



ELEMENT E

Open Space & Recreation

E. Open Space and Recreation Element

Element Defined

When residents hear the term open space it conjures up different meanings for each individual. Open space encompasses undeveloped land or land with very limited infrastructure/development. Open space may include parks, greenways and natural places such as forests, upland habitat, soils, streams, floodplains, and/or wetlands. This land is targeted for preservation to accomplish a number of important goals including agricultural, historical and environmental preservation as well as for recreational opportunities.

In the context of this Comprehensive Plan, the term Protected Open Space refers to privately or publicly held land protected from future development. This land has been targeted for preservation to accomplish several important goals including agricultural, historical and environmental preservation as well as for recreational opportunities. Important tools in open space preservation include conservation/preservation easements (agricultural & environmental) as well as open space areas associated with residential development plans (environmental, historical, and recreational).



Figure E-1: Delcastle Recreational Park

“Conservation of open space is critical to preserving biodiversity and healthy, resilient ecosystems. It provides habitat for a wide range of plants, animals, fungi, and beneficial microorganisms in the soil. Open space also influences human health and well-being, contributing to clean waterways, healthy air quality, and carbon sequestration that helps mitigate climate change. Once open space is developed into shopping centers, parking lots, highways, and subdivisions, it is generally gone for good. The U.S. Forest Service estimates that approximately 6,000 acres of open space are converted to other uses every day.¹ Therefore, the actions we take (or don’t take) now in terms of valuing and protecting open space are destined to have long-lasting implications far into the future.”

Open space protects a community's natural green infrastructure, providing places for recreation, preserving important environmental and ecological functions, and enhancing quality of life. It also benefits public health by reducing exposure to pollution and improving quality of life by greening urban areas, planting trees, and converting appropriate land to greenfields. Protecting buffer areas and wetlands have numerous benefits and access to healthy waters/clean waters (rivers, streams) vibrant economy is important to the vibrancy of the community.

Having access to natural lands, for active recreation like ballfields and kayaking as well as passive recreation, such as trails and birdwatching, are key to a robust and thriving community. Many of the uses are low or no cost to community members, like walking, jogging, or utilizing playground equipment, and provide numerous health benefits by promoting healthy lifestyles and encouraging a love of nature. Ensuring that all communities have equal access to open space and recreation is key, especially in more urbanized areas where there are fewer trees and parks. Equity and environmental justice are important

¹ U.S. Forestry Service <https://www.fs.usda.gov/science-technology/open-space-conservation>

components of open space and recreation. Open space and parkland also provide opportunities toward overall sustainability for the community. Effective planning and design support stormwater management, heat island mitigation, habitat protection and expansion, and other resiliency strategies.

What We Heard

During NCC2050's development, a public survey was released asking a variety of questions regarding priorities. The survey asked respondents "What are the top three (3) areas you see the greatest potential or opportunity for New Castle County?" The question was answered by 242 people and "Access to Parks, Trails, & Open Space" was selected as the greatest potential or opportunity within the county. Similarly, New Castle County residents frequently mentioned open space and recreation during the NCC2050 process. Here is what we heard:

"Open spaces mean a lot of different things depending on what kind of community you live in. We have to have conversations around open spaces in our smaller communities because for communities in Greenville or other places, open spaces are going to be different for that area than maybe between Rogers Road and Cherry Lane. So, in some of our communities, we have open spaces, but I think they need to be cleaned up and enhanced, and I would hope that is part of the conversation as well. Sometimes when we look at the bigger picture, we do not see the details so I would think with smaller communities this would be the detail of open space."

—Dora Williams; Community Representative, Route 9 Monitoring

"Utilize existing open spaces (city and state parks, vacant lots) in urban and suburban locations as a place to engage youth and teenagers, in the form of green schoolyards and outdoor learning environments to combat plant blindness/ nature deficit disorder."

– Deep Dive Session 1: Open Space, Conservation, Recreation, Environment Public Participant

"Promote a convenient, but active lifestyle by increasing park accessibility."

– Goal established by the New Castle County Youth Planning Board (YPB)

New Castle County Today

Existing Open Space and Recreation Analysis

Within the unincorporated and incorporated areas of New Castle County, there is a wide dispersion of recreational facilities and open space. **Map E-1** shows the total distribution of public lands and open space within the County today. County public land (shown in light green) is significantly concentrated above the canal, while Federal, State and Private conservation-oriented land is more abundant in the southern part of the county. South of the C&D Canal, the majority of open space is referred to as "private open space" due to its association with subdivisions and the fact that it may not be readily accessible for use by the public.

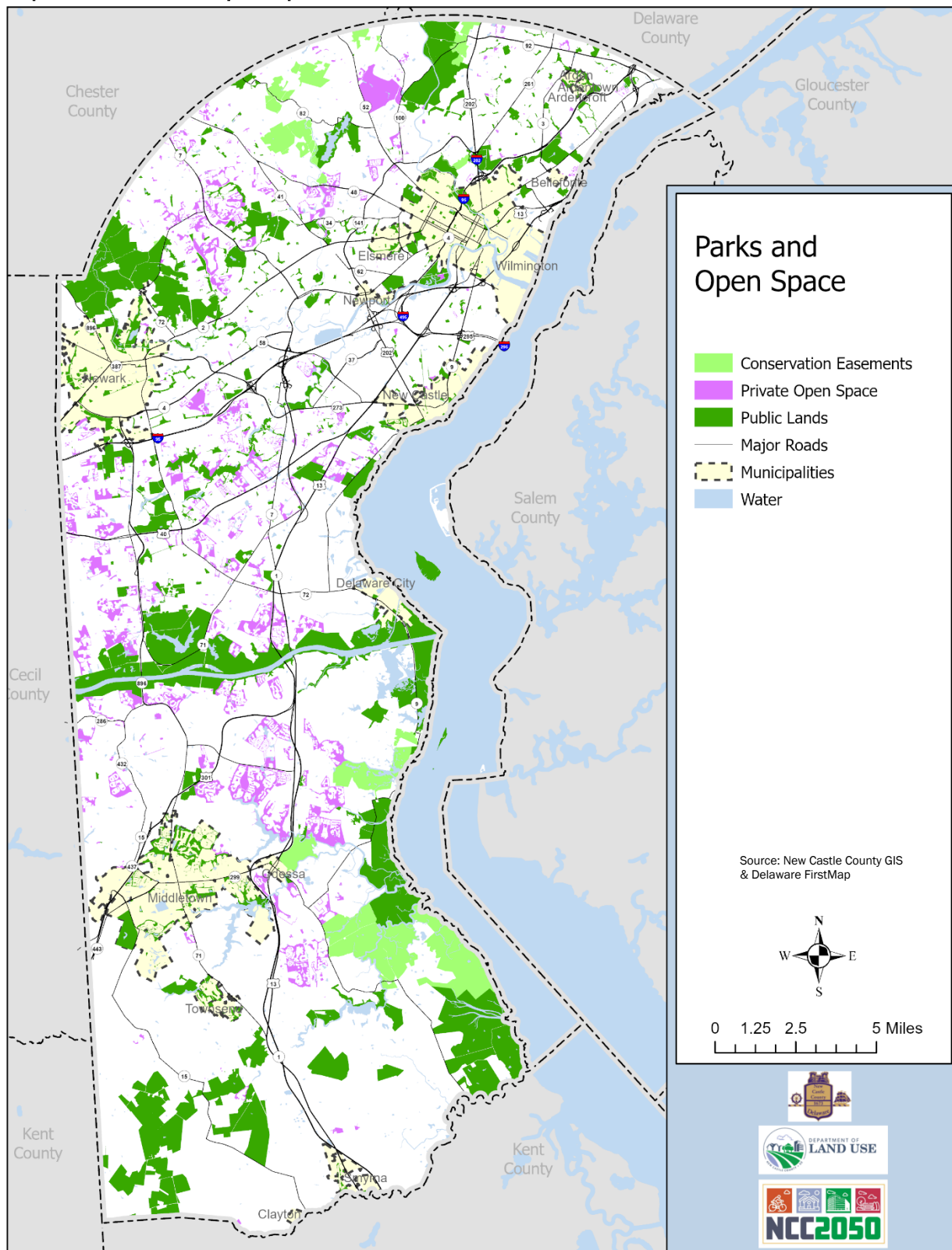
There are approximately 52,000 acres of parks and open space in New Castle County (approximately 48,000 acres in unincorporated New Castle County). Parks and open space include public lands (owned by federal, state, county or municipalities) and private open space (open space associated with development). The type of open space by percentage is shown in **Table E-1**. Over the last two decades, New Castle County has averaged approximately 170 acres of open space being added to preserved status per year because of new subdivisions. Open space created through the land development is provisioned for passive or active recreation (useable open space).² The Unified Development Code requires environmental resources be protected under conservation easements during the land development process.³ This does not include agricultural or private conservation easements, are also important when looking at land preservation goals, however not examined the context of recreation and active open space. Based on these numbers, there are 0.09 acres per person (3,920.4 ft²) in New Castle County. The World Health Organization recommends that there be at least 50m² of green space per person, which is one of many service standards defined in the literature. The County does not have an official policy for quantitative service standard for open space, but for purposes of general benchmarking, green space available countywide is well ahead of the WHO recommendation. A more localized evaluation of green space availability is recommended to better understand accessibility and level of service to local communities and sub-populations.

Expanding our public parkland, private open space, conservation easement, and other creative mechanisms and partnerships will continue to help attain the NCC2050 future goal of 7,100 acres of protected open space. It is critical that ensuring the quality of the existing protected open space and parks is also maintained and enhanced to realize the full benefits to the community.

² In subdivisions of thirty (30) dwelling units or more, an area or areas of useable open space shall be provided at a rate of one (1) acre per one hundred (100) dwellings units. (Unified Development Code Section 40.20.225.B.5)

³ Unified Development Code 40.05.050.E

Map E-1: Parks and Open Space



Map E-2: Parks and Trails

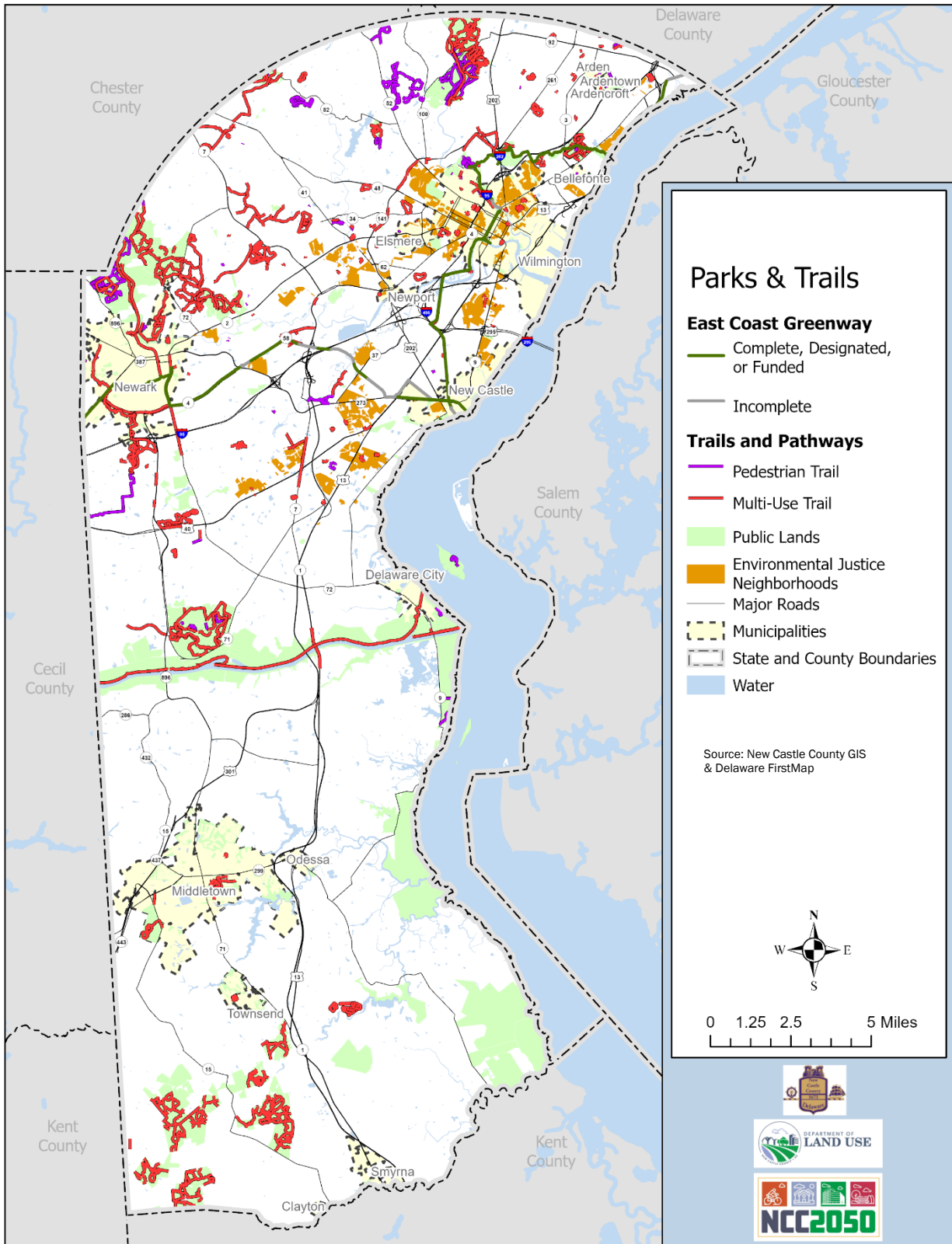


Table E-1: Open Space by Type in New Castle County (includes incorporated and unincorporated areas)

Type	Acres	Percentage
Federal	6,298	12%
State	23,543	46%
County	6,959	13%
Municipal	4,366	8%
Private Open Space	10,570	20%
Source: New Castle County GIS		

Looking specifically at active and passive recreation distribution throughout the County, New Castle County estimates that approximately 30% of the acreage in County owned parks is active recreation and 70% of the acreage is passive recreation. **Map E-2** shows County parks and trails, including the East Coast Greenway—a 3,000-mile rail trail linking the major cities of the Atlantic coast from Calais, Maine, to Key West, Florida—that traverses the County both via trails and on-road facilities. Again, this map demonstrates that there are areas with a good distribution of parks and outdoor amenities, and these features are found throughout the County; however, continuing to make sure that there are County-provided open space and recreation opportunities for all residents will be a key strategy moving forward.

The Delaware Division of Parks and Recreation published the most recent [Statewide Comprehensive Outdoor Recreation Plan](#) (SCORP) in 2018 which included an inventory of outdoor recreation facilities throughout the state. (Regions 1 and 2 cover New Castle County.) Resulting from the previous SCORP, the Division maintains an [interactive web application](#) which should be used to locate outdoor recreation facilities throughout the state.

Increasing the percentage of residents that have access to recreation and open spaces without a car is an objective of NCC2050. Access to parks and open space is an important part of overall community health and wellness. New Castle County has many parks that are available to the public. Development patterns and the transportation network impacts a community's ability to safely and easily access parks and open space. Based on an analysis developed by the Delaware Department of Transportation, approximately 55% of households within the County currently have easy and safe access to parks and open space (one mile or less with a low level of traffic stress). Approximately 75% of housing units within New Castle County are located within one mile of parks and open space. A portion of these households do not have safe access to these parks and open spaces (higher level of traffic stress). See **Figure E-2** to view how this was mapped.

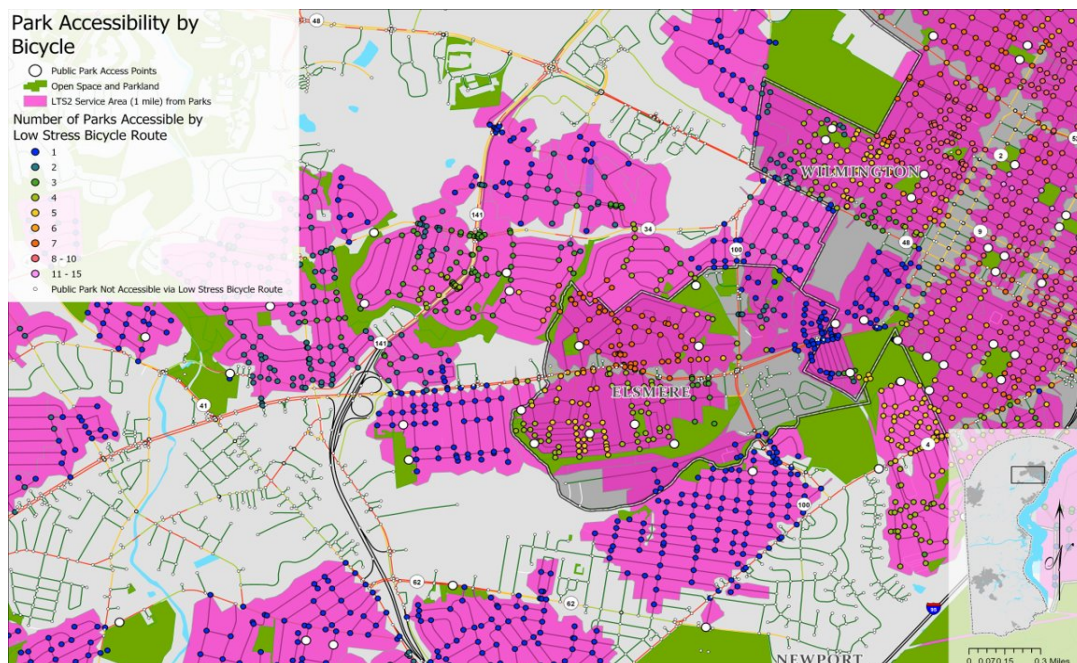


Figure E-2: Park Accessibility by Bicycle

Parks and Recreation in Unincorporated New Castle County

Park Planning, Acquisition, and Development

Over the life of the 2012 Comprehensive Plan, New Castle County has been very proactive in planning for both open space and recreation uses. In 2017, the New Castle County Department of Public Works completed an update to its 1984 *Long-Range Park Acquisition and Development Plan*. Within the plan, NCC analyzed the status of parks and recreation facilities and future need. Utilizing the National Recreational and Park Association (NRPA) definitions for recreational facilities and parks, the study identified four types of parks within New Castle County and utilized the NRPA's standards for number of facilities per population and travel time. See **Table E-1** for the existing conditions of County-owned parks and recreation facilities. The NRPA defined each of these facility types, as shown in **Table E-2**.

Table E-2: NRPA Facility Type Definitions

Facility Type	Acreage per Person	Distance from Home	Acreage Size	Facility Types
Neighborhood Parks	at least 3.2 acres per 1,000 persons	within a 1/4–1/2 mile radius	1/2 acre minimum to 30 acres in size (average: 15.25 acres)	Vary based on neighborhood need and available space
District Parks	2.3 acres per 1,000 persons	within a 1–2-mile radius	25 – 75 acres in size (average: 50 acres)	Active and passive recreation resources with diversified recreation
Regional Parks	3.8 acres per 1,000 persons	within a 1/2-hour drive	75-200 acres in size (average: 137.5 acres)	Meet the recreational needs of all County residents including specialized facilities and/or the preservation of lands of unique environmental quality
Reservation Parks	4.2 acres per 1,000 persons	within a 1/2-hour drive	200-800 acres in size (average: 500 acres)	Picnicking, bicycling, trails, and other passive recreational uses along with athletic fields and court games for organized and free-play youth and adult sports activities
Source: 2017 Long-Range Park Acquisition and Development Plan, pages 8-10				

The national standards were used to analyze existing conditions within the plan. New Castle County’s Department of Public Works found that there is a need for new parks, particularly smaller parks with neighborhood access. An updated plan containing more robust and nuanced analysis, factoring in non-motorized access, equity, and other measures of need and opportunities is recommended.

Most significantly, there is the need for smaller, community facilities with 14 new neighborhood parks and three new district parks recommended. Specifically, the plan identifies the following Planning Districts (PD), as shown in the Map in Section A of this plan, as needing additional facilities:

- **Piedmont PD:** About 1 1/2 additional Neighborhood Parks and about 1/3 of an additional District Park.
- **New Castle PD:** About 2 additional Neighborhood Parks and about 1/2 of an additional District Park.
- **Red Lion PD:** About 1/2 of an additional Neighborhood Park.
- **Central Pencader PD:** About 2 1/2 additional Neighborhood Parks and about 1/2 of an additional District Park.
- **MOT PD:** About 8 additional Neighborhood Parks and about 1 3/4 additional District Parks.

As defined, both facility types should be located within a 2-mile radius from the home. As heard in many of the public meetings, creating safe, walkable linkages between neighborhoods and neighborhood/district parks is a critical need within NCC.

Concurrently, the County assembled a New Castle County Parks Task Force comprised of community members and stakeholders. From this taskforce, the *Final Report of the New Castle County Parks Task Force* was produced. Found within the report are 15 priority recommendations. The recommendations were prioritized by a timeline ranging from immediate to long-term. The recommendations included organizational structure suggestions for the County, specific park projects to commence, key developments that should include recreation and open space facilities, and key equitable community identification to keep an open and ongoing dialogue.

Map E-3: New Castle County Planning Districts

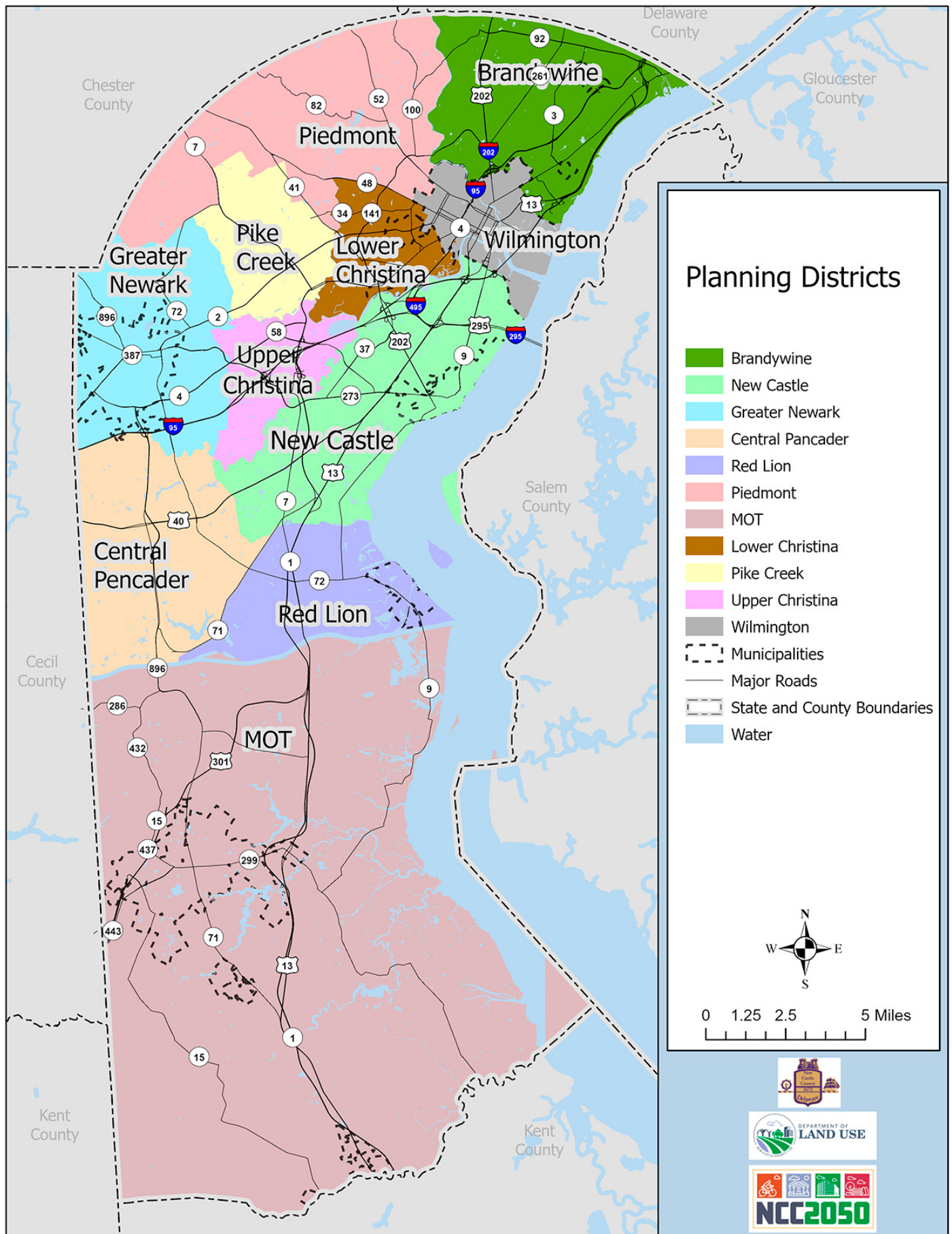




Figure E-3 Aerial View of Woodshaven Kruse Park

Currently, New Castle County has a priority pathways list, created in 2019, for key linkages between communities. Many of these priorities are planned to connect major trail networks and transportation facilities. Improving smaller neighborhood paths to link communities is an extension of environmental justice for communities that are underrepresented, or where facilities are inadequate for the needs of the community. While pedestrian and bicycle linkages are discussed in the [Mobility Element](#), the following priority pathway gaps specifically address linkages to open space and recreation:

1. **Commons Boulevard**

Provides a connection from the Markel Trail at the I-295 tunnel to the Churchmans Road Pathway, thereby providing direct pathway access for the numerous residential, commercial, office, and institutional uses in-between.

2. **Augustine Cut Off**

Provides a connection from the greater Blue Ball/US 202 Pathway system, located in the County, to the east side of the Trolley Square neighborhood, as well as the Brandywine Park trail network, both located in the City of Wilmington. Links the two largest population centers in the State, Wilmington and Brandywine Hundred, with a pathway.

3. Newport Connector

A connection from the Wilmington to New Castle Pathway near the north side of the Christina River Bridge, routing beneath I-95 and along Amtrak right-of-way, to the Town of Newport's industrial park. This potential pathway alignment was identified on DelDOT's 2014 Newark-to-Wilmington Pathway Study.

4. Newark to Castle Trail

Connects the City of Newark and the Castle Trail along the C&D Canal. It was identified in DelDOT's 2014 Newark-to-Wilmington Pathway Study. Alternative alignments may also be feasible.

5. North St. Georges

Short connection through Army Corps' land from Castle Trail to DelDOT ROW that will provide direct access to North St. Georges' commercial area.

6. Mill Creek Greenway

Segment 1 – Mendenhall Village entrance to Stoney Batter Road and Segment 2 – Stoney Batter Road to Delcastle Park pathway system

7. Churchman's Crossing Pathway System

A plan to connect the Churchman's Crossing area of the County, which includes a train station, with a network of shared-use pathways. These potential pathway alignments were identified on DelDOT's 2014 Newark-to-Wilmington Pathway Study.

8. New Castle to Delaware City

A plan, originating from the Trustees of the New Castle Common and Public Works, to connect the City of New Castle to Delaware City with a pathway utilizing both SR 9 and alignments through privately-held parcels. When completed, this pathway would constitute an 8-mile portion of a 40-mile continuous series of pathways connecting the City of Newark and Chesapeake City to the City of Wilmington. May be presented to Delaware Bike Council (DBC) for future feasibility study grant funding.

9. Middletown to South St. Georges

This pathway, which leverages previous pathway implementation along its alignment, will connect the northside of Middletown at North Broad Street to South St. Georges at the St. Georges Bridge (US 13), which has the only dedicated bicycle/pedestrian crossing of the C&D Canal. It will generally serve as the main north-south pathway spine for the central part of southern New Castle County north of Middletown.

10. South Bank C&D Canal

This pathway would be placed generally along the Tier 1 road (lowest tier) directly along the South Bank of the C&D Canal from the Delaware/Maryland Stateline to South St. Georges. A western extension into Maryland could bring the pathway to South Chesapeake City, while an eastern extension beyond South St. Georges could bring the pathway to Biggs Lane and back to South St. George along Biggs Lane. Additional connections along the South Bank of the C&D Canal to various existing and planned neighborhoods, roadways, trailheads, and protected open space are also feasible.

11. Claymont and Governor Printz Pathway

A plan to implement the far northern portion of the East Coast Greenway in Delaware as a separated pathway and/or cycle-track facility. Governor Printz Boulevard is currently a 4-lane

divided highway that is paralleled by both Philadelphia Pike and I-495; hence its current configuration is well over-capacity for projected traffic volumes. A road diet resulting in a reallocation of space within the Governor Printz right-of-way to implement a shared-use pathway from Bellevue State Park at Cauffiel Parkway to the existing Claymont Train Station would be part of the conceptual plan. The existing Claymont Train Station is slated to move northward to a site formerly occupied by the Claymont Steel Mill. The conceptual plan will analyze pathway routing from the existing station location to the new station location and through to the Pennsylvania state line along Philadelphia Pike, which is where the Pennsylvania portion of the East Coast Greenway begins. Coordination with the North Claymont Area Master Plan and potential development activity will be necessary.

12. Pike Creek - Three Little Bakers Golf Course Area

Various pathways through future open space areas that may utilize, in part, existing golf cart pathways and other connecting alignments.

Many of these pathways will connect key community linkages but as priorities are identified, equity should continue to be at the forefront of these conversations not only for pathway linkages but for the entire Open Space and Recreation element.

Land Preservation

As development continues in New Castle County, there is a need for more intentional land preservation. Beginning in 2019, the County convened a Land Preservation Task Force to recommend goals and strategies to increase the County's role in identification, protection and management of certain land uses for the County and its residents. One goal of the [resulting plan](#) was: Establish a structured and sustainable open space preservation program. Recommendations to support this goal included development of an Open Space Preservation Council and Land Preservation Master Plan, updating the County Park Master Plan, evaluation of County regulations and possibly strengthen regulations to preserve passive open space, and hiring a land preservation specialist/planner. These efforts would formalize the preservation of open space within County land use planning and policies to work toward the overall goal to preserve a minimum of 7,100 acres of land as protected open space in the county for open space in 30 years. [Element D. Conservation](#), includes additional information and maps of areas important as part of a land preservation strategy including *Map D-12* Critical Natural Areas.⁴

Effective planning related to recreation and open space influences nearly all aspects of life in our county. Recreation facilities, whether active or passive, are key to mental and physical health. Open space and parkland facilities support environmental conservation efforts, stormwater management, heat island mitigation, habitat protection and expansion, and resiliency and adaptation strategies. Safe and comfortable access to natural lands and recreational resources should be available to all residents to encourage healthy lifestyles and an appreciation of nature.

Related Goals, Objectives, and Strategies

1. Goal: New Castle County has a connected, well-maintained and well-loved network of open space (natural lands and recreational resources) that benefits all residents.
 - 1.1. Objective: Preserve at least a minimum of 7,100 acres land as protected open space in the county, within 30 years.

⁴ Critical Natural Areas are included in the UDC with protections and are defined as any site listed in the State natural areas inventory as administered by the State Office of Nature Preserves, Division of Parks and Recreation, DNREC.

- 1.1.1. Strategy: Establish the New Castle County Open Space Advisory Board in partnership with the state Open Space Preservation Council and implement the 2020 Land Preservation Task Force Report recommendations, including funding sources and public private partnerships.
- 1.1.2. Strategy: Develop a Land Preservation and Stewardship Master Plan with weighted project selection criteria.
- 1.1.3. Strategy: Develop policies and initiatives that coordinate/integrate open space across adjacent developments.
- 1.1.4. Strategy: Strategically create open space in developed areas to equitably increase green infrastructure, resiliency, and access to open space/recreation, such as the south Wilmington wetland park. Place emphasis on greening in underserved areas and coordinate with regional planning initiatives, such as the Brandywine-Struble Greenway Plan, Delaware River Program, Christina and Brandywine River Remediation, Restoration and Resilience Plan, and Chesapeake Bay Program.
- 1.1.5. Strategy: Link agricultural land preservation, open space, and land use strategies, including strategic programs that leverage diverse partnerships to preserve open space, resource and agricultural lands. For example: Where appropriate, permit passive open space, which is required by residential land development plans, to be preserved by a permanent agricultural land preservation easement and leased for agricultural use.
- 1.1.6. Strategy: Consider adding a preservation zoning category (greater than 5 acre minimum lot size).
- 1.2. Objective: Increase the percentage of residents that have safe, comfortable access (within 1 mile using a low-stress, accessible route) to a variety of recreational opportunities and natural spaces without the requirement of a personal automobile.
 - 1.2.1. Strategy: Implement the NCC Bike Plan, track progress, and keep the plan up to date. Coordinate with local, regional and state initiatives, such as Blueprint for a Bicycle-friendly Delaware, the Brandywine-Struble Greenway Plan, East Coast Greenway Plan, Connecting Communities Plan, and Mill Creek Neighbors for Safer Pathways.
 - 1.2.2. Strategy: Ensure safe, comfortable non-motorized facilities, particularly key connections in the network, are included in development and redevelopment plans.
 - 1.2.3. Strategy: Develop a countywide long-range Parks Master Plan that includes assessment of multi-modal and equitable access to parks and clean water recreational opportunities, as well as monitoring and tracking progress.
 - 1.2.4. Strategy: Identify communities, especially in dense residential areas, that have inadequate access to open space and recreational opportunities and prioritize preservation and design of open space areas adjacent to these communities. The County should use the vacant property list to evaluate park expansions in Environmental Justice Communities.
 - 1.2.5. Strategy: Ensure that existing parks and open space are sufficient to serve the population through updating equipment, maintaining existing infrastructure, and ensuring a safe and clean park experience for all.

See Also:

Mobility, Goal 8 & 11

Community Planning and Design, Goal 10