PENNSYLVANIA STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

DRAFT

RECREATION FOR **ALL**

RECREATION FOR **ALL**

pennsylvania
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

dcnr.pa.gov

Tom Wolf, Governor
Cindy Adams Dunn, Secretary

2020 - 2024

Table of Contents

Acknowledgments 2

Governor's Letter 3

Executive Summary 4

Overview 8

Public Input 14

Our Common Wealth 22

Demographics 25

Participation Trends 30

Priorities 35

- Health and Wellness 36
- Recreation for All 44
- Sustainable Systems 54
- Funding and Economic Development 62
- Technology 72

How This Plan is Used 81

Recommendations and Actions Implementation Matrix 85

Acronyms 92

Appendices (online only)

A. 2018 Fall Lion Poll Survey Final Report

B. 2019 Spring Lion Poll Survey Final Report

C. 2019 Spring Lion Poll Final Report (Forestry)

D. 2019 Minority Focus Groups Final Report

E. 2019 Pennsylvania Local Park and Recreation Provider Survey Final Report

F. 2019 Public Survey Final Report

G. 2018 Ethnic Minority Panel Survey for the Bureau of State Parks

H. Access to PA's Outdoor Recreation Areas: The Trust for Public Land Methods and Key Findings

I. Pennsylvania Waterways and Wetlands Update

J. Pennsylvania Land and Water Trail Network Strategic Plan 2020-2024

K. Leadership 2025

Acknowledgments

Technical Advisory Committee

Allegheny National Forest
Jim Seyler

Commission on African American Affairs
Jalila Parker

Commission on LGBTQ Affairs
Todd Snovel

Commission on Asian Pacific American Affairs
Tiffany Chang Lawson

Heritage PA
Elissa Garofalo

Keystone Trails Association
Joseph Neville
Dave Gantz

Land Studies
Kelly Gutshall

Landforce
Thomas Guentner

Lehigh Valley Center for Independent Living
Bob Amelio

Mid-Atlantic Youth Anglers & Outdoor Partners
Todd Pride

National Park Service
Julie Bell

PA Department of Aging
Steven Horner

PA Department of Community and Economic Development
Carrie Lepore
Michael Chapaloney
Jessica Trimble

PA Department of Education
Tammie Peffer

PA Department of Environmental Protection
Kim Hoover
Abbey Cadden

PA Department of Health
Justin Lehman
Amy Flaherty

PA Historical and Museum Commission
Janice Mullin
Shelby Splain
Bryan Van Sweden

PA Department of Transportation
Roy Gothie
Angela Watson

PA Environmental Council
Patrick Starr
Frank Maguire

PA Fish and Boat Commission
Carl Richardson
Mike Nerozzi

PA Game Commission
Joe Kosask

PA Land Trust Association
Andy Loza

PA Parks and Forestry Foundation
Marci Mowery

PA Recreation and Parks Society
Tim Herd
Niki Tourscher

Partnership for Better Health
Gail Witwer

Philadelphia Dept. of Public Health/Get Healthy Philly
Amanda Wagner

Pittsburgh Parks Conservancy
Taiji Nelson

Riverlife
Stephan Bontrager

Schuylkill Center for Environmental Education
Elisa Sarantschin

Schuylkill River Development Corporation
Joseph Syrnick

Susquehanna Greenway
Corey Ellison

Susquehanna Valley Team River Runner
Bill Butler

The Trust for Public Land
Owen Franklin

US Army Corps of Engineers
Scott Sunderland

Western Pennsylvania Conservancy
Michael Knoop

William Penn Foundation
Andy Johnson

The preparation of this plan was financed in part through a Land and Water Conservation Fund planning grant, and the plan was approved by the National Park Service, U.S. Department of the Interior under the provisions for the Federal Land and Water Conservation Fund Act of 1965 (Public Law 88-578).

Plan Development
Lauren Imgrund
Diane Kripas
Gretchen Leslie

Plan Writer/Editor
Gretchen Leslie

Contributing Writers
Emily Hendrickson
Michael Hoffman
Diane Kripas
Cheri Matter
Tyler Semder
Christine Ticehurst
Joshua VanBrakle

DCNR Recreation Team
Aaron Bierly
Benjamin Cassidy
Gregory Czarnecki
Christine Dettore
Paula Devore
Ryan Dysinger
Nicole Faraguna
Nathan Fite
Emily Hendrickson
Michael Hoffman
Cheri Matter
Chris Novak
Christopher Plank
Tara Ramsey
Ryan Reed
Kelly Rossiter
Tyler Semder
James Shaulis
Christine Ticehurst
Joshua VanBrakle
Paul Zeph

Plan Design
TCG Advertising & Design,
East Petersburg, PA

Plan Consultant Team
Strategic Consulting Partners
Monica Gould
Bob Whitmore

Penn State Center for Survey Research
Stephanie Wehnau
Nicole Sturges
Tim Servinsky

Governor's Letter

COMMONWEALTH OF PENNSYLVANIA
OFFICE OF THE GOVERNOR

Dear fellow Pennsylvanians:

It gives me great pleasure to present Pennsylvania's 2020-24 Outdoor Recreation Plan, a blueprint for how we can meet the outdoor recreation needs of all Pennsylvanians. Developed every five years with input from thousands of people, the outdoor recreation plan keeps us current on how we plan for and fund our outdoor recreation priorities.

On this 50th anniversary of Earth Day in 2020, we are reminded how important our lands and waters are to our quality of life and economic vitality. Our woodlands, waterways, parks, trails, and open spaces provide the backbone for our outstanding outdoor recreation amenities and support a thriving outdoor recreation economy. It's imperative that we continue to protect and enhance these spaces so our residents and visitors can find their outdoor passion.

This 2020 plan addresses how current trends and challenges are shaping how we offer outdoor recreation. As you read the plan, you'll discover that outdoor recreation can be a remedy for challenges faced by our communities and their residents. Outdoor activity can help Pennsylvanians on a path to wellness. Trails can link our communities, connect children to the outdoors, and serve as economic engines for small towns and big cities looking to attract tourists. And as we add these areas for people to recreate, we are also protecting the precious spaces that clean our air and protect our water for generations to come.

As the faces of Pennsylvanians continue to change, it is our aspiration that all people in every community will have access to safe and enjoyable outdoor recreation. I hope you will explore this plan and then get out and explore all that Pennsylvania has to offer.

Sincerely,

TOM WOLF
Governor

Executive Summary

Pennsylvania has long been an outdoors state. Pursuits like fishing, hunting, camping, and hiking are embedded in our history and culture. Today, outdoor recreation of all kinds continues to fuel our minds, bodies, and economies. Our abundance of local, state, and federal public lands provides opportunities to pursue close-to-home or the deep-in-the-woods experiences. Protecting these lands and waters and investing in future recreation needs for all Pennsylvanians is the intent of Pennsylvania's Statewide Comprehensive Outdoor Recreation Plan.

On the heels of two consecutive best-in-nation recognitions, planning for the outdoor recreation needs of Pennsylvanians and visitors continues to be a top priority for the state Department and Conservation and Natural Resources (DCNR), the agency charged with overseeing the development of outdoor recreation plan. This plan provides a five-year blueprint for state and local governments and other providers on how to best deliver and invest in outdoor recreation.

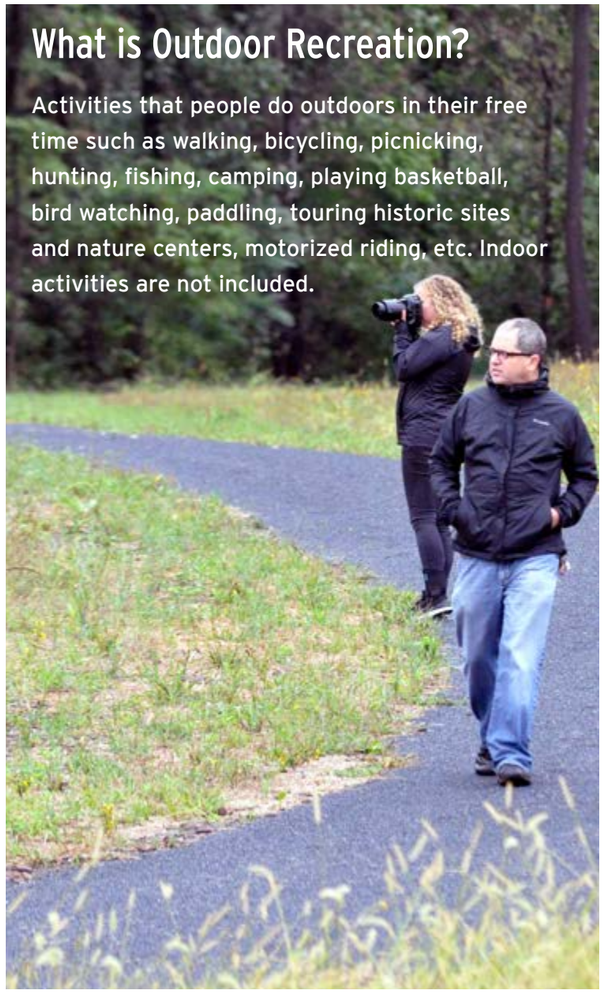
A plan for all people

Pennsylvania's outdoor recreation plan is meant to be a plan for all people, but the challenge is how to hear from the diverse audiences that make up Pennsylvania's population. Plan developers built the 2020 plan by gathering input on Pennsylvanians' outdoor recreation needs and wants from recreation providers, outdoor enthusiasts, the state's general population, and underserved populations through statically valid and online surveys and face-to-face conversations. In all, about 12,000 people weighed in on the plan. Formed in the early stages of the plan's development, a 40-member Technical Advisory Committee advised and guided the work based on the data received.

Research and data did not point to any dramatic shifts in attitudes or recreation needs from the 2014-2019 outdoor recreation plan, but demographics do indicate a shift to an older, more racially diverse population. Urban and suburban areas of the state are increasing, while people are migrating away from the rural counties.

What is Outdoor Recreation?

Activities that people do outdoors in their free time such as walking, bicycling, picnicking, hunting, fishing, camping, playing basketball, bird watching, paddling, touring historic sites and nature centers, motorized riding, etc. Indoor activities are not included.



With the abundance of resources, it is no surprise that Pennsylvanians like to get outdoors, with 90 percent participating in at least some outdoor recreation activity in the past year. They continued to seek out outdoor recreation at their local parks and open spaces more than any other outdoor venue. Pennsylvanians place a high value on conserving their natural resources and investing in outdoor recreation.

Access remains a challenge to outdoor recreation; only half of the respondents to surveys indicated they can safely walk to a public park or have easy access to water-based recreation like swimming pools, lakes, and streams. However, Pennsylvania's strength as a trail state shows, with more than two-thirds of residents saying they can safely access a trail within 15 minutes of their home. Trails continue to dominate feedback provided on how to improve outdoor recreation in the state. More than three-quarters of outdoor enthusiasts identified community or regional trail systems as their highest priority for facility investment. To specifically address Pennsylvania's trail needs, DCNR has developed the *Land and Water Trail Network Strategic Plan 2020-2024,* which is listed as Appendix J of this report.

Providers of outdoor recreation continue to face many of the same challenges and priorities from five years ago, but with increased fervor. Maintenance and funding issues continue to challenge their ability to provide the highest level of service to their constituents.

New research and data

For the first time in a Pennsylvania outdoor recreation plan, sophisticated mapping data developed by The Trust for Public Land located areas lacking recreational access and used demographic data to locate the populations with the greatest need within these areas. This data will be instrumental in determining equity in access to recreation for years to come.

Development of the outdoor recreation plan coincided with other statewide planning efforts, which helped to inform this plan. For the first time in more than two decades, DCNR's state parks and forestry bureaus are embarking on strategic planning processes. Both planning processes involved public input, which was used in the recreation plan. Strategies from the DCNR/ Pennsylvania Recreation and Parks Society's second Leadership Summit in 2018 were also considered, which pulled in the wisdom of more than 100 recreation and parks professionals to address critical issues facing the profession.

Priority areas

Early in the plan development process, the plan leadership team identified five priority areas to serve as the foundation for action. These priorities capture the current challenges and opportunities and offer recommendations for supporting outdoor recreation for all Pennsylvanians.

- Health and Wellness
- Recreation for All
- Sustainable Systems
- Funding and Economic Development
- Technology

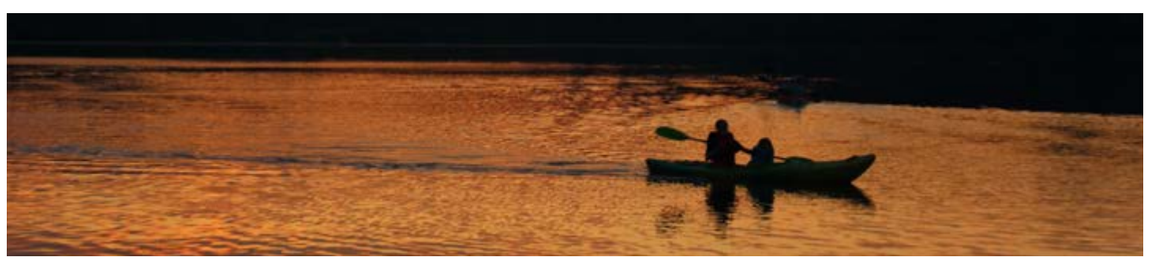
To help carry out these priorities, key state and local agencies and recreation providers will be guided by the 20 recommendations and 70 action steps found in this plan. A matrix of these action items, along with implementing partners, is found at the back of the plan.

Health and Wellness

Outdoor recreation is key to helping address some of today's pressing healthcare issues. A growing body of evidence suggests that spending time outdoors can benefit human health. Creating walkable and bikeable communities can encourage active living. An increased focus by the health care community on recreation and opportunities for new partnerships and coordination can lessen our chronic disease crisis. Getting people of all ages connected to the outdoors and nature can have a positive effect on the health and wellness of our citizens. This plan focuses on the growing connection between health and the outdoors, the communication of this connection to Pennsylvania residents, and leveraging partnerships with the healthcare community to expand nature-based health and wellness programs.

Recreation for All

Ensuring all Pennsylvanians have close-to-home opportunities for recreation is vitally important to the future of outdoor recreation in the state. A plan is not serving all people if there are segments of the population who feel disconnected or unwelcome, or simply don't have easy access to outdoor spaces and amenities. Our age, neighborhood, gender, color of skin, language, ability, or socioeconomic standing should not be barriers to enjoying outdoor recreation in Pennsylvania. This plan strives to provide new parks and green spaces where they clearly are lacking. It aims to ensure that all people feel invited and engaged in our outdoor spaces by developing strategies to overcome real and perceived barriers through enhanced access, amenities and programs.



Sustainable Systems

Our ability to protect and enhance our public natural and recreational resources grows increasingly challenging as interests diversify, pressures intensify, infrastructure ages, and our climate changes. Recreation providers must plan for how to sustainably manage the resources, while trying to predict the uncertainty of the future. And land managers and conservation leaders must work tirelessly to uphold Pennsylvanians' constitutional right to clean air, pure water, and to the preservation of the natural, scenic, historic, and esthetic values of the environment. This plan outlines strategies to balance the needs of our natural resources with the ever-changing demands of recreation enthusiasts through careful planning and design, innovative solutions and partnerships, and emphasis on stewardship by all.

Funding and Economic Development

Our parks, trails and other recreational amenities create places where people want to live, work and play. Pennsylvania has plenty of examples where towns and businesses are capitalizing on the benefits of the recreational and natural assets. Given the wealth of outdoor assets and successful case studies, the opportunities for the growth of the outdoor recreation economy in Pennsylvania is hopeful, but commitment to investments and prioritization must improve. Infrastructure needs and recreation demand greatly outpace investments at the state and local levels and grow exponentially each year. This plan outlines why safeguarding and increasing investments in outdoor recreation and expanding support for the outdoor recreation economy must be a top priority.

Technology

Over the last decade, advances in technology have had profound effects on how people experience the outdoors. Technology gives the public instant access to information about outdoor recreation opportunities. Advances in technology have allowed for better data collection and analysis of that data. New tools and equipment that enhance the way we navigate and explore are exposing more people to the wonders of nature. At the same time, technological advancements can lead to overuse and overpromotion and detract from the beauty of nature. This plan seeks to set the right balance on how we can use technology to our advantage without it being disruptive or destructive.

Priorities at a glance

Health and Wellness

1. Educate on the connection between health and outdoor recreation.
2. Support programs that connect health and outdoor recreation.
3. Equip health care providers with the tools needed to promote the health benefits of outdoor recreation.
4. Create walking and biking networks that provide safe, close-to-home access to recreation and encourage healthy behavior in communities.

Recreation for All

1. Provide opportunities for everyone to regularly engage in outdoor recreation.
2. Enhance recreational amenities to fit the needs and expectations of underserved people.
3. Provide equitable access to outdoor recreation and conservation programs.
4. Build a diverse workforce and volunteer base.

Sustainable Systems

1. Address infrastructure and maintenance needs in Pennsylvania's existing outdoor recreation areas.
2. Protect and conserve lands and waters considering the impacts of climate change on outdoor recreation.
3. Foster stewardship for Pennsylvania's recreation areas and natural, cultural, and historic resources.
4. Design outdoor recreation areas to minimize impacts on the environment or conflicts among user groups.

Funding and Economic Development

1. Protect and expand public and private investments in outdoor recreation.
2. Build strategic coalitions to maximize the economic impacts of outdoor recreation in Pennsylvania.
3. Market Pennsylvania as an outdoor recreation destination.
4. Demonstrate the benefits and impacts of nature-based solutions to addressing community needs.

Technology

1. Increase mobile connectivity in outdoor recreation.
2. Develop best practices for emerging outdoor recreation technologies.
3. Use technologies to support health goals and find places to recreate outdoors.
4. Enrich the understanding of the natural, cultural, and historic aspects of the outdoors through technology.

Overview

For millions of Pennsylvanians, outdoor recreation is a vital part of their lives, used to fulfill health, social and personal goals. But, for millions of others, outdoor recreation is inaccessible due to health, social and personal reasons. The goal of Pennsylvania's 2020-2024 Statewide Comprehensive Outdoor Recreation Plan is to help all Pennsylvanians achieve greater access and enjoyment from experiences in the commonwealth's abundance of local and state parks, state and national forests, trails, rivers, lakes, game lands, and other recreation spaces.

Pennsylvania's Vision for Outdoor Recreation

Enjoyable outdoor recreation is welcoming to all and accessible in every Pennsylvania community.

Nearly 90% of online public survey respondents agree that outdoor recreation is an essential part of their lives. *(Public Survey)*

For more than 50 years, Pennsylvania's recreation providers have been strategically planning for how outdoor recreation should meet the needs of the state's residents and visitors. The 2020 outdoor recreation plan is Pennsylvania's tenth plan since 1966. Plans are required every five years for states to remain eligible for federal Land and Water Conservation funds (LWCF). Since LWCF's inception in 1965, Pennsylvania has received $178 million from the fund, which has supported more than 1,600 projects in communities in every county of the commonwealth.

As a follow-up to Pennsylvania's 2014 Statewide Comprehensive Outdoor Recreation Plan, and in response to the most recent recreation needs and trends, the 2020 plan set forth several goals:

- Elevate the importance of outdoor recreation
- Build on success of the 2014-2019 plan and develop actionable items
- Use collaborative relationships with partners to identify common priorities
- Promote the plan as inclusive—for partners and bureaus
- Satisfy National Park Service federal LWCF requirements
- Develop a long-range vision

Early analysis and planning around these goals led to five plan priorities, which provide the framework for the plan:

- Health and Wellness
- Recreation for All
- Sustainable Systems
- Funding and Economic Development
- Technology

Within these priority areas are 20 recommendations and 70 actions to address Pennsylvanians' most pressing outdoor recreation needs. The actions are outlined in the subsequent chapters of this plan.

Why do this plan?

Pennsylvania's outdoor recreation plan helps to guide and prioritize planning and investments for local and state governments and other recreation providers. It identifies areas of greatest need, sets priorities for state and federal grant funding, and delineates a course of action. Hundreds of millions of dollars are invested each year into recreation and conservation, so careful planning and priority setting will ensure the funds are expended in the most-needed areas.

80% of online public survey respondents would like to participate more in outdoor activities. For individuals between the ages of 18 and 34 the number rises to nearly 90 percent. *(Public Survey)*

Partners in implementing the plan

Although the Department of Conservation and Natural Resources (DCNR) develops and administers the state's outdoor recreation plan, implementing it is a team effort. Other state agencies as well as recreation, conservation, and health partners work together to tackle challenges and embrace opportunities to deliver the very best recreation services to the people of Pennsylvania.

Pennsylvania's 2020-2024 Outdoor Recreation Plan Implementing Partners

Federal Agencies	Pennsylvania State Agencies/ Commissions	Statewide Committees	Non-profit Statewide Organizations
National Park Service	Dept. of Aging	PA Outdoor Recreation Plan Technical Advisory Committee	PA Land Trust Association
U.S. Army Corp of Engineers	Dept. of Community and Economic Development	PA Trails Advisory Committee	PA Environmental Council
U.S. Forest Service	Dept. of Education	PA Walkable Communities Collaborative	PA Parks and Forests Foundation
Federal Highway Administration	Dept. of Environmental Protection	Get Outdoors PA	PA Recreation and Parks Society
	Dept. of Health	Conservation and Natural Resources Advisory Council	Heritage PA
	Dept. of Transportation	Snowmobile/ATV Advisory Committee	PA Association of Environmental Educators
	Fish and Boat Commission		PA Humanities Council
	Game Commission		The Trust for Public Land
	Historic and Museum Commission		
	Council of the Arts		

2014 Plan Accomplishments

Pennsylvania's 2014-2019 outdoor recreation plan won the award for the best outdoor recreation plan in the nation from the National Park Service, as did its 2009-2014 plan. These plans represent the passion and commitment for providing quality outdoor recreation by those responsible for its planning and delivery. Because five years is often not enough time to fully implement ideas and programs that are becoming established and institutionalized, much of the ideas and work from previous plans is carried through in subsequent plans. The same will be true for the 2020 plan.

DCNR and its partners advanced 65 percent of the 83 action items recommended in the 2014-2019 outdoor recreation plan. Some notable accomplishments include:

Health and Wellness

- Parks prescription programs were launched in Pittsburgh (Pittsburgh Parks Rx), Centre County (Centred Outdoors), and Philadelphia (NaturePHL) to demonstrate innovative ways to connect outdoor recreation to health care.
- A partnership with the Pennsylvania Department of Aging led to additional fitness features and greater connectivity to benefit a healthy aging community in South Williamsport.
- Working with the Pennsylvania Department of Health, state park beaches and pools piloted free sunscreen dispensers.
- Diversity, equity, and inclusion initiatives advanced, including DCNR staff training, an urban outdoor recreation professional pilot program in Lancaster, and minority population polling for DCNR's State Parks strategic plan, Penn's Parks for All.

Local Parks

- DCNR launched a mobile-friendly website for residents to easily find more than 6,100 local parks.
- The Pennsylvania Recreation and Park Society launched the Good for You, Good for All campaign to raise awareness and use of local parks and recreation facilities.
- DCNR funded 11 nature play areas, many of which saw completion in 2019, and all will be completed in 2020.
- The Pennsylvania Recreation and Parks Society conducted Leadership 2025—a leadership summit for parks and recreation professionals that produced innovative ideas around diversity, equity, and inclusion; community health and wellness; maintenance and infrastructure; sustainable funding; and professional development.

Tourism and Economic Development

- The Pennsylvania Tourism Office launched the Pursue Your Happiness branding campaign with outdoor recreation as a central tenet of the brand.
- The Center for Rural Pennsylvania released a study on the economic impact of Pennsylvania's state forests, showing the total estimated annual expenditures associated with state forest visitation were nearly $400 million.

Resource Management

- Work advanced on seven Brownfields to Playfields projects, revitalizing abandoned industrial sites into new recreation areas.
- The Pennsylvania Land Trust Association created Pennsylvania's first-ever GIS layer of conserved lands.
- DCNR and partners closed two of the state's top 10 trail gaps.
- Facility managers continued efforts to provide more accessible facilities for Pennsylvanians with development of a new accessible trail at Hawk Mountain Sanctuary that enables access to spectacular views, and accessible dog-friendly cabins at an additional 21 state parks.

Funding

- Recreation and conservation professionals celebrated 25 years of the Keystone Recreation, Park, and Conservation Fund contributions to state and local parks and conservation areas, highlighting 100 success stories of the immense impact it has had on Pennsylvania's communities.
- A "fix-it-first" focus led to DCNR LWCF grants funding 25 park rehabilitation projects throughout the state, including playground replacements.
- Through advocacy and support by DCNR and many conservation partners, Congress reauthorized the Land and Water Conservation Fund in 2019.

Public Input

How does a plan speak to our growing, aging, and diverse population who may be at varying stages and levels of engagement? We ask people what they want and need. The input of thousands of Pennsylvanians shaped the ideas and recommendations found in the 2020 Pennsylvania Outdoor Recreation Plan. One of the National Park Service's core requirements for state outdoor recreation plans is robust public participation. In 2018, DCNR selected a 40-member Technical Advisory Committee that was representative of other state and federal agencies; local government; recreation, conservation, and environmental organizations; and specialty groups who represented diverse populations.

12,000 Pennsylvanians gave input into the 2020 Pennsylvania Outdoor Recreation Plan

Over the course of a year, this group served as an advisory panel for the plan's development, using data from several surveys conducted by the Center for Survey Research at Penn State Harrisburg to inform decision making. The surveys' key findings are found throughout the report and the full report from each survey is found in the appendix.

Pennsylvanians

In Fall 2018 and Spring 2019, the Center for Survey Research conducted two Lion Polls for the outdoor recreation plan—web surveys of adult Pennsylvanians that were statistically representative by region, age, and sex. These surveys gauged opinions on interest in outdoor recreation, places people recreate, what they like to do outdoors, access to their outdoor spaces, funding priorities, and other attitudinal questions. Slightly more than 1,000 adults each responded to the Fall Lion Poll in September and October 2018 and the Spring poll between February and March 2019.

KEY FINDING: **52%** of Pennsylvanians say they can safely walk to a park. *(Fall Lion Poll)*

Providers

Nearly 1,100 respondents completed a Center for Survey Research web survey in the Spring 2019 to collect the opinions of those who provide recreation services at the local or county government level. One-third were elected officials (34 percent), one-quarter were appointed officials (29 percent), one-fifth were park and recreation or public works directors (19 percent), and the remaining 18 percent were some other type of position. A plurality of respondents represented populations of less than 5,000 individuals (44 percent), while 36 percent represented 5,000 to 24,999 people, and 20 percent represented 25,000 or more.

Many questions were duplicative of a 2014 provider survey so responses could be compared and analyzed for trends. Overall, results were similar to the 2014 survey, but respondents indicated a higher level of priority for all items in the 2019 survey, perhaps indicating a higher level of understanding of the value of these services to their communities or a reflection of a stronger economy.

Respondents were asked to rate the benefits of outdoor recreation facilities in their communities, priorities for facility investments, maintenance and management challenges to providing outdoor recreation, and emerging trends.

KEY FINDING: The proportion of providers concerned about adapting to an aging population more than doubled from 2014 to 2019. *(Provider Survey)*

Once again, playgrounds were identified as the highest priority for facility investment over the next five years, although they were followed closely behind by community or regional trail systems and community or regional parks, which replaced neighborhood parks as a top priority from the 2014 survey.

When given the opportunity to share individual comments, more than 600 providers offered suggestions. Respondents overwhelmingly mentioned funding concerns. Other common themes included responding to varying needs across the state; the need for improved outreach and communication; a desire to look at new ways to connect communities; preservation of open space; best practices in park and recreation service provision; opportunities to obtain more consultation and guidance; addressing evolving population needs; and using parks and recreation to promote public health.

> "After many years of witnessing business move out of our town, a failing school district, and low incoming housing woes, visitors have begun to discover the beauty of the riverfront area, our rich history, and beautiful architecture. Developing our parks and recreation services is vitally important to our residents and to encourage visitors to come to our community, invest in our community, and purchase single-family homes." *– provider survey respondent*

Outdoor Enthusiasts

The Center for Survey Research also conducted a web survey designed to evaluate the opinions and experiences of Pennsylvanians who engage in outdoor recreation throughout the commonwealth. A total of 8,676 respondents from across Pennsylvania completed the web survey between May 15 and July 1, 2019; 54 percent were male, 65 percent were between the ages of 35 and 64, and 93 percent were non-Hispanic and white. Because the survey was open-access and not a random sample, the data are considered representative only of the respondents who chose to participate—most likely those who have an interest in outdoor recreation. Therefore, this group of respondents is referred to as "outdoor enthusiasts."

The survey asked enthusiasts to indicate their outdoor activities; investment priorities for facilities and recreation and conservation efforts; information sources for seeking outdoor recreation opportunities; use of technology to aid their outdoor experiences; and other attitudinal questions relating to climate change, health, youth, and access.

When given the opportunity to share the single most-important thing that parks and outdoor recreation agencies or organizations could do to help them participate in outdoor recreation in Pennsylvania, respondents shared a wide range of suggestions and concerns. Common topics included maintenance, general trail use, motorized trail use, technology, conservation, activities and programming, education, support of sportsmen and nature enthusiasts, access and affordability, communication, ADA compliance, and safety. Of the more than 6,700 open-ended comments received, about 2,600 were related to trails, (38 percent). Of those trail-related comments, about 1,000 related to motorized recreation, most of which were seeking an increase in opportunities for ATV and motor bike riding.

KEY FINDING: 79% of enthusiasts listed community or regional trail systems as the highest priority for facility investment over the next five years. *(Public Survey)*

> "Increase the distance and number of walking, biking, running trails connecting communities so outdoor recreation can be an integral part of daily life." *– public survey respondent*

This word cloud represents the frequency of words found in respondents answer to a question on how outdoor recreation agencies or organizations could help them participate in outdoor recreation. (Public Survey)

Focus Groups

To better understand the outdoor recreation needs and opinions of people of color, DCNR commissioned the Center for Survey Research to conduct two focus groups—one group focused on Black/African Americans and the second on Hispanic/Latinos. Sixteen Pennsylvanians participated in the discussions in April and June 2019 at the Penn State Harrisburg campus in Middletown, Pa. Focus group participants ranged in age from 23 to 66, with a mean age of 44 years old and the majority were male (63 percent). Half of the focus group participants identified as Hispanic, and three-fifths of participants reported they were Black/African American, while just over one quarter identified as "Other" race.

Respondents to an open, online survey provided more than 6,700 suggestions on how outdoor recreation agencies or organizations could help them participate in outdoor recreation.
(Public Survey)

Discussion topics included: definition of outdoor recreation; participation and views of outdoor recreation; familiarity with, location of, use, and feelings about outdoor recreation areas in their community; health and wellness; and technology use.

Participants said that most of their outdoor recreation was done at neighborhood or community parks, trails, or sports fields. Convenience, proximity, and safety were the main reasons they chose their local parks and trails for outdoor recreation. Most participants in the African American group indicated that they felt uncomfortable in certain recreation areas, particularly at events where they did not encounter many other minorities. Hispanic participants did not echo those concerns.

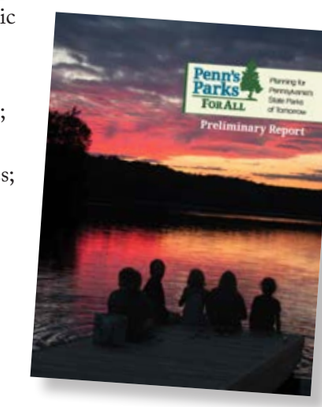
Supporting studies and research

The Trust for Public Land

For the 2020 plan, DCNR and Pennsylvania Land Trust Association collaborated with The Trust for Public Land (TPL) to use Geographic Information Systems (GIS) to understand access to outdoor recreation in Pennsylvania. In Pennsylvania, TPL's Research and Innovation Team used the data analysis methods developed through their Access Impact Methodology, ParkServe©, and ParkScore© programs to assist DCNR in identifying areas with the greatest need and opportunity. TPL used data that identified the location of public recreational sites (e.g. parks and open access lands, trails, and water access points) to locate areas lacking recreational access and used demographic data to locate the populations with the greatest need within these areas.

State Parks and State Forests User Surveys

In 2017, DCNR's Bureau of State Parks embarked on a multi-year data collection to gauge the ideas, interests, and suggestions about Pennsylvania's state park system through telephone, in-person, and online surveys. Led by Penn State University's Dr. Andy Mowen, the purpose of these surveys was to assess the attitudes and opinions of state park visitors, the general public, and ethnic minorities regarding key issues for the future of Pennsylvania state parks to inform the Penn's Parks for All 25-year strategic plan. Survey participants answered questions relating to recreational opportunities; overnight accommodations; cultural and natural resources; funding; and services and facilities in the state park system.



While not specifically conducted to gather data to inform the state's outdoor recreation plan, the surveys' data informed decisions and married ideas between the state parks' strategic plan and the outdoor recreation plan.

Public Input

The Center for Survey Research also conducted a Lion Poll in Spring 2019 for DCNR's Bureau of Forestry to help with their strategic planning process. While the survey was designed to collect opinions on a wide range of state forest issues, questions about visitation and use of the forests were relevant to the outdoor recreation plan.

Leadership 2025

DCNR and the Pennsylvania Recreation and Park Society convened Pennsylvania's second Recreation and Conservation Leadership Summit in December 2018. About 100 emerging and seasoned recreation, park and conservation leaders were invited to develop a visionary plan to address critical issues facing the profession, establish professional leadership and mentoring programs, and provide input for the development of this 2020 plan. The summit's planning team determined the five critical issues facing the profession in the coming years to be: diversity, equity and inclusion; health and wellness; park maintenance and Infrastructure; sufficient and sustainable funding; and professional and leadership development. Through keynote speakers, a tour showcasing leadership in action in the Centre Region, and facilitated discussions, attendees developed creative solutions, an action plan and a shared vision that will guide collaborative efforts to advance recommended personal, regional and statewide strategies. Many identified strategies have become actions in the 2020 outdoor recreation plan.

Feedback

Through each survey mechanism, respondents not only answered a set questions, they also had an opportunity to share open-ended thoughts. While comments were often general ideas, kudos, or criticisms—"build more trails" or "keep doing what you are doing," some people provided substantive remarks on how recreation opportunities can be improved for them. Collectively, among all the surveys administered specifically for the outdoor recreation plan, thousands of respondents chose to tell us what was on their mind. Those comments were factored into the development of the plan's recommendations and actions.

In addition to having the opportunity to respond to the surveys that went in to the plan's development, Pennsylvanians also were given the opportunity to react to the 20 recommendations that were formulated as the backbone of the plan. During the month of October 2019, the recommendations were posted online for people to pick their favorites actions and provide comments. More than 400 people helped to prioritize the action steps, offering more than 300 suggestions. That feedback helped plan developers make final edits to the plan's recommendations and action steps.

Our Common Wealth

Outdoor recreation is a shared responsibility in Pennsylvania among state, local and federal government. From Philadelphia's half-acre Love Park to the expansive 500,000-acre Allegheny National Forest managed by the federal U.S. Forest Service, millions of acres are in the public domain. Paid for by taxpayers and managed by all levels of government, these recreation spaces are an indisputable right of all Pennsylvanians.

State-managed resources

Much of the land currently enjoyed for outdoor recreation is available today thanks to our conservation leaders, who thoughtfully protected millions of acres over the last century. Today, DCNR manages 121 state parks and 2.2 million acres of state forest land, which support many recreation activities that Pennsylvanians and visitors are seeking. The Pennsylvania Game Commission controls 1.5 million acres for outdoor enthusiasts to pursue one of Pennsylvania's oldest recreational pursuit—hunting. Fishing and boating access and facilities are under the purview of the Pennsylvania Fish and Boat Commission who works in cooperation with DCNR to ensure a connection to water resources. The Pennsylvania Historical and Museum Commission stewards about 25 historic and museum sites that support the popular outdoor recreation/historic travel market.

Major cities to small towns

Pennsylvania's two largest cities, Philadelphia and Pittsburgh, collectively serve about one-sixth of the state's population. With hundreds of parks and miles of trails, each city ranks highly in a comprehensive annual evaluation of park access and quality in the 100 largest U.S. cities by The Trust for Public Land. ParkScore® rankings are based equally on four factors: park access, park acreage, park investment, and park amenities. In 2019, Philadelphia showed one of the strongest increases in the index, jumping from #30 to #19 nationally.[1] Ninety-five percent of Philadelphians, of all income levels, are within a 10-minute walk of a park. Pittsburgh increased its ranking from #23 to #22, with 91 percent of its residents within 10 minutes.[2]

But most of the state's residents reside in boroughs, townships, and cities of the second class. Scattered

OUR OUTDOOR SPACES

6,100 local parks, totaling **195,000** acres

20 state forests, totaling **2.2** million acres

121 State parks, totaling **300,000** acres

More than **12,000** miles of trails, including more than **1,700** miles of rail trails

513,000-acre Allegheny National Forest

1.5 million acres of State Game Lands

19 national park sites

12 heritage areas, six with national designation

3 national wildlife refuges

among those locations are over 6,000 local parks, from small municipal playgrounds to large county systems. Thousands of miles of trails and waterways weave in, around and among these communities. Regional landscape efforts are working to connect these trails to create larger systems that drive local economies and improve the quality of life for their residents.

Pennsylvania's federal lands and resources

Compared to other eastern states, Pennsylvania has a wealth of federal recreational land within its borders. The first national Wild and Scenic River in the country was the Delaware, which forms the commonwealth's eastern border. The 70,000-acre Delaware Water Gap National Recreational Area protects critical habitat while offering spectacular views, paddling, rafting and hiking on a portion of the Appalachian Trail. The Allegheny National Forest covers more than one-half a million acres of forested land in northwestern Pennsylvania, providing hundreds of trail miles, recreational lakes and reservoirs, stream miles, and outstanding hunting and fishing habitat. The Army Corps of Engineers owns and operates several large reservoirs that provide popular recreational boating and paddling opportunities, including Raystown Lake in southcentral Pennsylvania and dam release-powered white water runs on the Lehigh River.

From the Gettysburg Battlefield to Independence Hall in Philadelphia, Pennsylvania is home to 19 National Parks, six National Heritage Areas, and 26 National Natural Landmarks. Pennsylvania's system of Heritage Areas also includes 12 state-designated Heritage Areas, which for the past 30 years, have been innovators in regional community conservation and revitalization, heritage tourism, greenway preservation and story-telling. Pennsylvania also hosts several national trails including the Appalachian National Scenic Trail, the Potomac Heritage National Scenic Trail, the North Country Trail, and the Washington Rochambeau Revolutionary Route National Historic Trail.

WATER RICH STATE

86,000 miles of waterways

2,355 miles of water trails

19 state and federal scenic rivers

76 natural lakes, creating **5,266** acres of flatwater

2,300 impoundments, creating **200,000** acres of boatable waters

Sources:

[1] https://www.tpl.org/city/philadelphia-pennsylvania

[2] https://www.tpl.org/city/pittsburgh-pennsylvania

Demographics

Pennsylvania's population is changing and with it, our recreation needs. Meeting the demand and providing welcoming public lands for all 12.8 million Pennsylvanians is an exciting challenge that will require balancing the changing needs of recreational users with the resources available. Although the number of people living in Pennsylvania remains almost the same as in 2010, there are several important ways our population is changing, which may influence how we offer recreation programs, services, and facilities in the future.

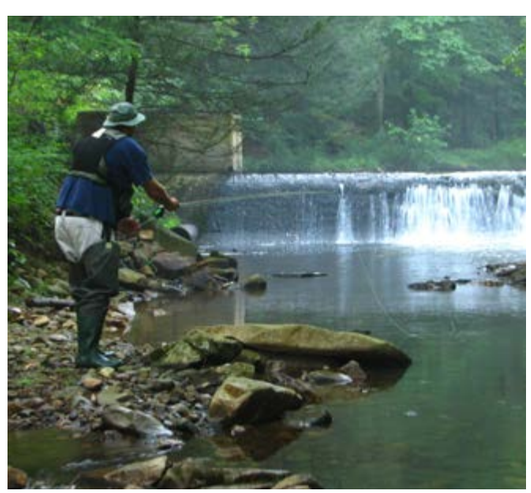
Growth and loss

Since 2010, Pennsylvania's population has grown less than one percent to 12.8 million, compared to almost 5.5 percent growth nationally. As was the case for the 2014 outdoor recreation plan, fastest growth occurred largely in southeastern and southcentral counties. The largest percentage growth occurred in Cumberland, Centre, Lehigh, Lebanon, Lancaster, and Chester counties. Philadelphia County gained the most people since 2010.

Growth counties are faced with protecting open spaces and forests as development moves in and making sure that trail and multi-modal connections are not lost between communities. More people means more pressure on existing recreation resources and requires more investments into new facilities.

Meanwhile, the fastest population losses mostly occurred in rural counties in the north and northwest: Cameron, Cambria, Venango, Elk, Susquehanna, Forest, Sullivan, and Warren counties all show greater than five percent loss since 2010. Westmoreland County had the largest overall population drop. As people migrate from rural areas, recreation services become harder to sustain and financially support.

Over the past seven years, Pennsylvania has experienced slower growth than all but one surrounding state. West Virginia's population declined by two percent, but Ohio, New York, New Jersey, Delaware, and Maryland all had population increases greater than Pennsylvania's 0.81 percent.[1]



Older Pennsylvanians

Pennsylvania's population is aging. Every county in the commonwealth saw the percentage of seniors over age 65 rise since 2010. In contrast, most counties have fewer children under 18 compared to 2010. The fastest growing counties for seniors are Perry, Pike, Monroe, Chester, and Centre, each with over 28 percent growth in the senior population.[2]

In 2030, baby boomers will all be at least 65. By 2035, people over 65 will outnumber children in the U.S. for the first time.[3] Pennsylvania's population is expected to grow four percent between 2015 and 2025, but the number of residents over age 65 is expected to grow by over 30 percent. Cameron and Sullivan counties have the highest 65 and older population.[4] Philadelphia and Centre counties had the lowest. The southeast and Centre County are growing and have younger populations.

Recreation planners and providers can help our growing senior population age in place and lead healthy, active lives by providing parks and trails that are easy to walk to and around.

The growth rate of Pennsylvania's elderly population from 2010 to 2017 was over 20 times that of the state's general population – an increase of 16.3%.[5]

Urban vs. Rural

Over 20 percent of Pennsylvanians lived in rural areas in 2010. However, the trend of urbanization is projected to continue. By 2040, 48 counties are expected to gain population while 19 are projected to decline. All but one of the projected population losses occur in rural counties.[6] Rural Pennsylvanians tend to be older than urbanites, with a 2010 median age of 44.1 years compared to urban median of 39.[7]

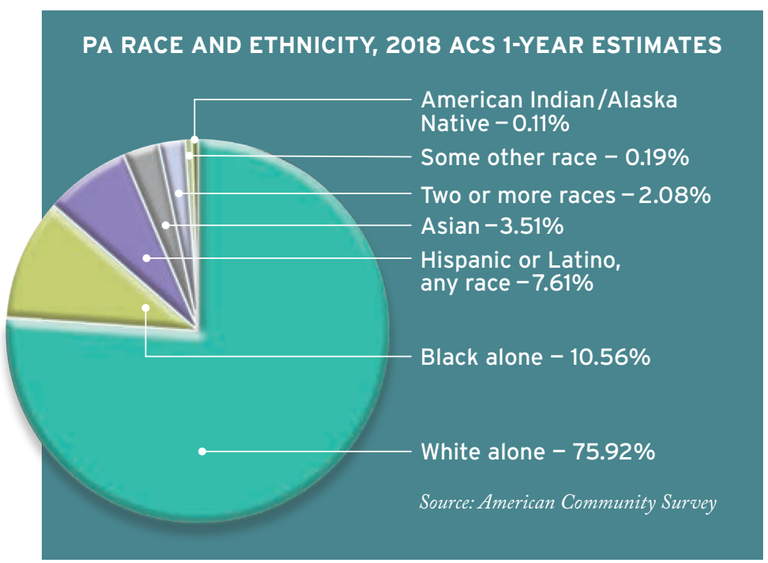
Demographics

Pennsylvania's public lands are concentrated in the northcentral region of the state, where only a small percentage of the population lives. Nearly one-quarter of Pennsylvania's state parks and more than one-half of the state forests are in the 12-county PA Wilds region.

As Pennsylvania's urban areas grow, state and local parks in those areas will experience increased pressures. Already, state parks in the eastern part of the state, like Beltsville and Neshaminy state parks, reach visitation capacity on some summer weekends. The importance of nearby nature, accessible trail networks and public transportation will continue to be a demand of those living in more populated areas of the state.

Ethnicity and Race

While the number of Pennsylvanians remains largely unchanged since the last census, our population is shifting in other important ways that will impact the recreation needs of the state. Although Pennsylvania is less diverse than the national average, people of color make up a growing segment of our population—a segment growing faster than the white population. In fact, the number of people reporting themselves white alone dropped by half a percent since 2010. New growth in the state will be driven by people of color, particularly the overall Hispanic population. As the state diversifies, recreation planners will need to respond to how different ethnicities use recreation spaces and how welcoming they feel in what have been spaces traditionally used by white people.



Environmental Justice Communities

Environmental Justice (EJ) communities, as defined by the Pennsylvania Department of Environmental Protection, are census tracts with more than 20 percent poverty or 30 percent nonwhite population, and may indicate areas which are underserved or which traditionally lack political power. Over four million Pennsylvanians, or 32 percent, live within EJ communities.

As of 2016, a little over 13 percent of Pennsylvanians lived in poverty, rising to almost 20 percent among children. Philadelphia County had the highest poverty rate at 26 percent, followed by Centre, Fayette, Clarion, and Indiana counties. Bucks, Montgomery, Chester, Butler, and Cumberland counties had the lowest poverty.[7]

The overall Hispanic population has increased 30% since 2010 to 7.6% of the state's population.

Sources:

[1] Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017. Source: U.S. Census Bureau, Population Division

[2] Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2017. Source: U.S. Census Bureau, Population Division

[3] U.S. Census (2018). Older people projected to outnumber children for first time in U.S. history. https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html

[4] U.S. Census; PA State Data Center.

[5] Pennsylvania State Data Center Research Brief: Population Characteristics and Change: 2010 to 2017

[6] Center for Rural PA. Population Projections 2010-2040

[7] Pennsylvania State Data Center Research Brief: Pennsylvania's Urban and Rural Population

[8] Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Participation Trends

According to the Outdoor Foundation's 2019 Outdoor Participation Report, a little more than half of the U.S. population participated in outdoor recreation at least once in 2018. This is a 3.1 percent increase from 2017 to 2018, which continued a three-year streak of modest growth in outdoor participation rates. The number of outdoor participants also slightly increased. However, the report noted some concerning trends: the moderate participation rate—participation about once a month—has declined by nearly two percent over the past decade. Overall outdoor outings declined by an average of 7.4 outings per participant over the past year, and youth outdoor outings have dropped by 1.4 percent over the past three years.[1]

Although the Foundation's report did not provide a state breakdown, Pennsylvania's 2019 Spring Lion Poll points to higher participation rates in Pennsylvania. Nine out of 10 Pennsylvanians said they participated in at least some outdoor recreation activity in the past year. More than 20 percent of respondents indicated they participated in outdoor recreation two or more times a week.

88.4% of Pennsylvania's outdoor enthusiasts said that outdoor recreation is an essential part of their lives **80.7%** said they would like to participate more in outdoor activities.

(Public Survey)

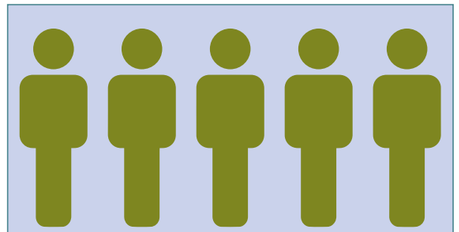
Age was one of the stronger predictors of outdoor recreation use. Over 93 percent of Pennsylvanians between the ages of 18 and 34 used some type of outdoor recreation area in the last year. By contrast, more than 70 percent of Pennsylvanians over age 65 did so. (2019 Spring Lion Poll)

Ethnicity

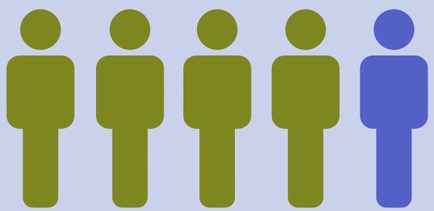
In Pennsylvania's surveys gauging frequency of participation, analysis showed no significant association between race/ethnicity and outdoor recreation.

When analyzing where people go for recreation, ethnicity differences emerged at the state and federal levels. While visitation to local and county facilities was the same among all ethnicities, visitation to state recreation areas was highest among white and Asian/Pacific Islander respondents, with Black/African American respondents reporting the lowest visitation. These trends may pose a challenge for Pennsylvania state parks and forests and may suggest a need to further reach out to communities of color to see what programs and activities would appeal to them.

When broken down by ethnicity, some differences emerge in respondents' favorite outdoor recreation activities. Among Black/African American respondents, playing basketball was the most frequently mentioned

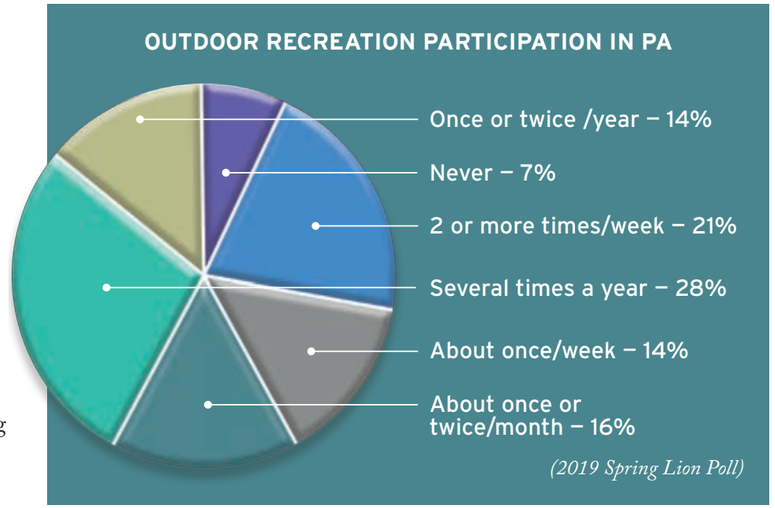


More than **9 out of 10** Pennsylvanians participated in at least some outdoor recreation activity in the past year. Over half of Pennsylvanians participated in outdoor recreation at least once or twice per month. Younger age and higher levels of annual household income were predictive of more frequent participation in outdoor recreation activities. *(2019 Spring Lion Poll)*



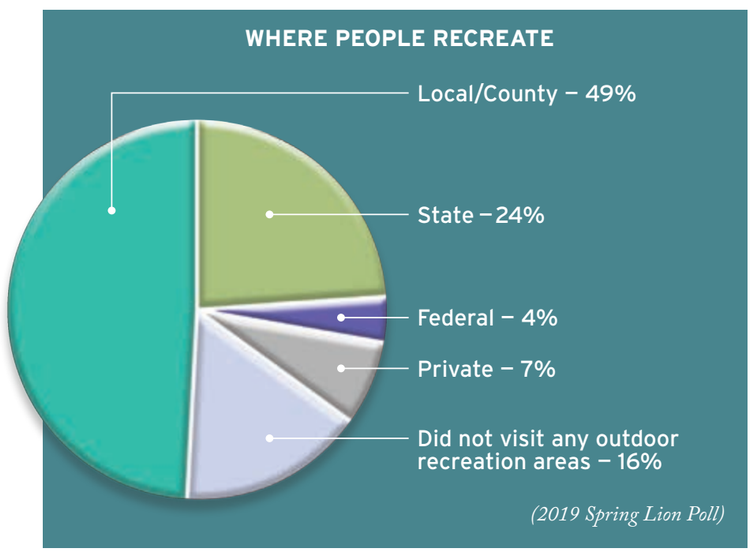
favorite outdoor activity. All ethnicity groups except Black/African American respondents identified hiking as one of the top outdoor activities. Walking was popular across groups. Swimming and fishing were also frequently mentioned among some groups. (PSU ethnic panel)

Nationally, a special report on fishing commissioned by the Recreational Boating & Fishing Foundation in partnership with the Outdoor Foundation shows that more women and Hispanics are fishing than ever before, highlighting record-breaking diversity for America's anglers. And according to 2018 North American Camping Report, the percentage of new non-white campers outpaced the percentage of new Caucasian campers in 2018. These could represent growth areas for Pennsylvania.



Places

Nationally, of outdoor participants, 63 percent report they recreate within 10 miles of their home, according to the Outdoor Foundation Report. Similarly in Pennsylvania, nearly half of Pennsylvanians visited a local, municipal or county park, trail, public pool, or recreation area most often in the past year, and about one-quarter visited state parks, forests, or game lands. Pennsylvanians with minor children living in a household visited local parks most often in the past year (60 percent). Those who live in the northern tier and central part of the state visit state parks and forests most often. (2019 Spring Lion Poll)



Activities

For the 2020 outdoor recreation plan, no statistically valid data was collected on the top outdoor activities of Pennsylvanians. Because it is assumed that people who were more interested and active in outdoor recreation answered the survey, the results are skewed to more traditional outdoor activities like hiking, camping, paddling, bicycling, and fishing, all of which did not even show up in the top 10 activities in the 2014 survey, but did in the online public survey in 2019. Walking, visiting historic sites and nature centers, scenic driving, picnicking and wildlife watching were activities that appeared in the top 10 of both surveys.

This word cloud represents the activities respondents to the Public Survey would most like to try.

Outdoor enthusiasts in the 2020 public survey responded that hiking and walking/running were their top activities. More than half said they visited historic sites or nature centers (61 percent), took a scenic drive (59 percent), camped (51 percent), or watched birds or wildlife (51 percent). More women than men indicated they participated in walking or running, wildlife watching or bird watching, swimming, picnicking, visiting historic sites or nature centers, night sky viewing, and playing at or visiting playgrounds. Conversely, more men than women indicated they participated in hunting, fishing, and motorized trail use. Those over age 65 participated in more wildlife/bird watching than other age groups. (Public Survey)

Respondents also were asked to provide one outdoor recreational activity they currently do not do but would like to try. The most common responses were kayaking

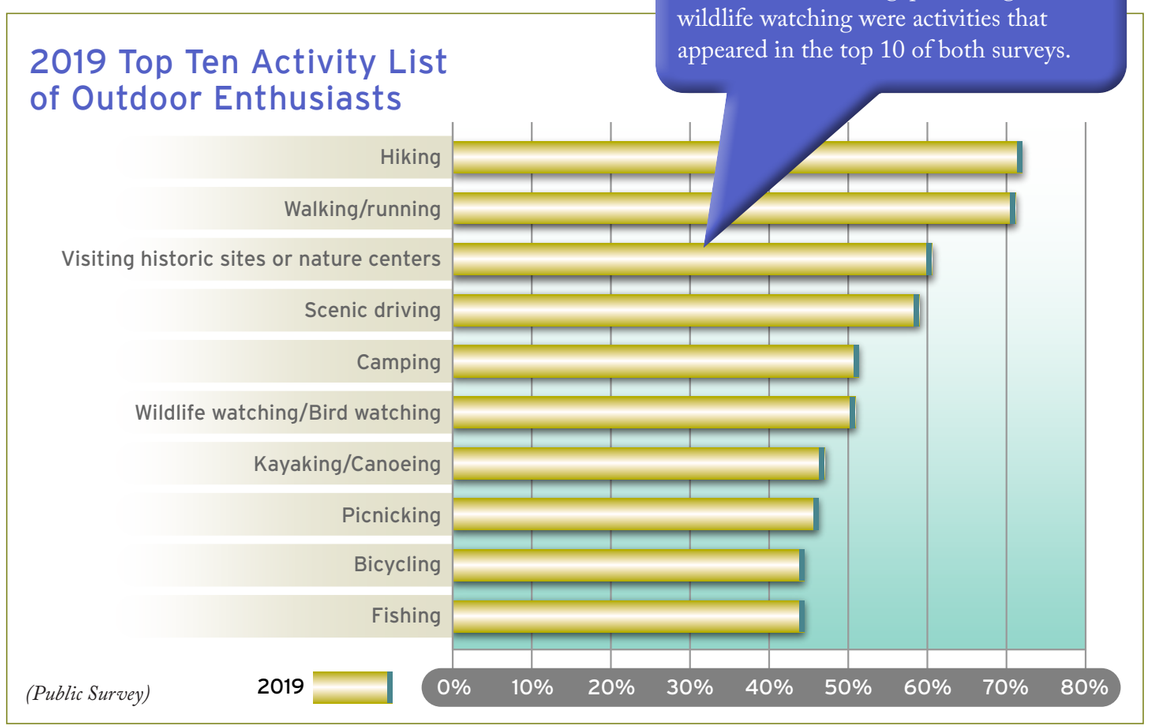
TOP FIVE ACTIVITIES BY RACE

White	Black/African American	Hispanic/Chicano/Latino	Asian/Pacific Islander
Walking	Basketball	Hiking	Hiking
Hiking	Walking	Walking	Walking
Swimming	Other	Other	Fishing
Fishing	Fishing	Swimming	Swimming
Camping	Swimming	Basketball	Swimming

(PSU ethnic panel of PA State Park survey)

or canoeing, rock climbing, motorized trail use, stand-up paddle boarding, bicycling, cross country skiing or snowshoeing, fishing, camping, ziplining, backpacking, hunting, and hiking. The single activity mentioned more frequently than any other activity was kayaking. (Public Survey)

More traditional outdoor activities like hiking, camping, paddling, bicycling, and fishing did not show up in the top 10 activities in the 2014 survey of Pennsylvania's general population while walking, visiting historic sites and nature centers, scenic driving, picnicking and wildlife watching were activities that appeared in the top 10 of both surveys.



Sources:

[1] Outdoor Foundation's 2019 Outdoor Participation Report, https://outdoorindustry.org/resource/2019-outdoor-participation-report/

PRIORITY: Health and Wellness

Promoting Healthy Living through Outdoor Connections

Improving the health of Pennsylvania's communities and residents is a complex challenge. Not only are biological factors at play, but our health also is influenced by the social, physical, and economic environments in which people live. Both the 2009 and 2014 outdoor recreation plans made health a priority, citing increases in obesity and chronic diseases, disconnect between people and nature, and the challenge of connecting health and recreation providers. Since then, our health concerns have only magnified, resulting in health and wellness once again being a priority for the outdoor recreation plan.

The clinical community of doctors and hospitals often bear the burden of solving these health care concerns, but just as the influences on our health are holistic, so too are the solutions and the preventions. Better health outcomes therefore require collaboration across multiple sectors, including recreation and the built environment, to positively impact our collective health.

GREAT IDEA:

Young Lungs at Play

The Young Lungs at Play program helps communities create tobacco-free parks, playgrounds, and recreational areas for children. Beginning in 2020, all Pennsylvania state parks playground areas—about 135—will be smoke/vape-free zones under the Young Lungs at Play program. The state parks are joining the more than 1,100 municipalities that participate in the program. This is the second partnership with the PA Department of Health to help state parks promote healthful outdoor recreation. A free sunscreen dispenser program at state parks also was launched with DOH in 2018.

New research regularly draws connections between green spaces, outdoor exercise, and better physical and mental health. Green spaces, such as parks and public plazas with trees, enhance the beauty and environmental quality of neighborhoods. In addition to these benefits, living near greener spaces is often associated with higher levels of physical activity and lower levels of instances of chronic disease. Emerging evidence is showing green recreational spaces also have a positive influence on the mental, emotional, and behavioral health by preventing or mitigating the impact of stress, anxiety, and depression. Study after study reinforce why making it easy for people to spend time outdoors will only help our collective society and the individuals within it.

The challenge, given the complexities of healthcare, is how we ensure these benefits of outdoor recreation are gaining awareness and understanding by all. Increasingly, healthcare institutions are recognizing in their Community Health Needs Assessments that prevention and education programs that encourage healthy lifestyles can be part of their implementation strategies. Chronic illnesses such as heart disease and obesity are often identified in the assessments as the most pressing issues, both of which can be proactively addressed through more active lifestyles.

Successfully infusing recreation as a healthcare solution can start with the principle "Health in all Policies," which suggests health and equity considerations be embedded into government decision-making processes at all levels and across multiple programs and policies. Engaging partners from a variety of sectors around collective health goals can help move the needle on today's health challenges.

The "Health in all Policies" principle applies to recreation providers. However, providers see challenges in fulfilling this role and could use assistance in conveying public health messages to their constituents to break through the distractions for people's time and attention (Local Provider Survey). Having

65% of Pennsylvanians agree that parks, trails, and open space are an essential part of the healthcare system.

(2018 Fall Lion Poll)

both recreation and health care providers conveying the same health and wellness messages in a community would make the message stronger and more impactful to Pennsylvanians. More tools and networks are needed to help providers make the health connection.

Preventative medicine

Chronic diseases are still the leading cause of death and disability in Pennsylvania. Certain areas of Pennsylvania have some of the highest rates of hypertension, cardiovascular disease, diabetes, and obesity in the nation. Despite emphasis on better nutrition and exercise over the past decade, in 2018 almost two out of three Pennsylvania adults were considered overweight or obese.[1] One third of K-12 students were considered overweight or obese in the 2016-2017 school year.[2] In 10 years, Pennsylvania's population is predicted to be 50.2 percent obese and 24.8 percent severely obese.[3]

Added to the continual upward obesity trends is now the burgeoning opioid epidemic. Over 40 percent of responding recreation and park directors reported having to respond to drug paraphernalia found in parks (Local Provider Survey). Recreation providers are prepared to be a part of the solution to opioid addiction with programs and facilities to offer, but guidance is needed on how to connect providers with state and local prevention efforts.

In the face of these growing statistics, this plan suggests that outdoor recreation can and should be used as a preemptive approach to health care. Preventative medicine focuses on the health of individuals, communities, and defined populations with the goal to protect, promote, and maintain health and well-being in order to prevent disease, addiction, disability, and death. Rather than treating illnesses and diseases, healthcare practitioners can "prescribe" outdoor recreation practices that can lead to healthier lifestyles. The patient becomes more proactive in their own health decisions.

Getting a start over a decade ago, "prescribing" time in the outdoors is a growing trend nationally, and Pennsylvania is hoping to cultivate relationships with doctors and medical professionals who are willing to provide the science and expertise behind these programs. As the result of the 2014 outdoor recreation plan, DCNR supported three parks prescriptions programs in Philadelphia, Pittsburgh, and Centre County. All three took different approaches to engagement, from a clinical tracking program involving "coaches" in Philadelphia's Nature PHL, to scheduled hikes with a conservation focus in Centered Outdoors.

FOREST BATHING

With its roots in Japan, the term "forest bathing" refers to the practice of taking an undirected, meditative walk in a forested setting to evoke all five senses. Studies have shown connecting with nature through a slow walk in the woods, even for a short period, has a positive wellness impact, like reducing blood pressure, lowering stress hormones, improving concentration and memory, and lifting depression. Several Pennsylvania state parks have hosted forest bathing opportunities with a certified forest therapy guide. **www.natureandforesttherapy.org**

If your doctor prescribed a walk rather than a pill, would you take it?

Learning from existing programs with varying approaches, there is a considerable opportunity to implement more park prescription programs. Advancing Rx programs will need successful models, clinical champions, and clear pathways to communicate the best practices with healthcare professionals. While no one size fits all, a peer assistance and learning network can help to share ideas and practices.

Pennsylvania's population is predicted to be **50.2%** obese; **24.8%** severely obese by 2030.[3]

Overcoming barriers

People list countless reasons why they don't recreate outdoors. But aside from not having enough time, the top reason for preventing people from outdoor recreation is their health (2019 Spring Lion Poll). Ironically, some of the same health problems keeping people indoors probably can be tackled by going outdoors.

GREAT IDEA:

Centred Outdoors

Centred Outdoors, a nature-based prescription program led by the ClearWater Conservancy, has engaged more than 2,300 participants and 26 prescribing physicians since 2017. The program's ethos: "getting outside is not only good for your mind, body, and spirit but also good for conservation, helping build a love of place that occurs when you know and explore these places." The program features organized social hikes, scheduled well in advance to help people plan and develop routine into their fitness. Partially funded by Mount Nittany Health and DCNR, the program helps participants become more confident in being outdoors and want to return on their own. The program saw a large increase in participants who said they participate to socialize with friends, especially in those over the age of 50. Through surveys, the Conservancy is learning that people understand the value of being outside to improving health, but it's not the primary factor for them to participate in the program. They are getting the benefit, but they see their participation as fun, not work.

CENTRED OUTDOORS

A growing aging population in Pennsylvania also experiences limitations to remaining healthy with additional barriers that come with getting older, such as mobility, access, and transportation.

And a growing reliance on electronic leisure, such as gaming and streaming, can lead to staying indoors and a sedentary lifestyle, particularly for youth.

Overcoming these challenges will require strong partnerships and a commitment to "Health in all Policies." Recreation providers will need to communicate the benefits of outdoor recreation and support recreation programs that address physical, mental, emotional, and behavioral health. Having an interagency health-based team to share resources can help better connect health and outdoor recreation.

Since the 2014 outdoor recreation plan, environmental threats to being outdoors have grown. In 2018, 7,920 confirmed cases of Lyme disease were reported in Pennsylvania, putting the state as the nation's leader in diagnosed cases of the tick-borne illness.[4] In addition, a rise in mosquito-borne illnesses, increasing temperatures, and unhealthy air quality are adding to the list of reasons people are staying inside.

Educational materials and guided programming can help those who are reluctant to venture outdoors to feel and be safe. Knowing the growing concern about Lyme disease was keeping some people indoors, the Get Outdoors PA program teamed up with the PA Lyme Resource Network in 2016 to create an awareness rack card in both Spanish and English to convey tick identification and prevention information.

Threats such as mosquitoes and ticks keep 36% of Pennsylvanians from enjoying outdoor recreation. *(2018 Fall Lion Poll)*

79% of public survey respondents clearly identified community or regional trail systems as the highest priority for facility investment over the next five years. *(Public Survey)*

More consistent efforts to communicate ways to overcome barriers could be achieved through online channels and creating and sharing advocacy materials to help turn non-participants into active participants with little investment.

Active transportation

Promoting active transportation by increasing the walkability and bikeability of communities is one way to promote the use of outdoor spaces to improve health. However, communities often face challenges when attempting to implement close-to-home recreational opportunities.

Surveys show Pennsylvanians want more trails. In the public survey, more than 2,700 comments—nearly 40 percent—were trail-related. How and where to put these trails will require community planners and recreation providers to work together for common purposes. Linking trail networks, closing major trail gaps, and creating safe routes from neighborhoods to parks all require close coordination among municipal and state agencies and a commitment to investing in these resources.

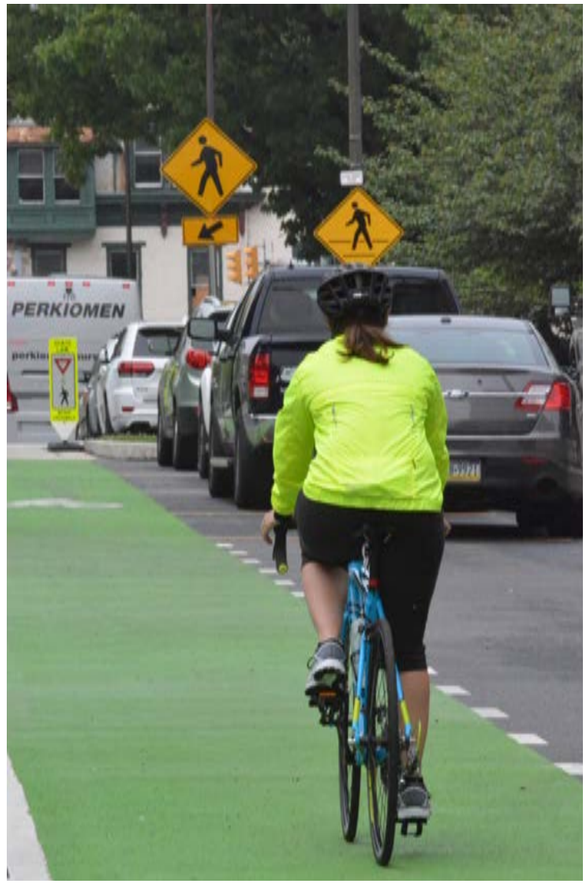
Pennsylvania's first Active Transportation Plan, completed by PennDOT in 2020, is working in conjunction with the outdoor recreation plan as well as the Department of Health's Pennsylvania State Health Improvement Plan 2015-2020 to develop a safe, connected multimodal transportation network that supports community health, equity, and economic opportunity for all Pennsylvanians.

One opportunity to address this priority is to create educational resources that promote the substantial impact of trails and engage community stakeholders around the importance of providing alternative modes of transportation to

Active transportation is any self-propelled, human-powered mode of transportation, such as walking or bicycling. As a form of human-powered transportation, active transportation engages people in healthy physical activity while they travel from place to place. People walking, bicycling, using wheelchairs, skate boarding, scootering and rollerblading are engaged in active transportation.

–from Pennsylvania's Active Transportation Plan

increase physical activity. Engaged residents and community champions for more trails can increase the likelihood that active transportation will become a priority for future investment.



Sources:

[1] Pennsylvania Department of Health

[2] Pennsylvania Department of Health

[3] New England Journal of Medicine in December 2019. https://www.nejm.org/doi/full/10.1056/NEJMsa1909301?query=featured_home

[4] https://www.cdc.gov/lyme/stats/tables.html

> "Bring trails closer to my home. I would use a trail daily if it didn't require me to drive 20 minutes, park, take snacks and water, etc. because it's such a production. If I could drive 5 minutes, or walk 10 minutes, I'd be at a trail several times a week." *–respondent to the public survey*

GREAT IDEA:

PA Walkable Communities Collaborative

To encourage more walking, the 2014 outdoor recreation plan recommended that local communities examine their built environments and promote healthful transportation alternatives. As an implementing strategy, state agencies teamed up with America Walks to conduct Pennsylvania's first Collaborative Workshop on Walkable Communities in 2016. Today, the PA Walkable Communities Collaborative consists of nine state and nonprofit agencies that meet regularly to increase walking and expand walkable communities across Pennsylvania. The collaborative has created training and educational materials and supported DOH's funding of 24 active transportation plans and policies. To learn more about the collaborative, WalkWorks, or funding for active transportation grants, visit: https://www.health.pa.gov/topics/programs/WalkWorks/Pages/WalkWorks.aspx

RECOMMENDATIONS AND ACTIONS

1. **Educate on the connection between health and outdoor recreation.**
   a. Compile and promote resources describing the physical and mental health benefits of outdoor recreation
   b. Deploy education campaigns on preventive measures to minimize health and safety risks like Lyme Disease and skin cancer.
   c. Create an interagency health-based team to coordinate relevant state grant programs and implement a program that recognizes communities for demonstrating the connection between health and outdoor recreation.
2. **Support programs that connect health and outdoor recreation.**
   a. Fund community-based programs that advance health and wellness and connect with outdoor recreation programming.
   b. Conduct peer-to-peer exchanges among recreation and conservation providers to share best practices for connecting health care providers and outdoor recreation opportunities.
3. **Equip health care providers with the tools needed to promote the health benefits of outdoor recreation.**
   a. Define the benefits and best management practices of park/trail prescription programs and share with health care institutions to expand into new regions.
   b. Create a statewide learning network to share research and best practices online and at health summits.
4. **Create walking and biking networks that provide safe, close-to-home access to recreation and encourage healthy behavior in communities.**
   a. Fund and support at least 30 active transportation plans.
   b. Close priority trail gaps to achieve the overall goal of having a trail within 10 minutes of every Pennsylvanian.
   c. Create a Pennsylvania Safe Routes to Parks Program to achieve a goal of having a park within a 10-minute walk of every Pennsylvanian.
   d. Improve connections between mass transit and public outdoor recreation opportunities.

PRIORITY: Recreation for All

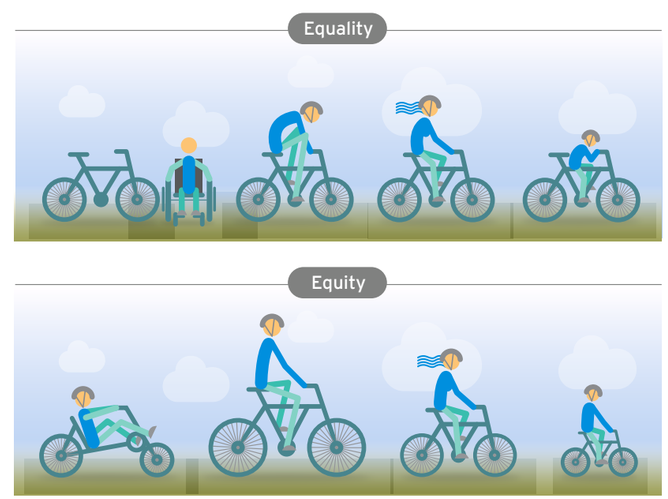
Ensuring Equity in Access to Pennsylvania's Outdoors

Recreation for All strives for equity in access to Pennsylvania's outdoors. Addressing the needs of people traditionally underserved by recreation and conservation agencies can only strengthen our organizations and support future leaders in the outdoor recreation and conservation fields. For the purposes of this plan, the term "underserved" refers to people or communities with reduced physical or social access to recreation opportunities.

> "All people—no matter their age, race, gender, sexual orientation, income level, ethnicity, beliefs, or physical or cognitive abilities—deserve access to opportunities, facilities, and places that enrich their lives. However, social, economic, political, and cultural factors can often lead to uneven or unfair access to community resources and opportunities."
>
> *–PRPS Leadership 2025*

Diversity can be defined as the differences between us based on which we experience systemic advantages or encounter systemic barriers to opportunities. It is not limited to race and ethnicity but includes identities that shape how people interact with institutions and outdoor space. Inclusion is fostering a sense of belonging by welcoming and valuing people. Equity is the process of removing barriers to ensure equal opportunity for all.

The 2014 outdoor recreation plan tackled diversity, equity, and inclusion (DEI) through a focus on local parks and connecting people to close-to-home recreational opportunities. Actions included incorporating inclusive park and playground design, reducing barriers to access, and researching the recreational needs of people of color who might not have easy access to outdoor recreational amenities.



Since the 2014 plan, the demographics of Pennsylvania continue to shift even as the total number of people remains about the same. Pennsylvania is still growing older, with every county in the commonwealth seeing the percentage of older adults over 65 rise since 2010.

PRIORITY: Recreation for All

Population growth is driven by people of color. The Pew Research Center projects that in 2045, the United States will become a majority-minority nation. When this happens, all Americans will statistically become minorities, as no ethnic or racial group will compose 50 percent or more of the nation's overall population. In Pennsylvania, the Hispanic population has increased 30 percent since 2010 and will soon reach 1 million Pennsylvanians. According to the Brookings Institution, because people of color tend to be younger than whites, the tipping point where minorities become a majority has already arrived for younger Americans.[1]

Good News: 69% of Pennsylvanians agree they can safely access a trail within 15 minutes of where they live.

(2019 Spring Lion Poll)

Only a little over half 52% of Pennsylvanians agree they can safely walk to a public park—males agreed more than females. *(2018 Fall Lion Poll)*

The number of people with mobility issues continues to climb as our populations ages and the obesity rate continues to increase. Almost a quarter of Pennsylvania adults have some type of disability.[2] Connecting youth to the outdoors continues to be a main focus of recreation providers, as well as supporting older populations and encouraging multi-generational experiences. Rural and urban needs can vary and addressing both can be challenging. Rural communities are less likely to live within a 10-minute walk to outdoor recreation.[3] Urban communities are more likely to have facilities nearby, but they might not be safe or well-maintained. Additionally, there are different recreational interests and needs. More providers serving communities with populations over 25,000 rated adapting to a more ethnically, racially diverse population as a significant or major challenge (32 percent) than those servicing 5,000-24,999 (21 percent) and less than 5,000 (14 percent). (Local Provider Survey)

Ensuring all Pennsylvanians have plentiful opportunities for recreation is of vital importance for the future of outdoor recreation in the state.

GREAT IDEA:

Connecting seniors in South Williamsport

A recent collaboration among DCNR, the Pennsylvania Department of Aging and South Williamsport Borough has more seniors in the community connecting to the outdoors. The Pathways to Fitness initiative used state funding to install fitness trail equipment; purchases bicycles, surreys, and walking poles; as well as make the necessary walking path connectors from the senior living center to the Susquehanna Riverwalk. Geared to benefit the community's aging residents and building upon existing DCNR investments in the area, the Pathways to Fitness initiative seeks to increase connections to the Susquehanna River Walk Trail and provide community assets for long-term, healthy lifestyles.

Access for all

Accessing recreation can include physical access such as proximity to outdoor recreation, transportation, and ADA facilities. It also means cultural access through relevant programming and language access, and ensuring all feel welcome and safe while playing outside.

Providing access to outdoor recreation for all people can be a challenge, especially considering ADA accessibility. Half of local recreation providers indicated providing inclusive programs and facilities for persons with disabilities as being a significant or major challenge. This percentage was significantly higher than those reporting this challenge in 2014, which means either more providers are working to be inclusive, or the population of people with disabilities is increasing. (Local Provider Survey)

Faced with an increasing aging population, local recreation providers are looking to meet older residents' needs while also serving younger residents. Collaborating with groups like the Center for Independent Living and Pennsylvania's Department of Labor & Industry's bureaus of Blind and Visual Services can garner recommendations for improving accessibility for all. (Local Provider Survey)

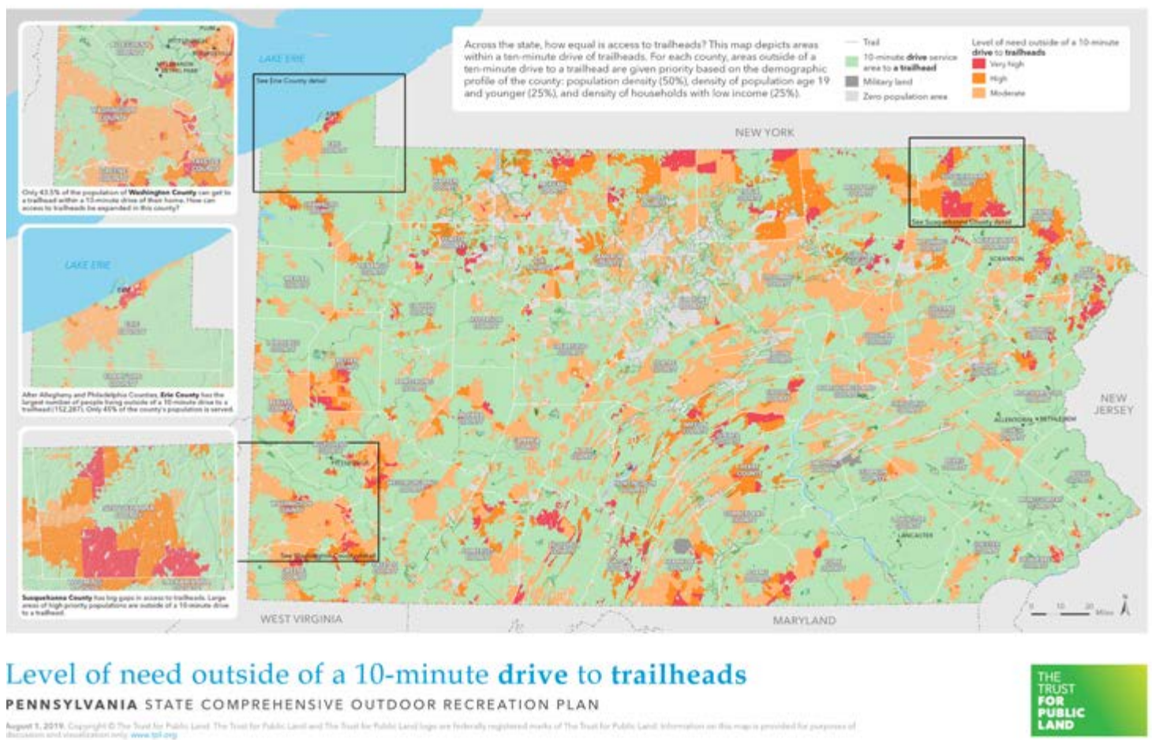
PRIORITY: Recreation for All

From the user's perspective, only about half of Pennsylvanians who responded to the 2018 Fall Lion Poll agree they can safely walk to a public park. Men agreed more than women. Focus group participants felt safe in recreation areas near their home, but safety on trails was a concern since these areas tend to be unlit and more wooded. While most Pennsylvanians agreed they could safely access a trail within 15 minutes (69 percent), white respondents agreed more than black respondents (2019 Spring Lion Poll). This data points to uneven access and proximity, as well as more structural challenges like safety.

41% of black people surveyed said not having transportation to the state parks or lack of available public transportation were constraints to their visitation, above health, lack of time or any other reasons.

(Penn State/DCNR State Parks Telephone Survey)

For this 2020 Plan, The Trust for Public Land used Pennsylvania data and applied a sophisticated mapping analysis to allow recreation providers to pinpoint those areas of the state where residents lack connections to outdoor recreation. Though transportation continues to be a challenge, opportunity exists to improve access through better sidewalk and bike lane connections, tapping into rideshares, and improving connections with mass transit.



GREAT IDEA:
Mentored Hunt at John Heinz

The John Heinz National Wildlife Refuge in Philadelphia hosted the first-ever archery hunt In October 2019 for new hunters to be part of a mentored experience and help the refuge trim the overabundant deer herd. The Pennsylvania Game Commission trained a team of certified hunter mentors to serve as coaches for the participants, and the Quality Deer Management Association provided educational resources through its Field to Fork program that connects new hunters to deer hunting.

For the two months leading up to the hunt, more than 600 community members attended archery and bowhunting-focused activities at the refuge. Twenty first-time hunters were selected from a pool of more than 100 applicants representing diverse backgrounds in the Philadelphia community. During eight days of hunting at the refuge, all participants saw deer, had shot opportunities, and learned how to cook venison and enjoy the wild harvest.

This unique program held at America's first urban wildlife refuge resulted in the local community being better connected to the importance of hunting in conservation and the understanding that wildlife management is critical to protect the health of ecosystems.

Welcoming to all

Diversity, equity, and inclusion issues also intersect with a sense of welcoming in outdoor recreation areas. Who "owns" or "belongs in" these spaces? Historically, that has not been everyone. In a panel survey of people of color conducted by Penn State for DCNR's Bureau of State Parks, a majority of respondents across race/ethnicity agreed or strongly agreed that they felt a sense of welcome and belonging in Pennsylvania's state parks. However, sense of welcome and belonging at state parks was significantly higher among white respondents than ethnic minorities.

Only half of Pennsylvanians have easy access to water-based recreation like swimming pools, lakes, and streams. *(2018 Fall Lion Poll)*

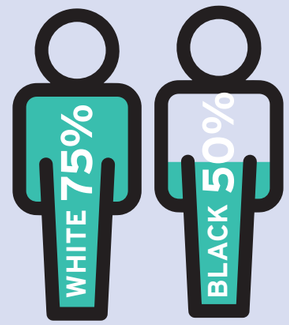
For participants in a Black/African American focus group conducted for the 2020 plan, going to parks in areas outside of their neighborhood or community was concerning due to racism or stereotyping. Most in this group indicated they felt uncomfortable in certain recreation areas where they did not encounter many other people of color.

PRIORITY: Recreation for All

To improve sense of belonging for all people, resources are needed to assess and address inclusivity for all ethnicities. Sense of welcome and belonging can be improved by including more culturally centered programming and telling the cultural and historical stories of people of color. Outdoor recreation providers could partner with community groups and organizations to provide multi-cultural events such as Holi, Lantern Festival, Eid, Juneteenth, and Tu Bishvat.

Parks and recreation organizations should promote practices and programming that are relevant, engaging and consider race and ethnicity, gender and gender identity, sexual orientation, age, military status, nationality and citizenship status, physical ability, cognitive ability, religious affiliation, socioeconomic status, and those facing trauma and addiction.

PA state parks are for people like me



(PSU Ethnic Panel Survey)

Employment for all

Historically, diversity within environmental, conservation, and recreation agencies has not been reflective of the population. Many organizations struggle to recruit employees and volunteers reflective of the demographics of the state and nation. There may have been limited pathways to employment for people with varying backgrounds, i.e. ability, race/ethnicity, and gender identity.

> "As someone in a major city without a car, getting to larger state parks for extended hiking trips can be difficult. Perhaps partnering with different organizations to provide mass transportation (buses) once or twice on weekends could help to provide greater access to parks further from cities."
>
> *–Public survey respondent*

A tremendous opportunity exists to expand the pool of volunteers and workforce to include all Pennsylvanians. Starting early to connect youth with the outdoors will create a workforce and volunteer pipeline for the future. The Pennsylvania Outdoor Corps began in 2016 as an employment pipeline for teens and young adults living in communities with limited conservation career opportunities. Over the first four years of the program, more than 700 young people—many of color—have gained experience in working

74% of Pennsylvanians agree that increasing the availability of affordable recreation programs at local parks/recreation centers for families of all income levels should be a goal of their local government. *(2019 Spring Lion Poll)*

in the outdoors, performing maintenance and resource management work in parks, forests, and communities across the state. Those employed in the program are connected to job opportunities upon completion of their service with DCNR.

Today's youth are engaged in issues such as climate activism and will bring fresh perspectives to conservation and recreation work if brought into the conversation. Connecting to diverse user groups already enjoying recreation spaces can yield additional volunteers and advocates for these places.

"I think some do not hike and explore because they don't know how, as silly as it sounds. I'm single and like to hike but I'm apprehensive because I do not know about the dangers of the woods, snakes, bears, etc.—a class would be nice."

–Public survey respondent

Sources:

[1] Our Nation's Demographic Shift, Rafael Payan, Ph.D., https://www.nrpa.org/parks-recreation-magazine/2019/april/our-nations-demographic-shift/

[2] CDC, https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/pennsylvania.html

[3] Access to PA's Outdoor Recreation Areas: The Trust for Public Land Methods and Key Findings (Appendix)

RECOMMENDATIONS AND ACTIONS

1. Provide opportunities for everyone to regularly engage in outdoor recreation.

a. Using The Trust for Public Land findings, prioritize communities without access to recreation areas and partner with county/local planners to improve access.

b. Develop a pilot program with school districts and universities that uses joint use agreements allowing public access to outdoor recreation facilities after school hours.

c. Expand recreation opportunities in priority communities through such amenities as pocket parks, splash pads and outdoor classrooms on vacant lots.

2. Enhance recreational amenities to fit the needs and expectations of underserved people.

a. Incorporate universal design practices to improve access for people of all abilities.

b. Increase availability and promotion of adaptive facilities and equipment such as kayak launches, fishing access, and beach wheelchairs

c. Develop and promote easy trail loops in community and state parks.

d. Engage diverse users in the management, planning and design of outdoor recreation spaces and access opportunities.

e. Expand DCNR's Peer Grant Program to provide assessments on how to be more inclusive.

f. Evaluate and update printed materials, displays and programs to include untold cultural stories and ensure inclusive historical content.

3. Provide equitable access to outdoor recreation and conservation programs.

a. Expand skills-based learning opportunities for outdoor recreation activities targeted specifically for individuals with limited access to outdoor experiences.

b. Increase access to "First Time" equipment kits and public programs in outdoor recreation.

c. Increase partnerships with historic and cultural organizations to develop joint programming that combines art, humanities and history with the outdoors.

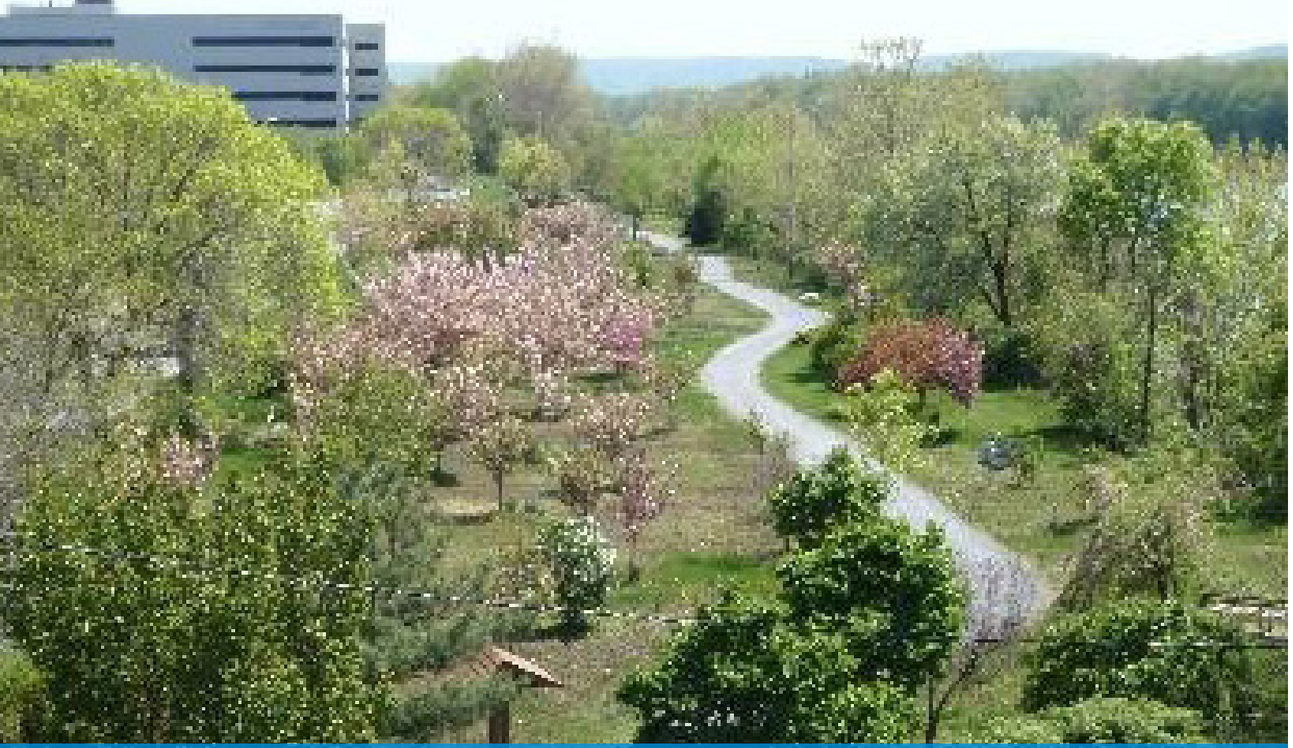
d. Adapt existing toolkits to establish a Pennsylvania-based guide for improving diversity, equity and inclusion in outdoor recreation programs.

4. Build a diverse workforce and volunteer base.

a. Develop apprenticeship programs and expand internship opportunities for young adults from diverse backgrounds, including people of color, interested in recreation and conservation employment positions.

b. Sustain the PA Outdoor Corps Program by implementing a strategic plan and diversifying funding and community partners.

c. Create a mentoring program and resources to encourage outdoor enthusiasts from diverse backgrounds, including people of color, to become program volunteers.



PRIORITY: Sustainable Systems

Protecting and adapting our resources

Pennsylvania's abundant recreational opportunities are dependent on public lands and waters that are managed and maintained for their use. They are also dependent on clean air, water, and land. As recreational interests and the using public diversifies, recreation providers must plan for how they meet the demands while ensuring protection of our natural resources. And land managers and conservation leaders must work tirelessly to uphold Pennsylvanians' constitutional right to clean air, pure water, and to the preservation of the natural, scenic, historic, and esthetic values of the environment.

Balance is a central tenet in sustainability and is increasingly challenging in a world of excess and overuse. Certain recreation uses are incompatible with others and cannot coexist. Some activities have a larger environmental footprint, which must be factored into decision-making and planning. Overcrowding is a challenge in many parks and natural areas, as climate change increases warm seasons and hot days. Popular hiking trails and special scenic areas of the state receive more love than they can handle, often fueled by social media hype.

How people will expect to experience the outdoors in the future is unknown. While traditional activities like walking, running, hiking, swimming, fishing, and biking all still trend as popular in Pennsylvania, planning for new audiences and activities is sometimes guesswork. Activities like gaga ball and pickleball were unknowns in the municipal recreation world 20 years ago. The explosion of e-bike sales will undoubtedly require land managers to be forward thinking.

But as we plan for the new, the biggest challenge is still the old—maintaining the multi-billion-dollar infrastructure system that supports outdoor recreation. Aging recreation facilities in local and state parks, thousands of miles of roads and bridges in state forests, and a legacy of abandoned gas wells and mines, all threaten future recreation use and growth

What is sustainability?

A 21st century buzzword, sustainability generally refers to how social, economic and environmental systems function in a way that all can continue in perpetuity without irreparable harm to any one system. Sustainable recreation is one created by balancing visitor objectives, managerial capacity, and ecological capacity.[1]

The Environmental Right Amendment

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Pennsylvania Constitution
Article I, Section 27
Natural Resources and the Public Estate

in Pennsylvania. Furthermore, model-based research predicts that Pennsylvania is expected to experience higher temperatures, changes in precipitation, sea level rise, increasing occurrences of severe weather events, and more flooding due to climate change in the coming decades. Already, extreme weather events cause millions of dollars in damage each year. Taken together, these factors will increase the weathering and degradation of public lands infrastructure, placing public assets at risk.

Given that 90 percent of Pennsylvania outdoor enthusiasts agree that outdoor recreation is an essential part of their lives, and 80 percent would like to participate more in outdoor activities, we need a sustainable system for recreation that serves the needs of all users. (Public Survey)

Over 60% of recreation providers said that maintaining existing local parks is a significant or major challenge, a jump from 46 percent in 2014. *(Local Provider Survey)*

Maintenance

The opportunities people have to experience outdoor recreation are largely limited by the resources available to them. For quality outdoor recreation opportunities to be available, the infrastructure—a road, trail, parking lot, restroom, boat launch, swimming pool—needs to be safe, accessible and ready to use.

Currently, Pennsylvania's state parks and forests have more than a $1 billion backlog of present infrastructure maintenance needs and have not experienced increases in staff complement nor funding levels to remain commensurate with rising recreation demands or even to meet maintenance costs of existing infrastructure. Similarly, at the community level, the more than 6,000 community parks have an equal maintenance backlog and face staffing and funding constraints as municipalities prioritize what are viewed as essential services for their residents.

GREAT IDEA:

Keep butts out of parks

Cigarette butts are the number one litter in the nation. Cigarettes make up 38 percent of all highway litter and 30 percent of litter at transition points, like entrances to buildings and bus stops. Several Pennsylvania state parks in the southeast teamed up with Keep Pennsylvania Beautiful (KPB) to install ash receptacles in public use areas at Benjamin Rush, Ridley Creek, Tyler and Nockamixon state parks. KPB reported a 48 percent reduction in the cigarette litter halfway through the program in November 2019.

56% of Pennsylvanians agree that public recreation areas where they live need upgrades and modernization. *(2019 Spring Lion Poll)*

A sustainable system for outdoor recreation ensures managerial resources, investments, and visitor use are commensurate. By studying what specific recreation areas need to operate sustainably, from the number of staff to visitation capacity, managers can make informed future land management decisions. As leaders work toward long-term funding and staffing solutions to tackle maintenance backlogs, short-term demonstration projects and shared training resources can help resource and facility managers create systems that are more resilient to use and change.

GREAT IDEA:

Showing parks our love

During the nine-day Love Your Park Week in Philadelphia, neighborhood parks hosted volunteer cleanups, bringing communities together to beautify their neighborhood parks and celebrate their public spaces. More than 50 parks hosted hikes, bilingual bird walks, bike rides, plant sales, and other family-friendly events.

Environmental Capacity/ Overuse

All recreational activities have environmental impacts of some degree—erosion and sedimentation, soil compaction, water pollution, increased fire frequency, unsanitary conditions, noise, litter, and effects to fragile ecosystems and wildlife habitat. Deliberate destruction through vandalism and graffiti continues to threaten the wild and aesthetic character of public and natural places. There is no shortage of examples of how too many people in a recreation space can have enormous negative impacts on the resource and visitor experience.

Outdoor recreation opportunities can and should be planned to avoid, minimize, or mitigate negative impacts to the environment. Recreation spaces have different capacities for sustaining the various activities. Truly wild, undeveloped places are in very short supply in Pennsylvania and therefore are extremely valuable. These places should have a low limit of acceptable change, and care should be taken so that ecological integrity and wild character are not affected. High impact activities should be placed in areas that are designed to support them.

Litter is a challenge for recreation managers. High use weekends and events in Pennsylvania state parks result in hundreds of employee hours spent cleaning up trash

left on park lawns. Graffiti on geologic formations on state forest lands deface scenic overlooks. Innovative volunteer activities have proven to be effective in removing litter and educating the public with positive actions. The Pennsylvania Parks and Forests Foundation led a concerted effort in 2016-18 to clean up the graffiti in state parks and forests using more than 1,000 volunteer hours.

Using campaigns and training to raise the awareness of recreation's impact on our natural resources can motivate people to change behavior and volunteer to help improve conditions in our recreation spaces.

GREAT IDEA:

New city green space

In 2016, Pittsburgh acquired the 626-acre Hays Woods, once used for mining and munitions, resulting in one of the largest protected lands within city limits, a rare feat for a city of this size in today's era. The city will spend the next decade planning for the ecological and recreational uses of the land. The tract will feature trails, provide research opportunities, and protect habitat and species. Most importantly, the forests will serve as the lungs and kidneys for the people living in the region, by sequestering carbon, filtering stormwater, and cleaning the air.

Climate change

Climate change models indicate increasing threats to infrastructure that is already in an unsustainable condition. Data collected by the National Association of State Park Directors since 1984, shows that for every percent increase in mean annual temperature, yearly park operating costs rise by $11.51 per acre.[1]

When asked whether DCNR should add more state forest acres, reduce the number of state forest acres, or keep the number of state forest acres the same in the next 10 years, **61%** of Pennsylvanians said that they would like to see more state forest acres added in the next decade. *(2019 Spring Forestry Lion Poll)*

As land managers and recreation providers plan for the future, sustainable practices will need to become standard practice. Infrastructure location and designs must anticipate changing conditions. Recreation spaces should serve multiple environmental needs to provide economic benefits for communities.

Today, parks and green spaces are being designed not only to meet recreation needs but also to accomplish climate change adaptation and mitigation goals such as curbing runoff through riparian buffers and swales. State parks and forests are installing solar panels and electric vehicle charging stations and building state-of-the-art facilities that use a suite of green features to achieve energy efficiency. Not only will these sustainable features help to reduce the energy consumption of those facilities, they will serve to educate the public and other land managers to their use, benefit, and functionality.

Acquisition of key parcels of land and planting trees are necessary components of the state's strategy to combat climate change and mitigate its effects. While protecting water quality and climate-impacted species and sequestering carbon, added lands also create new spaces for people to recreate many years into the future. Tree plantings in Pennsylvania to meet conservation goals, like those found in the Chesapeake Bay Watershed Implementation Plan, should be considered in recreation spaces where they can help beautify and provide shade for users.

More than half **53%** of public survey respondents and nearly two-thirds **64%** of respondents between the ages of 18 and 34 worry about how a changing climate is going to impact their future outdoor recreation experiences. *(Public Survey)*

"Conserve and protect the land so that I can continue showing my children the beauty of our state. By doing so, it will encourage them to want to protect it as well and be more active in curbing climate change and keep our planet and all things that live here safe." *– public survey respondent*

While models are making projections about the effect of climate change on our communities and

GREAT IDEA:

The Pennsylvania Park Maintenance institute

Park owners and stewards seldom have the proper resources—people, funds, and expertise—to keep their systems open, save, and ready to use. Established in 2019 and housed within the Pennsylvania Recreation and Park Society, the Pennsylvania Park Maintenance Institute serves as the "go-to" organization to develop systems, tools, and strategies necessary for proper park maintenance. Supplying park owners and stewards with technical training and resources, the Institute hopes to help protect the major capital investments in public parks that are at risk of falling into deterioration without sufficient resources for maintenance. The Institute also advocates for the lifelong care of parks and why park maintenance is an essential public service worthy of investment.

environment, we can only guess what changes are in store for recreation. Will people demand more access to water due to warming days? Will snow- and ice- based sports participation rates wane or will synthetic ice rinks and indoor ski mountains provide year-round fun? One thing is certain—this plan's and future plans' recommendations must reflect the changes to our climate that are to come.

User conflicts

Pennsylvania accommodates dozens of recreational activities through its millions of acres of public lands. Most of the time, these activities can co-exist without conflict. But as users and activities have diversified, available space and management capacity have not kept pace. Land managers currently do not have a statewide strategic approach to direct users to places where activities can be practiced sustainably, resulting in users converging on places without knowledge or regard for environmental or managerial capacity.

Most user conflicts arise between motorized and non-motorized activities, or when lands have been set aside for a specific purpose, like hunting. In the 2019 Spring Lion Poll for DCNR's Bureau of Forestry, more than half of the respondents said they use forested landscapes for viewing natural scenery, plants, or wildlife; hiking; and for picnicking, family gatherings, relaxing, or hanging out. Conversely, only four percent use the lands for riding off-road motor vehicles and only one percent ride snowmobiles. As DCNR considers expanding its ATV trail system on state forest land, it must build sustainable trails that minimize the impacts on other activities like wildlife watching and hiking.

79% of Pennsylvanians agree it is important for government to invest in sustainable park practices like recycling, native plants, etc.

(2019 Spring Lion Poll)

Sources:

[1] Zinser, Charles. Outdoor Recreation: United States National Parks, Forests, and Public Lands. Wiley. 1995.

[2] Attendance trends threaten future operations of America's state park systems, Smith, Jordan W., Wilkins, Emily J. Leung, Yu-Fai, https://www.pnas.org/content/116/26/12775

RECOMMENDATIONS AND ACTIONS

1. **Address infrastructure and maintenance needs in Pennsylvania's existing outdoor recreation areas.**
   a. Develop three pilot projects on public lands that demonstrate best management practices on how to retire redundant roads to accommodate high-impact trail activities.
   b. Increase capacity of public land managers to maintain infrastructure by securing necessary staffing and funding levels and increasing intra/interagency cooperation.
   c. Support Pennsylvania's Park Maintenance Institute to provide training on best sustainable park/trail practices.
   d. Enlist 1,200 young people in the PA Outdoor Corps by 2024 to address recreation infrastructure needs and improve visitor experience.
   e. Conserve 100,000 acres of land with a priority in climate resilient landscapes and urban areas with a lack of green space.
   f. Plant 100,000 trees in outdoor recreation areas.
2. **Protect and conserve lands and waters considering the impacts of climate change on outdoor recreation.**
   a. Design and construct ecologically sensitive and resilient infrastructure to accommodate increased stormwater flows and changing water levels.
   b. Design and implement climate resilient pilot projects where public open space and parks can address water quality improvements, reduce invasives, connect priority lands through wildlife corridors and greenways, and enhance ecosystem services.
   c. Provide demonstration areas and incentives for using only native plants, or plants better adapted to future climatic conditions, and pollinators in outdoor recreation areas.
   d. Using data on recreational facility locations and climate change projections, evaluate the areas with the greatest need for water-based recreation access and increase opportunities.
3. **Foster stewardship for Pennsylvania's recreation areas and natural, cultural and historic resources.**
   a. Identify best management practices and provide training for managing human impacts on public recreation areas.
   b. Implement a "Love Your Park Week in Pennsylvania" to strengthen volunteer activities and raise awareness of stewardship of public lands.
   c. Double the number of trainers and specialists in Leave No Trace™ principles to expand training for outdoor recreation providers.
   d. Develop a communication strategy that uses existing media campaigns and technology platforms to educate recreation users on proper safety and etiquette when recreating outdoors.
   e. Connect and promote existing digital platforms that support friends' groups, volunteer days and single-day stewardship events.
4. **Design outdoor recreation areas to minimize impacts on the environment or conflicts among user groups.**
   a. Develop opportunities for high-impact recreation and urban green space on restored brownfields to support economic development and stewardship opportunities.
   b. Conduct three pilot projects to analyze environmental and staffing capacity on public lands and natural areas and use the data to inform future land management decisions.
   c. Encourage professionals involved in the design of new parks or park renovations to be certified in sustainable landscape techniques and practices.

PRIORITY: Funding and Economic Development

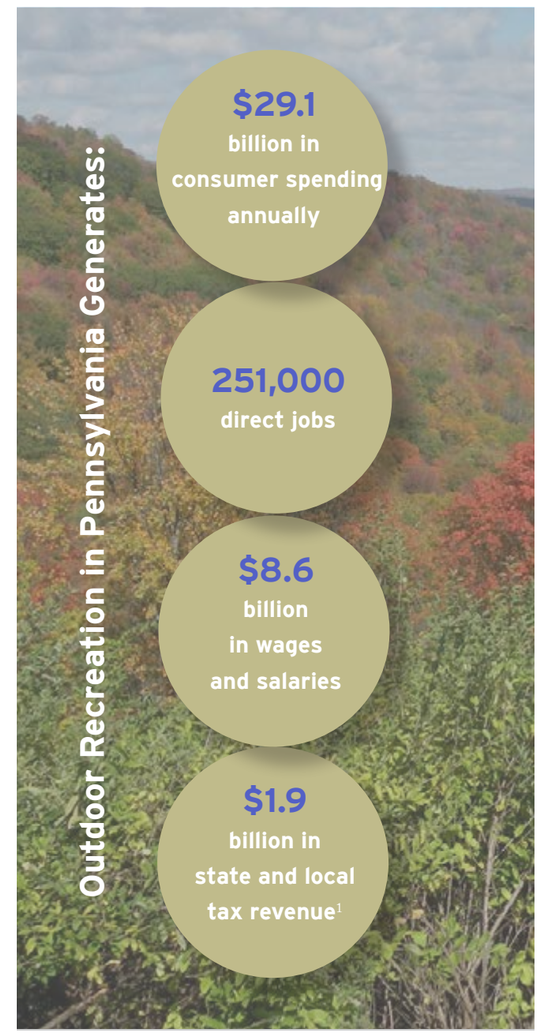
Elevating Outdoor Recreation

Overwhelming support exists for investments in outdoor recreation and conservation. People value these vital resources for the various benefits they provide, but often don't realize the significant role they play in strengthening our economy, contributing to our tax base, and implementing real cost-savings at local, county, and regional levels. Despite these benefits and strong public support, there is insufficient funding for outdoor recreation, and it remains a low priority for decision makers and elected officials in Pennsylvania. Meanwhile, demand for new and improved outdoor recreational amenities is high and existing infrastructure is aging and enduring damage from relentless and severe weather.

Safeguarding and increasing direct public investments in diverse outdoor recreation and reinforcing outdoor recreation as a vital industry to Pennsylvania are top priorities of the 2020 outdoor recreation plan.

Investing in recreation

Maintaining and improving Pennsylvania's outdoor recreation amenities and infrastructure is a significant challenge at both the local and state levels. Despite the positive impact these resources have on the state's economy, local governments struggle to prioritize funding for outdoor recreation when limited funds compete for other services like pension funds, fire, police, emergency systems, and public infrastructure. Pennsylvania also lacks meaningful incentives or guidance for fostering intergovernmental cooperation, leaving many communities to never consider the cost-saving benefits of collaboration on multi-municipal recreation projects.



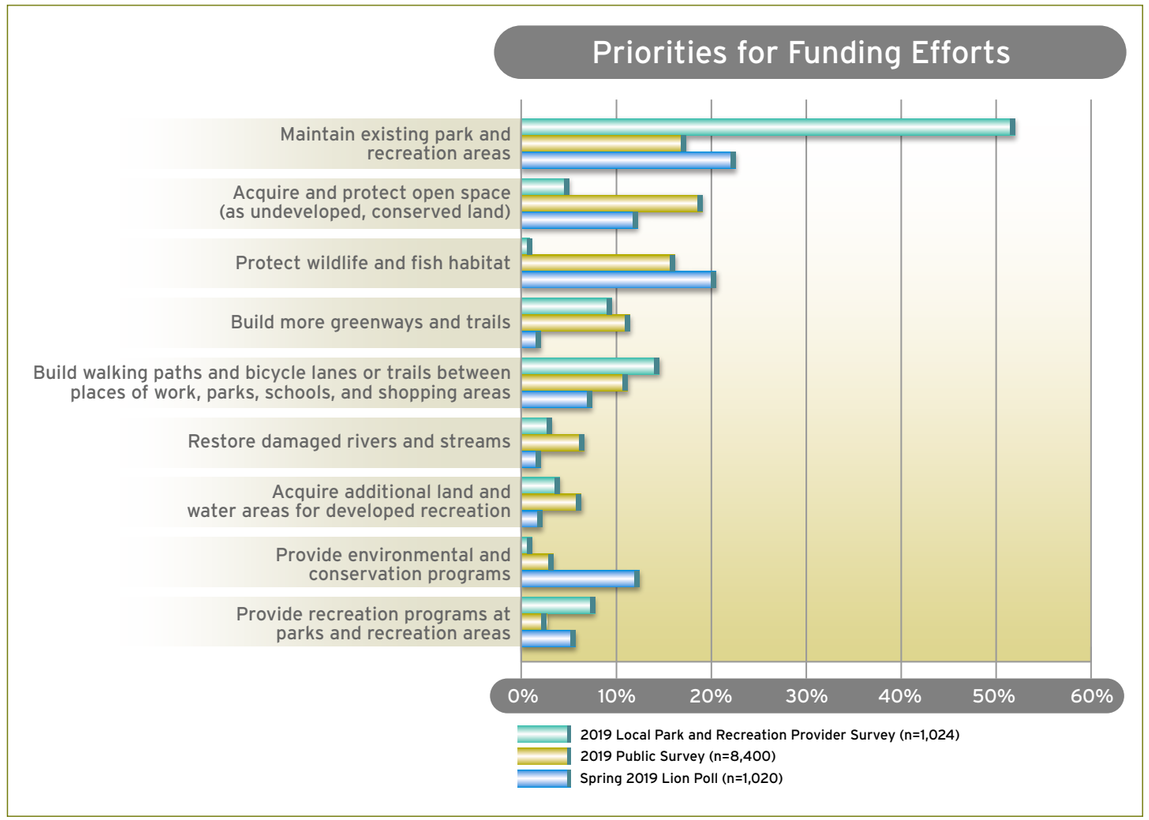
Overall, **90.7%** of Pennsylvanians surveyed indicated that they would support increasing state funds to conserve and protect open space, clean water, natural areas, wildlife habitats, parks, historic sites, forests, and farms. When asked if they would support increasing state funds at an average cost of $10-$20 more annually per household, **80.6%** were in support.

(Center for Survey Research at Penn State Harrisburg for the Nature Conservancy and The Trust for Public Land in 2015)

Dedicated state and federal outdoor recreation funding is consistently targeted for other uses to fill gaps in the state's budget. No new state funding sources have been leveraged since Growing Greener 2 in 2005 to aptly invest in improvements of current infrastructure or support future growth of outdoor recreation facilities.

In the absence of state-level action, local communities must step up. Pennsylvania's two largest cities have

PRIORITY: Funding and Economic Development



made recreation investment a priority for their residents. In Philadelphia, a city beverage tax went into effect in January 2017, leveraging a 1.5 cent-per-ounce tax on sugar-sweetened beverages. The tax is fueling the $500 million Rebuild parks rehabilitation program.

56% of Pennsylvanians agree that the state should increase its permanent source of funding for park and recreation opportunities and that their local municipality should have a permanent source of funding for park and recreation paid for by local tax revenues.

(2019 Spring Lion Poll)

In the 2019 general election, Pittsburgh voters approved a ballot referendum to impose a 0.5-mill property tax increase that would be used strictly for city parks improvements and maintenance. The tax is expected generate about $10 million annually, which will be used to address a $400 million backlog in maintenance projects.

Investments in recreation and nature-based facilities can serve multiple purposes, like allowing communities to address infrastructure needs and limit long-term maintenance costs while leveraging investments in outdoor recreation opportunities. Communities can prioritize local funding for outdoor recreation by allowing recreation facilities to serve hybrid roles and generate revenue. In Lancaster, the city's park system is part of its overall stormwater management plan, where green infrastructure is built into recreation facilities—pervious pavements, raingardens, bio retention areas—to help Lancaster meet its MS4 goals by absorbing runoff and nutrient flow into waterways.

With recreation needs being extensive, where to put the limited dollars differs whether you are a user or a provider. The top funding priority for Pennsylvanians and recreation providers is to maintain existing park and recreation areas, but providers view it with greater importance.

Outdoor Recreation Industry

The outdoor recreation industry is a hidden economy in Pennsylvania. According to the Outdoor Industry Association, outdoor recreation in Pennsylvania supports 251,000 direct jobs and generates $29.1 billion in annual consumer spending.[1] Our abundant outdoor recreation resources—state parks, forests, trails, rivers—are often cited as the draw for visitors, businesses, and young people to the commonwealth.

Facility funding priorities

68%
of providers identified playgrounds as the highest priority for facility investment over the next five years,

although they were followed closely behind by community or regional trail systems
62%,

and community or regional parks
61%,

which replaced neighborhood parks as a top priority.

(Local Provider Survey)

79%
of outdoor enthusiasts clearly identified community or regional trail systems as the highest priority for facility investment over the next five years,

followed by community or regional parks and outdoor environmental education/nature facilities
62%,

opportunities for/access to water-based recreation
60%,

and inclusive programs/facilities for persons with disabilities
55%.

(Public Survey)

PRIORITY: Funding and Economic Development

In 2013, Utah created the nation's first Outdoor Recreation Office to elevate opportunities and strategies for the outdoor recreation industry in the state. Since that time, 15 other states have followed suit, and the National Governor's Association created an Outdoor Recreation Learning Network in 2019 to aid these state's and others interested in sharing industry best practices and ideas. Given Pennsylvania's strong outdoor economy and infrastructure to support outdoor activity, the commonwealth is well positioned to capitalize on the national momentum, resources, and cooperation.

In 2019, the Pennsylvania Environmental Council held the first State of Play Summit, a gathering of about 50 outfitters, non-profits, concessionaires, and other outdoor-related businesses to discuss how a Pennsylvania outdoor recreation office could meet their needs. Participants suggested that an outdoor recreation office could bring state agencies together with a united purpose; serve as a liaison and go-to resource for businesses; streamline processes for accessing funding and state lands; build a stronger outdoor recreation work force; bring ideas from the national level to Pennsylvania; and advance new funding ideas.

The nation's overall economy is increasing at a rate of 2.4%. Outdoor recreation is tracking at 3.9%.[1]

Summit participants confirmed that the outdoor recreation sector is diffuse and could greatly maximize its potential with a unified voice, stronger organization, shared resources, and advocacy. Clear, consistent, and unified outreach, messaging and economic data is still a challenge when promoting the outdoor recreation industry and its "investment to return ratio," from the grassroots level up to state and federal legislators.

GREAT IDEA:

Kinzua Conservation Shop

PA Wilds Center, a regional nonprofit dedicated to marrying conservation and economic development in the Pennsylvania Wilds, kicked off a charity checkout campaign for conservation in 2019 at its PA Wilds Conservation Shop gift shops and online at ShopthePAwilds.com. All donations collected from the public are reinvested into the region's 29 state parks and eight state forests. More than half of the $1 billion maintenance statewide backlog at state parks and forests are in the Pennsylvania Wilds. In its first three months, the charity checkout campaign raised more than $9,000.

"The Center is proud to create this new sustainable revenue stream to support stewardship of these important natural assets—it goes to the heart of our mission."
– Ta Enos, PA Wilds Center Founder and CEO

An opportunity exists to create a strategic approach to demonstrate overall economic benefits and cost savings through the investment of conservation and outdoor recreation.

Tourism

The *Pursue Your Happiness* tourism brand for Pennsylvania leans heavily on the state's outdoor product as a core pillar of the state's appeal to travelers. Despite its huge economic impact, Pennsylvania's tourism promotion spending lags well behind all other leading states. Given that Pennsylvania is located within a day's drive of nearly 40 percent of the United States' population, including four of the 10 largest markets in the United States, the commonwealth is well positioned to capitalize on its expansive outdoor recreation opportunities for out-of-state travelers. But a stronger investment, coordinated voice for the industry, and outdoor brand are needed to propel the industry forward.

70% of Pennsylvanians agree that outdoor recreation amenities such as parks and trails attract new residents and businesses to communities. *(2019 Spring Lion Poll)*

Together, state agencies and local tourism promotion agencies can play a key role in reinforcing the state's outdoor recreation prowess with consistent communications, unified messaging, and fully connecting users with the outdoors. As demographics shift, a concerted effort is needed to make new, diverse audiences feel welcome in Pennsylvania outdoor spaces. By deploying technology to track users and collect data from the moment of the impression—interaction with social media posts or advertising—marketers can convey users' needs and wants to land managers.

"I believe connecting the state trails system to our towns to increase tourism would be a great asset to our State. Look at West Virginia. I travel down to West Virginia twice a year when I could be spending my money in PA." *–public survey respondent*

GREAT IDEA:

Trail-Friendly Businesses

In 2018, the Delaware and Lehigh National Heritage Corridor launched a Trail Friendly Business program to recognize businesses that demonstrate they value trail users and go out of their way to meet their needs, such as filling up water bottles, hosting trail events, and offering specials for trail users. The program started with 13 qualified businesses and added another 17 in 2019. Together these businesses have 172 full-time employees and over 1,500 part-time employees and estimate that trail users on average represent 39 percent of their customers.

"Small towns like White Haven can be part of this healthy phase of tourism and embrace the positive outcome of the trails and their activities."

– Terry Kimmey, owner of The Victorian Connection in White Haven

Saucon Valley Bike Shop, located adjacent to the Saucon Valley Rail-Trail in Hellerton, celebrated 20 years in business in 2019. When the rail-trail opened seven years ago, business at the store jumped 30 percent in the first year. Store owner Steve LaBrake said the trail not only was good for business, it transformed the community. Twenty-seven new businesses have opened since the trail was built, property values have increased, and the "vibe" of the community has changed, say community leaders. Sales of bike baskets soared as more people shopped in town and at the local farmer's market. Saucon Valley Bikes is one of six local businesses now participating in the new Lehigh Valley Green Retail Program, which allows customers to donate to future trail-related projects when they make a purchase. lvgreenways.org/green-retail

Community impact

Communities with trails, green spaces, parks, lakes, and waterways not only create a richer quality of life for their residents, they also have the potential to draw visitors into their unique outdoor spaces. Pennsylvania's conservation landscape program is helping communities across the state redefine themselves as outdoor towns through nature-based projects that draw residents, visitors, and businesses into their communities. Technical assistance and tools like the Pennsylvania Environmental Council's Towns and Trails Toolkit (http://www.townsandtrailstoolkit.com) can help communities rich in natural and recreation resources become gateways to the outdoors.

The Outdoor Town program grew out of a decades-long Trail Town program, which got its launch in communities along the Great Allegheny Passage in the Laurel Highlands conservation landscape. Born out of a vision in the 1980s to build a trail from Pittsburgh to Washington D.C. primarily on a rail-trail network, the now-completed 150-mile GAP generates more than $50 million in overall direct economic impact from trail users. From bike shops to bed and breakfasts to restaurants, small businesses attribute their growth and success to the trail users.

Source:

[1] Outdoor Industry Association, https://outdoorindustry.org/state/pennsylvania/

"Our small towns and villages and cities struggle for economic viability… why not embrace the outdoor industry, one of PA's top income generators?"

– Elissa Garofalo, Executive Director the D&L Heritage Corridor and SCORP TAC member.

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF), established in 1965, protects large landscapes and helps local communities acquire and develop parks. This federal funding source has helped protect places such as the Gettysburg National Military Park, Delaware Water Gap National Recreation Area, and the Appalachian Trail. On the state level, the National Park Service has funded more than 1,600 projects through $178 million in LWCF matching grants to Pennsylvania communities.

After sunsetting in 2015, Congress worked to reauthorize the LWCF in 2019, which is expected to provide Pennsylvania $7 million a year. LWCF helped Pennsylvania establish one of the finest state and local park systems in the nation. Pennsylvania's network of protected lands, including 1,400 LWCF-protected sites, needs this continual investment from the LWCF in perpetuity to assure that they remain accessible and readily available for public recreation.

DCNR's Community Conservation Partnerships Program Funding Sources

The Keystone Recreation, Park, and Conservation Fund (Key 93)

Generated from a portion of Realty Transfer Tax, the Keystone Fund is DCNR's primary source of funding to support grants for recreation and land conservation. Grants are available for community recreation for planning, development, and land acquisition; rivers conservation plans and projects; land trust projects; and trails projects.

The Environmental Stewardship Fund (Growing Greener I)

Funding for ESF is from tipping fees placed on disposal of municipal waste and from the Marcellus Legacy Fund (Act 13) of 2012. DCNR's portion of the fund is invested in state park and forestry facilities as well as grants for greenways, trails, open space, natural areas, river corridors and watersheds, community parks and recreation and other projects to conserve the biological diversity of the commonwealth.

Heritage Areas Funding

Act 46 of 2010 established the Pennsylvania Heritage Areas Program within DCNR to identify, protect, enhance, and promote the historic, recreational, natural and cultural resources of the commonwealth. Heritage areas funding supports the implementation of these activities via the state's 12 designated heritage areas and is contingent upon appropriation through the state budget process.

Snowmobile and ATV Fund

Generated from snowmobile and ATV registration fees, grants are available for the planning, acquisition of land, development and maintenance of areas and facilities for snowmobile and all-terrain vehicle use; the purchase or lease of equipment for trail construction and maintenance; and the development of educational materials and programs.

Federal Highway Administration Funds to the Recreational Trails Program

Funding for the Recreational Trails Program is provided to the commonwealth through the Federal Highway Administration. Grants are available for the construction, renovation and maintenance of trails and trail-related facilities for both motorized and non-motorized recreational trails, the purchase or lease of equipment for trail maintenance and construction, and the development of educational materials and programs.

Federal Land and Water Conservation Fund (LWCF)

Generated from revenue received from off-shore leasing for oil and gas on the Outer Continental Shelf, grants are available for general public outdoor park, recreation and conservation, land acquisition and development projects.

RECOMMENDATIONS AND ACTIONS

1. Protect and expand public and private investments in outdoor recreation.

a. Develop programs with retail businesses that enable consumers to contribute to recreation projects through donations when purchasing outdoor goods and services.

b. Advocate for the increase in state and local funding to ensure outdoor recreation remains a vital public service.

c. Advocate for the reauthorization and increased funding of the federal Recreational Trails and Transportation Alternatives programs and full funding of the Land and Water Conservation Fund.

d. Address the maintenance needs of our public outdoor recreation lands by increasing dedicated government funding and leveraging private philanthropy and strategic partnerships.

e. Educate local governments and nonprofits through guides and web-based resources on how to leverage local investments for recreation and conservation initiatives like passing successful open space referendums.

2. Build strategic coalitions to maximize the economic impacts of outdoor recreation in Pennsylvania.

a. Create a Pennsylvania Office of Outdoor Recreation supported by a statewide coalition to strengthen the outdoor recreation economy.

b. Create regional coalitions with community leaders, tourism agencies and businesses to strengthen outdoor towns and destinations.

c. Support the creation of friends' groups and strategic coalitions to assist local communities in protecting and enhancing local outdoor recreation resources.

3. Market Pennsylvania as an outdoor recreation destination.

a. Create a branding strategy for Pennsylvania's outdoors and provide consistent messaging about the state's outdoor assets.

b. Increase collaboration, data-sharing and funding among state agencies and develop campaigns to position Pennsylvania as an international outdoor recreation destination.

c. Improve marketing and messaging to reflect the diversity of outdoor recreation participants and activities.

4. Demonstrate the benefits and impacts of nature-based solutions to addressing community needs.

a. Demonstrate the value of investing in green infrastructure to create more resilient and sustainable recreation facilities that will support multiple community needs.

b. Provide technical assistance to communities on how to retain and attract residents and businesses using outdoor recreation assets.

c. Create a rapid response fund that would facilitate resources and grants for emergency repairs of outdoor recreation amenities due to severe weather events.

PRIORITY: Technology

Using new tools to improve engagement

Pennsylvania's 2014 outdoor recreation plan introduced "technology" as a trend worth exploring, noting that outdoor recreation providers will need to adapt to this new reality. Five years later, the digital technology era has accelerated rapidly, with impacts felt in many aspects of the outdoor recreation sector, from new equipment to new web-based tools. Appropriately, the 2020 outdoor recreation plan expands technology's role from a mere trend to a key priority for the state's outdoor recreation community.

The ubiquity of digital technology—and smartphones in particular—has had major impacts on outdoor recreation in Pennsylvania. These impacts are both positive and negative. Technology gives the public instant access to information about outdoor recreation opportunities. Web-based maps help the public find new parks, trails, and nature preserves to visit. Expanded park websites help prepare visitors for what to expect when they arrive. Social media—particularly photo-sharing websites like Instagram—can spotlight beautiful locations and encourage more people to visit them.

Advances in technology have enhanced gear and equipment to make navigating and experiencing the outdoors easier. E-bikes make trails more accessible to audiences that would otherwise lack the mobility or stamina to travel them. Drones are expanding the reaches of digital photographers.

In 2014,
91%
of U.S. adults had a cell phone and
55%
had a smartphone.
Today, nearly all Americans
96%
now have a cell phone, and **81%** own a smartphone.[2]

At the same time, technology can have downsides. Easy access to and promotion of locations have led to overuse in certain cases. New tech equipment like drones and e-bikes require public land managers to develop policies to regulate their use. And of course, the sheer amount of time spent on screens may lead to people spending less time outdoors, especially children.

The challenge for outdoor recreation in Pennsylvania is to find the appropriate balance of technology and time outside. Even Richard Louv, author of the seminal book Last Child in the Woods, recognized that separating humans, nature, and technology is no longer possible. Instead he advises people to "live simultaneously in both the digital and the physical world, using computers to maximize our powers to process intellectual data, and natural environments to ignite all of our senses and accelerate our ability to learn and to feel."[1]

Connectivity and distraction

How people connect to the internet varies widely. While 9 in 10 Americans use the internet, access to high-speed Internet connections, such as broadband, is not nearly as universal. About 75 percent of U.S. adults have broadband access. In rural areas, however, that figure drops to 63 percent. Low-income and minority communities similarly have below-average broadband access.[3] Today, over 650,000 Pennsylvania residents still lack high-speed internet access.

While many Pennsylvanians use technology to aid in outdoor recreation to search for places or navigate, lack of connectively is not a huge deterrent to getting outdoors. Only one quarter of Pennsylvanians are less likely to participate in outdoor recreation if the facility lacks a Wi-Fi network or cell coverage. However, that number jumps to one-third for younger adults aged 18-34. (2018 Fall Lion Poll)

U.S. adults spend more than a third of their day—nine hours daily—watching screens. Three of those hours are spent on a smartphone or tablet.[4] Overuse of smartphones has been linked to physical and mental health concerns including a rise in ADD-like symptoms, anxiety, and depression.[5] The constant notifications and "always-on" capabilities of smartphones can prove distracting even when outdoors.

Nearly 1 in 4 Pennsylvanians said that having no availability of Wi-Fi/cell coverage makes them less likely to participate in outdoor recreation. For younger Pennsylvanians, it was one in three. *(2018 Fall Lion Poll)*

Outdoor recreation providers are unlikely to affect these trends. Rather, their focus needs to be on putting that screen time to use to enhance outdoor experiences. Making outdoor recreation information easily findable, usable, and sharable online will help more people become aware of opportunities in their communities. Making trail and public lands information readily available, then pairing that information with photos, fitness programs, and other human connections will inspire both new and experienced outdoor recreationists to explore the nature around them.

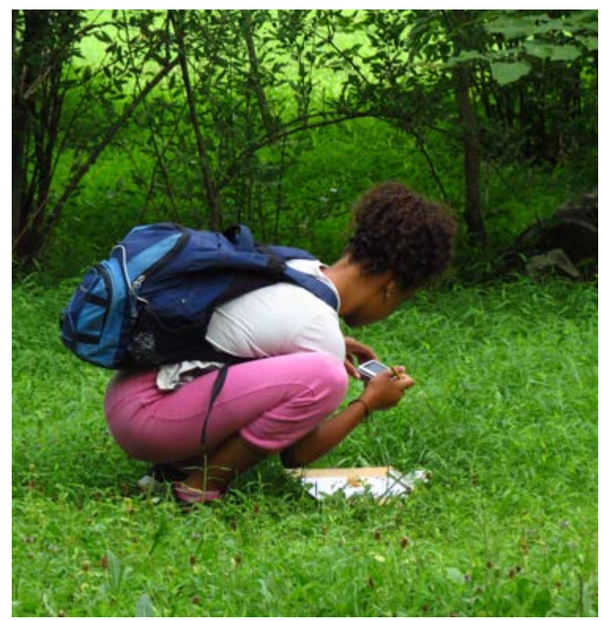
For many outdoor recreation users, nature is a place to get away from screens, a place to "unplug." Yet for others, connectivity is important if for no other reason than safety. Should these users become lost or injured, the ability to call for help and have first responders quickly locate them is an important benefit. Real-time notifications can alert visitors to hazardous conditions such as a felled tree, treacherous trail conditions, or an approaching storm.

To connect or not connect in outdoor settings through cell coverage or Wi-Fi networks is a central tension. The challenge lies in integrating technology into outdoor recreation while retaining the natural experiences people are seeking from their recreation. Rather than universal coverage and complete connectively, the 2020 outdoor recreation plan aims to identify priorities for connectivity and manage user expectations. Those who are seeking connectivity should know where they can find it. Those who want to unplug, should have those opportunities.

Ever-changing technology

Technologies are changing behaviors in the outdoors, some of which can place people and resources at risk. New technologies require new policies and practices. Selfies, e-bikes, drones, and smartphones are not going away, so developing and disseminating technology best practices to both outdoor recreation providers and users will become essential to maintaining outdoor safety and user experiences.

Sometimes these practices will be structural, like adding or enhancing safety barriers or, as some researchers have suggested, marking certain high-risk areas as "no selfie zones." From October 2011 to November 2017, 259 people nationally died taking selfies.6 These deaths often involved risky behaviors such as climbing past safety barriers or balancing on cliff edges. Other times the practices will be educational, encouraging outdoor recreation users to alter their behavior to protect their safety or the safety of others.



Disseminating best practices will be needed so recreation providers can stay current with emerging outdoor recreation technologies. New apps, data, and equipment are coming out constantly, and users are also combining existing technologies in new, often unpredictable ways. The word "drone" did not even appear in Pennsylvania's 2014 outdoor recreation plan. Five years later, drones have become commonplace among both recreational and commercial users.

Recreation providers mentioned the need to find better ways to do outreach to various constituencies such as connecting with older residents while also increasing youth engagement

GREAT IDEA:

Forest City Trailhead WiFi

Having Wi-Fi connections in strategic locations in the outdoors can help users find places to enrich their experiences. Thanks to a partnership with the Greater Forest City Business Alliance, the Endless Mountain Visitors Bureau, NEP Telephone and the Rail-Trail Council, users of the 38-mile D&H Trail in Susquehanna County can get connected at the Forest City trailhead hot spot to get information on the town's amenities, events, and attractions as they are passing through. Once in town, riders will find "trail-friendly" businesses, symbolized with a window sticker, that offer support, like bathrooms and water fill-ups. **www.visitforestcitypa.com**

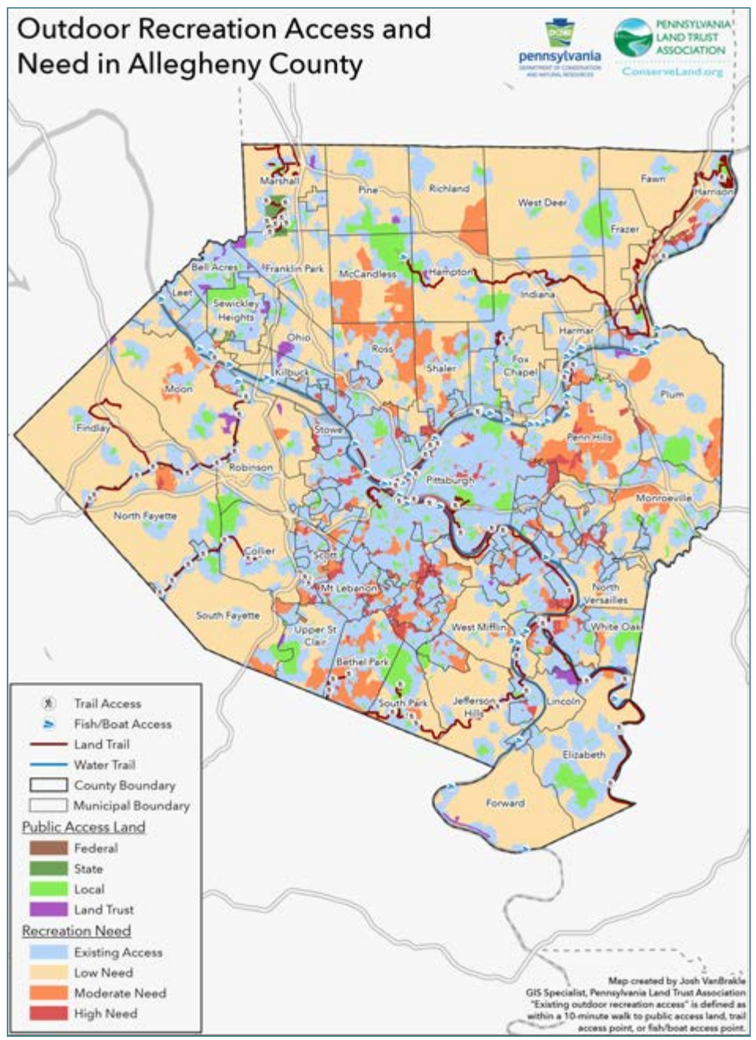
(Provider Survey). Particularly in established outdoor recreation institutions, the traditional bureaucratic methods that have served them well for decades may struggle to keep pace with the ever-shifting patterns of technology use by their visitors.

If anything, the pace of technological change will accelerate as time goes on. Outdoor recreation providers will therefore need to adjust the ways they manage technology in their facilities, and consider frequent training to keep up with users. Providers may need to rely on crowdsourcing data from visitors rather than using staff to collect information. They may also need to encourage the use of existing, third-party outdoor recreation apps rather than creating their own

Better prepared land managers and visitors

Technology can enhance not just user experiences but also the way outdoor recreation facilities are planned and maintained. For the first time, this outdoor recreation plan used GIS analysis to assess who has access to parks, trails, and water in Pennsylvania. The analysis used data collected on park, open space, and trail locations—a recommendation from the last plan. By combining this data with road networks, it became possible to construct the areas within a 10-minute walk and a 10-minute drive of outdoor recreation facilities in Pennsylvania.

Furthermore, overlaying those results with U.S. Census data allowed for a detailed, first-of-its-kind understanding of which Pennsylvanians have—and, more importantly, lack—outdoor recreation access. These data layers can also be combined with health data



An example map using the 2020 outdoor recreation plan park and trail access analysis. County planners may be able to use maps like these to identify priority neighborhoods for new parks and trails based on the number of underserved citizens.

47% of recreation providers said that keeping up with technological changes was a significant or major challenge.

(Local Provider Survey)

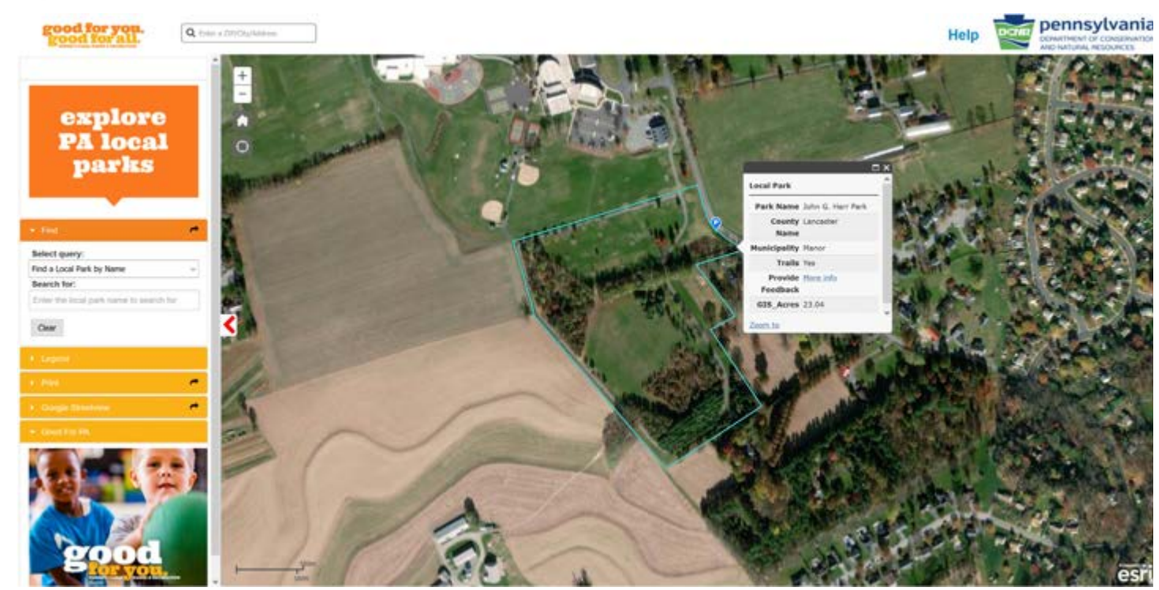
to determine communities who could most benefit from preventative health measures like outdoor exercise. The results of these analyses will help identify priority areas for new park and trail creation to maximize the public benefit of each dollar spent on outdoor recreation.

Continually maintaining, improving, and expanding critical outdoor recreation datasets such as Explore PA Trails, Explore PA Local Parks, and PA Conserved Land will ensure they are most useful for future planning and maintenance efforts.

These data rich tools can also be displayed on user-friendly web sites to help visitors prepare for their visits to outdoor spaces to manage expectations. Is it dog-friendly? Are there bathrooms? How easy are the trails? Expanding, updating, and enhancing these websites could further provide beneficial information to visitors, especially those visiting a location for the first time. Maps, for example, could transition from static printed products to web-based maps that include current condition information such as trail closures.

Many local parks departments have limited websites, if they have a web presence at all. For these parks, there may be opportunities to leverage work at the state level. Explore PA Local Parks, for instance, could become a surrogate website for local parks departments without a web presence. Parks departments could use links to send visitors directly to information about a park on Explore PA Local Parks. Doing so would provide many of the benefits of a website without the time and expense of maintaining one.

The use of deep links could provide an alternative for local parks departments that lack the resources to create and maintain their own website. Departments could use a general township page to link directly to park views on a broader statewide map like Explore PA Local Parks.



PRIORITY: Technology

Looking at how respondents use technology to aid in their outdoor recreation,

www.

80% said that they use the internet to find places to go or read reviews,

44% use GPS and

41% post their experiences to social media sites. Additionally,

29% use a fitness tracker, such as a Fitbit.

(Public Survey)

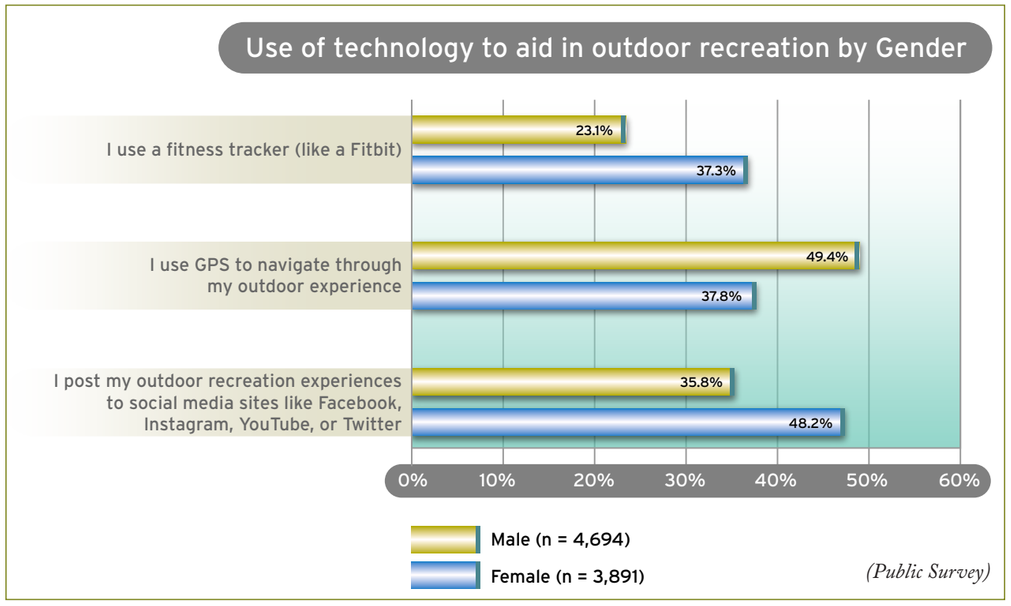
Enriching experiences

Technology has great power to distract, but it also has power to enhance outdoor connections if wielded appropriately. Perhaps the clearest example of this opportunity lies in the myriad of field guide smartphone apps. The Cornell Lab of Ornithology's Merlin app, for instance, helps users identify birds in the field based on their GPS location and the answers to a few simple questions. Similar apps exist for many other types of natural identification including stars and plants. Many of these apps are free and readily available.

Because of technology's rapid pace, it makes little sense for outdoor recreation providers to develop apps like these for their own facilities. New software resources are only encouraged when no existing resource adequately meets users' needs and where capacity exists to create them.

The same technology that enhances users' outdoor experiences can also have a conservation benefit. By combining observations from thousands of contributors, apps like iNaturalist and eBird offer scientists and land managers clues to the habits of and threats to wildlife.

"I already spend a lot of time participating in outdoor recreation, but I feel it is important to place an effort to get more younger folks outside. Since the younger generation is growing up in a technology driven environment, I believe it is becoming more important to have Wi-Fi availability and more interactive platforms that might fuel outdoor experiences and make it more appealing for all kinds of people to be outside." *–Public Survey Respondent*



Sources:

[1] Richard Louv, The Nature Principle: Reconnecting with Life in a Virtual Age, Algonquin Books: Chapel Hill, NC, 2012, 330 pp., p. 38.

[2] Pew Research Center, "Mobile Fact Sheet," June 12, 2019, accessed September 3, 2019, https://www.pewinternet.org/fact-sheet/mobile.

[3] Pew Research Center, "Internet/Broadband Fact Sheet," June 12, 2019, accessed September 4, 2019, https://www.pewinternet.org/fact-sheet/internet-broadband.

[4] Nielsen, "Time Flies: U.S. Adults Now Spend Nearly Half a Day Interacting with Media," July 31, 2018, accessed September 3, 2019, https://www.nielsen.com/us/en/insights/article/2018/time-flies-us-adults-now-spend-nearly-half-a-day-interacting-with-media.

[5] S. Fader, "Social Media Obsession and Anxiety," Anxiety and Depression Association of America, November 2018, accessed September 4, 2019, https://adaa.org/social-media-obsession.

[6] A. Bansal, C. Garg, A. Pakhare, and S. Gupta, "Selfies: A Boon or Bane?" Journal of Family Medicine and Primary Care, 2018, 7(4): 828-831, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6131996.

PRIORITY: Technology

RECOMMENDATIONS AND ACTIONS

1. Increase mobile connectivity in outdoor recreation.

a. Identify priority recreation areas for expanding cell phone coverage or deploying connectivity alternatives to enhance user experience and safety.

b. Develop a priority list of state park and forest Wi-Fi zones and partner with organizations to sponsor hotspots.

c. Use signage and online tools to communicate coverage and non-coverage areas to park, forest and trail visitors.

2. Develop best practices for emerging outdoor recreation technologies.

a. Develop an annual training session for recreation providers on the latest technology that improves recreation user experiences.

b. Disseminate educational programs and materials to help people use technology appropriately in outdoor settings.

3. Use technologies to support health goals and find places to recreate outdoors.

a. Update and expand existing recreation databases, maps, and apps to improve their accuracy and usability by recreation providers and the public.

b. Expand the use of existing apps and programs that make connections between outdoor recreation and fitness/wellness programs.

c. Overlay recreation GIS data layers with health data layers to determine areas of greatest need for recreation investment and potential connections.

4. Enrich the understanding of the natural, cultural, and historic aspects of the outdoors through technology.

a. Develop a virtual guide of existing apps and tools to help users navigate, learn about and enjoy the outdoors.

b. Build technology-based learning tours to help users more deeply learn about their outdoor experiences.

c. Provide technology-based opportunities for enthusiasts to gather and share their outdoor recreation experiences and engage in citizen science.

How This Plan is Used

While DCNR is the lead agency responsible for developing the plan, it is meant to be a guide for all of Pennsylvania's municipalities, counties, regional planning organizations, state agencies, non-profit partners, and outdoor recreation advocates. DCNR will use this plan to support its selection of state and federally funded grants, while partners will use it to guide planning, grant writing, and funding prioritization.

To support DCNR's State and Federal LWCF Open Project Grant Selection Process

DCNR's Bureau of Recreation and Conservation administers the Community Conservation Partnerships Grant Program, which funds park planning and development; land acquisitions; trail acquisition, planning and development; rivers conservation and riparian buffers; and partnerships. This plan provides the foundation for the criteria to evaluate and rank application submissions for state and LWCF grant funds. Pennsylvania's LWCF funding priorities for next five years include:

- **Development:** Rehabilitation of existing public parks, trails, and recreation areas focusing on the development of outdoor recreation amenities and waterway access.
- **Development:** Trail projects that would close Pennsylvania's Priority Trail Gaps.
- **Acquisition:** Acquisition of properties to support future public outdoor recreation opportunities.

DCNR follows a rigorous and formulaic competitive process to select grants using a grant manual, policies, standard operating procedures, and program instructions. The process begins with notification to all potentially eligible applicants of an open application period through various channels—media, newsletters, legislative, and an official notice in the Pennsylvania Bulletin. Once received, applications are scored based on standard selection criteria and ranked by at least two staff members. Joint meetings are conducted for final review, ranking, and recommendation to ensure fair evaluation and a full vetting of project needs, benefits, and issues. Selected applications that meet the LWCF program requirements and conform to DCNR's LWCF evaluation checklist are recommended to NPS for review and approval. Grant program information can be found at the following link: **https://www.dcnr.pa.gov/Communities/Grants/Pages/default.aspx**.

To support funding requests

DCNR's Bureau of Recreation and Conservation offers free, in-person grant workshops across Pennsylvania to provide training on its Community Conservation Partnerships Grant Program. Applicants will be asked to explain how their projects will help implement this 2020 plan and should consider which of the 70 actions further the 2020 plan priorities and recommendations. For each action step, the plan lists likely implementing partners, including county and municipal agencies, land trusts, heritage areas, etc. Public and nonprofit recreation providers are encouraged to use this plan's findings and recommendations to support funding requests to other state and federal agencies and private sources.

To guide regional, county, local, and strategic planning

For the first time in a state plan, Pennsylvania has evaluated equitable access to outdoor recreation areas and identified counties and municipalities with the greatest needs. All counties and municipalities now have access to data showing their communities' park, trail, or water 10-minute walk or drive score, which can be used when agencies are updating or developing new comprehensive plans. Additional local planning is needed to determine if residents can safely walk to a park and if the park is attractive and appealing to nearby residents. Questions local, county, and regional entities should consider when using this plan's supporting findings and studies include:

- Are there findings that were uncovered by this plan's process that should be explored when planning for a new local park or developing an open space plan?
- Could this plan's polling and survey questions be asked again for public input for a local plan?
- Is there an existing recreation or open space plan that should be updated to address this plan's five priorities and is health, equity and sustainable park systems also important locally?
- Can this plan be used to identify new areas of interest and provide support to better meet the outdoor recreation needs of all ages and abilities in a community?

To coordinate state and federal agency planning

Many agency representatives served on the plan's Technical Advisory Committee. Plan recommendations and actions have been coordinated with other state agency plans including PennDOT's Active Transportation Plan, DOH's State Health Improvement Plan, and PHMC's Pennsylvania Statewide Historic Preservation Plan. Over 12 state and federal agencies have agreed to serve as implementing partners for the plan's actions.

The Pennsylvania Department of Environmental Protection, Pennsylvania Game Commission and Fish and Boat Commission provided assistance to this plan with the update to Pennsylvania's waterways and wetlands report contained in the appendix. Agencies will continue to collaborate with the development of the 2020 update to DEP's Pennsylvania's Aquatic Resource Protection and Management Plan and the implementation of Pennsylvania's Wildlife Action Plan (2015-2025).

Outdoor enthusiasts and provider plan implementation ideas

OUTDOOR ENTHUSIASTS	LOCAL RECREATION AND PARK PROVIDERS
Plant trees at a local playground to provide shade for warmer temperatures	Attend Pennsylvania's Park Maintenance Institute training and learn how to manage more sustainable parks
Apply for DCNR's Pennsylvania Outdoor Corp positions (15- to 25-year-olds)	Become a Get Outdoors PA community partner and start new outdoor programs
Become an outdoor recreation mentor and teach someone how to kayak, hunt, or fish	Provide sunscreen dispensers at local parks and trail heads
Ask a family physician to become a Parks Rx supporter	Develop an easy 1-mile loop trail in a local park that is connected to nearby neighbors
Encourage local outdoor businesses to become bike-friendly	Partner with local senior centers to offer outdoor activities like bird watching
Use local trails to bike or walk to work, shops, or schools	Update local park and recreation plans with new state priorities like equity and health
Encourage local elected officials to provide consistent funding for parks and recreation facilities and programs	Include a connection to PALocalParks and ExplorePATrails on local recreation and park websites
Serve on a local planning committee to develop an active transportation plan	Adopt Young Lungs at Play and post no smoking/vaping signs at parks

HEALTH AND WELLNESS: Promoting Healthy Living Through Outdoor Connections

RECOMMENDATIONS AND ACTIONS STEPS	IMPLEMENTING PARTNERS
1. Educate on the connection between health and outdoor recreation.	
a. Compile and promote resources describing the physical and mental health benefits of outdoor recreation.	DCNR, DOH, PRPS, PPFF, APA
b. Deploy education campaigns on preventive measures to minimize health and safety risks like Lyme Disease and skin cancer.	Get Outdoors PA Partnership, PDE, APA community partners, county/local municipalities, trail organizations
c. Create an interagency health-based team to coordinate relevant state grant programs and implement a program that recognizes communities for demonstrating the connection between health and outdoor recreation.	PA Walkable Communities Collaborative DOH, DCNR, DCED, PDE, PennDOT, Aging
2. Support programs that connect health and outdoor recreation.	
a. Fund community-based programs that advance health and wellness and connect with outdoor recreation programming.	DCNR, DOH, community foundations, hospitals
b. Conduct peer-to-peer exchanges among recreation and conservation providers to share best practices for connecting health care providers and outdoor recreation opportunities.	PRPS, DCNR, PEC, Clearwater Conservancy, conservation landscapes, heritage areas
3. Equip health care providers with the tools needed to promote the health benefits of outdoor recreation.	
a. Define the benefits and best management practices of park/trail prescription programs and share with health care institutions to expand into new regions.	DCNR, PPC, PRPS, DOH, Clearwater Conservancy
b. Create a statewide learning network to share research and best practices online and at health summits.	DCNR, PPC, PDE, PRPS, DOH, PPFF, Aging, Clearwater Conservancy
4. Create walking and biking networks that provide safe, close-to-home access to recreation and encourage healthy behavior in communities.	
a. Fund and support at least 30 active transportation plans.	PA Walkable Communities Collaborative DOH, DCNR, PennDOT, MPOs, local/county municipalities
b. Close priority trail gaps to achieve the overall goal of having a trail within 10 minutes of every Pennsylvanian.	DCNR, PennDOT, MPOs, RPOs, TPL, PEC, NPS county/local municipalities, trail organizations
c. Create a Pennsylvania Safe Routes to Parks Program to achieve a goal of having a park within a 10-minute walk of every Pennsylvanian.	PA Walkable Communities Collaborative DCNR, DOH, PennDOT, DCED, PDE, Aging, TPL
d. Improve connections between mass transit and public outdoor recreation opportunities.	DCNR, PennDOT, MPOs, local transit authorities, county/local municipalities

RECREATION FOR ALL: Ensuring Equity in Access to Pennsylvania's Outdoors

RECOMMENDATIONS AND ACTIONS STEPS	IMPLEMENTING PARTNERS
1. Provide opportunities for everyone to regularly engage in outdoor recreation.	
a. Using The Trust for Public Land findings, prioritize communities without access to recreation areas and partner with county/local planners to improve access.	DCNR, TPL, PALTA, APA, county/local municipalities
b. Develop a pilot program with school districts and universities that uses joint use agreements allowing public access to outdoor recreation facilities after school hours.	DCNR, PDE, TPL, school districts, community colleges, universities, local recreation and park agencies
c. Expand recreation opportunities in priority communities through such amenities as pocket parks, splash pads and outdoor classrooms on vacant lots.	DCNR, PHS, TPL, WPC, APA, local recreation and park agencies, land trusts
2. Enhance recreational amenities to fit the needs and expectations of underserved people.	
a. Incorporate universal design practices to improve access for people of all abilities.	LVCIL, DCNR, PFBC, PPFF, county/local municipalities
b. Increase availability and promotion of adaptive facilities and equipment such as kayak launches, fishing access, and beach wheelchairs	DCNR, PPFF, PFBC, PRPS
c. Develop and promote easy trail loops in community and state parks.	DCNR, TPL, PALTA, PPFF/friends' groups, NPS, Landforce, county/local municipalities, trail organizations
d. Engage diverse users in the management, planning and design of outdoor recreation spaces and access opportunities.	DCNR, PRPS, PPFF, PHC, PEC, county/local municipalities
e. Expand DCNR's Peer Grant Program to provide assessments on how to be more inclusive.	DCNR, PRPS
f. Evaluate and update printed materials, displays and programs to include untold cultural stories and ensure inclusive historical content.	DCNR, PHMC, PHC, PDE, NPS conservation landscapes, heritage areas, county/local municipalities

3. Provide equitable access to outdoor recreation and conservation programs.	
a. Expand skills-based learning opportunities for outdoor recreation activities targeted specifically for individuals with limited access to outdoor experiences.	Get Outdoors PA Partnership, Landforce, APA, community partners, local recreation and park agencies
b. Increase access to "First Time" equipment kits and public programs in outdoor recreation.	Get Outdoors PA Partnership, APA, community partners, local recreation and park agencies
c. Increase partnerships with historic and cultural organizations to develop joint programming that combines art, humanities and history with the outdoors.	DCNR, PCA, PHC, PHMC, PDE, Landforce, heritage areas, conservation landscapes
d. Adapt existing toolkits to establish a Pennsylvania-based guide for improving diversity, equity and inclusion in outdoor recreation programs.	PRPS, DCNR, PDE
4. Build a diverse workforce and volunteer base.	
a. Develop apprenticeship programs and expand internship opportunities for young adults from diverse backgrounds, including people of color, interested in recreation and conservation employment positions.	DCNR, DEP, PDE, Landforce, APA, county/local municipalities, land trusts
b. Sustain the PA Outdoor Corps Program by implementing a strategic plan and diversifying funding and community partners.	DDCNR, L&I, PPFF, private funders
c. Create a mentoring program and resources to encourage outdoor enthusiasts from diverse backgrounds, including people of color, to become program volunteers.	Get Outdoors PA Partnership, PPFF, DCNR, PRPS, APA, friends' groups, county/local municipalities, land trusts

SUSTAINABLE SYSTEMS: Protecting and Adapting Our Resources

RECOMMENDATIONS AND ACTIONS STEPS	IMPLEMENTING PARTNERS
1. Address infrastructure and maintenance needs in Pennsylvania's existing outdoor recreation areas.	
a. Develop three pilot projects on public lands that demonstrate best management practices on how to retire redundant roads to accommodate high-impact trail activities.	DCNR
b. Increase capacity of public land managers to maintain infrastructure by securing necessary staffing and funding levels and increasing intra/interagency cooperation.	DCNR, PGC, PFBC, PennDOT, county/local municipalities
c. Support Pennsylvania's Park Maintenance Institute to provide training on best sustainable park/trail practices.	PRPS, DCNR, Landforce, private foundations
d. Enlist 1,200 young people in the PA Outdoor Corps by 2024 to address recreation infrastructure needs and improve visitor experience.	DCNR, PPFF, L&I, conservation landscapes
2. Protect and conserve lands and waters considering the impacts of climate change on outdoor recreation.	
a. Design and construct ecologically sensitive and resilient infrastructure to accommodate increased stormwater flows and changing water levels.	DCNR, PFBC, PGC, Landforce, APA, county/local municipalities
b. Design and implement climate resilient pilot projects where public open space and parks can address water quality improvements, reduce invasives, connect priority lands through wildlife corridors and greenways, and enhance ecosystem services.	DCNR, PGC, PALTA, PFBC, DEP, PDE, TPL, Landforce, APA, county/local municipalities, land trusts, trail and greenway organizations
c. Provide demonstration areas and incentives for using only native plants, or plants better adapted to future climatic conditions, and pollinators in outdoor recreation areas.	DCNR, PGC, PFBC, DEP, PDE, APA, county/local municipalities, land trusts, trail and greenway organizations
d. Using data on recreational facility locations and climate change projections, evaluate the areas with the greatest need for water-based recreation access and increase opportunities.	DCNR, TPL, PRPS, PFBC, PEC, local watershed organizations, water trail managers
e. Conserve 100,000 acres of land with a priority in climate resilient landscapes and urban areas with a lack of green space.	DCNR, PALTA, PGC, Landforce, APA conservation landscapes, county/local municipalities, land trusts
f. Plant 100,000 trees in outdoor recreation areas.	Pennsylvania TreeVitalize Partnership, DCNR, local municipalities, land trusts

3. Foster stewardship for Pennsylvania's recreation areas and natural, cultural and historic resources.	
a. Identify best management practices and provide training for managing human impacts on public recreation areas.	DCNR, PRPS, PALTA, Landforce, APA, county/local municipalities, land trusts
b. Implement a "Love Your Park Week in Pennsylvania" to strengthen volunteer activities and raise awareness of stewardship of public lands.	PRPS, PPFF, DCNR, DEP, PDE, PALTA, APA, county/local municipalities, land trusts, trail and greenway organizations
c. Double the number of trainers and specialists in Leave No Trace™ principles to expand training for outdoor recreation providers.	Get Outdoors PA Partnership, DCNR, PPFF, friends' groups, local recreation and park agencies, land trusts
d. Develop a communication strategy that uses existing media campaigns and technology platforms to educate recreation users on proper safety and etiquette when recreating outdoors.	DCNR, DOH, PPFF, PGC, PennDOT
e. Connect and promote existing digital platforms that support friends' groups, volunteer days and single-day stewardship events.	DCNR, PPFF, friends' groups, watershed organizations, land trusts, trail organizations
4. Design outdoor recreation areas to minimize impacts on the environment or conflicts among user groups.	
a. Develop opportunities for high-impact recreation and urban green space on restored brownfields to support economic development and stewardship opportunities.	DEP, DCNR, DCED, TPL, NPS, Landforce, APA, county/local municipalities, trail organizations
b. Conduct three pilot projects to analyze environmental and staffing capacity on public lands and natural areas and use the data to inform future land management decisions.	DCNR
c. Encourage professionals involved in the design of new parks or park renovations to be certified in sustainable landscape techniques and practices.	Pennsylvania Park Maintenance Institute, DCNR

FUNDING AND ECONOMIC DEVELOPMENT: Elevating Outdoor Recreation

RECOMMENDATIONS AND ACTIONS STEPS	IMPLEMENTING PARTNERS
1. Protect and expand public and private investments in outdoor recreation.	
a. Develop programs with retail businesses that enable consumers to contribute to recreation projects through donations when purchasing outdoor goods and services.	DCNR, PALTA, PPFF, APA, conservation landscapes, heritage areas, land trusts, outdoor recreation businesses
b. Advocate for the increase in state and local funding to ensure outdoor recreation remains a vital public service.	PALTA, PPFF, PRPS, PEC, TPL, APA
c. Advocate for the reauthorization and increased funding of the federal Recreational Trails and Transportation Alternatives programs and full funding of the Land and Water Conservation Fund.	DCNR, PennDOT, PEC, RTC, TPL, PPFF, PALTA, APA, county/local municipalities, trail organizations
d. Address the maintenance needs of our public outdoor recreation lands by increasing dedicated government funding and leveraging private philanthropy and strategic partnerships.	PALTA, PRPS, PPFF, DCNR, APA, county/local municipalities, private foundations
e. Educate local governments and nonprofits through guides and web-based resources on how to leverage local investments for recreation and conservation initiatives like passing successful open space referendums.	PALTA, TPL, DCNR, DCED, APA
2. Build strategic coalitions to maximize the economic impacts of outdoor recreation in Pennsylvania.	
a. Create a Pennsylvania Office of Outdoor Recreation supported by a statewide coalition to strengthen the outdoor recreation economy.	DCNR, PEC, DCED, outdoor recreation businesses
b. Create regional coalitions with community leaders, tourism agencies and businesses to strengthen outdoor towns and destinations.	DCED, DCNR, PennDOT, PCA, PEC, NPS, Landforce, heritage areas, conservation landscapes, DMOS (TPAs) county/local municipalities
c. Support the creation of friends' groups and strategic coalitions to assist local communities in protecting and enhancing local outdoor recreation resources.	PRPS, DCNR, county/local municipalities, conservation landscapes
3. Market Pennsylvania as an outdoor recreation destination.	
a. Create a branding strategy for Pennsylvania's outdoors and provide consistent messaging about the state's outdoor assets.	DCED, DCNR
b. Increase collaboration, data-sharing and funding among state agencies and develop campaigns to position Pennsylvania as an international outdoor recreation destination.	DCED, DCNR
c. Improve marketing and messaging to reflect the diversity of outdoor recreation participants and activities.	DCED, DCNR, DMOs (TPAs)
4. Demonstrate the benefits and impacts of nature-based solutions to addressing community needs.	
a. Demonstrate the value of investing in green infrastructure to create more resilient and sustainable recreation facilities that will support multiple community needs.	DCNR, DEP, PDE, PALTA, PEC, TPL, Landforce, APA,county/local municipalities
b. Provide technical assistance to communities on how to retain and attract residents and businesses using outdoor recreation assets.	PEC, DCED, DCNR, heritage areas, conservation landscapes
c. Create a rapid response fund that would facilitate resources and grants for emergency repairs of outdoor recreation amenities due to severe weather events.	PRPS, PALTA, RTC, PEC, DCNR

TECHNOLOGY: Using New Tools to Improve Engagement

RECOMMENDATIONS AND ACTIONS STEPS	IMPLEMENTING PARTNERS
1. Increase mobile connectivity in outdoor recreation.	
a. Identify priority recreation areas for expanding cell phone coverage or deploying connectivity alternatives to enhance user experience and safety.	Commonwealth Broadband team
b. Develop a priority list of state park and forest Wi-Fi zones and partner with organizations to sponsor hotspots.	DCNR, PPFF
c. Use signage and online tools to communicate coverage and non-coverage areas to park, forest and trail visitors.	DCNR
2. Develop best practices for emerging outdoor recreation technologies.	
a. Develop an annual training session for recreation providers on the latest technology that improves recreation user experiences.	Get Outdoors PA Partnership
b. Disseminate educational programs and materials to help people use technology appropriately in outdoor settings.	Get Outdoors PA Partnership PDE, community partners
3. Use technologies to support health goals and find places to recreate outdoors.	
a. Update and expand existing recreation databases, maps and apps to improve their accuracy and usability by recreation providers and the public.	PALTA, DCNR, PFBC, APA, counties/local municipalities, land trusts
b. Expand the use of existing apps and programs that make connections between outdoor recreation and fitness/wellness programs.	PALTA, DCNR, PEC, conservation landscapes, heritage areas, land trusts, local recreation and park agencies
c. Overlay recreation GIS data layers with health data layers to determine areas of greatest need for recreation investment and potential connections.	DCNR, DOH, TPL
4. Enrich the understanding of the natural, cultural and historic aspects of the outdoors through technology.	
a. Develop a virtual guide of existing apps and tools to help users navigate, learn about and enjoy the outdoors.	PAEE, DCNR
b. Build technology-based learning tours to help users more deeply learn about their outdoor experiences.	PAEE, DCNR
c. Provide technology-based opportunities for enthusiasts to gather and share their outdoor recreation experiences and engage in citizen science.	PAEE, DCNR, PDE, APA

Acronyms

Acronyms for Agencies, Organizations and Terms Referred to in Plan

ADA	Americans with Disabilities Act
APA	Audubon PA
ANF	Allegheny National Forest
ATV	All-Terrain Vehicle
CCAP	County Commissioners Association of Pennsylvania
CDC	Center for Disease Control
CFA	Commonwealth Financing Authority
CRP	Center for Rural PA
DCED*	Department of Community and Economic Development
DCNR*	Department of Conservation and Natural Resources
DEI	Diversity, Equity and Inclusion
DEP*	Department of Environmental Protection
DOA*	Department of Aging
DOH*	Department of Health
GIS	Geographic Information Systems
KTA	Keystone Trails Association
LEED	Leadership in Energy and Environmental Design
L&I*	Pennsylvania Department of Labor and Industry
LVCIL	Lehigh Valley Center for Independent Living
LWCF	Land and Water Conservation Fund
NPS	National Park Service
NWTF	National Wild Turkey Federation
OHV	Off-Highway Vehicle
PALTA	Pennsylvania Land Trust Association
PCA	Pennsylvania Council of the Arts
PDA*	Pennsylvania Department of Agriculture
PDC	Pennsylvania Downtown Center
PDE*	Pennsylvania Department of Education
PEC	Pennsylvania Environmental Council
PennDOT*	Pennsylvania Department of Transportation
PFBC*	Pennsylvania Fish and Boat Commission
PFSC	Pennsylvania Federation of Sportsmen's Clubs
PGC*	Pennsylvania Game Commission
PHC	PA Humanities Council
PHMC*	Pennsylvania Historical and Museum Commission
PHS	Pennsylvania Horticultural Society
PLM	Pennsylvania League of Municipalities
PPC	Pittsburgh Parks Conservancy
PPFF	Pennsylvania Parks & Forests Foundation
PRPS	Pennsylvania Recreation & Park Society
PSAB	Pennsylvania State Association of Boroughs
PSSA	Pennsylvania State Snowmobile Association
PSATS	Pennsylvania State Association of Township Supervisors
PSU	Pennsylvania State University
RTC	Rails-to-Trails Conservancy
SCORP	Statewide Comprehensive Outdoor Recreation Plan
TAC	Technical Advisory Committee
TPA	Tourism Promotion Agency
TPL	Trust for Public Land
TU	Trout Unlimited
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WPC	Western Pennsylvania Conservancy

**Indicates Pennsylvania state agency*