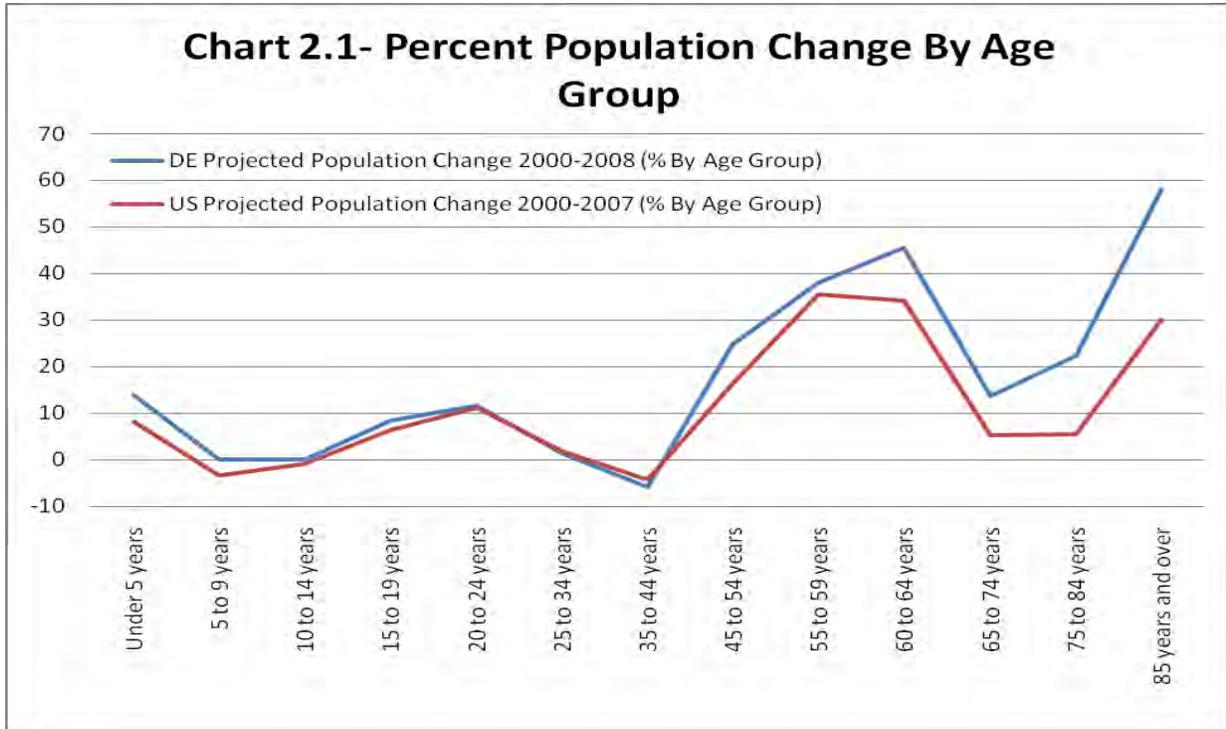
Though a small state, Delaware is located on the eastern seaboard of the United States and is bordered by the Atlantic Ocean and Delaware Bay, as well as by the states of New Jersey, Pennsylvania and Maryland. Delaware's Mid-Atlantic location offers convenient access to major metropolitan areas, making it an ideal place to live and still be a short car ride away from a major city. The proximity to Washington D.C., Philadelphia, and Baltimore has greatly contributed to the suburbanization of the State. Projected census data shows the population of Delaware, from 2000 through 2010, will increase 14.3% to 896,852 residents. Kent and Sussex Counties will have the greatest projected population increase, 24.7% and 24.5% respectively.

**Table 2.1- Projected Population Change 2000-2010**

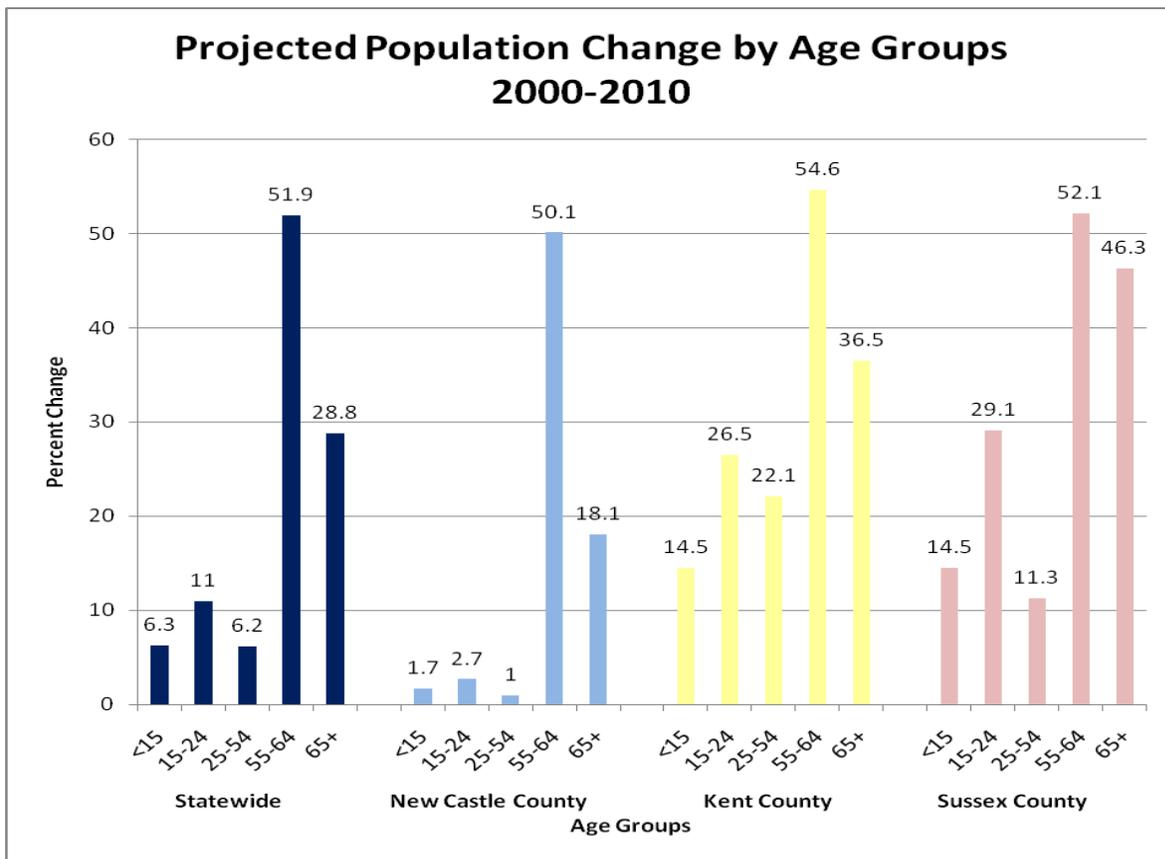
	<u>2000</u>	<u>2010</u>	<u>% change (projected)</u>
State of Delaware	784,870	896,852	14.3
New Castle County	521,506	569,011	9.1
Kent County	131,920	164,543	24.7
Sussex County	169,941	211,585	24.5
Region 1	439,648	451,605	2.7
Region 2	81,858	117,406	43.4
Region 3	131,920	164,543	24.7
Region 4	70,226	82,934	18.1
Region 5	99,715	128,651	29
Wilmington	82,005	81,623	-0.5
Newark	44,125	42,900	-2.8
Dover	43,158	52,423	21.5
Milford	11,227	13,100	11
Seaford	11,802	13,100	11

*Delaware Population Consortium- 'Delaware Small Area Population Projections, 2000-2030'*

Delaware's population change by age group closely follows that of the nation. The following Chart 2.1 shows the projected change in population by percentage for both Delaware and the United States. Similar to the U.S., Delaware's greatest population growth is within the 45 to 65 year old age cohort, better known as the Baby Boomer generation. Chart 2.2 shows the projected population change by age group for each of the counties.



Delaware Population Consortium- Annual Population Projections, October 31, 2008  
 US Census Bureau- [www.census.gov](http://www.census.gov)

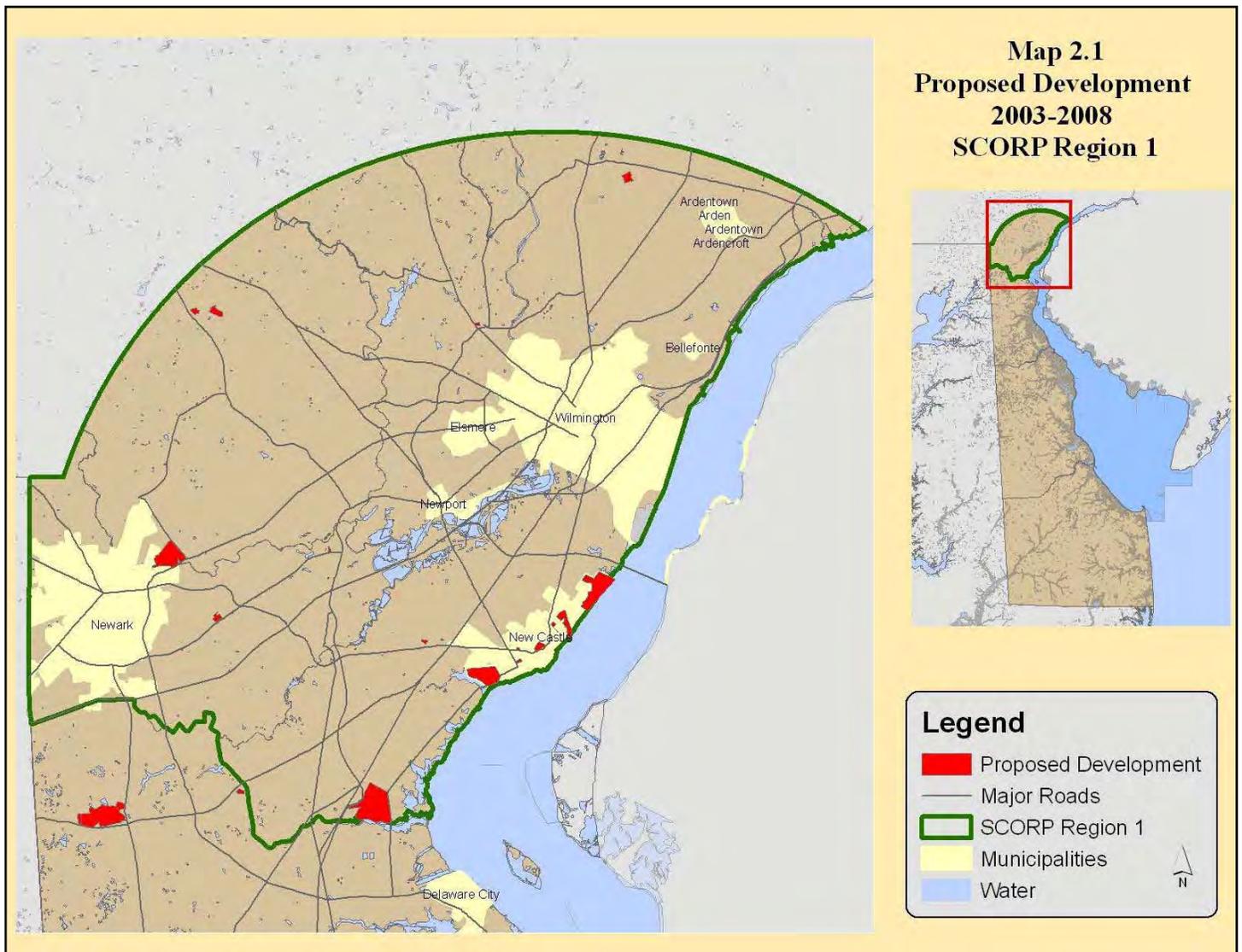


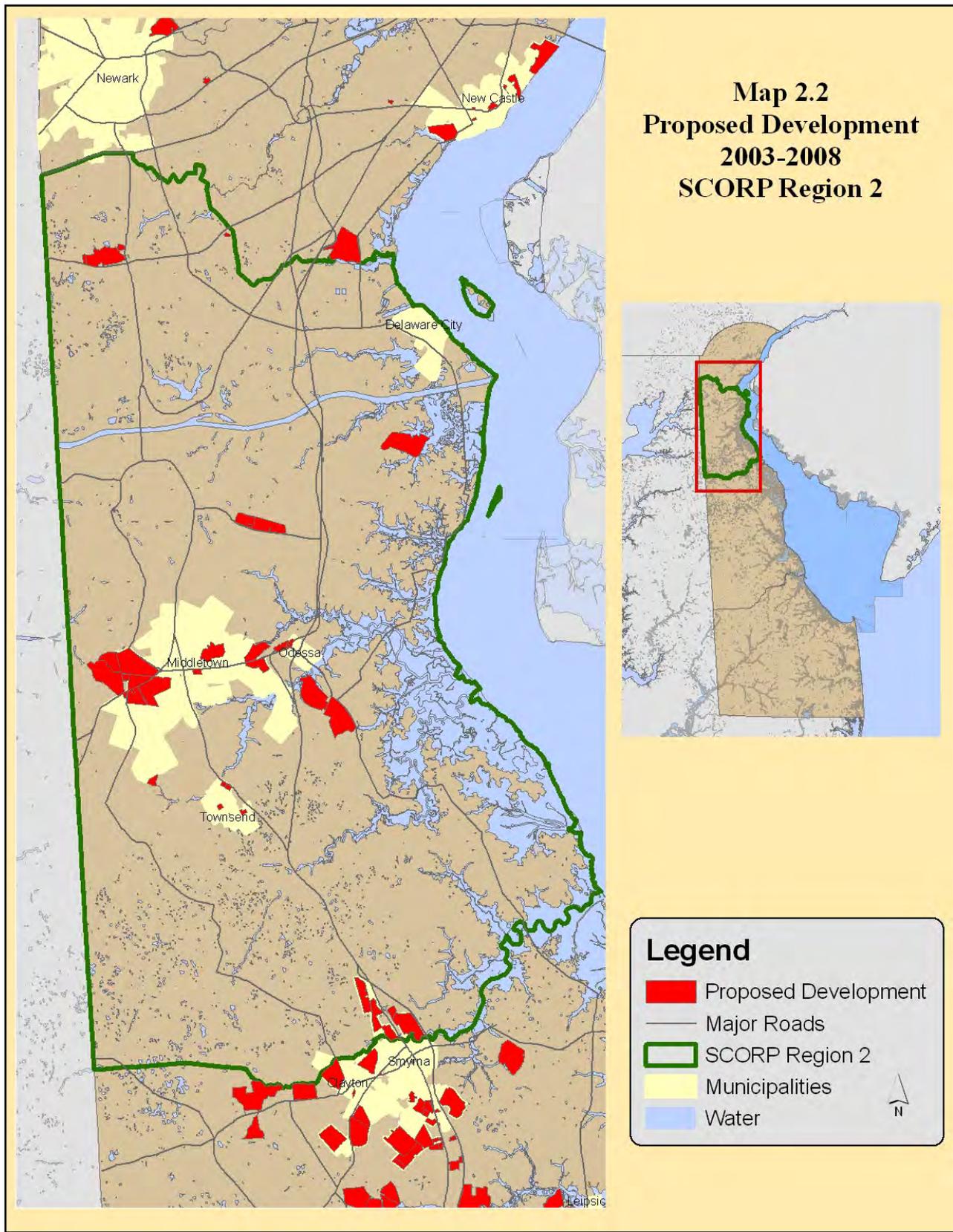
Delaware Population Consortium- Annual Population Projections, October 31, 2008

## Development Patterns

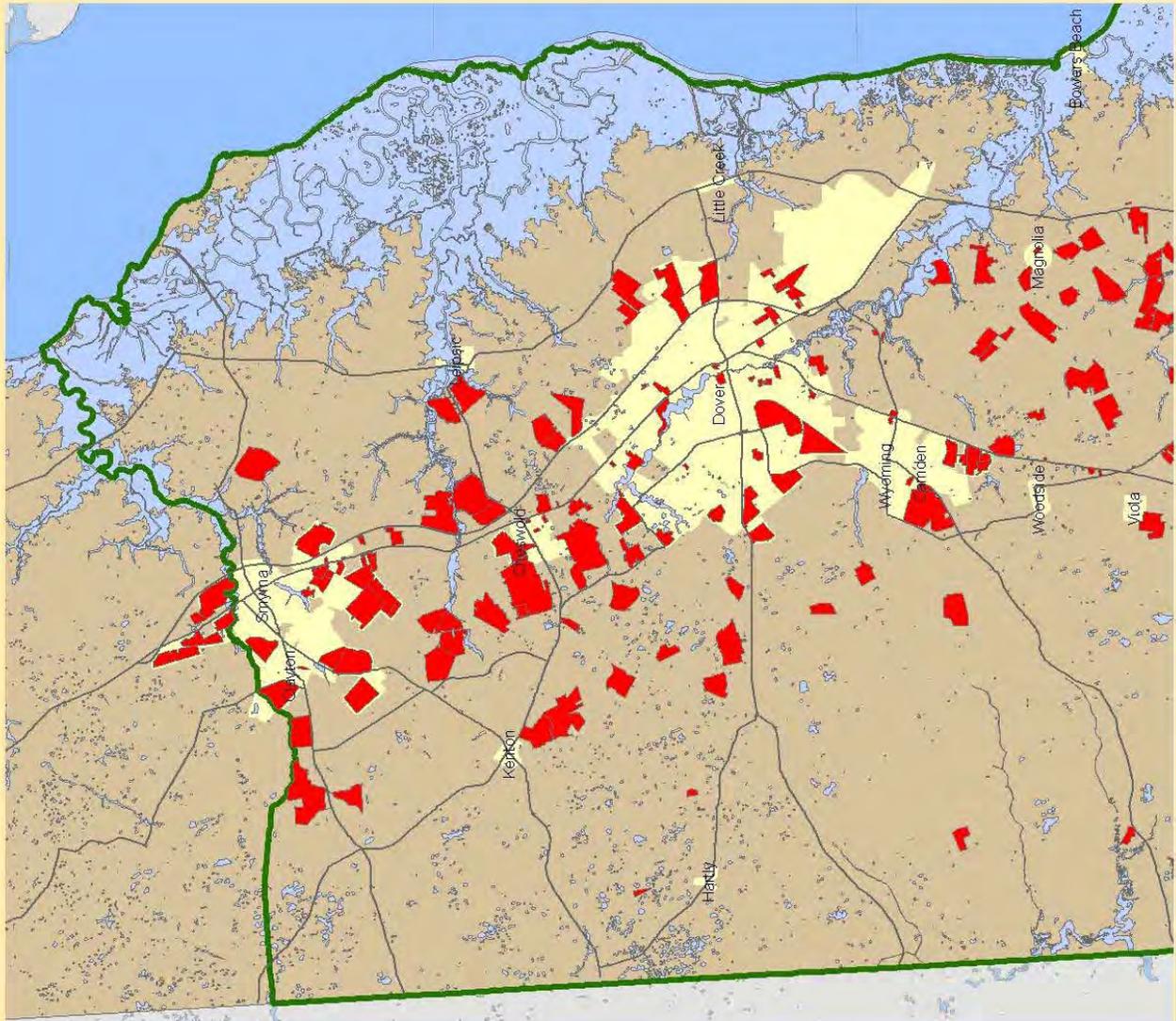
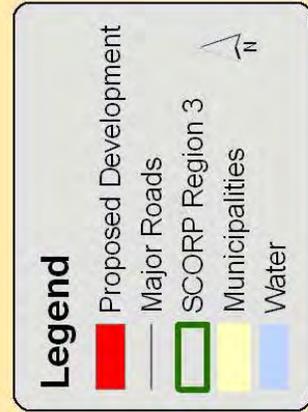
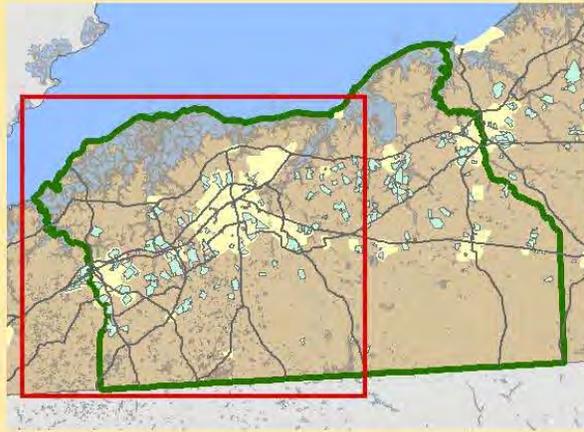
New development is an inevitable result of increased population. The explosive growth of the surrounding metropolitan areas has created massive suburban development in Delaware, bringing with it exponential rises in demand for consumer products, homes, cars, roads and services. Between 2002 and 2008, Delaware has had 1,012 parcels of land slated for residential or commercial development. Growth has been concentrated along Route 1, the main north/south highway in the state. Similar to population trends, the highest concentration of development has occurred in the southern portion of the state.

As population and development increase, careful land use decisions need to be made throughout the state. Land use decisions affect everyone and require quality comprehensive land use plans, community design standards, land use ordinances to direct growth while minimizing impacts on natural resources, and the willingness to adhere to the plans.

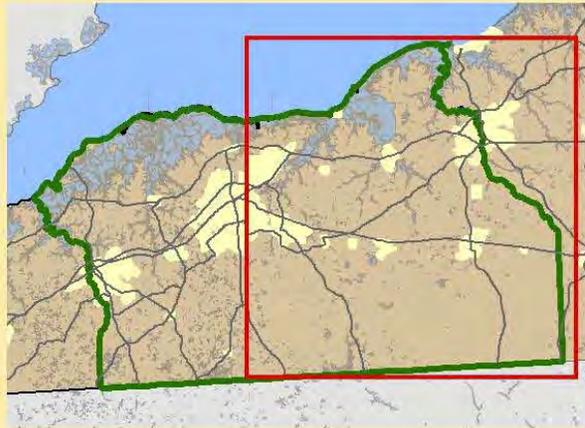




Map 2.3a  
Proposed Development  
2003-2008  
SCORP Region 3

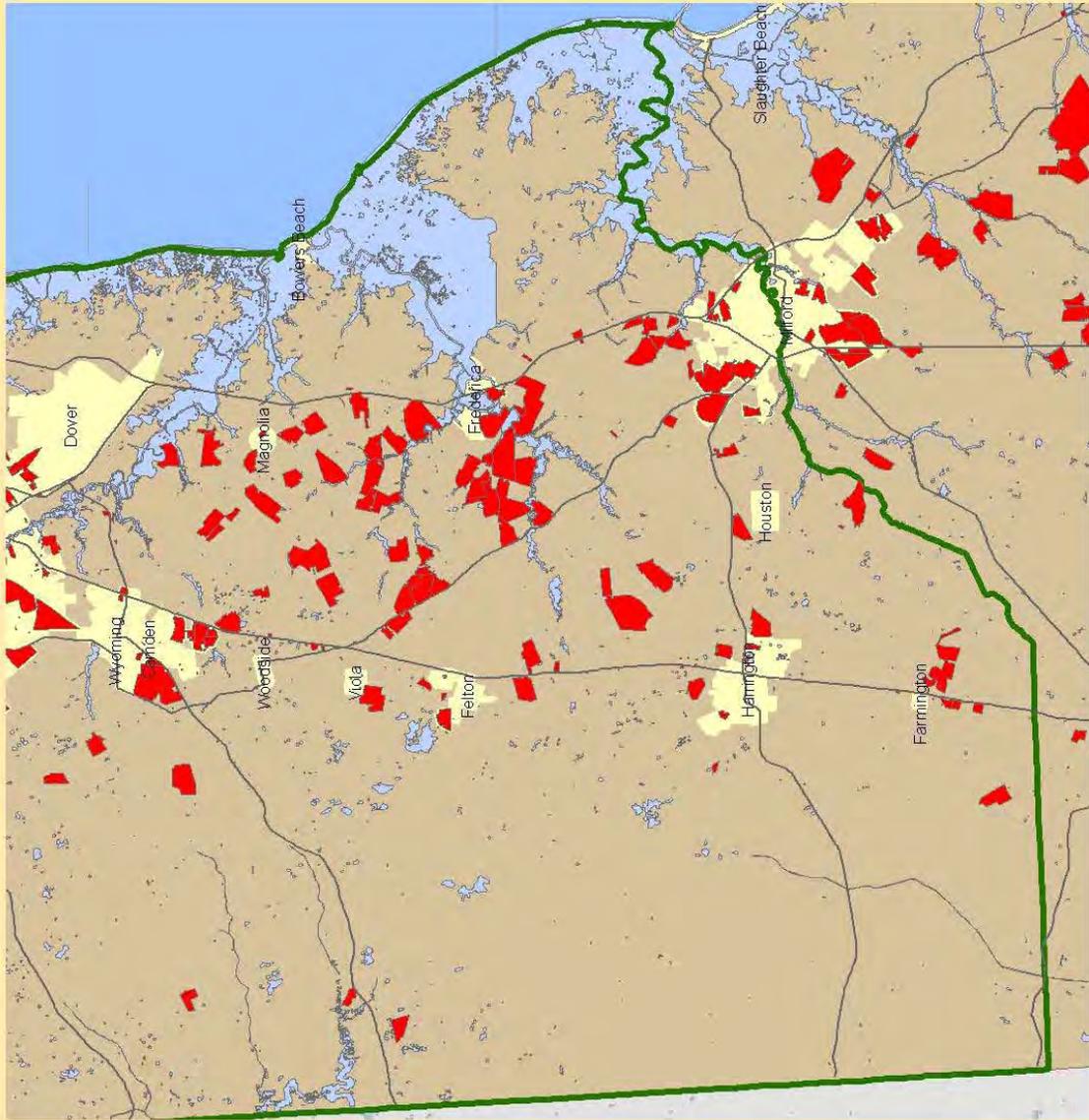


**Map 2.3b**  
**Proposed Development**  
**2003-2008**  
**SCORP Region 3**

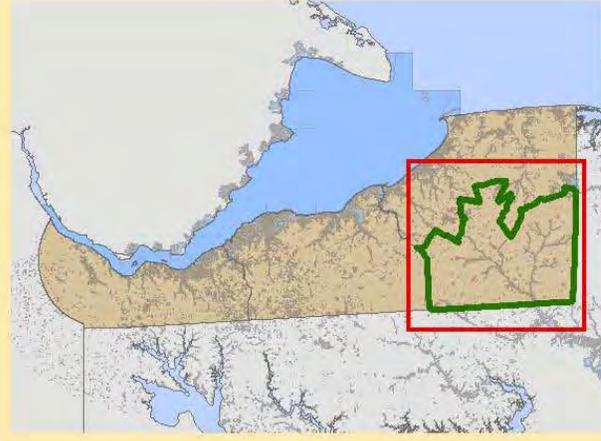


**Legend**

- Proposed Development (Red fill)
- Major Roads (Black line)
- SCORP Region 3 (Green outline)
- Municipalities (Yellow fill)
- Water (Blue fill)

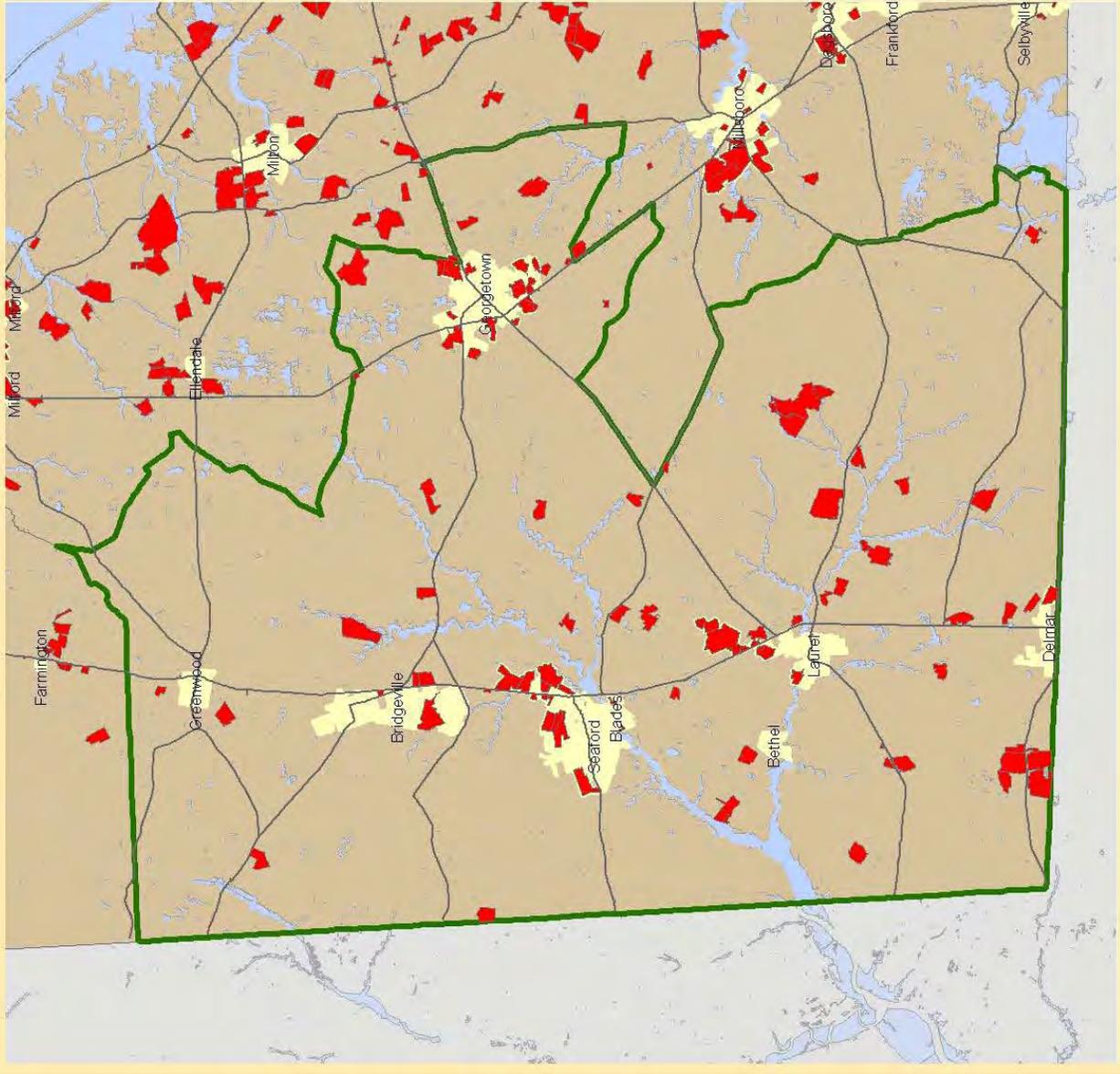


**Map 2.4**  
**Proposed Development**  
**2003-2008**  
**SCORP Region 4**

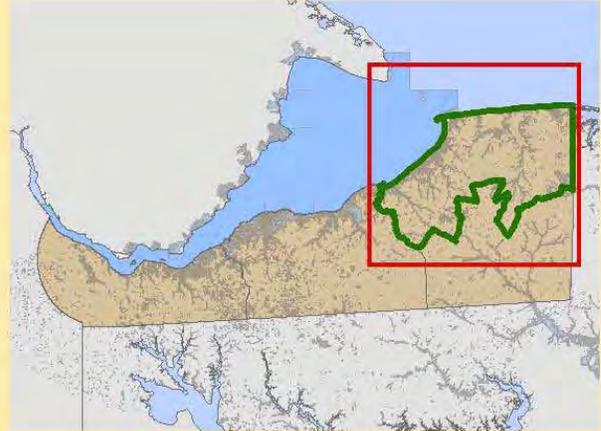


**Legend**

- Proposed Development (Red fill)
- Major Roads (Black line)
- SCORP Region 5 (Green outline)
- Municipalities (Yellow fill)
- Water (Blue fill)

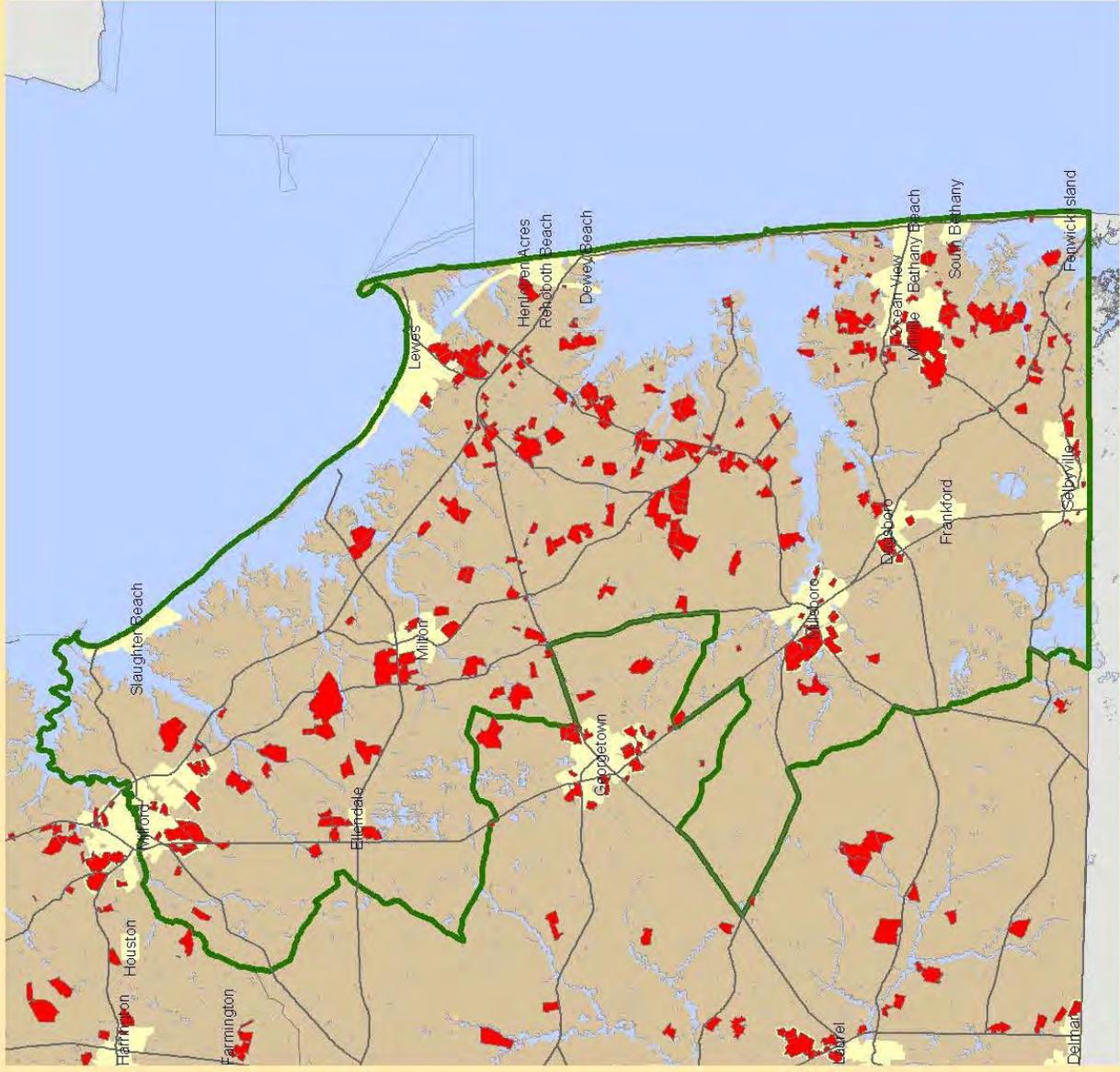


**Map 2.5**  
**Proposed Development**  
**2003-2008**  
**SCORP Region 5**



**Legend**

- Proposed Development
- Major Roads
- SCORP Region 5
- Municipalities
- Water



## Benefits of Outdoor Recreation

As development expands and population swells, there is an increasing demand on outdoor recreation facilities and for the use of our natural resources. As this demand increases, we are challenged to find a balance between reaping the largest benefit out of our parks and natural resources without overusing our land and reducing their availability for future generations. More often than not, the value of parks and natural spaces are overlooked when, in fact, these places provide a variety of benefits.

### *Health Benefits*

Today, obesity is one of the most serious health problems in the nation. According to the 2008 annual report released by the Trust for America's Health, adult obesity rates have doubled since 1980 and two thirds of adults are now either overweight or obese. In addition, childhood obesity rates have nearly tripled in the same time period, from 6.5% to 16.3%. Rising obesity rates create a domino effect with other health issues and are contributing factors to over 20 chronic diseases. Furthermore, obese children and teenagers are developing diseases that were formerly only seen in adults.<sup>1</sup> Delaware is no exception to the growing trend in overweight and obesity. According to the 2007 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the National Center for Disease Control, Delaware has one of the fastest growing obesity rates in the nation. In fact, in 2007 nearly two thirds of Delawareans (65.1%) were either overweight or obese.<sup>2</sup>

It is well documented that an increase in physical activity leads to a healthier lifestyle. There is a correlation between increased physical activity and a decrease in certain health risks including heart disease, obesity, and high blood pressure. Participating in outdoor activities provide physical benefits such as aerobic, cardiovascular and muscular fitness, and has also been shown to boost the immune system. Likewise, studies have shown that when people have access to parks they exercise more. Studies reviewed in the American Journal of Preventive Medicine showed that an increase in physical activity can be achieved by creating or enhancing access to opportunities for physical activity.<sup>3</sup>

Outdoor recreation not only promotes physical health, but also improves psychological well being. Relaxation, rest and renewal all occur when people are active outdoors. The influence of a natural environment and the opportunity to escape the doldrums of everyday life contribute to the ability of a person to deal with the world around them. Outdoor recreation offers the feeling of achievement and stress reduction which is an integral part of a healthy lifestyle. For additional health related data refer to the following Research Case for the Health Benefits of Active Recreation provided by Nemours Health and Prevention Services.

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<sup>1</sup> Trust for America's Health (2008), *F as in Fat: How Obesity Policies are Failing in America*, from <http://healthyamericans.org/reports/obesity2008/>

<sup>2</sup> CDC, Behavioral Risk Factor Surveillance System (2007), from <http://www.cdc.gov/brfss/index.htm>

<sup>3</sup> Kahn, E, Ramsey, L, Brownson, R, et. al. (2002). The Effectiveness of Interventions to Increase Physical Activity: A Systematic Review. *American Journal of Preventative Medicine*, 22(4S).

### ***Research Case for the Health Benefits of Active Recreation***

Childhood obesity has become a national epidemic, and it also affects every community in Delaware. Approximately 37% of Delaware's children and youth have a body mass index (BMI) at or above the 85<sup>th</sup> percentile, making them overweight or obese.<sup>1</sup> In addition, nearly two-thirds of adults in Delaware are overweight or obese.<sup>2</sup> The high percentage of overweight and obese children in Delaware is a cause for concern due to the health consequences of childhood obesity, which include abnormal cholesterol, high blood pressure, type 2 diabetes, asthma, depression and anxiety.<sup>3</sup> The obesity epidemic also has a significant impact on the state's economy, currently costing Delaware at least \$207 million in medical expenditures every year.<sup>4</sup>

Delaware is home to an abundance of state, local and neighborhood parks, in addition to trails and greenways that connect these spaces. These active recreation sites provide opportunities for children and families to be physically active near where they live. Regular physical activity helps maintain a healthy weight and prevent heart disease, type 2 diabetes and other chronic diseases.<sup>5</sup> Its benefits during childhood include promotion of healthy growth and development, maintenance of energy balance, psychological well-being and opportunities for social interaction.<sup>6</sup> Children who grow up in families that are physically active are more likely to continue being physically active into adulthood, when compared to their peers raised in families that have more sedentary lifestyles.<sup>7</sup>

Studies show an association between access to and availability of parks and open spaces and walking for transportation.<sup>8</sup> One survey of U.S. adults revealed that those with access to neighborhood parks were almost two times as likely to be physically active, when compared to those who did not have access.<sup>9</sup> Conversely, studies show that when not able to reach parks, people often forego exercise. This is particularly the case among low-income people unable to pay for gym memberships.<sup>10</sup> Parks benefit children by providing spaces for outdoor play, which is associated with higher levels of physical activity.<sup>11</sup> Play offers hands-on learning opportunities for children and contributes to their development of muscle strength and coordination and language, cognitive thinking and reasoning abilities.<sup>12</sup>

By connecting neighborhoods and other destinations like schools, workplaces and stores, trails offer opportunities for active transportation and active recreation. Trails enable adults to walk or bike to work or to take care of errands, and allow children to safely walk or ride their bikes to school or their friends' houses. Trails are an inexpensive location for physical activity, and provide the added benefit of social support as people on the trail observe and interact with others also being physically active. Research shows that the absence of this type of social support can often be a barrier to exercising.<sup>13</sup>

Providing adequate resources for park maintenance and programming is necessary to facilitate access to opportunities for active recreation and physical activity. Studies have shown that certain park features, such as adequate lighting, availability of toilets and drinking water, and park design and maintenance, influence park usage.<sup>14</sup> Additionally, programs like team sports, fitness classes and special events are needed to draw visitors to a park that is not in an ideal location and does not have unique features.<sup>15</sup>

## ***Research Case for the Health Benefits of Active Recreation***

### References:

- <sup>1</sup> Nemours Health and Prevention Services (2007). *2006 Delaware Survey of Children's Health Descriptive Statistics Summary, Volume 1*.
- <sup>2</sup> Centers for Disease Control and Prevention (2007). *Behavioral Risk Factor Surveillance System*. Retrieved March 24, 2009, from <http://www.cdc.gov/BRFSS>.
- <sup>3</sup> Nemours Health and Prevention Services (2005). *Delaware Children's Health Chartbook*, Newark, DE.
- <sup>4</sup> Finkelstein, E.A., Fiebelkorn, I.A., & Wang G. (2004). State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research*, 12(1), 18-24.
- <sup>5</sup> Nemours Health and Prevention Services (2005). *Delaware Children's Health Chartbook*, Newark, DE.
- <sup>6</sup> Ibid.
- <sup>7</sup> Ibid.
- <sup>8</sup> Williams, C.H. (2007). *The Built Environment and Physical Activity: What is the Relationship?* Research Synthesis Report No. 11. Princeton, NJ: Robert Wood Johnson Foundation. Retrieved March 24, 2009, from <http://www.rwjf.org/files/research/no11researchreport.pdf>.
- <sup>9</sup> Active Living by Design. *Parks Trails, and Greenways Fact Sheet*. Retrieved May 17, 2007, from [http://www.activelivingbydesign.org/fileadmin/template/documents/factsheets/PTG\\_Factsheet.pdf](http://www.activelivingbydesign.org/fileadmin/template/documents/factsheets/PTG_Factsheet.pdf).
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- <sup>12</sup> Gies, E. (2006). *The Health Benefits of Parks*. San Francisco, CA: The Trust for Public Land. Retrieved March 24, 2009, from [http://www.tpl.org/content\\_documents/HealthBenefitsReport\\_FINAL\\_010307.pdf](http://www.tpl.org/content_documents/HealthBenefitsReport_FINAL_010307.pdf).
- <sup>13</sup> Rails-to-Trails Conservancy. *Health and Wellness Benefits*. Retrieved March 24, 2009, from [http://www.railstotrails.org/resources/documents/resource\\_docs/HealthandWellness.pdf](http://www.railstotrails.org/resources/documents/resource_docs/HealthandWellness.pdf).
- <sup>14</sup> Gies, E. (2006). *The Health Benefits of Parks*. San Francisco, CA: The Trust for Public Land. Retrieved March 24, 2009, from [http://www.tpl.org/content\\_documents/HealthBenefitsReport\\_FINAL\\_010307.pdf](http://www.tpl.org/content_documents/HealthBenefitsReport_FINAL_010307.pdf).
- <sup>15</sup> President's Council on Physical Fitness and Sports (2008). The potential of parks and recreation in addressing physical activity and fitness. *Research Digest*, 9(1). Retrieved March 24, 2009, from [http://www.presidentschallenge.org/misc/news\\_research/research\\_digests/march2008.pdf](http://www.presidentschallenge.org/misc/news_research/research_digests/march2008.pdf).



### *Economic Benefits*

Tourism motivated by outdoor recreation greatly contributes to the economy. Outdoor recreation activities can be a catalyst for tourism, motivate business and residential choices, and encourage investment in natural resource protection. Studies have shown that an area's natural resources are a major attraction. Visitors choose these areas for a wide range of outdoor recreation activities, from visiting historic sites to mountain bike riding. Delaware's unique natural and cultural history allows the opportunity to capitalize on the desire of visitors to participate in diverse outdoor recreation activities. In certain instances, outdoor recreation can be viewed as an investment in preventative health care. Providing a variety of outdoor recreation opportunities allows a person to be physically active, which has been repeatedly proven to reduce the economic strain spent on health care costs.

### *Social Benefits and Community Building*

There has been an increasing awareness about the environmental and health impacts of sprawling urban and suburban cities in North America. This awareness has resulted in a reevaluation of the way communities are designed. Changing land use designs by placing homes, schools, recreation facilities, and worksites closer together and increasing pedestrian and bicycle pathways, simultaneously creates a greater sense of community. Accessible outdoor recreation facilities are vital to the quality of life for the residents of a community. They add to the quality of the local environment and are the foundation of community pride. Fostering team building, self esteem, cooperation, creativity, imagination, and communication skills, outdoor recreation activities bring people together and allow people to bond with others that have similar interests, building social capital.

### *Environmental Benefits*

When people spend time outdoors, they begin to foster an appreciation of the natural environment. Out of this appreciation comes a sense of ownership and a connection to a certain area. People who have a connection to the environment around them quickly become stewards to those resources. Not only do they have an increased willingness to preserve these areas, but they will be more likely to participate in activities that will enhance or protect an area they feel connected. Furthermore, by taking a genuine interest in the world around them, people become educators and share their experiences which can broaden others understanding of nature. As people recognize the importance of the natural environment, it often leads to the investment of both time and money on the protection, conservation, and/or maintenance of parks, natural areas, and open spaces.

## Outdoor Recreation Supply

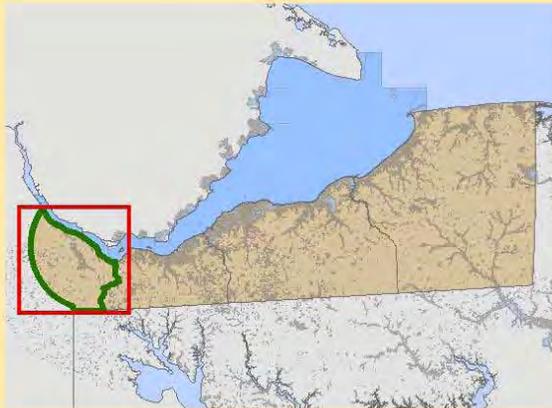
Before analyzing outdoor recreation needs, it is essential to have an understanding of recreational facilities that are already in place. The Delaware Division of Parks and Recreation maintains an Outdoor Recreation Inventory (ORI) for the state. The ORI contains the most complete list of protected land and public parks managed by federal, state, county, and municipal governments and school districts. At the Federal and State levels, public lands in Delaware are managed by the US Fish and Wildlife Service; Department of Natural Resources and Environmental Control, Division of Parks and Recreation, the Division of Fish and Wildlife, and the Division of Soil and Water Conservation; the Department of Agriculture, State Forest Service; and the Department of the State, Division of Historical and Cultural Affairs. Fifty-seven municipal and two county governments manage lands at the local level.

The ORI database contains information on a wide range of outdoor recreation amenities. An initial statewide inventory of publicly accessible recreation areas was completed in 1993. In March of 2002, the ORI was updated based on information submitted by the counties and municipalities that manage park facilities. To date, the Division of Parks and Recreation updates the ORI periodically as parks are enhanced or new parks are developed. Table 3.1 summarizes outdoor recreation facilities for each SCORP planning region. Map 3.1 through 3.5 graphically depicts the locations of public park and conservation lands. A list of Delaware's outdoor recreation facilities can be found in Appendix A.

Table 3.1  
**Summary of the Outdoor Recreation Inventory by SCORP Planning Region**

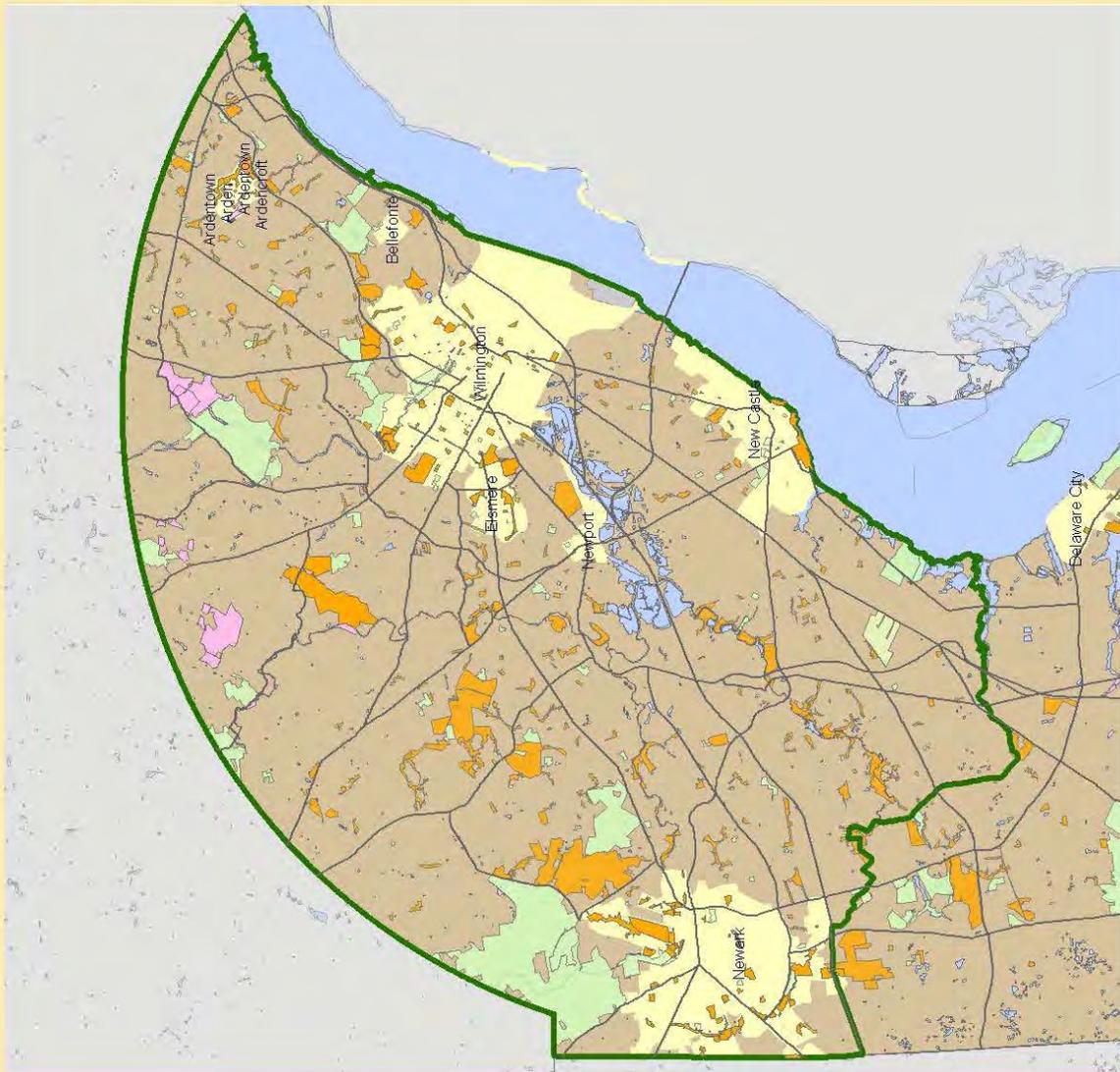
	Region 1	Region 2	Region 3	Region 4	Region 5	Statewide
Protected Land (acres)	15,172	28,165	52,498	23,597	43,725	163,157
Hiking Trails (miles)	170.8	120	53.3	90.7	105.9	540.7
Ball Fields	274	30	67	51	45	467
Football Fields	32	8	13	7	10	70
Soccer Fields	63	7	30	9	12	121
Tracks	23	4	9	4	7	47
Tennis Courts	206	31	53	21	30	341
Basketball Courts	185	15	32	12	13	257
Volleyball Courts	55	12	15	13	21	116
Horseshoe Pits	36	34	31	10	2	113
Multi-purpose Fields	129	32	50	16	18	245
Playgrounds	282	25	58	22	31	418
Tot Lots	103	10	19	8	16	156
Picnic Pavilions	57	19	20	15	26	137

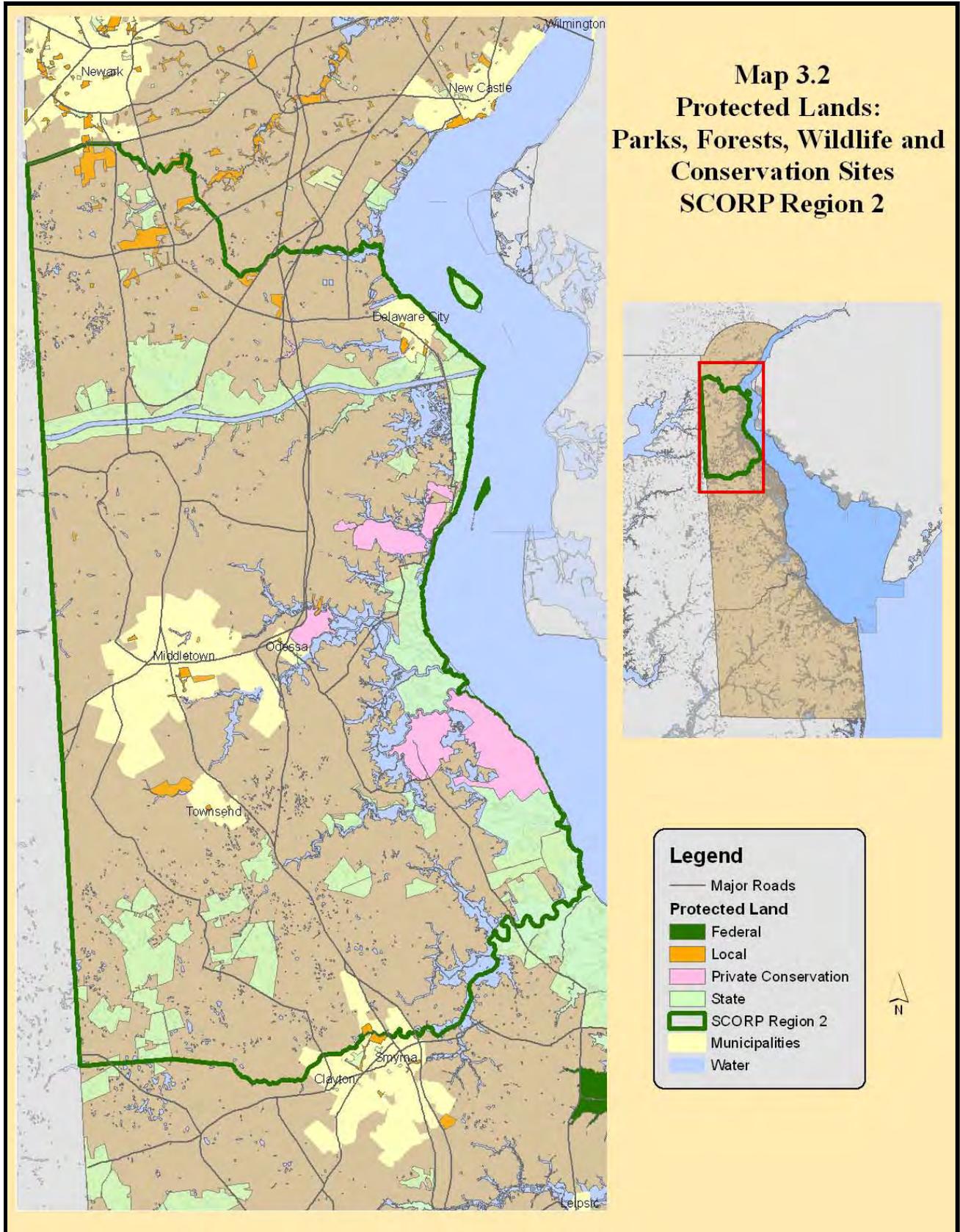
**Map 3.1**  
**Protected Lands:**  
**Parks, Forests, Wildlife and**  
**Conservation Sites**  
**SCORP Region 1**



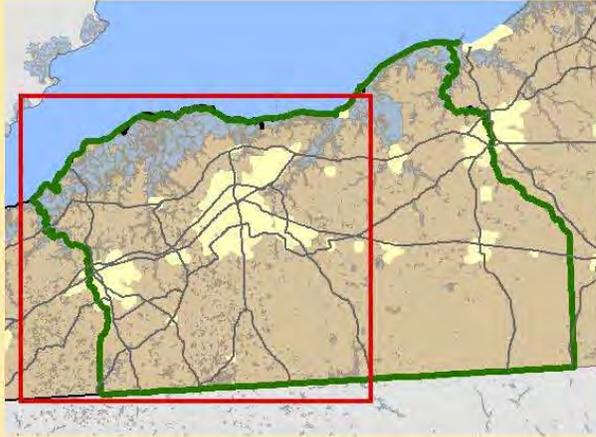
**Legend**

- Major Roads
- Protected Land**
  - Federal
  - Local
  - Private Conservation
  - State
- SCORP Region 1
- Municipalities
- Water



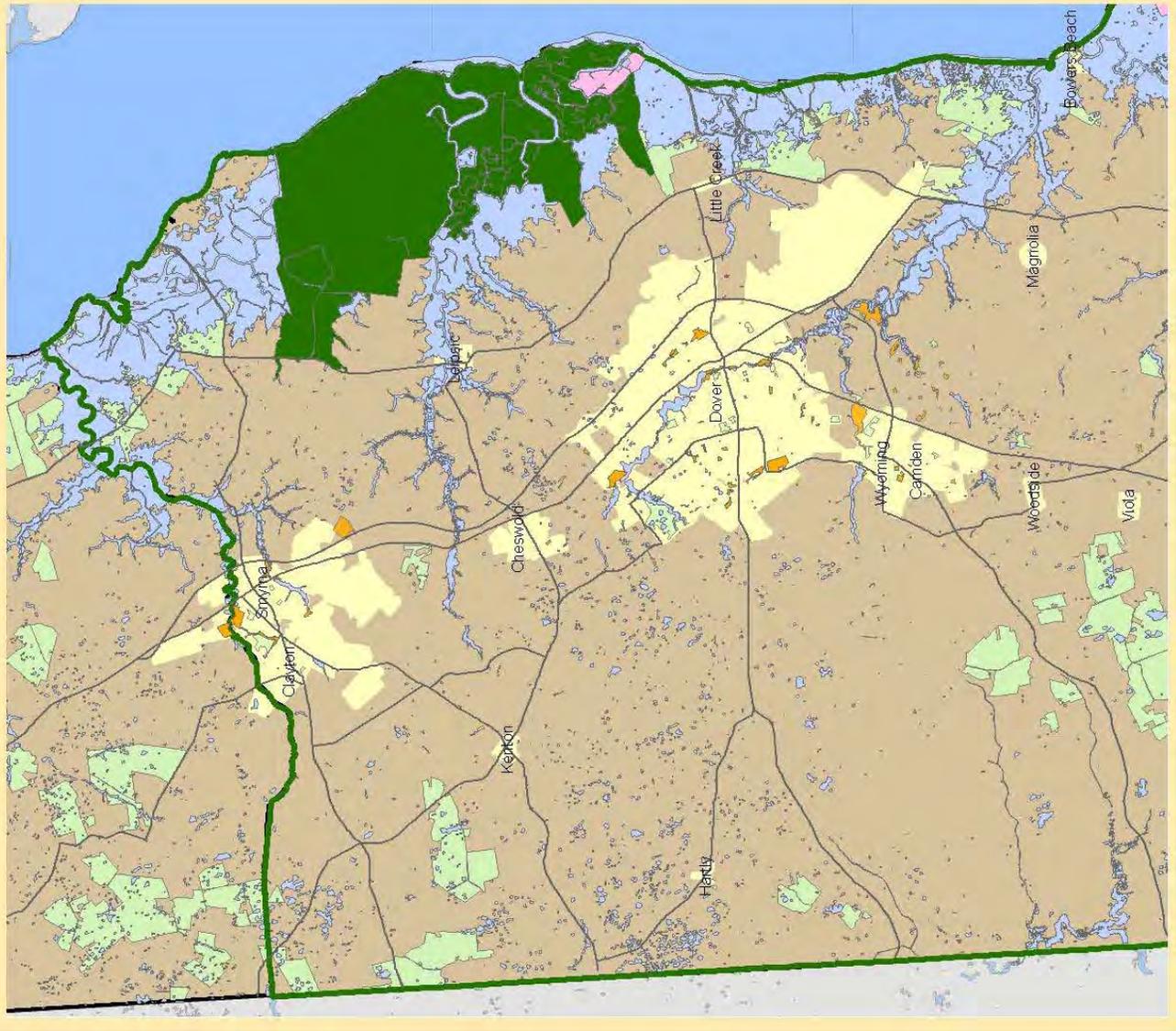


**Map 3.3a**  
**Protected Lands:**  
**Parks, Forests, Wildlife and**  
**Conservation Sites**  
**SCORP Region 3**

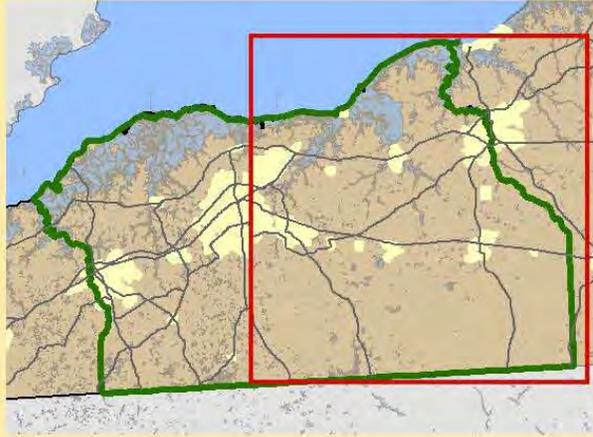


**Legend**

- Major Roads
- Protected Land**
  - Federal
  - Local
  - Private Conservation
  - State
  - SCORP Region 3
  - Municipalities
  - Water

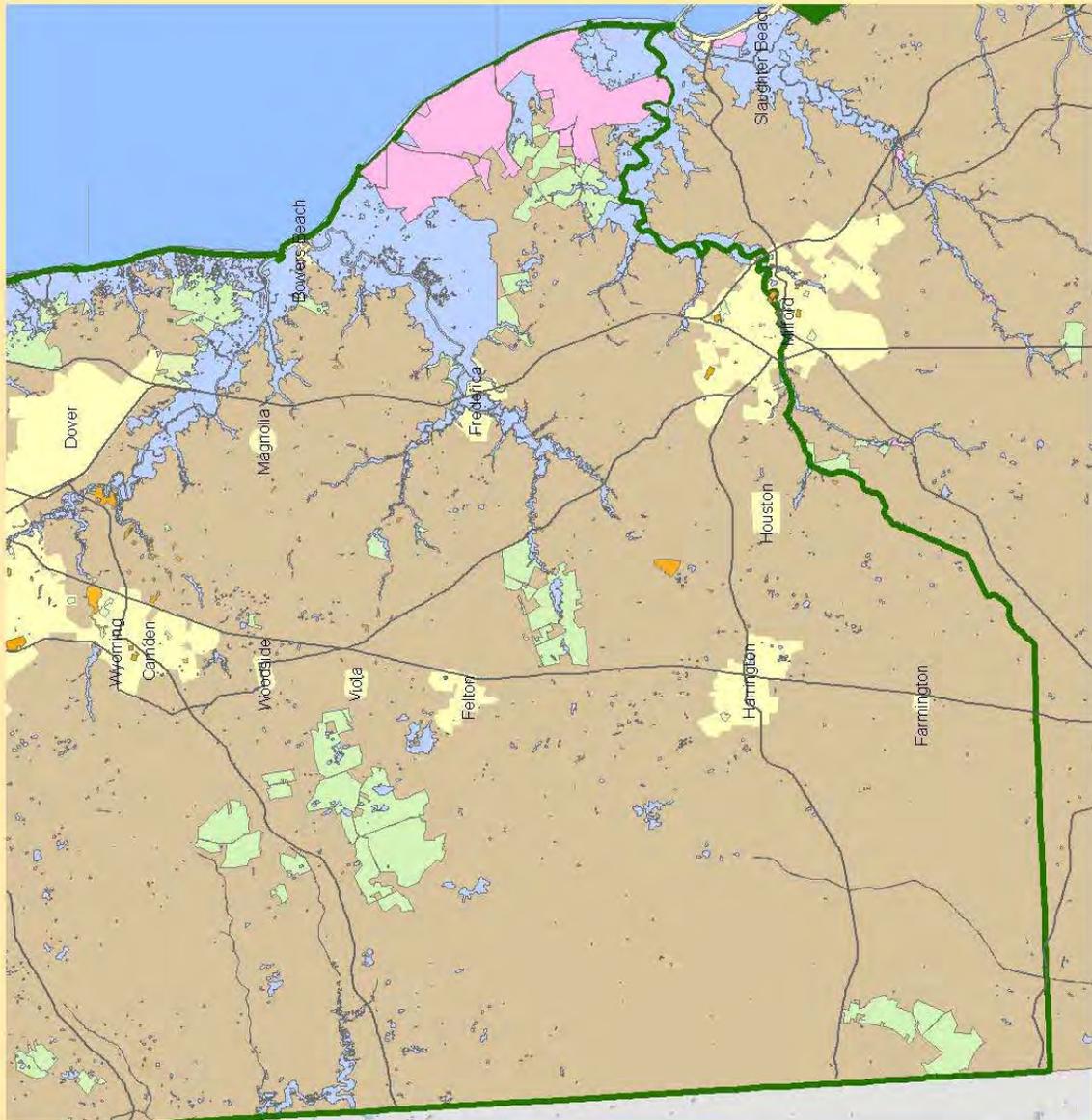


**Map 3.3b**  
**Protected Lands:**  
**Parks, Forests, Wildlife and**  
**Conservation Sites**  
**SCORP Region 3**

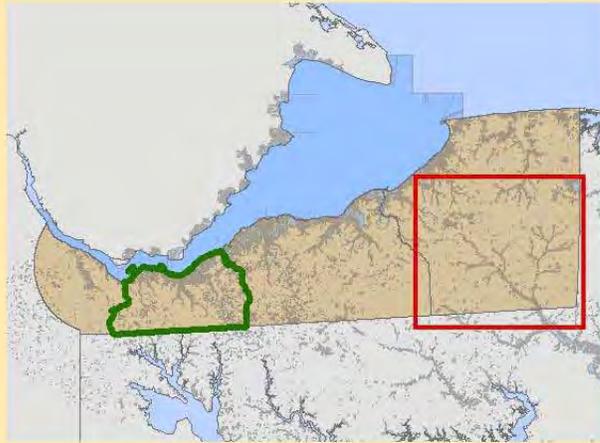


**Legend**

- Major Roads
- Protected Land**
  - Federal
  - Local
  - Private Conservation
  - State
  - SCORP Region 3
  - Municipalities
  - Water

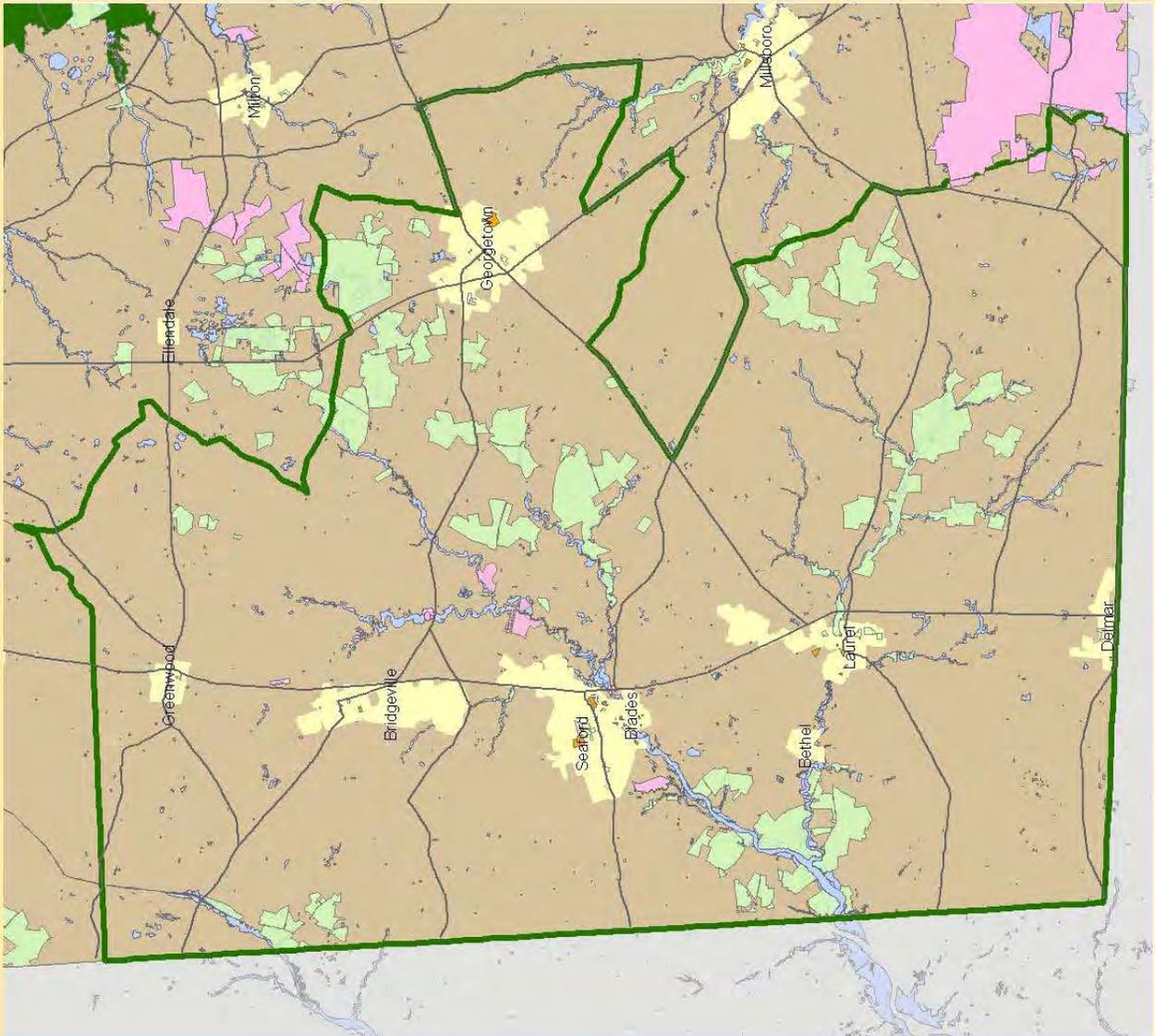


### Map 3.4 Protected Lands: Parks, Forests, Wildlife and Conservation Sites SCORP Region 4

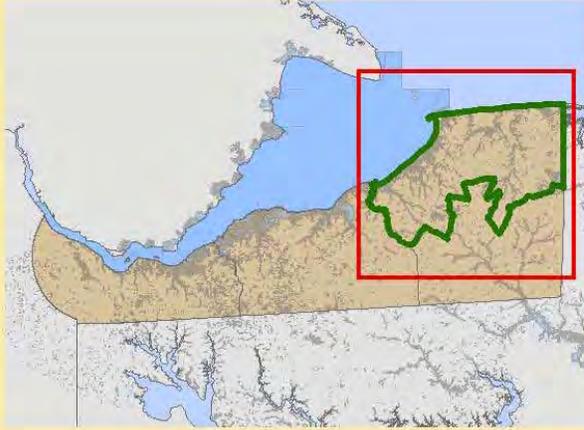


**Legend**

- Major Roads
- Protected Land**
  - Federal
  - Local
  - Private Conservation
  - State
  - SCORP Region 4
  - Municipalities
  - Water

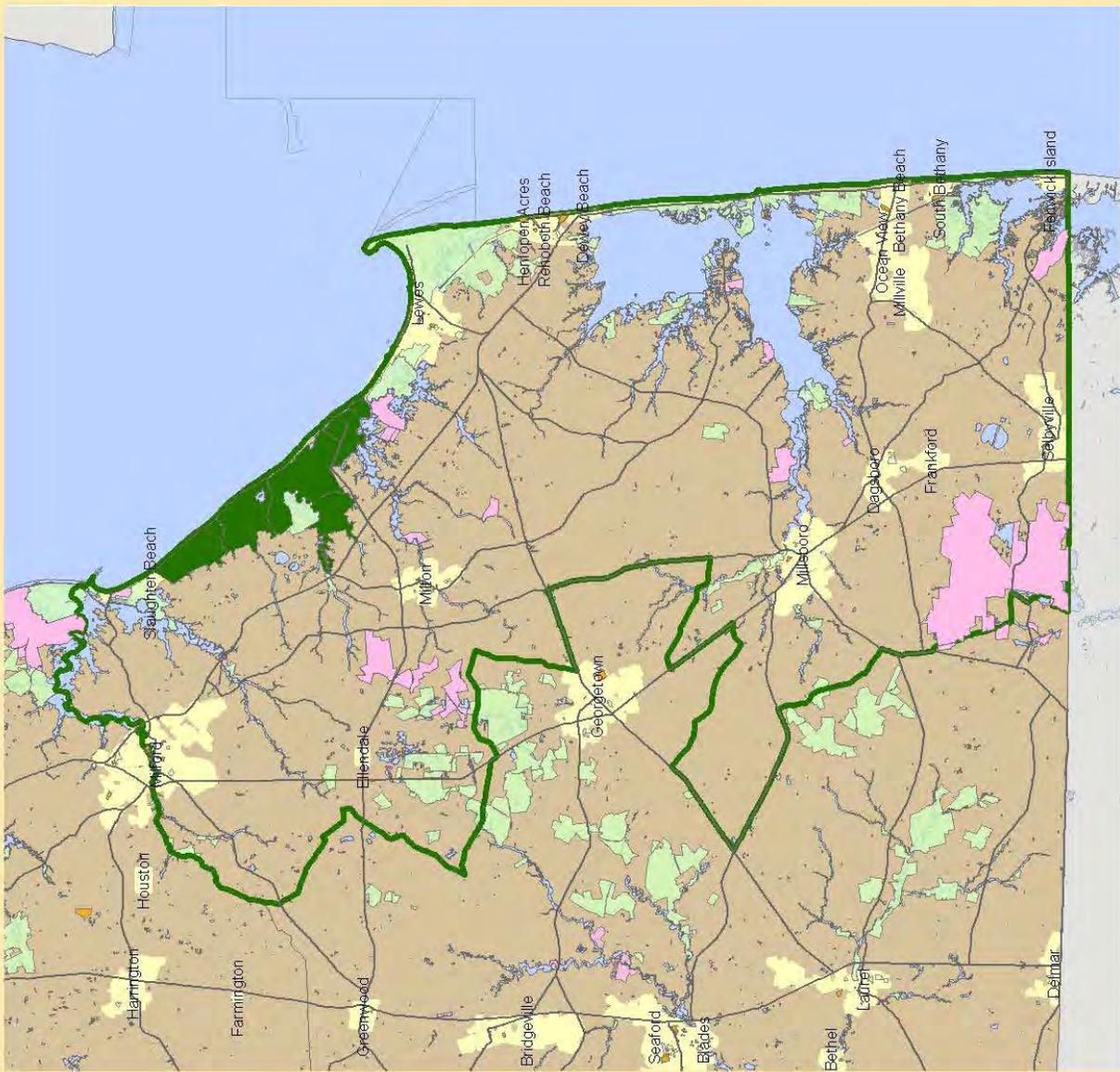


**Map 3.5**  
**Protected Lands:**  
**Parks, Forests, Wildlife and**  
**Conservation Sites**  
**SCORP Region 5**



**Legend**

- Major Roads
- Protected Land**
  - Federal
  - Local
  - Private Conservation
  - State
  - SCORP Region 5
  - Municipalities
  - Water



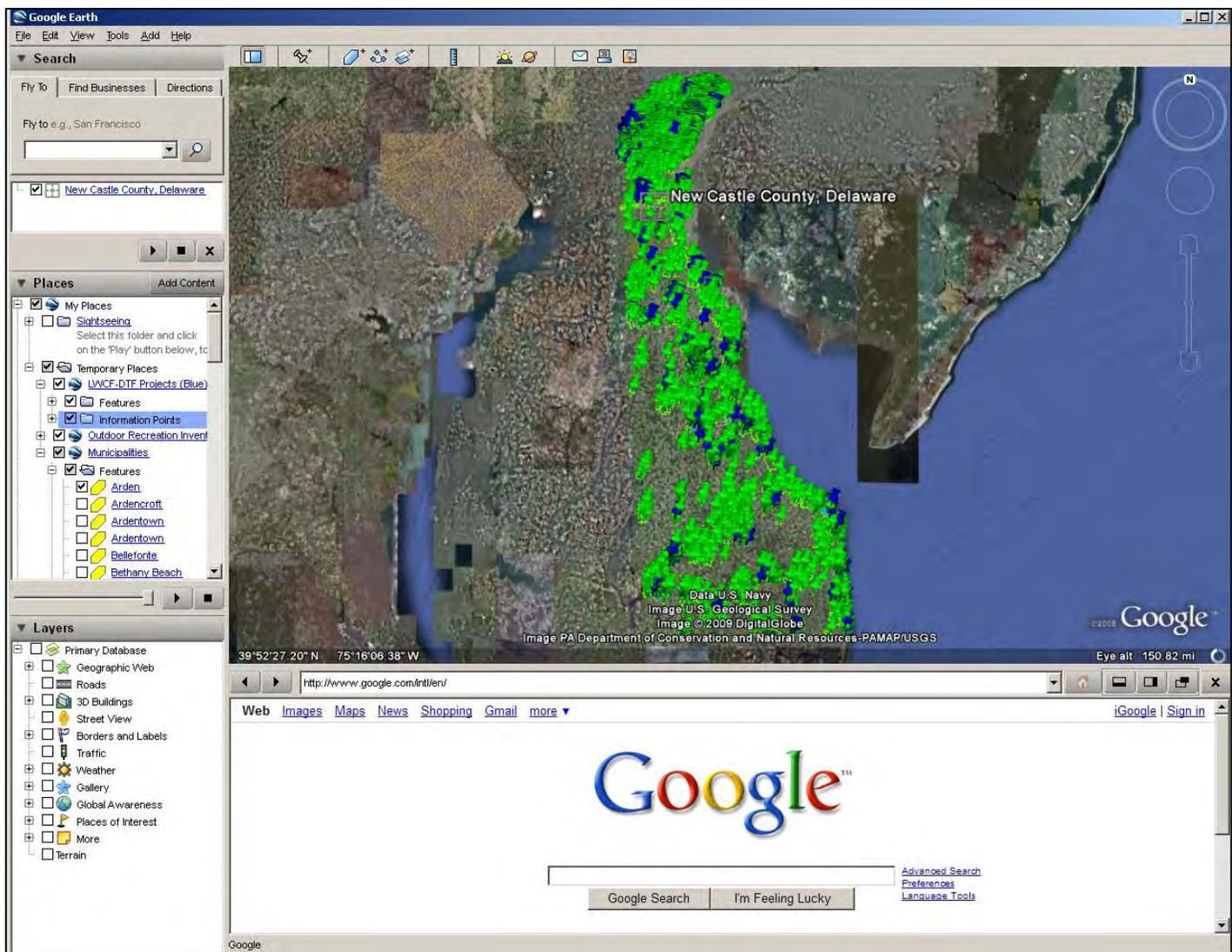
## Google Earth™ Coverage

As Delaware's Outdoor Recreation Inventory continues to grow, it is crucial to work with local and municipal governments to update the database. With a number of local governments lacking GIS software or staff to devote to managing resource data, the Division of Parks and Recreation has created ORI coverage that can be viewed using a Google Earth™ web application. The Google Earth™ files contain boundaries for the municipalities, all public and privately protected lands and all of the lands protected under the LWCF and the DTF programs. These files can be distributed to local governments, as well as residents, as an email attachment and when opened displays all ORI information for each locale. Users can click on particular sites to access site specific information. The Google Earth™ application can be a useful tool in locating and mapping parks, forests, wildlife areas and outdoor recreation facilities.

For residents, it is a useful tool for finding a chosen recreational activity or selecting places to live near parks. For public employees, the application assists in monitoring park and recreation sites for maintenance and stewardship responsibility associated with LWCF and DTF sites. The following demonstration illustrates how this application could be utilized.

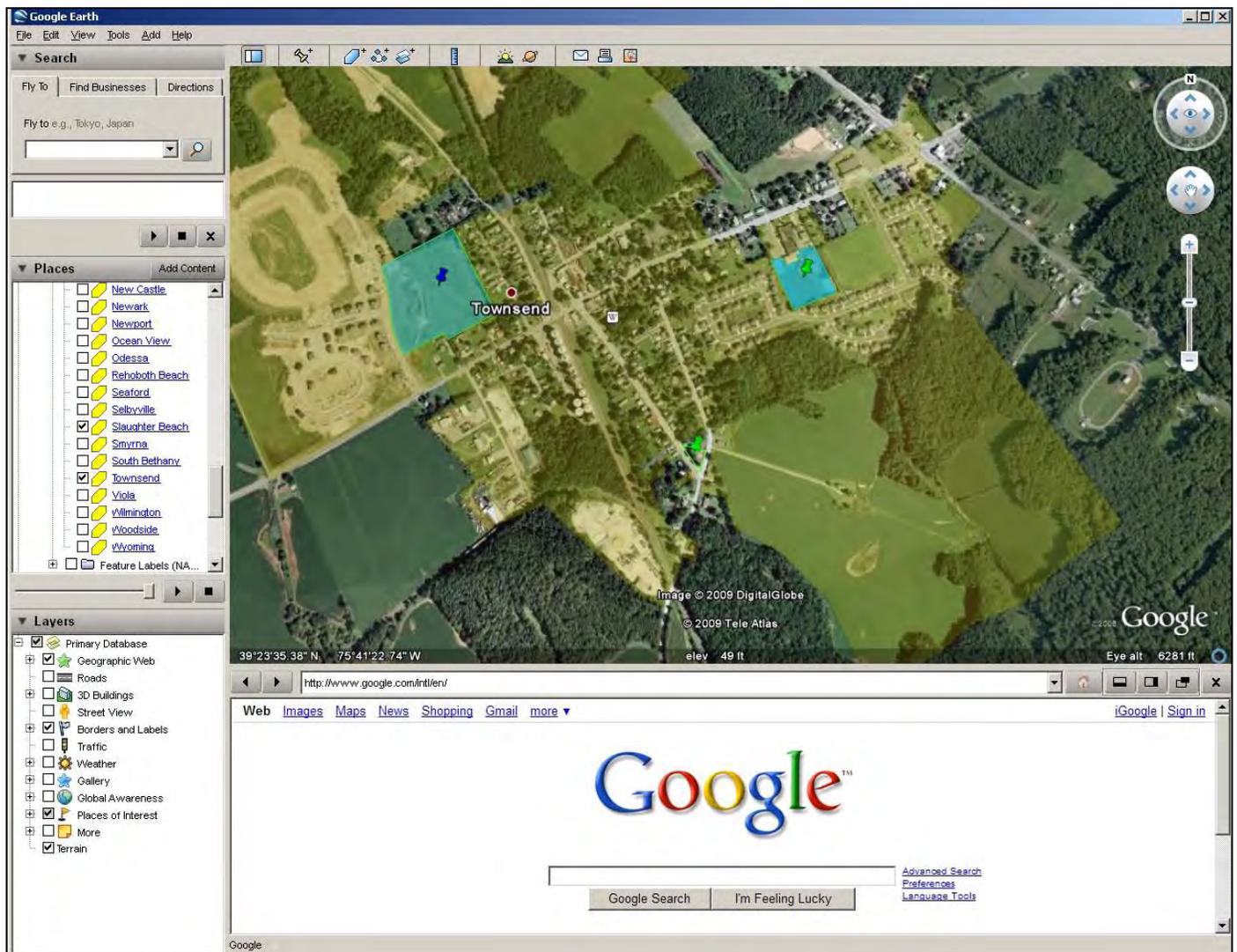
## Google Earth™ Outdoor Recreation Inventory Application

- Save ORI email attachment to your computer
- Navigate to ORI file and right click on it.
- Select Open With.
- Select Google Earth™ and click OK.
- Google Earth™ should launch and automatically zoom to Delaware.
- The layers from the attachment will be added to your Temporary Places visible on the left side of the screen.



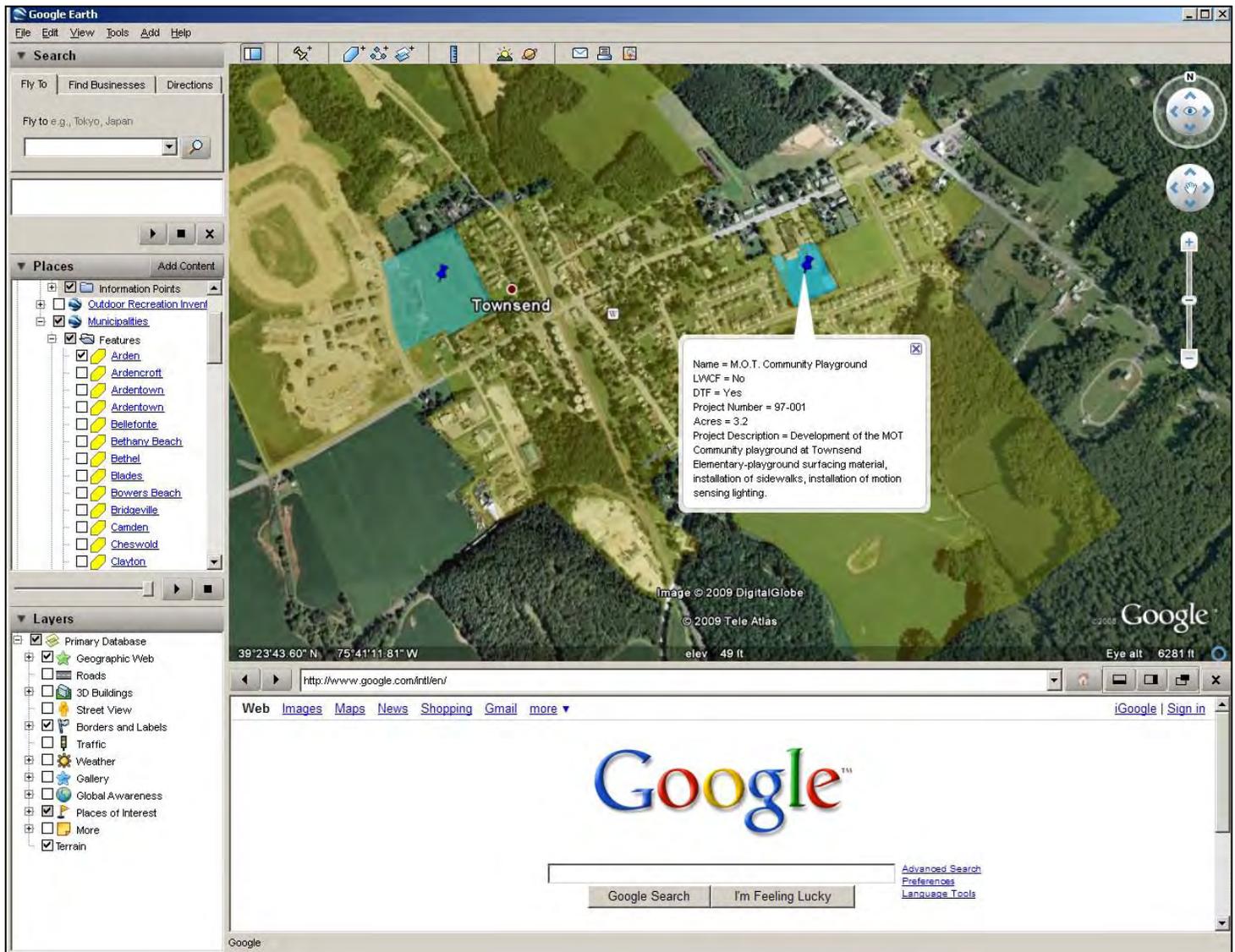
## Google Earth™ Outdoor Recreation Inventory Application

- Zooming to selected locations shows municipalities highlighted in yellow, the most recent Outdoor Recreation Inventory outlined in green, and the LWCF and DTF protected properties shaded in blue.
- Each coverage is represented on the screen by color corresponding push pins.



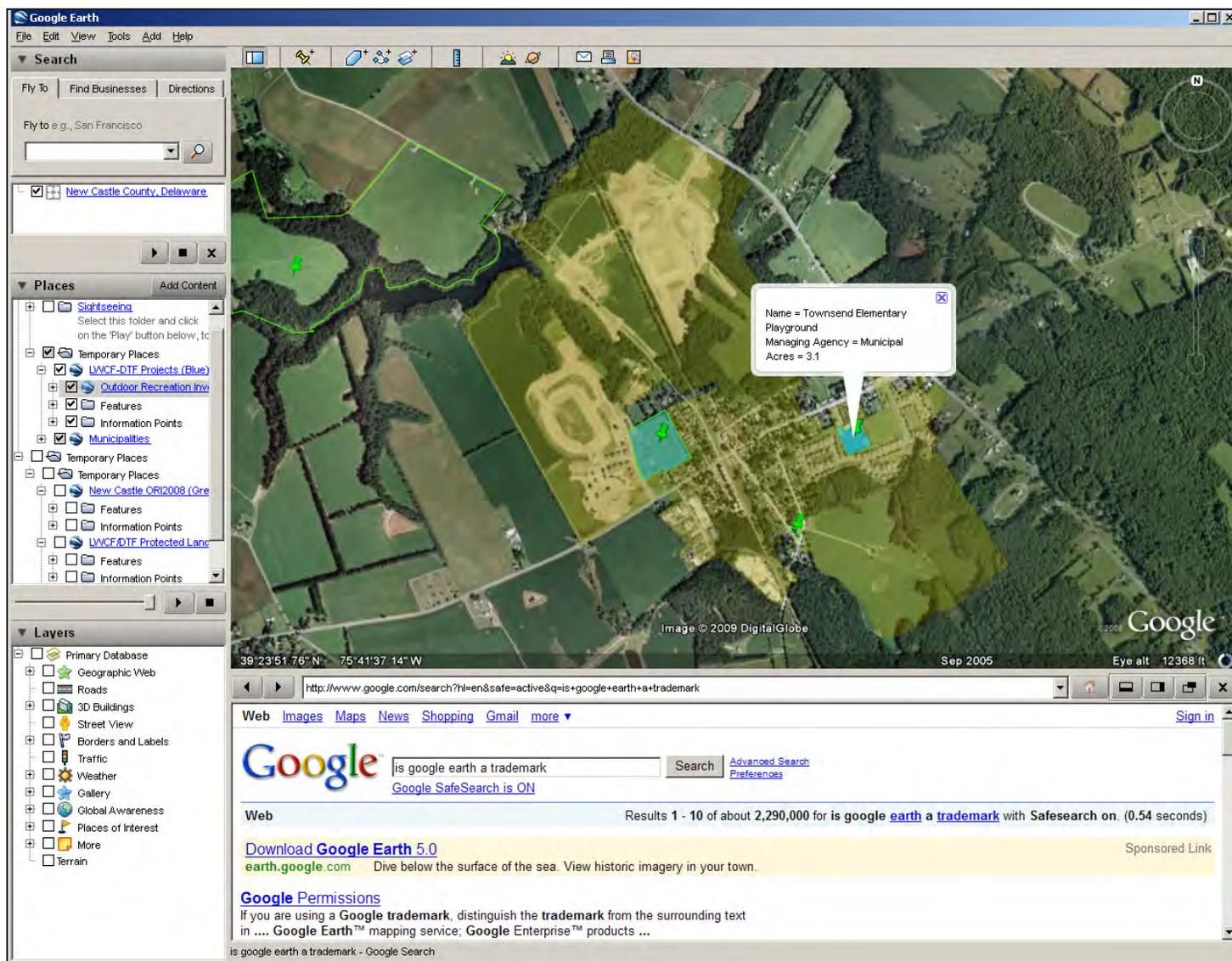
## Google Earth™ Outdoor Recreation Inventory Application

- Click on blue push pins to retrieve site specific LWCF and DTF information. This is the type of information collected and maintained to track LWCF and DTF protected properties.



## Google Earth™ Outdoor Recreation Inventory Application

- Click on the green push pin to retrieve information about the park of interest. These properties are listed in the Outdoor Recreation Inventory.
- ORI coverage will show the name of, the managing agency and the size of the park of interest. Future versions will allow a list of each amenity available at every park.



## Outdoor Recreation Trends and Demand

In this section of the SCORP document, findings are reported from a 2008 Outdoor Recreation Participation and Trends telephone survey of Delaware residents. The Division of Parks and Recreation contracted Responsive Management Inc., a survey and research firm specializing in outdoor recreation and natural resource issues, to conduct a survey to assess Delawareans' participation in outdoor recreational activities. The survey was conducted in May and June 2008. Responsive Management obtained a total of 1,940 completed interviews that were used in the statewide and regional results. An additional 239 completed interviews were obtained for the data used in the analysis for the selected municipalities that have staffed park departments. In total, 2,179 completed interviews were collected. Specifically, the survey concentrated on assessing the respondents' view of seven content areas:

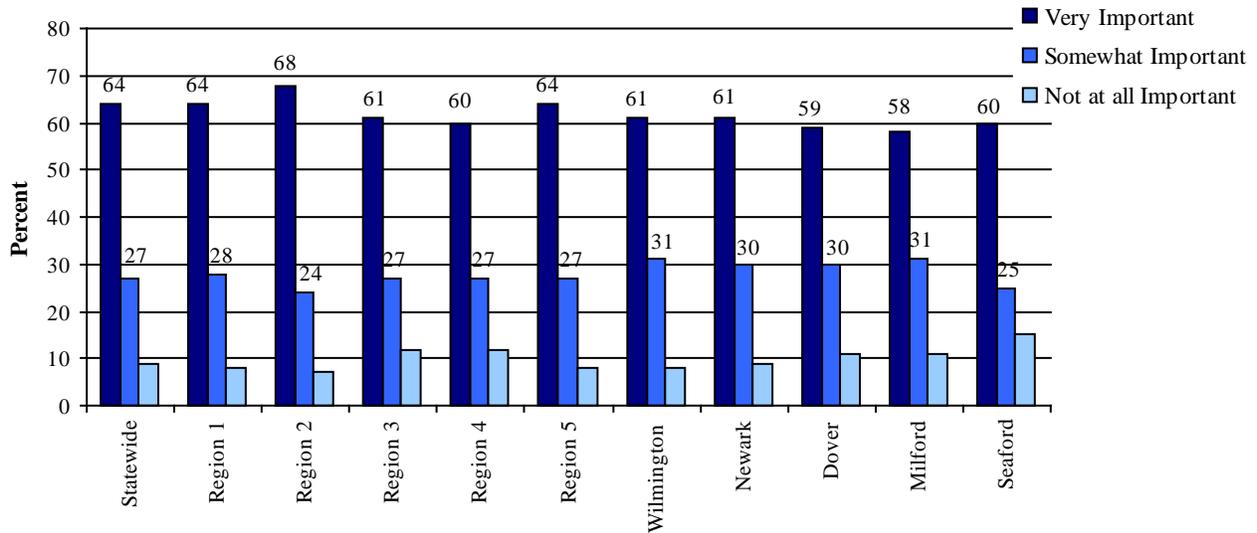
- Importance of and participation in outdoor recreation
- Outdoor recreational locations visited most frequently
- Accessing facilities
- Reasons for participating in outdoor recreation and for choosing specific areas
- Ratings of facilities and opinions on specific aspects of facilities
- Priorities for funding and for state and local policymakers
- Environment and land use attitudes

A similar survey was completed in 2002 which will be useful for comparisons and revealing outdoor recreation trends. The 2008 Outdoor Recreation Participation and Trends phone survey methodology, instrument, demographics and comments can be found in Appendices B-E.

### *Importance of Outdoor Recreation*

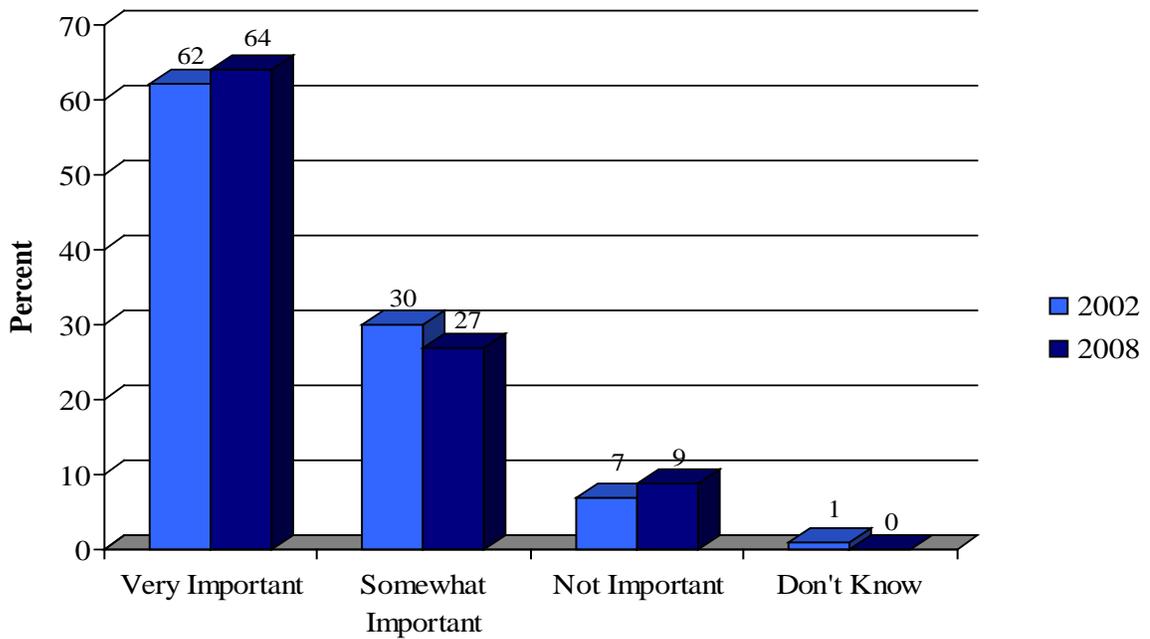
When looking at the findings from the 2008 telephone survey, it is apparent that Delawareans place a high importance on outdoor recreation. Statewide, 91% of Delaware residents indicated that outdoor recreation had some importance in their lives, while 64% said it was very important to them personally. These findings are very close to the results of the same question asked in the 2002 public opinion telephone survey, indicating a continued demand for outdoor recreation opportunities throughout the state. In charts 4.1 and 4.2 the importance of outdoor recreation is presented statewide, by region and for each municipality.

**Chart 4.1-  
How Important is Outdoor Recreation to Delawareans?**



Source: 2008 Outdoor Recreation Participation and Trends Telephone Survey

**Chart 4.2- 2002 and 2008 Trend Data:  
How Important is Outdoor Recreation to Delawareans?**

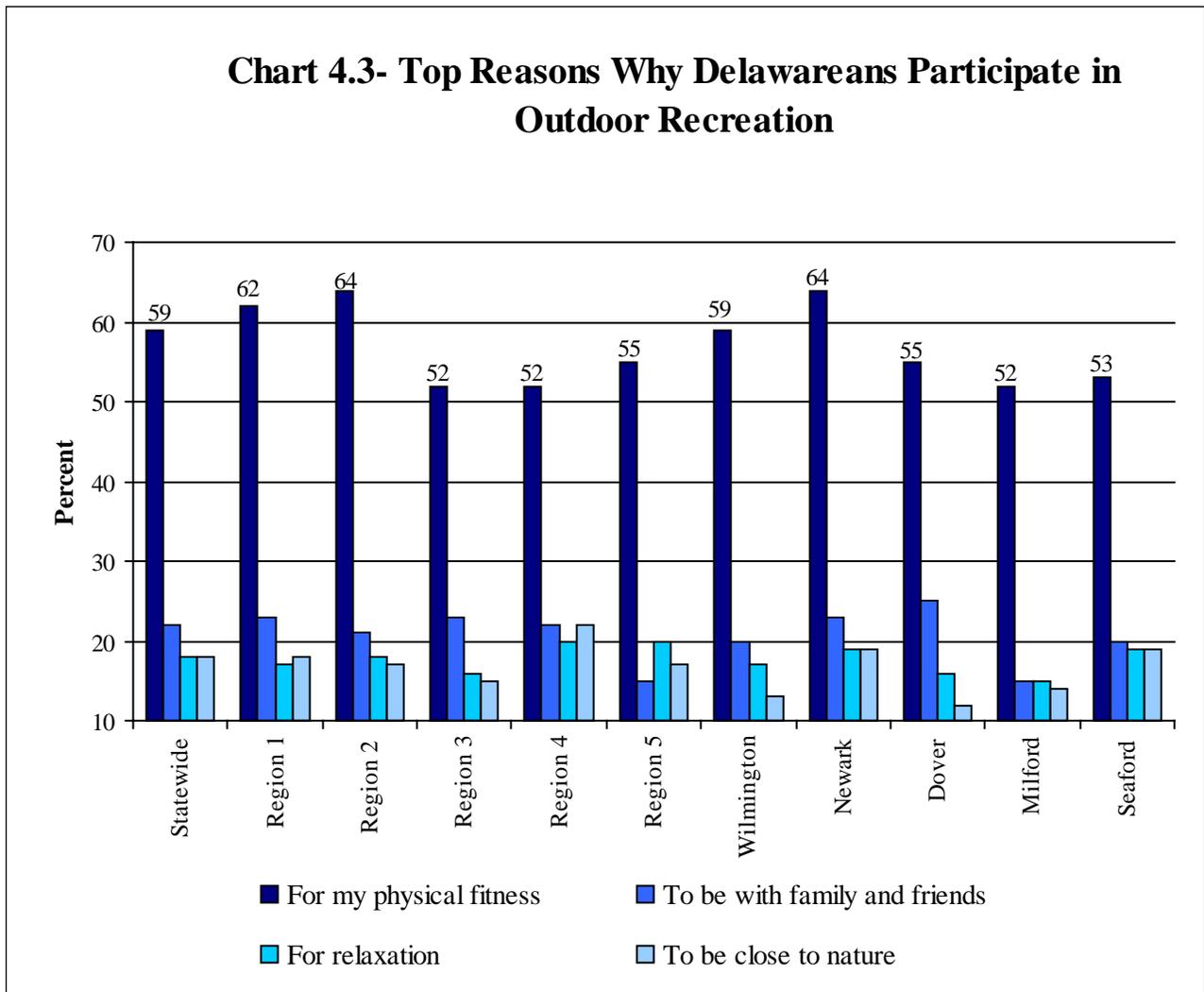


Source: 2008 Outdoor Recreation Participation and Trends Telephone

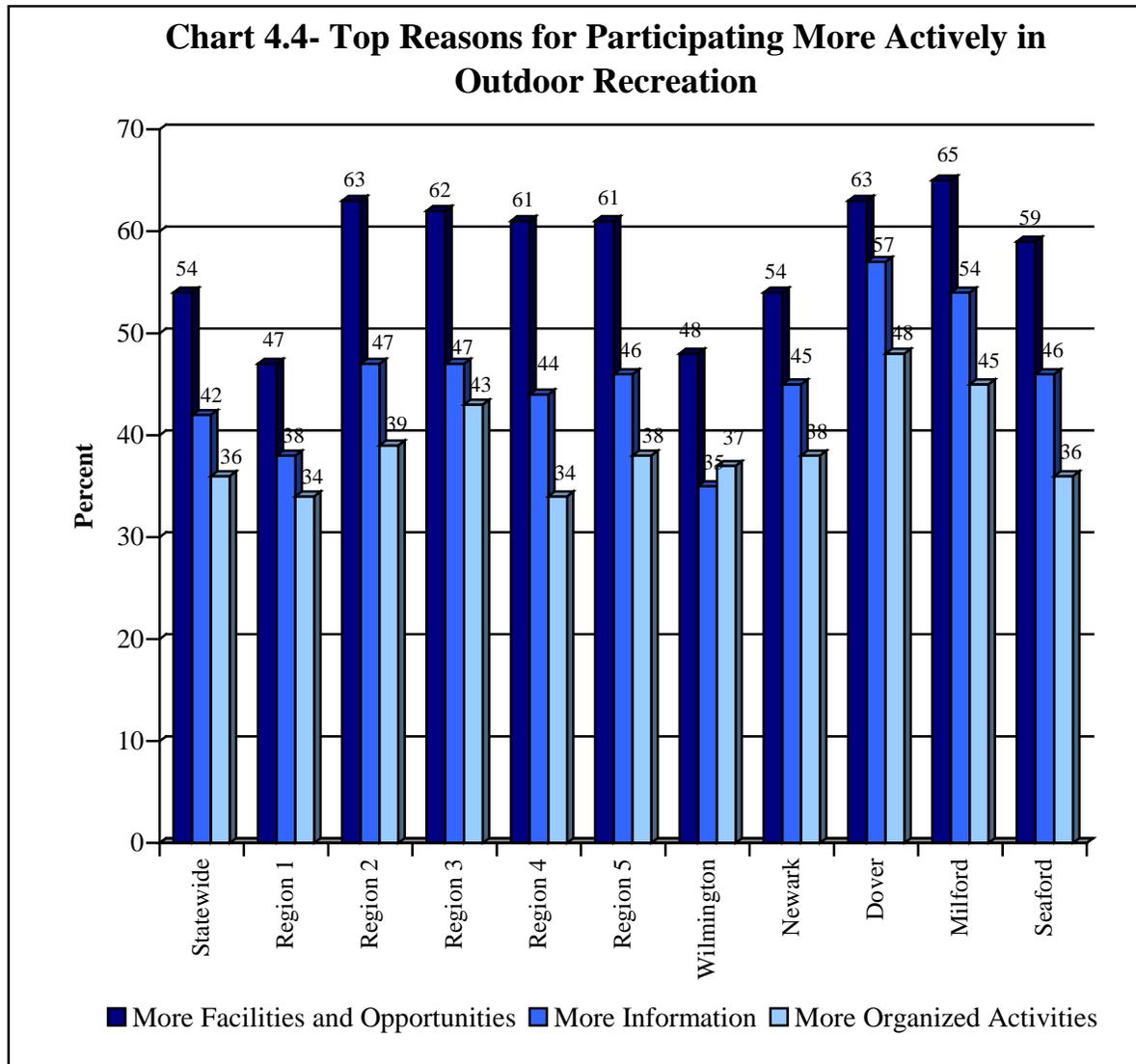
*Reasons for Participating in Outdoor Recreation*

Similar to the 2002 telephone survey, the top reasons for participating in outdoor recreation statewide include; for physical fitness, to be with family and friends, and both for relaxation and to be close to nature. According to the 2008 telephone survey responses, physical fitness is, by far, the number one reason given for participating in outdoor recreation. This response to this same question increased statewide from 2002 to 2008 from 49.7% to 59% respectively.

The survey asked respondents whether each of six items would increase their participation in outdoor recreation in Delaware. Having more facilities and opportunities closer to home is the leading item (54% said this would encourage them to participate or participate more actively); followed by having more information about facilities and opportunities (42%) and more opportunities to participate in organized activities (36%). The top reasons given in the telephone survey for why Delawareans participate in outdoor recreation and what would encourage them to participate more frequently are depicted in Chart 4.3 and 4.4.



Source: 2008 Outdoor Recreation Participation and Trends Telephone Survey



*Source: 2008 Outdoor Recreation Participation and Trends Telephone Survey*

### *Accessing Facilities*

A large majority of Delaware residents (71%) indicated that the recreation area that they visited the most was within 9 miles from home, and an overwhelming majority (84%) traveled less than 20 miles. The median distance was only 4 miles. While the automobile is the typical mode of transportation used to get to recreation sites in Delaware (76%), 19% walk or jog to their most visited site, and 3% bike to their most visited site. Comparing results from the 2002 SCORP survey, there is a noticeable increase (8%) in the number of people who are walking to their most visited recreation area. Similar trends are found in all of the SCORP planning regions indicating a demand for close to home recreation opportunities. Table 4.1 shows the median

distance survey respondents live from their most visited park or recreation area with the percentage of respondents that walk to that park.

Table 4.1 Close to Home Recreation by SCORP Region and Municipality

	Median distance from park or recreation area (mi.)	Percent walking to park they visit most frequently (2002)	Percent walking to park they visit most frequently (2008)
Statewide	4	11	19
Region 1	3	15	23
Region 2	4	6	12
Region 3	6	6	14
Region 4	9	8	16
Region 5	6	6	13
Wilmington	3	33	29
Newark	3	14	21
Dover	5	8	17
Milford	12	7	15
Seaford	7	10	19

## Preferences for Activity Participation

Statewide, 85% of those surveyed said walking or jogging are activities in which a member of their household will participate in over the next 12 months. Visiting historic sites (69%), Picnicking (66%), swimming at the beach (66%), swimming in a pool (63%), passive recreation in the outdoors (63%), and bicycling (60%) were the next highest preferred and participated in outdoor activities by household. Chart 4.5, found at the end of this chapter, shows the statewide responses to activities in which any member of the household will participate in the next 12 months. Although there are some regional variations to survey responses, with a few exceptions, the top activities statewide are also the top activities in each of the five SCORP regions.

### **Most Participated in Activities**

#### **Statewide:**

Walking or jogging  
Bicycling  
Swimming at the Beach  
Passive Recreation in the  
Outdoors  
Visiting Historic Sites

In addition to household participation, Delawareans were asked which three activities they personally participate in most often. Statewide, almost half of the respondents (48%) have personally walked or jogged within the last 12 months, making this the most popular individual outdoor activity. Personal participation in walking and/or jogging has increased by 8% from 40% to 48% since the 2002 survey. Statewide, other popular individual activities include;

bicycling (18%), hiking (13%), fishing (12%), passive recreation in the outdoors (12%), swimming at the beach and pool (both 11%), and golf (9%).

## Regional SCORP Survey Data

Combining the results from both the personal and household activity questions identifies the most participated in activities. Lists of most frequently participated in activities Statewide, by SCORP Region, and by municipality are included in the analysis for each of the areas.

### *Region 1 Outdoor Recreation Trends and Demands*

Region 1, Northern New Castle County, is both the most populated and the most

#### **Most Participated in Activities**

##### **Region 1:**

Walking or Jogging  
Bicycling  
Visiting historic sites  
Passive Recreation in the outdoors  
Swimming at the beach  
Picnicking  
Swimming in pools

developed area in the state. In 2008, the projected population of the entire county is approximately two thirds of the total population of the state. Linear recreation activities (walking, jogging, and bicycling) were very popular activities in this region, while visiting historic sites (70%) ranked third in household participation. Region 1 household participation responses are depicted in Chart 4.6.

Because Region 1 is the most developed area in the state, it is not surprising that Northern New Castle County residents were the closest to their most visited park or recreation area. In fact, eighty-

four percent live within nine miles of a park or recreation area, with the median distance being three miles. Though the automobile is the typical way Delawareans get to the area they visit the most, Region 1 residents are the most likely to walk or jog to their most visited site (23% do so, compared to 12-16% in other regions). For those who don't walk or bike to their most visited area, the most common reason for not doing so include the park being too far away and dangerous roads or traffic. These two responses were also the top responses in 2002, indicating a need for connectivity between residential and recreational areas.

### *Region 2 Outdoor Recreation Trends and Demands*

Region 2 lies in the southern portion of New Castle County from the Route 40 corridor to the boundary with Kent County. This region is one of the fastest growing areas in Delaware. Similar to the 2002 survey, 68%, more than any other region, of the survey respondents from Region 2 said that outdoor recreation is very important to them personally. Eighty-eight percent responded that they or someone in their family will participate in walking or jogging within the next 12 months. Chart 4.7 shows household participation by activity for Region 2.

#### **Most Participated in Activities**

##### **Region 2:**

Walking or Jogging  
Bicycling  
Swimming in pools  
Swimming at the beach  
Visiting historic sites  
Picnicking

Eighty-five percent, more than any other region, of respondents in Region 2 indicated that they use an automobile to get to the park or recreation area they visit the most. Conversely, only fourteen percent of the respondents in this region walk or bike to the park or recreation area they visit the most, less than any other planning region. This could indicate that close to home parks and recreation facilities are not keeping pace with the development in this region. When asked what would encourage them to participate more actively, nearly two thirds of the responses for this region included more outdoor facilities or opportunities close to home. Additionally, Region 2 had the highest percentage (64%) of respondents that said they participate in outdoor recreation for their physical fitness.

### *Region 3 Outdoor Recreation Trends and Demands*

#### **Most Participated in Activities**

##### **Region 3:**

Walking or Jogging  
Swimming at the beach  
Swimming in pools  
Visiting historic sites  
Passive recreation in the outdoors

With a 22% increase in population between 2000 and 2008, projections show Region 3 as the fastest growing of all the regions. Like all of the regions, walking and jogging (83%) was the most popular household activity in Region 3. Other popular activities for Region 3 include visiting historic sites (67%), swimming at the beach (67%), swimming in a pool (65%), picnicking and passive recreation in the outdoors (both 64%). Household participation in Region 3 is depicted in Chart 4.8.

Fifty-eight percent of the survey respondents in Region 3 live within 9 miles from the park they visit the most, with the median distance being 6 miles. Seventy-nine percent of respondents in Region 3 indicate that they use an automobile to get to the park or recreation area they visit the most while only 15% walk, jog or bike. Forty-three percent of survey respondents in Region 3 point to distance being the main reason for not walking or biking to the area they visit the most and sixty-two percent said that more outdoor facilities and close to home opportunities would encourage them to participate in outdoor recreation activities.

### *Region 4 Outdoor Recreation Trends and Demands*

Sussex County is the largest and southernmost county in Delaware. Though large in size, Sussex County is the only county in the Delaware without a county park system. Region 4, which encompasses the western part of Sussex County, has a landscape characterized by rural agricultural land punctuated by small towns. Walking or jogging (81%), picnicking (66%), visiting historic sites and passive recreation in the outdoors (both 62%) were the most popular household activities in this region. Residents in Region 4 are more likely to participate in hunting (23%), fishing (55%), and all-terrain vehicle use (15%) than in most other regions. Household participation for Region 4 is shown in Chart 4.9.

#### **Most Participated in Activities**

##### **Region 4:**

Walking or Jogging  
Passive recreation in the outdoors  
Picnicking  
Swimming in a pool  
Fishing

Being the most least populated and least developed region in the state, it is no surprise that more than one third (35%) of the respondents in Region 4 reported that there are no parks and/or outdoor recreation areas in or near their neighborhood and less than a quarter (24%) live within a 15 minute walk to a park or recreation facility. Western Sussex County residents live the farthest away from a park or recreation facility with only half living within nine miles of a park or recreation facility; with a mean distance of nine miles. Additionally, fifty-nine percent of respondents in Region 4 reported a lack of bicycle and walking trails in or near their neighborhood.

### *Region 5 Outdoor Recreation Trends and Demands*

#### **Most Participated in Activities**

##### **Region 5:**

Walking or Jogging  
Swimming at the beach  
Bicycling  
Swimming in a pool  
Fishing

Region 5, comprised of Eastern Sussex County, is characterized by Delaware's Inland Bays and the Atlantic coast beaches which seasonally attract thousands of visitors. More recently, this area has been promoted as a retirement destination. The average age of respondents within Region 5 is 57.02 years, the oldest of all the regions. An overwhelming seventy-four percent of respondents in this region have no children living in their household.

Ninety-one percent of respondents in Region 5 indicate that outdoor recreation is somewhat or very important. Walking and jogging (86%), swimming at the beach (74%), visiting historic sites (70%) are popular household activities in this region. Region 5 had lower than the statewide average household participation in tennis (13%) but had the highest level of participation in fishing (57%). Household participation for Region 5 is shown in Chart 4.10.

## **Municipal SCORP Survey Data**

For this SCORP, the Division of Parks and Recreation has collaborated with the Nemours Foundation, through its Division of Health and Prevention Services, to oversample five municipalities within the state. Separate data analysis for all questions was conducted based on five of Delaware's municipalities: Wilmington, Newark, Dover, Milford, and Seaford. An oversampling of respondents within these municipalities ensured that sample sizes were sufficient for analyses. By oversampling municipalities, the SCORP will be able to demonstrate recreational preferences in a more concise geographic area.

### *Wilmington Outdoor Recreation Demands*

Located at the convergence of the Christina River and the Brandywine Creek, is the City of Wilmington, Delaware's largest city. Historically a ship building city, in the 1980s, Wilmington experienced tremendous job growth and office construction when many national banks and financial

#### **Most Participated in Activities**

##### **Wilmington:**

Walking or jogging  
Picnicking  
Passive recreation  
Visiting historic sites  
Bicycling  
Swimming at the beach

institutions located corporate headquarters to the area. The City's first comprehensive park system was established in the late nineteenth century as lands that are now Rockford and Brandywine Park were set aside as open parkland. The City of Wilmington has the most extensive municipal parks system with more than 65 recreational facilities and 450 acres.

Ninety-two percent of Wilmington residents interviewed, more than any other municipality, indicated that outdoor recreation is very or somewhat important to them personally. When asked the most important reasons for participating in outdoor recreation activities, 59% of Wilmington respondents said for their physical fitness. Other popular responses included to be with family and friends (20%) and for relaxation (17%). Wilmington residents are the closest to their most visited park or recreation area. Eighty-four percent live within 9 miles of a park or recreation area. Being closer to their most visited park, Wilmington residents are the most likely to walk, jog, or bike to the recreation facility they visit the most (33% do so, compared to 17% to 26% in the other municipalities). Household participation for the City of Wilmington is depicted in Chart 4.11.

#### *Newark Outdoor Recreation Demands*

##### **Most Participated in Activities**

###### **Newark:**

Walking or jogging  
Bicycling  
Hiking  
Swimming in pools  
Passive Recreation  
Visiting historic sites

Newark boasts over 600 acres of parkland and open space, as well as extensive programs and outdoor education. An overwhelming ninety-one percent of Newark residents interviewed during the survey indicated that outdoor recreation is very or somewhat important to them personally. Residents of Newark participate in outdoor recreation for a number of reasons. When asked the most important reasons they participate in outdoor recreation activities, sixty-four percent of Newark respondents said for their physical fitness. As shown in Chart 4.12, other popular responses included: to be with family and friends (23%), relaxation (19%), to be close to nature (19%), for their mental well being (14%), for fun and entertainment (11%), and to enjoy the scenery (14%). Additionally, when asked what would encourage more active participation in outdoor recreation activities in Delaware, more than half (54%) of Newark respondents wanted more outdoor facilities/opportunities close to home. More than one third (38%) of the Newark respondents desire more opportunity to participate in organized activities.

The survey also asked about priorities for three items among state and local policy makers including public parks; acquiring more land for parks and open space; and bike and pedestrian pathways between places of work, schools, shopping areas, and neighborhoods. Newark residents considered all three of these survey items as important priorities that Newark policy makers need to consider. Looking at the responses that placed some level of importance, each has an overwhelming majority (87% or more), with public parks ranking the highest (95%).

### *Dover Outdoor Recreation Demands*

The City of Dover is located in Central Delaware in Kent County and is the capitol of Delaware. While its population is significantly less than that of Wilmington, Dover encompasses a larger geographic area than any other city in Delaware and on the Delmarva Peninsula. There are approximately 275 acres of parks and open space within the city limits of Dover. Eighty-nine percent of Dover residents interviewed during the survey indicated that outdoor recreation is very or somewhat important to them personally.

#### **Most Participated in Activities**

##### **Dover:**

Walking or jogging  
Swimming in a pool  
Passive Recreation  
Picnicking  
Visiting historic sites

Like all the municipalities, walking and jogging (87%) is the most participated in household activity. Dover residents indicated that swimming in a pool (71%) was the second most participated in household outdoor recreation activities. This activity ranks higher in Dover than in any of the other oversampled municipalities. Other popular household activities include picnicking (69%), visiting historic sites (69%), passive recreation in the outdoors (66%), swimming at the beach (63%), and bicycling (61%). Household participation in Dover is shown on Chart 4.13.

In Dover, hiking and bicycling are two activities that fall below residents' expectations. Thirty percent of Dover respondents rated hiking facilities in their community as excellent or good while 65% rate facilities in their community for hiking as fair or poor. Similarly, 31% of Dover residents rate facilities for bicycling as excellent or good while 65% rate these facilities as fair or poor.

### *Milford Outdoor Recreation Demands*

#### **Most Participated in Activities**

##### **Milford:**

Walking or jogging  
Swimming at the beach  
Passive recreation  
Picnicking  
Swimming in a pool

The City of Milford is centrally located in the southern part of Delaware. The Mispillion River, which bisects the downtown area, divides the city into two counties; Kent County on the north side of the river and Sussex County to the south. There are approximately 115 acres of parks and open space within the City of Milford highlighting the river. Milford residents highly rank outdoor recreation with 89% indicating that it has importance in their lives.

As shown on Chart 4.14, eighty-six percent of residents in Milford expect a member of their household to walk or jog within the next 12 months, distantly followed by swimming at the beach (69%), picnicking (67%), and passive recreation in the outdoors (66%). Among the oversampled municipalities, Milford residents lived the farthest from the park or recreation area they visit the most. Only 42% live within 9 miles of a park or recreation area with a median distance of 12 miles. When asked what would encourage more participation in outdoor recreation in Delaware, nearly two thirds (65%) of Milford residents point toward more outdoor facilities and opportunities close to home. The

demand for more close to home facilities is greater in Milford than in any of the other oversampled municipalities.

### *Seaford Outdoor Recreation Demands*

Eighty-five percent of residents in Seaford indicated outdoor recreation had some importance in their lives. Although Seaford residents appear to place less importance on outdoor recreation than all other municipalities sampled, Seaford had the second highest response (60%) for outdoor recreation being very important to them personally. More than half (53%) of the residents surveyed in Seaford said they participate in outdoor recreation for their physical fitness. Like both SCORP regions in Sussex County, the other top reasons for participating in outdoor recreation in Seaford include: to be with family and friends (20%), for relaxation (19%), and to be close to nature (19%).

In Seaford, walking or jogging (81%) was the most participated in household activity followed by picnicking (68%), passive recreation in the outdoors (63%), and visiting historic sites (62%). Other household activities are shown in Chart 4.15. In Seaford, hiking, more than any other activity falls below residents' expectations.

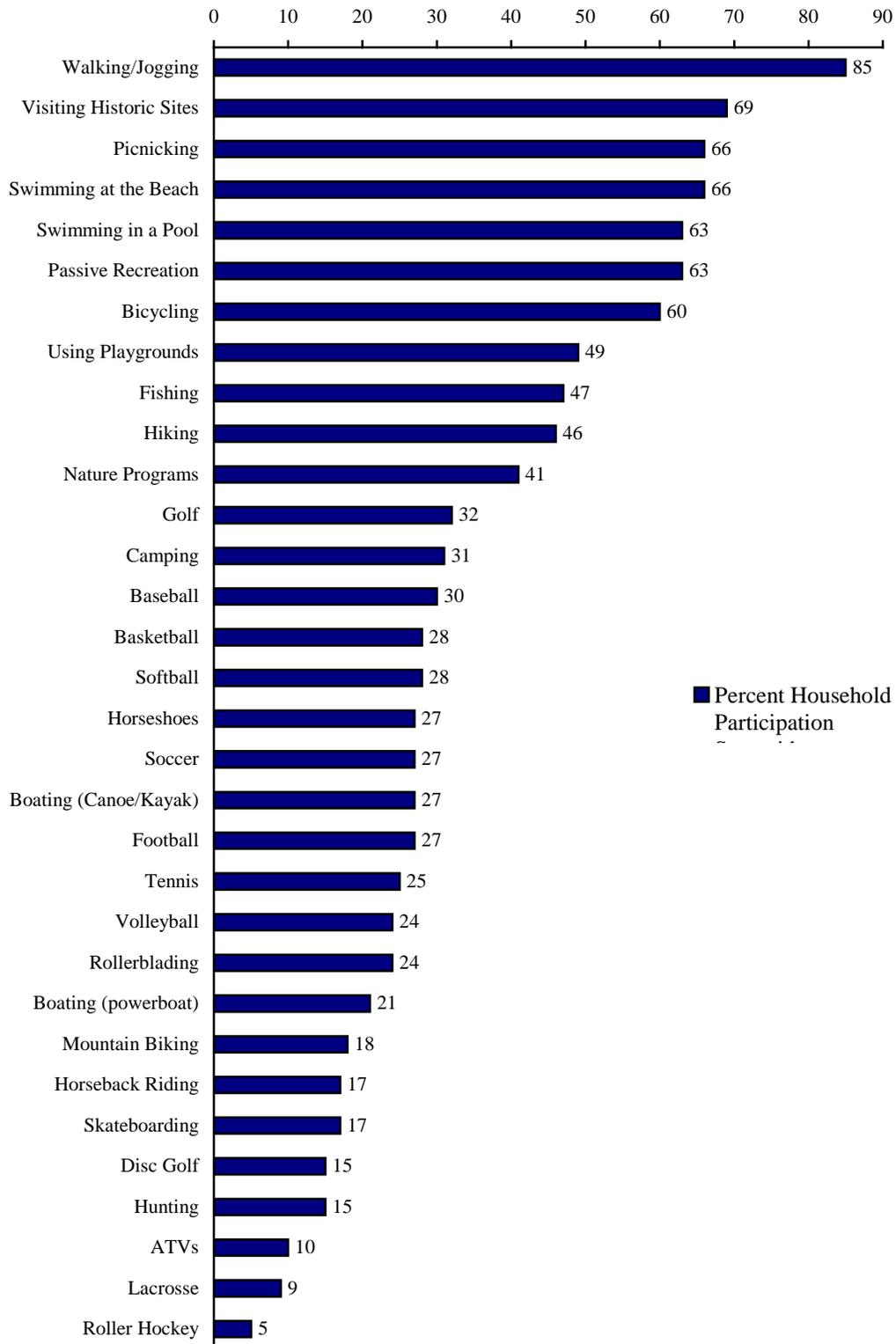
Only 18% of Seaford residents rated hiking facilities in their community as good while 54% rate facilities in their community for hiking as fair or poor.

Thirty-five percent of Seaford residents, more than all other oversampled municipalities, state that there are no parks and/or outdoor recreation areas in or near their neighborhoods that are easy to get to. When asked which of the following would encourage more active participation in outdoor activities, 59% in Seaford indicate more close to home facilities would encourage them to participate in outdoor recreation more actively.

#### **Most Participated in Activities** **Seaford:**

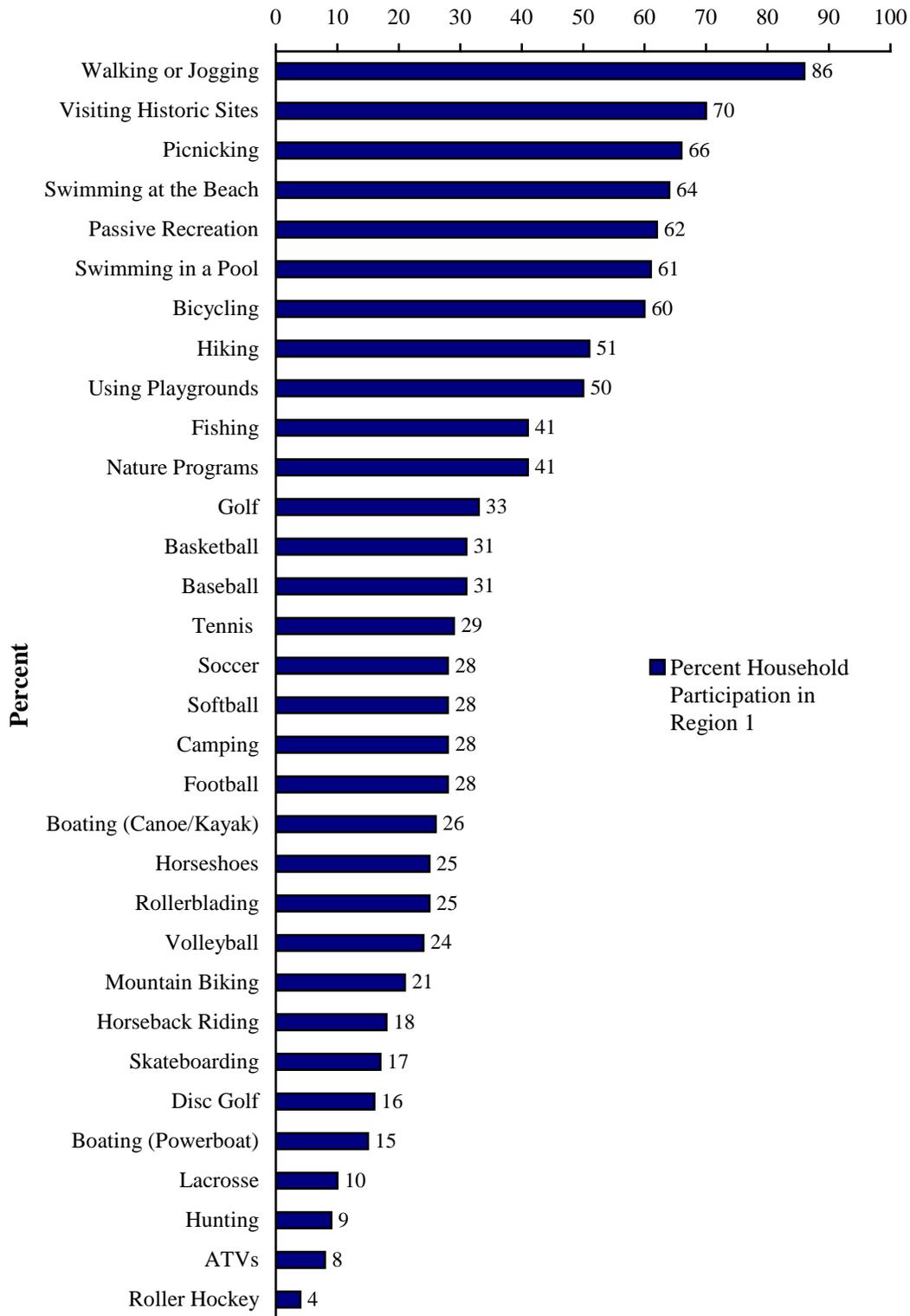
Walking or Jogging  
Passive recreation  
Picnicking  
Swimming in a pool  
Visiting historic sites

**Chart 4.5- Household Participation Statewide**



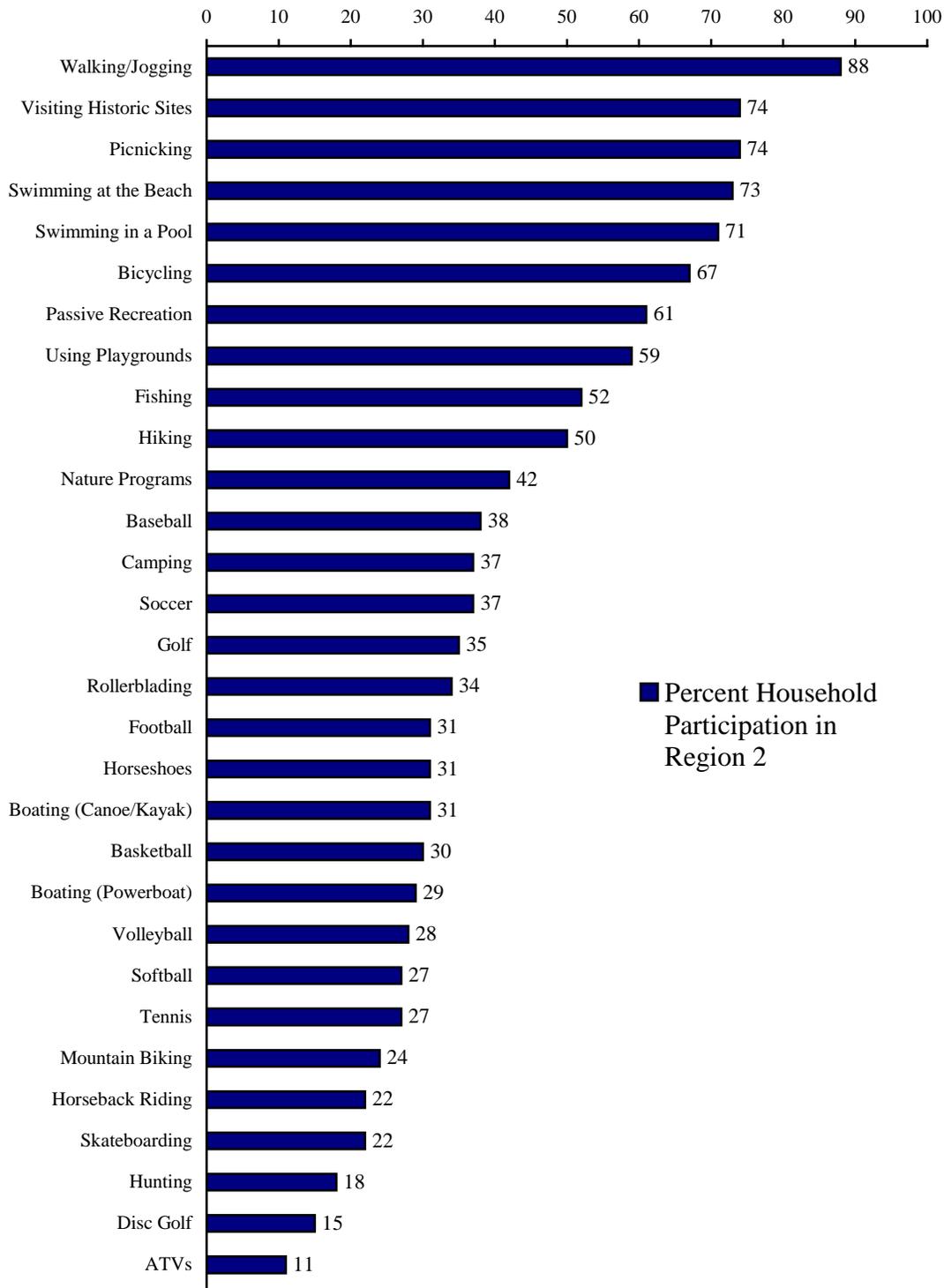
Source: 2008 Outdoor Recreation Participation and Trends Survey

**Chart 4.6- Household Participation in Region 1**



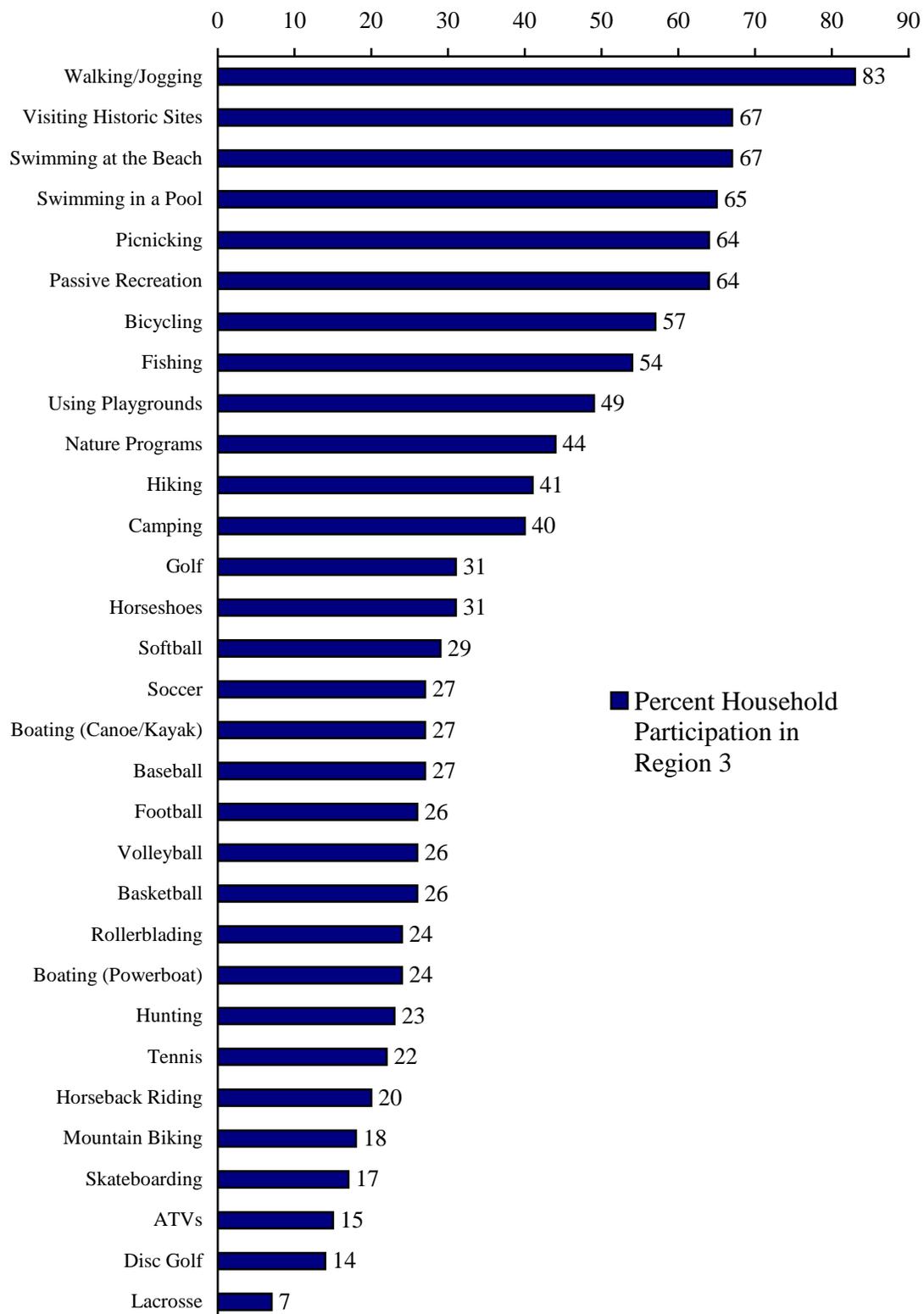
Source: 2008 Outdoor Recreation Participation and Trends Survey

**Chart 4.7- Household Participation in Region 2**



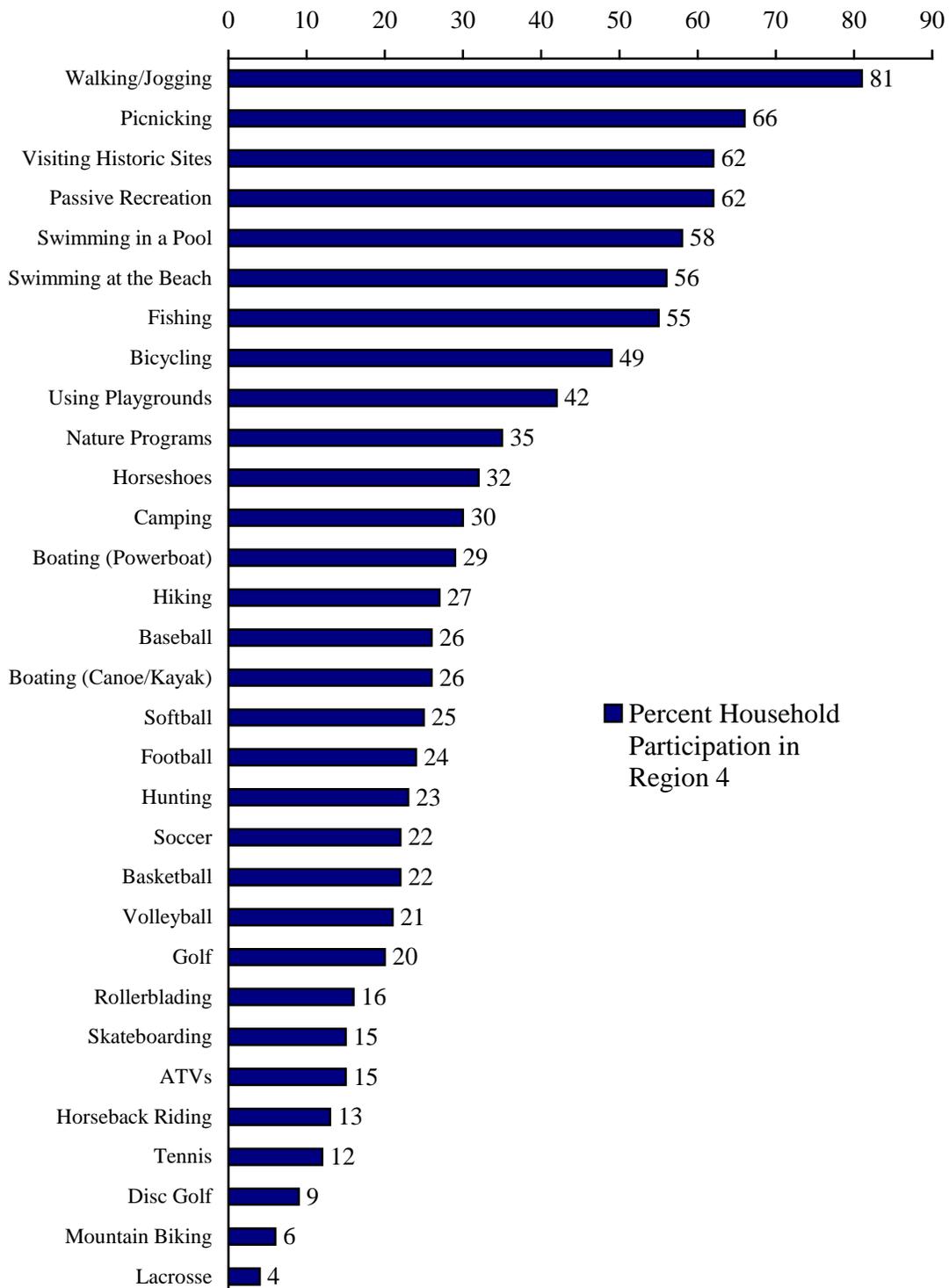
Source: 2008 Outdoor Recreation Participation and Trends Survey

Chart 4.8- Household Participation in Region 3



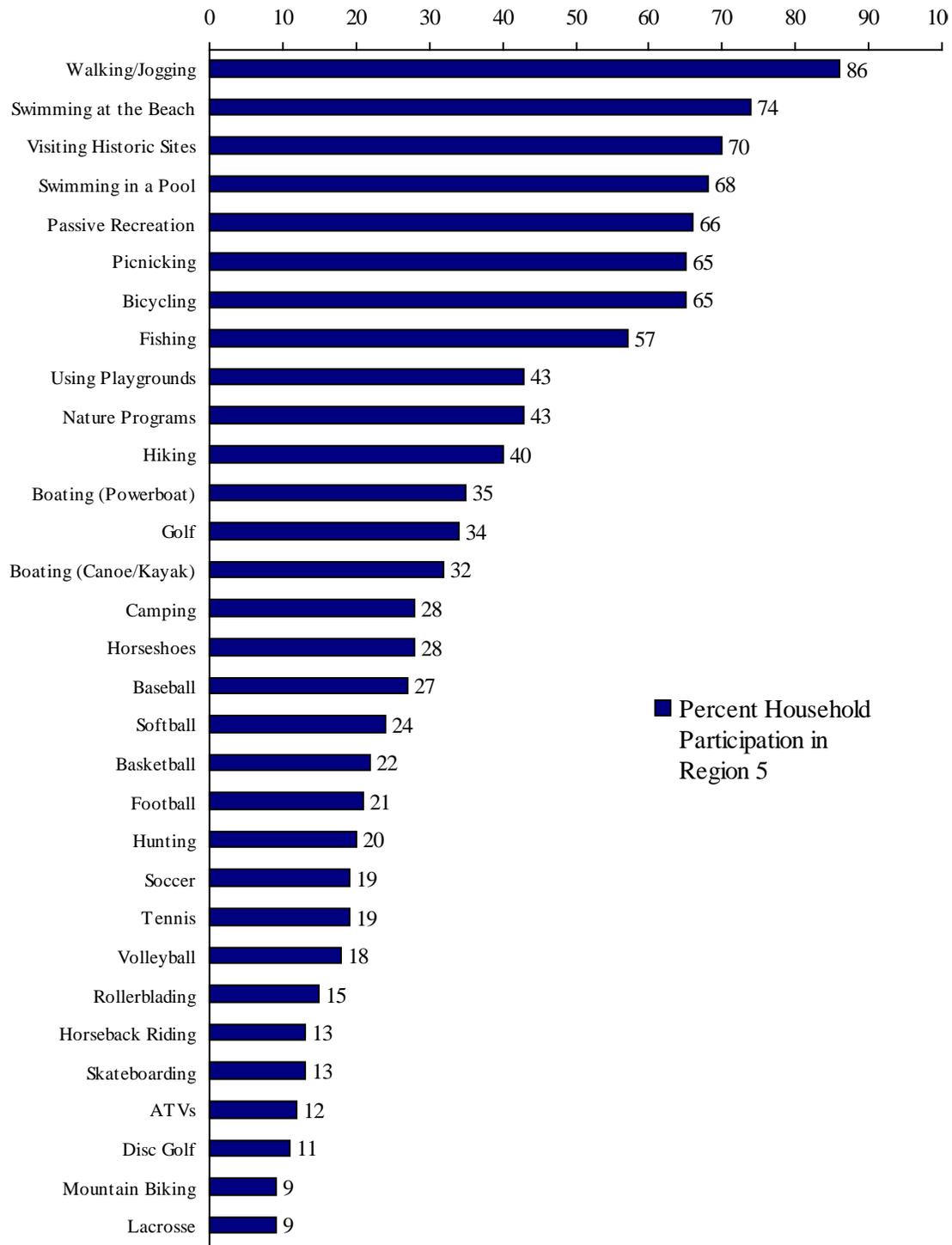
Source: 2008 Outdoor Recreation Participation and Trends Survey

Chart 4.9- Household Participation in Region 4



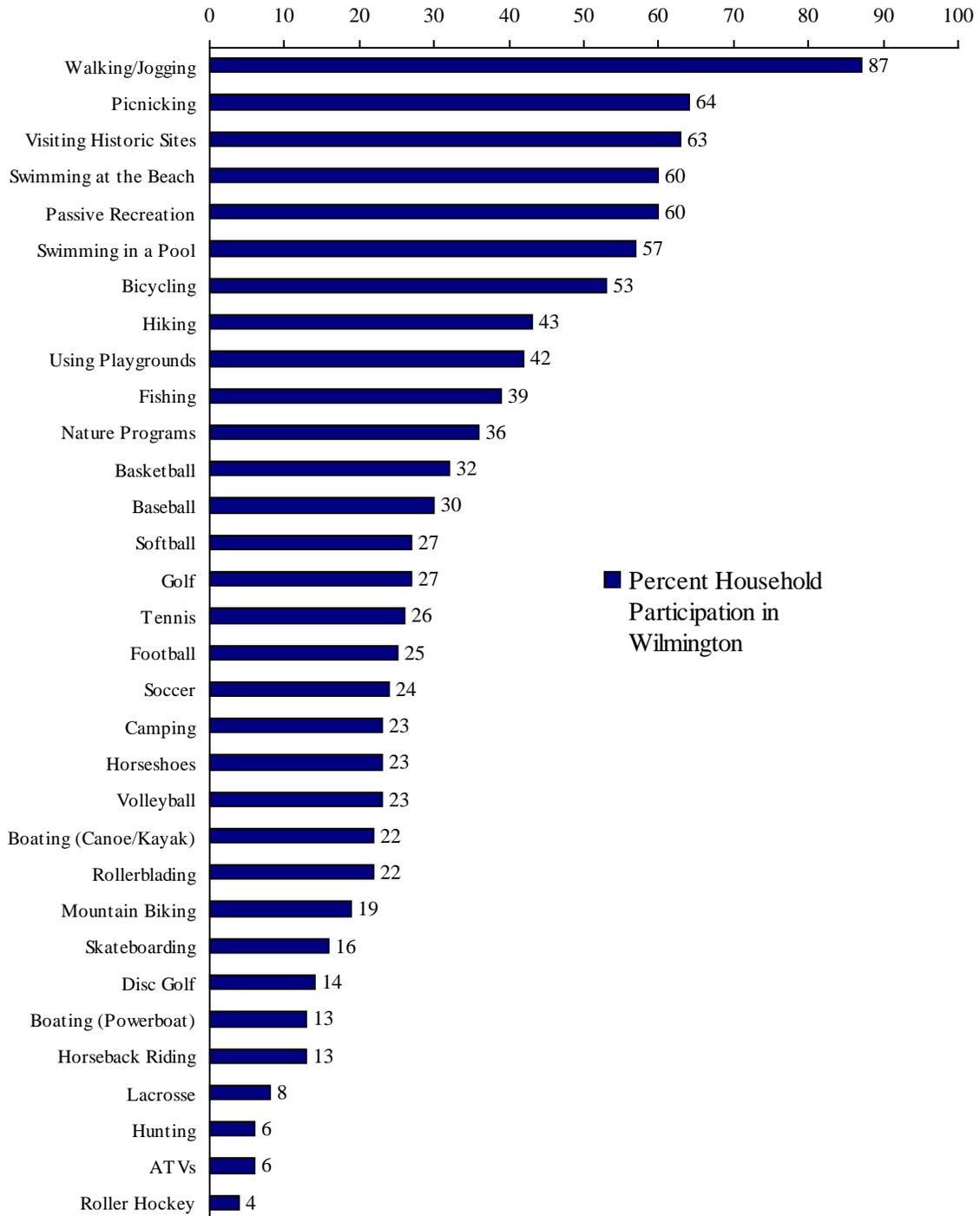
Source: 2008 Outdoor Recreation Participation and Trends Survey

Chart 4.10- Household Participation in Region 5



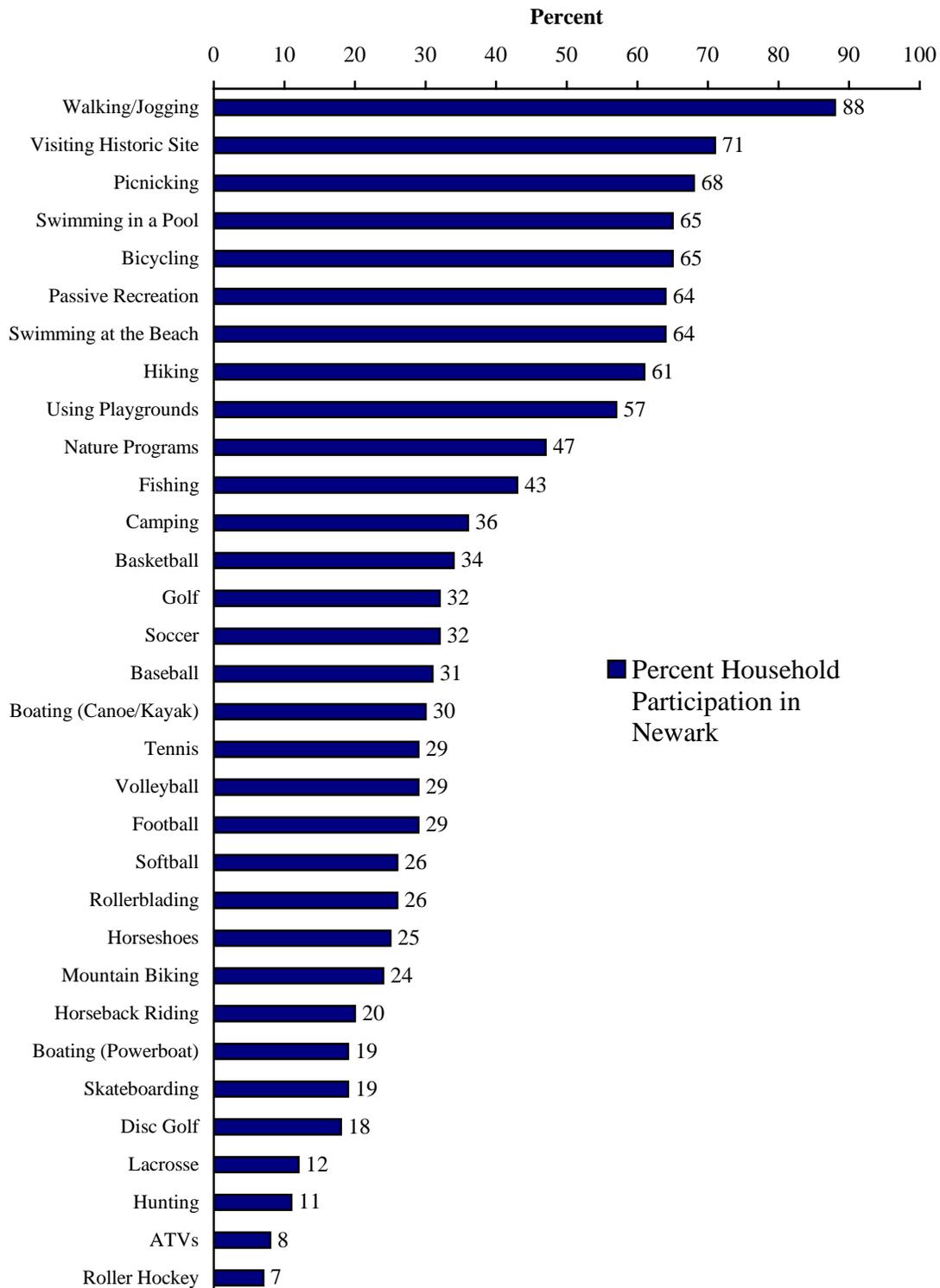
Source: 2008 Outdoor Recreation Participation and Trends Survey

**Chart 4.11- Household Participation in Wilmington**



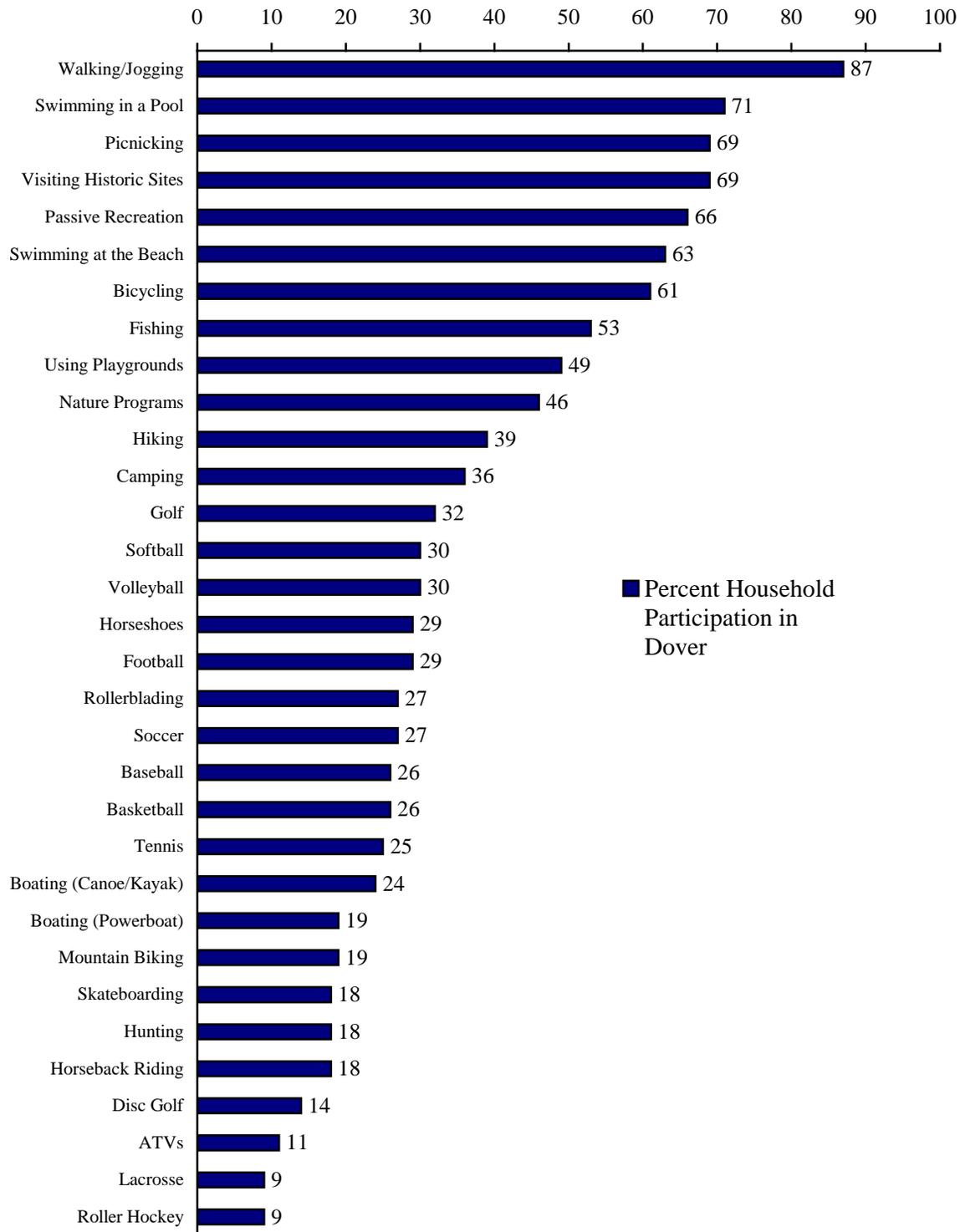
Source: 2008 Outdoor Recreation Participation and Trends Survey

Chart 4.12- Household Participation in Newark



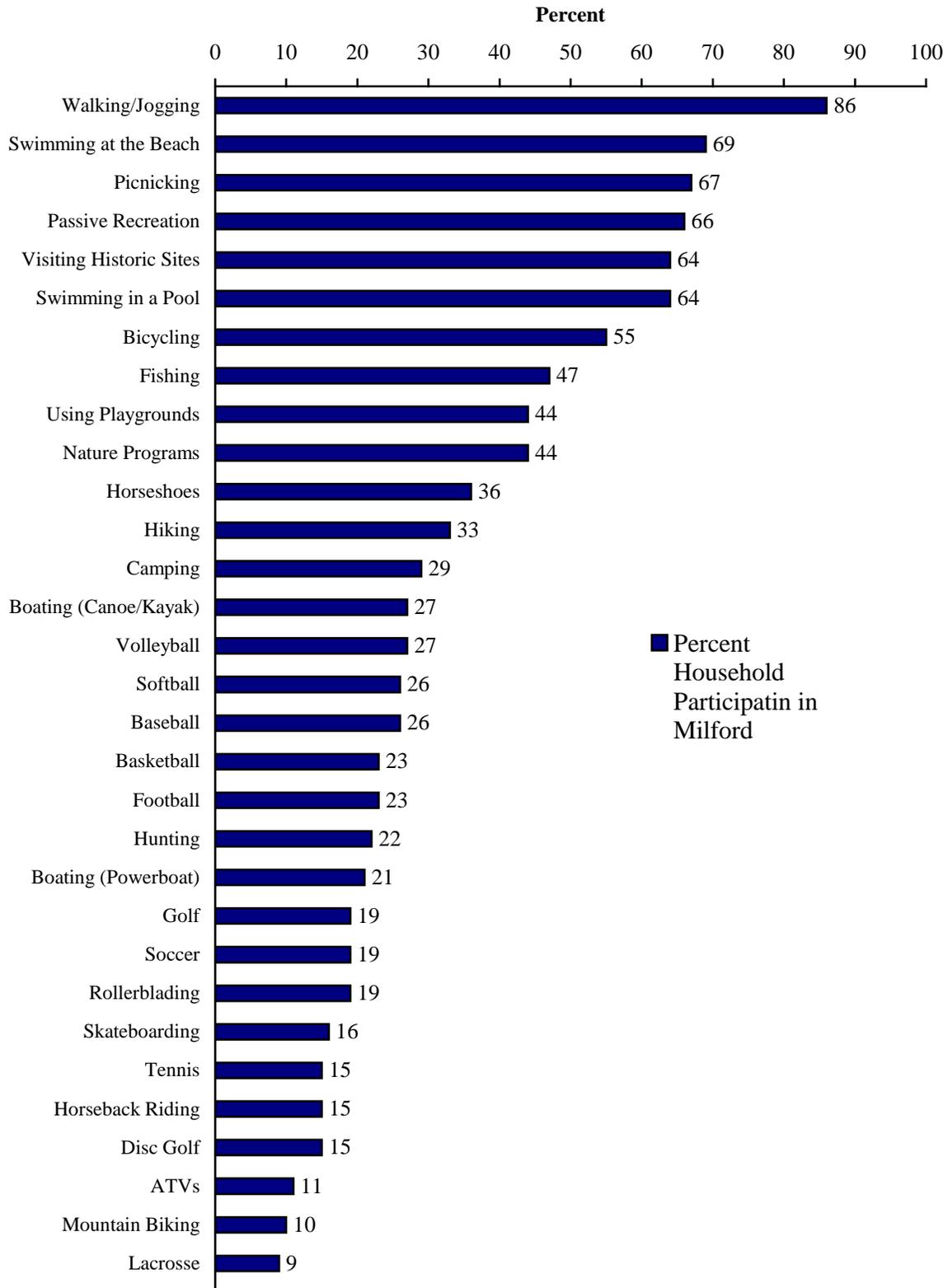
Source: 2008 Outdoor Recreation Participation and Trends Survey

**Chart 4.13- Household Participation in Dover**



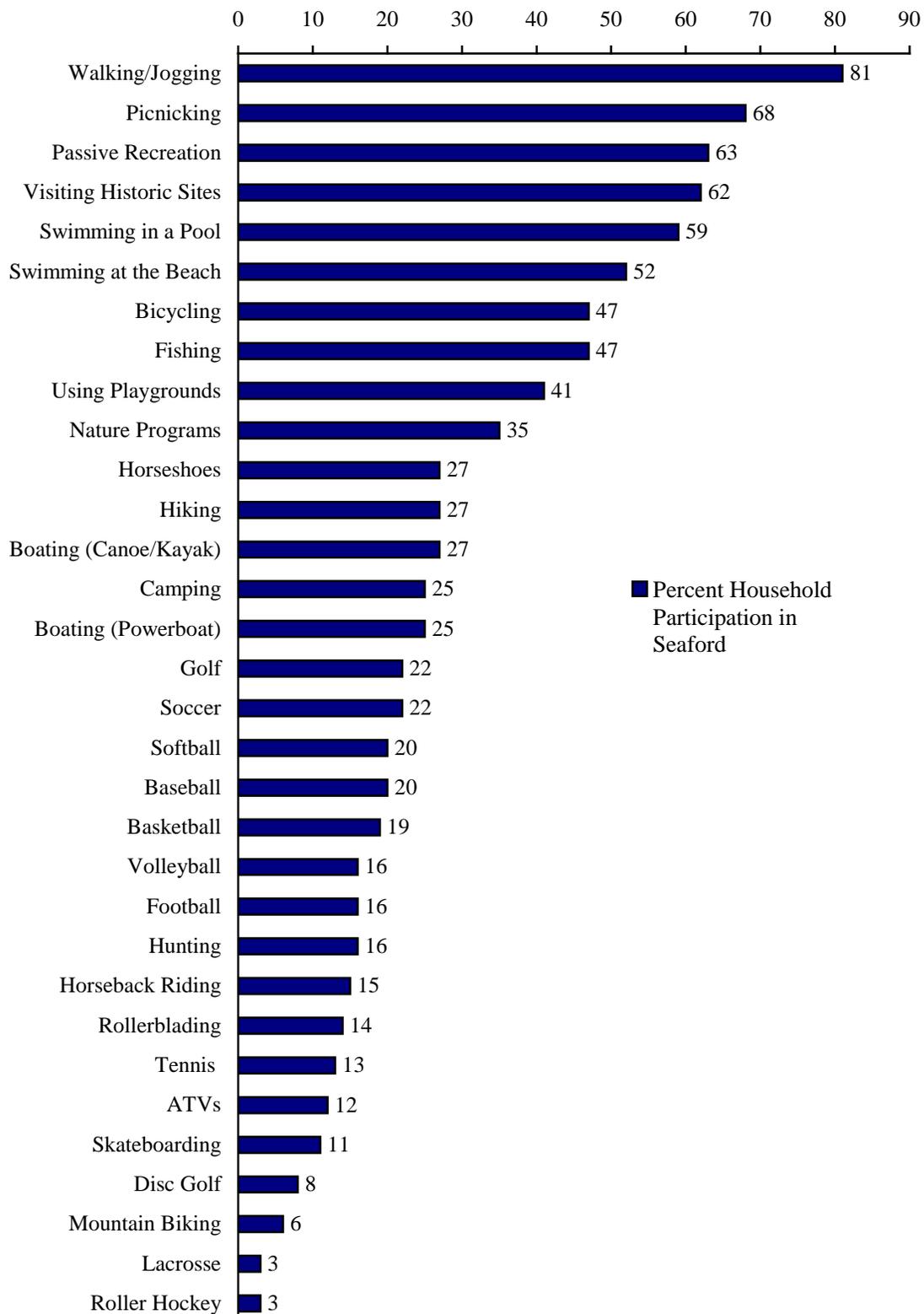
Source: 2008 Outdoor Recreation Participation and Trends Survey

**Chart 4.14- Household Participation in Milford**



Source: 2008 Outdoor Recreation Participation and Trends Survey

Chart 4.15- Household Participation in Seaford



Source: 2008 Outdoor Recreation Participation and Trends Survey

## Analysis of Outdoor Recreation Needs/Priorities

The principal purpose of the State Comprehensive Outdoor Recreation Plan is to address statewide outdoor recreation needs expressed by our residents. Looking at the supply of outdoor recreation areas and examining the public's preference and use patterns helps determine the needed outdoor recreation facilities, amenities, and enhancements. Priority facility needs analyses were conducted by region, by municipality and cumulatively for the state. This report highlights the public's participation in the SCORP planning process, and how the public's input was used to identify outdoor recreation facility needs.

During the 2008 Outdoor Recreation Participation and Trends Telephone Survey, respondents were asked if they would like to see facilities added to their community park. When the respondent's answer was yes, they were given the opportunity to identify specific facilities they would like to have available. Results from questions identifying household participation, personal participation, and added facilities were combined to demonstrate demand for specific outdoor recreation opportunities/facilities. Once ranked, this list was broken down to identify high, medium, and low priorities for outdoor recreation facilities. Because Delaware is such a small state, much of the public preference and attitude survey findings are meaningful statewide. However, variations in development density and population composition make it important to examine survey findings at a more concise geographical level.

The following tables represent the recommendations of this report resulting from the analysis of public facility needs and prioritize the need for outdoor recreation facilities by region. These regional rankings should guide future public investments made by local, county, and state agencies for the Federal Land and Water Conservation Fund, the Delaware Land and Water Conservation Trust Fund, and other sources of public or private funds invested in park land acquisition and outdoor recreation facility construction and management.

### Statewide Outdoor Recreation Facility Needs

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking/Jogging Paths	Nature Programs	Mountain Bike Trails
Bike Paths	Golf Courses	Equestrian Trails
Swimming Pools	Baseball/Softball Fields	Hunting Areas
Playgrounds	Basketball Courts	Disc Golf Courses
Beach Access	Campgrounds	ATV Trails
Open Space/Passive Recreation	Football Fields	Lacrosse Fields
Access to Historic Sites	Soccer Fields	Roller Hockey Areas
Picnic Areas	Canoe/Kayak Access	Dog Parks
Hiking Trails	Tennis Courts	Water Parks
Fishing Access	Powerboat Access	
	Volleyball Courts	
	Rollerblading/Rollerskating Areas	

### Region 1 Outdoor Recreation Facility Needs

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Golf Courses	Equestrian Trails
Bike Paths	Nature Programs	Powerboat Access
Playgrounds	Basketball Courts	Disc Golf Courses
Hiking Trails	Baseball/Softball Fields	Hunting Areas
Swimming Pools	Tennis Courts	ATV Trails
Access to Historic Sites	Soccer Fields	Lacrosse Fields
Open Space/Passive Recreation	Football Fields	Roller Hockey Areas
Picnic Areas	Camping Areas	Dog Parks
Beach Access	Kayak/Canoe Access	Water Parks
Fishing Areas	Volleyball Courts	
	Rollerblading/Rollerskating Areas	
	Mountain Bike Trails	
	Skate Parks	

### Region 2 Outdoor Recreation Facility Needs

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Golf Courses	Disc Golf Courses
Bike Paths	Camping Areas	ATV Trails
Swimming Pools	Soccer Fields	Lacrosse Fields
Beach Access	Canoe/Kayak Access	Roller Hockey Areas
Playgrounds	Nature Programs	Dog Parks
Access to Historic Sites	Basketball Courts	Water Parks
Picnic Areas	Powerboat Access	
Hiking Trails	Tennis Courts	
Open Space/Passive Recreation	Football Fields	
Fishing Areas	Rollerblading/Rollerskating Areas	
Baseball/Softball Fields	Volleyball Courts	
	Mountain Bike Trails	
	Skate Parks	
	Equestrian Trails	
	Hunting Areas	

**Region 3 Outdoor Recreation Facility Needs**

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Golf Courses	Mountain Biking Trails
Swimming Pools	Basketball Courts	ATV Trails
Bike Paths	Baseball/Softball Fields	Disc Golf Courses
Beach Access	Kayak/Canoe Access	Dog Parks
Access to Historic Sites	Powerboat Access	Lacrosse Fields
Open Space/Passive Recreation	Soccer Fields	Roller Hockey Areas
Fishing Areas	Football Fields	Water Parks
Playgrounds	Tennis Courts	
Picnic Areas	Volleyball Courts	
Hiking Trails	Hunting Areas	
Camping Areas	Rollerblading/Rollerskating Areas	
Nature Programs	Skate Parks	
	Equestrian Trails	

**Region 4 Outdoor Recreation Facility Needs**

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Hiking Trails	Tennis Courts
Swimming Pools	Camping Areas	Rollerblading/Rollerskating Areas
Open Space/Passive Recreation	Nature Programs	ATV Trails
Picnic Areas	Powerboat Access	Equestrian Trails
Playgrounds	Baseball/Softball Fields	Disc Golf Courses
Fishing Areas	Basketball Courts	Mountain Biking Trails
Bike Paths	Kayak/Canoe Access	Lacrosse Fields
Beach Access	Hunting Areas	Roller Hockey Areas
Access to Historic Sites	Football Fields	Dog Parks
	Soccer Fields	Water Parks
	Golf Courses	
	Volleyball Courts	
	Skate Parks	

### Region 5 Outdoor Recreation Facility Needs

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Powerboat Access	Volleyball Courts
Bike Paths	Nature Programs	Skate Parks
Beach Access	Golf Courses	Rollerblading/Rollerskating Areas
Swimming Pools	Kayak/Canoe Access	Equestrian Trails
Fishing Access	Camping Areas	ATV Trails
Open Space/Passive Recreation	Baseball/Softball Fields	Disc Golf Courses
Access to Historic Sites	Basketball Courts	Lacrosse Fields
Picnic Areas	Tennis Courts	Mountain Biking Trails
Playgrounds	Football Fields	Dog Parks
Hiking Trails	Soccer Fields	Roller Hockey Areas
	Hunting Areas	

The following tables represent the recommendations of this report resulting from the analysis of public facility needs and prioritize the need for outdoor recreation facilities within the oversampled municipalities. These rankings should guide future public investments made by each municipal agency for the Federal Land and Water Conservation Fund, the Delaware Land and Water Conservation Trust Fund, and other sources of public or private funds invested in park land acquisition and outdoor recreation facility construction and management. The following are comprehensive lists of all outdoor recreation facilities. There are limiting factors, such as municipal boundaries and geography, which may preclude municipal agencies from adding certain facilities.

### Wilmington Outdoor Recreation Facility Needs

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Nature Programs	Skate Parks
Swimming Pools	Baseball/Softball Fields	Disc Golf Courses
Bike Paths	Golf Courses	Powerboat Access
Picnic Areas	Football Fields	Equestrian Trails
Open Space/Passive Recreation	Tennis Courts	Lacrosse Fields
Access to Historic Sites	Soccer Fields	Hunting Areas
Beach Access	Camping Areas	Dog Parks
Playgrounds	Canoe/Kayak Access	ATV Trails
Hiking Trails	Volleyball Courts	Roller Hockey Areas
Fishing Access	Rollerblading/Rollerskating Areas	Water Parks
Basketball Courts	Mountain Bike Trails	

### Newark Outdoor Recreation Facility Needs

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Nature Programs	Skate Parks
Bike Paths	Basketball Courts	Powerboat Access
Hiking Trails	Baseball/Softball Fields	Equestrian Trails
Playgrounds	Camping Areas	Disc Golf Courses
Swimming Pools	Golf Courses	Lacrosse Fields
Open Space/Passive Recreation	Tennis Courts	Hunting Areas
Access to Historic Sites	Soccer Fields	ATV Trails
Beach Access	Canoe/Kayak Access	Roller Hockey Areas
Picnic Areas	Football Fields	Dog Parks
Fishing Access	Volleyball Courts	
	Mountain Bike Trials	
	Rollerblading/Rollerskating Areas	

**Milford Outdoor Recreation Facility Needs**

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Nature Programs	Golf Courses
Swimming Pools	Baseball/Softball Fields	Powerboat Access
Beach Access	Camping Areas	Hunting Areas
Open Space/Passive Recreation	Football Fields	Rollerblading/Rollerskating Areas
Picnic Areas	Basketball Courts	Skate Parks
Bike Paths	Canoe/Kayak Access	Equestrian Trails
Access to Historic Sites	Volleyball Courts	Disc Golf Courses
Playgrounds	Soccer Fields	ATV Trails
Fishing Access	Tennis Courts	Dog Parks
Hiking Trails		Mountain Bike Trails
		Lacrosse Fields
		Roller Hockey Areas

**Seaford Outdoor Recreation Facility Needs**

<b>High Priorities</b>	<b>Moderate Priorities</b>	<b>Low Priorities</b>
Walking or Jogging Paths	Nature Programs	Volleyball Courts
Picnic Areas	Powerboat Access	Hunting Areas
Open Space/Passive Recreation	Canoe/Kayak Access	Football Fields
Bike Paths	Camping	Equestrian Trails
Swimming Pools	Soccer Fields	Tennis Courts
Playgrounds	Golf Courses	Skate Parks
Access to Historic Sites	Baseball/Softball Fields	Rollerblading/ Rollerskating Areas
Beach Access	Basketball Courts	ATV Trails
Fishing Access		Disc Golf Courses
Hiking Trails		Mountain Bike Trails
		Dog Parks
		Roller Hockey Areas
		Lacrosse Fields
		Water Park

## Appendix

- A. Outdoor Recreation Inventory
- B. Phone Survey Methodology
- C. Phone Survey Instrument
- D. Demographic Data
- E. Phone Survey Comments
- F. Emergency Wetlands Act of 1986

## Appendix A

### Outdoor Recreation Inventory- New Castle County

Name	Management Agency	Use
Absalom Jones	New Castle County	Park
AI DuPont Natural Area	Delaware State Parks	Park
Alapocas Ball Fields	New Castle County	Park
Alapocas Run State Park	Delaware State Parks	Historical Site
Alban Park	New Castle County	Park
Albertson Park	New Castle County	Park
Anderson Property	New Castle County	Park
Appoquinimink River Nature Preserve	Delaware Wild Lands Inc	Natural Area
Ashland Nature Center	Delaware Nature Society	Natural Area
Auburn Heights	Delaware State Parks	Natural Area
Augustine Beach Access Area	State Fish and Wildlife	Wildlife Area
Augustine Creek	Delaware Wild Lands Inc	Natural Area
Augustine Wildlife Area	State Fish and Wildlife	Wildlife Area
Banning Park	New Castle County	Park
Barbara Hicks Playground	City of Wilmington	Park
Battery Park	Delaware City	Park
Bechtel Park	New Castle County	Park
Bellefonte Park	City of Bellefonte	Park
Bellevue	Delaware State Parks	Nature Preserve
Bicentennial Memorial Park	Town of Newport	Park
Biden Park	New Castle County	Park
Blackbird Reserve Wildlife Area	State Fish and Wildlife	Wildlife Area

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Name	Management Agency	Use
Bonsall Park	New Castle County	Park
Brandywine Creek	Delaware State Parks	Park
Brandywine Creek Valley Nature Preserve	Delaware State Parks	Nature Preserve
Brandywine Mills Park	City of Wilmington	Park
Brandywine Park	Delaware State Parks	Park
Brandywine Playground	City of Wilmington	Park
Brandywine Springs Park	New Castle County	Park
Bringhurst Woods	New Castle County	Natural Area
Brookfield	New Castle County	Park
Brown Park	City of Wilmington	Park
Brown-Burton Winchester Park	City of Wilmington	Park
Bryan Martin Park	City of Elsmere	Park
Buena Vista	Div of Historical and Cultural Affairs	Historical Site
Burrows Run Preserve	Delaware Nature Society	Nature Preserve
Buttonwood Park	City of New Castle	Park
C&D Canal Wildlife Area	State Fish and Wildlife	Wildlife Area
Calf Run North Park	New Castle County	Park
Calf Run South Park	New Castle County	Park
Camp Wright Acquisition	New Castle County	Active Recreation
Canby Park	City of Wilmington	Park
Canby Park West	City of Wilmington	Park
Castle Hills	New Castle County	Park
Cedar Swamp Wildlife Area	State Fish and Wildlife	Wildlife Area

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Name	Management Agency	Use
Chatham Park	New Castle County	Park
Chelsea Manor Park	New Castle County	Park
Christiana Village	New Castle County	Park
Christina Park	City of Wilmington	Park
Christina River Access Area	State Fish and Wildlife	Boat Ramp
Cleaver Farm Road Park	New Castle County	Park
Coleman Park	City of Newark	Park
Collins Park	New Castle County	Park
Collins Park Addition	New Castle County	Park
Conaty Park	City of Wilmington	Park
Connell Street Tot Lot	City of Wilmington	Park
Cool Spring Park	City of Wilmington	Park
Coventry Ridge Park	New Castle County	Park
Coverdale Park	City of Newark	Park
Dayette Mill	Div of Historical and Cultural Affairs	Historical Site
Dayette Mill	Div of Historical and Cultural Affairs	Historical Site
Deacons Walk Park	New Castle County	Park
Deerfield Golf and Tennis Club	Delaware State Parks	Active Recreation
Delamore Tot Lot	City of Wilmington	Park
Delaware City Athletic Fields	Delaware City	Park
Delaware City Community Center Playground	Delaware City	Park
Delaware Nature Society	Delaware Nature Society	Natural Area
Delcastle Recreation Area	Delaware State Parks	Park

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Name	Management Agency	Use
Delpark Manor Park	New Castle County	Park
Denn Place	New Castle County	Park
Devon Park	City of Newark	Park
District Park #4	New Castle County	Park
DNERRS	DNREC Division of Soil and Water	Natural Area
Dobbinsville Park	City of New Castle	Park
Dorothy Miller Park	City of Newark	Park
Dr. Foster M. Brown Pool	City of Wilmington	Active Recreation
Dragon Run Park	Delaware City	Park
Drew Elementary School	Christina School District	Park
Dugan Park	City of Wilmington	Park
Eagle Farms	State Fish and Wildlife	Wildlife Area
East 7th Street Park	City of Wilmington	Park
Eastlake Park/Playground	City of Wilmington	Park
Eastlawn	City of Wilmington	
Eden Park	City of Wilmington	Park
Edgebrook	New Castle County	Park
Edna C. Dickey Park	City of Newark	Park
Elbert Playground	City of Wilmington	Park
Ella Johnson Park	Town of Newport	Park
Elsmere Memorial Park	City of Elsmere	Park
Fairfield Crest Park	City of Newark	Park
Fairfield Park	City of Newark	Park
Fairgrounds Park	City of Elsmere	Park

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Name	Management Agency	Use
Father Tucker Memorial Park	City of Wilmington	Park
Faulkland Heights	New Castle County	Park
Flint Woods Nature Preserve	Delaware Nature Society	Nature Preserve
Flint Woods Nature Preserve	Delaware State Parks	Nature Preserve
Fort Casmir	City of New Castle	Park
Fort Delaware State Park	Delaware State Parks	Park
Fort DuPont State Park	Delaware State Parks	Park
Fox Point State Park	Delaware State Parks	Park
Freedom Tot Lot	City of Wilmington	Park
Fulton Street Tot Lot	City of Wilmington	Park
Garfield Park	New Castle County	Park
George M. Wilson Park	City of Newark	Park
George Read Park	City of Newark	Park
Gibraltar Gardens	Private Conservation	Historical Site
Glasgow Park	New Castle County	Park
Glen Bernie	New Castle County	Park
Glendale	New Castle County	Park
Glenville	New Castle County	Park
Gray Street Park	City of New Castle	Park
Greenbank Park	New Castle County	Park
Grendon Farms Park	New Castle County	Park
H. Fletcher Brown Boys Club	City of Wilmington	Active Recreation
H. Fletcher Brown Park	Delaware State Parks	Park
H.B. DuPont Park	City of Wilmington	Park

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Name	Management Agency	Use
H.M. Holloway Sr. Park	City of Wilmington	Park
Harrison Street Triangle Park	City of Wilmington	Park
Haynes Park	City of Wilmington	Park
Heald & B Tot Lot	City of Wilmington	Park
Helen Chambers Playground	City of Wilmington	Park
Heritage Park	New Castle County	Park
Hidden Valley Park	City of Newark	Park
Hobbs easement	County	Natural Area
Holloway Terrace Park	New Castle County	Park
Holly Oak Creek Park	City of Ardencroft	Park
Hyde Park	New Castle County	Park
Iron Hill Park/Playground	New Castle County	Park
James R. McCoy Park	City of Wilmington	Park
Jefferson Farms	New Castle County	Park
Jefferson Farms	New Castle County	Park
Jennie Weaver Playground	City of Wilmington	Park
Johnston Playground	City of Wilmington	Park
Joseph R. Walling Park	City of Elsmere	Park
Judy Johnson Park	City of Wilmington	Park
Junction Park	City of Elsmere	Park
Karpinski Park	City of Newark	Park
Kells Park	City of Newark	Park
Kershaw Park	City of Newark	Park
Kiamensi Garden	New Castle County	Park

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Name	Management Agency	Use
Kimberton Park	New Castle County	Park
Kingscroft	New Castle County	Park
Kingswood Community Center	City of Wilmington	Active Recreation
Kirkwood Park	City of Wilmington	Park
Klair Estates	New Castle County	Park
Kosciuszko Park	City of Wilmington	Park
Kruse Playground	City of Wilmington	Park
Lake Street Park	City of Middletown	Park
Leroy Hill Park	City of Newark	Park
Lewden-Green	New Castle County	Park
Lewis Park	City of Newark	Park
Lindell	New Castle County	Park
Linden Heath	New Castle County	Park
Llangollen Park	New Castle County	Park
Lombard & 4th Tot Lot		Park
Lumbrook Park	City of Newark	Park
Lums Pond State Park	Delaware State Parks	Park
Mack Park	City of Wilmington	Park
Madison Street Playground	City of Wilmington	Park
Madison Street Tot Lot	City of Wilmington	Park
Maple Avenue Park	City of Elsmere	Park
Marbrook	New Castle County	Park
Marshallton Heights	New Castle County	Park
McKees Park	City of Newark	Park

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Name	Management Agency	Use
Michaels Playground	City of Wilmington	Park
Middle Run Valley Natural Area	New Castle County	Natural Area
Middletown Nature Area	City of Middletown	Natural Area
Middletown Nature Area	City of Middletown	Natural Area
Middletown Village Park	City of Middletown	Park
Montclare	New Castle County	Park
Montgomery Tot Lot	City of Wilmington	Park
Municipal Openspace	City of Newark	Park
Naamans Little League	New Castle County	Active Recreation
New Castle Battery Park	City of New Castle	Park
New Castle Common	Div of Historical and Cultural Affairs	Historical Site
New Castle Entrance Park	City of New Castle	Park
Newark Reservoir	City of Newark	Park
Norma B. Handoff Park	City of Newark	Park
Northern View	Delaware State Parks	Nature Preserve
Oakmont Park	New Castle County	Park
Odessa Access Area	State Fish and Wildlife	Boat Ramp
Odessa Memorial Park	Town of Odessa	Park
Olan Thomas Park	City of Newark	Park
Old Academy Park	Town of Odessa	Park
Old Paper Mill Road Park	City of Newark	Park
Oliver Golf Course	City of Wilmington	Active Recreation
Ommelanden Hunter Education Center	State Fish and Wildlife	Wildlife Area

## Appendix A

Name	Management Agency	Use
Orville Clark Park	City of Newark	Park
Oversee Property	Delaware State Parks	Park
Overview Garden	New Castle County	Park
Paper Mill Park	New Castle County	Park
Paper Mill Property	City of Newark	Park
Park Place Park	City of Newark	Park
Park View Open Space	City of Newark	Park
Penn Acres	New Castle County	Park
Penn Valley Park	City of New Castle	Park
Pennwood	New Castle County	Park
Phillips Park	City of Newark	Park
Pleasant Hills	New Castle County	Park
Port Penn Interpretive Center	Delaware State Parks	Historical Site
Powell Ford Park	New Castle County	Park
Prestwick	New Castle County	Park
Prior Road Park	New Castle County	Park
Rahway Park	City of Newark	Park
Red Creek Acres	New Castle County	Park
Richardson Park	New Castle County	Park
Rittenhouse Park	City of Newark	Park
River Road Park	New Castle County	Park
Robinson House	Div of Historical and Cultural Affairs	Historical Site
Rock Manor Golf Course	City of Wilmington	Active Recreation
Rockford Park	City of Wilmington	Park

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Name	Management Agency	Use
Rockwood Museum	New Castle County	Historical Site
Rodney & 3rd Tot Lot	City of Wilmington	Park
Rodney & 4th Tot Lot	City of Wilmington	Park
Rodney & 5th Tot Lot	City of Wilmington	Park
Rogers Manor	New Castle County	Park
Rolling Hills Park	New Castle County	Park
Rose Hill	New Castle County	Park
Rosegate Park	New Castle County	Park
Rothwell	New Castle County	Park
Rutledge	New Castle County	Park
Sellers Park	City of Wilmington	Park
Seventh Street Park	Delaware City	Park
Sheets and Grau	State Fish and Wildlife	Wildlife Area
Sherwood Park	New Castle County	Park
Silver Lake School Park		Park
Simonds Gardens Park	New Castle County	Park
Soldiers & Sailors Monument	City of Wilmington	Historical Site
Speakman Park	City of Wilmington	Park
Stafford Park	City of Newark	Park
Stapler Park	City of Wilmington	Park
Stoney Davis Park	City of Wilmington	Park
Sunnyside Tract-Naamans Creek	City of Ardentown	Nature Preserve
Sunset Lake	Delaware State Parks	Natural Area
Surratte Park	New Castle County	Park

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Name	Management Agency	Use
Surrey Park	New Castle County	Park
Swanwyck Estates	New Castle County	Park
Swift Park	New Castle County	Park
Talley Day Park	New Castle County	Park
Tatnall Playground	City of Wilmington	Park
Taylor's Bridge	Delaware Wild Lands Inc	Natural Area
Taylorstowne Open Space	New Castle County	Park
The Herring Property	New Castle County	Historical Site
Town Hall Park	City of Elsmere	Park
Townsend	City of Townsend	Park
Townsend Community Park	Town of Townsend	Park
Townsend Elementary Playground	City of Townsend	Park
Tuxedo Park	New Castle County	Park
Valley Garden Park	City of Wilmington	Park
Valley Stream - White Clay Open Space	City of Newark	Park
Van Dyke Park	City of New Castle	Park
Village Circle Park	Town of Elsmere	Park
Vilone Park	City of Elsmere	Park
Weldin Park	New Castle County	Park
Westview Park	New Castle County	Park
White Chapel Park	City of Newark	Park
White Clay Creek State Park	Delaware State Parks	Park
William "Hicks" Anderson Community Center	City of Wilmington	Park
William M. Redd, Jr. Park	City of Newark	Park

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Name	Management Agency	Use
Wilmington Historic Trail	City of Wilmington	Historical Site
Wilmington Manor Gardens	New Castle County	Park
Wilmington Municipal Piece	City of Wilmington	Park
Wollaston Street Tot Lot	City of Wilmington	Park
Wood Mill	New Castle County	Park
Woodlawn Park	City of Wilmington	Park
Woodshaven Kruse Park	New Castle County	Park
Young Street Park	New Castle County	Park

## Outdoor Recreation Inventory- Kent County

Name	Management Agency	Use
Andrews Lake & Access	State Fish and Wildlife	Wildlife Area
Big Oak Park	Kent County	Park
Blackbird State Forest	Delaware Forest Service	State Forest Lands
Blackiston Wildlife Area	State Fish and Wildlife	Wildlife Area
Blairs Pond & Access	State Fish and Wildlife	Wildlife Area
Bombay Hook National Wildlife Refuge	US Fish and Wildlife Service	Wildlife Area
Bowers Beach Access Area	State Fish and Wildlife	Boat Ramp
Brecknock Park	Kent County	Park
Browns Branch County Park	Kent County	Park
Camden-Wyoming Little League	Camden-Wyoming	Active Recreation
Capitol Park Open Space	Kent County	Park
Carlisle Village Open Space	Kent County	Wildlife Area

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Name	Management Agency	Use
Clayton Community Park	Town of Clayton	Park
Constitution Park	City of Dover	Park
Courseys Pond & Access	State Fish and Wildlife	Wildlife Area
Crossgates Park	City of Dover	Park
Derby Pond & Access	State Fish and Wildlife	Wildlife Area
Dover Park	City of Dover	Park
Duck Creek Impoundment	State Fish and Wildlife	Wildlife Area
Felton Little League Park	Town of Felton	Park
First State BMX Facility	City of Milford	Active Recreation
Fortney Tract	State Fish and Wildlife	Wildlife Area
Garrisons Lake & Access	State Fish and Wildlife	Wildlife Area
Garrisons Lake Golf Course	Delaware State Parks	Active Recreation
Goat Island Nature Area	City of Milford	Natural Area
Green Branch Trail	Town of Smyrna	Park
Griffith Lake & Access Area	State Fish and Wildlife	Wildlife Area
Haven Lake & Access	State Fish and Wildlife	Wildlife Area
Heritage Park	City of Harrington	Park
Hunn Property	Kent County	Historical Site
Isaacs Branch Greenway Path	Kent County	Park
James Vaughn Memorial Park		Park
John Dickinson Plantation	Division of Historical and Cultural Affairs	Historical Site
Johnson Memorial Park	Town of Wyoming	Park
Kenton Municipal Park	Town of Kenton	Park

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Name	Management Agency	Use
Kesselring Property	Kent County	Park
Killens Pond	Delaware State Parks	Park
Lake Como Park	Town of Smyrna	Park
Lebanon Landing	State Fish and Wildlife	Boat Ramp
Leg. Green Park	City of Dover	Park
Leipsic Municipal Playground	Town of Leipsic	Park
Little Creek Park	Town of Little Creek	Park
Little Creek Wildlife Area	State Fish and Wildlife	Wildlife Area
Masseys Pond & Access Site	State Fish and Wildlife	Wildlife Area
Mayfair Park	City of Dover	Park
McCauleys Pond	State Fish and Wildlife	Wildlife Area
McGinnis Pond & Access	State Fish and Wildlife	Wildlife Area
Memorial Park	City of Dover	Park
Milford Neck	The Nature Conservancy	Natural Area
Milford Neck	Delaware Wildlands, Inc.	Natural Area
Milford Youth Sports Complex	City of Milford	Activer Recreation
Moore's Lake & Access	State Fish and Wildlife	Wildlife Area
Mud Mill Pond & Access Site	State Fish and Wildlife	Wildlife Area
Murderkill River, Burton-Derri	Delaware State Parks	Nature Preserve
NE Front Street Rec. Area	City of Milford	Park
New Street Park	City of Dover	Park
Norman G. Wilder Wildlife Area	State Fish and Wildlife	Wildlife Area
North Bowers Beach Community Park	Town of Bowers Beach	Park

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Name	Management Agency	Use
North Dover Athletic Complex	City of Dover	Active Recreation
Port Mahon Access & Fishing Area	State Fish and Wildlife	Wildlife Area
Port Mahon Open Space	The Nature Conservancy	Natural Area
School Lane Park	Town of Cheswold	Park
Schutte Park	City of Dover	Park
Scottons Landing Access Area	State Fish and Wildlife	Wildlife Area
Silver Lake Recreation Area	City of Dover	Park
Silver Lake, Milford	State Fish and Wildlife	Wildlife Area
Smyrna Municipal Park	Town of Smyrna	Park
St. Jones Reserve	DNREC Division of Soil and Water	Natural Area
St. Jones River Access	State Fish and Wildlife	Park
St. Jones River Greenway	City of Dover	Natural Area
Sunshine Builders Tract	State Fish and Wildlife	Wildlife Area
Taber Forest	Delaware Forest Service	State Forest Lands
Ted Harvey Conservation Area	State Fish and Wildlife	Wildlife Area
The Nature Conservancy	The Nature Conservancy	Natural Area
Tidbury Park	Kent County	Park
Tub Mill Pond & Access	State Fish and Wildlife	Wildlife Area
Turner Drive Park	City of Dover	Park
Urban Tract	State Fish and Wildlife	Wildlife Area
Woodland Beach Wildlife Area	State Fish and Wildlife	Wildlife Area
Wyoming Park	Town of Wyoming	Park

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### Outdoor Recreation Inventory- Sussex County

Name	Management Agency	Use
1812 Memorial Park	Lewes	Park
Abbotts Pond & Access Site	State Fish and Wildlife	Wildlife Area
Alfred A. Stango Park	Lewes	Park
Angola Neck Nature Preserve	Delaware State Parks	Nature Preserve
Assawoman Canal	Delaware State Parks	Natural Area
Assawoman Wildlife Area	State Fish and Wildlife	Wildlife Area
Barnes Woods	Private Conservation	Nature Preserve
Beach Plum Island Nature Preserve	Delaware State Parks	Nature Preserve
Bethel Memorial Park	Town of Bethel	Park
Bicentennial Park	City of Milford	Park
Blackwater Creek Preserve	Private Conservation	Nature Preserve
Blades Marina	State of Delaware	Boat Ramp
Blades Public Park	City of Seaford	Park
Blades Triangle Park	City of Seaford	Park
Blockhouse Pond Park	Lewes	Park
Bluff Point	State Fish and Wildlife	Wildlife Area
Brenda Jones Memorial Park	Town of Greenwood	Park
Bridgeville Community Playground	Bridgeville	Park
Bridgeville Little League Park	Bridgeville	Park
Bridgeville Museum & Park	Bridgeville	Park
Broadkill Canoe & Pedestrian Trail	The Nature Conservancy	Natural Area
Burton Tract	Sussex County Land Trust	Natural Area
Canal Front Park	Lewes	Park

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Name	Management Agency	Use
Cedar Creek Access Area	State Fish and Wildlife	Wildlife Area
Cedar Creek Nature Preserve	Delaware State Parks	Nature Preserve
Central Park	City of Rehoboth	Park
Chipman Pond & Access Site	State Fish and Wildlife	Wildlife Area
Concord Pond & Access Site	State Fish and Wildlife	Wildlife Area
Craigs Pond & Access Site	State Fish and Wildlife	Wildlife Area
Cranberry Park	City of Rehoboth	Park
Cupola Park	Town of Millsboro	Park
Deauville Beach	City of Rehoboth	Park
Deer Park	City of Rehoboth	Park
Delaware Seashore State Park	Delaware State Parks	Park
Delaware Wild Lands	Delaware Wildlands, Inc.	Natural Area
Delaware Wild Lands	Delaware Wild Lands, Inc	Natural Area
Delmar Park - State Street	Town of Delmar	Park
Dewey Beach Access	Town of Dewey Beach	Park
Doe Bridge Nature Preserve	Div of Historical and Cultural Affairs	Nature Preserve
Doe Bridge Nature Preserve	Delaware State Parks	Nature Preserve
Ellendale Town Park	Town of Ellendale	Park
Fenwick Island State Park	Delaware State Parks	Park
Fenwick Island Town Beach	Town of Fenwick Island	Park
Fenwick Island Town Park	Town of Fenwick Island	Park
Fisher Tract	The Nature Conservancy	Natural Area
Fleetwood Pond	State Fish and Wildlife	Wildlife Area
Frankford Community Park	Town of Frankford	Park

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Name	Management Agency	Use
Franklin Square Park	City of Milford	Park
Fresh Pond	Delaware State Parks	Park
Governors Walk - Mill Alley	Town of Milton	Park
Governors Walk Park	Town of Milton	Park
Great Cypress Swamp	Delaware Wildlands, Inc.	Historical Site
Grove Park	City of Rehoboth	Park
Hearns Pond & Access	State Fish and Wildlife	Wildlife Area
Henlopen Acres Marina	Town of Henlopen Acres	Boat Ramp
Holts Landing State Park	Delaware State Parks	Park
Horseys Pond & Access Site	State Fish and Wildlife	Wildlife Area
Ingram Pond & Access Site	State Fish and Wildlife	Wildlife Area
Issacs	Delaware Nature Society	Nature Preserve
James Branch Nature Preserve	Delaware State Parks	Nature Preserve
John T. West Jr. Park	Town of Ocean View	Park
John Waples Memorial Playground	Town of Dewey Beach	Park
Katie Helm Park	Town of Dagsboro	Park
Kimmey Park	Town of Georgetown	Park
Kiwanis Park	City of Seaford	Park
Lake Gerar Park	City of Rehoboth	Park
Laurel Basketball - Playlot	City of Laurel	Park
Laurel Little League Park	City of Laurel	Park
Laurel River Park	Town of Laurel	Park
Laurel Street Park	City of Rehoboth	Park
Layton Park	Georgetown	Park

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Name	Management Agency	Use
Lee Street Park	City of Rehoboth	Park
Lewes Access Area	Lewes	Boat Ramp
Lewes Beach	Lewes	Park
Lewes Boat Yard	Lewes	Boat Ramp
Library Park	Greenwood	Park
Lighthouse Park	City of Rehoboth	Park
Love Creek Fishing Access Site	State Fish and Wildlife	
Market Street Square Park	Town of Laurel	Park
Marshalls Pond Park	City of Milford	Park
Marshyhope Wildlife Area	State Fish and Wildlife	Wildlife Area
Mary Vessels Park	Lewes	Park
Masseys Landing Access Area	State Fish and Wildlife	Wildlife Area
Masten Park	City of Milford	Park
Midlands Wildlife Area	State Fish and Wildlife	Wildlife Area
Milford Athletic Complex	City of Milford	Park
Milford Memorial Park South	City of Milford	Park
Milford Neck Wildlife Area	Delaware Nature Society	Wildlife Area
Millsboro Pond & Access Site	State Fish and Wildlife	Wildlife Area
Milton Governors Walk	Town of Milton	Park
Milton Memorial Park	Town of Milton	Park
Milton Rail - Trail	Town of Milton	Park
Misphillion Riverwalk	City of Milford	Park
Nanticoke - Middleford North	The Nature Conservancy	Natural Area
Nanticoke River Watershed Conservancy	Nanticoke River Watershed Conservancy	Natural Area

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Name	Management Agency	Use
Nanticoke River Watershed Conservancy	Nanticoke River Watershed Conservancy	Natural Area
Nanticoke River Watershed Conservancy	Nanticoke River Watershed Conservancy	Natural Area
Nanticoke Wildlife Area	State Fish and Wildlife	Wildlife Area
Newton Pond	State Fish and Wildlife	Wildlife Area
Nutter Park	City of Seaford	Park
Old Furnace Wildlife Area	State Fish and Wildlife	Wildlife Area
Peninsula	Sussex County Land Trust	Wildlife Area
Pepper Tract	State Fish and Wildlife	Wildlife Area
Portsville Pond & Access Site	State Fish and Wildlife	Wildlife Area
Prime Hook National Wildlife Refuge	State Fish and Wildlife	Wildlife Area
Prime Hook Wildlife Area	State Fish and Wildlife	Wildlife Area
Raccoon Pond	State Fish and Wildlife	Wildlife Area
Railroad Park	Town of Delmar	Park
Records Pond & Access Site	State Fish and Wildlife	Wildlife Area
Redden State Forest	Delaware Forest Service	State Forest Lands
Redden State Forest	Delaware Forest Service	State Forest Lands
Redden State Forest - Headquarters Tract	Delaware Forest Service	State Forest Lands
Rehoboth Beach	City of Rehoboth	Park
Rehoboth Beach Boardwalk	City of Rehoboth	Park
Riverview Park	City of Seaford	Park
Rosa Street Park	Town of Georgetown	Park
Rosedale Beach & Access Area	State Fish and Wildlife	Wildlife Area
Seaford Canoe Launch	City of Seaford	Boat Ramp

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Name	Management Agency	Use
Seaford Community Pool	City of Seaford	Active Recreation
Seaford Gateway	City of Seaford	Park
Seaford Riverwalk	City of Seaford	Park
Seaford Sports Complex	City of Seaford	Active Recreation
Selbyville Recreation Park	Town of Selbyville	Park
Silver Lake Park	City of Milford	Park
Silver Lake Park, Rehoboth	City of Rehoboth	Park
Simpler/Bendel Tract	The Nature Conservancy	Natural Area
Slaughter Beach Community Park	Town of Slaughter Beach	Park
Soroptimist Park	City of Seaford	Park
South Bethany Beach	Town of South Bethany	Wildlife Area
South Bethany Community Park	Town of South Bethany	Park
Sowbridge Branch Nature Preserve	Private Conservation	Nature Preserve
Stockley Center	Delaware Health and Social Services	Nature Preserve
Surfside Park	City of Rehoboth	Park
The Nature Conservancy	The Nature Conservancy	Natural Area
The Nature Conservancy	The Nature Conservancy	Natural Area
The Nature Conservancy	The Nature Conservancy	Natural Area
Thompson Island Preserve	Delaware State Parks	Nature Preserve
Trap Pond State Park	Delaware State Parks	Park
Tunnell Tract	The Conservation Fund	Natural Area
Tussock Pond & Access Site	State Fish and Wildlife	Boat Ramp
W. Sussex Boys & Girls Club		Active Recreation

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Name	Management Agency	Use
W.B. Atkins Memorial Park	Town of Millsboro	Park
Wagamons Pond & Access Site	State Fish and Wildlife	Wildlife Area
Waples Pond	State Fish and Wildlife	Wildlife Area
Webb Avenue Basketball Court	Town of Laurel	Historical Site
West Delmar Playground	Town of Delmar	Park
Williams Pond Park	City of Seaford	Park
Zwaanendael Park	Lewes	Park

## Appendix B

### Phone Survey Methodology

This study was conducted for the Delaware Department of Natural Resources and Environmental Control, Division of Parks and Recreation (hereinafter referred to as ‘the Division’), to assess Delaware residents’ participation in outdoor recreation, the locations in which they participate, their opinions on the state’s management of outdoor recreation, and their opinions on various environmental issues affecting the state. The study entailed a telephone survey of Delaware residents 16 years old and older.

For the survey, telephones were selected as the preferred sampling medium because of the universality of telephone ownership. In addition, a central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation. The telephone survey questionnaire was developed cooperatively by Responsive Management and the Division. Responsive Management conducted a pre-test of the questionnaire to ensure proper flow, logic, and wording.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted project briefings with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey instrument, reading of the survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers’ knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent

## Appendix B

could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day.

The survey was conducted in May and June 2008. Responsive Management obtained a total of 1,940 completed interviews that were used in the statewide and regional results. An additional 239 completed interviews were obtained for the data used in the analysis by selected municipalities (discussed shortly). In total, Responsive Management collected 2,179 completed interviews.

The software used for data collection was Questionnaire Programming Language 4.1 (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey instrument was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection. The analysis of data was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management.

### Data Analysis

For all statewide results, the data were weighted so that the proportions of the sample among the state's regions matched the distribution of the state's population in those regions. In other words, the results were weighted so that 55.2% of the sample was from the North New Castle County region, which matches the state population, 55.2% of which reside in that region. The tabulation below shows the weighting factors.

#### Weighting Factors:

Region	Actual Sample	Proportion of Total Sample	Weighting Factor	Weighted Proportion of Sample	Population Proportion in the Region
North New Castle	388	19.38	2.762	55.2	55.2
South New Castle	402	20.98	0.415	8.6	8.6
Kent	384	19.74	0.817	16.2	16.2
West Sussex	386	19.90	0.412	8.2	8.2
East Sussex	380	19.59	0.602	11.8	11.8
Total	1,940				

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The results of the study are presented for the state as a whole, as well as by the five regions shown in the preceding map. Additionally, a separate data analysis for all questions was conducted based on five municipalities: Newark, Wilmington, Dover, Milford and Seaford. An oversampling of respondents within these municipalities ensured that sample sizes were sufficient for analyses. The sample sizes for the municipalities is shown in the tabulation below.

### Sample Sizes for Municipalities:

Municipality	Number from Statewide Survey	Number from Oversampling	Total Sample Size for municipal analysis
Newark	157	50	207
Wilmington	181	50	231
Dover	158	36	194
Milford	84	53	137
Seaford	136	50	186
Total	716	239	955

# Appendix C

## Phone Survey Instrument

Responsive Management Inc. is a Virginia-based public opinion polling and survey research firm specializing in natural resources, fisheries, wildlife, outdoor recreation and environmental issues. This study was conducted for the Delaware Department of Natral Resources and Environmental Control, Division of Parks and Recreation to assess Delaware residents' (16 years and older) outdoor recreation patterns, trends, and their future outdoor recreation needs. The study entailed a telephone survey of 2,179 Delaware residents. Telephones were selected as the preferred sampling medium because nearly all residents of Delaware have a telephone. The data were collected using Questionnaire Programming Language 4.1 (QPL), which is computer software specifically for telephone survey data collection. Surveys were conducted with scientific rigor according to the standards of the Council of American Survey Research Organizations

The survey focused on a number of issues facing the future of outdoor recreation in the state including competition for recreational resources, changing land use patterns, and funding for operation and maintenance of recreation resources. The survey narrative and questions are below.

Hello, my name is \_\_\_\_\_, and I'm calling on behalf of the state and local recreation agencies to ask some questions about outdoor recreation in Delaware. I am not selling anything and your answers will be kept strictly confidential. Your responses will be used to determine the future plans for outdoor recreation facilities and resources in Delaware. To be most accurate, may I speak with someone in the household who is 16 years of age or older?

For this survey, outdoor recreation includes any activity that takes place in a park, playground, or other outdoor environment. Examples might include, but are not limited to: walking, roller skating, boating, hiking, team sports, or nature activities.

Q8. In general, how important is outdoor recreation in Delaware to you personally?

1. Very important
2. Somewhat important
3. Not at all important
4. Don't know

## Appendix C

Q12. Now I'm going to read you a list of outdoor recreation activities. Please tell me if you expect any member of your household, including yourself, to participate in each activity in Delaware during the next 12 months. (Read List, check all that apply)

1. All-Terrain Vehicle Use (ATVs)
2. Baseball
3. Basketball
4. Bicycling
5. Boating (by canoe or kayak)
6. Boating (by power boat)
7. Camping
8. Disc Golf
9. Fishing
10. Football
11. Golf
12. Hiking
13. Horseback riding
14. Horseshoes
15. Hunting
16. Lacrosse
17. Mountain Biking
18. Participating in nature programs
19. Passive rec. in the outdoors (birding/painting/enjoying nature)
20. Picnicking
21. Rollerblading/Roller Skating
22. Roller Hockey
23. Skateboarding
24. Soccer
25. Softball
26. Swimming at the beach
27. Swimming in a pool
28. Tennis
29. Using playgrounds
30. Visiting historic sites
31. Volleyball
32. Walking or jogging
33. Don't Know

Q21-22 Other Activity? \_\_\_\_\_

## Appendix C

Q24, Q28, Q33 In which three activities did you personally participate in most often in the past 12 months?

1. All-Terrain Vehicle Use (ATVs)
2. Baseball
3. Basketball
4. Bicycling
5. Boating (by canoe or kayak)
6. Boating (by power boat)
7. Camping
8. Disc Golf
9. Fishing
10. Football
11. Golf
12. Hiking
13. Horseback riding
14. Horseshoes
15. Hunting
16. Lacrosse
17. Mountain Biking
18. Participating in nature programs
19. Passive rec. in the outdoors (birding/painting/enjoying nature)
20. Picnicking
21. Rollerblading/Roller Skating
22. Roller Hockey
23. Skateboarding
24. Soccer
25. Softball
26. Swimming at the beach
27. Swimming in a pool
28. Tennis
29. Using playgrounds
30. Visiting historic sites
31. Volleyball
32. Walking or jogging
33. Don't Know

Q47 Overall, how would you rate the facilities available to you in YOUR COMMUNITY for participating in your first activity?

1. Excellent
2. Good
3. Fair
4. Poor
5. Don't know

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Q48 Overall, how would you rate the facilities available to you in THE STATE OF DELAWARE for participating in your first activity?

1. Excellent
2. Good
3. Fair
4. Poor
5. Don't know

Q49 Overall how would you rate the facilities available to you in YOUR COMMUNITY for participating in your second activity?

1. Excellent
2. Good
3. Fair
4. Poor
5. Don't know

Q50 Overall how would you rate the facilities available to you in THE STATE OF DELAWARE for participating in your second activity?

1. Excellent
2. Good
3. Fair
4. Poor
5. Don't know

Q51 Overall how would you rate the facilities available to you in YOUR COMMUNITY for participating in your third activity?

1. Excellent
2. Good
3. Fair
4. Poor
5. Don't know

Q52 Overall how would you rate the facilities available to you in THE STATE OF DELAWARE for participating in your third activity?

1. Excellent
2. Good
3. Fair
4. Poor
5. Don't know

## Appendix C

Q55 Now please tell me the MOST IMPORTANT reasons you participate in outdoor recreation activities in Delaware. (No Not Read List, Check all that apply)

1. I live close to a park
2. I work close to a park
3. It is affordable
4. To be with family and friends
5. To spend time by myself
6. To enjoy the scenery
7. For my mental well being
8. For my physical fitness
9. For relaxation
10. For the challenge
11. To be close to nature
12. Because of the variety of opportunities available in Delaware
13. Don't know

Q56 Other Reason \_\_\_\_\_

Now I'd like to know a little about where you participate in outdoor recreation activities. First, I'm going to ask you about the top three public outdoor recreation areas you visit most frequently.

Q59 What is the first public outdoor recreation area you visit most frequently?

Q60. What county is this first area in?

Q62 What is the second public outdoor recreation area you visit most frequently?

Q63 What county is this second area in?

Q65 What is the third public outdoor recreation area you visit most frequently?

Q66 What county is this third area in?

Q69 Thinking about the public outdoor recreation area you visited the most, what are the main reasons you chose this area? (Do not read list, check all that apply).

1. Live close by
2. Work close by
3. No other parks in the area
4. Aesthetics/like the look of it
5. It has facilities for activities of interest
6. It has facilities for children
7. It has convenient hours

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8. Friendly/knowledgeable staff
9. Clean
10. Safe
11. Other
12. Don't know

Q70 Other reason \_\_\_\_\_

Q71 And thinking about the area you visited the most, approximately how many miles from your home is this area located?

Q75 How do you usually get to the area you visit the most? (Do not read list, check only one answer)

1. Walk/Jog
2. Bike
3. Automobile
4. Motorcycle
5. Public transportation
6. Don't know

Q76 Other means of travel \_\_\_\_\_

Q77 What is the main reason you do not walk, jog, or ride a bike to the area that you visit most?

Now, I would like to know specifically about outdoor recreation in or near your neighborhood.

Q79 Do you agree or disagree with the following statement: There are bicycle or walking trails in or near my neighborhood that are EASY to get to.

1. Strongly agree
2. Moderately agree
3. Neither agree nor disagree
4. Moderately disagree
5. Strongly disagree
6. (DNR) Don't know

Q80 Do you walk, jog, or ride a bike in your neighborhood?

1. Yes
2. No
3. Don't Know

Q81 What are the primary reasons you do not walk, jog, or ride a bike in your neighborhood?

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Q82 Do you agree or disagree with the following statement: There are parks and/or outdoor recreation areas in or near my neighborhood that are EASY to get to. (check only one answer)

1. Strongly agree
2. Moderately agree
3. Neither agree nor disagree
4. Moderately disagree
5. Strongly disagree
6. Don't Know

Q83 Do the parks and/or outdoor recreation areas in or near your neighborhood include the public outdoor recreation area you visit the most? (check only one answer)

1. Yes
2. No
3. Don't Know

Q84 Previously you indicated that you usually get to the public outdoor recreation area you visit most using transportation other than walking, jogging, or riding a bike. Are you able to walk, jog, or ride a bike to ANY park and /or outdoor recreation area that is in or near your neighborhood? (check only one answer)

1. Yes
2. No
3. Don't Know

Q85 Are you able to walk or bike to any park and/or outdoor recreation area that is near your neighborhood? (check only one answer)

1. Yes
2. No
3. Don't Know

Q88 Since you told me that you are unable to walk or bike to any park and/or outdoor recreation area near your neighborhood, can you tell me which of the following are obstacles for you? (Read list and check all that apply)

1. Poor maintenance of sidewalks, bike trails, and bike lanes leading to the park and/or outdoor recreation area
2. Lack of sidewalks, crosswalks, and/or pedestrian signals
3. Lack of bike trails or designated bike lanes
4. Fear of crime
5. Too far away
6. None of these
7. Don't Know

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Q91 Please tell me if you live within a 15 minute walk of each of the following. (read list, check all that apply)

1. A convenience store
2. A supermarket
3. A farmer's market
4. A park with recreational facilities
5. None of these
6. Don't Know

Q95 Which of the following would encourage you to participate or to participate more actively in outdoor recreation activities in Delaware? (Read list, check all that apply)

1. More outdoor **facilities and opportunities** close to where you live
2. more **information** about facilities and opportunities
3. Better **security** within facilities
4. Increased **accessibility** for persons with disabilities
5. More opportunity to participate in **organized activities**
6. None of these
7. Don't Know

Q98 Do you agree or disagree with the following statement: I would buy healthier foods and beverages in the vending machines and concession stands in parks and outdoor recreation facilities if they were available. (check only one answer)

1. Strongly agree
2. Moderately agree
3. Neither agree nor disagree
4. Moderately disagree
5. Strongly disagree
6. Don't Know

Q99 Are there any facilities you would like to see added to a park in your community? (check only one answer)

1. Yes
2. No
3. Don't Know

Q102 What facilities would you like to see added to a community park? (Do NOT read list, check all that apply)

1. Playgrounds for ages 2 to 5
2. Playgrounds for ages 6 to 12
3. Campgrounds
4. Fishing Areas
5. Outdoor public swimming pools
6. Biking paths

## Appendix C

7. Paved walkways
8. Hiking/walking trails
9. Boating access in coastal waters
10. Boating access in fresh water (streams, lakes, and rivers)
11. Access for canoes and kayaks
12. Fishing piers
13. Off leash dog areas
14. football fields
15. Soccer fields
16. Public tennis courts
17. Outdoor basketball courts
18. Public golf courses
19. Baseball fields
20. Softball fields
21. Indoor recreational facilities, such as indoor basketball courts, volleyball courts, and swimming pools
22. None of these
23. Don't Know

Q107 Other Facility \_\_\_\_\_

Now I'm going to read a list of programs, and I'd like to know whether you think each item should be very important, a somewhat important, or not an important priority for State and Local funding.

Q109 First do you think that more historic education programs should be a very important, a somewhat important, or not an important priority for state and local funding?

Q110 What about nature programs?

Q111 What about more organized leagues for team sports?

Q114 For which team sports(s) would you like to see more organized leagues? (do not read list, check all that apply)

1. Soccer
2. Baseball
3. Football
4. Basketball
5. Softball
6. Volleyball
7. Hockey
8. Lacrosse
9. Field Hockey

## Appendix C

### 10. Don't Know

Q115 Other sport: \_\_\_\_\_

Q116 What about more outdoor recreation programs for senior citizens, that is, those citizens who are 65 years of age or older? (Should this be a very important priority, a somewhat important priority, or not an important priority for state and local funding?)

Q117 What about more outdoor recreation programs for teens?

Q118 What about outdoor recreation programs for persons with disabilities?

Q119 What about more cultural and arts programs?

Q120 What about programs for children ages 4-12?

Next please tell me whether you think each of the following items should be a very important , a somewhat important, or not an important priority for state and local policy makers in Delaware.

Q122 Funding for Public Parks

Q123 Acquiring more land for parks and open space in the state of Delaware?

Q124 Bike and Pedestrian pathways between places of work, schools, shopping areas, and neighborhoods?

Q125 Overall, how would you rate the upkeep of parks and outdoor recreation areas in your community? Would you say it is excellent, good, fair, or poor?

Finally, I have a series of questions regarding your attitudes toward the environment, natural resources, and green spaces in Delaware.

Q126 In your opinion, how would you rate the number of Delaware's wetlands? Would you say there are too many, about the right amount, or too few wetlands in Delaware?

Q127 How would you rate the number of Delaware's forests?

Q128 How would you rate the amount of open natural areas or green space?

Q129 How would you rate the amount of farmland?

Q130 How would you rate the amount of development?

Q132 What is your zip code?

Q133 How many children, age 17 or younger do you have living in your household?

Q136 What are the ages of the children living in your household?

Q147 What is the highest level of education you have completed?

Q150 What races or ethnic background do you consider yourself? (read if necessary)

1. White or Caucasian
2. Black or African-american
3. Hispanic or Latino
4. Native American or Alaskan native or Aleutian

## Appendix C

5. Korean
6. Japanese
7. Chinese
8. Filipino
9. Native Hawaiian or other Pacific Islander
10. Vietnamese
11. Middle Eastern
12. African (not African-american)
13. South Asian (India, Pakistan, Bangladesh, etc)
14. Don't Know
15. Refused

Q151 Other Nationality \_\_\_\_\_

Q152 May I ask your age?

Q156 That's the end of the survey. Thanks for you time and cooperation. If you have any additional comments, I can record them here:

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Q157 Respondent's Gender- Observed and recorded

## Appendix D

### Demographics of Delaware Residents

<u>Demographic Characteristics</u>	<u>Projected 2008 Census Percent (%)</u>	<u>2008 Responsive Management (%)</u>
<b>Gender*</b>		
Male	48.5	43
Female	51.5	57
<b>Race/Ethnicity*</b>		
White, Non-Hispanic	75	83
Black, Non-Hispanic	21.6	10
All Other Races	3.5	3
<b>Age Demographics*</b>		
15-24**	13.45	5
25-34	12.53	10
35-44	13.76	15
45-54	14.95	21
55-64	11.66	20
65+	14.3	25
<b>Wilmington</b>		
<b>Gender*</b>		
Male	48.6	46
Female	51.4	54
<b>Race/Ethnicity*</b>		
White, Non-Hispanic	37	74
Black, Non-Hispanic	57.5	20
All Other Races	5.5	5
<b>Age Demographics*</b>		
15-24**	14.8	4
25-34	15.3	12
35-44	14.6	15
45-54	13.3	19
55-64	9.9	19
65+	11.4	29

## Appendix D

### Newark

#### Gender\*

Male	46.6	43
Female	53.4	57

#### Age Demographics\*

15-24**	46.8	4
25-34	10.3	10
35-44	7.4	23
45-54	9.2	19
55-64	7.5	21
65+	8.5	19

### Dover

#### Gender\*

Male	46.6	35
Female	53.4	64

#### Age Demographics\*

15-24**	19.8	8
25-34	12.9	13
35-44	11.7	16
45-54	13.1	20
55-64	9.9	19
65+	13.7	22

\*Survey categories not adding to 100 are due to refusal to answer (or did not know)

\*\*Survey only includes those respondents age 16 and older

## Appendix E

### Phone Survey Comments

Question 156 of Responsive Management's telephone survey asked respondents if they had any additional comments. The following are comments by survey respondents listed in no particular order.

<b>Q156. Additional Comments</b>
Address the environmental issues more.
Build a monorail.
Church would like to have a playground included.
Clean the parks up and make them actually parks.
I do like the parks a lot.
Dover is a dangerous place to ride bikes! Please give us bike trails and locations in the community to lock bikes while shopping.
Facilities here are old, outdated, falling apart; also, pools are way too small for the # of people.
Food and beverages should be appropriate for the area, they are not necessary for walking/jogging trails.
Fix the sidewalks.
Get us places to train the dogs. It's a great hobby and there are plenty of people doing it.
Give me a swimming pool.
GOLF!!
I appreciated you providing facilities and encouraging outdoor activities, but, REALLY wish more priority would be given to help eliminate our cancer causing air pollution from industry and autos... maybe a mass transit system.
I believe in balance. The public golf courses in north Delaware are horrific; I don't play as much because of this and I want to badly.
I definitely like the parks that are nearby. I wish there were a few more and less development.
I don't think they are concerned with our area.
I hate that they cut down trees.
I hope this survey does some good.
I like what the state has done, and they have good control over it. I think the amount of development has leveled off, except at the beaches.
I think as long as they have facilities for the young people, to keep their minds and bodies busy, we'll be ok.
I think it is important that these surveys are done.
I think it is very important for the children to have the parks to go to and to have people to teach team sports.
I think more attention needs to be paid to people with lower income.

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<b>Q156. Additional Comments</b>
I think pools should be more affordable... for low and non-income families, they should be free.
I think they could focus a little more towards family activities instead of certain age groups.
I used to go to Delcastle and Banning Parks
I wish they would pay more attention to teenagers and provide more dances, socials, etc.
I would like them to incorporate like they did at Salisbury, MD. They incorporated a zoo with a park. It would help the economy here and it would be a place for people to go and a place where the city could hold functions.
I would like to see higher density housing with more green spaces in Delaware.
I would like to see some areas for riding ATVs and dirt bikes, any place in New Castle County would be great.
I'm glad you guys are doing the survey.
We are ruining our environment.
Develop ways to inspire and teach parents how to organize programs or activities for their children and just make the parks available and maintained for this use.
Iron Hill for 20+ years was a place for illicit behavior and drugs. When they reopened it, I got the chills to see families and have a good feeling at parks.
Iron Hill park renovation is really nice.
Just curtail building of developments.
Just that there seems to be TOO MUCH developing and destruction of natural lands.
Keep kids out of trouble, keep them busy.
I think the pamphlets they put out are excellent.
Thank you for doing this.
Please add running tracks.
Lower Delaware is doing very well with bike pathways. We can bike to the beach.
Maintain the boat ramps.
Maximize the use of the current park systems, for various uses such as basketball courts.
There is a lack of sidewalks, you have to walk on the street.
More bike paths.
More bike paths are needed in Delaware.
More development in the city of Wilmington and less in the suburbs.
More lights in all parks.
More park facilities available in the Milford area; right now there is nothing.
More running tracks that are made of rubber or high tech material. Delaware is expanding with urban sprawl too quickly. There is not enough green space in general.
More security. Do something about safety in community parks.
Need an off road vehicle park.
Need an ice rink.

## Appendix E

<b>Q156. Additional Comments</b>
Need more greenspace and less development.
Need more recreational facilities, but where do they get the money?
Needs to be a larger part of budget.
Our park actually has pathways for mountain biking, we are very lucky.
Overall, DE State Parks seem to be fine. Communitie parks seem to be lacking in maintenance. Most all local park baseball fields are in terrible shape (tall grass, holes in the ground, etc.)
Please put in a pool.
Wetlands, forests, and farmland are important to preserve.
Parks need more funding.
Park programs should be less expensive or free.
Playground in area has been destroyed by teenagers.
Please give us more bicycle roads adjacent to commuting auto roads.
Preserve farmland. Children need to know about farming, and where their food comes from.
Public pool should be added to the area.
More music programs.
It is ridiculous you have to pay to get into state parks, it wasn't like that in MD.
Beginning computer classes.
Need better security.
Need more recycling areas.
Spend less tax money.
Stem the growth of building.
Possibly include programs to involve local people in community park planning and programs.
The government should provide incentive for people to put their land into a conservatory to prevent urban sprawl.
The park is poor because of bad town management. Not able to keep up with the progress of the park. It's not maintained.
The park system in DE seems really good compared to MD.
People shouldn't have to pay to fish and use the ocean.
The teens do not have enough activities to keep them occupied.
There is too much building in DE. We are forcing out the farmers and destroying woodlands and natural habitats.
We need dog parks.
More public shooting facilities and more organized shooting programs for teens.
There should be more outdoor recreation community days where people can hang out and get together with others in their community. We shouldn't have to pay to get into our own state parks.
There is too much that is being built. Habitats are being destroyed.

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<b>Q156. Additional Comments</b>
They need better facilities for handicapped people.
Need to fix the pier at Cape Henlopen State Park.
They need to have groups for adults to do activities and be able to find groups to do things with. Dover needs to have more real parks with better landscaping and better facilities.
They should make improvements for a broad spectrum of people.
They should build more things for teenage activities in rural areas. Put more things in parks other than slides and merry-go-rounds.
DE needs to focus on the outdoor spaces for tourism and public recreation attractions.
Time and money should be spent keeping up with what we already have instead of starting new projects.
Trap pond has been neglected.
Need more activities for youth.
Need a 50 meter pool for swim teams.
Need more trails, parks are opposed to cross country teams.
Stop or slow the development in Delaware.
Need more people to take park in recreation activities.
Public pool in Dover.
We need another community swimming pool in Milford. The one we have is too crowded.
We need more areas for sledding.
We need more bicycle pathways since gasoline is so expensive.
We need more fishing areas.
More places to recycle.
Wish that organized team leagues allowed individuals to sign up instead of only 'teams'.
Wish there were more hiking/walking clubs. They should build challenges (pull ups, stretching, etc.) on the trails.

## Appendix F

### Emergency Wetlands Act of 1986

The following source fulfills the Emergency Wetlands Act of 1986 requirement.

Delaware Department of Natural Resources and Environmental Control. 2008. Delaware Wetlands Conservation Strategy. Dover, Delaware, USA.

<http://www.dnrec.delaware.gov/Admin/DelawareWetlands/Pages/default.aspx>



Delaware State Parks

302.739.9235

[www.destateparks.com](http://www.destateparks.com)

