

Image courtesy of the Baton Rouge Downtown Development District



Chapter 4:

LOUISIANA'S OUTDOOR RECREATION SUPPLY

A. ANALYSIS METHODOLOGY

Introduction

GIS data was mined from multiple resources throughout the state in order to analyze the proximity of outdoor recreation opportunities to the state's population. In particular, analysis was performed on access to five specific outdoor recreation opportunities, selected based upon public input: all outdoor recreation opportunities, locations where picnicking opportunities exist, playgrounds, walking/hiking trails, and access to water for fishing and/or boating activities. The GIS data sets that were used to perform the analysis are listed below. The number of "features" (points, lines, or polygons that appear on a map) within each dataset are shown in parentheses. For example, the City of Alexandria provided data on the location of 28 of its facilities.

Acquired GIS Data

- City of Alexandria Parks (28), Rapides Parish, Region 6
- Recreation and Park Commission for the Parish of East Baton Rouge (BREC) (187), East Baton Rouge Parish, Region 2
- Louisiana State Parks (42 - includes 22 parks, 19 historic sites, and 1 arboretum), All Regions
- Louisiana Wildlife Management Areas (139)
- Public Marinas/Boat Launches (254)
- City of Monroe Parks (120), Ouchita Parish, Region 8
- Kistachie National Forest (1), Multiple Parishes, Region 6
- National Parks (2)
 - Cane River Creole, Natchitoches Parish, Region 7
 - Jean Lafitte, Jefferson Parish, Region 1
- City of New Orleans Parks (179), Orleans Parish, Region 1
- City of Shreveport Parks (62), Caddo Parish, Region 7
- St. Charles Parish Parks (53), Region 1
- USFW Wildlife Refuges (23), All Regions

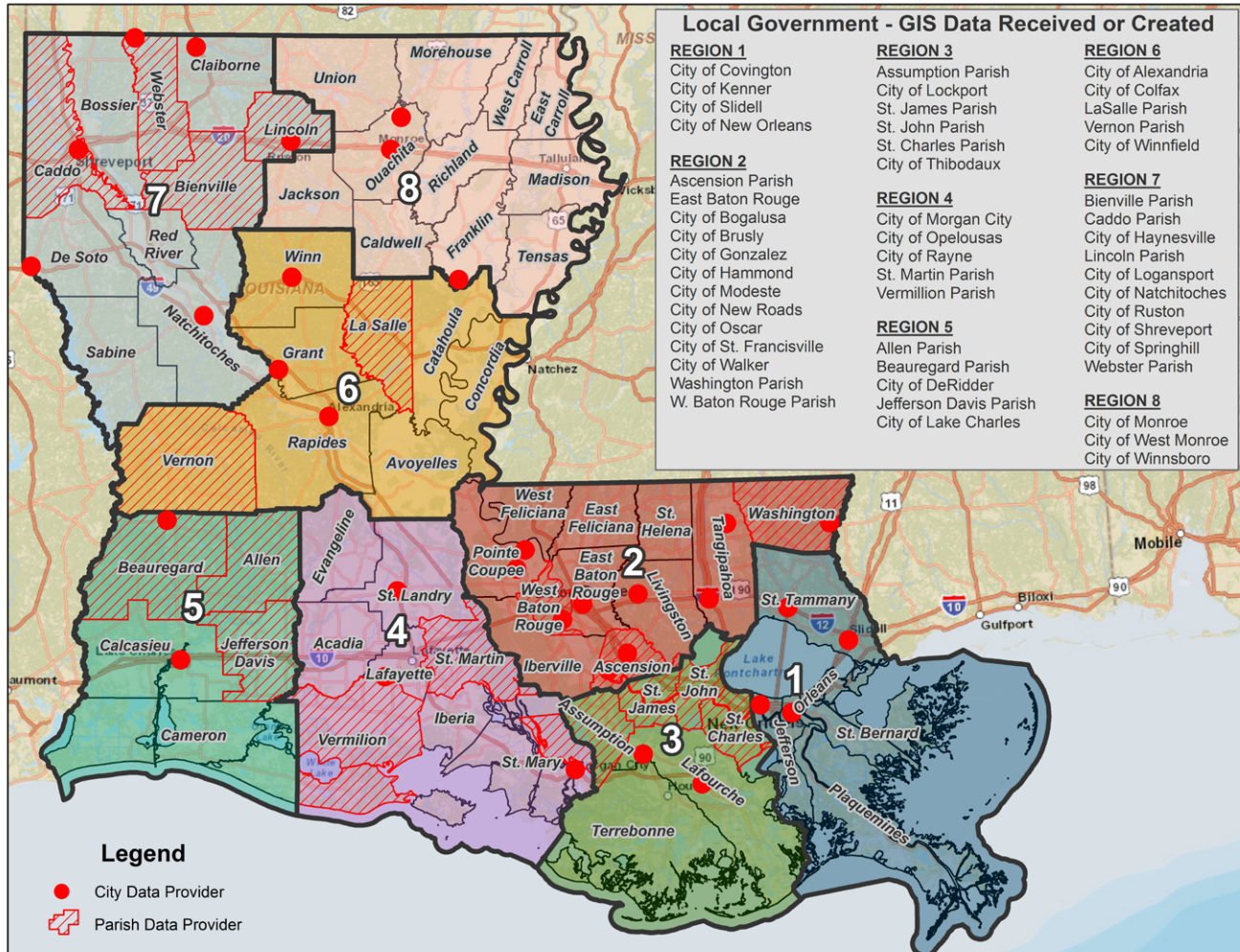
Created GIS Data

- Access Points for Paddle Routes (26)
- Land and Water Conservation Fund (LWCF) Projects (851)
- Paddle Routes (29)
- SCORP Regions (8)
- Tammany Trace Trail (1)
- Various Park Locations from Local Entities (288) (See map in **Figure 3.3**)
- Various Trailheads (13)

An effort was made to acquire data from as many outdoor recreation providers as possible throughout the state. All recreation providers were asked to share their outdoor recreation GIS data for inclusion in the **2014-2019 Louisiana SCORP**. A similar request was made regarding outdoor recreation facilities at public schools. Templates of the inventory forms for both requests are included in **Appendix N**.

Although this effort received a large response, adequate data is still missing from large areas of the state, as can be seen in the following figures. Louisiana State Parks hopes to maintain this data and continually add new resource and facility information as it is provided by recreation providers.

Figure 3.1: All Outdoor Recreation Providers Who Provided Information



Map courtesy of NTB Associates, Inc.

B. INVENTORY OF OUTDOOR RECREATION OPPORTUNITIES

The locations of the outdoor recreation opportunities were buffered by set distances to determine proximity to the state's population. A "buffer" is a ring drawn around a location (ex. park boundary, trailhead location, paddle route, etc.) at a set distance. The distance of the buffers varied from 5, 10, or 30 miles depending on the type of location being analyzed. The buffers did not take into account road distance or any travel barriers (ex. water bodies) but were strictly equidistant buffers around the set location. The distance was chosen to take travel time into account, with 5 miles assuming a travel time of less than 10 minutes for more local-type amenities (example: playgrounds) and up to 30 miles and a travel time of up to 60 minutes for more regional-type amenities (example: water access).

The parameters used for each analysis are summarized below:

All Outdoor Recreation Opportunities

- Buffer distance of 10 miles
- Includes all of the datasets collected and associated features listed above

Picnicking

- Separate buffer distances of 5, 10 and 30 miles
- Includes all parks from Alexandria, Baton Rouge, Monroe, and New Orleans except for ball fields, civic centers, golf courses, museums, sports complexes, stadiums, and recreation centers
- Includes parks from all other local entities, State Parks, and Kisatchie National Forest (www.fs.usda.gov/main/kisatchie/home) that had picnicking listed as an available activity at the location
- All LWCF projects associated with a park
- All USFW wildlife refuges and all Louisiana State Wildlife Management Areas

Playgrounds

- Separate buffer distances of 5 and 10 miles
- Includes parks from all local entities, State Parks, and Kisatchie National Forest that had a playground listed as an available activity at the location (Cypremort Point, Grand Isle, and Hodges do not have playgrounds)
- All LWCF projects associated with a playground
- No other national or state lands were included

Walking/Jogging/Hiking

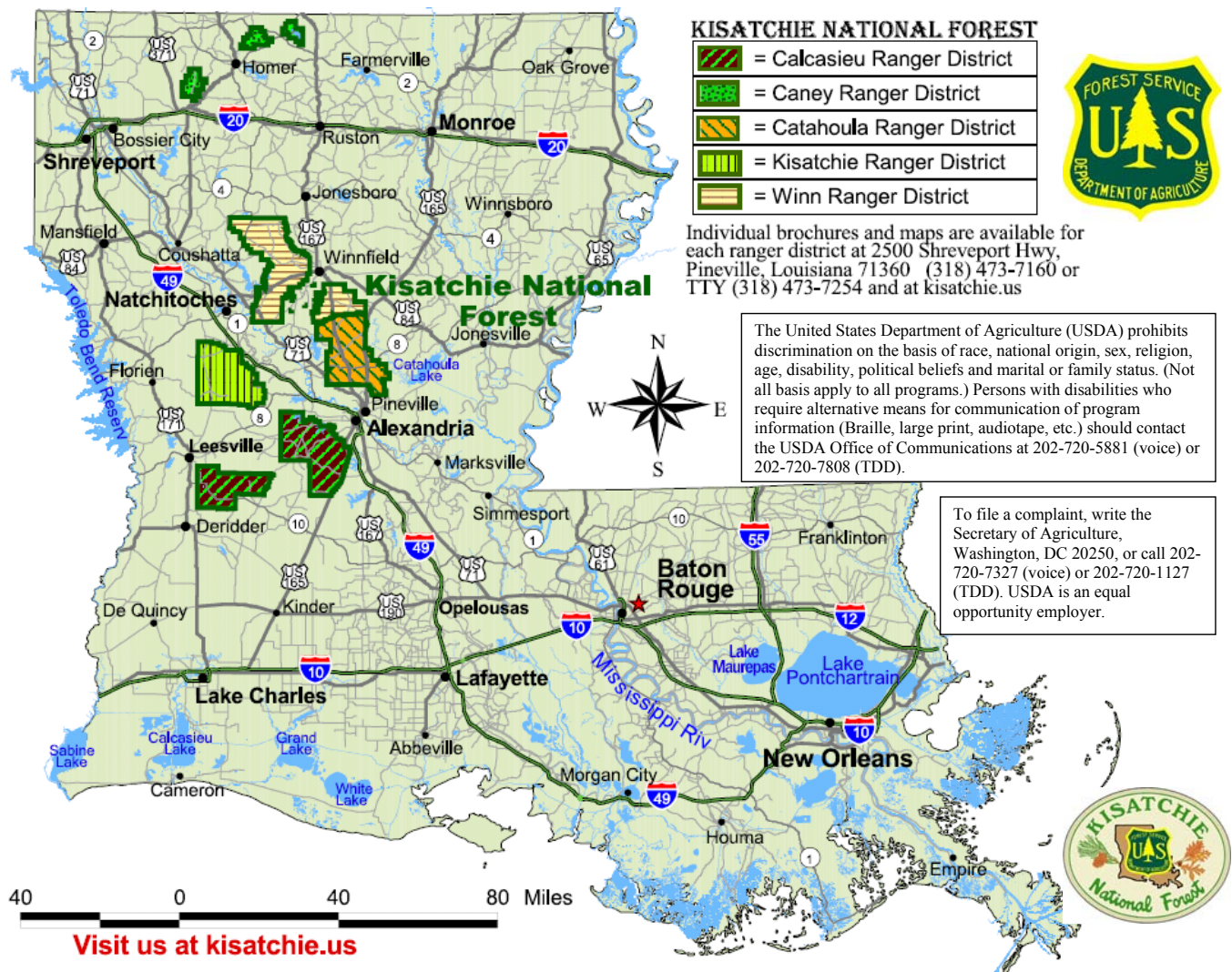
- Separate buffer distances of 5 and 10 miles
- Includes all parks from Alexandria, Monroe, and New Orleans except for ball fields, civic centers, golf courses, museums, sports complexes, stadiums, and recreation centers
- Includes parks from all other local entities and Kisatchie National Forest that had hiking or walking path listed as an available activity at the location
- All trails and trail heads
- All State Parks (Cypremort Point and Lake Bruin do not currently have trails)
- All LWCF projects associated with a park
- All USFW wildlife refuges and all Louisiana State Wildlife Management Areas

Water Access

- Buffer distance of 30 miles
- Includes parks from all local entities, State Parks, and Kisatchie National Forest that had water related activities (ex. fishing, boat launch, fishing pier, canoe, etc.) listed as an available activity at the location
- All mapped paddle routes
- All mapped marinas and boat launches
- All LWCF projects associated with boat launches
- All USFW wildlife refuges and all Louisiana State Wildlife Management Areas

The buffers that were generated for each of the categories above were then compared to the population data associated with the 2010 Census. **Figure 3.2** is a map showing the 2010 population density of Louisiana. The concentration of the state's population resides in the following seven areas: Shreveport, Monroe, Alexandria, Lake Charles, Lafayette, Baton Rouge, and New Orleans.

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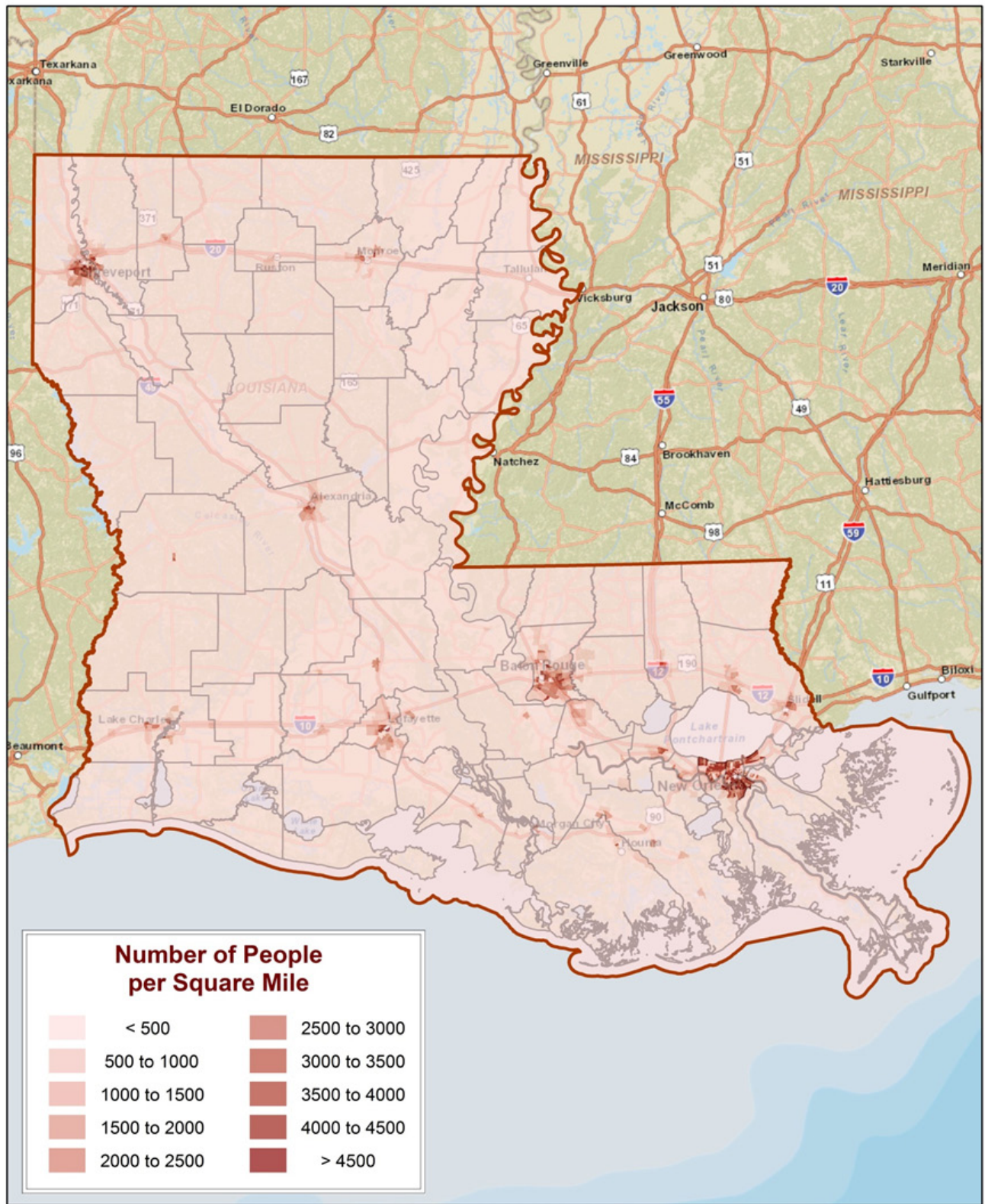


Kisatchie National Forest is the only National Forest in Louisiana [Map courtesy of the United States Department of Agriculture (USDA)]



Backpacking on the Wild Azalea Trail in the Kistachie National Forest [Image courtesy of Pack and Paddle (www.picasaweb.google.com/packpaddle)]

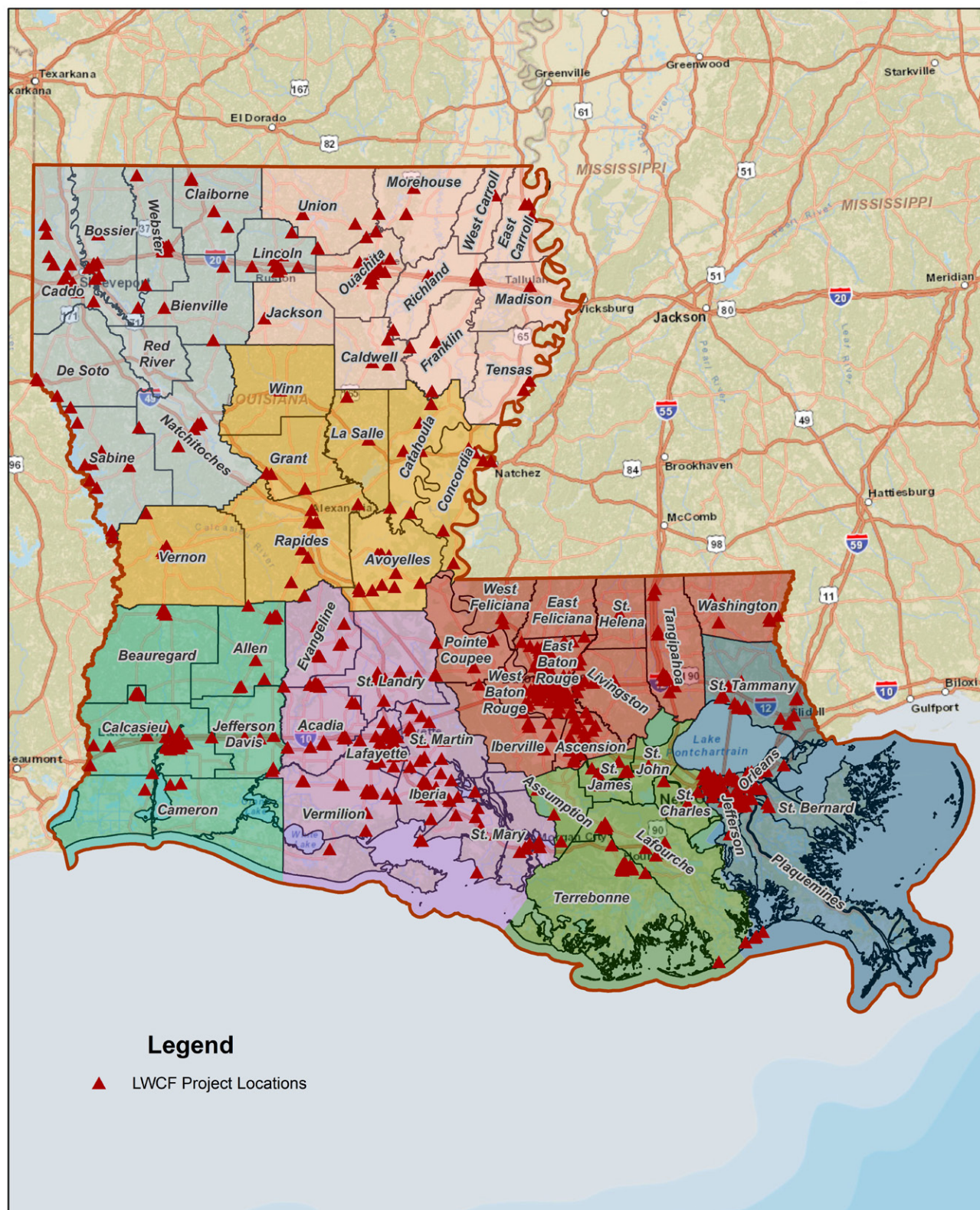
Figure 3.2: 2010 Louisiana Population Density



Map courtesy of NTB Associates, Inc.

C. INVENTORY OF PUBLIC LANDS

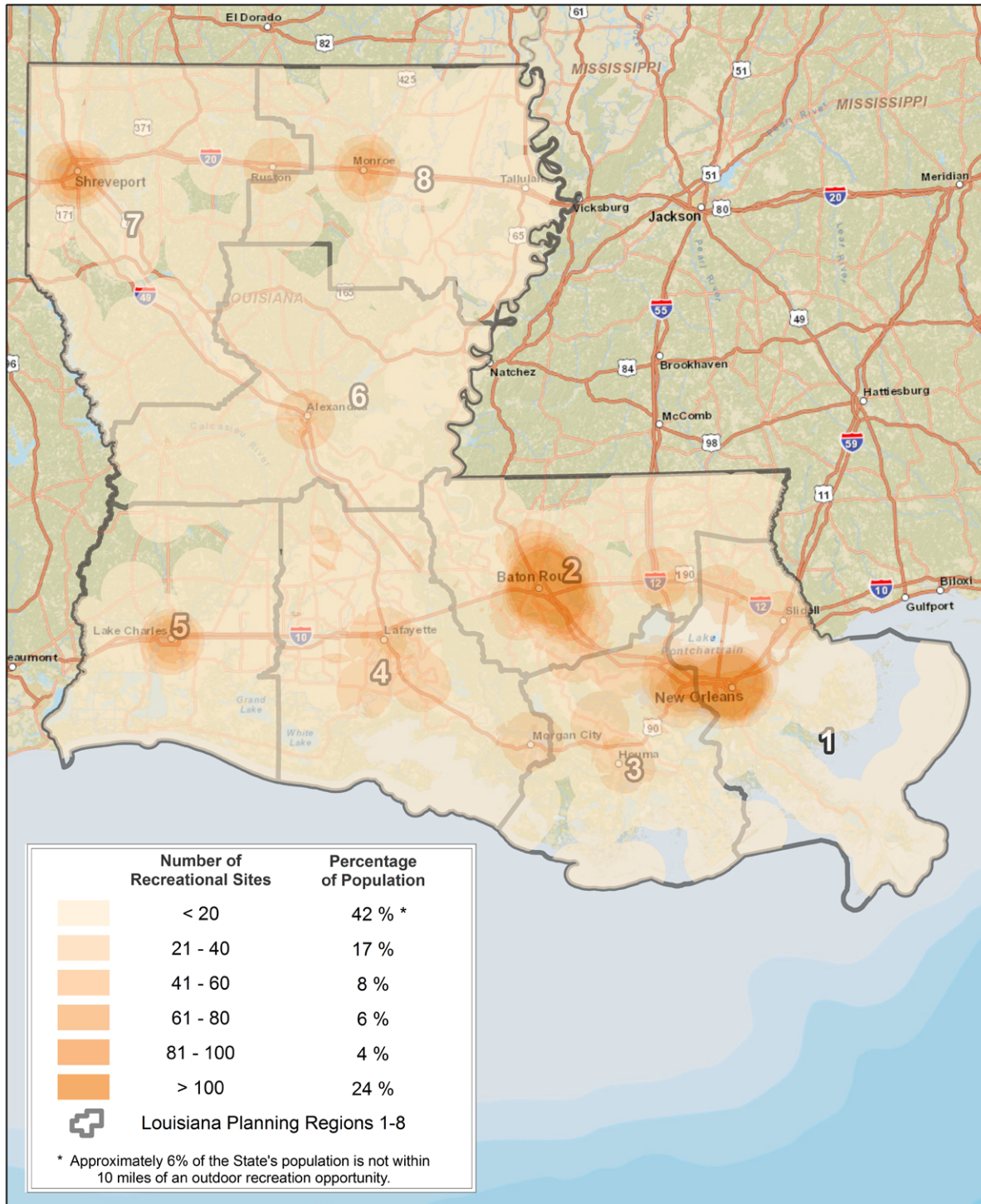
Figure 3.3: Past Land and Water Conservation Funded Projects



Map courtesy of NTB Associates, Inc.

D. RESOURCE MAPS

Figure 3.4: Outdoor Recreation Opportunities Within 10 Miles

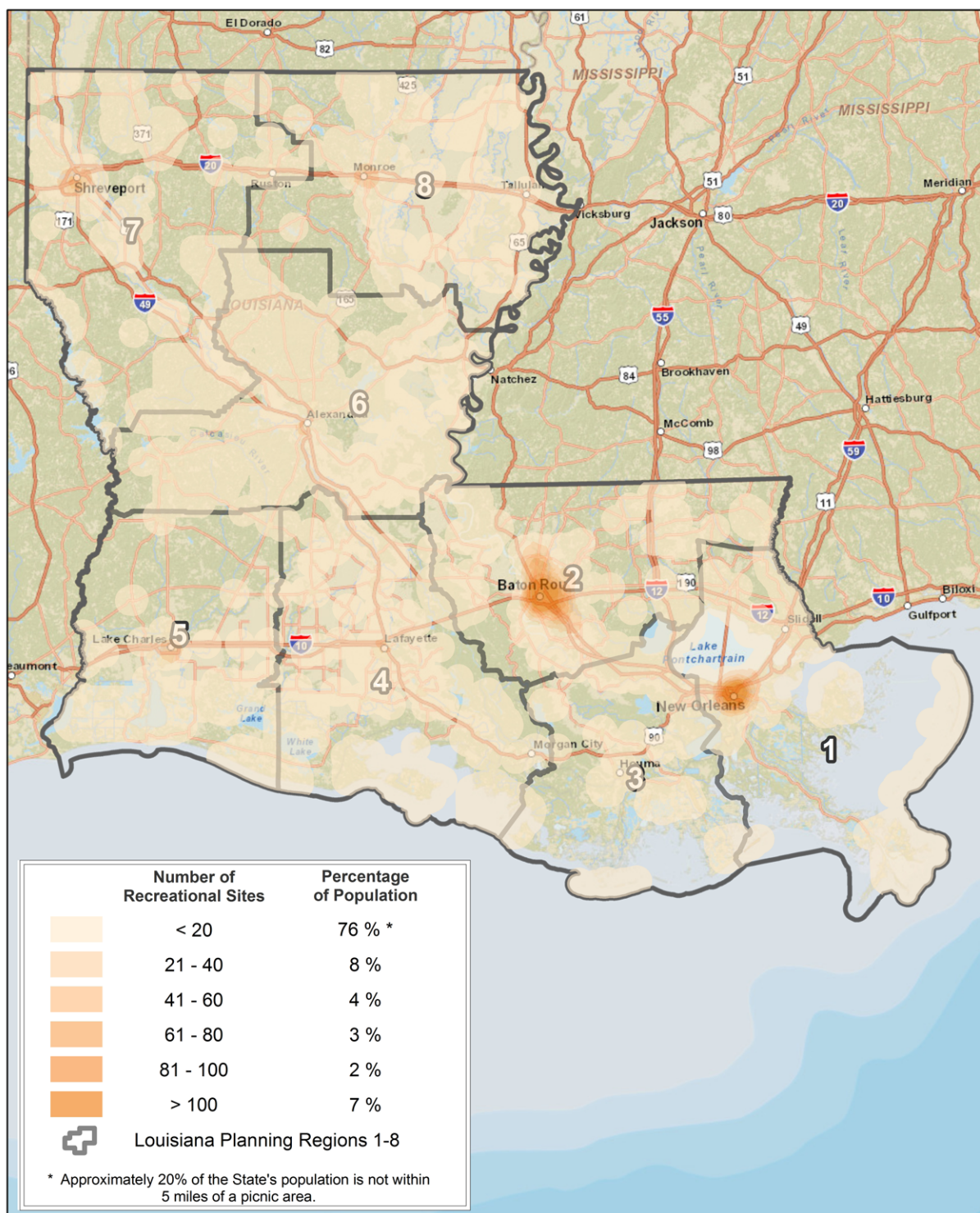


Map courtesy of NTB Associates, Inc.

94%

Ninety-four percent (94%) of the State's population is within 10 miles of some type of outdoor recreation opportunity, and all seven of the most populated areas have access to over 40 amenities within 10 miles.

Figure 3.5: Picnic Areas Within 5 Miles

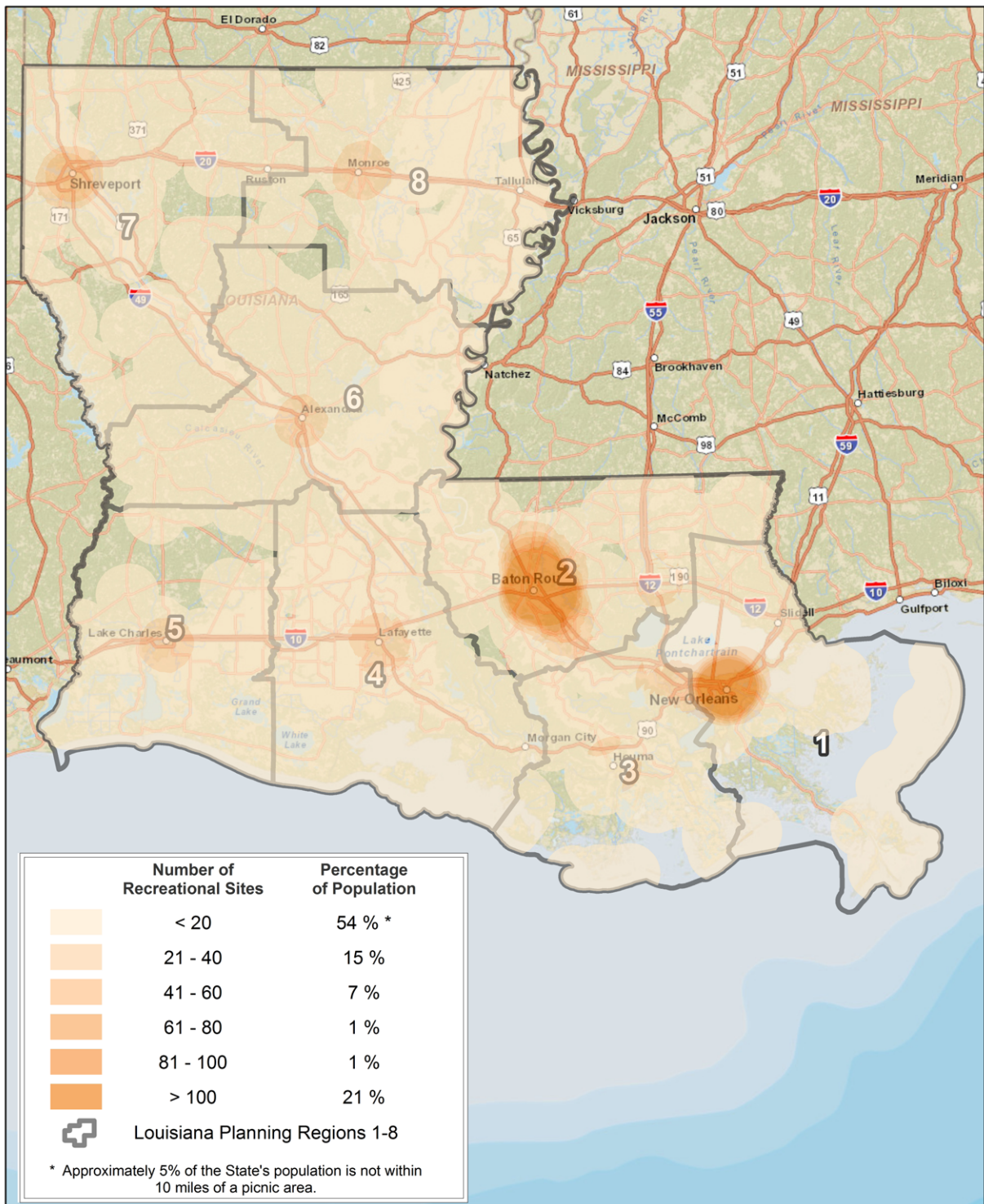


Map courtesy of NTB Associates, Inc.

80%

Eighty percent (80%) of the State's population is within five miles of a location with an opportunity to picnic.

Figure 3.6: Picnic Areas Within 10 Miles

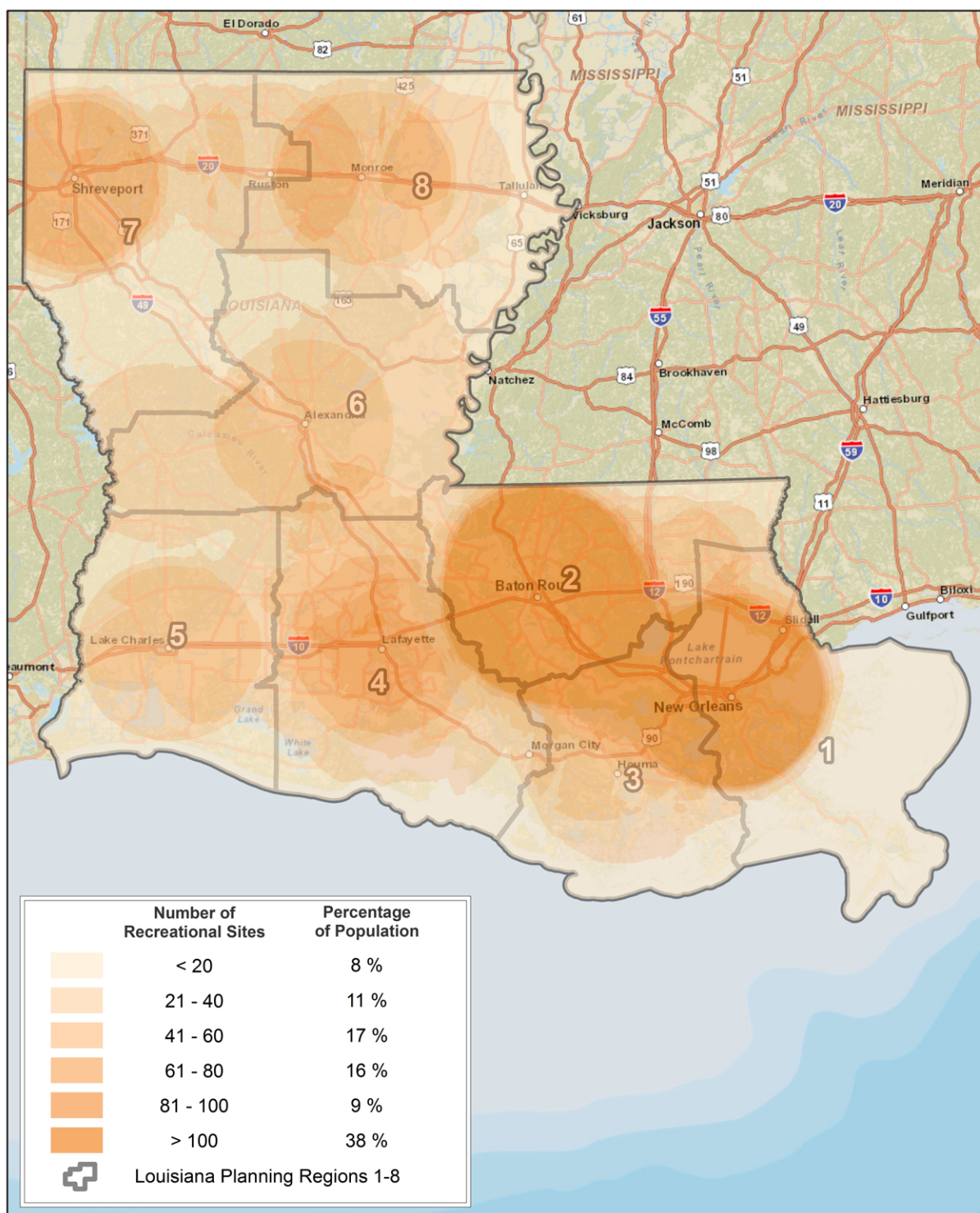


Map courtesy of NTB Associates, Inc.

95%

Ninety-five percent (95%) of the State's population is within 10 miles of a location with an opportunity to picnic.

Figure 3.7: Picnic Areas Within 30 Miles

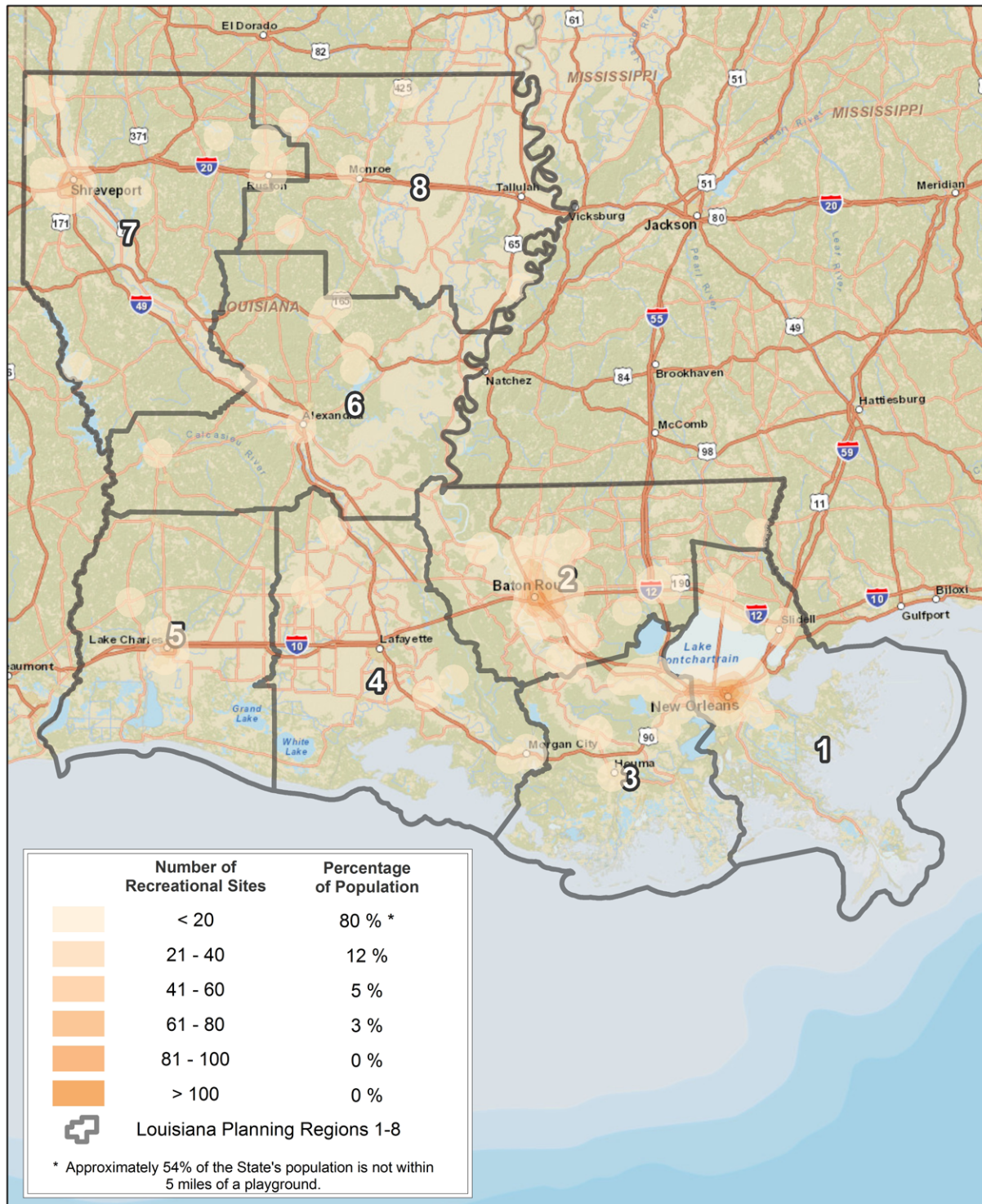


Map courtesy of NTB Associates, Inc.

100%

One hundred percent (100%) of the State's population is within 30 miles of a location with an opportunity to picnic.

Figure 3.8: Playgrounds Within 5 Miles

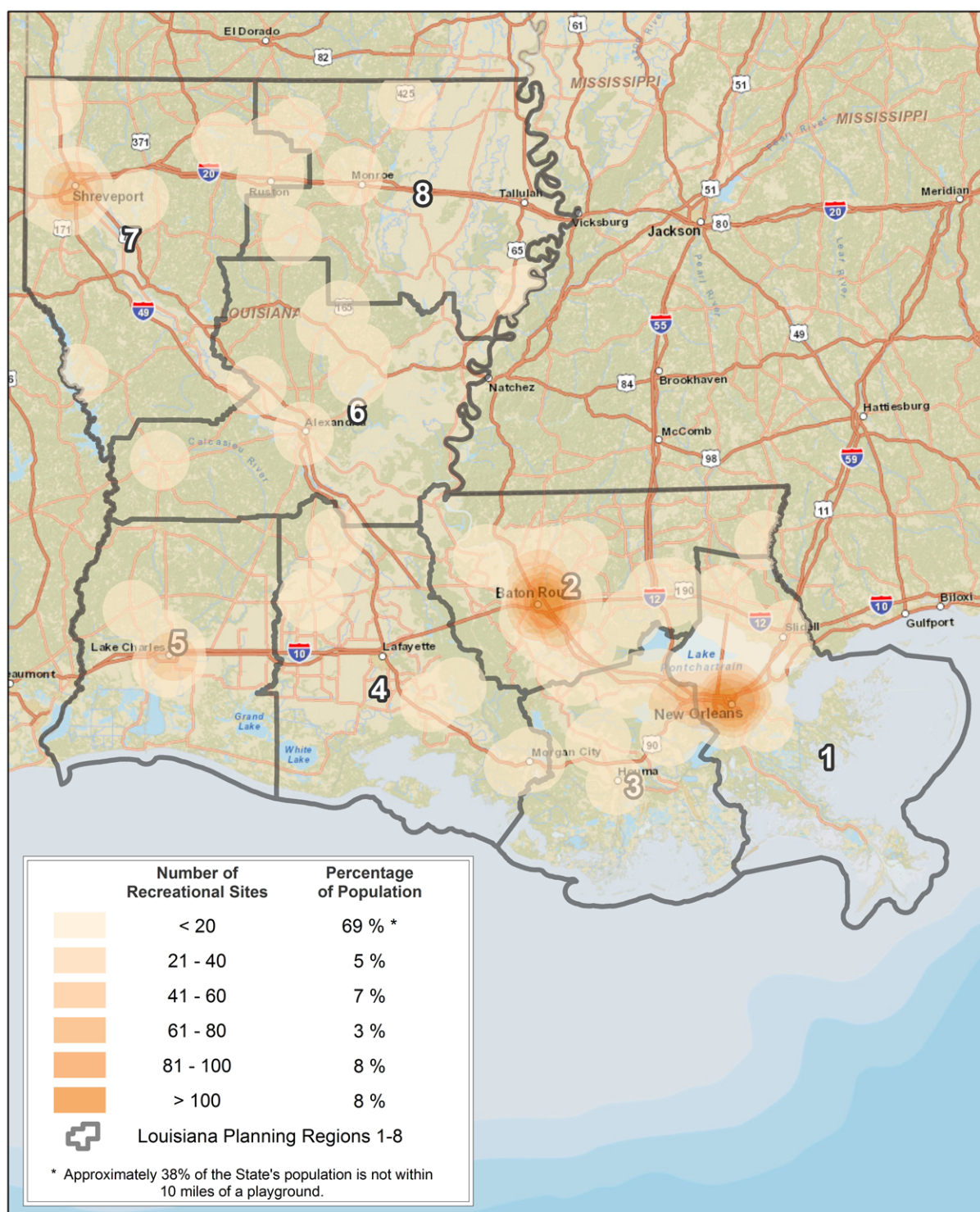


Map courtesy of NTB Associates, Inc.

46%

Only 46 percent of the State's population is within five miles of a playground based on the available data for this analysis.

Figure 3.9: Playgrounds Within 10 Miles

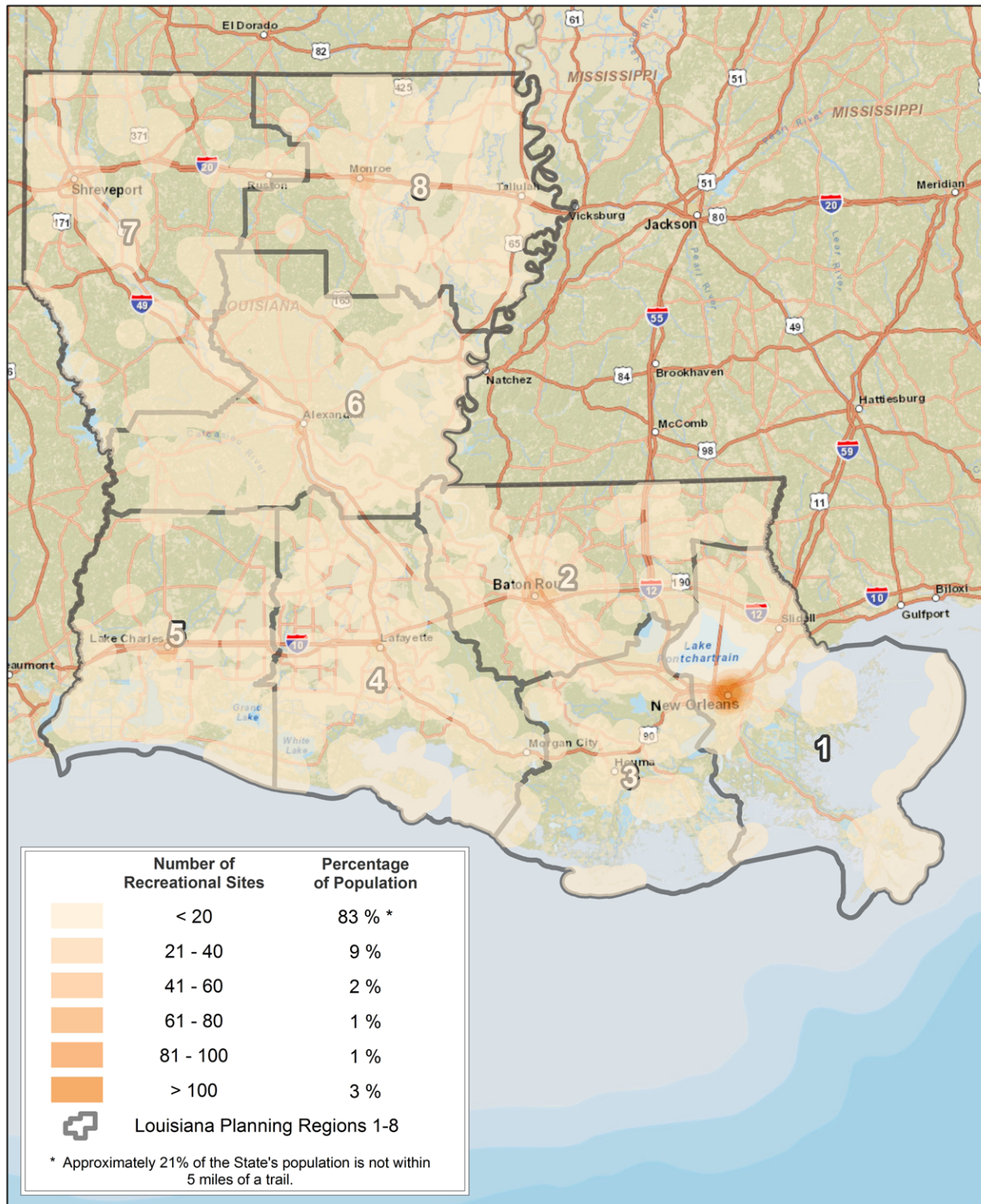


Map courtesy of NTB Associates, Inc.

62%

62% of the State's population is within 10 miles of a playground based on the available data for this analysis.

Figure 3.10: Walking/Jogging Trails Within 5 Miles

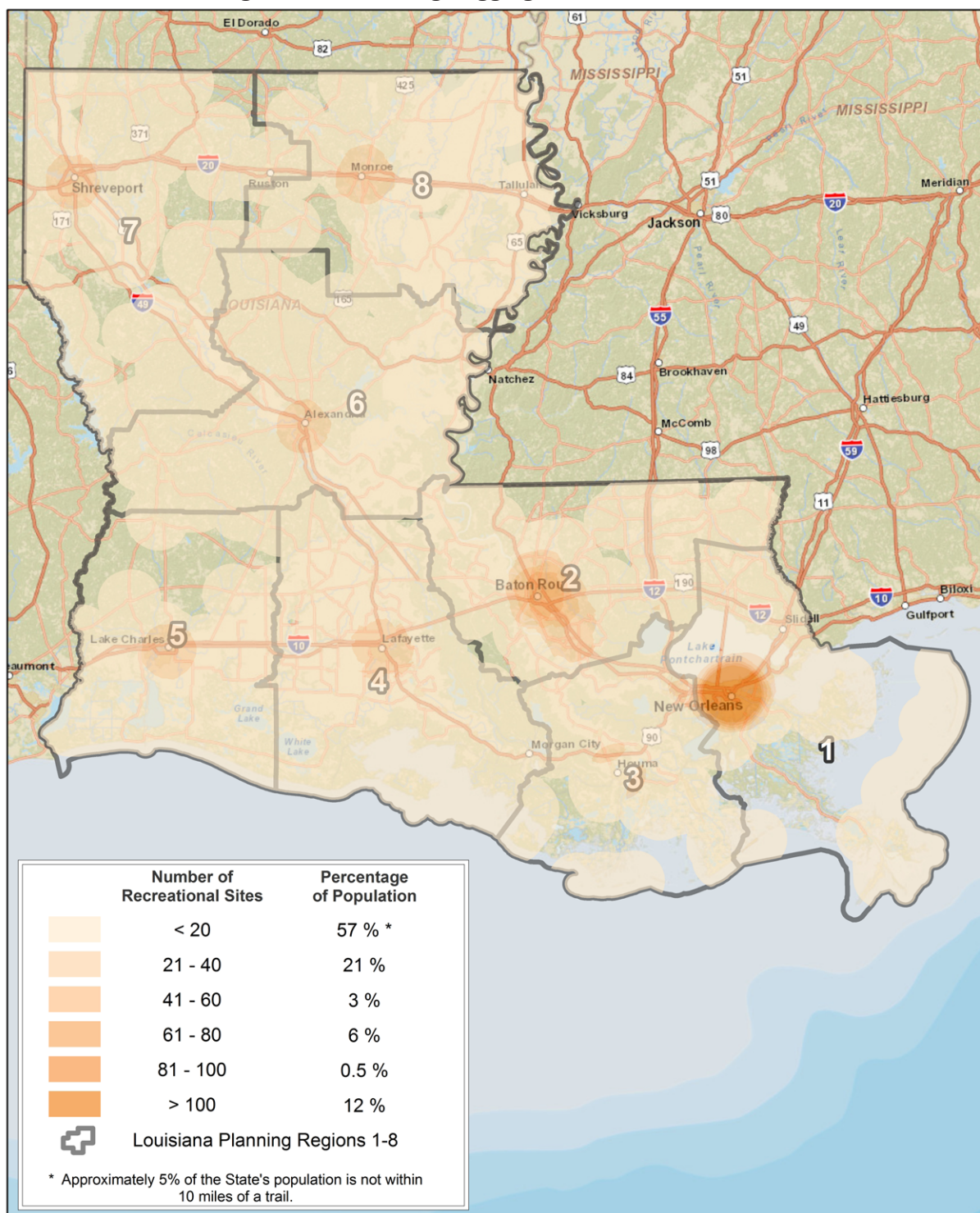


Map courtesy of NTB Associates, Inc.

79%

Seventy-nine percent (79%) of the State's population is within five miles of a location where they can participate in walking or hiking activities.

Figure 3.11: Walking/Jogging Trails Within 10 Miles

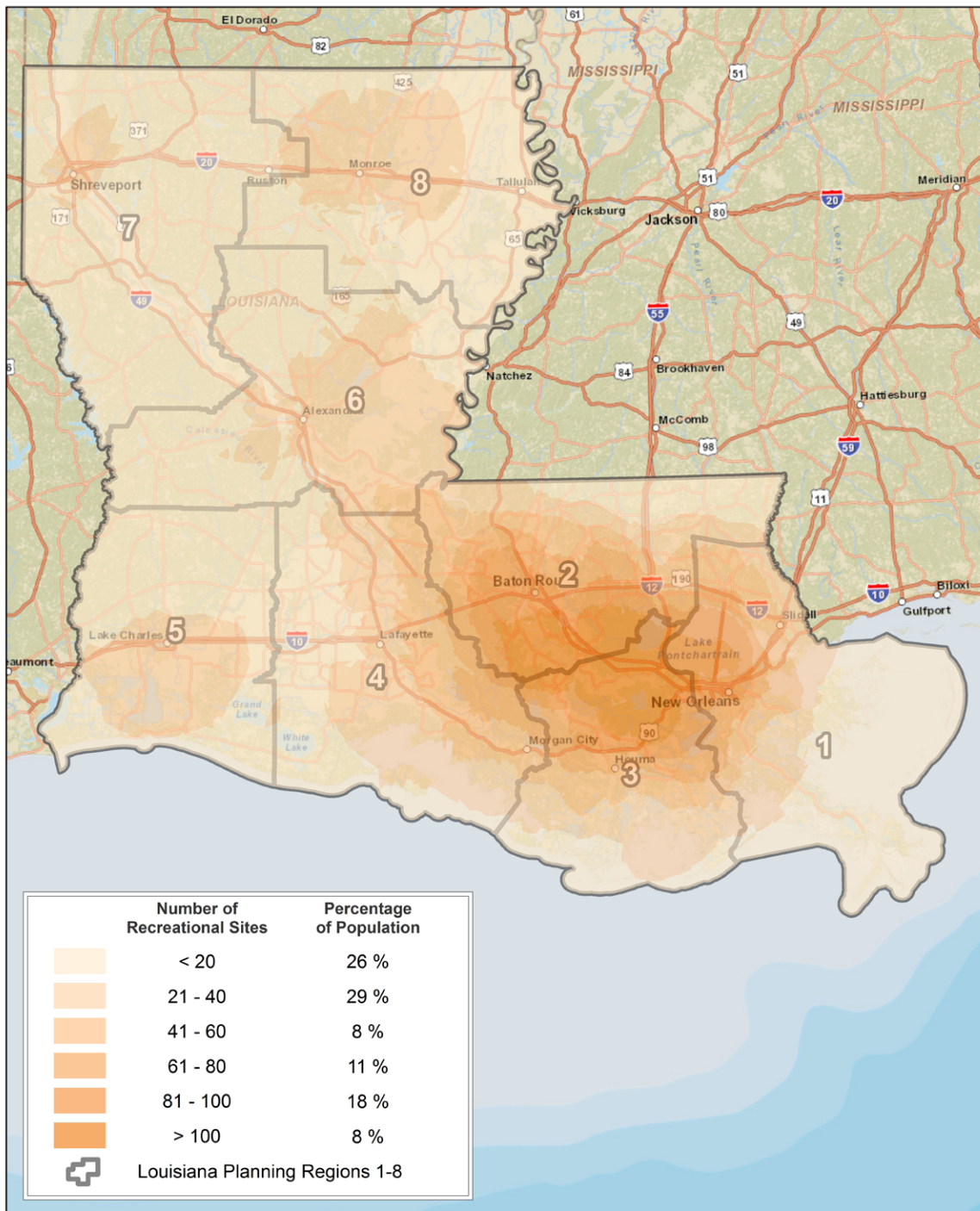


Map courtesy of NTB Associates, Inc.

95%

Ninety-five percent (95%) of the State's population is within 10 miles of a location where they can participate in walking or hiking activities.

Figure 3.12: Water Access Opportunities Within 30 Miles



Map courtesy of NTB Associates, Inc.

Based on this analysis, the state's population has ample access for water related activities within an hour drive. This is a discrepancy from the survey results, which indicate developing water access as a high priority. Therefore, a conclusion can be drawn that there is not adequate advertising of water access points in state, and the public cannot use access points if they do not know about them. The data for public marinas and boat launches is heavily concentrated in the southern portion of the state with very little data in the northern portion, although there are likely multiple access points throughout the state. Also, the analysis did not account for any private access points which are heavily used throughout the state, as well.

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Picnicking summary: Louisiana appears to provide adequate coverage for formalized picnicking opportunities throughout the state, as the areas without coverage within five miles are more rural in nature and have the opportunity for informal picnicking.

Playground summary: Based on the available information, access to playgrounds within a 10 mile radius from each playground appears under-represented across the state. Additional information that would be beneficial in analyzing playground access across Louisiana includes public and private schools that allow the public to utilize playgrounds during off hours.

Walking/Hiking opportunity summary: Walking/hiking opportunities were listed as very important activities on the survey. Based on the available information, access to walking/hiking areas within a five-mile radius from each opportunity appears under-represented across the state. Additional information that would be beneficial in analyzing walking/hiking access across Louisiana includes the locations of trails, sidewalks, athletic tracks, and other transportation-related paths.

E. SUSTAINING LOUISIANA'S WETLAND LEGACY

Section 303 of the Federal Emergency Wetland Act requires that the SCORP address wetlands as an important outdoor recreation resource. **Figure 3.13** depicts Louisiana's wetlands, based on information from the National Land Cover Dataset.

In further support of Section 301 of the Federal Emergency Wetland Act, The National Wetlands Priority Conservation Plan is a framework document of the U.S. Department of the Interior Fish and Wildlife Service which provides guidance to federal and state agencies acquiring wetlands through Land and Water Conservation (LWCF) appropriations. The plan provides a process for identifying priority wetlands for preservation and protection under the provisions of the LWCF.

Overall, Louisiana contains approximately 25 percent of the United States' coastal wetlands, and 40 percent of its salt marshes (www.seagrantfish.lsu.edu/pdfs/WetlandFunctions.pdf). The estimated acreage of wetlands in Louisiana is 3,300,000 acres, while 5,760,000 acres are classified as open water, based on the information from the National Land Cover Dataset. Accordingly, wetlands occupy approximately 10 percent, and open water 17 percent, of Louisiana's area. The majority of the wetlands are in the eastern and southern portion of the state, along the Mississippi River and the Gulf of Mexico, and consists of woody wetlands, bayous, and surface water.

Louisiana is fortunate to have ample water access across the state with numerous lakes, bayous, rivers, and the Gulf of Mexico. The Mississippi River and its delta form the eastern boundary of the state, and the southern portion of the state is adjacent to the Gulf of Mexico. Some of the benefits of wetlands include: aiding in stoppage of flood waters, filtering drinking water, providing habitat for animals, preventing erosion, providing aesthetic beauty, and protecting water quality. In addition, wetlands can provide recreation opportunities and economic benefits. In 2002, Louisiana commercial fish landings exceeded one billion pounds with a dockside value of \$343 million – approximately 30 percent of the total catch weight in the lower 49 states (water.epa.gov/type/wetlands/outreach/upload/EconomicBenefits.pdf).

Figure 3.13: Louisiana Wetlands - National Land Cover Database



Map courtesy of NTB Associates, Inc.

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Access to water has been proven in this SCORP to be a priority for residents of Louisiana. The state's wetlands contribute to recreational water access; however, once a site is available for recreation use, it must have long-term maintenance to ensure that there is a balance between the health of the eco-system and the enjoyment of the users.

F. WETLANDS PRESERVATION EMERGING ISSUES

In 2012, America's WETLAND Foundation released a report titled "Beyond Unintended Consequences: Adaptation for Gulf Coast Resiliency and Sustainability" that made recommendations focused on Gulf Coast sustainability based on research and input from several leadership forums held in different communities from Florida to Texas. To view a copy of this report, visit www.futureofthegulfcoast.org.

Additional resources on the value of Louisiana's wetlands, as well as approved methods for addressing negative impacts to wetlands as required by section 404 of the Clean Water Act are outlined in a series of white papers (www.greenfieldadvisors.com/blog/186-the-history-of-louisiana-coastal-wetlands) produced by Greenfield Advisors, a global real estate analysis firm.

Advocacy efforts to protect Louisiana's Gulf Coast are ongoing. For example, the Gulf Restoration Network (GRN), a multi-state coalition working to improve the health of the entire Gulf of Mexico, conducts research, education, and advocacy campaigns to raise awareness of gulf protection and restoration. The GRN's vision is that "...the Gulf of Mexico will continue to be a natural, economic, and recreational resource that is central to the culture and heritage of five states and three nations. The people of the region will be stewards of this vital but imperiled treasure, and they will assume the responsibility of returning the Gulf to its previous splendor."

According to the Gulf Restoration website, in April 2010, the BP oil disaster spilled more than 200 million barrels of oil and two million gallons of toxic chemical dispersants into the Gulf of Mexico. The federal government, along with local, state, and national advocacy and conservation groups, are leading efforts to improve public health and recreation, the commercial fisheries industry, and coastal restoration. These efforts remain ongoing. Partnerships and coalitions are working to rebuild barrier islands, restore wetlands, and improving natural storm protections in the Gulf Coast region.

Wetlands Loss

The following data regarding the current conditions and loss of wetlands in Louisiana has been compiled by the Coastal Protection and Restoration Authority of Louisiana.

(www.americaswetland.com/photos/article/Coastal_facts_sheet_03_27_2012.pdf):

- Length of Coastline: 397 miles
- Tidal Shoreline: 7,721 miles
- Coastal Zone Population: 2,000,000 (47% of the state's population)
- Coastal Area: 14,587 square miles
- Coastal Louisiana has experienced a net decrease of 1,883 square miles of land between 1932 and 2010 due to natural and man-made causes.
- Currently, Louisiana has 37 percent of the estuarine herbaceous marshes in the continental United States and accounts for 90 percent of coastal wetland loss in the lower 48 states.

Barrier island and wetland studies conducted by the United States Geological Survey (USGS) have explored strategies for mitigating future wetland losses from natural causes such as hurricanes, saltwater intrusion, natural shifts in the course of the Mississippi River, tidal currents, and sediment transport as well as man-made causes such as canal dredging and wetland draining, levees, and commercial and recreational boat traffic. Current scientific studies suggest restoration approaches that mimic natural processes for future diversions of the Mississippi River, including sea-level rise, subsidence of coastal areas, and beach nourishment.

G. WETLANDS PRESERVATION

In 2012, Louisiana published the *Coastal Master Plan*. This document provides information to assist citizens of the coast with caring for their families, managing their businesses, and planning for the future. The projects highlighted in the plan seek a balance between providing immediate relief to impacted areas and providing a foundation for larger efforts essential to protecting coastal communities from future impacts for the next 50 years.

A full version of this master plan is available online here: www.coastalmasterplan.louisiana.gov/2012-master-plan/final-master-plan/

One of our nation's most ecologically rich examples of river swamp stretches across 14 parishes in south-central Louisiana. The Atchafalaya National Heritage Area (www.atchafalaya.org) is home to more than 24 species of threatened or endangered birds and wildlife, as well as a culturally diverse population of Cajun, European, African, Caribbean and Native-American people. Significant concentrations of natural, scenic, cultural, historic, and recreational resources, provide Louisiana residents with myriad opportunities for education and outdoor recreation. A map of this area can be found in **Appendix M**.

In addition to the Atchafalaya National Heritage Area, other organizations provide wetlands education resources:

LaBranche Wetland Watchers (www.wetlandwatchers.org) is a wetlands education, awareness, and service learning organization serving over 1,100 fifth through seventh grade students annually at Hurst Middle School in Destrehan Parish. The organization primarily uses the Bonnet Carre Spillway as its outdoor classroom, and partners with the University of New Orleans Pontchartrain Institute for Environmental Science Water Testing Project (www.pies.uno.edu) and Louisiana State University Coast Roots Project (coastalroots.lsu.edu) to achieve its educational mission.



Education and service projects help increase awareness about wetlands (Image courtesy of the LaBranche Wetland Watchers [website](http://www.wetlandwatchers.org))



Replanting coastal vegetation (Image courtesy of Atkins/Tommy Davidson)

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The group is also developing a Wetlands Watchers Park (www.wetlandwatchers.org) and trail system in St. Charles Parish. Students conduct water quality monitoring, tree planting, clean ups, and species identification, and provide educational outreach to area residents.



Louisiana's coast and deltas are a major part of the state's unique character (Images courtesy of the Louisiana Office of Tourism)



People aren't the only species watching the wetlands (Image courtesy of Lenny Wells Photography (www.naturallylouisiana.com))