

AN ORDINANCE FOR THE PURPOSE OF REPEALING THE CALVERT COUNTY LAND PRESERVATION, PARKS, AND RECREATION PLAN AND ADOPTING A REVISED CALVERT COUNTY LAND PRESERVATION, PARKS, AND RECREATION PLAN

WHEREAS, pursuant to Section 5-905 of the *Natural Resources Article* of the *Maryland Annotated Code*, Calvert County is required to revise its land preservation, parks and recreation plan every five years;

WHEREAS, the Board of County Commissioners of Calvert County, Maryland did on April 15, 2014, adopt the *Calvert County Land Preservation, Parks, and Recreation Plan* by Resolution No. 15-14;

WHEREAS, comprehensive revisions have been proposed to the *Calvert County Land Preservation, Parks, and Recreation Plan* attached hereto as Exhibit “A” (the “Plan” hereafter);

WHEREAS, after due notice was published, the Board of County Commissioners conducted a public hearing on May 15, 2018, at which time the proposed Plan was discussed, staff's recommendations were considered, and public comment was solicited;

WHEREAS, the Board of County Commissioners met in public hearing on May 15, 2018, and determined to adopt the *Calvert County Land Preservation, Parks, and Recreation Plan* as recommended by the Planning Commission; and

WHEREAS, after considering the testimony presented at the public hearing regarding the proposed Plan and the recommendation of the Planning Commission, and in furtherance of the public health, safety and welfare, the Board of County Commissioners determined it is in the best interest of the citizens of the county to adopt the *Calvert County Land Preservation, Parks, and Recreation Plan* as set forth in Exhibit A, attached hereto and made a part hereof.

NOW, THEREFORE, BE IT ORDAINED, by the Board of County Commissioners of Calvert County Maryland that the *Calvert County Land Preservation, Parks, and Recreation Plan*, adopted April 15, 2014, being Ordinance No. 15-14, is hereby repealed.

BE IT FURTHER ORDAINED by the Board of County Commissioners that the *Calvert County Land Preservation, Parks, and Recreation Plan*, Exhibit “A” hereto, is hereby adopted and enacted as the official land preservation, parks and recreation plan for Calvert County, Maryland.

BE IT FURTHER ORDAINED by the Board of County Commissioners that the foregoing recitals be adopted as if fully rewritten herein.

BE IT FURTHER ORDAINED by the Board of County Commissioners that this Ordinance shall take effect on the date set forth below and publication of a fair summary.

RE: Repeal and Adoption of the Calvert County Land Preservation, Parks and Recreation Plan
Page 2 of 2DONE, this 15th day of May 2018 by the Board of County Commissioners of Calvert County, Maryland.

Aye:

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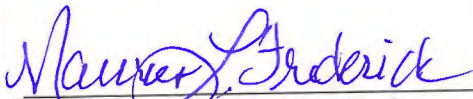
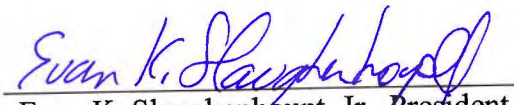
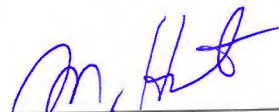
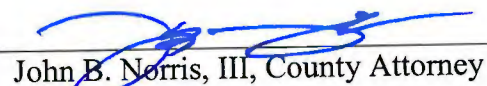
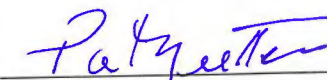
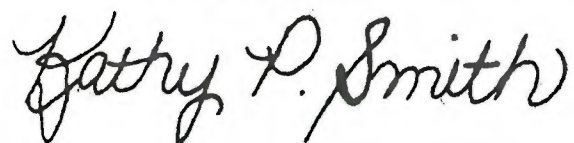
Nay:

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Absent/Abstain:

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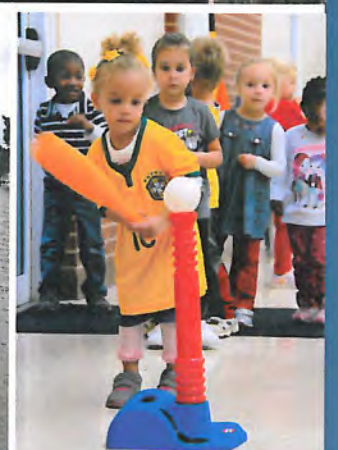
ATTEST:

BOARD OF COUNTY COMMISSIONERS OF
CALVERT COUNTY, MARYLAND
Maureen L. Frederick, Clerk
Evan K. Slaughenhoupt, Jr., President
Tom Hejl, Vice-PresidentApproved for form and legal
sufficiency by:
Mike Hart
John B. Norris, III, County Attorney
Pat Nutter
Steven R. WeemsReceived for Record..... 5/22 2018
at..... 10:46 o'clock..... A..... M. Same day
recorded in Liber KPS No. 54
Folio 122..... COUNTY COMMISSIONERS
ORDINANCES AND RESOLUTION.



Land Preservation, Parks, and Recreation Plan 2018

BK0005476124



Acknowledgements

Board of County Commissioners

Evan K. Slaughenhaupt, President; Tom Hejl, Vice President; Pat Nutter, Mike Hart, and Steven R. Weems

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Executive Summary

Purpose of this Plan

This update of the Calvert County Land Preservation, Parks, and Recreation Plan for 2017 serves two primary functions:

1. Maintains county eligibility to participate in Maryland's Program Open Space – a significant source of annual matching grant funds used to supplement county funding to improve local parks and recreation assets.
2. Provides key information, goals, and achievable recommendations to guide Calvert County's management and enhancement of its system of public parks, open spaces, and preserved lands for the next five years.



The planning process utilized multiple methods to collect data, inventory existing conditions, engage the community and evaluate input, and gauge the overall level of service provided by public parks, open spaces, and recreation amenities in Calvert County. Since the county last updated its Land Preservation, Parks, and Recreation Plan in 2014, natural resources conservation and agricultural land preservation goals have not changed, and acreage of land preserved for these purposes has not changed significantly. Most updates to the Plan are noted in **Section II: Recreation, Parks, and Open Space**, which includes in-depth information and analysis of factors influencing Calvert County's provision of public parks and recreation services.

Key Findings

Calvert County residents consider the rural character, natural landscape, and waterways, as well as having parks and opportunities for recreation close to home as significant contributors to their high quality of life. This sentiment and commitment to enhancing these local attributes for the public benefit are important components of the county's guiding plans and documents, and supported by the key findings of the planning process of the 2017 Land Preservation, Parks, and Recreation Plan. Key findings represent the synthesis of all data collection and analysis, and serve as the basis of the goals and recommendations presented for enhancing parks, recreation, and open space experiences for the public in Calvert County over the next five years.



*Kayaking on the Patuxent River
Image Credit: Calvert County Natural Resources Division*

KEY FINDINGS	
SUMMARY Calvert County's parks, recreation, and open space system meets most user needs. Several focus areas were identified where improvement and investment is needed to continue to meet public expectations, and more fully leverage the many social, environmental, and economic benefits of public recreation and resource conservation.	 There is high satisfaction with existing parks, recreation, and open space assets. • Highly engaging nature programs, especially for youth. • Generally high satisfaction with existing programs and facilities.
	There is a current need for strategic investment to expand recreation opportunities in Calvert County. • Existing demand occasionally exceeds capacity for some recreation amenities. • Projected population growth = projected increase in use and demand. 
	 There is significant demand for the creation of interconnected systems of public pedestrian and bicycle trails. • Easy access to recreation opportunities without dependence on the automobile is highly desired. • Walkable communities and expanded recreation and fitness opportunities are highly desirable local and regional assets.

Goals and Recommendations

As the goals for natural resource land conservation and agricultural land preservation are long-term in nature, they remain unchanged since 2014. Goals and recommendations for enhancing parks, open spaces, and recreation opportunities were updated to reflect the changing needs of the county's population and visitors. Enhancements proposed in this Plan for parks and recreation are based in the Key Findings.

2017 Goals for Recreation, Parks, and Open Space

1. *Continue to maintain and develop parks, recreation facilities, and programs to meet the diverse needs of the growing population in Calvert County.*
2. *Develop an interconnected system of pedestrian trails and bike paths throughout the county to link together places people live, work, play, and visit in Calvert County and Southern Maryland.*
3. *Continue to improve and expand opportunities for public access to the Chesapeake Bay and Patuxent River.*

I. Introduction and Background Information

A. Purpose of this Plan

This update of the Calvert County Land Preservation, Parks, and Recreation Plan for 2017 serves two primary functions:

1. Maintains county eligibility to participate in Maryland's Program Open Space – a significant source of annual matching grant funds used to supplement county funding to improve local parks and recreation assets.
2. Provides key information, goals, and achievable recommendations to guide the county's management and enhancement of its system of public parks, open spaces, and preserved lands for the next five years.

Calvert County relies on funding from the State of Maryland to support land acquisition and parks and recreation facility improvements. Completion of a regular five-year update to the county's Land Preservation, Parks, and Recreation Plan is a prerequisite for continued participation in the Localside Program (*per Section 5-905[b][2] of the Natural Resources Article – Annotated Code of Maryland*). Upon adoption by the Board of County Commissioners this updated Land Preservation, Parks, and Recreation Plan replaces the last version adopted in 2014.

The Land Preservation, Parks, and Recreation Plan provides updated information on programs, goals, and issues impacting Calvert County's provision of public parks, recreation facilities, and open space facilities. The 2017 update has been prepared in accordance with the requirements of:

- State of Maryland Statewide Land Preservation, Parks, and Recreation Plan Guidelines
- State of Maryland Program Open Space statutory requirements

The State of Maryland Land Preservation, Parks, and Recreation Plan Guidelines issued by the Maryland Department of Natural Resources includes new planning criteria for the preparation of this update of the Plan. Compared to the previous version of the Guidelines utilized to prepare Calvert County's 2014 Plan, the most substantive changes included in the 2017 planning criteria, and reflected in this Plan include:

- Parks and Recreation
 - a. Level of Service Analysis – a mixed-method approach of gauging how well the county's parks and recreation system appears to be meeting the recreational needs of the community and local users.
 - b. Goals and recommendations for enhancing Calvert County's parks, recreation, and open space assets based on land, facility, and program needs identified through the level of service analysis.
 - c. Retirement of the default statewide goal for counties to provide at least 30 acres per 1,000 population. In 2017, park and recreation goals are to be tied to service needs and are no longer based on the past default goal and acreage calculations.
- Natural Resource Land Conservation
 - a. Update only of relevant program data, inventories, and goals. No new analysis required.

- Agricultural Land Preservation
 - a. Update only of relevant program data, inventories, and goals. No new analysis required.
- Cultural and Historic Resource Conservation
 - a. Not required by state guidelines, but a focus area briefly addressed in this Plan by Calvert County.

Relationship with County and State Guiding Plans and Documents

Upon adoption by the Board of County Commissioners, this updated Land Preservation, Parks, and Recreation Plan becomes a companion plan to the Calvert County Comprehensive Plan. Upon adoption the 2017 Land Preservation, Parks, and Recreation Plan will replace the 2014 Land Preservation, Parks, and Recreation Plan as the detailed guiding document for parks, open space, and recreation planning in Calvert County for the next five years. The goals and recommendations of the 2017 Calvert County Land Preservation, Parks, and Recreation Plan are supportive of state, county, and local shared goals, including those established by:

Calvert County:

- 2010 Calvert County Comprehensive Plan
- 2014 Land Preservation, Parks, and Recreation Plan

State of Maryland:

- 2014 Statewide Land Preservation and Recreation Plan
- Program Open Space
- GreenPrint
- Maryland Agricultural Land Preservation Foundation Program
- Maryland 20-Year Bicycle and Pedestrian Master Plan

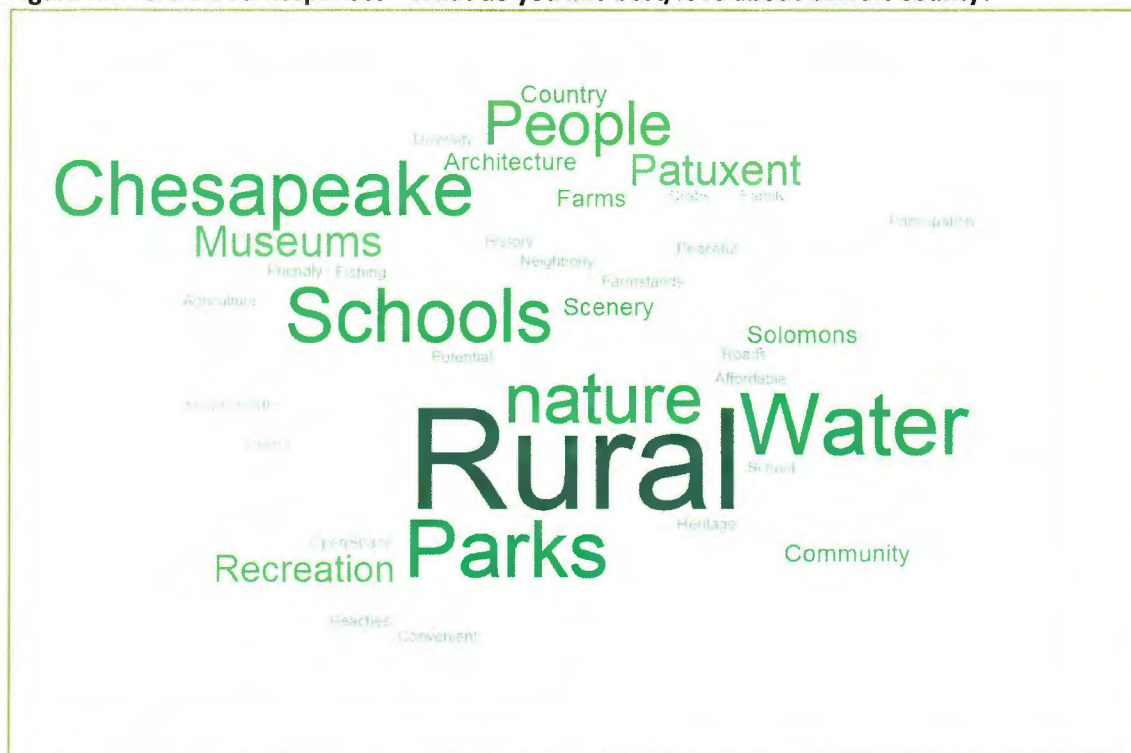
Calvert 2040



Calvert County was in the process of updating the current Comprehensive Plan during the development of this updated Land Preservation, Parks, and Recreation Plan. As part of the update process, residents participating in a planning meeting were asked to respond in a few words to the question “What do you like best/love about Calvert County?” The “word cloud” in **Figure 1** illustrates the most frequent words used in responses, with

emphasis on higher trending responses. Common responses included references to the rural character, parks, nature, and major waterways as the most loved assets of Calvert County.

Figure 1: Word Cloud Responses - What do you like best/love about Calvert County?



Source: Calvert County Department of Planning & Zoning

Rural character, ties to the natural landscape and waterways, access to parks and open spaces for recreation, and the high quality of life afforded by such have been, and will continue to be, important to residents and visitors of Calvert County. The 2010 Calvert County Comprehensive Plan includes a heavy focus on efforts and initiatives to preserve rural charm, natural character, and open spaces.

2010 Calvert County Comprehensive Plan Visions

1. *Our landscape is dominated by forests and fields.*
2. *Our Town Centers are attractive, convenient, and interesting places to live, work, and shop.*
3. *Our wetlands, streams, and forests support thriving plant and animal communities. Our seafood industry is improving.*
4. *Our highways are safe with only moderate congestion, and public transit is readily available. Walking and bicycling are practical alternatives.*
5. *We waste less, consume fewer natural resources, and properly dispose of waste.*
6. *Our communities are safe. We care for the well-being of each other.*
7. *Our children are well prepared for the future. We are healthy in body, mind, and spirit.*
8. *We are stewards of our cultural heritage.*
9. *We are building a strong local economy based on renewable resources, high technology, retirement, recreation, and tourism.*
10. *Our government is efficient, open, and responsive to citizen needs and concerns.*

B. Planning Process and Public Engagement

Preparation of the 2017 Calvert County Land Preservation, Parks, and Recreation Plan was led by a collaborative team of staff from the county's Department of Planning & Zoning, Department of Parks & Recreation, Department of Finance and Budget, Department of Economic Development, and GreenPlay, LLC.

Review of Guiding Plans, Programs, and Information

The planning process for the 2017 Land Preservation, Parks, and Recreation Plan began with a review of existing guiding plans, programs, and data resources relevant to the provision of public parks, recreation amenities, and open space assets in Calvert County. Current guiding documents, plans, and information considered during the update of this Plan included, but was not limited to:



County:

- 2010 Calvert County Comprehensive Plan
- 2014 Land Preservation, Parks, and Recreation Plan
- Economic Development Strategic Plan
- 2011 Town of Chesapeake Beach Comprehensive Plan
- 2012 Town of North Beach Comprehensive Plan
- Program Open Space Annual Programs

State:

- Maryland 2014 Statewide Land Preservation and Recreation Plan
- Maryland Department of Natural Resources – 2016 Annual Acreage Report
- Maryland Department of Natural Resources – LPPRP Guidelines and Resource Documents
- Maryland Department of Planning – State Data Center
- Maryland Department of Planning – Protected Lands Reporting Site
- Maryland Department of Agriculture – MALPF Program
- Maryland Department of Transportation – 2014 Bicycle and Pedestrian Master Plan



Staff, Stakeholder, and Public Participation

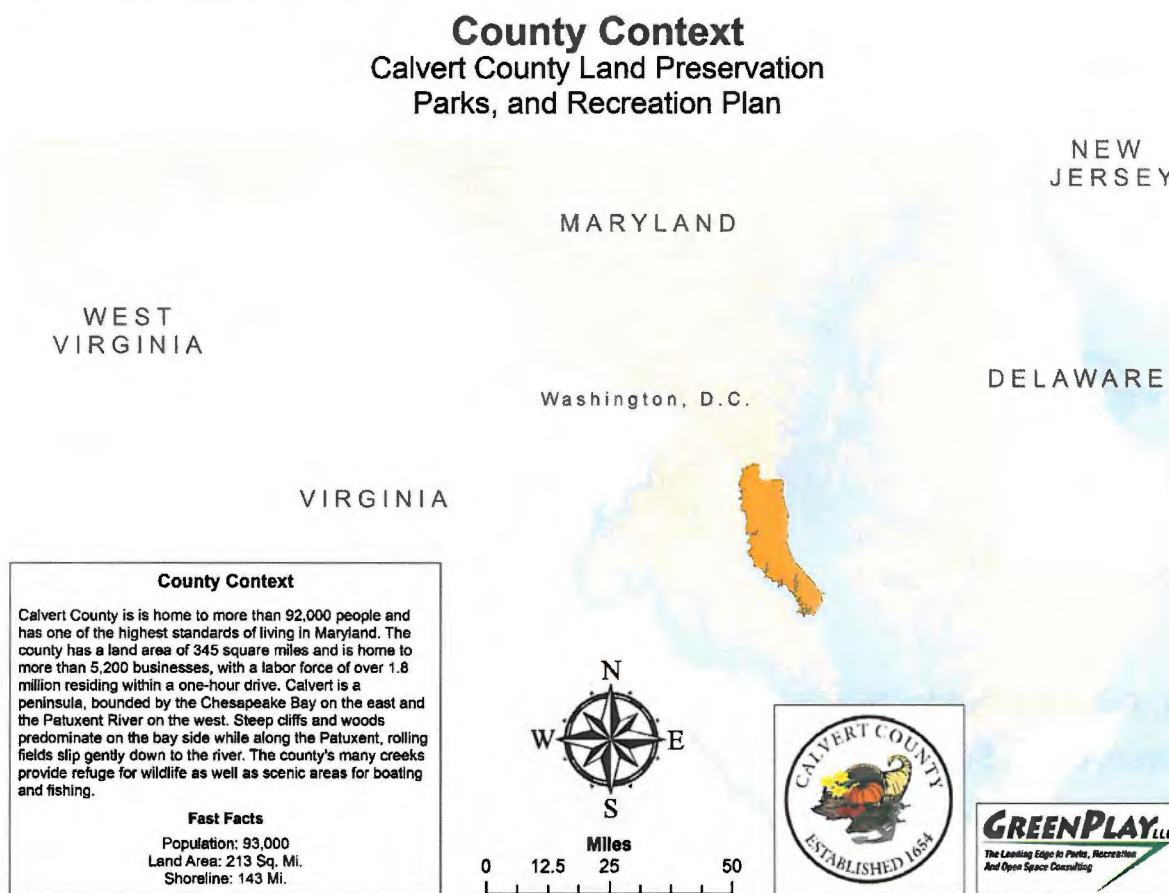
Ideas, information, and perceptions of the current parks, recreation, and open space assets and programs managed by Calvert County were collected through a series of staff and stakeholder focus group meetings, public meetings, and an online survey. Stakeholders who participated in the focus group sessions included representatives of local athletic leagues, sports groups, and clubs that utilize county facilities, land trust members, local farmers, and outdoor enthusiasts. County staff who participated represented the Department of Parks & Recreation, Department of Planning & Zoning, Department of Economic Development, Department of Community Resources Office on Aging, and Department of Finance & Budget, and Department of General Services. Approximately 30 stakeholders and staff participated in five focus group sessions, over a dozen community members and staff shared ideas at a public meeting, and more than 550 respondents provided feedback through the online survey. Key findings are further discussed in **Section II: Recreation, Parks, and Open Space**.

C. County Character and Population

Geographic Character

Calvert County is located on a peninsula in southern Maryland, approximately 30 miles southeast of Washington D.C. As illustrated on **Map 1**, the Chesapeake Bay borders the county to the south and east, and the Patuxent River flows the length of the western border. Anne Arundel County abuts the northern edge of Calvert County. Bridges across the Patuxent River provide connections to neighboring Prince George's, St. Mary's, and Charles Counties.

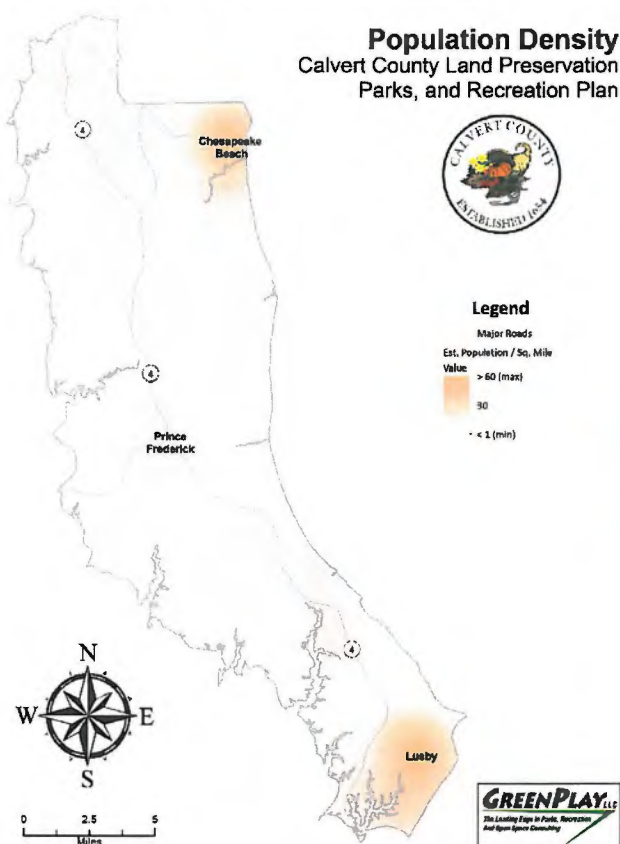
Map 1: Calvert County Regional Context



Source: GreenPlay LLC

The county consists of approximately 345 square miles (140,000 acres), is 35 miles in length, and varies between five to nine miles in width. The interior portion of the county is defined by rolling hills and upland plateau. The coastal areas along the Chesapeake Bay and Patuxent River have substantially contrasting character. On the Bay side, towering cliffs composed of clay, sand, and gravel define the coastal edge, whereas the topography of the Patuxent River coastal area is relatively flat and landscape includes large amounts of acreage in agricultural production.

Map 2: Calvert County Population Density



Source: GreenPlay LLC

Demographic Highlights

The population of Calvert County in 2015 was estimated to be slightly greater than 90,000, with a median age of over 40 years. Of the southern Maryland counties, Calvert had the smallest population with the highest median age in 2015. As illustrated in **Table 1**, the county's population also had a high median household income.

Table 1: Calvert County General Demographic Characteristics

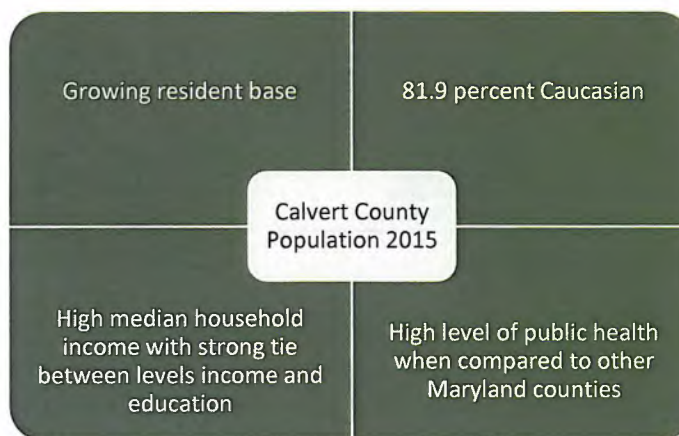
Population	90,114
Median Age	40.6
Households	31,155
Median Household Income	\$95,828

Source: Maryland Department of Planning and American Community Survey

Characteristics of Calvert County's existing and projected population trends that tend to influence the provision of public parks and recreation services is included in **Appendix A: Demographic Profile**. As illustrated in **Map 2**, residents lived throughout the county, with Lusby, North Beach, and Chesapeake Beach areas having the highest concentrations of people.

D. Existing Public Parks and Recreation System

The existing system of public parks, recreation facilities, open spaces, and cultural and historic resources in Calvert County includes a diversity of assets and amenities that provide a wide range of opportunities for public participation in sports, athletics, outdoor recreation, therapeutic recreation, and leisure activities. Most of the park and open space sites in the county include natural landscape features that provide ecosystem services (such as filtering water and air and supporting biodiversity). In addition to these services, natural areas in parks often serve as "outdoor classrooms," they connect people with nature, and they provide abundant recreation opportunities such as hiking, biking, boating, paddle sports, and fishing.



Over 12,000 acres within the county provide the public with access to recreation opportunities. A detailed review of the existing public parks, recreation, and open space system in Calvert County is discussed in **Section II: Recreation, Parks, and Open Space**.

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II. Recreation, Parks, and Open Space

A. Introduction

The existing system of public parks, recreation facilities, and open spaces in Calvert County, as illustrated in **Map 3**, includes lands and facilities that provide a wide range of opportunities for public participation in recreation, cultural, fitness, and leisure activities. This infrastructure supports the high quality of life residents of Calvert County value and expect, and serves to help preserve the rural charm of the county along with key goals and visions of the 2010 Comprehensive Plan and previous Land Preservation, Parks, and Recreation Plan.

11,997.5 acres
of parks, recreation areas, and open
spaces provided a vast array of
recreational opportunities in Calvert
County in 2016.

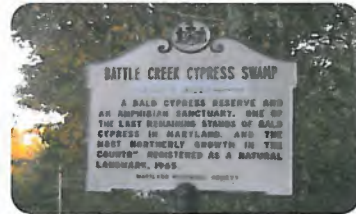
In 2017, nearly 12,000 acres of public and quasi-public properties provided the public with access to diverse recreation facilities, programs, and activities for all ages. The single largest manager of public recreation land and open space in Calvert County is State of Maryland Department of Natural Resources (4,955 acres).



Calvert County
&
Municipalities
4,275.5 acres

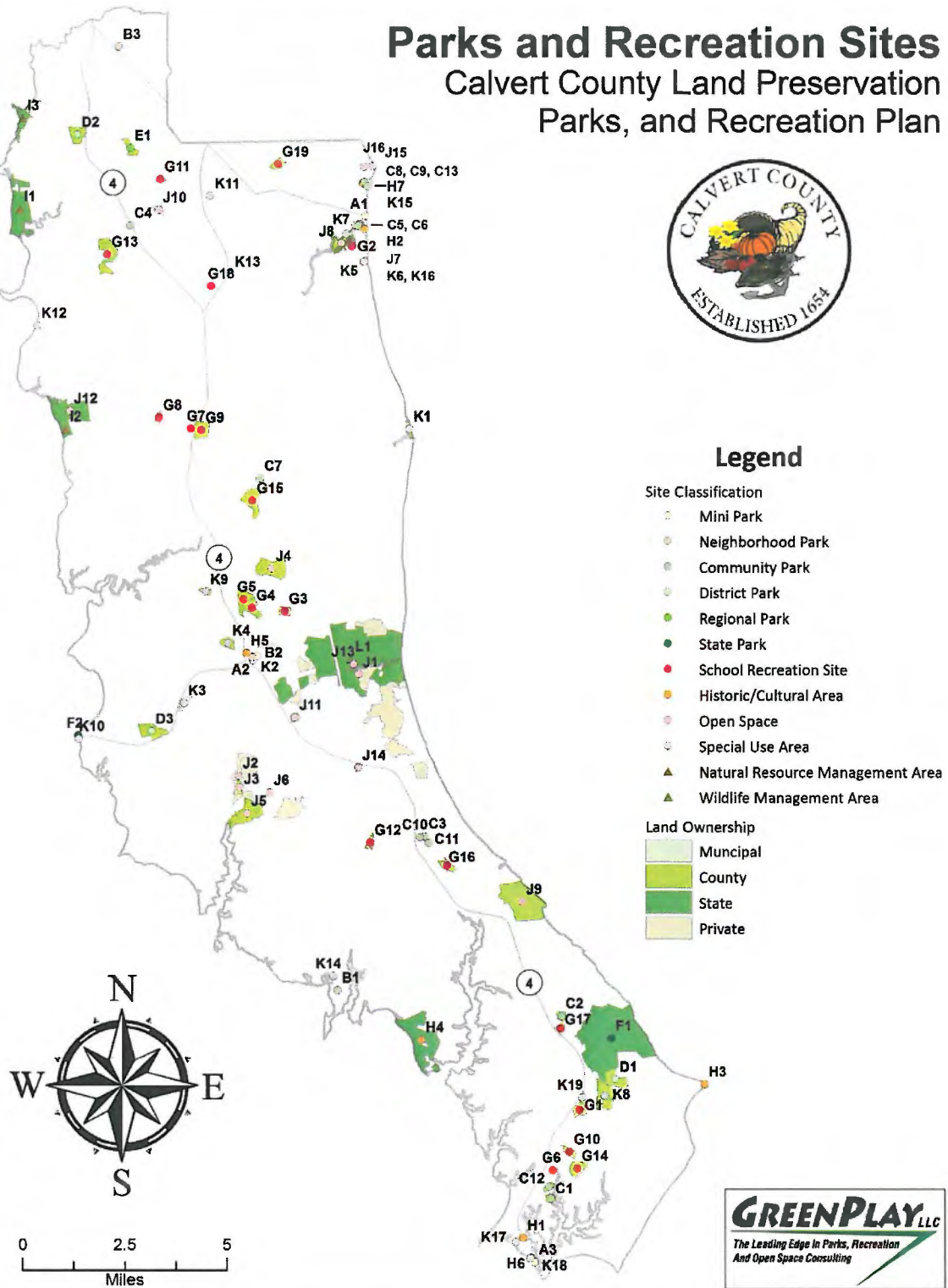


State of
Maryland
5,516 acres
(4,955 acres
are DNR lands)



Quasi-
Public/Private
with some
public access
2,206 acres

Map 3: Public Parks and Recreation Sites in Calvert County 2017



Source: GreenPlay LLC and Calvert County Department of Parks & Recreation

Parks

Mini Park

- A1 – Chesapeake Beach Veterans Memorial Park
- A2 – Courthouse Green
- A3 – Solomons Mini-Park & Comfort Station

Neighborhood

- B1 – Broomes Island Community Center
- B2 – King Memorial Park
- B3 – Twin Shields Recreation Area

Center

Community

- C1 – Annmarie Gardens
- C2 – BGE Field
- C3 – Dowell House Community Center
- C4 – Fairview Community Center & Library
- C5 – Kellam's Park Boat Ramps
- C6 – Lynwood T. Kellam Memorial Recreation Park
- C7 – Marley Run Recreation Area
- C8 – North Beach Callis Park
- C9 – North Beach Community Center
- C10 – Saint Leonard Recreation Area
- C11 – Saint Leonard Polling House & Garden of Remembrance Park
- C12 – Solomons Town Center Park
- C13 – Sunrise Garden

District

- D1 – Cove Point Park
- D2 – Dunkirk District Park
- D3 – Hallowing Point Park

Regional

- E1 – Ward Farm Recreation and Nature Park

State

- F1 – Calvert Cliffs State Park
- F2 – Hallowing Point Boat Ramp

School Recreation Site

- G1 – Appeal ES & Patuxent Elementary Recreation Area
- G2 – Beach ES Recreation Area
- G3 – Calvert ES & Calvert County Schools Recreation Areas
- G4 – Calvert HS & Career Center Ballfields
- G5 – Calvert MS Ballfields
- G6 – Dowell ES Recreation Area
- G7 – Hunting Creek Annex School Ballfields
- G8 – Huntingtown ES
- G9 – Huntingtown HS
- G10 – Mill Creek MS
- G11 – Mt. Harmony ES
- G12 – Mutual ES
- G13 – Northern MS & HS Ballfields
- G14 – Patuxent HS
- G15 – Plum Point ES & MS Ballfields
- G16 – Saint Leonard ES Recreation Area
- G17 – Southern MS
- G18 – Sunderland ES
- G19 – Windy Hill ES & MS

Historic/Cultural

- H1 – Calvert Marine Museum
- H2 – Chesapeake Beach Railway Museum
- H3 – Cove Point Lighthouse
- H4 – Jefferson Patterson Park & Museum
- H5 – Linden
- H6 – Lore Oyster House
- H7 – North Beach Bayside History & Nature Center

Natural Resource Management Area

- I1 – Hall Creek NRMA
- I2 – Kings Landing NRMA
- I3 – Merkle NRMA

Open Space

- J1 – American Chestnut Land Trust Property
- J2 – Battle Creek Cypress Swamp
- J3 – Battle Creek Nature Center
- J4 – Bennett Hughes Memorial Tree Farm
- J5 – Biscoe Gray Heritage Farm
- J6 – Calvert Nature Society property
- J7 – Chesapeake Beach Wetlands & Uplands
- J8 – Fishing Creek Park
- J9 – Flag Ponds Nature Park
- J10 – Fowler Road Open Space
- J11 – Goldstein Property
- J12 – Kings Landing Park
- J13 – Parker Creek Heritage Conservation Fund Site
- J14 – Port Republic School House
- J15 – Walton Beach Nature Preserve
- J16 – Wetlands Overlook Park

Special Use Area

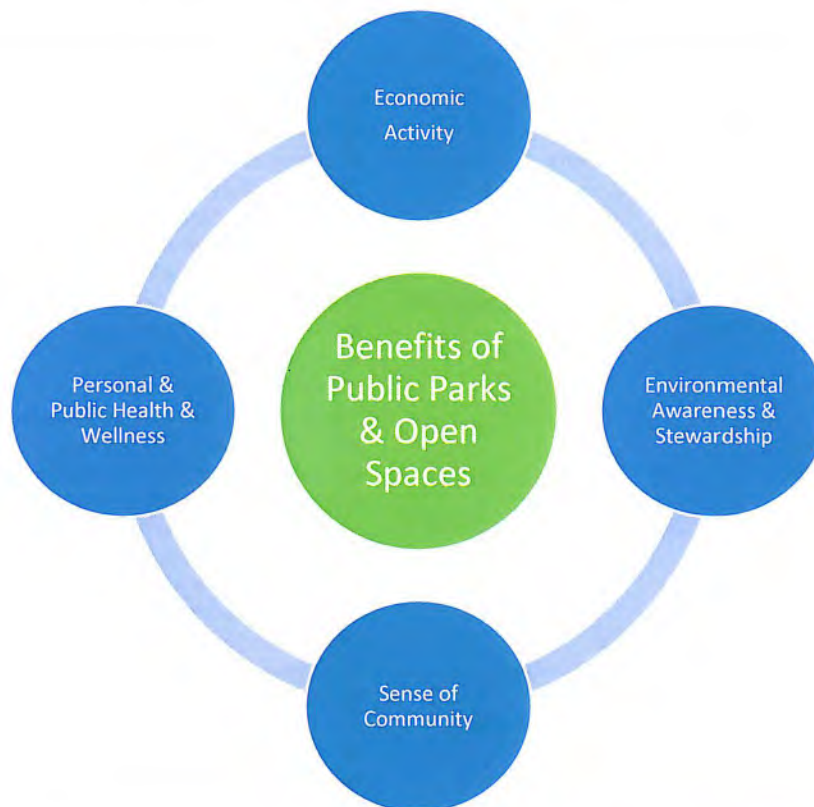
- K1 – Breezy Point Beach & Campground
- K2 – Calvert County Community Resources
- K3 – Calvert County Fairgrounds
- K4 – Calvert Pines Senior Center
- K5 – Chesapeake Beach Bayfront Park
- K6 – Chesapeake Beach Waterpark
- K7 – Chesapeake Beach Railway Trail
- K8 – Chesapeake Hills Golf Course
- K9 – Edward T. Hall Aquatic Center
- K10 – Hallowing Point Research Center
- K11 – Hutchins Pond
- K12 – Lower Marlboro Wharf
- K13 – Mt. Hope Community Center
- K14 – Nan's Cove Pier
- K15 – North Beach Waterfront Park & Boardwalk
- K16 – Northeast Community Center
- K17 – Solomons Boat Ramp & Fishing Pier
- K18 – Solomons Waterfront Park
- K19 – Southern Community Center

Wildlife Management Area

- L1 – Parkers Creek Wildlife Management Area

Significance of Public Parks, Open Spaces, and Recreation Opportunities in Calvert County

The system of public parks, recreation facilities, and open spaces in Calvert County supports a wide variety of benefits and services directly linked to the high quality of life of residents. The natural and cultural landscapes and ecological systems preserved on public lands support biodiversity, serve to mitigate flooding and impacts of climate change, and filter drinking water. The trails, sports fields, boat launches, and other public recreation amenities distributed throughout the county provide opportunities for thousands of people to engage with nature; run, play, and stay fit; and enjoy activities known to be beneficial for public health, personal well-being, and local economies.



Children in Nature

The State of Maryland recognizes that young residents have significant roles to play as future stewards of our communities and shared environment. Several major initiatives, including the State's Project Green Classroom (formerly the Partnership for Children in Nature), and statewide educational requirements in environmental literacy help provide Maryland youth with a basic understanding of the natural world. In Calvert County, the Department of Parks & Recreation offers nature and outdoor recreation programs year-round, Maryland State Parks programs engage with residents and visitors, and other private entities, such as 4-H, offer agricultural and land stewardship training for youth ages five through 18. These programs offer hands-on agricultural and natural resource-based activities, and learning experiences that fosters the development of future stewards of the environment. Several assets and programs in the community that engage children with nature include the following.

The Partnership for Project Green Classroom works collaboratively to provide opportunities for children to play and learn outdoors and promote environmental literacy.

- **Parks and Recreation Summer Camps** – Most of the camp programs offered through the Department of Parks & Recreation include outdoor recreation activities that engage children and youth ages five through 21 with the natural environment. In addition, the Department offers 14 different week-long nature camps at parks and open spaces throughout the county. The June 2017 camp program included activities at Flag Ponds Nature Park, Gilbert Run Park, Calvert Cliffs State Park, Calvert Marine Museum, Battle Creek Cypress Swamp, and Cove Point Pool.

Outdoor activities for youth at Calvert County summer camps include swimming, fishing, hiking, boating, nature engagement, and learning about the local landscape, cultural, and historic resources through hands-on activities.

- **Earth Day Celebrations** – The county's annual celebration of Earth Day is hosted at multiple parks and recreation sites. Annual activities for youth and teens include planting flowers, litter clean-ups, and other stewardship activities.
- **Natural Resources Programs** – provide opportunities that engage children, teens, families, and adults in activities in the outdoors. Programs are sponsored by the Calvert Nature Society, a 501(c)(3) that supports the natural resources engagement programs of the Department of Parks & Recreation. A full listing of current programs is available through the Calvert Nature Society online at www.calvertparks.org. Programs scheduled for Summer and Fall of 2017 include:

Programs for families:

- Meet the Osprey Families
- Fun with Fossils
- Campfire on the Beach
- Monarch Day

Programs for Teens:

- Animal Care
- Perseid Meteor Shower

Programs for Adults:

- Nature Preschool Workshop



Early Explorers Camp 2016

Image Credit: Calvert County Natural Resources Division

Calvert Stewards Volunteer Opportunities:

- Garden Club
- Salamander Study
- Warbler Nest Box Monitoring

- **CHESPAX** – The environmental education program of the Calvert County Public School System where Board of Education staff partners with other county agency staff to provide hands-on environmental education experiences. The program utilizes local natural areas as outdoor classrooms for teaching science, and relationship building with the natural environment. As of 2017, the program operated as a cooperative effort between the Board of Education, Calvert County Natural Resources Division, Calvert Marine Museum, Annemarie Gardens, Calvert County Solid Waste Division, and Jefferson Patterson Park and Museum.

B. Existing System of Public Parks, Recreation Areas, and Open Spaces

Introduction

Calvert County's system of publicly accessible parks and recreation sites totals nearly 12,000 acres. The Maryland Department of Natural Resources, Calvert County, and incorporated municipalities of Chesapeake Beach and North Beach were the major providers of land, infrastructure, and programs that provided public recreation opportunities throughout the county. **Appendix D** includes a detailed inventory of public parks, recreation sites, and open spaces in Calvert County.

Federal Recreation Amenities

Although there are no parks or preserves operated by the federal government in Calvert County, the National Park Service manages several significant regional trails and driving routes that link together sites of national historical and cultural significance. National trails that wind through the county include:



Captain John Smith Chesapeake National Historic Trail – links at least 13 sites in Calvert County related to the explorations of John Smith, with other relevant historical sites throughout the region.

Star-Spangled Banner National Historic Trail – links sites significant to the War of 1812 in Calvert County with others in the region.



Chesapeake Bay Gateways and Watertrails Network – links over 170 sites that tell the story of connections between people and nature in the Chesapeake region. Sites in the network include historic sites, communities, trails, parks, wildlife refuges, maritime museums, and other culturally and environmental significant sites.

In addition to these national trails, the Department of Defense operates the Navy Recreation Center Solomons. This site provides lodging and recreation amenities for military members and families, but does not accommodate public use.



State Parks, Recreation Sites, and Open Spaces

The Maryland Department of Natural Resources manages nine properties, totaling 4,955 acres in Calvert County in 2016. Six of the nine properties, and majority of Department acreage provides public outdoor recreation opportunities including hiking, biking, camping, fishing, boating, paddling, hunting, and nature appreciation. The remaining three properties housed Department operations focused on scientific research, natural resource conservation, and waterway management operations. The Department of Natural Resources properties are listed in **Table 2**.



*Calvert Cliffs State Park
Image Credit: Maryland Department of Natural Resources*

Additionally, the State of Maryland Department of Planning manages and operates Jefferson Patterson Park and Museum in St. Leonard, which provides year-round public programs, recreation activities including 5k fun-runs and arts in the park, and amenities including museums, trails, and canoe and kayak access to the Patuxent River. In total, the State of Maryland provides over 5,500 acres of public parks and open space areas in Calvert County, with the Department of Natural Resources managing 90 percent these lands.

Table 2: Natural Resources Lands Managed by State of Maryland Department of Natural Resources

DNR Properties	Acres
Calvert Cliffs State Park	1,311
Calvert Marine Police Radio Tower	5
Hall Creek NRMA	383
Hallowing Point Boat Ramp	6
Hallowing Point Research Center	1
Kings Landing NRMA	1,258
Merkle NRMA	113
Molly's Leg Dredge Spoil Site	2
Parkers Creek WMA	1,877
Total Acres:	4,955

Source: Maryland DNR FY2016 DNR Owned Lands Acreage Report

County and Municipal Parks, Recreation Sites, and Open Spaces

Calvert County and the municipalities of Chesapeake Beach and North Beach manage 4,275.5 acres of parks, open spaces, and recreation facilities. Additionally, these providers offer a variety of organized sports, recreation, and leisure programs that cater to all ages and interests. Parks and open spaces in Calvert County are treasured for the recreation opportunities they provide, the natural resources they preserve, and the environmental and social functions they serve. Many county and municipal parks provide opportunities for active, facility-based recreation and natural resource-based recreation.

Calvert County and municipalities of North Beach and Chesapeake Beach parks, recreation areas, and open space areas are classified into the following categories:

1. **Mini Parks** – smallest of the county designated park-types. Mini parks are generally one acre or less in size and designed to address a location-specific recreation need. Mini parks include:
 - Chesapeake Beach Veterans Memorial Park
 - Courthouse Green
 - Solomons Mini-Park & Comfort Station
2. **Neighborhood Parks** – are designed to be the recreational and social hub of a neighborhood and include small open space areas and/or developed recreation facilities. These parks are generally less than ten acres in size. Neighborhood parks in in the County included:
 - Broomes Island Community Center
 - King Memorial Park
 - Twin Shields Recreation Area

3. **Community Parks** – are designed to meet the recreational needs of multiple neighborhoods or larger sections of the community, as well as preserving open spaces and natural landscapes. In 2017, there were 12 community parks in Calvert County:
 - Annmarie Gardens
 - BGE Field
 - Dowell House Community Center
 - Fairview Community Center & Library
 - Kellam’s Park Boat Ramps
 - Lynwood T. Kellam Memorial Recreation Park
 - Marley Run Recreation Area
 - North Beach Callis Park
 - North Beach Community Center
 - Saint Leonard Polling House & Garden of Remembrance Park
 - Solomons Town Center Park
 - Sunrise Garden

4. **District Parks** – are designed to serve as large, active recreation hubs in each of Calvert County’s three election districts. These sites provide fields, courts, and associated recreation infrastructure for team and individual sports and recreation activities. There are three district parks in Calvert County:
 - Cove Point Park
 - Dunkirk District Park
 - Hallowing Point Park

5. **Regional Parks** – are designed to serve the needs of a large portion of the County and provide developed recreation facilities, such as sports fields and associated infrastructure, and/or preserved natural areas and open spaces. Regional parks are generally larger than 50 acres in size. Calvert County manages one regional park:
 - Ward Farm Recreation and Nature Park

6. **School Recreation Parks** – are the portion of a school or public educational institution available for public recreation use outside of school hours and usage. Limitations on public access and use varies by school site. In 2017, there were 19 school recreation sites in Calvert County including:
 - Appeal ES & Patuxent Elementary Recreation Area
 - Beach ES Recreation Area
 - Calvert ES & Calvert County Schools Recreation Areas
 - Calvert HS & Career Center Ballfields
 - Calvert MS Ballfields
 - Dowell ES Recreation Area
 - Hunting Creek Annex School Ballfields
 - Huntingtown ES
 - Huntingtown HS
 - Mill Creek MS
 - Mt. Harmony ES
 - Mutual ES
 - Northern MS & HS Ballfields
 - Patuxent HS
 - Plum Point ES & MS Ballfields
 - Saint Leonard ES Recreation Area
 - Southern MS
 - Sunderland ES
 - Windy Hill ES & MS

7. **Historic/Cultural Area** – land on which the primary recreational activities are dependent on the presence of one or more cultural, historical, or archaeologically significant resources.
 - Calvert Marine Museum
 - Chesapeake Beach Railway Museum
 - Cove Point Lighthouse
 - Linden
 - Lore Oyster House
 - North Beach Bayside History & Nature Center

8. **Special Use Areas** – these sites serve a specific, single purpose. Examples include golf courses or boat ramps. There are 19 special use areas in Calvert County including:
 - Breezy Point Beach & Campground
 - Calvert County Community Resources
 - Calvert County Fairgrounds
 - Calvert Pines Senior Center
 - Chesapeake Beach Bayfront Park
 - Chesapeake Beach Waterpark
 - Chesapeake Beach Railway Trail
 - Chesapeake Hills Golf Course
 - Edward T. Hall Aquatic Center
 - Hallowing Point Research Center
 - Hutchins Pond
 - Lower Marlboro Wharf
 - Mt. Hope Community Center
 - Nan's Cove Pier
 - North Beach Waterfront Park & Boardwalk
 - Northeast Community Center
 - Solomons Boat Ramp & Fishing Pier
 - Solomons Waterfront Park
 - Southern Community Center

9. **Open Space/Natural Resource Lands** – these areas preserve natural systems, unique landscapes, and/or local areas of unique social or ecological value. These areas offer outdoor recreation opportunities compatible with the natural landscape, cultural heritage, and ecological values of the site.
 - American Chestnut Land Trust Property
 - Battle Creek Cypress Swamp
 - Battle Creek Nature Center
 - Bennett Hughes Memorial Tree Farm
 - Biscoe Gray Heritage Farm
 - Calvert Nature Society Property
 - Chesapeake Beach Wetlands & Uplands
 - Fishing Creek Park
 - Flag Ponds Nature Park
 - Fowler Road Open Space
 - Goldstein Property
 - Kings Landing Park
 - Parker Creek Heritage Conservation Fund Site
 - Port Republic School House
 - Walton Beach Nature Preserve
 - Wetlands Overlook Park

A detailed inventory of all public parks, recreation sites, and open spaces in Calvert County is included in **Appendix D**.

C. Responsibilities and Resources of County Departments

The County's provision of parks and recreation infrastructure and services is managed by multiple departments within the local government structure. Each agency's area of expertise is utilized in the planning, development, maintenance, and improvement the facilities and programs offered to residents and visitors. In July 2017, the County reorganized portions of its government structure. As part of the restructuring the Parks & Recreation Division, and Natural Resources Division were merged into a new Department of Parks & Recreation. Previously, these two Divisions were part of the county's Department of General Services.



- **Department of Planning & Zoning** – coordinates all land use planning, managed development review, and application of the zoning ordinance. The Department led the planning and development of the Land Preservation, Parks, and Recreation Plan.
- **Department of Parks & Recreation** – this newly created county department combines the roles and responsibilities of the Parks and Recreation Division and the Natural Resources Division. These two divisions were formerly part of the Department of General Services and merged to form one Department in the summer of 2017. Given that the Department is new, data in this plan are presented for the former Parks and Recreation Division and Natural Resources Division.



- **Parks and Recreation Division** – focuses on providing facilities, programs, and opportunities for residents and visitors opportunities to engage in facility-based sports, fitness, and recreation activities at “active” recreation parks, community centers, and public-school recreation areas. As of May 2017, the Division employed:
 - ♦ 42 full time, merit employees
 - ♦ 284-part time, seasonal/summer staff
 - ♦ 499 volunteers

As of May 2017 the Parks and Recreation managed 14 parks and recreation sites, totaling approximately 566 acres. Facilities at these sites range from a public beach to athletic fields.

- **Natural Resources Division** – focuses on the preservation, management, and operation of natural areas for the purpose of providing compatible outdoor recreation and educational opportunities for the public. Several sites also include significant cultural resources, with interpretive programs offered. As of May 2017, the Division employed:
 - ♦ 9.5 full time, merit employees
 - ♦ 22-part time, seasonal/summer staff
 - ♦ 106 volunteers

As of May 2017, the Natural Resources Division manages nine natural resources sites, totaling approximately 1,500 acres. Facilities at these sites include boat ramps, beaches, equestrian trails, and boardwalks, along with forested and open meadow habitats.

- **Parks and Recreation Board** – this nine-member board is appointed by the Board of County Commissioners with the mission to aid and advise the Parks and Recreation Division in the provision of recreational facilities and programs and the establishment of policy for the operation of the same.
- **Department of Community Resources – Office of Aging** – operates senior centers and provides recreation, education, leisure, and volunteer opportunities for senior citizens throughout the county. The Commission on Aging, appointed by the Board of County Commissioners, serves an advisory role to the Office of Aging.

Partnerships

The work of Calvert County to provide public recreation opportunities, and engagement with nature is supported through partnerships with public and private organizations and assistance from citizen volunteers. Calvert County's parks and recreation programming is heavily supported by the work of approximately 600 volunteers annually. Natural resources programming is largely dependent on support provided through strategic partnerships with local and regional non-profit organizations. The Calvert Nature Society, a 501(c)(3) organization, was

established specifically to support the county's Natural Resources Division. In addition to programming, the Society raises funds through membership and program fees, donations, and securing of grants.

Additional partners of the Natural Resources Division include:

- | | |
|--|---|
| • American Chestnut Land Trust | • Dominion Calvert Cliffs Nuclear Power Plant |
| • Cove Point Heritage Trust | • Calvert County Forestry Board |
| • Jefferson Patterson Park & Museum | • Calvert K-9 Search and Rescue |
| • Maryland Department of Natural Resources | • Maryland Ornithological Society |
| • Maryland Historical Trust | • Southern Maryland Audubon |
| • Soil Conservation District | • U.S. Department of the Navy (REPI) |
| • Maryland Cooperative Extension | • Natural History Society of Maryland |
| • Maryland Forest Service | • Private land owners (countywide) |
| • Patuxent Tidewater Land Trust | |

Calvert Nature Society

- *Dedicated to the development of responsible environmental ethic*
- *Provides opportunities for environmental education and compatible recreation*
- *Preserves the natural heritage of Calvert County*



Budgets and Funding for County Parks and Recreation Assets

The operation and maintenance of county parks and recreation facilities is primarily managed by the Department of Parks & Recreation. The new Department was created in the final stages of the preparation of this Plan, and merged the roles and responsibilities of the Parks and Recreation and Natural Resources divisions. As no prior year budgets exist for the Department, this Plan reviews the county's FY2017 approved budgets for the two divisions.

Operating Funds –Parks and Recreation Division

Funding for the general operations and maintenance of county owned parks and recreation facilities approved for FY2017 totaled approximately \$3.6 million. As illustrated in **Table 3**, most of this budget was dedicated to the salaries of staff who directly provide and support the public parks, recreation facilities, and programs that tens of thousands of residents utilize on an annual basis.

Table 3: Parks and Recreation Division FY2017 Operations Budget

Salaries	\$2,994,503
Operating	\$453,539
Utilities	\$194,604
Maintenance and Repair Projects	\$85,000
Contracted Services	\$76,000
Capital Outlay	\$ 55,100
Total	\$3,858,746

Source: Calvert County Parks and Recreation Division

Operating Funds –Natural Resources Division

Funding for the general operations and maintenance of county owned natural resources facilities approved for FY2017 totaled approximately \$834,000. As illustrated in **Table 4**, most of the budget was dedicated to the salaries of staff who directly provide and support the public parks, natural resources, and programs that tens of thousands of residents utilize on an annual basis. The Division's FY2016 budget and expenses are noted in **Table 5**.

Table 4: Natural Resources Division FY2017 Operations Budget

Salaries	\$655,819
Operating	\$75,675
Utilities	\$49,250
Maintenance and Repair Projects	\$12,500
Contracted Services	\$7,500
Capital Outlay	\$33,000
Total	\$833,744

Source: Adopted Operating and Capital Budge Fiscal Year 2017, Board of County Commissioners, Calvert County

Table 5: Natural Resources Division Facility Operation and Programming Budget and Expenses FY2016

Revenue		Expenditures	
Program Revenue	\$17,469	Salaries	\$600,257
Rents & Concessions	\$23,808	Operating	\$34,743
Flag Ponds Entrance Fees	\$50,014	Utilities	\$51,856
Boat Ramp Fees	\$4,759	Capital Outlay	\$32,762
Hughes Tree Farm Rent	\$2,400	Contracted Services	\$25,935
Salary Reimbursement ¹	\$12,118	Contingency	\$2,254
General Fund Contribution	\$637,239		
Total	\$747,807	Total	\$747,807

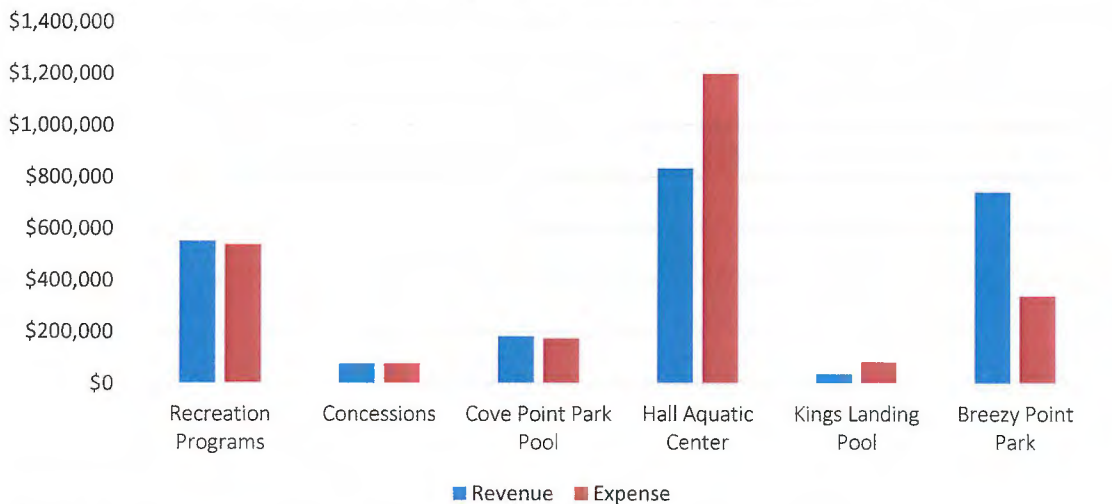
Source: Calvert County Natural Resources Division

1. Calvert Nature Society and Board of Education provide salary funds for summer camp counselors and CHESPAX staff, respectively

Self-Sustaining Programs and Enterprise Funds –Parks and Recreation Division

The Parks and Recreation Division charges modest fees for participation in program offerings and attendance at events. Funds collected through participation fees generally cover the county's baseline costs for staffing and operation of facilities that provided existing recreation programs and amenities for the public. For example, **Figure 2** provides 2016 summary data for the Division's major expenses and revenue generating programs and sites. As illustrated, revenue exceeded expenses for the provision of recreation programs, concessions, and operations at Cove Point Park Pool and Breezy Point Park. Expenses for the operation of the Hall Aquatic Center and Kings Landing Pool exceeded revenue. Funding for continued operation of non-revenue generating operations for the public benefit is drawn from other revenue generating programs and to a limited extent, the county's general fund.

Figure 2: Parks and Recreation Division Major Expenses and Revenues FY2016



Source: Calvert County Parks and Recreation Division

Although practical in many respects, and referenced as “self-sustaining,” as noted in **Table 6**, Calvert County’s funding model does not generate funds for necessary capital reinvestment in existing parks and recreation facilities, nor for supporting the acquisition of land or development of new park facilities to meet growing user demands. The existing funding model also limits the ability of the Parks and Recreation Division to grow existing program offerings, create innovative programs to meet the changing needs of its user base, or to make needed improvements at existing facilities.

Table 6: Parks and Recreation Division Revenue and Expenses FY2017

Revenue		Expenditures	
Program Revenue	\$988,033	Salaries	\$1,246,248
Rents & Concessions	\$198,366	Benefits	\$322,123
Camping	\$281,000	Operating	\$411,371
General Admission	\$644,000	Utilities	\$338,065
Passes	\$256,427	Food	\$45,220
Misc. Income	\$100,650	Capital Outlay	\$1,150
General Fund Contribution	\$402,055	Self-Sustained Programs	\$480,200
Use of Prior Year Fund Balance	\$124,476	Contracted Services	\$108,500
		Contingency	\$42,130
Total	\$2,995,007	Total	\$2,995,007

Source: Calvert County Parks and Recreation Division

The Parks and Recreation Division also operates the Chesapeake Hills Golf Course through fees collected from golfers and other users of the facility. As noted in **Table 7**, in FY2017, revenues and operating expenses for the golf course totaled slightly less than \$1 million. The parks and recreation quarterly report to the Board of County Commissioners in November 2016 indicated that facility usage rose by 6.5 percent, and revenues had increased by 13 percent at the golf course over the same period in 2015. The Parks and Recreation Division also reported that the number of tournaments hosted at the site increased by 75 percent between the summer of 2015 and summer of 2016.

Table 7: Chesapeake Hills Golf Course Funding FY2017 –Parks and Recreation Division

Revenue		Expenditures	
Charges for Services	\$812,902	Salaries	\$401,957
Other Revenue	\$13,000	Benefits	\$149,796
General Fund Contribution	\$166,200	Operating	\$406,215
		Capital Outlay	\$1,375
		Contracted Services	\$11,000
		Contingency	\$21,759
Total	\$992,102	Total	\$992,102

Source: Calvert County Parks and Recreation Division

Capital Improvement Program

Volume II, Section Five of Calvert County's Adopted Operating and Capital Budget for FY2017 included recurring and non-recurring funding for capital improvements to the county's parks and recreation system. The recreation resources capital improvement program included funding approved for FY2017, and funding requests for FY2018 through FY2022 as illustrated in **Table 8**. Approximately \$1.7 million in non-recurring capital improvement funds were dedicated for parks and recreation system improvements in FY2017. This equated to six percent of the FY2017 countywide capital improvement program.

Table 8: FY2017 Recreation Resources Capital Improvement Funding

FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
\$1,695,000	\$3,320,000	\$2,292,000	\$2,489,000	\$2,724,000	\$1,248,000

Source: Calvert County Adopted Budget FY 2017

Overall, capital funding for the enhancement of the county's parks and recreation system is projected to be substantially higher over the next four fiscal years. Such future, short-term increases in capital investment in the county's parks and recreation system is a positive trend. Conversely, the county has chosen not to allocate capital funds toward regular and recurring improvement of recreation facilities and park amenities. The lack of planned recurring capital investment minimizes the ability of the county to proactively plan for the long-term maintenance, management, and operational needs of existing assets and programs. This creates uncertainty in planning for longer term enhancement of the county's parks and recreation system. According to the county's approved budget, capital funding allocated for recreation resource improvements in FY2017 consisted of:

1. Hallowing Point Park
 - a. Lighting improvements
 - b. Comfort and concession facility enhancement
2. Ward Farm Recreation and Nature Park
 - a. Implementation of the park master plan and development of site amenities
3. Chesapeake Hills Golf Course
 - a. Course and drainage improvements
4. Battle Creek Cypress Swamp Nature Center
 - a. Exhibit renovation
5. Biscoe Gray Heritage Farm
 - a. Trail and boardwalk improvements
6. Flag Ponds Nature Park
 - a. Living shoreline installation
7. Kings Landing Park
 - a. Trail enhancements
8. Solomons Boat Ramp
 - a. Ramp renovation and expansion

The Significance of Program Open Space

Calvert County leverages annual matching grants allotted through Maryland's Program Open Space to implement projects that achieve goals for parks and recreation defined by the county's Comprehensive Plan and Land Preservation, Parks, and Recreation Plan, as well those established by the State of Maryland. Established in 1969 and administered by the Maryland Department of Natural Resources, Program Open Space receives funding through the collection of a small statewide tax on sale and transfer of ownership of real property, and disperses funds through subprograms to state and local public agencies to be used for the preservation of open space and enhancement of local outdoor recreation opportunities for the public benefit.

Program Open Space – Localside program has been used by Calvert County since the program's inception to match county funds allocated for projects to enhance the local parks and recreation system through the acquisition of land (for open space preservation, expansion of existing preserved land holdings, or for sites for future parks and recreation facilities), renovation and enhancement of existing facilities, or development of new assets. County requests for the use of Localside matching grants are made through annual program requests with the Maryland Department of Natural Resources. Calvert County's FY2017 Program Open Space Localside Annual Program proposed several dozen projects that support the recreation, parks, and open space-relevant visions, goals, and action plans of the county and state. Projects proposed for funding included the development of facilities to support water access, enhancement and expansion of trails, acquisition of land to expand existing properties, landscape and natural resource preservation, and to acquire land for the development of new parks and recreation facilities in or near town centers, where population growth is being directed.

Since 2012, Calvert County has received roughly \$1.2 million Program Open Space Localside matching grants to implement projects to enhance the county's public parks, recreation facilities, and open spaces for the benefit of residents and visitors. During this period, match grants ranged in value from \$81,667 in 2012, to \$327,084 in 2016.

According to the Maryland Department of Natural Resources, Program Open Space is good for business and the overall quality of life in Maryland. As of 2015 the program had:

- Protected 380,000 acres of land statewide.
- Awarded nearly 6,000 grants to local governments.
- Enhanced quality of communities.
- Established greenways and green infrastructure networks.
- Provided state and local park or public open space areas within 15 minutes of most residents.

2010 Comprehensive Plan Recreation Action Plan includes:

Provide a wide range of recreational opportunities for county residents.

- Promote a strong tourism economy.
- Protect and preserve unique natural, cultural, and historic resources.
- Help direct growth toward designated growth areas in accordance with the Economic Growth, Resource Protection and Planning Act.

2012-2017 Program Open Space Supported Recreation Enhancements in Calvert County:

- Dunkirk District Park – skate park
- Solomon's Town Center Park restroom and field lighting
- Hallowing Point Park improvements
- Land acquisition
- 3rd Street Park/Sunrise Garden improvements

D. Level of Service Analysis

Introduction and Focus Areas

The 2017 Land Preservation, Parks, and Recreation Plan Guidelines included new, purposefully adaptable, criteria for counties to utilize to assess the capacity of the parks and recreation system to meet existing and projected future needs of the public. Pre-2017 Guidelines placed a high emphasis on the State's "default recreational acreage goal" for counties to provide at least 30 acres of recreation land per 1,000 residents. This standard was removed from the current Guidelines.

In preparation of the 2017 Land Preservation, Parks, and Recreation Plan, a mixed methods approach was utilized to gather data and user perceptions. Findings from each focus area provided key information regarding service provision, including areas where public needs appear to be well served, and conversely, areas where significant challenges may be impacting the provision of public recreation services. The sum of all individual focus area findings provides a well-rounded understanding of the strengths, challenges, and perceived opportunities for improving the overall level of service provided by existing public recreation opportunities in Calvert County.

Level of Service Analysis Focus Areas

1. Current perceptions –online survey and public engagement findings
2. Measured participation in county Parks, Recreation, and Natural Resources Programs
3. Estimated participation in recreation, fitness, and leisure activities
4. Distribution of existing assets and ease of public access
5. Trends influencing the provision of parks and recreation services
6. Estimated economic impacts of local participation in recreation

Current Perceptions of County Parks, Recreation Amenities and Open Spaces – Engagement Session Findings and Survey Results

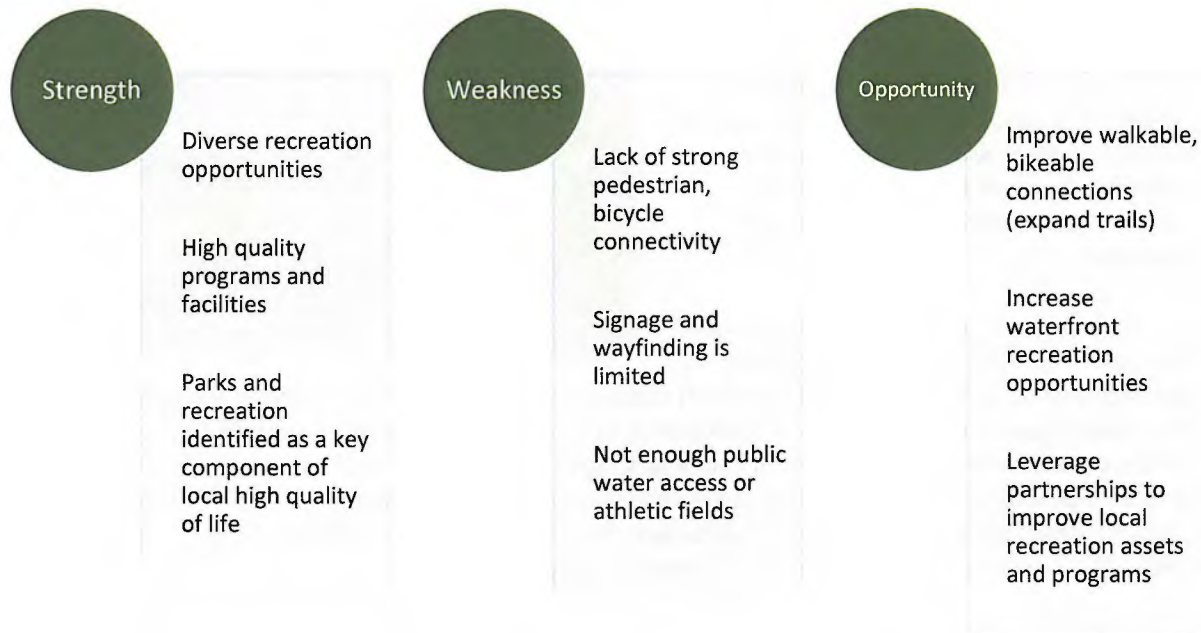
Staff and Stakeholder Engagement Sessions

Focus group sessions and a public community meeting were conducted on March 20 and 21, 2017. These meetings took place in the form of staff meetings, focus group meetings, and a public meeting. Meetings were held in Prince Frederick. The goal of these meetings was to gather information and perceptions regarding existing strengths, weaknesses, and opportunities of the county's parks, open space, and recreation offerings to guide the update of the Land Preservation, Parks, and Recreation Plan. In all, 22 members of the community participated in the information gathering sessions.

Participants included members from:

- American Chestnut Land Trust
- Girl Scouts
- Dominion
- Calvert County Park Board
- Calvert County Public Schools
- Calvert County Parks and Recreation Division
- Calvert County Natural Resources Division
- Calvert County Economic Development Committee
- Calvert Nature Society
- The Arc of Southern Maryland
- Patuxent Tidewater Land Trust
- Spider Hall Farm
- Office on Aging
- ANS Smith Development - Breezy Point Marina
- Private residents
- Local business owners

Discussions with these community members yield long lists of perceived strengths, weaknesses, and opportunities of the existing system of public parks, recreation facilities, and open spaces in Calvert County. Most participants noted they were generally satisfied with the recreation opportunities in the county, and shared their unique perspectives on where the current parks system or programs may be deficient or could benefit from improvement. Major recurring themes from these discussions are reflected in the graphic below.



Online/Open Link Survey Response Summary

As a means of gaining additional public feedback regarding parks and recreation offerings in Calvert County, an online survey was hosted in March/April 2017. The survey was hosted through the County's website and consisted of 13 questions with the option for respondents to provide additional feedback. Outreach and notification for the survey was accomplished through a press release, email blasts, and social media postings, primarily through the Department of Parks and Recreation. A total of 564 respondents completed the survey. A report of survey findings is included in **Appendix C**.

Key findings from the survey indicated:

- Nearly two-thirds (70 percent) of survey respondents indicated that they were satisfied or very satisfied with the availability of recreation opportunities in Calvert County.
- Most respondents (56 percent) indicated that the county parks and recreation facilities they visit and utilize are in "good" condition. An additional 29 percent responded that facilities were in "excellent" condition.
- Additional recreation opportunities desired by survey respondents focused on pedestrian and bicycle trails, open space, public beach access, and canoe and kayak launches. Indoor recreation facilities and expanded opportunities for skating and hockey were also desired.
- Respondents most frequently participated in walking, running, and hiking, followed by youth team sports. Other popular activities among survey respondents include nature exploration and trail usage, playground use, visiting museums or historic sites, indoor swimming, boating, and kayaking, canoeing, and stand up paddle boarding.

- Awareness, accessibility, and cost were identified as challenges to increasing park and recreation usage. Many respondents noted that they were not aware of the range of recreation opportunities in Calvert County. Many further noted challenges with accessing parks, primarily due to limited facility hours, and the distance to parks and recreation sites from some areas of the County. Cost was the third major limiting factor noted.

Measured Participation in County Parks and Recreation Programs

Calvert County provides a wide variety of parks, recreation facilities, programs, and services that are tied to the high quality of life of residents. The majority of Calvert County's parks and outdoor recreation amenities are open for public use from dawn to dusk throughout the year. Although no practical means currently exist to track all use of public parks, recreation facilities, and open spaces, program participation and registration data from the Parks and Recreation Division and Natural Resources Division indicates strong and growing public use of Calvert County's recreation and natural resource programs.

Parks and Recreation Division – Participation Highlights

The Division offers a variety of classes, sports, and recreation activities that provide opportunities for all ages and abilities to participate. The Division's quarterly program catalog is available online at <http://www.co.cal.md.us/index.aspx?NID=115>.

The Department of Parks & Recreation provides opportunities for healthful, enjoyable, lifetime leisure activities to our entire community through a comprehensive program of recreational activities in the community centers, aquatic facilities, the public schools, and the county parks.

Data tracked by the Parks and Recreation Division from September 2015 through August 2016 indicates high levels of participation in programs and activities, and use of facilities. As reported for this period:

- A total of 43,072 individuals from 16,369 households in Calvert County had registered to participate in the Division's programs, activities, reserve facilities, play golf, or purchases passes.
- There were 2,488 programs and activities offered.
- Individual participants in open/drop-in recreation programs totaled 33,921.
- Community and activity center were reserved for 4,388 functions, parties, and community group meetings.
- A total of 14,608 games and practices were scheduled on county athletic fields (parks and recreation, and school fields).
- Park pavilions and shelters were reserved 787 times for group functions.
- Park and Recreation operated aquatic facilities reported a total of 173,870 individual daily swimmers.
- Chesapeake Hills Golf Course logged 24,593 reservations for tee times. Most reservations were for traditional golf; however, over 300 reservations were made for footgolf.
- From May 2016 through October 2016, Breezy Point Beach and Campground usage included 50,454 daily admissions, 697 camp site rentals, and 74 reservations for the grove/beach area.

Natural Resources Division Participation Highlights

The Natural Resources Division manages and operates the county's natural resource areas and provides outdoor recreation and educational opportunities for the public. The Division works with its partners to provide environmental education field experiences for all county school children in grades one, three, and five, as well as outdoor recreation and educational programs for the public. A comprehensive volunteer program is also managed by the Division and Calvert Nature Society.

Calvert County's FY2017 Commissioner's Budget reported the following statistics on the Natural Resource Division's programs and initiatives:

- 100 percent of Calvert County 1st, 3rd, and 5th grade classes were engaged in Natural Resources Division outdoor learning experiences in FY2015, FY2016, and FY2017.
- At least 130 public programs were projected to be provided in FY2016 and FY2017. In FY2015 164 programs were offered, up from 140 programs provided in FY2014.
- The number of volunteers and volunteer hours invested in Division efforts is increasing.

The Natural Resource Division's 2016 Annual Report recorded visitation, facility rental, and program participation data. As reported by the Division:

- A total of 2,910 individuals participated in the Division's programs, activities, camps, and volunteer workshops.
- There were 244 programs and activities offered to the public.
- A total of 12,340 individuals from 417 separate groups (schools, scouts, community, and other groups) participated in activities provided by the Natural Resources Division.
- Wisner Hall, pavilions, campground, and the equestrian ring spaces were reserved for 137 functions, parties, horse shows, scout campouts, and community group meetings.
- In addition to attendees of planned programs and events, over 48,000 people visited the three primary nature parks (Flag Ponds, Battle Creek, and Kings Landing) in 2016.

Estimated County Participation in Recreation, Sports, and Leisure Activities

As detailed in **Appendix B**, Esri Business Analyst was utilized to estimate Calvert County's adult participation in a variety of recreation, fitness, and leisure activities in 2016. The most popular activities by estimated adult participation are highlighted in **Figure 3**.

Figure 3: Estimated Adult Participation 2016 – Top Activities in Calvert County



Statewide, participation in outdoor recreation activities is estimated to be high. According to the Outdoor Industry Association, 51 percent of Maryland residents, or nearly three million people, participate in outdoor recreation activities annually, with Maryland residents more likely to participate in trail and road running than the average American.¹

“Communities across Maryland recognize that outdoor recreation supports health, contributes to a high quality of life and—perhaps most importantly—attracts and sustains employers and families. Investing in outdoor infrastructure attracts employers and active workforces, ensuring those communities thrive economically and socially.”

Outdoor Industry Association – Maryland Outdoor Recreation Economy Report

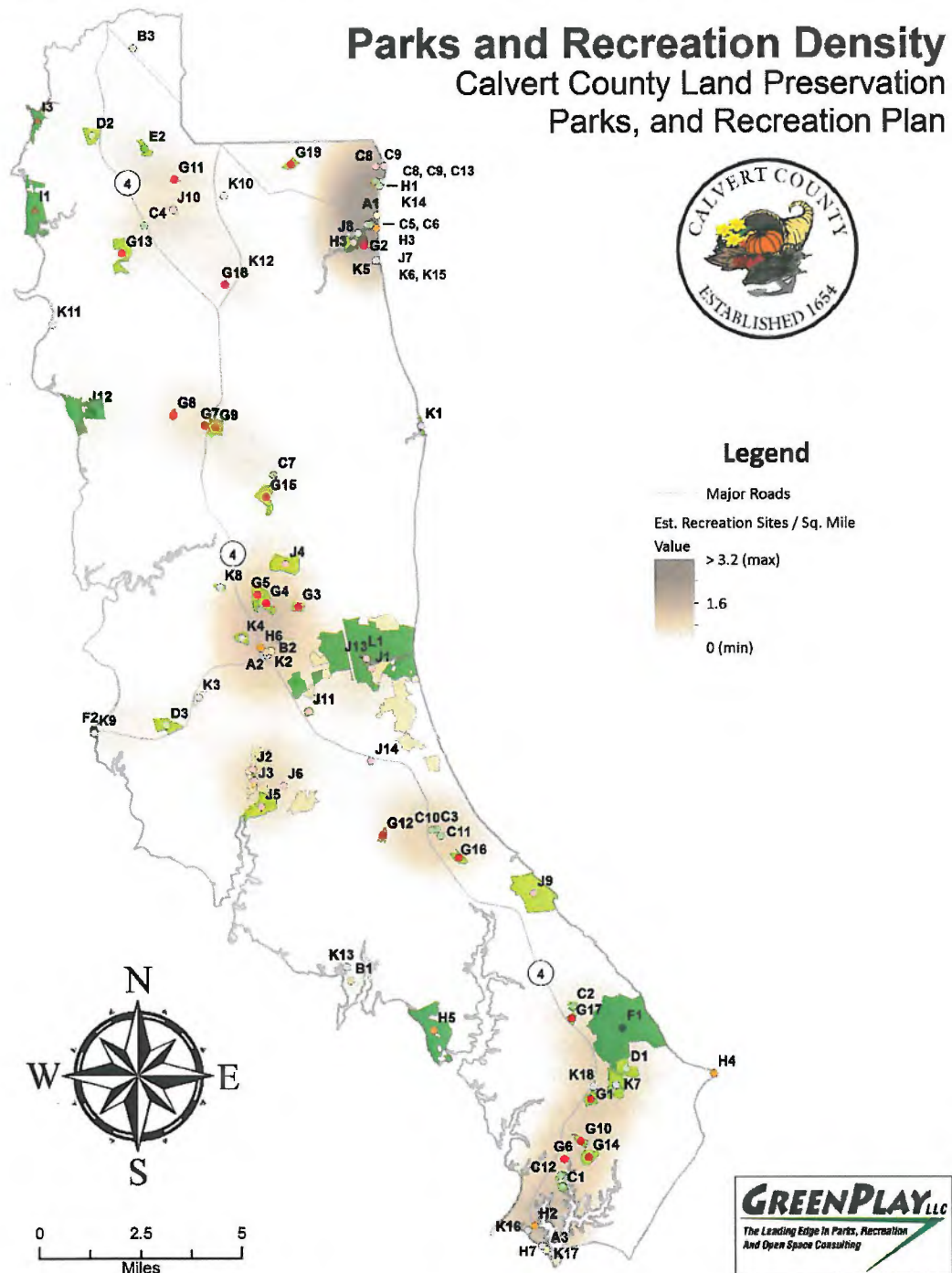
Distribution of Parks, Recreation Sites, and Open Space Assets (Drive-Time Proximity Analysis)

Public parks and recreation assets are located throughout Calvert County. The distribution of these community amenities should ideally provide residents living in all parts of the county with access to recreation opportunities close to where they live. County staff and stakeholders who participated in the planning process identified reliance on the automobile to travel from home to parks and other public recreation amenities. Although they expect to drive to access most community amenities, participants ideally desired to drive less than 10 minutes to access a recreation amenity, but were generally willing to travel up to 20 minutes to access recreation opportunities.

As illustrated in **Map 4**, public parks, open spaces, and recreation sites are clustered in their highest density in the area of North Beach, Chesapeake Beach, Lusby, and Prince Frederick. Most other sites are loosely grouped along the Route 4 corridor.

¹Maryland Outdoor Recreation Economy Report; Outdoor Industry Association; July 26, 2017; <https://outdoorindustry.org/resource/maryland-outdoor-recreation-economy-report/>

Map 4: Density of Parks, Open Space, and Recreation Sites in Calvert County



Source: GreenPlay LLC and Calvert County Department of Parks and Recreation

The following maps illustrate the distribution of public parks, recreation sites, and open spaces in Calvert County, and focus on identifying sites with specific, popular recreation amenities, as well as 10-minute and 20-minute drive-time areas to these sites. Areas illustrated within a 10-minute driving distance of sites are considered to have good access to sites with specified recreation amenities being studied. Areas located within between 10 and 20 minutes of drive time from a park are considered to have moderate access to sites with specified amenities being studied. The amenities at park sites in Calvert County selected for study include those with athletic fields, basketball courts, tennis courts, trails, and sites with public water access. These amenity types are consistent with those studied in the previous Land Preservation, Parks, and Recreation Plan.

Based on the drive time analysis, residents throughout the county have generally good access to recreation sites. However, access to sites with certain types of amenities, such as recreation sites with tennis courts, are only moderately accessible from most areas of Calvert County. The more highly populated areas of Prince Frederick, Chesapeake Beach, and Lusby tend to include higher densities of existing recreation sites than less densely populated areas of the county. Larger, foldout versions of these maps are included in **Appendix E**. This study helps identify potential challenges with access to certain amenities throughout the county. In the future, the Maryland Department of Natural Resources Park Equity Analysis tool could be utilized to gain additional insight into equitable access to parks and recreation opportunities.



Good Access

10 minute drive or less



Moderate Access

10 - 20 minute drive



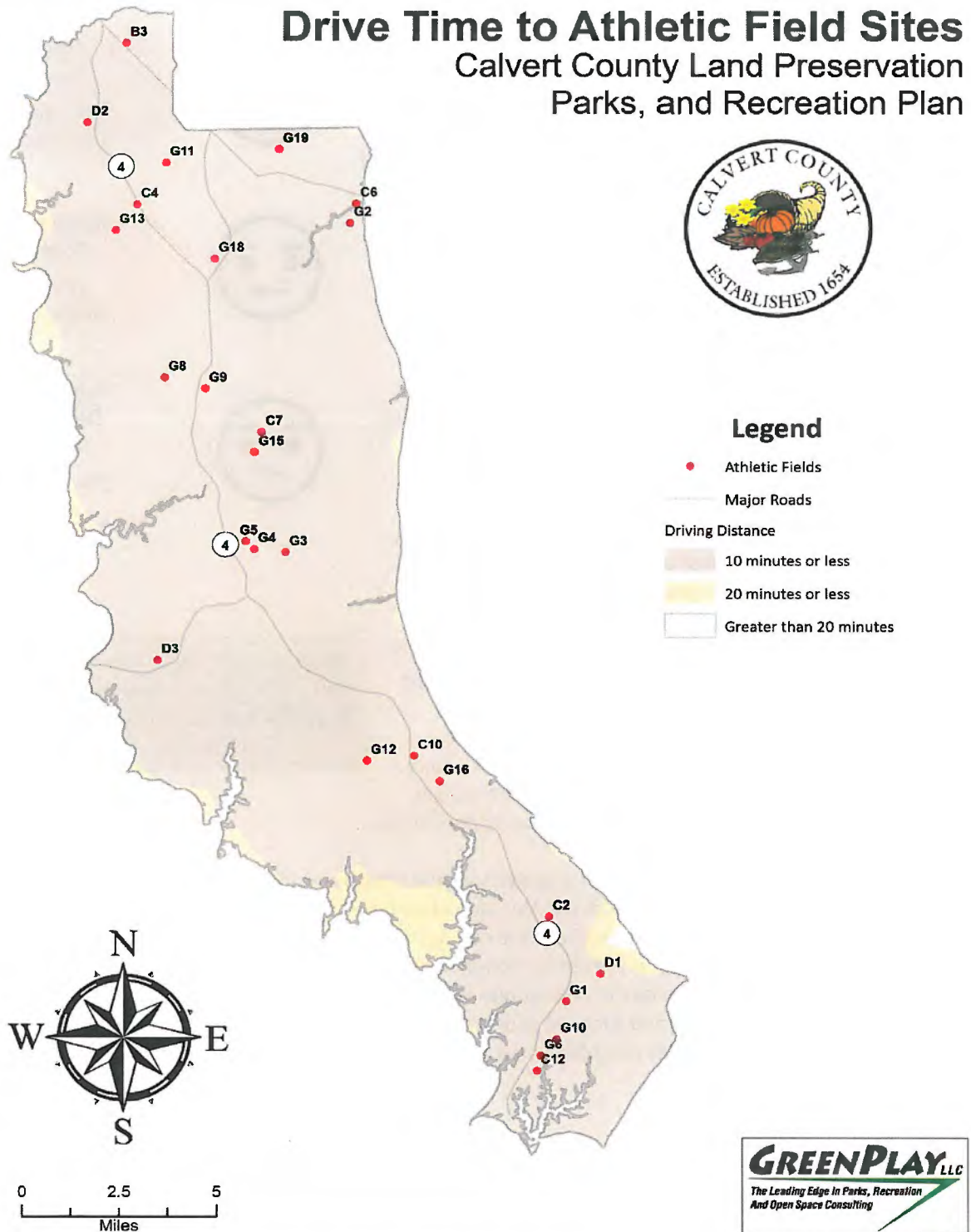
Less than Desirable Access

20+ minute drive

Drive-time analysis maps review sites with publicly accessible athletic fields, basketball courts, tennis courts, trails, and water access.

While informative, GIS-based proximity analysis should not be considered a complete measure of park access. The proximity analysis included in this plan provides a snapshot of distribution of parks and specified recreation amenities throughout the county, which is generally good. However, despite a favorable geographic distribution of assets, community input indicated that other barriers to access exist; primarily there is some lack of community awareness about the full spectrum of recreation opportunities in the county, and a lack of pedestrian and bicycle connectivity. The limited road network beyond the Route 2-4 corridor contributes to certain areas less accessible than others.

Map 5: Driving Distance to Sites with Athletic Fields

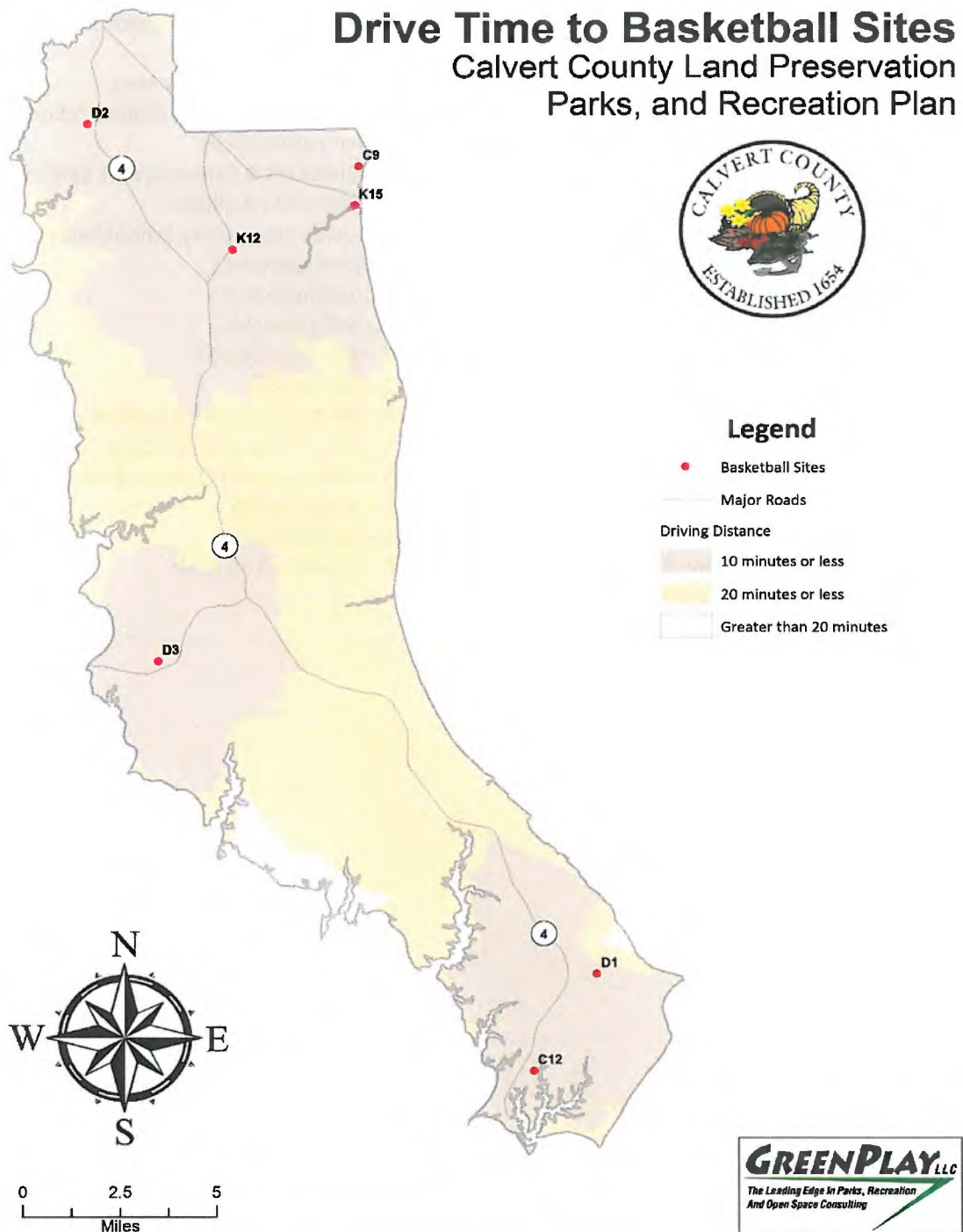


Source: GreenPlay LLC and Calvert County Department of Parks & Recreation

From most points within the county, there is at least one public park or recreation facility with athletic fields within a 10-minute drive, as illustrated in the gray shaded areas on **Map 5**. As of September 2017, there were over two dozen sites in Calvert County with publicly accessible athletic fields including:

Parks	
<i>Neighborhood</i>	
B3 – Twin Shields Recreation Area Center	
<i>Community</i>	
C2 – BGE Field	
C4 – Fairview Community Center & Library	
C6 – Lynwood T. Kellam Memorial Recreation Park	
C7 – Marley Run Recreation Area	
C10 – Saint Leonard Recreation Area	
C12 – Solomons Town Center Park	
<i>District</i>	
D1 – Cove Point Park	
D2 – Dunkirk District Park	
D3 – Hallowing Point Park	
<i>School Recreation Site</i>	
G1 – Appeal ES & Patuxent Elementary Recreation Area	
	G2 – Beach ES Recreation Area
	G3 – Calvert ES & Calvert County Schools Recreation Areas
	G4 – Calvert HS & Career Center Ballfields
	G5 – Calvert MS Ballfields
	G6 – Dowell Elementary School Recreation Area
	G8 – Huntingtown ES
	G9 – Huntingtown HS
	G10 – Mill Creek MS
	G11 – Mt. Harmony ES
	G12 – Mutual ES
	G13 – Northern MS & HS Ballfields
	G15 – Plum Point ES & MS Ballfields
	G16 – Saint Leonard ES Recreation Area
	G17 – Southern MS
	G18 – Sunderland ES
	G19 – Windy Hill ES & MS

Map 6: Driving Distance to Sites with Basketball Courts



Source: GreenPlay LLC and Calvert County Department of Parks & Recreation

Seven parks and recreation sites provide basketball courts for public use. Most of these sites are located in the northern portion of the county. Only one site (D2 Hallowing Point Park) is located within a 10-minute drive of Prince Frederick. As illustrated in **Map 6**, roughly half of the county area is within a 10-minute drive of a recreation site with basketball courts. The remaining half of Calvert County is within a 20-minute drive of a site with public basketball courts. Sites with basketball courts included:

Parks

Community

C9 – North Beach Community Center

C12 – Solomons Town Center Park

District

D1 – Cove Point Park

D2 – Dunkirk District Park

D3 – Hallowing Point Park

Special Use Area

K13 – Mt. Hope Community Center

K16 – Northeast Community Center

Map 7: Driving Distance to Sites with Tennis Courts

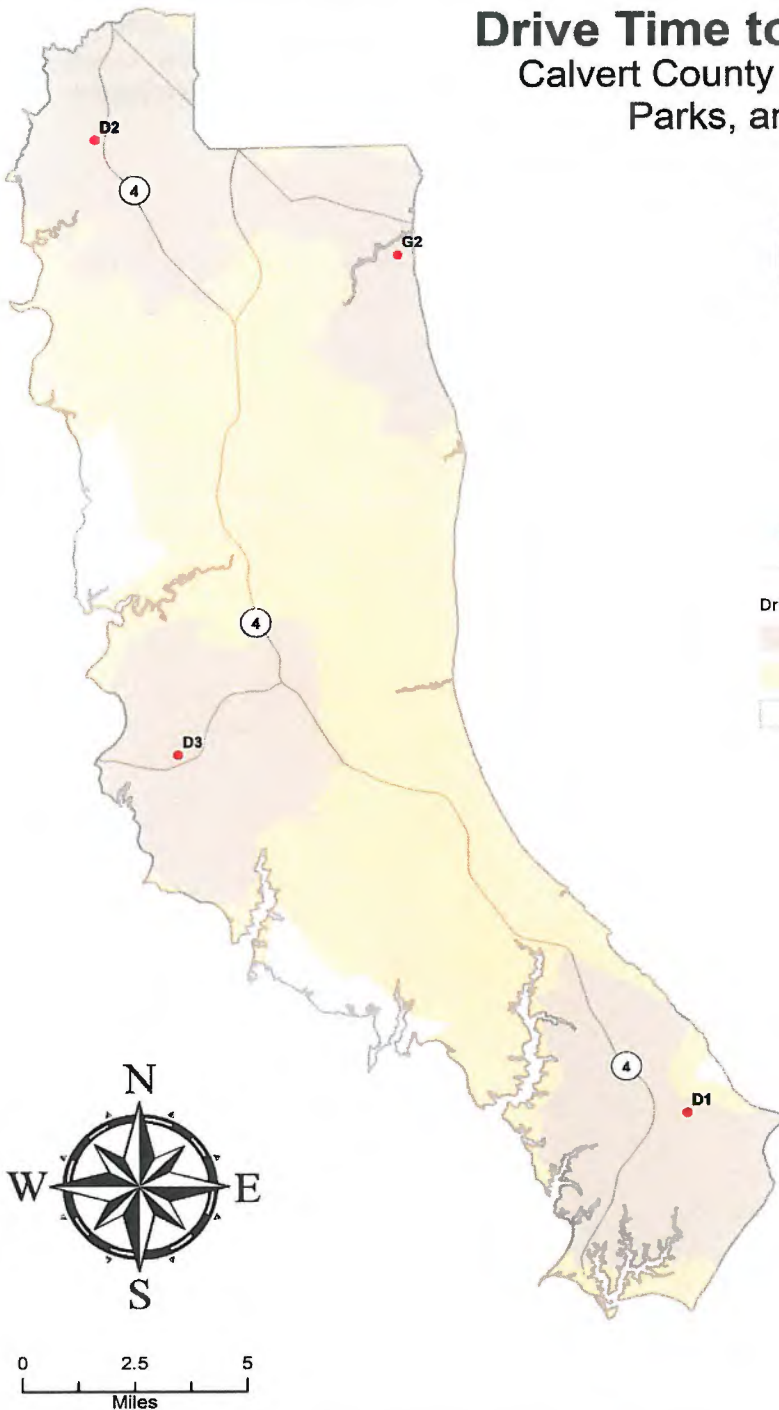
Drive Time to Tennis Sites

Calvert County Land Preservation Parks, and Recreation Plan



Legend

- Tennis Sites
- Major Roads
- Driving Distance
 - 10 minutes or less
 - 20 minutes or less
 - Greater than 20 minutes



Source: GreenPlay LLC and Calvert County Department of Parks & Recreation

Four park sites in Calvert County provided tennis courts for public use. Although these sites are distributed in the northern, central, and southern portions of the peninsula, less than half of the area in the county is located within a 10-minute drive of these sites. The majority of areas in the county are located within a 20-minute drive of these sites, but some areas (unshaded areas on **Map 7**) were further than a 20-minute drive from a site with a tennis court. The three sites with tennis courts in the county included:

Parks

District

D1 – Cove Point Park

D2 – Dunkirk District Park

D3 – Hallowing Point Park

School Recreation Site

G2 – Beach ES Recreation Area

Map 8: Driving Distance to Sites with Trails

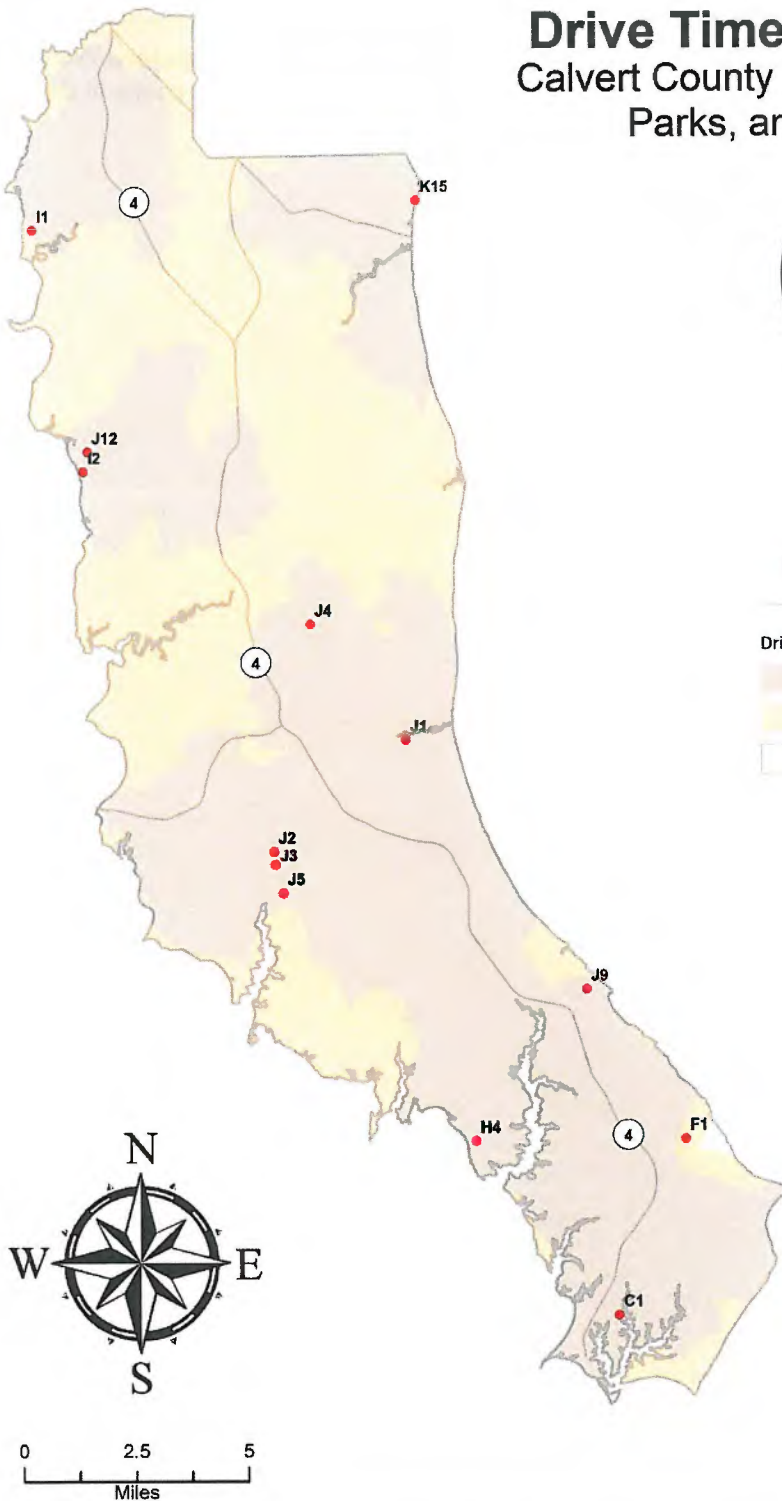
Drive Time to Trail Sites

Calvert County Land Preservation Parks, and Recreation Plan



Legend

- Trail Sites
- Major Roads
- Driving Distance
 - 10 minutes or less
 - 20 minutes or less
 - 20 minutes or more



Source: GreenPlay LLC and Calvert County Department of Parks & Recreation

At least 13 parks, recreation, or open space sites within the county include designated trails or trail systems that are available for public use. Individual trail maps for several of these properties are available online. These sites are distributed throughout the Calvert County, with most being located in the central and southern portions of the peninsula. Parks, open space areas, and recreation sites in Calvert County with trails included:

Community Park

C1 – Annmarie Gardens

State Park

F1 – Calvert Cliffs State Park

Historic/Cultural

H4 – Jefferson Patterson Park & Museum

Natural Resource Management Area

I1 – Hall Creek NRMA

I2 – Kings Landing NRMA

Open Space

J1 – ACLT Parker’s Creek Reserve

J2 – Battle Creek Cypress Swamp

J3 – Battle Creek Nature Center

J4 – Bennett Hughes Memorial Tree Farm

J5 – Biscoe Gray Heritage Farm

J9 – Flag Ponds Nature Park

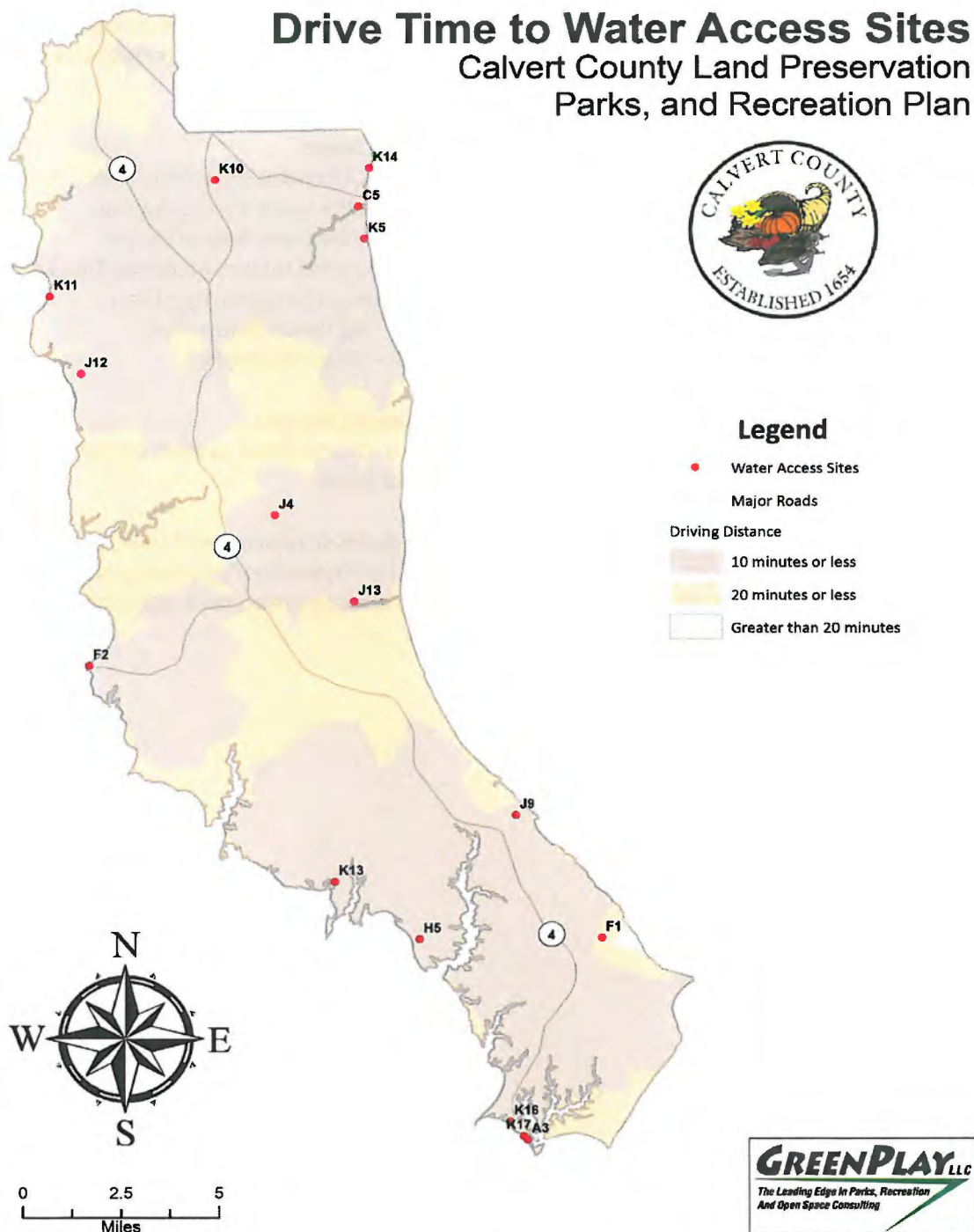
J12 – Kings Landing Park

Special Use Area

K15 – North Beach Waterfront Park & Boardwalk

It should be noted that although Calvert Cliffs State Park includes several miles of trails, it is illustrated as being greater than a 20-minute drive. The Park is bordered by major power generating facilities to the north and south, and as a result is largely isolated from residential development and public roads, and generally not as quickly accessible as other sites with trails.

Map 9: Driving Distance to Sites with Water Access



Source: GreenPlay LLC and Calvert County Department of Parks & Recreation

As illustrated in **Map 9**, the northern and southern portions of Calvert County are better served by water access sites than the central portion of the county. Boating, fishing, swimming, paddle sports, and other water-based recreation activities are known to be popular in the county and Southern Maryland. In 2017, over a dozen sites in the county provided public water access to the Patuxent River and Chesapeake Bay, and included:

Parks

Mini Park

A3 – Solomons Mini-Park & Comfort Station

Community

C5 – Kellam's Park Boat Ramps

State

F1 – Calvert Cliffs State Park

F2 – Hallowing Point Boat Ramp

Historic/Cultural

H4 – Jefferson Patterson Park & Museum

Natural Resource Management Area

I1 – Hall Creek NRMA

I2 – Kings Landing NRMA

I3 – Merkle NRMA

Open Space

J4 – Bennett Hughes Memorial Tree Farm

J9 – Flag Ponds Park

J12 – Kings Landing Park

J13 – Parker Creek Heritage Conservation Fund Site

Special Use Area

K5 – Chesapeake Beach Bayfront Park

K11 – Hutchins Pond

K12 – Lower Marlboro Wharf

K14 – Nan's Cove Pier

K15 – North Beach Waterfront Park & Boardwalk

K17 – Solomons Boat Ramp & Fishing Pier

K18 – Solomons Waterfront Park

It should be noted that although Calvert Cliffs State Park includes water access, it is illustrated as being greater than a 20-minute drive. This is a result of the site being bordered by major power generating facilities to the north and south, largely isolated from residential development and public roads, and generally not as quickly accessible as other sites with water access.

Trends Influencing the Provision of Parks and Recreation Services

The provision of public parks and recreation services in Calvert County is impacted by changes in population characteristics and changing preferences and participation rates in recreation activities. As detailed in **Appendix A**, demographic trends impacting the current and future provision of county parks and recreation services include:

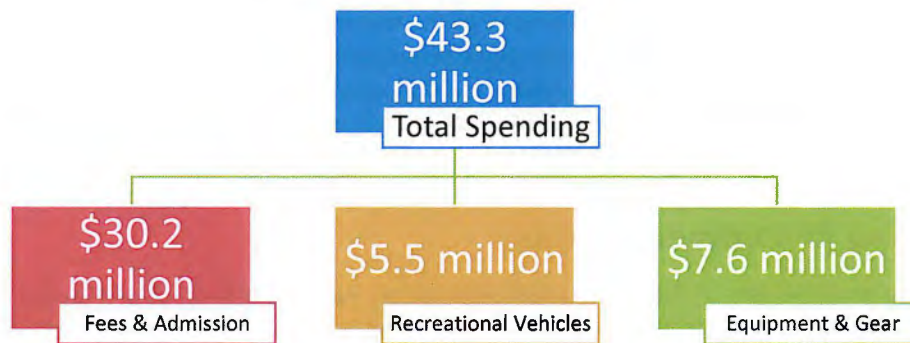
- **Population Growth:** The Maryland Department of Planning estimated the 2015 population of Calvert County to be 91,650, and projects the number of residents to reach 100,000 by 2030.
- **Generally Older Population with a high percentage of children and young teenagers:** The median age of Calvert County residents was 40.6 years, older than the median age of Maryland residents (38.4 years) and the national average median age (37.6). Despite the high median age, nearly 20 percent of the 2015 population was 14 years old or younger.
- **Income and ability to spend on recreation:** Calvert County households (\$95,828) had a higher median income than households statewide (\$74,551) or nationally (\$53,889). The median income rose significantly between 2000 and 2010. Education levels had a major impact on individual median earnings. Compared to residents with high school level education, the median earnings of those with bachelor's degrees was 40 percent greater, and those with graduate or professional degrees earned double.

National trends likely to impact the provision of parks and recreation services in Calvert County are reviewed in detail in **Appendix B**. Two key recreation trends of note impacting Calvert County are:

- Participation in outdoor recreation activities is high nationally as well as in Calvert County. Trail-based activities such as walking for exercise, cycling, and hiking are popular activities.
- Water-based recreation activities including swimming, boating, and fishing are a part of the local fabric of life in Southern Maryland. According to the National Sporting Goods Association, participation in power boating, canoeing, kayaking and other paddle sports contributed to water sports seeing the highest increase nationally (nearly three percent) in 2015, when compared to other activity types.

Economic Impacts of Participation in Recreation, Fitness, and Leisure Activities in Calvert County

Local participation in recreation, fitness, and leisure activities positively contributes to public health, community wellness, and the local economy. According to Esri, in 2016 Calvert County households collectively spent an estimated \$43.3 million on fees, equipment, and other costs typically associated with participation in recreation, sports, fitness, and leisure activities. Estimated household spending on recreation is further detailed in **Appendix B**.



Participation in sports and recreation activities also generates a significant amount of economic activity statewide. According to the Outdoor Industry Association, in Maryland outdoor recreation generates approximately \$14 billion in annual consumer spending, \$951 million in state and local tax revenue, and directly supports 109,000 jobs. Nationally, the outdoor recreation economy is estimated to generate as much as \$887 billion in annual consumer spending.

E. Key Findings of all Analysis

Each focus area for the level of service analysis utilized different means to gather and access data and ideas, and gauge how well the existing system of parks, recreation amenities, and open spaces in Calvert County meets the recreation needs of the public, and identify where improvements are needed.

The collective findings of all analysis informed the creation of the goals of this plan. When combined, key findings from all analysis indicate that:

1. Recreation is a significant component of residents' lives in Calvert County. County recreation program registration has been high and survey respondents noted high levels of satisfaction with the quality of existing amenities and programs.
2. Calvert County's natural resource engagement programs for school children and youth highlight the significance of the natural environment in defining the way of life in Calvert County. Structured and self-directed natural resource-based recreation and education opportunities are important to lives of many residents and visitors.
3. With continued population growth projected in the county, and in Southern Maryland generally, existing challenges with demand occasionally exceeding the capacity of the existing recreation system will continue limit service provision.
4. Enhancing the connectivity of existing pedestrian and bicycle trails and paths is needed to provide walkers, joggers, and cyclists with means of accessing a variety of community amenities without depending on their automobiles. Expanding trails and using them to connect people to the places they work, live, and play is highly desirable.

Level of Service Analysis Focus Areas

1. Current perceptions – online survey and public engagement findings
2. Measured participation in county Parks, Recreation, and Natural Resources Programs
3. Estimated participation in recreation, fitness, and leisure activities
4. Distribution of existing assets and ease of public access
5. Trends influencing the provision of parks and recreation services
6. Estimated economic impacts of local participation in recreation

Calvert County has a lot to celebrate in its parks and recreation system, including high levels of satisfaction with existing amenities and services. For the county to continue to meet user expectations and the recreational needs of its growing, and aging population, investment in enhancing existing parks and recreation facilities, and creating new recreation opportunities will be needed. The creation of new or expanded opportunities to recreate will require additional land to be purchased and facilities to be developed, operated, and maintained.

F. Goals and Recommendations

Goals and recommendations of the 2017 Land Preservation, Parks, and Recreation Plan update considered all information gathered through the planning process, as well as existing county and State plans that guide land preservation and recreation service provision for the public. The 2017 plan builds upon goals of the county's last (2014) plan, existing service provision, and current needs identified through the level of service analysis. Goals are listed in no order of importance; each is of equal significance to maintaining and enhancing parks and recreation assets in Calvert County for residents and visitors.

Goal 1: Continue to maintain and develop parks, recreation facilities, and programs to meet the diverse needs of the growing population in Calvert County.

Recommendations:

- a. Continue to adequately fund and provide resources for the operation and maintenance of county operated parks and recreation facilities.
- b. Target the development of any new indoor and outdoor sports fields or courts, and/or other active recreation components in or near town centers.
- c. Plan for the creation and/or expansion of centrally located parks and green spaces in town center areas.
- d. Develop a comprehensive inventory of quasi-public and private recreation providers in the county, including HOAs, and subdivision recreation and open space areas to help determine how they fit in to the overall calculation for future investment in public recreation assets.
- e. Leverage the creation of the county's new Department of Parks & Recreation to enhance service provision efficiencies formerly managed by the Parks and Recreation Division and Natural Resources Division.
- f. As the county's population grows, the inventory of parks and recreation assets and programs, as well as resources of the Department of Parks & Recreation should increase in a corresponding matter to ensure the continued delivery of high quality programs, facility maintenance, and infrastructure management.

Goal 2: Develop an interconnected system of pedestrian trails and bike paths throughout the County to link together places people live, work, play, and visit in Calvert County and Southern Maryland.

Recommendations:

- a. Complete a countywide bicycle and pedestrian master plan.
- b. Continue to evaluate existing linear corridors, rights-of-way, and other potential areas for future trail development.
- c. Seek to acquire rights-of-way and open space through zoning, or subdivision entitlement process to utilize for future trail creation.
- d. Create trails and paths within town center areas that connect with outlying parks and open spaces.
- e. Continue to create, support, and promote public water trails in Southern Maryland.
- f. Leverage lessons learned by neighboring counties to plan, construct, and operate multi-modal, hiker/biker trails.

Goal 3: Continue to improve and expand opportunities for public access to the Chesapeake Bay and Patuxent River.

Recommendations:

- a. Seek to acquire waterfront property capable of supporting active and passive recreational usage.
- b. Investigate opportunities to increase access, parking, and comfort features at existing public landings and waterfront park sites to allow for increased boat access and usage, and improved user experience.

The Department of Parks & Recreation current six-year capital improvement program (FY2018 – FY2023) includes approximately \$23 million in projects to enhance recreation opportunities county wide, consistent with the Goals of this plan. The capital improvement program is included as **Appendix G**. Proposed projects range from replacing non-functional playground equipment, the continued development of facilities at Dunkirk Park, phase one development of the recently acquired Ward Farm property, phase two improvements at Chesapeake Hills Golf Course, major improvements to Solomons Boat Ramp and Fishing Pier, and expansion of trails and water access at county nature parks. These projects seek to enhance close-to-home recreation opportunities in county population centers, increase opportunities to participate in trail-based activities, and improve facilities for recreational access the county's abundant water resources. This investment strategy leverages the strengths of existing parks, recreation, and open space assets while addressing needs identified through this planning process.

In working to reach the goals for parks and recreation, the county will need to plan and budget for increasing service and maintenance staff to operate new and expanding facilities planned to come on-line in the next five years, continue to be opportunistic in acquisition of land for future park development, especially those that can provide water access and/or serve to develop trail connections and continue to engage with community to ensure that needs are being satisfied.

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III. Natural Resource Land Conservation

The 345 square miles of Calvert County is defined by its farmlands, forests, and coastal resources. Small creeks, wetlands, and forested floodplain areas are found throughout the landscape.

The county is bordered by the Patuxent River to the west and Chesapeake Bay to the east. Shoreline conditions on each side of the peninsula are drastically different. Along the Patuxent River, most of the shoreline is relatively flat with numerous tidewater estuaries. The Chesapeake Bay coast is known for its high cliffs and abrupt transition from land to water. These natural areas support biodiversity and provide other ecosystem services needed to support a healthy population, such as wetlands filtering drinking water and forests cleansing the air. Protected open spaces and natural areas within the county also provide abundant opportunities for outdoor recreation and education, and they serve a key role in defining county character and quality of life of residents. The natural landscape of Calvert County generally consists of:

- High percentage of forest cover
- Farmed, developed, and forested uplands bisected by steeply sloped stream valleys
- Coastal and inland floodplain forests
- Low-lying coastal areas along Patuxent River, and coastal cliffs along the Chesapeake Bay.



Kings Landing Park

Image Credit: Calvert County Natural Resources Division

A. Existing Landscape and Resources

There is great public benefit gained from conserving natural resources and providing outdoor recreation opportunities. For example, the Calvert Nature Society (CNS), a not-for-profit organization that works to protect and promote and educate about Calvert County's natural places, particularly the lands and waters around our county nature parks, has emphasized the value of natural areas for public benefit. Since the 1980s, CNS has worked to support the mission and activities of Calvert County's Natural Resources Division (CCNRD) and the county nature parks. The vision of CNS represents how natural resources are critical in developing an environmentally literate citizenry:

"The Calvert Nature Society envisions a Calvert County that has an abundance of high-quality natural spaces and protected lands and healthy waterways that attract both residents and visitors and improve the quality of life for all."

- Residents and visitors to Calvert County have many opportunities to engage in environmental education and compatible recreation.

- People, from preschoolers to senior citizens, have access to Calvert's green spaces and waterways, and, through learning opportunities at our parks, have the knowledge and awareness to fully appreciate our natural world.
- People are informed and realize the importance of a two-way connection to nature: Just as they reap the benefits and enjoyment of nature, so must be responsible stewards of their natural resources, both now and for the future."

For example, the health of Calvert County's lands and its waterways are plagued by incursions from development, including loss of habitat, infrastructure demands, stressors on waterways from stormwater runoff, and a shrinking inventory of large tracts of land. New and better ways of controlling pollution and protecting water quality must be interpreted for county residents, and CNS works with CCNRD to communicate changes and to be a strong voice for protections for lands and waters. In addition, CCNRD's budget still contains shortfalls, and staff remains under pressure to fulfill their mandate while expanding to meet the demands of a growing population. These strains will become more evident as CCNRD brings new park properties online. Staffing restrictions hold back innovation and growth. To meet the challenges and opportunities ahead, work must continue and expand.

In the FY2017 Budget Book, objectives established by Calvert County's Natural Resources Division focused on the public benefit and opportunities for outdoor recreation. The Budget Book also provided a series of performance measures that illustrated the Division is working to a high capacity to achieve public environmental education and engagement objectives.

As noted in Calvert County's FY 2017 Budget Book, the Natural Resources Division consistently connects people with nature:

- *All 1st, 3rd, and 5th grade students in Calvert County public schools were engaged in environmental educational experiences at public natural areas designed to meet school-based curriculum.*
- *Since 2014, the county has consistently offered over 100 environmentally focused public programs annually.*
- *Volunteerism for natural resource conservation efforts is increasing. In FY 2015, 2,000 volunteer hours were logged at 40 workshops and activities at county natural resource properties. In FY 2017 participation was projected to increase to 2,500 volunteer hours contributed at 50 events.*
- *Naturalist-led activities have and are projected to continue to provide opportunities for the public to engage in nature and learn about local ecology.*

Natural resource land preservation efforts in the county are primarily led by the Maryland Department of Natural Resources, Calvert County, and non-profit land trusts. **Appendix D** includes an inventory of lands managed by the county and Maryland Department of Natural Resources, many of which are significant to preserving natural resources and providing opportunities for outdoor recreation.

As of July 2017, roughly 80 percent of Calvert County's total parks, recreation, and open space acreage is comprised of lands that were preserved primarily for their high natural resource conservation, open space, and outdoor recreation value. Several sites of note include the following.

Bennett O. Hughes Memorial Tree Farm

In 1986, Calvert County received a gift of land from the estate of Bennett O. Hughes. As a condition of the gift, the county agreed that 196-acre property would be maintained as a tree farm to demonstrate sustainable forest management. This generous donation provided the family with a tax benefit, and the County received a forest that can become a model for managing small forest lots. In 2016, the county, in cooperation with the Maryland Forest Service, developed a timber management plan to selectively harvest approximately 300 trees. The harvest was completed in the spring of 2017 and generated nearly \$80,000 income to the county. This demonstrates with proper planning and a well-designed forest stewardship plan, that forest-land can be maintained as a thriving ecosystem as well as generating income for the land owner.

Flag Ponds Nature Park

This 546-acre nature park is beloved by county residents as well as visiting tourists for its extensive Chesapeake Bay Beaches and views of the Calvert Cliffs. For hundreds of years, the forces of nature have reshaped the Chesapeake Bay shoreline of Flag Ponds Nature Park, creating a remarkable variety of natural environments – from the sandy beach, to freshwater ponds, to the forested heights of Calvert Cliffs. Today, nature continues to play with the sand, changing the park's landscape with each tide, each storm, and each season. The property was acquired through the use of Program Open Space, while funds through the Chesapeake Bay Gateways Network, Maryland Historical Trust, and the National Oceanic and Atmospheric Administration enabled the construction of the buildings and interpretive resources.

Fossil hunting and beach combing are extremely popular pastimes. Millions of years ago, sharks, whales, crocodiles, and other animals inhabited the waters and shores of this area. Most of these animals are now extinct; others are just no longer found here. To the sharp-eyed visitor, sharks' teeth and other Miocene fossils may be found along the park's shoreline. The park also offers hiking trails – a short, half-mile hike brings you to the sandy beach, or you may take longer trail routes that allow you to experience the beauty of the park. Additionally, there are observation platforms at two ponds, a fishing pier on the Chesapeake Bay and a visitors center with wildlife displays.

The preservation of natural resources often coincides with the protection of our cultural heritage. From the early 1900s until 1955, the area was a sheltered harbor on the Chesapeake Bay supporting a major "pound net" fishery supplying croaker, trout, and herring to markets as far away as Baltimore. At one time, three shanties housed fishermen during the main fishing season. Known as "Buoy Hotel," the last surviving shanty was destroyed by arson in October 2012.

Keim Forest

Calvert Nature Society preserved this tract of more than 100 wooded acres, fields, and wetlands, further protecting one of Calvert County's unique natural habitats. The purchase of the property doubled the preserved natural landscape around Battle Creek Cypress Swamp, one of the northernmost stands of bald cypress trees in the country. The 107-acre farm include a century-old farmhouse and a historic tobacco barn built from locally harvested and milled cypress logs. The acquisition was made possible with the assistance of the Maryland Heritage Area Authorities and The Conservation Fund. This acquisition demonstrates the role the local Land Trusts play in preserving the county's natural resources.

B. Natural Resource Land Conservation Goals

Current goals, visions, objectives, and actions guiding Calvert County's efforts to conserve natural resource lands were established by the county's 2010 Comprehensive Plan. These guiding criteria complement Maryland's statewide goals for natural resource land conservation, included in **Appendix F**. Relevant criteria from the 2010 Comprehensive Plan that guides the county's natural resource land conservation efforts include:

County Goal:

- Preserve the natural, cultural, and historic assets of Calvert County.

County Visions:

- Our landscape is dominated by forests and fields.
 - At least 40,000 acres of farm and forestland are preserved.
- Our wetlands, streams, and forests support thriving plant and animal communities. Our seafood industry is improving,
 - 90 percent of existing forest is retained.

County Land and Water Resources Objectives:

- Encourage preservation, protection, and conservation of natural resources.
- Establish a comprehensive approach to environmental planning with special emphasis on watershed planning.
- Protect environmental features that will help ensure continuance of a healthy and pleasant place to live for current residents and future generations.
- Protect environmentally sensitive areas from development impacts.
- Preserve stream valleys to maintain their important natural functions and to provide greenways throughout the county.
- Practice community planning and site design that conserves energy, protects natural resources, and minimizes impacts on the landscape.
- Encourage restoration of lost and/or damaged natural environmental features.
- Foster greater public awareness, education, and support of environmental concerns.
- Develop an implementation plan to accommodate growth in Priority Funding areas while reducing nutrient loads in waterways to targeted levels.
- Ensure sufficient water supply and water/sewer treatment capacity to serve future growth in Calvert County.
- Protect the quality and quantity of groundwater aquifers.

County Actions:

- Map forest resources and track forest loss and gain.
- Replace 100 percent of forest loss outside the Critical Area and Town Centers.
- Preserve and restore riparian forests.
- Maintain large tracts of forest and especially forest interior in the rural areas.
- Maintain or establish habitat corridors between large tracts of forest and between urban areas and adjoining forested areas.
- Support land preservation that protects forested areas.
- Adopt a map of the forest interior in Calvert County to guide the Planning Commission in subdivision and site plan review.

- Map and establish greenways systems along stream valleys to preserve as much of these low lands as possible.
- Require and maintain sufficient buffers from all perennial and intermittent streams to provide environmental protection.
- Reforest stream buffers wherever possible.
- Restore or create wetlands in areas that will reduce nutrient pollution runoff from farms and developed areas.
- Examine the effectiveness of 50-foot buffers and alter buffer requirements, if the study so indicates.
- Establish or re-establish forested wetland buffers where possible and feasible.
- Work with the State to map rare, threatened, and endangered species outside the Critical Area and develop protective measures.
- Protect from shore erosion control those areas of the Calvert Cliffs that have significant Puritan Tiger Beetle populations.
- Develop methods to protect the habitats of rare, threatened, and endangered species. Take steps to increase their numbers if possible.

The 30+ goals, visions, objectives, and actions guiding natural resource conservation established by Calvert County's 2010 Comprehensive Plan generally focus on:

1. *Preserving and enhancing lands with high natural resource value.*
2. *Improving information, including mapping resources, used in decision making.*
3. *Increasing residents' level of environmental education and literacy.*

In addition to the guiding objectives established by the Comprehensive Plan, through the FY 2017 adopted Budget Book, the Board of County Commissioners established twelve goals, including two to "Work to Preserve Calvert County":

- Environment, Heritage, and Rural Character: Create a sense of place, reflect the character, history, and natural environment of the community
- Growth Management & Land Preservation: Maintain the rural character through effective growth management with a proactive and consistent planning approach. Look at ordinances that impact growth outside of Town Centers

Except for the goals established by Calvert County's Natural Resources Division FY 2017 budget, State and county goals for natural resource land conservation remain unchanged since the last updated of the Land Preservation, Parks, and Recreation Plan in 2014. These goals and strategies reflect a long-term commitment to preserving and enhancing the quality of life in Calvert County through preserving land that is significant to watershed protection and habitat that supports biodiversity. The FY 2017 budget goals place a major focus on connecting residents to nature and fostering a strong and supportive network of educated stewards of Calvert County's environment and public open spaces. County goals and objectives are directly complementary to those of the State of Maryland, and are geared toward strategies to preserve lands of high natural resource value, and to connect people with nature.

Accomplishments 2014 – July 2017

Since the last update of the Land Preservation, Parks, and Recreation Plan in 2014, Calvert County has continued its ongoing work to achieve the long term natural resource conservation and land preservation goals established by the 2010 Comprehensive Plan, and goals of the State of Maryland. Since 2014, no new additional acres of land have been preserved for the public benefit. However, the county's use and management of facilities at public open spaces and natural areas for environmental education and resource-appropriate outdoor recreation continues to engage a growing number of residents annually, especially youth.

C. Natural Resource Conservation Programs

State Focus Areas for Natural Resource Land Conservation

Forests, wetlands, and waterways are key natural resource features of the Calvert County landscape that county and State actively work to preserve and protect. Many natural areas in Calvert County provide important habitat areas for diverse plant and animal species. Both the State and the county have created complementary programs that prioritize natural resource land conservation efforts. Maryland's BioNet and GreenPrint programs are utilized statewide to prioritize land preservation strategies.

Maryland BioNet – prioritizes areas of statewide importance for the conservation of species and natural communities into a five-tiered system, with Tier I being the most significant for conservation. Calvert County includes Tier I and Tier II areas.

Maryland GreenPrint – identifies Targeted Ecological Areas, lands and watershed areas of high ecological value that are considered conservation priorities by the Maryland Department of Natural Resources. Targeted Ecological Areas often include large areas of contiguous forests, wetland areas, and stream corridors that provide high quality habitat, important nesting areas, and spawning grounds.

Natural Heritage Areas – Among the most sensitive ecological areas in the county are three State-designated Natural Heritage Areas. These areas include features that set them apart as “best examples” of unique ecosystem within Maryland. In addition to their special natural resource characteristics, each is known to be home to at least one locally threatened or endangered species. Land disturbing activities and development within Natural Heritage Areas is regulated, with requirements that activities will have no adverse impact on the local plant and animal communities.

Natural Heritage Areas in Calvert County:

1. Camp Roosevelt Cliffs
2. Cove Point Marsh
3. Flag Ponds
4. Randle Cliff Beach

County Natural Resource Conservation Focus Areas and Tools

Calvert County has a strong dual focus regarding natural resource conservation. Environmental education and land conservation initiatives are both major components of the county's conservation strategy. Educational experiences are primarily provided by the Natural Resources Division, whereas the acquisition of land or easements to conserve land is guided by the county's Comprehensive Plan and zoning ordinance. The focal areas and goals of the county for conserving natural resources are complementary to goals established by the State of Maryland.

Calvert County protects lands and natural resources in Designated Protection Areas that include:

- Shoreline and Cliff Areas on the Chesapeake Bay, Patuxent River, and their tributaries
- Floodplain areas
- Steep slopes (25 percent or greater; 15 percent or greater in Critical Areas)
- Erodible soils adjoining streams
- Wetlands
- Perennial and intermittent streams, and wetland buffers
- Sites of state-listed threatened or endangered species
- Natural Heritage Sites
- Waterfowl concentration and staging areas
- Forest Interior Dwelling Species habitat

County Land Use and Zoning Tools

- **Designated Protection Areas** – receive protections from land development activities through Calvert County’s zoning ordinance. Development planned in or near Designated Protection Areas are generally required to avoid disturbing land within regulated areas and buffer zones.
- **Farm and Forest District** – The 2010 Comprehensive Plan and existing zoning ordinance use the term “Farm and Forest District” synonymously for Priority Preservation Area. Priority Preservation Areas include large land areas that are mostly undeveloped and have high existing and/or potential productive farm or forest uses. See **Map 10: Calvert County Preserved Agricultural Lands 2018** in Section IV: Agricultural Land Preservation.
- **Mandatory Clustering** – requires most new major subdivision developments located outside of designated growth areas to preserve 50 percent to 80 percent of the land on the parcel to be preserved as open space. The preserved areas resulting from clustered developments is classified as one or more of the following:
 - Farm Reserves – cleared land capable of functioning as cropland, pasture, or meadow.
 - Woodland Reserves – contiguous acreage of forest capable of supporting timber production or wildlife management.
 - Conservation Open Space – wetlands, floodplains, steep slopes, streams, and their buffer areas.
 - Community Recreation Open Space – recreation open space as required in subdivisions with 50+ units.
 - Public Access Open Space – land deeded (or to be deeded) to a land trust or government agency that provides public access.

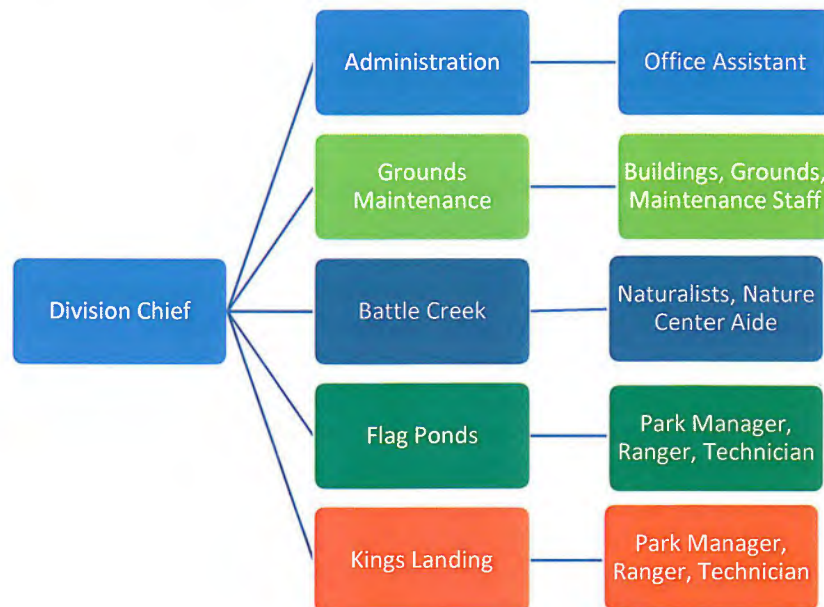
Environmental Education and Engagement – Calvert County Natural Resources Division

The Calvert County Department of Parks & Recreation, Natural Resources Division is responsible for the preservation, management, and operation of natural areas for the purposes of providing compatible outdoor recreation and educational opportunities for the public. The primary goal of the Division is **to increase the environmental awareness of the public** by:

1. Providing quality environmental education activities.
2. Providing environmentally compatible recreation activities.
3. Preserving the natural heritage of Calvert County.

In FY 2017, the Division employed 14.7 full-time equivalent employees that were organized into five functional groups under the Division Chief as illustrated in **Figure 4**. This staff provides programs and opportunities for connecting people with the natural landscape, and educating them about environmental issues and stewardship. Each year the Division's programs engage thousands of county school children and many more residents and visitors of all ages. Since the preparation of the last Land Preservation, Parks, and Recreation Plan in 2014, total staffing increased by slightly more than one full-time equivalent employee. During the same period, the Division's operating budget increased from \$784,139 in FY 2015 to \$833,744 in FY 2017. The Natural Resource Division budget in FY 2017 represented roughly 1/3 of one percent of the total county operating budget. Additional information regarding the Division's operations can be found in **Section II: Recreation, Parks, and Open Space**.

Figure 4: Natural Resources Division Organizational Chart FY 2017



Connecting People with Nature

As previously noted, Calvert County's Natural Resources Division is responsible for the preservation, management, and operation of natural areas for the purposes of providing compatible outdoor recreation and educational opportunities for the public. The primary goal of the Division is ***to increase the environmental awareness of the public*** by:

1. Providing quality environmental education activities.
2. Providing environmentally compatible recreation activities.
3. Preserving the natural heritage of Calvert County.

The Division works to achieve these goals through its operation of nine county natural area parks, and programs provided in partnership with several organizations including the Calvert County Board of Education and non-profit Calvert Nature Society. As detailed in **Section II: Recreation, Parks, and Open Space** the Natural Resources Division engages thousands of people in nature-based education, recreation, and stewardship activities on an annual basis. Connecting residents, especially school children, with nature is the Division's primary role.

Calvert County Natural Resources Division managed parks and natural areas:

1. Battle Creek Cypress Swamp Sanctuary
2. Biscoe Gray Heritage Farm
3. Flag Ponds Nature Park
4. Hughes Memorial Tree Farm
5. Hutchins Pond
6. Kings Landing Park
7. Nan's Cove
8. Lower Marlboro Wharf
9. Solomons Boat Ramp and Fishing Pier
10. Ward Farm Recreation and Nature Park
11. Rural Legacy properties

D. Evaluation of Natural Resource Land Conservation Programs

Calvert County works to preserve land of high natural resource and open space value through programs that regulate land development, incentivize private participation in easement programs, and/or directly purchases easements or property outright. Since 2014, there were no substantial changes made to existing natural resource conservation program. However, as of 2017, Calvert County was in the process of updating its Comprehensive Plan and zoning ordinance.

In 2014, the county reported four major challenges with natural resource land conservation:

1. General lack of public awareness of the needs to protect habitat, significance of erosion control, and stewardship needs of greenways:
 - a. The Calvert County Natural Resources Division actively engages citizens in the Calvert Stewards volunteer program, providing opportunities for public service in education, research, and stewardship which support the overall mission of the Division. This benefits the participants, the parks and the community as Calvert Stewards use and develop their skills to form an environmentally aware community and become the environmental stewards of Calvert County. The Calvert Stewards program also encourages youth and families in projects to create a pipeline of engaged citizens that will continue their involvement in the parks into adulthood.

2. Limited awareness of property owners of land conservation programs/alternatives to selling their land for development:
 - a. In November 2016, a Land Preservation Roundtable was organized to provide land owners information about the various options available through Federal, State, local and NGO programs. The following organizations partnered with Calvert County to describe and promote their land preservation programs:

i. Calvert Nature Society ii. Maryland Environmental Trust iii. MALPF iv. DNR (Rural Legacy) v. REPI vi. UMD Agriculture Extension vii. Land Trust Alliance viii. Soil Conservation District ix. SMADC	x. Historic District Commission xi. Farm Bureau xii. Calvert Sustainable Network xiii. American Chestnut Land Trust xiv. Calvert Farmland Trust xv. Patuxent Tidewater Land Trust xvi. Southern Calvert Land Trust xvii. Cove Point Natural Heritage Trust
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3. More strategic planning is needed to ensure the most effective and efficient use of limited resources for natural resource land conservation.
4. Maintaining a steady and reliable funding source for natural resource protection and conservation.

The 2014 Land Preservation, Parks, and Recreation Plan also noted seven program development strategies to guide natural resource conservation efforts. The 2014 strategies that remain relevant and valid in 2017 are:

1. Continue to support and promote the county's land use plan and policies outlined in the 2010 Comprehensive Plan.
2. Adopt a Greenways Map and use it to target areas that need to be protected. Include Forest Interior Dwelling Species (FIDS) habitat. Use the map to identify greenways during the subdivision process. Give priority to including greenways within designated open space.
3. Increase public awareness of the need for habitat protection and the maintenance of greenways. Techniques should include developing informational brochures, making public presentations, and developing programs for Channel 6 (public access cable television).
4. Continue to hold regional meetings to explain land preservation options that are available to property owners.
5. Promote eco-tourism by allowing natural resource related recreational businesses in the Farm and Forest District, consistent with resource and habitat protection.
6. Continue county funding support for land preservation at the local level and encourage the continuation of funding programs at the State level (MALPF, Rural Legacy, and Program Open Space).
7. Adopt and implement a cost-effective Calvert County Watershed Implementation Plan (WIP).

IV. Agricultural Land Preservation

A. Introduction

Farming has been a vital component of Calvert County's history and cultural identity, and efforts to preserve agricultural lands have been a focal area of the Land Preservation, Parks, and Recreation Plan. As required by the 2017 Land Preservation, Parks, and Recreation Plan Guidelines, updated information on the county's efforts to preserve farmland and goals for guiding future preservation work have been incorporated. Goals and guiding policies for the preservation of agricultural land for Calvert County were defined in the county's 2014 Land Preservation, Parks, and Recreation Plan and 2010 County Comprehensive Plan. Most of the goals and objectives for farmland preservation of these guiding plans remain valid as of May 2017.



Calvert County Farmland

Image Credit: Calvert County Department of Planning & Zoning

According to the current (2012) U.S. Department of Agriculture Census of Agriculture, the number of farms in Calvert County decreased since the last agricultural census in 2007. As illustrated in **Table 9**, although the number of farms decreased, the average size of farms increased, as did the overall acreage in farms and market value of agricultural products produced.

Table 9: 2012 and 2007 U.S. Census of Agriculture Highlights

	2007	2012	Percent Change
Number of Farms	274	269	-2%
Land In Farms	26,443 acres	32,901 acres	+24%
Average Farm Size	97 acres	122 acres	+26%
Market Value of Products Sold	\$4,052,000	\$11,141,000	+175%

Source: U.S. Department of Agriculture 2012 Census of Agriculture

In 2014, Calvert County's Department of Assessment & Taxation recorded that 63 percent of the county's land area, or 89,441 acres, was assessed as farmland. Forestry was a major agricultural land use, and was noted in the past "Land Preservation, Parks, and Recreation Plan" as, "one of the best and most productive uses for much of the county's slopes and soil types." The high percentage of forested agricultural land, and relative infrequency of harvests of timber and other forest products, leads to fluctuations in what lands and value of products from those lands are considered by the U.S. Department of Agriculture's Census of Agriculture. As illustrated in **Table 9**, the Census of Agriculture included 32,901 acres of farmland in Calvert County, which equates to approximately 37 percent of the total assessed farmland.

B. Agricultural Land Preservation Goals and Objectives

Since the county's first comprehensive plan in 1967, the preservation of the rural character of the county has been a primary goal. Calvert County's 2010 Comprehensive Plan established visions and objectives (that serve as goals) directly related to the preservation of agricultural land, which include:

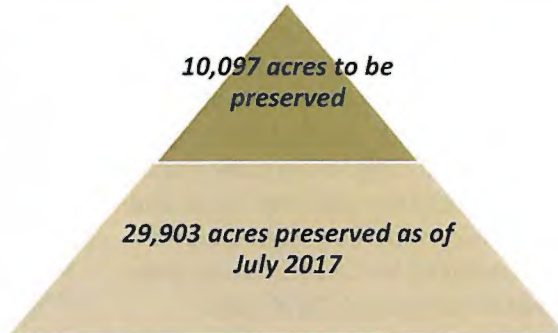
County Visions

- Our landscape is dominated by forests and fields.
 - At least 40,000 acres of farm and forestland are preserved.

**County Agricultural Land Preservation Goal:
Preserve 40,000 acres of farmland**

Land Use and Growth Management Objectives:

- Preserve the rural character of the county, its prime farmland, contiguous forests, historic resources, and environmentally sensitive areas.
- As an alternative to functioning primarily as a "bedroom community," adopt policies that will promote the county as a desirable location for high-technology industries, vacation destination, farming, and aquaculture region; resource protection area (i.e. "greenbelt"); and retirement community.



State Goals for Agricultural Land Preservation

- 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.
- 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 compliment state goals.
 - In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural land owners, the public, 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.

The county's agricultural land preservation goal remains unchanged since 2014, and focus continues to be the preservation of 40,000 acres of agricultural land. The programs, tools, and partnerships utilized by the county to work toward this goal also remains unchanged since the last update of this Plan. **Table 10** notes the general status of farmland acres reported to be preserved by the county as of May 2017. A full inventory of farmland preserved in Calvert County is maintained by the county and Maryland Department of Planning.

Table 10: Preserved Agricultural Land in Calvert County 2013-2017

	2013	2017	2013-2017
	Acres	Acres	Change in Acres
County Total	19,422	20,279	+857
Transferable Development Rights (TDRs)	14,442	14,442	0
Forest Conservation TDRs	693	693	0
PAR and LAR	4,287	5,144	+857
State Total	7,323	7,323	0
Maryland Agricultural Land Preservation Foundation	4,715	4,715	0
Rural Legacy	1,783	1,783	0
Maryland Environmental Trust	825	825	0
Combined Total	26,745	27,602	+857

Source: Calvert County; MALPF 2016 Annual Report,

C. Agricultural Land Preservation Programs in Calvert County

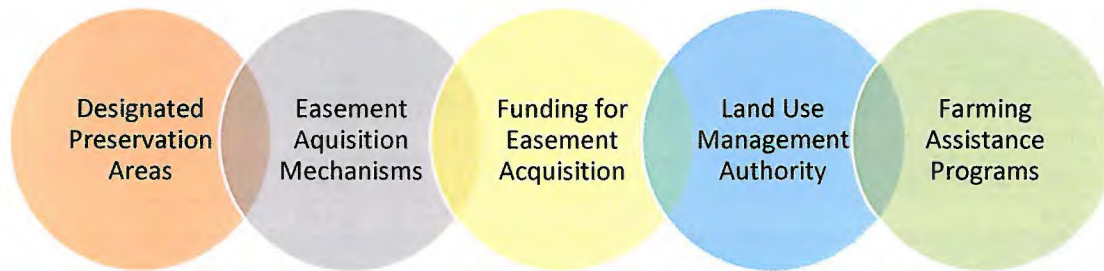
The Calvert County Planning & Zoning Department manages countywide agricultural land preservation programs and leads collaborative projects to achieve the goal of preserving 40,000 acres of farmland. The Planning & Zoning Department's work is guided by the county's Agricultural Preservation Advisory Board (APAB), which is charged with reviewing and acting on applications for county Agricultural Preservation Districts (APDs), applications to the county's Purchase and Retirement Fund, and reviews and makes recommendations on applications for the Maryland Agricultural Land Preservation Program. The Advisory Board consists of five members appointed by the Board of County Commissioners.

The county is proud of its long-standing agricultural land preservation programs, highly active transferable development rights program, and key partnerships developed with local organizations including:

- American Chestnut Land Trust
- Calvert Farmland Trust
- Calvert Nature Society
- Cove Point Natural Heritage Trust
- Patuxent Tidewater Land Trust
- Southern Calvert Land Trust

Calvert County utilizes five key programs and tools to preserve farmland and work toward achieving its goal of preserving 40,000 acres of agricultural land. Development and use of these tools began with the designation of county-wide agricultural preservation districts, subsequent adoption of effective land preservation tools, and 1999 and 2003 Zoning Ordinance updates that provided land use controls favorable to the preservation of farmland.

Primary Farmland Preservation Tools – Calvert County



The variety of programs utilized by Calvert County to preserve farmland allows the county and partners to tailor strategies on a case-by-case basis to achieve the best possible preservation outcome. This can result in a wide range of arrangements being made, from the fee-simple transfer of land ownership, to the transfer of development rights, in which case, a farmer is essentially paid an agreed upon sum to “sell” the legal right to develop an existing farm property (or a portion thereof) while being allowed to continue to use the land for agricultural purposes, but not later develop that land for another purpose such as a residential subdivision or commercial building.



Designated Preservation Areas

The 2010 Comprehensive Plan defines the Priority Preservation Areas in Calvert County. As required by state statute, Priority Preservation Areas include large land areas that are mostly undeveloped and have high existing and/or potential productive farm or forest uses. The 2010 Comprehensive Plan and existing zoning ordinance use the term “Farm and Forest District” synonymously for Priority Preservation Area.

“Reserve the Farm and Forest District (Priority Preservation Areas) for farming and natural resource-related uses and direct residential growth away from these areas.”

2010 Calvert County Comprehensive Plan Action Item

As of June 2017, there were approximately 57,000 acres in Priority Preservation Areas in Calvert County, which equates to 43.6 percent of the total land area in the county. Priority Preservation Areas are illustrated on **Map 10**.

Map 10: Calvert County Preserved Agricultural Lands 2018



Source: Calvert County



Easement Acquisition Mechanisms

Easement Acquisition Mechanisms

Preserving farmland in Calvert County through the use of easement tools, which create legal protections against development on a piece of land between a willing land owner and county, state, federal, or non-profit partner that “holds” the easement.

County Agricultural Land Preservation Easement Programs

Owners of farmland in Calvert County have the option to voluntarily apply for an Agricultural Preservation District designation on their properties. This designation remains in effect for five years, at which time property owners may opt-out. Farmland enrolled in the county’s Agricultural Preservation District receive varied degrees of legal protection against development and often offer incentives to participating landowners for dedicating land to continue in agricultural use into the future.

There are four easement tools used by the county for preserving Agricultural Preservation District designated farmlands through the establishment of a “transferable development rights” (TDR) and a market for the private creation and sale of TDRs. In 2015 and 2016, the county made a series of adjustments to improve the effectiveness of the TDR program. Updates to improve program performance included removing allowances for small-lot TDRs, varying the scale of TDRs allowed in town center areas, and allowing greater flexibility in the use of Forest Conservation TDRs.

1. **Transferable Development Rights (TDR) Program:**
Allows for private land owners in an Agricultural Preservation District to sell the development potential of their property to another party; the seller places a covenant on their land restricting development. The purchaser of a TDR can then be allowed to develop residential buildings at a higher density at a more appropriate site. The transfer of development rights is a private matter, but the county monitors the program.
2. **Forest Conservation Transferable Development Rights Program:**
Allows property owners of Agricultural Preservation Districts to convert regular density TDRs into Forest Conservation TDRs by preserving/recording at the registry of deeds, one acre of Forest Retention Area for each TDR converted. The Forest Conservation TDR can then be sold/transferred by the property owner to commercial developers for their use in meeting state and county Forest Mitigation Requirements associated with development projects.
3. **Purchase and Retirement (PAR) Fund:**
This fund allows the Board of County Commissioners to purchase TDRs from willing owners and “retire” and remove those TDRs from the marketplace, therefore reducing the total quantity of residential buildout countywide. By selling their development rights, owners can reduce their capital gains over time.

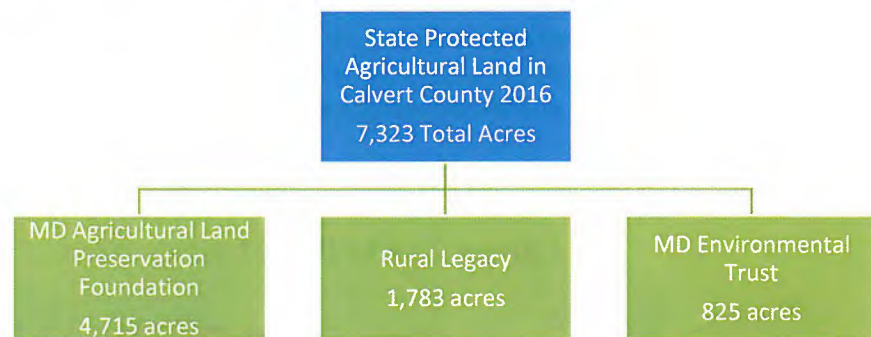
4. Leveraging and Retirement (LAR) Fund:

This program is similar to the Purchase and Retirement Fund program where TDRs may be purchased from a seller by the Board of County Commissioners and then permanently retired. Where this program differs is that it allows the owner of the TDR to sell more of those rights to the Board of County Commissioners (to retire the TDRs), and allows for the county to purchase the TDRs through an installment plan (over 10 to 20 years) where the owner receives annual tax-free interest payments and a lump sum payment constituting the principal purchase price of the TDRs.

As previously illustrated on **Table 10**, there was an increase of 857 acres of farmland preserved by County TDR programs from 2013 to 2017.

State Agricultural Land Preservation Easement Programs

The State of Maryland has been, and continues to be, an active partner in the preservation of farmland in Calvert County. Through three key easement acquisition programs, the State has worked to preserve land of agricultural value in every county in Maryland.



1. Maryland Agricultural Land Preservation Foundation (MALPF):

The Maryland Department of Agriculture, which manages this program, notes that MALPF was one of the first, and leading, agricultural land preservation program of its kind nationally. This program was created 1977 and works to purchase easements on prime agricultural lands, including farms and woodlands. As of June 2016, MALPF had preserved 300,916 acres statewide, 29 percent of the programs goal to preserve 1,030,000 acres of agricultural land by 2020. As of July 2017, Calvert County was certified by MALPF to continue to participate in the program.



According to the Maryland Agricultural Land Preservation Foundation FY 2016 Annual Report, there were 35 MALPF easements in Calvert County that permanently protected 4,715 acres of agricultural land. This equated to approximately 1.6 percent of farmland preserved through the MALPF program statewide.

2. Rural Legacy:

The Rural Legacy program is managed by the Maryland Department of Natural Resources to provide funding to preserve large, contiguous tracts of land significant for natural resource conservation, agriculture, forestry, and environmental protection, while preserving the land base needed to support sustainable natural resource-based industries. Rural Legacy functions by creating public-private partnerships with local governments and land trusts to target the preservation of ecologically valuable properties, with focus on these lands that directly impact the Chesapeake Bay and water quality of local streams and rivers. As of 2016, the State had worked with local partners to conserve land in at least one Rural Legacy Area in every Maryland county, preserving a total of 920,694 acres (1,783 acres in Calvert County).

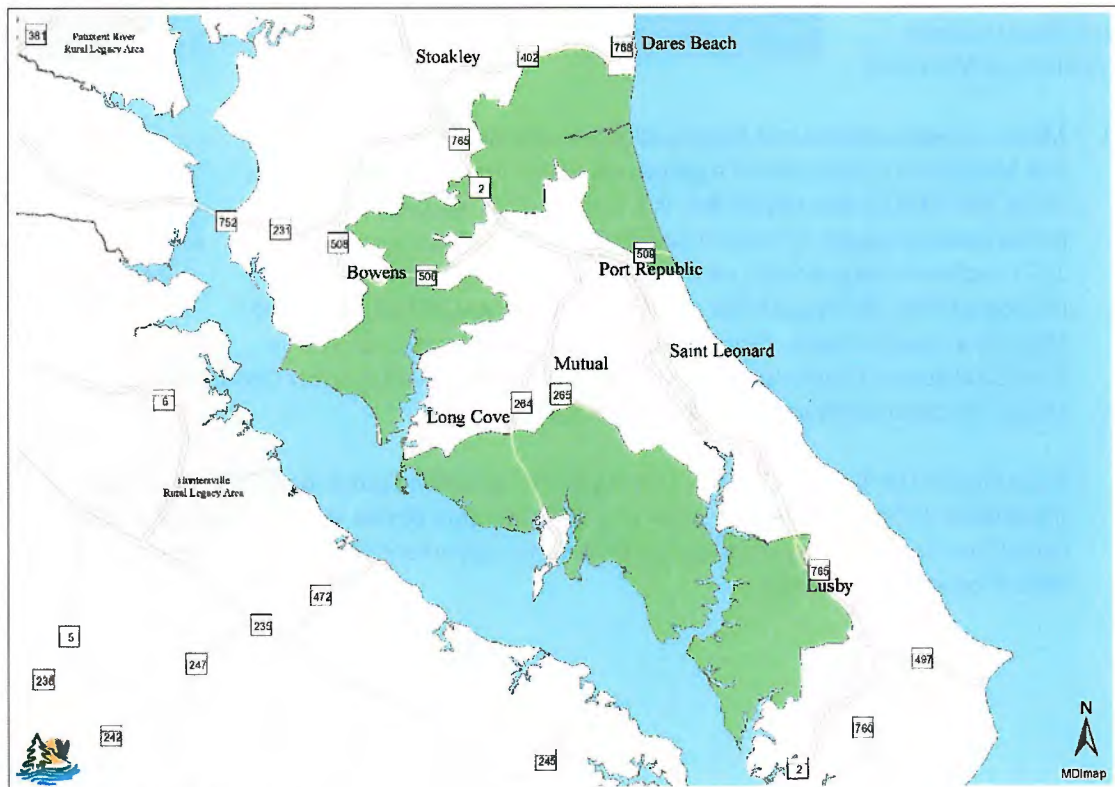
As of June 2017, there were two Rural Legacy Areas in Calvert County:

a. Calvert Creeks Rural Legacy Area

Four tributary stream and watershed areas flowing to the Patuxent River, including area around the Battle Creek Cypress Swamp Sanctuary and Parkers Creek. This Rural Legacy Area also encompasses several important local cultural resources including the Delhi Plantation and known archeological resources. Calvert Creeks is illustrated on **Map 11**.

Map 11: Calvert Creeks Rural Legacy Area

Calvert Creeks Rural Legacy Area

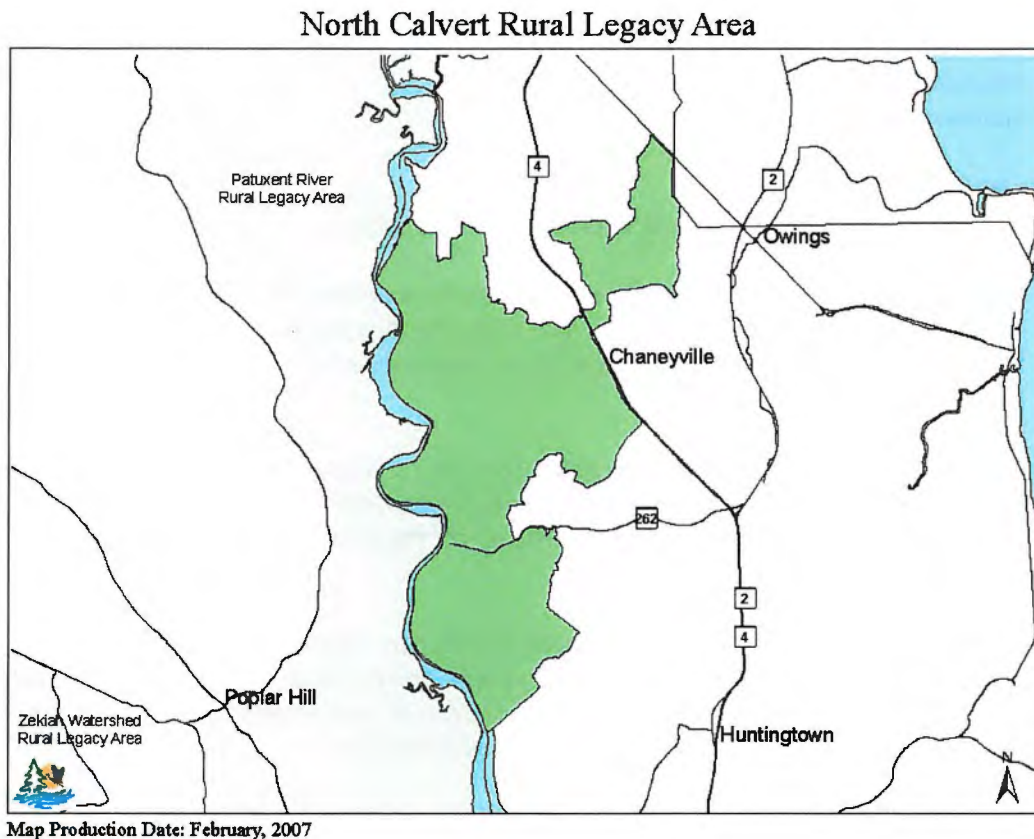


Map Production Date: September 2015

b. North Calvert Rural Legacy Area

An eight-mile-long greenway along the Patuxent River is preserved by this Rural Legacy Area. The North Calvert Rural Legacy Area (**Map 12**) protects sensitive wetlands and forests in four watersheds, and conserves large areas for farmed land and forests.

Map 12: North Calvert Rural Legacy Area



3. Maryland Environmental Trust:

The Trust is a quasi-public entity created in 1967 that is administered by the Maryland Department of Natural Resources and governed by a private Board of Directors. According to the implementing statute for the Trust, it was established to, “conserve, improve, stimulate, and perpetuate the aesthetic, natural, health, and welfare, scenic, and cultural qualities of the environment, including, but not limited to land, water, air, wildlife, scenic qualities, and open spaces.” As of December 2016, the Trust reported preserving 134,517 acres statewide, of which 825 acres were in Calvert County.

Federal Agricultural Land Preservation Easement Programs

The Federal Farm and Ranch Lands Protection Program (FRPP) is a program of the U.S. Department of Agriculture administrated through its Natural Resource Conservation Service. The FRPP program provides matching grant funds to assist in the purchase of development rights and conservation easements on farmland to keep that land in agricultural use. In Calvert County there were three areas of agricultural land, totaling 823 acres, preserved with funding assistance provided through the FRPP.

Non-Profits/Local Land Trusts

In addition to partnering with the Maryland Departments of Agriculture and Natural Resources, Calvert County is proud to actively work with local and regional non-profit organizations, primarily land trusts, to procure fee-simple ownership and easement protection of farmland. Partners include, but may not be limited to:

- American Chestnut Land Trust
- Calvert Farmland Trust
- Calvert Nature Society
- Cove Point Natural Heritage Trust
- Patuxent Tidewater Land Trust
- Southern Calvert Land Trust

Funding for Easement Acquisition

Funding of Calvert County's agricultural land preservation programs is primarily accomplished through:

- **State Agricultural Land Transfer Tax:** counties receive a portion of state taxes collected when agricultural land is sold for development through MALPF. As of July 2017, Calvert County was certified to participate in MALPF programs.
- **County Recordation Tax:** prior to the 2010 economic recession, the county allocated \$1.5 million annually in funds collected through the local recordation tax for easement acquisition. However, the county has not committed recordation taxes for this purpose since 2011, making it a non-viable funding source for over five years.
- **Local Government Funds:** in the past Calvert County had contributed up to \$1 million per year from the general fund for agricultural land preservation purpose. General funds have not been committed to agricultural land easement acquisitions in several years, but the county hopes to reinstate some level of funding over the next few fiscal years.
- **Matching Funds:** primarily from the Southern Maryland Agricultural Development Commission and Tobacco Buyout Fund. The last matching funds received to support easement acquisitions was from the Agricultural Development Commission in 2015 for \$700,000.



**Funding for
Easement
Acquisition**



**Land Use
Management
Authority**

Land Use Management Authority

The existing zoning code and subdivision regulations in Calvert County are designed to direct growth away from lands of agricultural and natural resource value as a major means of preserving farms, forests, and other important local landscapes and historic land uses. These countywide land use controls allow for limited development in priority areas for land conservation, including limiting single family residential development to densities of one dwelling per 20 acres, and required clustering of subdivisions. Clustering of subdivisions limits development to 20 to 50 percent of the parcel, with the remaining 50 to 80 percent of the parcel to be preserved as open space, with Calvert County holding an easement.



Farming Assistance Programs

Farming Assistance Programs

Calvert County actively works to promote the viability and growth of agricultural industries through its Economic Development Department, and Department of Planning & Zoning. In 2017, the county's Economic Development Department hired an agricultural marketing specialist to help improve sales of local agricultural products. The county maintains close working relationships with local public schools, the Southern Maryland Agricultural Development Commission, Southern Maryland Food Policy Council,

Calvert Farm Bureau, and Calvert Young Farmers.

The Southern Maryland Agricultural Development Commission (SMADC) is a major provider of programs that supports Calvert County farmers and others throughout the region. SMADC is self-described as, "committed to connecting food, farms, and healthy communities" and as providing "vision, support, and research in terms of education, grants, marketing and promotion as it incubates new farm and food industries."

Southern Maryland Agricultural Development Commission Goals:

- A market-driven and sustainable farming future
- A Maryland where farmland preservation and environmental stewardship positively impact the quality of our air and water
- Cultivating awareness among consumers and leaders of the vital role our farms play in a balanced community, safe, nutritious food, and cleaner and healthier environment

Specific programs, marketing initiatives, and economic/consumer outreach efforts of the Southern Maryland Agricultural Development Commission benefitting farmers in Calvert County were reported to have included:

- So Maryland, So Good: marketing and consumer education program
- Southern Maryland Trails: Earth, Art, Imagination – tourism program
- Southern Maryland Meats: farmer training and logistical assistance program
- Grant Programs: Growing Grapes for Wine Grants, Farm Viability Grants, and Regional Grants
- Buy Local Challenge: annual public awareness campaign.
- Farmers Market Support: provides education, promotional and start up assistance for new potential farmers markets.
- Maryland FarmLINK: assists aspiring farmers locate suitable agricultural land, mentors, and business partners for starting new farming ventures. The program provides online educational tools for all parties involved in the sale of farmland, agricultural businesses, etc.
- Children's Education and Outreach
- Farmer's Education Courses
- Policy and regulation advocacy

D. Evaluation of Agricultural Land Preservation Implementation Program

Overview and Summary of Strategy

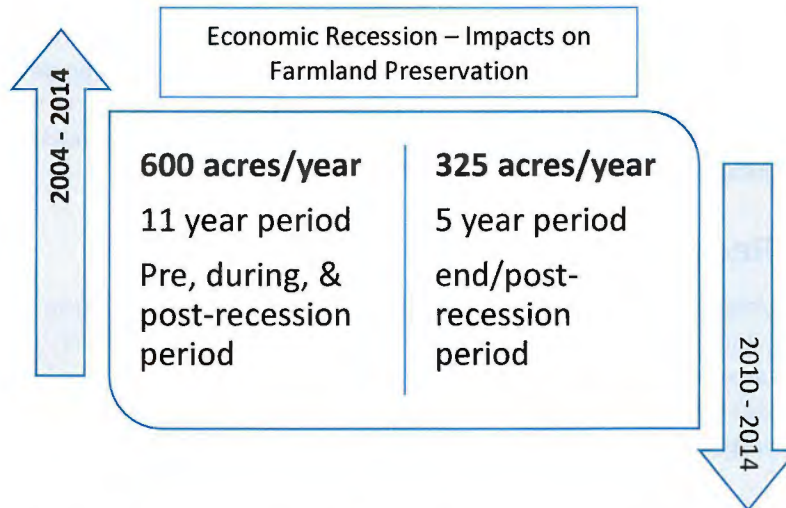
The 2014 “Land Preservation, Parks, and Recreation Plan” reported that the productivity of agricultural land preservation programs in Calvert County had generally remained low when compared to pre-2007 recession rates of preservation. For example, in 2004, the county compared the number of farmland acres being preserved versus the number of new residential lots being developed. During that year, fewer than 200 acres of new residential land had been developed, while at the same time nearly 1,200 acres of farmland were preserved. Between 2010 and 2014, the county reported that state and local farmland preservation efforts had collectively preserved an average of 325 acres per year. Since the last update of the “Land Preservation, Parks, and Recreation Plan” in 2014, an additional 930 acres of agricultural land were preserved (2013 through May 2017) in Calvert County. Since 2010, the county has consistently preserved farmland acreage each year.



Land Use Management Tools

At the county level, land use and zoning specifically controls TDR programs and land use controls that encourage development in defined districts outside of key preservation areas. These tools were essential for working to achieve agricultural land preservation goals, and generally required that land be preserved as development occurs throughout the county. The economic recession had a dramatic negative impact on real estate activity, and as development slowed, so did the productivity of local farmland preservation programs tied to current rates of development.

In fact, in 2012 Calvert County's TDR program preserved only 36 acres of agricultural land, the lowest recorded annual preservation rate since the program's inception. The significant impacts of the economic downturn on agricultural land preservation was significant, and county's rate of farmland preservation has not drastically improved. This is highlighted in average annual rates of agricultural land preservation in Calvert County:



As of 2017, Calvert County was in the process of updating its Comprehensive Plan and Zoning Ordinance. As part of these efforts (ongoing at the time of production of this plan) the county's existing farmland preservation tools are being evaluated for improvement.

Funding Levels

Calvert County's TDR program funding is tied to current levels of local development. In 2014, the county reported that the combination of slowed real estate activity and additional land development limitations introduced by Maryland Sustainable Growth and Agricultural Preservation Act curbed funding levels. The recession also significantly limited the county's ability to fund preservation programs. Decreased revenues, increased costs for preservation, and a slowed real estate market (and associated slowed participation in TDR programs) all limited funding and the county's ability to consistently preserve farmland.

State funding of agricultural preservation efforts in Calvert County have fallen short of expectations for the past ten or more years. When the local goal to preserve 40,000 acres of farmland was adopted in 2003, the county anticipated that the State of Maryland would fund the purchase of development rights and easements at a significantly higher level than has occurred since that time. From 2010 through 2014, approximately 200 acres of agricultural land were preserved in Calvert County by State funded programs. During the same five-year period, the county preserved 1,625 acres of farmland.

Combined Performance of Preservation Tools

The impacts of the economic recession on farmland preservation efforts in Calvert County were highly negative. Funding for and use of incentive-based means to protect land of agricultural value from development decreased dramatically. Although still important tools to maintain and utilize, TDRs and other similar county and State farmland preservation tools have not been as effective since the recession as they were prior to it. However, land use controls that directed development toward town centers and defined residential districts, and restricted land development in priority areas for preservation were reported to be functioning very well in 2014, with very limited development reported in defined preservation areas. As of 2017, the Calvert County was in the process of updating its Comprehensive Plan and Zoning Ordinance, with consideration being given to making targeted improvements in agricultural land preservation tools.

E. Goals and Recommendations

The three key goals/recommended actions for agricultural land preservation of the 2017 Land Preservation, Parks, and Recreation Plan remain the same as they were in Calvert County's last (2014) Plan. These actions are directly linked to countywide land use goals and plans established by the current (2010) Comprehensive Plan. These goals set a target acreage for the preservation of farm and forest lands, and direct county actions to support the existing farming community.

As previously noted, as of 2017, Calvert County was in the process of updating its Comprehensive Plan and Zoning Ordinance. Given the significant challenges in preserving agricultural land in the county since the economic recession a decade ago, the county is likely to consider amending existing goals, and/or mechanisms for agricultural land preservation as part of the update of the Comprehensive Plan and Zoning Ordinance.

2017 Land Preservation, Parks, and Recreation Goals for Agricultural Land Preservation

1. **Preserve at least 40,000 acres of farm and forestland countywide.**
2. **Continue to fund the county Purchase of Development Rights and urge the State to do the same.**
3. **Support zoning changes that allow farmers to have additional uses for agri-tourism, eco-tourism, and heritage tourism uses.**
4. **Continue to work with the Department of Economic Development and the Southern Maryland Agricultural Development Commission to develop and implement marketing programs.**

V. Cultural and Historic Resource Conservation

A. Introduction

The 2010 Comprehensive Plan includes the goal of “preserving the natural, cultural, and historic assets of Calvert County,” and the Plan’s “Heritage” section focuses on resources and conservation needs in the county at the time. Preservation of local cultural and historic heritage has been a priority for the county since 1974 when it created its first Historic District Commission. A general inventory of cultural and historic resources in Calvert County includes:

- 1,453 properties surveyed by Maryland Inventory of Historic Properties (9/2017)
- 531 archaeological sites recorded countywide (9/2017)
- 91 properties included in county Historic Districts
- 20 properties on the National Register of Historic Places
- Two properties designated local Historic Landmarks by Town of North Beach

A comprehensive map illustrating state and locally designated historic sites and resources within the county can be found online at: <http://www.co.cal.md.us/index.aspx?NID=1537>

Several cultural and historic sites of note in Calvert County include:

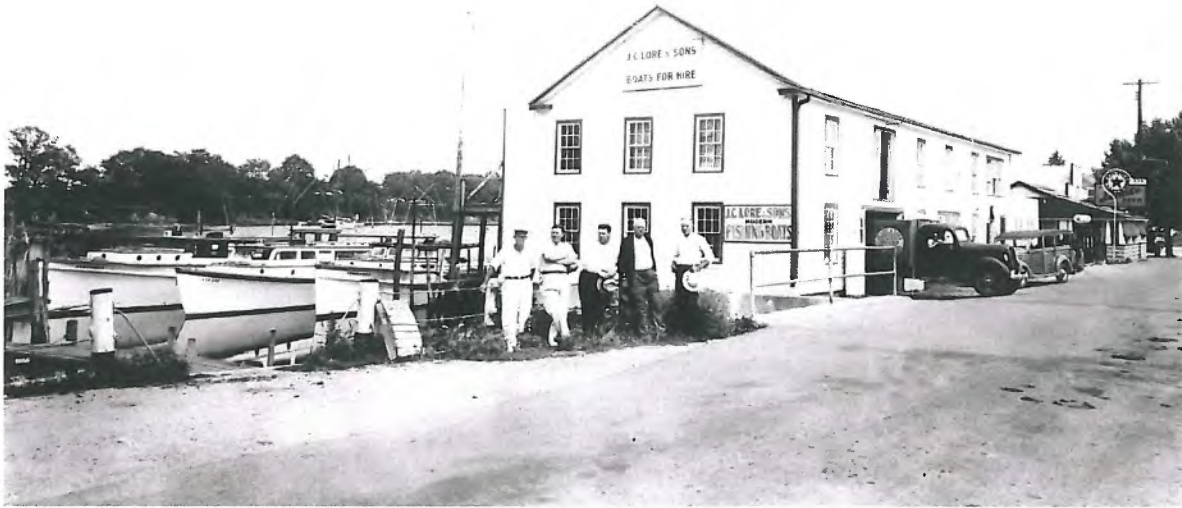
Patuxent Manor, also known as the Grahame House, was built in the 1700s and may be the oldest house in Lower Marlboro. It is one of few historic brick buildings in the county. The house has been lovingly restored and is both a Calvert County Historic District and listed on the National Register of Historic Places.



Patuxent Manor

Image Credit: Calvert County Department of Planning & Zoning

The Lore Oyster House is an increasingly-rare intact example of an early twentieth-century seafood packing house that were common on Maryland waterfronts. It was built in 1934 to replace a building destroyed by a hurricane. The Calvert Marine Museum staffs and interprets the Lore Oyster House, which was designated a Calvert County Historic District in 1982, and listed on the National Register of Historic Properties in 1984. In 2001, the Lore Oyster House was declared a National Historic Landmark.



The Lore Oyster House as it appeared in 1936. Image Credit: Calvert Marine Museum.

B. Cultural and Historic Resource Goals

Four goals for cultural and historic resource conservation were established in the county's 2014 Land Preservation, Parks, and Recreation Plan (Page VI-1). These goals remain valid in 2017, and continue to guide Calvert County's work to preserve and protect unique, local historic and cultural resources. Calvert County's goals for cultural and historic resource conservation are:

1. **Adopt a historic/scenic roads ordinance.**
Historic preservation staff and the Historic District Commission currently work with the Calvert County Department of Public Works to minimize negative effects on a list of roads that staff in all three agencies has agreed are most significant.
2. **Continue to add undocumented sites to the Maryland Inventory of Historic Properties** and update the forms for properties that have been previously surveyed but have inadequate information.
3. **Continue to record archaeological sites and add them to the Maryland Archaeological Sites Inventory** and to update forms recorded sites when new information is available.
4. **Adopt an archaeological site protection ordinance.**
At present, archaeology is required in only three of the seven town centers, on multi-family housing projects, or on county-funded projects. As town center master plans and zoning ordinances are updated, archaeological investigation is added as a requirement when an assessment of archaeological potential indicates a need.

As reported in the county's 2014 Land Preservation, Parks, and Recreation Plan, the county's goals complement the State of Maryland's recommendations for cultural and historic resource conservation. State recommendations for cultural and historic resource conservation:

- A. Identify historic and cultural resource survey as priority activity to provide data needed to inform local and statewide planning decisions and assist developers and project planners to more easily comply with federal, state, and local laws.
- B. Synthesize Maryland's archaeological data and make it available in the form of a searchable database.
- C. Launch a web-accessible comprehensive statewide inventory of historic properties that provides up-to-the minute data on historical and cultural resource documentation.
- D. Provide better guidance to local jurisdictions about including historic preservation in the comprehensive planning process and encourage active involvement by the Maryland Historical Trust during the draft process.
- E. Create a pay-for-performance grant program through which the State can support local-government-sponsored heritage preservation programs that will greatly enhance the identification, documentation, and protection of historic resources of significance to local communities, the state, and the nation. Such a program will provide local government with financial and human capital need to undertake new or expanded historic preservation initiatives and provide incentives to communities to provide professional, well run, effective programs benefitting the citizens of Maryland.

C. Implementation Program

Calvert County activities to implement state and county goals and state recommendations for conserving cultural and historic resources include:

- Cultural resources staff reviews development plans for possible effects on cultural resources.
- Staff records and documents archaeological and historic architectural sites and updates data on previously-recorded sites.
- Staff participates in inter-jurisdictional review of proposed projects that trigger review under Section 106 of the National Historic Preservation Act, and relevant state programs.
- Staff utilizes grants and local funding to complete cultural resource surveys, and uses that data to update the Maryland Inventory of Historic Properties and state archaeological site inventory data maintained by the Maryland Historical Trust, and to enhance our understanding of Calvert County's past.
- Staff works with other county departments, and with local nonprofit organizations to ensure that historic properties in their purview are appropriately managed and assists in writing scopes of work, grants, and content for interpretation as needed.
- Staff participates in the Southern Maryland Heritage Area Consortium and supports the activities of the heritage area.
- Staff provides web-based cultural and historic site information, with the exception of archaeological sites, the locations of which are not made public in order to protect the resources.

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Appendix A: Demographic Profile

Introduction

Gaining a clear understanding of the existing and projected demographic character of the county is an important component of the planning process for the update of Calvert County Land Preservation, Parks, and Recreation Plan. By analyzing population data, trends emerge that can inform decision making and resource allocation strategies for the provision of public parks, recreation amenities, and open spaces.

Key areas were analyzed to identify current demographic statistics and trends that can impact the planning and provision of public parks and recreation services in Calvert County. The following general characteristics of the county's population were reviewed in preparation of this Report:

- Existing and projected total population
- Age and gender distribution
- Ethnic/Racial diversity
- Household information
- Educational attainment
- Employment
- State and County Health Ranking

This demographic profile was completed using the most updated information available as of April 2017 from the Maryland Department of Planning State Data Center, U.S. Census Bureau, and U.S. Census Bureau's American Community Survey. A minor inconsistency in the estimated total population of the county in 2015 was noted between the American Community Survey (total population estimate: 90,114) and Maryland Department of Planning Community Survey (total population estimate: 91,650). A summary of demographic highlights is noted in **Table 10** below, followed by a more detailed demographic analysis.

Table 10: 2015 Calvert County General Demographic Profile 2015

Population	91,650
Median Age	40.6
Households	31,155
Median Household Income	\$95,828

Source: Maryland Department of Planning and American Community Survey

Key general 2015 demographic comparisons – County, State, and National:

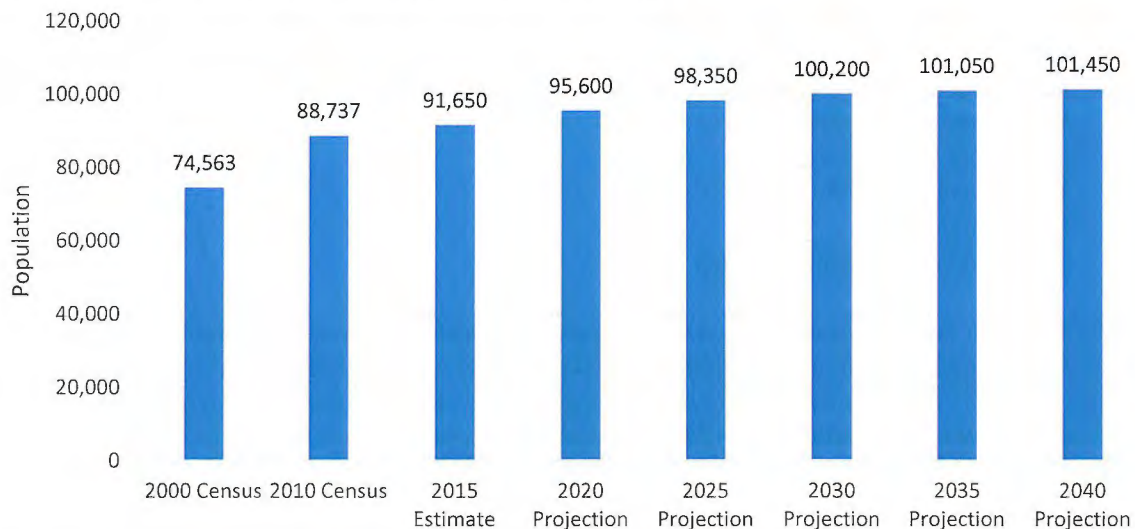
- The median age of Calvert County residents was 40.6 years, higher than the median age for Maryland (38.4) and slightly higher than median age in the United States (37.6).
- The median household income for Calvert County residents in 2015 was estimated to be \$95,828. This is higher than both the median incomes of residents statewide (\$74,551) and nationally (\$53,889).
- Calvert County's estimated population was almost evenly split between male (49 percent) and female (51 percent) residents. The populations of Maryland (48.4 male, and 51.6 percent female), and the United States (49.2 percent male and 50.8 percent female), are also roughly evenly divided between the sexes.

Population and Demographic Trends

Population Projections

Although future population growth cannot be predicted with certainty, it is helpful to make growth projections for planning purposes. **Figure 5** contains actual population figures based on the 2000 and 2010 U.S. Census for Calvert County, the 2015 estimated population from the Maryland Department of Planning, and population projections through 2040 from the Maryland Department of Planning. Based on this data, the county's population has been experiencing steady growth, with this trend predicted to continue through 2040. Between 2015 and 2025, the Maryland Department of Planning has projected Calvert County's population to increase by 6,700 new residents with an annual growth rate of less than one percent.

Figure 5: Calvert County, Maryland Population Growth Trend

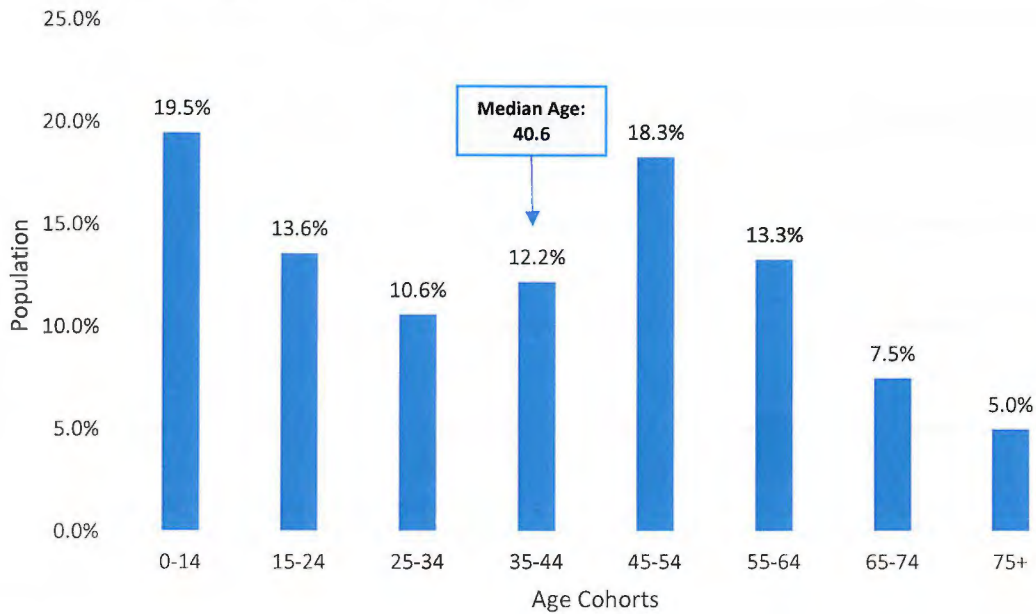


Source: U.S. Census Bureau, and Maryland Department of Planning

Population Age Distribution

As illustrated in **Figure 6**, the 2015 estimated county population included a high number (nearly 20%) of youth, teens, and young adults. Residents ages 45-54 comprised the second most populous age cohort (approximately 18 percent). The median age in Calvert County in 2015 was 40.6 years.

Figure 6: Population Age Distribution 2015



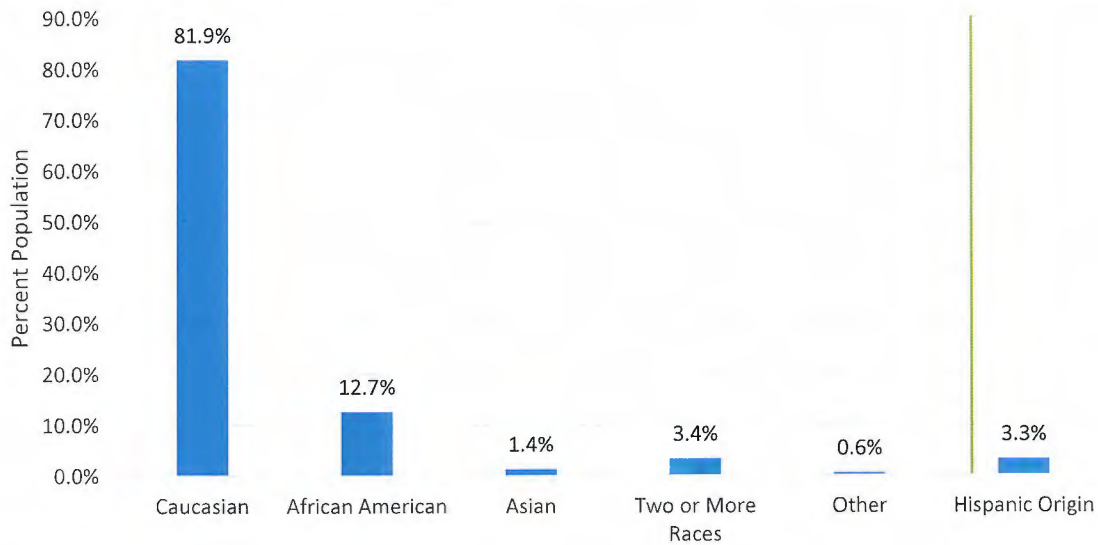
Source: Maryland Department of Planning and American Community Survey

Race/Ethnicity

Prior to reviewing demographic data pertaining to a population's racial and ethnic character, it is important to note how the U.S. Census classifies and counts individuals who identify as of Hispanic. The Census notes that Hispanic origin can be viewed as the heritage, nationality, lineage, or country of birth of the person or the person's parents or ancestors before arrival in the United States. In the U.S. Census, people who identify as Hispanic, Latino, or Spanish may be any race and are included in all of the race categories. All race categories add up to 100 percent of the population, the indication of Hispanic origin is a different view of the population and is not considered a race.

Figure 7 reflects the approximate racial and ethnic composition of Calvert County's 2015 population as estimated by the Maryland Department of Planning and U.S. Census Bureau's American Community Survey. As illustrated, over 80 percent of county residents identified as Caucasian. The most populous minority group was African Americans, who comprised nearly 13 percent of the population. Combined, these two groups comprise roughly 95 percent of the county's 2015 population.

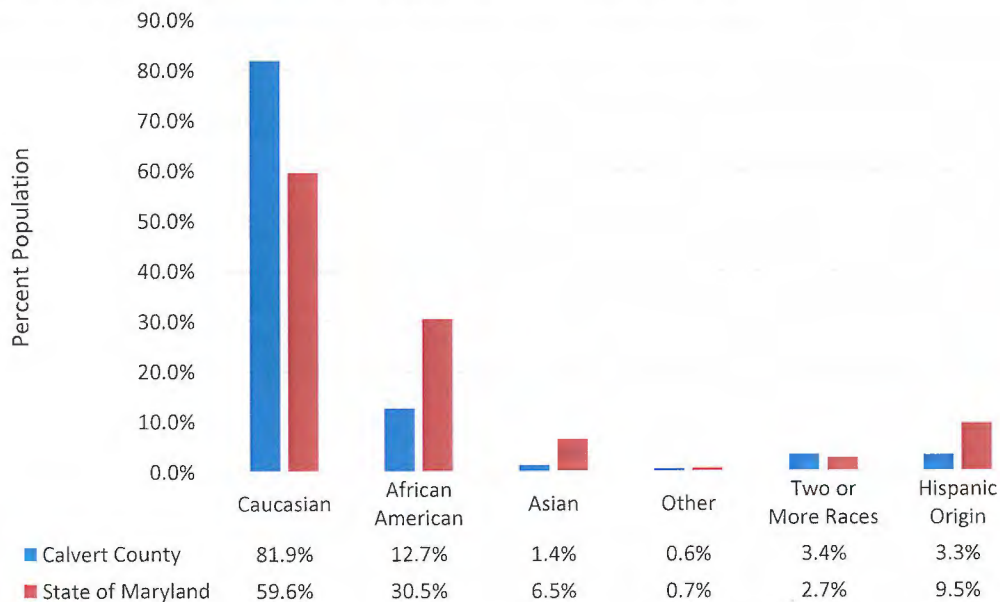
Figure 7: Racial and Ethnic Character 2015



Source: Maryland Department of Planning

As illustrated in **Figure 8**, the majority of residents in both Calvert County and the State of Maryland identified as either Caucasian or African American in 2015. However, the statewide population was estimated to have included greater racial/ethnic diversity than that of the county.

Figure 8: Racial/Ethnic Character Comparison 2015 – County to State

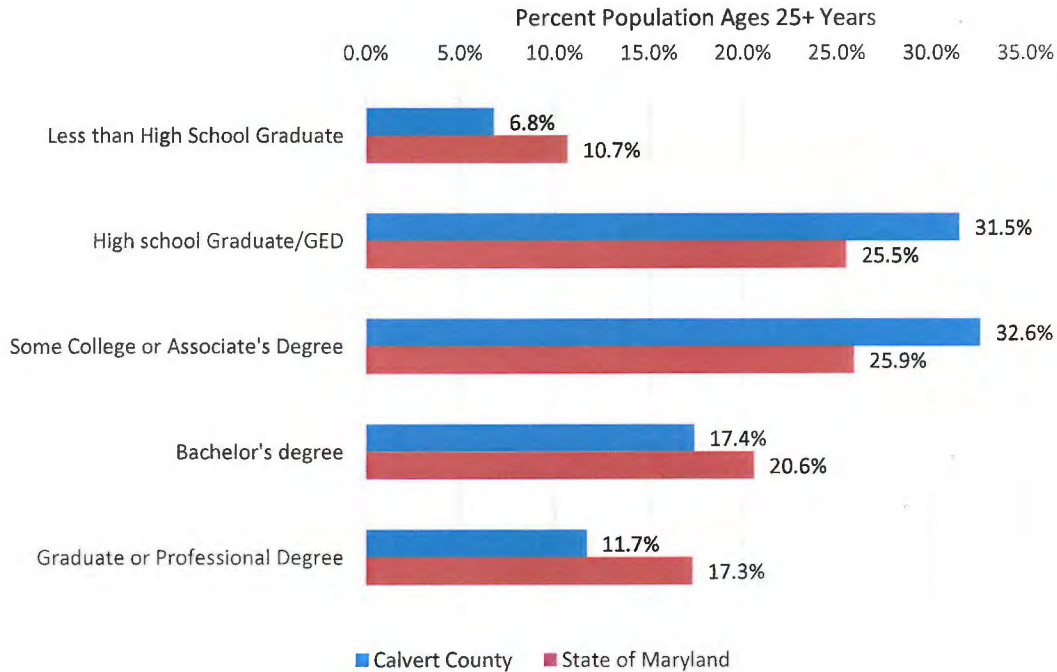


Source: U.S. Census Bureau and Maryland Department of Planning

Educational Attainment

According to the U.S. Census Bureau's latest American Community Survey (2015) on educational attainment, young adult (ages 18 to 24) and adult (ages 25+) residents of the county had relatively high levels of education. As illustrated in **Figure 9**, the majority (over 93%) of county adults over the age of 25 years have a high school education or greater, with 29.1 percent holding a Bachelor's degree or higher. Statewide, a higher percentage of adults (37.9%) hold a Bachelor's degree or higher.

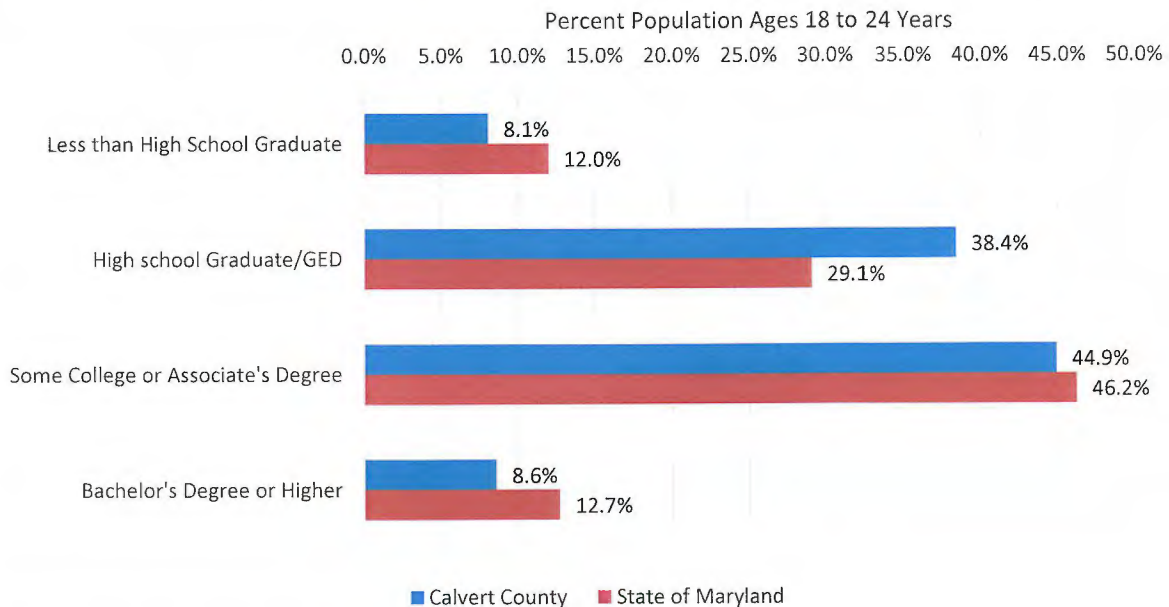
Figure 9: Educational Attainment of Adults (ages 25+) – County and State (2015)



Source: American Community Survey

As illustrated in **Figure 10**, young adults (ages 18-24 years) in Calvert County and State of Maryland are also generally well educated. Of these youth and young adults in the county, nearly 92 percent of those ages 18 to 24-years had earned a high school education or higher, with nearly 45 percent earning an Associate's degree or receiving some college level education, and 8.6 percent had earned a Bachelor's degree or higher.

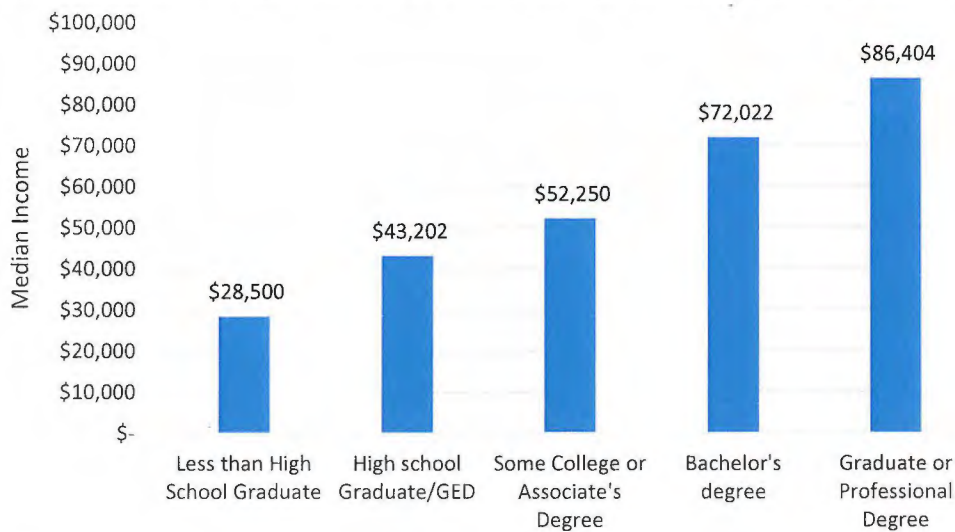
Figure 10: Educational Attainment of Young Adults (ages 18 – 24) - County and State (2015)



Source: American Community Survey

According to a Census study, education levels had more effect on earnings over a 40-year span in the workforce than any other demographic factor, such as gender, race, and ethnic origin.² This link between education and earnings appears clearly illustrated in Calvert County. As **Figure 11** shows, Calvert County residents (age 25+) with higher levels of education had higher annual incomes than those with lower levels of education. In fact, residents with a Bachelor's degree had annual earnings that were over double that of residents who did not graduate high school; those with graduate or professional degrees earned twice as much as residents with a high school education; and earned nearly three times as much as those without high school educations.

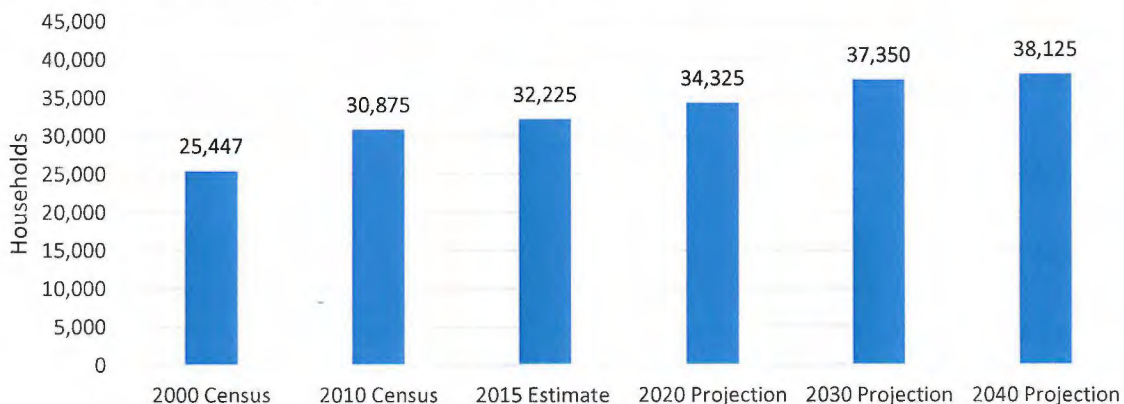
² Tiffany Julian and Robert Kominski, "Education and Synthetic Work-Life Earnings Estimates" American Community Survey Reports, US Census Bureau, <http://www.Census.gov/prod/2011pubs/acs-14.pdf>, September 2011.

Figure 11: Educational Attainment and Median Earnings of Calvert County Residents Age 25+

Source: American Community Survey

Household Information

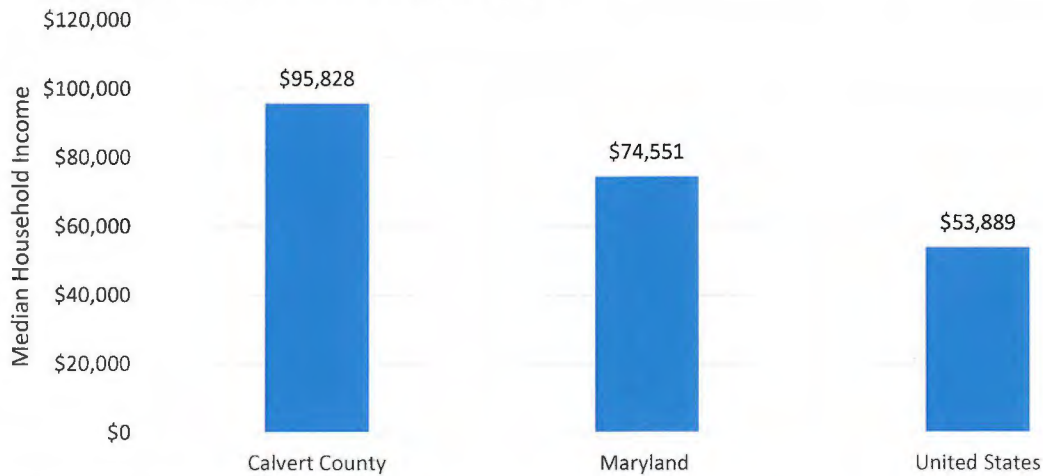
As reflected in **Figure 12**, the total number of households in the county increased by over 5,400 from 2000 to 2010. The Maryland Department of Planning estimated that from 2010 to 2015, the number of households in Calvert County increased by an additional 1,350 households. Coinciding with projected population growth, the number of households in the county is also predicted to continue to rise.

Figure 12: Projected Growth of Households in Calvert County

Source: Maryland Department of Planning

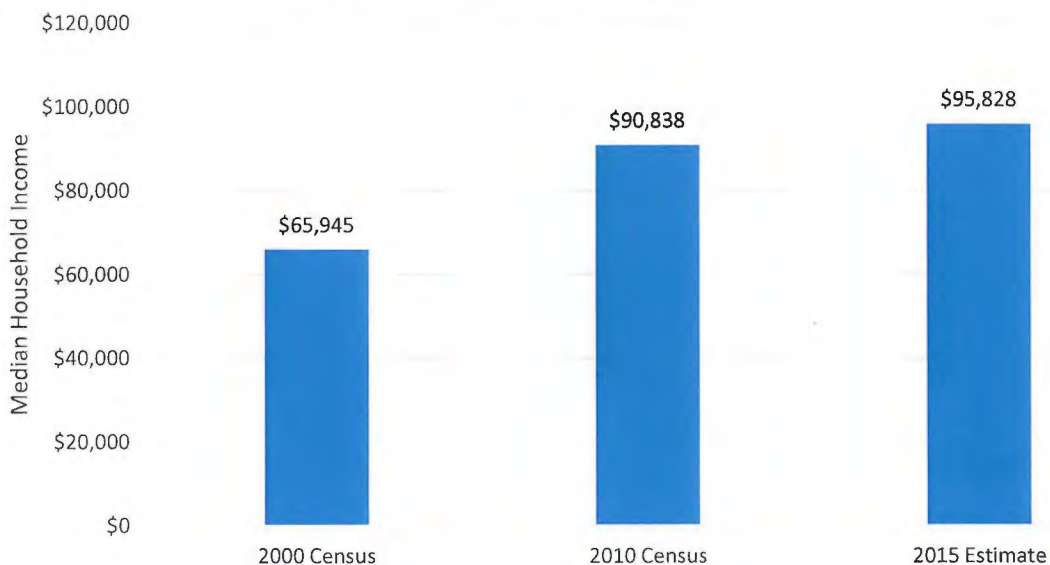
Household Income

The most current data (2015) from the Maryland Department of Planning and U.S. Census Bureau's American Community Survey, illustrated in **Figure 13**, indicated that the median household income in Calvert County was over \$20,000 higher than that of the median household in Maryland and nearly double the average median household income in the United States.

Figure 13: 2015 Median Household Income Comparison

Source: Maryland Department of Planning and American Community Survey

As **Figure 14** illustrates, the median household income in Calvert County grew significantly, by nearly \$25,000 from 2000 to 2010. This was an extremely high rate of increase, with median household income rising over the ten-year period by approximately \$2,500 annually; which equates to a slightly more than a \$200 raise in median household income each month. From 2010 to 2015, the median household income continued to increase at a slower rate of approximately \$1,000 annually (an increase of about \$84 per month).

Figure 14: Calvert County Median Household Income Growth

Source: U.S. Census Bureau and American Community Survey

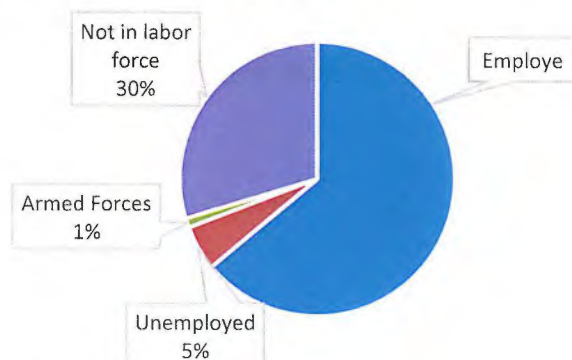
Figure 15 illustrates the distribution of household income in Calvert County in 2015. As noted, nearly 48 percent of households had median incomes of over \$100,000.

Figure 15: Distribution of Household Income in Calvert County (2015)

Source: American Community Survey

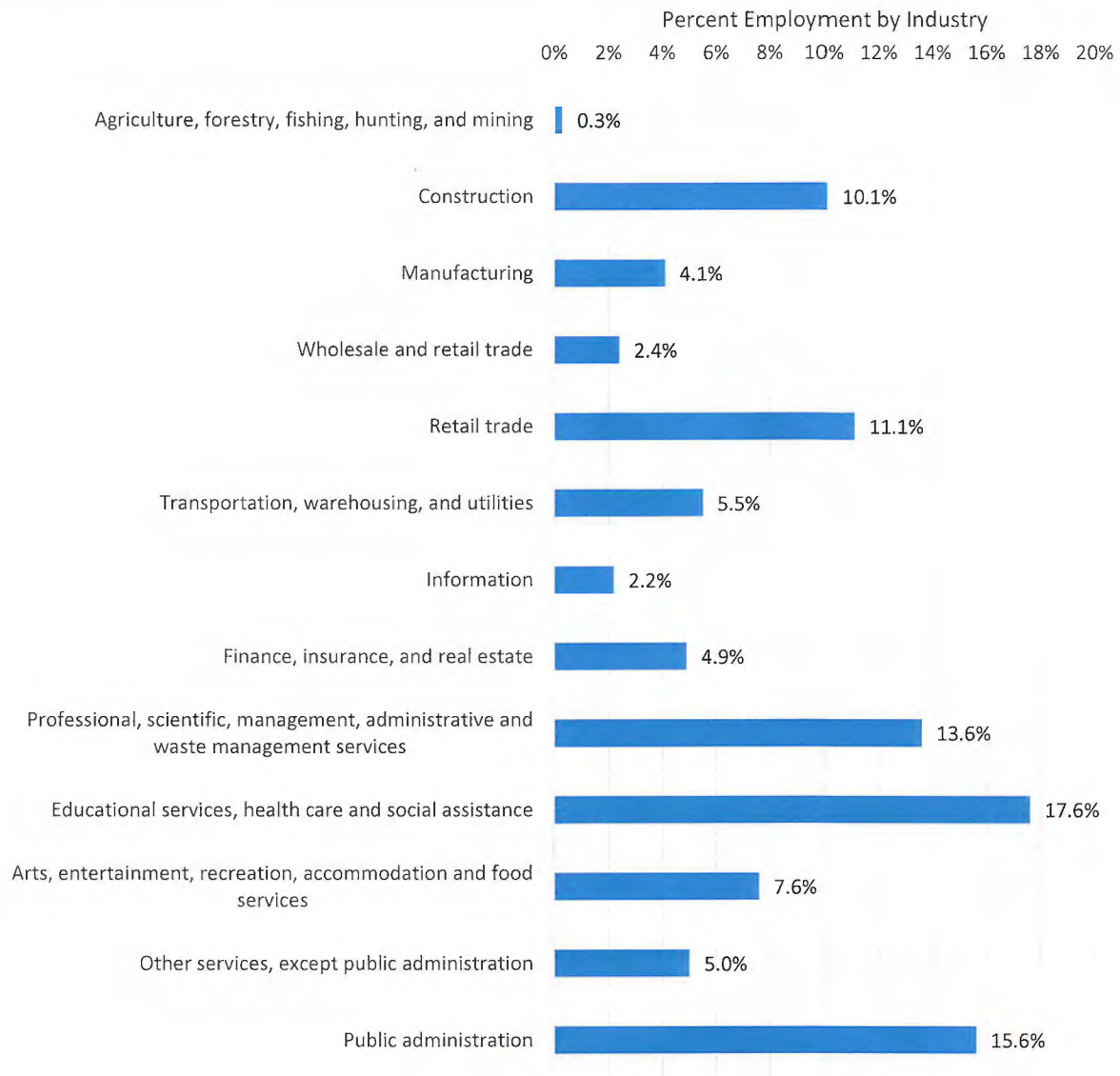
Employment

The U.S. Census Bureau's American Community Survey (2015) estimated that the eligible working population of Calvert County residents (those ages 16+) to be 70,850. Of these potential workers, 49,795 were in the labor force, with most (48,997) within the civilian labor force, and an additional 798 were estimated to be in military positions. A total of 21,055 residents over the age of 16 were not in the labor force. An additional 3,748 were listed as unemployed. Figure 16 represents the distribution of the labor force in Calvert County.

Figure 16: Employment of County Residents Ages 16+ (2015)

Source: American Community Survey

In 2015, the majority of working residents (age 16+) in Calvert County were employed in educational services, health care, social assistance (17.6%), various management positions (13.6%), and public administration (15.6%) as shown in Figure 17.

Figure 17: Employment by Industry in Calvert County (2015)

Source: American Community Survey

Health Ranking

The United Health Foundation's America's Health Rankings and Robert Wood Johnson Foundation's County Health Rankings and Roadmaps provide annual data on the general health of national, state, and county populations. The health rankings generally represent how healthy the population of a defined area can be perceived based on "how long people live and how healthy people feel while alive," coupled with ranking factors

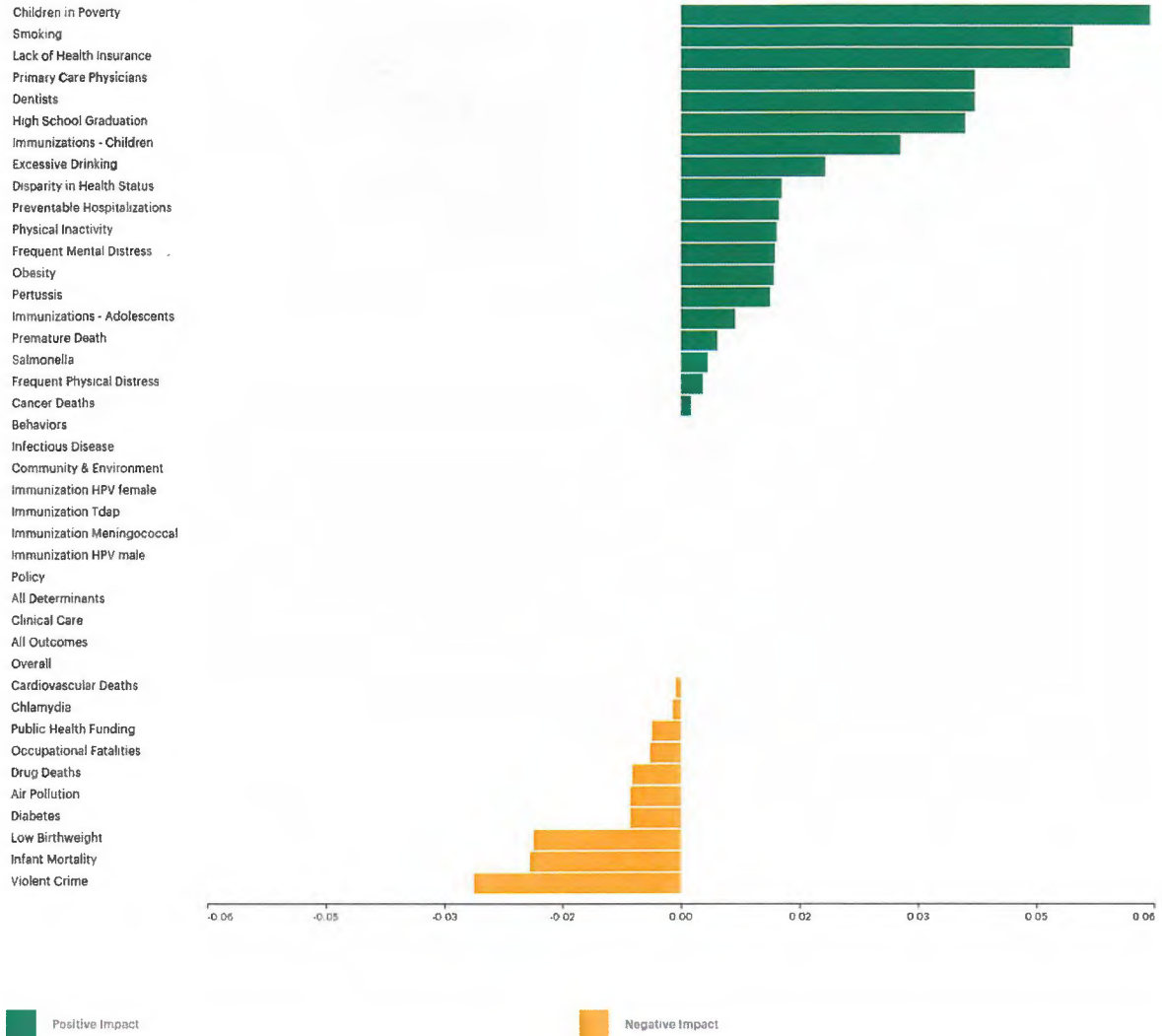
including healthy behaviors, clinical care, social and economic, and physical environment factors.³



The United Health Foundation's America's Health Rankings "2016 Annual Report" ranked Maryland as the 18th healthiest state nationally. According to the Foundation, Maryland's health ranking strengths include ready availability of primary care physicians, low prevalence of smoking, and low percentage of children in poverty. Health challenges faced by the state include high levels of air pollution, a high violent crime rate, and a large disparity in health status by education level. The Health Rankings Annual Reports combined measures of determinants with the resultant health outcomes to produce a comprehensive view of the overall health of each state. Rankings were based on expert review of data from sources including the U.S. Departments of Health and Human Services, Commerce, Education, Justice and Labor; the U.S. Environmental Protection Agency; the U.S. Census Bureau; the American Medical Association; the American Dental Association; the Dartmouth Atlas of Health Care; the Trust for America's Health; and the World Health Organization.

³ University of Wisconsin Population Health Institute & Robert Wood Johnson Foundation, *County Health Rankings and Roadmaps 2017*, <http://www.countyhealthrankings.org>

Core Measures Impact: Maryland, 2016 Annual Report



SOURCE:

- CDC, National Vital Statistics System, 2012-2014
- CDC, Behavioral Risk Factor Surveillance System, 2015
- US Department of Education, National Center for Education Statistics, 2014-2015
- America's Health Rankings Composite Measure, 2016
- US Environmental Protection Agency, 2013-2015
- CDC, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Atlas, 2014
- CDC, MMWR, Summary of Notifiable Infectious Diseases and Conditions, 2014
- BLS, Census of Fatal Occupational Injuries & Bureau of Economic Analysis, 2012-2014
- Federal Bureau of Investigation, 2015
- US Census Bureau, Current Population Survey: Annual Social and Economic Supplement, 2015
- CDC, National Immunization Survey, 2015
- US Census Bureau, American Community Survey, 2014-2015
- Trust for America's Health, 2014-2015
- Special data request for information on active state licensed physicians provided by Redi-Data, Inc.
- CDC, National Vital Statistics System, 2013-2014
- American Dental Association, 2015
- Dentimouth Atlas of Health Care, 2014
- CDC, National Vital Statistics System, 2013-2014

The 2017 County Health Rankings and Roadmaps ranked Calvert County 6th of Maryland's 23 counties and City of Baltimore in terms of health outcomes, a measure that weighs the current length and quality of life of residents, and 7th for health factors, a measure that considers the population's future health, based on a measure of multiple factors including health behaviors, clinical care, social and economic factors, and physical environment.

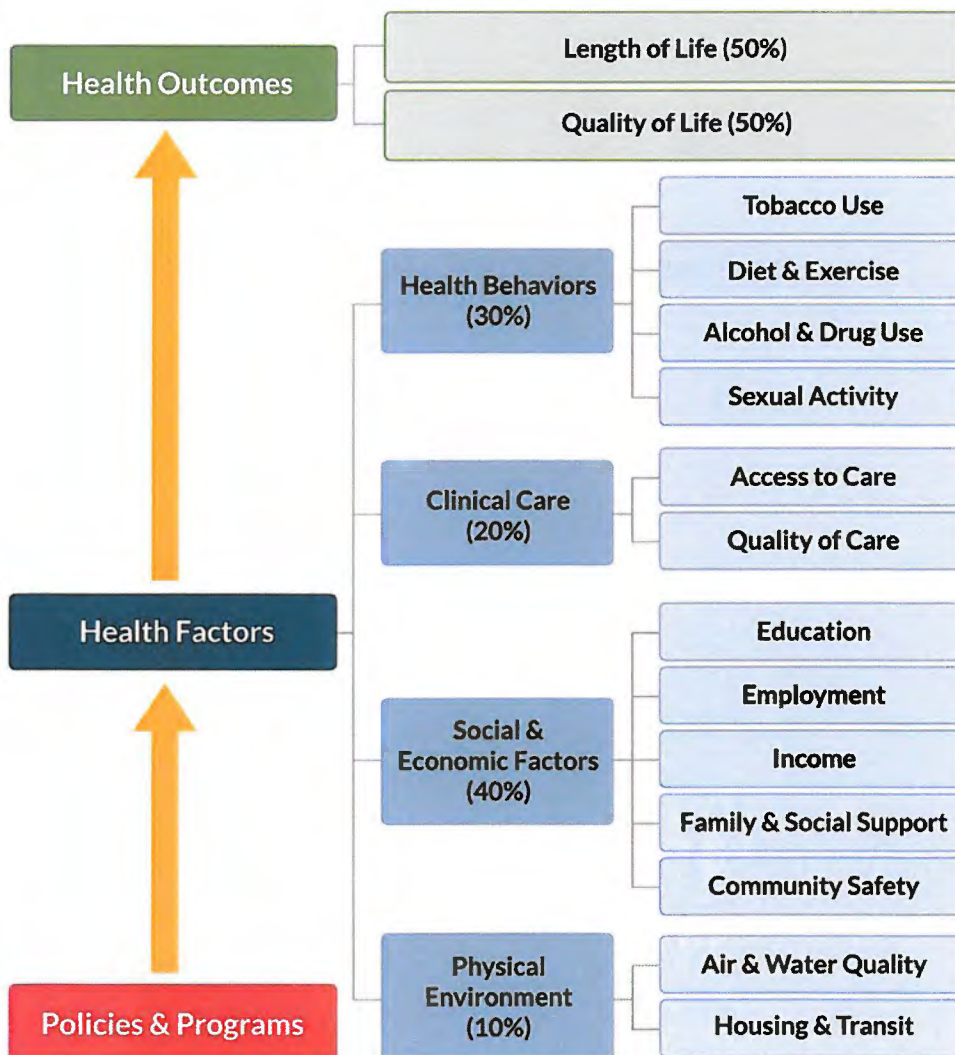
County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program



Figure 18: County Health Rankings Model



County Health Rankings model © 2016 UWPHI

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Appendix B: Recreation Trends Influencing Calvert County

The provision of public parks and recreation services can be influenced by a wide variety of trends, including the desires of different age groups, community values, and popularity of a variety of recreational activities and amenities. Within this section of the Plan, a number of local and national trends are reviewed that should be considered by the county when determining where to allocate resources toward the provision of parks, recreational facilities, and recreational programming for its residents and visitors.

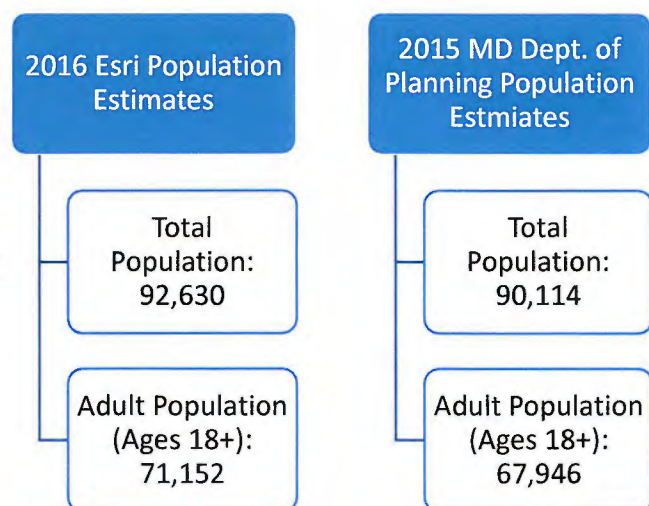
This Report is generally organized into two sections:

1. Esri Business Solution models and estimates of local household participation in, and spending on, recreational, sports, fitness, and leisure activities. Opportunities for participation in many of the activities analyzed are provided by Calvert County's system of public parks, recreation amenities, and open spaces.
2. Overview of key national recreation trends pertinent to the provision of parks, recreation facilities, and open spaces relevant to the population of Calvert County.

Household Recreation Participation and Spending Estimates

Esri Business Analyst estimates household participation rates in recreation, fitness, and leisure activities, as well as estimates household spending on fees, equipment, and other typical costs associated with participation. The estimates generated utilize a combination of information from the U.S. Census Bureau, Bureau of Labor Statistics, and other data sources that gauge national tendencies to participate and spend on these activities and weighs it against Esri's current (2016) local demographic characteristics including population, age, and household income. The results of the model yield an estimate of county adults (ages 18+) participation in a variety of recreation, sports, fitness and leisure activities, and an estimate of county household spending on participation in such activities.

Note that Esri's current demographic estimates (2016) used to gauge estimated participation rates and associated spending were used solely for his purpose. All other demographic data referenced in the Land Preservation, Parks, and Recreation Plan refers primarily to current data provided by the Maryland Department of Planning (2015). Although this difference exists, it should not be viewed as skewing the overall results of the recreation participation and spending estimate analysis.



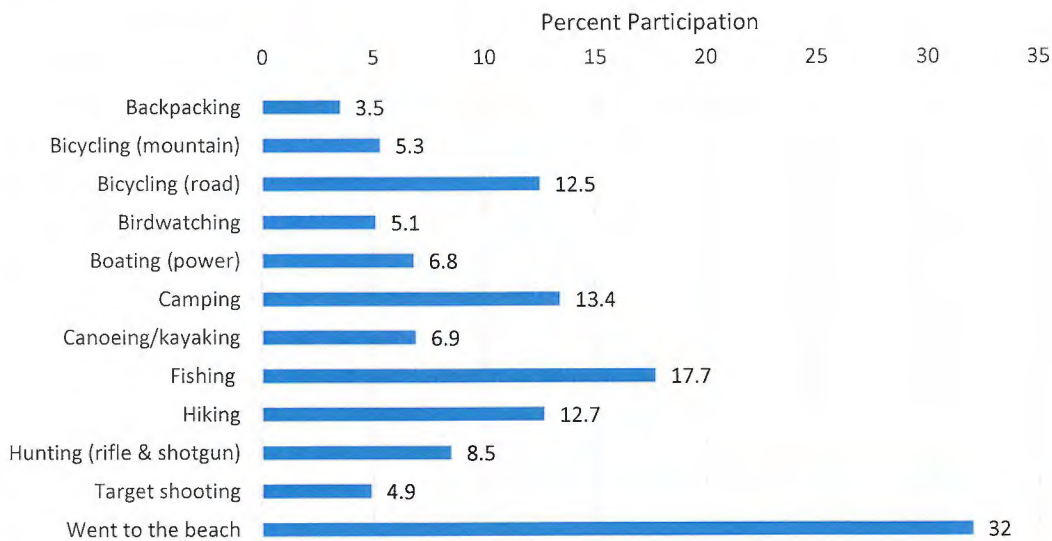
Estimated Household Participation

According to Esri Business Analyst, Calvert County residents participated in a variety of recreation, sports, fitness, and leisure activities in 2016. Opportunities for participation in activities reviewed were representative of those that often provided by public parks and recreation facilities and programs.

Figures 19 – 21 reviews the estimated participation of adult residents (ages 18+) from Calvert County households in outdoor recreation activities, team and individual sports, fitness activities, and leisure activities. Note that estimates reflect the percentage of adults from county households based on a total adult population of 71,152, and not a percentage of the county's total estimated population of 92,630.

Figures 22 – 23 reviews the estimated spending of county households through participation in recreation, fitness, and leisure activities.

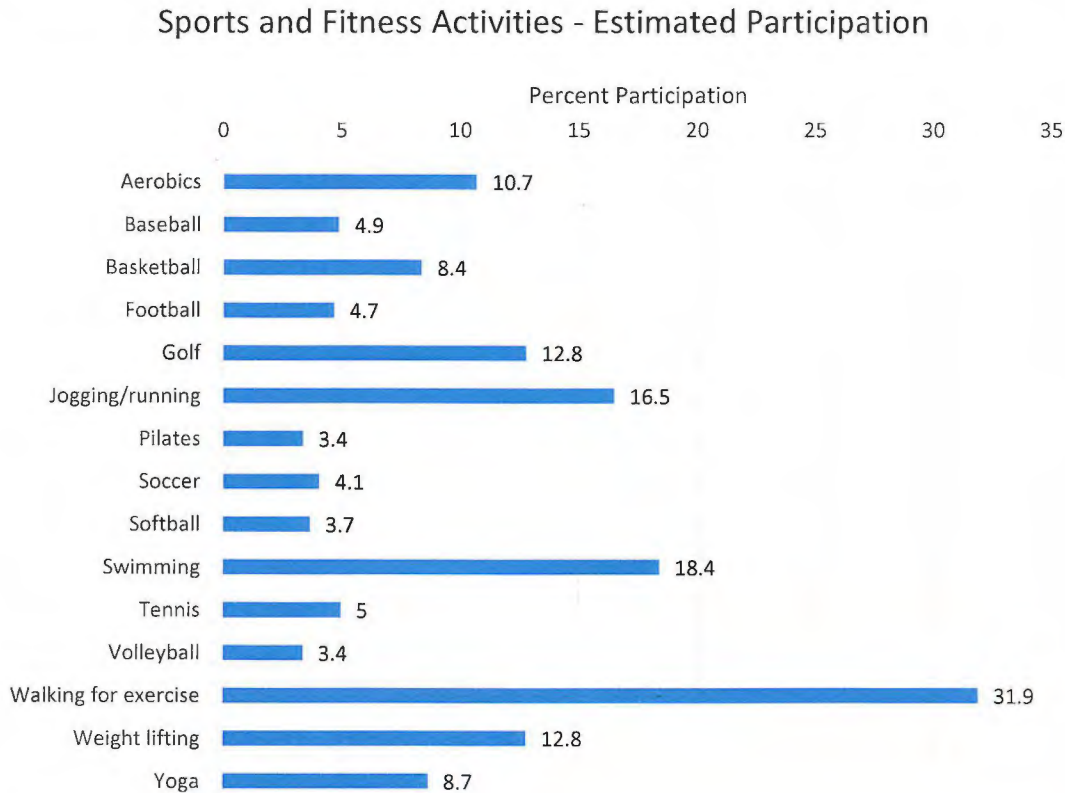
Figure 19: Estimated Participation in Outdoor Activities



Source: Esri Business Analyst, June 2016

As illustrated in **Figure 19**, nearly one third of adults from county households (over 22,000 residents) went to the beach. Between 10 and 20 percent of adult residents bicycled (on road), hiking, camping, and/or fishing.

Figure 20: Estimated Household Participation in Sports and Fitness Activities



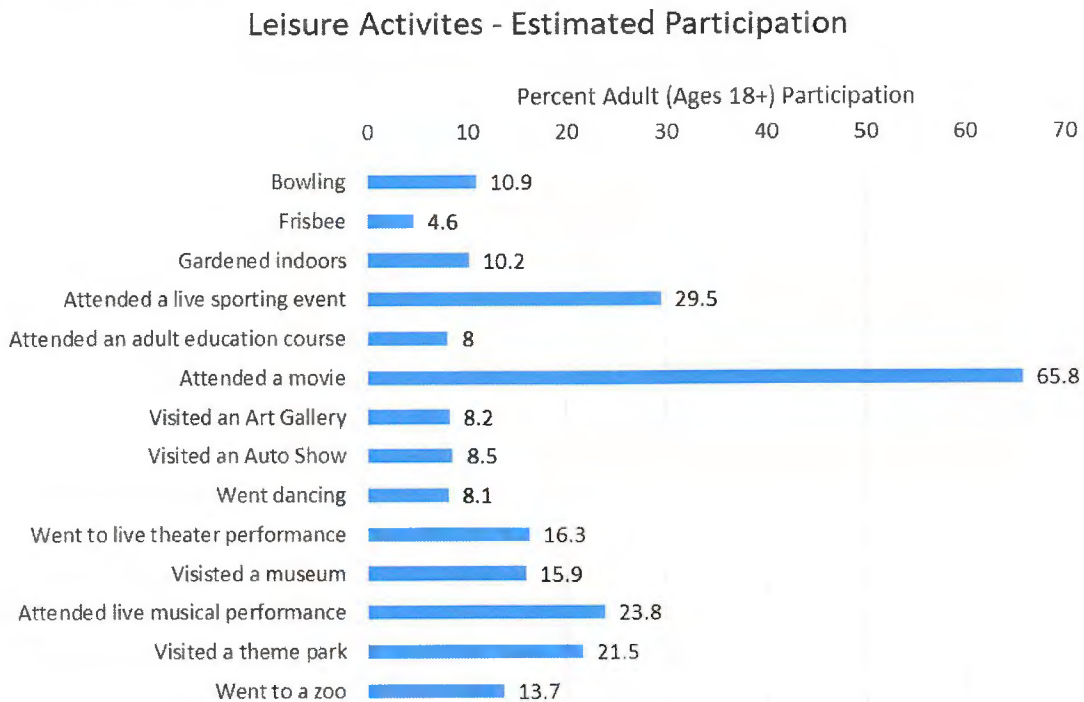
Source: Esri Business Analyst

As illustrated in **Figure 20**, in general, fewer Calvert County adults participated in team sports, individual sports, and fitness activities, than in outdoor sports and recreation activities. Basketball was estimated to be the most heavily participated in team sport, with over eight percent of adults having participated. Individual fitness activities saw higher rates of participation, with over 10 percent of adults having participated in aerobics, golf, weight lifting, and jogging/running. Walking for exercise was estimated to be the most highly participated in fitness activity, with nearly 32 percent of county adults having participated. Although Esri estimates that fewer households had members that participated in team sports, youth participation in organized team sports is known to be high in the county.

31.9% of county adults were estimated to have participated in walking for exercise in 2016.

Of note, combined, over 60 percent of county adults participated in bicycling, jogging, running, and/or walking for exercise. These healthy activities have generally few restrictions or costs for individual participation. With such a high estimated rate of participation, the provision of trails, paths, and facilities to support public participation should be a focus area for Calvert County recreation infrastructure and service delivery.

Figure 21: County Household Participation in Leisure Activities



Source: Esri Business Analyst

Roughly 2/3 of county adults attended a movie at least once in the past year. As illustrated in **Figure 21**, other popular leisure activities enjoyed by Calvert County households included attending live sporting events, attending live musical performances, and/or visiting theme parks. Over 20 percent of adults from county households participated in these activities, which all focused on providing an “experience” for the participant.

Estimated Household Spending on Participation in Recreation Activities

Local participation in recreation, fitness, and leisure activities positively contributes to public health, community wellness, and the local economy. According to Esri, in 2016 Calvert County households collectively spent an estimated \$43.3 million on fees, equipment, and other costs typically associated with participation in recreation, sports, fitness, and leisure activities. As illustrated in **Figure 22**, the majority of this spending was on fees and admission to entertainment and recreation activities. A detailed breakdown of estimated household spending is noted below in **Table 11**.

\$43.3 million
Estimated spending on recreation
by Calvert County households in
2016.

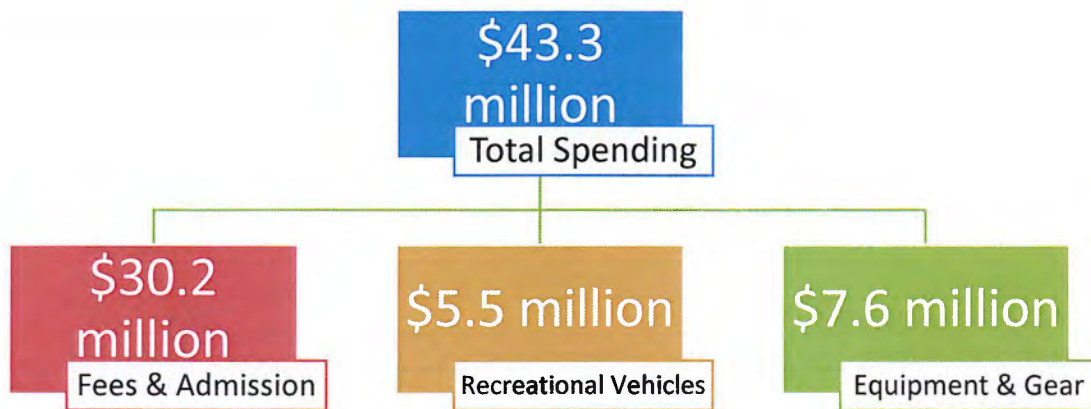
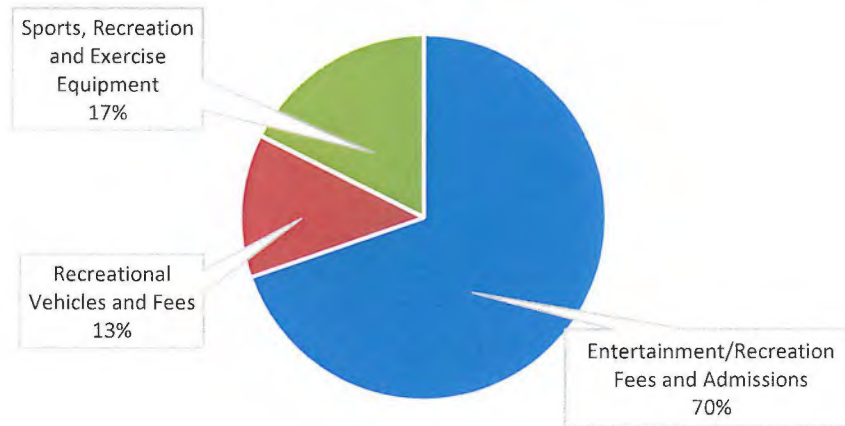


Figure 22: General Recreational Spending of Calvert County Households



Source: Esri Business Analyst

Table 11: Estimated County Household Spending on Recreation, Fitness, and Leisure Activities

	Average Spending Per Household	Total Spending - All Households
Entertainment/Recreation Fees and Admissions	\$934	\$30,159,297
Tickets to Theatre/Operas/Concerts	\$85	\$2,746,476
Tickets to Movies/Museums/Parks	\$98	\$3,164,297
Admission to Sporting Events, excl. Trips	\$84	\$2,727,041
Fees for Participant Sports, excl. Trips	\$146	\$4,728,888
Fees for Recreational Lessons	\$209	\$6,763,651
Membership Fees for Social/Recreation/Civic Clubs	\$310	\$10,028,944
Recreational Vehicles and Fees	\$170	\$5,489,374
Docking and Landing Fees for Boats and Planes	\$13	\$416,583
Camp Fees	\$64	\$2,052,702
Payments on Boats/Trailers/Campers/RVs	\$69	\$2,219,499
Rental of RVs or Boats	\$25	\$800,589
Sports, Recreation and Exercise Equipment	\$236	\$7,617,593
Exercise Equipment and Gear, Game Tables	\$79	\$2,543,550
Bicycles	\$37	\$1,206,178
Camping Equipment	\$22	\$709,280
Hunting and Fishing Equipment	\$64	\$2,051,609
Winter Sports Equipment	\$8	\$255,449
Water Sports Equipment	\$9	\$276,045
Other Sports Equipment	\$13	\$417,896
Rental/Repair of Sports/Recreation/Exercise Equipment	\$5	\$157,581
Total:	\$1,339	\$43,266,264

Source: Esri Business Analyst

National Recreation Trends of Relevance to Calvert County

Demographic Trends Influencing Public Recreation

Three major age groups, the Baby Boomers, Millennials, and Generation Z, are having significant impacts in the planning and provision of parks and recreation services nationwide. The approximate ages of people within these generational groups include:

- Baby Boomers: 52-70 years
- Generation X: 37-52 years
- Millennials: 18-36 years
- Generation Z: 17 years and under

In 2016, the majority (64.5%) of Calvert County's population belonged to one of these age groupings. However, Generation X was the largest single generational group, which coincides with the population's median age of 40.6 years.

The 2017 "Participation Report"⁴ from the Physical Activity Council characterized generational participation in recreation, sports, fitness, and other physical activities as:

BABY BOOMERS	GENERATION X	MILLENNIALS	GENERATION Z
• Least Active Generation • Top 3 activity preferences: ▪ Fitness Sports ▪ Outdoor Sports ▪ Individual Sports	• Varied Activity Levels • Top 3 activity preferences: ▪ Fitness Sports ▪ Outdoor Sports ▪ Individual Sports	• Moderately Active • Top 3 activity preferences: ▪ Fitness Sports ▪ Outdoor Sports ▪ Individual Sports	• Most Active Generation • Top 3 activity preferences: ▪ Outdoor Sports ▪ Team Sports ▪ Fitness Sports
Oldest Generation ←————→ Youngest Generation			

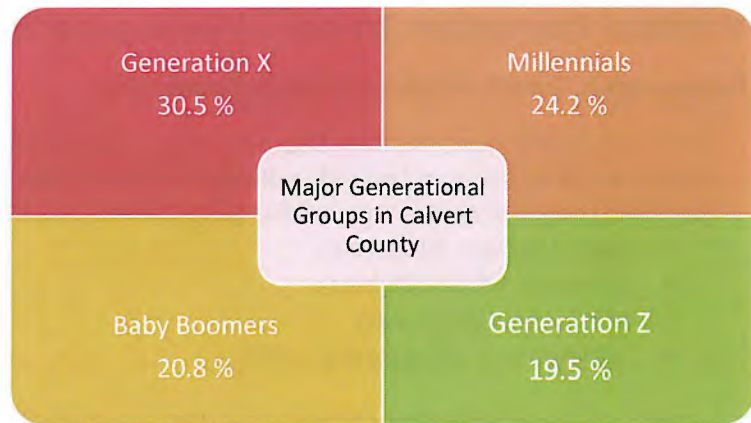
⁴ Physical Activity Council, 2017 *Participation Report*, <http://www.physicalactivitycouncil.com/PDFs/current.pdf>; accessed June 2017

Baby Boomer Generation

Baby Boomers are defined as individuals born between 1945 and 1964, as stated in "Leisure Programming for Baby Boomers."⁵

They are a generation that consists of nearly 76 million Americans, and is estimated to have included over 18,000 Calvert County residents in 2016. In 2011, this influential population began its transition out of the workforce. In the July 2012 issue of *Parks and Recreation* magazine,

Emilyn Sheffield, Professor of Recreation and Parks Management at the California State University, at Chico, contributed an article titled "Five Trends Shaping Tomorrow Today." In it, she indicated that Baby Boomers are driving the aging of America, with Boomers and seniors over 65 composing about 39 percent of the nation's population.⁶ As Baby Boomers enter retirement, they are looking for opportunities in fitness, sports, outdoors, arts and cultural events, and other activities that suit their lifestyles. With their varied life experiences, values, and expectations, Baby Boomers are predicted to redefine the meaning of recreation and leisure programming for mature adults.



In the leisure profession, this generation's devotion to exercise and fitness is an example of its influence on society. When Boomers entered elementary school, President Kennedy initiated the President's Council on Physical Fitness, making physical education a key component of public education. As Boomers matured and moved into the workplace, they took their desire for exercise and fitness with them. Now as the oldest Boomers are over 65, park and recreation professionals are faced with new approaches to provide both passive and active programming for older adults. Boomers are second only to Generation Y/Millennials in participation in fitness and outdoor sports.⁷

Jeffrey Ziegler, a past president of the Arizona Parks and Recreation Association identified "Boomer Basics" in his article, "Recreating Retirement: How Will Baby Boomers Reshape Leisure in their 60s?"⁸ Highlights are summarized below.

- *Boomers are known to work hard, play hard, and spend hard.* They have always been fixated with all things youthful. Boomers typically respond that they feel 10 years younger than their actual age. Their nostalgic mindset keeps Boomers returning to the sights and sounds of their 1960s youth culture. Swimming pools have become less of a social setting and much more of an extension of Boomers' health and wellness program. Because Boomers in general have a high education level, they will likely continue to pursue education as adults and into retirement.

⁵ Linda Cochran, Anne Roshchadl, and Jodi Rudick, "Leisure Programming For Baby Boomers," *Human Kinetics*, 2009.

⁶ Emilyn Sheffield, "Five Trends Shaping Tomorrow Today," *Parks and Recreation*, July 2012, p. 16-17.

⁷ Physical Activity Council, 2012 Participation Report, 2012.

⁸ Jeffrey Ziegler, "Recreating Retirement: How Will Baby Boomers Reshape Leisure in Their 60s?" *Parks and Recreation*, October 2002.

- *Boomers will look to park and recreation professionals to provide opportunities to enjoy many life-long hobbies and sports.* When programming for this age group, a customized experience to cater to the need for self-fulfillment, healthy pleasure, nostalgic youthfulness, and individual escapes will be important. Recreation trends will shift from games and activities that Boomers associate with senior citizens. Ziegler suggests that activities such as bingo, bridge, and shuffleboard will likely be avoided because Boomers relate these activities with old age.
- *Boomers will reinvent what being a 65-year-old means.* Parks and recreation agencies that do not plan for Boomers carrying on in retirement with the same hectic pace they have lived during their years in employment will be left behind. Things to consider when planning for the demographic shift:
 - Boomer characteristics
 - What drives Boomers?
 - Marketing to Boomers
 - Arts and entertainment
 - Passive and active fitness trends
 - Outdoor recreation/adventure programs
 - Travel programs

Generation X 30.5 %

Generation X

This generational group is comprised of individuals in the 37 – 52 year old age range. In 2016 the median age of Calvert County residents was 40.6 years, and nearly 1/3 (30.5 percent) of county's population was a member of Generation X. This was the largest single age group in the county in 2016. Many members of this generation are in the peak of their careers, raising families, and growing their connections

within the community.

As suggested by the 2017 "Participation Report" from the Physical Activity Council, members of Generation X were "all or nothing" in terms of their levels of physical activity, with 37 percent reported as highly active, and 27 percent reported as completely inactive. As further noted in the Report, over 50 percent of Generation X was likely to have participated in fitness and outdoor sports activities. An additional 37 percent participated in individual sports.

Millennials 24.2 %

The Millennial Generation

The Millennial Generation are generally considered those born between about 1980 and 1999, and in April 2016, the Pew Research Center reported that this generation had surpassed the Baby Boomers as the nation's most populous age group.⁹ Millennials were estimated to comprise 24.2 percent of Calvert County's 2016 population, or approximately 22,000 residents.

⁹ Richard Fry, "Millennials overtake Baby Boomers as America's Largest Generation," *Pew Research Center Fact Tank*, April 25, 2016, <http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtake-baby-boomers/>, accessed May 2015

In their book, *Millennials Rising, the Next Great Generation*, authors William Strauss and Neil Howe identify the following seven characteristics of the Millennials¹⁰:

1. Special: Used to receiving rewards just for participating, Millennials are raised to feel special.
2. Sheltered: Millennials lead structured lives filled with rules and regulations. Less accustomed to unstructured play than previous generations and apprehensive of the outdoors, they spend most of their time indoors, leaving home primarily to socialize with friends and families.
3. Team Oriented: This group has a “powerful instinct for community” and “places a high value on teamwork and belonging.”
4. Technologically savvy: Upbeat and with a can-do attitude, this generation is “more optimistic and tech-savvy than its elders.”
5. Pressured: Millennials feel “pressured to achieve and pressured to behave.” They have been “pushed to study hard and avoid personal risk.”
6. Achieving: This generation is expected to do great things, and they may be the next “great” generation.
7. Conventional (and diverse): Millennials are respectful of authority and civic minded. Respectful of cultural differences because they are ethnically diverse, they also value good conduct and tend to have a “standardized appearance.”

In a 2011 study of the Millennial Generation,¹¹ Barkley Advertising Agency made the following observations about Millennials and health/fitness:

- Sixty percent (60%) of Millennials say they try to work out on a regular basis. Twenty-six percent (26%) consider themselves health fanatics.
- Much of this focus on health is really due to vanity and/or the desire to impress others — 73 percent exercise to enhance their physical appearance.
- Millennials are also fans of relaxation and rejuvenation, as 54 percent regularly treat themselves to spa services.
- Despite their commitment to health, Millennials stray from their healthy diets on weekends. There is a noticeable difference between their intent to work out regularly and the amount of exercise that they actually accomplish

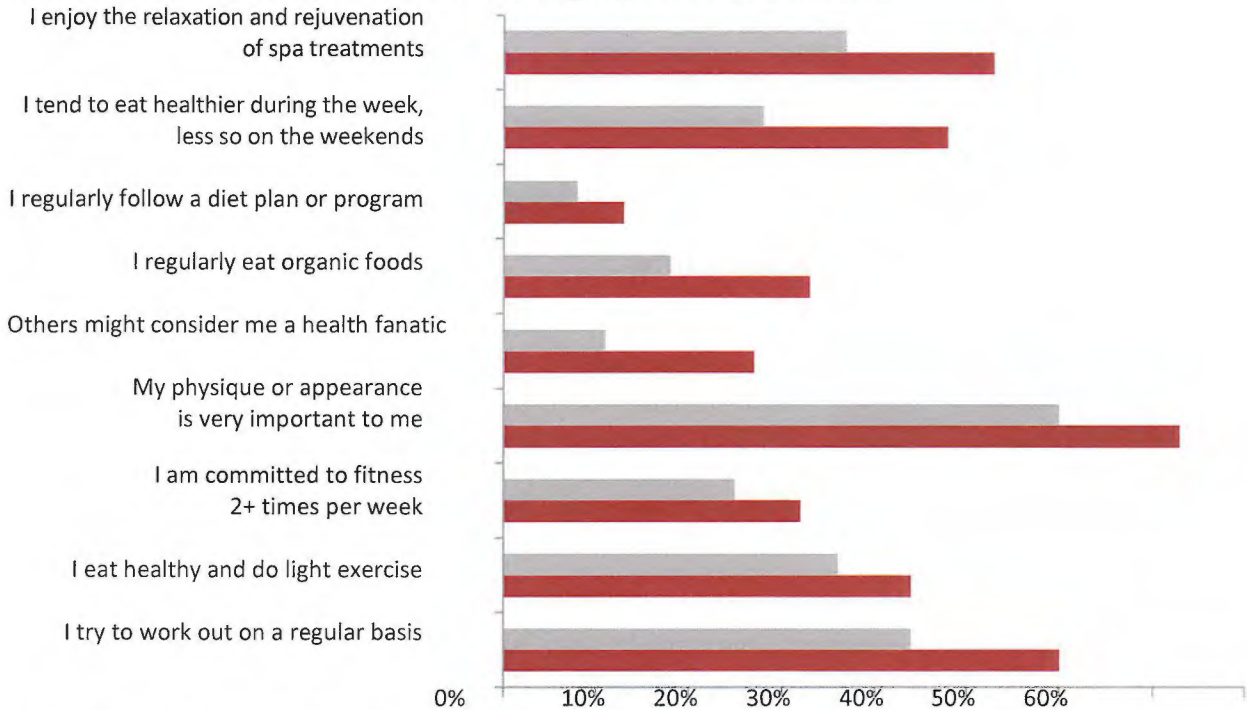
Figure 23 illustrates contrasts between Millennials and Non-Millennials regarding a number of health and fitness topics.¹²

¹⁰ William Strauss and Neil Howe, *Millennials Rising, the Next Great Generation*, Vintage: New York, New York, 2000.

¹¹ American Millennials: Deciphering the Enigma Generation, <https://www.barkleyus.com/AmericanMillennials.pdf>, accessed May 2015

¹² American Millennials: Deciphering the Enigma Generation, <https://www.barkleyus.com/AmericanMillennials.pdf>, accessed May 2015

Figure 23: Millennials (red) Vs. Non-Millennials (grey) on Health and Fitness



Source: *American Millennials: Deciphering the Enigma Generation*

Millennials tend to be a more tech-savvy, socially conscious, achievement-driven age group with more flexible ideas about balancing wealth, work, and play. They generally prefer different park amenities and recreational programs than their counterparts in the Baby Boomer generation. Engagement with this generation should be considered in parks and recreation planning. In an April 2015 posting to the National Parks and Recreation Association's official blog, *Open Space*, Scott Hornick, CEO of Adventure Solutions suggests the following seven considerations to make your parks Millennial friendly¹³:

1. Group activities are appealing.
2. Wireless internet/Wi-Fi access is a must – being connected digitally is a millennial status-quo, and sharing experiences in real time is something Millennials enjoying doing.
3. Having many different experiences is important – Millennials tend to participate in a broad range of activities.
4. Convenience and comfort are sought out.
5. Competition is important, and Millennials enjoy winning, recognition, and earning rewards.
6. Facilities that promote physical activity, such as trails and sports fields, and activities like adventure races are appealing.
7. Many Millennials own dogs, and want places in which they can recreate with them.

¹³ Scott Hornick, "7 Ways to Make Your Park More Millennial Friendly," *Parks and Recreation Open Space Blog*, August 19, 2015, <http://www.nrpa.org/blog/7-ways-to-make-your-parks-millennial-friendly>, accessed May 2016

In addition to being health conscious, Millennials often look for local and relatively inexpensive ways to experience the outdoors close to home; on trails, bike paths, and in community parks.¹⁴ They, along with the Baby Boomer generation, highly value walkability, and in a 2014 study by the American Planning Association, two-thirds noted that improving walkability in a community is directly related to strengthening the local economy. The study also noted that 46 percent of Millennials, and Baby Boomers, place a high priority on having sidewalks, hiking trails, bike paths, and fitness choices available to them in their community. In fact, these community features were viewed by study respondents to be of higher preference than a great school system, vibrant centers of entertainment and culture, and affordable and convenient transportation choices.¹⁵

Generation Z
19.5 %

Generation Z

In her article, Emily Sheffield also identified that the proportion of youth is smaller than in the past, but still essential to our future. As of the 2010 Census, the age group under age 18 forms about a quarter of the U.S. population. Nationwide, nearly half of the youth population is ethnically diverse, and 25 percent is Hispanic. In Calvert County, about 19.5 percent of the population (approximately 17,500 residents) was

under the age of 19 in 2016.

Characteristics cited for Generation Z, the youth of today, include¹⁶:

- The most obvious characteristic for Generation Z is the pervasive use of technology.
- Generation Z members live their lives online and they love sharing both the intimate and mundane details of life.
- They tend to be acutely aware that they live in a pluralistic society and tend to embrace diversity.
- Generation Z'ers tend to be independent. They do not wait for their parents to teach them things or tell them how to make decisions.

With regard to physical activity, a 2013 article published by academics at Georgia Southern University noted that the prevalence of obesity in Generation Z (which they describe as individuals born since the year 2000) is triple that of Generation Xers (born between 1965 and 1979). It suggests that due to increased use of technology, Generation Z spends more time indoors, is less physically active, and more obese compared to previous generations. The researchers noted that Generation Z seeks social support from peers more so than any previous generation. This is the most competent generation from a technological standpoint, but Generation Zers tend to fear, and often struggle with, some basic physical activities and sports.

¹⁴ "Sneakernomics: How The 'Outdoor' Industry Became The 'Outside' Industry," *Forbes*, September 21, 2015, <http://www.forbes.com/sites/mattpowell/2015/09/21/sneakernomics-how-the-outdoor-industry-became-the-outside-industry/2/#50958385e34d>, accessed May 2016

¹⁵ American Planning Association, "Investing in Place: Two generation's view on the future of communities: millennials, boomers, and new directions for planning and economic development," <https://www.planning.org/policy/polls/investing>, accessed May 2015

¹⁶ Alexandra Levit, "Make Way for Generation Z," *New York Times*, March 28, 2015, <http://www.nytimes.com/2015/03/29/jobs/make-way-for-generation-z.html>, accessed May 2016

Multiculturalism

The United States is becoming increasingly racially and ethnically diverse. In May 2012, the U.S. Census Bureau announced that non-white babies now account for the majority of births in the United States. "This is an important tipping point," noted William H. Frey,¹⁷ senior demographer at the Brookings Institution, describing the shift as a, "transformation from a mostly white Baby Boomer culture to the more globalized multi-ethnic country that we are becoming." Cultural and ethnic diversity adds unique character to communities expressed through distinct neighborhoods, multicultural learning environments, and restaurants, places of worship, museums, and nightlife.¹⁸

Calvert County's 2016 estimated population was predominantly Caucasian (81.9 percent). An additional 12.7 percent of the population was African American. The remaining 5.4 percent identified as of two or more races (3.4 percent), Asian (1.4 percent), or other (less than one percent). Overall 3.3 percent of residents identified as being of Hispanic Origin.

As recreation agencies continue to provide services within a more diverse society, race and ethnicity in the county will become increasingly important factors in determining programming needs, and means of service delivery. More than ever, recreation professionals will be expected to work with, and have significant knowledge and understanding of, individuals from many cultural, racial, and ethnic backgrounds.

- **Outdoor recreation participation varies by ethnicity:** Participation in outdoor activities is generally higher among Caucasians than any other ethnicity, and lowest among African Americans in nearly all age groups.
- **Lack of interest is a major reason for lack of participation in recreational activities:** When asked why they did not participate in outdoor activities more often, the number one reason given by people of all ethnicities and races was because they were not interested.
- **Most popular outdoor activities:** Walking, biking, running, fishing, and camping were the most popular outdoor activities for all Americans, with each ethnic/racial group participating to varying degrees.

General Recreational Preferences among Ethnic/Racial Groups (Self-Identifying):

Nationwide participation in outdoor sports by youths and young adults, ages 6 – 24, was highest among Caucasians in all age groups and lowest among Asian and Pacific Islanders, according to the 2016 "Outdoor Recreation Participation Topline Report."¹⁹ The Report found that within this age range, 71 percent of Caucasians, 12 percent of Hispanics, 8 percent of African Americans, 7 percent of Asians/Pacific Islanders, and 2 percent of those identifying their race as "other," participated in some form of outdoor recreation in 2014. The earlier 2014 "Outdoor Recreation Participation Topline Report" included a robust study of recreational preference among ethnic populations. Information from this report, as well as the updated 2016 Report, are referenced throughout this section.

¹⁷Adam Serwer, "The End of White America," *Mother Jones*, <http://www.motherjones.com/kevin-drum/2012/05/end-white-america>, May 17, 2012.

¹⁸Baldwin Ellis, "The Effects of Culture & Diversity on America," http://www.ehow.com/facts_5512569_effects-culture-diversity-america.html, accessed on Sept. 20, 2012.

¹⁹ Outdoor Foundation, *Outdoor Recreation Participation Report 2016*, <http://www.outdoorfoundation.org/pdf/ResearchParticipation2016Topline.pdf>, accessed May 2016

Park and Recreation Facility Trends

According to *Recreation Management* magazine's 2016 "State of the Industry Report,"²⁰ an annual survey of parks and recreation facility operators and service providers, current national trends influencing recreation facilities included:

- Partnerships – the popularity of partnering with outside organizations to share facility spaces to extend programming capabilities or potentially increase funding is continuing to grow in popularity nationally. Over 87 percent of agencies reported partnering with another agency in 2016. Of these partnerships, nearly 3/5 were with local schools, and nearly 52 percent with local government agencies.
- Cost Recovery – more recreation, sports, and fitness providers are being tasked to recover higher percentages of their operating costs through increasing revenues. The average level of cost recovery from public organizations nationwide was approximately 43 percent, with levels of cost recovery varying widely between different types of providers and facilities. The most common operating cost reduction action taken by parks and recreation providers was to improve the energy efficiency of facilities. Over half of agencies surveyed reported investing in energy efficiencies as an overall cost reduction strategy.
- Memberships and Usage Fees – nearly 60 percent of service providers surveyed charged membership or usage fees for their facilities. The vast majority of YMCAs (93.1%), health clubs (90.6%), and community recreation centers (69.3%) charged fees for memberships or facility use.
- Facility Use – in 2014 and 2015, the majority (59.8%) of survey respondents reported that they had expected use of their facilities to increase. In 2016 over 54 percent of survey respondents reported increased facility usage in the previous two years. Providers in urban areas were 10 percent more likely to have reported increased usage of their facilities when compared to rural providers.
- Existing Facilities – park agencies reported providing a variety facilities and amenities. Compared to other recreation providers, parks agencies were more likely to provide:

▪ Playgrounds	▪ Disc golf courses
▪ Picnic shelters	▪ Fitness trails or outdoor fitness equipment
▪ Outdoor sport courts	▪ Splash play areas
▪ Community centers	▪ Golf courses
▪ Bike trails	▪ Water parks
▪ Skate parks	▪ Ice rinks
▪ Dog parks	▪ Bikes/BMX parks
▪ Community gardens	

The average age of the "main" recreation facility operated by survey respondents increased from 27.5 years in 2013 to 32.6 years in 2016. Over 60 percent of respondents noted their main facility was at least 21 years old.

²⁰Recreation Management, 2016 *State of the Industry Report*, <http://recmanagement.com/state-of-the-industry/>; accessed June 2017

Construction Plans – with aging facilities being commonplace, and general increase of facility usage reported nationally, the majority (66.4%) of 2016 survey respondents reported having plans to renovate existing facilities or construct new ones to enhance service provision. This percentage of recreation service providers planning capital investments increased 3.7 percent from 2013 to 2016. The average planned capital improvement budget for public organizations in 2016 was expected to be \$3,887,000

Nationally, there has been a trend by public parks and recreation agencies toward the construction of “one-stop” indoor recreation facilities to serve all age groups. These facilities are typically large, multipurpose regional centers that have been observed to help increase operational cost recovery, promote user retention, and encourage cross-use. Parks and recreation agencies across the United States are generally working toward increasing revenue production and cost recovery. Providing flexible or multiple use space allows for one area to be adapted to serve programming and free-play opportunities. “One-stop” facilities often attract young families, teens, and adults of all ages. In addition to their large indoor recreation spaces, the sites of regional recreation centers are often developed with outdoor recreation amenities such as sports fields and courts or playgrounds. In many communities that have them, these regional recreation centers often serve as a major community hub.

Aquatics/Water Recreation Trends

According to the National Sporting Goods Association (NSGA), swimming ranked third nationwide among recreational activities in terms of participation in 2014.²¹ Nationally, there is an increasing trend towards indoor leisure and therapeutic pools. Swimming for fitness is the top aspirational activity for inactive individuals in all age groups, according to the Sports & Fitness Industry Association (SFIA) 2016 “Sports, Fitness, and Leisure Activities Topline Participation Report,” representing a significant opportunity to engage inactive populations.

Aquatic amenities such as splash pads, shallow spray pools, and interactive fountains are becoming increasingly popular attractions in the summer months, and if designed for such, can be converted into ice rinks for the winter months. These features can also be designed to be ADA-compliant, and are often cheaper alternatives to build and maintain than community swimming pools. Trends in the architectural design for splash parks can be found in *Recreation Management* magazine articles in 2014 and 2015.²²

The Outdoor Foundation’s 2016 “Outdoor Recreation Participation Topline Report” provided nationwide trends for various outdoor activities, including a number of water-based recreational activities noted below in **Table 12**. Among water recreation activities, stand-up paddle boarding had the largest increase in participation (25.7%), followed by several varieties of the kayaking experience: kayak fishing (17.4% increase) and whitewater kayaking (10.3% increase). Fly fishing participation went up, while other fishing activities went down in the same time period. Participation in surfing declined slightly in 2015, down by 2.2 percent overall. Sailing participation increased somewhat, while rafting and wakeboarding participation went down.²³

²¹ National Sporting Goods Association, “2014 Participation – Ranked by Total,”

²² Dawn Klingensmith “Make a splash: Spraygrounds Get (Even More) Creative,” *Recreation Management*, April 2014 (and April 2015 updates), http://recmanagement.com/feature_print.php?fid=201404fe01

²³ Outdoor Recreation Participation Topline Report 2016

Table 12: Water Recreation Participation by Activity (in thousands) (6 years of age or older)

	2011	2012	2013	2014	2015	3 Year Average Change
Boardsailing/windsurfing	1,151	1,593	1,324	1,562	1,766	4.7%
Canoeing	9,787	9,839	10,153	10,044	10,236	1.3%
Fishing (fly)	5,683	6,012	5,878	5,842	6,089	0.5%
Fishing (freshwater/other)	38,868	39,135	37,796	37,821	37,682	-1.2%
Fishing (Saltwater)	11,983	12,017	11,790	11,817	11,975	-0.1%
Kayak fishing	1,201	1,409	1,798	2,074	2,265	17.4%
Kayaking (recreational)	8,229	8,144	8,716	8,855	9,499	5.3%
Kayaking (sea touring)	2,029	2,499	2,694	2,912	3,079	8.0%
Kayaking (white water)	1,546	1,878	2,146	2,351	2,518	10.3%
Rafting	3,821	3,690	3,836	3,781	3,883	1.7%
Sailing	3,725	3,958	3,915	3,924	4,099	1.2%
Stand up paddling	1,242	1,542	1,993	2,751	3,020	25.7%
Surfing	2,195	2,895	2,658	2,721	2,701	-2.2%
Wakeboarding	3,389	3,348	3,316	3,125	3,226	-1.2%

Source: Outdoor Foundation 2016 Outdoor Recreation Participation Topline Report

Dog Parks

Dog parks are increasingly popular community amenities and have remained among the top planned addition to parks and recreational facilities over the past three years. In fact, the 10 largest cities in the U.S. increased the number of dog parks in their parks system by 34 percent between 2005 and 2010. Dog parks not only provide safe spaces for animals to socialize and exercise, they are also places where dog owners socialize and enjoy the outdoors. They help build a sense of community and can draw potential new community members and tourists traveling with pets.²⁴

In 2014, the National Dog Park Association was established and focused its mission on providing informational resources for establishing and maintaining dog parks. *Recreation Management* magazine²⁵ suggested that dog parks can serve as a relatively low-cost way to provide an oft-visited a popular community amenity. Dog parks can be as simple as a gated area, or more elaborate with “designed-for-dogs” amenities such as water fountains, agility equipment, and pet wash stations. Even splash pads are being designed for dog parks.

²⁴ Joe Bush, “Tour-Legged-Friendly Parks,” *Recreation Management*, February 2, 2016.

²⁵ Emily Tipping, “2014 State of the Industry Report, Trends in Parks and Recreation,” *Recreation Management*, June 2014.

Well-designed dog parks cater to users with design features for their comfort and pleasure. Some parks agencies even also offer creative programming at some dog parks for owners and their dogs.²⁶

Amenities in a well-designed dog park might include the following:

- Benches, shade, and water – for dogs and people
- At least one acre of fenced-in space with adequate drainage
- Double gated entry
- Ample waste stations well-stocked with bags
- Sandy beaches/sand bunker digging areas
- Custom designed splash pads or water-play feature for dogs
- People-pleasing amenities such as walking trails, water fountains, restroom facilities, picnic tables, and dog wash stations.

Parks and Recreation Programming

According to *Recreation Management* magazine's 2016 "State of the Industry Report," 96.5 percent of survey respondents provided recreation, sports, fitness, and leisure programs of some kind. The most common programming offered included:

- | | |
|---------------------------|--|
| 1. Holiday/special events | 6. Mind-body/balance programs |
| 2. Fitness programs | 7. Sports tournaments and races |
| 3. Educational programs | 8. Swimming programs |
| 4. Day and summer camps | 9. Adult sports teams |
| 5. Youth sports teams | 10. Active senior/older adult programs |

Approximately 31 percent of survey respondents indicated that they were planning to expand programming over the next several years. According to the 2016 "State of the Industry Report," the most commonly planned program new or expanded programs planned included:

1. Educational programs
2. Fitness programs
3. Mind-body/balance programs
4. Teen programs
5. Active senior/older adult programs
6. Environmental education
7. Arts and crafts
8. Day camps and summer camps
9. Sports tournaments and races
10. Holiday events and other special events

²⁶ Dawn Klingensmith "Gone to the Dogs: Design and Manage an Effective Off-Leash Area," *Recreation Management*, March 2014, http://recmanagement.com/feature_print.php?fid=201403fe02

Fitness Programming

Fitness programming, and popularity of various activities has significantly evolved over the past 15 years. The American College of Sports Medicine (ACSM) *Health and Fitness Journal* has conducted annual surveys since 2007 to gauge trends that would help inform the creation of standards for health and fitness programming. **Table 13** illustrates survey results that focus on trends in the commercial, corporate, clinical, and community health and fitness industry in 2015. Some trends first identified in 2007 have remained popular year after year, while other activities and associated programs were widely popular for short durations. For example, Zumba was a top 10 fitness trend/activity in 2012 but quickly declined in popularity. Two years later, in 2014, it failed to register in the top 20 fitness trends/activities. Body weight training appeared and high-intensity interval training are currently highly popular. Fitness programs for older adults have remained highly desirable activities for nearly a decade.²⁷

Table 13: Top 10 National Fitness Trends for 2015 Compared to 2007

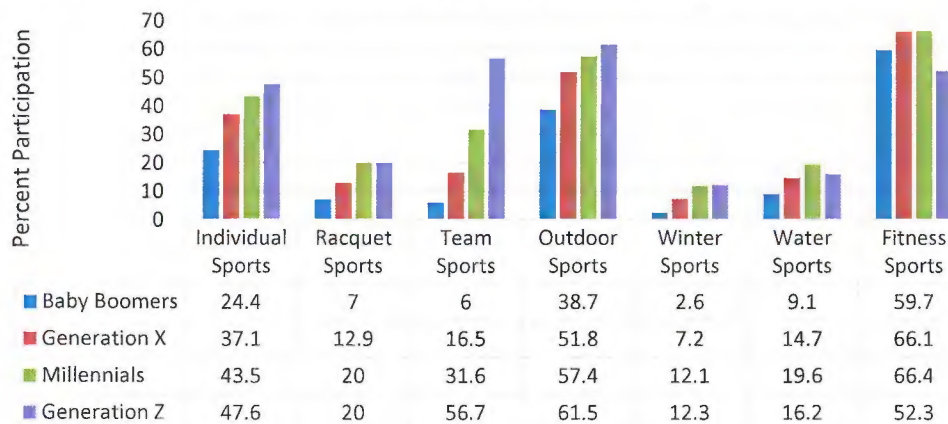
2007	Trends for 2015
1. Children and obesity	1. Body weight training
2. Fitness programs for older adults	2. High-intensity interval training
3. Educated and experienced fitness professionals	3. Educated and experienced fitness professionals
4. Functional fitness	4. Strength training
5. Core training	5. Personal training
6. Strength training	6. Exercise and weight loss
7. Personal training	7. Yoga
8. Mind/body exercise	8. Fitness programs for older adults
9. Exercise and weight loss	9. Functional fitness
10. Outcome measurements	10. Group personal training

Source: American College of Sports Medicine

According to the 2017 “Participation Report” by the Physical Activity Council, over half of each generation participates in fitness sports, with roughly 2/3 of Millennials and Generation Xers participating in fitness activities. Generation Z, those generally under the age of 18, participated at higher rates than their older peers in individual, team, and outdoor sports. Baby Boomers participated the least; however, roughly 1/4 of this generation participated in individual sports, more than 1/3 participated in outdoor sports, and nearly 60 percent participated in fitness sports. **Figure 24** illustrates participation rates by generation.²⁸

²⁷ Walter R. Thompson, “Worldwide Survey of Fitness Trends for 2012,” *Health & Fitness Journal*, American College of Sports Medicine, 2011.

²⁸ 2017 Participation Report,” Physical Activity Council, 2017

Figure 24: A Breakdown of Fitness Sports Participation Rates by Generation

Source: Physical Activity Council 2017 Participation Report

Older Adults and Senior Programming

Many older adults and seniors are choosing to maintain active lifestyles and recognize the health benefits of regular physical activities. With the large number of adults in these age cohorts, many communities have found a need to offer more programming, activities, and facilities that support the active lifestyle this generation desires. Public parks and recreation agencies are increasingly expected to be significant providers of such services and facilities. The American Academy of Sports Medicine issues a yearly survey of the top 20 fitness trends.²⁹ It ranks senior fitness programs eighth among most popular fitness trends for 2015. Programs including Silver Sneakers, a freestyle low-impact cardio class, and water aerobics have increased in popularity as more Americans are realizing the many benefits of staying active throughout life. According to the National Sporting Goods Association, popular senior programming trends include hiking, birding, and swimming.

Festivals and Special Events

Festivals and other special events are often popular activities in communities that not only entertain, generate economic activity, and serve to celebrate community identity, they are also fantastic means of introducing people the community's public parks and recreation system. Public parks and recreation agencies play a major role in planning, managing, and hosting festivals and other community programs that often serve to draw new users into their facilities. Attendants to events hosted in parks, or recreation centers, who enjoy their experience may want to return for another event or program, or simply to enjoy the park or recreation facility. Participants in these special programs can become interested in visiting other parks, recreation facilities or participating in programs.

²⁹ American College of Sports Medicine, "Survey Predicts Top 20 Fitness Trends for 2015," <http://www.acsm.org/about-acsm/media-room/news-releases/2014/10/24/survey-predicts-top-20-fitness-trends-for-2015>, accessed January 2015.

In 2014, festivals grew in popularity as economic drivers and urban brand builders. Chad Kaydo describes the phenomenon in the January 2014 issue of *Governing* magazine: “Municipal officials and entrepreneurs see the power of cultural festivals, innovation-focused business conferences and the like as a way to spur short-term tourism while shaping an image of the host county as a cool, dynamic location where companies and citizens in modern, creative industries can thrive.”³⁰ Examples of successful large-scale festivals include:

- South by Southwest (SXSW) – This annual music, film, and digital conference and festival in Austin, Texas, is a leading example. Launched in 1987, the festival’s economic impact has grown steadily over recent years. In 2007, it netted \$95 million for Austin’s economy. In 2013, the event topped \$218 million.
- Coachella Valley Music and Arts Festival in California – This two-week cultural event draws big-name bands, music fans, and marketers, attracting 80,000 people per day.
- First County Festival in Monterey, California – Private producer, Goldenvoice, launched this smaller music event in August 2013 with marketing support from the Monterey County Convention and Visitors Bureau, drawing on the county’s history as host of the Monterey Jazz Festival. Adding carnival rides and local art, furniture, and clothing vendors to the live music performances, the event drew 11,000 attendees each of its two days.

The success rate for festivals should not be evaluated solely on the basis of profit (sales), prestige (media profile), and size (numbers of events). Research by the European Festival Research Project (EFRP) indicates there is evidence of local and county government supporting and even instigating and managing particular festivals themselves to achieve local or regional economic objectives, often defined very narrowly (sales, jobs, and tourism).³¹ There are also a growing number of smaller, more local, community-based festivals and events in communities, most often supported by local councils that have been spawned partly as a reaction to larger festivals that have become prime economic-drivers. These community-based festivals often will re-claim cultural ground based on their social, educational, and participative value. For more information on the values of festivals and events, see the CRC Sustainable Tourism research guide³² on this topic.

Healthy Lifestyle Trends and Active Living

Active Transportation – Bicycling and Walking

In many surveys and studies on participation in recreational activities, walking, running, jogging and cycling are nearly universally rated as the most popular activities among youth and adults. Walking, jogging, and running are often the most highly participated in recreational activity, and cycling often ranks as the second or third most popular activity. These activities are attractive as they require little equipment, or financial investment, to get started, and are open to participation to nearly all segments of the population. For these reasons, participation in these activities are often promoted as a means of spurring physical activity, and increasing public health.

³⁰ Chad Kaydo, “Cities Create Music, Cultural Festivals to Make Money,” *Governing*, January 2014, <http://www.governing.com/topics/finance/gov-cities-create-mucis-festivals.html>.

³¹ European Festival Research Group, <http://www.efa-aef.eu/en/activities/efrp/>, accessed October 2012.

³² Ben Janeczko, Trevor Mules, Brent Ritchie, “Estimating the Economic Impacts of Festivals and Events: A Research Guide,” Cooperative Research Centre for Sustainable Tourism, 2002, <http://www.sustainabletourisonline.com/destinations-and-communities/implementation/destination-development/destination-products-and-experiences/events-festivals>, accessed October 2012.

The design of a community's infrastructure is directly linked to physical activity – where environments are built with bicyclists and pedestrians in mind, more people bike and walk. Higher levels of bicycling and walking also coincide with increased bicycle and pedestrian safety and higher levels of physical activity. Increasing bicycling and walking in a community can have a major impact on improving public health and life expectancy. The following trends as well as health and economic indicators are pulled from the Alliance for Biking and Walking's 2012 and 2014 Benchmarking Reports:

Public health trends related to bicycling and walking include:

- Quantified health benefits of active transportation can outweigh any risks associated with the activities by as much as 77 to 1, and add more years to our lives than are lost from inhaled air pollution and traffic injuries.
- Between 1966 and 2009, the number of children who bicycled or walked to school fell 75 percent, while the percentage of obese children rose 276 percent.
- Bicycling to work significantly reduces absenteeism due to illness. Regular bicyclists took 7.4 sick days per year, while non-bicyclists took 8.7 sick days per year.

Economic benefits of bicycling and walking include:

- Bicycling and walking projects create 8–12 jobs per \$1 million spent, compared to just 7 jobs created per \$1 million spent on highway projects.
- Cost benefit analyses show that up to \$11.80 in benefits can be gained for every \$1 invested in bicycling and walking.

National bicycling trends:

- There has been a gradual trend of increasing bicycling and walking to work since 2005.
- Infrastructure to support biking communities is becoming more commonly funded in communities.
- Bike share systems, making bicycles available to the public for low-cost, short-term use, have been sweeping the nation since 2010. Twenty of the most populous U.S. cities have a functional bike share system.

Bicycle-friendly communities have been emerging over the last 10 years. In addition to being a popular recreational activity, cycling has become a desirable, regular mode of transportation as people consider the costs and challenges of commuting by car or public transportation, their desire for better health, and concern for the environment.

The Alliance for Biking and Walking published its "Bicycling and Walking in the United States: 2014 Benchmarking Report,"³³ updating its 2012 Benchmarking Report. The Report shows that increasing bicycling and walking are goals that are clearly in the public interest. Where bicycling and walking levels are higher, obesity, high blood pressure, and diabetes levels are lower.

³³ Alliance for Biking and Walking, *2014 Benchmarking Report*, <http://www.bikewalkalliance.org/download-the-2014-benchmarking-report>, accessed January 2015

The Institute for Transportation & Development Policy published an updated Standard for Transportation Oriented Design in March 2014, with accessible performance objectives and metrics, to help municipalities, developers and local residents design land use and built environment “to support, facilitate, and prioritize not only the use of public transport, but the most basic modes of transport, walking and cycling.” The TOD Standard, along with its performance objectives and scoring metrics, can be found at <https://www.itdp.org/tod-standard/>.³⁴

Health and Obesity

According to the Center for Disease Control and Prevention (CDC), obesity continues to be a serious issue in America, growing at an epidemic rate—almost tripling since 1990. Overall, more than one-third (35.7%) of adults and 17 percent of children in the United States are obese.³⁵ These statistics illustrate the importance of intervention and curbing of the epidemic in youth. As obesity in the United States continues to be a topic of interest for legislators and our government, there continues to be research suggesting that activity levels are stagnant among all age groups. For example, the CDC has reported that:

- Only 25% of adults and 27% of youth (grades 9-12) engage in recommended levels of physical activity.
- Fifty-nine percent (59%) of American adults are sedentary.
- Children nationally spend 4.5 – 8 hours daily (30-56 hours per week) in front of a screen (television, computer, or other electronic device).

Trails and Health

Trails can provide a wide variety of opportunities for being physically active, such as walking/running/hiking, rollerblading, wheelchair recreation, bicycling, cross-country skiing, and snowshoeing, fishing, hunting, and horseback riding. Trails and community pathways are a significant recreational and alternative transportation infrastructure, but are most effective in increasing public health when they are part of a system. In fact, the Centers for Disease Control and Prevention’s Trails for Health Initiative³⁶ concluded that a connected system of trails increases the level of physical activity in a community. Several groups, including American Trails have created resources explaining the many benefits of trails: <http://www.americantrails.org/resources/benefits>.

The health benefits are equally as high for trails in urban neighborhoods as for those in state or national parks. A trail in the neighborhood, creating a “linear park,” makes it easier for people to incorporate exercise into their daily routines, whether for recreation or non-motorized transportation. Urban trails need to connect people to places they want to go, such as schools, transit centers, businesses, and neighborhoods.³⁷

³⁴Institute for Transportation & Development Policy, “TOD Standard, Version 2.1,” March 2014, <https://www.itdp.org/tod-standard/>

³⁵ Center for Disease Control and Prevention, “Obesity and Overweight – Facts,” <http://www.cdc.gov/obesity/data/facts.html>, accessed on October 3, 2012.

³⁶ Centers for Disease Control and Prevention, “Guide to Community Preventive Services,” <http://www.thecommunityguide.org/index.html>

³⁷ National Trails Training Partnership, “Health Community: What you should know about trail building,,” <http://www.americantrails.org/resources/health/healthcombuild.html>, accessed May 2016

Walk with a Doc

Also popping up in parks around the country are “Walk with a Doc” programs. These programs encourage people to join others in a public park to learn about an important health topic, get a health assessment, e.g. blood pressure and to take a healthy walk along a scenic trail, led by a physician, cardiologist, or pediatrician. This is a great way to make the important connection between people, parks, and physical and mental health. Cardiologist Dr. David Sabgir created this doctor-patient interactive program in 2004. With physicians “walking the talk,” the programs are getting people out in the parks, engaging in healthy physical activity, and reversing the consequences of a sedentary lifestyle “in order to improve the health and well-being of the country.”³⁸

Shade Structures – Solar Relief

Communities around the country are considering adding shade structures as well as shade trees to their parks, playgrounds, and pools, as “a weapon against cancer and against childhood obesity,”³⁹ both to reduce future cancer risk and promote exercise among children. A 2005 study found that melanoma rates in people under 20 rose three percent a year between 1973 and 2001, possibly due to a thinning of the ozone layer in the atmosphere. It is recommended that children seek shade between 10 a.m. and 4 p.m., but with so little shade available, kids have nowhere to go. Additionally, without adequate shade, many play areas are simply too hot to be inviting to children. On sunny days, the playground equipment is hot enough to scald the hands of would-be users.

Trees would help provide protection, as tree leaves absorb about 95 percent of ultraviolet radiation, but they take a decade or more to grow large enough to make a difference. So, many communities are building shade structures instead. The non-profit Shade Foundation of America is a good resource for information about shade and shade structures, www.shadefoundation.org.

State Health Ranking

The United Health Foundation’s America’s Health Rankings gauges the overall health of the U.S. population. The 2016 Rankings list Maryland as the 18th healthiest state in country, based on a review of several dozen public health factors including general healthy and unhealthy behaviors, environmental factors such as pollution, and social factors including economic issues, and access to health care.

Highlights from the Rankings include:

- State health strengths included ready availability of primary care physicians, low prevalence of smoking, and low percentage of children in poverty.
- State health challenges included high levels of air pollution, high violent crime rate, and large disparity in health status by education level.

³⁸ “Does your Doctor Walk the Walk,” <http://flowalking.com/2012/01/does-your-doctor-walk-the-walk/>; <http://www.walkwithadoc.org/who-we-are/walk-information/>, accessed September 13, 2012.

³⁹ Liz Szabo, “Shade: A weapon against skin cancer, childhood obesity,” *USA Today*, June 30, 2011, www.usatoday.com/news/health/wellness/story/2011/06/Shade-serves-as-a-weapon-against-skin-cancer-childhood-obesity/48965070/1, accessed May 2015

Natural Environments and Open Space

Parks and public lands are critical to the quality of life for all Americans, and that quality of life, for everyone, in any community, is improved by clean, green, and accessible parks and open space. Parks and open spaces serve an essential role in preserving natural resources and wildlife habitat, protecting clean water and clean air, and providing open space for current and future generations. Parks also provide an essential connection for Americans of all ages and abilities to the life-enhancing benefits of nature and the outdoors.⁴⁰ In 2013 the National Recreation and Parks Association (NRPA) further emphasized the critical role parks and recreation agencies play in conserving open spaces and natural resources when it included “conservation” as one of its “three pillars” or guiding themes (social equity, health and wellness, and conservation). The three pillars were created as a means encapsulating all of the areas where parks and recreation professionals make an impact into six words.⁴¹

In addition to being stewards of public open spaces and natural resources, parks and recreation agencies are extremely well positioned within communities to engage people of all ages with nature; educate the public about the outdoors and environmental issues, coordinate stewardship projects with public, non-profit, and private entities; and lead by example in land and resource conservation efforts. In defining its position on the role of parks and recreation agencies in conservation, NRPA noted the following benefits of conservation and environmental stewardship:

- Providing carbon-reducing sustainable landscapes that cleanse air and water, replenish aquifers, reduce storm water runoff, and protect wildlife habitat.
- Offering the public access to safe, affordable, and healthy ways to experience and appreciate nature.
- Contributing significantly to the economic well-being of communities through energy and resources conservation and providing many economic benefits to communities derived from outdoor recreation.

Additionally, NRPA noted the following points, and examples, to support its position that parks and recreation agencies play a major role in land and natural resource conservation:

- Outdoor recreation was estimated to have generated \$646 billion in consumer spending in 2012, according to the Outdoor Industry Association, and in 2016 the American Recreation Coalition estimated outdoor recreation will generate more than \$650 billion in consumer spending.
- The return on investment from protecting open space for public benefit from ecosystem services of water filtration, climate change protection, and other aspects of conserving public open space is estimated to be 100 to 1, according to a study by the Gund Institute for Ecological Economies at the University of Vermont.
- The number of Denver residents in 1980 who said they would pay more to live near a greenbelt or park: 16 percent. The number in 1990: 48 percent.
- The estimated gross increase in residential property value resulting from proximity to San Francisco's Golden Gate Park is \$500 million to \$1 billion.

⁴⁰ National Parks and Recreation Association, “Role of Parks and Recreation in Conservation,” <http://www.nrpa.org/About-NRPA/Position-Statements/Role-of-Parks-and-Recreation-in-Conservation>, accessed May 2016

⁴¹ Elizabeth Beard, “Pillars of Our Community,” *Parks and Recreation*, April 1, 2016, <http://www.parksandrecreation.org/2013/April/Pillars-of-Our-Communities>, accessed May 2016

- In Pima County, Arizona, wildlife viewing in one year amounted to an estimated \$173.5 million in direct spending, \$90.7 million in salaries and wages associated with 3,196 jobs, and about \$9.9 million in state sales and fuel tax revenue, according to the Arizona Department of Fish and Game.
- Public support for land conservation and open space protection ballot measures has remained above 70 percent passage over the past decade, even during times of economic downturns and recessions.

Economic and Health Benefits of Parks

There are numerous economic and health benefits of parks, including the following:

- In 2012 the Outdoor Industry Association estimated that national consumer spending on outdoor recreation generated \$646 billion in consumer spending, and directly supported 6.1 million jobs. In Maryland alone, outdoor recreation generated \$9.5 billion in annual consumer spending, and \$686 million in state and local tax revenue. Outdoor recreation was also estimated to generate 85,000 jobs in the State and an estimated \$2.8 billion in wages and salaries.⁴²
- Trails, parks, and playgrounds are among the five most important community amenities considered when selecting a home.
- Research from the University of Illinois shows that trees, parks, and green spaces have a profound impact on people's health and mental outlook.⁴³
- U.S. Forest Service research indicates that when the economic benefits produced by trees are assessed, the total value can be two to six times the cost for tree planting and care.⁴⁴
- Nearly half of active Americans regard outdoor activities as their main source of exercise.⁴⁵

"The Benefits of Parks: Why America Needs More County Parks and Open Space," a report from the Trust for Public Land, makes the following observations about the health, economic, environmental, and social benefits of parks and open space⁴⁶:

- Physical activity makes people healthier.
- Physical activity increases with access to parks.
- Contact with the natural world improves physical and psychological health.
- Residential and commercial property values increase.
- Value is added to community and economic development sustainability.
- Benefits of tourism are enhanced.
- Trees are effective in improving air quality and act as natural air conditioners.
- Trees assist with storm water control and erosion.
- Crime and juvenile delinquency are reduced.
- Recreational opportunities for all ages are provided.
- Stable neighborhoods and strong communities are created.

⁴² Outdoor Industry Association, *The Outdoor Recreation Economy*,

https://outdoorindustry.org/images/researchfiles/OIA_OutdoorRecEconomyReport2012.pdf; accessed December 2016

⁴³ F.E. Kuo, "Environment and Crime in the Inner County: Does Vegetation Reduce Crime?" *Environment and Behavior*, Volume 33, p. 343-367

⁴⁴ Nowak, David J., "Benefits of Community Trees," *Brooklyn Trees*, USDA Forest Service General Technical Report

⁴⁵ *Outdoor Recreation Participation Report 2016*

⁴⁶ Paul M. Sherer, "The Benefits of Parks: Why America Needs More County Parks and Open Space," The Trust for Public Land, San Francisco, CA, 2006

Researchers have long touted the benefits of outdoor exercise. According to a study published in the *Journal of Environmental Science and Technology* by the University of Essex in the United Kingdom, “as little as five minutes of green exercise improves both mood and self-esteem.”⁴⁷ A new trend started in China as they prepared to host the 2008 Summer Olympics. Their aim was to promote a society that promotes physical fitness and reaps the benefits of outdoor exercise by working out on outdoor fitness equipment.

The United States has caught up on this trend, as parks and recreation departments have begun installing “outdoor gyms.” Equipment that can be found in these outdoor gyms is comparable to what would be found in an indoor workout facility, such as leg and chest presses, elliptical trainers, pull down trainers, etc. With no additional equipment such as weights and resistance bands, the equipment is fairly easy to install. Outdoor fitness equipment provides a new opportunity for parks and recreation departments to increase the health of their communities, while offering them the opportunity to exercise outdoors. Such equipment can increase the usage of parks, trails, and other outdoor amenities while helping to fight the obesity epidemic and increase the community’s interaction with nature.

Nature Programming

Noted as early as 2003 in *Recreation Management* magazine, parks agencies have been seeing an increase in interest in environmental-oriented “back to nature” programs. In 2007, the National Recreation and Park Association (NRPA) sent out a survey to member agencies in order to learn more about the programs and facilities that public parks and recreation agencies provide to connect children and their families with nature.⁴⁸

- Sixty-eight percent (68%) of public parks and recreation agencies offer nature-based programming, and 61 percent have nature-based facilities.
- The most common programs include nature hikes, nature-oriented arts and crafts, fishing-related events, and nature-based education in cooperation with local schools.
- When asked to describe the elements that directly contribute to their most successful programs, agencies listed staff training as most important followed by program content and number of staff/staff training.
- When asked what resources would be needed most to expand programming, additional staff was most important followed by funding.
- Of the agencies that do not currently offer nature-based programming, 90 percent indicated that they want to in the future. Additional staff and funding were again the most important resources these agencies would need going forward.
- The most common facilities include: nature parks/preserves, self-guided nature trails, outdoor classrooms, and nature centers.
- When asked to describe the elements that directly contribute to their most successful facilities, agencies listed funding as most important followed by presence of wildlife and community support.

⁴⁷ Sally Russell, “Nature Break: Five Minutes of Green Nurture,” *Green Nurture* Blog, <http://blog.greennurture.com/tag/journal-of-environmental-science-and-technology>, accessed November 14, 2012.

⁴⁸ National Recreation and Parks Association, “NRPA Completes Agency Survey Regarding Children and Nature,” http://www.narpp.org/assets/Library/Children_in_Nature/nrpa_survey_regarding_children_and_nature_2007.pdf

Figures from the Association for Interpretative Naturalists, a national group of nature professionals, demonstrate that nature-based programs are on the rise. According to Tim Merriman, the association's Executive Director, the group was founded in 1954 with 40 members. It now boasts 4,800 members, with research indicating that about 20,000 paid interpreters are working nationally, along with more than 500,000 unpaid volunteers staffing nature programs at parks, zoos, and museums. The growth of these programs is thought to come from replacing grandparents as the teacher about the "great outdoors." It is also speculated that a return to natural roots and renewed interest in life's basic elements was spurred as a response to the events of September 11, 2001.⁴⁹

In his book, Last Child in the Woods: Saving Children from Nature Deficit Disorder,⁵⁰ Richard Louv introduced the concept of the restorative qualities of being out in nature, for both children and adults. This concept, and research in support of it, has led to a growing movement promoting connections with nature in daily life. One manifestation of this is the development of Nature Explore Classrooms in parks. Nature Explore⁵¹ is a collaborative program of the Arbor Day Foundation and the non-profit organization Dimensions Educational Research Foundation, with a mission of helping children and families develop a profound engagement with the natural world, where nature is an integral, joyful part of children's daily learning. Nature Explore works to support efforts to connect children with nature. More recently, Scott Sampson advanced the cause in a book entitled, How to Raise a Wild Child: The Art and Science of Falling in Love with Nature.⁵² Citing research supporting his case that connecting with nature is vital to the healthy development of individuals, communities, and the world, Sampson offers practical and helpful advice to parents, educators, and any other would-be nature mentors to kids.

Sports and Recreation Trends

The National Sporting Goods Association (NSGA) statistical survey on sports participation in the United States 2015 edition tracked participation in 54 different sports and activities for 2014. A summary of the survey results are noted in **Figure 25**, with several highlights noted below⁵³:

- Participation increased in 33 sports and activities in 2014 over the previous year. Roughly half that number (17) of sports and activities saw increases in 2013 compared to 2012.
- Open water sports saw the highest percentage increase (2.7%) in terms of number of participants. The increase is attributed to growth in popularity of boating (motor/power boat), canoeing, and kayaking.
- Individual sports and activities experienced the highest decrease in participation, falling 2.6% in 2014 compared to the previous year. The decrease is attributed to declining participation in bowling, golf, and tennis.

⁴⁹ Margaret Ahrweiler, "Call of the Wild – From Beautiful Blossoms to Bugs and Guts, Nature Programs Are Growing as People Return to Their Roots," *Recreation Management*, <http://recmanagement.com/200310fe04.php>, October 2003

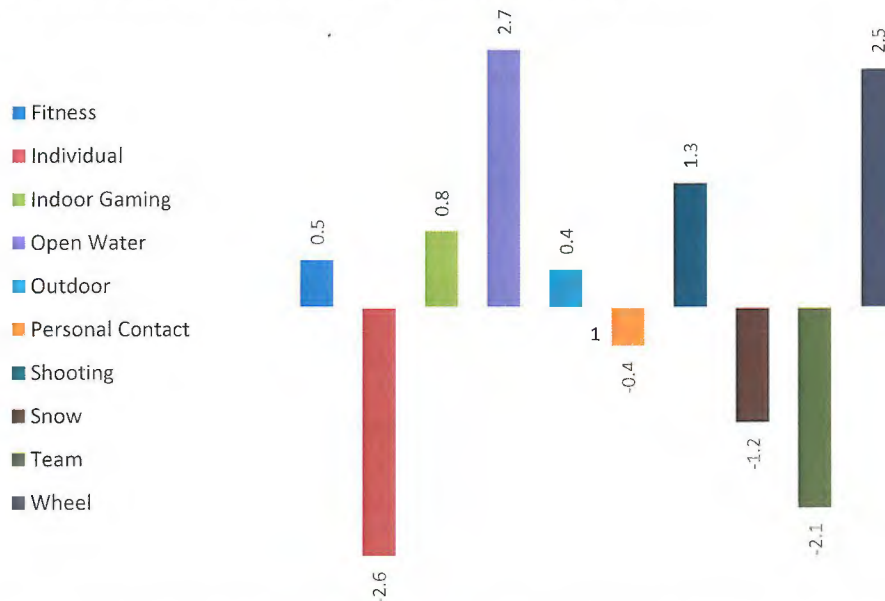
⁵⁰ Richard Louv, Last Child in the Woods: Saving Children from Nature Deficit Disorder, Algonquin Books of Chapel Hill, Maryland, 2005

⁵¹ National Arbor Day Foundation, "What is the Nature Explore Program," http://www.arborday.org/explore/documents/NE_FAQ_002.pdf, accessed August 2012

⁵² Scott D. Simpson, How to Raise a Wild Child: The Art and Science of Falling in Love with Nature, Houghton Mifflin Harcourt, New York, N.Y., 2015.

⁵³ National Sporting Goods Association, "2015 Sport/Recreation Activity Participation Report," <http://www.nsga.org>, accessed May 2016

Figure 25: Changes in Sport Activity Participation 2013 to 2014



Source: National Sporting Goods Association, *Sports participation in the United States 2015 survey report*

Longer term data from National Sporting Goods Association show that despite a recent downturn in the participation in the past year, over the past decade, participation in individual sports has increased, especially in aerobic exercising, exercise walking, exercising with equipment, hiking, kayaking, running/jogging, and yoga. Table 14 illustrates a ten year change in participation for selected activities including both team sports and individual sports.⁵⁴

⁵⁴ National Sporting Goods Association, "Historical Sports Participation 2015 Report, <https://www.nsga.org/research/nsga-research-offerings/sports-participation-historical-file-2015>, accessed April 2016

Table 14: Ten-Year History of Sports Participation (in millions) 2005-2014

Sport	2005	2007	2009	2011	2013	2014
Aerobic Exercising	33.7	34.8	33.2	42.0	44.1	44.2
Backpack/Wilderness Camping	13.3	13.0	12.3	11.6	12.2	12.0
Baseball	14.6	14.0	11.5	12.3	11.7	11.3
Basketball	29.9	24.1	24.4	26.1	25.5	23.7
Bicycle Riding	43.1	37.4	38.1	39.1	35.6	35.6
Camping (Vacation/Overnight)	46.0	47.5	50.9	42.8	39.3	39.5
Canoeing	N/A	N/A	N/A	N/A	6.7	7.3
Exercise Walking	86.0	89.8	93.4	97.1	96.3	104.3
Exercising with Equipment	54.2	52.9	57.2	55.5	53.1	55.1
Fishing (Salt Water)	10.0	10.4	8.2	9.7	9.5	9.4
Football (Flag)	N/A	N/A	N/A	N/A	6.8	6.3
Football (Tackle)	9.9	9.2	8.9	9.0	7.5	7.5
Football (Touch)	N/A	N/A	N/A	N/A	8.8	8.9
Golf	24.7	22.7	22.3	20.9	18.9	18.4
Gymnastics	N/A	N/A	3.9	5.1	5.1	5.4
Hiking	29.8	28.6	34.0	39.1	39.4	41.1
Kayaking	N/A	5.9	4.9	7.1	8.1	9.0
Lacrosse	N/A	1.2	N/A	2.7	2.8	2.8
Mountain Biking (off road)	9.2	9.3	8.4	6.0	5.2	5.4
Running/Jogging	29.2	30.4	32.2	38.7	42.0	43.0
Scuba Diving (Open Water)	N/A	2.4	N/A	N/A	2.7	2.4
Skateboarding	12.0	10.1	8.4	6.6	5.0	5.4
Soccer	14.1	13.8	13.6	13.9	12.8	13.4
Softball	14.1	12.4	11.8	10.4	10.0	9.5
Swimming	58.0	52.3	50.2	46.0	45.5	45.9
Tennis	11.1	12.3	10.8	13.1	12.6	12.4
Volleyball	13.2	12.0	10.7	10.1	10.1	10.2
Weight Lifting	35.5	33.2	34.5	29.1	31.3	34.0
Work-Out at Club/Gym/Fitness Studio	34.7	36.8	38.3	34.5	34.1	35.9
Wrestling	N/A	2.1	3.0	3.2	3.1	2.9
Yoga	N/A	10.7	15.7	21.6	25.9	29.2

Source: National Sporting Goods Association

The Sports & Fitness Industry Association (SFIA) produces a yearly report on sports, fitness, and leisure activities in the United States. The following findings were highlighted in the 2016 report⁵⁵:

- Overall participation in sports, fitness, and related physical activities has fluctuated in recent years with an increase in team, winter, water, and fitness sports participation. Racquet and outdoor sport participation remained flat in 2015, while individual sports declined slightly.
- Team sports experienced the largest increase in participation, including at least a four percent increase in baseball, cheerleading, ice hockey, lacrosse, rugby, indoor soccer, team swimming and flag and tackle football.
- Forty-three percent (43%) of parents reported an increase in spending on team sports at school in 2015.
- Twenty-eight percent (28%) of all Americans are inactive, while 31 percent are active to a healthy level.

⁵⁵ Sports and Fitness Industry Association, 2016 Sports, Fitness and Leisure Activities Topline Participation Report

Adult and Youth Recreation Trends

Adult Recreation: Pickleball

No adult recreational sport is taking off faster than pickleball.⁵⁶ Pickleball is a racquet sport played on a badminton court with a lowered net, perforated plastic ball, and wood paddles. While it originated in the Pacific Northwest in the 1960s, it has grown exponentially since 2000. The USA Pickleball Association (USAPA) estimates that there were about 500 pickleball players in 2000, with that number growing to 125,000 in 2013. It is especially popular with the 50+ crowd because it is low impact but gets the heart rate pumping.⁵⁷ Pickle ball is an attractive programming option for recreation managers because it is adaptable to a variety of existing facilities – four pickleball courts fit in one tennis court.

Adult Sport Teams In and After the Work Place

Adult sports teams of all sorts, from competitive volleyball to local flag football teams to casual kickball, are becoming more and more popular around the country, especially among Millennials who grew up with a full extra-curricular schedule of team sports. While adult team sport participation is not limited to the Millennial generation by any means, a recent survey conducted on behalf of the Sports Fitness Industry Association (SFIA) found that Millennials are twice as likely as Generation Xers (born between 1965 and 1979) to participate in team sports as adults.⁵⁸ Adult team sports are attractive as ways to be social, get exercise, or just for something to do after work. Instead of the bar scene, this provides a more comfortable form of interaction for many.⁵⁹

Sports teams in the work place are also a growing trend in the United States as companies look for new ways to keep their employees healthy and happy. The United States Tennis Association (USTA) promotes tennis in the work place, citing the following benefits:

- Developing team-building
- Creating leadership opportunities
- Increasing employee morale and overall health

A story on National Public Radio examined sports participation among adults in Finland.⁶⁰ Finland consistently makes the top-five list of “most physically active European countries” according to European Commission studies. There is a strong tradition of employers encouraging sports participation among their employees, which started about a century ago with the forest industry. These days, about 90 percent of employers provide some kind of support for their employee’s physical activity. Finns say it’s understood that healthy employees do better work.

⁵⁶ Chris Gelbach, “Never Stop Playing: Trends in Adult Recreational Sports” *Recreation Management*, September 2013, http://recmanagement.com/feature_print.php?fid=201309fe02, accessed January 2015

⁵⁷ David Crumpler, “Pickleball a fast-growing sport, especially for the 50 and older crowd,” *Florida Times Union*, January 26, 2015, <http://jacksonville.com/prime-time/2015-01-26/story/pickleball-fast-growing-sport-especially-50-and-older-crowd>, accessed January 2015

⁵⁸ Sarah M. Wojcik, “Millennials Fuel Rise of For-profit Recreation Leagues,” *The Morning Call*, <http://www.mcall.com/news/local/mc-millennials-adult-sports-leagues-20190727-story.html>, July 27, 2015, accessed July, 2015

⁵⁹ Liz Butterfield, “Adult Sport Leagues: The New After Work Social Scene,” *RVA News*, <http://rvanews.com/sports/adult-sport-leagues-the-new-after-work-social-scene/100639>, August 8, 2013, accessed July, 2015

⁶⁰ Rae Ellen Bichell, “How Finns Make Sports Part of Everyday Life,” *National Public Radio Morning Addition*, July 28, 2015, <http://www.npr.org/sections/healthshots/2015/07/28/426748088>

Youth Sports

The Sports & Fitness Industry Association (SFIA) produces a yearly report on sports, fitness, and leisure activities in the United States. The following findings regarding youth and sports were highlighted in the 2016 report.⁶¹ In 2015, youth aged 6-16 (Generation Z) participation was highest for outdoor (62%), team (59%), and fitness sports (51%). Camping was a top interest for youth across the age spectrum, age 6-24.

In 2009, an article in *The Wall Street Journal* observed that at the close of the past decade, lacrosse had become one of the country's fastest growing team sports. Participation in high-school lacrosse almost doubled in the first decade of the century. An estimated 1.2 million Americans over age 7 played lacrosse in 2009.⁶² A 2011 report, "U.S. Trends in Team Sports," found that lacrosse and other niche team sports and volleyball are continuing to experience strong growth for youth and adults.⁶³

Outdoor Recreation

Outdoor recreation trends are also a recurring topic of study by the United States Forest Service through the Internet Research Information Series (IRIS). An IRIS report dated January 2012⁶⁴ provides the following recent nature-based outdoor recreation trends: Participation in walking for pleasure and family gatherings outdoors were the two most popular activities for the U.S. population as a whole. These outdoor activities were followed closely in popularity by viewing/photographing wildlife, boating, fishing, snow/ice activities, and swimming. There has been a growing momentum in participation in sightseeing, birding, and wildlife watching in recent years.

The Outdoor Foundation releases a "Participation in Outdoor Recreation Report" annually. According to the 2016 Topline Report,⁶⁵ nearly half (48.4%) of Americans participated in outdoor recreation activities in 2015. This figure remained static from 2015, but dropped slightly (less than 1%) from 2013, with extreme weather and an unusually cold winter likely contributed to the decline. Increased participation in outdoor recreation activities were strong in paddle sports, with stand up paddle boarding remaining the top outdoor activity for growth, with participation growing by 26 percent from 2014 to 2015.

Additional key findings from the Outdoor Foundation's 2016 "Outdoor Recreation Participation Topline Report" include:

Participation in Outdoor Recreation

- In 2015, 48.4% of Americans ages 6 and older participated in at least one outdoor activity. This equated to 142.4 million Americans who went on a collective 11.7 billion outdoor recreation outings.
- Top five participation percentage increase in outdoor activities in the past three years were in stand up paddling, triathlon (traditional/road), kayak fishing, triathlon(non-traditional/off-road), and trail running.

⁶¹ Sports and Fitness Industry Association, *2016 Sports, Fitness and Leisure Activities Topline Participation Report*, <http://www.sfia.org/reports/all/>.

⁶² Evans and Trachtenberg, "Lacrosse Muscles Its Way West," *The Wall Street Journal*, May, 2009.

⁶³ SMGA, "2011 Preview: U.S. Trends in Team Sports," Fall 2011,"

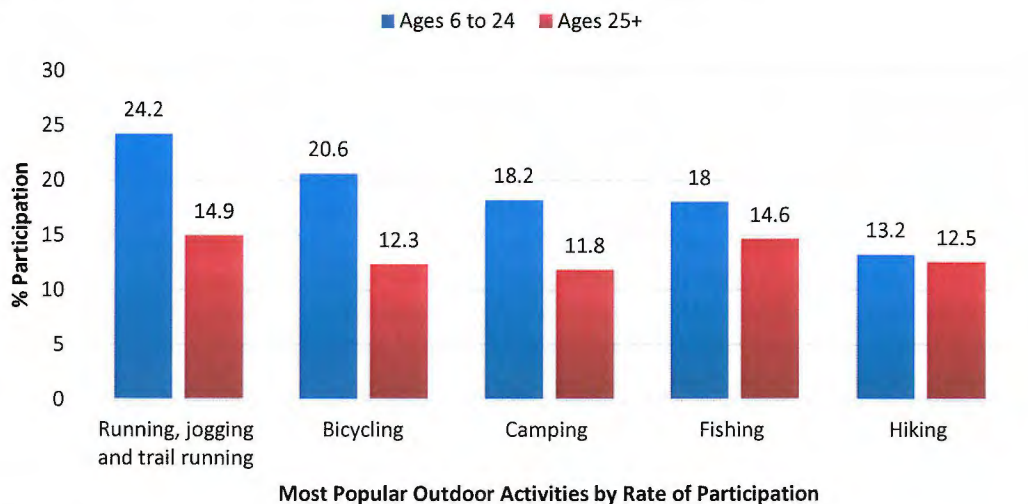
⁶⁴ USDA Forest Service, "Recent Outdoor Recreation Trends," *Internet Research Information Series (IRIS) Research Brief*, January 2012, <http://warnell.forestry.uga.edu/nrrt/nsre/IRISRec/IRISRec23rpt.pdf>, accessed August, 2012.

⁶⁵ "Outdoor Recreation Participation Topline Report" 2016

- Participation among youths ages 6 to 12 was at 63%, ages 13 to 17 was at 59%, and ages 18 to 24 was at 57%.
- Participation among adults ages 25 to 44 was at 56%, and 37% among adults ages 45 and older.

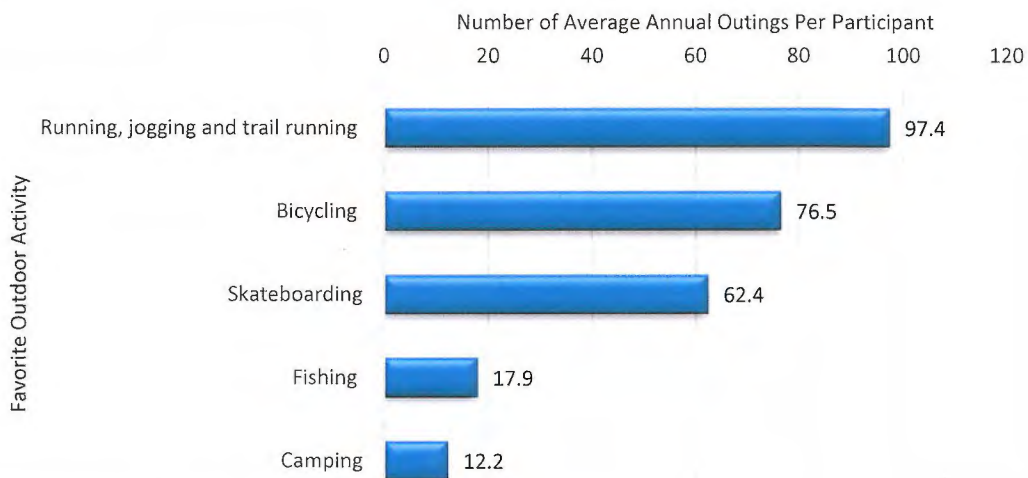
As illustrated in **Figure 26 – 28**, the 2016 “Outdoor Recreation Participation Topline Report” also lists the most popular (by participation rate) and favorite (by frequency of participation) outdoor activities for youth and young adults ages 6-24, and adults over the age of 25 nationwide:

Figure 26: Most Popular Outdoor Activities by Rate of Participation

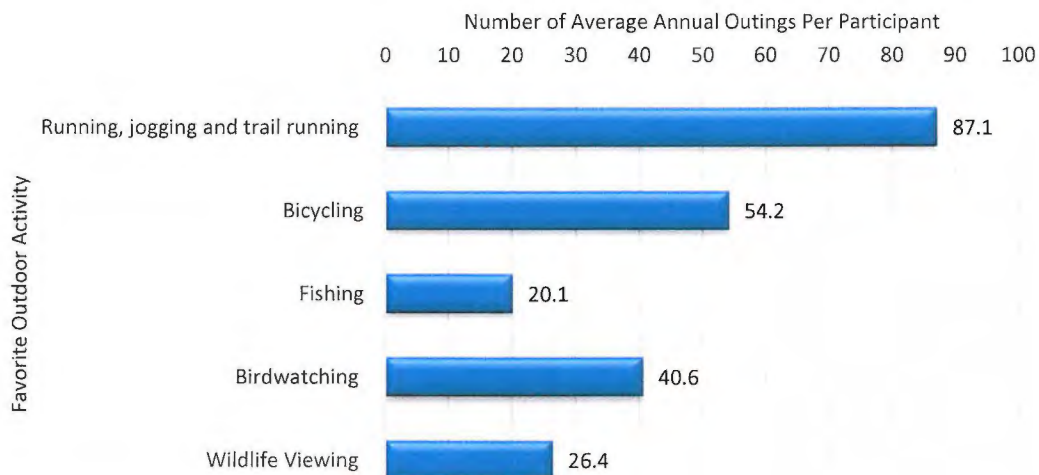


Source: 2016 Outdoor Recreation Participation Topline Report

Figure 27: Favorite Outdoor Activities by Frequency of Participation among Youths and Young Adults (Ages 6 to 24)



Source: 2016 Outdoor Recreation Participation Topline Report

Figure 28: Favorite Outdoor Activities by Frequency of Participation among Adults (Age 25+)

Source: 2016 Outdoor Recreation Participation Topline Report

Trail Recreation and Cycling Trends

For trail-related recreation activities such as hiking, bicycling, and running, the 2016 “Outdoor Recreation Topline Report” indicates a positive three-year trend for trail running, running/jogging, hiking, mountain biking, and BMX biking, as shown on **Table 7**. Additionally, participation in trail running and BMX biking is up significantly over the recent three-year period.

Table 7: Cycling and Trail Recreation Participation by Activity (Ages 6+)

	2010	2011	2012	2013	2014	2015	3 Year Average Change
BMX Bicycling	2,369	1,547	2,175	2,168	2,350	2,690	7.5%
Bicycling (Mountain/Non-Paved Surface)	7,161	6,816	7,714	8,542	8,044	8,316	2.8%
Bicycling (Road/Paved Surface)	39,320	40,349	39,232	40,888	39,725	38,280	-0.8%
Hiking (Day)	32,496	34,491	34,545	34,378	36,222	37,232	2.6%
Running/Jogging	50,713	52,187	54,188	51,127	49,408	48,496	-2.3%
Trail Running	5,136	5,610	6,003	6,792	7,531	8,139	10.7%

Source: 2016 Outdoor Recreation Participation Topline Report

Other Cycling Trends

- Bicycle touring is becoming a fast-growing trend around the world, including the United States and Canada. "Travelers are seeking out bike tours to stay active, minimize environmental impact, and experience diverse landscapes and countyscapes at a closer level."⁶⁶
- Urban bike tours, popular in cycle-friendly cities in Europe, are taking hold in the United States as well. Bikes and Hikes LA, an eco-friendly bike and hike sightseeing company founded in 2010, offers visitors the opportunity to "see the country's great outdoors while getting a good workout." In New York, a hotel and a bike store are partnering to offer guests cruisers to explore the county during the summer of 2014.⁶⁷
- One of the newest trends in adventure cycling is "fat bike," multiple speed bikes that are made to ride where other bikes can't be ridden, with tires that are up to 5 inches wide run at low pressure for extra traction. Most fat bikes are used to ride on snow but they are also very effective for riding on any loose surface like sand or mud. They also work well on most rough terrain or just riding through the woods. This bike offers unique opportunities to experience nature in ways that wouldn't be possible otherwise.⁶⁸

Therapeutic Recreation

The Americans with Disabilities Act of 1990 (ADA) established that persons with disabilities have the right to the same access to parks and recreation facilities and programming as those without disabilities. In 2004, The National Council on Disability (NCD) issued a comprehensive report, "Livable Communities for Adults with Disabilities."⁶⁹ This report identified six elements for improving the quality of life for all citizens, including children, youth, and adults with disabilities. The six elements are:

1. Provide affordable, appropriate, accessible housing
2. Ensure accessible, affordable, reliable, safe transportation
3. Adjust the physical environment for inclusiveness and accessibility
4. Provide work, volunteer, and education opportunities
5. Ensure access to key health and support services
6. Encourage participation in civic, cultural, social, and recreational activities

Therapeutic Services bring two forms of services for persons with disabilities into play, specific programming and inclusion services. Individuals with disabilities need not only functional skills but to have physical and social environments in the community that are receptive to them and accommodating individual needs. Inclusion allows individuals to determine their own interests and follow them.

⁶⁶ Hope Nardini, "Bike Tourism a Rising Trend," *Ethic Traveler*, <http://www.ethicaltraveler.org/2012/08/bike-tourism-a-rising-trend/>, accessed March 2014

⁶⁷ Michelle Baran, "New Trend: Urban Bike Tours in Los Angeles and New York," *Budget Travel Blog*, <http://www.budgettravel.com/blog/new-trend-urban-bike-tours-in-los-angeles-and-new-york,11772/>, accessed March 2014

⁶⁸ Steven Pease, "Fat Bikes, How to Get the Most Out of Winter Cycling," *Minnesota Cycling Examiner*, <http://www.examiner.com/article/fat-bikes-the-latest-trend-adventure-cycling>, February 1, 2014.

⁶⁹ National Council on Disability, *Livable Communities for Adults with Disabilities*, December 2004, <http://www.ncd.gov/publications/2004/12022004>.

Many park and recreation departments around the country are offering specific programming for people with disabilities, but not as many offer inclusion services. In “Play for All—Therapeutic Recreation Embraces All Abilities,” an article in *Recreation Management Magazine*,⁷⁰ Dana Carman described resources for communities looking to expand their therapeutic recreation services.

Therapeutic recreation includes a renewed focus on serving people with the social/emotional challenges associated with “invisible disabilities” such as ADHD, bipolar disorders, spectrum disorders and sensory integration disorders. A growing number of park and recreation departments are making services for those with invisible disabilities a successful part of their programming as well. When well done, these same strategies improve the recreation experience for everyone.⁷¹

Role and Response of Local Government

Collectively, these trends have created profound implications for the way local governments conduct business. Some local governments are now accepting the role of providing preventative health care through parks and recreation services. The following concepts are from the International City/ County Management Association.⁷²

- Parks and recreation departments should take the lead in developing communities conducive to active living.
- There is growing support for recreation programs that encourage active living within the community.
- One of the highest priorities is a cohesive system of parks and trails and accessible neighborhood parks.

In summary, the United States, its states, and its communities share the enormous task of reducing the health and economic burden of obesity. While numerous programs, policies, and products have been designed to address the problem, there is no magic bullet to make it go away. The role of public parks and recreation as a health promotion and prevention agency has come of age. What matters is refocusing its efforts to insure the health, well-being, and economic prosperity of communities and citizens.

Administration Trends for Recreation and Parks

Municipal parks and recreation structures and delivery systems have changed, and more alternative methods of delivering services are emerging. Certain services are being contracted out, and cooperative agreements with non-profit groups and other public institutions are being developed. Newer partners include the health system, social services, justice system, education, the corporate sector, and community service agencies. These partnerships reflect both a broader interpretation of the mandate of parks and recreation agencies and the increased willingness of other sectors to work together to address community issues. The relationship with health agencies is vital in promoting wellness.

The traditional relationship with education and the sharing of facilities through joint-use agreements is evolving into cooperative planning and programming aimed at addressing youth inactivity levels and community needs.

⁷⁰ Dana Carman, “Play for All,” *Recreation Management*, February 2007, <http://recmanagement.com/200710fe03.php>, accessed May 2016

⁷¹ Kelli Anderson, “A Welcome Inclusion,” *Recreation Management*, October 2010, <http://recmanagement.com/201010fe03.php>, accessed February 2015

⁷² International City/County Management Association, www.ICMA.org, accessed June 2012.

Listed below are additional administrative national trends:

- Level of subsidy for programs is lessening and more “enterprise” activities are being developed, thereby allowing subsidy to be used where deemed appropriate.
- Information technology allows for better tracking and reporting.
- Pricing is often determined by peak, off-peak, and off-season rates.
- More agencies are partnering with private, public, and non-profit groups.

Agency Accreditation

Parks and recreation agencies are affirming their competencies and value through accreditation. This is achieved by an agency’s commitment to 150 standards. Accreditation is a distinguished mark of excellence that affords external recognition of an organization’s commitment to quality and improvement.

The National Recreation and Parks Association administratively sponsors two distinct accreditation programs: The Council on Accreditation of Parks, Recreation, Tourism, and Related Professions (COAPRT) approves academic institutions and the Commission for Accreditation of Parks and Recreation Agencies (CAPRA) approves agencies. It is the only national accreditation of parks and recreation agencies, and is a valuable measure of an agency’s overall quality of operation, management, and service to the community.

Americans with Disabilities Act (ADA) Compliance

On September 14, 2010 the U.S. Department of Justice (DOJ) issued an amended regulation implementing the Americans with Disabilities Act (ADA 2010 Standards)⁷³ and, for the first time, the regulations were expanded to include recreation environment design requirements. Covered entities were to be compliant with design and construction requirements and the development of three-year transition plan by March 15, 2012. The deadline for implementation of the three-year transition plan was March 15, 2015.

Funding

According to *Recreation Management* magazine’s 2015 “State of the Industry Report,” survey respondents from parks and recreation departments/districts reporting about their revenues from 2012 through 2014 indicated a continued recovery from the impact of the recession of 2008. From 2013 to 2014, 44.1 percent of respondents reported that their revenues had either had increased and another 44.1 percent reported revenues staying steady. About 48.7 percent of respondents said they expected revenues to continue to increase in 2015, while 44 percent expected no change.

⁷³ U.S. Department of Justice, Americans with Disabilities Act, ADA Home Page, <http://www.ada.gov/>, accessed November 15, 2012.

Trends in Marketing by Parks and Recreation Providers

Active Network offers expertise in activity and participation management. Its mission is to make the world a more active place. In its blog, the organization offered the following marketing mix ideas which came out of a meeting with park and recreational professionals in the Chicago area.⁷⁴

- Updated booths and community event presence—Utilization of a tablet or laptop to show programs you offer and provide event participants the opportunity to register on the spot.
- Facebook redirect app—This application redirects people automatically to the link you provide. Add it to your Facebook page.
- Instagram challenge—Think about how you can use mobile and social tools at your next event. It could be an Instagram contest during an event set up as a scavenger hunt with participants taking pictures of clues and posting them on Instagram.
- Social media coupons—Research indicates that the top reason people follow an organization on a social network is to receive discounts or coupons. Consider posting an event discount on your social networks redeemable by accessing on phone or printing out.

Mobile marketing is a growing trend. Social websites and apps are among the most used features on mobile phones. Popular social media marketing tools include Facebook, Twitter, YouTube, Snapchat, Instagram, and LinkedIn. Private messaging apps such as Snapchat and WhatsApp are being used more and more for live media coverage.⁷⁵

Ninety-one percent (91%) of Americans own a cell phone, and most use the devices for much more than phone calls. Young adults engage in mobile data applications at much higher rates than adults ages 30 and older. Usage rates trends indicate that Millennials tend to get information most frequently using mobile devices such as smartphones. For example, 97 percent of cell phone owners ages 18–29 send and receive text messages, compared to 94 percent of ages 30–49, 75 percent of ages 50–64, and 35 percent of those 65 and older. In 2016, the vast majority of the population in the United States has access to a smartphone, computer, or other device, and is nearly always “connected.”

⁷⁴ Active Network, <http://www.activenetwork.com>, accessed May 2014

⁷⁵ Jacqueline Woerner, “The 7 Social Media Trends Dominating 2015,” Emarsys Blog, <http://www.emarsys.com/en/resources/blog/the-7-social-media-trends-dominating-2015/>, accessed February 26, 2015.

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Appendix C: Land Preservation, Parks, and Recreation (LPPRP) Survey Results

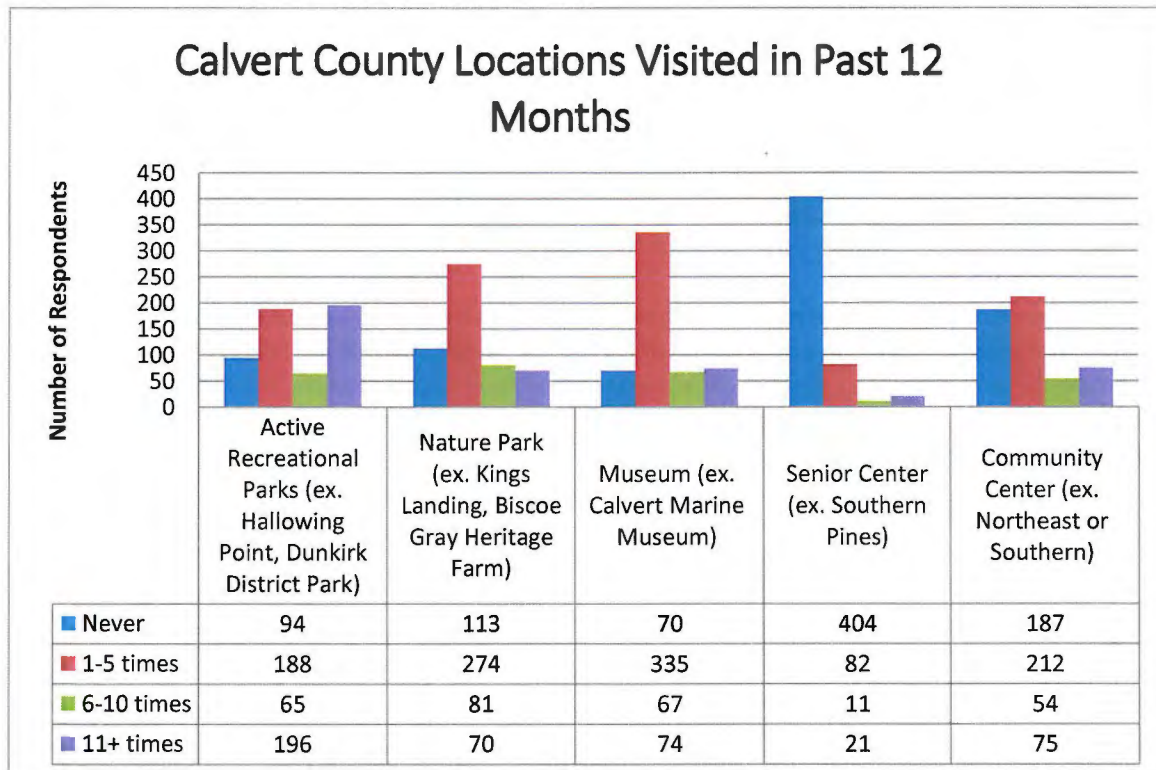
Overview

The Land Preservation, Parks, and Recreation survey was created in order to gain feedback from the community about recreational activities, facilities, and programs in Calvert County. There were a total of 564 respondents. Not all respondents answered every question.

Results

Question 1:

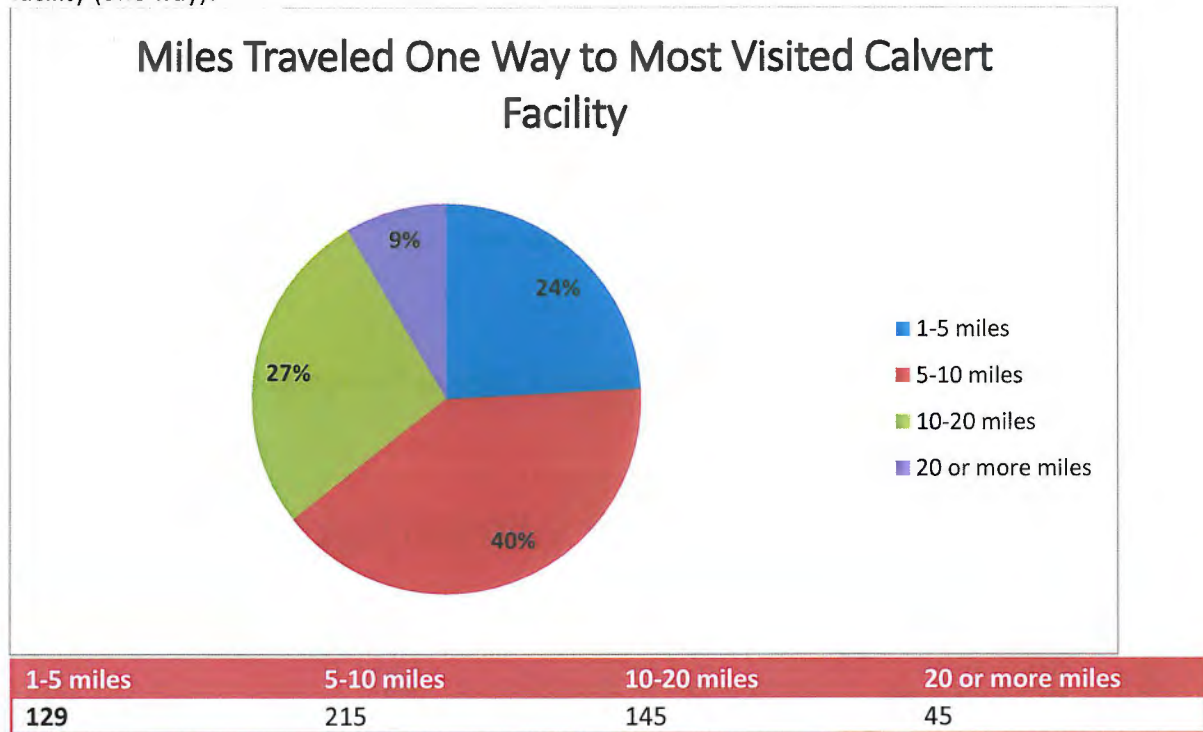
Have you or members of your household visited any of the following Calvert County locations during the past 12 months?



Results: There were 554 respondents who answered this question. Of the responses, the most frequently visited type of location in the county over the past twelve months was active recreational parks, with 196 of the respondents having visited an active recreational park 11 or more times over the past year. Additionally, museums, such as the Calvert Marine Museum were visited at least once in the past year by nearly 86 percent of the respondents. Nature parks and community centers were also visited by a majority of people who took this survey. The least visited location of the respondents was senior centers, with 114 respondents having visited at least once in the past year.

Question 2:

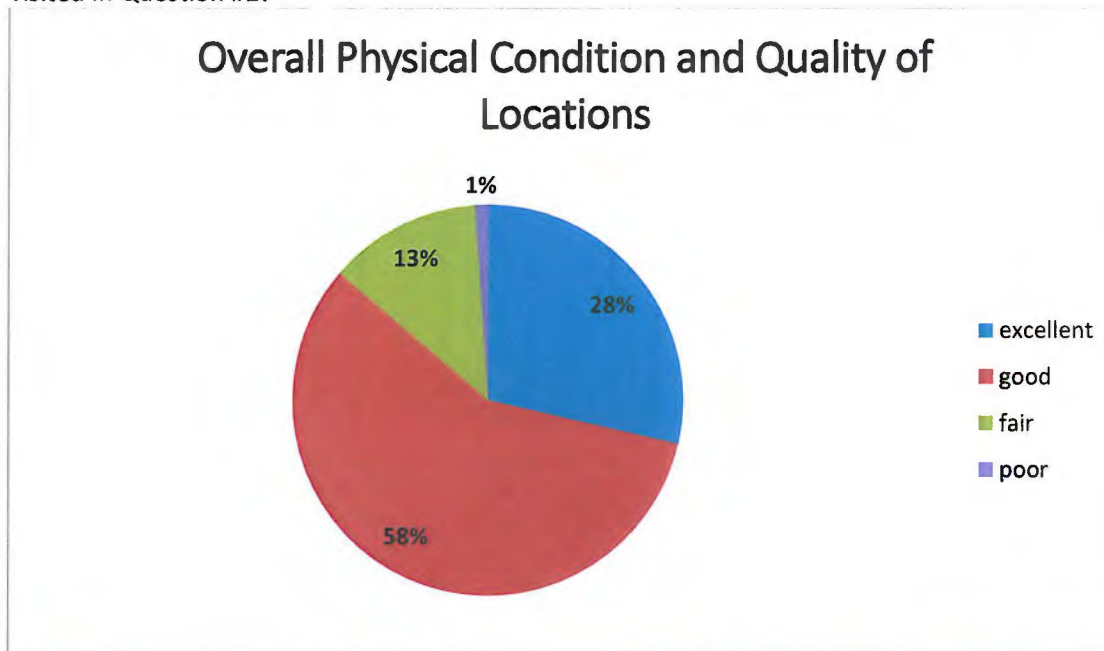
Using the facility you or your household most visited in Question #1, how far do you travel to use that facility (one way)?



Results: There were 534 respondents who answered this question. Of the respondents, 64 percent estimated that they drive 10 miles or less to visit their most frequently visited Calvert County facility. Additionally, 27 percent of the respondents estimated that they drive between 10 and 20 miles to visit their most frequently visited Calvert County facility. Only nine percent of the respondents estimated that they drive 20 or more miles one way to get to their most frequently visited Calvert County facility.

Question 3:

During the past year, how would you rate the overall physical condition and quality of locations most visited in Question #1?

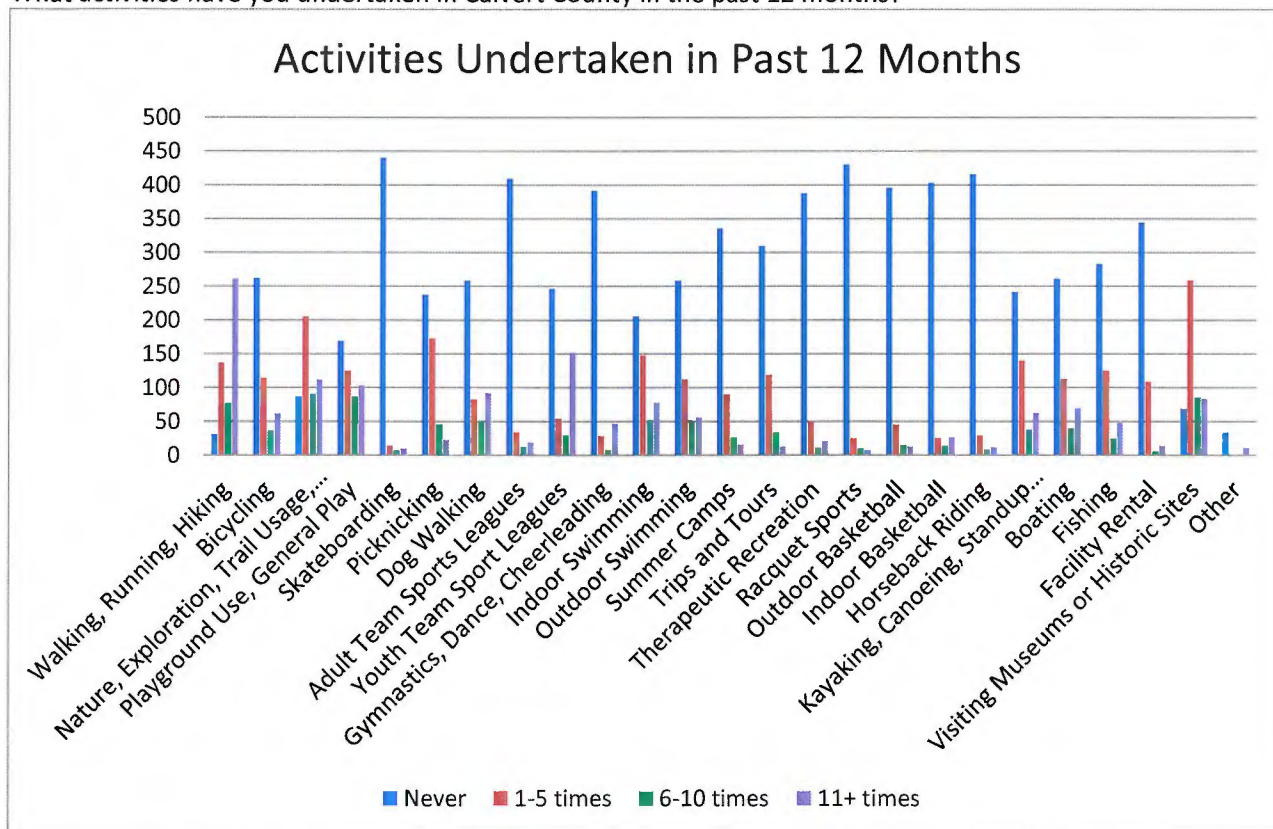


Poor	Fair	Good	Excellent
6	67	307	152

Results: There were 532 respondents who answered this question. Of the respondents, 86 percent rated the locations that they most frequently visited as being in good or excellent condition. Thirteen percent (13%) rated the locations that they most frequently visited as being in fair condition, and one percent rated the locations that they most frequently visited as being in poor condition.

Question 4:

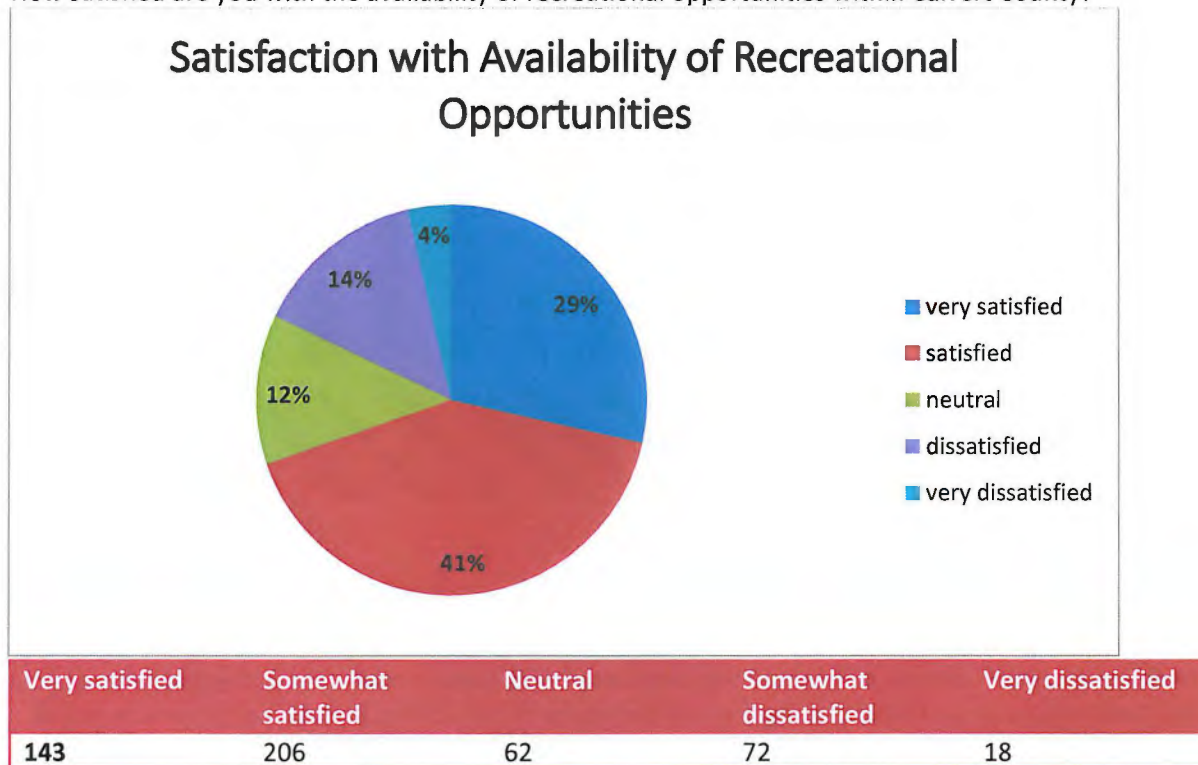
What activities have you undertaken in Calvert County in the past 12 months?



Results: There were 519 respondents who answered this question. The activities that the respondents have undertaken most frequently in the past year are walking, running, and hiking, followed by youth team sports. Other activities that were undertaken by many of the respondents include nature, exploration, and trail usage, playground use, visiting museums or historic sites, indoor swimming, boating, and kayaking, canoeing, and stand up paddle boarding. Among the respondents, the activities with the least amount of participation were racquet sports, skateboarding, and horseback riding.

Question 5:

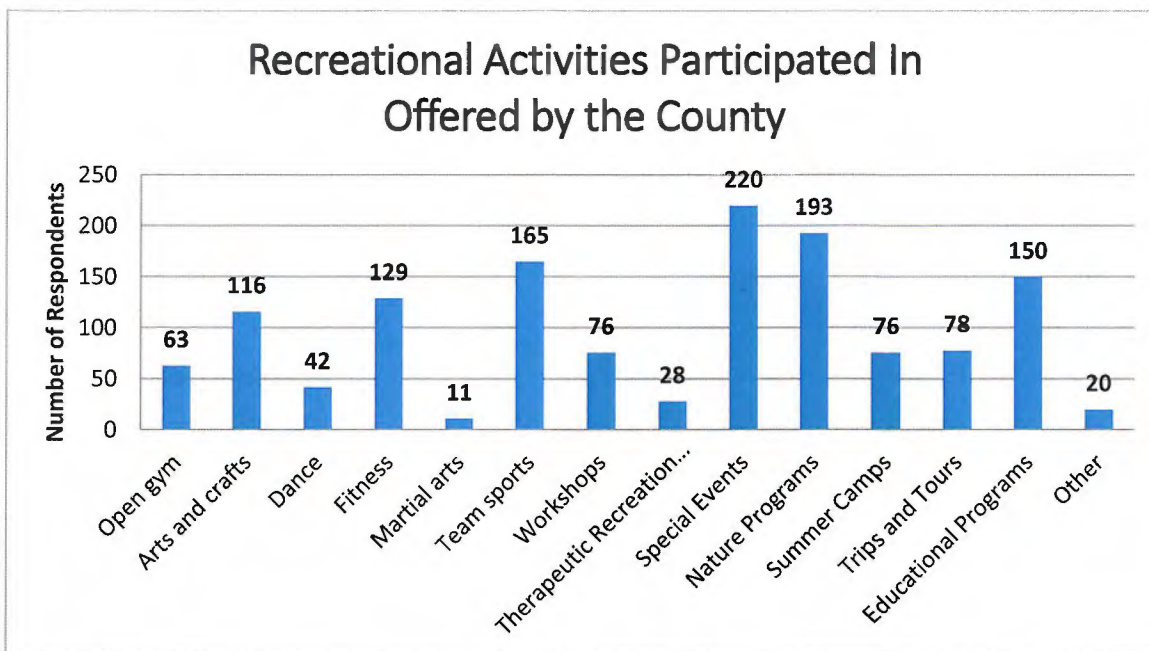
How satisfied are you with the availability of recreational opportunities within Calvert County?



Results: There were 501 respondents who answered this question. Of the respondents, 70 percent were either satisfied or very satisfied with the availability of recreational opportunities. Twelve percent (12%) of the respondents were neutral about the availability of recreational opportunities. Fourteen percent (14%) of the respondents were dissatisfied, and only four percent were very dissatisfied with the availability of recreational opportunities.

Question 6:

What recreational programs offered through the Calvert County's Parks and Recreation Division, Natural Resources Division, Calvert Marine Museum, Chesapeake Beach Railway Museum, or Office on Aging have you or your household participated in during the last 24 months (please select all that apply).



Results: There were 421 respondents who answered this question. The recreational activities that were participated in the most by respondents or by the respondents' households over the past 24 months were special events, nature programs, and team sports. Additionally, educational programs, fitness, and arts and crafts were participated in by many of the respondents. The least participated in recreational activity was martial arts.

Question 7:

What recreational programs or services would you like to see offered that currently are not available?

There were a total of 509 responses to this question. The responses mainly fell into four categories:

Water/Beach Access, Sports and Activities, Educational and Historic Programs, and Parks and Facilities.

Water/Beach Access

One of the most prevalent desires was for more free access to the water and to beaches, including more kayak launches throughout the county. There was also much desire for additional walking, biking, jogging, and hiking trails throughout the county, including the creation of some trails near ponds or rivers.

Sports and Activities

Many expressed a desire for additional activities for young children under the age of five, youth, and teens. Suggestions included expanding programs for young children to the weekends so that parents could attend, and providing activities such as skate parks, junior golf, gymnastics, and theatre. Additionally, there was a desire for more programs to be offered for children on school holidays and teacher work days. There was a repeated desire to see roller skating and/or ice skating, indoor track, and other indoor sporting facilities. There was also a consistent desire for more adult sports leagues, including volleyball and ultimate frisbee. Additionally, there was a desire for more adaptive sports for people with physical disabilities.

Educational and Historic Programs

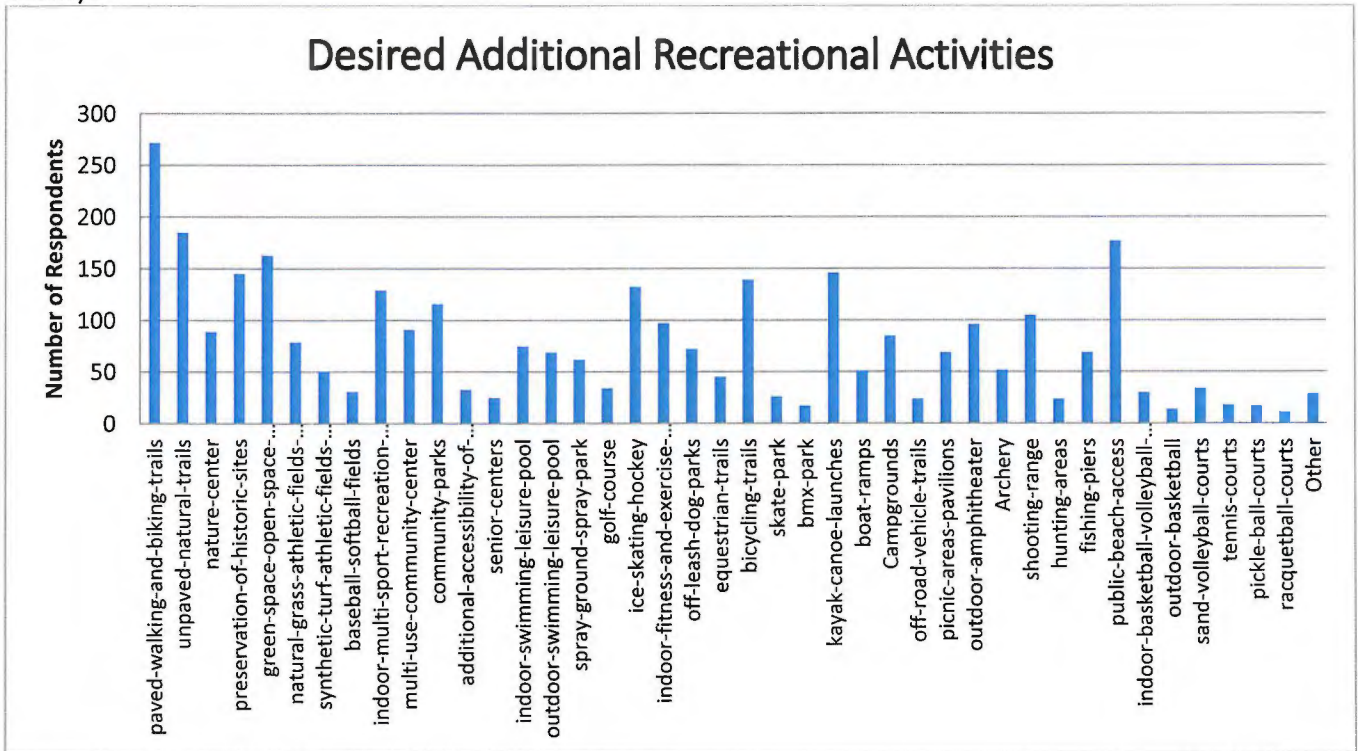
Many responded that they would like to see an expansion of targeted educational and historic programs for homeschooled students, single adults, and more programs for seniors that include less walking. Specific program suggestions included fossil hunts and historic walking tours. There was also a consistent desire for more adult classes and activities, including foreign language classes, and art classes, such as knitting and pottery. There was also a desire for cooking classes for both children and adults.

Parks and Facilities

There was an expressed desire for more facilities as well as more updated facilities, particularly in the southern end of the county. There was also a desire for extended park hours, dog parks, concerts in the park, and more outdoor swimming pools.

Question 8:

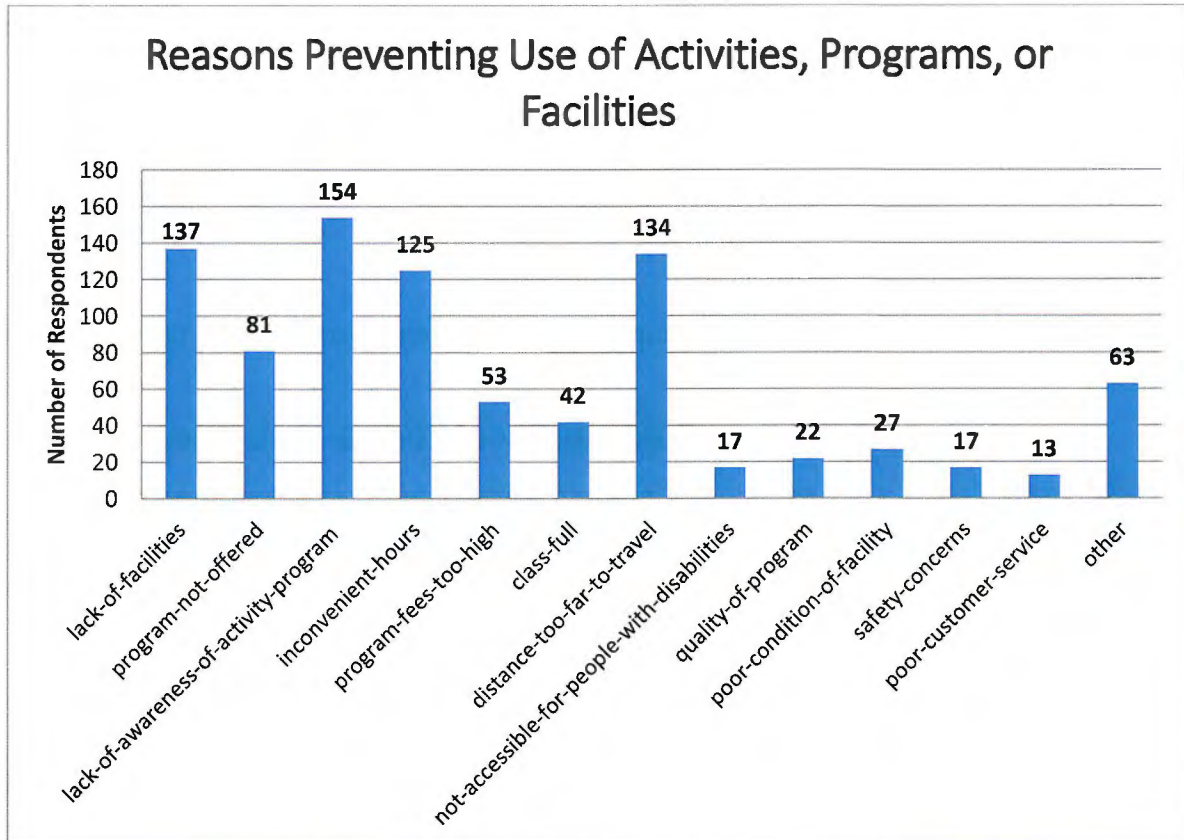
What additional recreational amenities does your household think are most needed for them in Calvert County?



Results: There were 484 respondents who answered this question. According to the respondents, the most desired additional recreational activities for Calvert County are paved walking and biking trails, unpaved natural trails, green space and open space, public beach access, and kayak and canoe launches. Bicycling trails, indoor multi-sport recreation facilities, and ice skating and hockey were also noted as desired recreational activities.

Question 9:

Please identify the top three reasons preventing your household from using county parks, trails, activities, programs, or facilities more often. (Check up to three)



Results: There were 420 respondents who answered this question. Of the responses, the top three reasons preventing the respondents from using activities, programs, and facilities were lack of awareness of activity programs, lack of facilities, and the distance being too far to travel. Inconvenient hours were the fourth highest picked reason preventing use of activities, programs, and facilities.

Question 10:

What could be done to encourage you or members of your household to use parks, museums, golf course, and other recreational facilities in Calvert County more often?

There were 490 responses to this question. The responses mainly addressed three broader themes: Awareness, Accessibility, and Cost.

Awareness

Many respondents noted that they would use the parks, but were simply not aware of many of the options. Many suggested that more advertisement through news media, fliers, and social media could help solve this. There were also suggestions to have more easily accessible maps and information about the parks and facilities, as well as better informing new residents of the county about the parks and facilities.

Accessibility

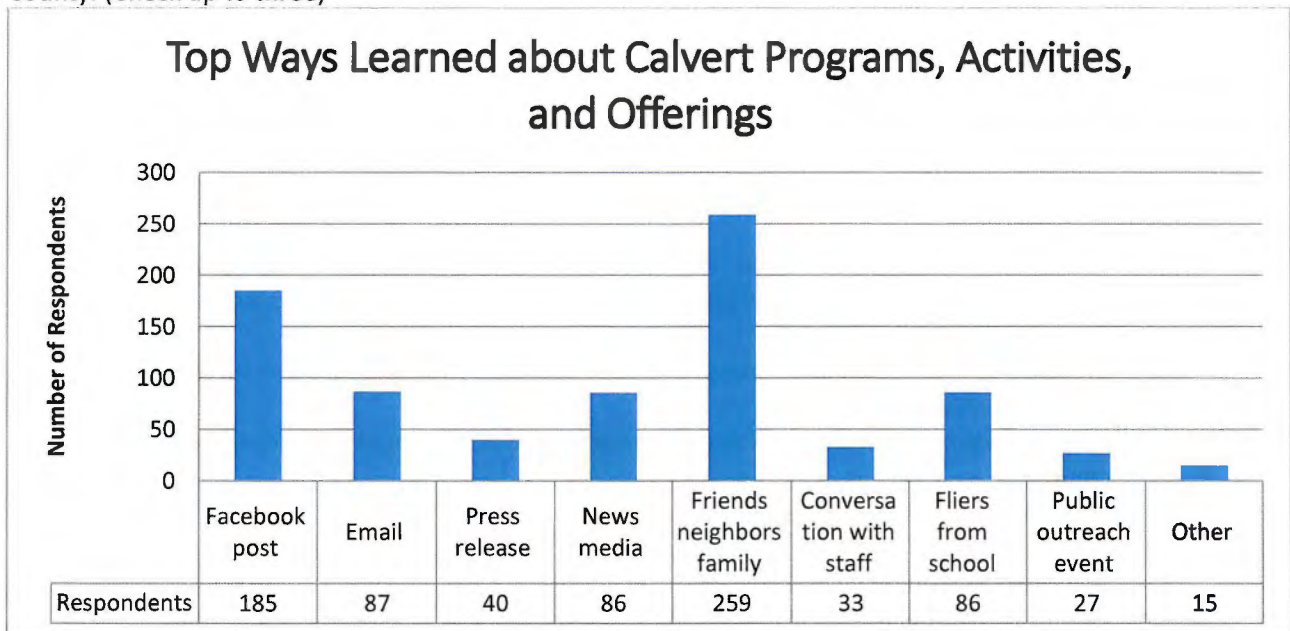
Another theme throughout the responses was a desire for more accessibility. Many people noted that they would like to go to the parks, but only have time to go later in the evening once parks are typically closed. Thus, many noted a desire for extended park hours, both earlier in the morning and later in the day, throughout all seasons. Some also expressed a desire for closer parks and facilities, including neighborhood parks. There was a desire for more parks and facilities in the northern end and more programs in the southern end of the county. Some also advocated for more accessibility to specific attractions, such as art classes, kayak/canoe launches, biking, hiking, equestrian, and nature trails, volleyball, and an ice rink. There was also a desire for more handicap accessible as well as stroller accessible parks and trails. Additionally, many advocated for more pet friendly parks.

Cost:

The third consistent theme noted was cost. Many said that they may utilize parks and facilities more often if there was a reduced cost or free tickets for county residents. Some suggested having open houses for the parks throughout the year so that citizens could both become aware of the parks and facilities, as well as experience the benefits of the parks and facilities before purchasing tickets for future entry. Additionally, some suggested for the parks and facilities to have discounted annual passes or free trial periods.

Question 11:

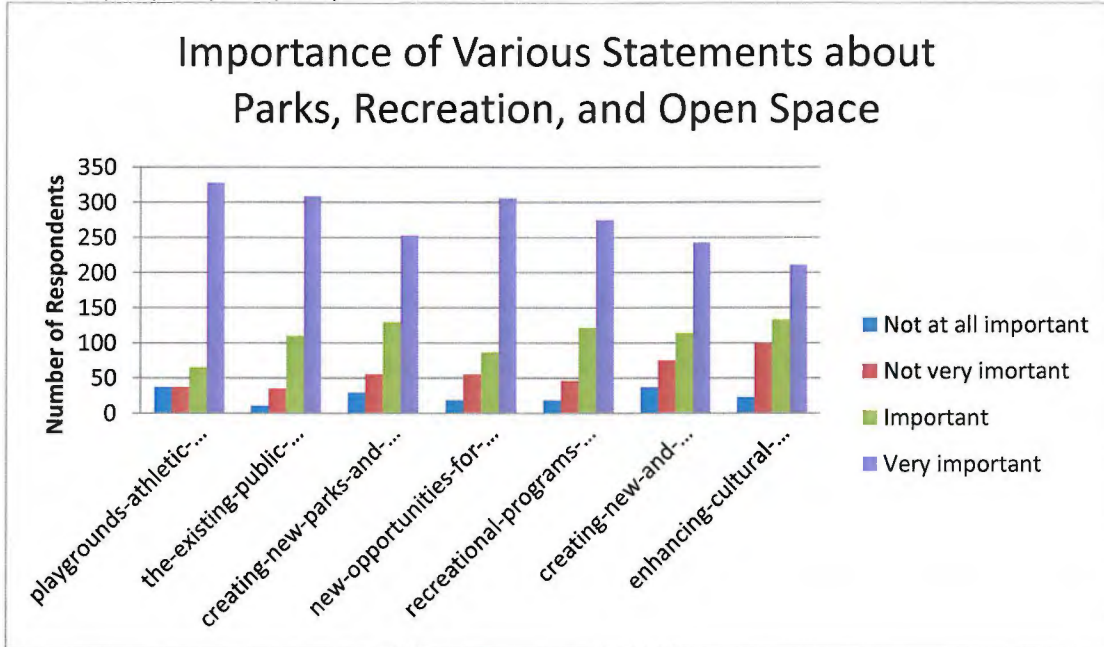
Please identify the top three ways you learn about programs, activities, and offerings within Calvert County. (Check up to three)



Results: There were 458 respondents who answered this question. The top two ways that the respondents learned about Calvert County programs, activities, and offerings were friends, neighbors, and family, and Facebook posts. Additionally, many people learned about programs, activities, and offerings through email, news media, and fliers from school.

Question 12:

On a scale from 1 to 4, where 4 is very important and 1 is not at all important, please indicate how you rate the importance of each of the following parks, recreation, and open space statements in terms of how they impact your quality of life as a resident.



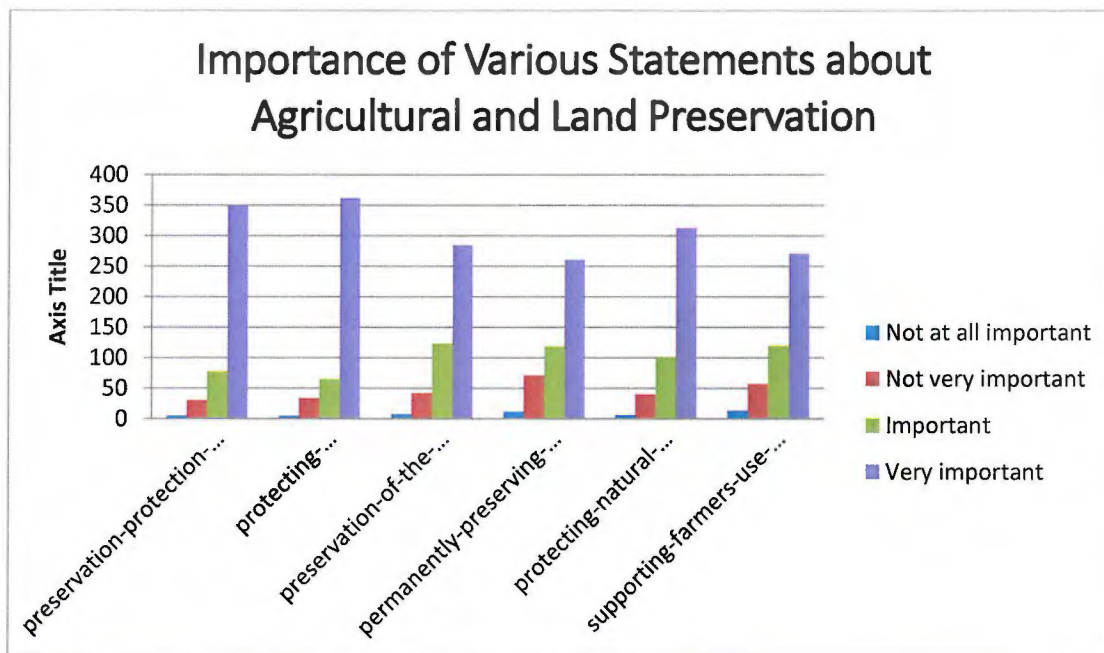
Results: There were 472 respondents who answered this question. Most of the respondents rated most of the various statements about parks, recreation, and open space as very important. The statement with the highest amount of mixed responses was statement number 7. The full statements are below.

Full Statements:

- Playgrounds athletic fields and other recreational amenities for youth are important.
- The existing public county parks recreation and open space opportunities available to me in Calvert County are important.
- Creating new parks and open spaces and providing new recreational opportunities within Calvert County are important.
- New opportunities for walking hiking running and bicycling would enhance the community county.
- Recreational programs for youth and adults are important.
- Creating new and enhanced waterfront access for water based recreation such as fishing-swimming and boating is important.
- Enhancing cultural historical and museum opportunities in the county is important.

Question 13:

On a scale from 1 to 4, where 4 is very important and 1 is not at all important, please indicate how you rate the importance of each of the following agricultural and land preservation statements in terms of how they impact your quality of life as a county resident.



Results: There were 467 respondents who answered this question. Most of the respondents rated most of the various statements about parks, recreation, and open space as very important. The full statements are below.

Full Statements:

- Preservation protection and conservation of natural resources are important.
- Protecting environmentally sensitive areas wetlands floodplains steep slopes from development impacts is important.
- Preservation of the county's historic and archaeological resources is important.
- Permanently preserving agricultural land capable of supporting a reasonable diversity of agricultural production is important.
- Protecting natural forestry and the rural character of the landscape associated with Maryland's farmland is important.
- Supporting farmers' use of their land for agri-tourism ecotourism and heritage tourism is important.

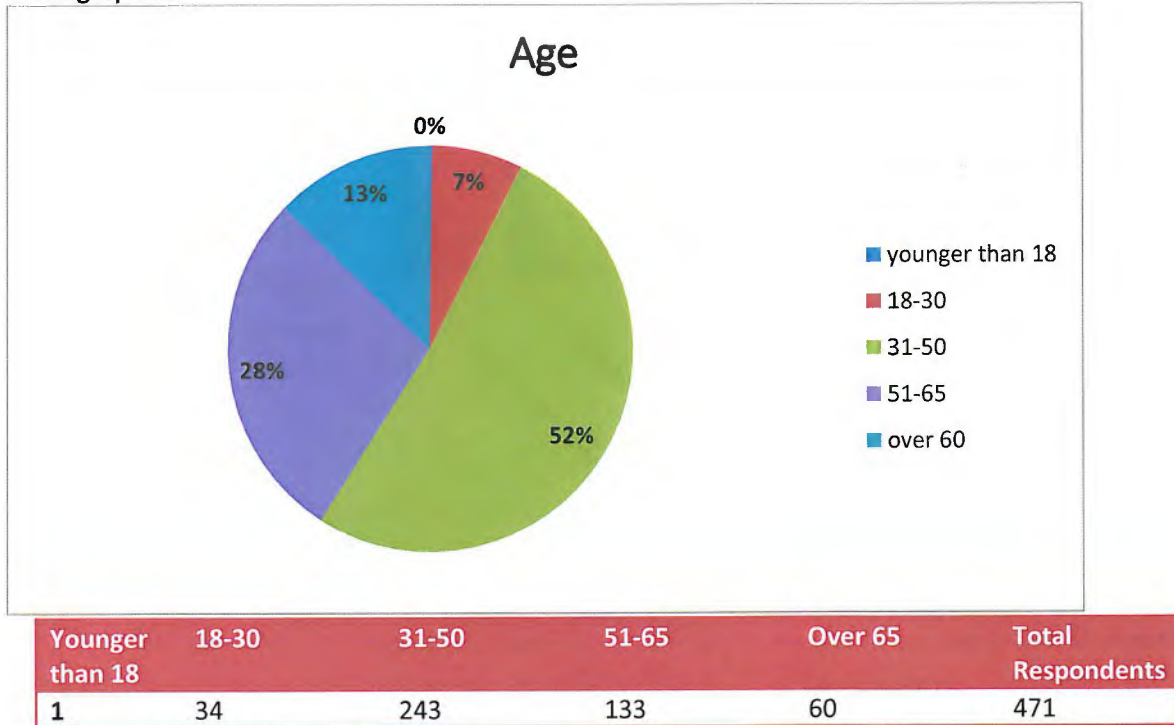
Additional Comments

There were 473 additional comments.

While there were a variety of additional comments, many of the people noted that one of their favorite parts of Calvert County is its rural and natural character. Many advocated for continuing efforts to preserve natural and historic areas throughout the county. In addition, there were suggestions for more facilities throughout the county, including indoor recreation facilities, swimming pools and splash parks, ball fields, including turf fields, kayak/canoe access, and running, biking, and hiking trails. There was also an expressed desire for an increase in free activities for teens and younger children during the weekends. Greater accessibility for individuals was a frequent request. This included a desire for wheelchair and stroller accessible parks, as well as building additional community and neighborhood parks that are closer to some of the neighborhoods throughout Calvert County.

Overall, many of the comments pointed back to the respondents' desire to maintain and preserve the rural character of Calvert County.

Demographics



Results: The majority of the respondents were between the ages of 31 and 50. Twenty-eight percent (28%) of the respondents were between the ages of 51 and 65, while 13 percent were 60 and over, and seven percent were between the ages of 18 and 30.

Appendix D: Parks and Recreation Inventory

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Calvert County Public Parks, Recreation, and Open Space Assets

Last updated: September 29, 2017																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Facility Name	Map Site Location	County & Municipal Acreage				State Acreage				Site or Facility Classification	Ownership	Facilities (x=amenity present, quantity noted where known)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		Recreation	Natural Resource	Educational Recreation Area	Historic & Cultural Area	Quasi-Public Recreation Lands	Quasi-Public Natural Resource Lands	Recreation Acreage (State of MD)	Natural Resource Acreage (State of MD)			Concession Stand	Parking	Rest Room	Community Center	Picnic Shelters	Athletic Fields		Sports Courts			Aquatic and Waterfront Facilities				Outdoor Recreation Amenities																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
																	Athletic Fields - Baseball/Soccer/Softball Fields	Athletic Field - Multi-purpose	Picnic Tables	Baseball Court (outdoor)	Baseball/Softball Fields	Tennis Courts	Basketball Court (Indoor - gym)	Beach Length (miles)	Beach Ramps	Beach Stairs	Canoe & Kayak Launch	Fishing/Crabbing	Pier	Shoreline (MDA, accessible)	Swim Pool (outdoor)	Swim Pool (indoor)	Camp Sites	Equestrian Facility	Golf Course (public)	Hunting (Acres)	Outdoor Stadium Seats	Outdoor Theater Seats	Picnic Tables	Trail - Hiking & Biking (miles)	Trail - Equestrian (miles)	Trail - Off-road Vehicles (miles)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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Calvert County Public Parks, Recreation, and Open Space Assets

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Appendix E: Full Size Maps

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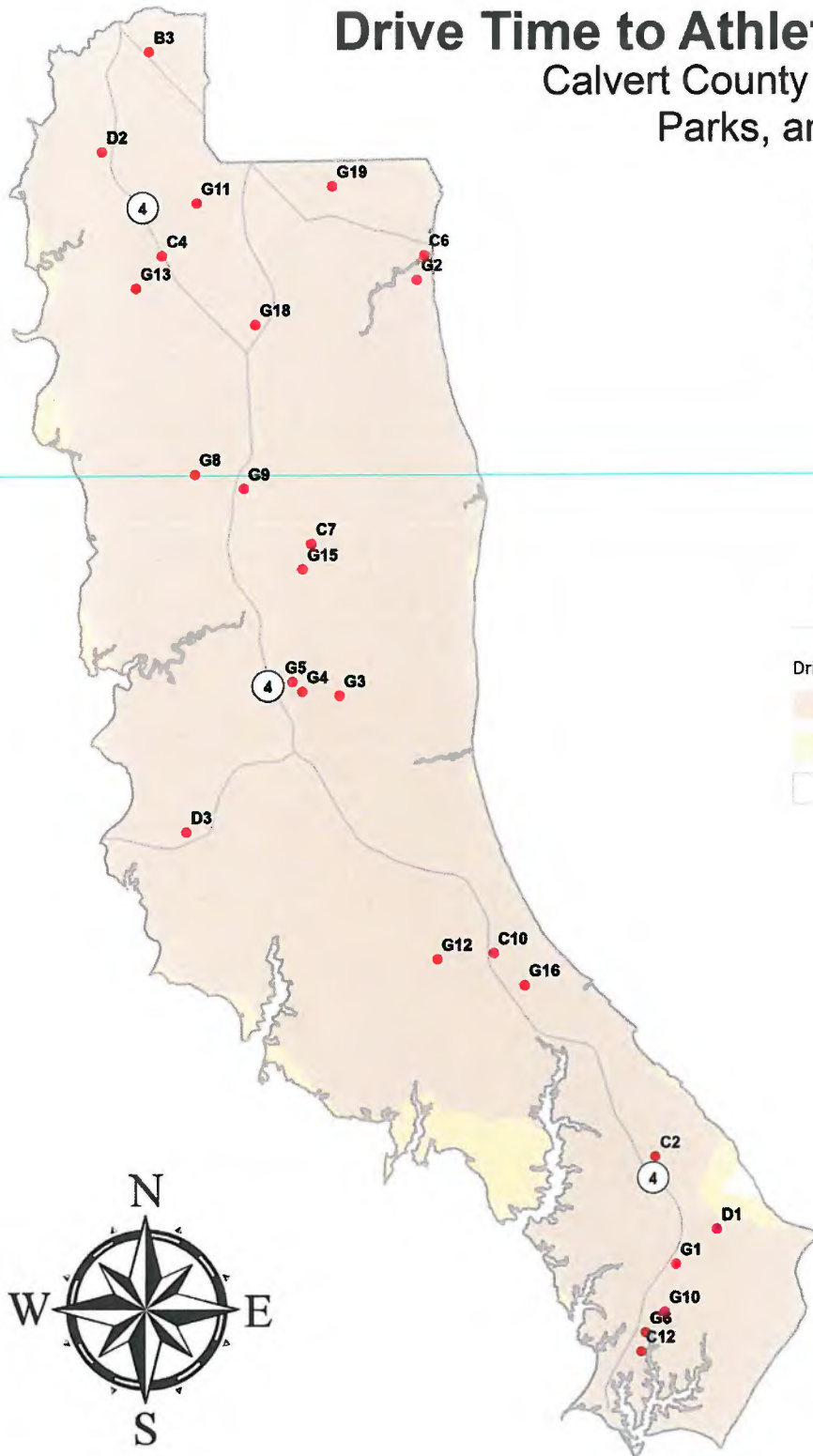
County Context

Calvert County Land Preservation Parks, and Recreation Plan



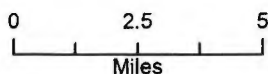
Drive Time to Athletic Field Sites

Calvert County Land Preservation Parks, and Recreation Plan



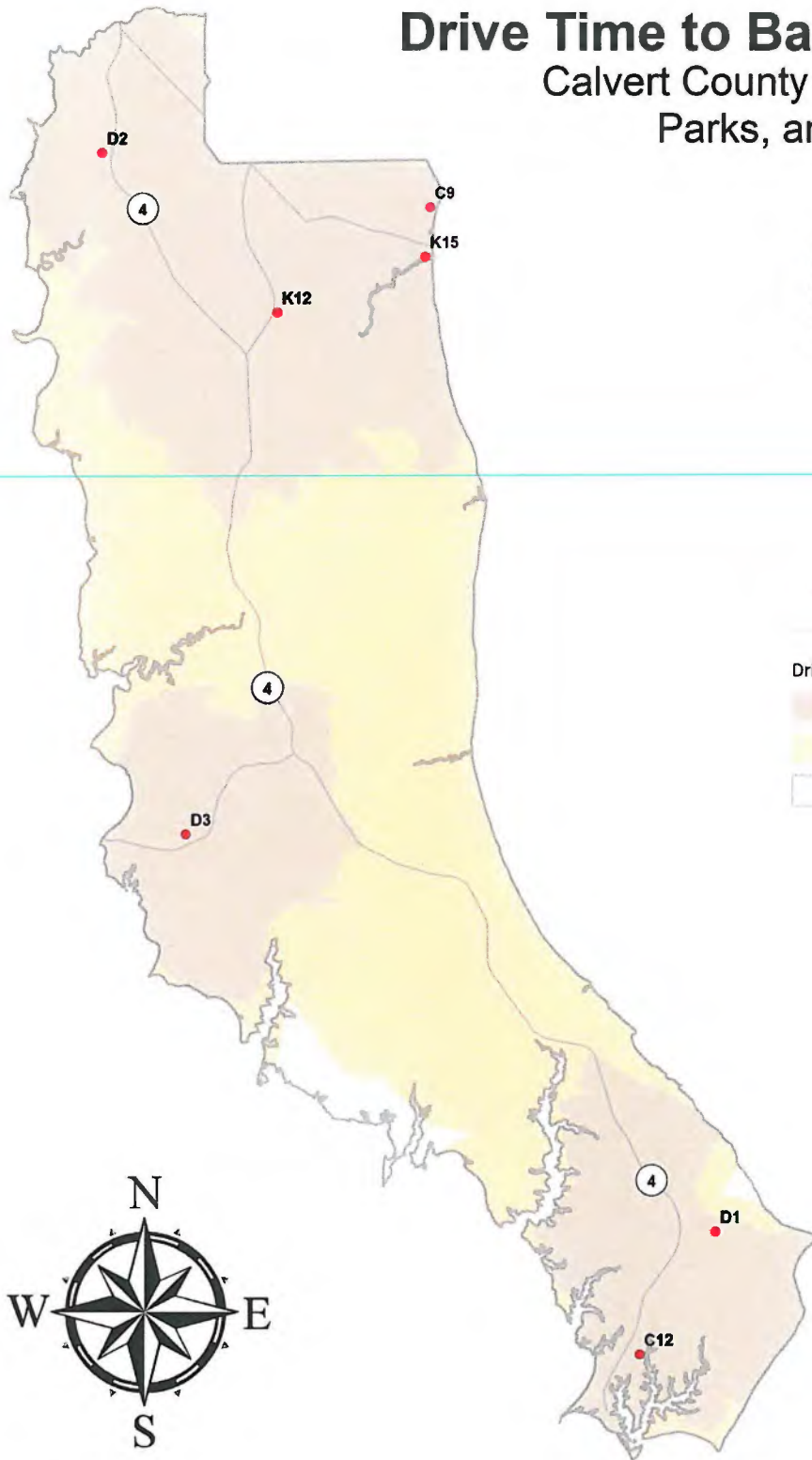
Legend

- Athletic Fields
- Major Roads
- Driving Distance
 - 10 minutes or less
 - 20 minutes or less
 - Greater than 20 minutes



Drive Time to Basketball Sites

Calvert County Land Preservation Parks, and Recreation Plan



Legend

• Basketball Sites

Major Roads

Driving Distance

10 minutes or less

20 minutes or less

Greater than 20 minutes

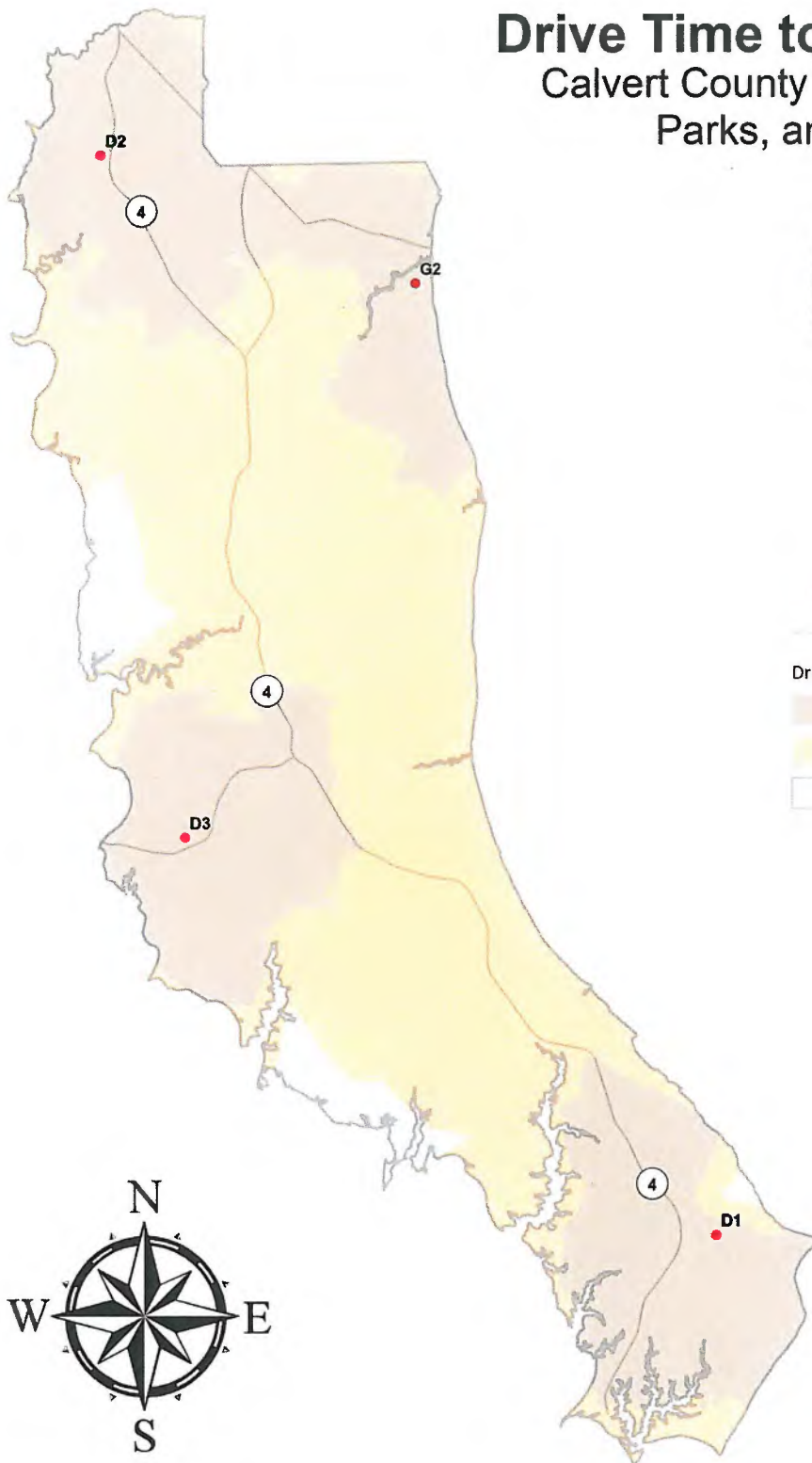
Drive Time to Tennis Sites

Calvert County Land Preservation Parks, and Recreation Plan



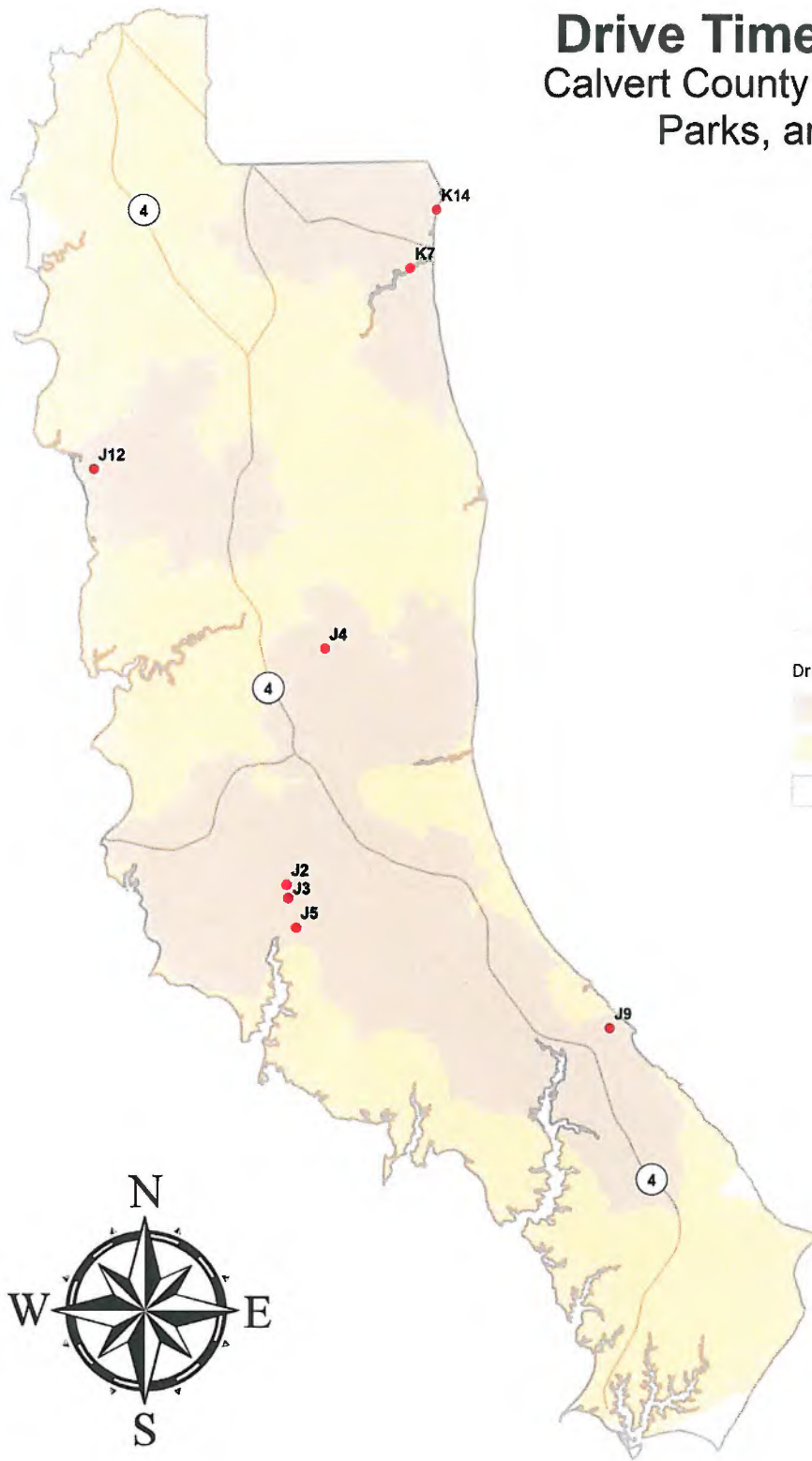
Legend

- Tennis Sites
- Major Roads
- Driving Distance
 - 10 minutes or less
 - 20 minutes or less
 - Greater than 20 minutes



Drive Time to Trail Sites

Calvert County Land Preservation Parks, and Recreation Plan

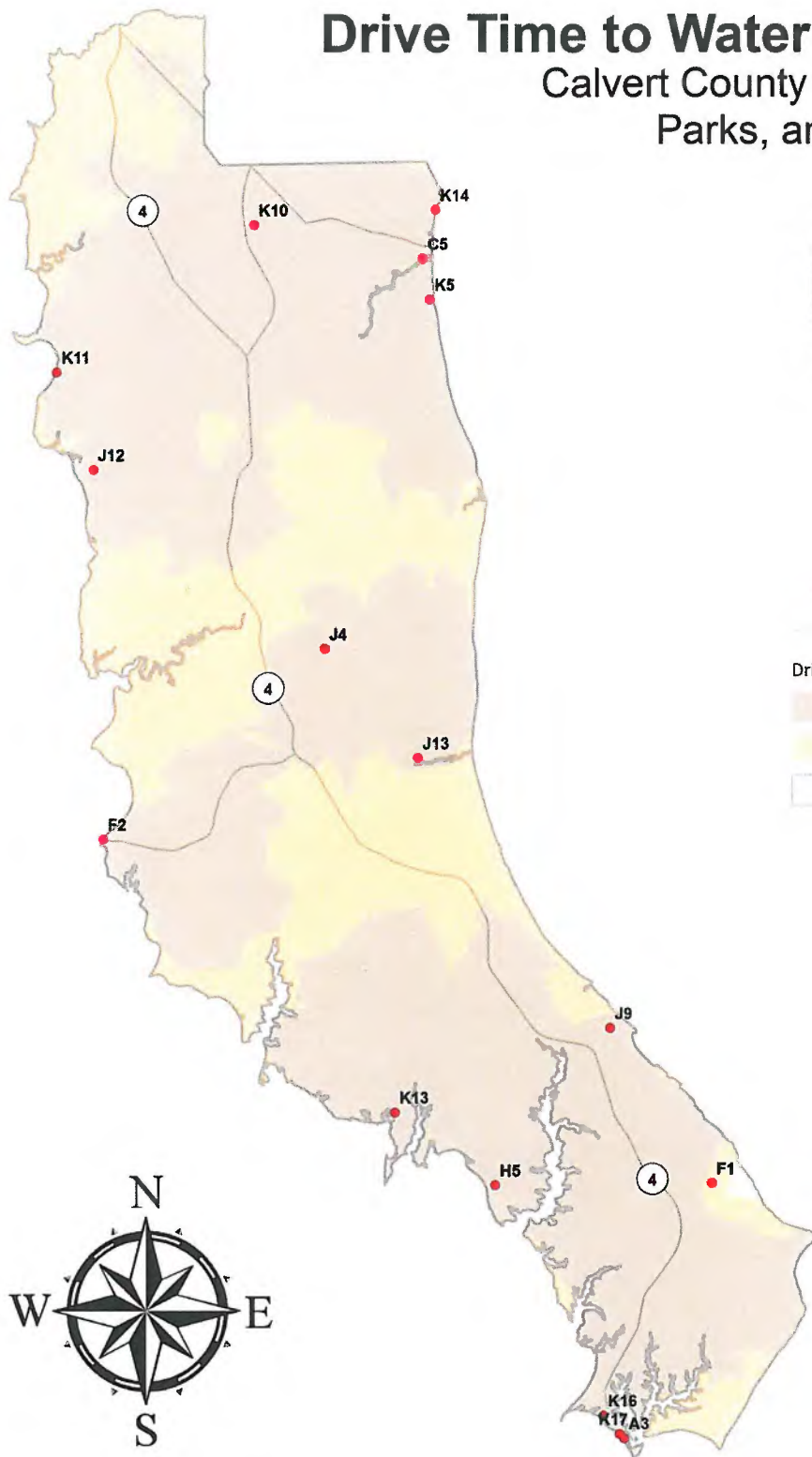


Legend

- Trail Sites
- Major Roads
- Driving Distance
 - 10 minutes or less
 - 20 minutes or less
 - Greater than 20 minutes

Drive Time to Water Access Sites

Calvert County Land Preservation Parks, and Recreation Plan



Legend

• Water Access Sites

Major Roads

Driving Distance

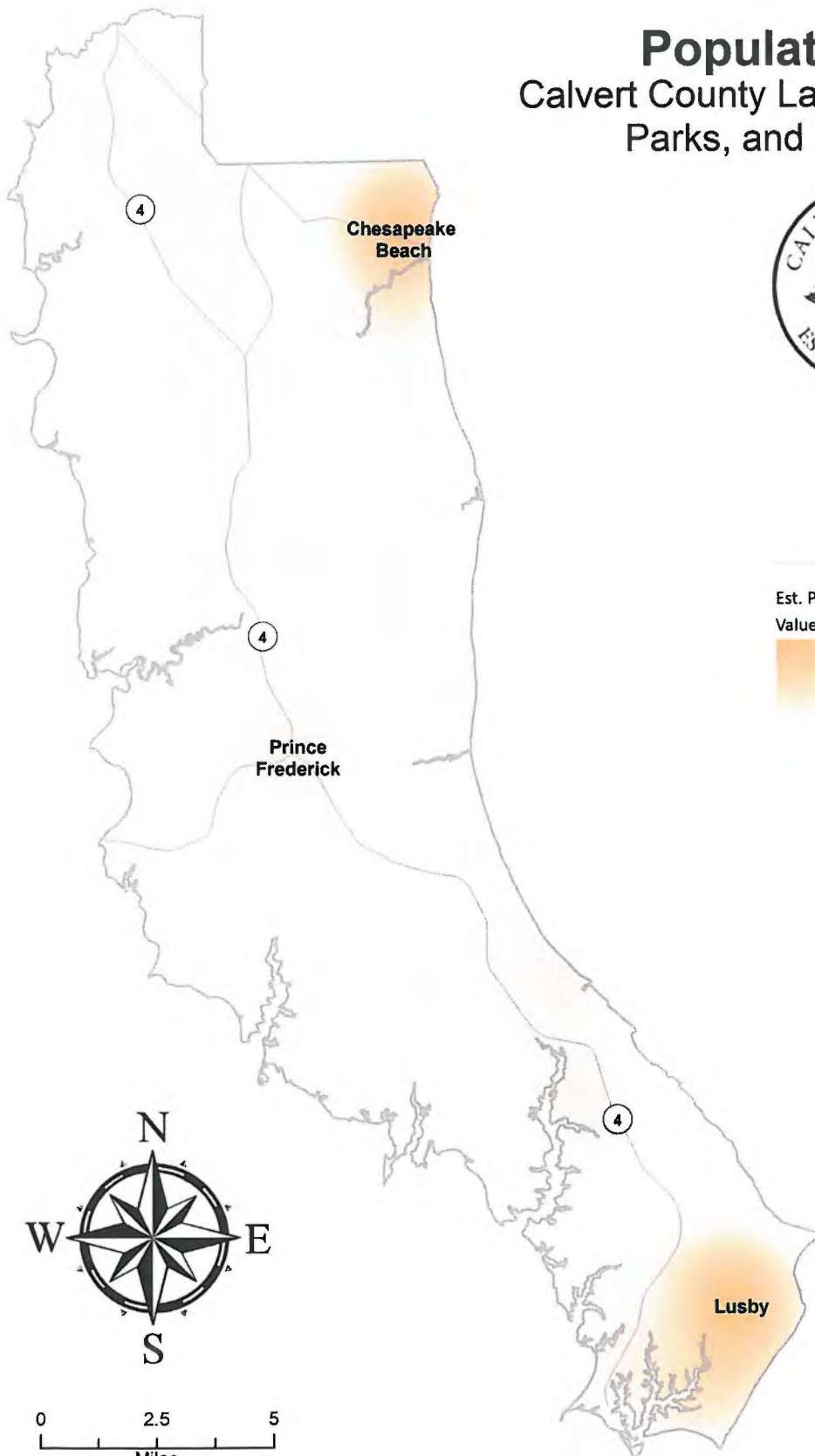
10 minutes or less

20 minutes or less

Greater than 20 minutes

Population Density

Calvert County Land Preservation Parks, and Recreation Plan



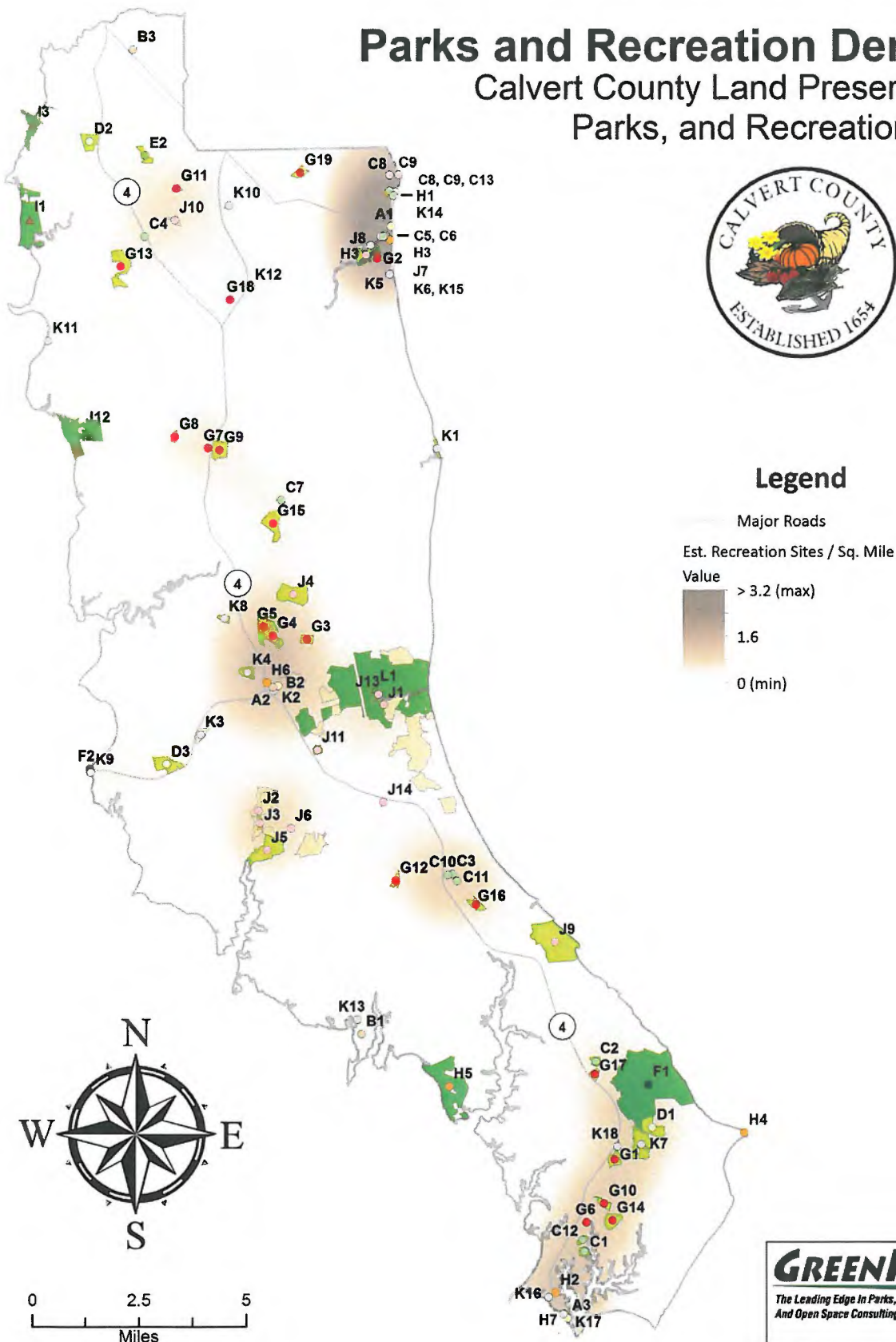
Legend

- Major Roads
- Est. Population / Sq. Mile
- Value
- > 60 (max)
- 30
- < 1 (min)



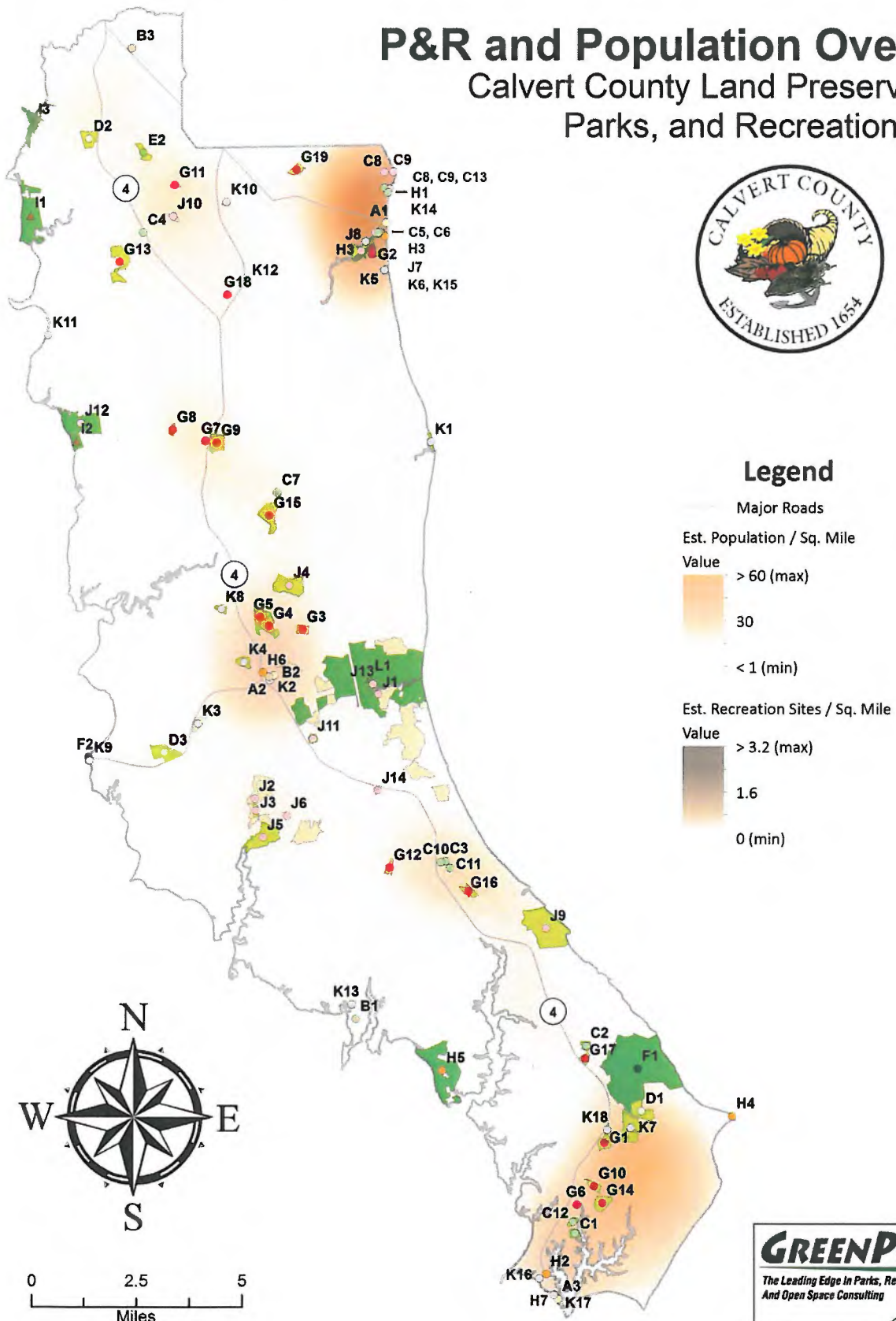
Parks and Recreation Density

Calvert County Land Preservation Parks, and Recreation Plan



P&R and Population Overlay

Calvert County Land Preservation Parks, and Recreation Plan



Parks and Recreation Sites

Calvert County Land Preservation Parks, and Recreation Plan



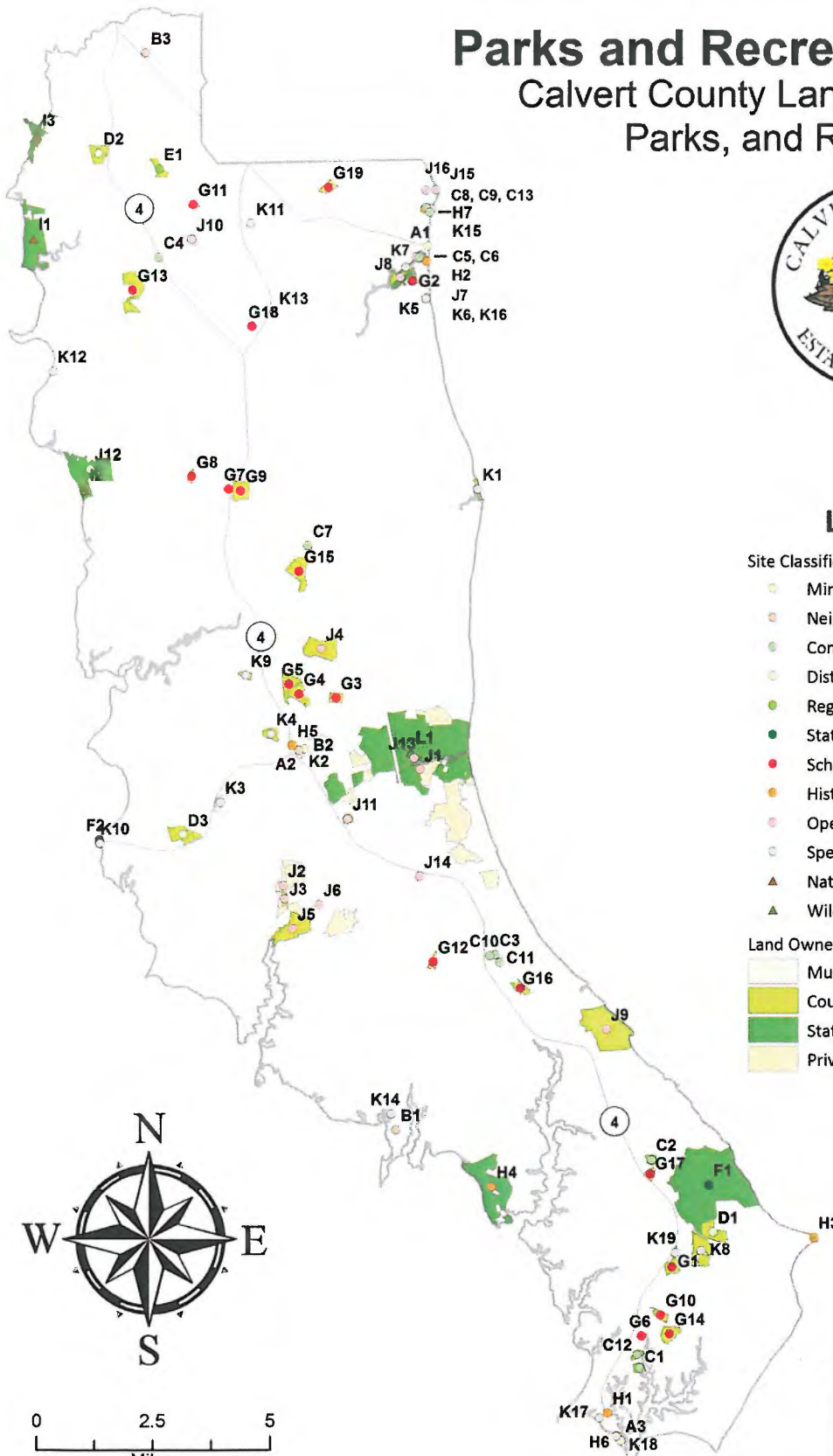
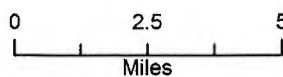
Legend

Site Classification

- Mini Park
- Neighborhood Park
- Community Park
- District Park
- Regional Park
- State Park
- School Recreation Site
- Historic/Cultural Area
- Open Space
- Special Use Area
- ▲ Natural Resource Management Area
- ▲ Wildlife Management Area

Land Ownership

- Municipal
- County
- State
- Private



Appendix F: Statewide Goals

State Goals for Parks and Recreation

- 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.

State Goals for Agricultural Land Preservation

- 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.
- 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 compliment state goals.
 - In each area designated for preservation, develop a shared understanding of goals and the strategy to achieve them among rural land owners, the public, 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.

State Goals for Natural Resource Land Conservation

- 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.
 - Support 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.
 - 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 the 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 critical links between growth management and aquatic biodiversity and fisheries production.
 - Support a productive forestland base and forest resource industry, emphasizing the economic viability of privately owned forestland.

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Appendix G: Parks and Recreation Department Capital Improvement Program

Parks & Recreation FY 18 CIP										
Area	Priority	Proj #	Prior Approval	FY18	FY19	FY20	FY21	FY22	FY23	Project Total FY 2018-FY2023
All Park Facilities										
Central Irrigation Control System	1	4379	-	42,000	-	-	-	-	-	42,000
Backstop/Protective Fencing	1		-	-	-	-	-	-	600,000	600,000
				\$ 42,000	\$ -	\$ -	\$ -	\$ -	\$ 600,000	642,000
Broomes Island Community Center										
Playground Replacement	1	4342	-	-	-	83,000	-	-	-	83,000
				\$ -	\$ -	\$ 83,000	\$ -	\$ -	\$ -	83,000
Cove Point Park										
Skate Park	1	4311	64,000	-	507,000	327,000	-	-	-	834,000
				\$ -	\$ 507,000	\$ 327,000	\$ -	\$ -	\$ -	834,000
Cove Point Park Pool										
New White Coat	1	4310	40,925	80,000	-	-	-	-	-	80,000
Deck Repair/Replacement	1	4310	-	-	-	200,000	-	-	-	200,000
				\$ 80,000	\$ -	\$ 200,000	\$ -	\$ -	\$ -	280,000
Dunkirk Park										
Tennis Court Construction	1	4316	7,505	-	489,300	489,300	-	-	-	978,600
Restroom @ New Tennis Courts	1	4316	-	-	-	-	240,300	-	-	240,300
Restroom/Snack Stand Replacement	2	4316	-	-	-	79,300	-	793,100	-	872,400
Picnic Grove	3	4316	-	-	-	75,000	-	752,400	-	827,400
Pathways and Lights	3	4316	-	-	-	57,900	582,500	-	-	640,400
Playground Replacement	1	4316	-	45,200	-	-	730,000	-	-	775,200
				\$ 45,200	\$ 489,300	\$ 701,500	\$ 1,552,800	\$ 1,545,500	\$ -	4,334,300
Hallowing Point Park										
Restroom/Snack Stand Complex	2	4320	103,000	-	81,700	736,200	-	-	-	817,900
Basketball Courts	2	4320	-	-	-	92,700	930,100	-	-	1,022,800
Pathways and Lights	3	4320	-	-	-	-	-	-	921,000	921,000
				\$ -	\$ 81,700	\$ 828,900	\$ 930,100	\$ -	\$ 921,000	2,761,700
Main Street Park										
Planning and Construction	1	4319	30,000	40,000	267,800	-	-	-	-	307,800
				\$ 40,000	\$ 267,800	\$ -	\$ -	\$ -	\$ -	307,800
Mount Hope Community Center										
Playground Replacement	1	4330	-	89,300	-	-	-	-	-	89,300
				\$ 89,300	\$ -	\$ -	\$ -	\$ -	\$ -	89,300
St. Leonard Recreation Area										
Playground Replacement	2	4350	-	-	-	96,000	-	-	-	96,000
				\$ -	\$ -	\$ 96,000	\$ -	\$ -	\$ -	96,000
St. Leonard Town Square										
Town Square and Skatespot	2	4350	-	-	300,000	3,100,000	100,000	-	-	3,500,000
				\$ -	\$ 300,000	\$ 3,100,000	\$ 100,000	\$ -	\$ -	3,500,000

Parks & Recreation FY 18 CIP										
Area	Priority	Proj #	Prior Approval	FY18	FY19	FY20	FY21	FY22	FY23	Project Total FY 2018-FY2023
Solomons Town Center/CPP										-
Irrigation	1	4348	17,600	55,000	-	-	-	-	-	55,000
				\$ 55,000	\$ -	\$ -	\$ -	\$ -	\$ -	55,000
Ward Road Property										-
Phase One	1	4318	405,600	600,000	600,000	143,500	600,000	600,000	140,600	2,684,100
				\$ 600,000	\$ 600,000	\$ 143,500	\$ 600,000	\$ 600,000	\$ 140,600	2,684,100
			\$ 668,630	\$ 951,500	\$ 2,245,800	\$ 5,479,900	\$ 3,182,900	\$ 2,145,500	\$ 1,661,600	\$ 15,667,200

Natural Resources FY 18 CIP										
Area	Priority	Proj #	Prior Approval	FY18	FY19	FY20	FY21	FY22	FY23	Project Total FY 2018-FY2023
Battle Creek Cypress Swamp										
Exhibit Renovation	1	4451	18,200	40,000	30,000	30,000	-	-	-	100,000
Building Renovation	1	4451	69,600	130,000	100,000	100,000	100,000	100,000	-	530,000
				\$ 170,000	\$ 130,000	\$ 130,000	\$ 100,000	\$ 100,000	\$ -	630,000
Biscoe Gray Heritage Farm										
Master Plan Implementation	2	4455	-	-	100,000	100,000	100,000	-	-	300,000
George Rice House	2	4455	92,800	-	-	100,000	-	-	-	100,000
Trails & Boardwalks	1	4455	95,400	50,000	-	-	-	-	-	50,000
				\$ 50,000	\$ 100,000	\$ 200,000	\$ 100,000	\$ -	\$ -	450,000
Flag Ponds Nature Park										
Beach Shelter	2	4453	-	-	-	70,000	-	-	-	70,000
Boardwalks	1	4453	-	50,000	-	-	-	-	-	50,000
Exhibits	1	4453	-	50,000	50,000	-	-	-	-	100,000
Fishing Shanty	2	4453	20,000	-	-	-	65,000	-	-	65,000
				\$ 100,000	\$ 50,000	\$ 70,000	\$ 65,000	\$ -	\$ -	285,000
Hughes Tree Farm										
Expand Public Use	3	4450	80,400	-	-	-	-	50,000	-	50,000
				\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	50,000
Kings Landing Park										
Cabins & Campground	1	4452	10,900	40,000	40,000	-	-	-	-	80,000
Event Parking	2	4452	-	-	140,000	140,000	-	-	-	280,000
Trails	2	4452	27,300	-	-	10,000	50,000	-	-	60,000
				\$ 40,000	\$ 180,000	\$ 150,000	\$ 50,000	\$ -	\$ -	420,000
Lower Marlboro Wharf										
Floating Dock	1	4456	-	30,000	-	-	-	-	-	30,000
				\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	30,000
Solomons Boat Ramp & Fishing Pier										
Planning and Construction	1	4385	42,700	900,000	-	-	-	-	-	900,000
				\$ 900,000	\$ -	\$ -	\$ -	\$ -	\$ -	900,000
			\$ 457,300	\$ 1,290,000	\$ 460,000	\$ 550,000	\$ 315,000	\$ 150,000	\$ -	2,765,000

