HOWARD COUNTY Land Preservation, Parks and Recreation Draft, Plan Update

Final Plan June 2022

HOWARD COUNTY Land Preservation, Parks and Recreation Draft Plan Update



Under development, cover letter for County Executive.

Under development, cover letter for Director of Recreation and Parks.

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Introduction

Introduction

Howard County residents have a strong connection and devotion to the natural environment. During the outbreak of the COVID-19 pandemic, reinvigorated interest in parks and open space reinforced the role of Howard County's system of parks and open space in building community. Additionally, the County's over 8,519 programs and 25,925 acres of parks and green space provide essential support to residents' health and wellbeing. Howard County's parks are the places where residents and visitors come together to exercise and fuel their bodies, to enjoy nature, to wander and play, and to clear their minds.

Beyond its local role in supporting residents and visitors, the county's natural systems provide vital infrastructure that supports the health and performance of a much larger ecosystem. The mature trees, woodlands, wetlands and watercourses, are home to a rich and diverse ecology that extends well beyond the boundaries of the county. Beyond the county, critical global issues such as climate change and environmental health present threats and challenges that impact local ecosystems. As such, these issues must be addressed at the local level as well, through strategic planning efforts. This plan will be an important tool to ensure Howard County and the State of Maryland contribute to the creation of a more inclusive, welcoming, and healthy future.

Every five years, the Howard County Department of Recreation and Parks (the Department), prepares a Land Preservation Parks and Recreation Plan (LPPRP) to comprehensively understand the County's system of open spaces, natural resources, agricultural lands, and recreational amenities. Required of all Maryland counties and Baltimore City, the LPPRP is an important resource to guide statewide decision-making and appropriately allocate public open space funds. For the Department, this document is also a road map to implement its Capital Improvement Plan and reaffirm the vision and goals for the State of Maryland, the County, and, most importantly, Howard County residents.

A THRIVING COMMUNITY

Located in the Mid-Atlantic region and situated almost equidistant between Washington D.C. and Baltimore, Howard County continues to be one of the most welleducated, affluent, and diverse counties in the nation. Howard County is frequently lauded for its high quality of life and has experienced significant and sustained population growth since the 1950s. According to the 2020 Census, the county recently surpassed 328,200 people.¹ People continue to be drawn to the same county assets as they were in 2017, including well-performing school districts, accessible open spaces, diverse recreational amenities, employment centers, historical heritage, and a mixture of urban, suburban, and rural communities. The County is dedicated to sound planning for the public realm and natural systems to sustain this high quality of life amid the development pressures of a growing community.

With no incorporated municipalities, Howard County is divided into five planning areas: Ellicott City, Columbia, Southeast, Elkridge, and the Rural West. While the majority of the population is concentrated in Ellicott City and Columbia, new development continues to expand elsewhere. Although there have been efforts to focus on infill development, development over the past several decades has reduced the amount of undeveloped areas and critical habitats. However, the County has continued to protect important and valuable natural resources and lands in support of a county-wide connected infrastructure and trail system.



Figure 1.1Throughout the COVID-19 pandemic, the County took extra measures to ensure important programs for youth could continue safely.

The County has protected 39% of its land area, including a significant acreage of farmland, through environmental, historic and agricultural easements, parkland and open space. This protected land contributes to the health of local and regional natural resources, and helps provide ecosystem services such as food production, clean water and flood control. The county's continued population growth and resulting need for active recreation amenities must be balanced with the need to ensure the county's natural resource amenities continue to be available for future generations.

Parks and Recreation Facilities

Today, there are 59,555 acres of parks and green space within the county. About 25,925 of these acres are for public use and include properties owned by the County, the State of Maryland, and private lands that permit general public access. These spaces include the following:

- County parks and facilities these include playgrounds, fields, natural resource areas, as well as community, athletic, and nature centers.
- State lands State lands are important natural resources with limited access for

visitors. The Patuxent River State Park along the southwest edge of the county and the Patapsco Valley State Park in the northern part of the county are the largest state-owned lands in Howard County.

- School-permitted program and activity spaces - this partnership with the Howard County School System includes space sharing for summer camps and after school programs.
- Historic/cultural properties some Countyowned historic sites exist within parks, such as the Blandair Historic Farm, and others are stand-alone properties like the Patapsco Female Institute Historic Park.
- Private lands permitting public access these include open space and parks owned by Columbia and private subdivisions.
- Washington Suburban Sanitary Commission (WSSC) Open Space along the Patuxent River.

The most recent Maryland Department of Natural Resources DNR Land Acreage Report from 2020 determines 9,248 acres within Howard County are Department of Natural Resources owned parkland.²

Other Preserved Lands

The remaining 33,630 acres are preserved lands not intended for public use,comprised of the following easement and parcel types:

- Maryland Conservation Easements
- Howard County Conservation Easements
- Environmental Preservation Parcels
- Howard County Agricultural Preservation Parcels
- Howard County Purchased Agricultural Easements
- Maryland Agricultural Land Preservation Easements
- Maryland Environmental Trust Easements
- Maryland Environmental Trust Easements/ Rockburn Land Trust
- Maryland Historic Trust Easements
- Neighborhood Preservation Easements
- Rural Legacy Trust Easements

See Resource Conservation and Historic Resources + Agriculture for more information.

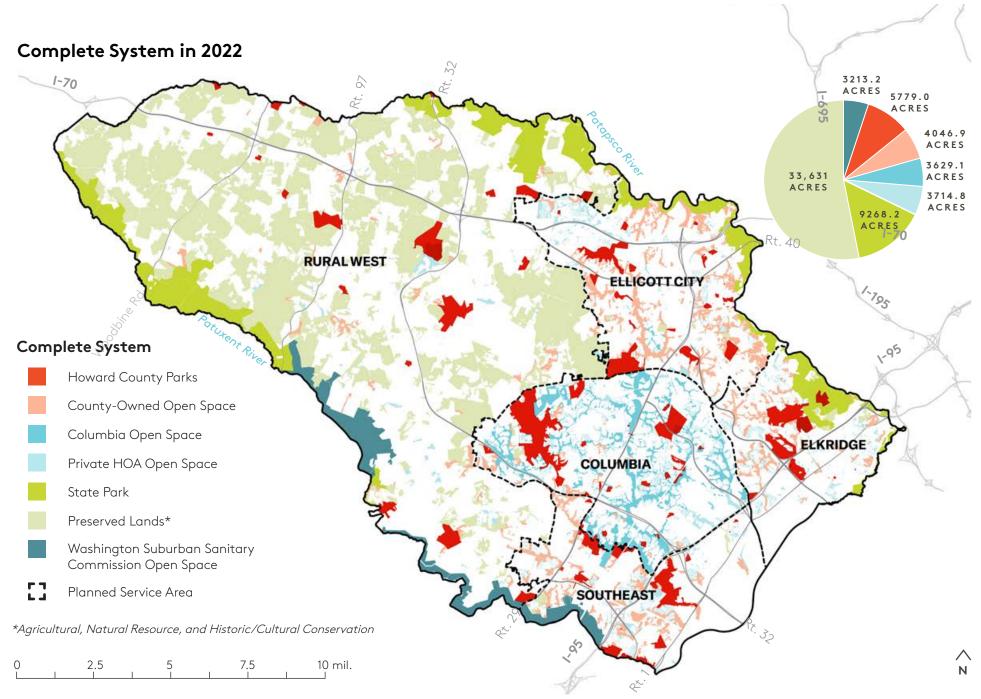


Figure 1.2 Howard County boasts a diverse and rich system of public parks, recreation facilities, and preserved land.



Figure 1.3 Howard County boasts a diverse and rich system of public parks, recreation facilities, and preserved land.

PLAN PROCESS

A Plan Driven By Resident Voices

The Department is committed to a plan that is driven by the community. In the wake of COVID-19, the Department adapted the LPPRP engagement process to continue to receive community input in safe and socially distanced ways. Residents learned about the plan process and ways to contribute through email newsletters from their schools and neighborhood groups, in the program guide mailed to every household, seeing flyers in community centers and signs in parks, through County partners like the Howard County Public School System, or by staying in touch via the Department's website, social media, and email correspondence.

Over a thousand voices have contributed to the LPPRP so far, helping to understand what is loved, what needs improvement, and where key opportunities reside. All of these ideas for the Department's programs, indoor and outdoor spaces, and land preservation policies directly informed the goals and recommendations of this document. The following methods of outreach contributed to the plan:

Public Engagement Events

The LPPRP process included three public engagement events. In September, members of the Department staff and the consulting team attended the Robinson Nature Center Anniversary Open House in order to generate project interest and increase awareness of the plan. More than 200 attendees stopped by to learn about the plan, share their favorite parts of the recreation and open space system, and give feedback about their visions for the future of the County's parks, programs, and centers. In early November, the planning team hosted a workshop pop-up at Centennial Park to share preliminary plan goals and solicit feedback about plan priorities. About sixty people stopped by and "voted" for their favorite goals, drew pictures of their dream parks, and asked questions about the plan's outcomes. From July 2021 to January 2022 the Department also asked residents to share memories and aspirations for the future of the system online. About 216 people participated in that online questionnaire.

Statistically Valid Survey

In August 2021, the Department administered a mail survey to 800 households across the county to better understand user satisfaction and community needs. The statistically valid survey captured responses across the county. This high degree of confidence ensured that the survey captured a snapshot of the county's diverse population across geographic area, income, race, and age, among other factors.

Staff Interviews

The consulting team conducted a series of interview sessions with employees who have direct contact with customers and leadership staff involved in managing programs and services. Staff shared insight on the Department's overall strengths and areas for improvement.

Focus Groups

The Department held six focus group sessions throughout the course of the LPPRP process, covering the topics of similar providers, active adults, land conservation, historic resources, athletics and recreation, and youth concerns. These sessions included more than 20 local stakeholders.

Advisory Board Presentations

In September, the consultant team presented to the Recreation and Parks Advisory Board to garner feedback and general guidance on the analysis and visioning phases of the LPPRP. During this meeting, the team also engaged the public in-person activities to understand their priorities for the plan.



Love the pickle ball

lines at Schooley.

97% of residents rated the physical condition of parks as "excellent" or "good" +23% percentage points better HoCo scored on park quality than the national average

Howard County residents told us...

Can we also involve

Indigenous voices in land use decisions?

History

A SHORT HISTORY OF DEVELOPMENT IN HOWARD COUNTY

Indigenous Life

The earliest records of human civilization within Howard County can be traced back to Native American tribes that were drawn to the region's lush landscape, fertile soils, proximity to water, and temperate weather conditions. The land around the Patapsco, Patuxent, and Middle and Little Patuxent River valleys was stewarded by the Piscataway tribe of the Algonquin and the Susquehannock tribe of the Iroquois. These tribes lived in a symbiotic relationship with the land, returning to the waters to fish and forested lands for an abundance of food sources.

At the time of European arrival in 1608, the land which would become Howard County was greatly appealing to colonizers due to the natural beauty and bounty of its dense oak-hickory and mixed deciduous forests. Open wetlands and rich soils drew settlers to establish settlements, creating tensions with both the Native American tribes and the rich landscape itself. After conflicts, disease, wars, and the 1652 Peace Treaty of the Susquehannock, the Indigenous Peoples conceded land to the European colonizers. Subsistence agriculture flourished under European development. By 1680, pressing agricultural needs required large-scale land clearing and significant deforestation.

Plantations

Agriculture continued to expand into the next century. By the 1740s, land clearing efforts were intrinsically linked to the growing slave trade economy. As the slave trade expanded, so did large scale agricultural needs leading to the creation of plantations. Plantations cleared even greater swathes of forested land and expanded the use of wood as fuel.

Mixed Agriculture

By the 1800s, farming philosophies and community needs transitioned agriculture to a mixed system. Multiple crop types were rotated, allowing the soil time to restore itself and support a diversifying human diet. The Industrial Revolution transformed farming, mechanizing daily procedures, amplifying crop yields, and increasing the acreage each farmer could successfully manage.

In 1830, the Baltimore & Ohio's (B&O) Railroad came to Howard County, laying the first 13 miles of track connecting Baltimore with the thriving community of Ellicott's Mills.³ America's first railroad terminal was then built in 1831, and resulted in the Ellicott City Station, which became the heart of the industrial and agricultural community and now exists as a National Historic Landmark.

Suburbanization

In the 1900s, development patterns within Howard County were influenced by mechanical inventions, growing leisure time, increased educational opportunities, and the notion of the suburbs. As industrialized agriculture grew more compact and efficient, farming as a profession began to decline. This led to some forest regrowth in developed areas and fallow fields. Despite this period of regrowth, ecological imbalances still occurred. The introduction of invasive species and deadly pathogens through commercial operations were on the rise. For example, in the early 1900s, the introduction of Japanese chestnut trees for commercial use caused The Chestnut Blight, which caused the extinction of native chestnut trees within the county as well as nationally.

The middle of the 20th century saw the advent of the suburban concept. Automobiles, modern philosophies about architecture, and a post-war generation saw white-flight from city centers and the expansion of single family homes into once rural land. Howard County, conveniently located between Washington D.C. and Baltimore, Maryland,

A Short History of Howard County

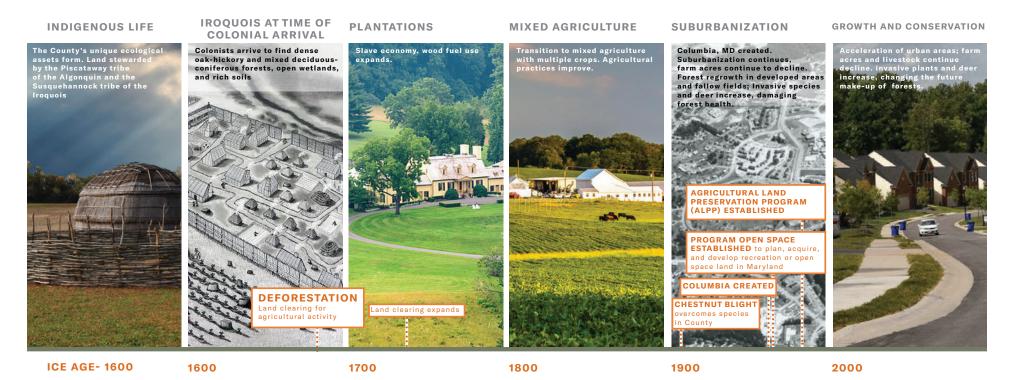


Figure 1.4 Howard County's history follows a trajectory that have similarities to many east coast colonial settlements.

was a favorable location. However, Howard County was unique in that some real estate decision makers were actively involved in alternative ideologies. With suburbanization came environmental degradation, and by the 1960s, ecological responsibility merged with modern philosophies into new urban planning approaches. James Rouse believed developers were responsible for creating environments that were both beneficial to humans and nature. Howard County was his testing ground, and led to the creation of Columbia, Maryland in 1967.

While the history of Columbia, Maryland may be old news for Howard County residents, its creation is a vastly important and monumental moment for the County. This settlement championed and formalized a commitment to ecological stability that continues to influence the high quality of life in Howard County.

Growth and Conservation

The county's high quality of life continued to draw residents into the 21st century. As the cost of living continued to rise in neighboring cities and counties, Howard County continued to see greater migration. The county has grown since the last LPPRP was issued in 2017, and continues to sustain population growth, although the pace of growth has plateaued in recent years.

Population growth puts pressure on existing land use and infrastructure, requiring the County to scale accordingly. Prospective real estate and economic development gains must be balanced with the land use needs of the profitable agricultural industry and protection and preservation of natural resources, most notably the Chesapeake Bay Watershed. As such, the County has sought directed growth approaches to curb the intrusion of urban sprawl onto existing agricultural and environmental land.

In order to limit development's impact on rural and agricultural resources, the County has introduced and implemented several tools, including strategies to protect certain parts of the county that have environmental or agricultural significance. Through zoning ordinances, The County has prioritized the preservation of large parcels in the Rural West portion of the County in order to help protect farmland. In addition, the County has introduced mechanisms to keep agricultural work profitable in the region.

As suburbanization continues throughout the county, unplanned sprawl poses a threat to unprotected open space and the ecosystems they house. Previously, suburbanization caused a decrease in farmland and livestock and a simultaneous increase in impervious cover. Invasive plants and deer populations also continued to rise, impacting the future health of understories and tree canopies. The preservation of The Chesapeake Bay Watershed is critical to the overall environmental health of the region: human activity has led to negative outcomes, such as erosion. Interventions to protect both soil and water quality of the watershed focus on stream restoration and reforestation to protect this vulnerable and valuable natural resource. As with agricultural land, many natural resources are protected for the benefit of the region at large.



Figure 1.5 Howard County's natural resources, like forests, streams, and soils are integral to protect and strengthen natural habitats, air quality, water quality, and mental health.

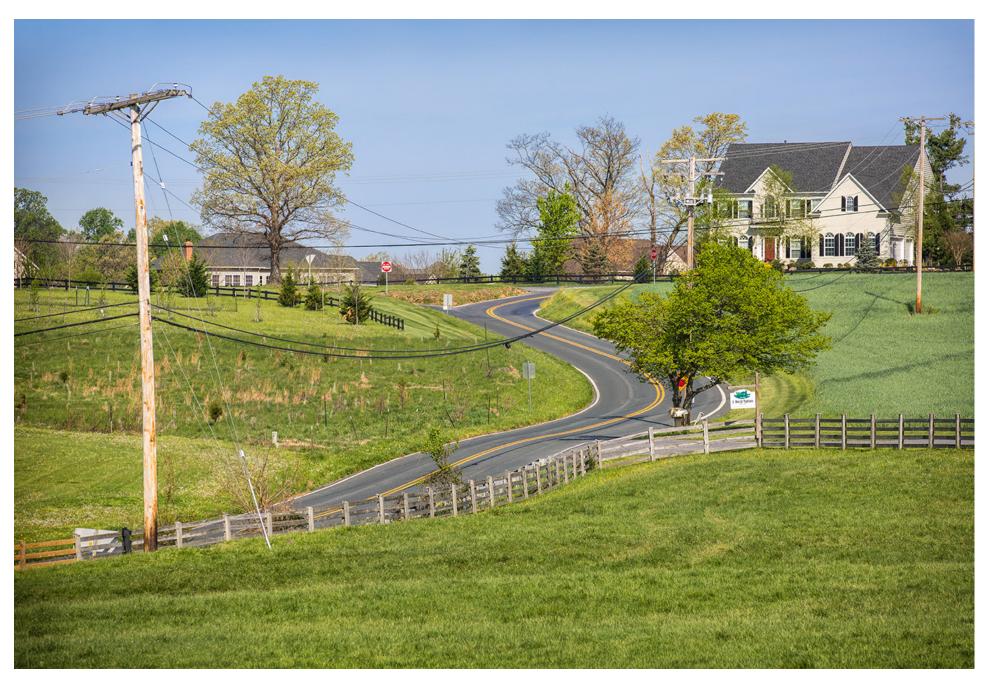


Figure 1.6 Balancing ecological needs, the climate crisis, recreation opportunities, and development pressures will require strategic thinking, environmental care, and creative thinking.

A SHORT HISTORY OF RECREATION + PARKS

Forestry Origins

The history of parks and open spaces within the United States has developed in direct response to changing development patterns, population increases, and cultural attitudes about the natural world. In Maryland, the effects of the logging and agricultural industries, as well as the urban growth of nearby cities like Baltimore and Washington, D.C., ushered in some of the first legislation aimed at addressing ecological decline.

Maryland's Department of Natural Resources shepherded an era of forest conscious preservation that preceded the Howard County Department of Recreation and Parks, but helped to frame natural resources as core to the Department's mission and values.

In the early 1900s, the state's first forestry laws decreased forest exploitation through the creation of a Department of Forestry that strove to protect these resources. Maryland was the third state in the nation to create such an agency, and the state's oldest parks developed from these preserves. At the beginning of the 1900s, the concept of leisure had yet to take hold and these forest preserves did not yet consider the beneficial effects of recreation and time spent in nature. Years later, as labor movements and child labor legislation swept the nation, these ideas became more common in public discourse. Maryland's forest preserves became natural settings for early recreational programming like camping. The first public park in the state was created within the Patapsco Forest Reserve. At this time, forest management and conservation was done at the state level.

Workforce Development through Conservation and Stewardship

As the decades continued and America strove to get people back to work after the Great Depression, the role of forestry departments changed. New Deal programs, such as the Civilian Conservation Corps, sought to turn these preserves into employment opportunities. Forest management, trail creation, and the building of facilities, infrastructure, and recreational spaces all became steady jobs. Simultaneously, the advent of the automobile and its growing accessibility made it easier for people to visit preserves and recreational facilities for day or weekend sojourns.

Creation of the Department

By the 1960s, the role of open spaces, parks, and preserves had once again changed, and these spaces were seen as integral elements of the human experience. In 1963, the first Park, Watershed, and Open Space Plan was adopted by Howard County Commissioners and spearheaded by a volunteer group, the Watershed Board. Four years later, this group would become formalized, consisting of volunteers appointed by the governor. The Board of Parks for Howard County then instituted a paid Executive Director position, and utilized the state Open Space Bill to acquire land.

In 1967, Columbia was founded with the intention of connecting residents to nature. These values extend to the larger scale of Howard County as a whole, which utilized strategic planning to preserve open space and provide opportunities for residents to interact with the environment. By the next year, the Board of Parks had officially become the Department of Recreation and Parks. Other landmark activity in 1968 included the establishment of summer recreational programming, and the amendment of the Park, Watershed, and Open Space Plan to facilitate the purchase of parkland as well.

A Short History of the Department of Recreation and Parks



Figure 1.7 The Department of Recreation and Parks was born from a state-led ommitment to forest preservation and ecological stewardship.

The creation of the statewide Program Open Space provided valuable funds for the acquisition and conservation of park and recreational spaces. Begun in 1969 by the Maryland Department of Natural Resources, Program Open Space uses taxes from the sale of property to devise a steady stream of income for these pursuits. This legislation directly linked the planning and parks professions. The structure of the fund required the creation of parks to be in direct conversation with planning and development outcomes. Additionally, the consistent funding provided a clear expectation that the park and recreation system was to expand to ensure a high quality of life for Howard County residents.

The Department purchased its first historical landmarks in 1969. A year later, the Historical Landmarks division was created, although it operated initially without staff or funding. As programming and Department divisions expanded, so did the need for additional staff to accommodate all of the responsibilities of the Department. By 1973, the number of permanent staff had increased significantly as school and summer recreation programs expanded and neighborhood parks and recreation centers were created.

Expansion of Programming and Facilities

In the latter half of the 20th century and beginning of the 21st century, the Department's growth included the County's first school recreation center, in 1993, the creation of the Park Ranger Program in 2000, and the construction of Howard County's first indoor athletic center in 2009 and first nature center in 2011.

Howard County used many Program Open Space funds to develop major sport facilities and tournament spaces, building a reputation as a local and regional athletic tournament hub. This strategy has had clear financial benefits, providing the Department with a strong revenue source. The Department has prioritized the building of synthetic fields which require less maintenance while providing for all seasonal programming.

Restoration of Natural Resources

While the goal of the Department of Recreation and Parks has always been to provide healthy spaces for both the planet and people, the effects of the climate crisis and suburbanization have made this mission all the more important on a local level. Recent events reinforce the Department's role as both a rehabilitator of historical buildings yet also a steward of valuable ecological resources.

It is critical that future projects not only prioritize gray infrastructure, but also bluegreen infrastructure that uses the county's natural resources to maximize resiliency while strengthening ecological systems. Howard County and the Department also understand the value of its tree canopy in mitigating climate change impacts, like the role of street trees in reducing temperature in neighborhoods on hot days, or the role that trees play in improving our air quality.

Efforts are currently underway to reforest land through public programs. The Forest Conservation Act provides mitigation for forest cleared during the development process, but not on an equal area basis. Easements created through this regulation undergo a three-year inspection process. This mitigation effort compliments more direct reforestation programs. To facilitate reforestation, The County has instituted several initiatives, ranging from volunteer efforts and incentivization programs, such as Stream ReLeaf, Turf to Trees, and Students Branching Out.

Forest conservation is particularly important when considering the larger ecological framework. The Maryland Forest Conservation Act (FCA) of 1991 sought to reduce the loss of forests across the state as land was developed by identifying and protecting environmentally significant or ecologically sensitive forests and natural areas⁴. Often, forest conservation easements overlap with open space containing sensitive natural resources such as streams and wetlands. This means that the health of forests directly relates to the health of other natural systems. Soil conservation efforts and environmental and development regulations are important in all green space, be it open space, preservation parcels, or agricultural land. Restoring one system often restores others, creating a powerful positive multiplier effect. The FCA enabled development regulations to support the protection of open spaces and easements of high ecological value like wetlands, riparian buffers, and forests. These lands are typically granted to the County, and often managed by DRP.

Existing Conditions

THE COUNTY IS GROWING AND CHANGING

The county's population is growing larger, older, and more diverse. These key shifts provide a unique opportunity to improve, preserve, and align Howard County's future community with the parks and recreation resources that will support it. Howard County's population is growing at an annual rate of two percent. In 2017, the population was 312,495. By 2020 the population grew to 332,317, with County residents concentrated within the Eastern parts of the county. As the population grows, development opportunities are becoming increasingly scarce. Development is slowing at an annual rate of 7.85 percent. In 2017, there were 718 newly submitted development plans for commercial, institutional, and residential projects. In 2020, there were 549 newly submitted plans.

Aging in Place

As noted in the 2017 LPPRP, Howard County's population is projected to become older - as residents who were part of the wave of new development in the 1970s and 1980s retire and decide to age in place. The population over 65 years of age is growing at an annual rate

of 5.6 percent. In 2017, 12.6 percent of the population was over 65 years old. In 2020, that number increased to 14.7 percent. Despite this increase, the largest age group in Howard County continues to be 35-39 years old, who represent 7.3 percent of the total population.

Increasing Diversity

The County is becoming increasingly more diverse. In 2017, the population of Black, Indigenous, People of Color (BIPOC) residents was 41 percent of the total population. In 2020, that percentage increased by 12 percent, to 53 percent of the total population. Howard County's demographic changes are reflective of changes happening at the state level. This can be seen when examining the Census Diversity Index (DI).⁵ The DI measures the probability that two people chosen at random will be from different racial and ethnic groups; Howard County's DI has grown 10.1 percent in the past decade, from 59.5 percent in 2010 to 69.6 percent in 2020. In comparison, this increase is much lower at the state level, where the DI increased by 6.6 percent in the past decade, from 60.7 percent in 2010, to 67.3 percent in 2020. The state of Maryland is now the third most diverse state in the country, after California and Nevada.

THE SYSTEM TODAY

SINCE THE 2017 PLAN +12% +2% annual population **BIPOC** population growth rate increase +6% - 8% arowth of annual rate of population over 65 development **STATEWIDE** COUNTY-WIDE 61% 70% 2020 Diversity 2020 Diversity Index Score Index Score +10%+7% **Diversity Index Diversity Index** increase since 2010 increase since 2010

RELEVANT PLANS AND PROJECTS

Since 2012, Howard County has undergone a multitude of planning efforts. These past plans span scales and focus areas. Focus group conversations and Steering Committee participants represented many of these recently completed or ongoing plans and helped to guide plan decision making as it relates to their own experiences.

Plans include specific initiatives such as the 2015 Bike Howard plan,⁶ which promotes sustainable transportation options and an integrated bike system, to the 2018 Downtown Columbia Monitoring Report,⁷ which provides an update on the implementation of the Downtown Columbia Plan.

Current plans address a wide number of issue areas, including flooding, (2020 Ellicott City Watershed Master Plan) the climate crisis (2015 Climate Action Plan), and a holistic approach to farmland preservation (2017 Land Preservation, Parks, and Recreation Plan). Howard County is currently undergoing an update to the County's general plan, known as HoCo by Design.⁸ This plan includes a robust community engagement effort that launched in July 2020, and also builds upon the last general plan adopted in 2012, known as PlanHoward 2030.⁹ While the 2022 LPPRP responds to the HoCo by Design process, it is also working in tandem with the plan to share data, mapping, and other necessary resources that will ensure both plans share similar implementation objectives. Other plans that have informed the development of the LPPRP include those in Figure 1.7.

Previous Planning Efforts

2012 Green Infrastructure Network Plan	2017 Trail Planning and Management Guide	2018 Downtown Columbia Monitoring Report	2020 Heritage Program Management Plan	2020 HoCo by Design Countywide Physical Assessments
KEY GOALS: Define, protect, and enhance a Green Infrastructure Network based on hubs and corridors.	KEY GOAL: Best management practices for trails to create consistency within county between those who contribute to the planning, design, construction,	KEY GOAL: Status Report on implementation of 2010 Downtown Columbia Plan.	KEY GOALS: Framework for expanding Living History and Heritage programs.	KEY GOALS: Summary of ongoing programs and projects across all County departments.
2015 Bike Howard	and management of trails. 2017 Howard County Energy Task Force Final Report KEY GOAL: Property Assessed Clean Energy (PACE) legislation makes it easier for solar projects to be developed on agricultural land. 2017	2019 Rec & Parks Strategic Plan (2020-2024)	2020 Ellicott City Watershed Master Plan	2022 CAPRA Accreditation
Emphasizes importance of a connected bike network to promote sustainable transportation and overall physical activity.		KEY GOALS: Action-oriented plan for implementing the department's goals from the 2017 LPPRP.	KEY GOAL: Provide a community-led vision for protecting and enhancing flood- impacted Ellicott City, through strategies addressing community character and placemaking, flood mitigation, environmental stewardship, economic development, and transportation and parking.	KEY GOAL: Accreditation process used by par and rec agencies for excellence in operation and service. Assures public that the agency meets national best practices.
2015 Climate Action Plan		FY 2020-2024 Parks and Rec Strategic Plan		In Progress HoCo by Design
KEY GOALS: Decrease GHG emissions and promote renewable energy. Focus on role of agriculture.	Land Preservation, Parks and Recreation Plan KEY GOALS: Vision + Goals for System	KEY GOALS: Establish Department's long- term goals and develop strategies to achieve them.	2021 Historic Resources Management Plan	KEY GOAL: Guide land use, growth and conservation policy for the next 20 years.
	Inventory of existing Parks and Open Space.	Implement methods to test achievement.	KEY GOALS: Guide for the care and maintenance of County owned historical structures.	Community Environment/History
				Health

Figure 1.9 Past plans span scales and focus areas. Current plans aim to address issues of climate, agriculture, transportation, and open space and recreation.

One Howard: Reinforcing the 2017 Vision in 2022

The vision for Howard County's system continues to be founded on how much the County has achieved over the past decade, and importantly, within the past five years. Since the last plan, the County's parks, programs, natural resources and agricultural lands have weathered significant economic, environmental, and public health challenges. The global pandemic, economic fluctuation of agricultural resources, and major flood events in the County have tested the Department and the framework of the LPPRP. Through these moments, the vision has held up. The One Howard vision established in 2017 continues to shepherd new innovations and successes in recreation and parks, natural resource conservation, and agricultural land preservation to maintain access for its residents in its densest neighborhoods and preserve undeveloped land where development pressures are greatest. As the system grows, the LPPRP celebrates unique places to interact with the natural environment, recreation programs, the County's rich historic legacy, and farming. Fostering many of the goals and objectives developed by the ongoing general plan, the LPPRP imagines a sustainable system that celebrates the diverse needs of a growing and evolving community.

The LPPRP is structured around five aspirations which incorporate both County and State goals and articulate strategies and actions for future potential capital improvements that align with the goals. They represent both the aspirations the Department has for itself in combination with aspirations the public has for the Department. Per state guidelines, three of the five plan aspirations also respond to the three themes of the LPPRP, parks and recreation, natural resource conservation, and agricultural land preservation. The plan aspirations and their related LPPRP themes are identified below:

- The Department delivers accessible experiences to all members of the community. [Parks and Recreation]
- The Department is a trusted steward for natural resources. [Natural Resource Conservation]
- The Department acknowledges and amplifies all cultural histories. [Agricultural Land Preservation]
- The Department maintains functional and financial responsibility.
- The Department maintains high quality spaces.



Figure 1.10 Howard County African drumming circle event, an example of the thousands of events and programs the Department either provides or supports.

2022 LPPRP Goals

The following state goals provide a framework for Howard County to protect, enhance, and expand its recreation and open space amenities, natural resources, and agricultural and historic places. Through the LPPRP process, the County identified strategies and actions to deploy the state goals with approaches that are unique to the County. This document also includes additional County goals to reflect outputs from the analysis and assessment, community aspirations, and stakeholder conversations.

RECREATION AND OPEN SPACE GOALS

2022 State Goals

Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens and thereby contribute to their physical and mental wellbeing.

Recognize and strategically use parks and recreation facilities as amenities to make communities, counties and the State, more desirable places to live, work, play and visit.

Use state investment in parks, recreation and open space to complement and mutually support the broader goals and objectives of local comprehensive/master plans.

To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile and help to protect natural open spaces and resources. Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.

Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

2022 County Goals (an update to the 2017 goals)

Promote programs and spaces that are accessible to all people.

Improve connectivity of people to recreation and park resources through all modes of travel, including walking, biking and transit.

Stay at the forefront of trends in recreation and park facilities, recreation programs and park design.

Instill flexibility to adapt to shifts in community needs and meet future growth.

Provide a range of recreation programs and inclusive park and facility designs to facilitate a diversity and cultural awareness.

Build partnerships within County government and across the County to efficiently share resources and provide the best customer service.

Use best practices to continue to provide sustainable parks, open spaces and recreation facilities that are safe and secure for users of all ages, backgrounds, and abilities.

Integrate a multi-faceted approach to health and wellness, supporting the mental, physical, social and emotional well-being of the diverse Howard County community.

RESOURCE CONSERVATION GOALS

2022 State Goals

Identify, protect and restore lands and waterways in Maryland that support important aquatic and terrestrial natural resources and ecological functions, through combined use of the following techniques:

Public land acquisition and stewardship;

Private land conservation easements and stewardship practices through purchased or donated easement programs;

Local land use management plans and procedures that conserve natural resources and environmentally sensitive areas and minimize impacts to resource lands when development occurs;

Incentives for resource-based economies that increase the retention of forests, wetlands or agricultural lands;

Avoidance of impacts on natural resources by publicly funded infrastructure development projects; and

Appropriate mitigation response, commensurate with the value of the affected resource. Focus conservation and restoration activities on priority areas, according to a strategic framework such as the Targeted Ecological Areas (TEAs) in GreenPrint (which is not to be confused with the former easement program also called GreenPrint).

Conserve and restore species of concern and important habitat types that may fall outside of designated green infrastructure (examples include: rock outcrops, karst systems, caves, shale barren communities, grasslands, shoreline beach and dune systems, mud flats, non-forested islands, etc.)

Develop a more comprehensive inventory of natural resource lands and environmentally sensitive areas to assist state and local implementation programs.

Establish measurable objectives for natural resource conservation and an integrated state/local strategy to achieve them through state and local implementation programs.

Assess the combined ability of state and local programs to achieve the following:

Expand and connect forests, farmland and other natural lands as a network of contiguous green infrastructure;

Protect critical terrestrial and aquatic habitats, biological communities and populations;

Manage watersheds in ways that protect, conserve and restore stream corridors, riparian forest buffers, wetlands, floodplains and aquifer recharge areas and their associated hydrologic and water quality functions;

Adopt coordinated land and watershed management strategies that recognize the critical links between growth management and aquatic biodiversity and fisheries production; and

Support a productive forestland base and forest resource industry, emphasizing the economic viability of privately owned forestland.

2022 County Goals (an update to the 2017 goals)

Protect and restore natural resources through habitat improvements and restoration efforts.

Continue to improve water quality through county-wide stream restoration and reforestation efforts, benefiting local waters and the greater Chesapeake Bay Estuary.

Enhance implementation of the Green Infrastructure Network Plan.

Encourage individual efforts to enhance biodiversity and environmental stewardship beyond park boundaries.

AGRICULTURAL LAND PRESERVATION AND HISTORIC RESOURCES

2022 State Goals

Few goals within the 2022 LPPRP directly speak to historic preservation. Instead, mention of these resources is inferred and suggested within agricultural goals. The most applicable goal is:

Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland's farmland.

2022 state goals for agriculture include:

Permanently preserve the County's agricultural land capable of supporting a reasonable diversity of agricultural production;

Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland's farmland;

To the greatest degree possible, concentrate preserved land in large, relatively contiguous blocks to effectively support long-term protection of resources and resource-based industries; Limit the intrusion of development and its impacts on rural resources and resource-based industries;

Ensure good return on public investment by concentrating state agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs;

Work with local governments to achieve the following:

- Establish preservation areas, goals and strategies through local comprehensive planning processes that address and complement state goals;
- In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural landowners, the public at large, and state and local government officials;
- Protect the equity interests of rural landowners in preservation areas by ensuring sufficient public commitment and investment in preservation through easement acquisition and incentive programs;

- Use local land use management authority effectively to protect public investment in preservation by managing development in rural preservation areas;
- Establish effective measures to support profitable agriculture, including assistance in production, marketing and the practice of stewardship, so that farming remains a desirable way of life for both the farmer and public-at-large.

2022 County Goals (an update to the 2017 plan)

Goals within the 2017 plan that were related to the historic resource system are restated as 2022 county goals. These goals include:

• Integrate County-owned historic and cultural resources into park programming and facilities in a way that encourages and promotes the stewardship of these resources.

Goals within the 2017 plan that were related to agriculture are restated as 2022 county goals. These goals include:

• Integrate the preservation of the county's agricultural land and activities with natural resource protection.

- Connect the county's agricultural heritage to its recreational goals, through the incorporation of community gardens, healthy eating resources, and educational programs.
- Incorporate farming across all scales from large land preservation to support for efficient use of small farms to community gardens.



Recreation + Parks

Aspiration

The Department delivers accessible experiences to all members of the community.

Recreation and Parks

Since 2017, Howard County has consistently grown older and more diverse.¹⁰ This sustained population growth has created two very different and unique conditions for the Department. Not only has population growth made large land parcels increasingly hard to acquire as the county becomes more built out, but the demographics of this population have encouraged new ways of thinking about the County's provision of amenities and programs. As a result, the County has evolved to respond to these shifting demands for parks and facilities against an increasingly limited number of affordable places to create new spaces to support these activities.

Regarding land acquisition, the Department has shifted to acquiring smaller parcels of land (25 acres or less) over the last decade. It is likely that this trend will continue into the future, and that the County will shift towards gaining smaller parcels and projects in denser parts of the county. This movement provides opportunities to prioritize investments that would increase equitable access to outdoor spaces in underserved urban areas. It also creates opportunities for linked open spaces between neighborhoods and their destinations, including schools, parks, and commercial districts. Small parcels will play a critical role in connecting various unconnected segments of greenways and trails where legacy patterns of development left many

neighborhoods without easy access to parks, trails, and natural areas. However, this also poses challenges. The uneven access to parks and open space between the Rural West and urbanized east could grow even wider. It will be important to balance recreation investments where they are needed with where they are possible.

Howard County is positioned to become one of the wealthiest and most diverse counties in the country. As young families and foreignborn individuals continue to flock to the County for its high quality schools, range of retail and cultural destinations, and appealing places to raise a family, the County is also prepared to respond to the diverse needs of its newest residents, whether they differ in race, ethnicity, age, income, or ability. As Howard County's population over the age of 65 continues to grow, the Department provides for older adults in active-aging and therapeutic recreational programming. The Department already provides programs and physical infrastructure that support the recreational desires of resident Korean, Indian, and African American populations and continues to maintain excellence in those program areas by expanding outreach to communities of color to better understand specific desires for future program investments.

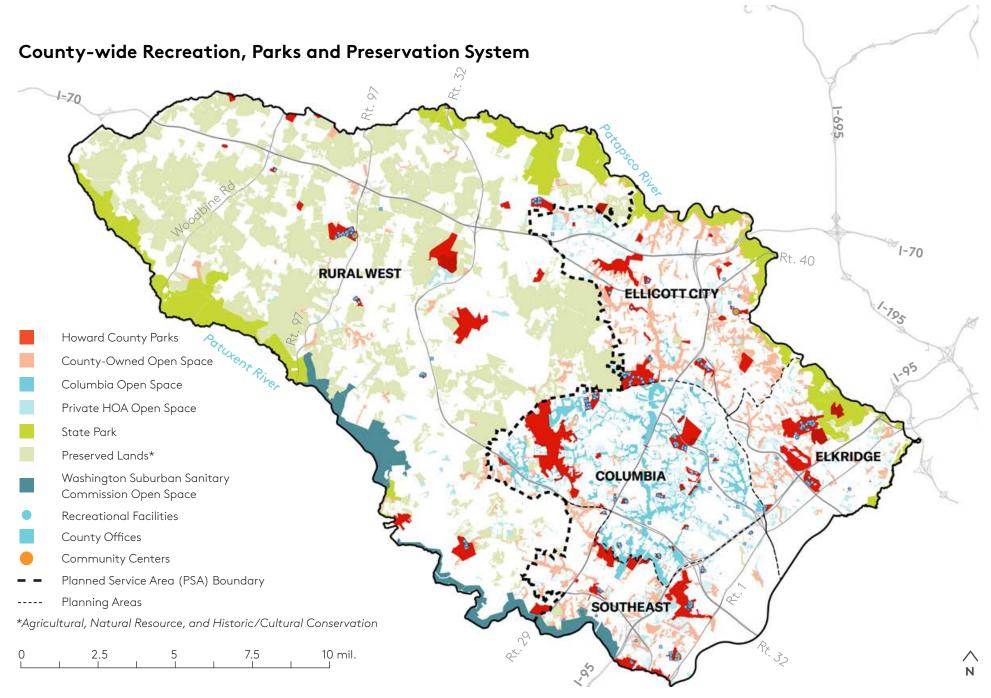


Figure 2.1 The Department of Recreation and Parks manages a multitude of offices, community centers, and parks. These assets are in addition to other privately owned, but publicly accessible, park and recreation amenities.



Figure 1.12 Howard County residents enjoy county park trails for various events throughout the year, such as Bird ID walks at Font Hill Wetland Park.

TRAILS NETWORK

The county is also supported by a growing trail system. This system consists of trails and pathways within parks and open spaces maintained by the Department, Columbia Association pathways, and state trails within Maryland state parks. The county maintains a total of 112 miles of trails and pathways within County Parks and while opportunities to expand the network between parks and other destinations are limited, the County continues to focus investments on safe access to parks in communities that need access most.

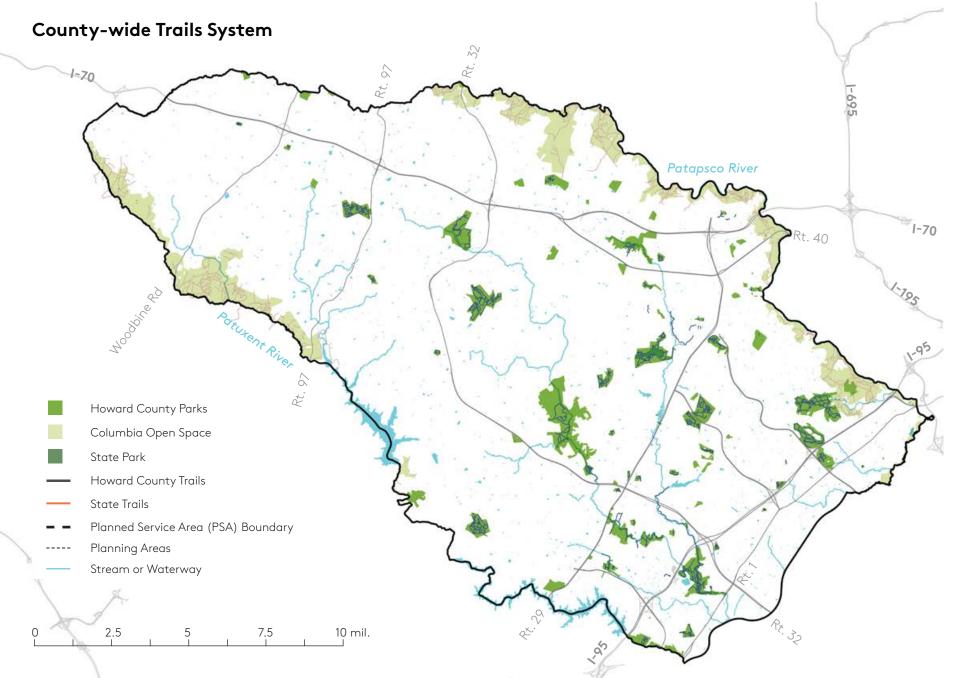


Figure 2.2 The Department of Recreation and Parks manages several trails throughout the county. These assets are in addition to other privately owned, but publicly accessible, trail amenities.

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Overview of Parks + Open Space system

2022 STATE GOALS

Recreation and Open Space goals from the State's 2022 plan are as follows:

- Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens and thereby contribute to their physical and mental well-being.
- Recognize and strategically use parks and recreation facilities as amenities to make communities, counties and the State, more desirable places to live, work, play and visit.
- Use state investment in parks, recreation and open space to complement and mutually support the broader goals and objectives of local comprehensive/master plans.
- To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile and help to protect natural open spaces and resources.

- Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.
- Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

Recreation and Open Space in Howard County continues to be a model for neighboring counties and within the state of Maryland. Howard County continues to offer a range of programs and recreational spaces that meet community needs.

2022 COUNTY GOALS (AN UPDATE TO THE 2017 GOALS)

- Promote programs and spaces that are accessible to all people.
- Improve connectivity of people to recreation and park resources through all modes of travel, including walking, biking and transit.
- Stay at the forefront of trends in recreation and park facilities, recreation programs and park design.
- Instill flexibility to adapt to shifts in community needs and meet future growth.
- Provide a range of recreation programs and inclusive park and facility designs to facilitate diversity and cultural awareness.
- Build partnerships within the County government and across the County to efficiently share resources and provide the best customer service.
- Use best practices to continue to provide sustainable parks, open spaces and recreation facilities that are safe and secure for users of all ages, backgrounds, and abilities.

• Integrate a multi-faceted approach to health and wellness, supporting the mental, physical, social and emotional well-being of the diverse Howard County community.

Both the Department and the State of Maryland's goals for recreation and parks are rooted in similar system principles including accessibility, equity, strong planning, collaboration, and recreational open space protection. Therefore, implementation of the Department's goals supports implementation of the statewide goals at the local level. Both County and State goals advocate for highquality recreational environments that are readily accessible and conveniently located relative to population centers. Additionally, the State goals specify that accessible spaces should be accessible without reliance on the automobile. These goals are well informed by the County's analyses, specifically where the County has measured user demand and level of service, which has indicated opportunities and gaps in the existing recreational system across the county.



Figure 2.3 Centennial Park North Ribbon Cutting for Sensory-Friendly Playground

Parks and Open Space

THE SYSTEM TODAY

Equitable access to parks and programs for residents is a core element of the Department of Recreation and Parks' mission and values. The Department and the County seek to align with the State of Maryland's approach to park equity and investment as well.

Park Equity Access

The Park Equity Analysis Tool allows the state of Maryland to quantitatively measure and increase equitable access to green spaces across the state.¹¹ Developed by the Maryland Department of Natural Resources and the University of Maryland, the tool combines United States Census Block Group data with spatial data of statewide public and local parks to identify areas in need of parks and recreation facilities. Using this method, the tool prioritizes underserved areas of Maryland by analyzing factors such as park distance, population density, income, walkability, access to transit, linguistic isolation, and demographic characteristics such as percent of non-white population, percent of children under 18 years old, and percent of adults over 65 years old. Access to park space is then evaluated on proximity to state, regional, and local parks and trailheads, and includes parklands outside of the Census Tract Block Groups and county boundaries. These factors are then scored and added together to produce a final combined

Park Equity Score for each Census Block Group in the state of Maryland. A lower score represents a lower need (high equity exists) while a higher score represents higher need (low equity exists).

The Park Equity Tool and resulting scores provide a helpful starting point for the County to evaluate where investments are needed most. The County will continue to work with the State to evolve the Park Equity Tool so that it incorporates additional metrics including the inclusion of the disability community, county spending on programs, range of programs, and private, publicly accessible open space.

There are more pockets of low equity in the eastern part of the county compared to the Rural West. This distinction informed the Level of Service Analysis for parks and recreation amenities for this effort. Using this metric, "access" in the eastern part of the county was defined as having an open space or recreation amenities within either a 10-minute walk or five-minute drive of one's home. In the Rural West "access" was defined as one being within a fifteen-minute drive of an open space or recreation amenity. This analysis is in accordance with the 2017 State goals which focus on ensuring that parks and recreational facilities are conveniently located relative to population centers and accessible without reliance on the automobile.



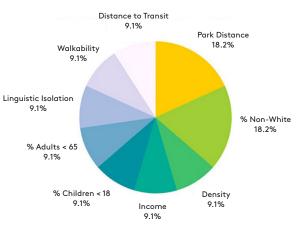


Figure 1.13 The Park Equity Tool uses a variety of metrics to determine if particular areas within Maryland are well served by park and recreation facilities. Attributes are weighted in varying proportions. Distance from a park and the percent of non-white population are weighted the heaviest.

Park Equity in Howard County

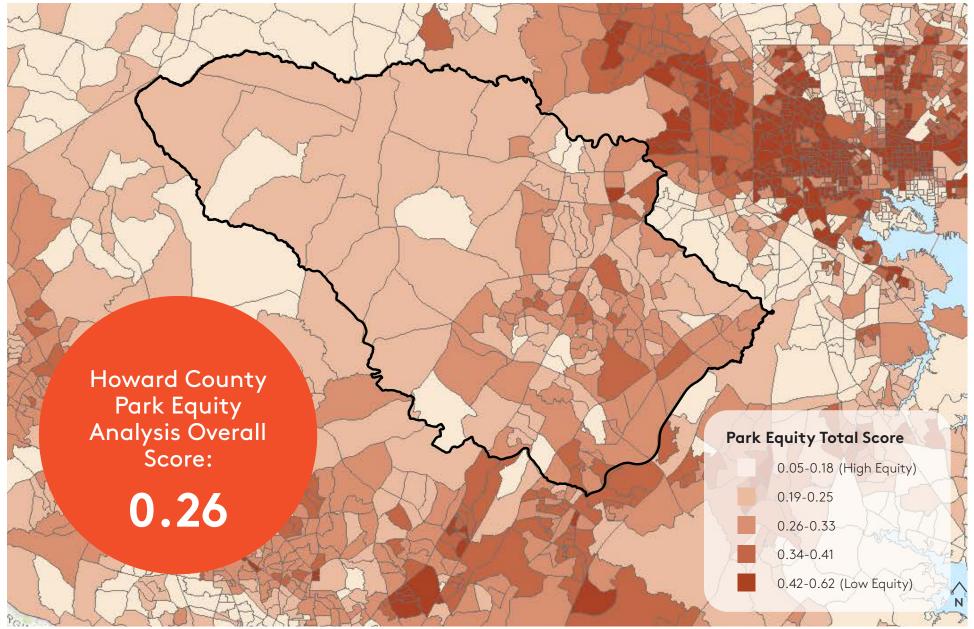


Figure 2.4 While Howard County generally has a Park Equity Score that is in the middle of possible ranges, there are great differences between the Rural West and the eastern areas of the county.

New Properties since 2017

Since the last plan, the County has grown the system by adding a cumulative 37.2 acres of park land. These acquisitions include Savage Properties (4.93 acres) in the Southeast planning region, Cole Properties (aka Shipley Park, 25.19 acres) and Downey Property (3.47 acres) in the Rural West planning region, Bailey Park (0.6 acres) in the Columbia planning region, and Johnson Property (3.01 acres) in the Elridge planning region.

1980

Rockburn Branch

(415.07 acres)

In the past decade, land investments have been smaller in size, as larger land parcels are less available than in the past. Trends show that since 1970, the average parcel acquired by the Department of Recreation and Parks has dramatically decreased in size. This reflects how large continuous tracts of land are growing more rare as the County develops. Many large parcels may also be in the hands of private entities and single land owners.

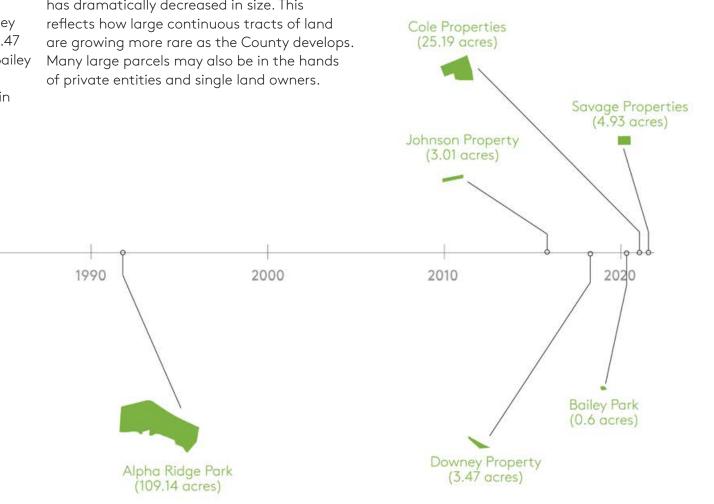
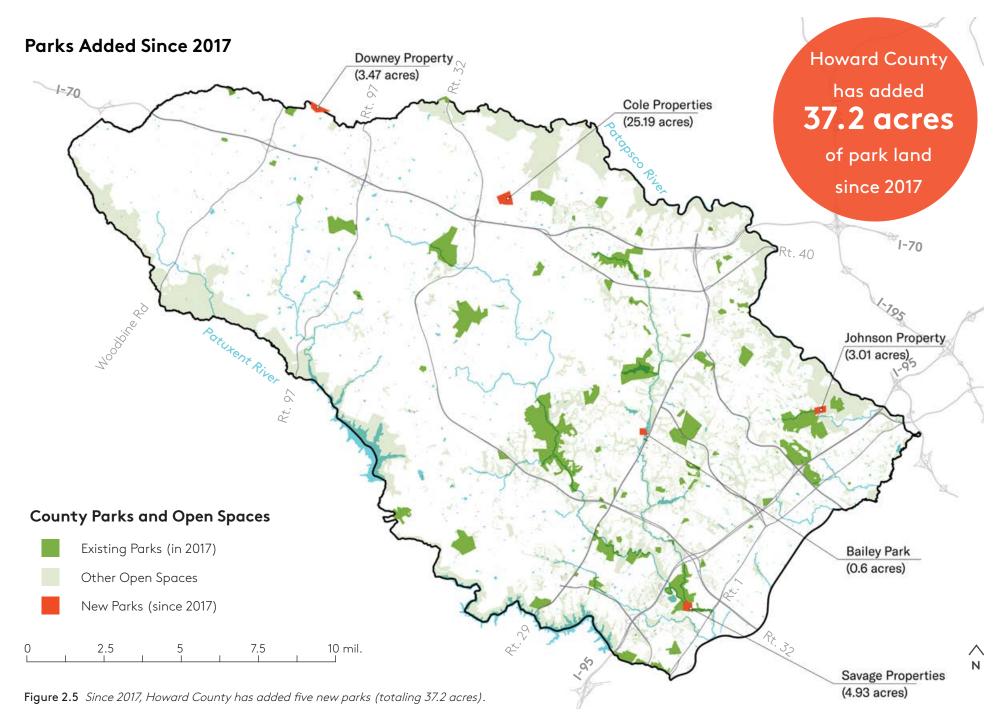


Figure 1.14*Recent County land purchases, those made since the 2017 plan, are smaller in size than previous decades.*



2022 Land Acquisition Goals

The 2017 LPPRP land acquisition goals directly correlated to user demands for more trails and the urgent need to acquire land in the rural west ahead of growth pressures there, the land acquisition goals for 2022 are to provide no less than 25 acres per 1,000 residents. The County currently exceeds this goal by providing 29.5 acres per 1,000 residents. Although the County has met its goals for land acquisition, the current land acquisition goals support increased equity and access to parks for all Howard County residents in the following ways:

- Promote western land acquisition if it enhances connectivity across Countyowned parcels
- Address the lack of parks in the growing northwest area of the county
- Acquire land adjacent to parks and open spaces where appropriate to expand the ecological function of parks
- Prioritize land acquisition along the Patuxent and Patapsco Rivers
- Prioritize land acquisitions, amenities and facilities in areas with dense or growing populations, especially along I-95 and Route 32 corridors

Between FY23 and FY27 Howard County shall acquire new parkland in each of the five existing planning areas within the county with an awareness and effort to prioritize land acquisition within census tracts in the greatest need of improved park equity and connectivity.

County-owned recreation amenities

Amenity Counts

The Department of Recreation and Parks has been working hard to grow recreation amenities. The largest increase in amenities in the County was in Tennis and Pickleball (+9 courts), Handball (+4 courts), and Lawn Games (+21 games). Changes in amenities since the last plan are as follows:

Department of Recreation and Park Owned Amenities



Figure 2.6 The Department has increased access to amenities since 2017.

Peer Analysis

The LPPRP conducted a peer analysis in order to compare the Department's system to similar departments. Investigation into the National Recreation and Park Association (NRPA) database identified 125 agencies across the nation with a similar population size and budget to Howard County.¹² Populations in each agency ranged from 150,000 to 750,000 (compared to Howard County's population of 332,317 in 2020) with five-year capital budgets ranging from \$100,000 to \$305,000,000 (compared to Howard County's five-year capital budget of \$38,675,000 in 2020). When comparing against these national peers, Howard County scores at or above the national median for the number of fields, courts, and miles of trails, for the number of each amenity per 100,000 residents. There is an abundance of overlay fields, adult baseball fields, adult softball fields, and tennis courts. Howard County is particularly well-served by multi-use courts and multi-purpose fields. It has roughly double the number of these amenities than the national average.

However, there is still room to grow. The same peer analysis revealed that Howard County has a deficit in recreation centers, community centers, and indoor swimming pools. Youth soccer and softball fields also had a big deficit, however, it should be noted that this deficit is

Comparison to National Peers

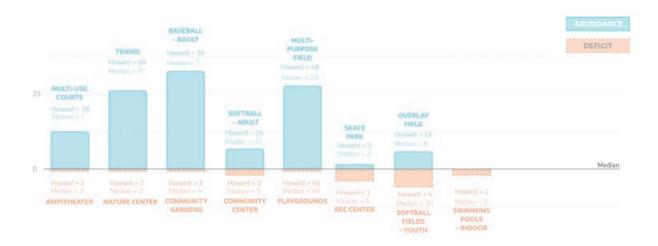


Figure 1.15 When comparing the Department to 125 agencies with similar populations and capital budgets, Howard County often had an abundance of amenities. The largest deficits remain in youth soccer and softball fields.

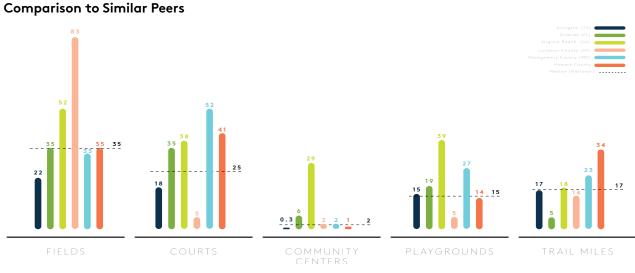


Figure 2.7 The charts above compare the top five most desired amenities across systems similar to Howard County. Counts are displayed in number of amenity per 1,000 residents. Howard County meets the median in all amenities but community centers.

partly made up by the several fields permitted through Howard County Public Schools which also contribute to the system.

While national averages are helpful to ground comparisons, it is also beneficial to include local peers and systems that are similar to Howard County in more nuanced ways. Arlington, Texas, Orlando, Florida, Virginia Beach, Virginia, Loudoun County, Virginia, and Montgomery County, Maryland were selected as these peers.

When compared to these agencies, Howard County offered the second greatest number of acres per 1,000 residents and third largest median park size. However, it ranked last in the rate of residents that live within a ten minute walk of a park. This indicates that Howard County's system may rely on larger parks that are further from residences.

Fields, courts, community centers, playgrounds, and increased miles of trails are some of the most desired amenities within a park and recreation system. When scrutinizing the rate of each of these amenities (amenity per 100,000 residents) Howard County offered more access to courts and miles of trails. It provided roughly the median amount of fields, playgrounds, and community centers. Howard County is doing a good job providing these five amenities, as none are well below the national median.

Non-County Owned Recreation Amenities

Seasonally, the Department provides hundreds of recreation programs and events, a wide variety of services, and a number of highguality facilities to both residents and visitors of the county. In addition to the Department, there is a very large number of other providers of these types of services within the county. As part of the five year update to the Howard County Land Preservation, Parks and Recreation Plan, this report summarizes the public, nonprofit, and private organizations that also provide a variety of recreation programs, events, and leisure services in and around Howard County. The goal of this effort is to ensure that Department staff are aware of the many opportunities that exist, to fill obvious gaps, to seek out partners when appropriate, and to reduce (or eliminate) the potential duplication of efforts.

Table 1 was originally created in 2011 as part of a study to determine duplicate services or service gaps related to recreation programming within the county. This information has been updated to depict the current programming of all of these organizations. The amenity and program types are listed in the first column with Howard County Recreation and Parks programs and services listed in the second column. The following organizations are included in this table:

	Кеу							
HCRP	Howard County Recreation & Parks							
CA	Columbia Association							
НСС	Howard Community College							
ССВС	Community College of Baltimore County							
HCPSS	Howard County Public School System							
ТА	Terrapin Adventures - Adventure park located in Savage, MD							
REI	Located in Columbia, MD							
YMCA	Located at 4331 Montgomery Road, Ellicott City, MD							
LF	Lifetime Fitness: Located at 7220 Lee Deforest Drive, Columbia, MD.							
HC Library	Howard County Library System: multiple branches: Columbia (4), Ellicott City (2), Elkridge, Glenwood, Laurel							
МС	Montgomery County							
сс	Carroll County							

Figure 2.8 Organizations in Similar Service Providers Report

Program Type	Howard County Recreation Programming Inventory											
	HCRP	СА	нсс	ССВС	HCPSS	ТА	REI	ҮМСА	LF	HC Library	мс	сс
Pre-K Classes & Activities (0-4 years)	Х	Х			Х			Х	Х	Х	Х	Х
Camps (0-4 years)	Х							Х	Х		Х	Х
Youth Classes & Activities (5-10 years)	Х	Х	Х	Х	Х	Х		Х	Х	X	Х	Х
Camps (5-10 years)	Х	Х		Х		Х		Х	Х		Х	Х
Tweens & Teens Classes & Activities (11-17 years)	Х	Х	X	Х	Х	Х	Х	X	Х	X	Х	Х
Camps (11-17 years)	Х	Х			Х	Х		X	Х		Х	Х
Adults Classes & Activities (18+ years)	Х	Х	Х	Х		Х	Х	X	Х	X	Х	Х
Adults Classes & Activities (55+ years)	Х	Х	Х	Х		Х	Х	X	Х		Х	Х
Aquatics	Х	Х	Х	Х				Х	Х		Х	Х
Fitness Centers	Х	Х	Х	Х				X	Х		Х	Х
Child Care	Х	Х						Х				
Special Events & Family Activities	Х	Х				Х	Х	Х	Х	X	Х	Х
Therapeutic Recreation & Inclusion Services	Х										Х	Х
Trips & Tours	Х	Х	X			Х	Х		Х		Х	Х
Volunteer Opportunities	Х	Х	X	Х	X		Х	Х		X	Х	Х

In addition to the organizations listed in Table 1, there are a number of other public and private organizations throughout the county that provide recreation programs and services. These organizations include nonprofits and private organizations. Unlike the organizations included in Table 1, these organizations typically offer one or two specific opportunities or target a specific age group or interest. Importantly, this review included an assessment of external swimming amenities, which ranked as the most desired amenity by residents as part of the statistically valid community survey conducted in 2021.

Nonprofits

One of the largest providers of recreation and leisure opportunities within the county is the nonprofit Columbia Association (included in Table 1). Following Maryland State parks at 57%, a total of 36% of survey respondents indicated that they utilized the Columbia Association for indoor and outdoor recreation and sports activities during the past 12 months. Located in Columbia, MD, this organization offers its residents the following:

- Three full-service fitness centers
- Five tennis clubs
- Four indoor swimming pools/one hot water therapy pool

- 23 outdoor swimming pools (including two mini water parks)
- An art center
- A dog park
- An ice rink
- A sports park
- Two golf courses: Fairway Hills Golf Club and Hobbit's Glen Golf Club
- A volunteer center
- Youth & teen center
- 3,600 acres of open space that include parks, lakes, tot lots, basketball courts, and 95 miles of pathways

In addition to providing the facilities listed above, the Columbia Association also provides a number of programs including youth programs, camps, before and after school care, school's out programs, martial arts, teen programs, programs for mature adults, fitness, swimming, art, tennis, ice skating, adults sports leagues (basketball, racquetball, and volleyball), special events, sustainable initiatives, volunteer opportunities, and an international exchange program. These programs are also available to non-residents for a higher fee. Other notable nonprofit providers of recreation type services within the county are divided into five categories including:

- Early childhood and camps
- Programs for people with disabilities or dealing with serious illness
- Youth sports and general recreation
- Performing Arts
- STEM/environmental education programming

Private Organizations Providing Recreation in the County

In addition to the many nonprofit organizations, there are a number of private entities in the county that provide recreation and leisure opportunities to residents. For the purposes of this report, these organizations are divided into childcare, fitness and youth sports. Table 7 includes all of the private organizations offering childcare services to county residents.

There are a wide range of private fitness facilities within Howard County. Although many of these facilities changed their operations due to COVID-19 (less offerings and smaller classes), they are all open and providing services. Table 8 includes the listing of private fitness facilities within the county. It should be noted that 14 out of the 23 opportunities (nearly 61%) are located within Columbia and this does not include the facilities of the Columbia Association.

Swimming Opportunities

Based on the results of the statistically valid community survey, more indoor and outdoor swimming opportunities are desired. Table 10 provides a listing of indoor swimming pools and table 11 provides a listing of outdoor swimming pools in Howard County. This information does not include the 23 outdoor pools and four indoor pools owned and operated by the nonprofit Columbia Association (Columbia Athletic Club, Columbia Gym, Columbia Swim Center, and the Supreme Sports Club).

HOA Amenities

There are various amenities owned by Homeowners Associations (HOA) across Howard County that are accessible to some Howard County residents and fulfill a recreational need in certain areas. These amenities include the pools at the Maple Lawn Community Center and Fairway Hills Apartments, the fitness centers at Supreme Sports Club and LifeTime Columbia, and the Cattail and Turf Valley Country Clubs.

State-owned amenities

In addition to County-owned parks, Howard County residents have access to two major state parks, the Patapsco Valley State Park and the Patuxent River State Park. Within these state parks, there are several trails and water access points, such as the Daniels Area on the Patapsco River. There is also the Hugg-Thomas Wildlife Management Area managed by the Wildlife and Heritage Services Division of the Maryland Department of Natural Resources that contains trails available for use by hikers and hunters.







Figure 2.10 There are a wide variety of amenities offered throughout the County from similar providers.

Access

Methodology

While it is telling to examine the number of each amenity the system provides, it is equally important to analyze how easy it is to access these amenities. Barriers like a lack of public transportation, amenities located far away from residences, and long drive times between amenities can make these attributes difficult to access. In order to analyze the accessibility of amenities, two different metrics were used. In denser areas of the county, such as Elkridge, Columbia, Southeast, and Ellicott City an amenity, park, open space, or facility was deemed accessible if it is within either a ten minute walk or a five-minute drive. The ten minute walk metric was determined using walksheds based on park access points, such as entrances or exits. In the Rural West Planning District, where farmland creates less density and rates of vehicle access are higher, an amenity, park, open space, or facility was deemed accessible if it is within a five to fifteen-minute drive.

County + State Parks

Howard County's system is very accessible if a resident has access to a car. In the county, 73% of land area is within a five-minute drive to a park. However, accessibility greatly decreases on foot. Only 10% of Howard

County's land area is within a ten minute walk to a County park. It is also prudent to analyze the accessibility of specific amenities that Howard County residents wish to be close to, such as playgrounds, fields, grills, or swimming facilities. Examining the location and accessibility of highly desired amenities also reveals if access is equitable across the system, and can inform where the County may want to invest in new amenities in

Access Methodology

geographic areas where there is higher need. It should also be noted that while this analysis primarily concerns County Parks, there are other privately-owned parks and trails that are publicly accessible across the county and contribute to the system, especially in Columbia.

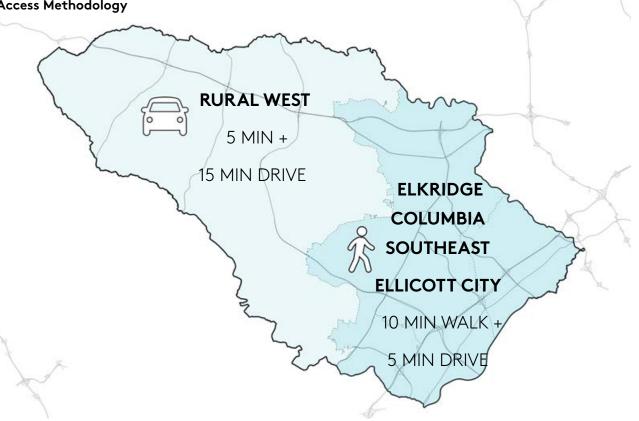
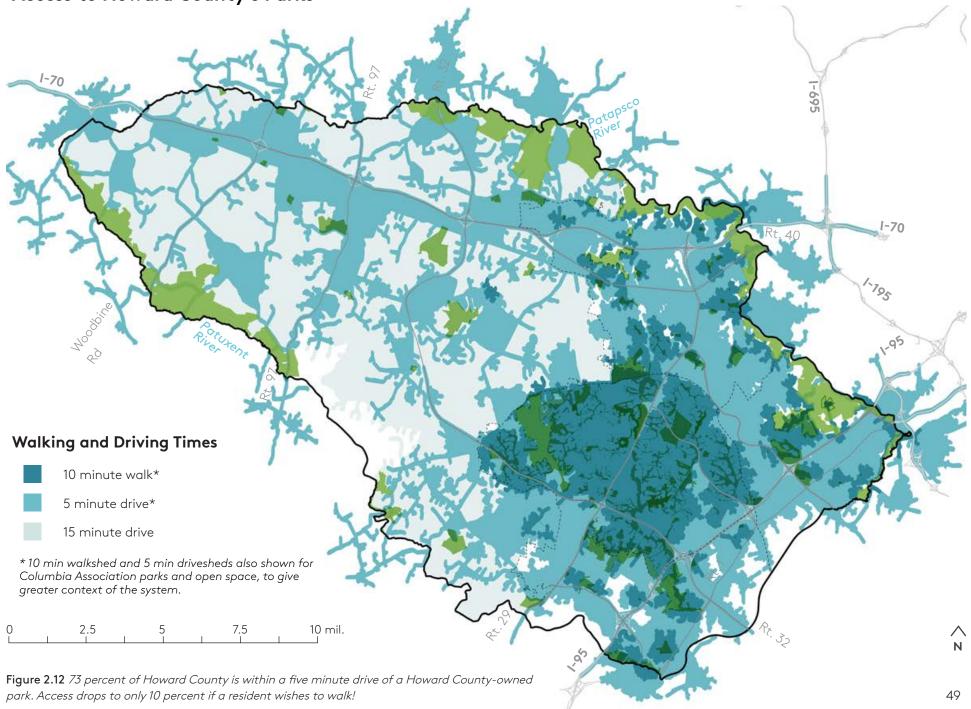


Figure 2.11 Due to a large number of farms in the Rural West, different definitions of "access" were used to determine if amenities are located in equitably accessible locations.





Playgrounds

In Howard County, 34.8 percent of land area is within a five-minute drive of a playground. Columbia offers the highest access, with 65 percent of land area within a five-minute drive of a County-owned playground. It should be noted that Columbia also has access to 15 playgrounds and 170 tot lots provided by the Columbia Association which are available for public access.¹³ Additionally, playgrounds provided by the Howard County Public School System (HCPSS) and mostly located at Howard County Elementary Schools also contribute to the system.

Ellicott City has the lowest access when compared to other planning areas in the East, with 47.2% of land area being within a fiveminute drive to a County-owned playground.

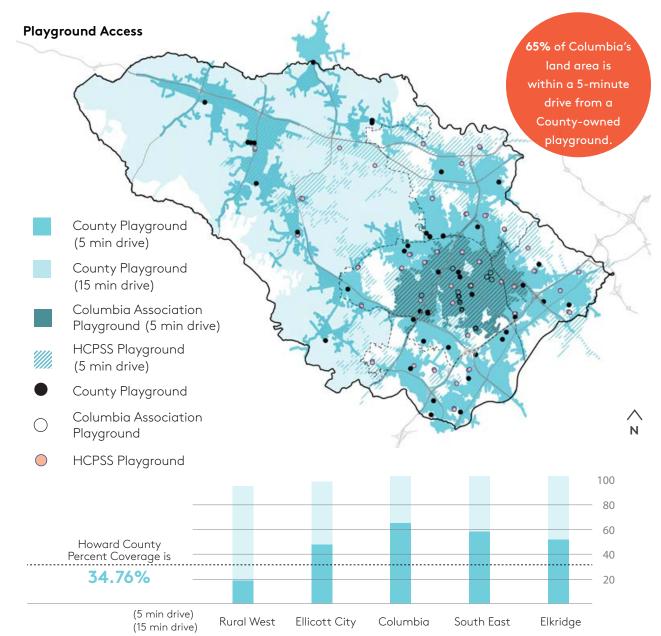


Figure 2.13 Playground access in the County.

Fields

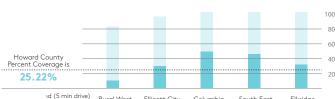
Howard County is almost equally served by both multi-purpose fields and ball diamonds. Within the county, 23.7 percent of land area is within a five-minute drive to a multi-purpose field, while 25.2 percent of Howard County's land area is within a five-minute drive to a ball diamond. Columbia has the highest access to ball diamonds and multi-purpose fields, where 50 percent of the planning area's land area is within a five-minute drive from a ball diamond, and 62 percent of the planning area's land area is within a five-minute drive from a multi-purpose field.

The Southeast has the lowest access to multi-purpose fields, where only 11.8 percent of its land area is within a five-minute drive of a multi-purpose field. It should be noted that there is partial general access to fields provided by the Howard County Public School System (HCPSS).



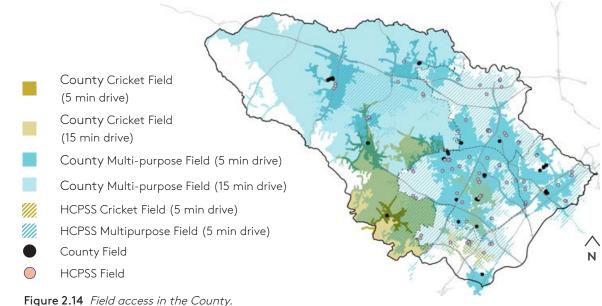
Ball Diamond Access

- County Ball Diamond (5 min drive)
- County Ball Diamond (15 min drive) HCPSS Ball Diamond (5 min drive)
- County Ball Diamond
- HCPSS Ball Diamond



ıd (5 min drive) ıd (15 min drive) Rural West Ellicott City Columbia South East Elkridg

Cricket + Multipurpose Field Access



51

Courts

Pockets of Howard County are well served by courts. Within the Southeast, 73 percent of land is within a five-minute drive from a tennis or pickleball court. In comparison, 64 percent of land area within Columbia, is within a fiveminute drive from a basketball, racquetball, or handball court. Others are less served. For example, there are no pickleball courts in Ellicott City. It should be noted that there is partial general access to courts provided by Howard County Public Schools, which also contribute to the system.



- County Pickleball (5 min drive)
- County Pickleball (15 min drive)

Rural West Ellicott City

Columbia

South East

Elkridge

Ν

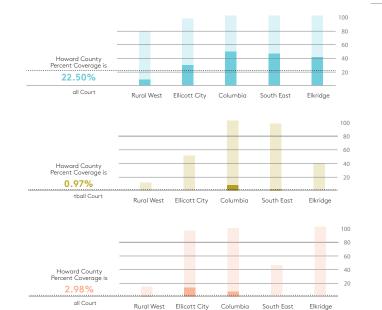
- County Tennis (5 min drive)
- County Tennis (15 min drive)
- HCPSS Tennis (5 min drive)
- County Tennis
- HCPSS Tennis

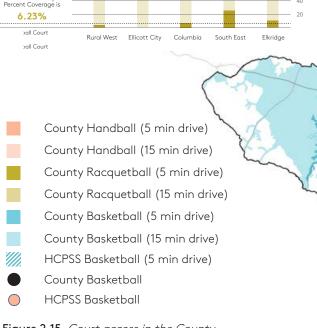
Howard County Percent Coverage

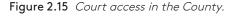
27.51%

Howard County

Court (5 min drive) Court (15 min drive)

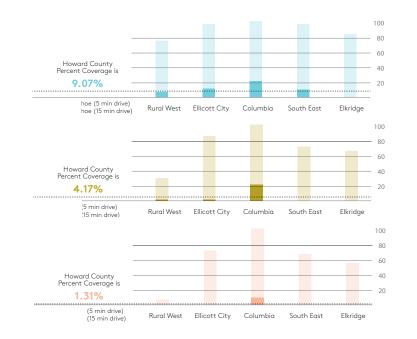


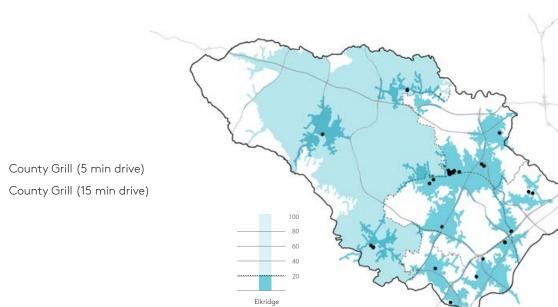




Leisure Activities

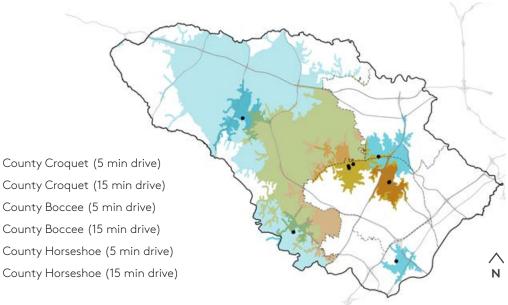
Leisure activities consist of lawn games and places to grill. Columbia is best served in accessibility to lawn games, where 58 percent of its land area is within a five-minute drive of amenities like a croquet field, bocce court, and horseshoe court. Southeast and Elkridge have the least amount of access, as they do not have any bocce courts or croquet fields. Columbia and Southeast have the best access to grill areas, where 38 percent of Columbia's land area is within a five-minute drive from a grill, and in Southeast, 51 percent. Elkridge has the lowest access to grills, where 22 percent of Elkridge's land area is within a five-minute drive from a grill.

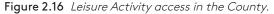






Grills





Trails and Water Access

Access to both trails and water are highly sought after in Howard County, and trails ranked as the second most desired amenity by residents in the statistically valid community survey. Over 43.7 percent of Howard County's land area is within a five-minute drive of a trail head. Accessibility increases within Ellicott City, Columbia, Southeast, and Elkridge, where 65 percent of land is within a five-minute drive of a trailhead.

Ellicott City is the most accessible to boat ramps and fishing areas, where 31 percent of its land area is within a five-minute drive. Elkridge has no boat ramps or fishing areas. It should be noted that all fishing areas require a state fishing license.¹⁴ It should also be noted that in Columbia, the Columbia Association allows public fishing access at Lake Elkhorn, Wilde Lake, and Jackson Pond. State waters and Washington Suburban Sanitary Commission waters also allow public access for fishing with a state license.



Trail + Pavilion Access

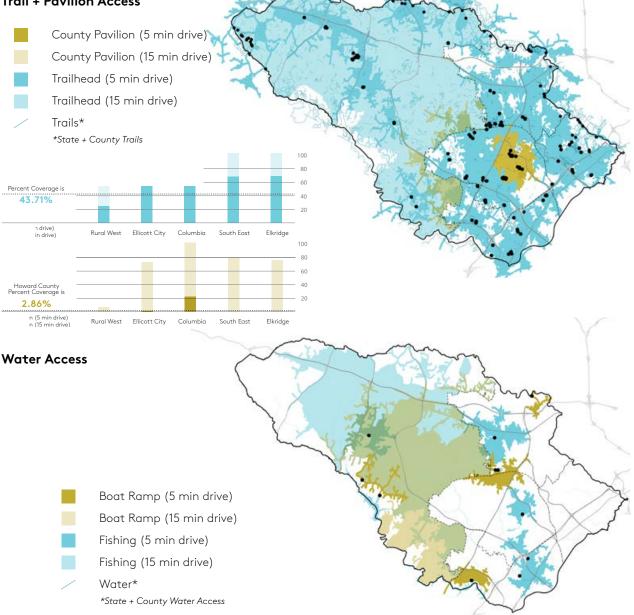


Figure 2.17 Trails, Pavilion, and Water Access in the County.

Swimming

Swimming Access

Swimming pools and splash pads are the least publicly accessible amenities in Howard County. This is often the case, as these facilities are expensive to create and upkeep over time. In Howard County, only two percent of the land area is within a five-minute drive of a swimming pool or splash pad. Ellicott City has the highest coverage, with 16.3 percent of the district within a five-minute drive of the one swimming pool in the county which is at Roger Carter Community Center.

While there aren't currently any Countyprovided swimming pools or water play opportunities in Columbia, Southeast, Elkridge, or the Rural West, there are a number of privately-owned pools that contribute to the system. In Columbia, the Columbia Association allows its residents access to 4 indoor pools and 23 outdoor pools.¹⁵ Additionally, across Howard County, various private organizations offer access to 4 indoor pools and 7 outdoor pools.

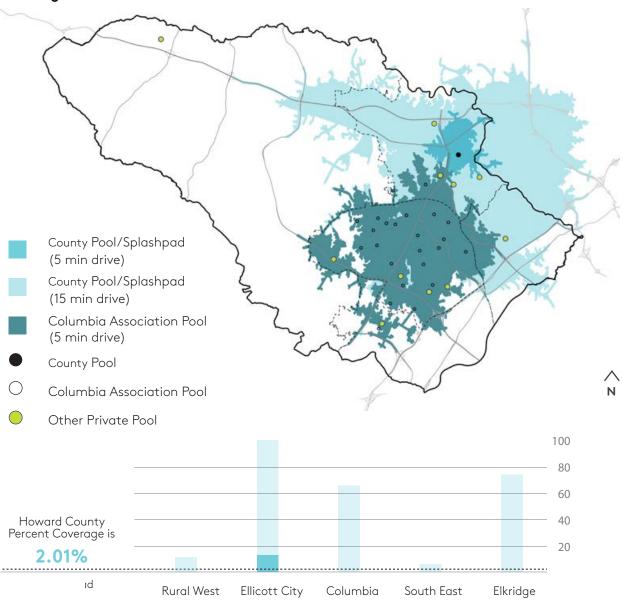


Figure 2.18 Swimming access in the County.

Implementation

Addressing the challenges and supporting the strengths of Howard County's open space and park system will require the utilization of as many tools as possible. The following list includes some of Howard County's most powerful and meaningful resources:

IMPLEMENTING PROGRAMS

Programs and funding sources used by the County to help achieve land preservation, parks and recreation goals include:

Program Open Space

Created in 1969, Program Open Space (POS) is a state-level initiative that aims to finance the acquisition of land for open space and recreation purposes.¹⁶ When a home is purchased, 0.5% of the transfer tax collected at the sale of a property is allocated to the Maryland Program Open Space fund, which is then disbursed to the counties each fiscal year. The system was created to directly tie development to available funding for open space and recreational facilities. While this system is the major funder of open space acquisition in the State, and specifically within the County, there is an opportunity to increase available funds with a county-specific tax that could be channeled into county-specific agricultural and land needs.

Land and Water Conservation Fund

This is a federally funded program that provides 50 percent matching grants to state and local governments for acquiring and/or developing public outdoor recreational areas and facilities.¹⁷ Municipalities and counties are eligible for up to a 50 percent matching fund assistance from the LWCF, with Program Open Space or Community Parks and Playground grants used as the match. Development and acquisition projects must be completed within three years from the provided start date.

Sustainable Communities designation

Established in 2010, this designation promotes efficient use of scarce state resources based on local sustainability and revitalization strategies.¹⁸ It is a place-based designation that offers resources to support projects focused on community development, revitalization, and sustainability, such as pocket parks or environmentally sustainable building development. Sustainable Community Areas are designated as places that achieve the following:

- Development of healthy local economy
- Protection and appreciation of historical/ cultural resources
- A mix of land uses
- Affordable and sustainable housing, employment options
- Growth and development practices that protect the environment, conserve natural resources, encourage walkability and recreational opportunities, and create access to transit

To participate, municipal and county governments submit an application defining a geographic area in need of revitalization, along with a sustainable community action plan.



Figure 2.19 Aerial View of Schooley Mill Park.

Programs THE SYSTEM TODAY

For decades, the Department of Recreation and Parks has been dedicated to protecting the health of the County's residents and visitors. As a part of the LPPRP process, an assessment of the Department's recreation program menu has identified strengths, weaknesses, and opportunities for future direction, establishing goals for the next five years based on recent insights and findings.

It is clear that the Department has consistently created a myriad of opportunities for leisure activities that pull participants from across the region. This regional draw creates a competitive market for public and private entities. Despite this, engagement in programs among underrepresented age groups and demographics remains uneven and has the potential to be greatly improved in the future.

OVERVIEW OF DEPARTMENT ADMINISTRATION AND OPERATIONS

The Recreation Bureau is made up of three divisions that provide recreation programming, with each focusing on the following services:

• Recreation Services (RS): recreation programs and services that relate to

arts, crafts, dance, special events, and children and adult leisure classes, camps, and programs. Oversee volunteer and community center management.

- Sports and Adventure Services (SAS): promotes active lifestyles through instructional programs and community partnerships. It offers programs such as sports instruction and leagues, hikes, camping and campfires, fishing, kayaking and canoeing, skiing and tubing, boating classes, nature programs, and rock climbing.
- Recreational Licensed Childcare and Community Services (RLCCS): childcare programs from ages 3 to 11 (licensed through Maryland State Department of Education Office of Child Care), teen programs for 13 to 18 year olds, therapeutic recreation and accommodation services, community outreach, and trips and tours and sports and fitness for the active adult community ages 55 and up.



Figure 2.20 Laura's Place "Play-For-All" Playground at Blandair Regional Park.

ASSESSMENT OF RECREATION PROGRAMS

Strengths

There are various strengths, weaknesses and opportunities that we have identified by analyzing Howard County's recreational programs. As seen in Figure 2.27, over the past 3 years, 11 of the 19 categories increased program offerings between FY 2017-2018 and FY 2019-2020. The categories with the largest percent increase were drop-in activities, trips & tours, and lifelong learning (75.0%, 66.7% and 61.2% increase respectively).

There has been a steady incline in Recreation Services and Sports and Adventure Services over the past three years. Additionally, there is a clear diversity of program categories that are offered within the program menu. Therapeutic Recreation programming variety is very strong, as are opportunities in nontraditional programming such as challenge courses and extreme sports.

The Department of Recreation and Parks provides a robust menu of programming. DRP staff have identified special events, therapeutic recreation, active aging, and summer camps as specific programmatic strengths. These programs, along with aquatics and swimming, fitness, outdoor



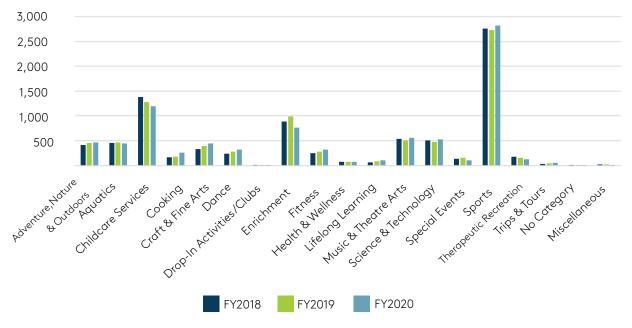


Figure 2.21 Program Categories and Number of Offerings, FY 2019

adventure, arts and culture, and life skills can be capitalized and expanded upon as they perform well.

Lastly, the program guide remains a clear strength within the department, as it is informative, clear, and remains the most popular way residents stay informed about programs and registration. When asked whether they used the seasonal program guide, 68% of survey respondents replied "yes", reflecting a percentage that is 34 percentage points higher than the national average.

Weaknesses

Despite the strength of programs and activities, DRP surveys show that unmet programmatic needs remain in therapeutic recreation, active aging, and special events and summer camps. Survey participants expressed the desire for more aquatic programming and that programming should be more affordable overall.

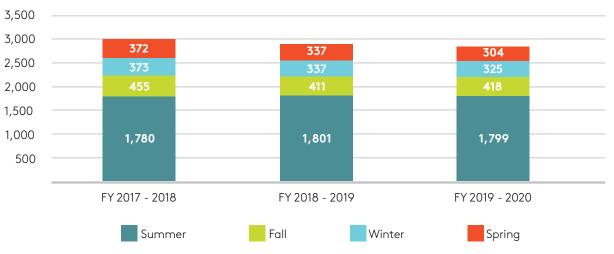
Opportunities

Based on a graph of program offerings by day of week, it is clear that programs are not as evenly distributed on the weekends, and there is an opportunity to increase these programs on Saturdays and Sundays in order to reach households who prefer to participate on the weekend or cannot attend programs during the week.

There are also specific program categories that represent opportunities for program menu expansion, such as horseback riding, e-sports, and ice skating/hockey. Programming for older adults can also be expanded. Additionally, while the program guide remains a strong tool for creating awareness of seasonal recreational programs at County facilities, it could also be valuable for the program guide to help promote opportunities at the County's park sites and trails.

Measuring User Demand

As part of the Recreation Program Assessment, it was critical to understand program performance. Data was collected on registration, total enrollment, participation rates, and types of programs offered over



Number of Recreational Licensed Childcare (RLC) Activities Offered

Figure 2.22 The number of Recreational Licensed Childcare courses decreased slightly from 2017.

2019 Opportunities for Program Expansion by Day of Week (Non-Child Care)

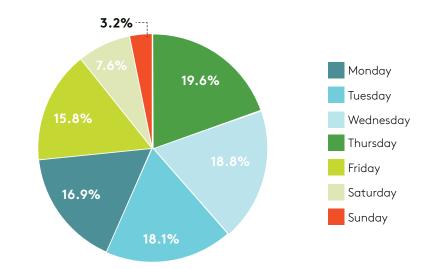


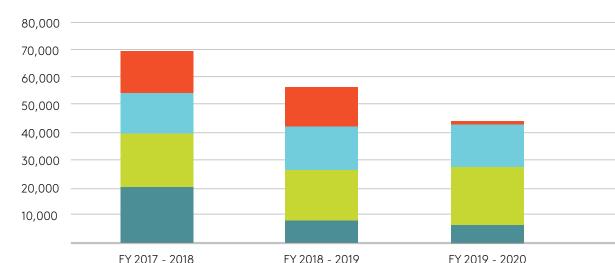
Figure 2.23 Program offerings could be increased over the weekend to increase access to households who cannot attend programs during the week.

the past three years. As shown in Figure 2.30, total enrollment decreased in 2019-2020 for Recreation Services (RS) and Sports and Adventure Services (SAS) and Recreational Licensed Childcare and Community Services (RLCCS). Due to the COVID-19 pandemic, DRP suspended Spring 2020 recreation programming, resulting in lower enrollment rates for the year overall. The facilities that house DRP recreation programming, such as public school building and community centers, were temporarily closed per physical distancing mandates, and DRP was unable to host its recreation programming. As a result, total enrollment for the 2019-2020 fiscal year decreased significantly due to the suspension of programming and enrollment rates may not fully capture user demand due to these extenuating circumstances.

Overall, the Departments' total enrollment from all three divisions decreased from 107,842 in 2018-2019, to 84,746 in 2019-2020.

The most notable shift between seasons was an increase of nearly 2,000 participants in Fall 2019 for RS and SAS compared to the previous fall season.

In discussions with the community during the Public Steering Committee Presentation, there was much discussion around needs for additional swimming pools and aquatic



Fall

Total Enrollment: RS and SAS

Figure 1.16 Total Enrollment for Recreation Services and Sports and Adventure Services over 2017-2020. The COVID-19 pandemic severely impacted the Department's ability to provide recreation services in Spring 2020.

Winter

Spring

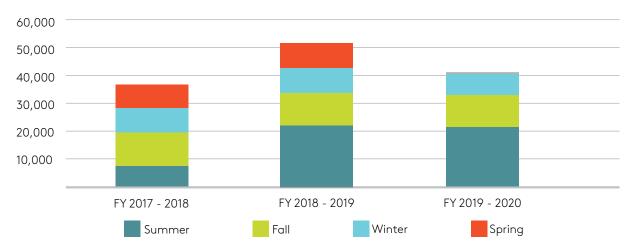


Figure 2.24 Total Enrollment for Recreational Licensed Childcare and Community Services over 2017-2020. The COVID-19 pandemic severely impacted the Department's ability to provide recreation services in Spring 2020.

Total Enrollment: RLCCS

Summer

Resident Demand for Facilities

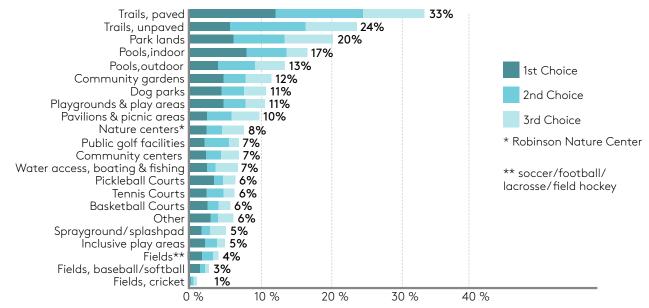
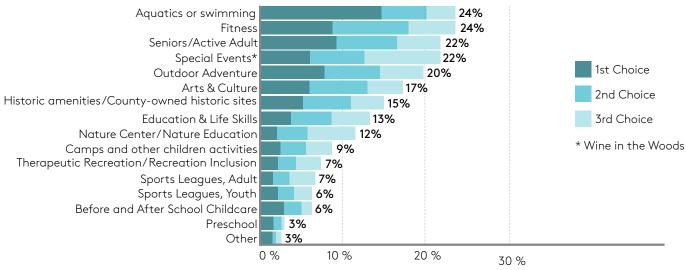


Figure 1.17 Residents would like to see more investment in paved and unpaved trails, parklands, and indoor pools.



Resident Demand for Programs

Figure 2.25 Residents would like more aquatics, fitness, seniors/active adult, and special events programming.

facilities. There is high demand and long waitlists for swimming lessons, therapeutic recreation, and the childcare program.

Additionally, according to results from the Statistically Valid Survey, the four parks and recreation facilities with the highest percentage of households that indicated a need for the facility were: paved trails (80%), park lands (71%), unpaved trails (61%), and pavilions and picnic areas (59%). ETC Institute also estimated a total of 24,316 households in Howard County that have unmet needs for indoor pools.

NATIONAL TRENDS

Understanding trends can allow Howard County to plan for current and potential participants and determine where to direct additional resources. The following types of trends were explored in this report, and can be used by staff when planning for new programs, parks and recreation amenities, and making updates to the annual budget and capital improvement plan.

Environmental Stewardship

Environmental stewardship remains an important general trend to 80% of agencies nationwide, with agencies providing education and awareness opportunities.

Technology

Embracing the use of technology remains important for parks and recreation agencies, from charting data on invasive species to the creation of Wi-Fi enabled smart parks that allow visitors to remain connected while still being outdoors. The use of technology can also help increase park usage, through visitor sharing of images, events and activities through social media. Additionally, digital displays and mobile apps accessible in parks can serve as environmental or historic education tools, and can even be used in ways to assist park staff with reporting maintenance issues from a geotagged location when visiting parks.

Outdoor Adventure

Outdoor Adventure Activities remain a strong trend. As of June 2020, bicycle sales increased 63% nationally compared to June 2019. Additional outdoor activities remain popular, including paddle sports, camping, bird watching and outdoor walking and running clubs.

Partnerships

Partnerships between public, private and interdepartmental partners remain crucial to meeting the programming needs of a community. These types of partners include public libraries, school districts, nonprofits, and other private entities which can oftentimes fulfill a gap in specific, niche program areas.

Niche Programming

Recreation agencies are focusing on a more holistic approach to program offerings, and starting to offer programs and services targeted at specialty audiences. Some of these audiences include people in the LGBTQIA+ community, retirees, military veterans, cancer patients, people needing mental health support, and individuals with visible and invisible disabilities. In addition to this kind of niche programming, there has been an increase in the number of offerings for families with children of all ages, with a focus on programming for families with teens. This trend represents a departure from previous trends that focused almost entirely on younger children, and encourages more multigenerational play experiences.

Animal-Friendly Facilities

With 90 million dogs residing nationwide, Animal-Friendly Facilities such as dog parks continue to be the fastest growing type of park, especially in urban areas.

Fitness Playgrounds

Fitness Playgrounds are becoming a recent trend that can be used by children and adults, offering experiences for beginner, intermediate and advanced visitors.

Fitness Trends

Each year, the American College of Sports Medicine (ACSM) conducts a survey of worldwide fitness trends. Now in its 15th year, the ACSM circulates an electronic survey to thousands of fitness professionals around the world to determine health and fitness trends. The COVID-19 outbreak certainly impacted the results of the survey with the top trend now Online Training, which was number 26 in 2020. Wearable technology, body-weight training, outdoor activities, and High-Intensity Interval Training continue to be among the top fitness trends.

Aquatic Trends

Pool Design

Municipal pools have shifted away from the traditional rectangle shape, and instead have shifted to facilities that include zero-depth entry, play structures that include multiple levels, spray features, small to medium slides, and separate play areas segmented by age/ability.

Indoor warm water therapy pools continue to grow in popularity with the aging population. Warm water therapy pools create a shallow space for low-impact movement at a comfortable temperature, which enables a number of different programming options. "Endless" or current pools that are small and allow for "low impact, high intensity movement" are becoming popular, as well.

Water Fitness

The concept of water fitness is a huge trend in the fitness industry, with many new programs popping up such as aqua yoga, aqua Zumba, aqua spin, aqua step, and aqua boot camp. Whether recovering from an injury, looking for ease-of-movement exercise for diseases such as arthritis, or simply shaking up a fitness routine, all demographics are gravitating toward the water for fitness. Partnerships can be important for parks and recreation agencies, such as working with hospitals to accommodate cardiac patients and those living with arthritis or multiple sclerosis.

Youth Programming

Swim lessons generally include the most significant number of participants and revenues for public pool operations. Programs can be offered for all ages and levels, including private, semi-private, and group lessons. Access to swimming pools is a popular amenity for summer day camp programs, too.

Aquatics was identified by Howard County staff as a core program area and analyzed in the Recreation Assessment. The Department currently offers a robust menu of aquatic programs including swim lessons, swim teams, aquatic fitness, and water safety.

Spray Parks

Spray parks (or spray grounds) are now a common replacement for aging swimming pools, particularly because it provides the community with an aquatic experience without the high cost of traditional pools. Spray parks do not require high levels of staffing, require only minimal maintenance, and offer a no-cost (or low-cost) alternative to a swimming pool. A spray park typically appeals to children ages 2–12 and can be a stand-alone facility in a community or incorporated inside a family aquatic center.

NRPA Trends

Each year in January, the NRPA publishes the top trends in recreation and parks.¹⁹ The top trends for 2021 from that report reflect predictions that COVID-19 will continue to exist and impact recreation and parks, and are as follows:

- Expansion of pedestrian spaces and outdoor dining on urban streets, the conversion of bike lanes and trails, and the installation of parklets in parking spaces and former travel lanes.
- State and local municipal budgets will continue to be impacted as revenues continue to decline.
- Focus on health and health equity, and how parks can support necessary services such as food distribution, food pantries, COVID-19 testing, daycare for children of essential workers and first responders, and safe spaces for learning.
- Community mental-health and wellbeing and cooperation with social service agencies, public health departments, and school systems.
- Social and racial equity, addressing gaps in services, and hiring health, equity, traumainformed, and community engagement specialists.

- Technology, data privacy, and social media
- Climate change and racial justice, including the effect of rising temperatures on low-income communities with little access to green space.
- Virtual programming such as e-sports



Figure 1.18 The E-sports Stadium in Arlington, Texas has become a popular destination in recent years.

Age-Related Trends

The following trends highlight growing demand for different age groups. In Howard County, there are opportunities to grow programming for seniors and youth over the age of 13, to ensure these growing cohorts have access to the wide variety of programs enjoyed by youth under 13 and families.

Youth age 13 and younger

- Traditional Sport Programming
- STEM Programs
- Nature-Related Programming
- Youth Fitness

Teens/Younger Adults Ages 13-24

- E-sports
- Parkour
- Outdoor Active Recreation
- Bicycling
- Life Sports
- Holistic Health

Adults ages 25-54

• Aerobic Activities

- Fun Fitness
- Group Cycling
- Yoga
- Outdoor Fitness
- Cornhole (or Bags)

Adults ages 55 or older

- Lifelong Learning
- Fitness and Wellness
- Encore Programming
- Specialized Tours
- Creative Endeavors
- Pickleball

COVID-19 Effects & Challenges

The COVID-19 pandemic greatly impacted the day to day operations and management of recreational programming. Physical distancing provisions necessitated temporary restrictions on enrollment numbers. Many youth programs, youth sports and child care in particular have experienced low registration numbers, which will require continued strategic planning to anticipate challenges stemming from the pandemic such as smaller participant-to-instructor ratios and reduced operating budgets. This "new normal" to accommodate COVID-19 safety measures puts additional pressure on DRP to provide local, affordable, equitable, and quality programming for children.

- Youth Sports
- Child Care

Diversity, Equity, and Inclusion

Agencies across the County have begun to establish data-driven equitable investment strategies to address existing gaps in parks and recreation systems which disproportionately impact low-income residents and communities of color. In order to drive equitable investment, the following are strongly recommended:

- Leverage strong leadership that advocates for equitable approaches, focusing on local foundations and nonprofits
- Define equity goals and maintain updates to data that is collected and analyzed
- Educate and engage the community on equity data
- Establish equitable funding practices
- Establish an oversight committee to consistently track and evaluate procedures

COUNTY-RUN RECREATION AMENITIES

Program Inventory and Distribution

An assessment of the Department's programs was conducted using FY 2019 data to fully understand and analyze the most recent fiscal year outside of pandemic impact and the number and type of programs that were offered. Creating an inventory of the Department of Recreation and Park's programs displays a willingness to test out new ideas that reflect community change and recurring trends. While it may take some time for new innovative programs to be successful, it is encouraged that the Department investigate what disconnects may exist in programming while still remaining open to new ideas.

Based on the program catalogue which lists the number of programs in FY 2019, the largest number of offerings was in the sports, childcare services, and enrichment categories. The 2,734 sports programs accounted for nearly 31.9% of all the Department's programs, followed by childcare services at 14.9%, and enrichment at 11.6%. While these were the strongest programs, there are other programs that should be viewed as opportunities for expansion, such as special events, Therapeutic Recreation (TR), active aging, and summer camps.

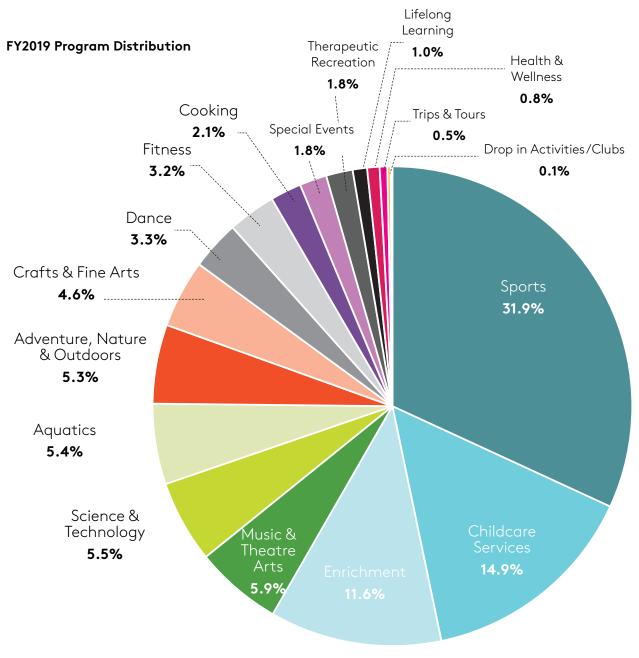


Figure 2.26 Sports, childcare services, and enrichment accounted for 58.4% of the 2019 program menu

Total Enrollment by Activity Category

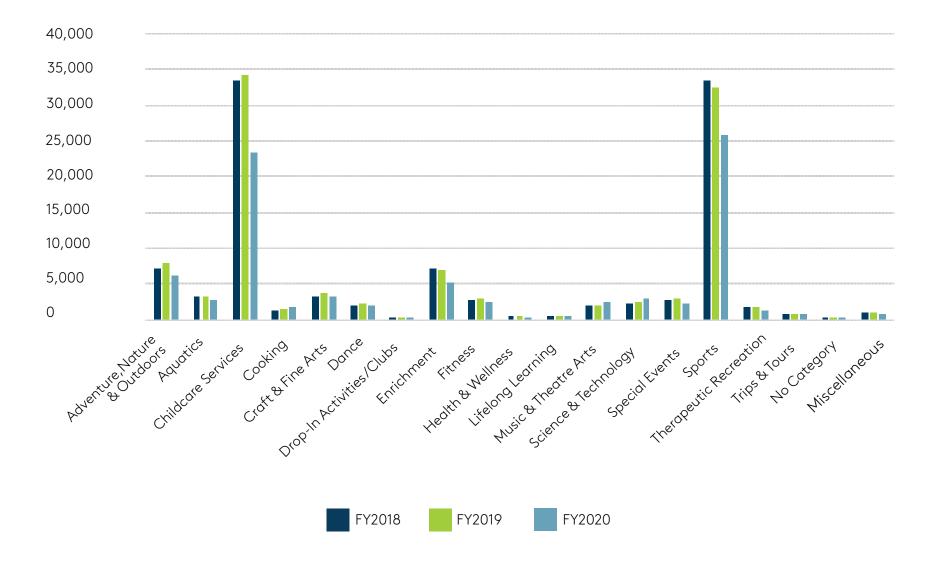


Figure 2.27 The Department of Recreation and Parks offers an extremely wide variety of programming with high levels of enrollment. The highest levels of enrollment are for childcare services and sports.

Program Participation and Evaluation

Currently, most of the County's programs require pre-registration to participate. Participants may register by phone, fax, mail-in, walk-in, as well as online through the County's registration software, which also offers assistance with English, Korean, Mandarin, and Spanish language interpreters. Additionally, there is information gained through the registration process to measure customer satisfaction. According to the Department's 2015 Program Plan, there is an informed approach to measuring customer satisfaction where upon completion of each program season, program coordinators distribute Program Evaluations and Customer Service Surveys to participants of their programs. Results of these evaluations are tabulated and reports are compiled, and these evaluations stimulate adjustments to program offerings as well as input for new program offerings.

Activity categories with the largest growth in participation were cooking (37.9%), science & technology (34.7%), and music & theatre arts (21.4%), and the largest decline was health & wellness (-33.4%) and childcare services (-30.3%). As seen in Figure 2.37, registration for athletic events and tournaments was also tracked over the past three years. The COVID-19 pandemic affected participation for indoor basketball tournaments and softball.

Athletic Tournaments and Event Participation

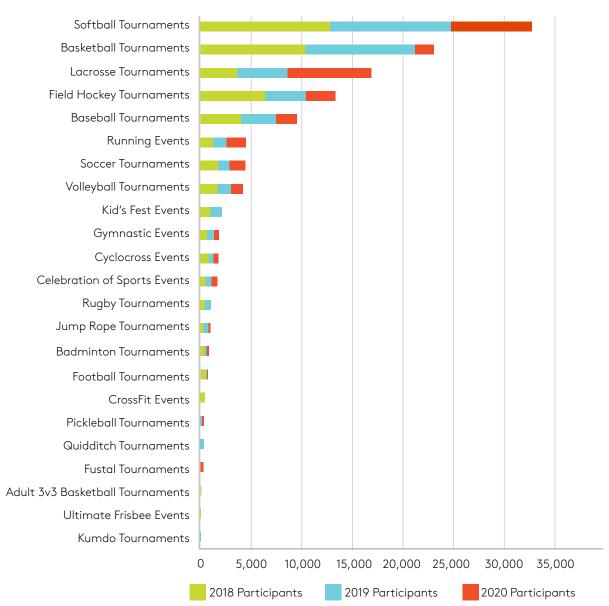


Figure 2.28 Since 2018, softball, basketball, and lacrosse tournaments have received the greatest participation.

As a part of the County's mission of serving the community, it is important to understand how programs serve both residents and nonresidents, and how this influences participation. As seen in Figure 2.36 which depicts 2019 Enrollment by Residency, 93% of enrollment was from residents in 2019. While only 7% of enrollment was from nonresidents. this percentage was further explored to identify what types of programs nonresidents were enrolling in, as shown in Figure 2.37. In 2019, the vast majority of nonresidents participated in sports (43.6%) followed by special events (9.5%).

In addition to tracking participation, program performance can be measured according to the number of programs offered as compared to those that ran.

Comparing the data in Figures 2.38 and 2.39 results in what is called a cancellation rate, a measure commonly tracked in the recreation services industry. The rate is calculated by dividing the number of programs that did not run by the total offered, resulting in the cancellation rate. The County's cancellation rates were 23.3%, 21.0%, and 31.8%, respectively over the three years studied.

A higher rate will generally indicate one of two things: either a) the programming team has been charged with trying new, innovative

2019 Enrollment by Residency

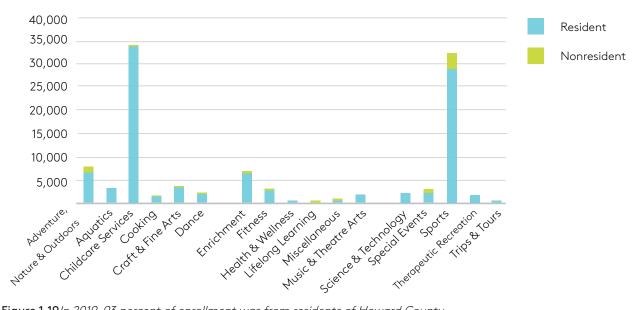


Figure 1.19 In 2019, 93 percent of enrollment was from residents of Howard County.

2019 Nonresident Enrollment: Most Popular

2019 Nonresident Enrollment: Less Popular

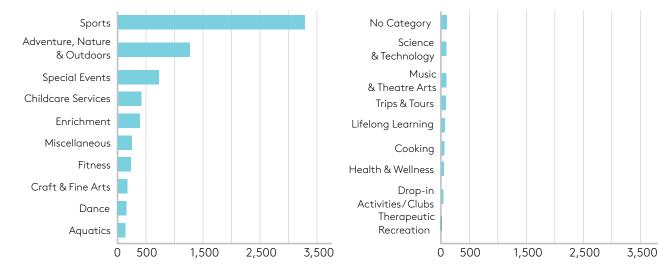


Figure 2.29 Nonresidents enrolled most in sports, adventure/nature/outdoors, and special event programs.

programs that have not been successful yet; or b) the programs being offered simply are not meeting the needs of the community. The first scenario requires patience and perseverance to allow time for exploration and to push communication efforts. The second scenario requires research to understand what factors contributed to the program cancellations (e.g., instructor performance, child agedout, or other barriers such as time, day, or transportation).

Typically, the target range of a "desirable" cancellation rate is between 10% – 20%, with 12% – 15% being most ideal. Any higher than 20 percent indicates the staff are doing a lot of work preparing for and marketing courses that do not run. Despite the fact that the COVID-19 pandemic caused an anomaly in FY 2019-2020, the other two years were a bit higher than desirable. The Department's staff should work to reduce its cancellation rate to a more ideal percentage, perhaps by one percent over the course of the next five years.

Number of Program Offered

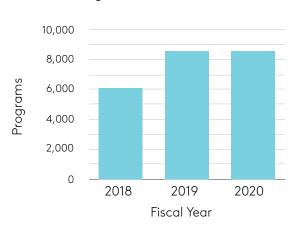
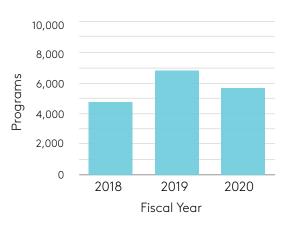
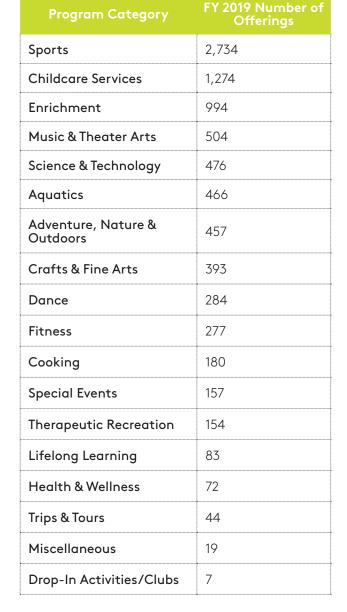
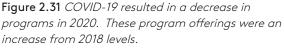


Figure 2.30 A lack of programs in Spring 2020 resulted in a plateau for program offerings from 2019 to 2020, but an increase from 2018 levels.

Number of Programs That Ran







REPORT THEMES

Digging into the program offerings of the Department of Recreation and Parks presents the following opportunities:

Places

- An aging population has different needs: The average population is growing older and more diverse, and amenities may need to adjust accordingly.
- Specific planning areas have specific needs: The Western and Eastern areas of the County vary in population size, demographic details, and access to the system. These differing needs should be met accordingly.
- Flexible program offerings: Parks and recreation programs need to be nimble and anticipate evolving community needs for differing ages, abilities, and skill levels.
- **Partnerships can be strengthened:** The Department of Recreation and Parks, County government, and schools can share resources to provide better customer service.

Elkridge and the Southeast are particularly unequal in their access to amenities: While the Southeast has the highest access to tennis or pickle ball courts, these areas consistently have lower levels of access to amenities. In particular, playgrounds, multi-purpose fields, leisure activities, and boat ramps are lacking.

Programs

- Build offerings strategically: There is a need to plan the comprehensive program menu more intentionally and holistically across divisions. This will eliminate redundancies and find areas of overlap that can be strengthened through teamwork.
- Strengthen what is working well: While sports and childcare remain strong, it may be beneficial to add additional programming in areas identified by staff as strengths. This includes therapeutic recreation, active aging, special events, and summer camps.
- Stimulate community health: Encourage activities that promote

the individual's feeling of being engaged, connected, and active.

- Address barriers to participation: Establish goals to bring programs to residents in local settings, create short registration commitment options, increase marketing support, outreach efforts, and peak capacity times
- Begin program performance tracking by program category: Track enrollment and financial performance of each core program area seasonally, reduce cancellation rate, and increase participation percentages.

Goals + Actions

In order to meet state and county goals, while addressing emerging themes and recommendation drivers, the Department of Recreation and Parks can take the following actions:

State Goal 1.1

Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens and thereby contribute to their physical and mental well-being.

ACTION: Expand outreach and wayfinding efforts to include multilingual resources and signage.

ACTION: Focus on expanding the impact of financial programs, specifically communicating about them to residents who could use the services.

ACTION: Continue reaching out to marginalized communities to learn about different perceptions of parks and programs.

State Goal 1.2

To the greatest degree feasible, ensure that recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile and help to protect natural open spaces and resources.

ACTION: Apply for grant funding through the NPS Urban Parks Fund to increase access to parks and recreation in urban areas.

ACTION: Increase creation of neighborhood parks and pocket parks, especially in commercial areas with little access to open space.

ACTION: Identify areas where there are gaps in amenities and implement needed facilities.

ACTION: Identify new access points to existing parks to connect adjacent neighborhoods and increase walkability.

County Goal 1.3

Promote programs and spaces that are universally accessible.

ACTION: Support competitive athletic swim options and community pools.

ACTION: Continue to lead in providing programs and places for all ages and abilities (active aging, therapeutic recreation, universal design).

ACTION: Minimize barriers in park designs when possible (stairs, walls, hazardous paving materials, poor wayfinding) and ensure that spaces in parks are able to be accessed easily by people of all ages and abilities.

ACTION: Subsidize membership fees to similar pool providers to increase accessibility to all income levels.

County Goal 1.4

Improve connectivity of people to recreation and park resources.

ACTION: Expand trails within parks and to parks and recreation amenities.

ACTION: Apply for funding through the Neighborhood Access + Equity Grant Program to facilitate shuttles or alternative transportation options to parks and facilities from underserved neighborhoods.

ACTION: Partner with other County departments to link parks, facilities, and open spaces to active transportation improvements.

County Goal 1.5

Stay at the forefront of parks and recreation trends.

ACTION: Incorporate recreation and activity trends that emerged during the pandemic and shifted community behaviors.

ACTION: Continue to provide virtual programming that allows more people to be involved (at non-traditional times and from convenient locations).

ACTION: Respond to the increasing desire for more individual sports/programming (ex: fishing, archery).

County Goal 1.7

Provide a range of recreation programs that emphasize inclusivity.

ACTION: Continue to provide a mix of virtual and inperson programming.

ACTION: Provide group exercise classes or outdoor adventure programs that explicitly state they are inclusive of all members, especially those in the LGBTQIA+ community.

ACTION: Enhance the recreational experience of individuals with disabilities and ensure they have the necessary accommodations that allow them to participate in the same community activities as individuals without disabilities.

County Goal 1.6

Instill flexibility to adapt to shifts in community needs.

ACTION: Design multi-use spaces when possible, and minimize new single-use spaces.

ACTION: Create systems to ensure program development continues to be nimble to change and reflective of enduring trends.

ACTION: Design and plan new parks and facilities that are flexible and adaptable to future community and environmental changes.

County Goal 1.8

Provide safe parks and recreation spaces for all ages and backgrounds.

ACTION: Conduct engagement and research to ensure all nationalities and identities feel safe and welcome in parks and public spaces.

ACTION: Increase lighting and evening programming in parks that may allow age groups such as teenagers safe access to recreation outside of busy daytime tournament hours.

ACTION: Install adequate signage and wayfinding to create visibility, raise awareness and clarify access and ownership.

County Goal 1.9

Integrate a multi-faceted approach to health and wellness.

ACTION: Provide programs for holistic wellness (physical, behavioral, social, financial wellness).

ACTION: Continue to provide family programs through the division of Recreational Licensed Childcare and Community Services, focusing on before/after-school and out-of-school programs, summer camps and early childhood education.

ACTION: Create outreach programs, youth groups and mentoring services to support communities in need.

Resource Conservation

Aspiration

The County is a trusted steward for natural resources.

Natural Systems

The County's rich and diverse existing natural resource system consists of stream valleys, forested land, wetlands, meadows, and mineral resources. Many of these lands are next to the Patuxent and Patapsco Rivers and provide Howard County residents with opportunities to enjoy a diverse system of outdoor recreational opportunities such as birdwatching, fishing, walking along trails, and kayaking. These recreational options offer a myriad of opportunities for people to connect with nature, with associated economic and public health benefits, and learn about environmental conservation.

In 2012 the Maryland General Assembly adopted The Sustainable Growth and Agricultural Preservation Act of 2012, which required local jurisdictions to adopt Growth Tiers. These Growth Tiers designate certain areas for different types of development depending on characteristics, such as sewerage service, agricultural use, forest and green space, and locally designated growth areas. These in turn dictate land use, which can affect the natural resources availability and quality in the county.

Centuries of agricultural and urban development, transformed the county from a wooded Piedmont and lush Coastal Plain to a developing urban and suburban landscape. The forest canopy is changing due to development, invasive species, an overabundant deer population, and climate change. Forest health in the county has been in decline, resulting in losses of wildlife habitat and biodiversity. These factors also degrade water quality and increase flooding by interfering with natural absorption of stormwater, which can contribute to erosion. Connecting fragmented ecosystems through strategic land acquisition and land management strategies not only addresses existing ecological health issues but also creates recreational spaces. Howard County has taken positive steps towards alleviating these issues and is committed to restoring the health and resilience of natural resources and managing them well in the future.

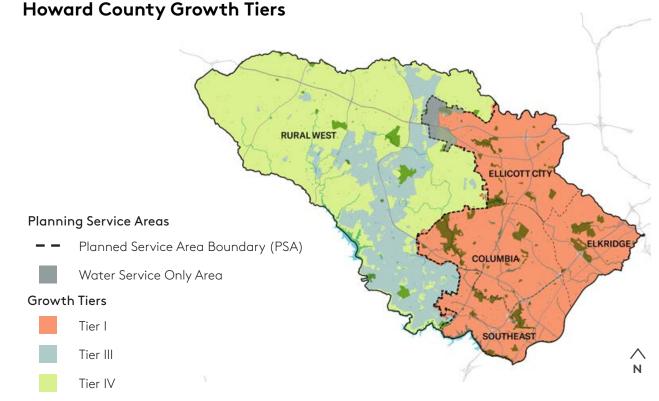


Figure 3.1 Growth Tiers within Howard County's planning areas. As required by state legislation, Howard County established Growth Tiers as a mechanism to control development. Different Growth Tiers have varying restrictions on sewerage extensions and other services that encourage development.

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2022 STATE GOALS

- Identify, protect and restore lands and waterways in Maryland that support important aquatic and terrestrial natural resources and ecological functions, through combined use of the following techniques:
 - Public land acquisition and stewardship;
 - Private land conservation easements and stewardship practices through purchased or donated easement programs;
 - Local land use management plans and procedures that conserve natural resources and environmentally sensitive areas and minimize impacts to resource lands when development occurs;
 - Incentives for resource-based economies that increase the retention of forests, wetlands or agricultural lands;
 - Avoidance of impacts on natural resources by publicly funded infrastructure development projects; and
 - Appropriate mitigation response, commensurate with the value of the affected resource.

- Focus conservation and restoration activities on priority areas, according to a strategic framework such as the Targeted Ecological Areas (TEAs) in GreenPrint (which is not to be confused with the former easement program also called GreenPrint).
- 3. Conserve and restore species of concern and important habitat types that may fall outside of designated green infrastructure (examples include: rock outcrops, karst systems, caves, shale barren communities, grasslands, shoreline beach and dune systems, mud flats, non-forested islands, etc.)
- Develop a more comprehensive inventory of natural resource lands and environmentally sensitive areas to assist state and local implementation programs.
- 5. Establish measurable objectives for natural resource conservation and an integrated state/local strategy to achieve them through state and local implementation programs.

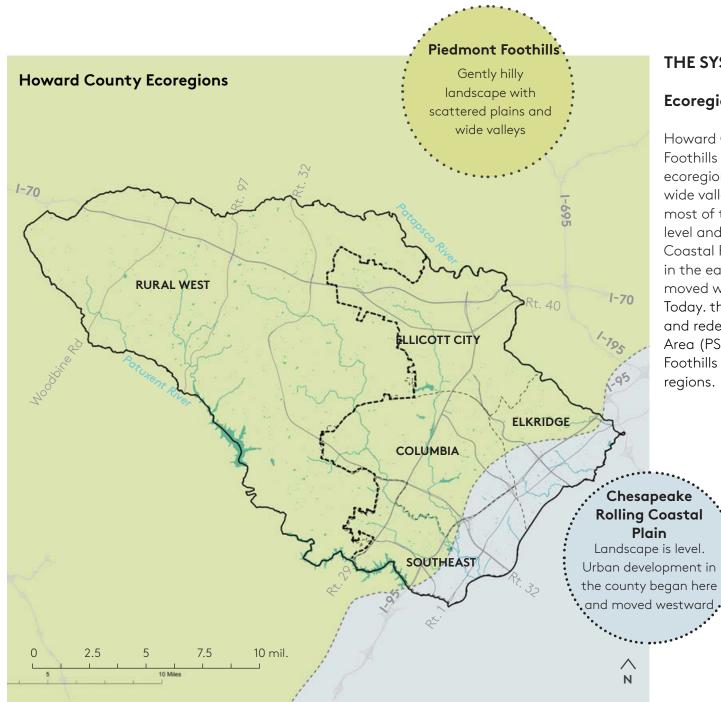
- 6. Assess the combined ability of state and local programs to achieve the following:
 - Expand and connect forests, farmland and other natural lands as a network of contiguous green infrastructure;
 - Protect critical terrestrial and aquatic habitats, biological communities and populations;
 - Manage watersheds in ways that protect, conserve and restore stream corridors, riparian forest buffers, wetlands, floodplains and aquifer recharge areas and their associated hydrologic and water quality functions;
 - Adopt coordinated land and watershed management strategies that recognize the critical links between growth management and aquatic biodiversity and fisheries production; and
 - Support a productive forestlandbased and forest resource industry, emphasizing the economic viability of privately owned forestland.

2022 COUNTY GOALS (AN UPDATE TO THE 2017 GOALS)

- Protect and restore natural resources through habitat improvements and restoration efforts.
- Continue to improve water quality through county-wide stream restoration and reforestation efforts, benefiting local waters and the greater Chesapeake Bay Estuary.
- Enhance implementation of the Green Infrastructure Network Plan. Expand and protect the Green Infrastructure Network, while incorporating the plan as a tool for the decision-making process.
- Encourage individual efforts to enhance biodiversity and environmental stewardship beyond park boundaries.



Figure 3.2 Birdwatching class at Font Hill Wetland Park.



THE SYSTEM TODAY

Ecoregions

Howard County is located within the Piedmont Foothills and Chesapeake Rolling Coastal Plain ecoregions. The rolling hilly landscape and wide valleys of the Piedmont Foothills occupy most of the county. However, because of the level and fertile land of the Chesapeake Rolling Coastal Plain, development historically started in the eastern region of the county and then moved westward into the Piedmont Foothills. Today. the County is focused on development and redevelopment within the Planned Service Area (PSA), which includes both the Piedmont Foothills and Chesapeake Rolling Coastal Plain regions.

Figure 3.3 Howard County encompasses the Piedmont Foothills in the central and western region, and Chesapeake Rolling Coastal Plan to the east.

Soils and Development

Soils are living ecosystems which support the natural resources of Howard County. Healthy soils provide widespread ecological services, including water absorption, filtration, nutrient cycling and carbon sequestration. Soils can be disturbed by natural events such as flooding during heavy rain events, which moves and deposits soil elsewhere. Human activity impacts soil structure as well. The county's soils have been impacted by human development and land use over the past 300 years. Agricultural activity has led to some soil disturbance, loss of soil structure, erosion, and nutrient degradation. Development, including the construction of roads, homes, and buildings, can destroy the soil profile by completely covering it with impermeable surfaces, obstructing oxygen from the soil. The process of construction can compact soils, reducing pore space and making it more difficult for some plants to live in the soil. In order for environmental conservation efforts to preserve the landscape character and natural resources of Howard County, soil ecosystems must be considered as well.

Howard County Soils

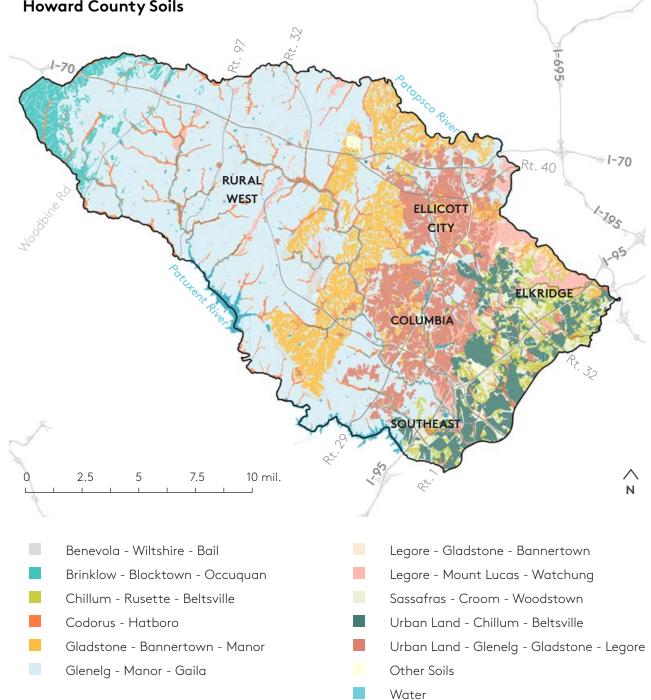
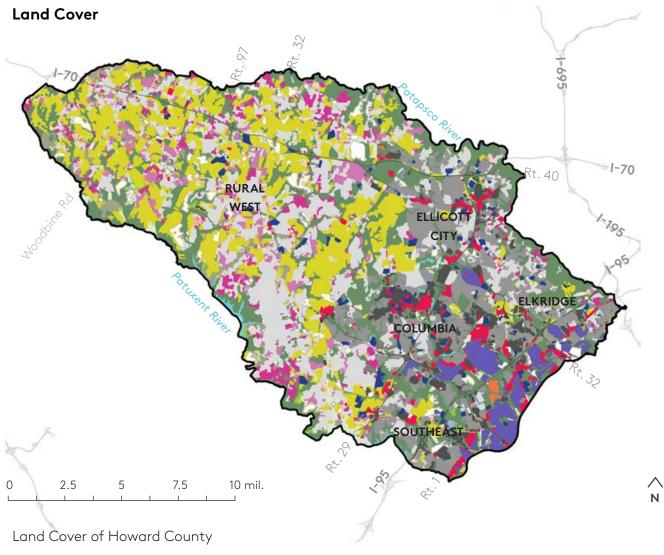


Figure 3.4 Soils of Howard County



* Source Data: 2010 Land Use and Land Cover, National Agriculture Imagery Program (NAIP) aerial imagery

Along with other factors, soils played a role in human settlement patterns within the county. The more level, well-drained soils in the east coincide with the earliest settlements, which are today the more developed areas of the county. Land use in turn impacts soil, where construction, infrastructure and the use of impermeable materials for roads and buildings, leads to issues in the soil profile.

Land Cover Classification

- 11- Low Density Residential
- 12- Medium Density Residential
- 13- High Density Residential
- 14- Commercial
- 15- Industrial
- 16- Institutional
- 17- Extractive
- 18- Open Urban Land
- 21 Cropland
- 22- Pasture
- 23- Orchards/Vineyards/Horticulture
- 25- Other Soils
- 41- Water
- 42- Deciduous Forest
- 43- Mixed Forest
- 44- Brush
- 50- Water
- 60- Wetlands
- 73- Bare Ground
- 80- Transportation
- 191- Large Lot Subdivision (agriculture)
- 192- Large Lot Subdivision (forest)
- 241- Feeding Operations
- 242- Agricultural Facilities

Hydrology

Howard County's dynamic hydrological location was established by its seven subwatersheds and two major tributaries of the Chesapeake Bay, the Patuxent and Patapsco Rivers. Because water flows eastward through Howard County to the Chesapeake Bay, management of the county's natural resource areas helps protect water quality in both the county and the Bay. Watersheds in the eastern region of the county have the most impervious cover due to historical development and the presence of the Planned Service Area boundary, which separates the Rural West from eastern planning areas. Impervious cover of asphalt, concrete and rooftops prevents water infiltrating into the soil, increases stormwater runoff across the land, and decreases water quality because pollutants are not removed along runoff flow paths. Consequently, the watersheds with the greatest impervious cover (Patuxent River Upper, Little Patuxent River, and Patapsco River Lower North Branch) also have the lowest Stream Health scores. The County recognizes that high population density and related development has led to high impacts in the Little Patuxtent Watershed and is currently developing strategies to remediate erosion and lack of tree buffers.²⁰

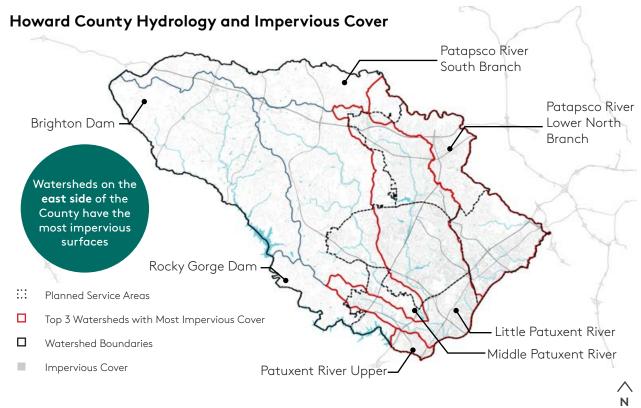


Figure 3.6 The three watersheds with highest impervious cover are Pataspco River Lower North Branch, Little Patuxent River, and Patuxent River Upper.

Stream Health

A healthy stream includes vegetated streambanks with little to no erosion. Erosion is characterized by the presence of exposed roots or bare ground. The root systems of an established canopy with native understory plants aid water infiltration, lowering nutrients and algae growth in waterways. The dappled light of overstory vegetation also shades micro-habitats for aquatic species that need cool and shaded conditions. In contrast, active erosion is evident in the banks and beds of an unhealthy stream as a result of too much surface runoff. This causes systemic issues, such as large pulses of sediment delivered with each storm to downstream waters, like Centennial Lake, where a vast sediment plume is building up.

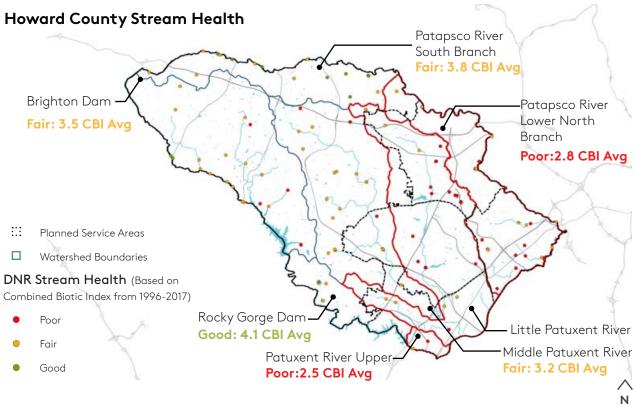


Figure 3.7 The three watersheds with highest impervious cover also show the poorest stream health scores. Averages calculated from the MD DNR CBI rating.

Due to climate change, a possible outcome for the future is that high-intensity, shortduration storms occur more frequently, increasing the risk of greater property damage and disruption. The county's agricultural inheritance and sixty-year development pattern have reduced the capacity of the landscape and its soils to manage these storms. Furthermore, the polluted streams and lakes will continue to affect fish and aquatic invertebrate populations while making the county's waters less pleasant, fun, and safe for humans to use.

Most streams in Howard County are in fair health. Stream health is monitored through a Combined Biotic Index (CBI) rating, provided by Maryland's Department of Natural Resources.²¹This rating gives streams a score for overall community biological health. Water bodies with an excellent health rating of five have the highest fish and invertebrate diversity, while those with a score of one have the lowest. Streams in the eastern county have an average 2.7 CBI rating. Streams in the West or at the edge of the county boundaries have an average rating of 3.8 CBI. One of the highest quality watersheds in Howard County is Rocky Gorge Dam, which has a CBI rating of 4.1.

Over the last 60 years the County has introduced programs to help improve stream health, conducting watershed assessments for each watershed followed by watershed restoration programs throughout the county. For example, Watershed Restoration Action Strategies (WRAS) in the Little Patuxent and Patpsco watersheds have received financial resources to plan and implement water guality and habitat restoration to improve stream health. These efforts have allowed the County to plant trees along stream edges on County parkland and provide free trees for eligible residents who live near a stream as a strategy to include private lands in stream quality restoration.

Climate change is producing larger and perhaps more frequent storms. NOAA's Maryland State Climate Summary (2022), projects impacts in Maryland from climate change will include increased average annual precipitation, especially during the winter and spring, and more frequent and intense rainfall events.²² The County understands these challenges. Following the deadly 2016 floods and subsequent 2018 floods in Ellicott City, the County introduced the Ellicott City Watershed Master Plan.²³ The community-led plan introduced measures to adapt to future storms, since the city's location at the confluence of multiple tributaries that feed into the Patapsco River will render it vulnerable to future events. Furthermore, the County created the EC Safe and Sound plan, a multi-phase plan built around the need for public safety, supporting business and property owners, preparing the county for a changing climate, and creating a more inclusive, community-driven process for decisions regarding Ellicott City's future.²⁴ Continued efforts and investments to the problem of water management and water quality will strengthen the county's resilience in the face of future climate impacts and additional development.

Howard County Tree Canopy

Healthy forests provide many ecological services, including filtering pollutants from the air, cooling the air which reduces the urban heat island effect. reducing atmospheric carbon by storing it in trunks and roots, providing habitat for half of the county's wildlife and plant species, building soils and stabilizing soils. Young subcanopy trees play a vital role, capturing more atmospheric carbon by weight than mature trees, providing ecological niches for a wider range of wildlife, and putting down finer roots that stabilize soil on slopes and streambanks. The latest and most accurate estimate for tree canopy shows that, as of 2018, 49.1% (79,495 acres) of Howard County is covered by tree canopy, including trees of all age

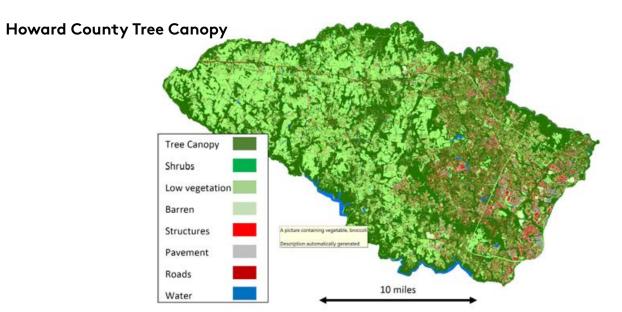


Figure 3.9 High-resolution land cover for Howard County, Maryland from 2013 imagery . Source: Assessment of Howard County, Maryland's Tree Canopy and Forest Cover (April 2022)

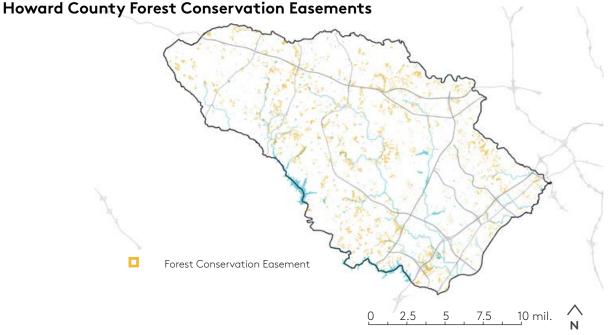


Figure 3.8 Forest Conservation Easements from the Private Conservation Easement Program (PFCE). Source: UMBC Assessment of Howard County, Maryland's Tree Canopy and Forest Cover (April 2022)

groups and canopy over structures, roads, and other impervious cover (from the Assessment of Howard County, Maryland's Tree Canopy and Forest Cover²⁵ using imagery collected in 2018).

Howard County understands the value of its canopy. Efforts are currently underway to reforest county land through public programs including providing free trees to residents to be planted within stream buffers on public and private lands. In 1993, the County passed the Forest Conservation Act (FCA), to establish and to enforce controls on the disturbance of wooded areas when properties are developed.²⁶ Last updated in 2020, the FCA sets priorities and requirements for forest retention, reforestation and protecting forests under forest conservation easements. The 2020 FCA update expanded the two-year postdevelopment forest conservation period to three years for the active monitoring of forest conservation easements for planting survival and public encroachments with subsequent monitoring and inspections limited to complaint-driven enforcement and restoration.

Deer and the Understory

Deer populations in Howard County have boomed in the last century, due to their high adaptability to the habitat changes brought by urban sprawl, a loss of agricultural land use and an increase in the "edge habitat" deer prefer, a loss of natural predators, and a decrease in hunting.²⁷ Preferring to browse on native understory, deer feed on tree seedlings, especially oaks, and herbaceous plants while often ignoring invasive plants in the ground layer, such as Japanese honeysuckle and stilt grass. Deer-browsing severely impacts the health of forest ecosystems, preventing forest regeneration and reducing diversity of the understory.

Unhealthy forests in the county often exhibit bare ground devoid of a healthy understory layer, which impacts the process of natural succession. This foretells a less diverse tree canopy layer in 50-100 years and is often a telling symptom of an over-abundant deer population. By contrast, healthy forests have a diverse native understory layer, including multiple generations of tree canopy species that will replace mature individuals when they die. The absence of tree saplings in most of the county's forests makes them particularly vulnerable to future climate change, disease, and other stressors since the less species and individuals are present, the less likely a forest or individual tree will be resilient to negative impacts. Furthermore, the best adapted species or individuals to these stressors may be missing from the canopy. To anticipate these future negative effects, building upon the county's existing deer management strategies will be integral to forest management and conservation efforts

Current deer management efforts in Howard County include population regulation through



Figure 3.10 A visual comparison of a typical healthy forest understory in Howard County vs an unhealthy understory.

hunting, educating landowners about deer populations (most of deer habitat in Howard County is on private land), installing fencing and other structural methods, and planting vegetation that is unattractive to deer. Hunting and trapping of all wildlife is prohibited on parkland except for research or management purposes, but the Department of Recreation and parks may propose to reduce deer populations on specific park properties, with participation by the surrounding community in its implementation.⁷ This method is regarded as most effective in controlling overabundant deer populations, but the County should continue to look at restoring its ecological system holistically, to achieve a natural equilibrium within the food chain, including managing for deer predators and a diversity of plants. Additionally, deer management legislation enables private landowners to manage deer populations on private property, which slows repopulation in nearby public property. A recent change to this legislation places restrictions on bow hunting.

Tree Canopy Loss

Large scale development, incremental tree removal and death on public and private property (in part due to invasive species), and limited or slow regrowth (due in part to deer browsing) have contributed to a small drop in tree canopy acreage across Howard County. The Assessment of Howard County, Maryland's Tree Canopy and Forest Cover²⁸, which interpreted existing tree canopy as canopy not over unpaved surfaces, found that between 2013 and 2018, there was a 0.5% loss of tree canopy. In addition to death and removal, tree canopy has been greatly affected by the Emerald Ash Borer, a non-native invasive species. This beetle has decimated the region's Ash trees and will continue to be a major issue for the county's natural areas. Current efforts have included spending \$400,000 per year in Ash tree removal as well as efforts to identify swatches of Ash forest for underplantings. Planting of young and diverse trees ensure forests will not be bare after Ash tree death. In 2020, the FCA increased maintenance time for new plantings from two to three years. The Department of Recreation & Parks often extends maintenance beyond three years for tree plantings done on county land. In 2018, the areas not suitable for tree planting had slightly increased due to an expansion in impervious cover, and the areas suitable for planting had slightly decreased as well. However, there is no set long-term management plan to maintain a healthy forest, and without designated funding, management will continue to be limited.

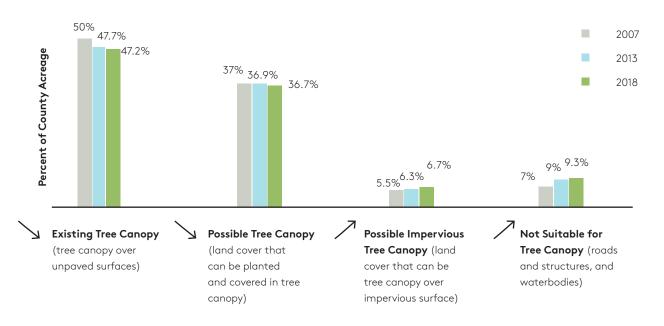


Figure 3.11 Comparison of Tree Canopy in Howard County between 2007, 2013, and 2018. Existing tree canopy has decreased overall but part of the difference shown between 2007 and 2013 was due to a change in definition of Tree Canopy as canopy over pervious surfaces, starting in 2013. Source: UMBC Assessment of Howard County, Maryland's Tree Canopy and Forest Cover, (April 2022)

Land Preservation Acreage

One of the strategies Howard County has used to protect its natural resources is to purchase, preserve, and protect land through easements. Currently, there are 59,555 acres of green space within the county (37 percent of the land base), 33,630 acres of which are within preserved lands (21 percent of the land base). Preserved lands are not intended for public use and are divided into two types, natural systems and agricultural land. Agricultural easements are explained in detail in the following Historic Resources and Agriculture Chapter. Natural systems easements account for 10,281 acres (6.4 percent) and include properties designated under Conservation ments, Environmental Preservation els, and Maryland Environmental Trust ments. Most natural resource land exists in Environmental Preservation Parcels. totaling 8,788 acres. Maryland Environmental Trust Easements account for 1,372 acres and

Easements, open space, and parks (both County- and State-owned) can interact to provide essential conservation acreage of high ecological value. With adequate land management, they can also connect important habitats as delineated by the Green Infrastructure Network.

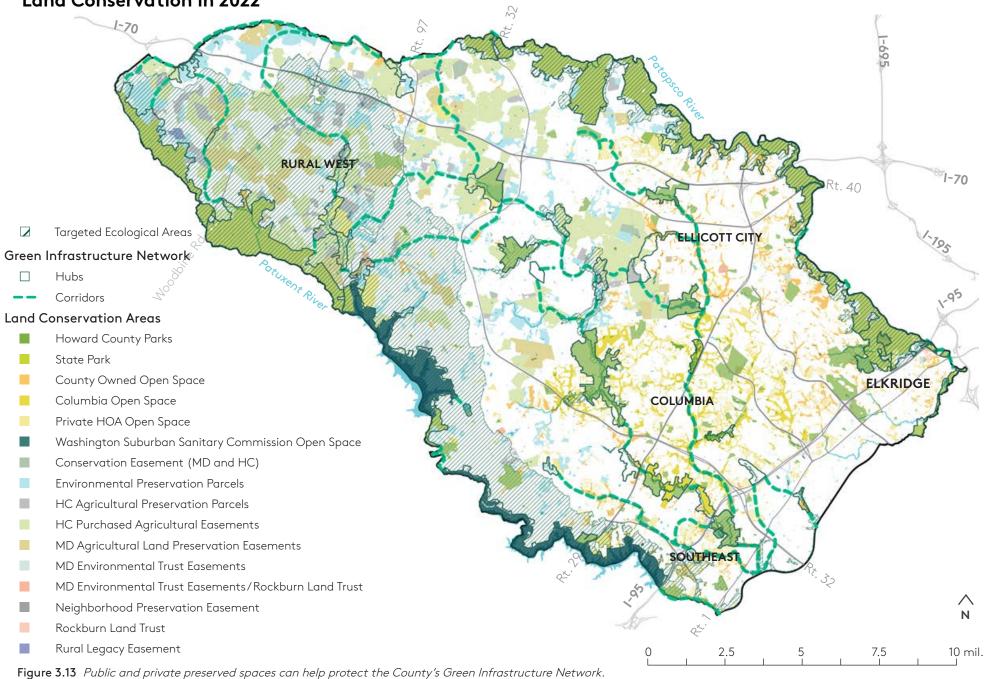
Conservation Easements total 206 acres.

	Natural Resource Preservation Acres		
	2017	2021	Change
Conservation Easement	206	206	+ 0
Environmental Preservation Parcels	7,475	8,788	+ 1, 313
Maryland Environmental Trust Easements	1,225	1,372	+ 147
TOTAL	8,906	10,366	+ 1,460

Figure 3.12 Since 2017, Howard County has increased the acreage of natural resource easements by 1,460 acres.

Easements are agreements that specified land uses or rights are voluntarily waived, sold or gifted to a party other than the land owner for enjoyment, monitoring and/or enforcement. Natural resource easements conserve land by permanently restricting the ability for it to be developed. Agricultural easements allow the landowner to remain on the property and continue farming. Agricultural easements prohibit industrial, commercial and most residential uses of the land, and allow for a wide variety of agricultural resource system and agricultural system work together to protect land from further development by limiting the scale and scope of development allowed (if at all) on these parcels. Preservation strategies recognize the importance of both natural ecosystems and Howard County's rural legacy. This rural legacy will be further explored in future report sections.

Land Conservation in 2022



REPORT THEMES

As Howard County looks to the future of natural resource management and preservation, it will be important to acknowledge and address current trends and key findings:

- It is time to act: Changes in the landscape are accelerating due to climate change, development pressure, and invasive species. These changes jeopardize environmental health and food security.
- Howard County's ecosystem is in need: Development patterns and human settlement damage water quality, stream health, and other essential ecological systems. These actions, in addition to the effects of the climate crisis, result in more frequent degradation, such as severe flooding. Through redevelopment there are opportunities to retrofit sites with essential stormwater infrastructure.
- The County needs to be intentional and strategic with acquisitions: Widespread residential encroachment on conservation areas is occurring

fast. Quickening the pace of land acquisition requires a long-term conservation and natural resource management vision. Many land acquisition successes are reactive and opportunistic, instead of intentional and strategic.

- A fragmented swatch of opportunities: The amount of land available for park purchase is diminishing greatly and availability for conserved lands happens in pockets of small land grabs. Fortunately, the Green Infrastructure Network, mapped based on existing (2009) conditions, provides a framework to create a connected network of remaining undeveloped land containing important natural resources. However, connectivity is critical to its function in protecting ecosystem services. A consistent vision needs to be established to protect and implement connectivity within a fragmented system.
- Protected land favors agricultural uses: It is undeniable that any type of preserved land has a positive effect on

Howard County's ecology. However, only 30.8 percent of Howard County's protected land serves natural resource conservation aims. The remaining 67.7 percent of protected land is represented by agricultural easements, while 1.5 percent is protected under cultural easements.

- Individual actions matter: Personal choices like tree removal or heavy use of fertilizers and pesticides on private property have large system wide effects. The public should be better educated about the effects of individual decisions on the ecology of Howard County.
- Balancing form and function: As Howard County looks to the future, it will likely need to modernize to suit the needs of a growing population while respecting historic and natural character. Site investments in parks and open spaces should account for the diverse systems found in the county, creating typologies that respond to site-specific identities.

Implementation

Addressing the challenges and supporting the strengths of Howard County's natural systems will require the utilization of as many tools as possible. The following list includes some of Howard County's most powerful and meaningful resources:

IMPLEMENTING ORDINANCES AND PROGRAMS

Natural and Historic Resources Division of the Department of Recreation and Parks has been instrumental in helping to create numerous policy and management guidelines that support Howard County's goals. Those policies and guidelines are identified in detail below:

ACQUISITION AND DEVELOPMENT

Department Policy and Procedures

The role of the Department is to ensure the Department's philosophy, goals and policies are appropriate; they will be reviewed by the director and designated staff at least yearly in accordance with HCDC Policy A-003, Policy and Procedure and Post Order review. Staff are encouraged to participate, to the maximum degree possible, in recommending changes as needed.



Figure 3.14 Family Volunteer Day at Robinson Nature Center

Open Space Acceptance Policy

The County receives fee simple ownership of lands that have been approved through the County's subdivision review process. This policy provides direction for inspecting and accepting these lands into the Department's system.

Open Space Land Acquisition

The State of Maryland's Program Open Space is a grant program which provides financial and technical assistance to local jurisdictions for the planning, acquisition, and/or development of recreation or open space areas. Occasionally, land is acquired through exchanges with owners for land of greater area while satisfying a need of another party. This particular action requires County Council approval. There are also stateside Program Open Space acquisitions, but these properties are retained by the State within the jurisdiction.

In this program, Open Space is parkland set aside to remain in a natural state and conserved for environmental protection and for limited, passive recreational use. Thus, some parcels acquired through Program Open Space have restrictions on public outdoor recreation uses based on covenant deeds in compliance with the Sections 5-906(e) (7) and (8) of the Natural Resources Article of the Annotated Code of Maryland, which states that land use conversions can only be approved after the County acquires land of equal area or recreational value as a replacement. The appraised value of the replacement must be of equal or higher value than the converted land.

Together, the LPPRP, the Parks and Open Space Plan and Plan Howard 2030 recognize the environmental importance of undisturbed natural vegetation and the Department places a high priority on protecting such areas. These natural vegetation areas provide wildlife corridors, aquifer recharge, habitat and passive recreational/educational opportunities and are protected by law under Title 19, Subtitle 2 of the Howard County Code.

Parkland Development

The Department of Recreation & Parks is charged with the development of the Howard County Parks system. The main function of the body is to assist in the development of parkland, related amenities and resource protection. The Plan helps the Department carry out its mission and vision by guiding the Department's policy decisions and day-to-day operations. One major goal of this Plan is to comply with the State of Maryland mandate that all local jurisdictions update their land preservation, parks and recreation plans to continue qualifying for Maryland Program Open Space funds. A second major goal is to guide the development of Recreation and Parks services, and help direct the County's efforts to conserve and protect its natural environment and farmland.

Parkland Rules and Regulation Enforcement

The Department is responsible for the management of Parkland within Howard County as set forth in Title 19, subtitle 2 of the Howard County Code. An adaptive management approach to conservation practices is used for management purposes. In this approach, implemented procedures are regularly monitored and changes in procedure are adapted according to the result. From 1992 onwards, stronger focus was towards natural resources protection. Emphasis is on compliance through education rather than enforcement. Whenever needed, enforcement measures are taken by Park Rangers, regulation inspectors or County litigators when educational efforts prove ineffective.

Trail Management Policy

This policy provides direction for the design, construction and maintenance of County trails. Best management practices for the Department, as well as for other county departments, are outlined in a trail planning and management guideline document that ensures sustainable standards. The Department is working to expand trail design,



Figure 3.15 Earth Day 2022 clean-up volunteer event



Figure 3.16 Tree planting for Earth Day 2022

construction, realignment, and maintenance efforts through the training and assistance of volunteer groups.

Utility Crossing on County Parkland

This policy set forth the requirements for allowing developers and the Department of Public Works (DPW) to cross parkland for the purpose of public improvements such as sewer, water, and other utility easements. A restitution fee is mandatory to be paid to the County for tree and habitat loss.

CANOPIES AND FORESTS

Forest Conservation Easements

Forest Conservation easements were established pursuant to the Forest Conservation Act of Howard County. In this program, there is an agreement between the "developer" and the "County," where the developer is required to retain existing trees, plant trees to replace trees cleared during the course of development, or plant trees to create new forests. The area dedicated for the required retention, reforestation or afforestation is shown on the plan's plat of the Forest Conservation Easement and is described in the Deed of Forest Conservation Easement.

Digitize

Easements recorded in plats, plans, and deeds are digitized into the GIS system.

Inspect

The Department of Recreation and Parks, as per an agreement with the Department of Planning and Zoning is responsible for the inspection of any forest conservation easement (FCE) established under a Forest Conservation Agreement between a land developer and the County during land development. A land developer is required to submit to the County a Deed of Forest Conservation Easement, a land records plat depicting the easement, and a Forest Conservation Plan for all FCE areas created during land development. The County will perform a minimum of two inspections of FCE areas to verify that the land developer has met its obligations. A land developer is required to complete a three-year survival and maintenance period (increased from a two year review in 2020) for all FCE areas created.

Accurate posting of protective signs along easement perimeters is carried out. Assessment of forest cover, plant survival and invasive species is performed. Threats like encroachments and deficiencies are reported.

Private Forest Conservation Easements

Though no longer in existence, this program was designed to create forest conservation easements on private properties with environmentally sensitive features. The Department of Recreation and Parks was responsible for site selection, planning and preparation, plantings, and management for 2 years. Reforestation was given priority over retention.

In 2017, under this program, 58 acres had been planted, 17,657 trees had been planted and 23,657 feet of stream had been buffered.

Reforestation Tree Planting on Public and Private Lands

This policy establishes guidelines for the afforestation or reforestation program within Howard County. The Department is the lead agency within the County for afforestation and reforestation financed by the forest conservation fund. The Natural and Historic Resources Division of the Department plans, designs, plants, maintains, and monitors the planting of the trees. The County benefits from this program through increased forested buffers that act as filters, stabilize stream channels, shade streams, and increase biodiversity.

Stream Re-Leaf Program

This program is designed to enhance riparian stream buffers by providing native trees and shrubs to property owners. The County provides trees and shrubs for the property owner to plant within 75 feet of a stream. Large orders of at least 75 plants may qualify for planting services as well. Since its implementation, tens of thousands of trees have been planted.

Turf to Trees Program

The Turf to Trees program was created to increase tree coverage throughout the county in order to help alleviate the damaging effects of stormwater runoff. The program provides trees and planting services to Howard County property owners with lots of 1.5 to 10 acres in size, free of cost. Since the project started in 2015, over 3,100 trees have been planted.

WILDLIFE MANAGEMENT

Beaver Management

In its role as a steward of Howard County's natural resources (Howard County Code Title 19, subtitle 2, Section 19.200-211), it shall be a goal of the Department of Recreation and Parks to practice an attitude of acceptance of, and tolerance for, beaver activity as part of the county's natural environment and it will foster this attitude among the public through education. The Department recognizes beavers as a natural and desirable component of the environment because of their contribution to



Figure 3.17 Insect Extravaganza at Robinson Nature Center

flood control, water quality and diversity of natural habitat.

Insect Collection Policy

The Department of Recreation and Parks prohibits the collection or harvesting of organisms from County property without prior evaluation and written approval of requests from amateur, professional, government, and university-based research projects to survey and study specific organisms. The Natural and Historic Resources provides for the coordination, oversight, guidance, and where applicable, public notice and enforcement of all activities related to allowing amateur, professional and university-lead research projects involving the collection of organisms/ insects within County-owned properties. Formal written request for permission should be approved to carry out the collection. The Department will not permit the collection of rare, threatened, or endangered insect species.

Invasive Plant Policy

The Department plays an active role in controlling invasive plants to improve overall habitat management, including the Conservation Stewardship and the Weed Warriors department programs. Volunteers contribute to the removal of non-native, invasive plant species and replanting of native trees and shrubs. Habitat restoration efforts include monitoring, invasive species control, including innovative mechanical means such as using goats as a new management tool, and conducting survival counts on planted trees and shrubs.

Policy 100.18: Integrated Pest Management on Parkland

The purpose of this policy is to protect and enhance both natural and developed landscapes with integrated pest management and limiting the use of pesticides. Following Howard County becoming a member of "Bee City USA," a coalition committed to protecting pollinators, use of Neonicotinoid and Glyphosate have been restricted on parkland. Neonicotinoid is a class of insecticides related to nicotine with a common mode that affects the central nervous system of insects. The use of neonicotinoids are prohibited on all County parkland including sports fields, garden plots, golf course and open space, with



Figure 3.18 Geese populations lead to algae growth in waterways because they are a major source of phosphorus.

few exceptions. Glyphosate has been shown to inhibit the production of melanin, which insects often use as part of their immune defenses against bacteria and parasites, therefore rendering them more vulnerable to pathogens. Howard County has severely restricted the use of Glyphosate on Countyowned land.

Nuisance Wildlife Management

Over population of certain species can create nuisance for humans and the environment. The white-tailed deer population is one such example where their presence has caused environmental damage, human illness, and traffic accidents. Howard County's comprehensive deer management plan addresses actions that can help reduce deerhuman conflicts but cannot eliminate them. Howard County's forests are also severely impacted by the deer population. Because deer browse the understory layer a majority of the forests do not have tree saplings to replace mature specimens following tree death. Consequently, the existing canopy acreage in the county is vulnerable to further significant loss. Furthermore, the forest bare ground increases negative impacts from stormwater runoff, exaggerating erosion and poor stream health quality.

Resident Canada Goose Management

This program manages and develops mitigation solutions to address the county's large Canada goose population, which has resulted in the degradation of lake and pond waters, and shorelines at several park properties. Geese are a major source of phosphorus in water bodies, and hence a driver of algae growth. The Department focuses on reducing damage at park properties, such as Centennial Park, as well as reducing the number of illegally released domestic waterfowl.

Goals + Actions

In order to meet state and county goals, while addressing emerging themes and recommendation drivers, the Department of Recreation and Parks can take the following actions:

State Goal 2.1

Concentrate preserved land in large, relatively contiguous blocks to effectively support longterm protection of resources and resource-based industries.

ACTION: Acquire properties to protect known natural resource areas or critical wildlife habitats, including atrisk properties and buffers identified as part of the Green Infrastructure Network, guided by past and future countywide natural resource inventories.

ACTION: Acquire properties for passive recreation that can connect to existing parks and open spaces (linear parks and gardens, walking trails) to create large continuous networks of preserved open space.

ACTION: Strategically conduct restoration activities (like tree plantings and forest maintenance) in large, preserved lands and connected corridors to promote long term ecological health.

State Goal 2.2

Limit the intrusion of development and its impacts on rural resources and resource-based industries.

ACTION: Focus land acquisition on future forest protection areas to preserve tree canopy. Use the Green Infrastructure Network as a framework for strategic land acquisition.

ACTION: Continue to use land use policy tools, including regulations and incentives, that protect agricultural land, forest and other important rural resources, and support the agricultural and forestry industries.

ACTION: Monitor implementation of the recently updated Forest Conservation Act and modify the Act as necessary to ensure adequate protection of forest resources.

Identify, protect and restore lands and waterways in Maryland that support important aquatic and terrestrial natural resources and ecological functions, through combined use of the following techniques:

- Public land acquisition and stewardship;
- Private land conservation easements and stewardship practices through purchased or donated easement programs;
- Local land use management plans and procedures that conserve natural resources and environmentally sensitive areas and minimize impacts to resource lands when development occurs;
- Incentives for resource-based economies that increase the retention of forests, wetlands or agricultural lands;
- Avoidance of impacts on natural resources by publicly funded infrastructure development projects; and
- Appropriate mitigation response, commensurate with the value of the affected resource.

ACTION: Prioritize public land acquisition and private land conservation and stewardship practices within the County's Green Infrastructure Network, which includes and links the most significant habitat areas in the county.

ACTION: Continue to seek federal and State funds for land acquisition and environmental restoration.

ACTION: Explore creation of a local Resilience Authority program, to generate funding for large-scale infrastructure projects to better adapt to the effects of climate change

ACTION: Continue and expand the use of ecologicallyaware maintenance practices on Department lands to support natural resource management.

State Goal 2.4

Focus conservation and restoration activities on priority areas, according to a strategic framework such as Targeted Ecological Areas (TEAs).

ACTION: Use the County's Green Infrastructure Network, which includes and links the most significant habitat areas in the County, and designated greenways to establish priorities for conservation and restoration activities.

ACTION: Continue native tree planting efforts to increase tree canopy and forest cover.

ACTION: Control non-native invasive species so as to increase native species diversity in forests, meadows, wetlands, and stream riparian zones.

Conserve and restore species of concern and important habitat types that may fall outside of designated green infrastructure.

ACTION: Develop a county-wide conservation plan that addresses species of concern and their habitat on both public and private lands.

ACTION: Prepare materials and provide technical assistance for conservation on private lands, focused on protecting stream hydrology, stream and wetland restoration, increasing native tree canopy diversity, and control of non-native invasive species.

ACTION: Prepare and disseminate in multiple ways the essential conservation messages about the county's ecological systems and species of concern.

State Goal 2.6

Develop a comprehensive inventory of natural resources, natural areas, and sensitive species to assist state and local implementation programs.

ACTION: Complete a county-wide natural resources inventory and conservation plan for terrestrial and aquatic communities and sensitive species. To develop the inventory, the County should partner with other governmental agencies, such as the Maryland Department of Natural Resources (DNR), organizations, academic institutions, and citizen scientists to utilize data from existing inventories and aggregate findings. The plan should prioritize, describe, and estimate costs for areas where protection, restoration and management will secure the county's ecological health and resilience.

ACTION: Adapt and expand existing parkland and open space acquisition and land management programs to implement the County Conservation Plan over ten years.

ACTION: Explore the creation of new easement programs to protect natural resources.

ACTION: Create a management and implementation plan for non-native invasive species control and species of concern protection that can be used across private and public natural resource areas.

ACTION: Revise existing deer management regulations to increase hunting opportunities on public and private land as a means of improving biodiversity and forest ecology.

Establish measurable objectives for natural resource conservation and an integrated state/ local strategy to achieve them through state and local implementation programs.

ACTION: Establish ten highly revealing biological metrics to evaluate success in implementing a ten-year County conservation plan. These will include increasing forest coverage (analyzed by satellite classification of land cover) and achieving target stream IBI score of Fair or better across all of the County's watersheds. For further biological metrics see University of Maryland Center for Environmental Science's Chesapeake Bay indicators.

ACTION: Establish ten highly revealing biological metrics to evaluate success in implementing a ten-year County conservation plan. These will include increasing forest coverage (analyzed by satellite classification of land cover) and achieving target stream IBI score of Fair or better across all of the County's watersheds. For further biological metrics see University of Maryland Center for Environmental Science's Chesapeake Bay indicators.

State Goal 2.8

Assess the combined ability of state and local programs to achieve the following:

- Expand and connect forests, farmland and other natural lands as a network of contiguous green infrastructure
- Protect critical terrestrial and aquatic habitats, biological communities and populations
- Manage watersheds in ways that protect, conserve and restore stream corridors, riparian forest buffers, wetlands, floodplains and aquifer recharge areas and their associated hydrologic and water quality functions
- Adopt coordinated land and watershed management strategies that recognize the critical links between growth management and aquatic biodiversity and fisheries production and
- Support a productive forest land base and forest resource industry, emphasizing the economic viability of privately owned forestland.

ACTION: Complete a comprehensive Conservation Plan that: (1) documents needed acquisitions and restoration and management work to complete a county-wide conserved lands network, (2) document costs to achieve over 10 years, (3) integrates with CIP and O&M budgets and (4) Identifies funding mechanisms and implementation.

ACTION: Establish Howard County as a viable county within the Family Forest Carbon Program, developed by the American Forest Foundation and The Nature Conservancy. The program encourages the growth of mature forest to provide water quality and habitat benefits while increasing carbon storage on the land. This program is not yet available in Howard County.

Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

ACTION: Use the parkland acquisition program to acquire an average of 25 acres of parkland per year over the 5-year term of the 2022 LPPRP. The County currently exceeds this goal by providing 29.5 acres per 1,000 residents. Although the County has met its goals for land acquisition, the current land acquisition goals support increased equity and access to parks for all Howard County residents.

ACTION: Continue to implement PlanHoward 2030 policies that address the creation of open space and protection of natural resources during the development process and continue these policies in the General Plan update.

ACTION: Recognize the need for passive recreation in natural areas as being equally important (for ecosystems and mental health benefits) as structured park land.

County Goal 2.10

Promote sustainability throughout the Department of Recreation and Parks.

ACTION: Continue to support staff training in ecologically-based land management practices and BMPs.

ACTION: Increase investment in staff who restore and maintain County lands and waters.

ACTION: Tie facility planning and development to secured budgets for staff and operating support.

ACTION: Increase sustainability within departmental practices –such as reducing waste (at events, camps, etc.), installing solar panels on pavilions, utilizing gray water for toilets, providing garden plots incorporated into parks in socially vulnerable areas, or other innovative sustainability measures

ACTION: Increase sustainable landscaping practices spanning from reduced mowing to alternative fueled lawn equipment.

ACTION: Continue to collaborate with other departments on sustainability initiatives and innovative solutions, projects, and programs.

County Goal 2.11

Encourage citizens to improve the environment.

ACTION: Collaborate with the marketing division on campaigns to increase public awareness for conservation efforts and "behind the scenes" ecology work.

ACTION: Expand volunteer opportunities for citizens to participate in restoration and conservation efforts.

ACTION: Leverage the trail system to increase passive recreation and public experience/awareness of natural resource areas.

ACTION: Increase signage along trails to educate citizens about local ecologies and the overall parks and open space system.

ACTION: Expand education and outreach about the importance of sustainable land management, such as sustainable landscaping, reduced mowing areas, native plantings, "natural looking" areas, reducing pesticide use and increasing manual weed control so residents and visitors to the parks can appreciate the non-manicured look of our parks.

County Goal 2.12

Improve water quality.

ACTION: Continue current initiatives in the County Watershed Implementation Plan and County Implementation Strategy in addition to creating a pollution reduction initiative that addresses the Chesapeake Bay Total Maximum Daily Load (TMDL).

ACTION: Use the findings of citizen-science groups and nonprofit water conservation organizations that actively monitor stream water quality to target locations for water quality improvements.

ACTION: Establish policies that value the benefits provided by ecological processes or functions in wetlands and riparian areas.

ACTION: Continue native tree planting efforts within stream buffers and wetland restoration to increase water quality.

County Goal 2.13

Improve tree health, quantity, and resilience.

ACTION: Prioritize forest health and overall forest diversity (including preserving mature trees as well as saplings) in management and restoration efforts, focusing on deer management, integrated pest management, and outreach events.

ACTION: Shift planting strategies beyond canopy trees to regenerating tree seedlings and saplings representing the future forest canopy.

ACTION: Encourage landowners to receive and implement forest stewardship plans prepared by the Maryland DNR Forest Service for a nominal fee.

Historic Resources + Agriculture

Aspiration

The County acknowledges and amplifies its agricultural and cultural histories.

Historic Resources

Howard County holds a unique and distinctive history. Its productive natural resources, agricultural legacy, and historic communities comprise a system that intrinsically links ecological preservation and community development. In this system, it is not only single sites that are historic, but entire communities and landscapes. Due to this complexity, historic preservation is a highly necessary and important discipline for Howard County. Through the work of historic preservation, past stories can be illuminated and deep connections with place can be maintained.

Howard County owns 24 historic sites. The Department of Recreation & Parks has a Living History and Heritage team that manages historic properties that are owned by Howard County and generally accessible to the public, supported by the Department's own Construction Division and the Department of Public Works as needed.

In addition, the County's Historic Preservation Commission, staffed by the Department of Planning and Zoning, conducts historic preservation tasks in cooperation with owners of locally designated historic districts and individual structures (including the Department). The County's two local historic districts are Ellicott City and Lawyers Hill in Elkridge. These districts, as well as Savage and Daniels Mill, are National Register Historic Districts.

Howard County was designated a Preserve America Community in 2013 by the Federal Advisory Council on Historic Preservation. Preserve America Communities "recognizes communities that celebrate their heritage; use their historic assets for economic development and community revitalization; and encourage people to experience and appreciate local historic resources through education and heritage tourism programs."²⁹ While this designation is primarily honorific, the County would be eligible for grants if Congress appropriates funds; and can erect attractive signs at entrances to the County and major communities. They have already made use of this designation to erect a sign on Rogers Avenue.

The Department of Recreation and Parks has a Historic Resources Management Plan that includes maintenance and management strategies for each of its 24 properties. The Department of Recreation and Parks, however, is solely responsible for these sites' maintenance and operation. The Department of Planning and Zoning employs an architectural historian on staff, who serves as a great resource for Living History and Heritage. The County's process of acquiring historic properties has been more opportunistic than strategic. Sometimes, potential properties have come to the County when a historic property comes up for sale or when an engaged member of the public contacts the County about a property. In other cases, historic properties come with open space purchased predominantly for other reasons -often parkland and open space. Properties located in town centers with historic uses are more likely to be managed by the Department of Recreation and Parks. Properties located in headwaters and with stormwater management potential are often purchased by the Department of Public Works.

OVERVIEW OF HISTORIC RESOURCE SYSTEM

2022 STATE GOALS

In the 2022 plan, historic preservation goals and resources are inferred and suggested within agricultural goals. The most applicable goal is:

 Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland's farmland.

2022 COUNTY GOALS (AN UPDATE TO THE 2017 PLAN)

Goals within the 2017 plan that were related to the historic resource system included:

- Integrate historic and cultural resources into park programming and facilities in a way that encourages and promotes the stewardship of these resources.
- 2. Share and promote the Department's numerous accomplishments.
- 3. Build sustainability goals into operational and departmental culture and functions.
- 4. Reflect Howard County's natural heritage while making open space a priority equal to its impact on the quality of life for future generations.

The Living History and Heritage team has done a great job in moving these goals forward in the Department. This is most clearly reflected in the Heritage Programs Strategic Plan Goals of 2019, a document that builds upon and adds detail to the 2017 LPPRP goals. According to the Living History and Heritage team, four of the seven strategic planning goals have been completed since 2019. The three remaining goals are in progress.



Figure 4.1 Blandair, the Patapsco Female Institute, and Harriet Tubman Cultural Center are all part of the DRP's historic assets.

THE SYSTEM TODAY

County Historic Preservation

Department of Recreation and Parks Historic Sites

Within the Department, the Living History and Heritage section under the Natural and Historic Resources Division as well as the Heritage Conservation Construction Section within the Bureau of Capital Projects, Park Planning & Construction Division manage, protect, and enhance the historic and cultural resources of the County. The Living History and Heritage team is tasked with maintaining, operating, and protecting the Department's historic assets spread across many parks. The mission of this program is to "benefit a diverse audience by utilizing our historic resources in various ways that promote good stewardship of the County owned historic resources, artifacts and archives. This is accomplished by staying current with technology and heritage tourism trends, by providing historically accurate information to our visitors, and maintaining a sense of place through the built environment and the intangible heritage associated with the region."

The Department of Recreation and Parks manages 24 sites ranging from museums to historic homes, ruins to historic districts. The standards for maintaining the character of the Department's historic resources depend, in part, on restrictions imposed through the use of State funding for the acquisition of the properties that included various historic buildings, and in part on self-imposed restrictions. In quite a few cases, properties owned by Howard County and managed by the Department are protected by preservation easements held by the Maryland Historical Trust (MHT). These easements were imposed at the time of the properties' acquisition through Program Open Space. MHT requires such easements when it determines that the property is of sufficient significance to require a great deal of care in its long-term management, including both rehabilitation and adaptive use. The Department's policy in these cases – and in others where no easements are held by MHT – is to follow the Secretary of the Interior's Guidelines for the Treatment of Historic Properties.



Figure 4.2 Sheep to Shawl Event at the Living Farm Heritage Museum

COUNTY-OWNED HISTORIC RESOURCES	ACREAGE
B&O Ellicott City Station Museum	0.34
Belmont Manor and Historic Park	72.64
Bernard Fort House (Heine Property)	5.56
Blandair Historic Farm (BLA)	n/a
Bollman Truss Bridge	2.21
Clover Hill Farm House (RBP)	n/a
Doyle Spring House (RBP)	n/a
Ellicott City Colored School, Restored	13.49
Firehouse Museum	0.04
Harriet Tubman Cultural Center	n/a
Hebb House (WFP)	n/a
The Original Courthouse of the Howard DIstrict*	0.19

COUNTY-OWNED HISTORIC RESOURCES	ACREAGE		
James Marlow House (SMP)	n/a		
James Sykes House (WFP)	n/a		
Lt. Col. Ephraim Anderson Grave Site (CAM)	.16		
McKenzie Barn (RBP)	n/a		
Patapsco Female Institute Historic Park	9.74		
Pfeiffer's Corner Schoolhouse (RBP)	n/a		
Poplar Springs Park	7.04		
Guilford Quarry Pratt Through Truss Bridge	0.20		
Simpsonville Mill Ruins (RNC)	n/a		
Thomas Isaac Log Cabin	0.16		
Troy House (TP)	n/a		
Waverly Mansion	3.44		

Figure 4.3 Current list of County-owned historic resources.

*Destroyed in May 27, 2018 flood

County-level designations are important for the maintenance of theses sites. Other designations matter rather less to the Department's daily operations. Sites listed in the federal National Register of Historic Places (which can be of local, state, or national significance) acquired by the County with state funds are likely to be under an MHT easement. Listing in the National Register largely confers greater public recognition without real restrictions on the Department's operations (but since MHT does impose restrictions, what the federal listing does or does not do matters little in this context). See more discussion of the National Register in the following sections.

The Living History and Heritage team's Historic Resources Management Plan, 2020-2021, classifies the 24 sites according to a tier system based on how actively programmed and visitor-friendly each site is - including some, in Tier IV, that are not open to the public in any form due to safety or accessibility issues. There is also category suggesting the removal of three resources from the list. These are resources that either do not have any kind of historical context to be interpreted by Living History and Heritage staff or are part of another property operated by another entity including the Baldwin Commons, Ryan Property Well and the Savage Mill Dam Ruins. The Living History and Heritage section offered highly successful summer camps and tours and manages historic homes, sites, and artifacts. COVID-19 has required a nimble rethinking of how best to connect residents and visitors with these resources. The pandemic has challenged the Department's ideas about the future of historic resources programming and the importance of integrating historic resources with opportunities to interact with integrating historic resources with opportunities to interact with them, in person and virtually. During the pandemic, the Living History and Heritage section offered virtual programs for the first time, including a Behind the Scenes tour of the B&O, history-themed storytimes with an at-home craft activity for kids, an archaeology lecture series, and a virtual field trip tour of the Patapsco Female Institute Historic Park.

Even before the pandemic, the Living History and Heritage team was attempting to reimagine how to connect residents and visitors with sites not applicable for standard programming. Historic sites unable to support traditional programming or events can still be interactive. Better linking historic sites to one another, as well as to their ecological and agricultural contexts, opens more opportunities for engagement. Now is the time to combine Heritage Section's recent virtual and at home programming with renewed interest in outdoor recreation to bring such programs into parks and open spaces.

Historic resources in the Department's portfolio are valued and well-maintained. The Department has invested in both creating maintenance and preservation plans for individual resources and maintaining the system as a whole. In addition to noting how best to care for the structure of sites, the plans also outline opportunities for public engagement. The Living History and Heritage section offers a wide range of interpretive history programs, lectures, events, public archaeology, field trips and summer camps that allow opportunities for all ages to interact with these resources.

Not all historic sites managed by the Department of Recreation and Parks are open to the public, however. Some are unsafe and in need of larger renovation efforts and funding before they can be fully utilized. The risk of flooding presents a threat to the condition of these sites, although there are several remediation projects that have taken place or are in the works to assuage these concerns. Currently, funding for both physical renovations and program operations is limited. An additional need for The Living History and Heritage section is to create more interpretive and wayfinding signage at all County owned historic sites. Many sites are without these elements, limiting the ability for residents and visitors to interact with these properties even if from afar. Efforts to address this issue are currently in progress.

Howard County Historic Sites

In addition to the historic properties owned by the Department of Recreation and Parks, Howard County boasts many other historical assets which are privately owned. Howard County's Historic Sites, seen in Figure 4.6, are a collection of over 1,000 properties that hold significant historic value at the count- level. While this designation does not automatically protect sites through historic preservation legislation, it does make property owners (both public and private) eligible for property tax credits.

The Department of Planning and Zoning also works to maintain, regulate, and protect historic resources at the county-level. It uses zoning regulations and a design review process to ensure changes by both private and public entities are appropriate to the character of designated historic resources. The Historic Preservation Commission (HPC) has a significant role in this task. The Commission provides advice to Howard County agencies (including the Department), Boards, Commissions, and property owners regarding historic sites and historic districts. It is also the steward of a long-range work plan, the Historic Preservation Plan, adopted in 2014. The HPC is staffed by the Department of Planning and Zoning's Resource Conservation Division, which covers Agricultural Preservation, Environmental Planning and Historic Preservation in Howard County. HPC advisory comments are reviewed and considered by DPZ during site plan review.

The HPC determines if exterior changes to a local historic district comply with their adopted Guidelines and County Code, and issues certificates of approval for all exterior changes, including new construction, historic building relocation or demolition, and repair or alteration of any structure and other changes that impact the appearance of a structure, per the HPC's code requirements. The Commission also assists with identifying historic resources on sites and provides advice regarding the design of development.

THE SYSTEM TODAY

2

County-owned National Historic Landmarks

43

Properties Listed in the National Register, according to the Maryland Historic Trust

293

Properties Evaluated for National Register Eligibility

24

County-owned Historic Sites*

24

Properties under MHT Preservation Easement

Figure 1.20 *D*ata acquired from the Medusa Database and is current as of April 17, 2020.

*count of MIHP properties sourced from Department of Planning and Zoning (DPZ) Architectural Historian, 2021.

State of Maryland Historic Preservation

A number of state-operated programs support the basic preservation responsibilities maintained by Howard County as described above.

Maryland Inventory of Historic Properties

Historic properties or assets included in the statewide database known as the Maryland Inventory of Historic Properties (MIHP) are generally at least fifty years old and can include standing structures or archaeological resources. Sites in the MIHP have undergone a review process to verify events or elements of the site that have historical significance. There are no regulatory restrictions or reviews needed for these properties; the MIHP is an instrument for research and documentation. It is worth noting that restrictions and review policies and procedures occur at the local and federal levels. As of July 2021, there were nearly 90,000 resources with this designation statewide.

Howard County has more than 1,100 properties entered in the MIHP, accounting for roughly 1 percent of all MIHP statewide.

Howard County has adopted a countylevel Historic Sites Inventory to note historic resources at a local level. These sites have been adopted by County Council Resolution

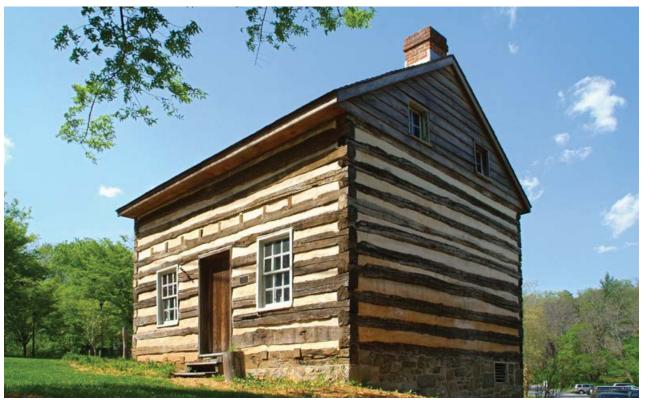


Figure 4.4 The Thomas Isaac Log Cabin is an example of a site that is listed as a Howard County Historic Site and is cared for by the Department of Recreation and Parks.

and are subject to Advisory Comments for certain activities like subdivision and site plan development. They are also eligible for tax credit programs.

The Historic National Road is a federallydesignated National Scenic Byway, consisting of Route 144 and Frederick Road in Howard County. As it has evolved in Maryland since the 1991 passage of the Intermodal Surface Transportation Efficiency Act (ISTEA), the federal program has funded the acquisition of conservation easements protecting views from scenic roads. Such views are delineated in formal corridor management plans that qualify roads for such public support.

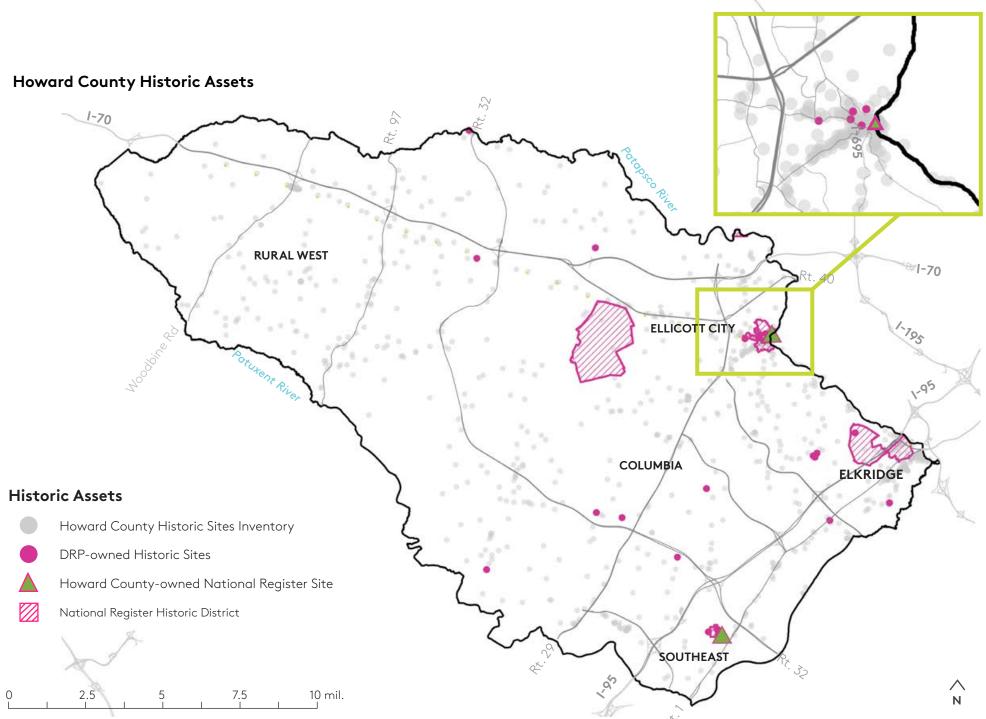


Figure 4.5 Howard County contains over 1,000 historic sites. 24 of these sites are owned by the Department of Recreation and Parks.

Federal Historic Preservation

There are two primary programs for recognizing important historic properties at the national level:

National Register of Historic Places

According to the National Park Service, which administers this program, "the National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources."³⁰ Listings include districts, buildings, structures, objects, and sites that are recognized for their significance in American history, archeology, architecture, engineering, or culture.

The program is administered at the State level by MHT. In Maryland, the register includes more than 1,500 listings, including approximately 200 districts. MHT notes that "listed properties span a wide variety of types and periods, ranging from prehistoric archaeological sites to buildings of the recent past, and include rural landscapes, urban and suburban." This distinction does not restrict private property owners from the use of their property.

Listing in the National Register provides access to the federal rehabilitation tax credit for qualified expenditures on commercial historic properties, as discussed below. The law furthermore protects both listed and eligible properties from unthinking actions by federal agencies or those receiving federal funding or licensing in a process commonly known as "Section 106 review" (named for the section in the original 1966 law).

Howard County has 65 sites list in the National Register of Historic Place, seven of these sites are owned by the Department of Recreation and Parks.

National Historic Landmarks

National Historic Landmarks (NHLs) are also listed in the National Register but meet a much higher standard of documentation and hold particular significance to the heritage of the United States. There are about 2,600 landmarks nationwide. Howard County boasts four National Historic Landmarks, two of which are owned by the Department of Recreation and Parks (B & O Ellicott City Station Museum and the Bollman Truss Bridge). Matching-grant funding through the federal Save America's Treasures (SAT) program, administered by the National Park Service, is available for NHLs.

Permanent Preservation of Historic Buildings and Lands

Maryland offers multiple programs for protecting land upon which a historic site is located or in entire historic districts, including important historical landscapes, through preservation or conservation easements (there is little difference between the two legally, with the former more generally applied to structures and the latter to land, sometimes in combination). Easements permanently restrict lands in the county to preservation uses, limiting such changes as new development or excavation. Howard County uses preservation easements held by the Maryland Historical Trust and the local Rockburn Land Trust to support the preservation of historic spaces.

FINANCIAL INCENTIVES FOR HISTORIC PRESERVATION

Historic Tax Credits

This program provides a tax credit of 20 percent of qualified expenses required to rehabilitate an "income-producing" property. The property must be listed individually in the National Register or located in a National Register-listed historic district and specifically identified as a "contributing property." While this qualification is helpful for rehabilitating offices, commercial spaces, farms, rental houses, or industrial spaces, it does not include private residences.

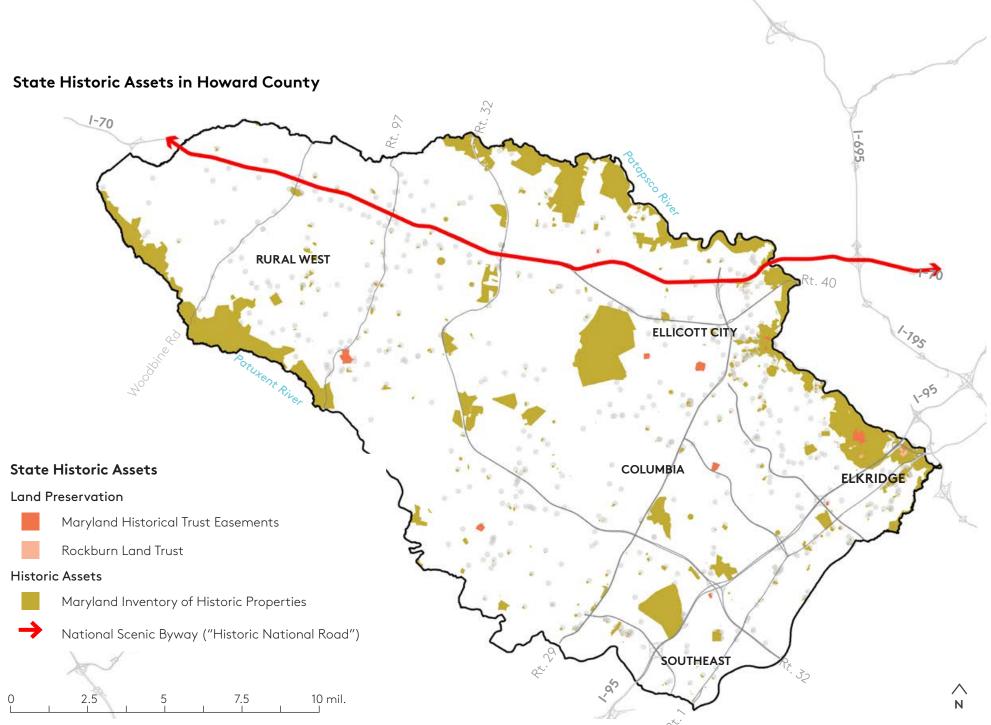


Figure 4.6 Howard County has many historic assets at the state level. This includes historic land preservation easements, historic properties, and a National Scenic Byway.





Figure 4.8 The Belmont Manor & Historic Park ribbon cutting and open house on April 11, 2015

Figure 4.7 Bollman Truss Bridge is one of the two National Historic Landmarks owned by the Department of Recreation and Parks.

The State of Maryland also offers its Historic Revitalization Tax Credit program. There are three at the State level: (1) a 20% tax credit for homeowners (capped at \$50,000 in a 24-month period with a minimum of \$5,000 of eligible expenses to qualify; (2) a 20% competitive tax credit for small commercial properties (for "Main Street" type projects that do not exceed \$500,000 in qualified expenditures), and (3) a 20% competitive tax credit for larger commercial properties.

In addition to Federal and State tax credits, there are local county-level tax credit programs for historic preservation efforts. The Historic Tax Credit Programs under 20.112 and 20.113 of the county code provide: (1) a credit for "qualified expenses" up to 25 percent of the cost of the eligible work. This credit applies to projects costing \$500 or more; (2) provides a tax credit to offset any "increase in property tax that would result from increased assessed value due to the restoration work done."³¹ It can be applied to projects valued at \$5,000 or more and "granted annually for ten years after the work is completed."³² These incentives are available for historic sites throughout the County or properties localed within local historic districts.

While Howard County has seen positive numbers, even more economic benefit is

possible. State tax credit criteria requires sites to be a contributing resource within a National Register district, individually listed on the National Register, or contributing within an area that the Maryland Historic Trust determines is eligible to access the state tax credit. This requirement means that most historic properties listed on the Howard County Historic Sites Inventory are not eligible for State tax credits. These limitations display the importance of the County's own 20.112 and 20.113 Historic Tax Credit Programs, which are less strict and more personalized to the needs of the County.

EASEMENTS	2017 Acres	2021 Acres	Change
Maryland Environmental Trust Easements/ Rockburn Land Trust	62	62	+ 0
Neighborhood Preservation Easement	33	75	+ 42
Rockburn Land Trust	47	46	0
Rural Legacy Easement	81	81	0
TOTAL	223	261	+ 42

Figure 4.9 In addition to historic designations for structures and districts, easements can also be historic in nature. Howard County has 42 acres protected in perpetuity for historic and cultural conservation.

COUNTY HISTORIC RESOURCES PROGRAMMING AND OPERATIONS

The 2017 LPPRP included several goals to expand the adaptive reuse of historic properties and to better integrate agricultural histories and the natural environment into the Department's recreational programming. To achieve this aim, this document looks to a novel approach that many cities and counties have embraced, known as "using the city (sic. county) as a living lab." The aim is to create an environment that is a place for people not only to learn more about the many histories of the places they visit, but also to immerse themselves in an understanding of how these histories have shaped the cities and counties today.

Beyond traditional programming that the Living Heritage and History section provides, the County could support the section's efforts and incorporate signage, wayfinding, and educational campaigns that amplify unique moments that are significant to Howard County's development. Columbia is not the only community in Howard County to represent important changes in city patterns. Agricultural land, land along water ways, and scenic roads are all historic examples of how humans have viewed the creation of settlement patterns and defined ideal communities. Linking self guided programming, like walking, biking or driving tours, to podcasts and audio programming would allow residents and visitors to explore

untold stories while exploring their own neighborhoods.

Within this effort, there is also an opportunity to better link preservation of historic resources with preservation of agricultural land. The Maryland Resident Curatorship Program, run at the State level, provides such an example. In this program, residents are provided lifetime tenancy in a historic property in exchange for restoring, maintaining, and periodically opening the property to the public. There are currently 27 homes within the program. As of April 2022, none of the three properties available for residency were located in Howard County, as DRP currently does not have any historic properties that are eligible for curatorship. The County could participate, or greatly increase participation in this statewide program or create a county-specific version. Such a program could also help to mitigate demolition by neglect issues by providing incentives to upkeep historic homes.

A county-specific program could also provide alternative incentives (beyond tax credits) for property owners to undergo historic renovations. Perhaps property owners who regularly engage in hosting historic programming could receive a tax credit or financial contribution. This idea of using the neighborhood, district, farmland, or environment actively also allows the County an avenue into current community issues. As an example, the Mahoning Historical Society in Youngstown, Ohio actively changed their strategy to one focused on archiving the past to serving as an community convener. This meant hosting "community conversations" about the community's "tough histories" and providing space for residents to discuss issues like social justice. The society also hosts cooking series and food-centric gatherings that reflect diverse resident



Figure 4.10 Cookie Table and Cocktails is a favorite event put on by the Mahoning Historical Society.

backgrounds. This can build on initiatives the County is already engaged in, like the scavenger hunts hosted by the Sports and Adventure Division, which targets youth and teen engagement.

While historic preservation serves to protect the past for future generations, it must also simultaneously anticipate what current sites and resources will be deemed historic in the future. The County must ask "what will Howard County need in 2100 to tell an accurate and complete story?" This requires an honest analysis of the histories currently told and a strategy for amplifying, uplifting, and preserving the stories of marginalized groups and communities. As the Department and the Living Heritage and History section consider the future of this work, it will be important to continue to add a choir of differing voices, sites, experiences, and histories to the historic resources catalog.

SUCCESSES SINCE 2017

Since the last plan, County staff have worked hard to accomplish many of the goals listed in the 2017 plan. The first major goal was in the securing of more protected land under easement. Since 2017, the Department of Planning and Zoning has acquired nine additional agricultural easements, totaling roughly 287 parcels. As of spring 2022, 15,955 acres were preserved under the ALPP- purchase program (an increase of 237 acres since 2017) and 3,024 acres under the ALPPdedication program (an increase of 42 acres since 2017). This count does not include the 127.7 acres Dickey/Sharp property that was approved by the County on November 1, 2021. This includes the relatively recent acquisition of the Dickey/Sharp property, which was approved by the County on November 1, 2021. This property is particularly notable, as it is the largest remaining farm in the Rural West that was eligible through the ALPP.

The ALPP stopped approving applications in 2018 due to budget concerns. In 2019, the program was able to reopen after collaboration between County Executive Calvin Ball, the Department of Planning and Zoning, the Finance Department, and the Agricultural Preservation Board led to an update of the scoring system used to determine easement pricing. As of April 2022, there are two additional properties, representing 55 acres, currently working through the application process.

Other goals included increasing access to fresh food and creating greater connections between farms and urban residents. The Roving Radish program, begun in 2014, connects residents to healthy meal kits with ingredients sourced from local farms. The program is government run and low-income residents receive subsidized meals. Since the last plan, the Roving Radish program has continued to grow. In 2020, it opened its first storefront, a location of more than 4,000 square feet in Columbia. The expansion of this program shows a commitment to integrating county-grown products more cohesively into daily life.

CHALLENGES SINCE 2017

Despite these many successes, the Department's work within historic resources management and operations has faced challenges since 2017. The onset of the COVID-19 pandemic halted many funding streams and ongoing renovations to structures and paused programs and historical site admissions as programming and admissions to historical sites were suspended.

The Department plays a vital, but often subtle role in achieving its overall mission to protect land and amenities for future generations. It lies at a complex, but critical, intersection. It often straddles multiple worlds as it addresses issues intertwined with Urban Planning and Zoning, the Historic Preservation Commission, land preservation, and heritage. Within the Department, the Natural and Historic Resources Division and the Living History and Heritage section engages many partners to help maintain historic sites. Partners include Capital Projects, which handles preservationrelated repairs; the Horticulture Division which addresses mowing, gardens, tree maintenance, and other grounds needs; and the Bureau of Facilities in the Department of Public Works which maintains building systems and controls (like HVAC systems). The keeping of properties is a collaborative team effort.

Many structures, such as historic farmhouses and architecturally significant residences, are facing demolition by neglect. The Department has previously received the resources for property acquisition, which would provide the necessary maintenance to prevent demolition by neglect from occurring. However, the Department plans to prioritize the preservation of its own properties and not use this tool to monitor or enforce the upkeep of private property that falls into disrepair. As development pressure increases throughout the county, many private landowners are incentivized to sell land for newer housing developments. Even if the Department of Recreation and Parks had the budget to purchase these private residences, it would lack the staff to restore and maintain such properties. Because most privately owned structures are not on the National Register list or have certain required designation, they receive state funding. Privately-owned structures are usually do not have the necessary required designations and are not eligible for Federal historic tax credits. Alternative mechanisms are needed to incentivize reinvestment in these historic

properties. Other federal programs, or countyspecific education campaigns and initiatives, may fill these gaps.

Extreme weather events, such as the 2016 and 2018 floods in Ellicott City, may pose a threat to historic structures as these natural disasters become more frequent due to climate change. A number of historic sites and structures are located in places that are impacted by climate change, making them more vulnerable to a number of potential threats. As a result of these events, the Historic Preservation Commission, Department of Planning and Zoning, and the Department of Inspections, Licenses, and Permits have established processes to assist rebuilding efforts and amended Code and Rules of Procedure to facilitate these processes.

Finally, Howard County is not immune to national conversations critically re-examining history and legacy. Questions about whose history is being told within historic systems is a meaningful one. While the county has a multitude of rich histories, it is often the stories attributed to colonial, agricultural, or urban planning that are most often amplified. Eighty-eight percent of the Department's 24 sites are dated back to the mid-1700s, even though the history of the Algonquin, Iroquois, and Susquehannock tribes pre-dated these historic landmarks and sites.



Figure 4.11 Fully acquiring the B & O Ellicott City Station Museum allowed the Living History and Heritage team to increase the number of full time programming and administration positions.

There are current efforts to tell more diverse, nuanced, and holistic stories and represent a more complete historical picture. Howard County's Network to Freedom and Underground Railroad sites are such programs The Living History and Heritage section provided a site and related exhibit at the Original Courthouse of the Howard District and a dedication to the building. Unfortunately, the building was lost in the 2018 flood. What is left of exhibition material is now located at the B&O Ellicott City Station Museum.

The 2020 Heritage Program Management Plan contains specific goals to address unheard histories. Some goals of this plan include " interpreting the history of the enslaved population as accurately as possible...," creating "accurate portrayals of inhabitants and sites for eras spanning Native American through Civil Rights," and sharing an "inclusive history of all races and backgrounds of people who contributed to the historical significance" of the county. These are positive steps to tell complete histories and better reflect the diversity of Howard County's population. Supporting initiatives that highlight contemporary Howard County history, such as culturally themed food events, creating history curriculum for schools, including Native American voices in wayfinding and signage, or other heritage based programming would further support these goals in an actionoriented way.

REPORT THEMES

The Department provides creative programs in tandem with thoughtful maintenance plans. Emerging themes point towards future actions:

- Historic Sites can be made resilient to climate change: Some Countyowned historic sites were damaged during natural disasters, and climate change will increase the frequency and intensity of these severe weather events. As a result of the major flooding in 2016 and 2018 for example, mitigation and rehabilitation measures were implemented by the County. The County should continue to anticipate the resources required to make repairs after damage and create plans that help mitigate and prevent further damage.
- **Historic programs are thriving:** The Living History and Heritage staff has been doing a great deal of work with a small staff and less financial resources than other sections. Since 2017, staff has grown, multiple historic sites/museums have been acquired, and management and preservation plans have been created.

Partnerships are valuable tools to protect historically significant places: The Department's role in maintaining and preserving structures will need to consider the growing threat of more frequent extreme weather events such as flooding and extreme heat and their impact on historic structures. Within the larger context of Howard County, demolition by neglect is also a growing concern. The Department should leverage Living History and Heritage team to save, rehabilitate, and restore historic resources.

Agriculture

Howard County has long been defined by a thriving agricultural tradition. Agriculture is both a major economic driver and a reflection of history and cultural identity. Since the 2017 LPPRP plan, which used the 2012 USDA Census, the number of farms in the county has grown in number, but decreased in acreage.³³ Most farms continue to be family-owned entities. Trends in Howard County have seen a shift from produce production to protein production, which has led to a current shortage of protein processing plants. Agritourism is a strong industry, but can bring conflict with neighbors due to parking, noise, and other land use issues. Agritourism has been able to remain such a strong economic driver due to the ongoing County support through zoning and regulation. The Department of Planning and Zoning, reflecting larger county-wide strategies, has diversified uses acceptable on farmland to provide farmers with additional revenue streams from such activities as breweries, event permits, and Community Sponsored Agriculture.

2022 STATE GOALS

- Permanently preserve agricultural land capable of supporting a reasonable diversity of agricultural production;
- Protect natural, forestry, and historic resources and the rural character of the landscape associated with Maryland's farmland;
- To the greatest degree possible, concentrate preserved land in large, relatively contiguous blocks to effectively support long-term protection of resources and resource-based industries;
- 4. Limit the intrusion of development and its impacts on rural resources and resource-based industries;
- 5. Ensure good return on public investment by concentrating state agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs;
- 6. Work with local governments to achieve the following:

- Establish preservation areas, goals and strategies through local comprehensive planning processes that address and complement state goals;
- In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural landowners, the public at large, and state and local government officials;
- Protect the equity interests of rural landowners in preservation areas by ensuring sufficient public commitment and investment in preservation through easement acquisition and incentive programs;
- Use local land use management authority effectively to protect public investment in preservation by managing development in rural preservation areas;
- Establish effective measures to support profitable agriculture, including assistance in production, marketing and the practice of stewardship, so that farming remains a desirable way of life for both the farmer and public-at-large.

2022 COUNTY GOALS (AN UPDATE TO THE 2017 GOALS)

- Integrate the preservation of the County's agricultural land and activities with natural resource protection.
- Connect the County's agricultural heritage to its recreational goals, through the incorporation of community gardens, healthy eating resources, and educational programs.
- Incorporate farming across all scales from large land preservation to support for efficient use of small farms to community gardens.

2022 County goals are similar to state goals in that they both aim to unite agricultural, historic heritage, and natural systems and maintain land preservation as a driver with community-wide economic benefits. There is much room for innovative and creative integration of agriculture with the greater park and recreation system, whether on new parcels, within existing facilities, or through collaborative programming. Institutional and state partnerships, local food markets, sustainable land management, and community garden and new farmer support programs are all areas for possible intersection.

THE SYSTEM TODAY

Agriculture is a powerful force both in the State of Maryland and within Howard County. Statewide, agriculture is the largest commercial industry, with a market value of \$2.2 billion dollars (2019). It employs 350,000 people. As of 2017, 96 percent of farms remained family owned.

Within Howard County, agriculture remains a major industry, creating roughly \$200 million in sales.³⁴ According to the Howard County Economic Development Authority, there are 335 farms within the county. According to the 2017 Census of Agriculture, these farms total 32,436 acres. Farms in Howard County are predominantly family operations, with 94 percent of farms family owned. Since 2012, the number of farms in Howard County has increased in number, but decreased in size. The average farm size in Howard County is 100 acres. Within the State of Maryland, farms are an average of 161 acres.

Agricultural Trends

There has been a county-wide trend to shift from produce production to protein production, a previous gap that is largely seen as beneficial to the county's agricultural community. The growth in protein production in the county will require both evaluation of environmental impact as the amount of protein processing plants increase to meet demand of production. There has also been an increase in the equine industry, which includes horse riding for recreation as well as boarding, and has provided additional income for farmers who grow hay.

Howard County, like many regions of the country, has seen a resurgence of interest in food and food systems from the general public. More residents are interested in how their food is grown and the environmental impacts of agricultural production, and are even curious about starting micro-enterprises that focus on locally grown products. Howard County farmers have responded by diversifying their operations to meet the public's interest in and desire for locally grown product. This is evidenced through thriving farmers markets, pick-your-own's, community supported agriculture and other on-farm sales mechanisms.

PlanHoward 2030

PlanHoward 2030, Howard County's general plan, has established priority preservation areas through the use of a Planned Service Area boundary (PSA) and Priority Funding Area/PSA for water and sewer. While parks and open space are dotted throughout the county, the majority of agricultural preservation and open space easements lie to the west of the PSA boundary.

Zoning and Subdivision

Howard County has been able to remain a thriving agricultural center due to decades of favorable zoning policies and a county-wide commitment to integrating everyday life with nature. While there are currently no specific agricultural zoning districts within Howard County, there are residential zoning categories that serve farmers and protect farmland.

The Rural Conservation (RC) and Rural Residential (RR) zoning districts are aimed at protecting natural resources and agricultural land. These districts are within the Rural West, on the western side of the PSA boundary and allow low-density, clustered residential development that protects farmland. The Density Exchange Overlay (-DEO) is an overlay district for both the RC and RR zoning districts, which helps protect agricultural land in the West by creating environmental preservation parcels through the DEO. The Overlay District incentivizes landowners in the RC and RR zoning districts to preserve large blocks of farmland and cluster residential development in areas that do not adversely effect farmland The main mechanism for this preservation is density exchange, in which density in the RC and RR districts are exchanged between parcels, preserving large parcels and directing residential development towards more appropriate parcels. Previously, the RC-DEO permitted sending and receiving within the RC.



Today, RC zoned properties cannot receive parcels unless they were grandfathered in. RCzoned properties can send density to RR zoned receiving parcels.

In addition to zoning districts, Howard County incorporated Growth Tiers in response to the Sustainable Growth and Agricultural Preservation Act adopted by the State in 2012. Tiers aim to further control the rate of development. They range from I to IV and separate areas planned for sewerage expansion and development from areas not planned for sewerage expansion and to be directed into resource protection. The intent of these tiers is to prohibit major subdivisions of five or more lots in Tier IV areas. while prioritizing sewerage funding in Tier I areas. Growth Tiers were incorporated into PlanHoward 2030, the current general plan (adopted in 2012).

The County has worked to keep its zoning regulations and allowable uses current with both trends in farming and economic realities. These updates strive to support the changing face of the farming industry and open up farms to various funding streams. Uses like Community Sponsored Agriculture, wineries, breweries, and "pick your own" programs only require permits as accessory uses. Conditional uses, which require Hearing Authority approval before being allowed, include commercial solar facilities, animal hospitals, protein processing, and even small hair salons. The success of this diversity of uses was made clear during the COVID-19 crises, when public health standards guided people toward activities offered by many farms that could be done outside with safe social distancing measures. Howard County has also upheld right-to-farm laws and intends to do so into the future.

However, there is still room to reimagine farming beyond the Rural West. While the large historic farms in that region are cornerstones of Howard County history and culture, farming trends suggest the integration of technology and urban farming as an important part of the future. The local food movement, coupled with growing urbanization throughout both the nation and Howard County, is changing food systems and access. The American Farmland Trust notes that "the majority of food sold directly to consumers comes from small farms in urban counties." While Howard County takes positive steps to secure rural living in the Rural West, it cannot discount the agricultural possibilities of its eastern regions. Planning for agriculture to the east of the Planned Service Area may entail the installation of local procurement policies and ordinances related to agricultural businesses, and conditional use approval for structures such as livestock hoop houses.

THE SYSTEM TODAY

STATEWIDE

COUNTYWIDE

96% family owned (2017 census)

94% family owned

\$2.2 B market value (2019)

\$200 m yearly sales

32% of land used for farming

25% of land used for farming

12,400 farms 335 farms

161 acres average size

100 acres average size

Figure 1.22 Howard County's agricultural system reflects larger state wide trends.

PlanHoward 2030 and HoCo By Design

During the creation of the 2022 LPPRP, Howard County was undergoing an engagement effort to inform an update to PlanHoward 2030, the County's general plan. The County's Department of Planning and Zoning is leading a community outreach effort to create a new General Plan, called HoCo By Design. HoCo by Design launched in July 2020 and will continue into 2022 after LPPRP adoption. While the 2022 LPPRP responds to PlanHoward2030, it also considers preliminary recommendations put forth by the HoCo by Design effort.

Currently PlanHoward 2030 divides the county into four "Designated Places." These place types aim to reflect the social fabric, development patterns, and needs of different Howard County communities. Policies, procedures, and resources may be manipulated slightly to best suit each corresponding place type. Currently, the Rural West is classified as either the "Rural Resource" or "Low Density" place types.

EASEMENTS

In Howard County, preservation of agricultural and open land also preserves culture and heritage. Farming is viewed as a positive and steadfast mechanism to preserve land. As of April 1, 2022, agricultural easements have preserved 23,100 acres of farmland.

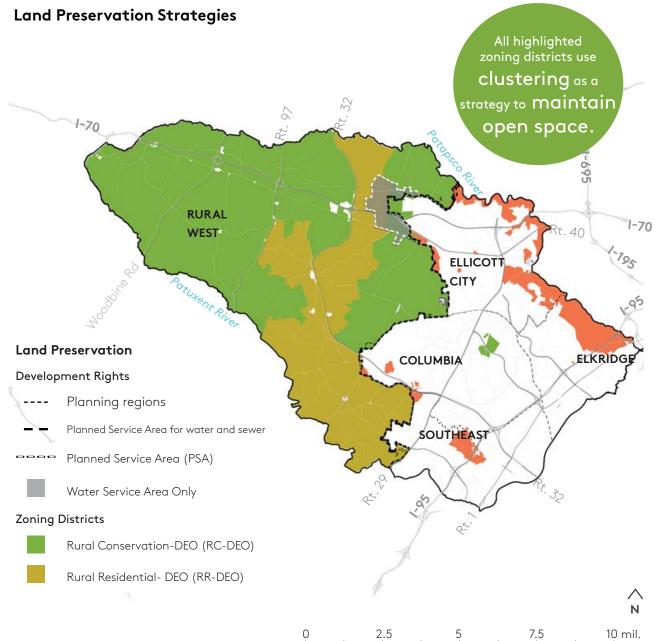


Figure 4.12 Howard County uses a combination of strategies to preserve farmland, such as the Density of Exchange Option (a County specific version of Transfer of Development Rights) and zoning.

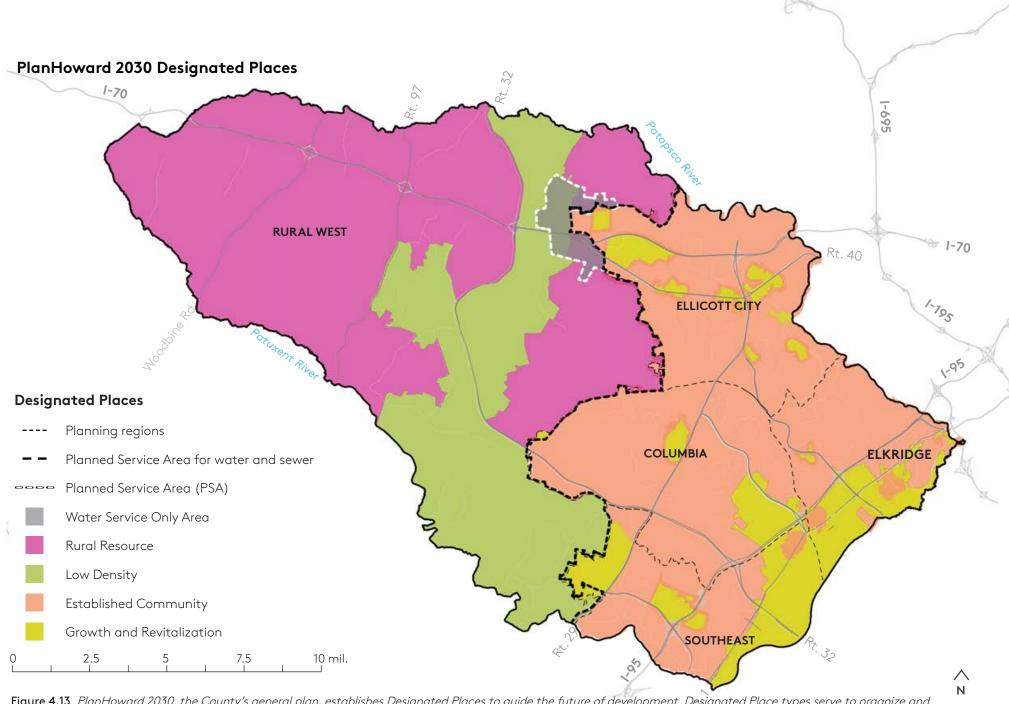


Figure 4.13 PlanHoward 2030, the County's general plan, establishes Designated Places to guide the future of development. Designated Place types serve to organize and coordinate State an local growth policies and resources.

Agricultural easements make up roughly 68 percent of all easements within Howard County, natural resources account for roughly 31 percent, and cultural or historic easements represent about two percent. Currently, about 25 percent of Howard County's land area is farmland, most of it under protected status. However, 77 farms still remain uncommitted to such programs creating an opportunity for additional easement acquisition.

Easements have been the largest drivers for land conservation. Agricultural easements are one of three general types in Howard County. In addition to protecting farmland through agricultural easements, natural or environmental resources are protected through conservation easements, and historic properties are protected through historic easements. Although the names may vary, they all function in essentially the same way: The landowner maintains the fee simple title to the land and continues to enjoy the benefits of ownership, but with restrictions as to development or other adverse changes. If the land is sold to a new owner, the development restrictions remain binding, "with the land." A variety of different programs use these easements for land preservation, each with their own qualifications and requirements at both the state and county scale.

	AGRICULTURAL EASEMENTS IN HOWARD COUNTY						
		PARCELS		ACRES			
	2017	2022	Change	2017	2022	Change	
Howard County Agricultural Preservation Parcels (ALPP, County purchased)	163	168	+5	15,718	15,955	+237	
Howard County Agricultural Preservation Parcels (ALPP, County dedicated)	75	77	+2	2,982	3,024	+42	
Maryland Agricultural Land Preservation Easements (MALPF)	36	38	+2	4,017	4,046	+29	
Rural Legacy Easements	4	4	0	81	81	0	
TOTAL	278	287	+9	22,798	23,106	+308	

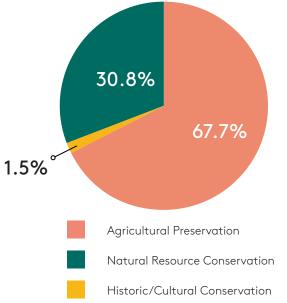
Figure 4.14 Since 2017, nine parcels totaling 117 acres have been added to the agricultural land preservation easement network. These numbers are updated as of April 1, 2022.

State Agricultural Easements

Easement programs conducted by the State of Maryland include the Maryland Agricultural Land Preservation Foundation (MALPF) and the Rural Legacy Program. These programs utilize the purchase of easements, meaning landowners sell development rights to these entities. MALPF was one of the first easementpurchase programs in the country. It is the third largest preservation program in the county, representing more than 4,000 acres. Farmers make a per acre offer to MALPF as to the price they are willing to sell their development rights for. The MALPF will pay the lesser of a property owner's offer or a calculated easement value. The program involves a local advisory body, the Howard County Agricultural Preservation Advisory Board.

The Rural Legacy Program is unique in that it prioritizes preserving both farmland and environmental resources. It aims to protect large, continuous tracts of "working lands" (farms and forests) by supporting acquisition of easements in areas where much land protection is already in place by other means (including conservation and historic easements). Easements under this program involve cooperative efforts among state and local governments and land trusts. Howard County has just 81 acres of the Upper Patuxent Watershed preserved within this system.

The Maryland Environmental Trust (MET) is a third state-level easement program. One of the nation's oldest land trusts, MET encourages landowners to donate easements to preserve the "aesthetic, natural, health and welfare, scenic, and cultural qualities of land...." This program has thus far conserved 1,372 acres within Howard County. MET frequently steps in as a backup to local land trusts, illustrated in Howard County by the 62 acres that are preserved under both the MET/Rockburn Land Trust programs.



Natural Resource Easements

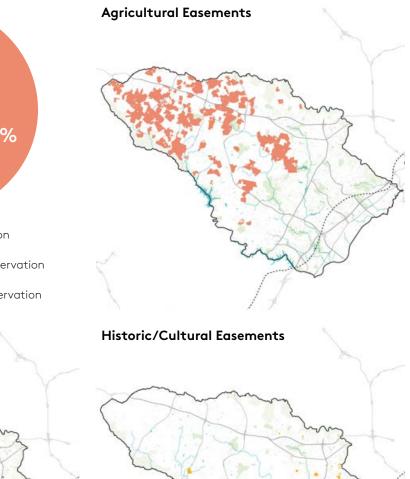


Figure 4.15 About 70 percent of Howard County's easements preserve agricultural land. Natural resources and historic/cultural easements represent about 30 percent of remaining easements.

County Agricultural Easements

Howard County has been a leader in agricultural land preservation since the late 1970s. Only one year after the creation of MALPF at the state level, Howard County launched the Agricultural Land Preservation Program (ALPP). In this program, easements can be either purchased from or dedicated by landowners. In the purchasing program, land must meet acreage and soil capability class standards. In the dedication program, parcels come to the program through the subdivision process as either cluster subdivision residue parcels or density sending parcels.

Parcels with agricultural benefits are adopted as dedicated agricultural easements. These dedicated agricultural easements, whether cluster subdivision remainders or density senders, are always held only by the County through the ALPP. Parcels with ecological benefits, or those that are deemed unsuitable for agricultural pursuits, are adopted into dedicated environmental easements. Dedicated environmental easements. both cluster and density, are most often co-held between the County (but not the ALPP) and either a local land trust or a homeowners association (HOA). In previous years, environmental preservation parcels always required two easement holders. Due

to regulatory changes in recent years, two easement holders are no longer required.

About 82 percent of Howard County's agricultural easements fall under the ALPP program. As of April 2022, 18,979 acres of the County's 23,106 agricultural easement acres are from the ALPP program (15,955 acres are purchased easement, while 3,024 are dedicated easements). As of 2021, 18,788 acres of the County's 22,915 agricultural easements are from the ALPP program (15,764 acres are purchased easements, while 3,024 are dedicated easements).

Another County easement program is the Conservation Easement program. This program promotes the acquisition of development rights on smaller parcels, usually under 50 acres. Generally, these transactions are conducted through a local land trust such as the Howard County Conservancy.

Currently, Agricultural Land Preservation Program (ALPP) easements represent almost half of all easements within Howard County (46 percent). The next two most common easements include Environmental Preservation parcels and Maryland Agricultural Land Preservation Foundation (MALPF) Easements. Together, these three easement types account for 85 percent of the County's easements.



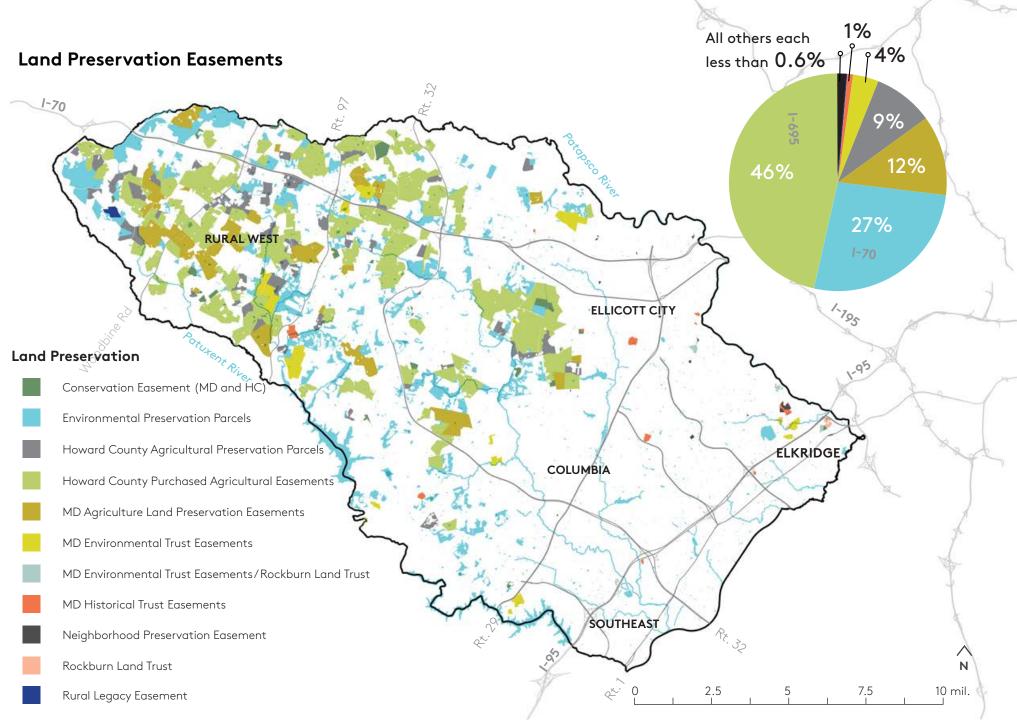


Figure 4.16 Easements have been helpful in protecting land, but are often disconnected.

Private Sector Preservation Tools

The private sector is required to dedicate easements during the cluster subdivision process that can flow into either agricultural or environmental easement. The private sector uses the same aforementioned processes to preserve land at the county level. However, the quality of cluster subdivision residue dedicated parcels is of some concern: developers provide low quality or oddly shaped parcels that are not clearly tied to strategic Department of Planning and Zoning goals.

The private sector also utilizes a Transfer of Development Rights (TDR) mechanism. In Howard County, this process is called the Density Exchange Option (DEO) and is Section 106 of the Zoning Code. In the Density Exchange Option, land is divided into parcels that are "senders" and "receivers." Parcels that are senders are placed under easement, and allowed to sell their rights to develop to landowners within "receiver" areas.

Zoning Regulations as Farmland Protections

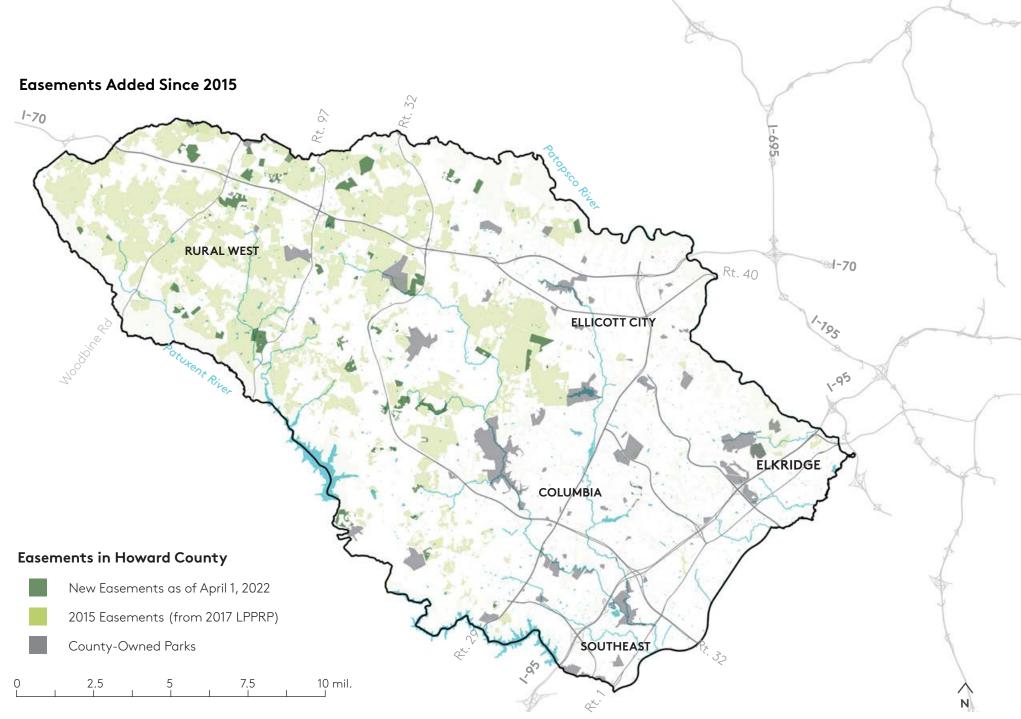
As of 2021, the Density Exchange Option allows sending sites to be approved on parcels within the DEO Overlay District zoned Rural Conservation (RC) that are capable of accepting a conservation easement of at least 20 acres in size. This structure allows developments in the receiver areas to increase density. This is a voluntary, incentive-based system that provides choice to individuals, while channeling density into appropriate areas. See Figure 4.19 for a map of these parcel locations and zoning areas.

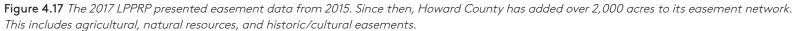
Advantages of Easements

Easements are seen as mutually beneficial conservation tools. Most easements restrict development on land, with the goal being to preserve and conserve acreage. This allows the easement entity, be it the State, County, or non-profit trust, greater control over the land. The Department of Recreation and Parks previously acquired easements through the Private Forest Conservation Establishment (PFCE) program. When these programs operate as intended, this control allows for strategic planning and more efficiency for achieving goals like preserving tree canopies, combating invasive species, or protecting soil quality. The relationship between ecosystem conservation and agricultural conservation is deeply and intrinsically linked. Land under agricultural easement often provides extremely critical ecosystem services and benefits to the natural environment, such as supporting pollination and groundwater replenishment.

Conversely, when environmental degradation







occurs on natural lands, farming also suffers.

Donated easements allow altruistic property owners to act out their values, creating a direct, personal contribution to land preservation and ecological restoration. Easement donors may also be eligible for a charitable contribution tax deduction.

Connection with Historic Resources

There are ample opportunities to better connect agricultural land with historic resources and cultural heritage sites. West Friendship Park is an example of where this integration is happening, but where more can be done. Currently, West Friendship Park has a multitude of programming. There are over 4.5 miles of trails frequented by birders and hikers plus the Living Farm Heritage Museum, operated by the Howard County Antique Farm Machinery Club, Hebb House, a historic farm house, and a replica of the Daisy oneroom schoolhouse. It is also located on the old National Road, a National Scenic Road.

While this site is active and hosts archeology camps, among other programs, there is opportunity for a more focused connection to historic resources and traditions. This could include completing the partially constructed exhibition hall, offering curated shows and other events, and increasing signage and branding efforts. The 2017 LPPRP plan recommended working with the Living Farm Heritage Museum to "identify potential expansions of multi-use trails and passive uses" and highlighted the location as a potential place for a natural resources facility. While these changes were noted as a long-term priority with a timeline spanning from 2028 - 2032, there may be a desire to begin some of these modifications at an earlier date.

Easements and Open Space

There are challenging aspects in how easement programs currently operate. First, acquisition: because programs rely on landowners to sell, donate, or dedicate through the subdivision process, the system is reactive instead of proactive. Easements are acquired ad hoc and one by one; gaps like missing puzzle pieces are unavoidable. Thus, it



Figure 4.18 Little History Explorers meet to learn about Howard County's history and earn skills.

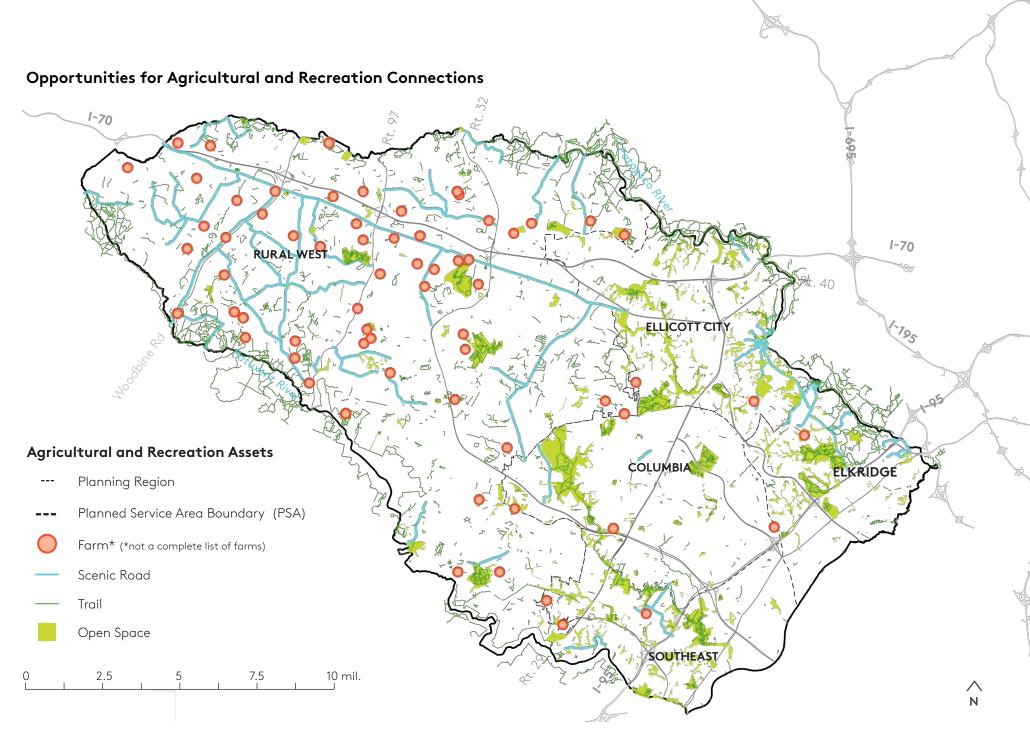


Figure 4.19 Farms and agritourism businesses are often located near recreational trails and scenic roadways, presenting opportunities to better connect these assets.

is difficult to acquire large integrated areas of land strategically solely through easements.

Reliance on easements or land contributed by developers can make it difficult to achieve additional departmental goals. Land received from developers tends to be lowland parcels, often wet or flood prone. While such land may be ecologically beneficial, it is not always usable for the Department's needs; it can be costly to mitigate the limitations. Within the Department, there is a strong desire to acquire and protect greater amounts of upland forests.

Open space in Howard County is owned primarily by the County, the State, and private homeowner's associations. The County owns a significant amount of undeveloped open space, 3,628 acres, independent of the 5,750 acres of land considered programmable park space. Open space preservation has been a consistent value throughout the history of the County's planning and development, allowing the County to grow in a sustainable fashion and defining its unique sense of place. In addition, the County faces a unique challenge in that it inherits all typologies categorized as open space, such as historic cemeteries. These unique space types must be cared for as well, adding additional maintenance responsibilities and expenses that the County is responsible for.

The Open Space Acceptance Policy facilitates

the transfer of land that has been approved through the County's subdivision review process to then be inspected and accepted into the receiving system. The three methods for open space land acquisition through the Open Space Acceptance Policy are as follows: dedication under the Department of Planning and Zoning, fee simple purchase, and Program Open Space. Established in 1969, Program Open Space is a funding mechanism and technical assistance program that continues the preservation of open space in Maryland, and has contributed to the planning, acquisition, and subsequent preservation of open space in the County.

Rural Legacy Program

The Maryland Rural Legacy Program is a natural and agricultural land preservation tool that was previously used by the County. A state-level easement program, the Rural Legacy Program is no longer utilized as a mechanism for land preservation in Howard County; it has been about 20 years since new parcels were added under this program. The Rural Legacy Area in Howard County is primarily located in the Upper Patuxent Watershed. 81 acres of the total 11,200 acres in the watershed constitute Rural Legacy Program protected land, in addition to other protected land within the boundary of the Rural Legacy Area. Although no longer in active use, land preserved through the Rural Legacy Program is still reported to the State for inventory purposes.



Figure 4.20 DIY Fishing Camp in Howard County

Easement Details

LAND PRESERVATION MECHANISM	ACREAGE INCREASE SINCE 2017?	PROGRAM MANAGER?	CONSERVATION INTENT?	REINFORCE AG. + ECOLOGICAL PRESERVATION?	REQUIRE ECOLOGICAL STEWARDSHIP?	REQUIRE HIGH SOIL QUALITY?	REQUIRES SALE?	RESTRICTS DEVELOPMENT?	BEST FOR CONTIGUOUS TRACTS OR INDIVIDUAL PARCELS?
Conservation Easements		DRP	Natural Resources				No		Individual
Environmental Preservation Parcels		DPZ	Natural Resources				No		Individual
HoCo Forest Conservation Easements		Natural + Hist. Resources Div.	Natural Resources				No		Individual
MD Environmental Trust Easements		MD Dept. Natural Resources	Natural Resources				No		Individual
HoCo Agricultural Land Preservation Parcels (ALPP, dedicated)		Howard County (DPZ)	Agriculture				No		Contiguous
HoCo Agricultural Land Preservation Parcels (ALPP, purchased)		Howard County (DPZ)	Agriculture				Yes		Contiguous
Maryland Agricultural Land Preservation Easements (MALPF)		MD Agricultural Land Pres. Fnd.	Agriculture				Yes		Contiguous
Maryland Historic Trust Easement		MD Historical Trust	Historic				No		Individual
Neighborhood Preservation Easement			Historic				No		Individual
Rockburn Land Trust		Rockburn Land Trust	Historic				No		Individual
Rural Legacy Easement		MD Dept. Natural Resources	Historic				Sometimes		Contiguous

Figure 4.21 Easement programs do a great deal of good to protect, preserve, and conserve land in perpetuity. However, different easement programs have varying metrics of success and standards. While this diversity is beneficial to serve varying types of parcels, it can also lead to a lack of cohesion between different programs. Many easements do not reinforce both agricultural and ecological preservation.

Alternative Options

There are opportunities for the County to think more nimbly about current land preservation programs and to encourage the private sector and non-profits to contribute more directly to larger agricultural and natural system preservation goals.

First, Howard County could combine programs that are already working well or add modifications to successful existing tools. For example, Program Open Space, which is currently the most powerful tool for open space conservation and recreation programming within Howard County should continue to be a source of funding. Howard County could create a scenic easement program that aims to preserve vistas. In contrast to other easements, scenic easements usually only apply to a portion of a property, most often the few hundred yards of a highway or roadway. Farms that remain undedicated, but abut the scenic road system, may have interest in this system.

Another is to establish one or more agricultural community land trusts. Local non-profit partners, community development corporations, and private residents may partner to create this system. Agricultural community land trusts, as non-profit institutions, are often eligible for funding and resources that municipalities are not. Additionally, agriculturally focused community land trusts could allow farmers to have more flexibility in how their agricultural land is used, while still protecting it in some capacity. This flexibility could further entice uncommitted farmers. DRP could work with existing land trusts, like the Howard County Conservancy, or with existing County programs like HoCo Fresh, the Roving Radish and HoCoFarms. com (within the Office of Community Sustainability). Additionally, DRP could initiate new programs to fit its specific needs.

Land trusts can also be more targeted and specific in mission, such as in the cultivation of new farmers. The Peconic Land Trust in Long Island, New York has a farm incubator



Figure 4.22 Belmont Manor

program that addresses this issue. The land trust will lease farmland to new farmers for five years, during which the farmers build skills and search for a long term property. During the lease, farmers must agree to using sustainable farming practices and have access to shared barn and greenhouse spaces with other new farmers. The American Chestnut Land Trust in Maryland has similar innovative programs where farming and public access are combined.

Another option is cooperative farming and succession programs. Cooperative ownership models can take many forms, placing ownership within the hands of individuals, customers, or workers. Through these models, farmers can join together to share land and resources while building experience and lowering individual financial risk. Workerowned farms can increase the attractiveness of farming as a career. According to the National Council of Farmer Cooperatives, the closest cooperative farm to Howard County is the Maryland & Virginia Milk Producers Cooperative Association, located in Laurel, Maryland.

In terms of connecting farm owners with beginning farmers, New Jersey's LandLink program is designed to help connect farmers and landowners to farming opportunities sought and available, including certain employment opportunities. The site covers leasing and other topics for beginning and established farmers and farm owners. Selling to a succession program may also be a more attractive option to aging farmers. In Wyoming, the Wyoming Stock Growers Land Trust, through its Ranchland Succession Program, specifically looks to ensure agricultural land within the program is granted to young agricultural producers. It also provides these new farmers with accountants, attorneys, and estate planners.

SUCCESSES SINCE 2017

Since the last plan, County staff have worked hard to accomplish many of the goals listed in the 2017 plan. The first major goal was in the securing of more protected land under easement. Since 2017, the Department of Planning and Zoning has acquired six additional agricultural easements, totaling roughly 221 acres. As of fall 2021,15,788 acres were preserved under the ALPP- purchase program (an increase of 46 acres since 2017) and 3,024 acres under the ALPP- dedication program (an increase of 42 acres since 2017). This count does not include the 127.7 acres Dickey/Sharp property that was approved by the County on November 1, 2021. Settlement on this property is expected to occur in early 2022. This property is particularly notable, as it is the largest remaining farm in the Rural West that was eligible through the ALPP.³⁵

The ALPP stopped approving applications in 2018 due to budget concerns. In 2019, the program was able to reopen after collaboration between County Executive Calvin Ball, the Department of Planning and Zoning, the Finance Department, and the Agricultural Preservation Board led to an update of the scoring system used to determine easement pricing. As of April 2022, there are two additional properties, representing 55 acres, currently working through the application process.

Other goals included increasing access to fresh food and creating greater connections between farms and urban residents. The Roving Radish program, begun in 2014, connects residents to healthy meal kits with ingredients sourced from local farms. The program is government run and low-income residents receive subsidized meals. Since the last plan, the Roving Radish program has continued to grow. In 2020, it opened its first storefront, a location of more than 4,000 square feet in Columbia.³⁶ The expansion of this program shows a commitment to integrating county-grown products more cohesively into daily life.

CHALLENGES SINCE 2017

The Rising Cost of Land

While the agriculture industry has seen successes since the last plan, there have also been mounting challenges. With the continued growth of the nearby major urban centers of Washington, D.C., and Baltimore, the price of land in Howard County is increasing.

According to Social Explorer, 2020 Census data shows Howard County has only 3.6 percent of housing units listed as vacant. This makes for an extremely competitive housing market. For comparison, the top ten most competitive housing markets throughout the nation are between 2.7% and 3.5% vacancy rate. The Rural West is not immune to this market pressure, and it is becoming exponentially more expensive for the Department of Recreation and Parks and other public agencies to purchase land for protection. This is especially true when considering the waning supply of "uncommitted" land in the West. While it is great that most land in the West is committed within a preservation system, roughly 77 parcels remain uncommitted. The price of these final parcels will most likely increase as the supply further dwindles and the cost of land increases



Figure 4.23 The Washington Farm Land uses both a cooperative model and an agricultural land trusts to support sustainable land practices and food production.

Other Financing Mechanisms Should Be Explored

The most common way DRP acquires parcels for preservation is by purchasing land in fee. Program Open Space is how Howard County most significantly finds the funds needed to purchase land. This state-level initiative continues to provide funding for open space and facility development each time a home is sold. While this program continues to be strong, the availability of land is dwindling. DRP must focus on continuing to find fee purchases to buy parcels as they become available.

One solution could be to investigate voter approved bonds. Currently, Howard County does not utilize local voter-approved bond options to fund land preservation. According to LandVote, a policy tracker and database created by the Trust for Public Land, Baltimore County has been the only county in Maryland to use local voter approved bond options for funding rural land/agricultural preservation, farmland development easements, or open space initiatives. Since 1996, 13 measures have been put on the ballot in Baltimore County. All 13 have been approved, with an average of 70 percent of the vote. This has provided Baltimore County with \$42,277,000 in approved funds for these initiatives. There is hope that Howard County residents, proud of their rural legacy, would support similar policies.

A case study to provide direction is Minnesota's Clean Water, Land, and Legacy Amendment. In 2008, Minnesota voters passed an increase to sales tax by 3/8th of one percent from 2009 to 2034. Clean water initiatives receive 33 percent of the funds, 33 percent goes to the outdoor heritage fund, 19.75 percent to the arts and culture heritage fund, and 14.25 percent to the parks and trails fund. Minnesota also places 40 percent of the net proceeds from the State

Lottery in an Environmental and Natural Resources Trust Fund, which provides stable and long term funding for "activities that protect and enhance Minnesota's environment and natural resources for the benefit of current citizens and future generations." This fund may receive other contributions. The lottery funds are guaranteed until the end of 2024. These programs have helped to safeguard significant financing that allows



Figure 4.24 The Roving Radish program opened its first storefront in 2020

for long-term visioning, strategizing, and implementation across decades.

Effect on Amenities

In addition to the rising cost of land, the combination of agricultural conservation land and developer-owned land holdings do not leave many unencumbered options for new parks and recreation spaces. Providing equitable access to recreation and leisure spaces is more difficult in the Rural West where a larger percentage of available land is restricted or unavailable.

The rising cost of land is even complicating such smaller plots like community gardens. Within the 2017 LPPRP effort, one goal was to "incorporate farming at all scales," with special attention given to increasing the number of community gardens within the county. According to National Recreation and Park Association (NRPA) data, the number of publicly accessible community gardens has stayed the same in Howard County since 2017. There still remain only three community gardens reflected in this database. In comparison, the national median of community gardens in peer cities has increased from one to four. Thus, while Howard County has kept its community garden program consistent, the program has not grown in line with its goals and does not keep pace with other peer communities. For example, the East region of the county has

high potential for adding community gardens.

Supporting New Farmers

A lack of various land types can also prove difficult when trying to encourage and support new farmers. Often, new farmers trying to "break in" to the industry find it difficult to procure land of an appropriate size. New farmers are often looking for smaller sized parcels, which can be difficult to find. Those that are available can be prohibitively expensive, especially without an existing farm to leverage. In the past plan, this predicament was noted, but has grown more pressing since the last plan.

Exploring new ways to support beginning farmers, such as through temporary leases on Recreation and Park owned land, may be helpful. Such a strategy could both revitalize nutrient depleted parcels while providing experience to new farmers. This effort would also support 2017 LPPRP goals to incorporate farming at all scales. Supporting the next generation of farmers is a critical issue to address not only within Howard County, but across the nation. According to the 2017 Agricultural Census, 35 percent of Howard County farmers are over the age of 65. This number was comparable with national averages, which found that 34 percent of all farmers nationwide were over the age of 65. However, the lack of farmers under the age of 35 was more telling. The 2017 Census

of Agriculture found that only 4 percent of farmers in Howard County were under the age of 35, compared to 8 percent nationwide. A farmer's age is only one indicator of the future of farming. In 2017, the Census of Agriculture identified 27 percent of farmers as "beginning farmers," or those with ten or fewer years of experience. In Howard County, 21 percent of farmers were classified as beginning producers. These numbers could indicate that younger Howard County residents may see farming as a less viable career path than past generations. A deeper analysis into this data would guide more specific recommendations.

While the Department of Planning and Zoning has been friendly to the agricultural industry, this has come with challenges. Innovation around expanding allowable uses on farmland has caused heartburn with neighbors. Farms that draw visitors from across the region or engage in larger scale events have caused increased traffic.

Finally, one of the largest challenges facing Howard County's agricultural industry is the increasing severity of the climate crisis. Warming temperatures, increasing precipitation and flood events, and ecological degradation will only continue to change the nature of farming in Howard County._Steps taken to protect the environment will also protect the farming industry, stabilizing not only food systems but also a major economic driver in the county.

REPORT THEMES

As Howard County looks toward the future of agriculture, it will be necessary to address the following themes:

• Development pressure continues to compete for agricultural land:

Residential encroachment on working farmland and conservation areas has a direct impact on the preservation of agricultural land. Development pressure expands beyond Howard County itself, as the Washington, D.C., area in particular experiences development pressure through high housing demand. The need to balance both growth and the preservation of farmland is of increasing importance, and must be reinforced through the LPPRP process.

• The time to act is now: Changes in the landscape are accelerating due to climate change, development pressure, and invasive species, all of which jeopardize food security and environmental health. Environmental issues are agricultural issues.

The future of farming is unclear:
Zoning and regulations try to anticipate farmers' needs but change the standard idea of "farming" in the process. While this is not inherently a negative, it poses questions about what farming may look like in the decades to come.
This most likely includes greater integration with technology and the urban environment. Policies will need to respond to these changes.
Additionally, farmers represent an aging population, and interventions should be made to support new farmers.



Figure 1.23 Howard County is dedicated to retaining agriculture as a strong economic driver and way of life while modernizing to meet the future.

Implementation

Addressing the challenges and supporting the strengths of Howard County's historic and agricultural systems will require the utilization of as many tools as possible. The following list includes some of Howard County's most powerful and meaningful resources:

IMPLEMENTING PROGRAMS

Monitoring, Evaluation, and Education

Regular processes like general plan and the LPPRP effort continue to craft policies that respond to the needs of residents while evaluating and monitoring land preservation programs.

Within the last few years, the Agricultural Land Preservation Program has created an approach for periodically visiting and assessing easement properties. This additional level of care is important not only to verify the condition of parcels, but to foster personal connections with farmers and their families. The ALPP has also begun to increase efforts to transition farms through new ownership and educating land owners about the uses and constraints of the ALPP program.

The Agricultural Preservation Board

also supports the ALPP by proposing recommendations for the acquisition of new agricultural easements, reviews proposals for land already under ALPP easement, and assists the ALPP with the creation and implementation of policy. Since 2018, the Agricultural Preservation Board has been given a broader scope by the passing of CB 63-2018 by the County Council, the Howard County Agriculture Sustainability and Land Preservation Act. The new law now asks the Agricultural Preservation Board to look beyond land preservation to larger sustainable agriculture solutions that will bolster the local economy. The board also provides outreach and education to the public, be they farming professionals or otherwise, about high-level county initiatives and programs. Finally, the board can receive citizen concerns related to farming and be a liaison between the agricultural community and policy makers.

Another entity providing educational support is the Economic Development Authority's Agricultural Marketing Program. The program assists farmers in business planning, and grant writing efforts, as well as food safety regulations. The Agricultural Marketing Program offers training courses for new farmers on topics including business licensure. Additionally, the Agricultural Marketing Program advocates for farmers and agricultural interests on agriculturalrelated legislation and economic development proposals.

The county agency essential to working with farmland property owners is the Howard Soil Conservation District. HSCD works with farmers to plan and install best management practices to maintain farm production, control soil erosion, improve soil health, manage nutrients, safeguard water quality, provide wildlife habitat, and improve air quality. HSCD also helps farmers access federal, State and local cost-share funds for installation of these practices.

Financial Support

Howard County's 2018 Agriculture Sustainability and Land Preservation Act (CB 63-2018) also provides technical assistance and financial support for agribusiness research and development, and developing future market opportunities.

Grants and loans are also available to farmers at the federal, state, and local level. Examples of state level financial entities include the Maryland Agricultural & Resource-Based Industry Development Corporation, which offers grants and loans for equipment, land, and value-added products. There are also federal Sustainable Agriculture Research & Education (SARE) grants that fund projects for commercial producers who want to test new ideas in the field. Projects must seek to discover new knowledge and be "directly linked to improved profits, better stewardship, and stronger rural communities."

Grants offered by Howard County also support curiosity. The Howard County Agricultural Innovation Grants encourage business expansion and diversification. It provides matching grants ranging from \$1,000 to \$10,000 for research and development. The purpose of this grant is to encourage Howard County's agricultural producers to expand or diversify their business operations and seek innovative ways to farm.

Goals + Actions

In order to meet State and County goals, while addressing emerging themes and recommendation drivers, the County can take the following actions:

State Goal 3.1

Ensure good return on public investment by concentrating state agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs.

ACTION: Continue the Economic Development Authority's Agricultural Marketing Program, including its Agricultural Innovation Grants, business planning, and other financial and technical assistance.

ACTION: Continue the Office of Community Sustainability efforts to connect local producers to local consumers.

ACTION: Diversify options and complement agricultural easements by establishing agricultural community land trusts and cooperative farms.

ACTION: Continue to implement PlanHoward 2030 policies that maintain the current Planned Service Area boundary and Rural Conservation and Rural Residential zoning in the Rural West.

State Goal 3.2

Protect the equity interests of rural landowners in preservation areas by ensuring sufficient public commitment and investment in preservation through easement acquisition and incentive programs.

ACTION: Research and develop innovative and flexible financial systems, like voter approved bond options, that can finance a wider variety of open space initiatives.

ACTION: Continue to implement PlanHoward 2030 policies that support agricultural land preservation in the Rural West.

State Goal 3.3

Establish effective measures to support profitable agriculture, including assistance in production, marketing and the practice of stewardship, so that farming remains a desirable way of life for both the farmer and public-at-large.

ACTION: Continue the Economic Development Authority's Agricultural Marketing Program, in addition to its business courses and resources.

ACTION: Create a grant and funding liaison that is well versed in public and private grants opportunities. Connect directly with farmers. Look to the Rural Business Cooperation for an example.

ACTION: Continue favorable planning and zoning codes that diversify income streams for farmers and anticipate future needs.

State Goal 3.4

Protect natural, forestry and historic resources and the rural character of the landscape associated with Maryland's farmland.

ACTION: Continue to advocate and partner for easements and land acquisition.

ACTION: Work with the private sector to increase historic and architectural documentation of historic structures on agricultural land and encourage the rehabilitation of these structures.

ACTION: Encourage and incentivize participation in the County's historic building tax credit programs.

ACTION: Explore ways to strengthen historic preservation programs to prevent demolition and demolition by neglect, and to better incentivize restoration and adaptive reuse.

State Goal 3.5

Permanently preserve agricultural land capable of supporting a reasonable diversity of agricultural production.

ACTION: Partner with other agencies to educate, incentivize, and create programs that reward agricultural diversity. Howard Innovation Grants and Howard County Agricultural Innovation Grants are good examples.

ACTION: Partner with other agencies to craft policies that respond to the trend of growing protein production.

State Goal 3.6

In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural landowners, the public-at-large and state and local government officials.

ACTION: Continue to support the work of the Agricultural Preservation Board as a convener between farmers and the County.

ACTION: Hold periodic and regular meetings between farmers, residents, and Agricultural Preservation Board to discuss goals and strategies.

ACTION: Explore the creation of a land preservation program that allows property owners to deed land to conservation efforts. Prioritize land that contains stream buffers.

ACTION: Invite and involve volunteers and local landowners to be actively involved in invasive species removal in parks, neighborhoods, and their own property.

ACTION: Continue educational efforts aimed at reducing tensions between farmers and their non-farming neighbors over land use issues.

State Goal 3.7

Work with local governments to achieve the following:

Establish preservation areas, goals and strategies through local comprehensive planning processes that address and complement state goals;

ACTION: Continue educational efforts aimed at reducing tensions between farmers and their non-farming neighbors over land use issues.

ACTION: Investigate the creation of an intergovernmental ad-hoc work group between various departments working with historic buildings, such as, Recreation and Parks, DPZ Resource Conservation Division and DPW Bureau of Facilities.

State Goal 3.8

Use local land use management authority effectively to protect public investment in preservation by managing development in rural preservation areas.

ACTION: Partner with other County departments and plans, such as the County's current General Plan, to realize shared visions for land use and management.

ACTION: Consider updates to the Subdivision and Land Development Regulations that would require new residential development to provide increased buffers for adjacent farmland.

County Goal 3.1

Reflect natural heritage and prioritize open space.

ACTION: Continue to implement the goals, objectives, and action items of the Historic Resources Management Plan and the Heritage Program Management Plan.

ACTION: Systemically integrate Department of Planning and Zoning's architectural historian into Department of Recreation and Parks' processes to ensure alterations to buildings are historically accurate.

ACTION: Preserve all histories

- ACTION: Support in-progress audits of historic sites to reveal previously-excluded stories and histories. Dedicate resources to filling in missing voices.
- ACTION: Crowdsource, research, and protect sites that are significant to Howard County's diverse population. This includes Hispanic, LatinX, African American, LGBTQIA +, Asian American, and immigrant histories.
- **ACTION:** Consult Monument Lab's Interactive Database.
- **ACTION:** Participate in the Maryland Resident Curatorship Program.
- **ACTION:** Look forward to look back -- document, discuss, and preserve moments, spaces, places, and events that are important to current events. These places are future historic resources.

ACTION: Integrate agritourism with historic storytelling and natural resource exploration.

County Goal 3.2

Integrate the preservation of agricultural land with natural resource protection.

ACTION: Continue to support the Howard Soil Conservation District's efforts to provide technical and financial assistance to landowners for planning and installing conservation practices to control erosion and improve water quality.

ACTION: Encourage landowner participation in the Maryland Department of Agriculture's Conservation Grants, examples of which include the Cover Crop Program and the Conservation Reserve Enhancement Program.

ACTION: Work with the agricultural community and the Howard Soil Conservation District to increase implementation of best management practices on agricultural lands to infiltrate and slow runoff, reduce runoff volume entering water bodies, and retain sediment and other pollutants.

County Goal 3.3

Incorporate farming across all scales - from large land preservation, to small farms, to community gardens.

ACTION: Create opportunities for new farmers through leasing Department of Recreation and Park's land to beginning farmers

ACTION: Establish a program where farmers establish farm spaces in urban backyards. Look to The Backyard Farm Company as an example.

ACTION: Reimagine hardscapes. Promote and support the transformation of hardscapes and interstitial spaces into growing areas. Look to urban farming practices as examples.

Organizational Health

Aspiration

The Department maintains functional and financial stability.

Organizational Health

Since the 2017 Plan, Howard County has continued to grow its acreage and staff capacity. The Howard County Department of Recreation and Parks also pivoted to an organizational model that aims to build awareness in the community and meet both the recreational needs of residents and the conservation needs of the County's natural resources. Parks and recreation agencies across the country have been challenged with understanding the needs of their community through a different post-pandemic lens. While other organizations have struggled to effectively respond, this new paradigm underscores Howard County's strengths as an agile and innovative system.

During the COVID-19 pandemic, Howard County continued to expand and develop other innovative programs, special events, and marketing approaches to keep the community engaged with each other and excited about the future. The strength of the organization's nationally renowned leadership, the strength of its mission and vision, and the commitment of team members all contribute to an extraordinary experience for the Howard County community.

While sustaining the current excellent level of services is the baseline for Howard County's future, the County needs support from its residents and County leadership to ensure it can continue to provide high quality spaces and programs residents expect, while supporting its mission to provide low cost experiences that all can enjoy.

2022 COUNTY GOALS (AN UPDATE TO THE 2017 PLAN)

Goals within the 2017 plan that were related to bolstering Department best practices and functions included:

- 1. Amplify and communicate the Department's leadership.
- 2. Build partnerships across the County.
- 3. Grow awareness of Department offerings and programs by bolstering marketing efforts and capacity.
- 4. Support the expansion of non-revenue generating areas of the Department in the short-term through grants and partnerships.
- 5. Strengthen recruitment and retention practices
- 6. Develop a customer service framework to ensure consistent service and support uneven staff capacities.

REVENUES AND PRICING

The COVID-19 pandemic has created a severe financial strain and has dramatically reshaped the Department's budget in a number of ways since mid-March 2020. And while the effects of the pandemic have impacted programs and services disparately, most core activities, programs and services experienced record low attendance rates, leading to significant declines in revenue. Furthermore, for those activities, programs, and services provided by the Department that have been less affected, such as child care, the pandemic has made it difficult to recruit and retain the necessary staff to service the demand. As a result, the Department has experienced a decline in revenue more significant than any decline in recent memory. At the same time, the pandemic has affected the economy throughout the County. Major revenue sources experiencing declines include tax collection, external funding support, and many other major revenue sources all County departments typically rely on for additional funding support.

Unlike various downturns in previous years, the COVID-19 pandemic is a major revenue loss event. In many cases, this loss will not be recaptured for several years. Prior to experiencing the full-effects of the pandemic, the Department operated on a growth trajectory for many of the programs and services it offers with a consistent focus to drive innovative program development, increased service levels, revenue generation, and efforts to maintain a sufficient fund balance. To further illustrate the prepandemic growth trajectory and to underscore the severity of the pandemic's impact on the Department's budget, the following table (Figure 5.1) contains aggregate Recreation and Park Fund revenue and expense data.

In order for the Department to return to prepandemic revenue levels, it is clear a onesize-fits-all solution is not the best approach. It will be important for the Department to leverage its very capable management and staff experience and service delivery experience in order to begin to work toward returning to a pre-pandemic fiscal environment. This may require a return to focusing on core service delivery and prudent fiscal management in the near-term while keeping a strategic focus on a return to program development and growth, enhanced service delivery, and increased revenue generation in the coming years.

FISCAL YEAR	REVENUE	EXPENSE	NET
		\$19,168,379	\$678,634
2018	\$19,656,774	\$19,470,157	\$186,617
2019			\$1,103,461
2020		\$18,483,234	(\$1,642,721)
2021			(\$4,411,902)

Figure 5.2 Department Revenues and Expenses 2017 to 2020

COMPARISONS TO PEERS

The process also worked to understand how the Department's investments and spending compared to similar-sized municipalities and departments, which included Virginia Beach, Virginia, Orlando, Florida, Montgomery County, Maryland, Loudoun County, Virginia, and Arlington, Texas.³⁸

Capital Investments: 12-18 months

When compared to the average capital investments of peer agencies surveyed, the Department's planned capital investments over the next 12 to 18 months are 47.5% of what peers have planned to invest.

Capital Investments: 5+ years

When compared to the average capital investments of peer agencies surveyed, the Department's planned capital investments for the next five years and beyond are 51.5% of what peers have planned to invest.

Annual Operating Budget

When compared to the average annual operating budgets of peer agencies surveyed, the Department's operating budget for FY 2022 is 11.3% more than the average budgets of peers.

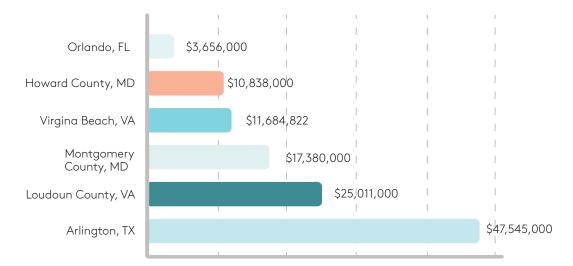


Figure 1.24 Planned Recreation + Park Capital Investments FY 2022

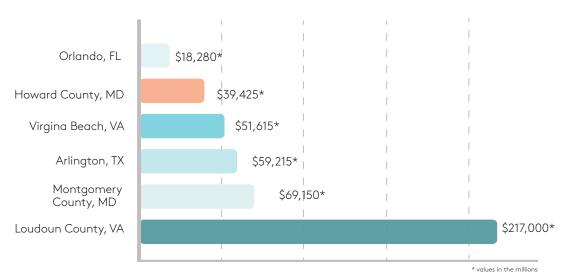


Figure 5.3 Planned Recreation + Park Capital Investments 5+ Years

Operating Budget as a Percent of General Fund

When examined as a percent of the County's general fund, the Department's operating budget represents an estimated 4.2% of all general fund expenditures, compared to an average of 4.5% of peers surveyed.

Budget per Capita

The Department's estimated operating budget per capita is \$162.77, the highest amongst all peer agencies surveyed.³⁹

Median Household Income

When compared to peer agencies surveyed, the County's annual median household income of \$121,160 is 137.8% of the average annual median household income of peers surveyed.⁴⁰

The Department accounts for fees, charges, and revenue, and expenses related to the provision of Departmental programs and services in two main operating budget categories: the Recreation and Parks Fund and the General Fund. The Department utilizes over 140 unique cost centers for more detailed budgeting, and expense and revenue tracking.

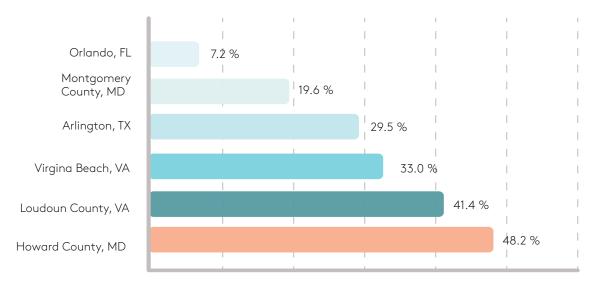


Figure 5.4 Cost Recovery as a Percent of Operating Budget

REPORT THEMES

As the Department of Recreation and Parks looks toward the future functionality and financial stability of the system, the following themes emerged:

- Partnerships can be strengthened: The Department and Howard County Schools can share resources to provide better customer service.
- Alternative funding streams
 should be explored: Federal support, under the American Rescue Plan Act (ARP), may help the Department
 bridge some of the revenue gaps
 experienced due to the pandemic;
 however, it is clear that the county wide requests for allocation of these
 funds will be greater than the total
 federal allocation to the County.
 There will not be enough funding to
 cover all county-wide revenue losses
 for each department.

IMPLEMENTING POLICIES AND PROGRAMS

The Department maintains eight regional parks, ten community parks, 12 neighborhood parks, four natural resource areas, 27 historic sites, three community centers, one nature center, one athletic center, and two community buildings and offers approximately 7,000 programs (including leagues, classes and camps) each year. In 2021, volunteers donated over \$1.5 million in labor hours costs. Many of the parks also host local and national tournaments and events. To maintain such a high functioning system, the Department relies on a multifaceted approach to support its operations, which are pulled from two funding sources, the Recreation and Parks Fund and the General Fund.

Capital Improvement Budget

The Capital Improvement Budget provides funding and appropriation for the construction or acquisition of physical assets and covers many different projects, including land acquisition and construction or renovation of community centers, parks, and trails. The Department has access to transfer tax funds and grants (which include Program Open Space) which make up almost half of the Capital Budget each year. It also has limited access to General Obligation (GO) bonds. To guide spending for these funds, the Department creates a Capital Improvement Plan, which identifies short-, medium-, and long-term capital spending priorities.

General Fund

Howard County's General Fund is funded by property and income taxes. It is the principal operating fund for the County and is used to fund most County services such as education, public safety, public facilities and health and human services. The Department is funded substantially by General Fund revenue, with revenue generated from user fees and charges projected to be 48.2% of total funding for FY 2022.

Recreation and Parks Fund

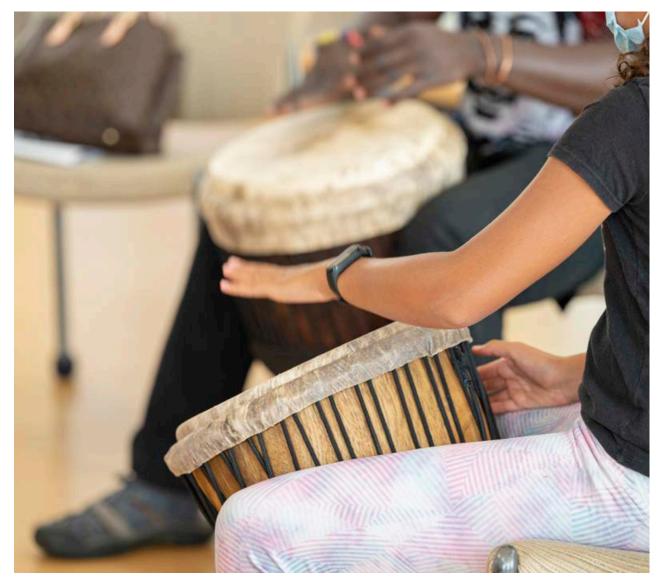
The Recreation and Parks Fund is supported primarily by program and facility fees, or revenues. The Department experienced robust activity and program participation, which resulted in significant revenue gains and funded balance contributions to the Recreation and Parks Fund over the past few years. However, several major macroeconomic related impacts, mainly the COVID-19 pandemic, have severely impacted core services participation over the last few years and have resulted in a significant revenue decline for the Department. Furthermore, because of the unique nature of programs and services provided by the Department, many core service revenues are cyclical, tend to fluctuate widely on an annual basis, and are dependent on macroeconomic trends that are beyond the control of the Department.

Pricing and Revenue Policy

The Department's fees and revenue policy, updated in May 2015, fulfills the Commission for Accreditation of Park and Recreation Agencies (CAPRA) required standard 5.1.1 Comprehensive Revenue Policy that relates to fees and charges. The policy includes philosophies, guidelines, and cost determination structures to manage fees and charges, and includes three levels of financial sustainability: direct costs, program administration, and institutional costs. Moving forward, the policy must include cost-recovery goals for the 10 major program categories, and for the various facilities used. Having these goals will create accountability for program staff and help to generate lost revenue due to the pandemic's impact.

Revenue Opportunities

The American Rescue Plan of 2021 provides \$1.9 trillion dollars in federal funding for states and communities impacted by the COVID-19 pandemic. In the plan, there are specific funds applicable to parks and recreation agencies, such as \$350 billion for investment in trails, parks, and open spaces within communities disproportionately impacted by COVID-19, and \$240 million in investment in cultural, arts, and tourism facilities, nature-based infrastructure, and outdoor recreation.⁴¹



Goals + Actions

In order to meet State and County goals, while addressing the plan's themes and recommendation drivers, the Department of Recreation and Parks can take the following actions:

County Goal 4.1

Amplify and communicate the Department's leadership.

ACTION: Increase communications with staff during the pandemic and after to address the COVID-19 pandemic's impacts on the budget, on revenue priorities, and on the protection of staff positions.

ACTION: Explore efficiencies in administrative processes that can reduce costs (like changes to credit card fees and charges).

ACTION: Communicate the importance of different roles that enable revenue, operations, and mission-oriented functions to balance one another.

ACTION: Eliminate programs with low or no enrollment.

ACTION: Maintain and increase staff levels by holding vacancies as needed.

County Goal 4.2

Build partnerships across the County.

ACTION: Encourage the creation of "Friends of" park groups.

ACTION: Continue scholarship programs, cross-training staff programs, and open communication across bureaus.

ACTION: Partner with other departments or social service agencies to strengthen expertise in certain areas (community health).

County Goal 4.3

Grow awareness of Department offerings and programs by bolstering marketing efforts and capacity.

ACTION: Grow full-time staff in the Marketing Division, including a team member with competencies in data analytics.

ACTION: Continue activity guides and diversity, equity, and inclusion (DEI) initiatives.

ACTION: Explore creation of an internal marketing process team to identify ways of strengthening the division's support to the Bureaus.

ACTION: Develop an ongoing system of selfexamination to support growth and marketing success.

ACTION: Develop metrics for measuring the effectiveness of marketing.

County Goal 4.4

Strengthen recruitment and retention practices

ACTION: Create an employee recruitment and retention task force consisting of a cross-functional team from all levels of the organization.

Work closely with Howard County's Human Resources Department to ensure recruitment and retention alignment with County policies.

ACTION: To address the increased childcare demands, consider creating a consortium of providers to tackle the recruitment and retention of childcare staff in a County-wide approach.

County Goal 4.5

Support the expansion of non-revenuegenerating areas of the Department in the short-term through grants and partnerships.

ACTION: Consider creating seasonal staffing incentives such as end-of-season incentive bonuses.

ACTION: Seek youth employees through collaborations with schools, creative marketing, and flexible hours.

ACTION: Outsource functions that can be done by other providers.

ACTION: Partner with local providers for naturebased programming in-lieu of direct organization programming.

ACTION: Partner with local organizations to expand the volunteer base and provide community service hours.

County Goal 4.6

Develop a customer service framework to ensure consistent service and support uneven staff capacities.

ACTION: Assign responsibilities to determine who is accountable for the overall customer service system.

ACTION: Continue deploying the existing customer service standards.

ACTION: Create an overall customer satisfaction measurement system that outlines and documents types, frequency, and data collection processes. This information should be documented and shared with the rest of the organization.

ACTION: Develop approximately five key customer requirements of key services and programs by identifying the service attributes most important to customers.

ACTION: Develop service mapping for key programs and services. Service mapping is one way to improve service system design.

ACTION: Complete a similar provider evaluation on an annual basis.

ACTION: Strengthen internal customer service support. Internal customer satisfaction is critical to effective delivery of excellent external customer service.

ACTION: Develop a service recovery process.

ACTION: Encourage customers to provide feedback about their experiences and make it easy for them to do so.

Respond quickly and personally. Organizations often take too long to respond to unhappy customers, and then respond impersonally.

Develop a problem resolution system. Service employees need specific training on how to deal with angry customers and how to help customers solve service problems.

ACTION: Develop key performance indicators for service quality.

Implementation Strategy

Aspiration The County maintains high quality spaces.

Implementation Strategy

The 2022 LPPRP (or, the Plan) aims to provide Howard County residents and visitors greater access to programs and amenities, expand and preserve protected agricultural land, and enhance the long-term benefits of natural resources and open space – ensuring that the system will prosper for future generations.

The 2022 LPPRP is timely; its implementation is timed with the County's General Plan Update. The LPPRP responds to waning available land and resources for significant new projects and land acquisition opportunities, and provides a snapshot of the current state of the County's system during the COVID-19 pandemic, which is now entering its third year.

The Plan requires committed community engagement and the investment of citizens, state and local governments, and private partners to successfully implement the ambitious goals and strategies set out by the vision. A critical first step in implementation will be to leverage existing partnerships and cultivate new collaborative relationships with groups invested in the future of the system, so as to ensure that funding aligns with community needs and the Plan's guiding principles.

2022 STATE GOALS

Three goals within the 2022 LPPRP directly relate to organizational health. Mention of these resources is inferred and suggested within the Recreation and Parks, Resource Conservation, and Agricultural Lands Preservation chapters. The most applicable goals are:

 Recognize and strategically use parks and recreation facilities as amenities to make communities, counties and the State more desirable places to live, work, play and visit.

2022 COUNTY GOALS (AN UPDATE TO THE 2017 PLAN)

Goals within the 2017 Plan that were related to bolstering Department best practices and functions included:

- Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.
- desirable places to live, work, play and visit.
 Use State investment in parks, recreation and open space to complement and mutually support the broader goals and objectives of local comprehensive/master plans.
 - 3. Connect the county's agricultural heritage to its recreational goals, through the incorporation of community gardens, healthy eating resources, and educational programs.
 - 4. Encourage future stewardship by connecting culture, history and programming.

LOCALLY-RESPONSIVE SITE INVESTMENTS

As Howard County and the Department of Recreation and Parks looks to steward the future of its natural and cultural resources. opportunities exist to tie together the County's unique history and diverse communities and celebrate its natural places, parks, and facilities. Today, Howard County's parks and facilities are unparalleled in their amenities and in the care that is taken to manage these important community spaces. Consistency has been a priority and has resulted in high quality spaces, but also in a sense of sameness or homogeneity across identity, character, and image of the system. With such a diverse ecological, historic, and cultural foundation, there is tremendous opportunity to amplify difference and celebrate unique attributes through park and open space design choices.

One notable case study in Howard County is the recent opening of Laura's Place because it introduced new and unique park elements and investments. The amenities in Laura's Place in Blandair Park, which were embraced by residents, made it a destination. With this plan and the next capital improvement cycle, the Department of Recreation and Parks can mimic this approach to other capital investments to one that reflects and amplifies the County's ecological systems, shares its historic legacy, and responds to local community desires. While Howard County's general plan process drives development, this ecologically-driven framework can structure site investments, specifically parks. In this section, the plan will explore opportunities to shift investment and maintenance to a district approach that is structured around the ecological and development makeup of that particular area of the county.



Figure 6.1 Western Regional Park in Cooksville contains open lawn fields for active recreation, a typical park typology found across the county.

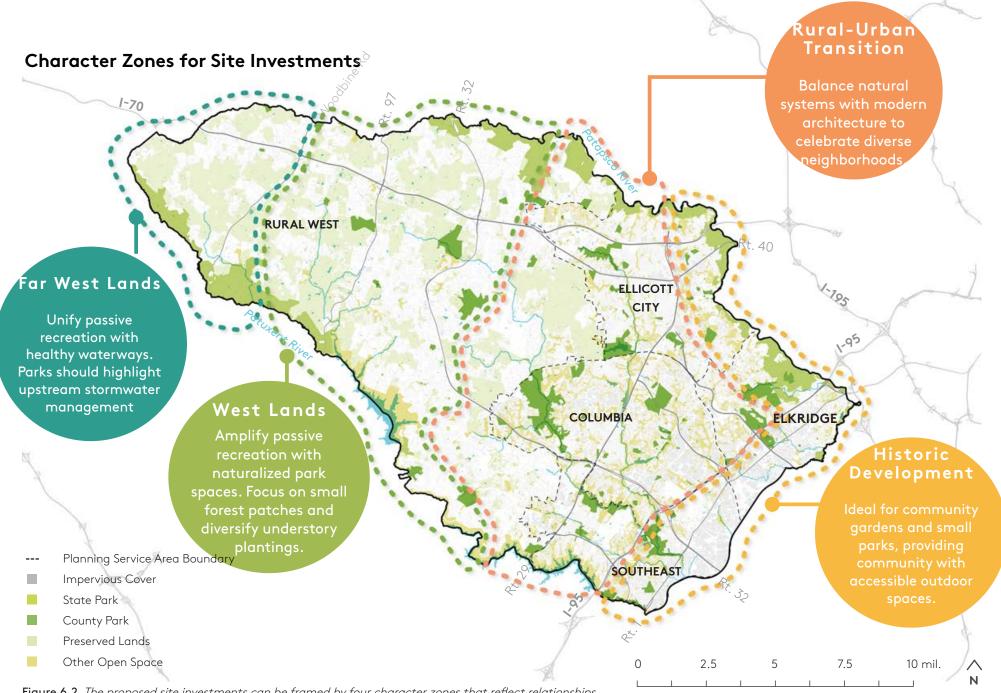


Figure 6.2 The proposed site investments can be framed by four character zones that reflect relationships between ecological and cultural systems, to diversify park typologies across the county

Defined by varying patterns in Howard County's natural and cultural resources, the locally-responsive site improvement framework identifies four zones across for the County to draw inspiration from and guide investments:

Eastern Development

Home to the County's the earliest settlements, this area includes steep river valleys and is mostly developed with small forest patches and more urban areas. Stream health is lower and stream banks are more eroded, especially to the east. There is very little agriculture in this area. Parks are likely smaller in scale.

Rural-Urban Transition

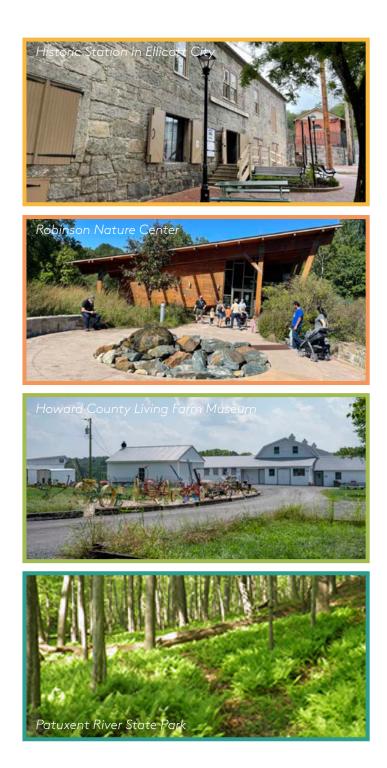
A rolling, partially developed landscape, with larger forest patches and streams. Robinson Nature Center exemplifies the typology of this landscape, where nature meets modern architecture to create a destination for the larger community to learn about Howard County's local wildlife and plant communities.

West Lands

A mostly agricultural landscape interspersed with rural residential and limited commercial development, with streams that are generally in fair to good condition. Most of Howard County's agricultural and conservation easements are in the West Lands. The Howard County Living Farm Museum represents a typology that can be replicated across this zone, providing a space where visitors can learn about the County's agricultural legacy.

Far West Lands

A landscape with steep slopes, this is one of the least densely populated areas in the county. Soils are very well drained and prone to drought. Passive recreation and trails can shine in this area, where visitors can immerse themselves in nature. Signage should educate the public about the local wildlife and plants of the area.



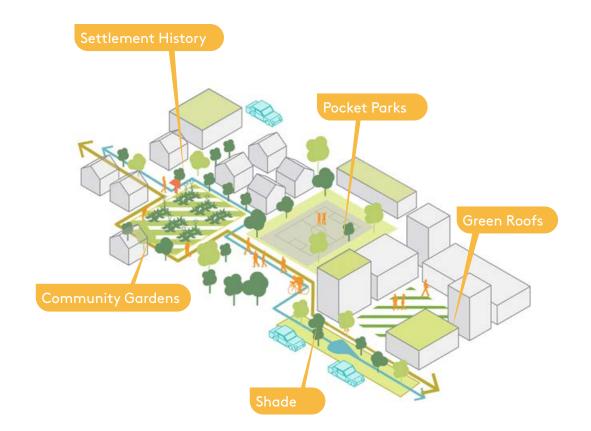
EASTERN DEVELOPMENT

Interpretation

Interpretative signage in Eastern Development parks should highlight history of human settlement and development. Humans (indigenous, then colonists, then modern community growth) were attracted to this land due to its stable soils and natural resources, which included water access and wildlife for hunting. This prime location for human use led to early dense settlement. Proximity to major travel routes and ports allowed communities to grow within the broader region. Signage should educate the public about this local geography, natural history, and human history with broader impact across the county. This is also an opportunity to educate the public about downstream resilience and flooding in low lying, flood-prone areas, such as in Ellicott City.

Uses

This area is ideal for community gardens which residents identified as a desired facility in the statistically valid community survey conducted in 2021. Small parks could include unique activities such as pickleball courts, providing the community with accessible active spaces within walking, biking, or public transit distance, prioritizing neighborhoods with low park equity.



Design Guidelines

Design should focus on providing comfortable shaded experiences within multi-use small city parks. Ecological practices in this area include creating green roofs on park buildings, implementing bird-friendly design practices for buildings, and amplifying the urban canopy with urban tolerant-plants. Design should focus on resilience, such as incorporating floodable landscapes and other blue-green infrastructure.

Management

Focus should be to reduce edge effects and invasive plant cover. The County should plant urban-tolerant native trees and shrubs to replace future canopy and insulate forest edges. Remove the most destructive invasive plants following integrated pest management principles.

Investment Potential

Investments should focus on areas with limited access to parks and high community need, such as south of Elkridge, as demonstrated by the State's park equity map tool.

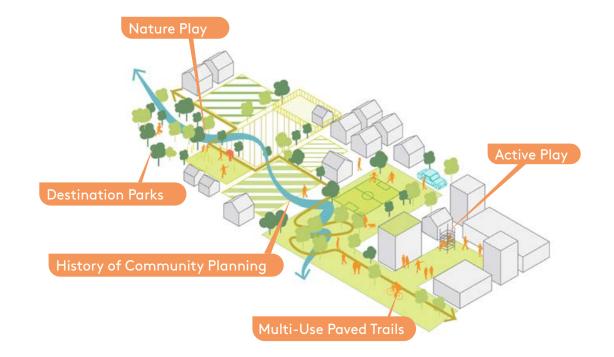
RURAL-URBAN TRANSITION

Interpretation

Signage in the Urban-Rural Transition parks should highlight the County's history of park development and suburbanization. Interpretive signage should focus learning objectives around early farming, early industrialization, community planning that supported park development, and the differentiation of vegetation apparent between the east and western edges of the county. Through this area's agricultural history and prominent suburban character, observers can learn about the relationship between soil health, vegetation, and development drivers.

Uses

This area is suitable for multi-use trails and destination parks for active recreation. Investments in paved trails should be prioritized, as it was the most important facility identified by residents as part of the statistically valid community survey. The connection between parks and neighborhoods is a priority, providing communities with accessible outdoor spaces within short driving distance, and blue-green infrastructure to support parking and other vehicular needs.



Design Guidelines

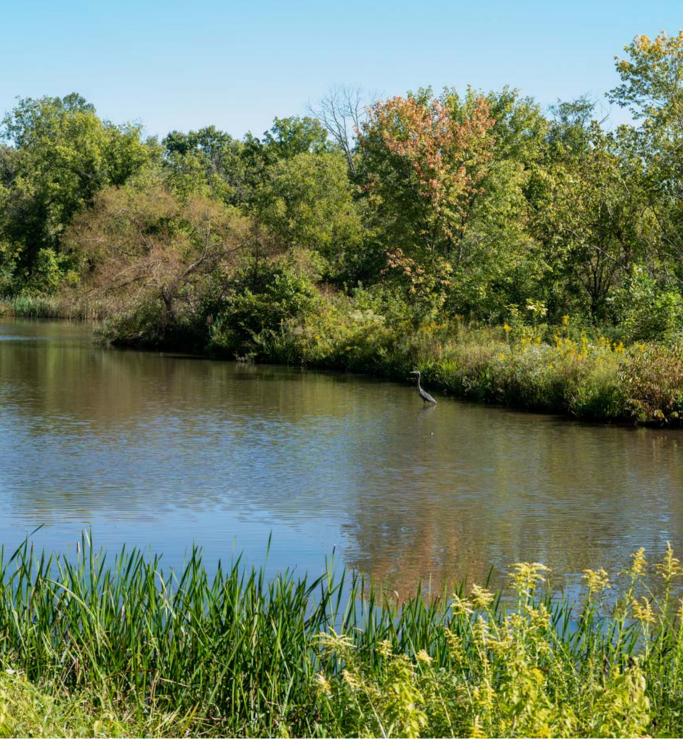
Elevate park experience with different play typologies from naturalized play to colorful playscapes based on neighborhood character. Low density open spaces within residential areas can be easily adapted to provide small habitat stepping stones and stopovers for many types of birds and small mammals.

Management

The goal within this region is to elevate forest health, restore stream health, and improve resilience. Gaps in the canopy and uneven forest edges should be filled with native or adapted tree and shrub plantings. Investments should prioritize protecting new planting and manage the deer population. Management plans should focus on most destructive invasive plants. Finally, stream banks should be stabilized using natural channel design principles including planting a robust native understory.

Investment Potential

Investments should preserve large natural areas where possible to maintain rural character, prioritizing communities where park equity and accessibility is low, such as west of Ellicott City.



WEST LANDS

Interpretation

Signage in the West Lands should highlight the history of human settlement interwoven with local geology. The geology story is complex, distinct and visible so park users will be more aware of it, which creates an opportunity to focus on the connection between geology and its effect on farming. While the Ice Age did not drive glaciers this far south, some soils may have originated in wind-blown soil from glaciated areas farther north. Learning objectives should focus on geology and the formation of soils, farming, and how the physical form of the county's roads, farms, and communities evolved in response to geology and topography. Furthermore, due to the preserved natural character of this region, the role of the Green Infrastructure Network on the greater landscape should be highlighted.

Figure 6.3 The native wildlife and plant communities of Howard County are on display along passive-use trails in Font Hill Wetland Park

Uses

The West Lands should highlight passiveuse recreation for visitors to enjoy Howard County's agricultural and geological legacy. Passive unpaved trails, one of the most important features ranked by residents in the statistically valid survey, will help protect sensitive areas and preserve landscape in its natural condition. Where possible, trails should follow the Green Infrastructure Network corridors, involving parks in its implementation and elevating their role in providing both an ecological and accessible connection to healthy natural spaces.

Topographical Features Connected Habitat

Design Guidelines

Due to its location and character, the West Lands act as a wildlife passage within the county. Corridors defined by the Green Infrastructure Network should therefore be prioritized. Rivers and stream banks should be stabilized with diverse vegetation. To promote healthy upstream stormwater management, hardscapes within parks should include natural and permeable materials to capture and infiltrate stormwater before it reaches the eastern region of the county. Passive trails of natural fines or compacted crushed gravel will aid in water infiltration and complement ecological areas. Buildings and other structures should highlight local natural materials such as stone, mortar, and wood. Diverse native plantings should be prioritized - rather than

favoring manicured lawns - to provide wildlife habitat and preserve the natural character of Howard County.

Management

Focus on improving water quality and connecting habitat patches. Plant native vegetation to buffer all streams and waterways on public land and easements; plantings should be compatible with setting. Plant steeper land into native vegetation on public land and easements. Expand size of designated core meadow habitat by converting adjacent forest to savanna.

Investment Potential

Investments should prioritize natural areas to maintain rural character, focusing on communities where park equity is low. The center of this region requires a 15 minute drive to a playground, therefore parks within this area should include nature-inspired playgrounds.

FAR WEST LANDS

Interpretation

The Far West Lands tell a story of ecology: The forest trees, steep slopes and drought tolerant soils co-occur and combine to form a unique ecology, different from the rest of the county. Furthermore, lower human density tends to allow more species of wildlife to persist, resulting in a thriving diverse ecological community. Some streams are in good quality in the Far West Lands. Interpretive signage should educate park visitors on local wildlife, the forest ecology, and the importance of healthy waterways - beginning with streams high in the watershed of the Far West Lands to the other watersheds farther downstream of the county.



Uses

The Far West Lands should highlight passiveuse recreation for visitors to enjoy Howard County's agricultural and ecological legacy. Passive trails will help protect sensitive areas, particularly around waterways.

Design Guidelines

Stabilize stream banks with diverse understory plantings, which can complement passive recreational use.

Management

Focus on protecting soil and slope stability. Plant native vegetation in cropland on public lands. Reduce cropland on easements by planting steepest ground to native vegetation.

Investment Potential

Park access currently mostly involves a 15 minute drive based on a walkshed analysis, therefore investments should improve accessibility to parks for local communities. Streams and blue-green infrastructure should be prioritized to promote resilience across all watersheds of the County.

CAPITAL IMPROVEMENT PLAN

The implementation process will also involve prioritizing improvements based on the Plan's evaluation of the system's existing assets, needs, accessibility, and community demands, as well as future trends within the industry. The Capital Improvement Plan (CIP), included in the following pages, will serve as the tool to strategize, prioritize and appropriately time these community improvements. The CIP identifies priority projects within a short-, medium- and long-term time frame and aligns project development with the 2022 State and County goals.

Reflecting on the County's 5-year Recreation and Parks Capital Improvement Plan, the Department proposes to allocate \$39,425,000 over the next five to six years for recreation and parks related infrastructure improvements.

Howard County continues to work with Columbia to ensure the private, yet publicly accessible amenities in Columbia like parks, playgrounds, and trails continue to contribute to State and County goals for a connected, thriving, and sustainable system. Today, Columbia does not have plans to expand its own park and recreation system, but continues to update and maintain its existing system.



Figure 6.4 Implementation of the plan includes large capital projects like park improvements and systemwide investments like tree planting.

Capital Improvement Plan

	le Improvements				Short Tern	n Priority		Mid Term	Priority		Long-term Priority			
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	
Park Systemic Improvements	Repair and replacement of existing park amenities are assessed annually and funded as needs arise. Prior Capital Improvement Plans did not identify most parks within the overall system and lumped funding in this category as it appears in County Capital Budgets.	Necessary park systemic improvements not anticipated within this Capital Improvement Plan will draw funding from other expenses listed in this CIP, whether within the park or another park based on the priority and public need for the repair or replacement.	0.00					196	et					
Greenway Infrastructure Network Systemic Improvements	not included	In alignment with the GIN Plan, protect, enhance and restore the habitat and natural areas within the Green Infrastructure Network to support a diversity of plant and animal life.	0.00			12	30							
Park Resurfacing	Repair and replacement of existing park roadways, parking, paths, and courts are assessed annually and funded as needs arise. Prior Capital Improvement Plans did not identify most parks within the overall system and lumped funding in this category as it appears in County Capital Budgets.	Necessary resurfacing improvements not anticipated within this Capital Improvement Plan will draw funding from other expenses listed in this CIP, whether within the park or another park based on the priority and public need for the repair or replacement.	0.00	rel	lect	7								
Historic Structures Rehabilitation	Maintenance of historic structures is assessed annually and funded as needs arise. Prior Capital Improvement Plans did nat identify most parks within the overall system and lumped funding in this category as it appears in County Capital Budgets; however, most historic structures are located outside parks.	Proposed maintenance to include annual maintenance of various historic structures not already identified within a park based on need. Renovation of the Bernard Fort House is not referenced elsewhere, is in design, and construction is anticipated to begin within the short-term.	4.00				2.50			0.75			0.75	
Pathway and Trail Rehabilitation	Proposed improvements to the Savage Mill Trail are referenced with Savage Park.	Continue to maintain, improve and expand the Spinal Pathway as well as other public pathways and trails.	4.00				2.00			1.00			1.00	

Systemwide Improvements					Short Term Priority			Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Parkland and greenway acquisition	No change; however, the parkland acquisition category shall now include acquisitions that enhance and expand the County's Green infrastructure Network, which includes and is not limited to, the Patapsco Greenway, the Patuxent Greenway, and the Howard County Interior Greenway	The County's land acquisition goals for 2022 are to provide no less than 20 acres per 1,000 residents. The County currently exceeds this goal by providing 29.5 acres per 1,000 residents. Although the County has met its land acquisition goals, the Department will continue to purchase land in support of increased equity and access to parks for all residents.	0	0			-1	ngå	et				

Columbia 1	Region				Short Terr	n Priority	,	Mid Term	Priority		Long-term Priority				
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.		
Atholton Park	Not included	Proposed development to consider new benches and shading for athletic courts. Proposed maintenance items to include roadway and parking lot repaving as well as pathway and drainage improvements.	0.41			0.06	0.20			0.15					
Bailey Park	Not included	Newly opened park should not require capital maintenance or equipment replacements within the next 15 years.	0.00												
Blandair Regional Park	The 2017 LPPRP recommendations for this park were constructed with the exception that two synthetic turf baseball diamonds were constructed instead of two additional synthetic turf multipurpose fields and a single baseball diamond.	Phase 6 development of pickleball courts, basketball courts, a skatepark, and additional parking are ongoing. An athletic center proposed for Phase 6 is postponed as a long-term priority. Historic buildings rehabilitation can proceed. Phase 4 postponed until FY28 Phase J bridge construction begins. Phase 5 and Phase 7 are also recommended as long term investments.	29.65			3.50	2.85		8.30			15.00			

Columbia I	Region, cont'd				Short Terr	n Priority	1	Mid Term	Priority		Long-term Priority			
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	
Cedar Lane Park	Not included	Proposed development to consider new pathway construction at this regional park. Proposed maintenance to repave roadways, parking lots, and pathways; sports fencing and backstop replacements are needed; and a pavilion replacement.	1.42			0.20	0.95		t				0.27	
Clarks Glen	Not included	Proposed development to consider development of a neighborhood park adjacent to the existing Clarks Glen playground and pathway. Proposed maintenance to include replacement of playground equipment and safety surfacing.	0.55			12	30	u ⁰⁵	0.15				0.40	
Columbia Garden Plots	Not included	The County will pursue the development of additional garden plot sites in the Southeast and either Elkridge or Ellicott City regions on County property and expansion of the Long Reach site. New sites require access, parking, and water as well as maintenance and replacement of existing raised planters as needed.	0.70	rel	ect	0.30	0.20			0.20				
Dickinson Park	Not included	Park owned by the Board of Education and maintained by the County. Proposed maintenance to include athletic court improvements.	0.20							0.20				
East Columbia Library Park	Design of the site has not changed since the 2017 LPPRP; however, prior funding was deferred to support Ellicott City flooding recover efforts.	Pursuing acquisition of the property from the Howard Hughes Corporation. Proposed construction remains the same as previously designed. Proposed maintenance to include pathway repaving.	4.70	16.60	0.50				4.00				0.20	
Elkhorn Park	This property is now owned by the County. Development of this park was not initiated between 2017 and 2022.	Proposed development to consider development of this park as a pickleball complex to include numerous courts, a loop trail, outdoor exercise equipment, a playground with safety surfacing, parking and other ancillary features. The County may collaborate with the neighboring Columbia Association.	2.30			0.30			2.00					

Columbia I	Region, cont'd				Short Terr	n Priority	,	Mid Term	Priority		Long-term Priority			
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	
Hawthorn Park	Not included	Park owned by the Board of Education and maintained by the County. No capital improvements or maintenance are planned at this time and will be reassessed in subsequent plans.	0.00						*					
Huntington Park	Not included	Park owned by the Board of Education and maintained by the County. Proposed development to consider realigning an existing pathway, relocate existing athletics courts, and make SWM improvements. Proposed maintenance to include replacing playground equipment and surfacing.	0.80			0.40	31	ngá	e				0.40	
Martin Road Park	Not included	Proposed maintenance to include athletics courts and pathway resurfacing and playground equipment and safety surfacing replacement.	0.60	re	lect		0.05						0.55	
Middle Patuxent Environmental Area	Not included	The County is pursuing the acquisition of properties adjacent to the MPEA to create opportunities for additional programming and connections to neighboring communities. Proposed development to consider construction of a storage building, trail improvements, and an amphitheater.	1.00 201 t		0.80	0.20								
Robinson Nature Center	Not included	Proposed development to consider the design and construction of an amphitheater and installation of shade structures. Proposed maintenance to include improvements to the Simpsonville mill ruins and resurfacing of the roadway and parking lot.	0.83			0.50	0.08			0.25				
Sewells Orchard Park	Not included	Proposed maintenance to include playground equipment and safety surfacing replacement, observatory deck replacements, pedestrian bridge replacement, and dredging of the ponds.	3.00							0.30			2.70	

Elkridge Ro	egion				Short Terr	n Priority	,	Mid Term	Priority		Long-term Priority			
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	
Belmont Manor & Historic Park	Not included	Proposed development to consider a new access road and connections to public water and sewer. Proposed maintenance to provide additional fencing, improve overflow parking, pond dredge and pier improvements, and to repave the roadway and parking.	3.10				1.20	20	1.50				0.40	
Harwood Park	Not included	Proposed maintenance to include pathway and athletics court resurfacing.	0.14				0.14	N. C.						
Rockburn Branch Park	A conservation easement was placed over a large portion of the park and a community center is no longer being considered. Restoration of the Clover Hill House has been postponed. Realignment and expansion of pathways were delayed to focus on realignment of the disc golf course.	Proposed development to consider the construction of a restroom facility near the tennis courts, the construction of a playground on the Landing Road side of the park, and explore and construct drainage and surfacing improvements for ball diamonds in the midterm. Proposed maintenance for roadway, parking lot, and pathway resurfacing.	3.20	ref	ect	2.50				0.70				
Timbers at Troy Golf Course	Not included	Proposed maintenance to include repairs to the clubhouse, renovations to the existing pavilion, and replacement of the maintenance building.	0.14				0.14							
Troy Regional Park	Development of Phase 2B improvements to Field #1 continues. All other improvements to this site are postponed by the consideration of the park as a site for Howard County High School #14.	Proposed development to include design and construction of an indoor athletics facility. Proposed maintenance to include renovations to the Troy Mansion and synthetic turf field scheduled replacements. Proposed construction of a maintenance facility to support upkeep.	21.70	5.00		0.30	0.50	1.00	17.50	0.60			1.80	
Waterloo Park	Not included	Proposed maintenance to include athletic field drainage improvements, playground equipment and safety surfacing replacement, and roadway, parking lot, and pathway resurfacing.	0.75				0.50			0.25				

Ellicott Cit	y				Short Term Priority			Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Baltimore & Ohio Ellicott City Station Museum	Not included	Proposed development to consider ADA ramp access improvements at the site. Proposed maintenance items to include caboose stairs replacement and turn table area improvements.	0.21			0.10	0.11						
Centennial Park	Lake dredging funding remains in the Capital Improvement Plan and has progressed into the mid-term priority category with an estimated price increase from \$6M to \$8M. Forebay dredging should become budgeted and completed every ten years.	Proposed development to consider West Area field, lighting, road way, and parking renovations; South Area boat area and overflow parking renovations; and an inclusive North Area playground. Proposed maintenance to include sign replacements, pavilion repairs, forebay and lake dredging, and various paving.	20.48	3.00	0.50	7.02	3.26	0.50	e	8.00	0.50		0.70
Cypressmede Park	Not included	Proposed maintenance to include athletics court amenity replacements and resurfacing; roadway, parking lot, and pathway repaving; and playground equipment and safety surface replacement.	3.49	re	lect		0.29			3.20			
David Force Natural Resource Area	Trail improvements are ongoing and pedestrian bridges are being replaced. At this time the County is not pursuing development of any portion of this park for active recreation.	Continue trail improvements throughout the park.	0.30			0.30							
Dunloggin Park	Not included	Proposed maintenance to include a stream restoration project with grant funding under other agency's budget and pathway resurfacing.	1.95				1.80						0.15
Font Hill Wetlands Park	Not included	Proposed maintenance to include ongoing stream restoration following damage from the 2016 and 2018 floods, pedestrian bridge replacements, boardwalk replacements, and pond dredging.	2.19				0.39			1.50			0.30

Ellicott Cit	y Region, cont'd				Short Terr	n Priority	,	Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Kiwanis Wallas Park	Not included	Proposed development to consider the redesign of existing and new park amenities. Proposed maintenance to include the replacement of existing ball diamond lighting.	1.38				0.18		1.20				
Meadowbrook Park	Not included	Proposed maintenance to include roadway, parking lot, and pathway repaving and playground equipment and safety surfacing replacement.	0.90			0.10	- 10	ud.8		0.30			0.50
Patapsco Female Institute	2012 and 2017 LPPRP recommendations for this site remain the same and are being pursued, but were delayed.	Proposed development to consider redevelopment and renovation of the PFI chapel area are in design and proposed for construction. Proposed maintenance to include road and parking resurfacing, basement drainage and pavers, and improvements to walking paths and landscaping.	1.03		ect	0.80	0.23						
Roger Carter Community Center	Not included	Proposed development to consider the alignment and construction of a pathway from the RCCC to the neighboring County office complex. Proposed maintenance to be managed and funded by the Bureau of Facilities in the Department of Public Works.	0.11	10.					0.11				
Tiber Park	Not included	Proposed development to consider the expansion of the existing Tiber Park pocket park on Main Street in Historic Ellicott City to be initially managed and funded by the Department of Public Works.	0.00										
Waverly Mansion	Not included	Proposed maintenance to include fencing replacements	0.08							0.08			
Worthington Dog Park	Not included	Proposed development to consider the construction of a pavilion at the park. Proposed maintenance to include parking lot resurfacing.	0.28						0.08				0.20

Rural West	Region				Short Terr	n Priority		Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Alpha Ridge Park	Future trail system to be studied.	Proposed development to consider new pickleball courts and a loop trail. Proposed maintenance items to include a new inline hockey surface, replacement entrance sign, and roadway and parking lot repaving.	0.73			0.25	0.48		ot				
Benson Branch Park	Recommendations from the 2017 LPPRP remain similar but budget restraints delayed work on the proposed parking and trail improvements. Consideration and planning for active development of the site has been postponed but may be renewed as a long- term priority.	Proposed development to consider construction of a new parking lot, equestrian trails, and planning and design of additional trails and active recreation improvements at the park.	0.60			0.25	31	ude	0.15			0.20	
Clarksville Park	Pursuing nearby acquisition opportunities in the Rural West and Columbia regions. The availability of 20-acre parcels in the County is now extremely limited.	Continue to pursue acquisition opportunities in and near Clarksville. Consider multiple smaller parcels.	4.00	20.00	1.00			3.00					
Dayton Oaks Park	Not included	Proposed maintenance to include athletic courts resurfacing, paving of the roadway, parking, and pathway, and replacement of the pavilion, playground equipment and safety surfacing.	0.55				0.02			0.15			0.38
Gary J. Arthur Community Center	Not included	Proposed maintenance to be managed and funded by the Bureau of Facilities in the Department of Public Works.	0.00										
Haviland Mill Park	Development of the ADA- accessible pathway and boardwalk to the river was delayed by budget constraints but work recently began. Development of the site for other recreational uses has been delayed.	Proposed development of an ADA-accessible pathway and boardwalk should continue. Development of additional parking will be considered based on park popularity once opened. Further planning for improvements to the park will be a long-term priority.	1.00			0.80			0.10			0.10	

Rural West	Region, cont'd				Short Term Priority			Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Lisbon Park	Not included	Proposed maintenance to include pergola and paver replacements, pathway resurfacing, and playground equipment and safety surfacing replacements.	0.40				0.05						0.35
Manorwood Park	Proposed design and development of this park has been postponed to a long- term priority within this LPPRP.	Proposed development to initiate planning and design of a community park at this site.	0.30					.3.9	,t			0.30	
Poplar Springs Park	Not included	No capital improvements or maintenance are planned at this time and will be reassessed in subsequent plans.	0.00			-17	30						
Schooley Mill Park	Not included	Proposed maintenance to include horse rink drainage improvements; roadway, parking lot, and pathway repaving; athletics courts resurfacing; and trail improvements.	0.66	9	ect		0.10			0.56			
Shipley Park	Not included	Newly acquired park property. Proposed development to consider development of a community park at this site. Masterplanning and design of the proposed park are short-term priorities.	6.82	101		0.32			6.50				
South Branch Park	Design and renovation of the historic buildings at this park as well as the development of public water and sewer connections have been initiated and will continue. Improvements and use of the warehouse building have to be consistent with Maryland Program Open Space regulations.	Proposed development to consider collaboration with the Town of Syskesville on designing and constructing gateway improvements between the park and the town as well as to continue to consider renovations and reuse of the historic structures.	0.40			0.20				0.20			
South Fulton Park	No change to 2017 LPPRP recommendations for this park; however, design and development of the park were delayed and may change between the 2022 and 2027 LPPRP.	Proposed development to consider the design and construction of a community park at this site.	0.70			0.20			0.50				

Rural West	ural West Region, cont'd					Short Term Priority			Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	
Warfield's Pond Park	Not included	Proposed maintenance to include playground equipment and safety surfacing replacements, athletic courts renovations, parking lot and pathway resurfacing, pond decking replacement, and pond dredging.	2.66				0.30		ot	0.36			2.00	
West Friendship Park	Considering master planning of this park for heritage, natural resource, and outdoor adventure programming uses.	Proposed development to consider the completion of construction of the main exhibit building, the relocation of archery programs from elsewhere in the County, and the renovation of a modern house on the property into County office space. Proposed maintenance for trails and resurfacing.	1.10			0.80	31	ude					0.30	
Western Regional Park	Infill development of the park to provide additional athletics courts.	Proposed development to consider the construction of additional tennis and pickleball courts with lighting. Proposed maintenance to include various resurfacing, playground shade replacement, athletics courts resurfacing, and synthetic turf field replacements.	2.26	ref	lect	0.30				1.31			0.65	
Woodstock Park	Design and development of this site into a community park was delayed. This site may not be eligible for the development of a community center due to an existing easement.	Proposed development to consider the design and development of this site into a community park.	0.10						0.10					
	W	lbewi												

Southeast	Region				Short Term Priority			Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Cedar Villa Park	Not included	Proposed maintenance to include mid-term athletic courts maintenance and pathway surfacing and long-term playground equipment and safety surfacing replacements.	0.48						*	0.08			0.40
Guilford Park	Not included	Proposed maintenance to include athletic courts resurfacing, pond pier replacement, playground equipment and safety surfacing replacement, pavilion replacement, sports fencing replacement, and pathway resurfacing.	2.50			12	30	udg		2.50			
Hammond Park	Not included	Proposed maintenance to include an upgraded pavilion, repaving roadway, parking, and pathway areas, athletic courts resurfacing, and playground equipment and surfacing replacement.	0.78		ect		0.08			0.70			
High Ridge Park	Not included	Proposed maintenance to include athletics court and pathway resurfacing and playground equipment and safety surfacing replacements.	0.62	1			0.02			0.40			0.20
Holiday Hills Park	Not included	Proposed maintenance to include athletics court and pathway resurfacing, pond maintenance, and fencing replacements.	0.30							0.05			0.25
North Laurel Community Center	Not included	Proposed maintenance to be managed and funded by the Bureau of Facilities in the Department of Public Works.	0.00										
North Laurel Park	Design and construction of an indoor swimming pool at the North Laurel Community Center is no longer a Department of Recreation and Parks capital project and is now a Department of Public Works capital project.	Proposed maintenance to include roadway, parking lot, and pathway repaving.	0.30							0.30			

Southeast Region					Short Term Priority			Mid Term Priority			Long-term Priority		
Park or Planning Area	Description from 2017 LPPRP	Description of 2022 LPPRP Recommendations	Estimated Total Cost (\$ in Millions)	Acres to be acquired	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.	Acquisition	Capital Develop.	Rehab.
Savage Park	Not included	Proposed development to consider an addition to the existing maintenance building, redesign of exist athletics fields, and the construction of a bridge over the river to connect to pathways. Proposed maintenance to Savage Mill Trail improvements, a pavilion replacement, and various resurfacing.	2.41			0.20	0.40	.12.0	1.40	0.41			

Will be updated to reflect ty 23 but

DESIGN CONSIDERATIONS

Sustainability and eco-friendliness have become a priority in park design. Parks provide ideal opportunities for green infrastructure, as sites are often already highly visible, multifunctional public spaces that typically include green elements. The use of green infrastructure has increased over the last decade as knowledge of its benefits has grown. High-performance landscapes with green infrastructure provide the maximum amount of benefits to communities, including:

- Green jobs
- Opportunities for recreation, education, and relaxation
- Economic growth
- Improved water quality
- Community resilience
- Lower urban heat island effects
- Manage flood risks
- New and improved wildlife habitat

The implementation of green storm water infrastructure duplicates a natural process to prevent, capture, and/or filter storm water runoff. A survey by the Trust for Public Land found that more than 5,000 acres of parkland in 48 major cities have been modified in some way to control storm water.⁴² With community parks containing thousands of acres across the country, there is a multitude of opportunities for integrating green infrastructure into park systems nationwide.

Common green storm water infrastructure projects include bio-retention, bioswales, constructed wetlands, impervious surface disconnections, green roofs, permeable pavements, rainwater harvesting, stream restoration, urban tree canopy, land conservation, vegetation management, and vegetated buffers.

Inclusive Playgrounds

Well-designed inclusive parks and inclusive playgrounds welcome children of all abilities to play, learn, and grow together. An inclusive playground takes away the barriers to exclusion, both physical and social, providing a "sensory rich" experience for all. Accommodating physical disabilities is one component of an inclusive playground—this refers to providing wheelchair-accessible routes and ramp transfers points. Customized equipment, such as special swings, allow all kids to enjoy the playground as it is meant to be enjoyed.

An inclusive playground also provides a number of different opportunities for children to explore. They are able to integrate all the senses, and the amenities encourage social play. A true inclusive playground does not mean that there is a special piece of equipment in a separate area off to the side, but rather that the space is designed as a cohesive community where play opportunities are integrated throughout. These types of park facilities stress the importance of inclusion in daily activities, regardless of ability level. More and more parks and recreation agencies across the country are installing inclusive playgrounds to better meet the needs of all constituents. The Department has several inclusion friendly parks and playgrounds, and the addition of the Savage Park inclusive playground and new Centennial North playaround sensory-friendly playground continue a tradition of offering spaces for all to enjoy.

From an educational perspective, the Department should do its part in educating residents about the impacts of climate change on the local economy and how residents can make a difference.

Alignment with State Goals

Park or Planning Area	Recreation + Parks	Resource Conservation	Historic Resources + Agriculture
Alpha Ridge Park	1	1	
Atholton Park	1-5	1	
Baltimore & Ohio Ellicott City Station Museum	1-5	1	
Belmont Manor & Historic Park	1	1-6	6
Benson Branch Park	1,5	1	2,4
Blandair Regional Park	1-6	1,3	
Cedar Lane Park	1-6	1	
Cedar Villa Park	2-4	1	
Centennial Park	1-5	1	6
Clarks Glen	1-6	1	
Clarksville Park	6	1-6	
Columbia Garden Plots	1-6	2	1-4
Cypressmede Park	1-5	1,3	
David Force Natural Resource Area	1-5	1-6	
Dayton Oaks Park	1	1	
Dickinson Park	1-5	1	
Dunloggin Park	1-5	1-6	
East Columbia Library Park	1-6	1	
Elkhorn Park	1-6	1	
Font Hill Wetlands Park	1-5	1	
Gary J. Arthur Community Center	1,4-5		
Greenway Infrastructure Network Systemic Improvements	1-4,6	1-6	2
Guilford Park	1		
Hammond Park	1		
Harwood Park	1-4	1	
Haviland Mill Park	4-5		
Hawthorn Park	1,3		
High Ridge Park	1,3		
Historic Structures Rehabilitation	1-3		6
Holiday Hills Park	1,3,4		
Huntington Park	1-5	1	

Park or Planning Area	Recreation + Parks	Resource Conservation	Historic Resources + Agriculture
Kiwanis Wallas Park	1-5	1	
Lisbon Park	1,5		
Manorwood Park	1,6	1,6	
Martin Road Park	2,3	1	
Meadowbrook Park	1-5	1	
Middle Patuxent Environmental Area	1-5	1-6	
North Laurel Community Center	1,4		
North Laurel Park	1,4		
Park Resurfacing	1-2,5	1,6	
Park Systemic Improvements	1-6	1-6	3
Parkland and greenway acquisition	1-6	1-6	2,4
Patapsco Female Institute	1	1,3	
Pathway and Trail Rehabilitation	1-4,6	6	2
Robinson Nature Center	1-5	1-6	
Rockburn Branch Park	1-5	1,3	
Roger Carter Community Center	5		
Savage Park	1-6	1,3	
Schooley Mill Park	1	1,3	
Sewells Orchard Park	2,3	1,3	
Shipley Park	1-6	1,3	
South Branch Park	1-5	1-4	6
South Fulton Park	1-6	1,3	
Tiber Park	5,6		
Timbers at Troy Golf Course	1	3	
Troy Regional Park	1-5	1,3	6
Warfield's Pond Park	1-5	1	
Waterloo Park	1-5	1	
Waverly Mansion	5	1	
West Friendship Park	2-5	1	2,4
Western Regional Park	1-5		
Woodstock Park	1-6	1,3	
Worthington Dog Park	4		

Goals + Actions

In order to meet state and county goals, while addressing the plan's themes and recommendation drivers, the Department of Recreation and Parks can take the following actions:

State Goal 5.1

Recognize and strategically use parks and recreation facilities as amenities to make communities, counties and the State more desirable places to live, work, play and visit.

ACTION: Use empty retail spaces in mixed-use housing for community centers and facilities.

ACTION: Increase investment in aquatic facilities and build a 50 m pool.

ACTION: Allow recreational facilities the opportunity to function as flexible-use spaces, available for community uses.

County Goal 5.2

Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.

ACTION: Build new housing or facilities in close proximity to one another so that access is prioritized.

ACTION: Identify funding opportunities available through state and federal sources.

ACTION: Invest in creative maintenance strategies for existing parks and recreational facilities.

County Goal 5.3

Use state investment in parks, recreation and open space to complement and mutually support the broader goals and objectives of local comprehensive/master plans.

ACTION: Identify potential sites for land acquisition, especially if sites represent opportunities to connect to state lands.

ACTION: Identify sources of State grants that could contribute to the funding of County recreation and parks projects.

County Goal 5.4

Connect the county's agricultural heritage to its recreational goals, through the incorporation of community gardens, healthy eating resources, and educational programs.

ACTION: Promote recreational programming that supports health and local food education (community gardens, co-ops, CSAs).

ACTION: Support learning through programming and partnerships that build community knowledge about the importance of healthy living.

ACTION: Use passive recreation to increase public education about ecology.

County Goal 5.5

Encourage future stewardship by connecting culture, history and programming.

ACTION: Expand the natural character of parks.

ACTION: Improve the identity of the system through enhanced wayfinding and impactful communication that is clear and visible.

ACTION: Use technology and mobile apps in parks and cultural sites to educate residents about history.

Endnotes

- 1 Data provided by the 2020 Decennial Census. "<u>United States Census Bureau:</u> <u>Howard County Maryland QuickFacts</u> <u>Dashboard.</u>"
- 2 Maryland Department of Natural Resources. "<u>Fiscal Year 2020: DNR Lands</u> <u>Acreage Report</u>."
- 3 Maryland Department of Natural Resources. "Forest Conservation Act."

Maryland Natural Resources Code. "<u>Natural Resources Article 5-1601-1613.</u>"

- 4 Howard County, Maryland. "<u>Howard</u> <u>County's History.</u>"
- 5 US Census. "<u>Measuring Racial and Ethnic</u> <u>Diversity for the 2020 Census.</u>"
- 6 Howard County, Maryland. <u>2015 Bike</u> <u>Howard Plan</u>.
- 7 Howard County Department of Planning and Zoning. "<u>2018 Downtown Columbia</u> <u>Monitoring Report.</u>"
- 8 Howard County, Maryland. <u>HoCo by</u> <u>Design</u>.
- 9 Howard County, Maryland. <u>Plan Howard</u> 2030.

- 10 Data provided by the 2019 American Community Survey and 2020 Decennial Census
- 12 <u>NRPA Park Metrics Database</u>.
- 13 Columbia Association. "<u>Tot Lots.</u>"
- 14 Maryland Department of Natural Resources. "<u>Maryland Sport Fishing and</u> <u>Crabbing Licenses.</u>"
- 15 Columbia Association.
- 16 Maryland Department of Natural Resources. "<u>Land Acquisition and Planning:</u> <u>Program Open Space.</u>"
- 17 National Park Service. "<u>Land and Water</u> <u>Conservation Fund.</u>"
- 18 Maryland Department of Housing and Community Development. "<u>Sustainable</u> <u>Communities: Enhancing Maryland</u> <u>Communities by Prioritizing Investment.</u>"
- 19 NRPA. "<u>Top Trends in Parks and Recreation</u> 2021."
- 20 Howard County, Maryland. <u>Watershed</u> <u>Management</u>
- 21 Maryland Department of Natural Resources. <u>"Results from Round 3 of the</u>

Maryland Biological Stream Survey (2007-2009)"

- 22 NOAA National Centers for Environmental Information. <u>State Climate Summaries</u> 2022: Maryland and The District of <u>Columbia</u>
- 23 Howard County Department of Planning and Zoning. "<u>Ellicott City Watershed</u> <u>Master Plan.</u>"
- 24 Ellicott City Safe and Sound Plan.
- 25 Dr. Matthew Baker, University of Maryland Baltimore County "Assessment of Howard County, Maryland's Tree Canopy and Forest Cover," April 2022
- 26 Maryland Department of Natural Resources. "<u>Land Acquisition and Planning:</u> <u>Program Open Space.</u>"
- 27 Howard County, Maryland. "<u>Comprehensive Deer Management Plan</u>"
- 28 Ibid.
- 29 Advisory Council on Historic Preservation, "Howard County, Maryland." February 2013. <<u>Hyperlink</u>>
- 30 National Register of Historic Places. Last Updated: December 10, 2021. <<u>Hyperlink</u>>

- 31 Howard County Department of Planning and Zoning, "Howard County Historic Property Tax Incentives." 2015. <<u>Hyperlink</u>>
- 32 Ibid.
- 33 https://www.nass.usda.gov/Publications/ AgCensus/2017/index.php
- 34 National Trust for Historic Preservation, "Historic Preservation Solutions to Build Back Better." March, 2021. Pg. 14. <<u>Hyperlink</u>>, 2021.
- 35 Miller, Mark, "Howard County to Add Nearly 128 Acres to Agricultural Land Preservation Program." Office of Public Information, Howard County Government New Release. October 6, 2021.
- 36 Legg, Heather, "Howard's Roving Radish Program Opens First Storefront." Maryland Association of Counties. September 2, 2020. <<u>Hyperlink</u>>
- 37 Howard County Department of Planning and Zoning, "Howard County Historic Property Tax Incentives." 2015.<<u>Hyperlink</u>>
- 38 In Fall 2021, BerryDunn surveyed the FY 2022 proposed operating and CIP budgets of five peer cities/counties in order to gain greater insight into how the Department's financial and demographic metrics

compare to those park and recreation operations which operate in similar environments with similar characteristics

- 39 U.S. Census Bureau (2021). Selected demographic characteristics, 2014-2018 and 2019 American Community Survey 5-year estimates. Retrieved from http:// factfinder2.census.gov/
- 40 Ibid.
- 41 https://www.congress.gov/bill/117thcongress/house-bill/1319/text
- 42 Trust for Public Land.