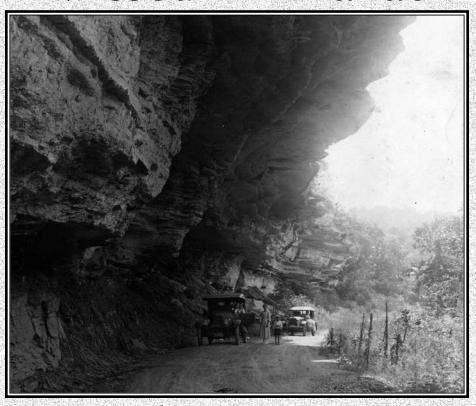
CHAPTER 1

Missouri Almanac



Cars along Elk River, near Noel, Missouri Danzero Photograph Collection Special Collections, Missouri State University

Pathways to Progress

Margot Ford McMillen

he very name of our state reflects the importance transportation has played in Missouri's history: It means "people of the big canoes." In 1673, Father Jacques Marquette drew the first map of the area, arriving with trader Louis Jolliet on the Mississippi River from Canada. "Missouri" was taken from the word used by Marquette and Jolliet's Native American guides to describe the people living here. Today, canoes still travel the Missouri, and the rivers remain public property shared by citizens and commerce. But our transportation system has become extensive, and Missouri has become a crossroads—a place where rivers, trails and roads from all across the country meet.

There are more than 32,000 miles of highways and 10,224 bridges in Missouri, including 55 major river bridges, more than any other state. Although cars and trucks continue to increase their efficiency, other modes of transportation continue to move people, produce and freight through the state. Barges, floating on river currents, use small amounts of energy and can utilize the state's 1,050 miles of navigable waterways. Missouri is a crossroad of rail networks, with nineteen railroads operating in the state and some 4,255 miles of main line track. Missourians travel in the air as well, with 120 airports and an estimated 12.6 million airline passengers moving through the state in 2008.

The numbers are impressive, but the real history of transportation in Missouri is a story of opportunity, job creation, and the shaping of communities. As Missourian and former Federal Highway Administration administrator Rex Whitton put it, "transportation and land-use planning to a very large extent will determine the future character of the city." From early times, goods and people have moved into the most remote places because someone created a path. And, as innovations have become necessities, the pathways have led to progress.

Background image: Maps of land grants claimed by Daniel Boone and his son Daniel Morgan Boone, 1799.
Registre d' Arpentage
Missouri State Archives

Water

Prehistoric humans followed the rivers to our state, traveling here while hunting animal herds. These early humans arrived at the end of the last Ice Age, about 11,000 or 12,000 years ago. When the animals moved from one area to another seeking fresh pasture, so did the people.

Because of this ancient travel, there are prehistoric sites all over Missouri, especially near the rivers. Scientists have more questions than answers about the end of the prehistoric humans, but they disappeared when the animals died. Later, new groups of migrating humans entered the land. By the 1500s, organized tribes of Native Americans had settled along the rivers.

Like the prehistoric people, Native Americans came for resources. Building their villages near rivers, which provided water and easy transportation by canoe, they moved according to the seasons. In the village they planted gardens of corn, squash and melons in the spring, before beginning the long journey, sometimes as long as 200 miles, to the bison grounds in the West. Spending the months of June (which the Osage called the Buffalo-Pawing Moon) and July (Buffalo-Breeding Moon) on the prairie, they returned to their villages in August (Yellow-Flower Moon). While the men continued to follow deer and smaller game on the rivers and woodland paths, women preserved the garden produce, buffalo meat and sinews in preparation for winter.

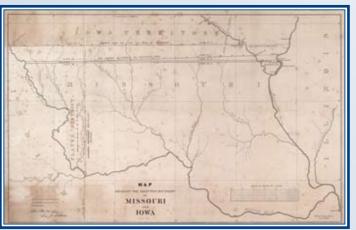
By the time European explorers traveled those same rivers to our area, there were well-established villages of Osage and Missouri tribes, with Native Americans still migrating from their villages to hunting grounds. At the time, the rivers were slow-moving, wide and shallow. Canoes, skimming the surface of the water, were the perfect transportation method. They

could navigate shallow creeks and be carried over land where there was no water. When early European entrepreneurs needed more space, they lashed two canoes together and put a deck between them. Later, they devised flat-bottomed boats, followed by keel boats. The downstream trip was a relatively simple float of 25 to 30 days, but to get upstream the boats were poled, or dragged by men walking on towpaths on the river bank

The journey of French explorers Marquette and Jolliet, who led an expedition down the Mississippi River in the late 1600s, gave us the first maps and journals of our region. Not long after, other Europeans traveled here in search of resources that could be sold in markets back in Europe. The French explorer Etienne de Bourgmont arrived in 1714 and wrote his Exact Description of Louisiana, of Its Harbors, Lands and Rivers, and Names of the Indian Tribes That Occupy It, and the Commerce and Advantages to Be Derived Therefrom for the Establishment of a Colony. The title leaves no question about the motives of the new travelers. As with travelers of the past, they moved from Europe to the new world for its resources. Many river and creek names today remind us of the French exploration. Naming the rivers "Platte" (meaning flat), or "Auxvasse" (meaning muddy), or "Cuivre" (meaning coppery), the early French explorers left their marks all over the waterways.

De Bourgmont spent most of his time in a Missouri Indian village of longhouses in present-day Saline County. Today the site is part of Van Meter State Park and provides a perfect example of a site typical of Native American river villages. It is close to water, but also buffered by forests. On a hill with views of the river in both directions, the location was secure and provided easy transportation to gather river plants and track animals. De Bourgmont liked the location enough to attempt to build a fort nearby. A team

of archaeologists led by Carl Chapman and Robert T. Bray excavated the fort in the 1950s, and estimated that the village was home to a thousand or more families. The archaeologists even found ocean shells and pipes made from Minnesota stone, indicating that the Missouri traveled as consumers, using the rivers as highways to new resources and trade with other tribal groups.



Albert Lee's 1839 map of the disputed boundary between Missouri and the Iowa Territory shows the network of rivers that covers the northern half of the state.

Missouri State Archives

By 1704, about a quarter-century from



Daniel Boone's Sons Making Salt at Boone's Lick, by Victor Higgins.

Missouri State Capitol Mural Missouri State Archives

when the French explorers Marquette and Jolliet first journeyed through the area, the governor of French Louisiana reported that there were 110 French traders along the Missouri and Mississippi Rivers. Lively communities of mixedblood people, or metis, were appearing in the region. By 1715, lead was discovered at Mine La Motte, in present-day Madison County, and settlement by French miners, mine developers and their slaves proceeded in fits and starts. By 1762, when the territory was transferred to the Spanish, there were about seventy Creole families, mostly farming and digging for lead, in the outpost called Ste. Genevieve, the first permanent settlement claimed in Missouri.

The famed Boone family, invited to the area by the Spanish government, brought some of the first American settlers. Daniel Boone's sons, Daniel Morgan Boone and Nathan, began an enterprise to purify salt from a saline spring in present-day Howard County. After boiling off the water in huge kettles, the salt was shipped to St. Louis by keelboat. The timing was perfect, as salt was a necessity for the settlers that were beginning to arrive along the Mississippi River.

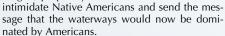
When Lewis and Clark returned safely from their voyage to the Pacific coast in 1806, the message was that pioneer families, along with supplies, could travel west safely. The heyday of transportation by horseback and covered wagon would soon begin, but the same transportation that brought pioneers from the east also brought salt from eastern factories, which forced the Boone salt factory to close. Today it is the home to Boonslick State Park near Napton.

By 1821, there were enough Americans in the Missouri territory to achieve statehood. This meant security for most settlers, but the urge for adventures pushed others farther west. By 1822, the trail west to Santa Fe was established, followed by the Oregon Trail northwest, which crossed the Rocky Mountains. Nearly as soon as it was created, that trail split in two directionsone to Oregon and one to California. River towns like Arrow Rock, Franklin, Independence and Westport quickly became prosperous as starting places for pioneer wagon trains heading west.

In such a town, a family could buy a wagon and team, plus food and supplies, then join a convoy of other wagons with a guide who was familiar with the route. A wagon measuring 4 feet by 12 feet could be purchased for \$80 to \$90. A list of supplies for a man, published in 1859, included two flannel overshirts, two woolen undershirts, two pairs of thick cotton drawers, four pairs woolen socks, two pairs cotton socks, four silk handkerchiefs, two pairs of shoes, two ponchos, one coat, one overcoat, one comb, one brush, two toothbrushes, four pounds of soap, one knife, needles, thread, buttons, pins, a thimble and some beeswax. Some river towns developed hearty Main Streets with merchants, hotels and restaurants. Missouri, in the middle of the nation, had become the crossroads state, a place where trails and rivers came together — the Gateway to the West.

Steamboats

n 1817, the Zebulon M. Pike became the first steamboat to arrive in St. Louis on the Mississippi River, taking six days to get to Missouri from Louisville. Two years later, the *Independence* ascended the Missouri River to Franklin. Soon after, the Western Engineer traveled the upper Missouri. This steamboat was built to look like a steam-blowing dragon, purposely to



Not long after Samuel Clemens was born in 1835, his family moved to the great Mississippi River town of Hannibal. Clemens, better known as Mark Twain, noted: "When I was a boy, there was but one permanent ambition among my comrades in our village on the west bank of the Mississippi River. That was, to be a steamboatman."

At the height of the steamboat era, wealthy Missourians took pleasure trips on the Missouri River on fine boats like the Montana and The Belle of St. Louis. In 1857, over 720 steamboats docked in Kansas City, some loaded with people and goods for business and others packed with travelers watching the river banks. Parties of fashionable young people and their chaperones might start in St. Joseph and end up in Kansas City, dancing quadrilles and Virginia reels and dining on fine foods.



The steamboat Cape Girardeau on the Mississippi River, c. 1920s. Missouri State Archives

Despite that success, river transportation was being challenged by the railroads. In 1836, fifty-nine delegates from across Missouri met to petition Congress for 800,000 acres of land on which to build two rail lines. A year later, financial panic killed the attempt, but boom times would return. By 1849, plans were laid for a transcontinental railroad.

On November 1, 1855, Jefferson City had spent months preparing for the arrival of the city's first "iron horse," and a great crowd had arrived to see the sight. Residents had prepared a meal for the ten train cars filled with 600 St. Louisans, including many of the state's dignitaries. In an era of crossings on river ferries rather than bridges, the route included travel over the state's first railroad bridge, spanning the Gasconade River. It had not been completed but had passed tests to determine its fitness. As the train began to cross, the first trestle collapsed and the engine and nine cars fell 30 feet to the river bed. Over two dozen people died.



The First Steamboat on the Missouri **River Arriving** in New Franklin in 1819. by Victor Higgins. Missouri State Capitol Mural Missouri State

Rails

Diver transportation was so successful that Missouri counties with river ports refused to let the rail lines cross their land. To make things more contentious, some rail backers were northerners at a time when the south was considering secession. Despite these setbacks, a few short lines were completed, and, in 1859, the first railroad reached across the state, from the Mississippi River town of Hannibal to the Missouri River town of St. Joseph. Early locomotives required wood and water every few miles, so the new line spawned new villages. Connecting major river towns on the east and

west sides of the state also opened the way for a daring experiment: the Pony Express, which picked up mail in St. Joseph and carried it by galloping horsemen to California.

The "Hannibal and St. Joe" was the only rail line across Missouri during the Civil War, but after the Civil War, peace brought progress. Nearly one-third of Missouri's population had disappeared in the violent times. In the years following, speculators and new immigrants began arriving from the north. This led to the railroad industry becoming one of the first building booms after the Civil War. By 1868, there was a railroad bridge across the Mississippi River at

While some of the old railroad service towns died as locomotives were developed to travel longer between stops, other towns became even more important. One such town, Moberly, was named for Colonel William E. Moberly, first president of the Chariton and Randolph Railroad. Established in 1866 as a main hub, it grew so fast that it earned the nickname "The Magic City." An 1867 advertising bulletin noted that "In the east, the towns and cities make the railroads - here the railroads make the cities and towns."

Moberly became a major stop for the Wabash Railroad, with a turntable, repair shops and switch yards. The turntable was necessary because early locomotives could not go backwards, so they needed a piece of track that turned them around. After the turn, they were driven into a switch yard, where lines of cars were sorted according to destination. From the grain fields and coal mines in the north, to the logging camps and lead mines in the south, Missouri products helped build the nation.

Missouri's economic future looked secure with rail transportation as a major player. Along the main lines, spur routes were built to serve communities and individual businesses. In Callaway County, which had voted 1,025 to 627 against building the railroad in 1853, a bond was floated in 1871 to build a spur line. The line ran from Mexico to Cedar City, with stops in many Callaway County towns. The main depot





Railway Map of Missouri, 1888.

Missouri State Archives

was in Guthrie, a town of about 100. Besides picking up and delivering people and products from local businesses, the line carried all of the parts for at least one house ordered from Sears, Roebuck and Co.

As overland travel continued to boom, many river towns went into decline. Others were able to successfully move from one mode of transportation to the other. St. Charles had been a successful river town and then housed the car repair shop of the North Missouri Railroad. When the shop closed, the city again backed the transportation business. The St. Charles Car Company first built horse-drawn street cars, trolleys and freight cars for steam railroads. They began building railroad passenger cars in 1886, during the height of the railroad building boom.

The company quickly became a major employer with 1,800 workers. In 1889, it merged with 12 other companies to form American Car and Foundry, a major producer of passenger cars.

As the century turned, the business prospered, but two World Wars meant that production shifted from civilian to military items. During World War I, St. Charles turned out 50,000 wagons and parts for artillery vehicles. In World War II, it produced 1,800 light tanks and 1 hospital car per day in 1944. After the wars, a return to civilian production again saw business boom as modern railroads replaced old equipment. The plant also built sleeping cars for a time, but by 1959, 100 years after the first railroad crossed the state from Hannibal to St. Joseph, the shops were closed permanently.

Harvey Houses and **Pullman Cars**

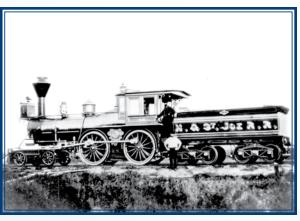
▲ issouri railroads not only con-Mnected people throughout the state, they created jobs for two groups emerging on the labor scene. From the beginning, the Pullman Company was a primary employer of African-American men, and the Harvey House restaurants were primary employers of white women.

Frederick Henry Harvey came to America in 1850 as a 15-year-old from England and found his way west. Working on railroads, he worked on the Hannibal and St. Joseph, which became the first line in the nation to include a car where mail was sorted as it traveled. But the train, with its board

seats and rough tracks, was so uncomfortable that it earned the nickname, "Horrible and Slow Jolting." Harvey quickly realized that he could make money providing comfort to exhausted travelers.

At major stops, hungry travelers came off the train, stiff and uncomfortable. In many railroad towns, food was hard to find, and when they found it, travelers would be served dry biscuits, greasy ham and weak coffee. Harvey had operated a restaurant in St. Louis, and he knew that if he served good food on china from France, with silver from England and linen from Ireland, he would send the message that dining, and rail-road traveling, could be civilized. Furthermore, he realized that if he had a railroad line as a partner, he would have a more reliable base of clients for his services. He made a deal with the Atchison, Topeka and Santa Fe lines, and "Meals by Fred Harvey" soon became a slogan of the line. The Santa Fe supplied space in their depots and brought fresh ingredients on their trains. The menus included Kansas City beef and California seafood and produce. At the same time, Harvey created a system that could feed hundreds of passengers in the time it took to service an engine.

The first "Harvey Restaurant" opened in 1876. Twenty years later, he had seventeen, including an elegant restaurant in St. Louis Union Station. To speed service and keep the passengers on schedule, a brakeman on the train would take orders and send them by telegraph to the Harvey House cooks. A mile from town, the engineer would blow the train whistle to let the restaurant know they were close. They would be greeted at the station by a servant in a spotless white coat hitting a brass gong. Heading for the sound, the passengers would be guided to the door and to the dining room, where the Harvey Girls served the meals. When Fred Harvey died in 1901, his company held 15 hotels, 47 restau-



Hannibal and St. Joseph Railroad locomotive.

Missouri State Archives

rants, and 30 dining car operations, and about half the employees were women. The company was continued by Harvey's sons.

While Harvey Houses were a major employer of women, The Pullman Company, operators of railroad sleeping cars that provided the most luxurious transportation of the time, offered jobs to African-American men. Pullman-Standard's history dates from 1859, when George M. Pullman remodeled two coaches into overnight sleeping cars that ran between Chicago and St. Louis for the Chicago, Alton & St. Louis Railroad. By 1886, the cars, also built by Pullman, boasted padded chairs and "toilet rooms." They were each 65 feet long and 9 feet 8 inches wide. Perhaps most innovative, the cars had large, plate glass windows with satin curtains. In the early years most overnight travelers were businessmen, and Pullman recognized that their accommodations would have to be clean and their attendants discreet. Each Pullman car had a conductor and a porter, who was in charge of cleaning, running errands and generally taking care of the travelers. Porters would also direct the white travelers to the best entertainment in their home cities, and the black entertainment districts in St. Louis and Kansas City became favorite stopping places for businessmen. The distinctive St. Louis blues sound and Kansas City jazz became part of the railroad experience, and soon Missouri musicians were touring the world and making recordings that would become the soundtracks of America in the 1920s, 1930s and 1940s.

At its peak, Pullman employed 20,000 black porters, and, in the 1920s, porters formed the first black labor union, the Brotherhood of Sleeping Car Porters. Through this organization, African Americans were able to improve their working conditions, laying the ground work for future generations to follow their footsteps in the labor movement.



Children stand in front of Charles Lindbergh's Sprit of St. Louis, c. 1928. Missouri State Archives

Air

There is no doubt that the twentieth century changed transportation in remarkable ways. At statehood in 1821, pioneers crossed Missouri in covered wagons. By 1921, transportation by rail was becoming commonplace. Yet, there was another form of transportation - the desire to take flight – competing for our attention.

Perhaps the oldest art in Missouri is a collection of rock carvings in Washington State Park, which record flocks of birds and single birds in flight. Do the petroglyphs celebrate a record sighting of birds? A longing by the artist to take wing? Do they represent the people's myths and beliefs? While we will never know the meaning of the birds carved in stone, it is clear that flight has always fascinated humans. If we could fly, early travelers thought, there would be no need for bridges, roads or rails. We could cross rivers and prairies easily and quickly, and leave rocks and trees in their places.

In July of 1859, a hot-air balloon was launched to carry mail from St. Louis to New York. The businessmen in the balloon carried food and drink and had a boat tied under the craft, just in case they landed on water. After a night in the air, they found themselves in a fast wind over Lake Erie. In a panic, they threw the

mail overboard and cut the boat loose. When the wind tossed them into the woods, the balloon burst and the wild ride was over - but they were, miraculously, in New York. They had traveled 809 miles in fewer than 20 hours - more than 40 miles per hour in a basket. That record was unbroken until 1910.

A few days after the eventful landing, the mail was rescued and delivered, but the mail delivery plan was abandoned. Despite the setback, ballooning continued to be a popular hobby. Designs improved, and at the 1904 World's Fair in St. Louis, there was the introduction of a lighter-than-air machine with steering. The hydrogen airship "Arrow" or "California Arrow" had a small motor with a propeller to control its direction. The Fair was a demonstration site for transportation of all kinds. Besides demonstrations of "Arrow," there were parades with people mounted on camels and horses, steam engines and carriages. On the artificial canals, fairgoers could enjoy a ride in a gondola.

Missouri's most famous aviator, Charles Lindbergh, was only 2 years old the summer of the World's Fair, but by the time he was twenty, he was learning to fly an airplane. Lindbergh was an experienced pilot by 1926, when he flew the first air mail route between St. Louis and Chicago in a machine that had wings made of wood covered with canvas. The 1859 balloonists would have been impressed. Taking off in farm fields and navigating by watching for landmarks, flying the mail route turned out to be excellent experience for Lindbergh. In 1927, motivated by a prize for the first pilot to fly across the Atlantic Ocean, Lindbergh was backed by St. Louis businessmen to compete. To honor the city that had always led the nation in transportation, they named his plane "Spirit of St. Louis."

The flight took 33 hours and 30 minutes, with Lindbergh sitting in a cramped chamber with no front window, navigating by periscope. With the engine in front, and fuel tanks behind it, piloting the airplane was like sitting inside a flying bomb. He wrote that he used fuel from the "nose tank" first, draining it so that the airplane's weight would shift to the back in case of a crash. "Lucky Lindy" made it from New York to Paris, where he was greeted by thousands of wellwishers after landing.

Having proven that long-distance air flight was possible, Lindbergh founded an airline that would fly across the United States. He also helped develop airports in St. Louis and Kansas City, which today link our state with the world.



Hot air balloon over University City, Missouri, 1910. Missouri State Archives

Roadways

At the same time air travel was becoming feasible, there was great progress and innovation happening on the ground. In 1893, the first "horseless carriage" came to St. Louis. Soon, Missouri manufacturers were building cars with names like Moon, Dorris and St. Louis Motor Carriage. By 1921, there were 16,387 registered cars in the state, which at that point was home to more than three million residents. Automobiles began as expensive novelties, but drivers quickly saw the potential of convenience and exploration of new places.

For the most part, road travel was slow and hazardous. Each county had planned their own road systems until 1907, when the General

miles of hard-surfaced state roads to connect counties throughout the state. A tremendous bi-partisan effort emerged in support of the measure, and Missourians passed the amendment with more than 52 percent of the vote.

What followed was a long, hot summer of negotiation in the General Assembly to determine how the money would be spent. A flurry of bills, amendments, proposals, and withdrawals led to a compromise: \$29 million went to the "peacock lanes," which connected urban centers to tourist attractions, and \$31 million would finance the first state highways. Each county also received a complete cross-county road before work started on any of the ancillary roads.

The "Centennial Road Law of 1921" represented the most expensive special session in



Intersection of Highway 66 and Highway 61, Kirkwood, Missouri, October 1948. Missouri State Archives

Assembly passed laws that enabled counties to hire highway engineers. Then in 1916, federal lawmakers passed a law to provide dollar-fordollar matches for road improvement. In his 1917 inaugural speech, Governor Frederick D. Gardner pledged to press forward with laws that allowed the state to benefit from \$2.5 million in federal funds. Despite the improvements, the funding was not enough to provide safe passage for the thousands of new drivers coming into the market every year. As the "Roaring Twenties" began, debate in the state hit a fever pitch.

In 1920, a constitutional amendment was proposed to finally "lift Missouri out of the mud." The amendment would allow the state to issue \$60 million in bonds, financing over 6,000 Missouri history to that point. A year later, the state highway system was established. Four years after that, Missouri's system was used in planning the U.S. system. After World War II, a national network of road transportation would connect towns and cities across state lines. Throughout this period of development, Missouri continued to be a transportation leader.

By 1952, the state maintained a vast network of farm-to-market roads, state highways and connecting routes - a total of nearly 20,000 miles of roadway. To label the roads, the state developed a system of labels in black letters on white signs. The system of using single or double letters (like "M" or "MM") originated here and has been adopted by other states. Although may appear



Federal Aid Highway Act sign along Highway 40 at St. Charles, Missouri, October 10, 1956. Missouri Department of Transportation Collection Missouri State Archives

unpredictable, the highway labeling system has rules, even though the rules are occasionally broken. Combinations of letters are allowed, but only with A as the first letter, as in "Route AD," unless the road goes to a recreational area. In that case, the road may have a name that begins with "R," like "RA." At county lines, the roads traditionally change names.

In the 1950s, the apex of the post-war boom, Americans took to the road as never before. The summer after leaving Washington and returning to life as ordinary citizens in Independence, Harry and Bess Truman took a three-week road trip to the East Coast and back. Logging 2,500 miles, the Trumans ate in roadside diners and slept in average lodgings, trying to blend in with American life. "I like to take trips - any kind of trip," Truman wrote. "They are about the only recreation I have besides reading."

The time had come to create a seamless path of pavement and bridges from coast to coast, and it began in Missouri when the first three contracts under the Federal-Aid Highway Act of 1956 were signed here. The first contract was to create U.S. 66, better known as Route 66, which connected Chicago to Los Angeles and included 317 miles of road across Missouri. A few years after that historic beginning, in 1961, Missouri native son Rex Whitton was appointed administrator of the Federal Highway Administration. Whitton encouraged roadside landscaping and noted that there are social implications to new highways, stating that "an investment in the highway plant, to increase its capacity, in turn increases the potential of economic and social development."

Even today, our economy depends on transportation, and in recent years, we have put many resources into our infrastructure. A new project, launched in 2007, promises to bring bridges and highways up-to-date, with wider yellow stripes, brighter signs, rumble strips, paved shoulders and smoother pavement. We also became the first state to rebuild parts of the old highway system by using federal funds from the American Recovery and Reinvestment Act of 2009.



Dedication of the I-70 Bridge over the Missouri River at Rocheport, Missouri, 1960.

Missouri Department of Transportation Collection Missouri State Archives

And the future beckons...

Missouri is on the cusp of change, and much of that change has to do with transportation. Some of the excitement still has to do with the sheer joy of moving around and seeing new sights. Travel on the original freeways – the Mississippi and Missouri Rivers – is now rare, but there is an exciting new trail beside the Missouri River. The Katy Trail extends across the state in a magnificent 225 miles of manageable, nearly flat hiking and bike path. The trail takes riders into wine country, past prairie land, river glades, and limestone bluffs, and through the stone tunnels and steel trestles of the old Missouri-Kansas-Texas, or MKT, Railroad. Much of the trail follows the Lewis and Clark Trail along the Missouri River, and it is the longest rails-to-trails project in the United States. Like the old spur railroads, the Katy Trail has spawned paths into the country side including a side trail nearly nine miles long from the river into downtown Columbia and the University of Missouri.

With the age of cheap oil behind us, Missourians are exploring new ways to move people and goods. Engineering students at the University of Missouri have built a race car that runs on hydrogen. In Neosho, college students fit solar panels onto electric golf cars. In Rockport and other Missouri towns, consumers can plug electric vehicles into a wind-generated electrical grid and charge batteries to drive on energy that can go on forever.

The future may be unknown, but one thing is sure: Missourians are innovators and creators. Throughout the history of the Show-Me



Bicyclists on the Katy Trail.Missouri Bicycle and Pedistrian Federation

State, we have traveled across waterways, built networks of roads, and took to the skies. As technology and times change, the people of our state will continue to lead the nation by finding new ways to connect people and goods with the rest of the world.



Missouri State Archives

The Missouri State Archives is the repository for state and local government records of historical value. Highlights among manuscripts and original documents in the Archives include French and Spanish land grants, testimony concerning the New Madrid earthquake of 1811–1812, documents concerning Frank and Jesse James, maps of Missouri's first surveyed roads, and material pertaining to Harry S. Truman.

Through partnerships with local historical societies, institutions, and communities across the state, the Missouri State Archives and the Missouri State Library have placed tens of thousands of historical documents, maps and photographs online. Visit www.MissouriDigitalHeritage.com for a glimpse into Missouri's past.



Alex M. Petrovic Reading Room of the Missouri State Archives

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Domino Danzero on horseback, ca 1900 Danzero Photograph Collection Special Collections, Missouri State University

Missouri --in Motion

Dear Fellow Missourians:

The people of our state have never been inclined to sit on the sidelines. Whether it's hauling logs by horse in Rich Hill, traveling on a riverboat in Washington, or wakeboarding on the Missouri River near the Capitol, we're always in motion. Missouri moves — and that is the inspiration for this year's photo contest.

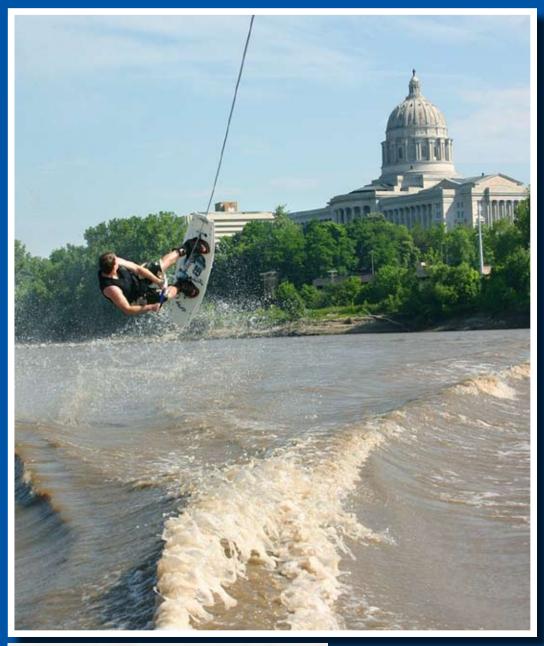
This is the 12th statewide photo contest, and for the first time you decided which photos made it into the Blue Book. A committee from the Secretary of State's office narrowed down the hundreds of great submissions sent in from all over the state to 10 photos in three categories: transportation and travels in Missouri, Missouri's weather and environment, and family and friends playing sports. Then, more than 12,000 Missourians voted for their favorite pictures online at www.sos.mo.gov to select the winners.

I'd like to thank everyone who submitted entries and voted online. This year, photography clubs got involved like never before, encouraging folks in communities across the state to dust off their cameras and send in their very best. I hope you enjoy the photographs, and that they show you how Missouri moves today and how, together, we are moving into the future.

Very truly yours,

Robin Carnahan

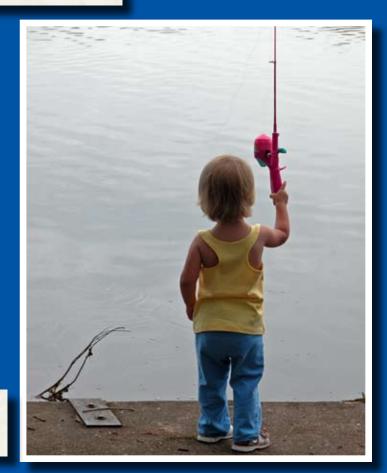
Family and friends playing sports in Missouri.



FIRST PLACE
Richard Moore Wakeboarding Near the State Capitol
Farrah Fite, Jefferson City



SECOND PLACE Learning to Play Soccer Jennifer Stilabower, Jefferson City

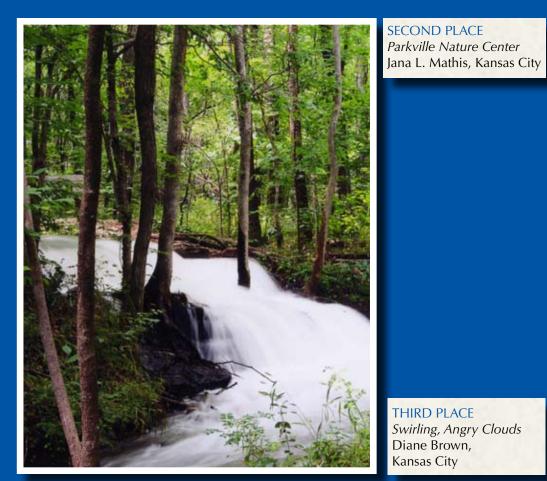


THIRD PLACE
Allison Learns to Cast
Rebecca Limback,
Warrensburg

Missouri's ever-changing weather and environment.



FIRST PLACE Lightning Bolt Matthew Ihrig, Florissant

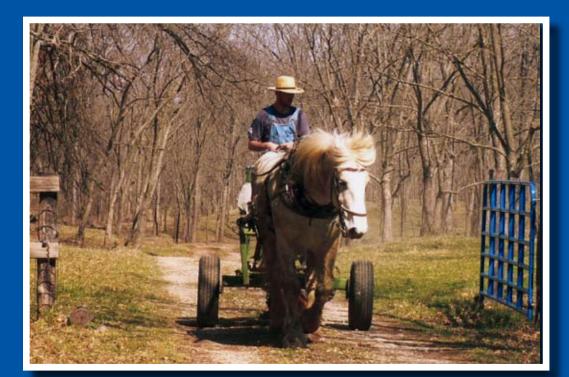


THIRD PLACE

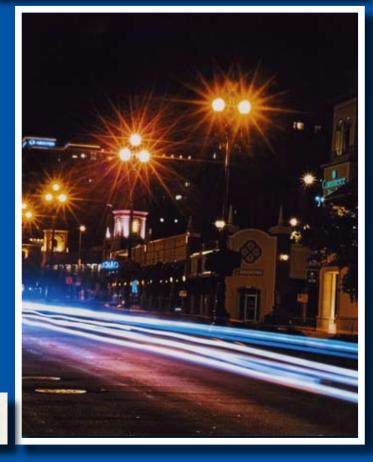


Transportation and travels in Missouri.





SECOND PLACE Hauling Logs Mary Alms, Rich Hill



THIRD PLACE
The Plaza in Kansas City
Liz Adcock, Kansas City

Honorable Mention



"TIME TO PLAY"
Playing at Double Drop
Maria Crusius, St. Louis

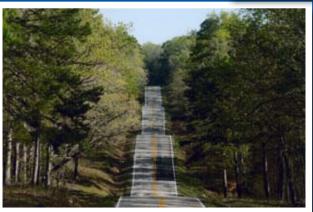
"FORCES OF NATURE"

Sunrise Seen From a Plane

Michael Alan Bailey,

Kansas City





"ON THE MOVE"
Rolling Route 19
Mark S. Kross, Jefferson City

State Symbols of Missouri



THE GREAT SEAL OF MISSOURI

The Great Seal was designed by Judge Robert William Wells and adopted by the Missouri General Assembly on January 11, 1822. The center of the state seal is composed of two parts. On the right is the United States coat-of-arms containing the bald eagle. In its claws are arrows and olive branches, signifying that the power of war and peace lies with the U.S. federal government. On the left side of the shield, the state side, are a grizzly bear and a silver crescent moon. The crescent symbolizes Missouri at the time of the state seal's creation, a state of small population and wealth which would increase like the new or crescent moon; it also symbolizes the "second son," meaning Missouri was the second state formed out of the Louisiana Territory.

This shield is encircled by a belt inscribed with the motto, "United we stand, divided we fall," which indicates Missouri's advantage as a member of the United States. The two grizzlies on either side of the shield symbolize the state's strength and its citizens' bravery. The bears stand atop a scroll bearing the state motto, "Salus Populi Suprema Lex Esto," which means, "The welfare of the people shall be the supreme law." Below this scroll are the Roman numerals for 1820, the year Missouri began its functions as a state.

The helmet above the shield represents state sovereignty, and the large star atop the helmet surrounded by 23 smaller stars signifies Missouri's status as the 24th state. The cloud around the large star indicates the problems Missouri had in becoming a state. The whole state seal is enclosed by a scroll bearing the words, "The Great Seal of the State of Missouri." (RSMo 10.060)



THE STATE FLAG

Nearly 100 years after achieving statehood, Missouri adopted an official flag on March 22, 1913. The flag was designed by the late Mrs. Marie Elizabeth Watkins Oliver, wife of former State Senator R.B. Oliver. The flag consists of three horizontal stripes of red, white and blue. These represent valor, purity, vigilance and justice. In the center white stripe is the Missouri coat-of-arms, circled by a blue band containing 24 stars, denoting that Missouri was the 24th state. The Oliver flag embraced national pride, and at the same time expressed characteristics of Missouri and Missourians.

The three large stripes were symbolic of the people of the state—the blue stripe represented vigilance, permanency, and justice, the red represented valor, and the white stripe symbolized purity. The Missouri coat-of-arms appeared in the center of the flag, signifying both Missouri's independence as a state, and its place as a part of the whole United States. Having the coat-of-arms in the center of the national colors represents Missouri, as it is—the geographical center of the nation. By mingling the state coat-of-arms with the national colors of red, white, and blue, the flag signified the harmony existing between the two. Twenty-four stars surrounded the coat-of-arms, representative of Missouri's position as the 24th state admitted to the Union. (RSMo 10.020)

MISSOURI DAY

On March 22, 1915, the 48th General Assembly set aside the first Monday in October each year as "Missouri Day," due to the efforts of Mrs. Anna Brosius Korn, a native Missourian. In 1969, the 75th General Assembly changed the date to the third Wednesday in October. Missouri Day is a time for schools to honor the state and for the people of the state to celebrate the achievements of all Missourians. (RSMo 9.040)



THE STATE FLORAL EMBLEM

On March 16, 1923, a bill was signed naming the white hawthorn blossom the official state floral emblem of Missouri. Known as the "red haw" or "white haw," the hawthorn (Crataegus) is a member of the great rose family, which resembles the apple group. The hawthorn blossoms have greenish-vellow centers and form in white clusters. More than 75 species of the hawthorn grow in Missouri, particularly in the Ozarks. (RSMo 10.030)

THE STATE BIRD

On March 30, 1927, the native bluebird (Sialia Sialis) became the official state bird of Missouri. The bluebird, considered a symbol of happiness, is usually 61/2 to 7 inches long. While its upper parts are covered with light blue plumage, its breast is cinnamon red, turning rust-colored in the fall. The bluebird is common in Missouri from early spring until late November. (RSMo 10.010)





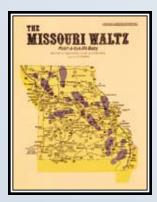
THE STATE TREE

On June 20, 1955, the flowering dogwood (Cornus Florida L.) became Missouri's official tree. The tree is small in size, rarely growing over 40 feet in height or 18 inches in diameter. The dogwood sprouts tiny greenish-yellow flowers in clusters, with each flower surrounded by four white petals. The paried, oval leaves are olive green above and covered with silvery hairs underneath. In the fall, the upper part of the leaves turn scarlet or orange

and bright red fruits grow on the tree. (RSMo 10.040)

THE STATE SONG

The "Missouri Waltz" became the state song under an act adopted by the General Assembly on June 30, 1949. The song came from a melody by John V. Eppel and was arranged by Frederic Knight Logan, using lyrics written by J.R. Shannon. First published in 1914, the song did not sell well and was considered a failure. By 1939, the song had gained popularity and six million copies had been sold. Sales increased substantially after Missourian Harry S Truman became president. (RSMo 10.050)



THE STATE MINERAL

On July 21, 1967, the mineral galena was adopted as the official mineral of Missouri. Galena is the major source of lead ore, and the recognition of this mineral by the state legislature was to emphasize Missouri's status as the nation's top producer of lead. Galena is dark gray in color and breaks into small cubes. Mining of galena has flourished in the Joplin-Granby area of southwest Missouri, and rich deposits have been located in such places as



43

Crawford, Washington, Iron and Reynolds counties. (RSMo 10.047)



THE STATE ROCK

Mozarkite was adopted as the official state rock on July 21, 1967, by the 74th General Assembly. An attractive rock, mozarkite appears in a variety of colors, most predominantly green, red or purple. The rock's beauty is enhanced by cutting and polishing into ornamental shapes for jewelry. Mozarkite is most commonly found in Benton County. (RSMo 10.045)

THE STATE INSECT

On July 3, 1985, the honeybee was designated as Missouri's state insect. The honeybee, (Apis Mellifera) yellow or orange and black in color, is a social insect which collects nectar and pollen from flower blossoms in order to produce honey. The honeybee is common to Missouri and is cultivated by beekeepers for honey production. (RSMo 10.070)





THE STATE MUSICAL INSTRUMENT

The **fiddle** became the state's official musical instrument on July 17, 1987. Brought to Missouri in the late 1700s by fur traders and settlers, the fiddle quickly became popular. The instrument was adaptable to many forms of music, could be played without extensive formal training and was light and easy to carry. For generations, the local fiddle player was the sole source of entertainment in many commu-

nities and held a position of great respect in the region. (RSMo 10.080)





 \star If necessary, the lowest note in right hand chords and octaves, may be omitted. Copyright MCMXIV by Forster Music Publisher, Inc., Chicago, Ill.

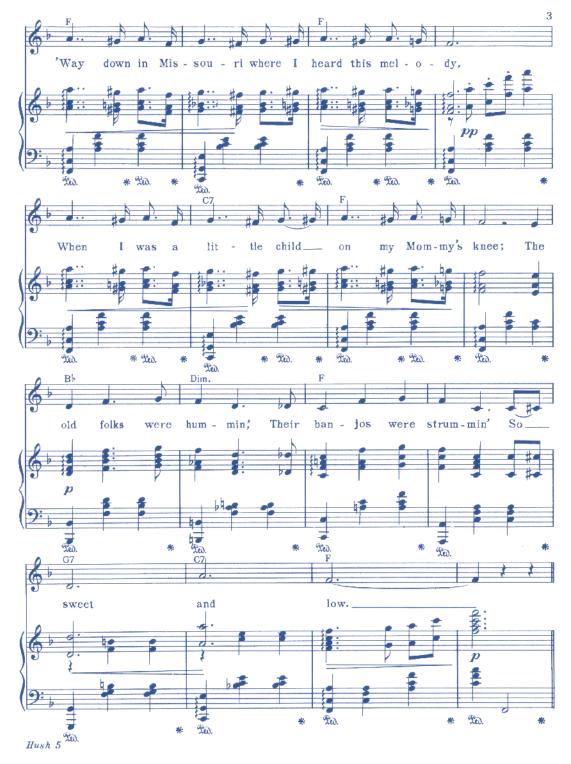
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Visit Your Record Store For Recordings Of "Missouri Waltz"



THE STATE FOSSIL

The **crinoid** became the state's official fossil on June 16, 1989, after a group of Lee's Summit school students worked through the legislative process to promote it as a state symbol. The crinoid (Delocrinus missouriensis) is a mineralization of an animal which, because of its plant-like appearance, was called the "sea lily." Related to the starfish, the crinoid which covered Missouri lived in the ocean more than 250 million years ago. (RSMo 10.090)

THE STATE TREE NUT

The nut produced by the black walnut tree (Juglans Nigra), known as the eastern black walnut, became the state tree nut on July 9, 1990. The nut has a variety of uses. The meat is used in ice cream, baked goods and candies. The shell provides the soft grit abrasive used in metal cleaning and polishing, and oil well drilling. It is also used in paint products and as a filler in dynamite. (RSMo 10.100)





THE STATE ANIMAL

On May 31, 1995, the Missouri mule was designated as the official state animal. The mule is a hybrid, the offspring of a mare (female horse) and a jack (male donkey). After its introduction to the state in the 1820s, the mule quickly became popular with farmers and settlers because of its hardy nature. Missouri mules pulled pioneer wagons to the Wild West during the 19th century and played a crucial role in moving troops and supplies in World Wars I and II. For

decades, Missouri was the nation's premier mule producer. (RSMo 10.110)

THE STATE AMERICAN FOLK DANCE

The **square dance** was adopted as Missouri's official American folk dance on May 31, 1995. Square dances are derived from folk and courtship dances brought to the United States by European immigrants. Lively music and callers are hallmarks of square dancing. The caller directs the dancers by singing the names of figures and steps to be performed. (RSMo 10.120)



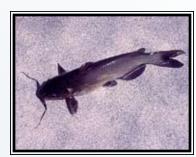
THE STATE AQUATIC ANIMAL

The paddlefish (Polyodon Spathula) became Missouri's official aquatic animal on May 23, 1997. Only three rivers in Missouri support substantial populations of the paddlefish: the Mississippi, Missouri and the Osage. They are also present in some of the state's larger lakes. The paddlefish is primitive, with a cartilage skeleton, rather than bone. They commonly exceed five feet in length and weights of 60 pounds;

20-year olds are common, and some live 30 years or more. (RSMo 10.130)

THE STATE FISH

On May 23, 1997, the channel catfish became the official fish of Missouri. The channel catfish (Ictalurus Punctatus) is slender, with a deeply forked tail. Young have spots that disappear with age. The catfish does not rely on sight to find its food; instead, it uses cat-like whiskers to assist in the hunt. The channel cat is the most abundant large catfish in Missouri streams. Its diet includes animal and plant material. Adults are normally 12 to 32 inches long



and weigh from a half-pound to 15 pounds. (RSMo 10.135)



THE STATE HORSE

On June 4, 2002, the Missouri fox trotting horse became Missouri's official state horse. Missouri fox trotters were developed in the rugged Ozark hills of Missouri during the early 19th century. Bloodlines can be traced from early settlers to Missouri from the neighboring states of Kentucky, Illinois, Tennessee and Arkansas. The distinguishing characteristic of the fox trotter is its rhythmic gait, in which the horse walks with the front feet and trots with the hind feet. This gait

gives the rider a smooth gentle ride. (RSMo 10.140)

THE STATE GRAPE

On July 11, 2003, the Norton/Cynthiana grape (Vitis Aestivalis) was adopted as the official state grape. This adaptable, self-pollinating variety has been cultivated since the 1830s and is likely North America's oldest grape variety still commercially grown. Norton/Cynthiana has long been prized by Missouri vintners for its hardy growth habit and intense flavor characteristics, which produce lush, dry premium red wines of world-class quality and distinction. (RSMo 10.160)



CITY LIMIT Adrian PURPLE MARTIN CAPITAL OF MO

THE PURPLE MARTIN CAPITAL

The City of Adrian, located in Bates County, was declared the purple martin capital of the state of Missouri on August 28, 2003. Purple martins are largely dependent on humans to build and maintain their housing and are happy in large bird houses or in gourds. These creatures are partial to living near water, in open parts of a yard, or along rural roadsides. Purple martins are popular among bird lovers because of their melodic singing and aerial feats. (RSMo 10.141)

THE STATE DINOSAUR

Hypsibema missouriense is a type of dinosaur called a Hadrosaur or "duck billed" dinosaur. It was a herbivore with jaws that contained over 1,000 teeth. Hypsibema had evolved specialized teeth to handle the tough, fibrous vegetation of the time. Hypsibema lived in Missouri during the Late Cretaceous Period. Hypsibema was first discovered in 1942 by Dan Stewart, near the town of Glen Allen, MO,



and became the state's offical dinosaur on July 9, 2004. (RSMo 10.095)



THE STATE AMPHIBIAN

On June 5, 2005, the American Bullfrog (Rana catesbeiana) became the official state amphibian. The bullfrog is the largest frog native to Missouri and is found in every county. Most Missourians are familiar with the deep, resonant "jug-of-rum" call, which is typically heard on warm, rainy nights between mid-May and early July. The idea for the bullfrog designation came from a fourth grade class at Chinn Elementary School in Kansas City. (RSMo 10.170)

THE STATE GAME BIRD

The bobwhite quail (Colinus virginianus), also known as the northern bobwhite, became the official state game bird on July 13, 2007. The northern bobwhite is found throughout Missouri in a variety of habitats. In the fall and winter, northern bobwhites form loose social groups better known as a covey. A covey will generally contain ten to twelve quail, but can have as many as twenty or thirty birds. The familiar two- or three-note "bobwhite"



whistle is made by males in the spring and summer to attract females. (RSMo 10.012).

THE STATE INVERTEBRATE

On June 21, 2007, the crayfish (also known as crawfish and crawdad) became the official state invertebrate. Crayfish are an important food source for Missouri fishes. Missouri supports more than 30 species of crayfish (including seven species that occur nowhere else in the world). Crayfish are found in every county of the state and contribute to our unique biodiversity and conservation heritage. The nomination of cray-

fish for state invertebrate came from Mrs. Janna Elfrink's elementary school class in Reeds Spring, Missouri. (RSMo 10.125)

THE STATE REPTILE

On June 21, 2007, the three-toed box turtle (Terrapene carolina triunguis) became the official state reptile. Most Missourians are familiar with this land-dwelling turtle. Three-toed box turtles, as their name implies, typically have three hind toes. The hinged bottom shell allows the turtle to retreat inside as if enclosed in a box. Males have red eyes and females have brown eyes. (RSMo 10.175).



THE STATE GRASS

Big bluestem (Andropogon gerardii) was designated as Missouri's stategrass on June 11, 2007 as a result of efforts by the Fourth Grade class at Truman Elementary School in Rolla. Big bluestem is native to Missouri and occurs throughout the state, with the exception of a few southeastern-most counties. It is a major component of Missouri's tallgrass prairies where it impressed the first explorers by sometimes growing tall enough to hide a person on horseback. The name bluestem comes from the bluish-green color of the leaves and stems that turn an attractive reddish-copper color in autumn. (RSMo 10.150).

THE STATE DESSERT

The ice cream cone became the state of Missouri's official dessert on August 28, 2008. The 1904 World's Fair in St Louis was the birthplace of the treat and has become a staple at many community events across the state, such as the State Fair. The University of Missouri-Columbia has played a large role in the development of ice cream products for over a century. Missouri presently ranks tenth in ice cream production. (RSMo 10.180).



Louise and Omar Putman Collection, photograph by Louise Putman-Missouri State Archives

Missouri at a Glance

General Information

Entered the Union: August 10, 1821 (24th state).

Capitol: Jefferson City.

Present Constitution adopted: 1945.

Motto: "Salus populi suprema lex esto" which is Latin for "The welfare of the people shall be the supreme law."

Nickname: The Show Me State.

Origin of state name: "Missouri" is most likely a French rendition of the Algonquian word meaning "town of large canoes."

Land area in square miles (national rank): 68,945 (18).

Number of counties: 114 with one independent city (St. Louis).

Largest county: Texas—1,180 square miles. **Smallest county:** Worth—266 square miles.

Population

10 30 490	
Ten largest cities:	
Kansas City	475,830
St. Louis	
Springfield	
Independence	
Columbia	
Lee's Summit.	
St. Joseph	
O'Fallon	74.976
St. Charles	
St. Peters	
Missouri population (2008 census estimate)	
National rank (2008)	18
Male/female population (percentage)	48.85 / 51.15
(Census American Community Survey, 2008)	
Ethnic population (by percentage)	
White	95.0
Black	
Asjan	
Native American	
Native Hawaiian	
Pacific Islander/Two or More Races	
Hispanic (Not considering race)	
Urban/rural distribution (by percentage) (2000)	
Resident live births (Census Population Estimates, 2008)	
Resident deaths (Census Population Estimates, 2008)	
Total personal income and national rank	\$208.3 billion (22)
(U.S. Bureau of Economic Analysis, 2008)	1019 11
Per capita income and national rank	\$35,228 (36)
(U.S. Bureau of Economic Analysis, 2008)	
Median household income and national rank	\$45,114 (37)
(U.S. Bureau of Economic Analysis, 2008)	
Gross Domestic Product and national rank (2008)	\$237.8 billion (26)
(U.S. Bureau of Economic Analysis, 2008)	

Geography/Climate

Highes	t point (in feet above sea level: Taum Sauk Mountain, Iron County)	1,722
	point (in feet above sea level: St. Francis River, Bootheel)	
Approx	kimate mean elevation in feet above sea level (national rank)	800 (32)
Norma	I daily mean temperature	54.6°F
Percen	tage of full sunshine days per year	30%-est.