

## 2018-2022 Show Me the Missouri Outdoors

The Statewide Comprehensive Outdoor Recreation Plan for Missouri


GOVERNOR
State of Missouri

## Dear Fellow Missourians:

It is with great pleasure that I present to you the 2018-2022 Show Me the Great Outdoors Report. The report is the Statewide Comprehensive Outdoor Recreation Plan for Missouri. The purpose of the report is to identify outdoor recreation issues of statewide significance and evaluate the supply and demand of public outdoor recreation resources in the State. The report also provides guidance for future development and expansion of outdoor recreation opportunities in Missouri. This five-year planning document meets Land and Water Conservation Fund grant requirements and ensures that Missouri remains eligible for federal outdoor recreation project funding.

The process for soliciting public input for the 2018-2022 Show Me the Great Outdoors Report took a multi-faceted approach, with special emphasis on children, teens, and families. The plan includes survey results from outdoor recreation professionals that identify specific recreation needs in Missouri communities. In addition, an advisory committee of federal, state, and local public recreation providers, as well as experts in other fields, came together to help shape the recommendations outlined in the report.

Using the results from focus groups and surveys, the advisory committee identified seven broad goals for enhancing outdoor recreation opportunities in Missouri:

- Expand recreational opportunities that serve multiple generations and user types, target underserved populations, and incorporate universal design principles;
- Expand Missouri's statewide trail system and promote trails as a critical component to engaging in an active and healthy lifestyle;
- Leverage Land and Water Conservation Fund grant financing to replace obsolete recreational facilities, address safety issues, and encourage long-term sustainability of projects;
- Connect youth to the outdoor world through environmental education, stewardship opportunities, and project-based learning;
- Promote the health and community benefits of the outdoors through partnerships, messaging, and programming;
- Promote and identify grant and other funding opportunities that expand outdoor recreation facilities and activities; and
- Continue data collection, research efforts, and spatial analysis to identify areas of greatest recreation need.

It is my hope that the information presented within this plan will provide assistance and guidance as we work together to protect, improve, and expand the Show-Me State's tremendous outdoor opportunities.


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## LIST OF ACRONYMS

ADA - Americans with Disabilities Act
CDC - Centers for Disease Control and Prevention
COA - Conservation Opportunity Area
DESE - Missouri Department of Elementary and Secondary Education
DHSS - Missouri Department of Health and Senior Services
ESIP - Eat Smart in Parks
GRG - Great Rivers Greenway
FEMA - Federal Emergency Management Agency
FFA - Future Farmers of America
LWCF - Land and Water Conservation Fund
MDC - Missouri Department of Conservation
MoDNR - Missouri Department of Natural Resources
MoNASP - Missouri National Archery in Schools Program
MPA - Missouri Park Association
MPRA - Missouri Parks and Recreation Association
MTAB - Missouri Trails Advisory Board
NAMI - National Alliance on Mental Illness
NHS - National Honor Society
NPS - National Park Service
NRPA - National Recreation and Park Association
OCS - Outer Continental Shelf
OIA - Outdoor Industry Association
RTP - Recreational Trails Program
OPSP - Open Project Selection Process
SAMHSA - Substance Abuse and Mental Health Services Administration
SCORP - Statewide Comprehensive Outdoor Recreation Plan
TPL - Trust for Public Land
ULI - Urban Land Institute
UPOP - Urban Populations Outreach Program
ORLPP - Outdoor Recreation Legacy Partnership Program
USACE - United States Army Corps of Engineers
USDA - United States Department of Agriculture
USFWS - United States Fish and Wildlife Service
USFS - United States Forest Service

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## INTRODUCTION

From neighborhood pocket parks to sprawling county sports complexes, Missouri's outdoor recreation offerings are as diverse as its landscapes. The Show-Me State, as Missouri is affectionately known, is replete with recreational resources. Managing these resources to ensure public access is a complex task, as is the task of ensuring these resources are adequately funded for their continued enjoyment by future generations. The 20182022 Show Me the Great Outdoors plan provides a framework for inventorying the state's recreational resources, by assessing public trends and needs, by identifying issues that face recreation providers, and by identifying gaps in the spectrum of outdoor recreation facilities across the state.

The 2018-2022 Show Me the Great Outdoors plan is the Statewide Comprehensive Outdoor Recreation Plan (SCORP) for Missouri. The SCORP is a five-year planning document required by the federal Land and Water Conservation Fund (LWCF) grant program. The purpose of the SCORP is to identify outdoor recreation issues of statewide significance and evaluate the supply of and demand for outdoor recreation resources and facilities in the state.

The SCORP provides guidance to state and municipal agencies as they develop and expand outdoor recreation opportunities for their respective constituents and jurisdictions.

As stated in its name, the plan must be comprehensive. According to LWCF requirements, a SCORP is considered comprehensive if it:

- Identifies outdoor recreation issues of statewide importance based on, but not limited to, input from public participation. The plan must also identify those issues that will be addressed through the LWCF grant process and those issues which may be addressed by other means.
- Evaluates demand, i.e., public outdoor recreation preferences.
- Evaluates the supply of outdoor recreation resources and facilities in the state.

Additionally, the plan must have an implementation program that identifies Missouri's strategies, priorities, and actions for the obligation of its annual LWCF grant apportionment. The implementation program must be of sufficient detail for use in developing project selection criteria for Missouri's Open

Project Selection Process (OPSP), the process by which potential grant projects are reviewed and recommended for LWCF funding each year.

## History of the LWCF Program

The Land and Water Conservation Fund was established by the LWCF Act in 1965. The fund launched the LWCF State Assistance Program, which provides 50/50 matching grants to states and local governments for the acquisition and development of public outdoor recreation areas and facilities. The program is intended to create and maintain a nationwide legacy of high quality recreation areas and facilities and to stimulate nonfederal investments in the protection and maintenance of recreation resources across the United States.

Revenue for the LWCF program is derived from oil and gas leasing in the Outer Continental Shelf (OCS). Since the inception of LWCF, \$18.4 billion has been generated from these offshore leases, nearly $\$ 4.7$ billion of which has been made available to state and local governments to fund more than 42,000 projects throughout the nation. Most of these projects have gone to county and municipal governments to provide close-to-home recreation opportunities.

The Department of Interior's National Park Service (NPS) oversees the LWCF State Assistance Program and has delegated administration of the program to each state. In Missouri, the Department of Natural Resources (MoDNR) administers the program. Direct oversight of the program is performed by the Division of State Parks. Since the advent of the LWCF State Assistance Program in 1965, MoDNR has granted nearly $\$ 90$ million in funding to more than 1,600 projects statewide, with at least one LWCF project to be found in every county in the state. Map 1 on page 4 shows the distribution of LWCF projects statewide, and demonstrates the enormity of the impact the grant program has had on the state.

## LWCF Stewardship Requirements

The benefits of LWCF extend beyond park and recreation facility construction and open space acquisition. The fund also plays a major stewardship role. It ensures the integrity and recreational quality of fund-assisted parks and conservation lands, now and for future generations. When a LWCF grant is accepted, the project must remain dedicated to public outdoor recreation use in perpetuity. LWCF's most important tool for ensuring perpetual stewardship is its "conversion protection" requirement.

This protection requirement is outlined in Section 6(f)(3) of the LWCF Act and strongly discourages casual discards and conversions of LWCF-funded park and recreation facilities to other uses. Section 6(f)(3) specifically states, "No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location." If a LWCF-assisted park or project is "converted" from its original intent and made no longer available to the public for outdoor recreation, then an equivalent replacement must be provided by the grant recipient.

The conversion protection outlined in Section $6(f)(3)$ of the LWCF Act serves as both an opportunity and a challenge for grant recipients, particularly local governments. It protects a park from facilities that are incompatible with outdoor recreation and can assist an agency in fending off undesirable development proposals. Conversely, it can lead to the unintended consequence of a community struggling to financially support a park in perpetuity. This is especially true in smaller communities experiencing declining
populations and a shrinking tax base. This issue will be discussed in more detail in the following pages, along with other issues pertinent to recreation provision within the state.

## Summary

Over the next several chapters, the 2018-2022 Show Me the Great Outdoors plan will explore issues and trends facing both the state and recreation providers, provide an assessment of
the physical recreation resources that currently exist in Missouri, and discuss key findings from public surveys and focus groups regarding demand for recreation facilities and programs. Using this information, the Show Me plan will outline priority areas in which to focus future funding and partnership efforts, in order to develop a comprehensive statewide roadmap for the future of outdoor recreation in Missouri.

Map 1. LWCF Project Sites in Missouri


## RECREATION RESOURCES

Much of Missouri's incredible diversity of natural features and subsequent recreational opportunities are a direct result of its location at the intersection of the Great Plains with the Ozark Plateau. Situated on the eastern edges of the Great Plains, northern and portions of western Missouri were once covered by vast prairies, remnant pockets of which still exist at places such as Prairie State Park. These fertile plains bisected by rivers and streams now make up a large portion of the state's agricultural landscape.

South of the Missouri River is the Ozark Plateau. The karst topography of this heavily-wooded region contributes to Missouri's moniker as the "cave state," with most of the state's nearly 6,400 caves to be found in this area. In the southeast region of the Ozark Plateau stand the St. Francois Mountains, older than the Appalachian Mountains and containing the highest point in Missouri, Taum Sauk Mountain.

The Bootheel region, located in the far southeast corner of the state, was once covered in swamps and lowland forests more typical of the Mississippi coastal forests of Louisiana and Mississippi. The last remaining cypress swamp from this region is preserved at Big Oak Tree State Park.

Two of America's most important waterways flow through Missouri - the Mississippi River, which snakes along the state's entire eastern border; and the Missouri River, which slices through the middle of the state. Many additional rivers and streams flow through the state, making Missouri a paddler's paradise. Two rivers - the Current and Jacks Fork rivers are part of the Ozark National Scenic Riverways, the first national park area to protect a river system. Additionally, a 44-mile section of the Eleven Point River has been designated a National Wild and Scenic River and is managed by the U.S. Forest Service.

Several major lakes contribute to the waterbased recreation opportunities within Missouri, including the 55,000-acre Lake of the Ozarks, the largest lake in the state and a major resort destination. Other lakes include Mark Twain and Long Branch lakes in the north; Longview, Smithville, and Blue Springs lakes in the Kansas City region; Truman, Pomme de Terre, and Stockton lakes in the southwest region of the state; Clearwater and Wappapello lakes in the southeast; and Table Rock and Bull Shoals along the southern border.

## Missouri Public Outdoor Recreation Providers <br> Missouri is fortunate in that it has a cadre of federal, state, and local government providers

managing the diversity of its recreation offerings. Each has a critical niche to fill federal managers protect the state's resources of national significance, state managers protect resources of statewide import and provide compatible recreational opportunities, and local agencies provide close-to-home recreational opportunities for their community residents. Public land in Missouri totals approximately three million acres, which accounts for about $6.6 \%$ of its $44,248,320$ total acres. The map on the following page depicts the locations of public lands in Missouri by agency type as well as depicts a dot distribution of all local outdoor recreation sites, where one dot is equivalent to one site.

Table 1. Acreage of Public Lands in Missouri

| Public Lands | Acreage |
| :--- | ---: |
| Federal | $1,636,598^{1}$ |
| State | $1,160,730$ |
| Local | $112,030^{*}$ |
| Total | $2,909,358$ |

*Estimate based on community inventory as described below.

## Local Recreation Providers

Missouri is home to 114 counties and one independent city (St. Louis), and 952 incorporated places. ${ }^{2}$ Many of these counties, cities, towns, and villages fill an essential role in providing close-to-home recreation opportunities for their residents. In many cases, public school districts also contribute to the outdoor recreation opportunities within a community, oftentimes as the sole provider of the local playground, ballfield, play court or walking track. In fact, a 2010 study found that $71 \%$ of school districts in Missouri had adopted a joint community use policy allowing their outdoor recreation facilities to be used by community residents outside of school hours. ${ }^{3}$

During the SCORP research phase, an inventory was undertaken to identify local public recreation providers and local recreation sites. A list of incorporated places with public parks and other outdoor recreation facilities was
compiled using Missouri's LWCF database of grant recipients, self-reported data from members of the Missouri Parks and Recreation Association, a search of local parks and recreation department websites, and a review of online aerial maps. GPS data points were assigned to individual locations identified as outdoor recreation sites and a list of specific facility types was assembled in a database.

Missouri's park to population ratio of one park per every 2,191 residents is very similar to the national average of one park per every 2,114 residents. ${ }^{4}$ Local public recreation providers in the state range in size from small communities with one park managed by City Hall to large municipal and county park and recreation agencies with thousands of acres of parkland. The most common types of recreation facilities across the park spectrum include picnic shelters, ballfields, playgrounds, tennis courts, and basketball courts. Table 2 lists the frequency of facility types for local recreation providers.

Not surprisingly, the largest recreation providers are associated with large population centers in the state - Jackson County, St. Louis County, City of Kansas City, Clay County, St. Charles County, City of Columbia, SpringfieldGreene County, and the City of St. Louis. More unexpected, however, are the number of small communities that also contain parks. Over 200 Missouri communities with populations of 500 or less contain at least one park or outdoor recreation facility. A quarter (26\%) of these communities received LWCF grants sometime in the past, underscoring the importance of the LWCF program to smaller communities with limited resources. The vast majority ( $88 \%$ ) of these grants, however, were distributed in the early decades of the LWCF program. Very few of these smaller communities have received


Source: MODNR, MODOT, USFWS
subsequent grant funding for much-needed improvements to their aging park facilities, underlying the difficulty many of these communities face in leveraging non-federal match dollars.

Although over 200 cities within Missouri have established local sales taxes to fund parks and stormwater improvements, the lack of a consistent funding system still plagues many parks and recreation agencies, as indicated in the Recreation Providers Survey. Future LWCF funding priorities should focus on rehabilitating aging park infrastructure, particularly in smaller communities. Additionally, a concerted effort


Many smaller communities struggle with finding funds to renovate existing LWCF project sites.
needs to be undertaken to assist communities in finding non-federal funding sources to be used as grant match.

In addition to revealing the need to emphasize rehabilitation of aging infrastructure, the inventory process also exposed the need for a more comprehensive mechanism for assembling park and facility data. Priority should be given to developing a GIS-based asset management system of park locations with area boundaries and facility types. This is especially critical for LWCF project sites, to ensure Section $6(f)(3)$ boundaries are maintained in perpetuity.

Table 2. Local Public Recreation Providers Frequency of Facility Types

| Facility Type | Number |
| :--- | ---: |
| Shelters/Pavilions | 2,273 |
| Baseball/Softball Fields | 1,697 |
| Playgrounds | 1,196 |
| Tennis Courts | 868 |
| Basketball Courts | 859 |
| Soccer Fields | 571 |
| Concession Stands | 389 |
| Volleyball/Sand Volleyball Courts | 284 |
| Lakes/Ponds | 279 |
| Indoor/Outdoor Pools/Aquatic Centers | 274 |
| Nature Areas | 224 |
| Community/Recreation/Civic Centers | 198 |
| Historic Structures/Museums | 123 |
| Gymnasiums/Field Houses | 175 |
| Amphitheaters/Outdoor Classrooms | 95 |
| Skateboard/Skate Parks | 94 |
| Disc Golf Courses | 74 |
| Multi-use/Practice Fields | 70 |
| Public Golf Courses | 68 |
| Splash Pads/Spray Gardens | 65 |
| Dog Parks | 59 |
| Football Fields | 43 |
| Inclusive Playgrounds* | 38 |
| Campgrounds (1,802 individual campsites) | 23 |
| Community Gardens | 20 |
| Ice Rinks | 1,587 |
|  | Miles of Trail |
| Cous |  |

*Counted separately from playgrounds because of the specialized nature of the equipment.

## State Recreation Providers

Missouri is distinctive among many states in that it has two state agencies responsible for managing the state's outdoor recreation resources. The Missouri Department of Conservation (MDC) manages the state's fish, forest and wildlife resources, while Missouri State Parks (MSP), a division of the Missouri Department of Natural Resources (MoDNR), preserves the state's outstanding natural landscapes and cultural landmarks. Both agencies are funded by sales taxes approved by the citizens of Missouri - the $1 / 8^{\text {th }}$ cent Design for Conservation Sales Tax that funds MDC and the $1 / 10^{\text {th }}$ cent Parks, Soils, and Water Sales tax
that funds MSP. Both sales taxes demonstrate the importance of resource protection and outdoor recreation to Missouri's citizenry.

## Missouri Department of Conservation

The Missouri Department of Conservation administers 1,027 properties, totaling over one million acres statewide. ${ }^{5}$ MDC sites offer a variety of outdoor recreation opportunities, including fishing, hunting, trapping, wildlife viewing, camping, and gun and archery target practice. Table 3 lists the number of facilities by activity that the department manages. Additionally, the department operates seven nature centers and seven interpretive sites that are open to the public. Together, these centers and sites see more than 800,000 visitors each year and host over 186,850 programs. ${ }^{6}$

Table 3. MDC Facilities By Activity

| Activity |  |
| :--- | ---: |
| Biking | 52 |
| Boating | 402 |
| Camping | 330 |
| Fishing | 763 |
| Hiking | 179 |
| Horseback Riding | 44 |
| Hunting | 537 |
| Picnicking | 95 |
| Target Shooting | 73 |

## Missouri State Parks

Missouri's state park system plays a unique role in providing parks, open spaces and cultural opportunities for local citizens. Generally, local and community parks focus on providing recreation and open spaces close to home. National parks were created to preserve natural and historic wonders of national and international significance. Missouri's state park system fits somewhere in between: it preserves and interprets landscapes and cultural features of at least statewide or regional significance and provides appropriate or compatible recreation. The Missouri state park system encompasses over 160,000 acres, with 91 state parks and historic sites as well as the Roger Pryor Pioneer

Backcountry, a privately owned forest along the Current River cooperatively managed by the L-
A-D Foundation and Missouri State Parks (MSP). Missouri's state parks and sites provide a wide array of recreational opportunities and unique experiences, ranging from the tiny 0.3 -acre Benton Home State Historic Site to the substantial Lake of the Ozarks State Park, at $17,000+$ acres. Table 4 lists the state parks and historic sites within the system and their respective acreages. Within the system are more than 2,000 structures, 3,500 campsites, 194 cabins, almost 2,000 picnic sites, and nearly 1,200 miles of trail. These trails include opportunities for hikers, backpackers, bicycle riders, off-road vehicle users, and horseback riders. Missouri State Parks also boasts the longest developed rails-to-trail project in the nation, Katy Trail State Park. Additionally, 38 Natural Areas have been designated within the state park system, totaling nearly 20,000 acres.

The Missouri State Park system also includes state-designated Wild Areas. The Missouri Wild Area System was partially modeled after the National Wilderness Preservation System. Wild areas are protected for the benefits they provide for hiking and backpacking as well as the benefits they provide as outdoor classrooms for environmental education and as increasingly important reservoirs of scientific information. Typically, a wild area must be 1,000 or more acres in size. It must also appear to have been affected primarily by the forces of nature with limited interference by man, and to possess outstanding opportunities for solitude and unconfined recreation. Today, almost 23,000 acres at 12 state parks are designated as Missouri wild areas.

## Missouri Department of Agriculture

While not an outdoor recreation provider in the traditional sense, the Missouri Department of Agriculture manages the 400-acre Missouri State Fairgrounds. Site of the annual State Fair in August, the Fairgrounds also include a LWCFfunded campground, as well as a RTP-funded trail spur to the Katy Trail.

Table 4. Missouri State Park System Facilities and Acreage

| Facility | Acreage | Facility | Acreage |
| :---: | :---: | :---: | :---: |
| Arrow Rock State Historic Site | 167.39 | Lewis and Clark State Park | 189.13 |
| Dr. Edmund E. Babler Memorial State Park | 407.41 | Locust Creek Covered Bridge State Hist .Site | 32.22 |
| Sam A. Baker State Park | 5,323.62 | Long Branch State Park | 1,828.47 |
| Battle of Athens State Historic Site | 408.5 | Mastodon State Historic Site | 431.14 |
| Battle of Carthage State Historic Site | 7.4 | Meramec State Park | 6,896.33 |
| Battle of Island Mound State Historic Site | 40.0 | Missouri Mines State Historic Site | 64.59 |
| Battle of Lexington State Historic Site | 94.97 | Missouri State Museum |  |
| Battle of Pilot Knob State Historic Site | 77.4 | Montauk State Park | 2,920.12 |
| Bennett Spring State Park | 3,338.55 | Morris State Park | 161.22 |
| Thomas Hart Benton Home \& Studio State Historic Site | 0.32 | Jay Nixon State Park | 1,231.72 |
| Big Lake State Park | 407.41 | Onondaga State Park | 1,357.7 |
| Big Oak Tree State Park | 1,028.68 | Osage Village State Historic Site | 100 |
| Big Sugar Creek State Park | 2,025.54 | Ozark Mountain State Park | 1,011 |
| Bollinger Mill State Historic Site | 43.85 | Pershing State Park | 5,362.23 |
| Boone's Lick State Historic Site | 51.17 | Gen. John J. Pershing Boyhood Home State Hist. Site | 5.62 |
| Nathan Boone Homestead State Hist. Site | 400.2 | Pomme de Terre State Park | 734.44 |
| Bothwell Lodge State Historic Site | 246.91 | Prairie State Park | 3,955.26 |
| Bryant Creek State Park | 2,917.0 | Roger Pryor Pioneer Backcountry | 701.89 |
| Castlewood State Park | 1,818.77 | Roaring River State Park | 4,820.68 |
| Clark's Hill/Norton State Historic Site | 13.4 | Robertsville State Park | 1,224.65 |
| Confederate Memorial State Historic Site | 135.22 | Don Robinson State Park | 818.18 |
| Edward "Ted" \& Pat Jones-Confluence Point State Park | 1,121.43 | Rock Bridge Memorial State Park | 2,272.83 |
| Crowder State Park | 1,912.06 | Route 66 State Park | 424.02 |
| Cuivre River State Park | 6,426.94 | St. Francois State Park | 2,734.97 |
| Current River State Park | 839.0 | St. Joe State Park | 8,242.98 |
| Deutschheim State Historic Site | 0.69 | Sandy Creek Covered Bridge State Hist. Site | 211.78 |
| Dillard Mill State Historic Site | 131.77 | Sappington Cemetery State Hist. Site | 4.28 |
| Gov. Dunklin's Grave State Historic Site | 1.37 | Stockton State Park | 2,175.9 |
| Echo Bluff State Park | 476.62 | Table Rock State Park | 356.03 |
| Elephant Rocks State park | 133.75 | Taum Sauk Mountain State Park | 8,395.8 |
| Eleven Point State Park | 4,167.0 | Thousand Hills State Park | 3,078.97 |
| Finger Lakes State Park | 1,128.69 | Towosahgy State Historic Site | 64.0 |
| First Missouri State Capitol State Historic Site | 0.66 | Trail of Tears State Park | 3,415.39 |
| Graham Cave State Park | 386.13 | Truman Birthplace State Historic Site | 2.51 |
| Grand Gulf State Park | 321.96 | Harry S Truman State Park | 1,440.0 |
| Ha Ha Tonka State Park | 3,751.74 | Mark Twain State Park | 2,775.14 |
| Hawn State Park | 4,955.66 | Mark Twain Birthplace State Hist. Site | 13.0 |
| Hunter-Dawson State Historic Site | 19.80 | Felix Valle House State Historic Site | 12.29 |
| Illiniwek Village State Historic Site | 127.49 | Annie \& Able Van Meter State Park | 1,104.63 |
| Jefferson Landing State Historic Site | 1.27 | Wakonda State Park | 1,053.87 |
| Jewell Cemetery State Historic Site | 0.45 | Wallace State Park | 501.61 |
| Johnsons's Shut-Ins State Park | 9,432.27 | Washington State Park | 2,157.57 |
| Scott Joplin State Historic Site | 3.9 | Watkins Mill State Park | 876.22 |
| Katy Trail State Park | 3,541.1 | Watkins Woolen Mill State Historic Site | 624.0 |
| Knob Noster State Park | 3,934.38 | Weston Bend State Park | 1,133.08 |
| Lake of the Ozarks State Park | 17,666.18 | Union Covered Bridge State Historic Site | 1.24 |
| Lake Wappapello State Park | 1,854.23 |  |  |

## Federal Recreation Providers

In Missouri, federal agencies providing outdoor recreation include the Department of Interior's National Park Service and U.S. Fish and Wildlife Service, the Department of Agriculture's U.S. Forest Service, and the Department of Defense's U.S. Army Corps of Engineers.

## National Park Service

The National Park Service (NPS) manages six national park units totaling 54,405 acres in Missouri. These six units attract nearly three million visitors annually and generate nearly $\$ 204$ million in tourism revenue. ${ }^{7}$

The six National Park Service units include:

- George Washington Carver National Monument - located in Diamond in southwest Missouri, the monument preserves the birthplace and childhood home of the renowned African American agricultural botanist and educator.
- Gateway Arch National Park - located in St. Louis, the park reflects St. Louis' role in the $19^{\text {th }}$ century westward expansion of the U.S and Thomas Jefferson's role in opening the West.
- Ulysses S. Grant National Historic Site also located in St. Louis, this site preserves White Haven, the home of the former Civil


White Haven at Ulysses S. Grant National Historic Site

War general and $18^{\text {th }}$ president of the United States.

- Ozark National Scenic Riverways - the Ozark National Scenic Riverways preserves 134 miles of the Current and Jacks Fork rivers, in the southeast part of the state. The Current River, in particular, is of global conservation significance according to The Nature Conservancy and provides habitat for myriad aquatic species, many populations of which occur only in this river.
- Harry S Truman National Historic Site - the site preserves the home of President Truman, the nation's $33^{\text {rd }}$ president, in Independence, as well as the Truman Farm Home in Grandview. Both are within the Kansas City metropolitan area.
- Wilson's Creek National Battlefield located near Springfield in the southwest part of the state, Wilson's Creek was the first major Civil War battle fought west of the Mississippi River, and the site of the death of Nathaniel Lyon, the first Union general killed in action.

The National Park Service also manages the National Trails System. Established by the National Trails System Act of 1968, the system includes national scenic trails, national historic trails, national recreation trails, and side and connecting trails. Missouri is fortunate to have six national historic trails in the state, including the California, Lewis and Clark, Oregon, Pony Express, Santa Fe, and the Trail of Tears national historic trails.

## U.S. Fish and Wildlife Service

The National Wildlife Refuge System, within the U.S. Fish and Wildlife Service (USFWS), manages a national network of lands and waters set aside to conserve America's fish, wildlife, and plants. Additionally, the refuges provide wildlife-related recreation opportunities, such as hunting, fishing, wildlife viewing, and photography.

In Missouri, there are nine National Wildlife Refuges totaling 60,565 acres:

- Big Muddy National Fish and Wildlife

Refuge - seventeen units make up this refuge, with the majority scattered along the Missouri River. Three units - Panther Creek, West St. Clair and Moresi - are located south of the Missouri River on the western side of the state.

- Clarence Cannon National Wildlife Refuge - located in Pike County, the refuge is in the floodplain of the Mississippi river and is comprised of managed moist soil units, open water, wet meadows, and bottomland forest habitats.
- Great River National Wildlife Refuge - this refuge is made up of three divisions within the floodplain of the Mississippi River, only one of which is located in Missouri - the Fox Island Division located just south of the Iowa border near Alexandria.
- Loess Bluffs National Wildlife Refuge originally known as Squaw Creek National Wildlife Refuge, the name was changed to Loess Bluffs National Wildlife Refuge in 2017. The refuge includes wetlands, grasslands, and forests along the eastern edge of the Missouri River floodplain in the far northwest portion of the state.
- Middle Mississippi River National Wildlife Refuge - tracts in this refuge lie south of the confluence with the Missouri River, in a portion of the Mississippi River where river levels are not regulated by the lock and dam system. Harlow Island Division near Festus is the only unit within this refuge located in Missouri.
- Mingo National Wildlife Refuge - located in southeast Missouri in Stoddard and Wayne counties, Mingo National Wildlife Refuge preserves the swamps and bottomland hardwood forests left by an abandoned channel of the Mississippi River. It is also the site of the 7,730-acre Mingo Wilderness Area.
- Swan Lake National Wildlife Refuge located in north central part of the state, the refuge is managed for migratory birds including waterfowl, geese, and shorebirds.

It also provides natural habitat for many neo-tropical migrating species of birds.

- Ozark Cavefish National Wildlife Refuge located near Neosho in the southwest and acquired to protect a federally-threatened species, the Ozark cavefish, this refuge is closed to the public to avoid potential impact to the fish.
- Pilot Knob National Wildlife Refuge - the 90-acre refuge, a donation from the Pilot Knob Ore Company, is located atop Pilot Knob Mountain in Iron County. The refuge contains abandoned iron mine shafts excavated in the mid-1800s that have since become critical habitat for the federallyendangered Indiana bat. To avoid disturbance to the bats and for public safety, the refuge is closed to the public.


## U.S. Forest Service

The Mark Twain National Forest, managed by the U.S. Forest Service (USFS), encompasses 1,505,833 acres in 29 counties in central and southern Missouri. Mark Twain National Forest has a wide range of popular recreation opportunities, including over 750 miles of trails for hiking, horseback riding, mountain biking, and motorized use. Approximately 200 miles of the Ozark Trail wind through the forest. More than 350 miles of perennial streams, suitable for floating, canoeing, and kayaking, meander through its canopied expanses. The forest's more than 35 campgrounds offer visitors a variety of forest experiences, including semiprimitive and wilderness camping for solitude. The Mark Twain National Forest has seven Congressionally-designated Wilderness areas and 26,000 special areas that are managed for the protection of unusual environmental, recreation, cultural or historical resources, and for scientific or educational studies.

Additionally, a 44-mile section of the Eleven Point River, between Thomasville and the Highway 142 bridge near Gatewood in southeastern Missouri, is managed by the USFS as a National Wild and Scenic River. This section of the Eleven Point is free of impoundments
with a largely undeveloped shoreline and watershed.

## U.S. Army Corps of Engineers

The United States Army Corps of Engineers (USACE) is a U.S. federal agency under the Department of Defense, responsible for civil works projects in the U.S., such as dams, canals, flood protection, hydroelectric reservoirs, and other water resource projects. Additionally, the Corps provides outdoor recreation opportunities to the public, including hunting, fishing, hiking, camping, wildlife viewing, and equestrian use. The USACE operates 12 lakes within three districts in Missouri. Many of the recreational lands surrounding the Corps lakes are leased and managed by other recreation providers.

## Kansas City District:

- Blue Springs Lake - located in Lee’s Summit in the Kansas City Region, Blue Springs Lake recreational opportunities in Fleming Park are managed by Jackson County Parks + Rec. Amenities include campgrounds, trails, boat launches, a marina, and picnicking areas.
- Long Branch Lake - adjacent to Macon in north Missouri, the recreational opportunities at Long Branch Lake are managed by Missouri State Parks. Amenities at Long Branch State Park include boat ramps and a marina, a swimming beach, fishing locations, a campground, hiking trails, and the Chariton River Hills Natural Area.
- Longview Lake - also managed by Jackson County Parks + Rec, Longview Lake Park offers camping, a horse park, a public golf course, swimming, a softball complex, a marina, fishing, and picnicking.
- Pomme de Terre Lake - two state park locations in Pomme de Terre State Park Hermitage and Pittsburg - offer camping, boat launches, a marina, swimming beaches, fishing, and hiking trails. Eight

Water sports at Blue Springs Lake
other campgrounds are located along the lake, six of which are managed by the Corps.

- Smithville Lake - the recreational opportunities at Smithville Lake are managed by Clay County Parks, Recreation and Historic Sites. Amenities include swimming beaches, campgrounds, marinas, a dockside restaurant, two public 18-hole golf courses, disc golf courses, mountain bike and equestrian trails, fishing and hunting areas, and a native grassland restoration area.
- Stockton Lake - several campgrounds and boat access areas are located on Stockton Lake, as is Stockton State Park. Northwest of Springfield, the state park provides a marina with a sailing school, boat launches, fishing sites, a swimming beach, a campground, lodging cabins, and hiking and mountain biking trails. Additionally, the 20acre Bona Glade Natural Area is located within the Stockton Lake project area.
- Harry S. Truman Lake - located in the west central part of Missouri, the recreational opportunities at Truman Lake include five marinas, hunting and fishing, hiking and equestrian trails, multiple campgrounds, and Cooper Creek ATV Area. Harry S Truman State Park is located on Truman Lake, as well.


## Saint Louis District:

- Mark Twain Lake - located in north central Missouri, Mark Twain Lake offers swimming beaches, two marinas, fishing locations, boat ramps, campgrounds, hiking and equestrian trails, hunting and a shooting range. Mark Twain State Park is centrally located on the lake.
- Wappapello Lake - located in Wayne and Butler counties in the southeast corner of the state, re creational opportunities at Wappapello Lake include camping and cabin rentals; hiking, backpacking, biking and equestrian trails; boat launches and fishing locations; swimming beaches; hunting areas; and picnicking areas.


## Little Rock District:

- Bull Shoals Lake - located in southwestern Missouri and north central Arkansas, 19 parks around the lake offer facilities including campgrounds, pavilions, docks and boat launches, picnic sites, fishing areas, swimming areas, and commercial marinas.
- Clearwater Lake - located near Piedmont in the southeastern portion of the state, Clearwater Lake offers five campgrounds, three swim beaches, picnic and playground areas, boat ramps, fishing sites, and hiking and biking trails.
- Table Rock Lake - located in the tourist hotspot of Branson, Table Rock State Park offers a marina, fishing, boat launches, camping, sailing, scuba diving, hiking, and mountain biking.


## Missouri Natural Areas

Celebrating its $50^{\text {th }}$ anniversary in 2017, the Missouri Natural Areas Program ensures that protection is afforded to some of the most significant natural landscapes within the state,
formally recognizing that these areas are the least disturbed and highest-quality biological and geological sites across the state. Jointly managed by the Missouri Department of Conservation and the Missouri Department of Natural Resources, the program safeguards the best, and oftentimes the last, examples of Missouri's original landscapes, including remnant prairies, old-growth forests and woodlands, rare wetlands, caves, and many other kinds of native habitat. The scientific, educational and recreational values of Missouri's natural areas are incalculable.

There are 189 natural areas encompassing 92,473 acres within the state. Map 3 depicts the locations of natural areas in Missouri. The majority of these areas are owned or managed by a variety of public and private land managers, including:

- National Park Service
- U.S. Army Corps of Engineers
- U.S. Fish \& Wildlife Service
- U.S. Forest Service
- Mo. Dept. of Conservation
- Mo. Dept. of Natural Resources
- Excelsior Springs Parks \& Rec. Dept.
- Gladstone Parks, Recreation \& Cultural Arts Dept.
- Jackson Co. Parks + Rec
- City of Joplin
- Kansas City Parks \& Recreation Dept.
- St. Louis Co. Parks \& Recreation Dept.
- University of Missouri-Columbia
- Audubon Society of Missouri
- Boone Co. Pinnacles Youth Foundation
- Doe Run Mineral Corporation
- L-A-D Foundation
- Missouri Botanical Garden
- Missouri Prairie Foundation
- The Nature Conservancy


## Map 3



## Wetlands

Section 303 of the Emergency Wetlands Resources Act of 1986 requires states to include a wetlands component in their SCORPs, since LWCF monies may be used to acquire wetlands. Wetlands are no longer common in any part of Missouri. Nearly 90 percent of the state's historic native wetlands have been drained and now serve as pasture, urban development or farm land.

Although Missouri's wetlands have been substantially reduced from their historic extent, they remain incredibly valuable for conservation, outdoor recreation and environmental involvement. Modern wetlands contribute significantly to tourism and outdoor recreation in Missouri, with hunting, fishing, hiking, and birding all being popular wetland pursuits. Missouri's remaining wetlands also serve as the primary habitat for 200 plant and animal species considered rare or endangered in the state. Many thousand waterfowl seek Missouri wetlands as wintering grounds, breeding grounds or stopovers during
migration. All 43 of Missouri's amphibian species continue to depend on them, and many species of native fish, songbirds, mammals and insects inhabit them.

Recognizing the significant resource and recreational value of wetlands, Missouri's land management agencies are engaged in a concerted effort to restore, manage, interpret and preserve wetlands on public lands. Examples include the U.S. Department of Agriculture's (USDA) Agricultural Conservation Easement Program, the US Fish and Wildlife Service's National Wildlife Refuge system, and the U.S. Army Corps of Engineer's (USACE) Missouri River Recovery Program. Additionally, Missouri's Comprehensive Wildlife Strategy includes many Conservation Opportunity Areas (COAs) with featured wetlands. These COAs are an important means of focusing cooperative effort toward conservation priorities in Missouri's most significant resource localities, and many include important wetland regions. COAs are priority areas for many of Missouri's major programs, grants and management initiatives, as well as an important means for Missouri's public, environmental constituents and resource agencies to interact.

Missouri's two state resource agencies also place a premium on wetland restoration and preservation. The Missouri Department of Conservation (MDC), who owns considerable public land in Missouri, lists 15 conservation areas that host wetland outdoor recreation activities across the State. The 80,587 acres listed contain some valued wetland acres. MDC also assists the USACE in developing and maintaining public lands set aside for mitigation of water control works and navigation environmental impacts along the Mississippi and Missouri rivers. Additionally, in 2016, MDC received $\$ 2.4$ million from the U.S. Department of Agriculture to restore and enhance existing wetlands on private land.

Wetland restoration and management is also a primary emphasis of Missouri State Parks (MSP)
and, through boardwalks, trails, overlooks, visitor centers, wayside exhibits and naturalist programs, give the public opportunities to experience and connect in various ways to natural wetlands. Some of Missouri's most unique types of wetlands are located within a state park, including the wet prairies of Pershing State Park in northern Missouri; the swamps of Big Oak Tree State Park in the southeast part of the state; and the fresh water marshes and fens of Van Meter State Park, located in the north central part of the state.


The next generation learning about the importance of wetlands at Big Oak Tree State Park.

In addition to individual agency initiatives, MDC and MSP jointly administer the Missouri Natural Areas Program. A primary function of this program is to designate the best remaining examples of Missouri's native natural environments as State Natural Areas, to be "managed and protected for their scientific, educational and historic values." These offer an important mechanism for recognizing and preserving important examples of Missouri's natural communities, including the 23 distinct wetland natural community types found in the state.

Because of their habitat importance and recreational significance, wetlands of any type should be an acquisition priority for public land managers. Those situated near existing wetlands and public lands have particularly high value, as they expand and concentrate natural systems into functional core units which are most valuable for conserving species and maintaining wetland function, as well as the public's opportunity to experience them. Additionally, several rare wetland types should receive particularly high emphasis, including wet prairies, fens, marshes, flatwoods, swamps and wet bottomland forests. Strategically, acquisitions that accomplish objectives within designated COAs, enhance protection of Missouri Natural Areas and offer the best
opportunity for the public to experience natural wetlands should receive top priority. Facilities to make wetlands more available and accessible to the public, including trails, boardwalks, viewing areas and interpretation should be a part of the overall state plan.

## Trails

Trails are perhaps one of the most valuable recreation resources in the varied spectrum of facilities and amenities offered by recreation providers, a value that is recognized and called out by the Missouri recreation providers surveyed during the SCORP planning process. Trails reach across demographic differences as the most likely to be used of any other outdoor recreation amenity. One of the most direct benefits of community trails and greenways is the close-to-home, accessible recreation opportunities they provide. Trails offer a way to serve a diverse population that may otherwise have limited opportunities to access outdoor areas due to financial or transportation constraints.

Trails also provide affordable exercise to residents. The Centers for Disease Control and Prevention have demonstrated that just 150 minutes a week of moderate intensity aerobic activity such as brisk walking or hiking, or 75 minutes a week of vigorous intensity activity
such as hiking uphill or with a heavy backpack, provide significant health benefits such as:

- Lower risk of:
- early death
- heart disease and stroke
- high blood pressure
- type 2 diabetes
- colon and breast cancer
- Achieving and maintaining a healthy weight
- Improved cardiorespiratory fitness
- Improved bone health
- Reduced depression ${ }^{8}$

Additionally, while people who suffer from arthritis may have difficulty being physically active, walking and hiking can potentially reduce joint pain and improve function for many adults with arthritis. ${ }^{9}$

In 2013, Missouri was named the "Best Trails State" by American Trails, a national nonprofit organization working on behalf of the nation's hiking, biking and riding trails. The national award is presented every two years to a state that has made tremendous contributions to promote and improve their trails system.

Missouri does indeed have much to tout regarding its trail accomplishments. From a short walk on a paved trail to a hike through the wilderness, Missouri's extensive trail system has a lot to offer. More than 500 miles of National Recreation Trails designated by the U.S. Department of Interior traverse the state. Missouri lives up to its reputation as "Gateway to the West" with significant National Historic Trails including the Lewis and Clark, Trail of Tears, and Santa Fe national historic trails passing through the state and the Pony Express, California, and Oregon national historic trails beginning on the western border.

Missouri is also the home to the 240-mile Katy Trail State Park, currently the longest completed rail-trail in the nation and recently extended with the addition of the 48 -mile Rock Island Spur. Another long-distance trail, the Ozark Trail, is a hiking and backpacking trail in the southeastern part of the state that connects

multiple state and federal public lands through some of the most rugged and beautiful areas of the Ozarks. Currently at 350 miles long and growing, the Ozark Trail will eventually reach the Arkansas border, where it will connect with the Ozark Highlands Trail.

Not surprisingly, with its abundance of rivers and lakes, Missouri is also home to several water trails. The Mississippi River Water Trail stretches 121 miles of the Upper Mississippi River from Saverton, Mo. to St. Louis, Mo. Other water trails include the 500-mile Missouri River

Water Trail; sections of the Jacks Fork, Current, Eleven Point, Gasconade, James, and Niangua rivers; sections of Shoal, Bryant, and Courtois creeks; as well as lake trails at Stockton, Lake of the Ozarks, Wakonda, and Finger Lakes state parks.

Missouri's growing trail system is due in large part to the Federal Highway Administration's Recreational Trails Program (RTP). The RTP is a federally-funded assistance program authorized by the U.S. Congress under the Fixing America's Surface Transportation (FAST) Act. Its purpose is to help states provide and maintain recreational trails and trail-related facilities for both motorized and non-motorized recreational use. In Missouri, the Missouri Department of Natural Resources administers the RTP, with direct oversight of the program by Missouri State Parks (MSP). The Missouri Trails Advisory Board (MTAB), a nine-member panel, assists MSP with administration of the program by evaluating the RTP grant applications and recommending
projects for funding on an annual basis. Since 1993, nearly $\$ 26$ million has been awarded to over 360 recreational trail projects throughout the state. Map 4 depicts the locations of RTP projects throughout the state.

The growth and importance of trails in Missouri has led to the establishment of the Missouri Trails Alliance, an association of state and local recreation agencies and trail advocacy organizations across the state. The purpose of the Alliance is to create a centralized repository of statewide trail information. This initiative, called The Missouri Trails Project, is being led by the Missouri Parks and Recreation Association (MPRA), a nonprofit advocacy organization representing local, state and federal recreation agencies. Awarded a RTP grant by Missouri State Parks in 2017, MPRA is in the initial phase of a three-year effort to collect and compile trail data from every public trail in Missouri, and create a public website of searchable trail information.


Page |

The foundation of the trail data for the Missouri Trails Project is the recently completed inventory by Missouri State Parks of its nearly 1,200 miles of trails. From this inventory, Missouri State Parks has created a unique trail asset management database that will assist state park and historic site facility supervisors in managing their trail resources. Continued compilation of statewide trail data is an important priority for the development of a statewide trail plan. The statewide plan will identify gaps in Missouri's trail system and set future funding priorities for additional recreational trail development.

## Summary

Missouri is blessed with an abundance of natural resources and diverse outdoor recreation opportunities. Public outdoor recreation sites run the gamut, from vast tracts of forests managed by the U.S. Forest Service to small pocket parks in downtown areas operated by local parks and recreation departments. Missourians are invested in their public outdoor spaces, as is evidenced by the number of approved sales tax initiatives across the state. However, lack of funding remains a critical issue, particularly in smaller communities where the tax base does not fully support the outdoor recreation needs of their residents. Future LWCF grant opportunities should prioritize renovation of aging park infrastructure, especially in these smaller communities, while greater emphasis should be given to assisting communities identify sources of non-federal matching dollars.

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## ISSUES \& TRENDS

Missouri's population is expected to approach 6.8 million people in 2030*, a growth of roughly 1.2 million people from the year 2000, which will represent a $21 \%$ increase in the state's population. Missouri's rank among the nation's most populous states has been on the decline since the turn of the century, when Missouri ranked fifth in the nation. The state's projected growth rate of approximately $6 \%$ per decade is slower than the nation's projected rate of $10 \%$ per decade. ${ }^{9}$

Natural change (births minus deaths) will continue to add the largest number of people to Missouri's population. Natural change is expected to add an average of 244,000 Missourians per decade. Moreover, net migration (those migrating in compared to those migrating out) is expected to further increase Missouri's population by 139,000 persons every ten years.

Recent migration trends predict the outlook for the next thirty years to be large growth in the suburban counties around Kansas City, St. Louis, and Springfield with significant decline for St. Louis County and agricultural counties. Shifts have been from rural agricultural areas to urban areas and to rural areas rich in recreational amenities. Projections show that these patterns
will continue, and there will be more movement to urban fringe areas. Missouri is expected to experience the greatest growth in Christian and Lincoln counties. Their populations are projected to more than double between 2000 and 2030. The top five most populous counties in the state in 2000 were St. Louis, Jackson, St. Louis City, St. Charles, and Greene. Those counties are projected to remain the largest in the state in 2030. Table 5 lists the ten counties projected to be the most populous and their projected populations for 2030.

Table 5. 2030 Population Projects by Top 10 Counties in Missouri

| Population <br> Rank | County | 2030 Population <br> Projections |
| :---: | :--- | ---: |
| 1 | St. Louis | 956,817 |
| 2 | Jackson | 714,467 |
| 3 | St. Charles | 499,126 |
| 4 | St. Louis City | 349,004 |
| 5 | Greene | 329,825 |
| 6 | Clay | 300,021 |
| 7 | Jefferson | 260,276 |
| 8 | Boone | 204,264 |
| 9 | Jasper | 152,490 |
| 10 | Cass | 136,933 |

[^0]
## Changing Demographics

Not surprisingly, the face of Missourians will change along with the state's population numbers. These changes will have a direct impact on outdoor recreation provision in the state.

## An Aging Population

The year 2030 marks an important demographic turning point in U.S. history, according to the U.S. Census Bureau's 2017 National Population Projections. ${ }^{10}$ By 2030, all baby boomers will be older than age 65 . This will expand the size of the older population so that one in every five residents will be of retirement age. Even more noteworthy is the fact that, by 2035, adults aged 65 years or older are projected to outnumber children aged 18 years or less (Chart 1). Additionally, by 2060, minorities are projected to be close to half (45\%) of seniors 65 years of age or older. ${ }^{11}$

Missouri, too, will experience an aging population. By 2030, persons over age 65 will represent more than one-fifth of all Missourians. Senior citizens are expected to increase $87 \%$ between 2000 and 2030, when there are projected to be 1.4 million seniors in the state. ${ }^{9}$ With the increase in older adults will come an increase in age-related illnesses, many of which can be combated or minimized by regular physical activity. The aging of Missouri's population will have a profound effect on the services, facilities and programming expected of recreation providers. Providers will need to ensure that accessible trails and greenways connect parks to retirement communities, residential facilities and senior centers. Programs that target older participants, such as walking programs, birdwatching, or senior trips, will become increasingly popular. Additionally, communities will experience an increasing demand for the development of park amenities and facilities specific to older adults.

Chart 1. U.S. Population Projections to 2065 for Auss
An Aging Nation
Projected Number of Children and OIder Adults

For the First Time in U.S. History Older Adults Are Projected to Outnumber Children by 2035


## Local and Statewide Trends and Initiatives

According to a 2017 national survey conducted by the National Recreation and Park Association (NRPA), more than nine out of 10 park and recreation agencies offer facilities, activities and programming that cater to older adults but, because of staffing and budgeting issues, these agencies frequently look for partners to assist with funding, programming, transportation, etc. ${ }^{12}$ For example, in an effort to reach its senior audience, Missouri State Parks is partnering with the Missouri Parks Association (MPA), a non-profit advocacy organization dedicated to protecting and promoting the Missouri state park system, on the "Seniors to State Parks Outreach Program." This program provides special opportunities designed for seniors and individuals with disabilities to explore and enjoy Missouri's outdoors and its history. Transportation, lunch, tours and activities are provided as part of these outings.

Among activities recommended to improve health in older adults is the game of pickleball,
which has received considerable recent attention because of its rapidly growing popularity amongst seniors. ${ }^{13,14,15}$ A 2018 article in Missouri Life magazine suggests that "...Missouri might just have the fastest-growing pickleball community in the country." ${ }^{16}$ The oddly named sport has been described as a combination of tennis, ping pong and badminton, played with a racquet resembling a large ping pong paddle and a ball resembling a whiffle ball, with a miniature court half the size of a tennis court. Its popularity with the older generation is due in large part to its lower physical impact and its social nature. A plus for recreation providers is the minimal infrastructure investment if using an existing tennis court or other play court, only requiring painted lines delineating the pickleball court.

## A Diversifying Population

In addition to an aging population, the U.S. is growing increasingly racially, ethnically and socially diverse. Currently, $37 \%$ of the U.S.
population is comprised of people of color. The U.S. Census predicts that by 2060, people of color will make up $57 \%$ of the U.S. population. ${ }^{17}$ Nowhere will this be more evident than in the diversification of America's children. Each succeeding generation has been more diverse than the generations that came before it. For example, in 1980, the two newest generations in the population, the Baby Boomers (born 1946-1964) and the Gen Xers (born 1965-1980), were, respectively, $21 \%$ and $26 \%$ percent minority. Looking at the two newest generations today, the Millennials (1981-2000) and the Post-Millennials (2001-2020), the corresponding figures are 44\% and 49\% minority. Forecasting ahead to 2040, the PostMillennial 2 Generation (2021-2040) is projected to be $57 \%$ minority. In 2060, the PostMillennial 3 Generation (2041-2060) is projected to be $64 \%$ minority. ${ }^{11}$

The U.S. Census Bureau's 2017 population estimates for Missouri indicate that its current

## Chart 2.

Racial/ethnic composition: United States, 1980-2050


[^1]

Table 6. Missouri Racial Composition

| 2017 Racial Composition of Missouri | $\%$ |
| :--- | ---: |
| White | $79.5 \%$ |
| Black or African American | $11.8 \%$ |
| American Indian and Alaska Native | $0.6 \%$ |
| Asian | $2.1 \%$ |
| Native Hawaiian and Other Pacific <br> Islander | $0.1 \%$ |
| Hispanic or Latino | $4.2 \%$ |
| Two or More Races | $2.3 \%$ |

minority population accounts for just over 20\% of the total population, with African American populations accounting for the highest percentage of minority populations in the state. ${ }^{18}$ The table above provides a breakdown of 2017 estimates of minority populations. The map on the following page depicts percentage of minority populations by county and includes an overlay of Missouri's public lands.

Using U.S. Census data, a 2017 study compiled a list of the top 50 most diverse cities in Missouri with a population of more than 5,000 , as depicted in the graph on the following page. ${ }^{19}$ Where Missouri is most racially diverse includes the St. Louis and Kansas City regions; the central Missouri region around Columbia, Boonville and Jefferson City; in the extreme southeast of the state in the Bootheel; in the Joplin region of the southwest; in northwest Missouri in the St. Joseph metropolitan region; and the areas surrounding the military bases at Fort Leonard Wood and Whiteman Airforce Base.

As with U.S. population projections, minority populations in Missouri are also projected to increase but at a slower rate. A 2015 report by the Center for American Progress, the American Enterprise Institute, and the Brookings Institution, projects that Missouri's minority population will equal nearly $36 \%$ by $2060 .{ }^{11}$ With the increase in diversity in Missouri and across the U.S. comes the increasing concern of how to encourage minority participation in outdoor recreation. A 2017 survey report by the Outdoor Foundation found that of the 144.4
million Americans who participated in outdoor activities, the vast majority ( $73 \%$ ) were white. ${ }^{20}$

The outdoor recreation industry has long been challenged with this disparity in outdoor recreation participation. Studies abound with reasons for the lack of minority participation, but all agree that the reasons are varied and complex, ranging from cultural to socioeconomic to historical. ${ }^{21,22,23,24}$ The lack of minority representation can mean that some people feel unwelcome in the outdoors, fearing prejudice or feeling apprehensive about heading outside because they don't see themselves reflected in the other participants around them. This is compounded by the lack of representation in the outdoor industry and media. Minority communities may also face economic and accessibility barriers that prevent them from pursuing outdoor activities. Lack of transportation, lack of close-to-home facilities, lack of affordable opportunities and lack of knowledge of places to go can create significant impediments to participation. ${ }^{21,22,23,24}$

According to a 2017 survey of park and recreational professionals conducted by the National Recreation and Park Association, 71\% of park and recreation agencies across the U.S. offer programming and activities specifically for members of multi-cultural and multi-racial communities, while $27 \%$ provide programming and activities targeting members of refugee or immigrant communities. ${ }^{25}$ Recreation providers must continue to be cognizant of the obstacles and barriers that prevent all community members from taking advantage of recreation resources, and plan outdoor facilities and programming accordingly. Differing cultural norms and use patterns may require providing non-traditional facilities. For instance, some minority groups are motivated by experiencing the outdoors with family and friends, so providing facilities that can accommodate large groups would have considerable appeal to these groups. Ensuring that close-to-home facilities are abundant in communities with a higher percentage of minority residents is also

Chart 3.

## Most Diverse Cities In Missouri




Source: HomeSnacks (https://www.homesnacks.net/most-diverse-cities-in-missouri-128925/)
crucial, as is ensuring that adequate transportation is available to these facilities.

## Statewide Initiatives

In an effort to reach underserved communities throughout the state, Missouri State Parks has established two urban outreach offices, one in St. Louis and the other in Kansas City. Staff in these offices work to increase engagement and access to Missouri State Parks in urban and underrepresented communities throughout the state; to develop and implement statewide engagement initiatives; and to support facilityspecific outreach, engagement and accessibility efforts at parks and historic sites. One such initiative is the Show Me MO State Parks program, a series of free summer day camps for youth ages 6-18. Locations of the day camps are in nearby state parks and historic sites that can more easily be reached from the St. Louis urban area. Participants are introduced to natural history, cultural history and outdoor recreational activities through interpretive programs provided by park and site staff.


Show Me MO State Parks day camp participants.

Transportation to and from the day camps, as well as equipment, supplies, and food, are provided for the camp participants.
To address the issue of transportation costs, Missouri State Parks has implemented the Missouri State Parks Bus Grant program. This program underwrites the cost of field trips for schools and non-profit youth organizations to visit state parks and historic sites, in an effort to connect children with nature and their heritage. Pre-K-12 ${ }^{\text {th }}$ grade public schools, private schools, charter schools and youth-based nonprofit organizations with 501(c)3 status are eligible for this program.

In addition to its urban outreach programming, Missouri State Parks offers a range of programs that teach outdoor skills to families, women and those less comfortable in an outdoor setting. The Learn2 programs offer basic instruction in kayaking, camping and backpacking, and takes place at locations throughout the state. Glamp Pin Oak, hosted at Camp Pin Oak in Lake of the Ozarks State Park, is a unique opportunity for women to experience the outdoors and learn to be safe, confident and comfortable in the outdoor environment. All sessions are taught by women and created for women and provide the opportunity to learn by doing.

Additionally, Missouri State Parks and other state and federal agencies partner with Bass Pro's Wonders of Wildlife to host WOW National Outdoor Recreation and Conservation Schools. The WOW Schools are weekend programs designed to teach families how to enjoy a wide range of outdoor recreation activities while practicing personal safety and outdoor responsibility. Four schools are taught annually across the state - St. Louis, Kansas City, Springfield and at Roaring River State Park near Cassville. The St. Louis and Kansas City schools are specifically geared for underserved and minority participants living in these urban areas. Another partnership initiative is the Urban Populations Outreach Program (UPOP). Sponsored by the Missouri Parks Association, UPOP provides field trips to Missouri's state
parks and historic sites for hundreds of urban youths from the St. Louis, Kansas City and Columbia urban cores and several southwest Missouri communities.

Helping children and families discover nature is a key part of the Missouri Department of Conservation's (MDC) mission, as well. The department offers many outdoor skills classes and programs, such as Discover Nature Girls Camps for girls ages 11-15. Other programs include Kids Fishing Days and Discover NatureFishing Program events, which are designed to help families and youth groups learn about fish, fish habitat, and fishing techniques. Each program event provides fishing equipment and instruction. Additionally, the department provides loaner road-and-reel sets at various locations throughout the state.


Kids Fishing Day participant at Finger Lakes State Park

MDC also works closely with schools with its Discover Nature Schools (DNS) program. DNS teaches students from pre-K through high
school about Missouri's native plants, animals, and habitats and connects them with nature, while meeting Missouri Learning Standards. Student books, teacher guides, and training workshops are available at no charge to Missouri educators. Teachers who formally enroll in the DNS program are eligible for additional resources including grant opportunities for equipment and field trips. Another program that MDC has introduced to Missouri schools is the Missouri National Archery in the Schools Program (MoNASP), modeled after the National Archery in the Schools Program, which teaches kids the basics of archery as a part of school curriculum. MoNASP supports international-style target archery in 4th- through 12th-grade physical education classes during the school day. Over 600 schools and nearly 180,000 participants throughout Missouri participate in the MoNASP.

## Health and Wellness

The Centers for Disease Control and Prevention (CDC) report that the prevalence of obesity in American adults is nearly $40 \%$ (39.8\%), affecting about 93.3 million adults in the U.S. ${ }^{26}$ Map 8 below compares obesity rates among states. Compounding the obesity problem is the sedentary lives many adults lead. A 2018 report by the Physical Activity Council indicates that $28 \%$ of the population, 82.4 million Americans,

Map 6

are inactive. ${ }^{27}$ Fewer than half of all Americans engage in the nationally recommended 150minutes of physical activity a week. ${ }^{28}$ The CDC report that obesity-related conditions, including heart disease, stroke, type 2 diabetes and certain types of cancer, are some of the leading causes of preventable, premature death in the U.S. Additionally, the estimated annual medical cost of obesity in the United States was \$147 billion in 2008 US dollars. ${ }^{26}$

Childhood obesity, too, is a serious problem in the U.S., putting children and adolescents at risk for poor health and complications later in life. Map 7 below provides a comparison of the childhood obesity rates by state. Childhood obesity sets up a high probability for a potential lifetime of costly diseases (e.g., diabetes, heart disease, and cancer), diminished quality of life and disability. For children and adolescents aged 2-19 years, the prevalence of obesity is $18.5 \%$ nationally and affects about 13.7 million children and adolescents. Obesity prevalence is $13.9 \%$ among 2 - to 5 -year-olds, $18.4 \%$ among 6 to 11 -year-olds, and $20.6 \%$ among 12 - to $19-$ year-olds. ${ }^{26}$ Childhood obesity is estimated to cost the United States more than $\$ 14$ billion annually. ${ }^{29}$

Map 7


Missouri is not immune from this health crisis. According to a report by the Trust for America's Health and the Robert Wood Johnson Foundation, Missouri has the 17th highest adult obesity rate in the nation. ${ }^{30}$ The Missouri Department of Health and Senior Services reports that heart disease is the leading cause of death in Missouri, ${ }^{31}$ while the CDC rank Missouri as $10^{\text {th }}$ in the nation for mortalities caused by heart disease. ${ }^{32}$ Maps 10 through 12 on the following pages depict, by county, the percentage of Missouri adults considered obese or who suffer from diabetes or cardiovascular disease, while map 13 shows county percentages of inactive adults.

Regarding childhood obesity, although Missouri doesn't rank as high nationally for the frequency of obese or overweight children, the state is still ranked 32 for the obesity rate of youth ages 10 to 17 . Nearly $30 \%$ (28\%) of 10-17 year olds in Missouri are overweight or obese. Furthermore, 12.9\% of Missouri's low income youth ages 2-5, the most at-risk for disease and health disparity, are obese. ${ }^{33}$

Physical health is only one aspect of the overall health and wellbeing crisis in America. Another major health concern is the prevalence of mental health issues in the United States. The National Alliance on Mental Illness (NAMI) reports that approximately one in five adults in the U.S. ( 43.8 million or $18.5 \%$ ) experiences mental illness in a given year, while one in 25 ( 9.8 million or $4.0 \%$ ) experiences a serious mental illness that substantially interferes with or limits one or more major life activities. Additionally, approximately one in five youth aged 13-18 (21.4\%) experiences a severe mental disorder at some point during their life. For children aged 8-15, the estimate is as much as $13 \% .{ }^{34}$ In Missouri, a 2015 study by the Centers for Disease Prevention found that 28\% of high school students felt sad or hopeless during the past year, while a 2013 study found that $11 \%$ of adolescents aged 12 to 17 reported having at least one major depressive episode in the past twelve months. ${ }^{35}$ A 2013-2014 study by

$\stackrel{\text { Map } 9}{ }$
Missouri Adult Diabetes (2018)



the Substance Abuse and Mental Health Services Administration (SAMHSA) found that about 230,000 Missouri adults aged 18 or older ( $5.1 \%$ of all adults) had a serious mental illness in the previous 12 months that substantially interfered or limited major life activities. ${ }^{36}$

Many studies and reports have documented the numerous physical and mental benefits of public parks. ${ }^{37,38,39,40,41,42,43,44}$ Regular outdoor activity provides a number of physical health benefits, including lowering blood pressure, reducing arthritis pain, contributing to weight loss and lowering the risk of diabetes, certain cancers, osteoporosis and cardiovascular disease. Natural settings rejuvenate and calm the mind, improving outlook and increasing positive affect. Both physical activity and outdoor settings reduce stress, anxiety and depression. Spending time in a park leads to an increase in dopamine levels, the hormone that contributes to positive moods, and a reduction in cortisol levels, a hormone released when the body feels stress.

As noted, public park and recreation agencies have a vital role to play in addressing mental wellness, sedentary lifestyles, obesity and other health-related issues in Missouri. The following pages provide a series of maps that depict the counties in Missouri where adult obesity, heart disease and diabetes are most prevalent, and where residents are least physically active. Priority should be given in these areas to upgrading existing parks and developing additional facilities that contribute to increasing physical activity for community residents. Focus should also be on establishing collaborative partnerships between recreation providers, healthcare organizations and other agencies, to develop programming that encourages the use of parks and outdoor spaces for physical activity.

## National, Statewide and Local Initiatives

Recognizing that there is an increasing disconnect between communities and the outdoor world and that this disconnect

health problems and chronic
disease, several national, statewide and local initiatives have been implemented to use parks and public recreation spaces to combat these issues. The following summarizes a few of these initiatives in Missouri and elsewhere.

## Prescription for Parks

Walk with a Doc, a grassroots effort that began in Ohio in 2005, is now a worldwide campaign to engage doctors with their patients through walking outside. Walk with a Doc events typically include a presentation by a physician, who then leads participants on a walk at their own pace. In Missouri, there are currently two Walk with a Doc chapters in Kansas City, and chapters in Fairfax, St. Louis, Bowling Green, Ellington, Springfield and Joplin. ${ }^{45}$

Another similar program is the Park Prescription or "Park $\mathrm{R}_{\mathrm{x}}$ " program, which encourages physicians or other healthcare providers to "prescribe" physical activity in park settings to their patients. Park $R_{x}$ programs are gaining in popularity throughout the nation and are helping to motivate people to be active in community parks. Currently, there are no park prescription locations within Missouri, ${ }^{46}$ but the concept is ripe with partnership possibilities between physicians and local parks and recreation agencies. Once completed, the Missouri Trails Project will serve as a significant
resource to physicians looking for close-tohome trails and greenways that they may use to prescribe physical activity for their patients.

## Eat Smart in Parks

According to the U.S. Department of Agriculture's Healthy Eating Index, only $12 \%$ of American households have good diets that emphasize fruits, vegetables, lean meats, whole grains, and low-fat dairy foods. The average American scores less than a 60 (out of 100 ) on the Healthy Eating Index, a measure of how individuals' food choices align with the dietary guidelines established by the department. ${ }^{47}$

A statewide effort aimed at promoting healthier eating options in Missouri's state and local parks is the Eat Smart in Parks (ESIP) program. ESIP is a collaborative effort led by individuals from the University of Missouri Extension, Missouri Department of Health and Senior Services (DHSS), Missouri State Parks, Missouri Parks and Recreation Association, Missouri Council for Activity and Nutrition (MOCAN) and the Health Communication Research Center at the Missouri School of Journalism. The program develops model nutrition standards to assist parks in serving healthier concession options.

The program also trains state and local park agencies to help them with using the guidelines, and provides materials to promote healthier food choices.

## Local Initiatives

In addition to offering healthier concession items, local parks can assist with the provision of fresh fruits and vegetables in their communities by hosting farmers' markets or by providing space on park grounds for community gardens. A 2017 report by the National Recreation and Park Association (NRPA) found that $62 \%$ of park and recreation agencies across the U.S. provide community gardening spaces. ${ }^{48}$ A local example of this is a new park being developed by the City of Columbia, Clary-Shy Community Park. Partial funding for development of the new park is through a 2016 ORLPP grant. Development will include a threeacre urban demonstration farm, fitness trail and farm-themed playground. Produce grown at the park will be donated to food pantries and other hunger-relief organizations. Programming will include workshops on establishing individual urban gardens and cooking with fresh produce.


Eat Smart in Parks (ESIP) is a statewide collaborative effort between multiple agencies and organizations, aimed at promoting healthier concession options in Missouri's state and local parks.

Another example is Farmer Park in the City of Berkeley. The City of Berkeley is a densely populated urban area within the St. Louis metropolitan region, where green space is at a premium and where many residents are constrained in their ability to maintain their own gardens. The City's population is predominantly African American (82\%). Farmer Park is a six-acre park that gives residents the opportunity to farm individual garden plots that easily accessible within city limits.

Another growing trend in Missouri is the installation of fitness equipment in parks. In fact, the establishment of fitness parks is an emerging trend across the nation, as park and recreation providers increase efforts to provide multigenerational recreation facilities. ${ }^{49}$ Missouri recreation providers recognize this need, as indicated in results from the Recreation Providers Survey. Several providers called out the need for developing fitness parks and obstacle courses.

## Technology

The American Academy of Pediatrics has estimated that the average child spends upwards of seven hours watching television, browsing the Internet and playing video games each day. ${ }^{50} \mathrm{An}$ increase in exposure to technology can often mean a decrease in
physical activity. As children spend more time sitting in front of the TV or computer, they spend less time outside playing and burning calories. Additionally, greater screen time often leads to increased snacking. A study published in the Journal of the American College of Cardiology in 2014 monitored the habits of 1,003 sixth-graders. The researchers found that kids who spent more time in front of a screen, whether it was a computer, TV or video game, snacked more often and ate fewer healthy snacks than children who used technology less frequently. ${ }^{51}$

According to a 2018 Pew Research Center survey, $95 \%$ of teens report they have a smartphone or access to one. These mobile connections are in turn fueling more-persistent online activities: $45 \%$ of teens now say they are online on a near-constant basis. Another 44\% say they go online several times a day, with roughly nine-in-ten teens going online multiple times per day. Additionally, $84 \%$ of teens say they have access to a game console at home, and $90 \%$ say they play video games of any kind (whether on a computer, game console or cellphone). While a substantial majority of girls report having access to a game console at home ( $75 \%$ ) or playing video games in general ( $83 \%$ ), those shares are even higher among boys. Roughly nine-in-ten boys (92\%) have access to a game console at home, and $97 \%$ say they play video games in some form or fashion. ${ }^{52}$

The presence of technology in parks can oftentimes spark debate between those who feel it has no place in park settings, which are meant to be refuges from the modern world, and those who are concerned about maintaining relevancy to a younger generation. In an effort to keep up with
technological trends, many parks and recreation agencies maintain social media presence through Facebook, Twitter, park-based apps and other platforms. Additionally, many parks provide charging stations and Wi-Fi access. Another form of technology that is seeing an increase in parks is the use of drones. Agencies are mixed in their reception of this technology. Some provide specific locations within parks, similar to radio-controlled aircraft fields, or allow the use of drones by permit only. Others ban the use outright, citing concerns with noise pollution and disruption to park visitors seeking peace and solitude.

Technology, and social media in particular, is having a profound impact on the way we recreate in the outdoors. The proliferation of smartphone apps such as Twitter, Instagram and Snapchat have given rise to a spate of outdoor selfies and other carefully crafted photographic images of scenic landscapes and outdoor adventures. Critics of this phenomenon argue that such images aren't "true" and that the intent behind the images isn't so much about connecting to nature as it is in getting the perfect shot. Additionally, concern has been expressed that outdoor social media tagging has led to irresponsible or illegal behavior and, in some cases, injury or death. Other critics cite concerns over the prevalence of geotagging and the resulting exponential increase in visitation, oftentimes to the detriment of fragile ecosystems or unique landscapes that don't have the developed infrastructure to sustain the influx of visitors. ${ }^{53}$, 54, 55, 56

On the other hand, the upside of the amplified (and free) exposure to the outdoor world that social media provides has led to a renewed interest in national parks, state parks and other outdoor spaces. Increased visitation oftentimes equates to increased user fees and other revenue sources. Outdoor recreation agencies are learning to capitalize on this free exposure
by interspersing interpretive messages amongst the breathtaking photographic images, messages that encourage responsible outdoor use and other stewardship concepts. In the same vein, followers of the Leave No Trace philosophy, which espouses seven principles for minimizing impact in outdoor use, have recommended an eighth "digital" principle of using discretion before geotagging a location as a way to reduce overuse impact. And, some advocates have suggested that social media can aid in integrating and diversifying the face of outdoor users, as well as serve as a way to attract and draw in underserved youth. ${ }^{57,58,59,60}$


## Accessibility

According to the Centers for Disease Control (CDC), $22.5 \%$ of U.S. residents have some type of disability, including hearing, visual, cognitive, and ambulatory impairments as well as difficulty with self- and independent-care. ${ }^{61}$ Missouri's population percentage is similar, with $22.4 \%$ of residents having some type of physical or cognitive disability. Map 14 shows the location of adult residents with a disability, by county. A little over 6\% (6.2\%) of Missouri
children ages 0-15 are also reported to have some type of disability, with the majority having a cognitive disability. ${ }^{62}$

Surveys have indicated that individuals with disabilities are significantly more likely to be inactive and suffer from other health-related issues, such as high blood pressure and obesity. ${ }^{63}$ In Missouri, health care costs for individuals with disabilities equal nearly $\$ 9$ billion annually. ${ }^{61}$ Parks and recreation facilities have an active role in combating these healthrelated issues and fostering societal inclusion. ${ }^{64}$ Public park and recreation agencies across the U.S. recognize the importance of providing recreation opportunities to individuals with physical or cognitive disabilities. The majority (74\%) of agencies provide programs and activities that serve individuals with physical disabilities while 62\% have programs and activities that serve individuals with cognitive disabilities. Additionally, two in five agencies have formal inclusion policies that emphasize access to all community members. ${ }^{25}$

Although significant gains have been made in the inclusion of individuals with disabilities since the Americans with Disabilities Act (ADA) was written into law in 1990, more needs to be done to ensure parity in facility and programming provision. As more emphasis is


Jake's Field of Dreams Playground, City of Wentzville
placed on inclusion and diversity in public recreation spaces, a movement to incorporate universal design and provide inclusive facilities has begun to grow nationally, as well as in Missouri. An example of this is the increase in the number of inclusive playgrounds being installed in parks and schoolyards across the state. Inclusive playgrounds go beyond just meeting the ADA requirements, to ensuring physical and social inclusion of people of all ages and abilities. Inclusive playgrounds provide facilities that stimulate physical, cognitive, communicative, social/emotional, and sensory development. Future LWCF funding priorities should emphasize such facilities like all-inclusive playgrounds, as well as ensuring support facilities like restrooms and shelters are upgraded to meet ADA requirements.

## Local Initiatives

Jake's Field of Dreams, a recently completed project in the City of Wentzville partially funded by LWCF, is an inclusive playground that provides ramping systems at every play element, as well as wheelchair-accessible merry-go-rounds, transfer stations, specialized seating, hand-holds and slanted climbing systems. Two other recently completed inclusive playgrounds funded by LWCF include Woolridge Park in the City of Columbia and Little Heroes Playground in Roubidoux Park in the City of Waynesville. Woolridge Park includes ground-level roller slides to provide a unique sensory experience; a group swing so that several kids or a parent and child can swing together; musical therapy play features; and ramps to all levels of the playground to ensure access for everyone. Little Heroes Playground includes highbacked swings, ramps, a disc swing, and musical sensory equipment.

In addition to the increase in number of inclusive playgrounds in the state, a statewide initiative is underway to document locations and provide a web directory of gender-neutral and family


Source: waw.countyhealthrankings.org. MOONR, MODOT, USFWS
restrooms in Missouri and in the nation. Missouri Disability Empowerment, or MoDE, is a non-profit advocacy organization that promotes inclusivity in public facilities. They are in the process of populating an interactive map of non-gender specific restrooms, family restrooms, and family restrooms with adultsized changing tables. ${ }^{65}$

## Economic Sustainability

According to a 2018 report by the Outdoor Industry Association (OIA), outdoor recreation is among our nation's largest economic sectors, generating $\$ 887$ billion annually in consumer spending, directly supporting 7.6 million jobs and generating $\$ 125$ million in tax revenue. ${ }^{66}$ In Missouri, outdoor recreation generates \$14.9 billion annually in consumer spending, supports 133,000 jobs, creates $\$ 4.6$ billion in salaries and wages, and produces $\$ 889$ million in tax revenue. ${ }^{67}$ Regional and local park and recreation agencies account for a significant portion of the economic impact of outdoor recreation. According to a report by the National Recreation and Park Association, America's local public park and recreation agencies generated more than $\$ 154$ billion in economic activity in 2015, supporting more than 1.1 million jobs through operational and capital improvement spending. Missouri's regional and local parks and recreation agencies produced nearly \$2 billion in economic activity in 2015, which in turn supported over 16,000 jobs and $\$ 719$ million in labor income. ${ }^{68}$

Although park and recreation agency budgets seem to be recovering after the Great Recession of 2008, this process is slow. Most agencies remain underfunded, a chronic reality of the country's park systems. Furthermore, park agencies are among the first departments to be cut in times of fiscal crisis, according to a 2017 study by Penn State University and the National Recreation and Parks Association. ${ }^{69}$ There is strong citizen support for publically funded parks and recreation facilities in Missouri, as evidenced by the $80 \%$ approval
rating of the recently reauthorized Parks, Soils and Water Sales Tax. This tax accounts for about three-fourths of the state park system's operating budget. Additionally, over 200 municipalities within Missouri have established local sales taxes to fund parks and stormwater improvements. In spite of this progress, the lack of consistent funding still plagues many parks and recreation agencies, as indicated in the Recreation Providers Survey. The issue of budget shortfalls is particularly prevalent in smaller communities in Missouri, many of whom are experiencing a decline in their resident populations and a subsequent decrease in their tax base.

The map on the following page shows county projections to 2030 and delineates those counties whose populations are projected to decline. Communities within these counties are the hardest hit, many of whom have LWCF project sites that were developed in the early decades of the LWCF program and who now struggle just to find funding to maintain these parks, let alone try to find funding to leverage as match for future LWCF grants. What is most disheartening is that a larger number of these counties have a higher percentage of children living in poverty (as depicted on the map on page 40), where park and recreation facilities are most needed but least afforded.

## Environment and Stewardship

Of the myriad benefits provided by public outdoor spaces, the environmental benefits are among the most critical. Parks, by their very nature, preserve and protect public land and open spaces. Additionally, parks contribute to providing clean air and clean water, as well as mitigate for flooding and extreme weather events. Trees, shrubs and vegetation within parks release oxygen and absorb carbon dioxide and pollutants that cause respiratory problems and corrode and damage buildings. Tree canopies, garden vegetation, grassy areas, and other green spaces in parks capture and filter rainwater, reducing the amount of oil, salt, and


Source: Missouri OA MODNR, MOOOT, USFWS


Source: www.countyhealthrankings.org, MODNR, MODOT, USFWS


Low-Impact Development (LID) Protects Streams, Caves and Aquatic Life
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pollutants flowing from roads and lawns into nearby waterways and groundwater. Parks also transport and store stormwater runoff that could otherwise cause costly flood damage and environmental pollution. And, in many cases, new parks and open spaces can repurpose or reclaim an area destroyed by a natural disaster. As one of the largest landowners in a community or region, parks and recreation agencies are uniquely positioned to capitalize on their very public forum to address other environmental issues and act as role models for sustainability and stewardship. For instance, native landscaping using drought-tolerant climate and geography not only reduces turf maintenance and saves taxpayer dollars but, with an accompanying interpretive message, encourages park visitors to adopt similar practices at home.

Park and recreation agencies often struggle with finding adequate funding and staffing to incorporate principles of sustainability into their operations, programming and development. A 2017 NRPA report indicates only 23\% of local and regional park and recreation agencies across the U.S. have adopted a formal sustainability plan. ${ }^{50}$ In spite of this, over half (56\%) of the agencies surveyed report using

An interpretive panel at Rock Bridge Memorial State Park demonstrates the importance of incorporating low-impact development, such as using pervious pavers in place of concrete or asphalt. An adjacent rain garden is planted with native species attractive to pollinators.
environmentally friendly building practices, including the construction of green and sustainable infrastructure. The most common practices include using LED lighting; using Energy Star-rated appliances; installing low-flow plumbing fixtures and water recycling systems; using recycled construction materials; sensitively rehabilitating and reusing historic buildings; constructing rain gardens, bioswales, and wetlands; increasing the use of permeable surfaces, such as using pervious pavers for parking lots; and purchasing fuel-efficient vehicles and equipment.

Lack of funding is by far the most limiting factor preventing agencies from implementing sustainability measures, with nearly threefourths (61\%) of the agencies surveyed citing this as a barrier. Other barriers include lack of dedicated staff (40\%), limited expertise in
developing sustainability measures (39\%), and limited expertise in developing sustainability practices. Future grant funding should prioritize projects that include landscaping with native species and methods for minimizing the spread of invasive species; projects that incorporate design elements that increase sustainability of the project, such as features that provide erosion control and minimize stormwater runoff; or projects that use recycled materials. Focus should also be given to projects that minimize impact by developing within a smaller footprint or using permeable surfaces; installing energy-efficient mechanisms such as timers or sensors; and projects that incorporate renewable energy sources, such as solar or geothermal. Emphasis should also be given to grant proposals for acquisition of recreation lands that preserve wetlands, wildlife habitat and other natural environments.

## Statewide Initiatives

A primary component of the Missouri State Park mission is to preserve areas that best exemplify the natural heritage of the state, which has led to a long history of rigorous resource management practices. However, with the everincreasing resource threats posed by invasive and exotic species, habitat loss, undesirable encroachment, and other ecosystem degradation, resource managers are implementing a series of management initiatives that have been recently adopted to ensure a more comprehensive stewardship strategy. These initiatives include:

- Preparing a natural resource management plan abstract for each facility that lists special resources and management goals specific to the individual facility.
- Developing an exotic species control plan for each facility.
- Requiring each facility manager and naturalist to engage in at least 50 hours of stewardship activity annually.
- Engaging in one prescribed burn every three to five years per designated burn unit,
at facilities where prescribed burns are required.
- Ensuring continued flora and fauna species inventory and recording new species in the system-wide Natural Resource Inventory Database System (NRIDS), for each facility.
- Conducting annual Wild Area and Natural Area assessments at facilities that contain areas with these special designations.
- Requiring naturalists to become familiar with indicator plant species for their facility's natural communities and engaging in at least 40 hours of biological identification activity.


## Summary

There is an increasing disconnect between communities and the outdoors that is contributing to health problems and chronic disease. People of color, low-income populations and people with disabilities still face disparities regarding healthcare and access to parks. ${ }^{25,30}$ Public park and recreation agencies have a vital role to play in addressing these societal and health-related issues, but are hampered by a lack of funding that is needed to provide facilities that keep up with the changing demographics and demands of their citizenry. LWCF grant funding can assist by prioritizing projects that meet the needs of underserved communities. Agencies should prioritize programming that targets specific user populations, as well as utilize technology to attract a diverse user base and incorporate sustainability and stewardship in development projects.

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## RECREATION NEEDS

The process for soliciting public input for the 2018-22 Show Me the Great Outdoors plan took a multi-faceted approach with special emphasis on children and urban families. Since the 2005 publication of Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder, much has been made of the lack of connection between children and the outdoors and the various physical, social and psychological issues stemming from this disconnect. Subsequent to the book's initial publication, a growing body of research addressing this issue has resulted in oftentimes conflicting reports that suggest that youth participation in outdoor recreation is either continuing to decline or is beginning to increase. A common thread amongst the studies remains consistent, however, and that is that access to outdoor recreation opportunities is critical to the health and wellbeing of children and that recreation providers, healthcare professionals, education professionals and the like should look for ways to encourage participation in outdoor recreation activities.

Other than anecdotal and limited attendance data, Missouri does not have much in the way of quantitative or qualitative data regarding youth participation patterns, barriers to participation, and emerging outdoor recreation trends that appeal to children and teens. Additionally, there is a dearth of data specifically related to urban, minority and underserved youth and their participation in
outdoor recreation. This lack of data is particularly noticeable in Missouri's past SCORPs, which have traditionally relied on national participation data and on statewide survey data from recreation providers and adults residents, but not focused on youth participation, barriers or needs.

In order to give a voice to Missouri's youth and to assist land managers and recreation providers making decisions on their behalf, the Show Me plan includes a special study of children, teens and families and their interaction with the outdoors. Because of this new and unique approach to the outdoor recreation planning process, Missouri State Parks was awarded a competitive grant through the LWCF Outdoor Recreation Legacy Partnership Program (ORLPP) to assist in the funding of the following studies.

## Urban Focus Groups

To supplement a quantitative survey with parents and youth from around the state and to learn more about the unique needs of underserved populations, a series of eight focus group discussions were conducted in St. Louis and Kansas City by Missouri State Parks and its partners Synergy Group and Smarty Pants, to hear directly from young people and their parents regarding their attitudes about outdoor recreation, current and desired outdoor activities, and motivations for and barriers to
spending time outdoors. Each group was 60-75 minutes in duration and consisted of 6-9 respondents for a total of 57 participants (29 in St. Louis, 28 in Kansas City). Groups were ethnically diverse (greater than $90 \%$ minority in St. Louis, and $83 \%$ in Kansas City) and were segmented by age and gender as follows:

|  | St. Louis | Kansas City |
| :--- | :---: | :---: |
| Elementary school <br> (grades 3-5) | 1 group girls | 1 group boys |
| Middle school <br> (grades 6-8) | 1 group boys | 1 group girls |
| High school <br> (grades 9-11) | 1 group girls | 1 group boys |
| Parents | 1 group parents of <br> $3^{\text {rd }}-5^{\text {th }}$ graders | 1 group parents of <br> $6^{\text {th }}-10^{\text {th }}$ graders |

Youth participants were asked to tell their favorite free-time outdoor activity, describe a favorite memory of an outdoor activity, express what being outdoors does for them, and list reasons that may prevent them from being outside. Additionally, participants were given a series of emotive images and asked to indicate which best depicted how they felt when going outside. Lastly, participants were shown photographs of outdoor activities and asked to choose three activities they hadn't done but would most like to try.

Parent participants were asked to participate in similar tasks, such as tell their child's favorite outdoor activity, describe what outdoor activity they most liked engaging in with their child, recount a memory of their child's most enjoyable outdoor experience, and define the ideal outdoor space for middle school and high school youth. Additionally, parents were asked to identify the top three activities in which they wanted their children to participate. Copies of the youth and parent focus group discussion guides are provided in Appendix A.

## What the Outdoors Currently Provides Urban Youth

Urban youth acknowledge that being outdoors can benefit their bodies through active play and sports, but they mention far more emotional

St. Louis Focus Groups


benefits, demonstrated by the imagery they use to represent how they feel doing their favorite outdoor activity:

1. A sense of peace and calm. Being in outdoor spaces offers stress relief and serenity to middle and high schoolers in particular, who can forget about their problems and get away from crowds and noise. always around noise."

- High school girl, St. Louis

2. A sense of freedom. The outdoors offers a welcome respite for urban youth from feeling constrained by their home and school.

"Being outside makes me feel free, because I'm cooped up in buildings all day."

- Middle school girl, Kansas City

3. A sense of fun and friendship. Urban youth like to meet up with others, both those they already know and those they don't, and spend time making memories and laughing together.

"I just go to the park by my house and meet up with people, and meet new people."

- Middle school boy, St. Louis

4. A sense of adventure, risk-taking, and achievement. Urban youth want to challenge themselves and feel like they're pushing the envelope, the reason why rockclimbing, horseback riding, shooting, and ATV riding topped the list of desired activities to try.

"I want to feel like I can do anything."

- High school girl, St. Louis

5. A sense of being fully enveloped by nature. Urban youth expressed an interest in being "lost in the woods," completely surrounded by nature. But for youth growing up in the city, that is a rare occasion. Even favorite parks have noisy roads nearby, city crowds and visible buildings.

"St. Louis is all just city things. I want to see something pretty, I want to feel like I'm in nature."

- High school girl, St. Louis

6. Exposure to new experiences and new surroundings. Urban youth's most memorable outdoor experiences tended to be those that were new, and somewhat rare. School trips, scout camps, family vacations to new locations - youth value being exposed to things that they don't get to experience on a daily basis.

## What Urban Youth Are Doing, And Want

To Do, Outdoors
Not surprisingly, urban youth participate in many traditional outdoor activities. More unexpected, however, are the types of activities they wish they could try.

1. Urban youth love an array of outdoor activities. From sports to games to just "hanging out," youth currently participate in a wide variety of outdoor activities:

- Elementary school kids play pick-up sports ranging from basketball to soccer to kick-ball, but also are more likely than older youth to use the playground (slides, swings) and play games (tag, hide and seek). They are unlikely to go to the park without adult supervision. Being outdoors is a highly social activity at this age.
- Middle school kids also enjoy spending time with friends outdoors, but at this age some start to value being alone with their thoughts in nature as well. The playground starts to feel too young, and sports, organized activities, or just "hanging out" become a priority.
- High school youth want to socialize outdoors and crave a place to do so. Both boys and girls like playing basketball or volleyball outside but also seek alternative outdoor activities such as visiting The Loop or Forest Park in St. Louis, and The Plaza in Kansas City.


2. Activities that allow challenge and risk are the ones youth gravitate to the most. Because they want to push their own boundaries and seek adventure, youth of all ages, but especially middle-and highschoolers, prioritize activities they feel fall into that category. Most desired activities include:

- Target shooting or hunting
- ATV riding
- Archery
- Horseback riding
- Rock climbing (either manufactured walls or natural rock formations)


3. Activities that allow quieter enjoyment of the outdoors are also appealing. Immersing themselves in nature is also a primary goal. Urban youth seek activities that are more likely to take place outside of the city. Examples include:

- Fishing
- Hiking
- Canoeing or kayaking
- A picnic or campfire with friends

4. Urban youth also want to enhance the outdoor sports in which they are already participating. Many young people already play basketball and volleyball and ride their bikes, but feel there aren't enough courts, spaces, or trails for them. Some mentioned not having access to volleyball or basketball courts, particularly outside, or having only one or two available courts nearby which are often occupied when they want to play.
5. Teens seek organized activities in addition to free play. Socializing with friends and meeting new people, and having a gathering place to do so, is a priority for teenagers. But they feel like there are limited options for people their age. Organized activities (basketball tournaments, car shows, archery lessons) would offer them a way to enjoy the outdoors in a safe setting, while being around others their age.
6. Food also would be a welcome addition to open spaces. Youth regularly included concession stands as part of their outdoor space wish list. The novelty of eating outdoors and the desire for concession stands in local parks are surprisingly widespread sentiments, particularly amongst older teens.
7. Parents particularly value outdoor activities that teach useful skills. While parents would like to see their children do many of the same activities that youth themselves desire - ATV riding, fishing, bike riding, archery, hiking, etc. - the most appealing activities for parents were ones that would teach children essential life skills:

- Gun handling. While young people desire target shooting or hunting for the sport of it, parents see a few larger purposes for their kids:
- Responsible gun usage. Parents understand that their children are
likely to come across a gun at some point in their lives and want them to know how to handle it properly and safely.
- Demystifying firearms. Knowing that children will likely be exposed to guns at some point, parents would like to deemphasize the allure. If their children are allowed to handle guns in a safe context, they hope that it will help lessen the "cool" factor.
- Gardening. While not selected by any tweens or teens as an activity of interest, gardening was a favorite among parents in both cities. Parents like that it would teach their children a practical skill that they could implement at home. Some also saw that young people might be able to beautify their local parks while learning these new skills.


## Barriers Between Youth And The Outdoors

 Urban youth and their parents often feel that the recreation areas most accessible to them are violence-prone and neglected. Additionally, older tweens and teens feel that outdoor spaces cater to younger kids, and they crave spaces that feel like a better fit for their interests.1. Violence. In seven of eight groups, respondents mentioned violence as a barrier to urban youth spending more time outdoors. While not quite as prevalent among elementary-aged kids, because they are less likely to venture out alone and because their parents are still likely shielding them from the news, violence is top of mind for older kids, teens, and their parents. Examples include:

- Fights are prevalent among middle- and high-schoolers. Urban youth and parents witness them on a regular
basis, and also feel compelled to participate to defend themselves.
- Shootings are commonplace in their communities and make young people fearful for what they may encounter if they venture outside. One father in Kansas City would love to take his children hiking, but is hesitant after multiple murders on trails in 2017.

- Kidnappings may be less common, but they are a genuine fear for youth of both genders, in both cities. One teen girl in St. Louis never spends time outside alone, for fear of being kidnapped.
"Being outdoors is not good for me because a stranger might take me."
- Elementary school boy, Kansas City

2. Lack of trails and sidewalks. Most respondents have bikes and most love riding their bikes. But bike riding in the city isn't as safe as they'd like it to be. With a lack of trails and sometimes sidewalks, some youth feel that the roads are too congested for them to navigate.
"Every time we go to the park, we get into fights when people take our stuff."

- Middle school boy, St. Louis

3. Lack of age-appropriate spaces. While elementary-aged kids seem fairly content with the outdoor spaces available to them, middle- and highschoolers feel excluded. Playground equipment caters to younger kids. Even if they wanted to use it, older youth say they would need higher monkey bars, bigger structures to climb, and swings that could hold their weight. Some also feel that they don't have enough space to socialize with friends away from younger kids.
"Parks are 'dumbed down' for children, they're for little kids."

- Middle school girl, Kansas City
shooting/hunting, and horseback riding are all favorite aspirational activities, many respondents are unsure how they would get started - where or how to participate. Additionally, attempts to create their own fun, such as teen boys in Kansas City trying to organize their own car show, are met with officials telling them they're not allowed. They are being told "you can't" without being told "here's how."

5. Unmaintained open spaces. Urban youth and their parents readily describe instances of their local parks being neglected, which they internalize as the powers that be not caring about them. Examples include:

- Unusable water fountains.
- Broken basketball hoops or picnic tables.
- Dead grass or overgrown grass.
- Unsanitary conditions, including empty alcohol containers, used needles, and discarded condoms.
- The homeless population sharing open spaces.
minutes. Although ATV riding,

4. Lack of organized activities nearby. Urban youth have so much they want to do, but don't always know how to get started. Some outdoor opportunities like hiking, fishing, and even paintball likely require a drive of at least 30


Tweens and teens often have to "make do" with facilities they feel are designed for younger children. These age groups look for facilities and activities that provide more challenge and risk.
6. Too much screen time. Missouri urban youth are not immune from the draw of electronic devices, in spite of parental concern about too much time spent in front of a screen. As one elementary boy from Kansas City put it, playing outside kept him from "playing Fortnite."

## Summary of What We Heard from Our Focus Group Participants

Urban youth crave new surroundings and new experiences. They move from home to school and back again, and many do not have the means to venture far outside of the city. Going to a different part of Missouri or a new state is a rare occurrence for many, so the desire to simply experience something new is a high priority. Urban youth want to get away from the city and want to take advantage of the trails, natural areas and organized outdoor recreation events and programs that Missouri has to offer within an hour from their homes. But the distance, even just 30 miles away, is a barrier. Having more supervised and organized outings would give them the nature adventures they crave.

Urban youth are surrounded by crowds and noise, and crave peace and solitude. Many respondents live in dense, populated city centers. While they seek peace in the outdoors, they aren't always able to find it. As one teen pointed out, even in the best city parks, traffic noise is still present and buildings are still visible.

The novelty of eating outdoors, and the desire for concession stands in local parks, is a surprisingly widespread sentiment, among older teens in particular. While building and staffing a concession stand may be prohibitive, offering a rotation of food vendors - keeping with the food truck trend sweeping the nation - could fulfill this desire.

Urban youth feel overlooked in parks. They want to use the outdoors as a place to be active, find peace, and to be with their friends.

But parks don't seem like a good fit for tweens and teens. There is plenty of playground equipment for younger kids, but not much of interest for them. Additionally, they report that oftentimes their parks are neglected, which makes them feel as if they're not important. Having young people invest in the improvement of their local spaces by partnering with area adults on repairs, maintenance, and beautification would give them a sense of accomplishment and help develop skills, while combating issues of neglect.

Both youth and their parents feel somewhat helpless when it comes to violence in parks. Violence in underserved communities is unlikely to decline in the near future, but there are steps that would help reassure youth and their parents. One mom wishes for emergency call boxes, with a direct line to emergency responders, so that children can get the help they need quickly. Even older teens wish for some kind of supervision - whether it's frequent law enforcement patrols, metal detectors, or an adult volunteer who could help manage fights and ward off escalations. Parents want to be more engaged in community recreation efforts. Another mom expressed a desire for a neighborhood watch-type program, to keep parents involved and aware of what is happening in their community.

## Youth and Parent Surveys

As a companion piece to the urban focus groups, Missouri State Parks commissioned Synergy Group and Smarty Pants to conduct a quantitative survey of youth and their parents, exploring attitudes about outdoor recreation; current and desired outdoor activities; and motivations for and barriers to spending time outdoors.

A total of 1,500 parent/child pairs, representing youth age 8-17 from across Missouri, completed a 25 -minute online survey during April, 2018. A copy of the survey is provided in Appendix B. The sample composition included

443 respondent pairs that were recruited through Missouri school districts, and 1,057 respondent pairs that were recruited through online survey panels. The survey panel profiles include the following breakdown of participants by age and gender:

|  | $\mathbf{8 - 1 2}$ | $\mathbf{1 3 - 1 7}$ | Total |
| :--- | ---: | ---: | ---: |
| Boys | 394 | 360 | 754 |
| Girls | 395 | 351 | 746 |
| Total | 789 | 711 | 1,500 |

The below tables detail parent and youth participant demographics, as well as participating school districts.

## Youth and the Outdoors: The Big Picture

 Nearly all the youth respondents (92\%) describe the outdoors as fun and, in fact, roughly three in four say that their most fun times have been spent outside, for reasons like:- Time with family and friends.
- New adventures - going new places, trying new things.
- Experiencing nature - especially if it involves animals or getting dirty.

Outdoor time is so much fun that the majority wish they could spend more time outside. However, many youth noted that the outdoors can be uncomfortable - bad weather (or too hot/cold), too many bugs, etc. Sixty-three percent (63\%) said that being inside is more comfortable. There is also an allure to primarily indoor activities like TV and playing video games. In the suburbs, young people are especially likely to want to do things with friends, so if their friends are inside, they are too. Additionally, safety is a concern in urban areas that keeps young people inside. The graph on the following page is a summary of outdoor perceptions from youth survey respondents.

Tables 7-9. Parent and Youth Participant Demographics; Participating School Districts


|  | Total Yout Statistics |  |
| :---: | :---: | :---: |
|  | Public School | 91\% |
|  | Private School/Parochial School | 4\% |
|  | Home Schooled | 4\% |
| $\begin{aligned} & \text { 冗N } \\ & \text { K } \end{aligned}$ | Urban | 12\% |
|  | Suburban | 54\% |
|  | Rural | 34\% |
| 准 | Caucasian/White | 85\% |
|  | African-American/Black | 11\% |
|  | Hispanic | 4\% |
|  | Other | 6\% |
|  | Eligible | 39\% |
|  | Not Eligible | 61\% |
|  | North Missouri | 7\% |
|  | Kansas City | 32\% |
|  | Central | 9\% |
|  | St. Louis | 30\% |
|  | South | 23\% |
| *Respondents could select multiple categories for ethnicity |  |  |


| School District |  |
| :--- | :--- |
| North Kansas City Schools | 228 |
| Wentzville R-IV School District | 39 |
| Columbia Public Schools | 33 |
| Polo R-VII School District | 23 |
| Silex R-1 School District | 22 |
| Parkway Schools | 19 |
| Rockwood School District | 17 |
| Hazelwood School District | 16 |
| North Harrison R-III School District | 15 |
| Waynesville R-VI School District | 9 |
| Ferguson-Florissant R-II School District | 8 |
| King City R-1 School District | 7 |
| West Plains School District | 6 |
| Nixa Public Schools | 1 |
| Total School Recruits | 443 |
|  |  |

Page | 55

Chart 4．Outdoor Perceptions of Youth Survey TOTALLY AGREE！｜SOMEWHAT AGREE｜SOMEWHAT DISAGREE｜TOTALLY DISAGREE！ $\begin{gathered}\text { Tomatly／y }\end{gathered}$ Agre ฝั้ 亏ัํํ กํ 잉 คั้ かे ํ ฝे ํ กั้ $\frac{20}{子}$ $\stackrel{\circ}{\infty}$ $\stackrel{\circ}{\circ}$ $\stackrel{\text { ํ }}{\stackrel{1}{7}}$ ๗ั ํ 웅 กัํ กํ 웅 స్రి ஹ우 $46 \%$ TOTALIY AGREL SOMEWHAT AGREE｜SOMEWHAT DISAGRE｜TOTALIY DISAGRE Being outside is fun $\square 57 \% \quad 35 \% \quad 6 \% 20$ | $52 \%$ | $39 \%$ |
| :---: | :---: |
| $4 \% 20$ |  |



 \begin{tabular}{|c|c|c|}
\hline $43 \%$ \& $42 \%$ \& $12 \%$

 

\hline $40 \%$ \& $40 \%$ \& $14 \%$ <br>
\hline \& $5 \%$ <br>
\hline

 

\hline \& \& <br>
\hline $8 \%$ \& $19 \%$ \& $34 \%$ <br>
\hline

 

\hline $23 \%$ \& $40 \%$ \& $26 \%$

 

\hline $13 \%$ \& $35 \%$ \& $28 \%$ <br>
\hline $12 \%$ \& $36 \%$ \& $33 \%$
\end{tabular}

 \begin{tabular}{l|l}
\& $14 \% \quad 3 \%$ <br>
$40 \%$ \&

 

\hline $6 \%$ \& $21 \%$ \& $32 \%$ \& $40 \%$ <br>
\hline $5 \%$ \& $22 \%$ \& $38 \%$ \& $35 \%$ <br>
\hline \& \& \& <br>
\hline

 

\hline $19 \%$ \& $36 \%$ \& $30 \%$ <br>
\hline $19 \%$ \& $31 \%$ \& $32 \%$ <br>
\hline

 

\hline $25 \%$ \& $44 \%$ \& $23 \%$ \& $9 \%$ <br>
\hline

 

\hline $24 \%$ \& $38 \%$ \& $24 \%$ <br>
\hline
\end{tabular}

 I care about nature and the environment I love spending time outside I love all of the adventures I can have outside Some of the best times I＇ve ever had have happened outside I love exploring nature I wish I got to spend more time outside I only like being outside when I＇m playing sports Being inside is more comfortable than being outside It＇s just not comfortable outside I don＇t have enough time to spend time outside It＇s not safe to go to the parks in my area Being outside makes me worried

 My friends don＇t think it＇s cool to hang out outside It＇s more fun to use an electronic device than do something outside I＇d rather spend time outside than use my phone or other device We have great parks in our area


# "It's Not Safe to go to the Parks in My Area" - Youth Reported TOTALLY AGREE! | SOMEWHAT AGREE | SOMEWHAT DISAGREE \| TOTALLY DISAGREE! 



Young people would like a way to use their wellloved electronic devices outside. Within the suburbs, opportunities for friend groups to participate together are desired. In urban areas, safety is essential, including proper lighting and adult or security supervision. Among urban youth, $32 \%$ say it is not safe to go to parks in their area, as depicted in the chart below. This echoes what the focus group participants had to say.

Parents are anxious for their kids to spend time outdoors but seek low and no-cost programs for their children that work with their schedules. Parents and youth are looking for activities they can enjoy together and parks within walking distance from their homes.

## Girls vs. Boys

Although there are many similarities between girls' and boys' experience of the outdoors, there also are some key differences.

Girls are more likely than boys to:

- Enjoy being outside spending time with family.
- Look for new experiences and the opportunity to learn new things.
- Express interest in nature.
- Care about nature and the environment.
- Be busier with more commitments and have less free time for outdoor activities.

Boys are more likely than girls to:

- Spend more time outside.
- Express interest in building things.
- Love the rush of going fast, competition and challenge when outdoors.
- Enjoy getting away from the typical rules when outside.
- Be drawn to staying inside with video games.


## Tweens vs. Teens

As with gender, many universals apply across age groups, but tweens and teens have some core differences.

Compared to teens, 8 to 12 year-olds:

- Spend more time outside.
- Love being outside, and equate fun with being outside.
- Enjoy the adventures that outdoor activities offer.
- Are more interested in nature.
- Love being able to get dirty.
- Enjoy going fast.
- Face challenges because of parents' limited time to take them outside.

Compared to tweens, 13 to 17 year-olds:

- Love going outside to relax.
- Feel there is not enough to do at parks for people their age.
- Appreciate the comforts of the indoors.
- Are more pulled by electronics.
- Tend to be busier with other commitments (homework, jobs, indoor activities, etc.) that preclude outdoor activity.


## Current Activities

Similar to the focus group activities, youth respondents were shown a series of outdoor recreation areas and asked to indicate where they spend time outside. Youth across Missouri are currently participating in simple, close-tohome activities:

- Unstructured play.
- Hanging out, outside.
- Pick-up sports.
- Walking (with and without a pet).
- Visiting playgrounds.

Parent responses are similar, reporting that their children are more likely to:

- Hang out, outside.
- Play in a yard, driveway or sidewalk.
- Participate in unstructured play outside.
- Go for a walk (with and without a pet).
- Go for a run or jog.

Urban vs. Suburban vs. Rural
The chart on the following page compares the top ten most common outdoor locations for activities in urban, suburban and rural areas, as reported by youth. Urban youth are statistically more likely to use bike trails than rural youth, whereas suburban and rural youth are more likely to use trails for hiking and walking. Suburban youth are statistically more likely to report using a community pool or lake than urban or rural youth. Similar to what their parents reported, rural youth are statistically more likely to use fields, woods and streams near their homes than urban or suburban youth.

The chart on page 60 compares the top ten most common outdoor locations for youth activities in urban, suburban and rural areas, as reported by parents. Per their parents, urban and suburban youth are statistically more likely to recreate in a neighborhood park or playground, on residential streets, or at a community pool or lake, than rural youth. Conversely, rural youth are statistically more likely to recreate in fields, woods and streams near their homes or at state parks, than urban and suburban youth. The most common recreation location across the urban, suburban and rural spectrum is respondents' yard, driveway or sidewalk.
Chart 6.
Top 10 Most Common Locations for Youth Outdoor Activities in Urban，Suburban and Rural Areas－Youth reported $\mathrm{U} / \mathrm{S} / \mathrm{R}$ label indicates that item is statistically higher than other group（If＂ U ＂－group is higher than urban；if＂ S ＂－group is higher than suburban；if＂ R ＂－group is higher than rural） Suburban 品

|  | Swimming pools／water parks $57 \%$ |  |  |  | $\begin{aligned} & \text { Nature parks/areas } \\ & 49 \% \mathrm{U} \end{aligned}$ | 产룽 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | 毞这 |  |  |  |  |  | $\begin{gathered} \text { \%Іદ } \\ \text { sұnoد \|ıeqłəyseg } \end{gathered}$ |

Chart 7.
Top 10 Most Common Locations for Youth Outdoor Activities in Urban, Suburban and Rural Areas- Parent reported $\mathrm{U} / \mathrm{S} / \mathrm{R}$ label indicates that item is statistically higher than other group (If " U " - group is higher than urban; if " S " - group is higher than suburban; if " $R$ " - group is higher than rural)畾国 Urban $1 \begin{gathered}\text { A yard, driveway or sidewalk } \\ 71 \%\end{gathered}$ $56 \%$ R
Local park in our neighborhood
In the street
42\% R
pool or lake
Schelds
41\%

A yard, driveway or sidewalk

## A yard, driveway or sidewalk $73 \%$

Fields, woods or streams near our home
$53 \%$ US
Town/city park
$47 \%$ U



pool $33 \%$
School playgr


51\% R

## Town/city park

School fields
$45 \%$
ахејо ןood

| $\square$ |
| :---: |
|  |

$\square$


| Local/community playground |
| :---: |
| neighborhood |
| $41 \% \mathbf{R}$ |

In the street
39\% R
Fields, woods or streams near our home
$35 \%$ U

## School playground <br> 35\%

Sports fields
34\% R

## Desired Activities

During the survey, youth respondents were shown a series of outdoor images and asked to indicate which areas they would most like to visit. Regardless of where they live, youth across the state would like to visit areas where they could participate in more adventurous activities. Horseback riding areas are among the top desired locations for all young people. They are seeking both the adventure and the connection with animals. Other top locations include boating and water sports areas, target shooting sites, sledding and skiing areas, and trails for motorized vehicles.

The chart below compares desired activity sites by urban, suburban and rural youths. Urban youth are statistically more likely to report wanting to visit a community swimming pool or lake and fishing sites than suburban and rural youth respectively. Suburban youth too are
more likely to want to visit fishing sites than rural youth. Rural youth are more likely to want to visit hiking/walking trails or nature areas than urban youth.

## Barriers to Participation

Of considerable interest to recreation providers are reasons for lack of participation. Parents and youth alike were asked to indicate reasons why more time wasn't being spent outside. Interestingly, parents reported that it isn't lack of programs or activities that prevent their kids from being outside - their kids simply prefer doing indoor activities. Perhaps this isn't so surprising when considering the amount of time American youth spend on screen time. The youth respondents reflect this trend, with over half indicating they would rather watch TV or videos, or play video games or video apps. The charts on page 62 compare responses between parents and youth regarding barriers.

Chart 8.
Top 10 Desired Locations for Youth to Spend Time (that they are not currently visiting) - Youth reported $\mathrm{U} / \mathrm{S} / \mathrm{R}$ label indicates that item is statistically higher than other group (If " U " - group is higher than urban; if " S " - group is higher than suburban; if " R " - group is higher than rural)


Suburban
Rural


| Horseback riding areas 33\% R | Horseback riding areas 28\% |
| :---: | :---: |
| Sledding/skiing/snowboarding areas 30\% | Trails for motorized vehicles 27\% |
| Target shooting sites $26 \%$ | Sledding/skiing/snowboarding areas 26\% |
| Trails for motorized vehicles 24\% | Boating and water sports areas $24 \%$ |
| Boating and water sports areas $24 \%$ | Mountain biking areas 22\% |
| Ice skating rinks 21\% | Target shooting sites 22\% |
| Mountain biking areas 21\% | Ice skating rinks 20\% |
| Camping sites/areas $20 \%$ | Camping sites/areas $20 \%$ |
| Picnic areas 15\% | Trails for walking/hiking $17 \% \text { U }$ |
| Tie: Dog park Fishing sites R 14\% | Tie: Bike trails Nature parks/areas U $16 \%$ |

Chart 9.

## Top 10 Barriers to Youth <br> Spending Time Outdoors



Page

Chart 10.
Reasonable Walk to a Park- Parent reported
< 5 MINUTES | 5-10 MINUTES | 11-15 MINUTES | 16-20 MINUTES | $21-30$ MINUTES | OVER 30 MINUTES


## Helping Youth to Go Outside

Parents report that access to more free outdoor programs or activities would be the greatest determining factor for helping to get their kids outside. This might also help with youth's top suggestion for helping get them out of doors, which is having their parents take them more often. Both agree that the second most important factor would be having parks within walking distance. The majority of parents report that a reasonable walk to a park is less than 15 minutes (as depicted in the above chart), very similar to the national standard of a 10 -minute walk. Also within the top four suggestions given by both sets is the notion of having outdoor programs or activities that appeal to BOTH parents and kids. An interesting side note is that seventh on the list of top ten suggestions from youth is being able to use their phone or tablet while outside. Only $10 \%$ of parents think this would help get their kids outside, and it doesn't rank in their top ten.

## Recreation Providers' Survey

A third component of the research conducted for the SCORP was a survey of local recreation providers. An online survey of parks and recreation departments, city administrators and public educators was conducted in April and May, 2018. An email was sent to 852 potential respondents, with several follow-up email reminders. Nearly 160 (159) respondents completed the survey, for a response rate of $18.8 \%$. A copy of the survey instrument is provided in Appendix C and survey results are provided in Appendix D. Seventy percent (70\%)
of respondents reported serving a rural/small town geographic service area, with the remaining $30 \%$ reporting an urban/suburban service area.

Respondents were asked to rank their existing recreational facilities from "no need of improvement" to "extreme need of improvement." Overall, a third (33\%) of respondents indicated that their outdoor swimming pools were in extreme need of improvement, with nearly a third (32.7\%) indicating their playgrounds were also in extreme need of improvement. The chart on page 64 compares need for improvement by facility. Rural providers feel that outdoor swimming pools, splash pads, outdoor basketball courts, playgrounds and tennis/pickle ball courts need the most attention; whereas urban/suburban providers feel that playgrounds, tennis/pickle ball courts, trails, nature parks/areas and multi-use fields in their communities are in most need of improvement.

In an open-ended question, providers were also asked to describe any other facilities in their communities that were in need of improvement. Although trails were included in the list of facilities, many recreation providers felt the need to reiterate the importance and need for improvement of trails, as demonstrated by the word cloud on page 65 . Additionally, general improvement to parks was listed, as were specific facilities such as

Chart 11. Outdoor Recreation Facilities Identified by Recreation Providers as Needing Improvement

Q5 Think about the outdoor recreation facilities that your community offers. Using a scale of $\mathbf{1}$ to $\mathbf{5}$, where $\mathbf{1}$ is no need of improvement and 5 is extreme need of improvement, how would you rate the need of improvement of your local...


amphitheaters, restrooms, all-weather tracks, playgrounds and pavilions.

Providers were then asked to assess the demand in their communities for their existing facilities, and to indicate if demand was much lower, lower, slightly lower, about right, slightly higher, higher or much higher. Playgrounds, trails, baseball/softball fields, and multi-use fields all show the most demand, whereas golf courses, football fields and volleyball courts show demand is remaining steady or declining. Chart 12 on page 66 compares facility demand.

The top five facilities growing in demand in rural communities and small towns include:

- baseball/softball fields (80\%)
- playgrounds (78\%)
- outdoor swimming pools (73\%)
- trails (72\%)
- multi-use fields (70\%)

Urban/suburban providers report that the following are all among the top five facilities showing most demand:

- multi-use fields (64\%)
- trails (64\%)
- splash pads (61\%)
- playgrounds (55\%)
- soccer fields (55\%)

For facilities or activities that are experiencing a decline in demand, recreation providers were asked to identify those facilities and speculate as to the reasons for their decline.
Baseball/softball fields, outdoor swimming pools, playgrounds, tennis courts, football fields and golf courses all made the list of declining facilities. Reasons ranged from age of facilities, upkeep and maintenance issues and lack of funding, to competition from other larger communities or private recreation providers, demographic changes and lack of interest, and injury concerns (in the case of football, in particular).

In a slightly different question, recreation providers were asked what facilities they expected would grow in popularity over the next five years. Overall, respondents expect playgrounds (80.6\%), trails (77.5\%), multi-use fields (71.8\%) and nature parks/areas (68.4\%) to grow most in popularity over the next five years. Chart 13 on page 67 shows those facilities expected to grow most in popularity over the next five years. In rural areas and small towns, playgrounds (81\%), trails (72\%), multi-use fields (70\%), nature parks/areas (65\%), and ballfields (64\%) will likely be the facilities that grow most in popularity. In urban and suburban areas, the top five facilities are very nearly the same, with the exception of dog parks. Trails (89\%), playgrounds (80\%), dog parks (78\%), multi-use fields (75\%), and nature parks/areas (75\%) are all expected to be the top facilities growing in popularity over the next five years.

Chart 12. Current Demand for Outdoor Recreation Facilities, As Identified by Recreation Providers
Q7 Would you say that local demand for the following is much lower, lower, slightly lower, about right, slightly higher, higher, or much higher than what is currently provided, if at all?


Chart 13. Where Outdoor Recreation Facility Growth is Expected by Recreation Providers
Q10 Do you see the popularity of the following decreasing a lot, decreasing a little, not changing, increasing a little, increasing, or increasing a lot?


Chart 14. Importance-Performance Analysis
Comparing Facility Improvement Needed by Growing Demand

*Open-ended comments by respondents suggest that, while tennis may be on the decline, pickle ball is increasing in demand.

An Importance-Performance (IP) analysis was conducted to further explore which type of facilities recreation providers feel are most in need of improvement and most likely to grow in demand over the next five years. The above chart demonstrates that recreation providers feel trails, playgrounds, multi-use fields, nature parks and areas, soccer fields, outdoor swimming pools, splash pads, picnic areas, and baseball/softball fields are most in need of improvement, and are expected to grow in demand in the next five years.

Respondents were asked to list any other facilities they felt would grow in popularity over the next five years. The word cloud on the following page captures the respondents' comments. Again, the predominant facility listed was trails, followed closely by obstacle courses and outdoor fitness equipment/parks, splash pads, bike courses/pump tracks, pickle ball courts, and all-inclusive playgrounds.

## bike courses/pump tracks outdoor fitness equipment/parks outdoor obstacle all-weather track olleyballall-inclusive playgrounds baseball/softball fields $\Delta$ archery ranges <br> trails <br> soccer fields frisbee golf football splash pads gardens pickle ball courts

Support facilities that providers feel need the most improvement include public transportation to facilities and public restrooms, as depicted in the graph below right. Of the open-ended comments, the concept of trails and trail connectivity between schools and facilities was the most frequently cited for other needed support facilities. Community centers, security lighting and updated playgrounds were also mentioned.

Providers were asked to rank priorities that would allow them to make improvements to the recreational opportunities in their communities. The priorities included:

- Increasing overall funding for outdoor recreation.
- Increasing the amount of money for maintenance and operation.
- Educating the public and officials on the values and benefits of outdoor recreation.
- Expanding, updating and maintaining existing outdoor recreation facilities.
- Increasing conservation/preservation efforts.
- Increasing, improving and diversifying marketing and public relations.

Not surprisingly, respondents ranked increasing overall funding; funding for maintenance and
operations; and expanding, updating and maintaining outdoor recreation facilities as their highest priorities.

Outdoor recreation providers were also asked to rate the degree to which the following were obstacles in preventing improvements being made to community recreation facilities:

- Low priority/support for recreation.
- Lack of a consistent funding system.
- Ignorance/lack of education on benefits/value of outdoor recreation.
- Inadequate planning.
- Lack of flexibility/fear of trying something new.
- Increasing demand/use.
- Demographic shifts (specifically related to ethnic/cultural diversity).
- Participating in outdoor recreation is unsafe due to local crime.
- Outdoor recreation creates too many liability issues.
- Availability of future park land.

Chart 15. Support Facilities in Need of Improvement Identified by Recreation Providers

Q 12 Using a 1 to 5 scale, where 1 is not at all adequate and 5 is very adequate, rate the adequacy of the following support components.


Q15 Using a scale of 1 to 5 , where 1 is not an obstacle at all and 5 is a very large obstacle, how would you rate the following obstacles at preventing improvements in outdoor recreation from being made in your community?


Overall, lack of a consistent funding system presented as the largest obstacle, as shown in Chart 16 above. Surprisingly, the notion that participating in outdoor recreation is unsafe due to local crime was listed as not an obstacle by a wide margin. Nearly two-thirds (62\%) of respondents did not feel this as an obstacle at all. A cross tabulation of urban/suburban responses showed that, while $59 \%$ of respondents did list this as somewhat of an obstacle, none of the respondents indicated that it was a very large obstacle and the majority (41\%) listed it as not an obstacle at all. This somewhat belies the focus group results, in which crime and fear of violence were very real threats acting as barriers to outdoor recreation participation.

When asked to indicate how well they are able to meet the needs of differing age groups, providers agreed that they struggle somewhat
with meeting the needs of the 13-18 and 55+ age groups. In a follow-up question, providers indicated that the 13-18 age group is the one with the most unmet needs, echoing the results from the focus group and youth surveys.

In the open-ended comments, recreation providers admitted to difficulties when trying to provide facilities and activities for teens. Most of the play equipment or facilities in their communities are geared to younger children, and providers feel that teens lack interest in organized sports or other programming, preferring to engage with technology instead. Several expressed frustration at not being able to connect with teens to determine their needs and preferences. The focus group and survey results will hopefully be an aid to managers as they try to determine what facilities and activities to provide for this underserved group, although several providers already seem to

Chart 17. Recreation Providers' Ability to Meet the Needs of Various Age Groups
Q 16 Using a scale of 1 to 5 , where 1 is needs are not being met at all and 5 is needs are being met very well, how would you rate your ability to meet the needs of the following age groups?


Chart 18. The Age Group with Most Unmet Needs
Q 17 Out of the following age groups, which one has the most unmet needs?

have their finger on the pulse of teen recreation needs by proposing the development of more adventure-based facilities such as obstacle courses, pump tracks and the like.

## Focus Group and Survey Summary

Both parents and youth enjoy and recognize the benefits of being outdoors, but struggle with barriers preventing greater participation in
outdoor activities. Competing interests, particularly technology, hamper their ability to enjoy parks and recreation spaces as much as they'd like. Urban youth and their parents worry about violence in their neighborhood parks, and all parents and youth want neighborhood parks within walking distance of home. Teens and tweens feel that facilities designed specifically for them are lacking in the
current park landscape. All youth, particularly teens and tweens, crave adventure-based facilities and activities that provide a sense of risk and freedom. Parents look for activities that are free or low-cost and that appeal to both. Recreation providers feel that trails, playgrounds, outdoor swimming pools, and nature parks/nature areas are in need of most improvement in their communities, in order to keep up with growing demand. Providers also recognize that teens and older adults are
underserved in facility offerings, and are attempting to incorporate programming and facilities that appeal to multiple generations as well as install facilities that target specific age groups, such as pickleball courts, bike pump tracks, and adventure fitness courses. However, recreation providers are often hindered in their efforts to provide additional facilities and programming because of a lack of consistent funding.


## GOALS \& PRIORITIES

Although the primary intent of the Show-Me plan is to assess statewide recreation needs and establish a mechanism for awarding Land and Water Conservation Fund (LWCF) grants to those communities in need of outdoor recreation opportunities, research conducted as a part of the planning process took a much broader approach and explored other related issues such as health, demographic changes, economic sustainability, and underserved communities. Because of this comprehensive approach, a SCORP advisory review committee was established to assist with developing goals and setting future funding priorities. The advisory review committee included federal, state and local public recreation providers, but also included experts in other fields beyond public land management.

Using the results from the focus groups, youth/parent surveys, and the recreation providers' survey, the advisory committee identified the following seven broad goals and subsequent objectives to be implemented by public recreation providers and other stakeholders for meeting the future recreation needs of Missourians. Many of these goals and objectives will also be incorporated into the Open Project Selection Process (OPSP), the annual process by which potential outdoor recreation projects are selected for Land \& Water Conservation (LWCF) grants.

Goal 1. Expand recreational opportunities that serve multiple generations and user types; that target underserved populations such as youth, older adults, and communities of color; and that incorporate universal design principles and provide recreational facilities for users with physical or developmental disabilities.
Objective 1.1 - Increase the number and geographic distribution of inclusive playgrounds and other recreational facilities that address the developmental needs of all ability levels and that provide opportunities for physical, cognitive, communicative, social/emotional, and sensory development, particularly for those with physical or developmental disabilities.
Objective 1.2 - Allocate $50 \%$ of the annual LWCF apportionment for targeted themes, such as health issues (ex. prioritize funding for areas at higher risk of heart disease, obesity, diabetes, etc.); income disparities (ex. prioritize funding for communities with a higher percentage of children eligible for free or reduced lunches); and other underserved locales or populations.
Objective 1.3 - Ensure that outdoor recreation facilities provide quality recreation opportunities for the broadest possible user base, avoiding exclusive levels of service that contribute to barriers to participation.

Objective 1.4 - Develop public recreation opportunities that encourage social interaction and provide community gathering spaces, such as urban gardens, farmers markets, dog parks, and outdoor concert venues.
Objective 1.5 - Develop facilities and programs that appeal to and emphasize youth participation, particularly teens, and that provide a sense of freedom and adventure.
Objective 1.6 - Where appropriate, encourage technology accessibility in parks and recreation areas to encourage prospective new users, particularly youth. Objective 1.7-Establish facilities and programming that appeal to older adults and facilitate social interaction, participation in low-impact physical activities, and stimulate mental acuity.

Goal 2. Expand Missouri's trail system and promote trails as a critical component to engaging in an active and healthy lifestyle. Expansion should be encouraged where fiscally reasonable, recognizing that trail managers have finite resources for development, maintenance, operation, and liabilities.
Objective 2.1 - Continue to identify trail gaps by completing the Missouri Trails Project. Prioritize Recreational Trails Program (RTP) funding for trail projects that close gaps.
Objective 2.2 - Establish trails that connect to parks, downtown areas and business districts, schools, and neighborhoods. Prioritize RTP funding for trails that act as connectors.
Objective 2.3 - Develop common messaging that emphasizes the economic benefit of trails, particularly those that draw users into business and downtown districts. By "selling" the economic importance of trails, especially to businesses, grant applicants are better able to secure grant match.

Objective 2.4 - Expand the state's water trail system, and emphasize connection between public lands. Prioritize RTP funding for development of water trails.
Objective 2.5 - Design trails that incorporate active fitness pursuits. For instance, develop fitness stations along trails or construct trails that can accommodate long-distance races, such as 5K races. Prioritize RTP funding for trail projects that integrate active elements. Objective 2.6 - Implement readily marketable trail-related health programs, such as St. Louis County Park and Recreation Department's 30/30 Hike and 10/10 Bike programs. The 30/30 Hikes Program includes 30 trails that take approximately 30 minutes to hike, while the 10/10 Bikes Program includes ten trails with distances of at least ten miles for bicycling.
Objective 2.7 - Leverage RTP funding for projects that renovate existing trails and trail facilities, particularly those that upgrade facilities to meet Americans with Disabilities Act (ADA) standards.

## Goal 3. Leverage Land and Water Conservation Fund (LWCF) grant financing to replace obsolete recreational facilities, address security issues, and encourage longterm sustainability of projects.

Objective 3.1 - Prioritize LWCF grant funding for projects that upgrade existing park and recreation facilities and infrastructure to meet ADA standards.
Objective 3.2 - Prioritize LWCF grant funding to replace obsolete facilities and address safety and security issues, particularly at previous LWCF sites.
Objective 3.3 - Give precedence to grant proposals that emphasize adequate funding and staffing for long-term maintenance of projects.
Objective 3.4 - Emphasize support facilities and infrastructure, such as restrooms, parking lots, and sidewalks, recognizing that the need for these types of facilities is equally great in order to ensure access to all.

Objective 3.5 - Encourage cost-savings and operational efficiency by highlighting LWCF grant proposals that incorporate multi-use spaces or facilities that can be adapted to accommodate multiple uses, as well as incorporate facilities that have a smaller footprint and require less infrastructure (i.e., spraygrounds vs. swimming pools).
Objective 3.6 - Focus LWCF grant funding on proposals that incorporate stormwater retention ponds, create or acquire wetlands in flood prone areas, or implement other flood control practices that also provide recreational opportunities.
Objective 3.7 - Prioritize LWCF grant funding for projects that include landscaping with native species and methods for minimizing the spread of invasive species, as well as projects that preserve or create wildlife habitat and other natural environments.
Objective 3.8 - Emphasize projects that use recycled materials or install permeable surfaces; projects that incorporate energyefficient mechanisms such as timers or sensors; and projects that integrate renewable energy sources, such as solar or geothermal.
Objective 3.9 - Prioritize projects that contribute to neighborhood stabilization, by reusing or revitalizing brownfields, FEMA disaster sites, or other infill opportunities.

Goal 4. Connect youth to the outdoor world through environmental education, stewardship opportunities, and projectbased learning.
Objective 4.1 - Partner with universities and colleges to provide students classroom experience in developing park master plans, needs assessments, and feasibility studies, as well as special event planning. Students gain experience and classroom credit, as well as future employment opportunities.
Objective 4.2 - Incorporate natural and cultural history, as well as other core curriculum competencies, on interpretive signs in parks and along trails. Doing so will
assist schools with justifying student field trips to outdoor places.
Objective 4.3 - Develop youth volunteer and stewardship programming to encourage youth "buy-in" and ownership of local parks. Work with school clubs and school organizations such as Future Farmers of America (FFA), National Honor Society (NHS), and National Beta Club chapters to identify service projects that fulfill required volunteer hours.
Objective 4.4 - Partner with vocational schools on construction and development projects, providing hands-on trade experience and allowing students to earn classroom credit.
Objective 4.5 - Include teens in the planning and design process for developing new parks or facilities. Encourage teens to participate in the public input process for new park or facility development, and give higher priority to LWCF grant proposals that include teens in the planning and input phases.
Objective 4.6 - Partner with the Missouri
Department of Elementary and Secondary Education (DESE) and public recreation providers to list local amenities and educational resources in a centralized online database so that schools and other youth organizations can more readily identify area outdoor facilities and activities that can be incorporated into curricula.

[^2]Objective 5.2 - Partner with community, regional, and transportation planners to identify sidewalks, bike lanes, and alternative transportation corridors needed to connect residents to parks, as well as facilitate greater walkability/bikeability within communities.
Objective 5.3 - Develop messaging and educational materials that demonstrate the importance of park and recreation facilities as essential community services, for distribution to health care professionals, social service providers, insurance companies, community planners, as well as state and local officials.
Objective 5.4 - Coordinate with community and county health care providers to develop park- and trail-specific prescription programs that encourage use of local parks and trails for health and fitness activities.
Objective 5.5 - Host a statewide workshop with public recreation providers and health care professionals, to explore opportunities for partnering on health initiatives and improving community health and wellness through physical activity, as well as identify potential sources of health care funding that could be leveraged as match for LWCF grants.
Objective 5.6 - Continue regularly-scheduled meetings with the SCORP advisory committee, to identify and implement recreation and health initiatives, as well as determine implementing partner agencies and organizations.
Objective 5.7-Coordinate with state and local recreation providers to increase awareness of close-to-home outdoor recreation opportunities.

## Goal 6. Promote and identify grant and other funding opportunities that expand outdoor recreation facilities and activities.

Objective 6.1 - Establish a statewide grants coalition that includes public agencies, nonprofit organizations, and other stakeholders, to identify and advertise sources of public and private grant funding
for outdoor recreation, as well as sources of match and cost-sharing.
Object 6.2 - Develop an online clearinghouse of public and private funding sources for outdoor recreation development and programming.
Objective 6.3 - Provide technical assistance to grant applicants by coordinating with other funding providers to host grant-writing workshops around the state.

Goal 7. Continue data collection, research efforts, and spatial analysis to identify areas of greatest recreation need.
Objective 7.1 - Partner with agencies such as the Missouri Department of Health and Senior Services (DHSS) and exploreMOhealth (https://exploremohealth.org/) to conduct community health and community needs assessments.
Objective 7.2 - Coordinate with regional planning commissions to develop GIS gap analysis mapping that identifies communities and neighborhoods lacking in local outdoor recreation opportunities, or communities and neighborhoods with high health risk factors.
Objective 7.3 - Continue research efforts to understand recreation needs, use patterns, and barriers to African American, Hispanic, and other ethnicities.
Objective 7.4 - Coordinate with public recreation providers to share data in order to develop a GIS-based asset management system of park locations, that includes park boundaries, a list of facilities in each park, as well as facility and infrastructure locations within park boundaries.

## APPENDIX A. YOUTH \& PARENT FOCUS GROUP DISCUSSION GUIDES

The Great Outdoors
Focus Groups Discussion Guide - Kids
FINAL 4.12.18

## Project Details

- Six, 75-minute discussions with kids grades 3-11
- 2 groups of $3^{\text {rd }}-5^{\text {th }}$ graders ( 1 boys, 1 girls)
- 2 groups of $6^{\text {th }}-8^{\text {th }}$ graders ( 1 boys, 1 girls)
- 2 groups of $9^{\text {th }}-11^{\text {th }}$ graders (1 boys, 1 girls)


## Key Objectives

- Identify the activities that kids are currently doing outside, and what they wish they could do outside
- Understanding what kids like about being outdoors, how it makes them feel, and what motivates them to go outdoors
- Uncovering the barriers that prevent them from doing what they want to outdoors


## Materials

- Blank paper and markers for creative exercises
- Stuffed animal for lightning rounds (for younger kids)
- Emotive image sets
- Outdoor visuals
- Sticky notes


## 1. Introductions and Warm-Up (10 minutes)

Moderator will:

- Introduce herself and welcome respondents
- Explain basics of discussion
- Be open and honest
- No right/wrong answers
- Okay for all to have different opinions
- Videotaping - please speak one at a time
- Let's start by introducing ourselves - l'll go first
- Please let us know your name, age, grade, and who else lives in your home with you
- Favorite thing to do outdoors - moderator to start running list of favorites
- That was a great list of things to do outdoors to start with! I want to see if we can come up with an even longer list of things you do outdoors when you have free time. Doing something you have to do - like sports practice - doesn't count, even if it's fun. We're going to do a "lightning round".
- If someone passes you this stuffed animal, you have to say the name of something you do outdoors for fun on a regular basis.
- As soon as you name an activity, toss it to someone else. We'll keep going until we're out of ideas. Ready? The moderator will add to running list to refer back to.


## 2. The Great Outdoors - Benefits and Motivators ( 20 minutes)

- We've come up with a great list of things you do outdoors. But now I want to know what the BEST things are to do outdoors. So, I want you to think about the most fun times you've ever had in the outdoors. Remember that it should be something you choose to do in your free time - not a sports team, etc.
- Then pick the MOST FUN you can ever remember having outdoors in your area - and create a memory of it on the paper in front of you. You can draw a picture of it, write a quick summary, a poem - how you choose to remember it is up to you. There are no rules.
- When you are done, we are going to share them with each other.
- Respondents will get five minutes to work on their memory. Once respondents are finished, they will share their memories one at a time with the group, with the moderator probing as needed.
- What were you doing?
- Where were you?
- Who were you with?
- What made it so fun?
- [If something you can also do inside] Why did you do this outside instead of inside?
- Do you plan to do it again? Why (not)? Moderator to probe on barriers
- Why should someone else try it?
- Let's move on to something new now. I want you to help me finish some sentences. You don't have to raise your hands - if you think of words, just say them.
- I like to be outdoors because $\qquad$ .
- I don't like to be outdoors because $\qquad$ .
- Being outdoors is good for me because $\qquad$ .
- Being outdoors is not good for me because $\qquad$ .
- My favorite places to be outdoors are $\qquad$ .
- I would spend more time outdoors if $\qquad$ .
- I would spend more time doing my favorite outdoor activity if $\qquad$ .

For each response, the moderator will ask respondents why they choose that word/phrase.

## 3. Desired Outdoor Activities \& Barriers (20 minutes)

- Let's take another look at the list of things you told me you do outdoors. I'm going to pass out a stack of images that may describe how you feel on the inside when you're doing these things. For example: Moderator to show one image and see if kids can guess what feeling it expresses.
- Let's quickly go around the table. Which image did you pick?
- Why does that describe how you feel outdoors?
- We've talked a lot so far about what you already do outdoors. Let's talk about what you want to do outdoors, that you're not already doing. There are a bunch of images of things you might be able to do outdoors posted on the walls around us. I am going to give each one of you three sticky notes. Please take a look at all of the images, and then select the three that you'd most like to do.
- OK, let's start with those that have the most sticky notes. Why is [X] something you want to do?
- What makes it different from what you're already doing? Moderator to repeat exercise for every image with a sticky note attached.
- Look back at the images in front of you. How would you feel if you were able to do this outdoor activity? Why?
- You've told me what you want to do and how it would make you feel. So why aren't you doing these things outdoors? Let's start with [X]. Moderator to generate list of barriers.
- What's stopping you? If needed, the moderator will probe for reasons including proximity, safety, transportation, parent involvement, etc.
- Do you think it's something you could do soon? Why (not)?
- If you decided you want to do this soon, what would it take? How would you - if needed, with help from your parents - make this happen?


## 5. Outdoors Advertising Campaign ( 20 minutes)

- For the rest of our time together, you have a job! Your job is to create a TV commercial for The Great Outdoors. You need to tell kids that live near you why they should spend more time outdoors, and how they can do it. Here are some details you might want to include.
- Why should kids spend time outside?
- What will being outside do for them, or how will it make them feel?
- Where should they go - what places or types of places?
- How will they get there?
- Who should they go there with - or who else will be there?
- What should they tell their parents to convince them that they should do this?
the youth and family experts
- The good news is, you don't have to do this alone. We're going to split into two groups and you can work together to come up with these ideas.
- You can draw pictures, write words, or both! How you show your ad is up to you. You have 10 minutes, and then we'll hear your ideas.

After 10 minutes, both groups will present their ads, with the moderator probing as needed.

## 6. Closing @ 75 minutes

- Thank you for your participation and feedback. Do you have any additional thoughts you would like to share?
the youth and family experts
The Great Outdoors
Focus Groups Discussion Guide - Parents
FINAL 4.12.18


## Project Details

- One 60 -minute discussion with parents of $3^{\text {rd }} 5^{\text {th }}$ graders
- One 60 -minute discussion with parents of $6^{\text {th }}-10^{\text {th }}$ graders


## Key Objectives

- Identify the activities that kids are currently doing outside, and what they wish they could do outside
- Understanding what kids like about being outdoors, how it makes them feel, and what motivates them to go outdoors
- Uncovering the barriers that prevent them from doing what they want to outdoors


## Materials

- Emotive image sets
- Outdoor visuals
- Sticky notes
- Blank paper and pens (if desired for 3 wishes exercise)


## 1. Introductions and Warm-Up (10 minutes)

Moderator will:

- Introduce herself and welcome respondents
- Explain basics of discussion
- Be open and honest
- No right/wrong answers
- Okay for all to have different opinions
- Videotaping - please speak one at a time
- Let's start by introducing ourselves - l'll go first
- Please let us know your name and who lives in your home with you, including ages of kids
- Your [insert grade range]'s favorite thing to do outdoors in their free time - moderator to start running list of favorites
- Thank you! Because some/all of you have more than one child, for the rest of our time together today, we'd like for you to think about your child that's in [insert grade range].
- Let's talk in more detail about outdoor activities now. What are all of the things that your [insert grade range] likes to do outdoors in his or her free time? Regularly scheduled activities like sports practices and games don't count. The moderator will add to running list to refer back to.
- Which, if any, of these activities do you like to do with them? Or wish you could do with them?


## 2. The Great Outdoors - Benefits and Motivators ( 20 minutes)

- We've come up with a great list of things your kids do outdoors. But now I want to know what the BEST things are for them to do outdoors. So, I want you to think about the most fun time you've ever seen them have outdoors in your area, or one that they told you about.
- Let's go one at a time around the table and you can share what came up with:
- What was the outdoor activity?
- Where did it take place?
- Who was he/she with? Were you there?
- What made it the best time he/she has ever had outdoors?
- [If something you can also do inside] Why did you think he/she did this outside instead of inside?
- Is this something he/she has done again - or plans to do again? If no, why not? What is preventing him/her from doing it again?
- Let's move on to something new now. I want you to help me finish some sentences. No need to raise hands - when you know how you'd finish the sentence, just tell me.
- Let's take these one at a time. How did you finish...
- My son/daughter likes to be outdoors because $\qquad$ .
- My son/daughter doesn't like to be outdoors because $\qquad$
- I like my son/daughter to be outdoors because $\qquad$
- I don't like my son/daughter to be outdoors because $\qquad$ .
- Being outdoors is good for my son/daughter because $\qquad$ .
- Being outdoors is not good for my son/daughter because $\qquad$ .
- My son/daughter's favorite places to be outdoors are $\qquad$ .
- He/she would spend more time in these places if $\qquad$
- My favorite places to be outdoors with my child are $\qquad$ .
- We would spend more time in these places if $\qquad$ .

For each response, the moderator will ask respondents why they choose that word/phrase.

## 3. Desired Outdoor Activities \& Barriers (20 minutes)

- Let's take another look at the list of things you told me your son/daughter does outdoors. I'm going to pass out a stack of images that may describe how you think they feel when doing these things. For example: Moderator to show one image and see if respondents can guess what feeling it expresses.
- Let's quickly go around the table. Which image did you pick?
- Why does that describe how he/she feels outdoors?
- We've talked a lot so far about what your kids already do outdoors. Let's talk about what you want them to do outdoors, that they're not already doing. There are a bunch of images of things they might be able to do outdoors posted on the walls around us. I am going to give each one of you three sticky notes. Please take a look at all of the images, and then select the three that you most want them to do.
- OK, let's start with those that have the most sticky notes. Why is [ X$]$ something you want your kids to do?
- What makes it different from what they're already doing? Moderator to repeat exercise for every image with a sticky note attached.
- Do you see yourself being involved? Why (not)?
- Look back at the images in front of you. How do you expect your kids would feel if they were able to do this outdoor activity? Why?
- You've told me what your kids would want to do and how it would make them feel. So why aren't they doing these things outdoors? Let's start with [X]. Moderator to generate list of barriers.
- What's stopping them? If needed, the moderator will probe for reasons including proximity, safety, transportation, parent involvement, etc.
- Do you think it's something they could do soon? Why (not)?
- If you decided you wanted your kids to do this soon, what would it take? How would you make this happen? What needs to change?


## 5. Three Wishes for Kids \& the Outdoors (10 minutes)

- If you were to have the Outdoors Genie grant you three wishes for your kids, what would they be? Please take a few minutes to think about it - you can write it down on a piece of paper if that helps. Please come up with at least three - but more if you'd like - wishes you'd ask for to help your kids better enjoy the great outdoors.
the youth and family experts
- Let's quickly go around the table - what are your three wishes? Why is [X] so important for you and your kids to enjoy the outdoors?


## 4. Closing @ 60 minutes

- Thank you for your participation and feedback. Do you have any additional thoughts you would like to share?


## APPENDIX B. YOUTH \& PARENT SURVEY INSTRUMENT

State of Missouri SCORP Youth Survey
Online Survey for Parent-Child Pairs
FINAL - UPDATED 4.2.18 POST SOFT LAUNCH

25-minute online survey of up to 2000 parent-child pairs representing youth age 8-17 in Missouri

SAMPLE PARTNER SAMPLE:

| Parent-child Pairs <br> with: | Age 8-12 | Age 13-17 |
| :---: | :---: | :---: |
| Boys | 250 | 250 |
| Girls | 250 | 250 |
| TOTAL | $\mathbf{N}=500$ | $\mathbf{N}=500$ |

IN ADDITION TO 1000 PARTICIPANTS ABOVE, A SUPPLEMENTAL SAMPLE OF UP TO 1000 ADDITIONAL PARTICIPANTS WILL BE RECRUITED VIA EMAIL INVITATIONS FROM UP TO 8 SCHOOL DISTRICTS. (AGE/GENDER CAN FALL NATURALLY FOR THE SUPPLEMENTAL SAMPLE, BUT SET MAX QUOTA OF 300 PER AGE/GENDER SUB-GROUP)

## Participant Requirements

All parents MUST:

- Be the parent/guardian/caregiver of a child between the ages of 8 and 17 who is available to participate in the survey
- Be age 25 or older
- Live in Missouri

PROGRAMMER INSTRUCTIONS:

- DO NOT INCLUDE SECTION HEADERS
- DO NOT INCLUDE RESPONSE OPTION LETTERS


## SURVEY INTRO SCREEN

Thank you for agreeing to help us with this survey! We hope that you find it interesting. As a reminder, your responses will be completely anonymous and any personal information will be kept strictly confidential. Let's get started.

1. First, how old are you? [TWO DIGIT NUMERIC BOX]

TERMINATE IF AGE <25
2. Where do you live?
[LIST STATES IN A DROP-DOWN BOX]

INCLUDE OPTION AT BOTTOM FOR ‘NOT A US RESIDENT’

MUST RESIDE IN MISSOURI; IF NOT, TERMINATE
3. And, what is the name of the county where you live?
[LIST ALL MISSOURI COUNTIES IN DROP-DOWN BOX PLUS OTHER AND DON’T KNOWSEE EXCEL DOC FOR COMPLETE LIST; TERM IF OTHER OR DON’T KNOW]
4. Now please tell us your zip code.
[5 DIGIT NUMERIC BOX - CHECK AGAINST LIST OF ZIP CODES IN EXCEL DOC; TERMINATE IF NOT LISTED IN EXCEL DOC]
5. Are you the parent, guardian, or primary caregiver of any children age $\mathbf{1 8}$ and under, who currently live with you at least $50 \%$ of the time?
a. Yes
b. No

IF NO, TERMINATE
6. And how many children age 18 and under do you have living with you at least half the time?
a. One
b. Two
c. Three
d. Four
e. Five
f. Six
g. Seven
h. Eight
i. Nine
j. Ten
k. More than 10
7. And what are the children's ages and genders?
[IF Q6=K, SHOW: Please think about the youngest 10 children.]

SHOW \# OF ROWS CORRESPONDING TO \# CHILDREN AT Q6 UP TO 10
FIRST LINE: Child 1
SECOND LINE: Child 2
THIRD LINE: Child 3
ETC.

NEXT TO EACH CHILD, SHOW DROP DOWN WINDOWS FOR GENDER (BOY/GIRL) AND AGE (<1 TO 18)

MUST HAVE AT LEAST ONE CHILD AGE 8-17 YEARS TO QUALIFY; IF NOT, TERMINATE
8. Which of the children below are available to complete part of this survey today - either right now or later today?

ALLOW MULTIPLE RESPONSES
PIPE AGE \& GENDER OF CHILDREN AGE 8-17 FROM Q7
INCLUDE "None of these" OPTION AT BOTTOM

IF NO CHILD AVAILABLE, TERMINATE
9. ASSIGNMENT OF RESPONDENT TO SPECIFIC CHILD AGE/GENDER GROUP:

IF ONLY 1 QUALIFYING \& AVAILABLE CHILD AT Q8, ASSIGN RESPONDENT TO THAT CHILD. IF MORE THAN 1 QUALIFYING CHILD IS SELECTED AT Q8, RANDOMLY ASSIGN RESPONDENT TO FOCUS ON 1 CHILD ONLY BASED ON TARGET QUOTAS.

NEW SCREEN:

Great! For the rest of this survey, when we ask about your child, please keep only your [INSERT CHILD ASSIGNED IN Q9 - SHOW AS XX-year-old boy/girl] in mind.

PROGRAMMING NOTE: UNDERLINE \& BOLD CHILD INSERTION ABOVE. HOWEVER, FOR ALL REMAINING "INSERT CHILD..." INSTRUCTIONS - DO NOT BOLD THE INSERTION (UNLESS SURROUNDING TEXT IS ALSO BOLD); UNDERLINE ONLY IF INDICATED

Please select "yes" below to certify that you are the parent/guardian of the child and give permission for your [INSERT CHILD ASSIGNED IN Q9] to take this survey and participate in this research project.
a. Yes
b. No [TERMINATE]
10. What grade is your child currently in, for the 2017-2018 school year?
a. $1^{\text {st }}$ grade
b. $2^{\text {nd }}$ grade
c. $3^{\text {rd }}$ grade
d. $4^{\text {th }}$ grade
e. $5^{\text {th }}$ grade
f. $6^{\text {th }}$ grade
g. $7^{\text {th }}$ grade
h. $8^{\text {th }}$ grade
i. $9^{\text {th }}$ grade
j. $\quad 10^{\text {th }}$ grade
k. $11^{\text {th }}$ grade
l. $12^{\text {th }}$ grade
m. College
n. My child is no longer in school

MUST SELECT $\mathbf{2}^{\text {ND }} \mathbf{- 1 2} \mathbf{1 2}^{\text {TH }}$ GRADE IN ALIGNMENT WITH AGE; IF NOT, TERMINATE
11. What type of school does your child attend?
a. Public school
b. Private school
c. Parochial/religious school
d. My child is home schooled

ASK Q12 IF Q11 = A (PUBLIC SCHOOL)
12. And what is your child's current school district?

[LIST ALL MISSOURI SCHOOL DISTRICTS IN DROP-DOWN BOX PLUS DON’T KNOW - SEE EXCEL DOC FOR COMPLETE LIST; TERM IF DON’T KNOW]<br>FOR SCHOOL DISTRICT RECRUIT - MUST BE FROM DISTRICTS [DISTRICTS AND INCENTIVE LIMITS PROVIDED SEPARATELY]

PARENT: CHILD PARTICIPATION AND TIME SPENT IN OUTDOOR RECREATION ACTIVITIES \& BELIEFS ABOUT

Thanks! We will ask your child to come to the screen in a few minutes. First, we have some questions for you about your [INSERT CHILD ASSIGNED IN Q9]'s free time.

By free time, we mean all time spent OUTSIDE of school, homework, or work commitments. Free time could include downtime or just hanging out, or it could include sports and fitness classes/teams, programs, or other activities your child is signed up for.
13. Thinking about all of your [INSERT CHILD ASSIGNED IN Q9]'s free time, including both weekdays and weekends, what percent of [his/her] time is spent inside vs. outside? Note: your answer must add up to $100 \%$.
(Remember, by free time we mean all time spent outside of school, homework, or work commitments - which could include downtime or just hanging out, sports and fitness classes/teams, programs, or other activities your child is signed up for.)

Total free time spent...

RANDOMIZE LIST
Outside: [INSERT 3-DIGIT NUMERIC BOX] \%
Inside: [INSERT 3-DIGIT NUMERIC BOX] \%
MUST SUM TO 100\%; AUTO-POPULATE 2ND BOX AFTER 1ST BOX IS COMPLETED [SO RESPONDENTS DO NOT NEED TO CALCULATE BALANCE ON THEIR OWN].
14. Now, think about the kinds of unstructured activities your [INSERT CHILD ASSIGNED IN Q9] typically does outside during [his/her] free time. How often, if ever, does your child do each of these (when the weather permits)?
(For this question, think only about times that this activity occurred outside, even if it's something your child sometimes does indoors. And only think about unstructured activities your child does on [his/her] own, or with friends/family - not an organized sport or other organized program.)

SCALE ACROSS:
Every day
At least once a week
At least once a month
A few times a year
Less often
Never

RANDOMIZE A-EE; ANCHOR ITEM AA AFTER ITEM Z
SINGLE RESPONSE PER LINE
a. Agriculture/farm activities
b. Bird watching
c. Outdoor boarding/riding activities (ex., skateboard, roller skates/blades, bike/mountain bike, scooter, etc.)
d. Boating
e. Camping
f. Climbing/zip lines/ropes course (outside)
g. Disc golf
h. Fishing
i. Gardening
j. Having a picnic/BBQ
k. Horseback riding (outside)
I. Hunting
m. Ice skating (outside)
n. Motorized recreation vehicles (ex., ATV riding, motor bikes, etc.)
o. Outdoor unstructured play/games/activities (ex., jumping on a trampoline, jump rope, tag, catch, hopscotch, or other outdoor play with friends)
p. Outdoor paintball, air gun/blasters, water gun play (ex., Air Soft, Nerf, etc.)
q. Outdoor pick-up sports games / sports games with friends (ex., pick-up basketball, frisbee, baseball, wiffle ball, etc.)
r. Playing at a playground
s. Playing outside in a yard or on a driveway or sidewalk
t. Playing in fields, woods or streams near our home
u. Running/jogging (outside)
v. Outdoor shooting/archery (ex., target shooting, skeet shooting, archery, etc.)
w. Skiing/snowboarding/sledding
x. Swimming (outside)
y. Tennis/pickle ball or other outdoor racket sports
z. Using augmented reality apps outside (that help you explore the world and look for things, like Pokémon Go)
aa. Doing other activities on devices, outside (ex., playing video games, watching TV or videos, texting/using social media., etc.) [ANCHOR WITH PREVIOUS]
bb. Walking/hiking on trails
cc. Walking/playing with pet (outside)
dd. Water sports (ex., water skiing, tubing, kayaking, paddle boarding, etc.)
ee. Wildlife viewing
ff. Building forts/treehouses or other structures outside
gg. Practicing photography skills/taking pictures outside
hh. Going for a walk
ii. Just hanging out, outside
jj. Other (please tell us)
15. Now, please think more generally about the kinds of things your [INSERT CHILD ASSIGNED IN Q9] typically does outside that are structured or organized. (By structured or organized, we mean things like organized programs, sports leagues, or other activities your child does outdoors, but NOT something your child does on [his/her] own or with friends/family. And, for sports teams, please tell us how often your child does this when the sport is in season.)

How often, if ever, does your child spend time doing structured/organized outdoor activities?
a. Every day
b. At least once a week
c. At least once a month
d. A few times a year
e. Less often
f. Never
16. Thinking about all of the different structured and unstructured activities your [INSERT CHILD ASSIGNED IN Q9] typically does outside, what are the places your child typically does these types of outdoor activities? (You can choose more than one.)

RANDOMIZE A-T

## ALLOW MULTIPLE RESPONSES

a. A yard, driveway or sidewalk
b. Fields, woods or streams near our home
c. In the street
d. Local park in our neighborhood
e. Town/city park
f. State park
g. National park
h. School playground (after school hours)
i. Local/community playground in our neighborhood
j. YMCA or similar organization
k. Church or other religious organization (outdoor areas)
I. Nature center
m. Botanical garden
n. School fields
o. Sports fields (not at a school or park)
p. Activity park (ex., skate park, bike park, etc.)
q. Town/city pool or lake
r. Historic/educational site
s. Dog park
t. Private organization/business (ex., outdoor areas at a fitness club/facility, country club, etc.)
u. Other (please tell us)
17. Which, if any, are reasons your [INSERT CHILD ASSIGNED IN Q9] does not spend more time outside? (You can choose more than one.)
[Note: in this question, when we talk about "parks", please consider any neighborhood, town/city, or state park, neighborhood or school playgrounds or fields, etc.]

## RANDOMIZE LIST A-Y; ANCHOR ITEM C AFTER ITEM B

ALLOW MULTIPLE RESPONSES A-Z
a. My child is too busy with school work
b. My child is too busy with sports teams
c. My child is too busy with other structured activities
d. I do not have time to drive my child to outdoor activities
e. I do not have time to supervise my child during outdoor activities
f. My child won't do outdoor activities without me or another adult also participating
g. My child won't do outdoor activities without a friend also participating
h. Outdoor programs/activities cost too much
i. We don't have a good way to get to outdoor activities
j. There are no parks close to where I live
k. I don't know about any good parks
l. I don't know about any good outdoor programs/activities that would be appropriate for my child
m . There are not enough outdoor programs/activities that are appropriate for my child
n. My child would rather do indoor activities
o. I'm not really interested in encouraging outdoor activities
p. I'd rather spend time with my child indoors
q. My child doesn't like outdoor conditions (the weather, bugs, dirt, poison ivy, etc.)
r. It's not safe enough to spend time outside in our area
s. Our local parks are not safe
t. My child might get hurt doing outdoor activities
u. My child just doesn't like to be outside
v. The cell service/connectivity isn't good enough when we're at a park
w. Our family does not feel welcome at available outdoor programs, activities, and locations
x. People at outdoor programs, activities, and locations do not look like me and my family
y. My child is not healthy enough for outdoor activities
z. Other (please tell us)
aa. None of these - my child already spends plenty of time outside
18. What would you define as a reasonable drive to get to an outdoor park?
a. Less than 5 minutes
b. 5-10 minutes
c. 11-15 minutes
d. 16-20 minutes
e. 21-30 minutes
f. More than 30 minutes
19. And, what would you define as a reasonable walk to get to an outdoor park?
a. Less than 5 minutes (less than a quarter mile)
b. 5-10 minutes (roughly a quarter to less than half a mile)
c. 11-15 minutes (roughly a half to less than three-quarters of a mile)
d. 16-20 minutes (roughly three-quarters of a mile to less than 1 mile)
e. $21-30$ minutes (roughly 1 to less than 1.5 miles)
f. More than 30 minutes (roughly 1.5 miles or more)
20. And what would help your [INSERT CHILD ASSIGNED IN Q9] spend more time outside? (You can choose more than one.)

My child would spend more time outside IF...

RANDOMIZE LIST A-S
ALLOW MULTIPLE RESPONSES A-T
a. There were a park within reasonable walking distance of our home
b. There were a park within a reasonable driving distance of our home
c. There were more free outdoor programs or activities
d. I (or another adult in my household) had more time to take my child to outdoor activities
e. There were another adult in our lives (ex., grandparent, family friend) who had more time to take my child to outdoor activities
f. There were a bus or other transportation that could take my child
g. I knew more about the outdoor programs/activities available for my child
h. There were a good way to learn about outdoor sports/activities my child has never done
i. There were more programs/activities for people my child's age
j. My child could use a phone or tablet to do outdoor activities (like playing games that get him/her to look for things outside)
k. There were people around who helped make sure my child is safe when he/she is outside
I. There were more security or police around to keep things safe
m . There were places outside that had good lighting
n. My child's school or after-school program helped organize more outdoor activities
o. There were an outdoor program/activity that was organized for my child's group of friends
p. There were an outdoor program/activity that was organized for families
q. There were an outdoor program/activity that looked fun/interesting to me AND my child
r. There were an outdoor program/activity that worked better with our family's schedule
s. Doing outdoor activities was more popular with my child's friends
t. Other (please tell us)
u. None of these - there is nothing that would get my child to spend more time outside

Thanks for your help so far! Before we ask your child to come to the screen, we have just a few more questions about your household, for classification purposes only. Remember, all responses are anonymous and will never be used to identify you or your household.
21. Which best describes the area where you live?

## SINGLE RESPONSE

a. Rural (areas that are not heavily populated; tend to have agriculture)
b. Suburban (towns or small cities that are near major metropolitan cities)
c. Urban (major metropolitan cities that are very heavily populated)
22. What is your gender?
a. Male
b. Female
c. Prefer not to say
23. What is your race/ethnicity? (Select all that apply)

ALLOW MULTIPLE RESPONSES FOR A-G
a. African-American/Black
b. Asian-American/Asian
c. Caucasian/White
d. Hispanic/Latino
e. Native American
f. Pacific Islander
g. Other (please specify):
h. Prefer not to say
24. And what is your [INSERT CHILD ASSIGNED IN Q9]'s race/ethnicity? (Select all that apply)

ALLOW MULTIPLE RESPONSES FOR A-G
a. African-American/Black
b. Asian-American/Asian
c. Caucasian/White
d. Hispanic/Latino
e. Native American
f. Pacific Islander
g. Other (please specify):
h. Prefer not to say
25. What is your current marital status?

SINGLE RESPONSE
a. Single
b. Married or living with a partner
c. Divorced/separated
d. Widowed
26. What is your current employment status?

## SINGLE RESPONSE

a. Homemaker/Stay-at-home Parent
b. Employed part-time
c. Employed full-time
d. Unemployed/retired
27. What is the highest level of education you, yourself, have completed?

SINGLE RESPONSE
a. Less than high school
b. High school
c. Some college
d. Undergraduate college degree
e. Graduate school degree
f. Prefer not to say
28. Before taxes, what is your total annual household income?

SINGLE RESPONSE
a. $\$ 19,999$ or less
b. $\$ 20,000$ to $\$ 34,999$
c. $\$ 35,000$ to $\$ 44,999$
d. $\$ 45,000$ to $\$ 54,999$
e. $\$ 55,000$ to $\$ 64,999$
f. $\$ 65,000$ to $\$ 74,999$
g. $\$ 75,000$ to $\$ 99,999$
h. \$100,000 to \$149,999
i. \$150,000 or more
j. Prefer not to say
29. Is your [INSERT CHILD ASSIGNED IN Q9] eligible for free or reduced-price lunches, breakfasts, snacks, and/or milk at [his/her] school?

RANDOMIZE A-B
SINGLE RESPONSE
a. Yes (eligible for free or reduced-price school lunch, breakfast, snack, and/or milk)
b. No (not eligible for free or reduced-price school lunch, breakfast, snack, and/or milk)

NEW SCREEN

SHOW ALL:

Thank you! Now, we have some questions for your [INSERT CHILD ASSIGNED IN Q9] about similar free time topics. Please ask [him/her] to come to the screen.

SHOW FOR SCHOOL-RECRUITED SAMPLE ONLY: After your child completes [his/her] part, we will ask you to come back to the screen so you can share your contact information and we can send you the $\$ 5$ gift card.

## SHOW ALL:

You can stay nearby in case your [son/daughter] has any questions, but we ask that your [INSERT CHILD ASSIGNED IN Q9] answer the questions by [himself/herself] and be given privacy to respond honestly.

If your [son/daughter] isn't available right now, you can close this window and come back to the survey later using the link we sent you. You'll be able to start where you left off. Don't wait too long, though. We'll close the study as soon as we have the number of responses we need.

Please select "yes" below to certify that your [INSERT CHILD ASSIGNED IN Q9] will be coming to the screen and personally completing the survey.
a. Yes
b. No TERMINATE

Please click "NEXT" below when your [son/daughter] is at the screen.

## CHILD: INTEREST IN \& BARRIERS TO OUTDOOR RECREATION PARTICIPATION

Hi! Thank you for agreeing to help us with this survey. We've just asked your parent some questions and now we would like to ask you a few. We hope that you find them interesting.

This survey is not like a test in school - there are no right or wrong answers! We are just curious about your opinions.

Your responses will be completely private and any information you share will not be linked to you in any way. We ask that you please be as honest as possible.

Please click or tap "next" when you are ready to start!
NEW SCREEN

Today we'll be asking your opinions about spending time outside. It doesn't matter if you love being outside or hate being outside - we just want to know what you think.

## NEW SCREEN

30. First, think about some of the most fun times you've had with your friends and family the things you will always remember. Are those fun memories more likely to be about things you did inside or things you did outside?

RANDOMIZE LIST
SINGLE RESPONSE
a. Inside
b. Outside
31. Next, think about some of the most fun times you've had with your friends and family when you were outside. What was it about these fun outdoor experiences that makes them something you will always remember? (You can pick up to 5)

RANDOMIZE LIST A-Q
ALLOW UP TO 5 RESPONSES
a. Spending time with family
b. Spending time with friends
c. Competing/winning
d. Being in nature
e. Seeing animals or birds
f. Learning about new things
g. Going really fast
h. Getting better at something
i. Challenging myself
j. Doing something new and different
k. Going someplace I've never been before
I. Catching/hunting something we can eat
m . Getting to relax
n. Doing something without too many rules
o. Getting dirty/getting wet
p. Building/creating/making something
q. Other (please tell us)
32. Please tell us how much you agree or disagree with each of these sentences.

## SCALE ACROSS (DO NOT USE ICONS):

Totally agree!
Somewhat agree
Somewhat disagree
Totally disagree!

RANDOMIZE LIST
SINGLE RESPONSE PER LINE
a. I love spending time outside
b. I don't know good places to go when I want to spend time outside
c. Some of the best times l've ever had have happened outside
d. I care about nature and the environment
e. Being outside is fun
f. Being outside makes me worried
g. It's more fun to use an electronic device (like a cell phone, tablet, or video game) than to do something outside
h. I'd rather spend time outside than use my phone or other device
i. There aren't enough fun things to do outside
j. I wish I got to spend more time outside
k. I don't have enough time to spend time outside
l. My friends don't think it's cool to hang out outside
m . My family loves do things outside
n. My parents don't like to go outside with me
o. It's not safe to go to the parks in my area
p. We have great parks in our area
q. There's not enough for people my age to do at the parks in our area
r. Being inside is more comfortable than being outside
s. I love exploring nature
t. I only like being outside when I'm playing sports
u. I love all of the adventures I can have outside
v. It's just not comfortable outside (too hot, too cold, too many bugs, too dirty, etc.)
33. Where have you spent time outside in the past year? (You can choose as many as you'd like)

## SHOW IMAGE FOR EACH WITH TEXT/LABEL UNDERNEATH

RANDOMIZE LIST A-GG
ALLOW MULTIPLE RESPONSES FOR A-HH
a. In a yard, driveway or sidewalk
b. In fields or woods near my home
c. In the street
d. Baseball/softball fields
e. (Outdoor) basketball courts
f. Bike trails
g. Mountain biking areas
h. Boating and water sports areas (including rivers, lakes, etc.)
i. Camping sites/areas
j. Disc golf course
k. Dog park
l. Fishing sites
m. Football fields
n. Gardens
o. Golf courses
p. Historic/education sites
q. (Outdoor) horseback riding areas
r. Hunting sites
s. (Outdoor) ice skating rinks
t. OMITTED
u. Nature parks/areas
v. Parks
w. Picnic areas
x. Playgrounds
y. (Outdoor) Roller skating/skateboarding parks
z. Sledding/skiing/snowboarding areas
aa. (Outdoor) Soccer fields
bb. (Outdoor) swimming pools/water parks
cc. (Outdoor) Tennis courts
dd. Trails for walking/hiking
ee. Trails for motorized vehicles (like ATVs, motor bikes, etc.)
ff. (Outdoor) Volleyball courts
gg. (Outdoor) Target shooting sites (for archery, skeet shooting, etc.)
hh. Other (please tell us)
ii. None of these - I don't spend any time outside
34. And which of these outside places would you LIKE TO use or visit, if you could? (You can choose as many as you'd like)

SHOW IMAGE FOR EACH WITH TEXT/LABEL UNDERNEATH

PIPE RESPONSES A-EE IF NOT SELECTED AT Q33
RANDOMIZE LIST A-GG
ALLOW MULTIPLE RESPONSES FOR A-HH
a. In a yard, driveway or sidewalk
b. In fields or woods near my home
c. In the street
d. Baseball/softball fields
e. (Outdoor) basketball courts
f. Bike trails
g. Mountain biking areas
h. Boating and water sports areas (including rivers, lakes, etc.)
i. Camping sites/areas
j. Disc golf course
k. Dog park
l. Fishing sites
m. Football fields
n. Gardens
o. Golf courses
p. Historic/education sites
q. (Outdoor) horseback riding areas
r. Hunting sites
s. (Outdoor) ice skating rinks
t. OMITTED
u. Nature parks/areas
v. Parks
w. Picnic areas
x. Playgrounds
y. (Outdoor) Roller skating/skateboarding parks
z. Sledding/skiing/snowboarding areas
aa. (Outdoor) Soccer fields
bb. (Outdoor) swimming pools/water parks
cc. (Outdoor) Tennis courts
dd. Trails for walking/hiking
ee. Trails for motorized vehicles (like ATVs, motor bikes, etc.)
ff. (Outdoor) Volleyball courts
gg. (Outdoor) Target shooting sites (for archery, skeet shooting, etc.)
hh. Other (please tell us)
ii. None of these - I don't spend any time outside
35. Why don't you spend more time outside? (You can choose more than one.)

## RANDOMIZE LIST A-T

ALLOW MULTIPLE RESPONSES A-U
a. My parent/caregiver won't let me
b. I have too much homework
c. I do too many organized sports
d. I do too many (indoor) activities
e. It costs too much
f. No one can take me
g. Good parks are too far away
h. There's no good way to get to parks
i. I don't know about any good parks
j. I don't know about any good outdoor programs/activities that are for people my age
k. There aren't enough outdoor programs/activities for people my age
I. I'd rather play video games or game apps
m. I'd rather watch TV or watch videos
n. I'd rather play inside
o. The weather isn't nice enough to be outside
p. It's not safe enough in our neighborhood to go outside
q. I'm afraid of getting hurt
r. My friends don't want to do things outside
s. My family doesn't want to do things outside
t. I just don't like being outside
u. Other (please tell us)
v. None of these - I go outside a lot
36. And what might help you spend more time outside? (You can choose more than one.)

I would spend more time outside IF...

RANDOMIZE LIST A-U; ANCHOR ITEM E AFTER ITEM D AND ANCHOR ITEM U AFTER ITEM T
ALLOW MULTIPLE RESPONSES A-V
a. There were a park I could walk to
b. There were a park within a close drive of our home
c. There were free outdoor programs or activities
d. My parents could take me more often
e. My grandparents or other adults (not my parents) could take me more often
f. My older siblings could take me more often
g . There were a bus or other transportation to take me
h. I knew more about outdoor programs/activities
i. There were a good way to learn about outdoor sports/activities I've never done
$j$. There were more outdoor programs/activities for people my age
k. I could use my phone or tablet outside (like playing games that get me to look for things outside)
I. There were people around who helped make sure I am safe when I'm outside
m . There were more security or police around to keep things safe
n . There were places outside that had good lighting
o. My school or after-school program helped organize more outdoor activities
p. There was an outdoor program/activity that was organized for my group of friends
q. There was an outdoor program/activity that was organized for families
r. There was an outdoor program/activity that looked fun/interesting to me AND my parent(s)
s. Being outside was more popular with my friends
t. My parents would do more things with me outside
u. My grandparents or other adults (not my parents) would do more things with me outside
v. Other (please tell us)
w. None of these - there is nothing that would get me to spend more time outside

SHOW REMAINING TEXT AND QUESTION TO SCHOOL-RECRUITED SAMPLE ONLY; SAMPLE PARTNER-RECRUITED RESPONDENTS SKIP TO END.

## NEW SCREEN

Thanks for all of your help! Those are all the questions we have. Now please ask your parent or caregiver to come back to the screen so we can collect some last information. Thank you!
37. We appreciate your time today! Please share your email address below, so we can send you the $\$ 5$ gift card as a thank you. Note: it may take a few weeks before you receive an email link to the gift card, so keep your eyes open for it!

Email address: INSERT TEXT BOX - MUST HAVE AN @ SIGN INCLUDED

Those are all the questions for today. Thank you!

## APPENDIX C. RECREATION PROVIDERS' SURVEY INSTRUMENT

1. What is your current position within your agency?Executive DirectorDirectorAssistant DirectorPlannerDeputy DirectorOtherSuperintendent
Other (please specify)
$\square$
*2. What is your zip code?
$\square$

* 3. In what county are you located?
$\square$
* 4. Which of the following defines the geographic area served by your agency?Suburban/Urban/CityRural/Small Town

5. Think about the outdoor recreation facilities that your community offers. Using a scale of 1 to 5 , where 1 is no need of improvement and 5 is extreme need of improvement, how would you rate the need of improvement for your local...

|  | no need of improvement |  |  |  | extreme need of improvement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| besemamsamames | $\bigcirc$ | - | - | - | $\bigcirc$ | - |
| cols | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Samamen wees sous | ○ | - | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| cmmenses | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| butigues | $\bigcirc$ | - | $\bigcirc$ | - | $\bigcirc$ | - |
| Iomataless | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| gareses | ○ | - | - | $\bigcirc$ | - | $\bigcirc$ |
| gotemeses | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ |  | $\bigcirc$ |
|  | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
| nomamest | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| mimuerates | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | ○ | $\bigcirc$ |
| poinaes | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| pepanams | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| soxefeles |  | - |  | $\bigcirc$ |  | $\bigcirc$ |
| autuos smmampous | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Eenemparemamaums |  | - | ○ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| mas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | 0 | $\bigcirc$ |
| volumomous | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| masestouns ses | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| naucemensasas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outexs stereats | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| spantuats | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| meseasasaot | O | - | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| dogats | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

6. Are there other outdoor recreation facility types in your community that are in need of improvement?
$\square$
7. Would you say that local demand for the following is much lower, lower, slightly lower, about right, slightly higher, higher, or much higher than what is currently provided, if at all?

|  | Much Lower | Lower | Slightly Lower | About Right | Slightly Higher | Higher | Much <br> Higher | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| baseball/softball fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor basketball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| boating and water sports access sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| camping sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| fishing sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| football fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| gardens | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| golf courses | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| historic/education sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $0$ | $\bigcirc$ |
| hunting sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| multi-use fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| picnic areas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| playgrounds | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| soccer fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor swimming pools | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| tennis/pickle ball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| trails | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| volleyball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| target shooting sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| nature parks/areas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor skate parks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| splash pads | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| frisbee/disc golf | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| dog parks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

8. Are there any other outdoor recreation facilities/activities in your community that you have traditionally provided that you have seen decline over the past five years? If yes, please list the facilities/activities and what you feel are the reasons for their decline.
$\square$
9. Has the popularity of the followingdecreased a lot, decreased, decreased a little, no change, increased a little, increased, or increased a lot over the past five years?

|  | Decreased a lot | Decreased | Decreased a little | No Change | Increased a little | Increased | Increased a lot | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| baseball/softball fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor basketball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| boating and water sports access sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| camping sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| fishing sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| football fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| gardens | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| golf courses | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| historic/education sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| hunting sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| multi-use fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| picnic areas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| playgrounds | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| soccer fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor swimming pools | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| tennis/pickle ball courts | $\bigcirc$ | $\bigcirc$ | $0$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| trails | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| volleyball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| target shooting sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| nature parks/areas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor skate parks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| splash pads | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| frisbee/disc golf | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| dog parks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

10. Do you see the popularity of the following decreasing a lot, decreasing, decreasing a little, not changing, increasing a little, increasing, or increasing a lot over the next five years?

|  | Decrease a lot | Decrease | Decrease a little | No change | Increase a little | Increase | Increase a lot | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| baseball/softball fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor basketball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| boating and water sports access sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| camping sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| fishing sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| football fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| gardens | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| golf courses | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| historic/education sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| hunting sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| multi-use fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| picnic areas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| playgrounds | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| soccer fields | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor swimming pools | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| tennis/pickle ball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| trails | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| volleyball courts | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| target shooting sites | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| nature parks/areas | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| outdoor skate parks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| splash pads | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| frisbee/disc golf | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| dog parks | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
|  |  |  |  |  |  |  |  |  |

11. Are there any other outdoor recreation facilities/activities that you predict will gain in popularityover the next five years? If yes, please list the facilities/activities and why you think they will increase in popularity.
$\square$
12. Using a 1 to 5 scale, where 1 is not at all adequate and 5 is very adequate, how would you rate the adequacy of the following park and recreation related support components in your community?

|  | Not at all adequate |  |  | Very adequate |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Public restrooms | 1 | 2 | 3 | 5 |

13. Are there any other support related components that you don't feel are adequate in your community?
$\square$
14. Using a 1 to 5 scale, where 1 is not a priority at all and 5 is high priority, how would you rate the priority of the following when it comes to improving outdoor recreation in your community?
Increasing overall funding
for outdoor recreation
Increasing the amount of
money for maintenance all
and operations
Educating the public and
officials on the values and
benefits of outdoor
recreation
Improving communication
and collaboration among
partners
Expanding, updating, and
maintaining existing
outdoor recreation
facilities
Increasing
conservation/preservation
efforts
Increasing, improving,
and diversifying marketing
and public relations
Other (please specify
15. Using a scale of 1 to 5 where 1 isnot an obstacle at all and 5 is very large obstacle, how would you rate the following obstacles at preventing improvements in outdoor recreation from being made in your local community?
Not an obstacle at
low priority/support for
recreation
lack of consistent
funding system
ignorance/lack of
education on
benefits/value of outdoor
recreation
inadequate planning
lack of flexibility/fear of
trying something new
increasing demand/use
demographic shifts
(specifically related to
ethnic/cultural diversity)
participating in outdoor
recreation is unsafe due
to local crime
outdoor recreation
creates too many liability
issues
availability of future park
land
16. Using a 1 to 5 scale, where 1 is needs are not being met all and 5 is needs are being met very well, how would you rate your ability to meet the needs of the following age groups?

|  | Needs are not being met all 1 | 2 | 3 | 4 | Needs are being met very well 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0-5 year olds | $\bigcirc$ |  | $\bigcirc$ |  | $\bigcirc$ |
| 6-12 year olds | $\bigcirc$ |  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 13-18 year olds |  |  |  |  | $\bigcirc$ |
| 19-34 year olds |  |  |  |  | $\bigcirc$ |
| 35-54 year olds |  |  |  |  |  |
| 55 years and older | ) |  |  |  | $\bigcirc$ |

17. Out of the following age groups, which one has the most unmet needs? choose one0-5 year olds
35-54 year olds
6-12 year olds55 years and older13-18 year olds
〇all needs are met
19-34 year olds
18. Why do you say that?
$\square$
19. What are the two most popular oudoor recreation resources that you supply for families in your community?
$\square$
20. What are the two most popular outdoor recreation activities you provide for the following age categories?
Pre-school (0-5 years old)
Children (6-12 years old)

Adolescents (13-18 years old)

Young Adults (19-34 years
old)

Adults (35-54 years old)


Seniors (55 years or older)
21. Are there any other outdoor recreation, facilities, trails, or programs that are not provided in your area but should be?
$\square$
22. Please identify the top $2-3$ critical issues that you see impacting the future of outdoor recreation in your community?
$\square$

## APPENDIX D. RECREATION PROVIDERS' SURVEY RESULTS

## Q1 What is your current position within your agency?



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Q2 What is your zip code?
Answered: 158 Skipped: 0

## Q3 In what county are you located?



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| ANSWER CHOICES | RESPONSES |  |
| :--- | :--- | :--- |
| Adair County | $1 \%$ |  |
| Andrew County | $1 \%$ | 2 |
| Atchison County | $1 \%$ | 1 |
| Audrain County | $1 \%$ | 1 |
| Barry County | $0 \%$ | 0 |
| Barton County | $0 \%$ | 0 |
| Bates County | $1 \%$ | 1 |

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| Benton County | 0\% | 0 |
| :---: | :---: | :---: |
| Bollinger County | 0\% | 0 |
| Boone County | 4\% | 7 |
| Buchanan County | 1\% | 1 |
| Butler County | 1\% | 1 |
| Caldwell County | 1\% | 1 |
| Callaway County | 0\% | 0 |
| Camden County | 1\% | 2 |
| Cape Girardeau County | 0\% | 0 |
| Carroll County | 0\% | 0 |
| Carter County | 0\% | 0 |
| Cass County | $3 \%$ | 4 |
| Cedar County | $2 \%$ | 3 |
| Chariton County | 1\% | 1 |
| Christian County | 1\% | 2 |
| Clark County | 0\% | 0 |
| Clay County | $2 \%$ | 3 |
| Clinton County | 2\% | 3 |
| Cole County | 1\% | 1 |
| Cooper County | 1\% | 1 |
| Crawford County | 1\% | 1 |
| Dade County | 0\% | 0 |
| Dallas County | 0\% | 0 |
| Daviess County | 1\% | 1 |
| DeKalb County | 0\% | 0 |
| Dent County | 0\% | 0 |
| Douglas County | 1\% | 1 |
| Dunklin County | 1\% | 2 |
| Franklin County | 1\% | 1 |
| Gasconade County | 0\% | 0 |
| Gentry County | 1\% | 1 |
| Greene County | 1\% | 1 |
| Grundy County | 0\% | 0 |
| Harrison County | 0\% | 0 |
| Henry County | 0\% | 0 |
| Hickory County | 0\% | 0 |
| Holt County | 1\% | 1 |
| Howard County | $3 \%$ | 5 |
| Howell County | 1\% | 2 |
| Iron County | 0\% | 0 |
| Jackson County | 4\% | 7 |

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| Jasper County | 1\% | 1 |
| :---: | :---: | :---: |
| Jefferson County | 3\% | 4 |
| Johnson County | 1\% | 2 |
| Knox County | 0\% | 0 |
| Laclede County | 0\% | 0 |
| Lafayette County | 1\% | 1 |
| Lawrence County | 1\% | 2 |
| Lewis County | 0\% | 0 |
| Lincoln County | 1\% | 1 |
| Linn County | 0\% | 0 |
| Livingston County | 1\% | 2 |
| Macon County | 2\% | 3 |
| Madison County | 1\% | 1 |
| Maries County | 1\% | 1 |
| Marion County | 1\% | 1 |
| McDonald County | 0\% | 0 |
| Mercer County | 1\% | 1 |
| Miller County | 2\% | 3 |
| Mississippi County | 0\% | 0 |
| Moniteau County | 1\% | 1 |
| Monroe County | 1\% | 1 |
| Montgomery County | 0\% | 0 |
| Morgan County | 1\% | 1 |
| New Madrid County | 0\% | 0 |
| Newton County | 0\% | 0 |
| Nodaway County | 3\% | 5 |
| Oregon County | 1\% | 1 |
| Osage County | 0\% | 0 |
| Ozark County | 0\% | 0 |
| Pemiscot County | 1\% | 1 |
| Perry County | 1\% | 1 |
| Pettis County | 1\% | 1 |
| Phelps County | $2 \%$ | 3 |
| Pike County | 0\% | 0 |
| Platte County | 3\% | 4 |
| Polk County | 1\% | 2 |
| Pulaski County | 0\% | 0 |
| Putnam County | 0\% | 0 |
| Ralls County | 1\% | 1 |
| Randolph County | 1\% | 2 |
| Ray County | 0\% | 0 |

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| Reynolds County | 0\% | 0 |
| :---: | :---: | :---: |
| Ripley County | 1\% | 1 |
| Saline County | 1\% | 1 |
| Schuyler County | 0\% | 0 |
| Scotland County | 1\% | 2 |
| Scott County | 0\% | 0 |
| Shannon County | 1\% | 1 |
| Shelby County | 1\% | 1 |
| St. Charles County | 6\% | 9 |
| St. Clair County | 0\% | 0 |
| St. Francois County | 2\% | 3 |
| St. Louis County | 11\% | 18 |
| St. Louis City | 1\% | 1 |
| Ste. Genevieve County | 1\% | 1 |
| Stoddard County | 1\% | 1 |
| Stone County | 1\% | 2 |
| Sullivan County | 0\% | 0 |
| Taney County | 1\% | 2 |
| Texas County | 1\% | 2 |
| Vernon County | 1\% | 1 |
| Warren County | 0\% | 0 |
| Washington County | 0\% | 0 |
| Wayne County | 1\% | 2 |
| Webster County | 1\% | 2 |
| Worth County | 1\% | 1 |
| Wright County | 1\% | 1 |
| TOTAL |  | 158 |

# Q4 Which of the following defines the geographic area served by your agency? 

Answered: 158 Skipped: 0


Q5 Think about the outdoor recreation facilities that your community offers. Using a scale of 1 to 5 , where 1 is no need of improvement and 5 is extreme need of improvement, how would you rate the need of improvement for your local...



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Q6 Are there other outdoor recreation facility types in your community that are in need of improvement?

Answered: 49 Skipped: 109

Q7 Would you say that local demand for the following is much lower, lower, slightly lower, about right, slightly higher, higher, or much higher than what is currently provided, if at all?


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Q8 Are there any other outdoor recreation facilities/activities in your community that you have traditionally provided that you have seen decline over the past five years? If yes, please list the facilities/activities and what you feel are the reasons for their decline.

Q9 Has the popularity of the following decreased a lot, decreased, decreased a little, no change, increased a little, increased, or increased a lot over the past five years?


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| frisbee/disc golf | $1 \%$ | $2 \%$ | $3 \%$ | $27 \%$ | $18 \%$ | $12 \%$ | $6 \%$ | $31 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 3 | 5 | 41 | 27 | 18 | 9 | 151 |
| dog parks | $1 \%$ | $3 \%$ | $1 \%$ | $24 \%$ | $15 \%$ | $14 \%$ | $10 \%$ | $33 \%$ |
|  | 1 | 4 | 1 | 36 | 23 | 15 | 51 | 153 |

## BASIC STATISTICS

baseball/softball fields

|  | 1.00 | 7.00 | 5.00 | 4.79 | 1.57 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| outdoor basketball courts |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.60 | 1.08 |
| boating and water sports access sites |  |  |  |  |  |
|  | 3.00 | 7.00 | 4.00 | 4.58 | 0.98 |
| camping sites |  |  |  |  |  |
|  | 3.00 | 7.00 | 4.00 | 4.79 | 1.02 |
| fishing sites |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.71 | 1.03 |
| football fields |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.39 | 1.28 |
| gardens |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 4.76 | 1.00 |
| golf courses |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.02 | 1.19 |
| historic/education sites |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.42 | 1.01 |
| hunting sites |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.53 | 1.10 |
| multi-use fields |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 5.25 | 1.22 |
| picnic areas |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 4.82 | 1.03 |
| playgrounds |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 5.41 | 1.13 |
| soccer fields |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.90 | 1.41 |
| outdoor swimming pools |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.86 | 1.31 |
| tennis/pickle ball courts |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.77 | 1.38 |
| trails |  |  |  |  |  |
|  | 3.00 | 7.00 | 5.00 | 5.42 | 1.13 |
| volleyball courts |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.28 | 0.97 |
| target shooting sites |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.68 | 1.25 |
| nature parks/areas |  |  |  |  |  |
|  | 3.00 | 7.00 | 5.00 | 4.98 | 1.09 |
| outdoor skate parks |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.30 | 1.24 |
| splash pads |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.90 | 1.33 |
| frisbee/disc golf |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.73 | 1.20 |
| dog parks |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.98 | 1.31 |

Q10 Do you see the popularity of the following decreasing a lot, decreasing, decreasing a little, not changing, increasing a little, increasing, or increasing a lot over the next five years?


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| frisbee/disc golf | $1 \%$ | $2 \%$ | $3 \%$ | $30 \%$ | $24 \%$ | $9 \%$ | $5 \%$ | $27 \%$ | 7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 3 | 4 | 45 | 37 | 14 | 41 | 152 | 4.1 |
| dog parks | $1 \%$ | $2 \%$ | $3 \%$ | $23 \%$ | $21 \%$ | $15 \%$ | $10 \%$ | $26 \%$ |  |
|  | 1 | 3 | 5 | 34 | 31 | 22 | 15 | 39 | 150 |
|  |  |  |  |  |  | $4 .!$ |  |  |  |

BASIC STATISTICS
baseball/softball fields

|  | 1.00 | 7.00 | 5.00 | 4.87 | 1.43 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| outdoor basketball courts |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 4.79 | 1.05 |
| boating and water sports access sites |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.70 | 0.99 |
| camping sites |  |  |  |  |  |
|  | 3.00 | 7.00 | 5.00 | 4.89 | 1.06 |
| fishing sites |  |  |  |  |  |
|  | 3.00 | 7.00 | 4.50 | 4.81 | 0.98 |
| football fields |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.37 | 1.32 |
| gardens |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 4.81 | 1.06 |
| golf courses |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.18 | 1.11 |
| historic/education sites |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.48 | 1.08 |
| hunting sites |  |  |  |  |  |
|  | 1.00 | 7.00 | 4.00 | 4.67 | 1.13 |
| multi-use fields |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 5.34 | 1.18 |
| picnic areas |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.88 | 1.07 |
| playgrounds |  |  |  |  |  |
|  | 1.00 | 7.00 | 6.00 | 5.51 | 1.08 |
| soccer fields |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 5.04 | 1.30 |
| outdoor swimming pools |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 5.03 | 1.25 |
| tennis/pickle ball courts |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 4.82 | 1.20 |
| trails |  |  |  |  |  |
|  | 4.00 | 7.00 | 5.00 | 5.51 | 1.09 |
| volleyball courts |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.43 | 0.98 |
| target shooting sites |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.77 | 1.19 |
| nature parks/areas |  |  |  |  |  |
|  | 3.00 | 7.00 | 5.00 | 5.14 | 1.04 |
| outdoor skate parks |  |  |  |  |  |
|  | 2.00 | 7.00 | 4.00 | 4.44 | 1.08 |
| splash pads |  |  |  |  |  |
|  | 2.00 | 7.00 | 5.00 | 4.95 | 1.26 |
| frisbee/disc golf |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.66 | 1.09 |
| dog parks |  |  |  |  |  |
|  | 1.00 | 7.00 | 5.00 | 4.95 | 1.27 |

Q11 Are there any other outdoor recreation facilities/activities that you predict will gain in popularity over the next five years? If yes, please list the facilities/activities and why you think they will increase in popularity.

Q12 Using a 1 to 5 scale, where 1 is not at all adequate and 5 is very adequate, how would you rate the adequacy of the following park and recreation related support components in your community?


# Q13 Are there any other support related components that you don't feel are adequate in your community? 

# Q14 Using a 1 to 5 scale, where 1 is not a priority at all and 5 is high priority, how would you rate the priority of the following when it comes to improving outdoor recreation in your community? 



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| Increasing conservation/preservation efforts | 1.00 | 5.00 | 4.00 | 3.73 | 1.06 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Increasing, improving, and diversifying marketing and public relations |  |  |  |  | 1.00 |

Q15 Using a scale of 1 to 5 where 1 is not an obstacle at all and 5 is very large obstacle, how would you rate the following obstacles at preventing improvements in outdoor recreation from being made in your local community?


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| availability of future park land | $\begin{array}{rr} 26 \% & 22 \% \\ 39 & 33 \end{array}$ | $\begin{array}{rr} 16 \% & 22 \% \\ 24 & 34 \end{array}$ |  | $\begin{array}{r} 14 \% \\ 22 \end{array}$ | 152 | 2.78 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BASIC STATISTICS |  |  |  |  |  |  |
|  | MINIMUM | MAXIMUM | MEDIAN | MEAN | STANDARD DEVIATION |  |
| low priority/support for recreation |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 3.00 | 2.74 |  | 1.19 |
| lack of consistent funding system |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 4.00 | 3.96 |  | 1.11 |
| ignorance/lack of education on benefits/value of outdoor recreation | 1.00 | 5.00 | 3.00 | 3.13 |  | 1.16 |
| inadequate planning |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 3.00 | 2.97 |  | 1.21 |
| lack of flexibility/fear of trying something new |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 3.00 | 2.91 |  | 1.24 |
| increasing demand/use |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 3.00 | 2.86 |  | 1.13 |
| demographic shifts (specifically related to ethnic/cultural diversity) | 1.00 | 5.00 | 2.00 | 2.19 |  | 1.05 |
| participating in outdoor recreation is unsafe due to local crime |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 1.00 | 1.65 |  | 1.00 |
| outdoor recreation creates too many liability issues |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 2.00 | 2.13 |  | 1.12 |
| availability of future park land |  |  |  |  |  |  |
|  | 1.00 | 5.00 | 3.00 | 2.78 |  | 1.41 |

Q16 Using a 1 to 5 scale, where 1 is needs are not being met all and 5 is needs are being met very well, how would you rate your ability to meet the needs of the following age groups?


## Q17 Out of the following age groups, which one has the most unmet needs? choose one

Answered: 154 Skipped: 4



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## Q18 Why do you say that?

Answered: 134 Skipped: 24

# Q19 What are the two most popular oudoor recreation resources that you supply for families in your community? 

Answered: 147 Skipped: 11

## Q20 What are the two most popular outdoor recreation activities you provide for the following age categories?

Answered: 143 Skipped: 15

| ANSWER CHOICES | RESPONSES |  |
| :--- | :--- | :--- |
| Pre-school (0-5 years old) | $95 \%$ | 136 |
| Children (6-12 years old) | $99 \%$ | 141 |
| Adolescents (13-18 years old) | $96 \%$ | 137 |
| Young Adults (19-34 years old) | $90 \%$ | 128 |
| Adults (35-54 years old) | $91 \%$ | 130 |
| Seniors (55 years or older) | $90 \%$ | 129 |

Q21 Are there any other outdoor recreation, facilities, trails, or programs that are not provided in your area but should be?

Q22 Please identify the top 2-3 critical issues that you see impacting the future of outdoor recreation in your community?

Answered: 135 Skipped: 23


[^0]:    *When projecting population changes, the year 2030 is typically used as a near-term benchmark to avoid the unreliability of longer-term projections.

[^1]:    PolicyLink/PERE National Equity Atlas, wawnationalequityatias.org

[^2]:    Goal 5. Promote the health and community benefits of the outdoors through
    partnerships, messaging, and programming.
    Objective 5.1 - Partner with public agencies, nonprofits, retailers and other outdoor advocates to host regional or statewide outdoor events, such as the WOW National Outdoor Recreation and Conservation Schools
    (http://www.wondersofwildlife.org/educatio n/wow-school.html) and the Great Rivers Greenway (GRG) Life Outside Festival (https://greatriversgreenway.org/lifeoutside/).

