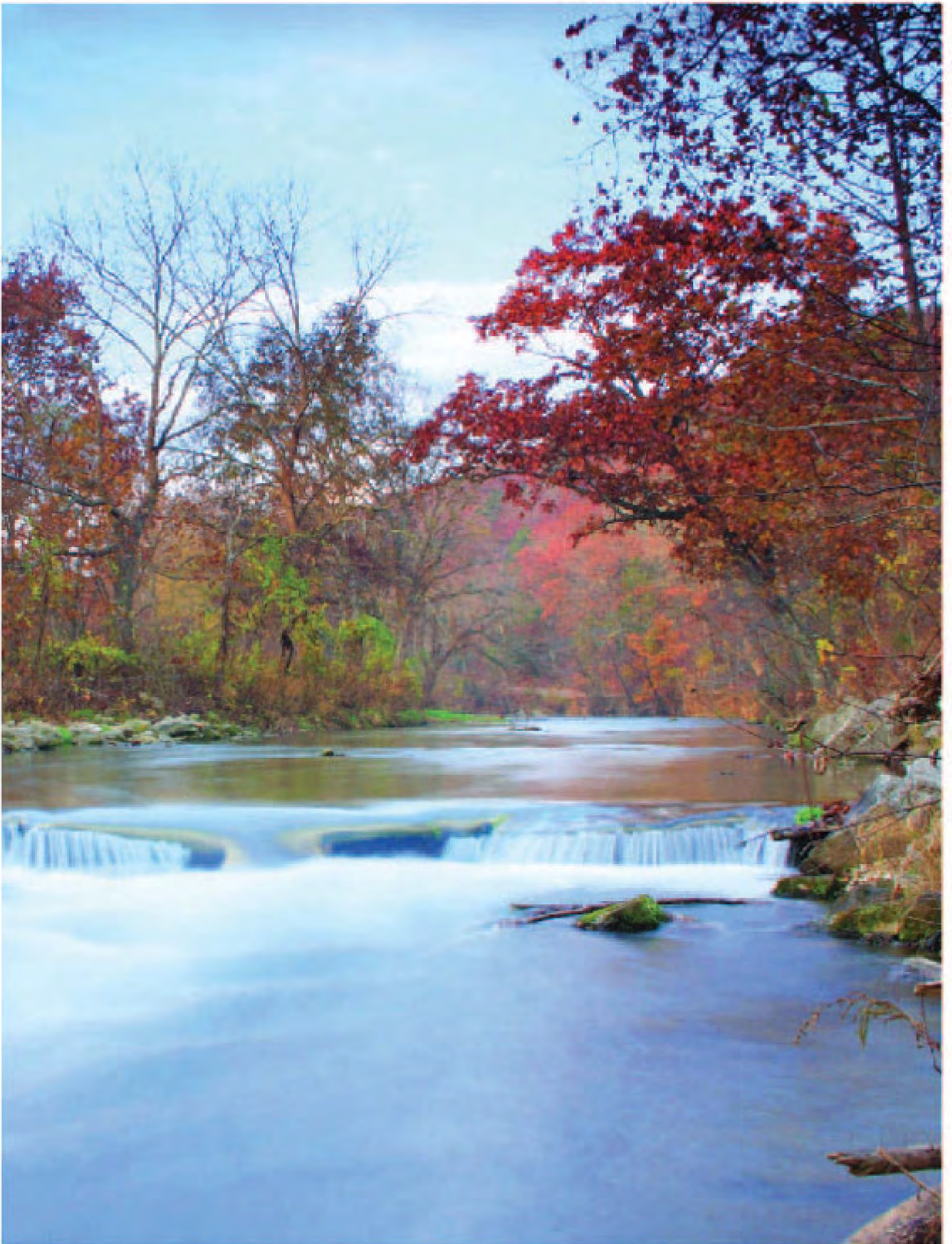


MISSOURI

Statewide Comprehensive Outdoor Recreation Plan

2013-2017





Missouri Statewide Comprehensive Outdoor Recreation Plan (SCORP)

2013-2017

Synergy/PRI/JPA
Synergy Group
Pragmatic Research, Inc.
James Pona Associates



GOVERNOR OF MISSOURI

JEFFERSON CITY
65102

JEREMIAH W. (JAY) NIXON
GOVERNOR

P.O. Box 720
(573) 751-3222

Dear Missouri Citizens:

It is with pleasure that I present the 2013-2017 Missouri Statewide Comprehensive Outdoor Recreation Plan. This plan provides a framework for the planning, development, management and protection of Missouri's outdoor recreation resources. In addition, this plan will ensure that Missouri remains eligible to receive federal Land and Water Conservation Funds for outdoor recreation projects.

We took a fresh approach to this plan, often referred to as the "SCORP", engaging Missouri residents and outdoor recreation professionals alike in the research. The goals were to assess current and future recreation needs, desires and preferences; identify trends and priorities that will impact the future of outdoor recreation in Missouri; and project future recreational demands. The plan also identifies areas of concern such as obesity and nature deficit disorder, both of which can be addressed with our plans for getting kids outdoors.

In completing this plan, three statewide surveys of residents and outdoor recreation professionals were conducted. The data from those primary research studies were compared to national studies and trends for a broad-based perspective.

And for the first time, an inventory of Missouri trails was conducted to quantify this rich resource that distinguishes Missouri as an outdoor destination. The trail inventory has already become the basis for a continued effort to further advance the sharing of trail information in Missouri.

The First Lady and I know first-hand the value of our treasured outdoor resources. From our award-winning state park system to our local parks, trails, playgrounds and greenspaces, we know that spending time outdoors leads to happier and healthier citizens. In fact, the studies show that 95% of Missourians agree with us.

We encourage all Missourians to utilize the recommendations in this plan. But most importantly, we urge you to get outside and enjoy Missouri's outdoors.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jay Nixon".

Jeremiah (Jay) Nixon
Governor

www.governor.mo.gov

In compliance with Federal regulations, the following are being included in and supported by Missouri Statewide Comprehensive Outdoor Recreation Plan (SCORP):

Title VI of the Civil Rights Act of 1964

The Age Discrimination Act of 1975

Section 504 of the Rehabilitation Act of 1973

The Americans with Disabilities Act (P.L. 101-336)

No person shall, because of race, color, national origin, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under any program or activity receiving federal financial assistance.

Equal opportunity is to be practiced in all phases of federally assisted projects including the planning, awarding of contracts, hiring of personnel and the use of access to facilities and programs.

Complaints regarding discrimination may be filed with:

Office of Equal Opportunity

National Park Service

U. S. Department of the Interior

Washington D.C. 20240

The Missouri Department of Natural Resources has the authority to represent and act for the State in dealing with the Secretary of the Interior for purposes of the Land and Water Conservation Fund Act of 1965, as amended.

**Missouri Statewide Comprehensive
Outdoor Recreation Plan
(SCORP)
2013-2017**

Prepared For
State Inter-Agency Council for Outdoor Recreation

Prepared By
Missouri Department of Natural Resources
Missouri State Parks
Planning and Development Program
Grants Management Section
1659 E. Elm Street
Jefferson City, MO 65109
(573) 751-0848

Synergy/PRI/JPA
Synergy Group
(314) 961-9772
www.synergy-pr.com
Pragmatic Research, Inc.
James Pona Associates

THE STATE OF MISSOURI
Jeremiah (Jay) Nixon, Governor

STATE INTER-AGENCY COUNCIL FOR OUTDOOR RECREATION

Missouri Department of Natural Resources.....	William (Bill) Bryan
Missouri Department of Agriculture.....	Marla Young
Missouri Department of Conservation.....	David H. Thorne, Ph.D.
Missouri Department of Economic Development	Andy Papen
Missouri Department of Transportation.....	Richard Moore
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Missouri Office of Administration.....	Matthew Sweetwood
Missouri University of Missouri.....	David Vaught

MISSOURI DEPARTMENT OF NATURAL RESOURCES

Sarah Parker- Pauley, Director

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- William (Bill) Bryan – Director, Missouri State Parks & SLO
- Jane Lale – Director, Planning and Development Program
- Christopher D. Buckland – Section Chief, Grant Management Section & ASLO
- Mary Donze – Planner
- Don Stier – Planner

We apologize for oversight of any individual or agency that may also have provided assistance in this endeavor.

TABLE OF CONTENTS

Executive Summary	2
Introduction	4
Background.....	10
Who We Are	10
Outdoor Recreation Providers	22
Local Recreation Providers	22
State of Missouri Recreation Providers.....	23
Federal Recreation Providers in Missouri	24
Conservation Organizations, Nonprofit and Private Providers	28
How We Play	30
How We Pay for Play	30
Research and Findings	36
Missouri Residents and Professionals Survey 2009	36
Methodology	36
Research Results	37
Missouri Residents Survey 2011.....	44
Methodology	44
Survey Results.....	45
Missouri Residents Survey - Importance/Performance Findings.....	56
Summary of Findings.....	64
Missouri Parks and Recreation Professionals Survey 2011.....	66
Methodology	66
Survey Results.....	68
Summary of Findings.....	82
Missouri Trail Inventory 2011.....	84
Methodology	85
Survey Results.....	85
Themes, Emerging Issues & Trends	86
Themes and Emerging Issues	86
Sociodemographic Shifts.....	86
Funding and Economics – Doing More with Less	87
Demand for Trails and Walkable Communities.....	88
Education – the Benefits and Value of Parks and Recreation	89
Health & Wellness	90
Youth, Technology and the Reality of Nature Deficit	94
Outdoor Recreation Trends.....	98
Facilities	98
Activities	98
Obstacles to Outdoor Recreation	102
Missouri Wetlands	104
Next Five Years – Goals & Recommendations	110
Research Bibliography	112
Appendices available under separate cover	

Executive Summary

The Missouri Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2013-2017 is a research and planning document with a dual goal – to guide the development and funding of outdoor recreation within Missouri over the next five years, and to ensure Missouri’s eligibility for federal Land and Water Conservation Funds.

For this SCORP, Missouri residents and outdoor recreation professionals alike were engaged in research studies to assess current and future recreational needs and preferences, identify trends and priorities, and project future recreational demand in the state of Missouri.

The data from three statewide surveys of residents and outdoor recreation professionals, conducted specifically for this SCORP, was compared with national studies and trends to achieve a broad-based perspective. A first-time, detailed inventory of Missouri trails also was made as part of this SCORP process.

By engaging both residents and professionals in the process, a great deal was learned about the challenges and issues involved in making outdoor recreation opportunities available to all Missouri residents.

The studies conducted for the 2013-2017 Missouri SCORP include:

Missouri Residents and Recreation Professionals Opinions on Parks & Recreation Study 2009 – this 2009 survey, conducted by the Missouri Parks and Recreation Association (MPRA) with Missouri SCORP funds, surveyed 874 Missouri residents and 349 recreation professionals to determine the needs, concerns and values of the public as they related to parks, recreation and open space. While Missourians love their parks and outdoor recreation facilities, the study found that many do not connect what they value about parks, recreation and open space with the services that recreation agencies provide, or with the funding needed to support them. The findings indicated a need for better public communications, and led to a MPRA public education campaign titled “Did You Know?” unveiled in 2012. The goal of the campaign is to educate parks and recreation enthusiasts about the measurable benefits of outdoor recreation and transition park users into knowledgeable advocates.

Missouri Residents Survey – this 2011 statewide survey of 768 Missouri residents confirmed a high demand for trails, walkable streets and sidewalks, and more organized youth and teen activities. The survey revealed the different outdoor recreation needs of urban and rural Missouri communities, and shed light on the outdoor recreation issues, concerns and priorities of Missouri residents as a whole.

Missouri Professionals Survey – this 2011 statewide survey of 150 Missouri outdoor recreation professionals highlighted critical funding issues and an ongoing need to “do more with less.” Outdoor recreation professionals track a growing demand for facilities that encourage a variety of activities such as trails and trail connections, walkable streets and sidewalks, and multi-use sports fields. They see a need for more facilities close to home, and for expanded teen and older

adult activities. Professionals' concerns over issues such as a lack of transportation may lead to future collaborations with other agencies.

Missouri Trail Inventory – Missouri is home to the Katy Trail State Park, Ozark Trail, and thousands of miles of trails, but no central database has existed to guide professionals and trail users. This 2011 inventory, completed by 160 recreation professionals, counted and gathered data on more than 3,000 miles of trails, located in nearly all of Missouri's 114 counties plus the city of St. Louis. The resulting trail database can be sorted and filtered to provide a wide range of trail information and statistics. Although the inventory is not complete, a Trail Alliance comprised of all entities managing trails in the state is being formed. The Alliance will continue to develop a more comprehensive trail database for management and public information purposes.

Our state faces a number of challenges in providing outdoor recreation opportunities to all residents. These include an obesity epidemic, a slow-growth but aging population, inadequate public transportation opportunities, a slow economy, and a lack of interest in outdoor recreation by many teens and older adults.

In addition to providing rich data, these SCORP research studies have led us to develop a set of goals, priorities and action steps. These action steps address overall demand for outdoor recreation in Missouri as well as specific issues such as funding, youth engagement, access, public education and agency collaboration.

Introduction

Every five years, the Missouri Department of Natural Resources, Division of State Parks produces a Statewide Comprehensive Outdoor Recreation Plan (SCORP) as a framework for planning, development, management and protection of the state's outdoor recreation resources.

The SCORP also meets the requirements of the federal Land and Water Conservation (LWCF) grant program, ensuring that Missouri remains eligible to receive federal LWCF funds for future outdoor recreation projects. (Missouri State Parks staffs the State Inter-Agency Council for Outdoor Recreation (SIACOR), which administers the LWCF program for the state of Missouri.)

Land and Water Conservation Fund

Congress created the Land and Water Conservation Fund in 1965 to safeguard natural areas, water resources and our cultural heritage, and to provide recreation opportunities to all Americans. LWCF uses revenues from offshore oil and gas receipts -- more than \$14.4 billion since the program began -- to acquire new federal recreation lands and to provide matching grants to States for outdoor recreation purposes.

The LWCF program has two components: the "Federal side" which funds the acquisition of new land and water areas by federal agencies, and the "State side" which provides matching grants to state and local governments.

State Assistance Program

The LWCF state assistance program provides grants to states and local communities to protect parks and recreation resources. From wilderness areas to trails and neighborhood playgrounds, LWCF funding has benefited nearly every county in America, supporting more than 41,000 projects nationwide.

The LWCF program for states ensures that families have easy access to parks and open space, hiking and riding trails, and neighborhood recreation facilities. Over the life of the program, more than \$3 billion in LWCF grants have been provided to the states, which in turn have used the funding to leverage more than \$7 billion in non-federal matching funds.¹

To be eligible for federal LWCF grants, every state must prepare and regularly update a Statewide Comprehensive Outdoor Recreation Plan (SCORP). Most SCORPs address the demand for, and supply of, outdoor recreation resources (local, state and federal) within a state; identify needs and new opportunities for recreation improvements; and set forth an implementation program to meet outdoor recreation goals.

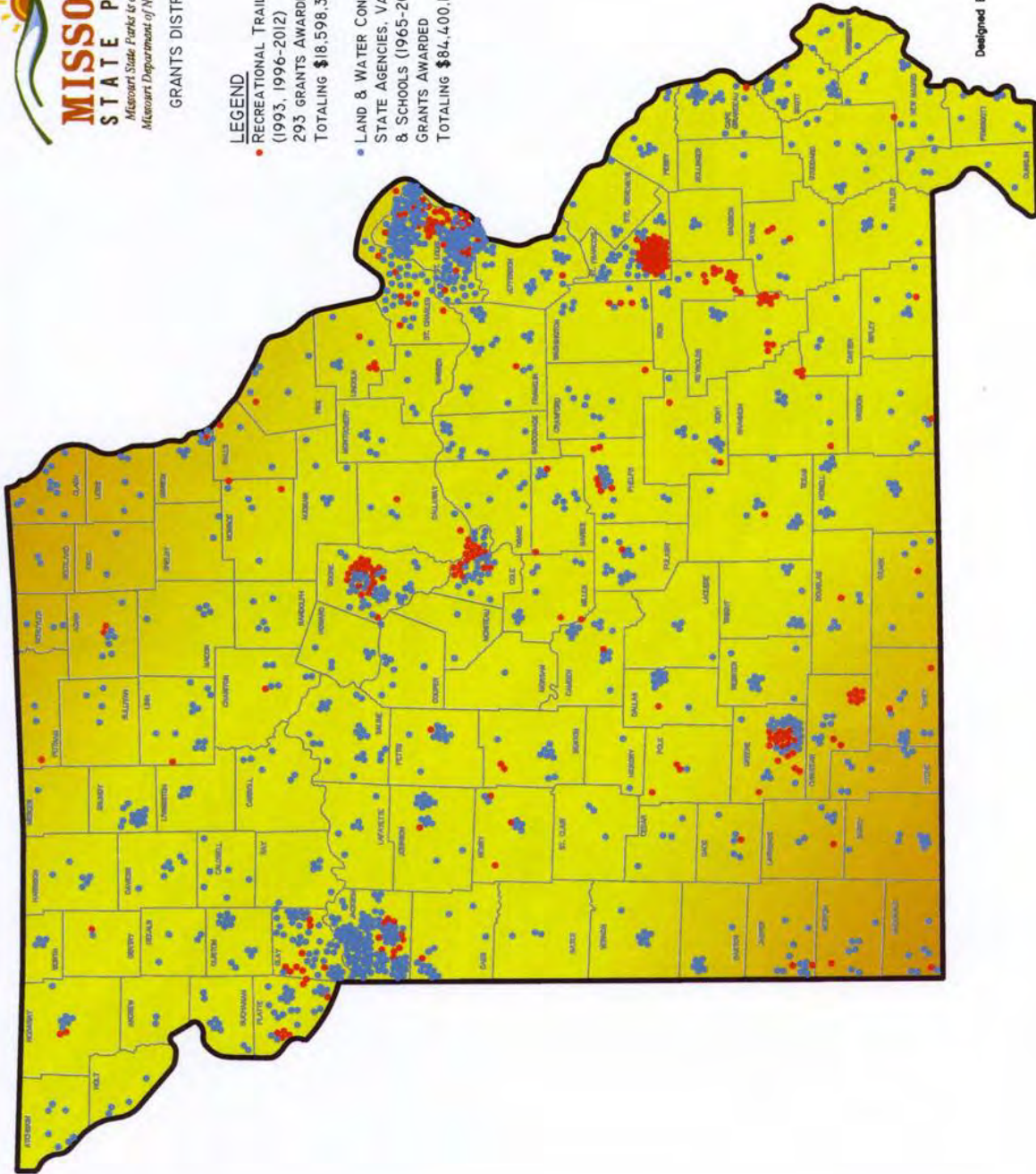
In Missouri, 1,270 LWCF grants totaling over \$84 million in federal funds have been awarded since 1965, creating and protecting recreation opportunities in all counties of the state
(

¹ Land and Water Conservation Fund Coalition. <http://www.lwcfcoalition.org/about-lwcf.html>.

Figure 1).



- LEGEND**
- RECREATIONAL TRAILS PROGRAM (1993, 1996-2012)
293 GRANTS AWARDED
TOTALING \$18,598,360.92
 - LAND & WATER CONSERVATION FUND STATE AGENCIES, VARIED GOVERNMENTS & SCHOOLS (1965-2010)
GRANTS AWARDED
TOTALING \$84,400,188.00



Designed By: Janet Prenger

Figure 1 - Geographic Distribution of LWCF Grants

LWCF grants are available to Missouri cities, counties and school districts for outdoor recreation projects, and require a 55 percent match. All funded project sites are taken under perpetuity by the National Park Service and must be used only for outdoor recreational purposes.

Missouri State Parks also administers Recreational Trails Program (RTP) grants for the construction and renovation of trails and trailheads, and for interpretive/educational programs. The Recreational Trails Program is a federal grant program thru the Federal Highway Administration, created to promote recreational trails.

Goals of Missouri SCORP 2013-2017

Ultimately, the purpose of SCORP is to increase outdoor recreation participation by residents and visitors to the state of Missouri. To accomplish this, it is important to first identify and understand the needs and desires of residents and visitors.

The goals for this SCORP are to:

- Conduct a need-based inventory of outdoor recreation facilities and activities in Missouri;
- Describe regional and statewide trends in outdoor recreation;
- Identify conflicts, threats, gaps, barriers and other critical issues effecting outdoor recreation in Missouri;
- Identify strengths and opportunities to improve outdoor recreation in Missouri;
- Propose strategies and action items for improving outdoor recreation in the state;
- Conduct a statewide inventory of trails;
- Identify issues that need further study.

To accomplish these goals, DNR/Missouri State Parks contracted the research and planning team Synergy/PRI/JPA to conduct the following primary research studies during the summer of 2011:

Survey of Residents – Residents across the state were surveyed to assess their outdoor recreation activities, interests, preferences, desires and concerns as part of a need-based inventory of current outdoor recreation resources.

Survey of Recreation Professionals and Providers – Recreation professionals and providers (local park and recreation directors, state and federal agencies, nonprofits, community leaders, etc.) were surveyed to assess public demand for outdoor recreation facilities and activities, and to identify trends and critical issues impacting the future of outdoor recreation in Missouri.

Missouri Trail Inventory – more than 400 park and recreation organizations and communities were invited to complete an online inventory survey to document trails across the state. Responses came from more than 100 of the state's 114 counties, with information on nearly 1,000 trails. The trail inventory created a solid database that can be expanded and refined as a resource for recreation planners and, ultimately, the public.

Literature Search – dozens of studies were reviewed and Missouri was compared with national trends affecting outdoor recreation, such as socio-demographic shifts, increased urbanization, loss of greenspace, population group changes, health and obesity, and youth and minority participation.

Missouri Residents and Recreation Professionals Opinions on Parks & Recreation Study 2009 – SCORP includes findings from the Missouri Park and Recreation Association (MPRA) study of Missouri residents and recreation professionals, conducted in 2009 with SCORP funds for the Missouri Park and Recreation Association, Missouri State Parks, the Conservation Federation of Missouri, and the Open Space Council. The MPRA study assessed the values and perceptions of residents, recreation professionals and public officials regarding parks, recreation and open space in Missouri. The purpose was to help parks and recreation professionals better meet public needs and concerns, and create outcomes to ensure that parks and recreation services are understood, appreciated, valued, supported and protected through community and political support.

The Missouri SCORP 2013-2017 presents the findings of these primary and secondary research efforts along with an overview of trends and critical issues, a wetlands report, and goals and recommendations for the next five years. The Appendices (available under separate cover) provide additional in-depth information, research study reports, and additional charts, graphs and maps.

Background

A Missouri Snapshot

Long before Lewis and Clark set out from Missouri to explore the West, people hunted, fished and played on our lands.

As many as 14,000 years ago, the ancient Paleo-Indians hunted Missouri big game – the mastodons and giant sloth that roamed the area. Many millennia later, the Hopewell and Osage tribes inhabited Missouri and made the most of the region’s natural resources. Other Native American tribes including the Delaware, Kickapoo, Shawnee and Piankashaw hunted our lands, lived in our forests and plains and canoed our rivers and streams.²

Today, Missouri remains a land rich in natural resources and abundant in outdoor recreation opportunities, from canoeing the Current River to hiking the Katy Trail State Park, from playing Little League baseball to gathering with family and friends at a local park. Missourians take advantage of their outdoor playground, participating in outdoor recreation at a significantly higher rate than the national average.³

Still, Missouri faces challenges in providing outdoor recreation opportunities to *all* of its residents. Funding to maintain, replace and develop new facilities to meet public demand is a major concern among both recreation professionals and residents. Attention also must be focused on other major issues affecting outdoor recreation in Missouri, such as obesity, poverty, lower participation by minorities, and a decline in interest among youth.

Who We Are

Missouri is home to nearly six million people and growing steadily at 6 percent per decade, yet lagging behind the national growth projection of 10 percent per decade.⁴

Unlike many Sunbelt states that grow through in-migration, Missouri's population increase is primarily due to natural change – births minus deaths. Birth rates in Missouri will increase only a few thousand a year over the next decade while death rates will rise due to aging baby-boomers.

Migration is the primary agent of change -- either growth or decline – in only a few geographic areas such as St. Charles County, which will gain 145,000 net in-migrants by 2030, and St. Louis City, which has experienced fairly rapid decline through out-migration.⁴

As a result of this ongoing slow growth, Missouri’s population rank has steadily dropped from the 5th most populous state in the early 1900s to the 18th most populous in 2010.

² Missouri Native American History. www.missouri-vacations.com. River Valley Regional Association.

³ Outdoor Recreation Participation Report. The Outdoor Foundation. 2010 and 2011.

⁴ Missouri Economic Research and Information Center, Missouri Department of Economic Development.

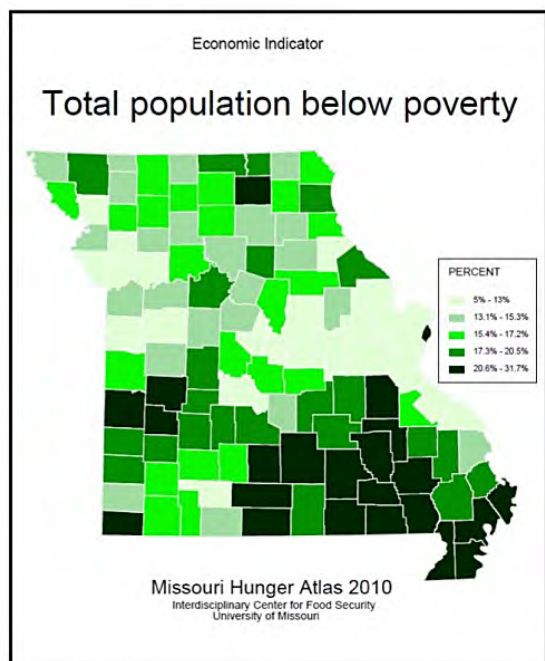


Figure 2 - Missouri Population Below Poverty

overall that are obese. More than 13 percent of children and adolescents in Missouri are considered obese⁶ (Figure 3).

On a county level, the rates of obesity range even higher. In four counties of Missouri, more than 36 percent of the population is obese, a statistic that correlates closely with lack of exercise in those regions.⁷

Diversity

Following another national trend, Missouri has become more racially and ethnically diverse over the course of the last decade. Eighty-three percent of Missourians are white, nearly 12 percent are black and 3.5 percent are Hispanic. According to the 2010 U.S. Census, Missouri’s total minority population increased from 16 percent in 2000 to 19 percent in 2010 (Table 1).

Poverty

Missouri is trending toward the top, however, in poverty. Overall, 15.5 percent of Missourians saw their income slip below the poverty level in 2010, doubling the poverty level of 2000 and putting the state in the top third of the nation in the number of poor residents (Figure 2).

Obesity

Most of the poorest counties in Missouri are in the less populated rural south and southeast regions of the state⁵ where obesity is high.

Missouri, in fact, ranks high as the 11th most obese state in the country. An alarming two-thirds of Missourians are overweight, including 30 percent

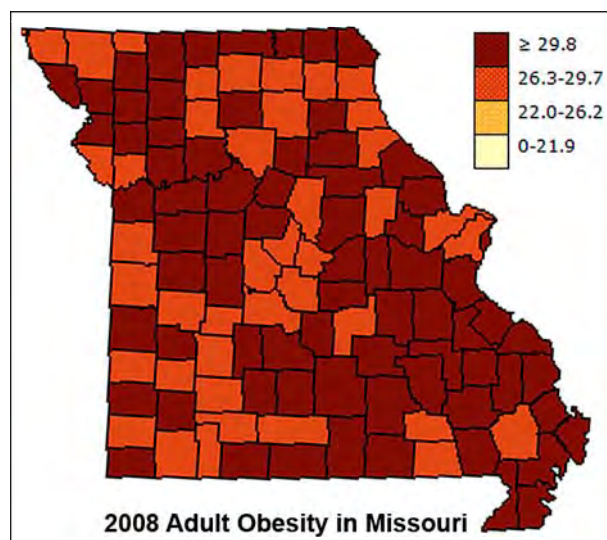


Figure 3 - Adult Obesity in Missouri

⁵ Centers for Disease Control and Prevention: National Diabetes Surveillance System.

⁶ “F as in Fat: How Obesity Threatens America's Future 2011.” Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF).

⁷ Centers for Disease Control [Behavioral Risk Factor Surveillance System](#) (BRFSS). Missouri County Level Study. 2007.

Minority populations in Missouri are growing faster than the general population, increasing over the past decade three times as fast as the state population as a whole (18 percent minority growth vs. 6 percent overall).

The Hispanic population in Missouri is growing faster than any other population group at 79 percent since 2000⁸

Missouri Population by Race as a Percentage of Total Population 2010									
By Race, Hispanic Origin and Total Minority									
	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	Hispanic or Latino (of any race)	Total Minority
Missouri	82.8%	11.6%	0.5%	1.6%	0.1%	1.3%	2.1%	3.5%	19.0%

Source: Census 2010 - P.L. 94-171
Prepared by Missouri Office of Administration-Division of Budget and Planning 2/28/2011

Table 1 - Missouri Population by Race

The challenge for Missouri recreation planners is that minority groups tend to participate in outdoor recreation at a lower rate than whites, in part because of a lack of awareness. According to one study conducted for the National Park Service, although America has become more diverse over the last decade, black and Hispanic Americans remain underrepresented in visits to national parks. The barrier most often expressed by those ethnic groups is that they just don't know much about National Parks or the recreation opportunities they provide.⁹

The problem of low minority participation in outdoor recreation involves issues of access, awareness, programming and staffing. The National Park Service study acknowledges that simply increasing awareness among minority non-visitors will not necessarily increase their visits. Parks must provide experiences that are relevant, desirable and accessible if they hope to attract minority visitors.

Parks also must increase diversity among their own employees if they are to attract minority visitors. The National Park Service introduces minority youth to careers in outdoor recreation through training programs, job shadowing and internships.

Aging

Missouri's population also is aging (Table 2). The number of children under 20 will remain steady at about 26 percent over the next decade, but those 65 and older will increase from less than 14 percent of the population to nearly 17 percent. By 2030, more

⁸ Missouri Office of Administration. Missouri's First Detailed 2010 Census Counts.

⁹ Lovitt, Rob. National Park Service Comprehensive Survey of the American Public 2008–2009: Racial and Ethnic Diversity of National Park System Visitors and Non-Visitors.

than one in five Missourians – 1.4 million people – will be over the age of 65, an astounding 87 percent increase over 2000.¹⁰

Population Projections by Age Missouri Counties: 2000 through 2030								
County	Age	Year						
		2000	2005	2010	2015	2020	2025	2030
Statewide Total	0-4	369,898	384,226	392,155	406,994	417,559	418,296	416,469
Statewide Total	5-9	398,900	379,331	394,173	401,219	415,759	426,060	426,274
Statewide Total	10-14	412,080	402,452	383,326	396,834	403,097	417,094	426,816
Statewide Total	15-19	413,316	427,130	418,039	398,044	410,097	415,361	428,151
Statewide Total	20-24	369,640	431,154	444,986	435,628	415,493	427,070	431,328
Statewide Total	25-29	362,497	349,633	414,313	429,251	419,111	398,004	409,885
Statewide Total	30-34	376,714	375,661	361,453	429,960	445,734	434,506	412,334
Statewide Total	35-39	443,570	380,562	379,059	363,554	433,173	448,675	436,454
Statewide Total	40-44	444,529	446,388	383,141	380,615	364,019	433,587	448,449
Statewide Total	45-49	395,729	441,562	443,893	379,550	376,378	359,163	427,830
Statewide Total	50-54	346,941	389,453	435,247	437,218	373,093	369,838	352,588
Statewide Total	55-59	279,100	337,049	379,357	424,444	426,858	364,232	361,522
Statewide Total	60-64	228,357	266,644	323,641	365,100	409,988	414,048	354,396
Statewide Total	65-69	205,386	210,894	248,687	303,316	344,060	388,945	395,493
Statewide Total	70-74	187,870	181,731	189,043	224,822	276,438	316,040	360,272
Statewide Total	75-79	157,213	156,247	153,623	161,701	194,745	242,350	279,984
Statewide Total	80-84	106,375	118,226	120,597	120,971	129,893	159,760	202,317
Statewide Total	85+	98,572	102,950	114,611	125,169	134,355	147,839	176,200
Statewide Total	Total	5,596,687	5,781,293	5,979,344	6,184,390	6,389,850	6,580,868	6,746,762

Components of Change - Total Over the Previous Five Years								
Statewide Total	Births	-	377,342	384,203	399,122	409,636	410,608	409,282
Statewide Total	Deaths	-	267,613	268,239	270,110	273,531	281,642	297,170
Statewide Total	Net Migration	-	74,877	82,087	76,034	69,355	62,052	53,782

Table 2 - Missouri Population by Age

This dramatic growth in Missouri's elderly population, due to increased longevity and aging of the baby-boom generation, will have a greater impact on the state than any other age group population change. Recreation professionals currently rank the age group 55+ second (after teens) in unmet needs,¹¹ a trend that will increase as baby-boomers age unless additional efforts are made to serve the senior age group.

For most of the last century, increased fertility has been the primary cause of Missouri's population increase. Future fertility rates are expected to remain at year 2000 levels, with births increasing from an average 76,000 a year to 82,000 by 2030 as an increasing number of women reach childbearing years. The number of deaths in Missouri has averaged around 50,000 a year since the early 1960s but is expected to increase to 59,000 a year by 2030 due to aging baby-boomers.¹⁰

In 2000, life expectancy at birth in Missouri was 73 years for men, 79 for women, and is expected to rise even higher thanks to improvements in health care.

¹⁰ Missouri Office of Administration. Population Projections - Trends

¹¹ Missouri Division of State Parks SCORP Professionals Survey, 2011.

Recent studies and trends, however, suggest that women in some regions of Missouri¹² and some young adult populations may experience declines in life expectancy due to obesity in youth, smoking and other health issues. Outdoor recreation can play an important role in improving the health outlook for these groups.

The distribution of Missouri's population age groups has changed dramatically since 1900, when it was wide at the base with younger groups and narrower toward the top as mortality claimed older age groups (Figure 4).

By 1950, the base was wide with post-war births (the baby-boom generation), but narrow bands above the base showed the smaller group born during the Great Depression.

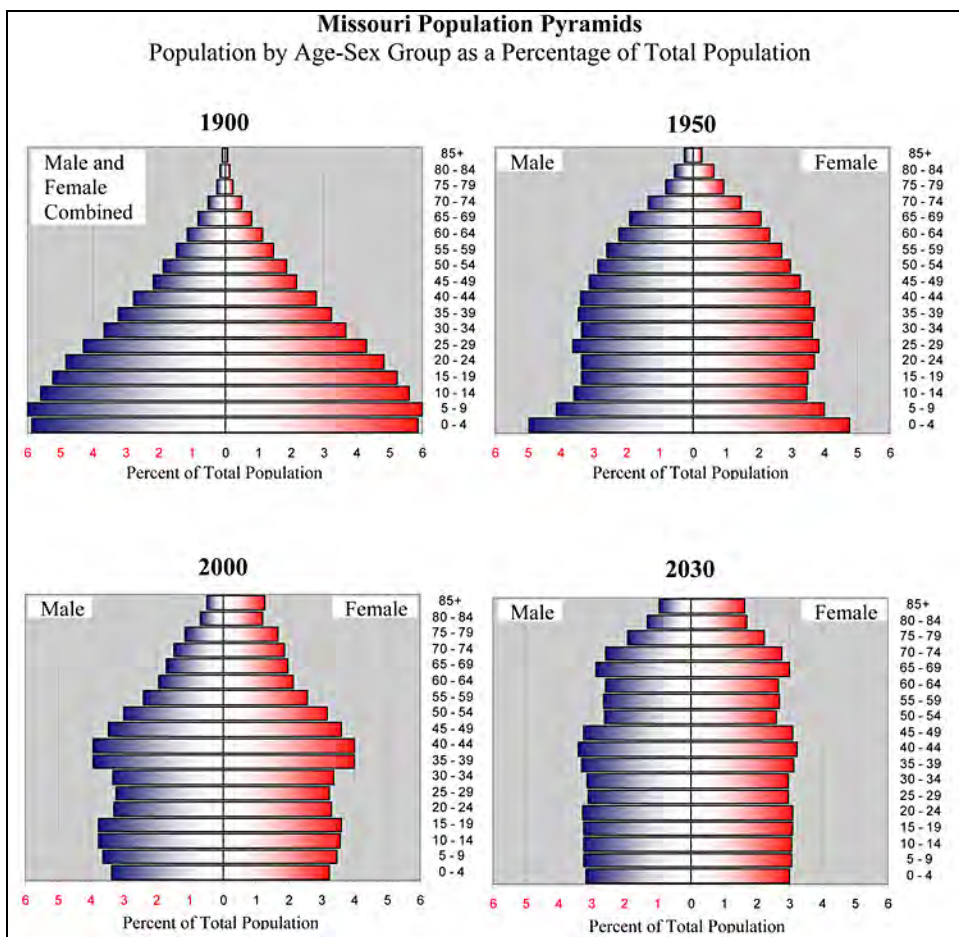


Figure 4 - Missouri Population Pyramids

By the year 2000, the middle-age baby boom generation remained a prominent factor, followed by the "baby bust" and the "boom echo," (the Baby Boomers children) in the 5- to 19-year-old age groupings. But by 2030, Missouri's population will have a rectangular cast. Baby-boomers will swell the upper sections of the pyramid to unprecedented widths

¹² Murray, Christopher. Falling behind: life expectancy in US counties, Population Health Metrics

while long-sustained low levels of fertility will produce consistent narrow bands in the lower half of the age distribution. The following are highlights of projected changes in Missouri's age distribution for select groups between 2000 and 2030:¹³

Preschool Age

By 2030, this age group will have increased by 13 percent, or 47,000 additional preschoolers. However, due to larger increases in Missouri's older age groups, preschoolers will represent only six percent of the population by 2030.

Elementary School Age

This age group is projected to increase five percent by 2030 to a total of 768,000, representing 11 percent of the total population.

High School Age

This group's population will increase by 12,000, or four percent, to a total of 342,000 in 2030, representing five percent of the total population.

College Age

This group is expected to increase an additional 13 percent to a total of just over 600,000. However, this group's percentage of the total population is expected to drop to nine percent by 2030.

Young Adults

Nearly one of every three Missourians, 1.6 million persons, was in the 25-44 age group in 2000. Young adults will have a modest increase of five percent between 2000 and 2030 to a final population of 1.7 million persons or 25 percent of the total population.

Older Adults

The 45-64 age group increased 43 percent between 1950 and 2000, for a final population of 1.3 million. By 2030, this group is estimated to grow by an additional 20 percent, to a population of 1.5 million. The 45-64 age group will represent 22 percent of the population in 2030, the same ratio as in 1950 and 2000.

The Elderly

The elderly have increased more consistently and proportionately than any other age group. Persons 65+ represented only 10 percent of the population in 1950. By 2000, their ranks had risen to 13 percent. By 2030, adults 65+ will represent more than one-fifth of Missourians (21%).

The 85+ age group has grown even more rapidly and will continue to grow. In 1950, there were 21,000 seniors over 85 in Missouri, just one-half of one percent. By 2000, there were 99,000 over 85, two percent of the population. By 2030, the number of elderly people 85+ in Missouri is expected to increase by another 78,000 to 176,000, or 2.5 percent of the overall population.

¹³ Missouri Office of Administration. The Missouri Population Projections 2000-2030 - Population Trends

Where We Live

Missouri is a mostly rural land of rolling hills, upland prairies, rivers, deep forests and rich agricultural areas. Yet, increasingly more Missourians -- nearly three out of four -- live in the three percent of the land that is classified as urban.¹⁴

Over the years, Missouri's population density has steadily shifted from rural agricultural regions to urban areas and to rural areas that are rich in recreational amenities, such as those near Lake of the Ozarks and Branson (Figure 5).

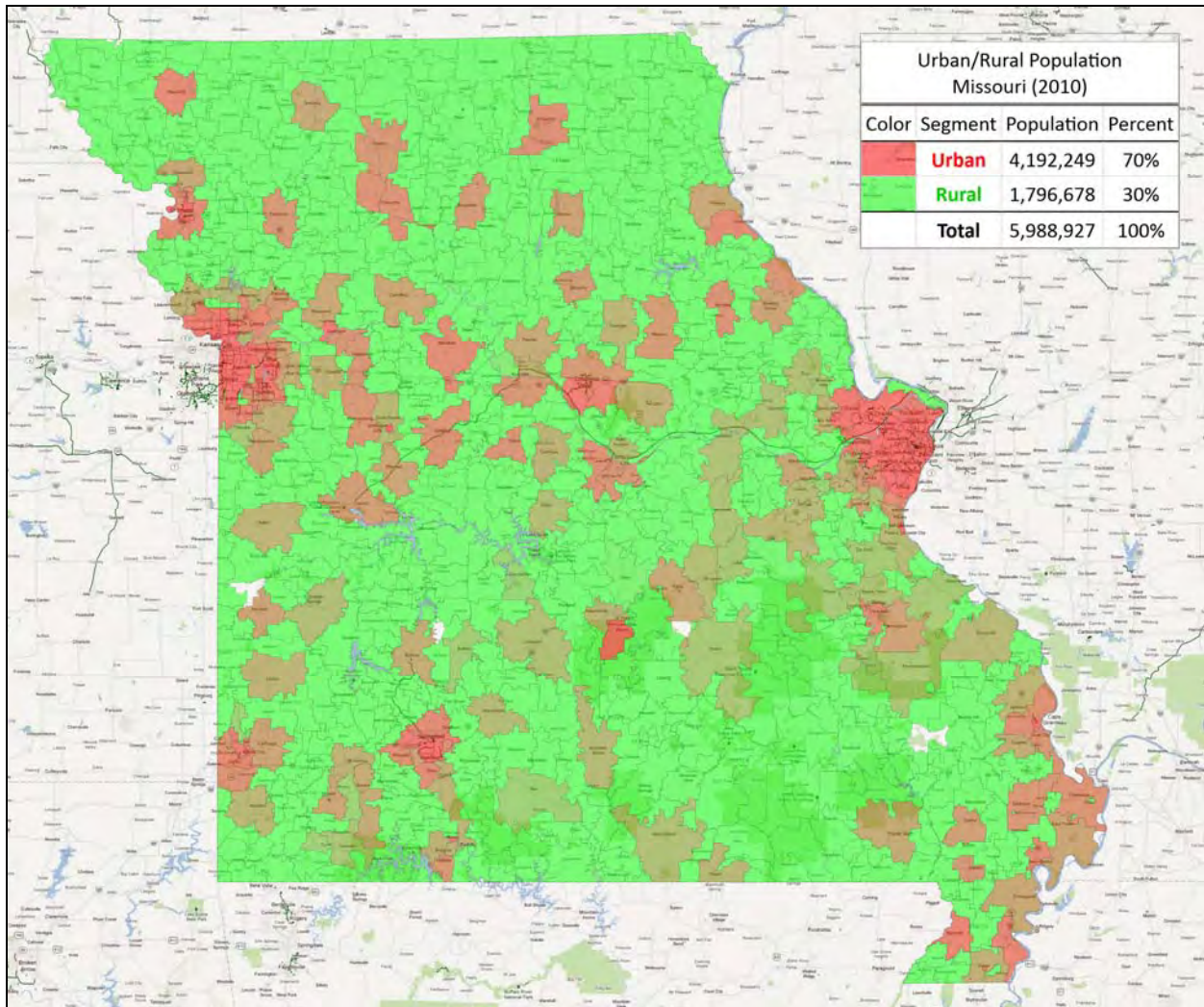


Figure 5 - Missouri Rural and Metropolitan Population

These patterns were evident in the 2010 census (Figure 6) and are expected to continue, with an even greater shift to the urban fringes over the coming decades. Metropolitan areas in Missouri are home to the state's 10 fastest-growing counties, while the population in Missouri's agricultural counties is on the decline.

¹⁴ U.S. Department of Agriculture Economic Research Service – State Fact Sheets: Missouri.

Although St. Louis County is Missouri's most populous county, a distinction it will retain over the coming decades, the county lost 1.7 percent of its residents since 2000⁴. That trend is expected to continue as people move farther from urban centers, increasing the demand for outdoor recreation in the urban fringe communities.

2010 Census: Missouri Profile

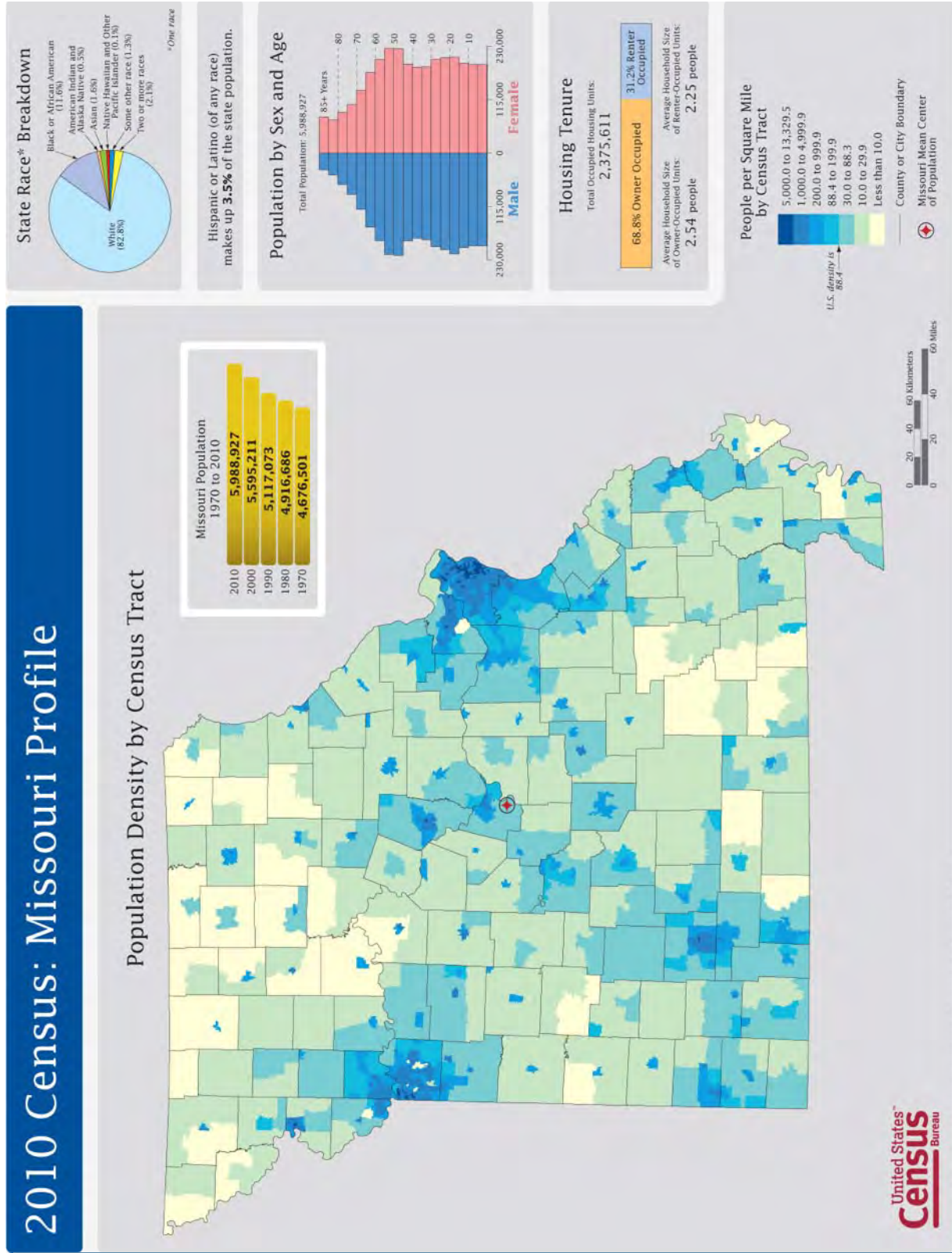


Figure 6 - 2010 Missouri Profile

The ratio of urban vs. rural residents in Missouri has remained fairly steady, with the urban population growing about one percent since 1980, when it was about 72 percent. In 2010, nearly 4.4 million Missourians, or about 73 percent, lived in urban areas while 1.6 million, about 27 percent, lived in rural areas (Table 3).¹³

Missouri Population - Rural and Urban			
	Rural *	Urban *	Total
Year			
1980	1,383,367	3,533,399	4,916,766
1990	1,390,705	3,726,368	5,117,073
2000	1,525,249	4,069,962	5,595,211
2010	1,613,417	4,375,510	5,988,927

Table 3 - Missouri Population - Rural and Urban

** The terms “rural” and “urban” refer to data for non-metro and metro areas, a county-level classification defined by the Office of Management and Budget. According to official U.S. Census Bureau definitions, rural areas comprise open country and settlements with fewer than 2,500 residents. Urban areas comprise larger places and densely settled areas around them and do not necessarily follow municipal boundaries.¹⁴ See “10 Things to Know About Urban vs. Rural” in Appendix A.*

Natural change and in-migration work together to accelerate the population shift in some regions of Missouri.

For example, St. Charles County, northwest of St. Louis, is growing through both strong net in-migration (much of it from St. Louis County) and natural growth. St. Charles County is expected to grow 76 percent by 2030, with a net gain of 145,000 in-migrants plus an additional 70,000 residents through natural growth. At half a million people, St. Charles County is projected to overtake St. Louis City for the number three population ranking in the state.¹³

Large growth also is expected in the suburban counties surrounding Kansas City, St. Louis County and Springfield. Jackson County, which includes part of Kansas City, will hold its position as Missouri’s second most populous county. Around the Kansas City area, Cass, Clay, and Platte counties combined may grow by as much as 62 percent. Both Christian County south of Springfield and Lincoln County northwest of St. Louis are expected to more than double in size by 2030.

Clay and Jefferson Counties are expected to switch in the rankings between the number six and seven spots. And Cass County is expected to overtake Franklin County as the 10th most populous county in 2030.

Missouri counties with increasing population will impact recreation planning in the state, creating a need for additional outdoor recreation facilities and activities in those areas.

In New Madrid County, the situation is just the opposite, with a projected loss of 7,000 people through out-migration by 2030 and an additional 500 through natural decline. Except for St. Louis County, the top ten counties of greatest population decline are rural. New Madrid County could lose more than a third of its population by 2030. Both Iron and Gentry counties could lose 30 percent. (See Missouri Population by County charts in Appendix A)

Where We Play

Missouri is a state rich in outdoor recreation resources, with hundreds of conservation areas, 87 state parks and historic sites, two major rivers, the vast Mark Twain National Forest, the Ozark National Scenic Riverways, the 225-mile Katy Trail and six national historic trails, and thousands of hunting and fishing spots.



Big Muddy National Wildlife Refuge (U.S. Fish & Wildlife)

for exploring. At least 20 are "show" caves, open to the public with guided tours.

All of these features make for an unusually varied, beautiful and interesting natural history that has shaped Missouri's cultural history and provide a backdrop for outdoor recreation in the state.

Missouri truly is a land of rivers and streams. Two of our country's greatest waterways – the Mississippi River and the Missouri River – have shaped both economic development and outdoor recreation in Missouri.

Missouri also is home to several major water trails, where visitors experience beautiful and serene wilderness areas from the unique vantage point of the river or lake. A growing trend in outdoor recreation, water trails offer opportunities for boating, canoeing, kayaking and wildlife viewing, and they benefit conservation and tourism in river states and communities.

The Mississippi River Trail is a 3,000-mile+ system of water trails, on-road bikeways and pedestrian pathways that stretches from the river's headwaters in Itasca, Minnesota to the Gulf of Mexico. Other designated Missouri water trails include the Mississippi River Water Trail, a 300-mile water trail on the Upper Mississippi River from Saverton, Missouri to Cairo, Illinois; and



Canoeing a water trail (U.S. Fish & Wildlife)

the 500-mile+ Missouri River Water Trail, which crosses through the very heart of the state.

The 630-foot Gateway Arch in St. Louis pays tribute to Missouri's role as the “Gateway to the West.” St. Louis’ prime location along the Mississippi River made it an ideal base for western expansion in the early 1800s. Missouri was the launching pad for the Lewis and Clark Expedition, which began near St. Louis and traveled 800 miles along the Mississippi and Missouri Rivers in its 1,600-mile Northwest Passage to the Pacific Ocean.

Missouri also is home to at least 15 major lakes, all man-made, and hundreds of smaller bodies of water. Many of Missouri’s lakes are used as water reservoirs and/or recreation. The Lake of the Ozarks, the largest lake in Missouri, covers 55,000 acres and has become a major resort area attracting millions of visitors each year.¹⁵

The region north of the Missouri River is largely agriculture/crop land while the region south of the river encompasses the foothills and plateau of the Ozark Mountains. The



Downy Woodpecker (U.S. Fish & Wildlife)

rough, heavily forested eastern section of the Ozarks extends into the less hilly farming plateau in the west and the irregular, twisting Lake of the Ozarks. Southwest Missouri is a long, narrow area of Great Plains flat land. The southeast Bootheel region south of Cape Girardeau is Mississippi River floodplain, once swampy forestland before it was drained for agriculture.

Two of America's clearest spring-fed rivers – the Current River and the Jacks Fork – make up the Ozark National Scenic Riverways, the first national park to protect a wild river system. These crystal clear, spring-fed rivers create a destination of splendor and natural beauty, perfect for rafting and canoeing trips.

In the spring and fall, the Ozarks are alive with color. Riverbank campsites, caves, sink holes, bluffs, springs and other natural features invite exploration, and the crystal clear, cool water is ideal for fishing.

The Ozark Trail winds through the Missouri Ozarks and provides access to some of Missouri’s most scenic and rugged landscape. More than 350 miles of trail have been developed in a multi-use trail system that eventually will run from the St. Louis area to the Arkansas border, where it can connect with the Ozark Highland Trail, in Arkansas.

¹⁵ Ozarkland.com. <http://www.ozarkland.com/chalkridge/j/LocalInformation.htm>

The entire trail is open to hiking and backpacking, with some sections also available for mountain biking and equestrian use. Much of the trail is located on state and federal land, with some areas on private property.

Development of the Ozark Trail began more than 25 years ago through the efforts of many volunteers, the U.S. Forest Service, Missouri State Parks, Missouri Department of Conservation, National Park Service, the U.S. Army Corps of Engineers and other land management agencies and partners. Today, the non-profit, volunteer Ozark Trail Association continues to develop, maintain, preserve, promote and protect the Ozark Trail.

Outdoor Recreation Providers

A variety of agencies in Missouri – national, state and local – form an integrated effort to bring people to these natural resources through parks, recreational areas, conservation areas, open space and cultural opportunities.

Federal providers are charged with preserving natural and historic sites of national and international significance. State agencies preserve landscapes and cultural features of statewide significance and provide compatible recreation. Local and community parks departments and other agencies focus on providing recreation and open spaces close to home.

Local Recreation Providers

Although Missouri offers many thousands of acres of public lands, most outdoor recreation happens close to home. Nearly three out of four Missourians live within four miles of an outdoor recreation facility, and more than half drive less than 10 miles to participate in outdoor activities during the week.¹⁶

Missouri is home to 114 counties and one independent city (St. Louis), 637 cities, 110 towns and 212 villages.¹⁷ These municipalities play a critical role in providing outdoor recreation opportunities. Currently, the most prevalent and popular facilities in Missouri include playgrounds, trails, parks, picnic areas, sports fields and outdoor swimming pools,¹¹ which often are provided by local communities.

Public school districts also play a role in outdoor recreation in Missouri. A 2010 study by Washington University¹⁸ found that the majority of public school districts in Missouri (71%) have joint community use policies to make their playgrounds, sports fields, walking trails and other outdoor recreation facilities available to the community on weekends and in the summer. Larger districts in both urban and rural areas are the most likely to have joint use policies in place.

¹⁶ Missouri Division of State Parks SCORP Residents Survey, 2011.

¹⁷ U.S. Census Bureau 2010 Missouri Quick Facts.

¹⁸ Eyley, Amy, Ph.D. Missouri Community Use Policy Analysis, Washington University in St. Louis, 2011.

On the individual school level, more than 90 percent of the state’s middle and high schools allow community-sponsored use of their physical activity facilities for youth programs outside of normal school hours.¹⁹

Joint use policies encourage physical activity, enhance community connectedness and make the most of existing facilities. The Missouri Consultants for Education and the Missouri School Boards’ Association provides policy templates.

Still, less than half of Missouri youth have access to a playground, park, community center, sidewalk or walking path within a half-mile of their home.¹⁹ According to the Trust for Public Land, various studies have shown that people are unwilling to walk more than a quarter-mile to a half-mile to access a park, depending on the built environment, their age, health, safety and time constraints.²⁰

State of Missouri Recreation Providers

State-managed lands in Missouri provide a wide variety of outdoor recreation opportunities, ranging from hiking, bicycling, camping, bird watching and picnicking to boating, hunting, fishing, swimming, caving and river rafting. State-level providers include the Missouri Department of Natural Resources, Division of State Parks and the Missouri Department of Conservation.

Missouri State Parks preserves and interprets outstanding natural landscapes and cultural landmarks, and provides recreational opportunities that are compatible with goals to protect those areas. Missouri State Parks, ranked five times among the top four state park systems in the nation, includes 87 state parks and historic sites plus the Roger Pryor Pioneer Backcountry, a 60,000-acre forested natural area in a remote corner of the Missouri Ozarks.

More than 200,000 acres of Missouri State Park land is available to the public, with 1,500 structures, 3,700 campsites, 194 cabins, nearly 2,000 picnic sites, and 840 miles of trail for hikers, backpackers, bicycle riders, off-road vehicle users, horseback riders and outdoor enthusiasts of all kinds.

The Katy Trail State Park, for example, attracts an estimated 400,000 visitors a year and has a total economic impact of \$18,491,000 a year on the local economy. About two-thirds of the visitors are nonlocal, spending more and staying longer than the typical local visitor. About one in four visitors spends the night at a local hotel, motel, B&B inn or campground. Overnight visitor parties (average 3.9 visitors per party) spend an average \$700 per trip and another \$504 in annual trail-related expenses.²¹

¹⁹ State Indicator Report on Physical Activity, 2010 Missouri Action Guide. Department of Health and Human Services, Centers for Disease Control & Prevention

²⁰ Donahue, Ryan. City Parks Blog. The Trust for Public Land. “Pedestrians and Park Planning: How Far Will People Walk?” May 13, 2011

²¹ Missouri Division of State Parks Katy Trail Economic Impact Study. 2011.

Visits to Missouri State Parks increased from 14.9 million visitors in 2008 to 15.9 million in 2009, 16.4 million in 2010 and 17.8 million in 2011, ending a 10-year decline in parks attendance and moving the state toward the goal of attracting 20 million visitors a year.²²

To achieve that goal, the Missouri DNR Division of State Parks created Parks 20/20:A Strategic Plan²³ in 2010 to guide park development over the next decade. The plan's three primary initiatives are to:

- Increase visitation among all Missourians, especially young and out-of-state visitors, to 20 million by the year 2020;
- Increase revenue \$20 million by 2020 to sustain operations, allow for growth and improve existing facilities;
- Cultivate public and political support in ways that complement the visitor and revenue initiatives, and that perpetuate the principles of a state that values its state park system.

To recognize and protect significant natural elements of the state, Missouri State Parks has designated nearly 20,000 acres of land as Missouri Natural Areas and 23,000 acres as Missouri Wilderness and Wild Areas.

Missouri's Natural Areas are managed and protected for their scientific, educational and historic values. The state's designated Wild Areas are available for hiking and backpacking, and are valuable outdoor classrooms for environmental education and reservoirs of scientific information. (See state park amenities and lists of Missouri Natural Areas and Wild Areas in Appendix A)

The **Missouri Department of Conservation** administers more than 994,406 acres in Missouri, of which 790,977 acres are in public ownership and an additional 203,429 are managed through lease and other agreements with a variety of entities and organizations. There are nearly 1,000 conservation areas, thousands of miles of rivers and streams, and more than 600 lakes.

Department of Conservation sites offer a variety of outdoor recreation opportunities, including fishing, hunting, trapping, wildlife viewing, nature study, camping, nature and interpretive centers, fish hatcheries, natural areas, shooting ranges and education centers, and outdoor skills programs.

Lands administered by the Department of Conservation provide outdoor recreation in addition to a variety of habitats, watershed protection, forest and wood products, and scenic beauty. Missouri has nearly 500,000 hunters, 1.1 million anglers, and 2.2 million wildlife watchers, and the economic impacts from fish and wildlife-related recreation and the wood products industry in Missouri is more than \$11 billion annually (U.S. Department of the Interior, Fish and Wildlife Service, 2006).

Missouri residents are encouraged to participate and partner for recreation and conservation efforts as interpretive and shooting range volunteers, hunter education instructors, members of

²² Missouri State Parks Post a 6 Percent Increase Attendance During 2009. Kansas City Infozine, Marcy 29, 2010.

²³ Parks 20/20:A Strategic Plan. Missouri Department of Natural Resources, Division of State Parks. 2010.

more than 4,321 Missouri Stream Teams, volunteer water quality monitors, and private land management cooperators. The Department of Conservation provides technical assistance to private landowners for beneficial habitat management practices.

The Department of Conservation offers *Missouri Conservationist*, a free monthly magazine for Missouri residents. Focused on conservation and fish, forest, and wildlife-related recreation, the magazine is received by about 500,000 households.

The Department also publishes an additional free bimonthly magazine called *Xplor*. Targeted to Missouri children age 7 through 12, *Xplor* has a circulation of about 100,000 and a companion website. The Department of Conservation also sponsors Discover Nature Schools instructional units. Ninety-five Missouri school districts have adopted elementary school habitats units and 115 districts have adopted middle-school aquatic units.

An online Conservation Atlas sponsored by the Department of Conservation includes descriptions of lands and recreational opportunities. Many Department areas offer designated trails, which provide recreational and educational opportunities in addition to access to conservation lands (see Missouri Department of Conservation Map in Appendix A).

Federal Recreation Providers in Missouri

In Missouri, federal agencies providing outdoor recreation include the **National Park Service** which manages six National Park properties and six National Historic Trails; the **U.S. Fish and Wildlife Service** which operates 60,831 acres of wildlife refuges and the Neosho Fish Hatchery; the **U.S. Department of Agriculture Forest Service**, which manages the 1.5 million Mark Twain Forest, its 14 rivers and streams, 16 lakes and numerous natural springs; and the **U.S. Army Corps of Engineers** which operates and maintains recreational areas at 15 Missouri lakes and rivers.

National Park Service (NPS), a bureau of the U.S. Department of the Interior, manages six national park units in Missouri. Missouri's national parks attract more than four million visitors a year and generate an annual tourism economic benefit of more than \$140 million.

National Park land in Missouri includes:

- **George Washington Carver National Monument** – the birthplace and childhood home of the famous black scientist, educator, and humanitarian.
- **Harry S Truman National Historic Site** - the "Summer White House" of the 33rd President of the United States until his death in 1972.
- **Jefferson National Expansion Memorial** – home of the Gateway Arch on the Mississippi riverfront in St. Louis, the park memorializes Thomas Jefferson.
- **Ozark National Scenic Riverways** - the nation's first scenic riverway, encompassing 134 miles of river.
- **Ulysses S. Grant National Historic Site** – Grant's estate in St. Louis County before the Civil War began.
- **Wilson's Creek National Battlefield** – site of the first major Civil War engagement west of the Mississippi River.

The National Park Service also manages the **National Trails System**, a network of scenic, historic and recreation trails. Missouri is fortunate to have six national historic trails run through the state, including the California, Lewis & Clark, Oregon, Pony Express, Santa Fe and the Trail of Tears National Historic Trails.

U.S. Fish and Wildlife Service (USFWS) is a federal agency that works to conserve, protect and enhance fish, wildlife, plants and their habitats for the benefit of the American people.



Wildlife classroom (U.S. Fish & Wildlife)

Since the vast majority of USFWS habitat is on lands not owned by the federal government, USFWS works closely with state and local governments, tribes, corporations and families.

The National Wildlife Refuge System Improvement Act passed by Congress in

1997 established hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation as "priority public uses" when compatible with the mission and purpose of the individual refuge.

In Missouri, the U.S. Fish and Wildlife Service oversees 60,831 acres of wildlife refuges. In 2010, 430,731 people visited national wildlife refuges in Missouri to hunt, fish, participate in interpretive programs and view wildlife.²⁴

National Wildlife Refuges in Missouri include:

- Great River National Wildlife Refuge
- Clarence Cannon National Wildlife Refuge
- Big Muddy National Wildlife Refuge
- Mingo National Wildlife Refuge
- Pilot Knob National Wildlife Refuge
- Ozark Cavefish National Wildlife Refuge
- Middle Mississippi River National Wildlife Refuge
- Squaw Creek National Wildlife Refuge
- Swan Lake National Wildlife Refuge

²⁴ U.S. Fish & Wildlife Service. Missouri State Fact Book. 2011.

All of the refuges except Pilot Knob and Ozark Cavefish are open to the public for a variety of activities, such as hunting, fishing, wildlife viewing and photography, and environmental education. The Mingo National Wildlife Refuge in Southeast Missouri receives 100,000 visitors a year and offers additional opportunities for canoeing, kayaking, horseback riding, biking, hiking, jogging, berry and mushroom gathering, and picnicking.

The Midwest Region of the U.S. Fish and Wildlife Service also operates the **Neosho Fish Hatchery** in Neosho, Missouri. The oldest operating federal fish hatchery, Neosho raises endangered pallid sturgeon, rainbow trout and freshwater drum, and supports conservation of the endangered blind Ozark cavefish. The public is invited to tour the hatchery, which includes an Ozark blind cavefish display. More than 45,000 people visit each year.

U.S. Forest Service, an agency of the U.S. Department of Agriculture, manages public lands in national forests and grasslands including the 1.5 million acre **Mark Twain National Forest** in southern and central Missouri.

The Mark Twain National Forest encompasses 29 counties, more than any other national forest, and is the largest public land in the state, encompassing more than five percent of Missouri's land base. Known for its rivers, streams, lakes and trails, Mark Twain National Forest is home to 14 floatable streams and 16 lakes. Recreation opportunities at Mark Twain National Forest include hiking, biking, horseback riding, camping, fishing, hunting, nature viewing, ATV/UTV riding, picnicking, rock and mineral collecting, wildlife and bird watching, scenic driving and water activities.

Among the forest's unique attractions is Greer Spring, the largest spring on National Forest land, which releases an average 214 million gallons of water a day. Visitors also enjoy the Glade Top Trail National Scenic Byway, which offers 30-mile views to the Boston Mountains in Arkansas.

U.S. Army Corps of Engineers manages and protects project lands, soil resources, vegetation, and fish and wildlife for the public good. Most Corps-managed lands are available for outdoor recreational pursuits including hunting, fishing, hiking, bird watching, sightseeing and outdoor photography. Hunting, camping and equestrian uses are permitted with some restrictions.

Missouri lies within three U.S. Army Corps of Engineers regions – The Northwestern Division, the Mississippi Valley Division and the Southwestern Division. (See Corps of Engineers maps in Appendix A)

The Corps of Engineers Kansas City District operates and maintains **Blue Springs Lake, Harry S. Truman Lake, Long Branch Lake, Longview Lake, Pomme de Terre Lake, Smithville Lake** and **Stockton Lake** and their associated recreational areas.

The Corps of Engineers St. Louis District operates and maintains **Wappapello Lake, Clarence Cannon Dam** and **Mark Twain Lake** and their associated recreational areas. These lakes provide flood protection, recreation, a potable water supply and hydroelectricity, and average more than 15 million visitors a year. The Corps of Engineers Little Rock District operates **Bull Shoals, Clearwater** and **Table Rock Lake** in Missouri.

The Corps enlists the help of several other agencies to accomplish its goals.

- The Missouri Department of Conservation (MDC), for example, licenses Corps land for fish and wildlife management purposes.
- The Missouri Department of Natural Resources manages several state parks on Corps of Engineers lakes.
- The new Audubon Center at Riverlands, near the confluence of the Mississippi and Missouri Rivers just north of St. Louis, is a partnership between the Corps St. Louis District and the National Audubon Society. The center is surrounded by 3,700 acres of prairie marsh and forestland at the Corps of Engineers' Riverlands Migratory Bird Sanctuary.

Conservation Organizations, Nonprofit and Private Providers

Dozens of local and national conservation organizations acquire and protect green space, and offer outdoor experiences in Missouri. These include the Nature Conservancy, the Trust for Public Land, the Conservation Fund, Audubon Missouri, Kansas City Zoo, Great Rivers Greenway, Missouri Botanical Garden, Bridging the Gap, St. Louis Zoo, Trailnet and many others.

Nonprofit organizations such as the YMCA, six Boy Scout Councils, three Girl Scout Councils and various churches own and operate outdoor recreation centers and camps in Missouri. Others like the Boys and Girls Clubs of America, Big Brothers-Big Sisters of America and Little League of America organize activities at public parks, schools and other facilities.

Missouri has 386 private and public golf courses. St. Louis, Kansas City, Columbia, Springfield, Branson, Joplin, Saint Charles, Blue Springs, Eureka and Lees Summit are the cities with the most golf courses.²⁵

The Missouri Canoe and Floaters Association, a non-profit organization of paddle sports outfitters, includes dozens of private members who provide canoe rentals, campgrounds, cabins and organized canoeing, rafting and kayaking trips on 29 rivers throughout Missouri.²⁶

Private cabins, motels, hotels, bed and breakfast inns, lodges and private campgrounds cater to canoe and rafting, camping, hunting, fishing, birding and horseback riding enthusiasts throughout Missouri.

²⁵ GolfLink, www.golflink.com.

²⁶ Missouri Canoe and Floaters Association, www.missouricanoe.org.

How We Play

Overall, Missourians are more active in the outdoors than the average American. More than three-fourths of the Missouri residents surveyed had participated in outdoor recreation at least once in 2010¹⁶ as compared to less than 50 percent nationwide.³



Birdwatching from a nature trail
(U.S. Fish & Wildlife)

On the weekends, two out of three Missourians enjoy at least three hours of outdoor recreation and about half of them get outdoors that often during the week. Only one in four Americans plays outdoors two or more times a week.

Those who enjoy outdoor recreation daily in Missouri are most likely to be walking/hiking, gardening, watching birds and wildlife, and walking their dogs.

On a weekly basis, Missourians like to swim, bicycle, play baseball, run and play basketball. Family gatherings, nature sightseeing drives, picnicking, fishing, visiting playgrounds and hiking are the most popular outdoor activities among Missourians on a monthly basis.

Missourians would like to see more walking/bicycle trails, outdoor pools and parks in their communities, and more activities for children and adolescents.¹⁶

Trails, playgrounds, multi-use fields, picnic areas and gardens are the most popular outdoor recreation facilities in Missouri and are expected to become even more popular over the next five years.¹¹

How We Pay for Play

Both recreation professionals and residents in Missouri see funding as the number one critical issue affecting outdoor recreation in the state. Most Missouri residents agree that outdoor recreation is important and benefits them, and that funding is a high priority. They cite funding, upkeep and the need for more locations as the most critical issues affecting outdoor recreation in the state.¹⁶

More than half of Missourians surveyed in 2009²⁷ agreed that parks, open spaces, greenways and conservation areas should be considered budget priorities even in difficult economic times. And in an era when children have been described as “nature deficient,”

²⁷ Missouri Residents’ and Recreation Professionals’ Opinions of Parks and Recreation in Missouri, 2009. Missouri Park & Recreation Association. 2009.

92 percent of Missouri parents said government spending on recreational services for children is important.

In the same survey, Missouri residents ranked the importance of conservation and environmental protection efforts just behind education, public safety and public works. More than 90 percent of residents said these were important government expenses, including 30 percent who rated them as very important. Missourians ranked parks, open space and recreational facilities alongside economic development as important government efforts.

State Park Funding

Three-fourths of the funding for the Missouri State Park system comes from the state's Parks and Soils Sales Tax, a one-tenth-of-one-percent sales tax approved by voters in 1984. Half of the funds are earmarked for the state park system and half for soil erosion projects. Additional funding for Missouri State Parks is generated within the state park system and through federal funds.

The Parks and Soils Sales Tax has been reapproved by voters three times (1988, 1996 and 2006) by more than two-thirds of Missouri voters, demonstrating the public's strong support of the state park system.

Missouri Department of Conservation Funding

The Missouri Conservation Sales Tax approved by voters in 1976 is a one-eighth-of-one-percent general sales tax dedicated to statewide conservation efforts. This revenue makes up 58 percent of the Missouri Department of Conservation's annual operating budget. Permit fees from fishing, hunting and trapping account for about 20 percent of the Department's annual revenue and about 14 percent comes from federal reimbursement sources including the U.S. Fish and Wildlife Service's Wildlife and Sport Fish Restoration programs.

Federal Grant Programs

The Missouri Division of State Parks administers two federal programs that provide outdoor recreation and trail grants. Land and Water Conservation Fund (LWCF) grants are available to cities, counties and school districts to fund outdoor recreation facilities and to acquire land for use by the general public.

Nearly \$84 million in Land & Water Conservation Fund (LWCF) grants have been awarded in Missouri since 1965. Approximately 80 percent of the Missouri State Park sites have received LWCF funding and are protected under the LWCF Program. In addition, since 1949 more than 6,337 acres of federal surplus land have been transferred to the state of Missouri and local entities for use as local parks and other recreation through the National Park Service's Federal Lands to Parks Program.

Recreational Trails Program (RTP) grants are available for the construction and renovation of trails and trailheads, and for interpretive/educational programs. Local, state

and federal governments, school districts, non-profit and for-profit organizations, and Indian tribes are eligible project sponsors for the Recreational Trails Program.

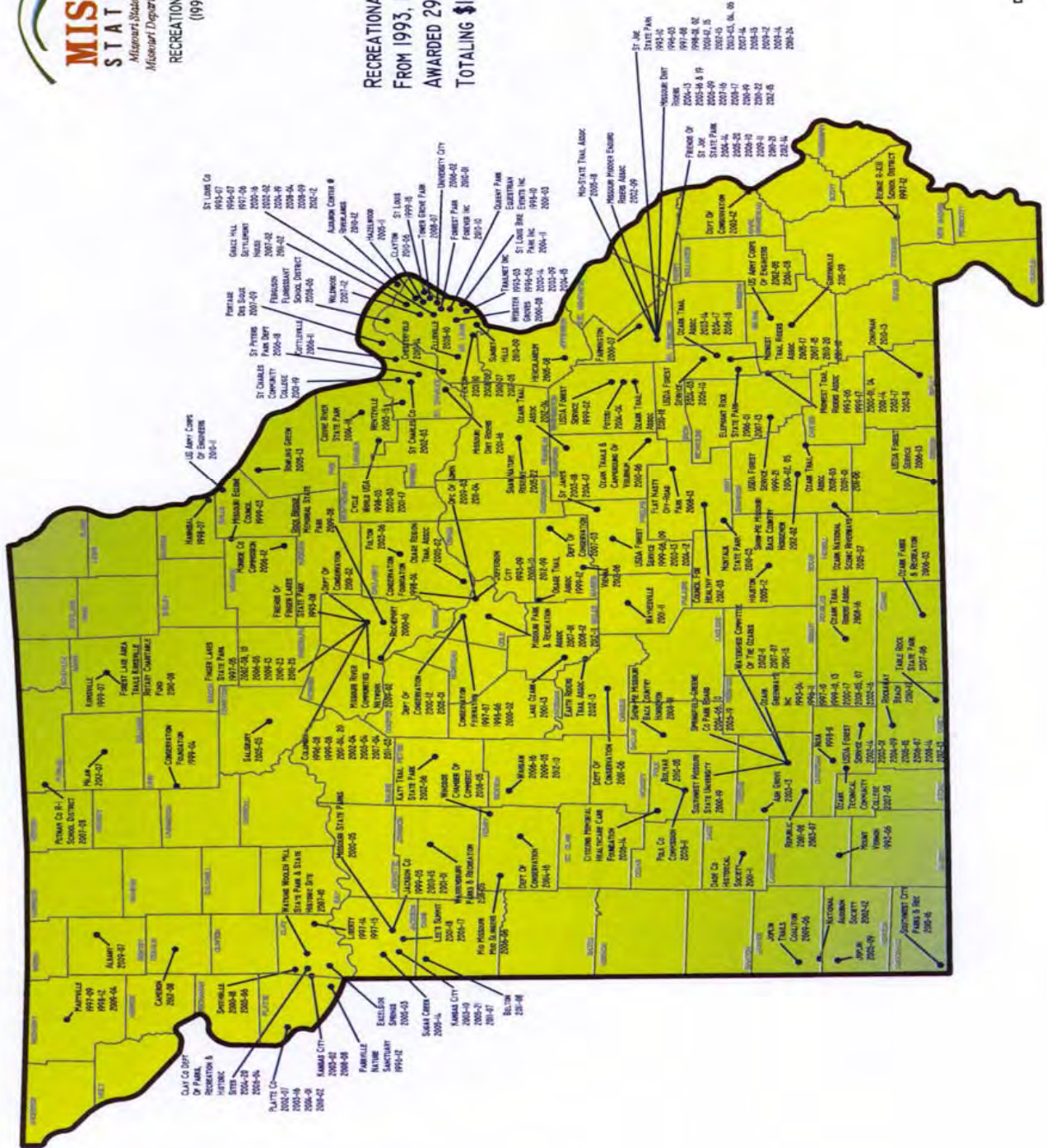
Projects eligible for RTP grants include construction of new recreational trails; maintenance or renovation an existing trail; development or renovation of trailheads or trail amenities; acquisition of land for recreational trails; purchase or lease of trail maintenance equipment; and trail safety or environmental education programs.

In 1993 and from 1996 through 2012, the Recreational Trails Program funded 293 grants for the state of Missouri totaling more than \$18 million dollars (Figure 7).



**RECREATIONAL TRAILS PROGRAM GRANTS
FROM 1993, 1996-2012
AWARDED 293 GRANTS
TOTALING \$18,598,360.92**

LEGEND
DISSEMINATION OR AREA RECEIVING FUNDS
FISCAL YEAR OR FUNDING FILE NO.



Designed By: Joneth Prenger

Figure 7- Missouri Grant Locations

Landmark Local Parks Program funds

The Landmark Local Parks Program (LLPP) was started by the late Governor Mel Carnahan in 1997 to help Missouri cities and counties meet outdoor recreation needs during the years when the Land & Water Conservation Fund was not available due to federal budget cuts.

The LLPP was funded by the state of Missouri through the Department of Natural Resources-Division of State Parks for five years, through fiscal year 2001.

Through the program, the Division of State Parks helped 87 communities successfully complete outdoor recreation projects. The state funded approximately \$21 million through 108 grants. These grants leveraged approximately \$35 million of outdoor recreation enhancements, with the local communities providing the additional \$14 million in matching funds.

Municipal Taxes for Local Parks

Currently, 177 communities in Missouri fund local parks through a local sales tax of up to one-half of one cent. The State of Missouri grants municipalities and counties the authority to pass a local sales tax to fund parks and/or stormwater control projects, pursuant to [Section 644.032 RSMo](#).

Other Public Funding

In some areas, local taxes provide funding for outdoor recreation. For example, Great Rivers Greenway, the Kansas City Zoo and the St. Louis Zoo are funded through separate taxing districts, just to name a few.

Nonprofit and Private Funding

Hundreds of non-profit environmental and conservation organizations and umbrella groups like EarthShare²⁸ of Missouri fund environmental education and outdoor programs through private donations and workplace giving campaigns.

Need for New Funding Sources

Professionals throughout Missouri cite lack of a consistent funding source as a major obstacle to improving outdoor recreation in Missouri. They also understand that educating the public on the benefits and value of being active outdoors is extremely critical to the future of outdoor recreation in Missouri.¹¹ Half of Missouri's parents surveyed said they would make educating their children about the outdoors a higher priority next year than it was last.²⁷

²⁸ EarthShare of Missouri. www.earthsharemo.org.

Research and Findings

What Missourians say about outdoor recreation

Four primary research studies on outdoor recreation in Missouri informed and guided the development of this SCORP:

- Missouri Residents and Professionals Survey 2009
- Missouri Residents Survey 2011
- Parks and Recreation Professionals Survey 2011
- Missouri Trail Inventory

Missouri Residents and Professionals Survey 2009

The Missouri Residents and Recreation Professionals Opinions on Parks & Recreation Study was conducted in 2009 to assess the opinions, attitudes, perceptions and values of residents and recreation professionals as they relate to outdoor recreation in Missouri.

The Missouri Parks and Recreation Association (MPRA) in conjunction with Missouri State Parks, The Conservation Federation of Missouri, the Open Space Council and the Missouri Parks Association initiated the study to better understand the needs and concerns of the public, and the values and perceptions they place on parks, recreation and open space. Ultimately, the goal was to develop outcomes that would ensure that parks and recreation services are understood, appreciated and valued by the public, and thereby supported and protected through community and political support.

According to the National Recreation and Park Association (NRPA), the stakes are high. The positive effects of outdoor recreation on physical and mental health, social wellbeing, youth development and the environment all have real economic impact in the community.²⁹

The NRPA summary of research found that “parks and recreation departments are leading weapons in the battle against obesity. They benefit local residents’ psychological wellbeing by reducing anxiety and depression, and increasing resilience and concentration. Parks help young people build necessary life skills and help adults function as part of the social community. Parks improve the local air quality and help the overall environment. All these benefits help municipalities’ bottom lines.”

By understanding and communicating the benefits of outdoor recreation to residents, recreation professionals and elected officials can positively influence support for outdoor recreation.

Methodology

The study involved a telephone survey of 874 Missouri residents and an email survey of 349 recreation professionals and public officials.

²⁹ Summary of Research Papers 2010: The Key Benefits. National Recreation and Park Association.

The surveys explored outdoor recreation in Missouri, specifically:

- Perceived value of parks and outdoor recreation;
- Priorities for government spending;
- Residents' participation;
- Satisfaction with the parks.

Research Results

Priorities and Importance of Governmental Efforts

To study and evaluate public priorities, values and perceptions, the survey asked respondents to rate the funding importance of 13 governmental efforts.

According to the survey, Missourians rank schools/education and public safety (police and fire) in the top tier of funding importance. They rank social services (food, job training and health care), public works (roads and sewers), affordable housing, environmental protection, and conservation of natural resources in a second tier.

The respondents' third tier ranking of funding priorities includes economic development, parks and open spaces, recreation facilities (ball fields, swimming pools, community centers), and preservation of historic and cultural resources. Communities connected by sidewalks and trails, and community beautification projects rank in the respondents' bottom tier of funding importance.

Values

Missourians believe parks are beneficial to their wellbeing.

More than 90 percent of Missourians believe that spending time outdoors leads to a happier and healthier life, and that parks, recreation and open space are important for good health.

And their instincts are correct – studies show that a 15-minute walk in a forest environment reduces stress more than the same experience in a city environment, as measured by lower concentrations of cortisol, lower pulse rate, lower blood pressure and reduced stress.³⁰

They value parks for various reasons.

Missourians value parks for a wide variety of ecological, family, community and personal reasons. Nearly 80 percent of residents say cleaner air and water, healthy childhood development, and positive family activities are very important benefits of parks and recreation activities. Two-thirds rate wildlife habitat, health and fitness, stress relief and employment opportunities as very important benefits, and sixty percent believe protection of natural and historic resources is a very important benefit of parks and recreation.

Missouri residents want parks in their neighborhoods.

When asked whether having a park or open space nearby would be an important criterion when purchasing a home, 84 percent agree, including more than half of respondents who say a nearby park or open space would be very important.

³⁰ Kuo, Frances E. (Ming). Parks and Other Green Environments: Essential Components of a Health Human Habitat. 2010

From activity, health and economic standpoints, various studies demonstrate the value of parks. People who live within a mile or within walking distance of a park or facility are more likely to participate in recreation activities.³¹

Adolescents with easy access to multiple recreation facilities were both more physically active and less likely to be overweight and obese than were teens without such access.³²

Parks also are good for the economy. According to the Department of the Interior, our nation's federal parks, refuges and monuments generate nearly \$25 billion in recreation and tourism.³³

Missouri state park visitors spend approximately \$410 million a year and generate an estimated total economic impact of \$538 million, according to an economic impact study conducted by the University of Missouri. Approximately, 22 percent of visitation comes from out-of-state, bringing new dollars into the local economy³⁴.

Parks closes to home also have a direct impact on local home values. A Portland, Oregon study showed that having a park within 1,500 feet of a home increased its property value by \$1,214 to \$5,657.³²

Connectivity and funding for trails and connections rank high.

More than 60 percent of residents believe connections between neighborhoods are important to their quality of life, and 74 percent say that connecting communities by sidewalks and trails is an important government expense.

Residents tend to link the idea of parks and recreation to facilities and activities, not to health or environmental benefits.

When asked what comes to mind when they think about parks and recreation, the most common answers among residents are physical facilities, places or programs. They do not readily connect parks and outdoor recreation to health, environmental conservation or family activities, benefits that they value more highly than facilities.

Funding Priorities

Missourians are strongly committed to conservation and environmental protection, but they rate parks and recreation as less important.

Nearly 90 percent of residents believe local communities have a responsibility to preserve and maintain open space in Missouri. When asked to compare the importance of all types of governmental expenses, 94 percent of Missourians say conservation of natural resources is “very” or “somewhat important”, just behind education, public safety and public works.

³¹ Godbey-Mohen. The Benefits of Physical Activity Provided by Park and Recreation Services: the Scientific Evidence. National Rec and Park Association. 2010.

³² Economic Benefits of Open Space, Recreation Facilities and Walkable Community Design. Active Living Research, a national program of the Robert Wood Johnson Foundation. May 2010.

³³ Economic Impact of the Department of the Interior's Programs and Activities. 2009.

³⁴ Missouri State Parks. www.mostateparks.com

Ninety-two percent of residents rank parks/open space and environmental protection as very or somewhat important as government expenses. Eighty-six percent of residents rank recreational facilities such as ball fields and swimming pools as very/somewhat important, just above sidewalks/trails and community beautification projects.

Missourians want tax dollars spent on parks and recreation services for children.

In an era when children are described as “nature deficient,” 93 percent of residents say government spending on recreational services for children is important. Half of Missouri parents say educating their children about the outdoors should be an even higher priority in the future.

Missourians believe parks and recreation agencies should be properly funded, even in difficult economic times.

More than half of Missourians agree that parks, open spaces, greenways and conservation areas should be budget priorities, even in difficult economic times.

Residents and community leaders need to be educated that outdoor activity actually has a positive, far-reaching ripple effect on the economy and on tax revenue. The money spent by Americans in pursuit of active outdoor recreation generates \$88 billion in state and federal sales and income taxes a year, which in turn supports government programs that empower and develop communities.³⁵

Some Missouri residents believe parks are a luxury, not a necessity.

Although 88 percent of Missourians believe local communities have a responsibility to preserve and maintain open space, more than a third of residents say parks, open space, greenways, conservation areas and recreation programs are a luxury, not a necessity. Nearly half of residents and three-fourths of professionals, however, disagree with the statement that parks are a luxury.

Case Study – Community Support

St. Louis County residents demonstrated their support for local parks in October 2011, when the St. Louis County Executive proposed closing nearly half of the county’s 50 parks and eliminating about 140 parks department jobs to cut \$4.3 million from the budget. According to newspaper accounts, the parks would be sold or land-banked. Elk, deer and bison at a wildlife sanctuary could be sold to zoos. Rangers would be eliminated. In fact, a high-ranking county staff member reportedly commented “I didn’t know our parks needed rangers.”

The budget proposal was withdrawn after a crowd of 500 residents, the largest in memory for a meeting at the County administration building, showed up in protest. Ninety people signed up to speak at the budget hearing and several council members expressed their opposition. Groups organized rallies and 4,400 residents signed an online petition protesting the proposed park closures. In early December, the County Executive backed off his plan to close any of the parks, although some park budget cuts and layoffs ultimately were made.

³⁵ Active Outdoor Recreation Economy. Outdoor Industry Foundation. 2006.

Participation

Missouri residents are active outdoors.

More than three-fourths of Missourians visit local community parks “frequently” or “sometimes,” although half say they don’t participate as much as they would like.

Missouri Children – Outdoor Activity

The number of hours that Missouri children spend outdoors range widely, but the median number is 12 hours a week. Nationally, 61 percent of children ages six to nine spend 14 or more hours a week outdoors.³⁶ A 2012 study shows that between 58% and 64% of children nationwide spend two hours or more outdoors during the week, depending on the region, and 77% spend that much time outdoors on weekends.³⁷ Meanwhile, kids eight to 18 years old spend more than 53 hours of indoor “screen time” a week.³⁸

A balance of indoor and outdoor recreation is favored. More than half of Missouri residents enjoy indoor and outdoor recreation activities about equally well. Of those who do have a preference, a greater number prefer the outdoors.

Cost is not a barrier to recreational participation.

Among the residents who don’t participate in recreation activities as much as they would like, very few blame cost for their lack of participation. Most say work obligations or time constraints get in the way. Residents who never visit parks or recreation facilities most often blame health, age, disability or lack of interest.

Satisfaction

Missourians rate outdoor recreation agencies high.

More than four out of five Missourians believe the quality and availability of parks and recreation facilities in Missouri are good or excellent. They are most satisfied with their local community parks/recreation department followed by Missouri State Parks, the Missouri Department of Conservation, the National Park Service and their local county parks/recreation department.

Missouri residents feel safe in their parks.

Nearly three-fourths of Missourians say safety in their community parks is good or excellent. Those who feel safe also have visited parks frequently in the past two years and give high ratings to the availability and quality of their local parks, the quality of parks and recreation services, and conservation agencies at all levels of government.

Conversely, those who say local parks are not safe do not visit parks regularly, and they rate the availability and quality of local parks and recreation agencies as fair or poor.

Implications of the Study

³⁶ Cordell, H. Ken; Betz, Carter J; Green, Gary T. National Kids Survey: How Much Time Do Kids Spend Outdoors. 2009

³⁷ Cordell, H. Ken, Project Leader. Kids’ Time Outdoors in Different Regions of the U.S. Athens Research Group, Southern Research Station, USDA Forest Service, Athens GA.

³⁸ Generation M2: Media in the Lives of 8- to 18-Year-Olds. Kaiser Family Foundation. 2009.

Missourians love their parks, although they rank them lower in funding importance than other government efforts such as education, social services and public safety. They rank recreational facilities lower in funding priority than parks and open space.

Missouri residents believe local communities have a responsibility to preserve open space, and they rate conservation and environmental protection as important government efforts. Yet nearly a third of Missourians believe that parks and recreation programs are a luxury, not a necessity.

Missourians strongly support the funding of outdoor recreation services for children. They also want neighborhood connections and parks nearby when they buy a home. Still, when compared to other government services, they rank trails and connections lower in funding importance.

The apparent disconnect between what the public wants and what they support for funding indicates a need for better public education and communications. Recreation agencies and communities should consider focusing resources on promoting the *benefits of outdoor recreation* and *recreation services* that match residents' strongest values – children, health, conservation/natural resources, clean air and water, employment opportunities and economics.

For example, Missouri parks and recreation professionals need to educate the public that parks and open space support green conservation and environmental protection efforts. They need to communicate the health benefits of connecting neighborhoods with parks via community trails. And they need to understand that by providing services for children, they not only meet the desires of parents and promote healthy behaviors, they also strengthen the future of outdoor recreation in Missouri.

The study informs agencies and communities that when it comes to outdoor recreation, Missourians most highly value their children, health benefits, conservation and natural resources, clean air and water, employment opportunities and economics.

As a result of this study, MPRA initiated the “Did You Know?” campaign, which was the focus and theme of the 2012 MPRA conference.

"Did You Know" is a fact-based education campaign designed to turn parks and recreation users into knowledgeable advocates through a better understanding of the measurable benefits that a vibrant parks and recreation system provides to the community.

Lee's Summit Parks and Recreation developed a “Did You Know” pilot program that is being used by the MPRA as a template for a statewide educational and repositioning campaign. The program includes editorials, facts, implementation steps, friends-of-the parks set-up procedures, and other tools to help recreation departments customize their own educational programs.

The Missouri Residents and Recreation Professionals Opinions on Parks & Recreation Study 2009 was conducted by Responsive Management for the Missouri Park and Recreation Association (MPRA), and received support from Missouri Department of Natural Resources, Division of State Parks SCORP funds.

MPRA partnered on this initiative with the Missouri Department of Natural Resources, Division of State Parks; the Conservation Federation of Missouri; the Open Space Council of the St. Louis Region; and the Missouri Parks Association.

Full details of the Missouri Residents and Recreation Professionals Opinions on Parks & Recreation Study 2009 can be found in Appendix B.

Missouri Residents Survey 2011

As part of the SCORP effort to better understand outdoor recreation needs and trends in Missouri, DNR contracted with Synergy/PRI/JPA to survey Missouri residents. The statewide residents survey was conducted to:

- Study the popularity, demand and availability of outdoor recreation activity and facilities in Missouri;
- Predict changes in demand for outdoor recreation over the next five years;
- Identify trends and critical issues of statewide importance that are impacting the future of outdoor recreation in the State of Missouri.

The survey looked at eight basic management questions regarding outdoor recreation in Missouri, from the perspective of residents:

- *How familiar are residents with outdoor recreation activities and facilities in Missouri?*
- *How far do they travel and how much time do they spend outdoors?*
- *How available is outdoor recreation in Missouri?*
- *Which outdoor recreation activities and facilities are most popular?*
- *Why don't some residents participate in outdoor recreation activities?*
- *How satisfied are residents with outdoor recreation activities and facilities?*
- *What are residents' opinions and perceptions regarding outdoor recreation in Missouri?*
- *What are their perceived critical issues or suggested improvements?*

Methodology

The telephone survey of Missouri residents was conducted in July 2011. A total of 768 surveys were completed, half in urban and half in rural regions of the state, providing a 95% (+/- 5%) confidence interval for each. Results were combined and weighted based on the 70%/30% urban/rural ratio of the state's population.

The survey focused on residents who had participated in outdoor recreation at a public facility at least once in the past year; those who had not participated in the past year were screened out of the survey.

Specific Action Standards were established for each of the research questions in this study, as explained in the Missouri Residents Study in Appendix C.

Action Standards help determine when action on a particular issue is needed based on the response. Action Standard benchmarks were applied to the entire sample and/or subgroups of at least 96 responses, to ensure a confidence level of 95% (+/- 10%).

In general, if the Top Box score (the number of people who selected the top answer on a question, such as Very Satisfied) was less than 30%, or if the mean score of satisfaction was below 3.5 on a scale of one to five, then action was recommended.

Survey Results

Familiarity, Distance and Time Spent Outdoors

Missourians are very familiar with outdoor recreation in the state, and most are fortunate to have facilities and activities close to home. A third of Missourians live less than a mile from an outdoor recreation facility and nearly two-thirds live within two miles (Table 4).

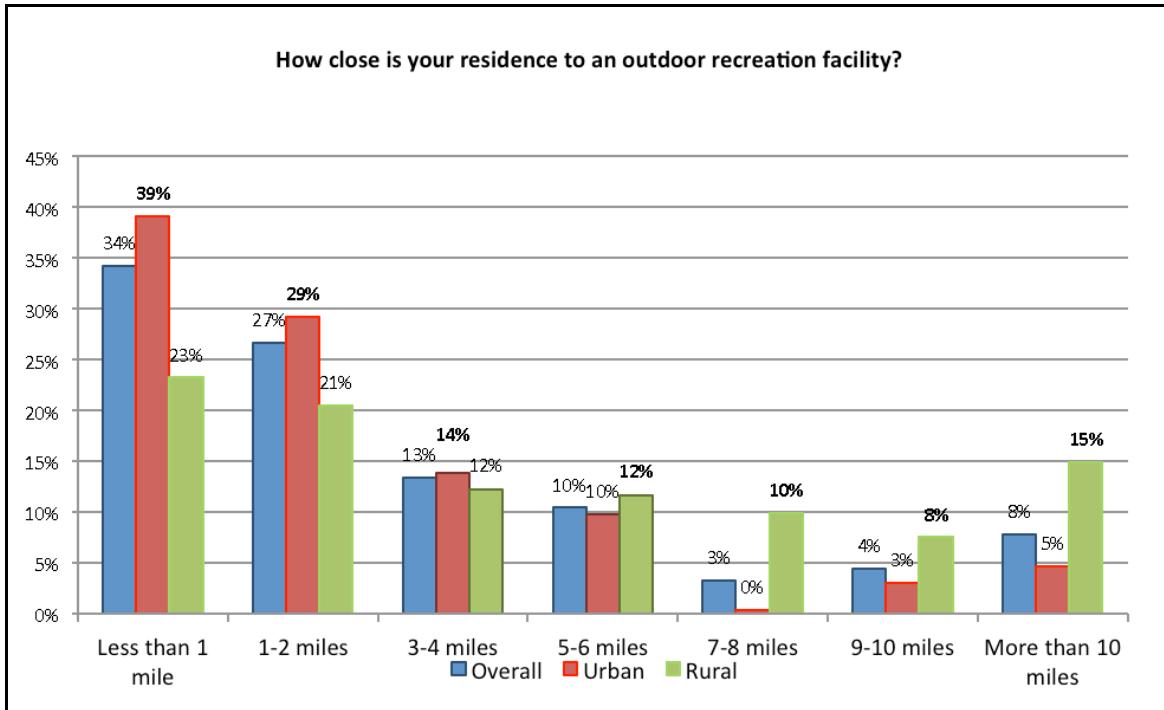


Table 4 - Distance from Home to Outdoor Recreation

During the week, Missourians recreate close to home, with half travelling less than 10 miles from home for outdoor activities (Table 5). On weekends, they venture farther away, with one in five traveling 100 miles from home to participate in outdoor recreation (Table 6).

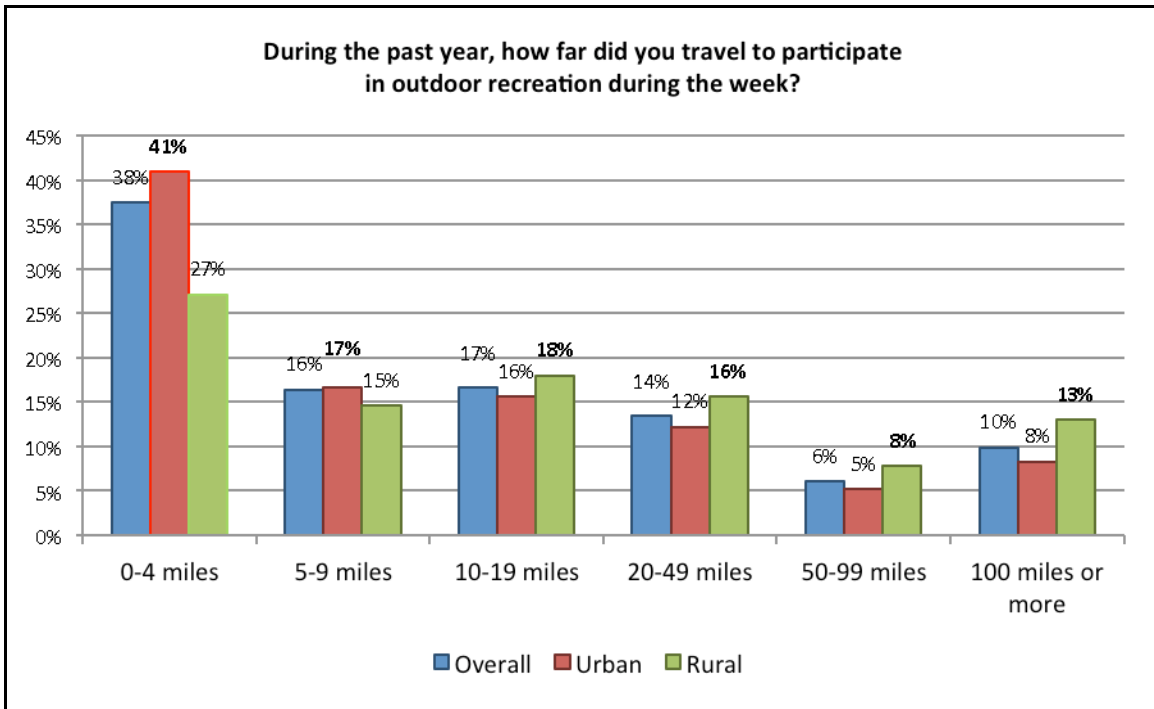


Table 5 - Distance Traveled to Outdoor Recreation During the Week

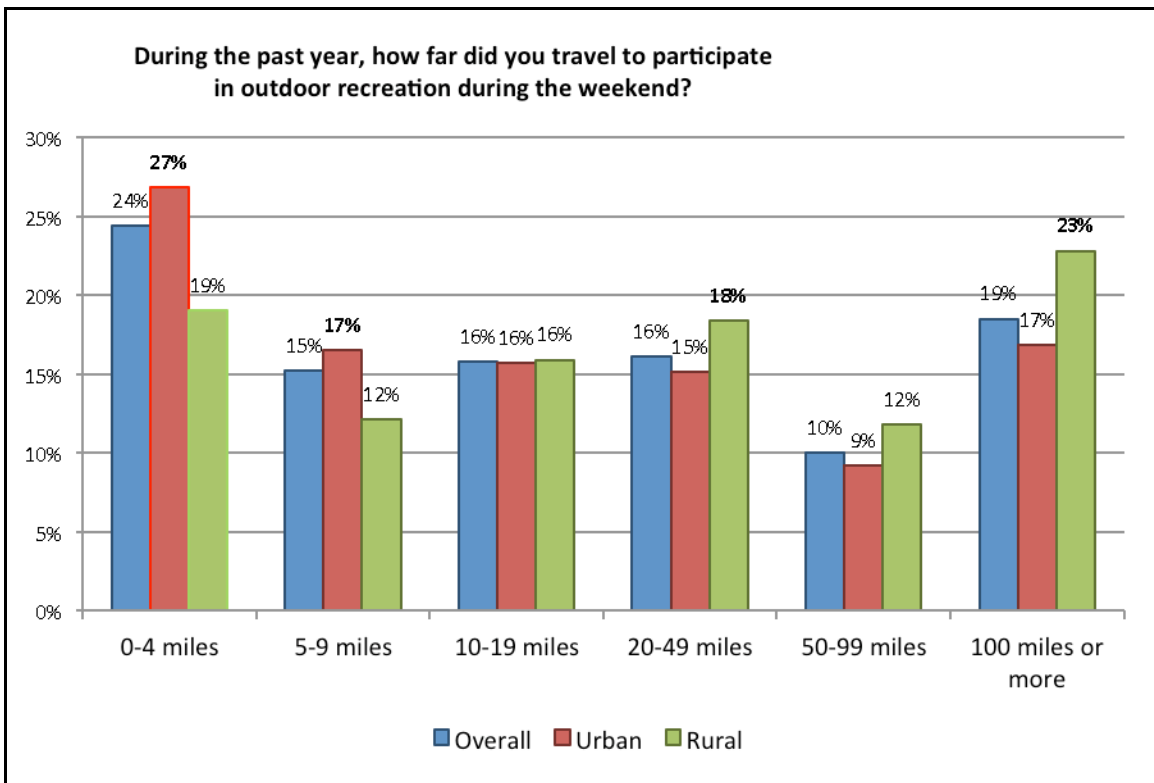


Table 6 - Distance Traveled to Outdoor Recreation - Weekend

More than a third of Missouri residents had participated in outdoor recreation within the week prior to the survey, and more than half had participated in the last month.

Missourians are more active outdoors on weekends than during the week. Two-thirds spend at least three hours or more on outdoor recreation activities on the weekends, and rural residents are more active than urban. One in five rural Missourians spends more than 16 hours per weekend on outdoor recreation, as compared to just one in ten urban residents who spends that much time outdoors (Table 7, Table 8).

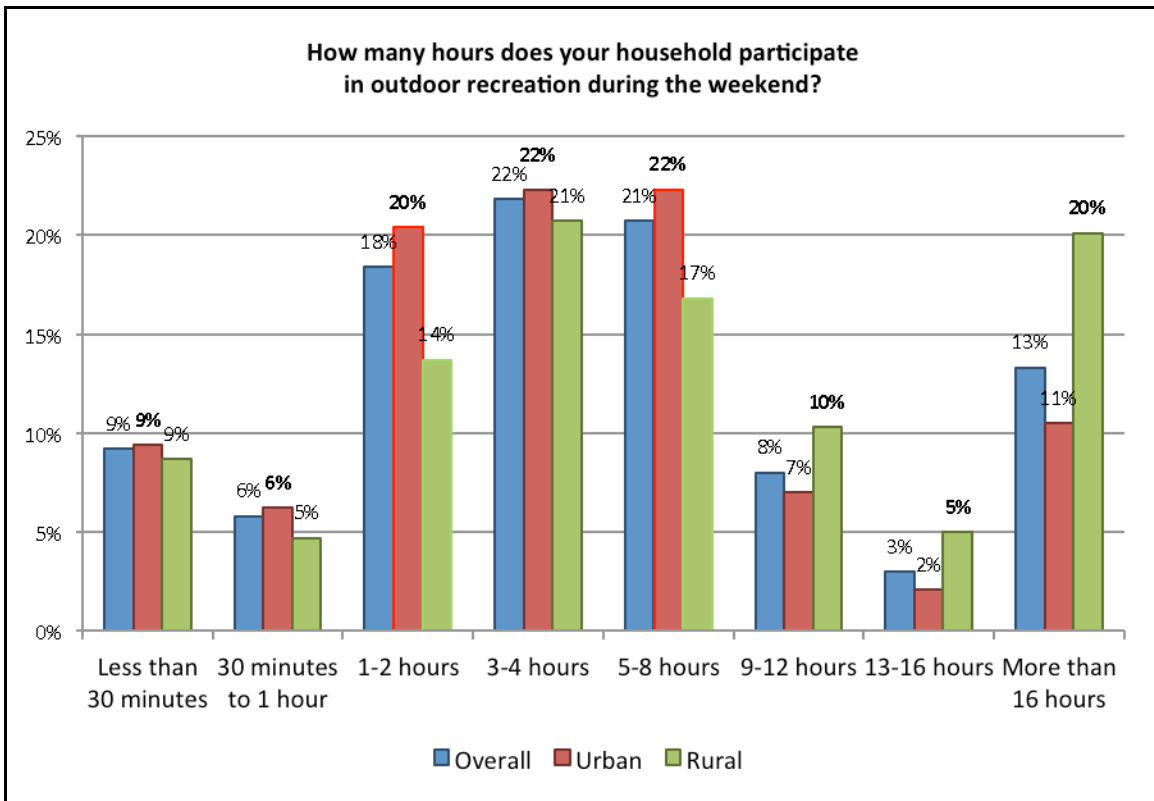


Table 7 - Outdoor Activity on Weekends

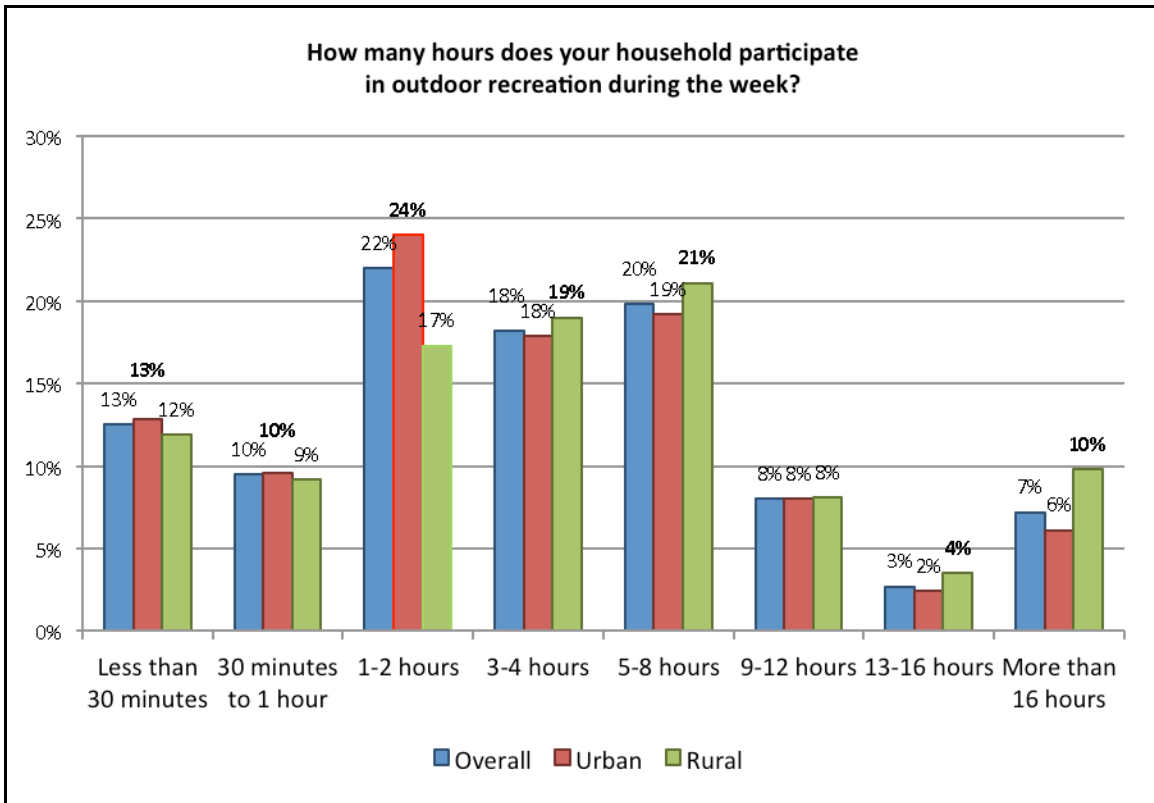


Table 8 - Outdoor Activity During the Week

Nationally, only 40 percent of outdoor enthusiasts participated in outdoor activities at least once a week in 2010, and only 24 percent got outside two or more times per week.³

Availability of Outdoor Recreation

Available Activities

Residents are satisfied with the availability of outdoor recreation activities in Missouri overall, and more than a third are very satisfied.

They are less satisfied, however, with the availability of organized and supervised outdoor recreation programs and only one in five residents is “very satisfied.” In particular, residents who are not satisfied with programs want more opportunities for **walking, biking and youth-related** activities.

Available Facilities

Most Missourians are satisfied with the number and availability of outdoor recreation facilities in the state, but those who are not satisfied want more **walking trails, water parks/pools and parks**.

One in ten Missourians has limited access to **sidewalks**, and more than half of those residents would use sidewalks if they were available in their neighborhoods. Young Americans nationwide

expressed similar desires for sidewalks during President Obama's America's Great Outdoors (AGO) Initiative, suggesting that communities use sidewalks and pathways to link neighborhoods to parks and green spaces.³⁹

Missouri residents who visit certain types of facilities at least once a year say more of those are needed -- **gardens, trails, outdoor swimming pools, camping sites, outdoor aquatic complexes, target shooting sites, ATV/ORV riding areas, outdoor basketball courts, tennis courts and Frisbee golf courses.**

Popularity of Outdoor Recreation

Popular Activities

The most popular outdoor recreation activity among Missourians is **walking** – more than a third of residents walk daily. More than one in five Missourians enjoy daily **gardening, wildlife observation/birding** and **dog walking** (Table 9).

Most Missouri residents **walk for recreation, join in outdoor family gatherings, drive for sightseeing, visit local parks and garden** at least once a year. More than half enjoy **picnicking, outdoor swimming, visiting historic/education sites, wildlife observation/birding, fishing** and **boating** at least annually.

Walking, bicycling, baseball and golf are more popular among urban residents while rural Missourians are more likely to be **fishing, boating, target shooting, hunting** and **ATV riding.**

³⁹ America's Great Outdoors: A Promise to Future Generations. Executive Summary. Council on Environmental Quality, 2011.

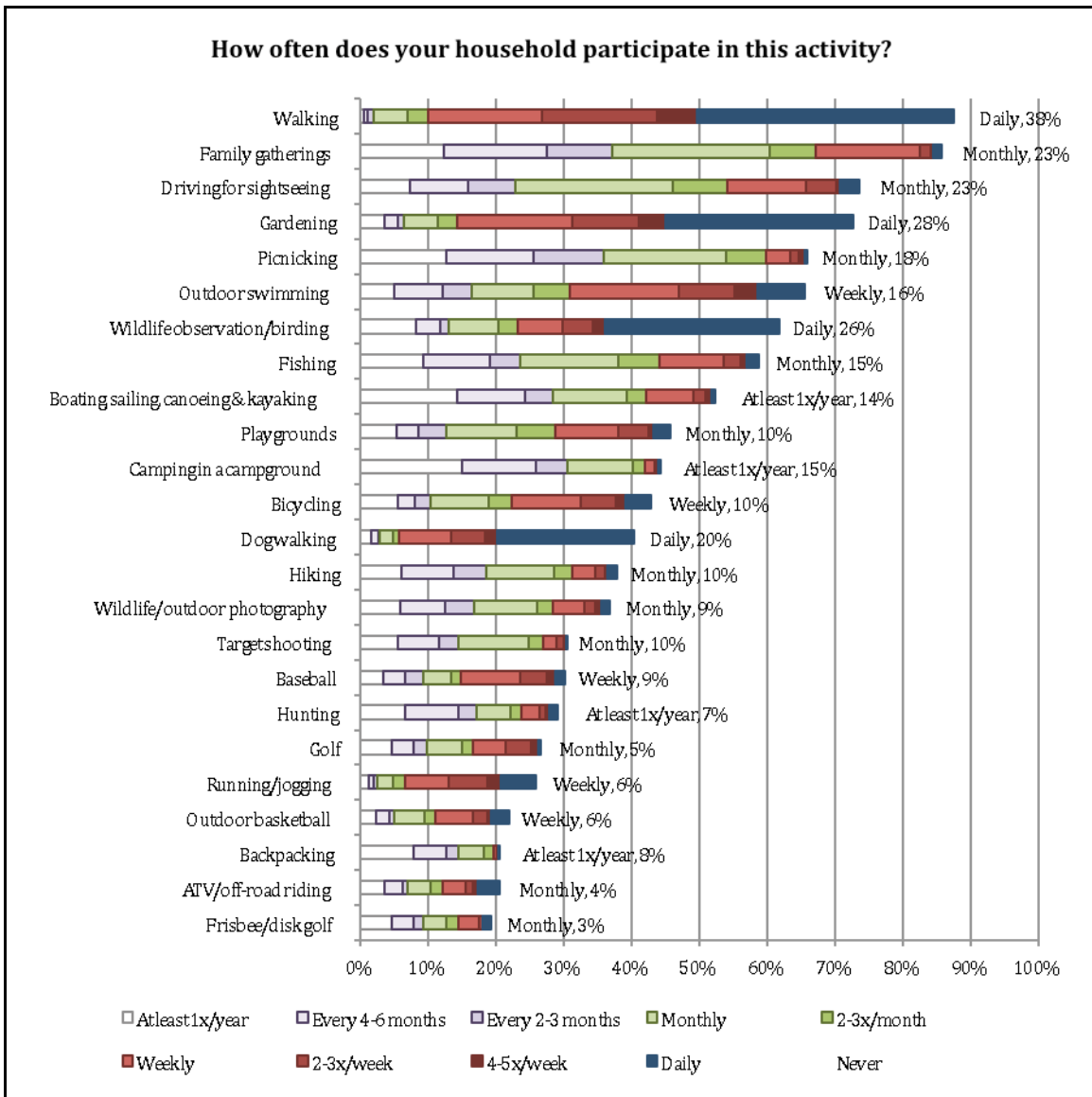


Table 9 - Frequency of Participation
(Daily, Weekly and Monthly labels indicate the most statistically significant responses)

Activity Increasing or Decreasing?

Half of Missourians expect their outdoor activities to increase over the next five years, with more urban residents saying their activity will increase a lot as compared to rural residents (Table 10).

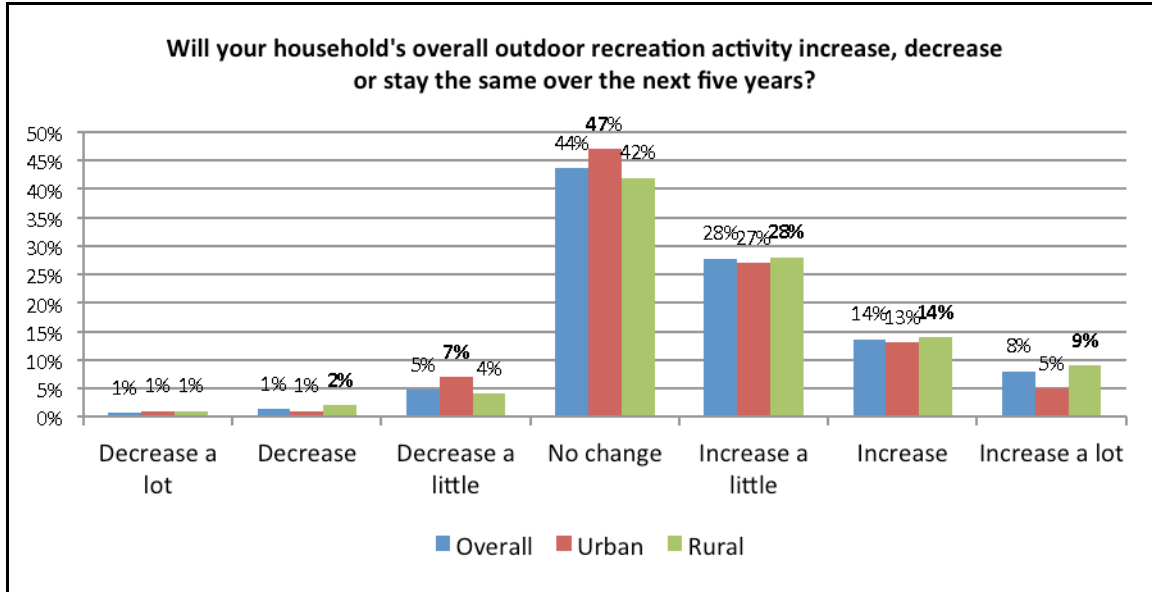


Table 10 - Changes in Activity – Urban vs. Rural

Missourians overall expect to enjoy more **walking, fishing, bicycling, camping, wildlife observation/birding, driving for sightseeing and gardening** over the next five years. Among those who currently participate in **fishing, camping, bicycling, baseball, golf, running/jogging or soccer**, one in five expects their activity to increase (Table 11).

Nationally, the outdoor activities that people choose is changing over time. Some more traditional activities such as picnicking, visiting historic sites, hunting, horseback riding on trails, sailing, cross-country skiing and diving are becoming less popular. At the same time, walking, family gatherings, wildlife and nature viewing and photography, visiting beaches, visiting farms, ATV/ORV driving, kayaking and snowboarding are becoming more popular. These trends may represent an ordering of priorities and have very significant implications for both public and private providers of outdoor recreation opportunities.⁴⁰

⁴⁰ Cordell, H. Ken; Betz, Carter J; Green, Gary T.; and Mou, Shela H. Outdoor Recreation Activity Trends: What's Growing, What's Slowing? IRIS Internet Research Information Series, 2008.

Will your household's participation in this activity increase, decrease or remain the same over the next five years?

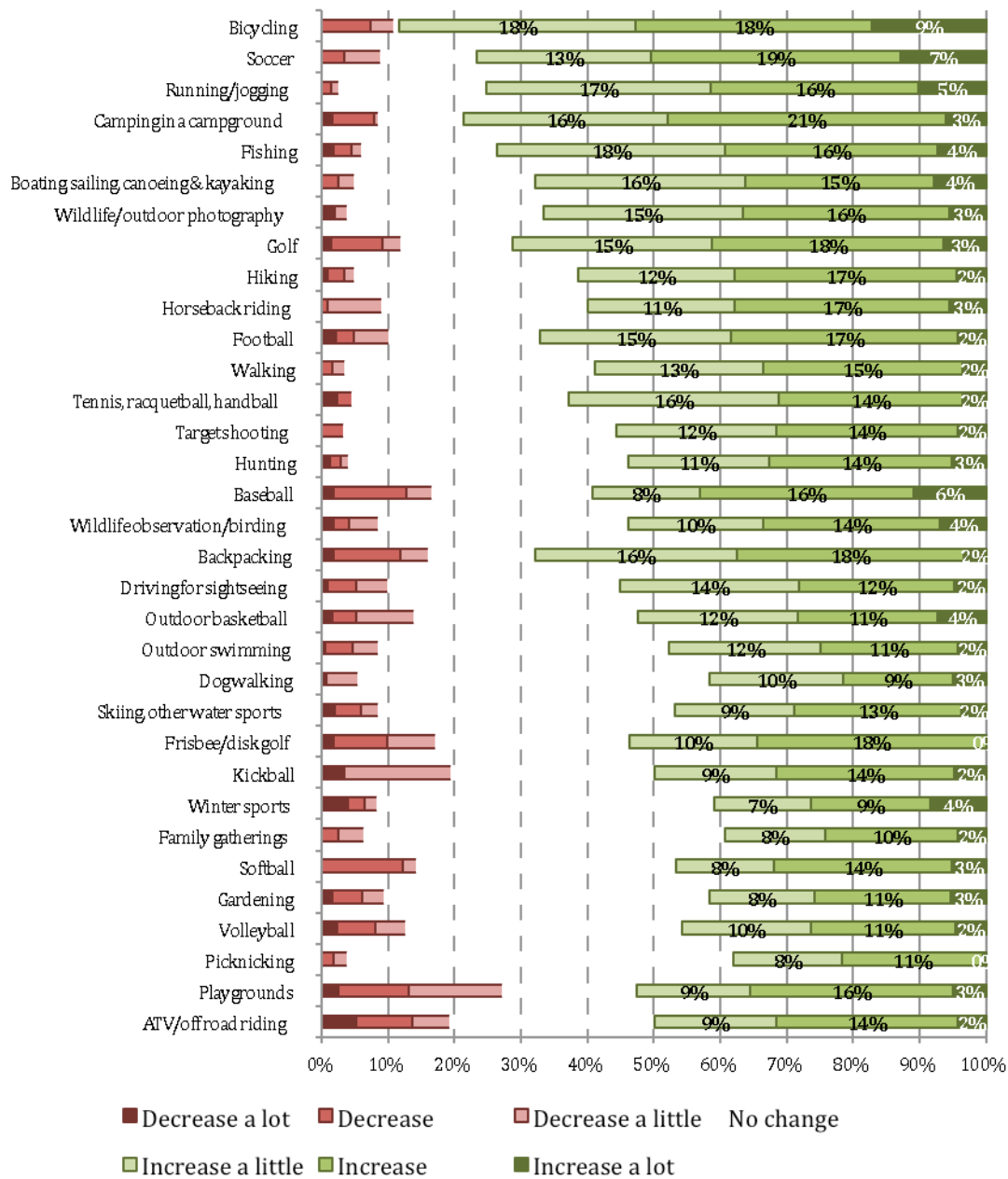


Table 11 - Changes in Activity by Sport

Popular Facilities

Walkable streets/sidewalks, local parks, gardens, fishing sites and **outdoor swimming pools** are the most popular facilities used by Missourians at least monthly. More than one in five residents visit **playgrounds, lakes, trails, boat access sites, rivers, picnic areas** and **historic/education sites** at least once a month.

Three out of four Missourians use **local parks** and **walkable streets/ sidewalks** at least once a year. More than half visit **historic/education sites, lakes, gardens, picnic areas, and state parks** annually or more often. A recent national study showed that people place a greater priority on having sidewalks and places to take walks than on living within walking distance of specific places in a community, such as stores and restaurants.⁴¹

Not surprisingly, urban residents are more likely to use **walkable streets/ sidewalks** and **local parks** while rural residents are more likely to use **fishing sites, lakes** and **rivers**.

Why Some Residents Don't Participate

Although the majority of Missourians are active outdoors, a third spend less than two hours on outdoor recreation during the weekend and nearly half spend less than two hours outdoors during the work week.

Nearly one in four residents in the random sample had not visited a *public* park, recreation area or other outdoor recreation facility during the past year, and were screened out of the survey.

Those residents who had not visited a *public* outdoor recreation facility in the past year most often blamed **health concerns/disabilities, lack of interest, cost and economic concerns** and **age**. A few said the **weather, transportation issues, and lack of time** prevented them from getting outdoors. Five percent participate in outdoor recreation on a farm or other *private* property.

Surprisingly, national studies show that lack of time may not be a valid excuse for not participating in outdoor recreation. Americans who are more active outdoors also are more active indoors. Outdoor participants on average spend six to eight more work hours a week than those who are not active outdoors. They make time for outdoor activities by spending fewer hours watching TV and movies than non-active people.³

⁴¹ The 2011 Community Preference Survey: What Americans are looking for when deciding where to live. National Association of Realtors.

Satisfaction with Outdoor Recreation Activities and Facilities in Missouri

Outdoor Recreation Activities

Missourians rate satisfaction with outdoor recreation activities in the state high, at 4.17 on a scale of one to five. But when asked about outdoor recreation activities in their local area, which is where they recreate most often, the satisfaction rating slips to 3.89 out of 5.0.

Missourians also are less satisfied with certain aspects of outdoor recreation activities in the state – the quality and variety of activities, accessibility of information, community participation and their interactions with other users.

When asked about the quality of organized and supervised programs, fewer than one in five Missourians is “very satisfied,” reflecting previously stated concerns about the availability of programs for youth.

Outdoor Recreation Facilities

As with their rating of recreation activities, residents are more satisfied with outdoor recreation facilities in Missouri overall than with facilities in their own local area, where they most often participate.

Missourians are very satisfied, however, with certain aspects of outdoor recreation facilities, including the distance of the facilities from their home, travel time/congestion, professionalism of facility staff, quality, safety and cleanliness. They are less satisfied with the number and variety of facilities and the accommodations for pets/dogs.

Opinions and Perceptions About Outdoor Recreation

The overwhelming majority of Missourians believe that outdoor recreation is important and that it benefits Missouri residents. About half say that funding for outdoor recreation in Missouri is a high priority, and a similar number say that trails are important to their household. More than two-thirds agree that Missouri is well known for outdoor recreation.

Two-thirds of residents with children under 18 say that the outdoor recreation facilities in their local area satisfy their children’s activity needs. Sixty percent say their children participate in enough outdoor recreation activities, which correlates with national studies showing that only 60 percent of children ages six to 24 participate in outdoor recreation.⁴²

For those children who are not physically active, the risk of obesity and diabetes is high. In Missouri, more than 13 percent of children and adolescents are considered obese.⁶

⁴² Special Report on Youth: The Next Generation of Champions. Outdoor Foundation, 2010.

Perceived Critical Issues

Missourians believe that funding is by far the greatest issue affecting outdoor recreation in Missouri. Residents also cite upkeep and a need for more outdoor recreation locations as important issues.

Suggested Improvements

When asked to suggest improvements, Missourians most often mention upkeep, safety and security, funding and better communications about facilities and activities.

Missouri Residents Survey - Importance/Performance Findings

The following “Importance/Performance” charts present satisfaction data from the residents in a grid format, to help planners prioritize actions and resources. The first chart shows results for Missouri overall; the second chart shows results for local areas.

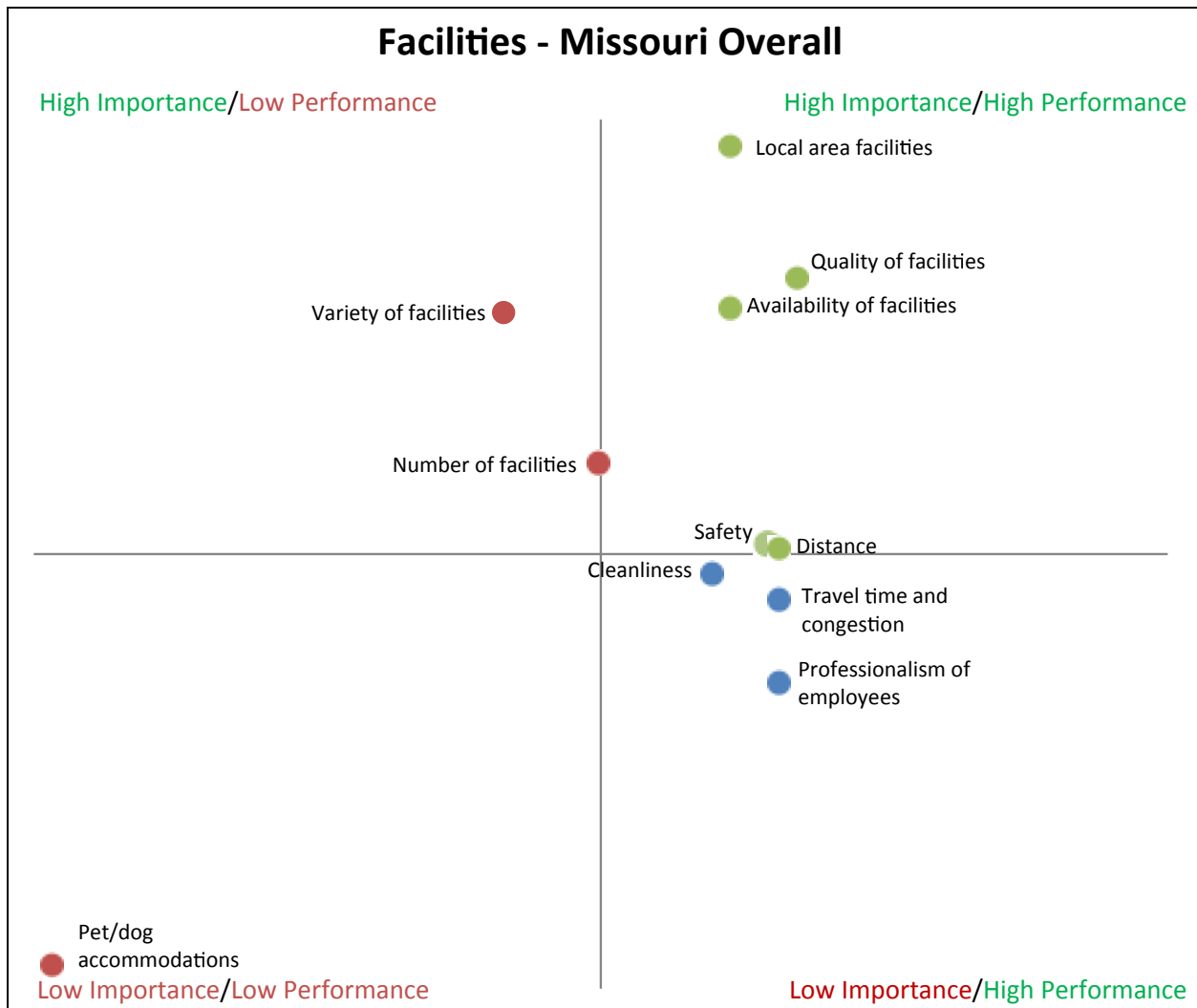


Table 12

In these important/performance charts, the highest priority issues appear in the upper left quadrant. **High Importance/Low Performance** issues are those that are important but are not performing well, and thus deserve high priority resources.

The upper right quadrant of each chart shows **High Importance/High Performance** “stars,” issues that are important and performing well, and thus require fewer new resources.

The lower right quadrant of each chart shows **Low Importance/High Performance** issues, those that are not as important but are performing well. Focus should be on maintaining performance but deemphasizing resources.

The lower left quadrant of each chart shows **Low Importance/Low Performance** issues, those that are neither important to audiences nor performing well, and have low priority for resources. Please explain the differences between circles and squares in the following graphics. Also, labels could be closer to the shapes to better associate the two.

Action standards were developed to determine when action should be taken on a particular issue. The action standards below were applied to the importance/performance measures, as shown on the charts.

High Importance/High Performance - if the relative importance score and the satisfaction mean score are **both above** the 50th percentile (upper right quadrant of the chart), maintain current emphasis and performance.

Maintain performance:

On the local level and in Missouri overall:

- Quality of activities
- Availability of activities
- Quality of facilities
- Availability of facilities
- Distance to facilities

In Missouri overall:

- Variety of activities
- Quality of activities
- Safety of facilities

High Importance/Low Performance - if the relative importance score is **above** the 50th percentile and the satisfaction mean score is **below** the 50th percentile (upper left quadrant of the chart), increase performance.

Shift resources in and increase performance:

Both on the local level and in Missouri overall:

- Number of facilities
- Variety of facilities

In local areas:

- Variety of activities

Low Importance/Low Performance – if the relative importance score is **below** the 50th percentile and satisfaction mean score is **below** the 50th percentile (lower left quadrant of the chart), take action but deemphasize.

Take action but deemphasize:

Both on the local level and in Missouri overall:

- Interactions with outdoor recreation activity users and groups
- Pet/dog accommodations at facilities
- Community participation in local outdoor recreation activities
- Availability of organized/supervised outdoor recreation programs
- Quality of organizes/supervised outdoor recreation programs

In local areas:

- Accessibility of activity information

Low Importance/High Performance – if the relative importance score is **below** the 50th percentile and the satisfaction mean score is **above** the 50th percentile (lower right quadrant of the chart), deemphasize and shift resources to another quadrant.

Deemphasize and shift resources away:

Both on the local level and in Missouri overall:

- Professionalism of outdoor recreation employees
- Cleanliness of facilities
- Travel time and congestion to facilities

In Missouri overall:

- Accessibility of activity information

In local areas:

- Safety of facilities

Importance/Performance – Missouri Overall

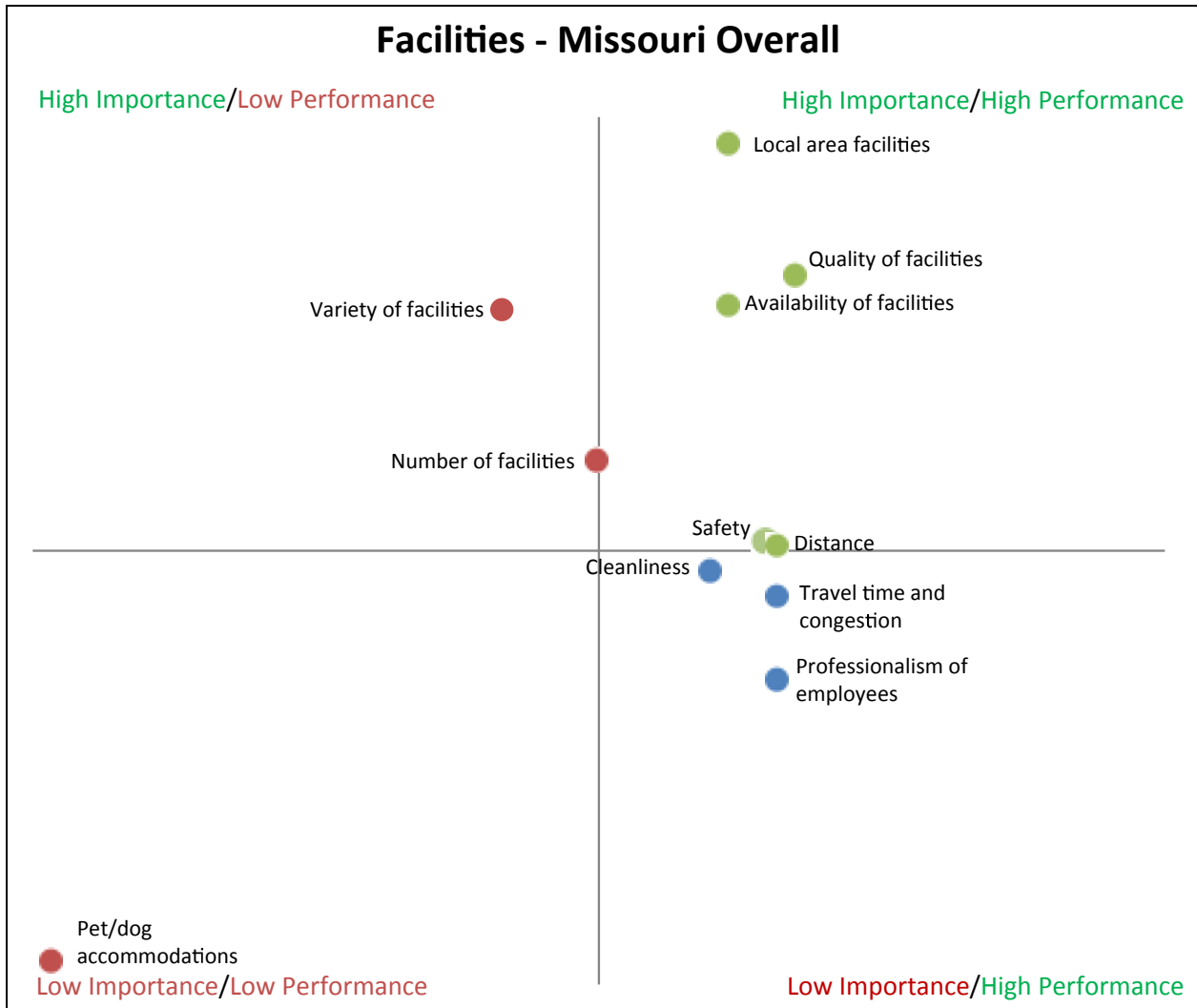


Table 12 - Importance/Performance Facilities - Missouri Overall

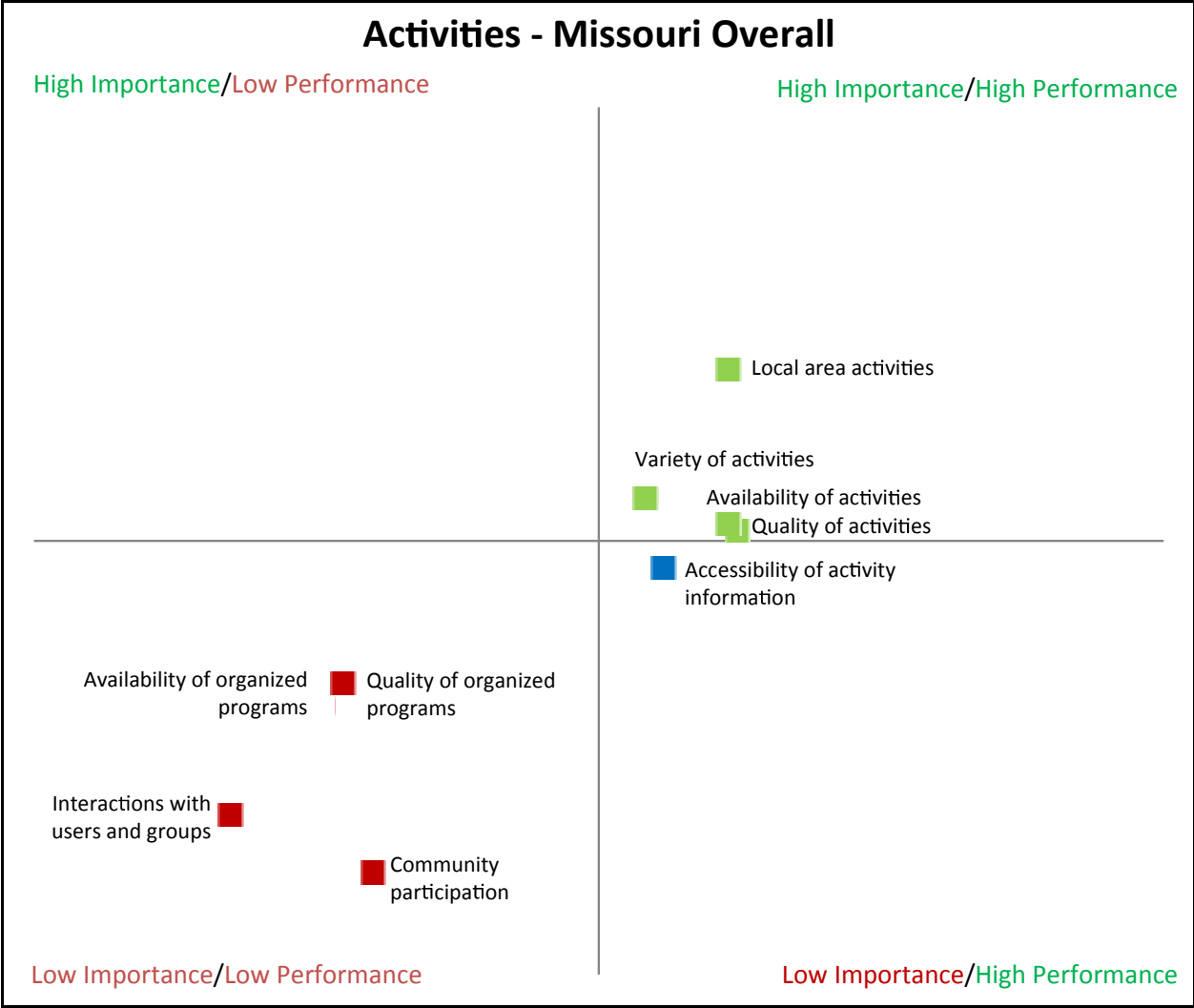


Table 13 - Importance/Performance Activities - Missouri Overall

Importance/Performance – Local Area

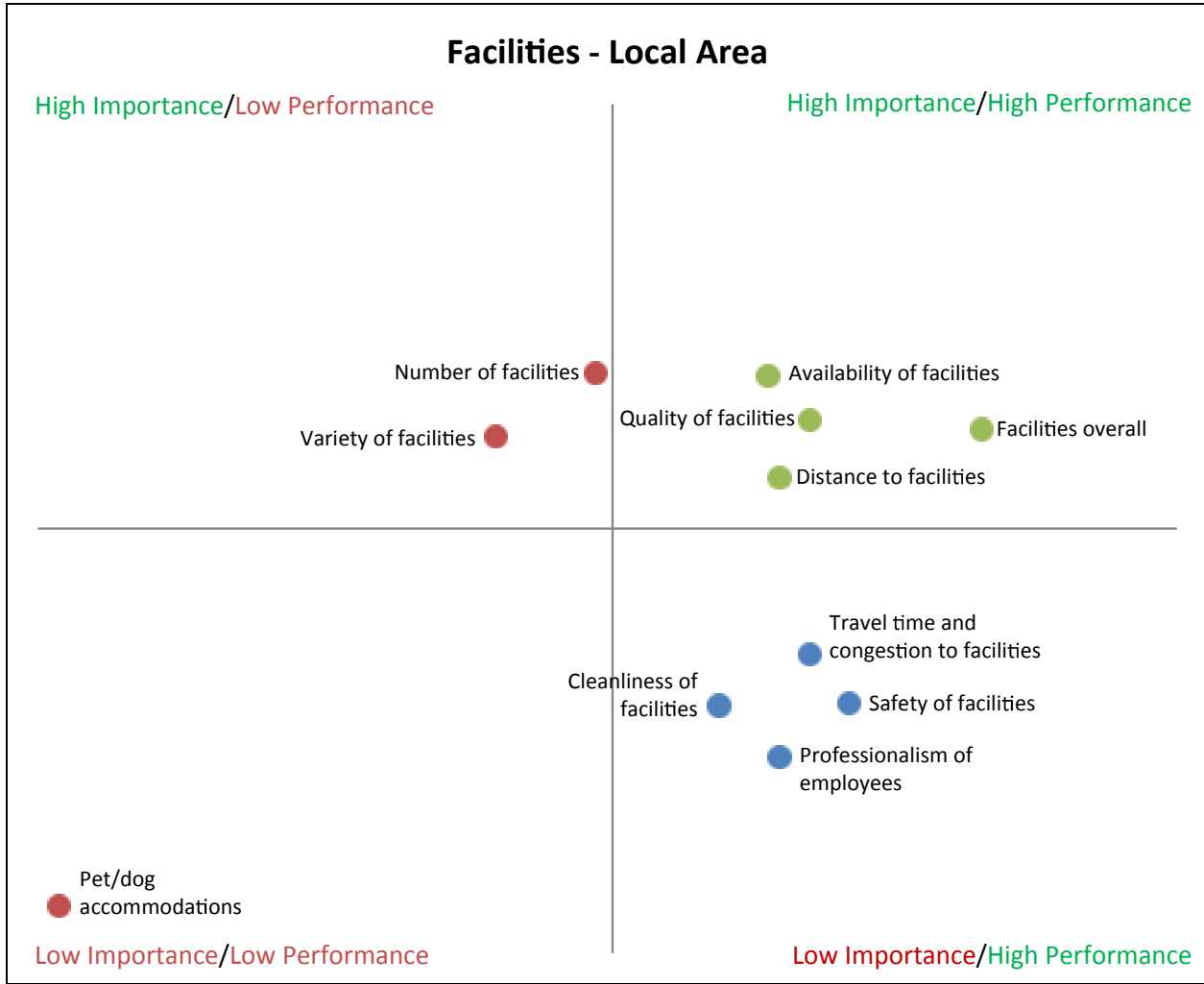


Table 14 - Importance Performance Facilities - Local Area

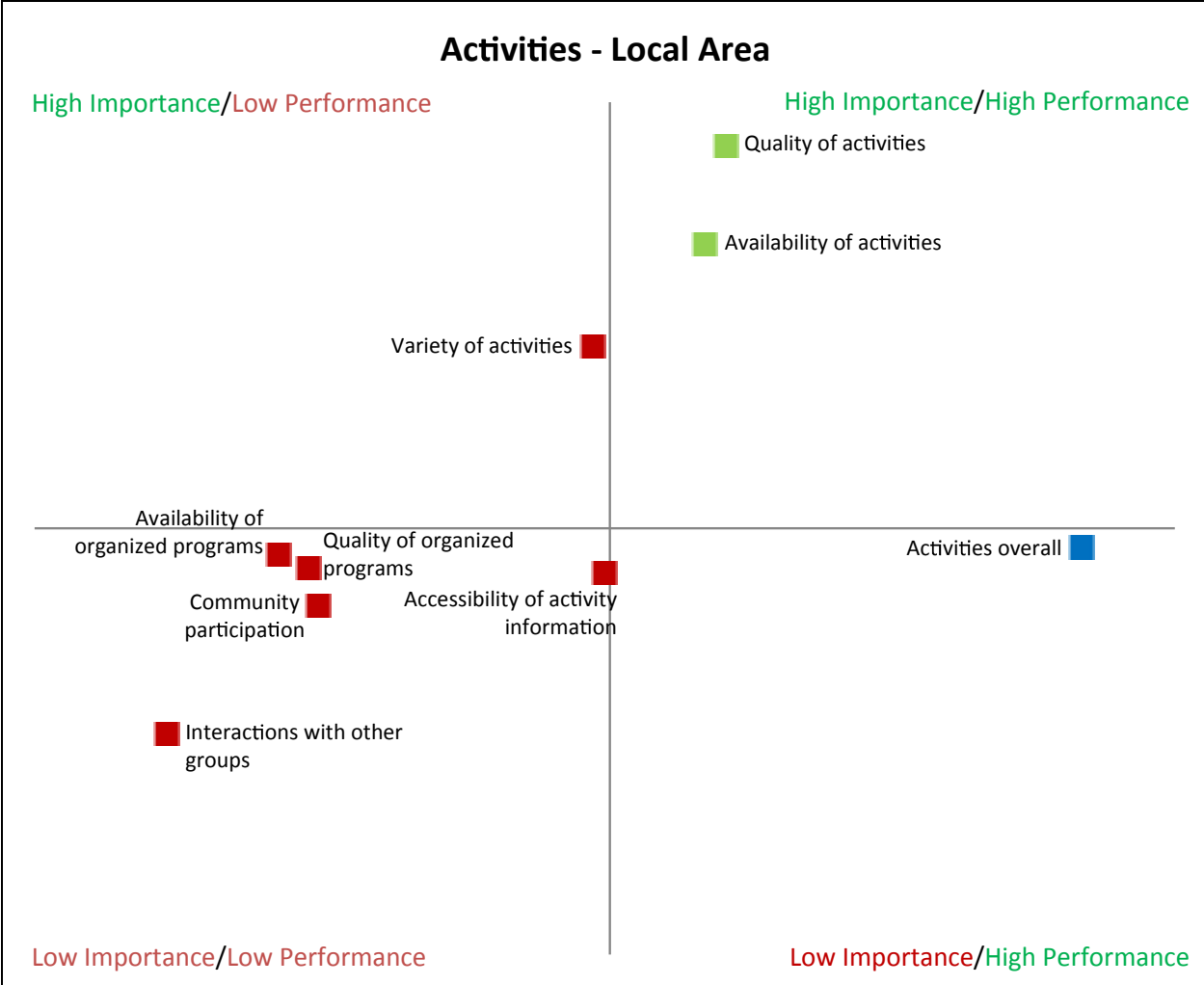


Table 15 - Importance/Performance Activities - Local Area

Summary of Findings

The survey of residents answered important questions regarding outdoor recreation in Missouri and informed the action items outlined later in this report.

Q. How familiar are residents with outdoor recreation activities and facilities in Missouri?

- Most Missourians are familiar with the outdoor recreation in the state, and more than a third are very familiar.

Q. How far do they travel for recreation and how much time do they spend outdoors?

- Most Missourians travel less than 10 miles from home to participate in outdoor activities.
- More than a third had participated in outdoor activities during the week before the survey, just under the national average of 40 percent.
- Two out of three spend at least three hours a week or more on outdoor recreation, particularly on weekends.

Q. How available is outdoor recreation in Missouri?

- Two thirds of Missourians live within two miles of an outdoor recreation facility.
- Six out of ten residents overall say there are enough local parks, but the demand for walkable streets and sidewalks, dog parks, ATV/ORV riding areas and outdoor aquatic complexes exceeds the supply.
- Among Missourians who use these facilities at least once a year, more than one in three says there are not enough outdoor basketball courts, ATV/ORV riding sites and Frisbee/disk golf courses; more than one in five says there are not enough gardens, trails, outdoor swimming pools, camping sites, target shooting sites and tennis courts.

Q. Which outdoor recreation activities and facilities are most popular?

- Walking, family gatherings, driving for sightseeing and gardening are very popular, enjoyed at least annually by more than 70 percent of Missourians.
- More than half of residents participate in picnicking, outdoor swimming, wildlife observation/birding, fishing and water sports at least once a year.
- More than a third visit playgrounds, camp in a campground, bike, walk a dog, hike, and take wildlife/outdoor photos.
- At least one in five Missourians participates in target shooting, baseball, hunting, golf, running/jogging, outdoor basketball, backpacking and ATV/ORV riding at least annually.
- Half of Missourians expect to be more active outdoors over the next five years.
- Participation in fishing, camping in a campground, bicycling, baseball, golf, running/jogging and soccer is expected to increase over the next five years.

Q. Why don't some residents participate in outdoor recreation activities?

- Those who don't participate at all most often blame health concerns/disabilities, lack of interest, cost and economic concerns, and age.
- Weather, transportation issues and lack of time prevent some residents from getting outdoors.

Q. How satisfied are residents with outdoor recreation activities and facilities?

- Residents are satisfied overall but want more supervised/organized outdoor recreation, particularly for youth.
- Residents want improvements in community participation in outdoor recreation, interactions among users, and the quality of organized/supervised programs.
- Residents want a wider variety of outdoor recreation facilities and better pet/dog accommodations at those facilities.

Q. What are residents' opinions and perceptions regarding outdoor recreation in Missouri?

- Most Missourians believe outdoor recreation is important and benefits them.
- More than half say Missouri is well known for outdoor recreation, funding for outdoor recreation is a high priority, and trails are important.

Q. What are their perceived critical issues or suggested improvements?

- Residents consider funding, upkeep and more locations/availability as the most critical issues affecting outdoor recreation in Missouri.

Full details of the Missouri Residents Study can be found in Appendix C.

Missouri Parks and Recreation Professionals Survey 2011

Over the next five years, the population of Missouri will grow older, more diverse and more urban, while also trending toward the top nationally in such critical issues as obesity and poverty.

Within this changing environment, parks and recreation professionals, like many others, are being asked to “do more with less” as they strive to meet the needs of six million residents.

To make the 2012-2017 SCORP a viable planning tool, Missouri DNR, Division of State Parks needed a first-hand understanding of the challenges that parks and recreation professionals face.

A statewide telephone survey of Missouri parks and recreation professionals and providers was conducted to gather data on outdoor recreation popularity and demand, the issues and obstacles impacting outdoor recreation, and a needs-based inventory of outdoor recreation facilities and services in the state.

The survey or professionals looked at eight basic questions regarding outdoor recreation in Missouri:

- *Which types of outdoor recreation are most popular?*
- *How available are various types of outdoor recreation facilities?*
- *Which types of outdoor recreation facilities need the most improvement?*
- *How well are we meeting the needs of various age groups?*
- *How adequate are support components such as transportation, restrooms, drinking water, and disability access?*
- *What are the greatest outdoor recreation priorities?*
- *What are the obstacles that prevent improvements in outdoor recreation?*
- *What critical issues are impacting outdoor recreation?*

Methodology

A telephone survey of Missouri parks and recreation professionals was conducted in May/June of 2011. The sample of professionals to be surveyed was taken from several organizational lists, which were condensed to 600 contacts. Only one person at each outdoor recreation facility or provider was called.

The survey achieved a completion rate of 25%, providing a 95% confidence level with a confidence interval of +/-6.91%. The 150 survey participants included directors, superintendents, supervisors, planners and educators.

When data sets within the survey results were large enough, data was cross-tabulated to compare urban vs. rural and to report regional results.

For this survey, regions are classified by telephone area code:

- 🕒 **St. Louis-East** – 314 area code
- 🕒 **East-Central** – 636 area code
- 🕒 **Northeast-Central-Southeast** - 573 area code
- 🕒 **Southwest** - 417 area code
- 🕒 **Northwest** - 660 area code
- 🕒 **Kansas City-West** - 816-area code.



Survey Results

As Missouri outdoor recreation professionals face the challenge of “doing more with less,” they also report that public interest and demand is shifting toward close-to-home and multi-use recreation options, which can efficiently meet the needs of a wide range of interests and age groups.

For example, trails and trail connections, walkable streets and sidewalks, multi-use fields, playgrounds, picnic areas and gardens are increasingly popular and cost-effective solutions to the challenge of diverse public needs.

Missouri professionals also acknowledge a lack of activities and facilities to interest teens and Missouri’s expanding older adult population. They see a need to improve facilities such as camping and historic/education sites, and to collaborate with other agencies on issues such as transportation.

Major issues on the minds of outdoor professionals in Missouri include overall funding, educating the public about the benefits and importance of outdoor recreation, and securing funding for facility upkeep and maintenance.

Statewide Popularity Trends - Past Five Years

Over the past five years, **trails, playgrounds, multi-use fields, picnic areas, gardens and soccer fields** have increased the most in popularity, according to Missouri outdoor recreation professionals.

Trails in particular became much more popular in Missouri over the past five years, a trend echoed by national studies. Fortunately, trails can support a wide variety of activities. Some of the 20 most popular American outdoor activities can take place on trails – running/jogging, biking, bird watching, triathlon training and hiking.³

Trails can be a “gateway” to other outdoor activities and an important asset in fostering the growth of outdoor recreation in communities. Gateway activities have a contagious effect, according to the Outdoor Foundation. People who participate in gateway activities get hooked on outdoor recreation and often go on to try other activities. In fact, 88 percent of bikers participate in one or more other outdoor activities.³ Running became the most popular gateway activity nationwide in 2010, a trend that could fuel demand for trails locally.

Walking trails also are important in increasing outdoor activity and health among youth and the growing segment of older adults in Missouri. Research shows that people who have walking routes near their homes get outdoors more often than those who do not have them nearby. Parks with paved trails are 26 times more likely to be used for physical activity than parks without paved trails.⁴³

⁴³ Outdoor Recreation, Health & Wellness: Understanding and Enhancing the Relationship. Outdoor Resources Review Group Resources. 2009.

Having a network of safe and accessible walking trails leads to better health and increased participation among youth, and make parents feel more secure about their children’s safety.⁴⁴ And adolescents who bicycle are half as likely to be overweight as adults.⁴⁵

Football fields, baseball fields, picnic areas, fishing sites and outdoor swimming pools in Missouri also have increased in popularity over the past five years. Popularity has not changed much at **target shooting sites, hunting sites, golf courses, boating and water access sites, camping sites and volleyball courts.**

Fishing and camping also are major gateway activities, and especially important to foster. According to the U.S. Fish and Wildlife Service’s “National Survey of Fishing, Hunting and Wildlife Recreation” report, 1.1 million Missouri residents and non-residents fished in the state during 2006.⁴⁶ Nationally, 86 percent of fishing participants and 83 percent of camping participants also participate in other outdoor activities.³

Urban vs. Rural Popularity Trends – Past Five Years

For the most part, the popularity of outdoor recreation activities over the last five years was similar in urban and rural areas. The exceptions are **picnic areas, tennis courts and pools**, which were more popular in cities and towns (Table 16).

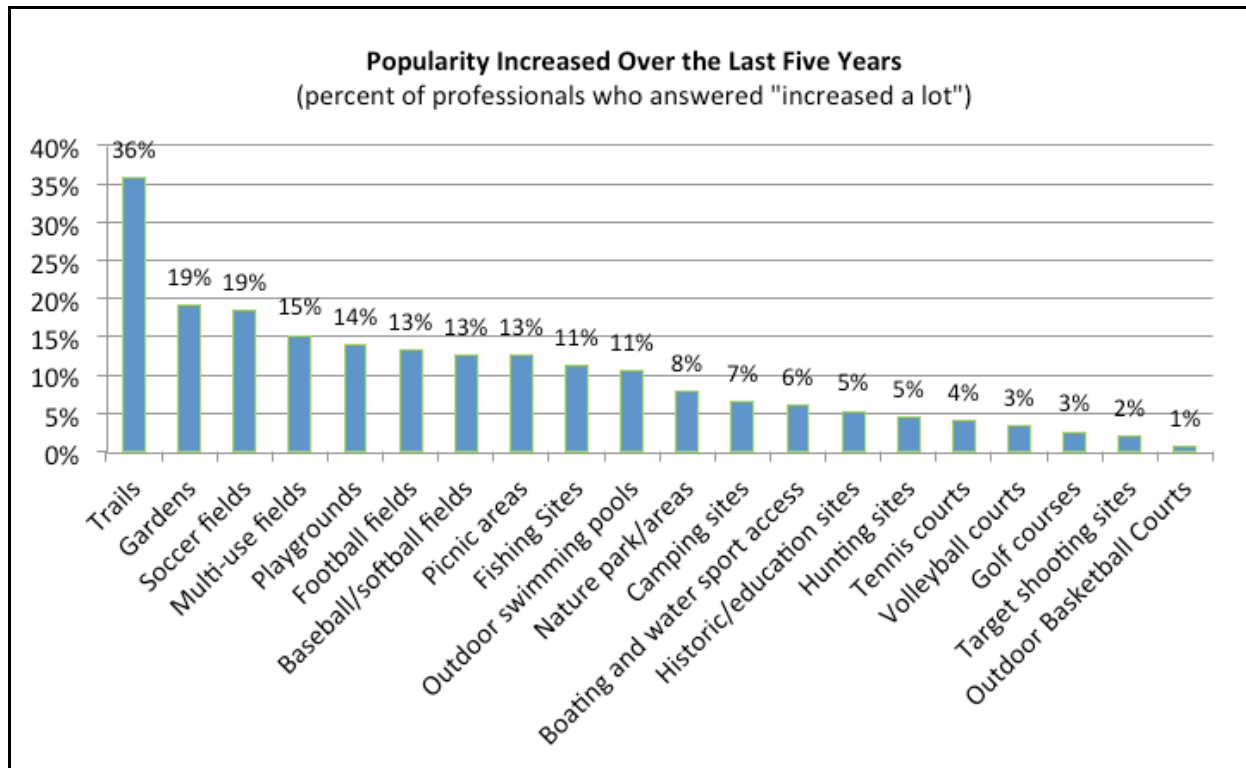


Table 16 - Activity Increases Last Five Years

⁴⁴ “Solving the Problem of Childhood Obesity Within a Generation.” White House Task Force on Childhood Obesity: Report to the President. 2010.

⁴⁵ When People Ride Bikes, Good Things Happen. Bikes Belong. 2011.

⁴⁶ National Survey of Fishing, Hunting, and Wildlife – Missouri. U.S. Fish and Wildlife Service. 2006

Statewide Popularity Trends - Next Five Years

Missouri professionals predict that **trails, playgrounds, multi-use fields, picnic areas, gardens and soccer fields** will become even more popular over the next five years, with more than a third projecting a particularly significant increase in demand for trails (Table 17).

Professionals nationwide also report a growing popularity of multi-use facilities, which offer many types of recreational amenities and serve a broad spectrum of ages.

According to the Outdoor Resources Review Group, providing many different types of facilities is a promising recreation planning policy because children engage in such a variety of activities and their recreational needs vary widely by age.⁴³

Most professionals in Missouri don't expect the popularity of **target shooting and hunting sites, volleyball courts, camping sites, golf courses, boating and water access site and outdoor basketball courts** to change over the next five years.

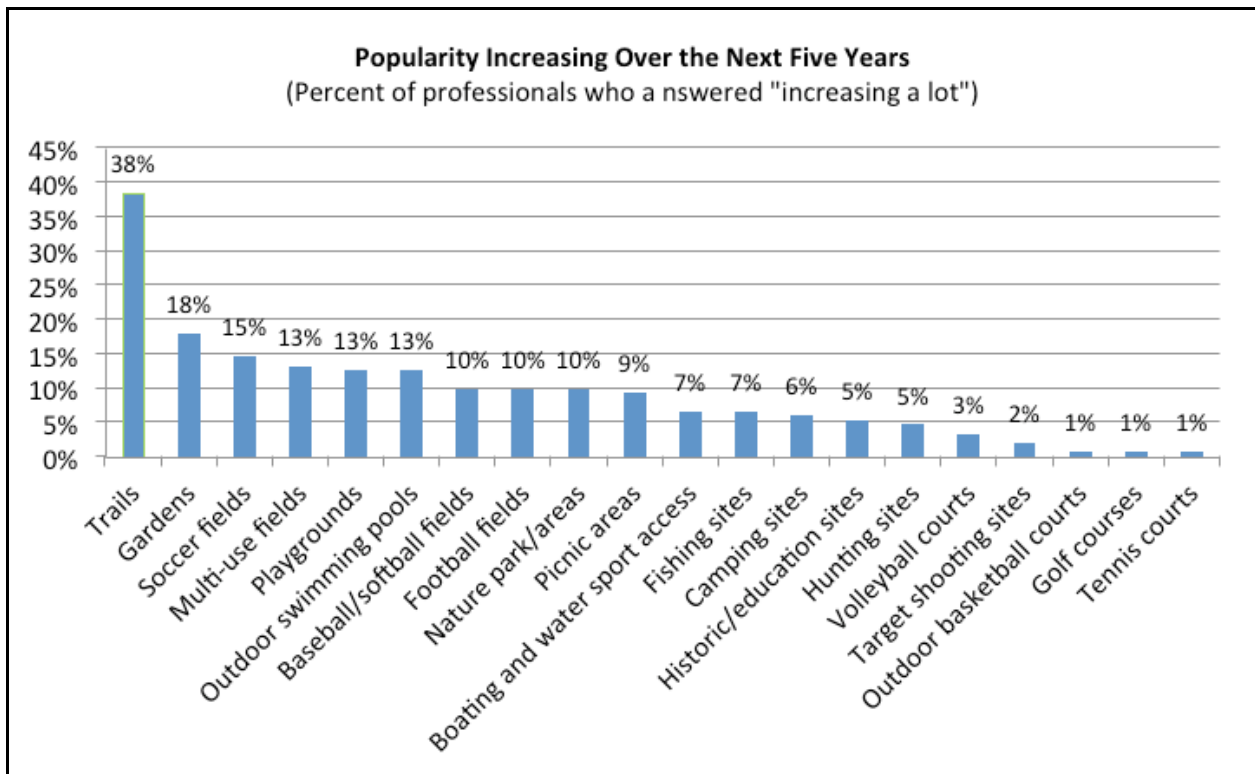


Table 17 – Activity Increases Next Five Years

Popularity Among Children

Playgrounds, water parks/swimming pools and aquatic centers are the most popular facilities among Missouri pre-school children, ages 0 to 5 (Table 18).

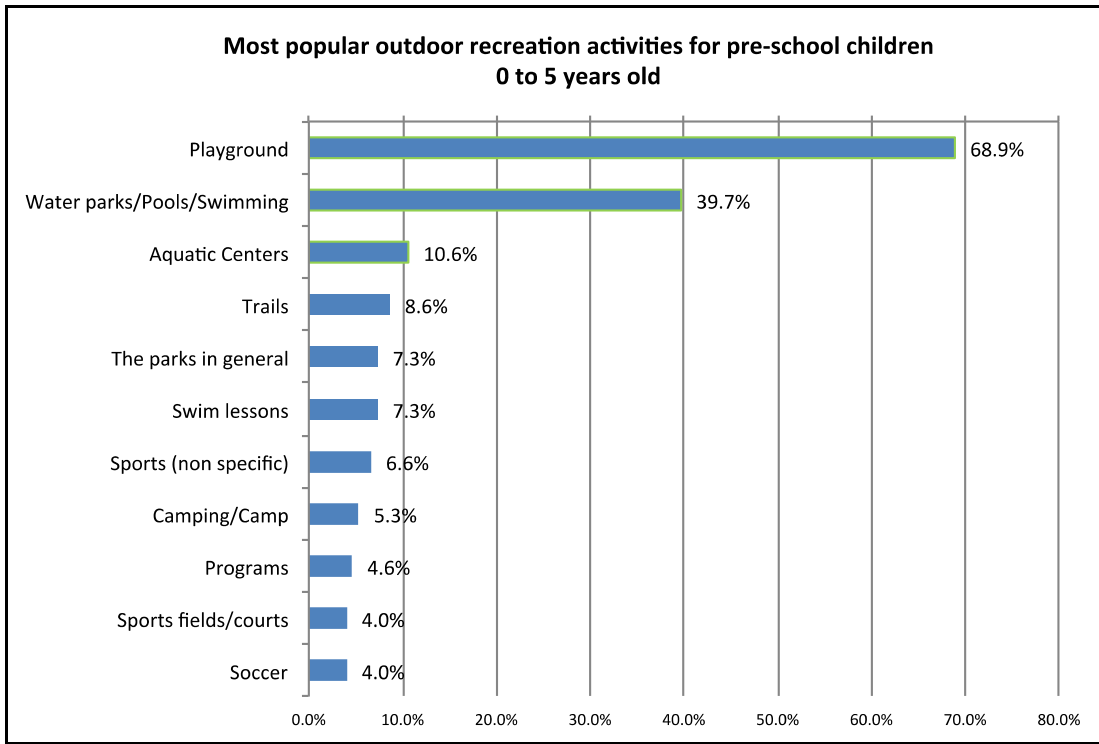


Table 18 - Popular Activities for Preschoolers

Children 6 to 12 years old are most likely to use **playgrounds, water parks/swimming pools, sports fields/courts, sports facilities and camping sites** (Table 19).

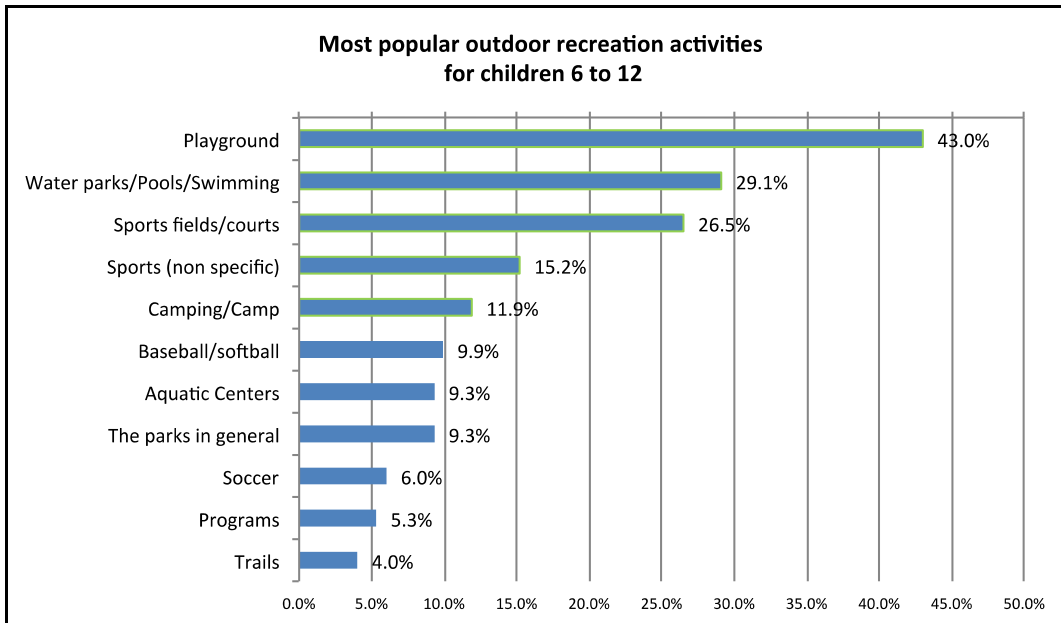


Table 19 - Popular Activities for Ages 6-12

Recognizing the strong benefit of parks and playgrounds, a key 2010 White House Task Force on Obesity report recommendation was to “increase the number of safe and accessible parks and playgrounds, particularly in underserved and low-income communities.”⁴⁴

Playgrounds play a critical role in the level of physical activity for the youngest age groups, according to the White House report. “Parks and playgrounds in a community provide opportunities to run and play and increase unstructured physical activity. If children can easily access safe parks and playgrounds in good repair, they are more likely to engage in recreational physical activity.”

In the absence of accessible playgrounds, parks and recreation facilities, obesity rates climb, according to the report.

“Children with low neighborhood amenities or those lacking neighborhood access to sidewalks or walking paths, parks or playgrounds, or recreation or community centers had 20 to 45% higher odds of becoming obese or overweight as compared to children who had access to these amenities.”⁴⁴

Popularity Among Adolescents

Among Missouri adolescents ages 13 to 16, the most popular facilities are **sports fields/courts, water parks/swimming pools, skate/skateboarding parks, sports facilities** and **baseball/softball fields** (Table 20).

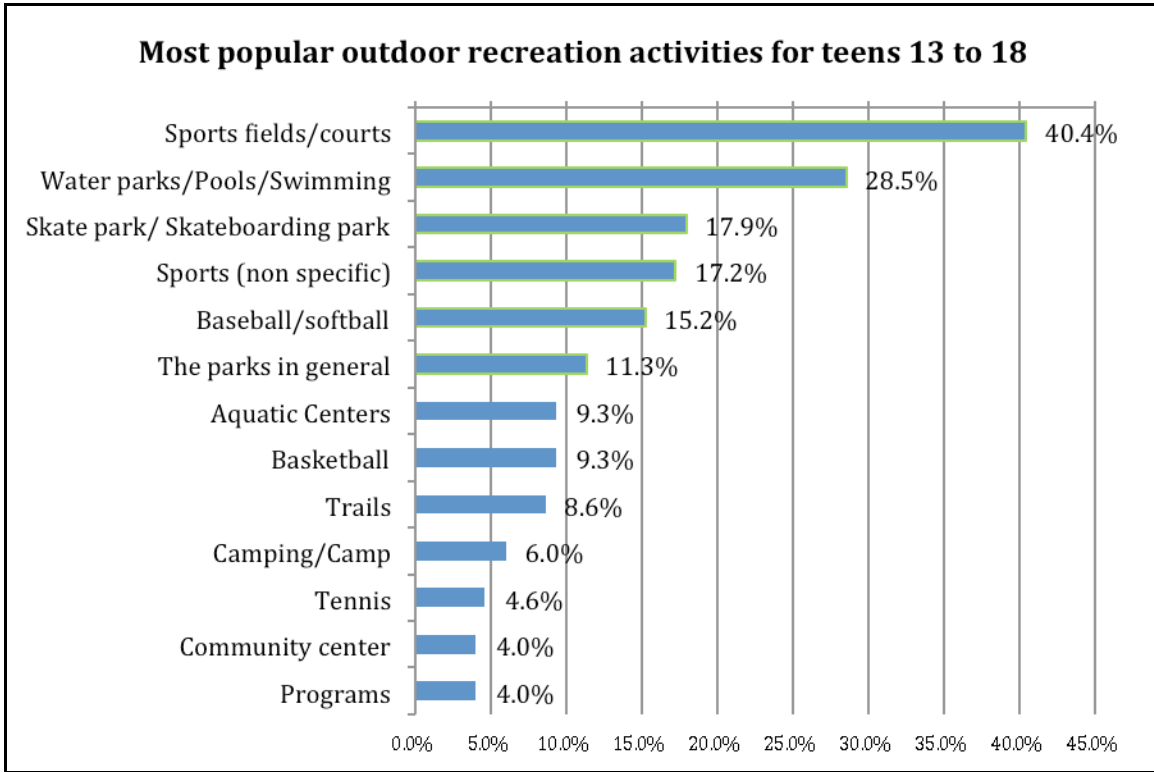


Table 20 - Popular Activities for Teens

The popularity of skateboarding in Missouri reflects the staggering growth of skateboarding as an outdoor sport nationwide, which recreation professionals should consider when planning for teens.

In 2010, skateboarding climbed to America’s number three favorite sport by frequency of participation among *all* Americans, ages six and older, according to The Outdoor Foundation. The study reported 61.3 average outings per skateboarder, for a total of 329 million outings nationwide in 2010.³

Popularity Among Young Adults

Young adults ages 19 to 34 most often use **trails, sports fields/courts, baseball/softball fields, sports facilities, water parks/swimming pools and parks** (Table 21).

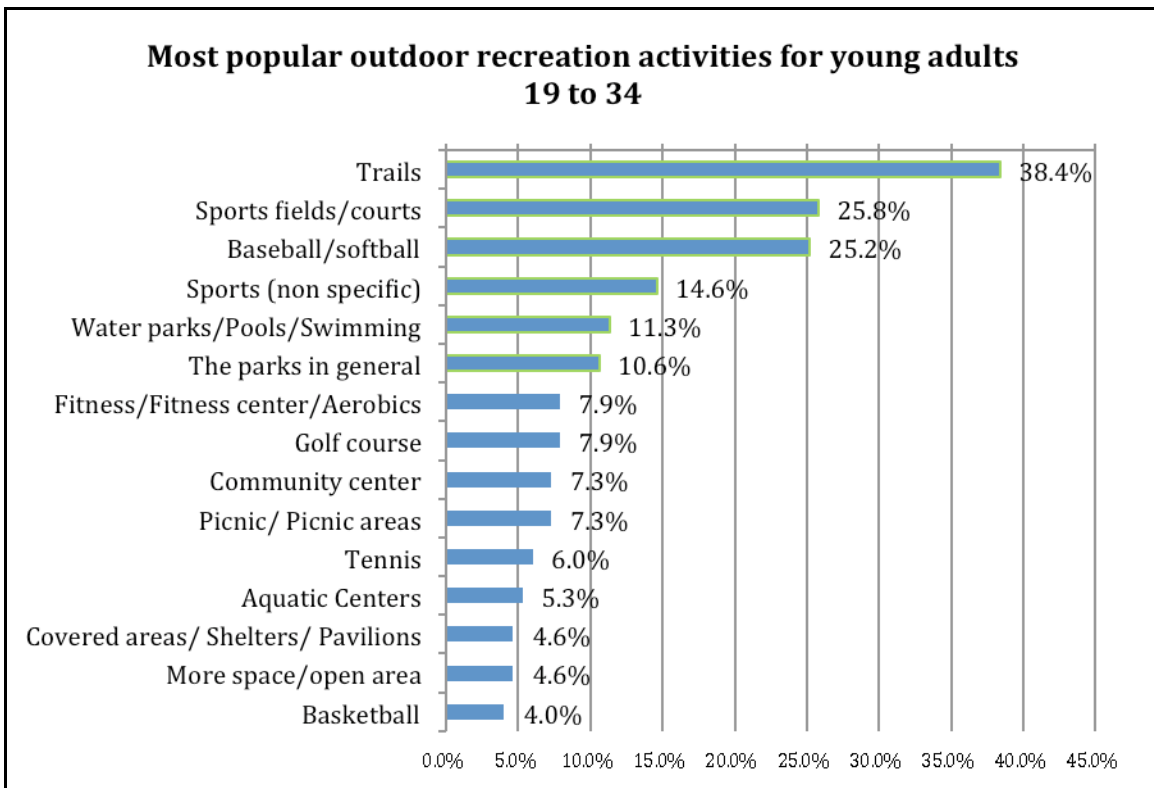


Table 21 - Popular Activities for Young Adults

Popularity Among Adults

Missouri adults ages 35 to 54 use **trails** more than any other facility. Adults also prefer **picnic areas, golf courses, baseball/softball fields, community centers, walking/hiking paths, water parks/swimming pools, fitness centers, sports fields/courts and parks** (Table 22).

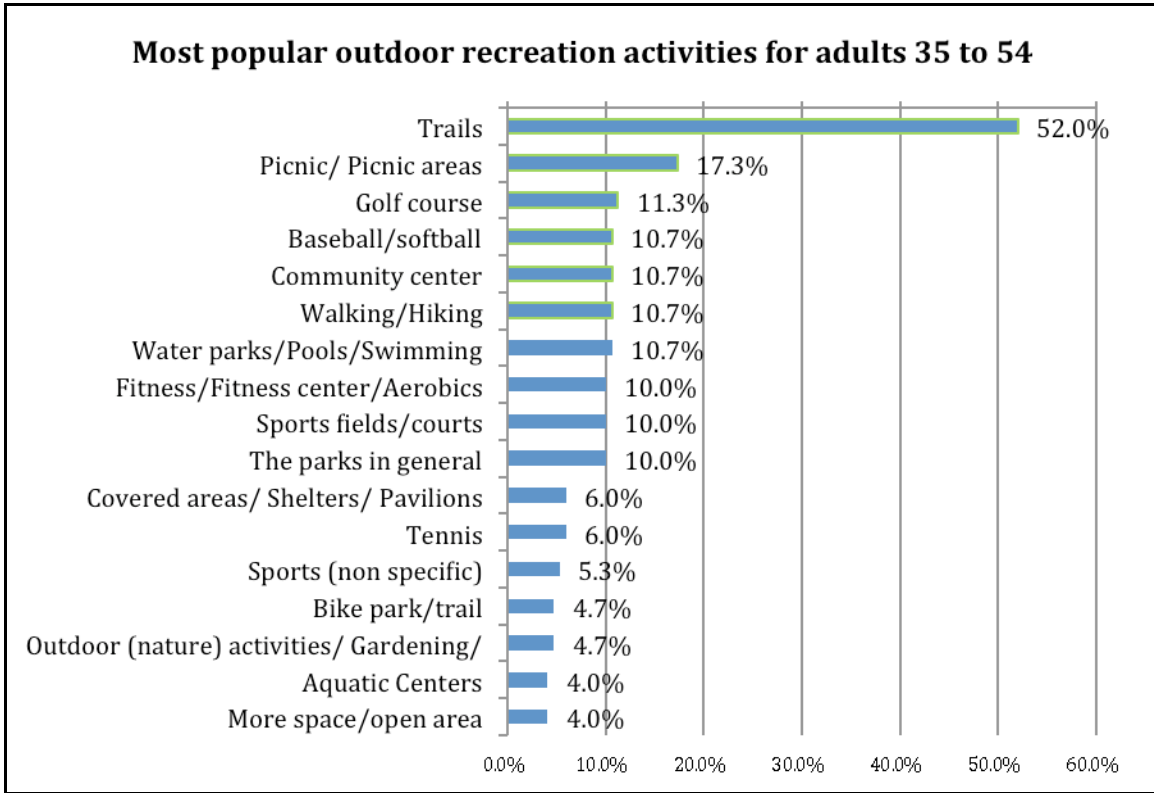


Table 22 - Popular Activities Adults 35-54

Popularity Among Seniors

Seniors also use **trails** most often, and also enjoy **picnic areas, golf courses, water parks/swimming pools, community centers, walking/hiking paths** and **parks**. National research shows that walking for pleasure or exercise is a popular activity for older adults (Table 23).³¹

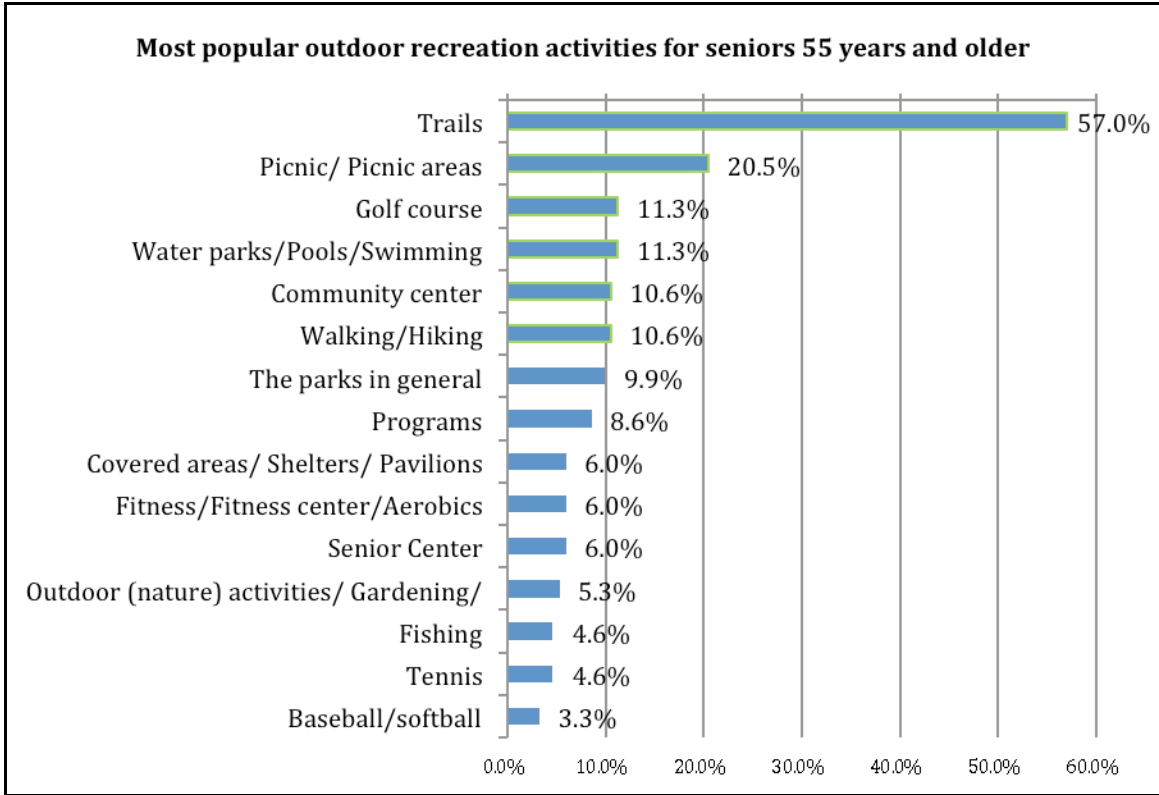


Table 23 - Popular Activities for Seniors

Popularity Among Families

Trails also are the most popular outdoor recreation facility among Missouri families, followed by playgrounds, parks, sports fields and courts, water parks and swimming pools and picnic areas (Table 24).

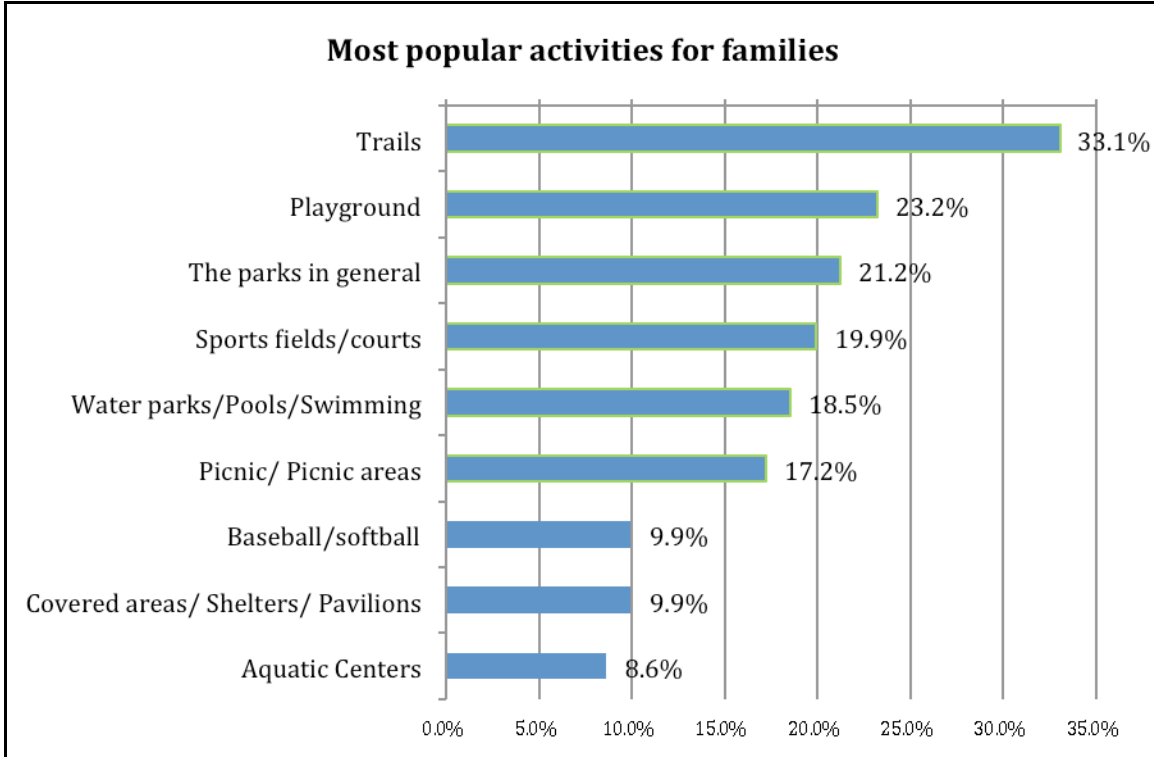


Table 24 - Popular Activities for Families

Developing facilities and programs that appeal to families is essential to nurturing the next generation of outdoor enthusiasts. For many, getting outside for the first time simply takes a little encouragement from family and friends. More than half of those between 6 and 24 years old became involved in outdoor activities for the first time because their family or friends already participated.³

Other Popular Activities/Facilities

When asked about outdoor recreation facilities/activities besides the traditional ones, Missouri outdoor recreation professionals say they expect to see **disk golf** and **trails** increase in popularity over the next five years. They also expect to see more interest in **skate** and **skateboarding parks, soccer, dog parks** and **bike parks/trails**.

Although the numbers are low, at least two percent predict a decline in **baseball/softball, golf, volleyball, field sports** and **tennis**.

Demand & Supply

According to the survey, **playgrounds** are the most abundant outdoor recreation facility in Missouri, provided by every park, city and agency surveyed.

More than 90 percent of Missouri’s outdoor recreation providers also offer **picnic areas, trails, baseball/softball fields and multi-use fields**. More than 80 percent offer **tennis courts, soccer fields, outdoor basketball courts, outdoor swimming pools, fishing sites and nature park/areas, gardens and volleyball courts**.

How well is Missouri meeting the demand for outdoor recreation facilities?

Demand exceeds supply for the most popular outdoor recreation facilities in Missouri – **trails, playgrounds and multi-use fields**. At least a third of Missouri professionals say that demand for trails is *much greater* than the supply.

Facilities or programs that are not available but in demand in some areas include **trails and bike parks, nature and botanical gardens, dog parks, skate and skateboarding parks, disc golf/Frisbee and open space** (Table 25).

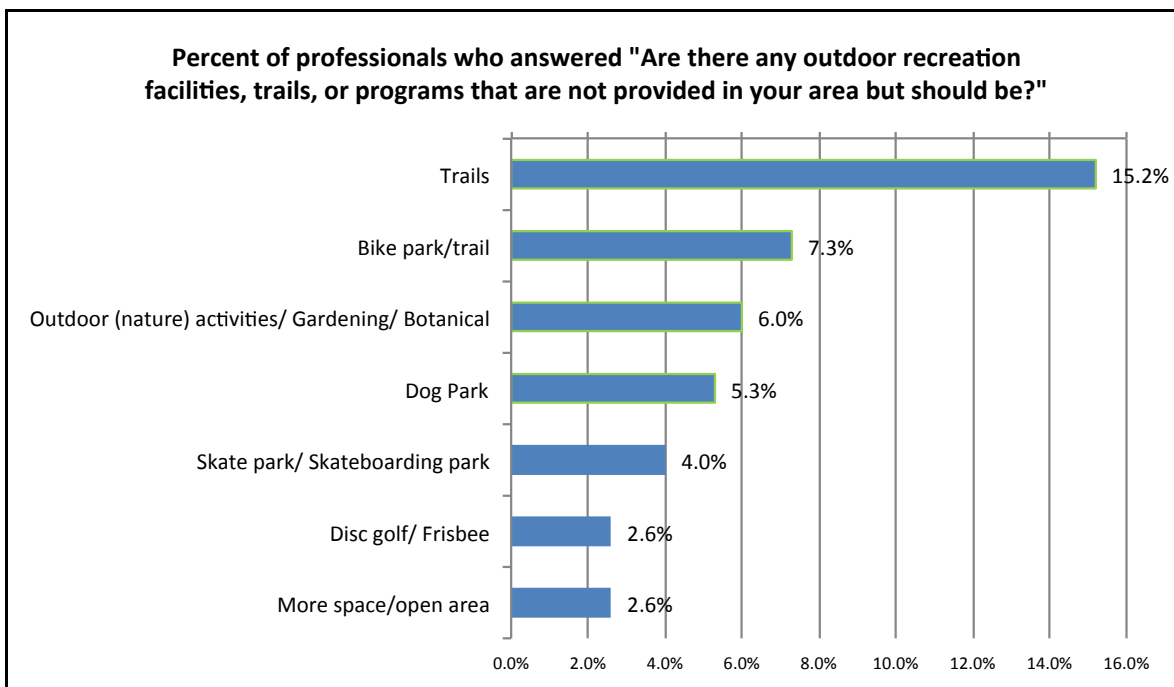


Table 25 - Activities Not Available but In-Demand

Demand also outstrips supply for **picnic areas, soccer fields, baseball/softball fields, gardens, nature parks, outdoor swimming pools, football fields, boating and water sport access sites, camping sites, outdoor basketball courts, historic sites, hunting sites, tennis courts and target shooting sites**.

Golf courses and volleyball courts are the only facilities in which supply currently exceeds demand.

Urban vs. Rural Demand

Picnic areas, outdoor swimming pools and tennis courts are in greater demand in urban areas, while **boating and water sport access sites** are in greater demand in rural areas.

Meeting Demand by Age Groups

Missouri’s outdoor recreation professionals are meeting the needs of children ages 6 to 12 better than any other age group. Young and middle age adults and preschool children also are being served reasonably well, according to the professionals.

Teenagers have the greatest unmet outdoor recreation needs of all age groups in Missouri. More than one in ten professionals says that the needs of teenagers are not being met *at all*. Professionals in rural areas report less success than their urban peers in meeting the outdoor recreation needs of children 6 to 12-year-olds and middle-age adults (Table 26).

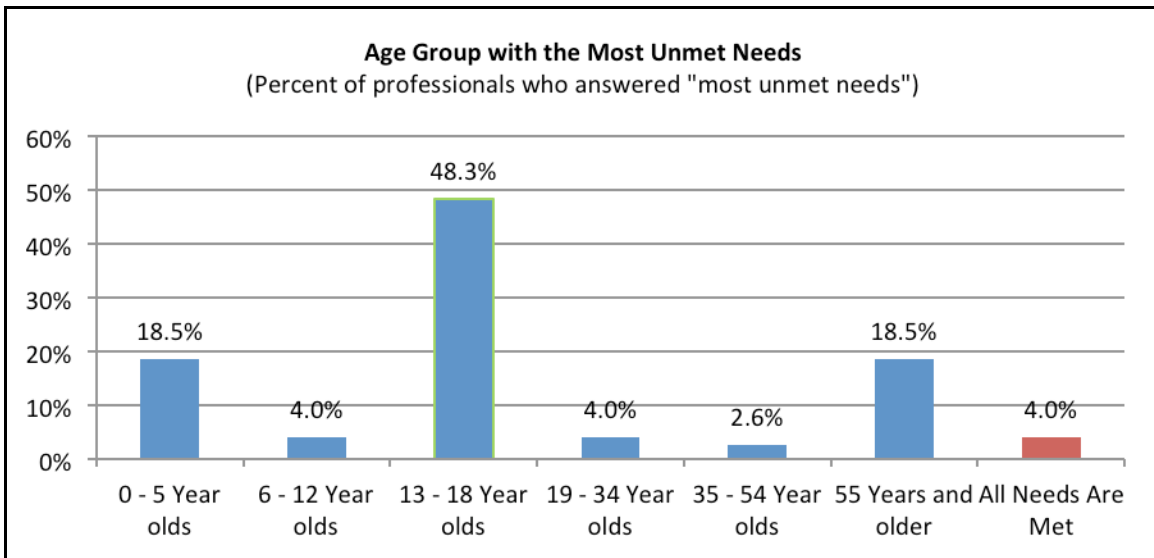


Table 26 - Most Unmet Needs by Age Group

Professionals find it difficult to interest teens in outdoor recreation and to keep them involved. They report a lack of age-specific programs, activities, equipment and facilities.

These findings in Missouri correlate with national studies, which show that participation in outdoor activities declines with age. A 2010 study of outdoor participation rates, by The Outdoor Foundation, shows that “participation reached a high of 62 percent among the youngest surveyed and a low of 38 percent among the oldest.”³

Youth nationwide are not participating in enough outdoor activity according to The Outdoor Foundation. Among youth who consider themselves outdoor participants, 37 percent take part in an outdoor activity less than twice a month.

Multiple studies show that time spent outdoors is the strongest correlate of a child’s physical activity, so it is not surprising that most teens also are not meeting basic recommendations for physical activity.²⁹

According to the White House Task Force on Childhood Obesity, fewer than one in five high school students meets the current recommendation of 60 minutes of daily physical activity. Yet adolescents spend more than seven hours a day watching television, DVDs and movies, or using

a computer or a mobile device.⁴⁴

There are many barriers to outdoor physical activity among teens, including time at school, technology and a preference to hang out with friends. More in-depth study is needed to understand what motivates those teens who do participate in outdoor recreation. This insight, along with an understanding of the barriers to participation, can help guide planning and programming.

Besides improving program quality, efforts need to be made to create a positive buzz about program offerings for both parents and adolescents (e.g., use of peer recruiters and engaging advertising, including social media).⁴⁷

Partnering with schools and other government agencies to reach teens through environmental education and after-school programs is another important tactic. Children's level of physical activity increases when they participate in environmental education programs that promote outdoor activity.⁴⁴ One such program in Missouri is the WOW (Wonders of Wildlife) National Outdoor Recreation and Conservation School, designed to teach participants how to enjoy a wide range of outdoor recreation activities while practicing personal safety and outdoor responsibility.

Improvements

Which outdoor recreation facility types need the most improvement?

According to the survey of professionals, the Missouri outdoor recreation facilities most in need of improvement are **camping sites, multi-use fields, trails, outdoor basketball courts and historic/education sites. Boating and water sport access sites, playgrounds, nature parks/areas and tennis courts** also need improvement.

Professionals rank **multi-use fields** most often as having an *extreme* need of improvement, followed by **camping sites, boating and water sport access sites, gardens and tennis.**

Between 15 and 20 percent of professionals say **outdoor basketball courts, outdoor swimming pools, historic sites, soccer fields, football fields, playgrounds, target shooting sites, fishing site and nature parks/areas** are in extreme need of improvement. Other facility types needing improvement include **skate and skateboarding parks, dog parks and sports fields/courts.**

Golf courses and hunting sites need the least amount of improvement.

Support Components

How adequate are support components such as transportation, restrooms, drinking water, and disability access?

Public transportation to outdoor recreation facilities and activities is the least adequate support component measured. More than a third of professionals rate transportation "not at all adequate."

⁴⁷ Caldwell, Witt. The Rationale for Recreation Services for Youth: An Evidenced Based Approach. National Recreation and Parks Association, 2010.

Drinking water is rated the most adequate support component followed by disability access and public restrooms.

In rural areas, public transportation to facilities, restrooms and disability accessibility are significantly less adequate.

Priorities

What are the greatest outdoor recreation priorities in Missouri?

Educating the public and officials about the values and benefits of outdoor recreation is the highest priority of outdoor recreation professionals. They ranked the need for public education about outdoor recreation at 4.22 out of 5. This is similar to findings of the 2009 MPRS Study.

The age group with the greatest unmet need is the 13- to 18-year-olds and the most in-demand facilities for teens are sports fields, water parks and skate parks.

Other high priorities include expanding, updating and maintaining existing facilities; funding for maintenance and operations; and overall funding.

Professionals also ranked communications and collaboration among partners, conservation/preservation efforts, and marketing and public relations above the midpoint.

Urban professionals rate public education and conservation/preservation efforts higher as priorities than rural professionals.

Obstacles

What obstacles prevent improvements in Missouri's outdoor recreation?

More than one in five professionals say the lack of a consistent funding system and the availability of future parkland are *very large* obstacles to improving outdoor recreation in Missouri.

Overall, professionals say that the largest obstacles are ignorance and lack of education on the benefits/values of outdoor recreation; low priority support for recreation; the lack of a consistent funding system; and the availability of land for future parks.

More than half of professionals say that local crime and liability issues are not obstacles at all.

Regional Obstacles

Rural professionals are more concerned about the lack of a consistent funding system and the availability of future park land as compared to urban professionals. Urban professionals are more concerned about crime affecting outdoor recreation as compared to rural professionals.

Critical Issues

What critical issues are impacting outdoor recreation in Missouri?

Funding is by far the most critical issue affecting outdoor recreation in Missouri, mentioned by more than three-fourths of the professionals surveyed. The next most pressing issues are available space for future parkland, upkeep/restoration/maintenance and awareness/education.

Summary of Findings

The survey of outdoor recreation professionals answered important questions regarding outdoor recreation in Missouri and led to action items that are outlined later in this report.

Q. Which types of outdoor recreation are most popular? Which need the most improvement?

- Trails, playgrounds and multi-use fields in Missouri are in the greatest demand, are expected to increase in popularity over the next five years, and need the most improvement.
- Picnic areas, gardens and soccer fields are becoming more popular but do not need much improvement.
- Camping sites, outdoor basketball courts, historic/education sites, boating and water sport access sites, tennis courts and target shooting sites need the most improvement but are not as popular as other facilities.
- Skate parks and dog parks are becoming more popular and need improvement. Soccer fields are increasing in popularity faster than baseball/softball fields, football fields, outdoor basketball courts, golf courses, tennis courts and target shooting sites.
- Hunting sites, golf courses, volleyball courts, target shooting sites, tennis courts, outdoor basketball courts and fishing sites are not in high demand as compared to other outdoor recreation facilities.

Q. How available are various types of outdoor recreation facilities?

- Trails, multi-use fields and playgrounds are the most popular facilities and present the greatest unmet demand, now and in the future.
- Demand for picnic areas, gardens, soccer fields and nature parks/areas also is higher than supply and is expected to increase over the next five years.
- Football fields and baseball/softball fields also rank among the top ten facilities in unmet demand but popularity is not expected to increase as much.

Q. How well are we meeting the needs of various age groups?

- Teenagers have the greatest unmet needs, and professionals struggle to get them interested and keep them involved.
- Sports fields, water parks/pools and skateboard parks are the most popular activities among teenagers.
- Trails are by far the most popular outdoor recreation facility among adults, increasing in popularity as residents age.

Q. How adequate are support components such as transportation, restrooms, drinking water, and disability access?

- Public transportation to outdoor recreation is inadequate.
- Disability access, drinking water, restrooms and parking are well supplied.

Q. What are the greatest outdoor recreation priorities?

- Education and funding for maintenance and operations are the most important priorities among outdoor recreation professionals in Missouri.

Q. What obstacles prevent improvements in outdoor recreation?

- Lack of a consistent funding system, availability of future parkland, lack of education, and low priority/support for recreation are the greatest obstacles to improving outdoor recreation in Missouri.
- Crime and safety are not considered major issues affecting outdoor recreation in Missouri.

Q. What critical issues are impacting outdoor recreation?

- Future funding and obstacles to funding are the most critical issues facing outdoor recreation professionals, especially among rural professionals.

Detailed survey results including the survey tool, methodology, demographics and a complete report with tables are included in Appendix D.

Missouri Trail Inventory 2011

Missouri is a state rich in trails, from paths linking neighborhoods with community parks to the 237-mile Katy Trail State Park, the longest rails-to-trails project in the nation.

Trails contribute immensely to both the health and economic vitality of a community. As a multi-use resource, trails accommodate a wide variety of activities, and they appeal to youth and adults alike.

In Missouri, our studies show that trails are increasing in popularity more than any other outdoor recreation facility.¹¹ Trails are an important community asset and a gateway to other outdoor activities.

For several years, Missouri outdoor recreation professionals have envisioned a trail alliance, a group of organizations working together to promote the state's trail resources and provide for better access and use of trails. In support of that vision, Missouri State Parks decided to conduct an inventory of trails as part of the 2013-2017 Missouri SCORP.

More than 400 organizations around the state were invited to complete an online survey. Responses came from 100 of the 115 counties in Missouri, representing 354 zip codes and 300 cities, parks, agencies and conservation areas.

Nearly 1,000 Missouri trails were counted, spanning a distance of more than 3,000 miles. Although the inventory does not yet represent all trails in Missouri, it does provide some interesting statistics:

- All of the trails (except for two water trails) are designed for hiking and walking (947 trails, 1,302 trailheads, 3,082 miles);
- About half allow biking (457 trails, 2,228 miles);
- More than one-fourth allow backpacking (255 trails, 1,131 miles);
- 134 equestrian trails provide 1,439 miles of trails for horse lovers;
- Five trails have ATV/ORV access (112 miles);
- Sixteen trails have boardwalks;
- More than half have a natural surface (508 trails, 2,129 miles);
- A third have an asphalt surface (312 trails, 638 miles);
- 151 trails (16%) have a gravel surface;
- One fourth are ADA compliant and one in ten has interpretive signage;
- Half are located within parks (492 trails, 1,852 miles);
- 101 trails share jurisdiction with other organizations.

Methodology

Synergy/JPA/PRI conducted the trail inventory in July/August 2011 using no-cost online tools including Google Documents online survey and database programs.

The goal of the trail inventory was to establish a database of trail information that could be easily accessed, maintained and expanded for use by trail planners and ultimately, the public. Management-level professionals at 402 organizations (cities, towns, counties, parks, trail and outdoor recreation associations, state and federal agencies, etc.) were asked to participate. To avoid overlap, the trail survey invitation was sent to a single contact at each organization. Up to three reminder emails and three telephone calls were made to encourage response.

Data collected includes trail names, organizations that own or manage them, geographic/GPS locations, trail length, type of surface, allowed uses and other trail properties. To assist organizations that managed multiple trails, the team provided an Excel spreadsheet form and then imported their data into the database.

Survey Results

The survey response rate was about forty percent, with 102 organizations entering trail data (58 respondents did not own or manage trails). As trail providers completed the online survey, the data automatically populated a spreadsheet database, which can be sorted and analyzed in a variety of ways.

The collected data was cleaned for consistency and the team used a geomapping app to add GPS data when it wasn't supplied. Google Maps and Google Charts were used to create an online display of Missouri trail data, currently hosted at <http://www.pragmatic-research.com/dnr-trail-inventory/maptest.html>.

Searchable filters allow the user to view the trail data on a map and sort it in various ways such as by trail surface, allowed activities, interpretive elements, ADA compliance, shared jurisdiction, location within a park, owner organization, and by city, county and zip code. The trail data also can be combined with U.S. Census Bureau and Centers for Disease Control information for demographic and community health correlations.

Trails can be added at any time via the online survey at http://bit.ly/DNR_Trail_Inventory. As every new set of data is entered, the Missouri Trail Inventory becomes a more useful, living tool for communities, planners and trail enthusiasts.

Themes, Emerging Issues & Trends

What trends and issues will impact the future of outdoor recreation in Missouri?

In preparing the 2013-2018 SCORP, the primary Missouri SCORP research studies were reviewed to spot future growth trends as well as gaps in outdoor recreation specific to Missouri. That information was then compared with national research and literature on outdoor recreation to broaden and confirm the perspective.

Six important themes and issues emerged:

- Sociodemographic Shifts
- Funding and Economics
- Demand for Trails and Walkable Communities
- Educating the Public on the value and benefits of parks and recreation
- Health and Wellness
- Youth, Technology and Nature Deficit.

In addition to exploring these themes and issues, this SCORP details trends in participation as well as the obstacles that affect the future of outdoor recreation in Missouri.

Themes and Emerging Issues

Sociodemographic Shifts

Missouri's demographic trends present ongoing challenges for managers and planners, who must meet the needs of a changing and diverse population. This impacts the location and types of facilities to be developed and the types of programs to be offered.

As described in detail in the Background section, the state of Missouri overall is growing more slowly than the national average. Yet like much of the nation, Missouri is becoming more urban. The population growth is fastest in metropolitan regions and is on the decline in agricultural areas.

At the same time, the population of Missouri is increasingly becoming overweight, lower income, older and more ethnically diverse, trends that present planning challenges.

Currently, more than 30 percent of Missourians are obese, and more than 15 percent live below the poverty level. Both obesity and poverty correlate with low levels of exercise in some parts of the state, particularly in Southeast Missouri where obesity overall is the highest⁴⁸ and poverty in 2008 was more than 19% compared to 13.5%.⁴⁸

Aging is another striking demographic shift in Missouri, a state whose population is growing mostly through natural change rather than in-migration and whose residents are living longer. In

⁴⁸ Domazlicky, Bruce. Poverty in Southeast Missouri. Center for Economic & Business Research. October 2010.

1950, only one in ten Missourians was 65 or older. By 2030, the percentage of seniors 65 and older in Missouri will double to one in five.⁸

Seniors today are more active than ever, yet Missouri recreation professionals rank them second after teens in unmet outdoor recreation needs.¹¹ Unless programs and facilities are provided to meet the needs of seniors, that unmet demand is likely to grow.

Missouri's ethnic populations also present new challenges. Minority populations have grown three times as fast as the state's general population over the last decade, with a Hispanic growth rate of 79 percent during that time.⁸



Seniors birdwatching (U.S. Fish & Wildlife)

Minorities tend to participate in outdoor recreation at a lower rate than white residents, which impacts not only their own health but also decisions regarding future outdoor recreation development and funding. The National Park Service, for example, considers the issue of underserved minority populations in parks a critical one, since it affects how parks are developed, visited and valued, and ultimately, how the public will support future funding for parks and outdoor recreation.⁹

Funding and Economics – Doing More with Less

The economy is on everyone's mind today, including outdoor recreation professionals and residents. The Missouri SCORP studies show that professionals¹¹ and residents¹⁶ agree – lack of a stable funding source is the number one critical issue affecting outdoor recreation in Missouri. Missourians also believe that facility upkeep, more locations and the availability of future park land, all of which require funding, are important issues.

More than half of Missouri residents say that funding for parks, greenways and conservation areas should be budget priorities, even in difficult times. More than nine out of ten want tax dollars spent on parks and recreation services for their children, and more than half say that educating their children about the outdoors should be a higher priority in the future. Nearly 90 percent of Missourians believe local communities have a responsibility to protect open space.¹⁶

Outdoor recreation and open space require funding, but they also can stimulate local economies. Trail systems, in particular, contribute to the economic vitality of the community while cost-effectively meeting a wide range of recreation needs: from hiking, trail running and bicycling to nature study and bird watching. Trails and multi-use fields are increasingly popular among Missouri communities and residents because they serve those multiple needs, ultimately allowing communities to “do more with less.”

Studies show that trails enhance property values, reduce transportation congestion and road maintenance, lower health care costs, and stimulate the economy through tourism, retail and sales and taxes.⁴⁹ Construction of trails, bike lanes and sidewalks alone can result in nine to 11 jobs per \$1 million of spending.⁵⁰

Parks and greenspace can be economic drivers through tourism, even exceeding commercial attractions. Nationally, for example, 150 million people visit the top 20 theme parks annually. But that number pales alongside the 912 million visits to federal parks and lands, the 730 million visits to state parks, and the countless millions of visits to regional, county and local parks and beaches, by people who also spend money in the local communities.⁵¹

Studies show the outdoor recreation industry contributes \$730 billion to the national economy each year through tourism, retail sales, services, jobs and taxes, including nearly \$24 billion in the seven-state census region to which Missouri belongs.³⁵

One way that communities can demonstrate their parks are economic engines is to enumerate the programs, festivals, events and facilities operated or co-sponsored by the park and recreation department, then compare them to similar activities sponsored by local nonprofit and commercial organizations. In most communities, parks attract many more visitors than commercial attractions, and are central to tourism.⁵¹

Demand for Trails and Walkable Communities

Since the 1950s, America's communities and streets have been designed and built for cars, but that perspective is shifting due to changing demographics and rising energy costs. Missouri leaders and planners recognize a need for transportation options that meet the needs of all citizens, regardless of ability, age or income level.

The Missouri Livable Streets initiative builds support around the state for livable streets, with a focus on providing transportation corridors for all users whether they drive, bike, walk or use assistive devices such as wheelchairs.⁵² This public-private partnership of the University of Missouri Extension, Missouri Department of Transportation and 12 other organizations has helped 14 communities develop Livable Streets policies and resolutions since its founding in 2004.

Trails and walkable communities can meet a variety of needs while also encouraging walking, running and bicycling for recreation. Many popular outdoor activities – running, jogging, bicycling – can take place on trails, sidewalks and walkable streets. Americans with trails, walking and bike routes near their homes have outdoor recreation participation rates 20 to 25 percent higher than those without.³

⁴⁹ Economic Benefits of Trails. American Hiking Society, 2001.

⁵⁰ Garrett-Peltier, Heidi. Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts. Political Economy Research Institute, University of Massachusetts, Amherst. June 2011.

⁵¹ Crompton, John L. Measuring the Economic Impact of Park and Recreation Services. Research Series. National Recreation and Park Association, 2010.

⁵² Missouri Livable Streets Design Guidelines. University of Missouri Extension. August 2011.

Our own studies show that trails are the most popular type of outdoor recreation facility in Missouri and the one that residents most want to see increased. Missourians would like to see more walking and biking trails, and three-fourths of residents who don't have sidewalks say they would use them.¹⁶

Currently only two percent of Missourians walk to work and 0.2 percent ride their bikes, as compared to 2.9 percent of Americans who walk and 0.6 percent who bike. Missouri, in fact, ranks 40th among the states in walking and 44th in bicycling to work. But efforts in Kansas City, St. Louis and other Missouri communities offer hope for future increases in bike/ped transportation. Although Kansas City is 33rd among the largest 50 U.S. cities in rates of walking to work and 44th in bicycling, it ranks 12th in the nation in per capita funding for bicycle/pedestrian transportation and in the top third for policy and education/encouragement.⁵³

Although biking and walking rates are lower in rural areas than overall national rates, bicycle and pedestrian infrastructure is still important to rural residents. According to a report by the Rails-to-Trails Conservancy, the share of trips made on foot or by bike in “rural cores” of 2,500 to 50,000 residents is only 20 percent lower than the rate for larger urban cores. For work-related trips, rural areas fall in line with overall national biking- and walking-to-work rates.⁵⁴

Public transportation to outdoor recreation facilities is a major issue throughout Missouri, both rural and urban. Few state parks and outdoor recreation facilities in rural areas can be accessed through public transportation. Many urban neighborhoods in Missouri lack parks and connections to nature within walking distance.

A University of Chicago study found that communities with lower incomes, higher poverty rates, and higher proportions of racial and ethnic minorities had the fewest opportunities for community-level physical activity.⁵⁵ Communities can find space for urban parks through good planning and creative thinking. In other regions of the country, new parks have sprouted in unlikely places – abandoned rail lines, parking lots, rooftops, reservoirs and landfills.

In Missouri, parks and recreation professionals expressed a desire to inventory all of the trails in the state. Therefore, as part of this SCORP, a statewide inventory of trails was conducted to identify available resources and provide a base of knowledge for determining gaps. The trail inventory is ongoing and not yet comprehensive, but the first effort identified nearly 1,000 trails stretching more than 3,000 miles throughout Missouri. The ultimate goal is to develop a user friendly, web based, interactive trail inventory and trip planning tool.

Education – the Benefits and Value of Parks and Recreation

Recreation professionals in Missouri put education at the top of their list of priorities.¹¹ They believe that residents need to understand the benefits and value of outdoor recreation if they are to become more active and more supportive of future funding for outdoor recreation.

⁵³ Bicycling and Walking in the United States 2012: A Benchmarking Report. Alliance for Biking & Walking.

⁵⁴ Active Transportation Beyond Urban Centers. Rails-to-Trails Conservancy. 2012.

⁵⁵ Revitalizing City Communities with Parks: How can cities adapt to a changing climate? Planet Forward on PBS, 2011.

Unfortunately, residents don't always link the benefits of recreation facilities with specific funding needs. A study conducted for SCORP by the Missouri Park & Recreation Association showed that residents valued neighborhood parks highly when they bought a home, but ranked trails and connectors relatively low in funding importance.²⁷

Recreation professionals understand that educating the public and elected officials about the health and environmental benefits of outdoor recreation is important to developing, sustaining and increasing support. For example, Missouri residents overwhelmingly (95%) believe that spending time outdoors leads to happier and healthier lives; that parks, recreation and open space are important to health (90%); and that local communities have a responsibility to preserve and maintain open space (88%). Education can link these important public values with the need to support parks and open space.²⁷

Outdoor recreation must be recognized, stimulated and supported by the public and public officials, in order to thrive. The Missouri State Parks "Parks 20/20: a Strategic Plan" addresses this issue, outlining strategies to build public and political support for funding, strengthen partnerships, educate legislators, increase visibility and engage the public in improving the state park system.²³

St. Louis County, for example, recently proposed closing 23 county parks and eliminating park rangers, a projected savings of \$4.3 million in the 2012 budget. But when hundreds of residents protested, the proposed cuts were withdrawn. The incident highlighted the benefits and value that residents place on their investment in parks. The Missouri Parks and Recreation Association launched the "Did You Know" campaign in 2012 to educate outdoor recreation users and turn them into knowledgeable advocates.

Health & Wellness

Outdoor recreation can have a powerful impact on both an individual's and a community's health, an important consideration for Missouri, the 11th most obese state in the country. More than two-thirds of Missourians statewide are overweight and 30 percent are obese. In some counties, the average obesity level reaches nearly 40 percent. Thirteen percent of children statewide are considered obese.⁶

Rigorous studies over the past decade have objectively measured data such as crime statistics, blood pressure, neurocognitive tests and immune system function to show that people living in neighborhoods with more open space, parks and trees have better health, even when the economic advantages of "green" neighborhoods are taken into account.³⁰

Some studies have established links between land development patterns and obesity. Sprawling developments and communities without sidewalks, parks and communal open space may correlate with high levels of obesity while parks, trees, and open space may contribute to better health as well as cleaner air and water.⁵⁶ These patterns emerge in some Missouri counties when comparing maps of obesity rates and lack of physical activity (Table 27, Table 28).

⁵⁶ Americans Outdoors: Recreation and Conservation Patterns, Trends, and Emerging Issues. Resources For The Future.

Obesity Rate, 2007

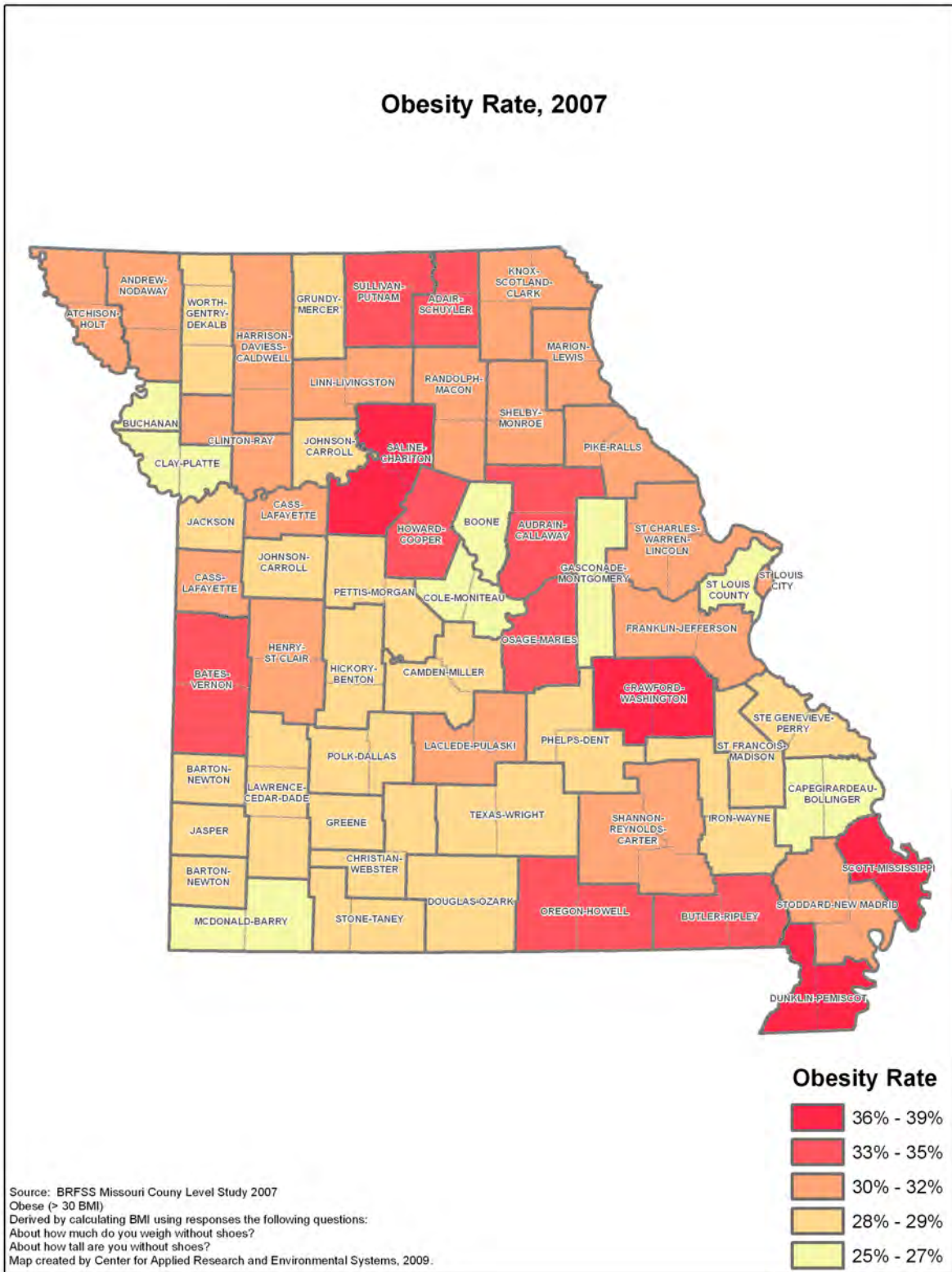


Table 27 - Missouri Obesity Rate 2007

No Leisure Time Physical Activity Rate, 2007

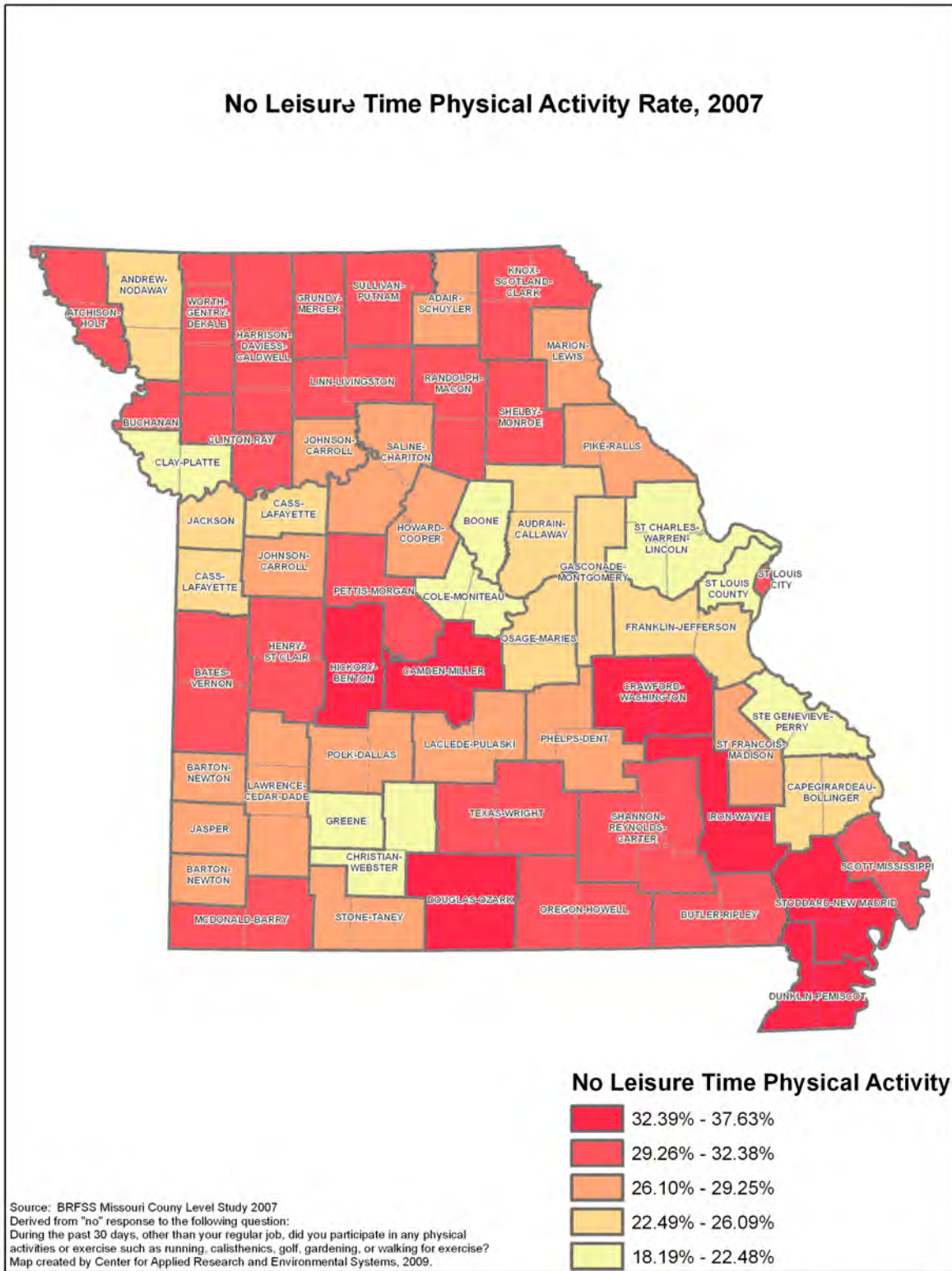


Table 28 - Lack of Leisure Time 2007

Some of Missouri's healthiest counties are in rapidly growing metropolitan areas, which tend to have more parks and rank the highest in activity levels, various other health factors, and health outcomes. These healthy areas include most of the state's ten fastest growing counties.

Many rural areas and older city centers, however, are much less healthy. The city of St. Louis ranks 105th among 114 Missouri counties in terms of health outcomes and it ranks 114th, dead last in the state, for various health factors. Meanwhile, neighboring St. Louis County ranks 18th best for health outcomes and 4th best for health factors.⁵⁷

St. Louis University researchers found that 31 percent of St. Louis city residents and 22 percent of St. Louis County residents do not engage in any physical activity. Their study also found that city residents die of heart disease, cancer, stroke and diabetes at a higher rate each year than county residents.⁵⁸

The health benefits of outdoor recreation are undeniable. Brisk walking for just three hours a week or half an hour a day is associated with a 30 to 40 percent lower risk of heart disease in women.⁵⁹

Having a park or open space close to home greatly influences how often a person participates in outdoor recreation. In Missouri, only 17 percent of the state's census blocks contain at least one park or have one within a half-mile, as compared to a national average of 20 percent.¹⁹

In addition to building more parks, communities can partner to develop interconnected trails, parks and open space. They also can work with schools to provide community programs at school-owned recreation facilities. More than 90 percent of Missouri middle and high schools allow community-sponsored use of their facilities after hours.¹⁹

National studies show that people are more likely to use specific areas of a park when organized activities are provided, suggesting that the availability of structured, supervised activities will also increase park use.⁵⁹ In Missouri, residents want to see more organized and supervised recreation programs, according to our SCORP study.¹⁶

⁵⁷ Missouri County Health Rankings: Mobilizing Action Towards Community Health. <http://www.countyhealthrankings.org/missouri>. Robert Wood Johnson Foundation in collaboration with the University of Wisconsin Population Health Institute, 2011.

⁵⁸ Billhartz, Cynthia. Study analyzes health in poor neighborhoods. St. Louis Post-Dispatch, 2011.

⁵⁹ Godbey, Geoffrey. Outdoor Recreation, Health, and Wellness: Understanding and Enhancing the Relationship. Resources for the Future Background Study – Discussion Paper, 2009.

Youth, Technology and the Reality of Nature Deficit

Remember playing outdoors from morning ‘til dusk, coming inside only when someone called you to dinner?

Those long childhood days outdoors are largely gone, lost to competition from television, handheld devices, computers, increased homework and extracurricular activities, and reduced access to natural areas.

Today’s children spend only half as much time outside as their parents did, but use electronic devices an average seven hours a day.³⁹ They may be very aware of global threats to the environment but their intimacy with nature in their own communities is quickly fading.

As a result, many children are experiencing diminished senses, attention difficulties, obesity, and higher rates of physical and emotional illnesses – something Richard Louv, author of the book *Last Child in the Woods*, calls nature-deficit disorder, the human cost of alienation from nature.⁶⁰



Children in nature (U.S. Fish & Wildlife)

“At no other time in our history have children been so separated from direct experience in nature,” says Louv, who adds that the impact goes far beyond this young generation. “If nature experience continues to fade from the current generation of young people, and the next, and the ones to follow, where will future stewards of the earth come from?”

Nationally, the nearly 80 percent of Americans who live in or near cities find it difficult to connect with the outdoors, according to America’s Great Outdoors, an initiative launched by President Obama to develop a 21st century conservation and recreation agenda.³⁹ Since outdoor activity typically declines with age, adults must find ways to involve children early to ensure a healthy future population.

Childhood participation in outdoor recreation nationally is highest among six- to 12-year-olds and declines gradually through the teen and early adult years, according to the Outdoor Foundation.⁴²

These participation rates are reflected in Missouri, where professionals are able to meet the recreation needs of young children but find it difficult to interest teens and keep them involved.¹¹ Only 60 percent of Missouri parents believe that their children’s outdoor recreation needs are being met, and residents want to see more organized recreation programs for youth.¹⁶

⁶⁰ Louv, Richard. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*, 2010.

In Missouri, less than one in three children under 17 spend two hours or more a day in outdoor recreation,²⁷ much lower than the 60 percent or more of children nationally who spend at least two hours outdoors according to a 2009 study.³⁶ One in four Missouri high school students, however, is physically active at least an hour a day as compared to just 17 percent of teens nationwide.³⁶

The most popular outdoor recreation facilities for Missouri children under five are playgrounds, pools and aquatic centers. Children six to 12 use those facilities plus sports fields, sports facilities and camping sites. Teens most often use sports fields, pools, skate and skateboard parks, sports facilities and baseball/softball fields.¹¹

As mentioned earlier, the nationwide popularity of skateboarding may provide an entry point to outdoor recreation for some teens. In Missouri, recreation professionals rank skate parks as the third most popular facility among teens.¹¹

Trail running is increasingly popular among teens nationally and is a gateway activity – 98 percent of trail runners also participate in other outdoor activities.⁶¹ And unlike many outdoor activities, participation in trail running increases as youth age.

The recession may have spurred an increase in activity at parks and recreation facilities. A 2009 Trust for Public Land report showed a sharp increase in park use by families.⁵⁹ And a 2010 National Survey on Recreation and the Environment's (NSRE) National Kids Survey offers hope for future participation trends. According to the study, 41 percent of kids spent more time in outdoor recreation during the study year as compared to the previous year, while only 15 percent reported spending less time outdoors.⁶²

Missouri residents want to see more organized outdoor recreation programs, particularly for youth.¹⁶ State agencies have long made efforts to involve children in the outdoors. Missouri State Parks, the Missouri Department of Conservation and other agencies offer Children in Nature programs to get children outdoors where they can experience and connect with nature.

Governor Jay Nixon and First Lady Georganne Nixon launched the statewide Children in Nature Challenge to give Missouri children more opportunities to learn about and experience nature first-hand across the state. Two lead agencies – the Missouri Department of Conservation and Missouri State Parks – work with the Departments of Elementary and Secondary Education, Health and Senior Services, Mental Health, Higher Education, and Economic Development to:

- Reach out to Missouri communities and encourage their use of existing state programs to educate and connect children with nature and the outdoors;
- Encourage communities to build local programs that expand upon existing state programs;

⁶¹ Special Report on Trail Running. Outdoor Industry Foundation, 2010.

⁶² Cordell, H. Ken; Betz, Carter J; Green, Gary T.; Dunleavy, Patricia G. National Survey on Recreation and the Environment - National Kids Survey. 2010.

- Serve as informational resources for Missouri communities undertaking the Challenge;
- Champion the Discover Nature Schools program and other indoor and outdoor instructional components for K-12 curriculum that strengthen children's connection to nature and enhance their education about the environment;
- Promote the Challenge and develop a process to recognize Missouri communities for their efforts and successes.

The WOW (Wonders of Wildlife) Program is a National Outdoor Recreation and Conservation School program that introduces families and individuals to a variety of outdoor activities. WOW provides hands-on learning in an outdoor setting, attracting a wide range of ages, interests and abilities. In Missouri, WOW is conducted at various locations throughout the state as a multi-agency effort between local, state and federal partners.

The Department of Conservation mentors new hunters and anglers through youth hunting seasons, kids fishing days, free fishing days, youth hunt workshops and other special events.

The Missouri State Park Youth Corps gives young Missourians a chance to prepare for tomorrow's careers while experiencing the beauty and grandeur of Missouri's state parks.



Outdoor classroom (U.S. Fish & Wildlife)

Participants are challenged to “Think Outside” by working on projects that help preserve and enhance the state park system. A partnership between the Missouri Department of Economic Development’s Division of Workforce Development and the Missouri State Parks, the program helps youth develop critical leadership skills while bolstering an appreciation for the environment and “green” business concepts.

These kinds of programs can deliver big results. According to a nationwide study of data from the Youth Risk Behavior Surveillance

System, a small annual per-person increase in spending for parks and recreation may have significant positive effects on youth physical activity.

For example, an extra \$10 per capita spent on parks and recreation was associated with one-third of a day more per week of vigorous exercise by girls. To put that expense into a broader perspective, healthcare costs in the United States topped \$8,000 per person in 2009, with almost none of the money going to prevention.⁵⁹

In Missouri, Kansas City spends \$129 per person/per year in park capital and operating expenses, well above the national median of \$84. The City of St. Louis, which includes Forest Park, the sixth most-visited park in the nation, and the Jefferson National Expansion Memorial (the Gateway Arch), spends \$61 per capita.⁶³

Mentoring by parents, friends and schools is an important tool for getting children interested in the outdoors. A study by The Outdoor Foundation shows that 90 percent of adults who are active outdoors were introduced to outdoor activities between the ages of five and 18.³

Technology is a double-edged sword that may help agencies increase participation in outdoor recreation. The Outdoor Nation Youth Summit attended by 500 “Outsiders” youth identified GPS devices, iPods, MP3 players and mobile phones as tools that can both enhance and worsen the outdoor experience. Technology provides practical benefits – such as music for exercise, GPS mapping, social media planning – that also can act as distractions.⁶⁴

Ultimately, studies show that the key to reaching youth who don’t recreate outdoors is to bring the outdoors to them through family participation, incentives, mentoring, partnerships with celebrities and companies that youth respect, school outreach and field trips.⁶⁴

⁶³ City Park Facts. Trust for Public Land. 2011.

⁶⁴ Technology and Social Media. Outdoor Nation, 2010.

Outdoor Recreation Trends

Facilities

Trails stand out as the most popular outdoor recreation facility type in Missouri and demand is expected to continue over the next five years, according to outdoor recreation professionals.¹¹ Trails are the most popular facility of Missouri adults, from 19-year-olds to seniors, now and in the near future.¹⁶

Playgrounds and multi-use fields are the next two most popular outdoor recreation facilities among Missouri residents, followed by picnic areas, gardens and soccer fields. Football and baseball fields, picnic areas, fishing sites and outdoor swimming pools also are growing in popularity.¹⁶

Missouri children use playgrounds, water parks and pools, sports fields, and campsites more than other facilities. Teens most often use sports fields, water parks and pools, skateboard and skate parks, sports facilities and ball fields.¹¹

Field sports, swimming and parks attract young adults. As they age, Missourians visit picnic areas, golf courses, ball fields, community centers and pools more often. Missouri recreation professionals predict an increased demand for soccer fields, multi-use fields, playgrounds and outdoor pools over the next five years.¹¹

Recreation professionals expect to see little change over the next five years in the use of target shooting and hunting sites, volleyball courts, campsites, golf courses, boating and water access sites, and outdoor basketball courts in Missouri. Most professionals report that none of the outdoor recreation facilities they manage are decreasing significantly in popularity.¹¹

Activities

Walking is the most popular activity among Missouri residents who get outdoors daily, followed by gardening, birding/wildlife observation and dog walking.

Missouri residents overall expect to increase their walking, bicycling, birding/wildlife observation and hiking activity over the next five years,¹⁶ and recreation professionals expect trails to become much more popular.¹¹

Missourians camp at the same rate as the national average, about 15 percent of the population.⁶⁵ Camping is one of the most important and influential gateway activities, with more than three-fourths of people who camp also participating in other outdoor activities. Camping is expected to grow more in popularity in East-Central Missouri (636 area code) than other regions of the state.¹¹

⁶⁵ Special Report on Camping. Outdoor Foundation and Coleman Corporation, 2009.

Fishing and hunting, two important activities for introducing youth to the outdoors, are much more popular in Missouri than the national average, particularly among rural residents.⁶⁶ Nearly



Duck hunting (U.S. Fish & Wildlife)

30 percent of Missouri residents hunted in the past year as compared to just ten percent of Americans, according to a nationwide survey.

Two-thirds of rural Missourians go fishing each year as compared to 55 percent of urban residents¹⁶ and just 17 percent of Americans nationally.⁴⁶ Nearly 15 percent of Missourians overall expect to go fishing more often over the next five years.¹⁶

Not surprisingly, fishing, water sports, target shooting, hunting and ATV riding all are more popular among rural Missouri residents. Forty percent of rural

residents hunt and target shoot as compared to about one in four urban residents.¹⁶

One in five Missourians overall participates in ATV riding, another sport that is much more popular among rural than urban residents.¹⁶ Recreation professionals in Southwest Missouri expect to see hunting sites grow more popular over the next five years as compared to St. Louis-East. They also expect visits to target shooting sites to increase in Southwest and Northeast-Central-Southeast Missouri.¹¹

Urban Missourians walk, ride bikes, play baseball and golf more often than their rural neighbors.¹⁶ Professionals in urban areas predict an increased demand for ball fields, picnic areas and trails over the next five years.¹¹



Family bass fishing (U.S. Fish & Wildlife)

Half of Missouri residents expect to be more active outdoors over the next five years, with one in five saying their outdoor recreation will increase a lot. More urban residents anticipate their future activity increasing a lot as compared to rural residents (Table 29).¹⁶

⁶⁶ Special Report on Fishing and Boating 2010. Recreational Boating & Fishing Foundation and the Outdoor Foundation, 2010.

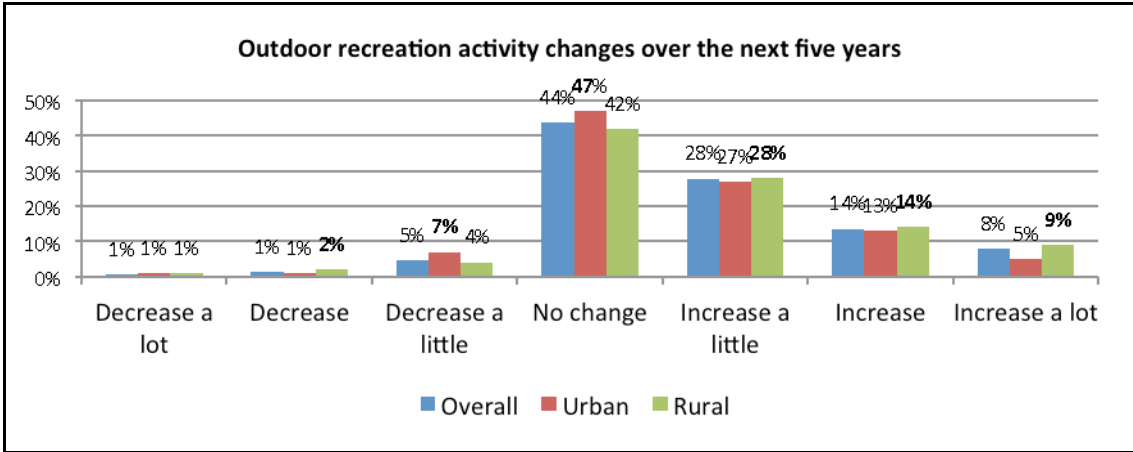


Table 29 - Changes in Activity Next Five Years - Urban vs. Rural

Fishing is the most popular activity expected to increase among current participants, followed by camping, bicycling and baseball (Table 30).

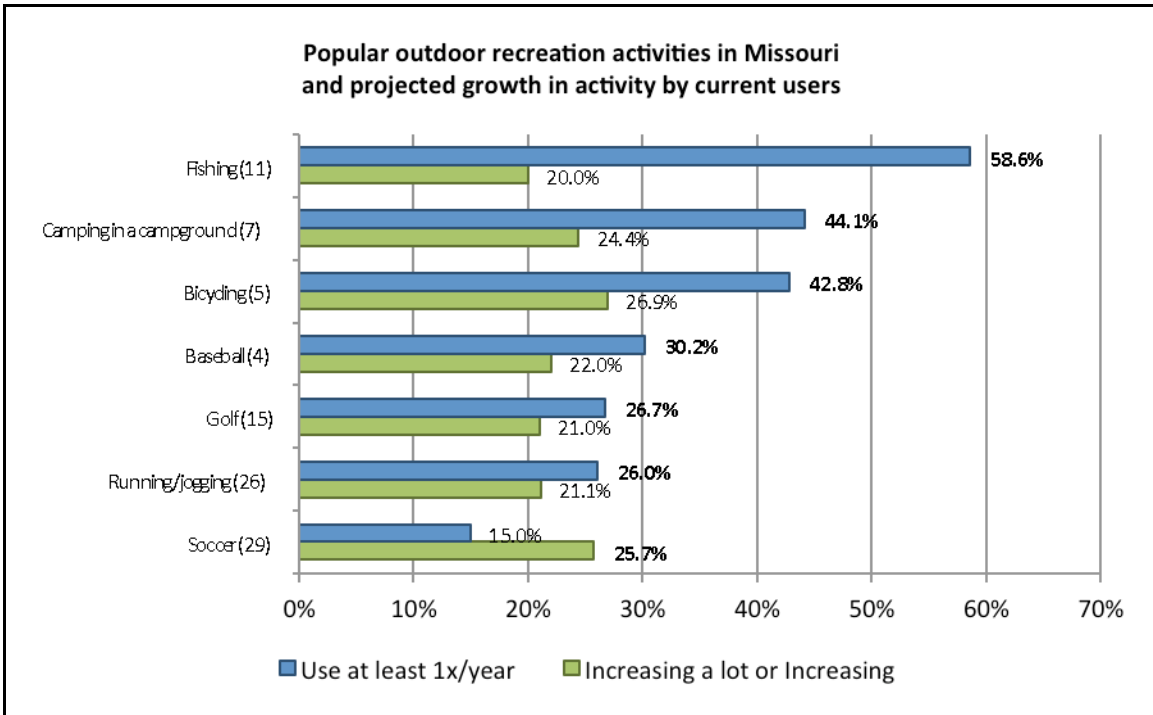


Table 30 - Growth in Popular Activities Next Five Years

Regionally, recreation professionals in Southwest Missouri (417 area code) predict an increased demand for gardens, ball fields, nature areas, campsites, and target shooting and hunting sites.

Professionals in the East-Central region predict a need for more multi-use fields, historic/education sites and campsites.¹¹

Recreation professionals in St. Louis-East (314 area code) expect an increased demand for gardens and nature areas while those in Northeast-Central-Southeast Missouri (573 area code) predict a higher demand for football fields and target shooting sites in their areas.

Professionals in the Northwest (660 area code) see a need for more gardens and campsites, and those in Kansas City-West (816 area code) expect ball fields and football fields to increase in popularity.¹¹

Obstacles to Outdoor Recreation

Time, health issues and cost often are cited as obstacles to spending time outdoors.

Half of Missouri residents don't get outdoors as much as they would like, and most say that work, family and personal obligations get in the way. Missourians who don't participate in outdoor recreation at all, blame age, health concerns and disability. Fifteen percent who never participate simply are not interested. Only one in twenty non-participants blames lack of time.²⁷

Nationally, the uncertain economy has affected spending on outdoor recreation but has not affected the time spent outdoors as much. A third of Americans have cut expenditures on equipment, travel and fees but more than half have not reduced their time outdoors. In fact, over the past decade, the number of people participating in outdoor activities has increased four percent and the days of participation have increased 25 percent.⁴⁰

One in five Missourians believes funding is a critical obstacle to improving outdoor recreation in the state. They also cite concerns about maintenance of existing facilities, a need for more locations and the availability of land for future parks.¹⁶

Finally, a lack of interest among some children and most teens presents unique challenges to outdoor recreation professionals. They must find ways to engage children and teens in outdoor activity, to improve their health and ensure their future participation and support for the outdoors.

Missouri Wetlands

Wetlands once covered nearly five million acres in Missouri. Most were bottomland ecosystems, filling the floodplains of Missouri's rivers and streams with marshes, swamp, shrub swamps, wet forests, prairies, oxbow ponds and sloughs.

Some wetlands were expansive, particularly along the Missouri and Mississippi rivers or the 2.4 million acre Mississippi Lowlands of southeast Missouri. Others were small, linked to geologic formations such as sinkhole ponds and grassy fens along lakes and rivers. On the flatwoods and hardpan prairies of the uplands, clay soils or bedrock held water on level plains and ridges.

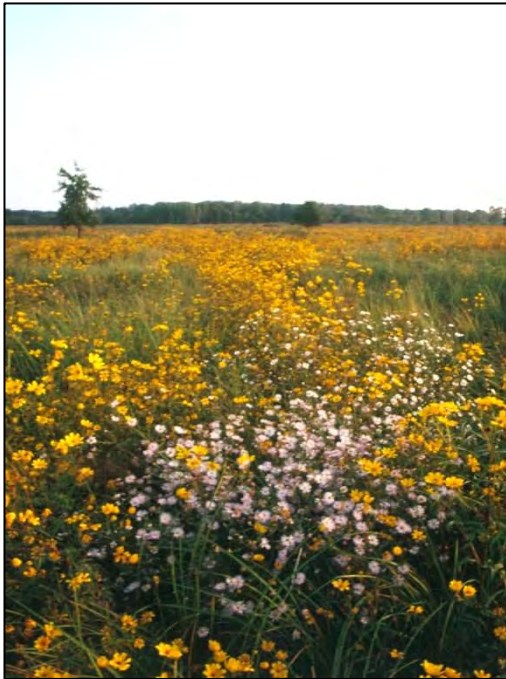


Figure 8

individuals, schools, environmental and youth organizations participating in wetland restoration projects made available by several recent public land acquisitions.

Agencies and Programs

Most public lands in Missouri contain or feature wetlands, and several agencies have developed programs to restore, manage, interpret or preserve them.

The Missouri Natural Areas program, the USDA's Wetland Reserve and Emergency Watershed Protection (EWP) programs, and the USACE's Missouri River Recovery Program all are examples of wetlands programs.

The Missouri Department of Conservation, Missouri State Parks, and the US Fish and Wildlife Service's National Wildlife Refuges all manage large units of public land that contain wetland resources, many with strong restoration and management components.

Today, wetlands are no longer common in any part of Missouri. Nearly 90 percent of our historic native wetlands have been drained for urban, pasture or farmland. While some types of wetlands have become quite rare, they still are the primary habitat for 200 plant and animal species considered rare or endangered in Missouri.

Wetlands are the wintering grounds and breeding habitat for many thousands of waterfowl, and the stopover grounds for migrating birds. All 43 of Missouri's amphibian species depend on wetlands, and many species of native fish, songbirds, mammals and insects inhabit them.

Modern wetlands also contribute significantly to tourism and outdoor recreation in Missouri. Hunting, fishing, hiking and birding are popular wetland

pursuits. Missourians increasingly sought are becoming involved with volunteerism on wetlands, with

Missouri's Comprehensive Wildlife Strategy includes many Conservation Opportunity Areas (COA) that feature wetlands. COAs focus the cooperative efforts of Missouri's public, environmental constituents and resource agencies on conserving Missouri's most significant resources, many of which include wetland regions. COAs also are priority areas for many of Missouri's major programs, grants and management initiatives.

For example, one of only two extant wet prairies in Missouri, the Locust Creek Prairie at Pershing State Park, recently was expanded through a major collaborative effort. This 1,400-acre wetland addition was purchased and is being restored largely through the USDA-NRCS EWP program (Figure 8).

The restoration planning for Confluence Point State Park involved a highly interactive collaboration between agencies and organizations. This wetland complex so close to the St. Louis metropolitan area is an excellent example of the planning being done in Missouri (Figure 9).

The many recent Missouri River Recovery Program acquisitions and sites, led by the US Army Corps of Engineers, also are excellent examples of wetland acquisitions and planning among Missouri's resource agencies.



Error! Reference source not found. - School field trips include a restoration project at the Edward "Ted" and Pat Jones Confluence Point State Park

The U.S. Department of Agriculture has the lead role in restoring wetland acres on private lands in Missouri. The Natural Resources Conservation Service (NRCS) tracks Wetland Reserve Program restorative gains and reports that 137,798 acres in Missouri have been enrolled in WRP (Table 31).⁶⁶ Top counties include areas of low slope in Central Missouri and part of the Mississippi River lowlands in Southeast Missouri (Table 32).⁶⁷

Gerald Hrdina of the U.S.D.A. Farm Service Agency in Columbia, Missouri reported in October 2011 that the agency has enrolled 17,056 acres in their Conservation Reserve Program. These restored wetland tracts are parcels that flood often, so returning these wet areas to their functional status as wetlands is the most economically viable solution for the landowner.

⁶⁷ Missouri NRCS Wetlands Restoration Statistics. Source: Missouri NRCS Environmental Easements Geodatabase. Compiled October 25, 2011 by Clifford J. Baumer and checked by Elizabeth A. Cook.

Missouri NRCS Wetlands Restoration Acres by Program				
	<i>WRP</i>	<i>EW RP</i>	<i>EWPP- FPE</i>	<i>TOTAL</i>
Restoration Cost-Share Agreement	913			913
30-Year Easement	15309			15309
Permanent Easement	92967	19364	9245	121576
TOTAL	109189	19364	9245	137798
State or Federal Ownership	18065	6048	1469	25582
Private Ownership	91124	13316	7776	112216
TOTAL	109189	19364	9245	137798
<i>Average Easement Size = 141.3 acres</i>				
<i>Total Missouri NRCS wetlands restoration easements: 975</i>				

Table 31

Missouri NRCS Wetlands Restoration Acres by County			
<i>Rank</i>	<i>County</i>	<i>Number of Easements</i>	<i>Easement Acres</i>
1	Chariton	166	21036.2
2	Pemiscot	28	10372.2
3	Vernon	17	10181.7
4	Carroll	69	6963.1
5	Saline	46	6774.2
	New		
6	Madrid	25	6305.5
7	Livingston	44	5995.2
8	Howard	31	5081.9
9	Dunklin	24	4803.0
10	Linn	32	4349.1

Table 32

The U.S. Environmental Protection Agency (EPA) funds local, tribal and state wetland protection efforts and wetland program development. The EPA also oversees protection of all U.S. waters for water quality and beneficial uses. The EPA assists the Army Corps of Engineers in the oversight of Section 404 dredge and fill permits and Missouri 401 Water Quality Certification for projects that impact Missouri's streams and wetlands.

The Missouri Department of Conservation (MDC), which owns considerable public land in the state, lists 15 conservation areas with 80,587 acres of valued wetland acres that host wetland outdoor recreation activities. The MDC also assist the Army Corps of Engineers in developing and maintaining public lands that have been set aside for mitigation of water control works and navigation environmental impacts along the Mississippi and Missouri Rivers

<http://www.mvr.usace.army.mil/EMP/>.

Missouri State Parks, operated by the Missouri Department of Natural Resources (MDNR), manages 85 state parks and historic sites. The state park mission includes preserving Missouri’s natural landscapes. Both major and minor wetlands exist throughout the system, and wetland restoration and management is a primary emphasis at all of these sites. In many cases, the public is given opportunities to experience and connect with natural wetlands through boardwalks, trails, overlooks, visitor centers, wayside exhibits and naturalist programs.

MDC and MDNR jointly administer the Missouri Natural Areas Program, which designates 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.”

Missouri Natural Areas offer a mechanism for recognizing and preserving important examples of Missouri’s natural communities, including the 23 distinct wetland natural community types found in the state. They include many of Missouri’s signature wetlands, including examples from north Missouri’s Big Rivers and Glaciated Plains (Figure).

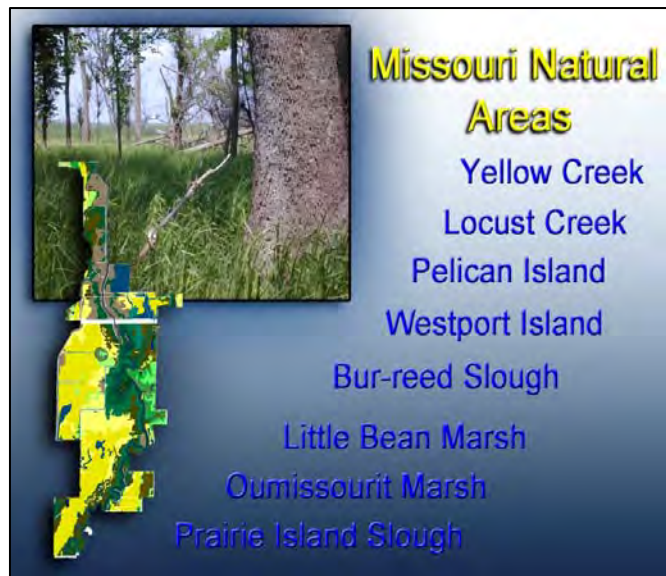


Figure 10

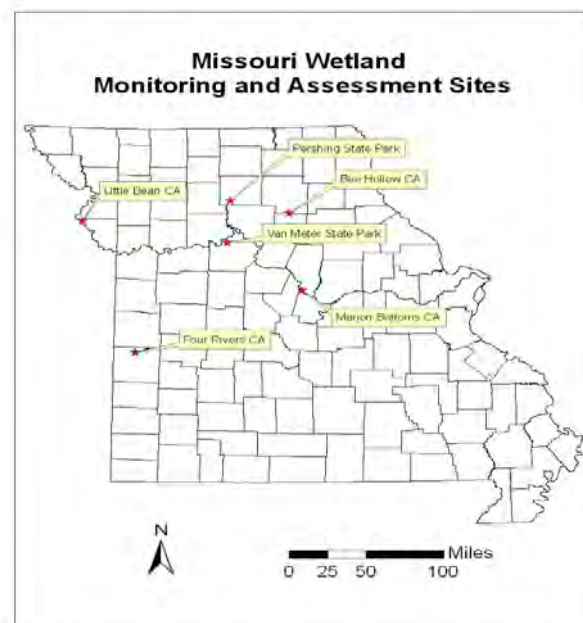


Figure 11

The MDNR Water Resources Center and several universities and state agencies have researched these wetlands, helping agencies refer back to a preferred condition for restored wetlands. State Natural Areas also serve as valuable education and recreation sites to help the public learn more about streams and wetland resources.

The MDNR Water Resources Center monitors the health and status of six Missouri wetland reference sites as part of a wetlands monitoring pilot program (Figure 11). The weather and hydrologic data from this project is made available in real time via the Internet. Streaming real-time data from these sites is a powerful tool for natural resource managers, wetland scientists and hydrologists working to better understand wetland functions. Further information on the wetland monitoring site locations is available at

<http://dnr.mo.gov/env/wrc/wetlands.htm>.

Wetland Acquisition Priorities

Missouri's wetlands are substantially reduced from their historic extent, yet they remain valuable for conservation and popular for outdoor recreation.

Wetlands of any type should be an acquisition priority for SCORP. Those situated near existing wetlands and public lands are particularly valuable, as they expand and concentrate natural systems into functional core units, which are most valuable for conserving species and maintaining wetland function. They also offer opportunities for the public to experience wetlands.

Several rare wetland types should receive particularly high emphasis. These include wet prairies, fens, marshes, flatwoods, swamps and wet bottomland forests.

Facilities to make wetlands more available and accessible to the public through trails, boardwalks, viewing areas and interpretation should be part of the overall state plan.

Strategically, wetland acquisitions that accomplish objectives within a designated Conservation Opportunity Area, enhance protection of Missouri Natural Areas and offer the best opportunity for the public to experience natural wetlands should receive top priority.

Next Five Years – Goals & Recommendations

Outdoor recreation can play a critical role in the lives and wellbeing of Missourians over the coming years, but only if it is affordable, accessible and relevant to residents' needs.

Research shows that outdoor recreation can improve physical and mental health, enhance local economies and reconnect people to the wonders of nature. In order to ensure future support and funding, providers must connect residents and community leaders with the values of outdoor recreation.

Missouri outdoor recreation goals and recommendations:

Meet Missourians' outdoor recreation needs

- **Provide easily accessible outdoor recreation facilities.**
Children and adults are more likely to participate in outdoor recreation if a facility is available close to home. Less than half of Missouri children currently have an outdoor recreation facility within a half-mile of their homes.
- **Focus on multi-use facilities.**
Trails, multi-use sports fields and other multi-use facilities help communities “do more with less” and serve the needs of more residents.
- **Encourage gateway activities.**
People who bike, run or walk on trails, go camping or fishing tend to participate in other sports as well. Gateway activities like these get people moving and often introduce them to new outdoor recreation options.
- **Provide more organized activities.**
Missourians want to see more organized activities, particularly for teenagers, who tend to lose interest in outdoor recreation.
- **Increase youth participation.**
Young people today are less active outdoors than any previous generation. Most active adults were first introduced to outdoor recreation as a child, by an adult. When kids play outdoors, everyone benefits – individuals, the community, the outdoor recreation industry and society as a whole.
- **Increase participation by minorities and older adults.**
Minorities are underrepresented in our parks and outdoor programs, and older adults are the second most underserved population after teenagers. Both groups make up growing segments of the population in Missouri

Make Connections

- **Team with other agencies that encourage healthy lifestyles.**
Other state agencies and nonprofit organizations share common goals and desired outcomes, such as reducing obesity, encouraging an active lifestyle and promoting amenities such as trails. Teaming with like-minded partners will increase the likelihood of success.
- **Communicate the value of outdoor recreation to residents and community leaders.**
Residents and community leaders value children, health, natural resources, conservation, clean air and water, employment opportunities and economics, but don't always connect them with outdoor recreation. Providers should promote the *benefits* of outdoor recreation that match these strong public values.
- **Connect community needs with the benefits of outdoor recreation.**
Residents want parks and other outdoor facilities near their homes but don't rank funding for parks as high as other community resources. Public communication can connect their needs with the benefits of outdoor recreation.
- **Promote the importance of funding outdoor recreation.**
Funding for outdoor recreation is the number one concern among recreation professionals, and is an issue that is growing more critical every day. Again, public communication is key to ensuring future funding for outdoor recreation.

Support Trails and Walkable Communities

- **Provide the structure and data for an ongoing trail inventory.**
A statewide trail inventory was conducted as part of this SCORP. The structure remains in place to expand the database.
- **Support the activities of a statewide Trail Alliance.**
The trail inventory conducted for this SCORP provides an excellent framework for an ongoing database of trail information, for use by planners and the public.
- **Encourage local officials to build walkable communities.**
Trails and walkable streets are in high demand throughout the state, and can provide close-to-home access to a wide variety of outdoor recreation activities.

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