



Image courtesy of LensArt Photography/Tobi Gomez



Chapter 2: **LOUISIANA'S OUTDOOR RECREATION DEMAND**

To establish priorities for land conservation, outdoor recreation, and natural resource protection for the next five years, Louisiana's Office of State Parks, along with outdoor recreation providers nationwide, face the challenge of balancing the demand for active and passive outdoor recreation use of public lands with protection and stewardship of water and land based natural resources.

This chapter highlights relevant recreation trends in Louisiana. Trends have been identified through multiple sources to demonstrate the demand for outdoor recreation facilities and natural resource protection. This data has influenced the focus and recommendations of the **2014-2019 Louisiana SCORP**.

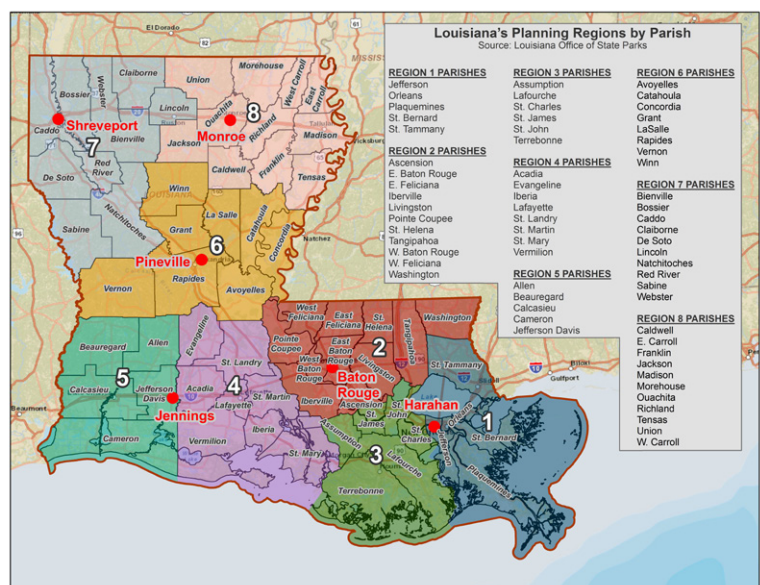
A. PLANNING METHODOLOGY

Innovative and traditional planning and analysis tools were used in developing the **2014-2019 Louisiana SCORP**, with input and guidance from our Task Force Committee (TFC) and SCORP Advisory Team (SAT). These groups are comprised of staff from the Division of Outdoor Recreation, Office of State Parks and representatives from academic, business and economics, health, and outdoor recreation provider sectors. A collaborative planning approach created a five-year plan with implementable recommendations that incorporates statewide comment and institutional history. The following methodologies were used.

Public Engagement and Surveys

Citizen stakeholder meetings were held in six regions throughout Louisiana. The meetings were hosted by local agencies in the following communities:

- Jennings - Jefferson Davis Parish, Regions 4 and 5
- Baton Rouge - East Baton Rouge Parish, Region 2
- Harahan - Orleans and Jefferson Parish, Regions 1 and 3
- Shreveport - Caddo Parish, Region 7
- Swartz - Ouachita Parish, Region 8
- Pineville - Rapides Parish, Region 6



Public meeting locations (Map courtesy of NTB Associates, Inc.)

In addition to public meetings, three meetings were conducted with the Task Force Committee throughout the planning process, as well as Office of State Parks staff project team meetings and interviews with key stakeholders as needed.

Surveys were conducted in several different formats:

- Random Telephone Survey (700)
- Online Open Link Survey (568)
- Provider Survey (106 received, target 100)
- MindMixer Online Community Engagement (564)

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Demographics, Trends, and Previous Planning Efforts

A demographics analysis and trends summary was prepared using data from ESRI Business Solutions and relevant outdoor recreation industry research. The trends analysis explored state and national trends in outdoor recreation participation, water recreation, active transportation, and healthy lifestyles. The previous SCORP was reviewed to determine commonalities and provide guidance.

Outdoor Recreation Resource Inventory and Proximity Level of Service Analysis

Using GIS data collected from state agencies and local parishes, an outdoor recreation resource inventory and proximity level of service analysis of Louisiana's outdoor recreation assets was developed. **Resource maps** depicting LWCF funding history, planning regions, population density, and **Proximity Analysis maps** showing levels of service for picnicking, playgrounds, walking trails, and water recreation at various distances traveled were produced. Analyses focused on proximity to known/mapped outdoor recreation assets across the state.

Findings and Visioning Workshops

Members of the Task Force Committee reviewed the findings and participated in a Visioning Workshop to evaluate recommendations based on five key areas: Economic Tourism, Trails, Innovation, Community Outdoor Recreation, and Cooperation and Coordination.

Key Issues Analysis, Strategies, and Recommendations

A Key Issues Analysis exercise was conducted using the highlights from the community engagement process, surveys, and GIS mapping process, which contributed to the development of strategies and recommendations.

B. PUBLIC ENGAGEMENT SUMMARY

The goals of the public engagement process for the **2014-2019 Louisiana SCORP** were to:

- Gather quantitative, relevant, and meaningful information to inform strategies and recommendations for the next five years
- Provide Louisiana residents and stakeholders the opportunity to be involved in the planning process
- Inform and encourage stakeholders to create a recreation vision for their communities and use sound planning principles to make their dreams a reality

Highlights of the public engagement activities are outlined below.

Regional Public Meetings

Citizen stakeholder meetings were held in six regions throughout the state. All meetings began with a presentation by the planning team to introduce stakeholders to the purpose of the plan, the planning process, and goals for outdoor recreation, natural resources, and open space in Louisiana. An interactive discussion was held to receive input on broad questions relating to outdoor recreation.

Detailed summaries of each regional meeting are provided in **Appendix C**. The regional meetings were hosted by local agencies, and yielded the following key findings.



Public meeting in Shreveport (Image courtesy of GreenPlay/Cindy Heath)

1.) Jennings

- Corridor management plan in progress (bicycling, off road, water, hiking) with a connectivity focus
- Natural resource protection is a priority
- Public beach access is desired
- Opportunities exist for agri-tourism, youth access, promotion of local assets

2.) Baton Rouge

- Partnerships, promotion, trends are a priority – target youth
- Expanded promotion of outdoor activities desired – highlight uniqueness
- Larger parks with staff presence/maintenance promote a feeling of safety
- Variety of activities available – bicycling, hiking, walking, water-based recreation
- Designing natural surface trails for seniors a desire
- Separate and distance ATV use from “quiet recreation”

3.) Orleans and Jefferson Parish

- Wetlands and family cabins are an asset
- Bicycling/walking trails are desired (with lighting for nighttime use)
- Floating cabins suggested to expand water access

4.) Shreveport

- Bicycle trails connecting adjacent parks desired
- Beautify and modernize parks to make them more attractive
- Perception of safety a concern
- Better access to bank fishing, ponds, lakes, rivers
- ATV groups underrepresented, but incompatible with “quiet recreation”



Off-highway vehicle (OHV) facilities, such as this 12 mile trail at South Toledo Bend State Park, are becoming more popular, but are incompatible with more passive forms of recreation (Image courtesy of the Louisiana Office of State Parks)

5.) Ouachita Parish

- Build awareness of geocaching community in Louisiana (70,000 users reported)
- Perception of safety for walking, running, recreation is a concern
- Multi-use facility desired for soccer/baseball/softball to enhance local economy
- Capacity of wildlife areas compromised (hunting overuse concerns)
- Tennis court upgrades desired
- Promote gateway activities to attract new users (ex: developed camping)

6.) Rapides Parish

- Red River an asset for water-based recreation
- Accessible dock on Pineville side of Red River desired – liability and safety issues
- Natural resource protection a priority
- Improve senior citizen accessibility/safety
- Rapides Foundation – funding sources

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Consistent themes emerged among the regions to suggest that the perception of safety is a factor in participation in outdoor recreation activities. This includes running and walking on trails, as well as a desire to make facilities more accessible to youth, senior citizens, and people with disabilities. Attendees across the regions recognize Louisiana's world class outdoor recreation opportunities and their potential to positively impact the local and state economy. Expanded access to water recreation (i.e. bank fishing) also emerged as a theme.

Statistically Valid and Open Link Surveys

A statistically valid, random telephone survey of 700 Louisiana residents was conducted during the planning process, with the results providing key insight into participation levels, preferred outdoor recreation activities, barriers to participation, and priorities for future investment. Concurrently, an open link web based survey was conducted with 568 respondents. It is useful to compare the results of the two surveys to determine where responses were aligned, which informs strategies and recommendations.

A significant number of respondents to both surveys prefer that outdoor recreation providers pursue an equal balance between preservation and protection of natural resources and developing outdoor recreation facilities, as noted in **Appendix I**.

Respondents' participation in outdoor recreation activities shows a preference for low cost natural resource based recreation preferences as well as visiting playgrounds. This finding helps to guide priorities for LWCF projects related to fishing and general water recreation access, trails, and community playground development. In addition to the priorities below, 70 percent of Open Link web survey respondents participate in outdoor recreation by visiting natural areas.



Many people prefer nature-based forms of recreation (Image courtesy of the Louisiana Office of State Parks)

The Top Ten most popular outdoor recreation activities reported are as follows:

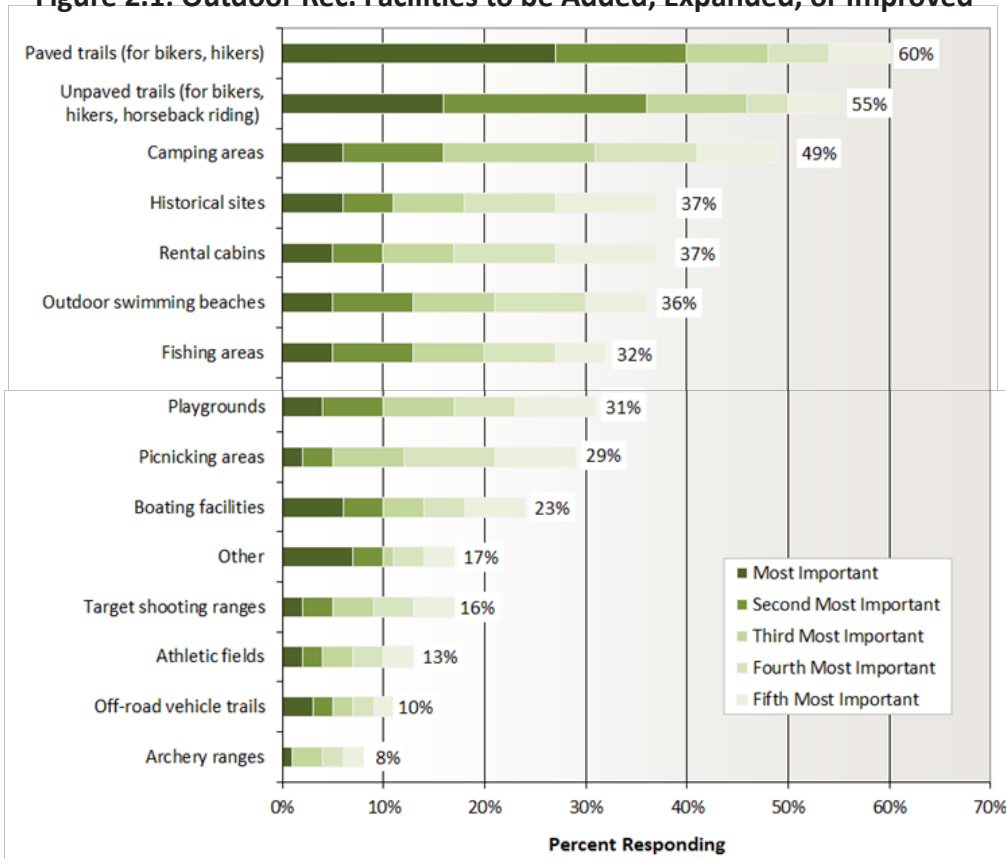
TOP TEN ACTIVITIES: RANDOM SURVEY	TOP TEN ACTIVITIES: OPEN LINK SURVEY
1. Fishing* (62%)	1. Walking (80%)
2. Walking (61%)	2. Visiting natural areas (70%)
3. Picnicking (55%)	3. Fishing (61%)
4. Swimming outdoors (52%)	4. Picnicking (61%)
5. Visiting playgrounds (51%)	5. Hiking/backpacking (53%)
6. Spectator activities (44%)	6. Nature programs/self-guided tours (52%)
7. Visiting natural areas (44%)	7. Swimming outdoors (49%)
8. Hunting (42%)	8. Paddling (48%)
9. Playing outdoor athletic team sports (40%)	9. Primitive tent camping (47%)
10. Non-team outdoor sports (37%)	10. Botanical gardens (47%)

**Ranked as the most popular outdoor activity in the previous SCORP survey*

Kidz Korner Playland Project is a collaborative endeavor between the Pilot Club of Denham Springs Foundation and the City of Denham Springs. The goal of the project is to build an ADA approved playground for the children of Livingston Parish and surrounding areas to play without limitations set on their physical, mental or developmental abilities.

In a related question, survey participants were asked to identify facilities to be added or expanded. Paved and unpaved trails were by far the top priority as shown in **Figure 2.1** below:

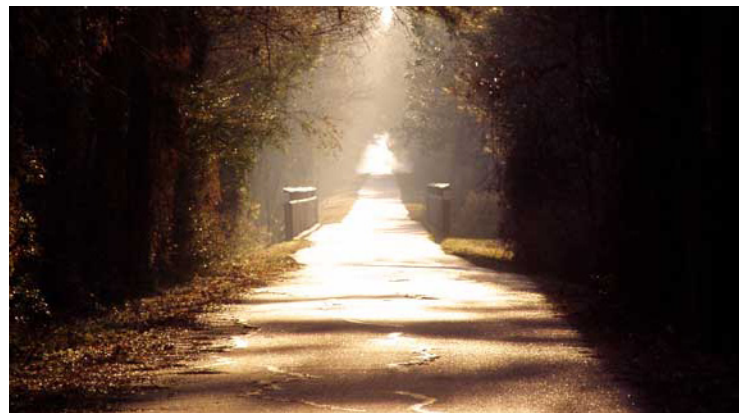
Figure 2.1: Outdoor Rec. Facilities to be Added, Expanded, or Improved



Fun for all (Images courtesy of Brandy Roberts/ Pilot Club of Denham Springs)



Adding sports lighting is one type of improvement to outdoor recreation facilities (Image courtesy of Atkins/Tommy Davidson)

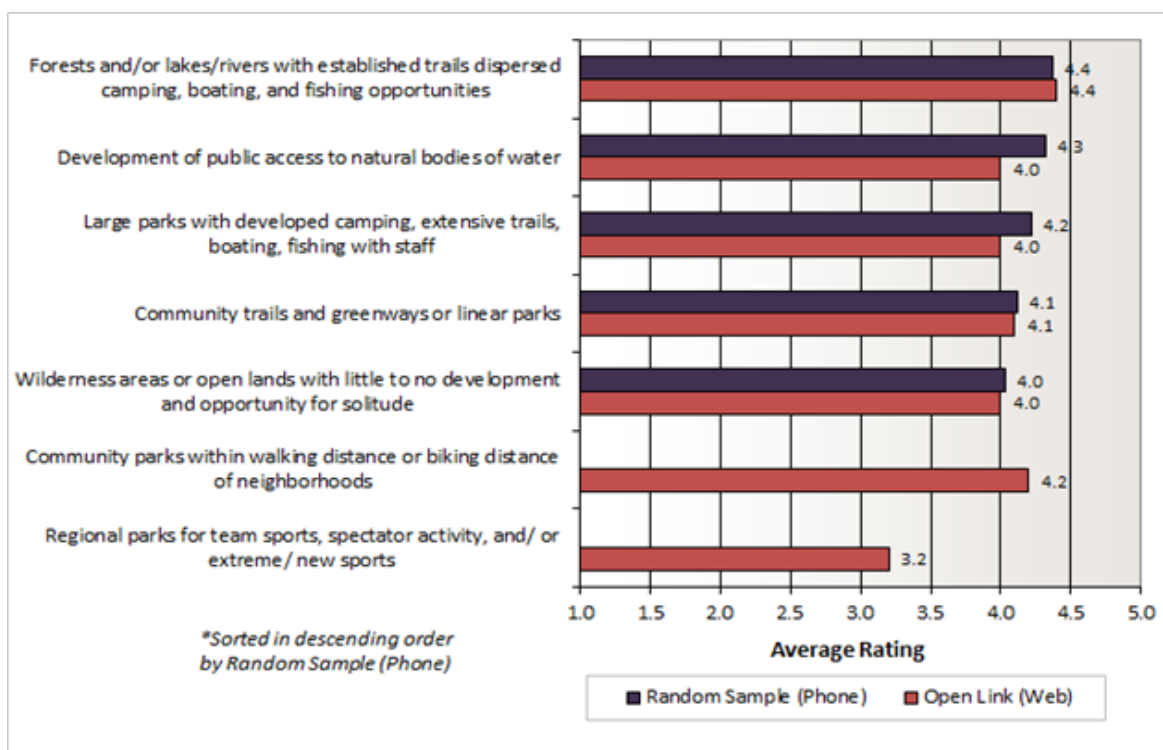


A connected network of paved trails will improve access to recreation facilities (Image courtesy of the St. Tammany Parish Government [website](#))

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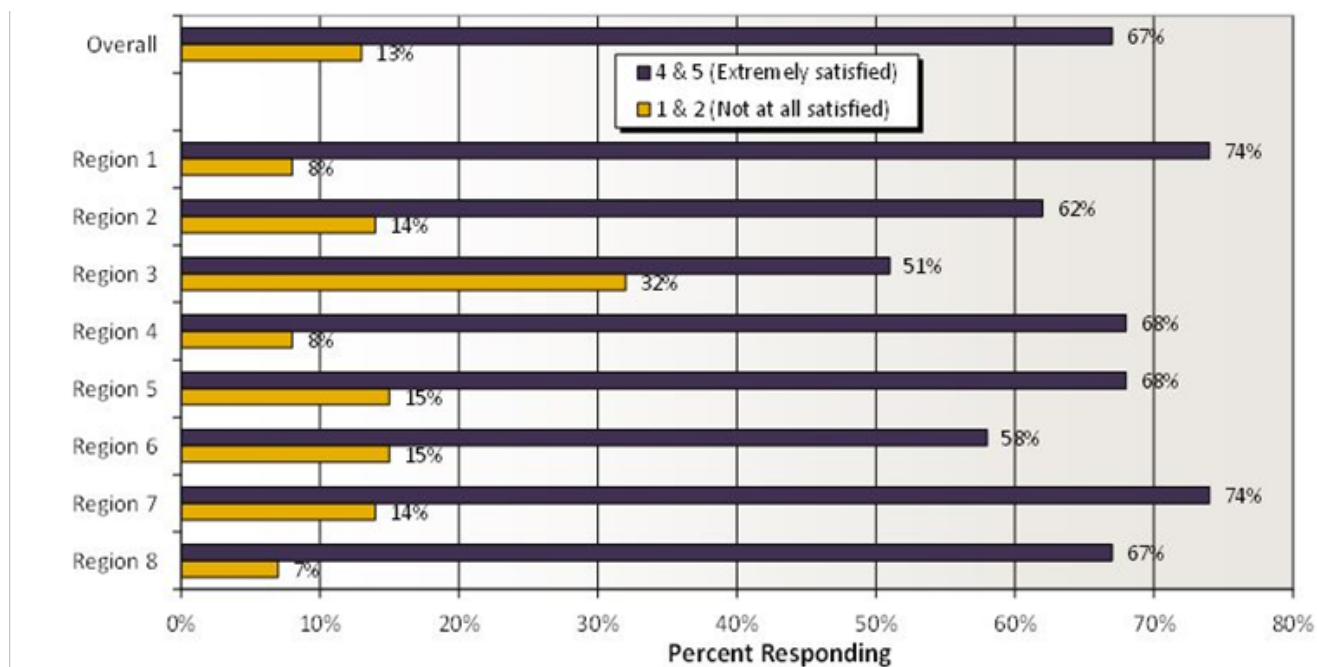
Priorities for future investment in outdoor recreation aligned with respondents' preferences for more trails, camping areas, and access to water recreation, as shown in **Figure 2.2** below:

Figure 2.2: Priorities For Future Investment



Regionally, respondents indicated a high level of satisfaction with the amount of public access to natural bodies of water near their home, indicating that more promotion of water recreation assets is needed to inform users of the opportunities for water recreation.

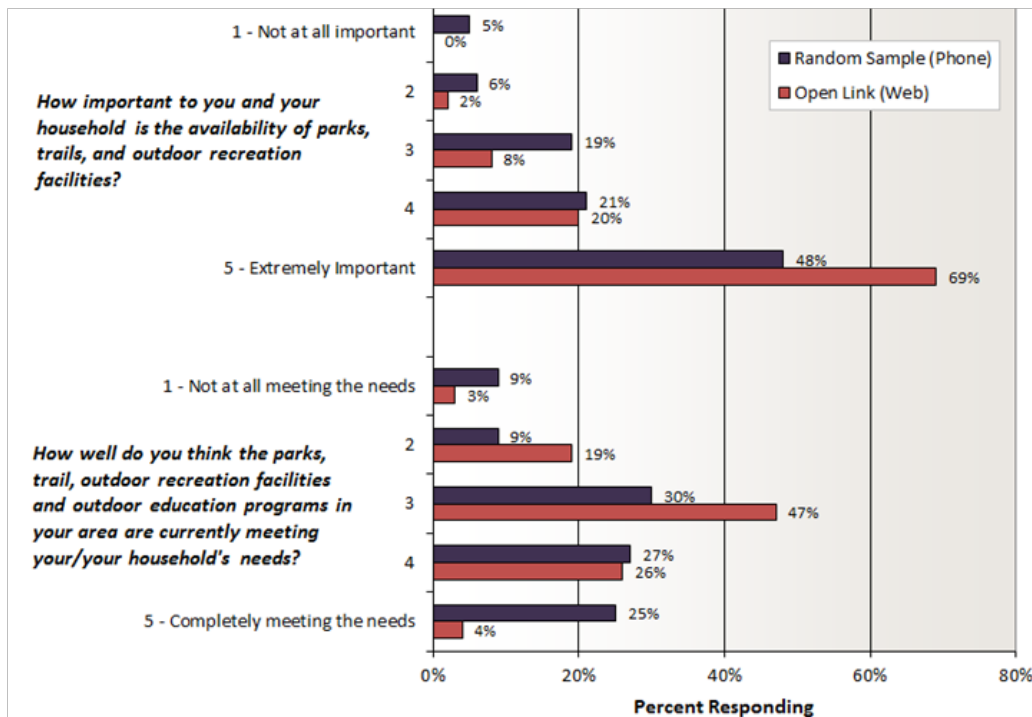
Figure 2.3: Satisfaction with the Amount of Public Access to Natural Bodies of Water Near your Home - By Region



Importance of Outdoor Recreation to Louisianans

Random and open link surveys conducted for the **2014-2019 Louisiana SCORP** revealed that 48 percent and 69 percent (respectively) feel that the availability of parks, trails, and outdoor recreation facilities are “extremely important” to their households. Responses to the random survey indicated that 48 percent shared this view, while the open link survey had a 69 percent response. When asked whether their needs were being met by outdoor recreation facilities, respondents were generally satisfied, but there is room for improvement, as shown in **Figure 2.4** below:

Figure 2.4: Importance of Outdoor Recreation and Needs Being Met



When asked, “How important is it to you that the State of Louisiana spend public funds to acquire land to prevent the loss of exceptional natural areas to development?” a majority of respondents to both surveys indicated that it was “extremely important,” as noted in **Appendix I**.

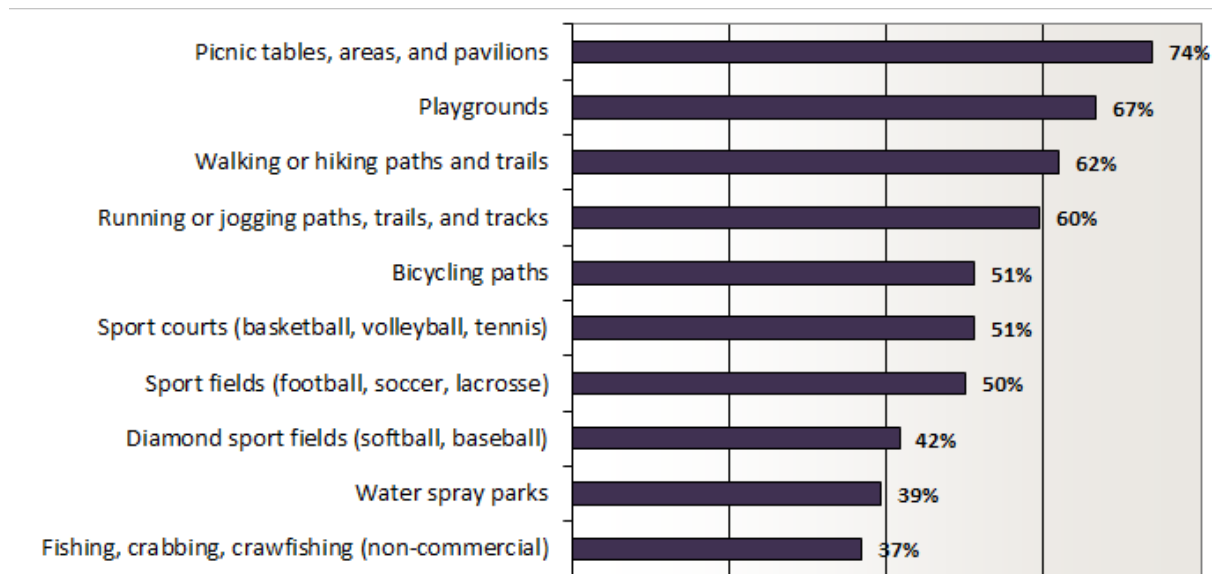


The availability of outdoor recreation facilities is extremely important to the public (Image courtesy of Atkins/Tommy Davidson)

Provider Survey

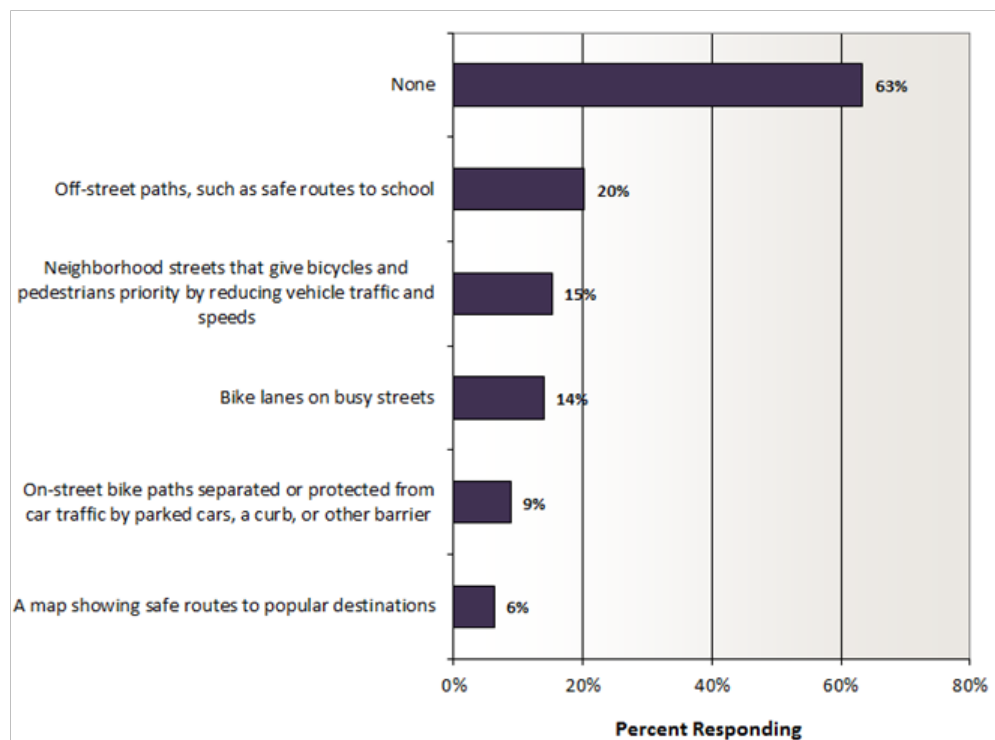
A significant finding in the results of the Provider Survey, sent to members of the Louisiana Recreation and Park Association, was the response to the following question, “What facilities or natural resources would you consider the most ‘in demand’ in your area?” As noted in **Figure 2.5** below, the results aligned with the citizen responses in the online and random surveys – picnic areas, walking and bicycling trails, and playgrounds – but access to water recreation does not appear to be an issue according to providers’ responses.

Figure 2.5: Facilities or Natural Resources Most In Demand



Interestingly, outdoor recreation providers identified walking and jogging trails and bicycling paths as facilities in demand, yet they do not provide bicycling facilities, as noted in **Figure 2.6** below:

Figure 2.6: Bicycling Amenities Provided



C. MINDMIXER ONLINE COMMUNITY ENGAGEMENT RESULTS

For this project, MindMixer Community Engagement tools were used to garner broad public input online at playoutdoorsla.mindmixer.com. Similar to the other community engagement tools, the MindMixer online engagement polls revealed a number of themes and ideas which contributed to the overall strategies and recommendations for the **2014-2019 Louisiana SCORP**. The MindMixer tool allows contributors to suggest ideas for improvement, and allows other visitors to provide comments and indicate support for the specific idea. Ideas that generated the most support were as follows:

- Demand for bicycling and walking facilities
- Safer and more connected bicycling and walking routes to recreation and community destinations
- Maintaining water quality for fishing and boating access
- Adding accessible launch facilities for car-top boats to water access facilities
- Preserving natural resources and land acquisition for future generations
- Provide better maintenance for existing parks/facilities to encourage new visitors
- Benches, observation decks, and boardwalks/walkways/bridges around natural features on the trails located in the Louisiana State Park system
- Promote awareness of local outdoor recreation opportunities

MindMixer contributors also provided comments to expand on the ideas that were generated. Relevant comments are outlined below:

“The active transportation movement is pushing all progressive communities and cities towards connecting trails.”

“There are many watersport-loving residents of EBR Parish and surrounding communities without any river access. I suggest launches be built at intervals along the Comite and Amite Rivers to provide residents a much-needed outlet to these water sources and allow boaters to put in and take out at measured intervals along these rivers. Suggested locations include the Comite/Amite Confluence, Waddill Wildlife Refuge, Bayou Manchac Confluence, etc.”

“I would love to see greenways which not only connect large community parks within parishes, but also city parks to state parks and refuges. For example, a hiking and biking trail that connects BREC’s Frenchtown Road Conservation Area to Tickfaw State Park would be an end goal to the project. It would provide a recreational outlet common in many other parts of the country that Louisiana has never experienced before!”

“Every community along the Mississippi River has a levee just waiting to be turned into a walking, running, and biking trail.”

“Don’t need a commuter network, but would like to see trails that connect neighborhoods to schools, shopping, grocery, and restaurants, not just to or from parks.”

“First impressions are everything. If a park is clean and well-kept, users tend to respect that. We must educate by example and, in turn, they will help out with the process. We need local communities where a park is located to buy into the pride of having that asset close to them.”

Task Force Committee (TFC)

Three meetings were conducted with the project's Task Force Committee, providing valuable multi-sector feedback on the community engagement findings and development of the project's vision for the next five years. The following highlights emerged:

- *Improve Trails and Connectivity:* For senior citizen access and perception of safety, consider both paved and natural surface trail improvements.
- *Build Awareness of Water Recreation Opportunities:* Consider all types of water recreation including fishing, swimming, and boating; encourage future information gathering on types of water access and water recreation activities.
- *Water Quality Concerns:* Relevant coastal studies cite water quality as an issue.
- *Multi-Sport/Regional Complexes and Youth Sports Participation:* Local recreation providers are lacking funds for maintenance and upgrades, many local ball park facilities are in disrepair, some are abandoned. Multi-sport regional facilities are an economic draw.
- *Youth Swimming Lessons:* Decline in lesson opportunities due to pool closings, local surveys indicate a demand and need for water safety training.
- *Playgrounds:* Quality improving in urban areas, but need exists to educate communities on maintenance and safety standards for playgrounds. A copy of the Public Playground Safety Handbook, published by the Consumer Product Safety Commission (CPSC) is available here: www.cpsc.gov/PageFiles/122149/325.pdf.
- *Open Space and Forest Lands:* Undeveloped forests are being clear cut and developed; survey respondents identified natural resource preservation/protection as a priority.



Piers facilitate many types of water recreation opportunities (Image courtesy of Atkins/Tommy Davidson)

D. ANALYSIS OF TRENDS IMPACTING OUTDOOR RECREATION

The following information highlights relevant state and national outdoor recreation trends from various sources that may influence Louisiana outdoor recreation planning for the next several years.

Parks and Recreation Industry Trends

Overarching trends impacting parks and recreation were identified in 2013 by the National Recreation and Park Association (NRPA) in collaboration with a national group of industry leaders. These trends are summarized below:

- **Human Capital:** Parks and recreation professionals of the future must be equipped to contribute to creating and sustaining livable, healthy, and environmentally resilient communities. Human-capital development will focus on young professionals and succession-planning needs.
- **Green Infrastructure:** Parks and conservation lands will increasingly be tapped for their potential to contribute to stormwater management and improving air quality
- **The Societal Piece:** It is vital that parks and recreation professionals understand the concept of social equity in the context of social innovations such as technology, placemaking, and repositioning agencies as contributors to public health.
- **Reframing Our Proposition:** Parks and recreation must be contributors to the social innovation strategies such as healthy eating and active living strategies that help communities become vibrant places that people value.
- **Economic Forecast:** New trends, such as the infusion of private capital into public parks, innovative public-private partnerships, and privately funded and managed parks have caused a re-evaluation of traditional methods of funding parks and recreation through tax supported general funds.

Demographic Trends in Recreation

Adults – The Baby Boomers - Planning for the Demographic Shift

Baby Boomers are defined as individuals born between 1946 and 1964, as stated in Leisure Programming for Baby Boomers.⁶ They are a generation consisting of nearly 76 million Americans. In 2011, this influential population began its transition out of the workforce. As Baby Boomers enter retirement, they will be looking for opportunities in fitness, sports, outdoors, arts and cultural events, and other activities to suit their lifestyles. With their varied life experiences, values, and expectations, Baby Boomers are predicted to redefine the meaning of recreation and leisure programming for mature adults.

In the leisure profession, this generation's devotion to exercise and fitness is an example of its influence on society. When Boomers entered elementary school, President John F. Kennedy initiated the President's Council on Physical Fitness; physical education and recreation became a key component of public education. As Boomers matured and moved into the workplace, they took their desire for exercise and fitness with them. Now as the oldest Boomers are nearing 65, park and recreation professionals are faced with new approaches to provide both passive and active programming for older adults. Boomers are second only to Gen Y/Millennials (born between 1980 and 1999) in participation in fitness and outdoor sports.⁷

In an article titled, *"Recreating retirement: how will Baby Boomers reshape leisure in their 60s?"*⁸ Jeffrey Ziegler, a past president of the Arizona Parks and Recreation Association, identified "Boomer Basics." Highlights are summarized below.

⁶ Linda Cochran, Anne Roshchadl, and Jodi Rudick, *Leisure Programming For Baby Boomers*, *Human Kinetics*, 2009.

⁷ 2012 Participation Report, Physical Activity Council, 2012.

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

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Boomer Basics

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

Boomers will look to park and recreation professionals to give them opportunities to enjoy many life-long hobbies and sports. When programming for this age group, a customized experience to cater to the need for self-fulfillment, healthy pleasure, nostalgic youthfulness, and individual escapes will be important. Recreation trends will shift away from games and activities, such as bingo, bridge, and shuffleboard, that Boomers associate with senior citizens, because they relate these activities to being old and inactive.

BABY BOOMERS: IMPLICATIONS FOR OUTDOOR RECREATION IN LOUISIANA

Louisiana's demographic profile indicates that 26.2% of the current population falls within the Baby Boomer age range (approximately 45 - 64 years of age). As a result, local parishes should begin to evaluate programs and services, conduct outreach to determine the needs and interests of this cohort, and recognize the need to support this group's health and physical activity needs.

Boomers have reinvented what being retired and 65 years old means. Parks and recreation agencies should plan for Boomers carrying on in retirement at the same hectic pace in which they have lived during their years in employment. Things to consider when planning for the demographic shift:

- Boomer characteristics
- Passive and active fitness trends
- What drives Boomers?
- Outdoor recreation/adventure programs
- Marketing to Boomers
- Travel programs
- Arts and entertainment

MULTI-GENERATIONAL PROGRAMMING: IMPLICATIONS FOR OUTDOOR RECREATION IN LOUISIANA

In Louisiana, the highest ranking age cohort is 25 - 34 (14.3% of the population), followed closely by the 45 - 54 (13.6%), 55 - 64 (12.9%), and 35 - 44 (12.2%) age groups.

The 64 - 75 cohort is expected to grow from 6.9% in 2010 to 9.2% in 2018.

Planning for the next ten years suggests a growing demand for programs and services for young adults, Baby Boomers, and seniors.

Cultural Diversity Trends

The 2010 U.S. Census indicates that, while the overall Louisiana population increased by only one percent, there was a 79 percent increase in Hispanic population between 2000 and 2010. The age group of those under age 18 forms about a quarter of the U.S. population, and this percentage is at an all-time low. Nearly half of this population group is ethnically diverse, and 25 percent is Hispanic.

CULTURAL DIVERSITY: IMPLICATIONS FOR OUTDOOR RECREATION IN LOUISIANA

Regarding cultural diversity, implications for Louisiana outdoor recreation and leisure service providers include a greater awareness of the Hispanic community's priority on multi-generational family activities, and considering the potential for language barriers to impact participation.

Youth - Planning for the Demographic Shift

As one of the five trends shaping tomorrow today, Emilyn Sheffield identified that the proportion of youth is smaller than in the past, but still essential to our future. As of the 2010 Census, the age group under age 18 forms about a quarter of the U.S. population, and this percentage is at an all-time low. Nearly half of this population group is ethnically diverse and 25 percent is Hispanic.⁹

Facilities Development Trends

According to *Recreation Management* magazine's "2013 State of the Industry Report,"¹⁰ national trends continue to show an increased user-base of recreation facilities (private and public). To meet that growing need, a majority of the survey respondents (62.7%) reported that they have plans to build new facilities or make additions or renovations to their existing facilities over the next three years. The average age of respondents' main facilities is 27.7 years. Public parks and recreation respondents planning construction were the most likely to be planning renovations (50.5%), building new facilities (28.3%), and making additions to current facilities (27.9%).

The average amount planned by public parks and recreation respondents for construction for parks in 2013 budgets saw an increase of 15.5 percent from an average of \$3,440,000 in last year's survey to an average of \$3,973,000 for 2013. The five most commonly planned facility additions include: dog parks, splash play areas, trails, park structures (shelters/restrooms), and playgrounds.

This national trend in facility planning generally aligns with the random telephone survey results for outdoor recreation participation in Louisiana, in which respondents identified trails and greenways (74%), public access to water (80%), and large multi-use parks (77%) as desired future improvements.

The current national trend is toward "one-stop" indoor recreation facilities to serve all ages. Larger, multi-purpose recreation centers that serve large portions of the community help increase cost recovery, promote retention, and encourage cross-use. Agencies across the U.S. are increasing revenue production and cost recovery. Multi-use facilities versus specialized space is a trend, offering programming opportunities as well as free-play opportunities. "One stop" facilities attract young families, teens, and adults of all ages.

⁹ Emilyn Sheffield, "Five Trends Shaping Tomorrow Today," *Parks and Recreation*, July 2012, p. 16-17.

¹⁰ Emily Tipping, "2012 State of the Industry Report, State of the Managed Recreation Industry," *Recreation Management* magazine, June 2012.

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Aquatics

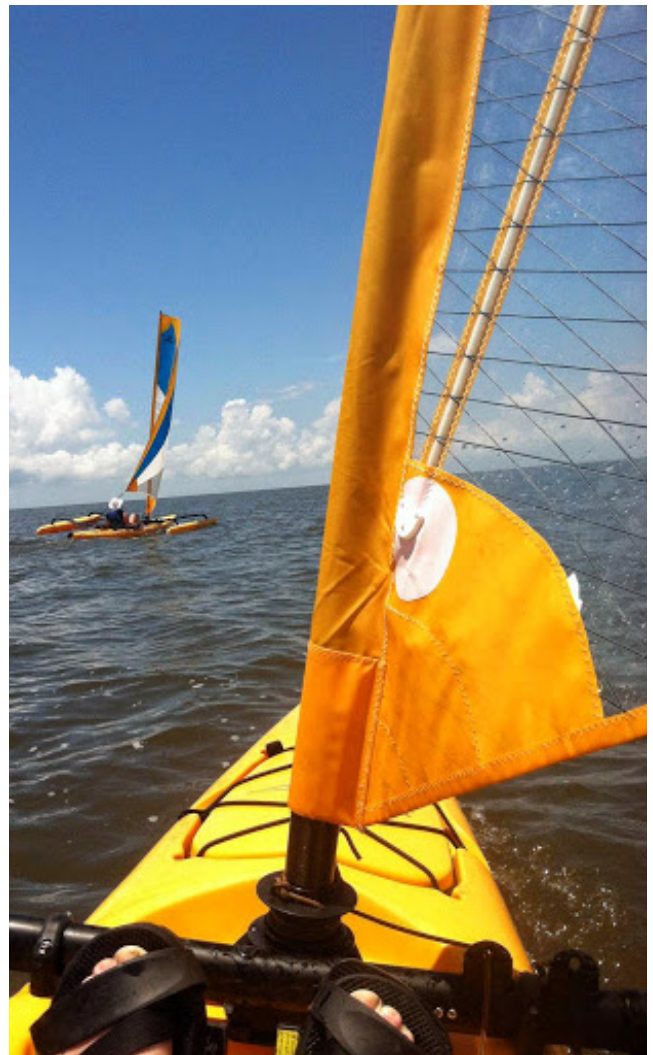
According to the National Sporting Goods Association (NSGA), swimming ranked third nation-wide in terms of participation in 2012.¹¹ Outdoor swimming pools are not typically heated and open year round. Swimming for fitness is the top aspirational activity for “inactives” in 6 of 8 age categories in the Sports and Fitness Industry Association (SFIA) “2013 Sports, Fitness and Leisure Activities Topline Participation Report,” representing a significant opportunity to engage inactive populations. Nationally, there is an increasing trend towards indoor leisure and therapeutic pools. Additional indoor and outdoor amenities like “spray pads” are becoming increasingly popular as well.

AQUATIC TRENDS: IMPLICATIONS FOR OUTDOOR RECREATION IN LOUISIANA

In a random telephone survey of Louisiana residents, swimming outdoors ranked among the top five outdoor recreation activities, along with fishing, walking, picnicking, and visiting playgrounds. This result suggests that local parishes and other outdoor recreation providers consider strategies such as outdoor “spraygrounds,” leisure pools, and enhanced promotion of water recreation opportunities in capital planning and marketing plans.



Aquatic recreation is becoming increasing popular [Images courtesy of Pack and Paddle (www.picasaweb.google.com/packpaddle)]



¹¹ National Sporting Goods Association, “2012 Participation – Ranked by Total Participation”, 2013.

Healthy Lifestyles

In October, 2010 the Robert Wood Johnson Foundation's *Vulnerable Populations Portfolio*¹² shared thoughts on how health is impacted by where and how we live, learn, work, and play. Below demonstrates the connection that nonmedical factors play in where health starts before illness sets in.

Where We Live

Residential instability has adverse health impacts. Examples include:

- Homeless children are more vulnerable to mental health problems, developmental delays, and depression than children who are stably housed.
- Difficulty keeping up with mortgage payments may be linked to lower levels of psychological well-being and a greater likelihood of seeing a doctor.
- The connection between access to public transportation and health studies found that people who live in counties with high "sprawl indexes" were likely to have a higher body mass index than people living in more compact counties.
- Convenient, affordable, and available eating habits result from inability to move from place to place within the community. PolicyLink and the Food Trust, two nonprofits focused on expanding access to fresh foods where low-income people live, have found that "decreased access to healthy food means people in low-income communities suffer more from diet-related diseases like obesity and diabetes than those in higher-income neighborhoods with easy access to healthy food, particularly fresh fruits and vegetables."
- Communities without crime are healthier. Researchers from the Baltimore Memory Study found that residents living in the most dangerous neighborhoods were nearly twice as likely to be obese as those living in the least dangerous neighborhoods.

Where We Work

The relationship between work and health is critical to creating productive environments.

- Investing in the right ways to support employees, businesses can help create a workforce that is less stressed and more content. The net result: a happier, healthier workforce which is more productive and yields better results.
- An approach such as "lifestyle leave" to take care of the inevitable personal and family needs that arise is a valuable asset for many working parents. Programs which help provide employees with peace of mind also help them to breathe and work more easily.
- Business leaders and employees alike should view work as a place of opportunity — a source of support, satisfaction, and motivation, which can offer mutual benefits when done right.

Where We Learn

Eight times more lives can be saved with education than with medical advances.

- Without graduating from high school, one is likely to earn less money and struggle to make ends meet, work longer hours and maybe even need two jobs just to feed family, and live in a compromised neighborhood without access to healthy food.
- Better educated people have more opportunities to make healthier decisions. They have the money and access necessary to buy and eat healthier foods.
- Data from the National Longitudinal Mortality Study indicates that people with higher education live five to seven years longer than those who do not finish high school.
- Schools are not just centers of teaching and learning, they are places that provide the opportunity to improve the health of all Americans.

¹² Health Starts Where We Live, *WJF Vulnerable Populations Portfolio*, Robert Wood Johnson Foundation, <http://www.rwjf.org/en/research-publications/find-rwjf-research/2010/10/health-starts-where-we-live.html>, Accessed 2012.

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Where We Play

Play is a profound biological process that shapes brain function.

- Play prompts us to be continually, joyously, physically active, combating obesity and enhancing overall health and well-being.
- Play can interrupt damage done by chronic stress and give the immune system relief.
- Play is a basic need; a biological requirement for normal growth and development. Scientists with the National Institute for Play are united in their concern about “play under-nutrition,” noting that the corrosive effects of this form of starvation gradually erode emotional, cognitive and physiologic well-being – a major aspect of sedentary, obesity, and poor stress management can be readily linked to play starvation.
- Places to spend leisure time and recreate are critical to creating healthy communities.

For more active living resources, see **Appendix F**.

America's Health Rankings®

In an effort to educate Americans and encourage them to take steps toward a healthier future, the United Health Foundation (UHF) annually presents *America's Health Rankings®: A Call to Action for Individuals and Their Communities*. The rankings are derived from a composite index of over 20 different metrics that give a snapshot of health of a population in each state relative to the other states, such as obesity, smoking, cancer, diabetes, and physical inactivity.

The UHF has tracked the health of the nation for the past 22 years, providing a unique, comprehensive perspective on how the nation (and each state) measures up. Recent editions of the Rankings suggest that our nation is extremely adept at treating illness and disease. However, Americans are struggling to change unhealthy behaviors such as smoking and obesity, which cause many of these diseases. Obesity continues to be one of the fastest growing health issues in our nation, and America is spending billions in direct health care costs associated with poor diet and physical inactivity.

The UHF has ranked Louisiana 48th in its 2013 *State Health Rankings*, up from its ranking of 49th in 2012. Louisiana's biggest strengths and challenges include:

STRENGTHS	WEAKNESSES
Small disparity in health status by educational attainment	High prevalence of physical inactivity, obesity, and diabetes
High immunization coverage among adolescents	High infant mortality and high prevalence of low birth weight
Low incidence of pertussis infections	High percentage of children in poverty

The 2014 Pennington Biomedical Research Center Childhood Obesity and Public Health Conference focused on creating healthier communities for Louisiana's youth. Reports from that conference can be found at www.pbrc.edu/childhood_obesity_conference/links_and_resources.htm.

AMERICA'S HEALTH RANKINGS®: IMPLICATIONS FOR OUTDOOR RECREATION IN LOUISIANA

Research on the positive health impacts of the built environment is growing. It is vital that state, regional, and local agencies involved in health promotion in Louisiana take the lead to address the health issues facing Louisiana citizens of all ages. Health, planning, transportation, and parks and recreation professionals have the capacity and skills to collaborate to create healthier communities through infrastructure changes (trails, greenways, bike/walk friendly initiatives), policy changes (Safe Routes to School, Complete Streets, Safe Routes to Play), and community engagement efforts (events, campaigns, health/wellness programs).

Shade Structures

Communities around the country are considering adding shade structures as well as shade trees to their parks, playgrounds, and pools as, “a weapon against cancer and against childhood obesity”¹³ – both to reduce future cancer risk and promote exercise among children. A 2005 study found that melanoma rates in people under 20 rose three percent a year between 1973 and 2001, possibly due to a thinning of the ozone layer in the atmosphere. It is recommended that children seek shade between 10 a.m. and 4 p.m., but with so little shade available, kids have nowhere to go. Additionally, without adequate shade, many play areas are simply too hot to be inviting to children. On sunny days, the playground equipment is hot enough to scald the hands of would-be users.

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

Trails and Health

Physical activity of a community can be increased through development of a connected system of trails. The “Trails for Health” initiative of the CDC has scientifically demonstrated the value of this approach.¹⁴ Trails provide a wide variety of opportunities for being physically active, such as walking, running, hiking, rollerblading, wheelchair recreation, bicycling, cross-country skiing and snowshoeing, fishing, hunting, and horseback riding. Recognizing active use of trails for positive health outcomes is an excellent way to encourage people to adopt healthy lifestyle changes. The “Benefits of Trails and Greenways” section of the American Trails website is an excellent resource. www.americantrails.org/resources/benefits

The health benefits are equally as high for trails in urban neighborhoods as for those in state or national parks. A neighborhood trail, creating a “linear park,” makes it easier for people to incorporate exercise into their daily routines, whether for recreation or non-motorized transportation. Trails can connect people to places they want to go, such as schools, transit centers, businesses, and neighborhoods.¹⁵

¹³ Liz Szabo, “Shade: A weapon against skin cancer, childhood obesity”, *USA Today*, June 30, 2011, <http://usatoday30.usatoday.com/news/health/wellness/story/2011/06/shade-serves-as-a-weapon-against-skin-cancer-childhood-obesity/48965070/1>, Accessed May 23, 2013.

¹⁴ “The Guide to Community Preventive Services” Centers for Disease Control and Prevention (CDC), <http://www.thecommunityguide.org/index.htm>

¹⁵ “Health Community: What you should know about trail building,” National Trails Training Partnership: Health and Fitness, <http://www.americantrails.org/resources/health/healthcombuild.html>, Accessed on May 24, 2013.

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Economics of Bicycling and Walking

The Alliance for Biking and Walking's *Bicycling and Walking in the United States 2014 Benchmark Report* (www.bikewalkalliance.org/download-the-2014-benchmarking-report)¹⁶ contains hundreds of references to the following:

- Pedestrian and bicycle infrastructure projects create 8 to 12 jobs per \$1 million of spending. Road infrastructure projects create seven jobs per \$1 million of expenditures (Garrett-Peltier, 2011).
- The total economic cost of overweight and obese citizens in the United States and Canada was roughly \$300 billion in 2009. This estimate includes medical costs, disability, and excess mortality (Behan et al., 2010).
- A modest increase in bicycling and walking could save three billion gallons of gasoline and prevent the release of 28 million tons of CO² (Rails to Trails Conservancy, 2008).

The report identifies the following Louisiana initiatives related to bicycling and walking:

- A combined bicycle and pedestrian master plan
- A Complete Streets policy
- Bicycles on roadways are considered vehicles
- Helmets are required for youth
- Three feet required for safe passing of bicyclists by cars

Louisiana ranks below the national average (2.1%) in federal transportation dollars dedicated to bicycling and walking (1.5%). Louisiana also has among the lowest percentage of schools (2.4%) participating in the Safe Routes to School program. The highest school participation rate is 60 percent (Maine).

Inactivity and obesity in the United States cost the country hundreds of billions of dollars annually. Recent studies¹⁷ have identified at least four major categories of economic impact linked with the meteoric rise of obesity in this country, likely leading to over \$215 billion in economic costs associated with obesity, annually:

- Direct medical costs (as much as 100% higher than for healthy weight adults)
- Productivity costs (absenteeism, presenteeism [working while sick], disability, and premature mortality – total productivity costs as high as \$66 billion annually)
- Transportation costs and human capital costs (studies indicate that these are significant, but further work is needed to quantify)

The economic benefits of bicycling and walking:

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

At the 2013 Walking Summit in Washington, D.C.¹⁸, presenters called walking a wonder drug with the generic name “physical activity.” While other forms of physical activity work equally well, three factors were cited as making walking the most effective treatment:

1. Low or no cost
2. Simple to do for people of all ages, incomes, and fitness levels
3. Because walking is America's favorite physical activity, we are more likely to stick with a walking program than other fitness or pharmaceutical regiments

¹⁶ The Alliance for Biking and Walking published *Bicycling and Walking in the United States 2012 Benchmark Report*.

¹⁷ Ross A. Hammond and Ruth Levine, “The Economic Impact of Obesity in the United States”, Dove Medical Press: *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047996/>, Accessed December 31, 2013.

¹⁸ Jay Walljasper, “Walking as a Way of Life, Movement for Health and Happiness”, *The Walking Summit Brochure*, October 2013, http://everybody-walk.org/media_assets/WalkingAsAWayOfLife1_Final.pdf.

Active Transportation

The Centers for Disease Control (CDC) has studied the health implications of the current U.S. transportation infrastructure, which “focuses on motor vehicle travel and provides limited support for other transportation options for most Americans.”¹⁹ Several quality of life and health concerns emerge from the CDC’s study.

- Physical activity and active transportation have declined compared to previous generations.
- The lack of physical activity is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke and other chronic health conditions in the United States.
- Motor vehicle crashes continue to be the leading cause of injury-related death for many age groups.
- Pedestrians and bicyclists are at an even greater risk of death from crashes than those who travel by motor vehicles.
- Many Americans view walking and bicycling within their communities as unsafe because of traffic and the lack of sidewalks or multi-modal paths, crosswalks, and bicycle dedicated lanes.
- Although using public transportation has historically been safer than highway travel in light duty vehicles, highway travel has grown more quickly than other modes of transportation.
- A lack of efficient alternatives to automobile travel disproportionately affects vulnerable populations such as the poor, the elderly, people who have disabilities and children by limiting access to jobs, health care, social interaction, and healthy food choices.
- Although motor vehicle emissions have decreased significantly over the past three decades, air pollution from motor vehicles continues to contribute to the degradation of our environment and adversely effects respiratory and cardiovascular health.
- Transportation accounts for approximately one-third of all U.S. greenhouse gas emissions.



A Better Block Demonstration on Government Street in Baton Rouge (Image courtesy of Whitney Cooper/Baton Rouge Downtown Development District)

As a result of these implications, communities around the country are creating programs to address and support alternative methods of transportation. Policy is being created, funding options are available, and partnerships are emerging. Initiatives like Safe Routes to Schools, Safe Routes to Play, and designing for “Complete Streets” are emerging to create safe, walkable communities. A copy of the transportation part of a plan that has been created for Baton Rouge to implement such initiatives can be found here: brgov.com/dept/planning/pdf/FBRTransportationE.pdf.

¹⁹ CDC Transportation Recommendations”, <http://www.cdc.gov/transportation/>, accessed July 13, 2010.

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In November 2013, the Institute for Transportation and Development Policy published a *Standard for Transportation Oriented Design (TOD)*, with accessible performance objectives and metrics, to help municipalities, developers, and local residents design land use and built environment “to support, facilitate, and prioritize not only the use of public transport, but the most basic modes of transport, walking, and cycling.” The TOD Standard, along with its performance objectives and scoring metrics, can be found at go.itdp.org/display/live/TOD+Standard.²⁰

National Bicycle Trends

- Bike sharing and bike libraries allow people to rent bikes and tour communities using multiple pick up and drop off locations.
- Infrastructure to support biking communities is becoming more commonly funded in communities.
- Cycling participation by those ages 25-64 almost doubled, from 23 percent in 1995 to 42 percent in 2009.
- Cycling participation by ethnicity shows that non-Hispanic whites have the highest bike mode sharing among ethnic groups, but cycling rates are rising faster among African Americans, Hispanics, and Asian Americans.

Louisiana “Bikeability” Trends

Louisiana ranks 29th among states as a “bikeable” state, according to the League of American Bicyclists’ 2013 Bike Friendly State Ranking.²¹ The league’s ratings are based on the following scoring criteria:

- Legislation and Enforcement – Louisiana received 40-60% of points available
- Policies and Programs — Louisiana received 40-60% of points available
- Infrastructure and Funding — Louisiana received 0-20% of points available
- Education and Encouragement — Louisiana received 20-40% of points available
- Evaluation and Planning — Louisiana received 0-20% of points available

The League of American Bicyclists’ Bicycle Friendly Community Programs has awarded bronze level designations to Baton Rouge and New Orleans.

Natural Environments and Open Space

Conservation

The top ten recommendations of the National Recreation and Parks Association (NRPA) Conservation Task Force were published in the November 2011 issue of *Parks and Recreation* magazine.²² These recommendations are a compilation of best practices used by trend-setting agencies.

1) Take a leadership role in the community to promote conservation. Park and recreation agencies have a unique opportunity to bring governmental agencies, non-profit organizations, community leaders, and the public together for the cause of working together on community wide conservation objectives – clean water, wildlife habitat preservation, reducing energy use, and improving environmental quality. Park and recreation agencies must lead the way in promoting conservation to diverse and underserved audiences.

2) Lead by example in employing best management conservation practices in parks. Park and recreation agencies should become the catalyst in the community for conservation by showing how best practices can be adopted, i.e. not mowing what you do not need to mow, stopping wasteful energy consumption, and reducing pesticide use for example. Show the public how conservation practices can benefit everyone.

²⁰ “TOD Standard, Version 2.1”, Institute for Transportation and Development Policy, November 2013, <https://go.itdp.org/display/live/TOD+Standard>

²¹ The League of American Bicyclists, <http://www.bikeleague.org/content/ranking>, accessed on March 27, 2014.

²² “Conservation Leaders in our Community,” *Parks and Recreation* magazine National Recreation and Parks Association (NRPA), November 2011, page 7, http://www.nrpa.org/uploadedFiles/nrpaorg/About_NRPA/Initiatives/Parks-Recreation-Conservation-Report-102611.pdf

3) Engage volunteers in conservation and stewardship. Create a sense of belonging and stewardship for parks by creating a personal sense of ownership and value. Enable people to identify with their parks and natural resources, and to care about their future. Sustain stewardship by creating meaningful public participation in implementation of conservation principles and practices.

4) Establish a strategic land acquisition strategy based on knowledge and awareness of significant natural and cultural resources (watershed protection, unique ecological characteristics, and sensitive natural areas deserving protection). As the largest owners of public land within most communities, park and recreation agencies should lead the way in developing a strategic vision for preserving open space and conserving important landscapes and natural features.

5) Engage youth in conservation. Get kids and teens outdoors and enjoying their parks. The experience of nature is inherently rewarding for youth. Set as a goal to connect kids in the community to nature and the outdoors. Children and youth will be fascinated by nature and may develop a lifelong affinity as well as a conservation ethic if they have early opportunities to enjoy nature and recreate outdoors in a safe, rewarding way.

6) Conserve energy in all ways. Park and recreation agencies must lead by example, showing the public how and why they should adopt practices they can see demonstrated in parks and recreation facilities. Park and recreation agencies should adopt energy conservation measures that make sense and save public taxpayer funds.

7) Protect natural resources in parks and in the community. A core mission of public parks is to protect land and water resources and to be stewards of natural resources. This means committing personnel and resources to protect natural and cultural resources and creating sustainable, long-term methods of funding this conservation mission. Parks and recreation agencies are entrusted with some of the most important public assets of a community and the conservation and long-term protection of this public trust is and should be a core component of every parks and recreation agency's mission.

8) Create sustainable landscapes that demonstrate principles of conservation. Utilize sustainable landscape practices to save taxpayer funds, to measurably improve conservation benefits, and to educate the public about conservation. For example, agencies can reduce turf grass and mowing frequency; replace turf with native plants; manage floodplains for multiple uses including conservation and public recreation; enhance wetlands for water filtration and groundwater recharge; plant model landscapes of drought tolerant native plants adapted to climate and culture; and promote parks as food sources through edible landscapes and community gardens.

9) Forge partnerships that foster the mission of conservation. The greatest and most beneficial conservation successes most often occur as a result of collaboration. Park and recreation agencies should partner with non-profit and community service organizations, universities and colleges, school systems, other governmental agencies, and non-traditional partners for conservation outcomes. Promote health, education, and other goals while working toward a common mission of conservation.

10) Utilize technology to promote conservation. Park and recreation agencies should embrace technology to promote conservation. This is not only in applications such as GIS, but in utilizing social media to engage the public, especially youth. Technology offers the opportunity of a means of sharing knowledge and connecting people to conservation and stewardship.

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Economic and Health Benefits of Parks

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

- Trails, parks, and playgrounds are among the five most important community amenities considered when selecting a home.
- Research from the University of Illinois shows trees, parks, and green spaces have a profound impact on people's health and mental outlook.²³
- U.S. Forest Service research indicates when the economic benefits produced by trees are assessed, the total value can be two-to-six-times the cost for tree planting and care.²⁴
- Fifty percent (50%) of Americans regard outdoor activities as their main source of exercise.²⁵

The Trust for Public Land has published a report titled: "The Benefits of Parks: Why America Needs More City Parks and Open Space." The report makes the following observations about the health, economic, environmental, and social benefits of parks and open space²⁶:

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

For many years, researchers have publicized the benefits of outdoor exercise. According to a study published in the *Environmental Science and Technology Journal* by the University of Essex in the United Kingdom, "as little as five minutes of green exercise improves both mood and self-esteem."²⁷ In China, a new trend emerged as they prepared to host the 2008 Summer Olympics. Their aim was to showcase a society that promotes physical fitness, and reaps the benefits of outdoor exercise, by working out on outdoor fitness equipment.

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

²³ F.E. Kuo, "Environment and Crime in the Inner City: Does Vegetation Reduce Crime?" *Environment and Behavior*, Volume 33, pp 343-367.

²⁴ Nowak, David J., "Benefits of Community Trees", (Brooklyn Trees, USDA Forest Service General Technical Report, in review).

²⁵ "Outdoor Recreation Participation Report 2010", Outdoor Foundation, 2010.

²⁶ Paul M. Sherer, "The Benefits of Parks: Why America Needs More City Parks and Open Space," The Trust for Public Land, San Francisco, CA, 2006.

²⁷ "Appendix F: Influencing Trends," City of Lafayette, <http://www.cityoflafayette.com/DocumentCenter/View/2561>. Accessed on November 14, 2012.

Nature Programming

Noted as early as 2003 in *Recreation Management* magazine, park agencies have been seeing an increase in interest in environmental-oriented “back to nature” programs. In 2007, the NRPA sent out a survey to member agencies in order to learn more about the programs and facilities that public park and recreation agencies provide to connect children and their families with nature.²⁸ A summary of the results follow:

- Sixty-eight percent (68%) percent of public parks and recreation agencies offer nature-based programming, and 61% have nature-based facilities.
- The most common programs include nature hikes, nature-oriented arts and crafts, fishing related events, and nature-based education in cooperation with local schools.
- When asked to describe the elements that directly contribute to their most successful programs, agencies listed staff training as most important followed by program content and number of staff training.
- When asked what resources would be needed most to expand programming, additional staff was most important followed by funding.

“There’s a direct link between a lack of exposure to nature and higher rates of attention-deficit disorder, obesity, and depression. In essence, parks and recreation agencies can and are becoming the ‘preferred provider’ for offering this preventative healthcare.”

– **Fran P. Mainella**, former director of the National Park Service and Instructor at Clemson University.



Parks provide a great setting for outdoor exercise (Image courtesy of the Louisiana Office of State Parks)

²⁸ National Recreation and Parks Association (NRPA), “NRPA Completes Agency Survey Regarding Children and Nature,” http://www.narrp.org/assets/Library/Children_in_Nature/nrpa_survey_regarding_children_and_nature_2007.pdf, April 2007.

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- Of the agencies that do not currently offer nature-based programming, 90% indicated that they want to in the future. Additional staff and funding were again the most important resources these agencies would need going forward.
- The most common facilities include: nature parks/preserves, self-guided nature trails, outdoor classrooms, and nature centers.
- When asked to describe the elements that directly contribute to their most successful facilities, agencies listed funding as most important followed by presence of wildlife and community support.

Figures from the Association for Interpretative Naturalists, a national group of nature professionals, demonstrate that nature-based programs are on the rise. According to Tim Merriman, the association's Executive Director, the group was founded in 1954 with 40 members. It now boasts 4,800 members, with research indicating that about 20,000 paid interpreters are working nationally, along with an army of more than 500,000 unpaid volunteers staffing nature programs at parks, zoos and museums. The growth of these programs is thought to come from replacing grandparents as the teacher about the "great outdoors." It is also speculated that a return to natural roots and renewed interest in life's basic elements was spurred as a response to September 11, 2001.²⁹

In his book *Last Child in the Woods: Saving Children from Nature Deficit Disorder*,³⁰ Richard Louv introduced the concept of the restorative qualities of being out in nature, for both children and adults. This concept, and research in support of it, has led to a growing movement promoting connections with nature in daily life. One manifestation of this is the development of Nature Explore Classrooms in parks. Nature Explore³¹ is a collaborative program of the Arbor Day Foundation and the non-profit organization, Dimensions Educational Research Foundation, with a mission of helping children and families develop a profound engagement with the natural world, where nature is an integral, joyful part of children's daily learning. Nature Explore works to support efforts to connect children with nature.

Coastal Management

The Louisiana Coastal Management Program Assessment and Strategy (2011-2015)³² establishes six strategies to guide the implementation of priority coastal management enhancement projects:

1. Implement an updated inland boundary for Louisiana's coastal zone
2. Implement Federal consistency procedures to improve beneficial use of dredged material
3. Establish mitigation regulations for unavoidable impacts due to permitted activities in coastal Louisiana
4. Address risk and hazards through the Local Coastal Program of the Louisiana Coastal Resources Program
5. Establish new permit procedures for avoiding and mitigating oil and gas facility siting conflicts
6. Improve decision-making regarding water management

Pursuant to the assessment, coastal hazards and wetlands remain a high priority as in prior assessments. Public access decreased from medium to low priority. Marine debris is increased from low to high priority. Ocean resources and special area management increased from low to medium priority, as did energy and government facility siting. Cumulative and secondary impacts and aquaculture remain low priorities.

²⁹Margaret Ahrweiler, "Call of the Wild – From beautiful blossoms to bugs and guts, nature programs are growing as people return to their roots" *Recreation Management* magazine, <http://recmanagement.com/200310fe04.php>, October 2003.

³⁰ Richard Louv, *Last Child in the Woods: Saving Children from Nature Deficit Disorder*, Algonquin Books of Chapel Hill, North Carolina, 2005.

³¹ "What is the Nature Explore Program", http://www.arborday.org/explore/documents/NE_FAQ_002.pdf, Accessed on August 12, 2012.

³² Louisiana Department of Natural Resources, "Louisiana Coastal Management Plan", <http://coastalmanagement.noaa.gov/mystate/docs/la3092011.pdf>, Accessed March 15, 2014.

Riparian and Watershed Best Practices

The ability to detect trends and monitor attributes in watershed and/or riparian areas allows planners opportunities to evaluate the effectiveness of their management plan. By monitoring their own trends, planners can also identify changes in resource conditions that are the result of pressures beyond their control. Trend detection requires a commitment to long-term monitoring of riparian areas and vegetation attributes.

The United States Environmental Protection Agency (EPA) suggests the following steps to building an effective watershed management plan. See water.epa.gov³³ for more information from the EPA.

- Build partnerships
- Characterize the watershed
- Set goals and identify solutions
- Design a watershed management plan
- Implement the watershed management plan
- Measure progress and make adjustments



Louisiana watersheds create habitat for wildlife [Images courtesy of Lenny Wells Photography (www.naturallylouisiana.com)]

National Outdoor Recreation Trends

The Outdoor Foundation releases a “Participation in Outdoor Recreation” report, annually. According to the 2013 report,³⁴ while there continues to be fallout from the recent economic downturn, the number of outdoor recreation outings reached an all-time high in 2012. The foundation reports that the top outdoor activities in 2012 in the nation were running, fishing, bicycling, camping, and hiking. Bird watching is also among the favorite outdoor activities by frequency of participation.

The Outdoor Foundation’s research brought the following key findings³⁵:

- Nearly 50% of Americans ages six and older participated in outdoor recreation in 2012. That equates to a total of 141.9 million Americans and a net gain of one million outdoor participants.
- Top Five Biggest Participation Percentage Increase in Outdoor Activities in the Past three years:
 1. Triathlon (Off Road)
 2. Adventure Racing
 3. Telemarking
 4. Freestyle Skiing
 5. Triathlon (Traditional/Road)



Mountain biking on the trails at Lake Kincaid (Image courtesy of MindMixer)

³³ “Implement the Watershed Plan – Implement Management Strategies, US Environmental Protection Agency, <http://water.epa.gov/type/watersheds/datait/watershedcentral/plan2.cfm>

³⁴ “Outdoor Recreation Participation Report 2013”, Outdoor Foundation, 2013.

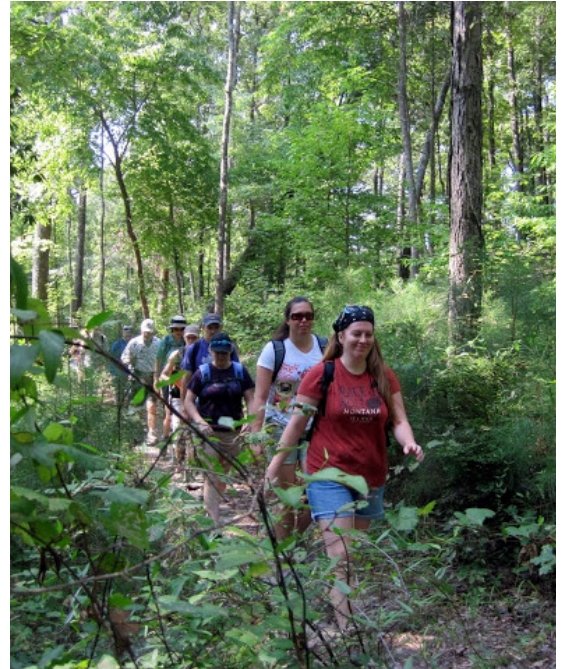
³⁵ “Recent Outdoor Recreation Trends”, USDA Forest Service Internet Research Information Series (IRIS) Research Brief, January 2012, <http://warnell.forestry.uga.edu/nrrt/nsre/IRISRec/IRISRec23rpt.pdf>, accessed August, 2012.

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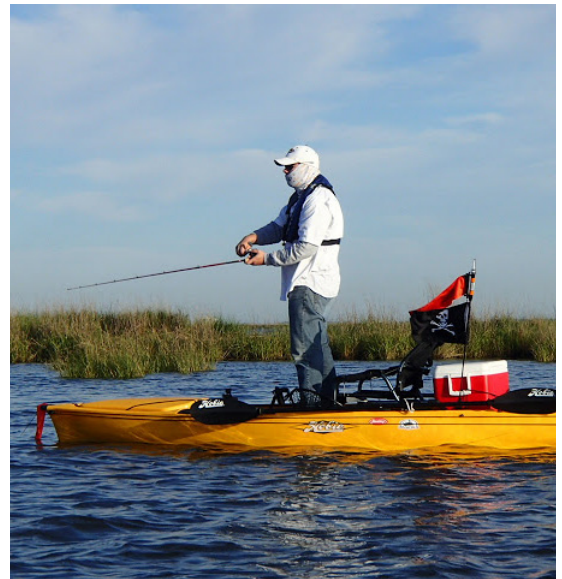
Outdoor recreation trends are also a recurring topic of study by the United States Forest Service through the Internet Research Information Series (IRIS). An IRIS report dated January 2012³⁶ provides the following recent nature-based outdoor recreation trends: Participation in walking for pleasure and family gatherings outdoors were the two most popular activities for the U.S. population as a whole. These outdoor activities were followed closely in popularity by viewing/photographing wildlife, boating, fishing, snow/ice activities, and swimming. There has been a growing momentum in participation in sightseeing, birding and wildlife watching in recent years.

National Recreation and Cycling Trends

For trail-related recreation activities such as hiking, bicycling, and running, the 2013 *Outdoor Recreation Topline Report* indicates a positive three-year trend for trail running, running/jogging, hiking, and mountain biking, but a slightly negative trend for road/surface bicycling. Participation in BMX bicycling is up significantly over the past three years (12.2%).



A multi-use pathway (Image courtesy of Atkins/Tommy Davidson)



Hiking and fishing were two favorite outdoor activities in 2012 [Images courtesy of Pack and Paddle (www.picasaweb.google.com/packpaddle)]

“...the number of outdoor recreation outings reached an all-time high in 2012.”

³⁶ Hope Nardini, “Bike Tourism a Rising Trend”, Ethic Traveler, <http://www.ethicaltraveler.org/2012/08/bike-tourism-a-rising-trend/>, Accessed on Marcy 24, 2014.

Table 2.1: National Recreation Participation by Activity (in thousands) (6 years of age or older)

	2007	2008	2009	2010	2011	2012	3 Yr. Change
BMX Bicycling	1,887	1,904	1,811	2,369	1,547	2,175	12.2%
Bicycling (Mountain/Non-Paved)	6,892	7,592	7,142	7,161	6,816	7,714	2.9%
Bicycling (Road/Paved)	38,940	38,114	40,140	39,320	40,349	39,232	-0.7%
Hiking (Day)	29,965	32,511	32,572	32,496	34,491	34,545	2.0%
Running/Jogging	41,064	41,130	43,892	49,408	50,713	52,187	6.0%
Trail Running	4,216	4,857	4,833	5,136	5,610	6,003	7.5%

Source: Outdoor Foundation 2013.

The *Outdoor Recreation Participation Report* for 2013 reports a downward trend nation-wide for equestrian participation from 2007 – 2012 (from a high of 4.4 percent in 2007 to a low of 2.8 percent participation in 2012).

Other Cycling Trends

- Bicycle touring is becoming a fast-growing trend around the world, including the U.S. and Canada. “Travelers are seeking out bike tours to stay active, minimize environmental impact, and experience diverse landscapes and cityscapes at a closer level.”³⁷
- Urban bike tours, popular in cycle-friendly cities in Europe, are taking hold in the United States as well. Bikes and Hikes LA, an eco-friendly bike and hike sightseeing company founded in West Hollywood, California last September, offers visitors the opportunity to “see the city’s great outdoors while getting a good workout.” In New York, a hotel and a bike store are partnering to offer guests cruisers to explore the city during the summer of 2014. A similar opportunity is also available in New Orleans.
- One of the newest trends in adventure cycling is “fat bike,” multiple speed bikes that are made to ride where other bikes cannot be ridden, with tires that are up to five inches wide run at low pressure for extra traction. Most fat bikes are used to ride on snow but they are also very effective for riding on any loose surface like sand or mud. They also work well on most rough terrain or just riding through the woods. This bike offers unique opportunities to experience nature in ways that wouldn’t be possible otherwise.³⁸

Water Recreation Trends

The *Outdoor Recreation Topline Report* 2013 includes nationwide trends for various outdoor activities, including the following water recreation activities: boardsailing, canoeing, fishing, kayaking, sailing and stand-up paddling. Among water recreation activities, stand-up paddling had the highest number of new participants in 2012. Fishing is the second most popular outdoor activity nationwide (with 16 percent participation) after running/jogging (19 percent participation).



Stand Up Paddleboarding (SUP) is in high demand (Image courtesy of MindMixer)

³⁷ Michelle Baran, “New trend: Urban bike tours in Los Angeles and New York”, Budget Travel Blog, <http://www.budgettravel.com/blog/new-trend-urban-bike-tours-in-los-angeles-and-new-york,11772/>, Accessed on March 24, 2014

³⁸ Steven Pease, “Fat bikes, how to get the most out of winter cycling”, Minnesota Cycling Examiner, <http://www.examiner.com/article/fat-bikes-the-latest-trend-adventure-cycling>, February 1, 2014.

Table 2.2: National Water Recreation Participation by Activity (in thousands) (6 years of age or older)

	2007	2008	2009	2010	2011	2012	3 Yr. Avg. Change
Boardsailing/Windsurfing	1,118	1,307	1,128	1,617	1,151	1,593	17.6%
Canoeing	9,797	9,935	10,058	10,553	9,787	9,839	-0.6%
Fishing (Fly)	5,756	5,941	5,568	5,478	5,360	6,012	2.6%
Fishing (Freshwater/Other)	43,859	40,331	40,961	38,860	38,868	39,135	-1.5%
Fishing (Saltwater)	14,437	13,804	12,303	11,809	11,983	12,017	-.08%
Kayaking (Recreational)	5,070	6,240	6,212	6,465	8,229	8,144	10.1%
Kayaking (Sea Touring)	1,485	1,780	1,771	2,144	2,029	2,446	12.1%
Kayaking (White Water)	1,207	1,242	1,369	1,842	1,546	1,878	13.3%
Sailing	4,056	4,226	4,342	3,869	3,725	3,958	-2.8%
Stand-Up Paddling	NO DATA	NO DATA	NO DATA	1,050	1,242	1,541	N/A

Source: Outdoor Foundation 2013.

WATER RECREATION: IMPLICATIONS FOR OUTDOOR RECREATION IN LOUISIANA

The random telephone and open link surveys revealed high participation rates in fishing (62 percent random, 61 percent open link) and varying participation rates for paddling (18 percent random, 48 percent open link). In addition, respondents placed a high priority for future investment on boating and fishing opportunities and public access to natural bodies of water. A coordinated effort to conduct an inventory and promotional campaign for state and local parish water recreation opportunities could increase participation rates.



Investing in the future of boating and fishing could help increase participation in the popular activities (Image courtesy of the Louisiana Office of Tourism)



Kayaking is one of the most common forms of water recreation (Image courtesy of Ron J. Berard/Tour de Teche)

E. ACCESSIBILITY AND EQUITY

Park Equity

Equitable access to parks, trails, natural areas, and outdoor recreation facilities is a trending issue in the parks and recreation industry. Conducting a GIS based Park Equity Analysis provides a quantitative statewide analysis to evaluate the access of public lands for children of unserved communities (communities that have little to no access to nature and open space). The online Park Analysis Tool (www.dnr.state.md.us/) was developed by the Maryland Department of Natural Resources, and is built using U.S. Census Data combined with statewide layers identifying public parks. The model prioritizes unserved areas of in need of park space by identifying areas with:

- High concentration of children under the age of 16
- High concentration of populations below the poverty line
- High population density
- Low access to public park space



Accessible facilities create lasting memories for families (Image courtesy of Brandy Roberts/Pilot Club of Denham Springs)



Waterparks and splash pads are becoming a popular amenity in parks and recreation facilities (Image courtesy of MW Domingue/FWHA Recreational Trails for Louisiana)



Boardwalks facilitate access to ecologically sensitive environments while minimizing impacts from construction (Image courtesy of the Louisiana Office of Tourism)