



BRIDGING THE MIGHTY RED

RED RIVER CROSSINGS BETWEEN OKLAHOMA AND TEXAS

PREPARED FOR THE OKLAHOMA DEPARTMENT OF TRANSPORTATION BY MEAD & HUNT, INC.

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Mead & Hunt, Inc.
www.meadhunt.com
cultural.resources@meadhunt.com



Oklahoma Department
of Transportation
www.ok.gov/odot

This report completes a mitigation task stipulated in the *Memorandum of Agreement Among the Federal Highway Administration, Oklahoma Department of Transportation, Oklahoma State Historic Preservation Office, Texas Historical Commission, and the Advisory Council on Historic Preservation Regarding Replacement of the SH-79 Bridge over the Red River*.

This report was prepared by the Cultural Resource Specialists at Mead & Hunt, Inc. with contributions by Angela Hronek, Kathy Knapp, Rick Mitchell, Dusty Nielsen, Emily Pettis, Sebastian Renfield, Tim Smith and Christina Slattery.

Cover Photo: Looking across the Red River from Bryan County, Oklahoma, to Grayson County, Texas, with a view of the Denison-Durant vehicular and railroad bridges, August 28, 1951. [Photograph 2012.201.B0106.0792], Photograph, August 28, 1951, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, <http://gateway.okhistory.org/ark:/67531/metadc253009>. Photo cropped and colorized.

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INTRODUCTION

The Red River has been a nexus of settlement, trade, and transportation through generations of Native American inhabitants, Spanish and French explorers, early American settlers, cattle drivers, farmers, railroad engineers, and motorists. Each of these groups confronted the question of how to cross the waterway. As time and technology evolved, different methods emerged: natural fords helped individuals to wade or ride across, ferries carried travelers from shore to shore, and railroad and vehicular bridges shuttled people and goods in droves over the "Mighty Red." Charting Red River crossings through time reveals the greater historic fabric of the region and the cultural and geographic connections between Oklahoma and Texas that remain vital today.

This publication discusses crossings of the Red River from prehistory to the present day, focusing on the stretch of the river that forms a border between Oklahoma and Texas. The chapters follow a chronological order and discuss the dominant forms of transportation through time. The first chapter provides an overview of the Red River basin through Texas and Oklahoma. It describes major geographical landmarks, the bioregions that the river flows through, and the parks and wildlife preserves along the waterway. Chapter Two focuses on the region's early history, beginning with prehistoric inhabitants and moving on to early Native American tribes and their interactions with Spanish and French explorers, traders, and colonists, many of which took place on and around the river. The third chapter picks up after the Louisiana Purchase and charts early American settlement in Texas and Native American removal and resettlement in Indian Territory. This chapter also details the steamboat landings and ferry crossings that materialized as the area's population and economy grew, as well as the immigrant trails and Longhorn cattle drives out of Texas that forded the Red River. The railroad, which arrived next, brought truly dramatic change to the region.

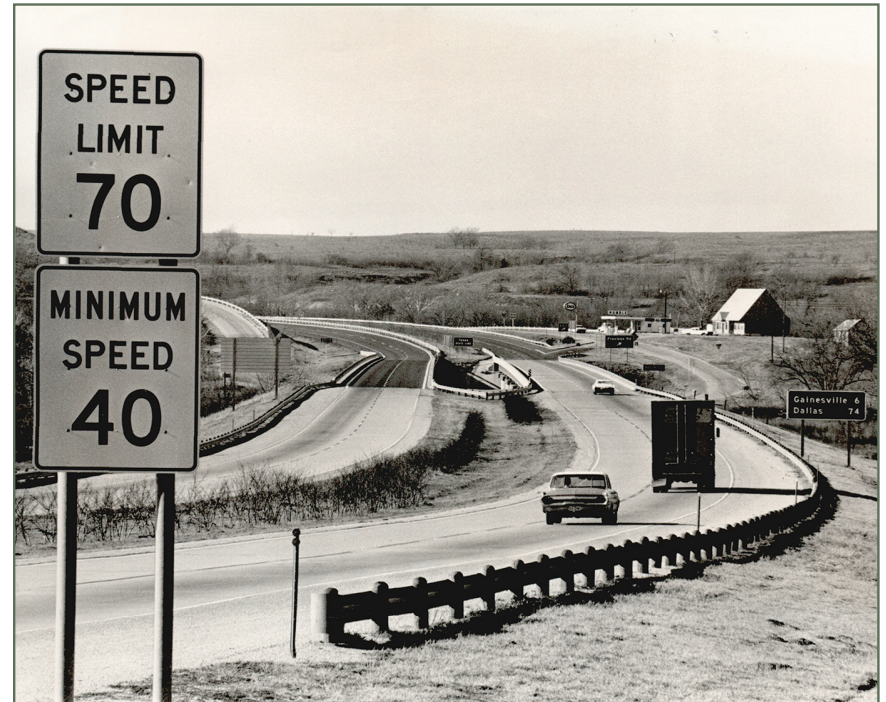


Figure 1. The I-35 Bridge over the Red River between Oklahoma and Texas, 1971. (Courtesy of the Oklahoma Historical Society.)

The final three chapters examine the bridges that have spanned the river for the past century-and-a-half, as well as the railroad lines and highways they carry. Chapter Four traces the development of the regional rail network, beginning in the 1870s, and profiles each of the lines that crossed the Red River. Chapter Five describes early automobile bridges that traversed the river, many of which were privately owned toll crossings, and the hard-fought transition from toll to free bridges between Oklahoma and Texas. Lastly, Chapter Six covers the road system since World War II and the more modern crossings associated with major Interstate Highways.



Figure 2. The Red River near the State Highway (SH) 89 Bridge, which connects western Love County, Oklahoma, and Montague County, Texas.

Historic vehicular bridges crossing the Red River are profiled in a separate section after Chapter Six. These bridges were extant as of 2016. The bridge descriptions are arranged in order of the bridge's location on the Red River, from west to east. Information provided for each crossing includes bridge type, year built, National Register eligibility status, and location. A narrative description, historical background, and summary of its significance is also included. Each profile features a map illustrating the location of the bridge.

The Red River is a prominent landmark and border cutting from west to east between Oklahoma and Texas. Its many crossings throughout the years—including some still in use today—created a complex network between the two states and made the river a regional center of culture and exchange. The story of these many, layered crossings begins with the Red River itself. The following pages delve into its unique geography and begin to unlock the history of transportation and trade between Oklahoma and Texas.

CHAPTER 1

Geography and Hydrology of the Red River

[A] distinguishing feature of this river is, that the country on its upper waters differs in every respect from that in the vicinity of its mouth.... The main branch...flows through an arid prairie country almost entirely destitute of trees, over a broad bed of light and shifting sands.... It then enters a country covered with forest trees of gigantic dimensions growing upon an alluvial soil of the most pre-eminent fertility...¹

Randolph B. Marcy, 1852

In the spring and summer of 1852, United States Army Captain Randolph B. Marcy headed an expedition to find the source of the Red River.² Marcy carefully recorded his findings, including the river's dramatic change in landscape from the upper basin to the lower mouth. Many of his observations still hold true; for example, that the river west of Fulton, Arkansas, "suddenly changes its course," and that a strip of forest, the Cross Timbers, "forms a boundary line, dividing the country suited to agriculture from the great prairies." His journal became a bestselling book about the American West.³ Even today, more than 150 years later, any understanding of exploration, transportation, and trade in this region traces back to the physical boundary of the river. Accordingly, the following chapter details the geography and hydrology of the Red River and its surrounding alluvial plain.

The Geography of the Red River

The Red River is 1,360 miles long and flows southeast from its source in eastern New Mexico through Texas, Oklahoma, Arkansas, and Louisiana. It empties into the Mississippi River 45 miles north of Baton Rouge. The river's drainage basin is 66,640 square miles, encompassing 30,700 square miles in Texas and 23,000 square miles in Oklahoma. Major tributaries are the Pease and Wichita Rivers in Texas and the Washita River in Oklahoma (see Figure 3).⁴

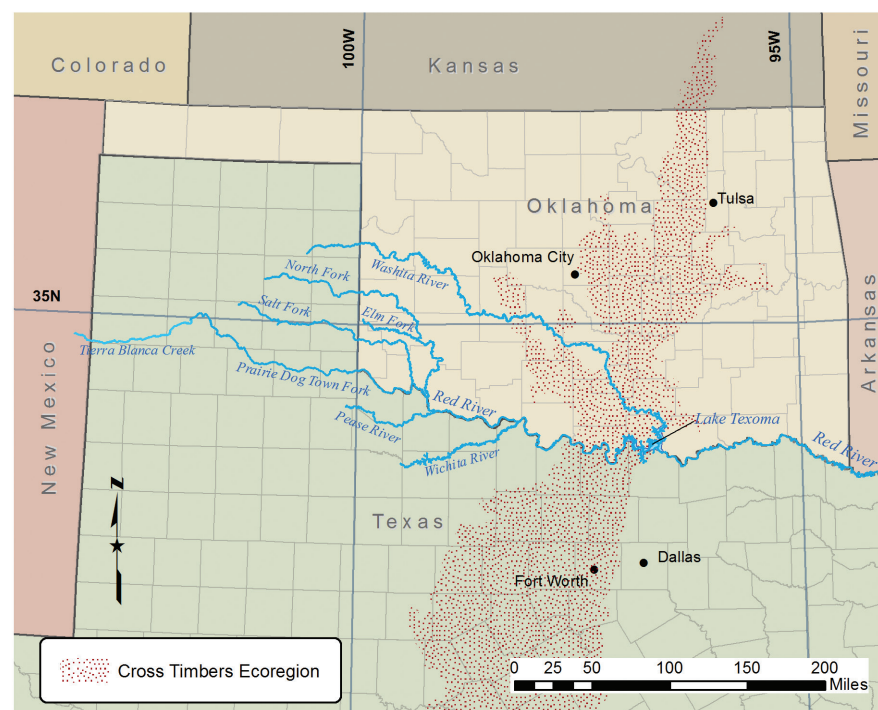


Figure 3. Map of the Red River through Texas and Oklahoma showing major forks and tributaries, Lake Texoma, and the location of the Cross Timbers Ecoregion.



Figure 4. The Red River near US Highway 69/75, which runs between Durant, Oklahoma, and Denison, Texas.

Several major geographical landmarks are located along the Red River as it flows from west to east. In the far western portion of Tillman County in southwest Oklahoma the North Fork, which flows 210 miles through Oklahoma, runs into the Prairie Dog Town Fork, which is the main branch of the river reaching west through the Texas Panhandle. Other noteworthy branches include the Elm Fork and the Salt Fork, both of which drain into the river in southwest Oklahoma. South and east of Ardmore, Oklahoma, in Love, Marshall and Bryan Counties, the Red River flows through Lake Texoma, an 89,000-acre manmade reservoir formed when Denison Dam was constructed in 1944 (see Figures 5, 6, and 7). Across the Arkansas border, near Fulton, the river turns south to join with the Mississippi.



Figures 5 and 6. The Denison Dam in Bryan County, Oklahoma, and Grayson County, Texas, has been an important landmark on the Red River since its construction in 1944. (Courtesy of the Oklahoma Historical Society.)



Figure 7. The Denison Dam in Bryan County, Oklahoma, and Grayson County, Texas, 1946. (Courtesy of the Oklahoma Historical Society.)

The Red River has long served as a dividing line between various geographic and political entities. Currently, from the 100th meridian eastward the Red River forms a significant portion of the boundary between Texas and Oklahoma. Historically, the river was a border between the United States and Spanish territory, the United States and Mexico, and federal Indian Territory and the state of Texas.⁵ As a boundary it facilitated trade between various cultures, and was also a site of conflict. The Red River's geography continually shapes settlement, politics, and culture in its surroundings.

The Bioregions of the Red River Basin

The floodplain that encompasses and immediately surrounds the Red River in Texas and Oklahoma is wide and shallow with a sandy, silty bed. This topography contributes to the surrounding fertile agricultural land that is ideal for cattle grazing; timber harvesting; cultivating corn, grain, and wheat; and, in some western areas, cotton farming. Adjacent to the river are several large areas of oil and gas production, including one gas processing plant located in Love County, Oklahoma, and a multitude of oil wells west of Lake Texoma in Texas.⁶ Though a good portion of the river basin supports agriculture and industry, some areas are not as productive. The western reaches of the waterway have a high saline content; in some areas, according to the United States Geological Survey, the water has a higher salinity than seawater. This limits the species that can survive in the river, as well as ways in which nearby residents can safely use the water.⁷

The winding nature of the Red River, particularly in its eastern stretches, creates a series of oxbow lakes where meanders have been cut off from the main flow. The region's silty soil contributes to this stream instability; additionally, an expansive log jam called the Great Raft blocked the river north of Shreveport, Louisiana, from prehistoric times until its removal in the mid-nineteenth century. These streambed characteristics meant that, throughout history, the navigation of the Red River's upper basin was challenging and limited to small vessels.

The bioregions of the Red River through Texas and Oklahoma change from west to east. From the short-grass high plains of the Texas Panhandle, the river flows southeast through the Great Plains and North Central Plains of southwest Oklahoma and northwest Texas. This region consists of rolling hills covered in prairie grasses.⁸ Here the major branches of the Red River include the North Fork, which passes through the Wichita Mountains of southwest Oklahoma, and the Salt Fork. Doan's Crossing, a major river crossing in the late nineteenth century, was located just east of where the Salt Fork drains into the Red River's main stem. The Pease and Wichita Rivers are major tributaries that flow into the river from Texas. While there are some isolated pockets of forest, this region is largely dominated by savanna comprised of limited low tree cover and scrubby vegetation. Deposits of copper, granite, gypsum, and red clay along the river bed contribute to the red color that gives the waterway its name. At some points during the year water levels in this upper section of the river are very low, and portions of it even run dry (see Figure 8). Rainfall averages just 22-24 inches per year along the 100th meridian. Elevations alongside this stretch of the river range from approximately 500 to 1,500 feet.⁹



Figure 8. This 1936 *Daily Oklahoman* photo shows a portion of the Red River that had run dry. (Courtesy of the Oklahoma Historical Society.)

The Red River then flows through the Cross Timbers, a region of mixed oak trees with interspersed areas of grassland. This forested strip runs north-south through southeast Kansas, Oklahoma, and Texas, and divides eastern woodlands from western plains.¹⁰ The Washita River, a major waterway traversing much of western and south central Oklahoma, is the main tributary in this region. Interstate Highway (I-) 35 now crosses the Red River in the Cross Timbers area.

Geography east of the Cross Timbers consists of Coastal Plains, which reach north from the Gulf of Mexico and encompass rolling prairie stretched across a broad floodplain.¹¹ Rainfall is far more abundant along this section of the river; McCurtain County at Oklahoma's eastern border averages 46-48 inches of rain annually.¹² Steady precipitation contributes to the floodplain's notably fertile soil, which makes this region particularly well-suited for agriculture.¹³ Topography is generally less than 500 feet above sea level.¹⁴ While relatively level, the Gulf Coastal Plain abuts the Ouachita Mountain Region of southeast Oklahoma, which features large, heavily forested hills with hardwoods and bottom pines. Here smaller tributaries drain the southern Ouachita Mountains, providing the Red River with a fresh infusion of water. Colbert Station, an important ferry crossing and, later, the location of major railroad and highway bridges, was located in this region just east of present-day Lake Texoma.

Recreation Areas and Wildlife Preserves

For many years the eastern portions of the Red River were prone to flooding. From 1938 to 1944 the United States Army Corps of Engineers designed and built Denison Dam to control these seasonal floods, creating Lake Texoma in the process. The dam is made of a rolled earth embankment and was, at the time of its construction, the largest such structure in the United States at 15,200 feet long and 165 feet tall.¹⁵ When engineers built the dam they had to account for the replacement or removal of a great deal of infrastructure, including highways, railroads, and riverfront towns. Several early communities, including the once-prominent crossing of Preston, Texas, are now located at the bottom of Lake Texoma (see Figure 9).

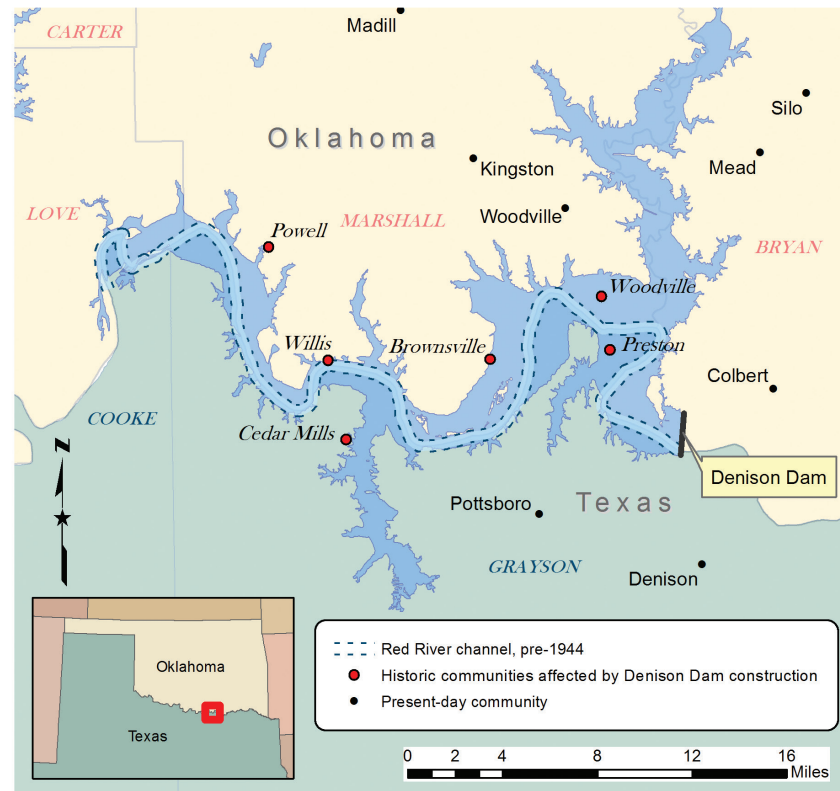


Figure 9. Map of Lake Texoma showing former Red River channel.

In addition to controlling the flow of the river, Denison Dam and Lake Texoma—which has a shoreline of 550 miles—also serve as sources of municipal water supply, recreation, and hydroelectric power for surrounding communities; the dam can generate up to 70 megawatts of energy (see Figure 10).¹⁶ Lake Texoma State Park in Oklahoma and Eisenhower State Park in Texas preserve waterfront areas for camping, boating, and fishing. The lake is also the southern destination for seasonal bird migration in the region. The 16,500-acre Tishomingo National Wildlife Refuge along the north shore of the lake and the 11,300-acre Hagerman National Wildlife Refuge on its southern bank each shelter various bird and mammal species.¹⁷



Figure 10. Denison Dam generates a significant amount of hydroelectricity for the region.

In addition to protected areas around Lake Texoma, other preserved lands are located along the Red River through Texas and Oklahoma. They include Palo Duro Canyon State Park in the Texas Panhandle, which encompasses a 120-mile-long, 20-mile-wide canyon—the second-largest in the United States—and is home to a variety of wildlife; the 10,300-acre Cross Timbers Wildlife Management Area in Love County, Oklahoma, just west of Lake Texoma; the Caddo National Grasslands and the Pat Mayse State Wildlife Management Area, which promote sustainable hunting and fishing east of Lake Texoma; and the Red Slough Wildlife Management Area along the southeast border of Oklahoma, which contains 1,700 acres of bottomland hardwood restoration fields and 3,200 acres of soil management land.¹⁸ This range of habitats and wildlife reflects the biodiversity of the Red River's alluvial plain.



Figure 11. View of the Red River from the SH 89 Bridge between Love County, Oklahoma, and Montague County, Texas.

The natural environment of the Red River is vitally related to its crossings throughout history. Known as a highway to the plains for settlers and homesteaders, the river facilitated early travel and its surrounding lands encouraged trade in cattle, lumber, corn, grain, wheat, cotton, and minerals. Today, state parks and wildlife preserves conserve the biodiversity of the region, demonstrating the value of the fertile land adjacent to the river and conveying the natural history of the long-contested area. Ultimately, the geography and hydrology of the Red River factor into crossings throughout history. From initial explorations like that of Randolph B. Marcy and his team, to cattle drives, steamboats and ferries, to railroad bridges and, later, auto bridges, the natural environment is a constant factor in every form of transportation over the Muddy Red.

"AN UNPREDICTABLE AND UNRELIABLE STREAM"

Crossing the Red River, with its quicksands and recurrent floods, has bedeviled cattle drivers and bridge engineers alike. As one meteorologist observed, "Texas is a land of perennial drought, broken by the occasional devastating flood."¹⁹ This statement applies to much of the Red River watershed. Throughout history, heavy rains from spring storms and late-summer hurricanes created flood waves hundreds of miles downstream.

Native American tribes and early Red River settlers recounted stories of major floods on the river as early as the 1840s. Each flood brought a heartbreaking loss of crops, livestock and, in some cases, human lives. A record-setting June 1908 flood was particularly destructive to the Red River Valley, with the river noted as 5 or 6 miles in width at a bend near the Sowell's Bluff crossing between Durant and Bonham. Residents reported seeing trees, wagons, and houses floating down the swollen waterway.²⁰ When early travelers relied on fords and ferries to cross the Red River, floods could halt travel for several days. Even after waters receded, the Red River's infamous quicksand terrified those who crossed its channel. The riverbed is composed of loose red silt and clay, which easily



Figure 12. The Clarksville-Idabel suspension bridge after a 1932 flood. (Courtesy of the Texas Department of Transportation.)

liquefies to create quicksand. Stories abound of travelers, wagons, and livestock becoming trapped in the riverbed.

The Muddy Red's floodwaters and silty channel were equally destructive to early bridges spanning the river. An 1875 spring flood collapsed

the first vehicular bridge over the Red River, opened by John Colbert only a year earlier. Its replacement, built in 1882, was also soon destroyed by floods. Decades later, the suspension spans and timber trestles of Red River toll bridges frequently washed away during river flooding. In 1941, just three years after

its construction, floodwaters washed away the northern approaches to the SH 78 at Red River Bridge, leaving the crossing inaccessible from Oklahoma. Engineers used a variety of techniques to stabilize the river banks for Red River bridges, including steel jetties, rock riprap, and even junked cars that held the eroding soils in place.

For decades, civic leaders in counties along the Red River called for flood-control dams. Their requests were answered with the construction of Denison Dam and impoundment of Lake Texoma in the early 1940s, a cause championed by Speaker of the House (and Bonham native) Sam Rayburn. While upper reaches of the river remained susceptible to flood damage, areas downstream of the dam gained some protection.

Occasionally even Lake Texoma was unable to hold back the floodwaters. After a multi-year drought was broken by three weeks of torrential rains in 1957, the Lake Texoma emergency spillway was opened for the first time, sending uncontrolled waters down the Red River channel. A similar situation occurred in 2015, with the Red River reaching record levels. Major highway bridges along the river were closed to

traffic as the waters reached the bridge decks. As had happened nearly 70 years earlier, the approaches to the SH 78 Bridge washed away, leaving the bridge closed for several weeks as the channel banks were repaired. Now, as in the past, the Red River remains “an unpredictable and unreliable stream.”²¹



Figure 13. Collapse at the north end of SH 78 at Red River Bridge, 2015.

CHAPTER 2

The Early History of the Red River Basin

“This new discovery of the Caddudacho Nation was...made by General Don Domingo Terán de los Rios, Lt. Gen. of all New Spain.”²²

*-Translation of the “Río de San Andrés de Galve”
map of a Kadohadacho settlement on the Red River, 1691*

On November 28, 1691, a Spanish expedition crossing current-day Texas stopped at a Kadohadacho Native American settlement along the Red River. A member of the traveling party sketched a map that depicted plots of land with scattered thatch roof residences and granaries, lined with vegetation, on either side of the river (see Figures 14 and 15). The map bears an elaborate, colorful crest and seal that mark its Spanish origins.²³

In addition to vividly portraying a seventeenth-century Kadohadacho village, this map illustrates the complex cultural exchanges that marked the region's early history. The following chapter describes the people who inhabited the Red River basin from prehistoric times through the turn of the nineteenth century. The history of two tribes that settled on the river, the Caddo—of which the Kadohadacho is one band—and the Wichita, will represent more widespread native experiences in the region. Both of these groups related in nuanced ways to the Europeans that infiltrated their land beginning in the 1500s, and the Red River was at the center of these interactions.



Figure 14. Detail of a 1691 map of a Kadohadacho settlement on the Red River. (Courtesy of the Ministerio de Educación, Cultura, y Deporte, Archivo General de Indias [Ministry of Education, Culture, and Sport, General Archive of the Indies.])



Figure 15. Map of a Kadohadacho settlement on the Red River drawn by Spanish explorers in 1691. (Courtesy of the Ministerio de Educación, Cultura, y Deporte, Archivo General de Indias [Ministry of Education, Culture, and Sport, General Archive of the Indies.]

Early Native Peoples

The earliest human presence along the Red River consisted of nomad hunters who first inhabited the region approximately 10,000 to 12,000 years ago, having migrated south across the North American land mass. These Paleo-Americans hunted big game, including mammoth and bison. Beginning approximately 8,000 years ago, native communities became hunter-gatherers. Their population rose as they developed better tools and learned to adapt to a changing climate. Starting around 1,500 years ago, civilization shifted again when agricultural settlements began to take hold throughout the region. These farming communities grew squash, maize, and beans. Once more, population increased and technology improved; these advances are visible in the weapons, ceramics, and architecture of the era. As society grew increasingly stationary, social and political boundaries took root, giving rise to early communication and trade along the Red River.²⁴



Figure 16. This image of the Red River near what is now the eastern shore of Lake Texoma captures how the waterway may have appeared to its earliest human inhabitants.

One of the most prominent early cultures that made a home on the river were the Caddo people, who began to emerge approximately 1,200 years ago along the eastern portion of the Red River that runs through Texas, Oklahoma, Arkansas, and Louisiana. Along the channel through Texas and Oklahoma, some groups settled along Ouachita Mountain tributaries that drain into the Red River and others occupied the pine hills of northeast Texas. Tribal bands generally included what Europeans termed the Hasinai in present-day East Texas; the Kadohadacho on the Red River extending from current Fulton, Arkansas; and the Natchitoches downstream in what is now Louisiana.²⁵ The Caddoan culture was characterized by a horticultural economy that relied on the farming of maize. Caddo communities consisted of swaths of farmland and small villages connected to central civic-ceremonial hubs in a long-distance trade network. Through trade, the Caddo obtained exotic goods including copper from the Great Lakes area and turquoise from New Mexico. They also disseminated their ceramic wares, which were some of the most unique and elaborate among Native American cultures.²⁶ With population centers on both sides of the Red River, the Caddo regularly traversed the waterway. Their main transportation vessels were dugout canoes fashioned from hollowed logs, which efficiently carried people and goods throughout the region.²⁷

As was the case with many native tribes, Caddoan culture shifted dramatically with the arrival of European colonists in North America. One distinctive trait of the Late Prehistoric Caddo culture was the construction of temple and burial mounds in the civic-ceremonial capitals central to tribal geography (see Figure 17). The Caddo stopped constructing mounds during the Protohistoric era, which is the period from approximately 1500 to 1700 between the time of initial European contact and colonization. In addition to this, burial practices changed and new pottery styles emerged, marking an indelible shift in native culture.²⁸ As French and Spanish settlements grew in New Spain and Louisiana, the Caddo participated extensively in the trade of fur, horses, guns, and other products and became acculturated to European goods. They were also raided by the Osage and other tribes and exposed to epidemics that severely decreased their population.²⁹ This interest in trading, tenuous alliance-building with European emissaries, and boundary warfare with

other tribes was typical of native groups through the eighteenth century in the Red River basin. The influx of foreign explorers throughout this era forever changed native culture and the history of the region.



Figure 17. Photo of a collapsed Caddo mound in Le Flore County, Oklahoma, taken in 1914. (Courtesy of the Oklahoma Historical Society.)

European Colonization

Spanish explorers were the first foreigners to investigate the Red River basin, followed by the French a century later. The means and goals of the two groups, however, were markedly different. The Spaniards entered and claimed portions of the Red River basin during the Coronado and De Soto explorations of the 1540s. Coronado is believed to have reached the upper Prairie Dog Town Fork of the river in western Texas, and De Soto's lieutenant Moscoso crossed the lower portion of the Red River in Louisiana.³⁰ Later explorers included Domingo Terán de los Ríos, who traversed modern-day Texas from southwest to northeast in 1691 and encountered

Caddo bands on the shores of the Red River. Many seventeenth- and eighteenth-century explorers traveled what would become known as the Great Spanish Road. This trail ran from the Texas Panhandle into Oklahoma where it crossed the North Fork of the Red River, followed the waterway south, and finally crossed the Red River southwest of present-day Durant before continuing to Natchitoches, Louisiana. The road was heavily traveled in both directions.³¹ In general, Spanish explorers sought gold and wished to spread their Catholic religion in the Americas; accordingly, they established mission outposts throughout what is now the American Southwest.

The French arrived later to the Red River basin. In March 1682 explorer Robert de La Salle's expedition entered the mouth of the river, following it to claim the lower portion of the Mississippi for France. Jean-Baptiste Le Moyne de Bienville and Louis Juchereau de St. Denis followed in 1700, visiting the Natchitoches band of the Caddo and returning down the Red River in canoes.³² St. Denis would go on to found Fort Natchitoches, an important trading post for the French, Spanish, and Native Americans on the Red River in present-day Louisiana.³³ Between 1718 and 1720 another explorer, Jean-Baptiste Bénard de la Harpe, traveled upstream on the Red River from Louisiana, eventually reaching current-day Oklahoma.³⁴ In time, France established a number of outposts in the New World and engaged in extensive trading. French trading centers, where guns, furs, horses, and human slaves were bought and sold, engaged the Caddo and other native peoples in commercial alliances.

By the mid-eighteenth century, the Red River was a center of exploration, conflict, and trade. Both Spain and France laid claim to the lower Mississippi River basin, with Spanish territory stretching generally to the southwest, also encompassing Florida, and French-claimed land extending north along the Mississippi and its tributaries.³⁵ Accordingly, tensions regularly arose between France's westernmost trading post at Natchitoches along the Red River and Spain's easternmost garrison, Los Adaes, which was located just 15 miles west of it.³⁶ Even in the midst of ongoing border disputes, however, the two nations traded extensively across the river, which became an important byway for commercial development in the region.

Meanwhile, European traders along the Red River continued to encounter native tribes including bands of the Caddo, Wichita, Quapaw, Choctaw, and Comanche.³⁷ The Apache and Comanche inhabited areas around the western Red River basin and moved in nomadic groups, often crossing the Red River in their pursuits and pushing further south and west through the years.³⁸ An area encompassing large swaths of present-day Kansas, Oklahoma, and Texas, including the Red River basin west of the Cross Timbers, was claimed by Comanche groups and became known as “Comancheria” by the early 1700s.³⁹ Increasingly, tribes were displaced by European land claims and growing settlements. In other instances native groups allied with Europeans, creating complex trade networks and boundaries. Nowhere was this more evident than in an area along a bend of the upper Red River where the Taovaya established twin villages on either bank of the waterway.⁴⁰

Cross-Cultural Interactions at Spanish Fort

The Taovaya were an affiliated tribe of the Wichita that originated in present-day Nebraska and Kansas and were pushed south by encroaching Osage and Comanche in the eighteenth century. They had an agriculture-based economy and grew crops including corn, tobacco, and gourds; like other Plains tribes, they also relied on bison from roaming bands of hunters. They were one of the tribes that French explorer Jean-Baptiste Bénard de la Harpe encountered on his journey through Oklahoma, and they eventually allied with France for trading purposes.⁴¹ Between 1750 and 1757 the Taovaya settled in what were called the Twin Villages on opposite shores of the Red River, one in current-day Jefferson County, Oklahoma, and the other in what would become the community of Spanish Fort in Montague County, Texas. The Twin Villages, which were important trading posts with an established militia, were symbolic capitals of the Wichita nation. Their juncture on the Red River became a hub for transportation, commerce, and conflict across the waterway.⁴²



Figure 18. The Taovaya, an affiliated tribe of the Wichita, settled on the banks of the Red River in what is now south-central Oklahoma and northeast Texas.



Figure 19. A c.1900 photograph of a Wichita house and summer arbor in Oklahoma Territory. (Courtesy of the Oklahoma Historical Society.)

The Taovaya constructed an elaborate fort in the village on the northern shore of the Red River. The structure included entrenchments, stockades, a moat, and underground apartments where members of the tribe could take refuge during warfare.⁴³ In 1758 the Taovaya partnered with other tribes to execute a raid on the Spanish San Sabà de la Santa Cruz mission approximately 300 miles south of their settlement. Hundreds of Spanish soldiers retaliated the following year in an attack on the northern village. The Taovaya successfully defended their fort, establishing the regional dominance of the Wichita.⁴⁴ This victory, however, was relatively short-lived as the complex alliances in the region shifted following the French and Indian War.

As war drew to a close in 1763, France ceded the Louisiana territory of the lower Red River valley to Spain. Many native tribes, such as the Taovaya, had existing trading relationships with the French that did not transfer to Spanish rule. The Spanish imposed strict trade regulations that hurt the Wichita economy. The Twin Villages along the Red River finally made peace with the new Spanish government of the Natchitoches region in the 1770s; however, soon after they suffered a series of smallpox epidemics.⁴⁵ They also endured regular raiding by the Osage Tribe, which developed a better relationship with Spain and pushed other native peoples from the region. By the end of the eighteenth century the Osage overtook the Twin Villages and the Taovaya fell from their position of power on both shores of the Red River.⁴⁶

The Taovaya were just one of many native populations living along the river in the eighteenth century. Their complex interactions with other native tribes and French and Spanish colonists illustrate how the Red River was a nexus of cultures in the region's early history. When an American settler discovered the ruins of the lower Twin Village in 1859, he mistakenly believed it was an old Spanish garrison. This is how the former Native American village became known as "Spanish Fort," a misunderstanding that emphasizes the entanglement of these cultures in the Red River basin. This anecdote also suggests the encroachment of American settlers in the nineteenth century. Just 100 years after Taovaya occupation, Spanish Fort was a stopover point for cattle drivers crossing the Red River on the Chisholm Trail.⁴⁷

The Louisiana Purchase

The United States acquired a vast expanse of land west of the Mississippi River in the Louisiana Purchase on April 30, 1803. This new territory doubled the size of the young country's land mass. It also raised the question of the exact location of the border between Spain and the United States. The 1819 Adams-Onís Treaty somewhat resolved this dispute, making the section of the Red River that runs between present-day Oklahoma and Texas part of the western border of the United States. In the meantime, the American government launched fledgling expeditions to explore its new territory. The first official investigation of the Red River was the Dunbar-Hunter expedition, which traveled upstream and reached the mouth of the Washita tributary at current-day Lake Texoma in 1804-1805.⁴⁸ Additional attempts to reach the headwaters of the river in 1806 were not successful, and, in fact, the source of the Red River remained unknown until Randolph Marcy's expedition in the 1850s.⁴⁹ Even so, the Louisiana Purchase precipitated a tide of American settlement in the Red River basin, including the current-day states of Louisiana, Arkansas, Oklahoma, Texas, and New Mexico.



Initially serving as a transportation artery for Native American tribes, the Red River evolved into a boundary of conflict and negotiation between Spanish, French, and native groups in the sixteenth through eighteenth centuries. Settlements along the river, including those of the Caddo bands and Taovaya tribe, were hubs of activity and exchange. After the Louisiana Purchase the Red River became an important thoroughfare to explore the new American territory. Before long white settlement brought permanent roads and official crossings, including fords and ferries. The river also became the southern boundary of Indian Territory when the federal government removed the so-called Five Tribes—the Choctaw, Chickasaw, Cherokee, Creek and Seminole—to present-day Oklahoma. From early human history the Red River has been a site of complex cultural interactions, a trend that continued with the arrival of American settlers along its shores.



Figure 20. With the Louisiana Purchase the American government launched a number of expeditions to explore new territory, including the Red River basin.

RED RIVER BOUNDARY DISPUTES

The meandering channel and various forks of the Red River have led to frequent debates over the exact boundary between Oklahoma and Texas. In the late 1800s the Greer County dispute arose over questions regarding which fork of the Red River should be considered its main stem and, therefore, the boundary between the state of Texas and federally controlled Indian Territory. Texas claimed that the North Fork of the Red was the state's northern border, while the United States government asserted that the river's Prairie Dog Town Fork marked the boundary. In 1860 Texas organized the 2,345-square-mile area between the two forks as Greer County. More than 5,300 residents had settled in the county by 1890, many taking advantage of Texas's issuance of land certificates to veterans of the Texas Revolutionary Army and Confederate Army. In response, United States Army troops periodically traveled from Fort Sill to Greer County to maintain federal claims. When Oklahoma Territory organized in 1890 the matter came to a head with legal suits and motions filed between the Texas and United States governments. In 1896 the United States Supreme Court ruled that the Prairie Dog Town Fork formed the border, based on legal

findings from the Adams-Onís Treaty of 1819 and Captain Randolph Marcy's expeditions of the 1850s. Today, four southwestern Oklahoma counties make up what was once Greer County, Texas.

The boundary question again surfaced in 1919, when the huge Burkburnett Oil Field was found to extend into the bed of the Red River. Oklahoma property owners accused Texans of pumping oil from beneath their land. With much uncertainty over what constituted the exact boundary line, both states jockeyed to exercise control over the Red River oil wells, including collection of oil production royalties. Oklahoma deputy sheriffs occupied the well sites in January 1920, but they were quickly ousted by a company of Texas Rangers. By spring, armed guards hired by Texas oil companies had fortified the wells with barbed wire, expecting an invasion from the Oklahoma National Guard. However, the incident was soon settled peacefully when the United States Supreme Court again ruled in favor of Oklahoma. The south bank of the river was fixed as

the boundary between the two states, with the federal government retaining control, including mineral rights, of the riverbed itself. In spite of Supreme Court decisions, the river's shifting banks continued to create property ownership disputes, leading the two state legislatures to establish Red River Boundary Commissions. The Red River Boundary Compact, which took effect in 2000, establishes Texas's northern boundary at the vegetation line of the Red River's south bank, except at Lake Texoma where the border follows a fixed demarcation line through the lake. Oklahoma controls the north half of the Red River bed, while the federal government controls the south half of the riverbed in trust for the Kiowa, Comanche, and Apache tribes. The Compact has already been tested in recent years. A North Texas water district's intake pipes were found to inadvertently cross the state boundary in Lake Texoma, requiring the Oklahoma and Texas governors to sign a formal agreement to allow continued water use. After nearly 200 years as a border, the exact boundary of the Red River continues to evade area residents and politicians.



This sidebar has been adapted from an entry in the *Handbook of Texas Online*.

Handbook of Texas Online, "Boundaries," <http://www.tshaonline.org/handbook/online/articles/mgb02>.

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CHAPTER 3

Settlement and Early Crossings of the Red River

"Soon we heard them shooting and whooping then followed the roar of the cattle coming down the road, horns and hoofs a-pounding. Into the water they went nearly damming the river, but they did not lose one, and it surely was a sight to see that many cattle on such a wild run."⁵⁰

*-John Malcolm,
pioneer ferryman, describing a herd of 8,000 cattle stampeding across the Red River*



Figure 21. Cattle ford the Red River into Oklahoma during a 1966 reenactment of historic Longhorn drives. (Courtesy of Oklahoma Historical Society.)

In the spring of 1870 a young Scottish immigrant named John Malcolm went to work at a ford and ferry crossing on the Red River. The land south of the river was, by then, the state of Texas, and the river and terrain to its north was part of the Chickasaw Nation in Indian Territory. Each day, Malcolm assisted with the process of driving up to four cattle herds north across the waterway.⁵¹ He also guided anywhere from 25 to 200 immigrant wagon trains traveling south across the river into Texas. Malcolm eventually ran Colbert's Ferry, a major crossing, in the 1880s (see Figure 22).⁵²



Figure 22. The site of Colbert's Ferry, south of Durant, Oklahoma, on the Red River, in 1972. (Courtesy of the Oklahoma Historical Society.)

During his tenure as a ferryman, Malcolm shuttled people, cattle, and goods across the Red River. This chapter elaborates on river crossings in this era, which included early settlement in Texas and the resettlement that took place with Native American removal. It describes fords and ferries that traversed the wide river bed, as well as early trails used for immigration, goods, and cattle. This burgeoning infrastructure prompted connection and confrontation along the Red River and laid the groundwork for the more permanent crossings that would follow.

Regional Settlement

Early American Settlers

The first wave of American settlers along the Red River established communities in Miller County, Arkansas Territory, in the 1810s and 1820s. Miller County encompassed what is now a large portion of southeast Oklahoma, including Choctaw and McCurtain Counties.⁵³ Some pioneers even settled on the southern bank of the river, encroaching on Spanish Territory in what is now northeastern Texas. These homesteaders argued that they, too, were citizens of Miller County because the Red River's entire watershed—even the portion that reached south into Spanish-claimed land—constituted American soil. In 1816 a band of settlers built an encampment on a peninsula known as Pecan Point that extended into the Red River; before long, the Jonesborough ferry crossing and trading post was established to the northwest and a group of new plantations in the area spurred agricultural production.⁵⁴

In 1813 trader Nicholas Trammell forged a 180-mile path that linked some of these early Red River settlements to Nacogdoches, Texas, later widening the trail for wagon usage. "Trammel's Trace" (spelled with one "L" even though its founder's name had two) was one of the first Euro-American trading and immigration routes in the region.⁵⁵ Pioneers could also reach the hub of Natchitoches, Louisiana, by following the Red River downstream. When Texas declared independence in 1836, the renegade settlers south of the river shifted their allegiance to the new republic. A steady wave of immigrants began to arrive in Texas by way of the Red River. Meanwhile, Indian Territory was beginning to take form north of the river in present-day Oklahoma.



Figure 23. Map of Texas, Arkansas, and Indian Territory in 1841, showing the locations of Pecan Point, Texas; Jonesborough, Texas; and Natchitoches, Louisiana, along the Red River. It also depicts Nacogdoches, Texas, including the path of Trammel's Trace leading north to the river. (From the Library of Congress.)

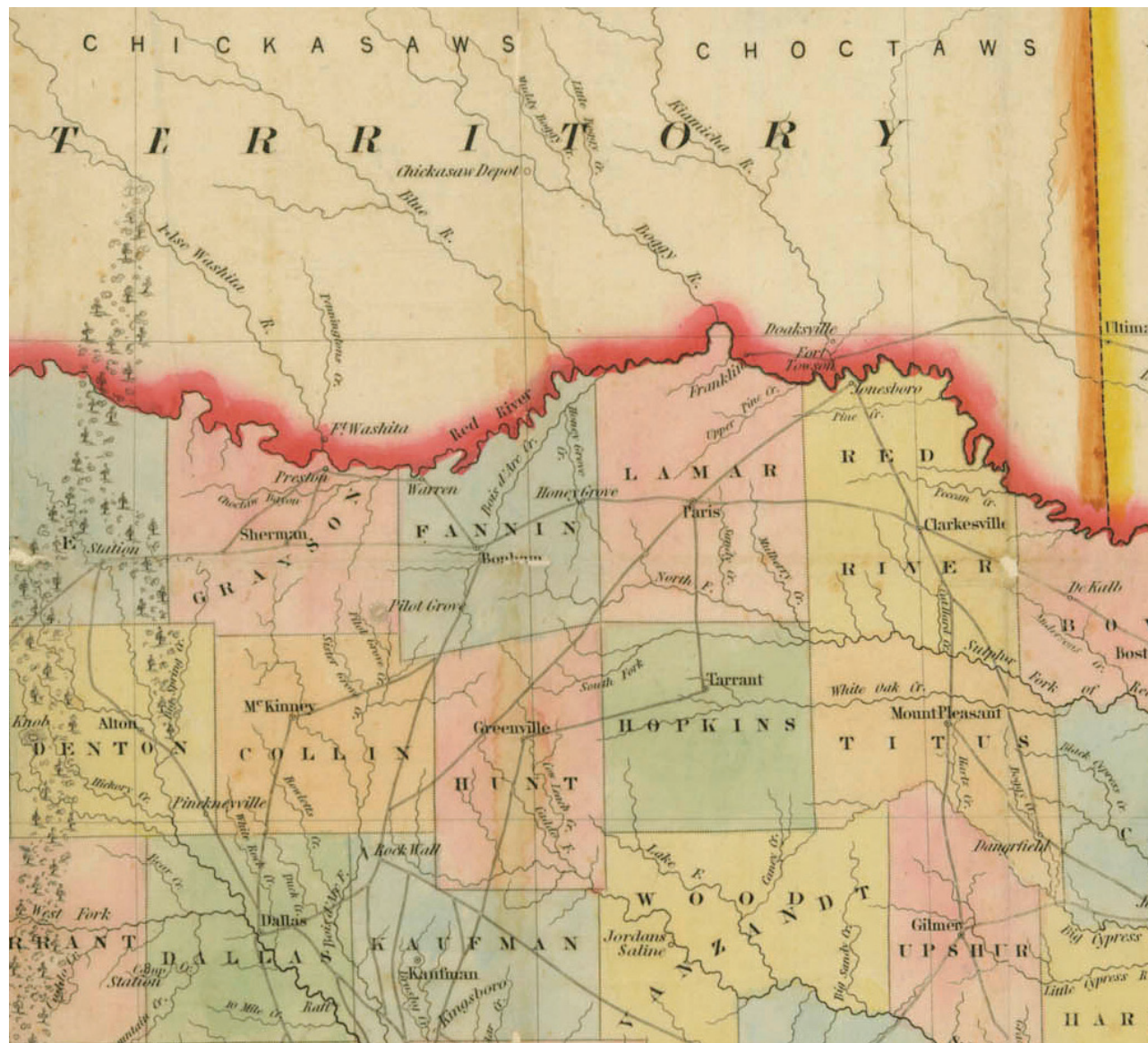


Figure 24. Map with settlements along the Red River and early Texas counties in 1851. (Courtesy of the Texas State Library and Archives Commission.)

Indian Territory

Following the Indian Removal Act of 1830, the United States government forcibly relocated five southeastern Native American tribes to Indian Territory in present-day Oklahoma. The Choctaw people were the first that federal agents approached. In 1830 tribal leaders signed the Treaty of Dancing Rabbit Creek, agreeing to sell their ancestral land in Mississippi and move west. Designated Choctaw land in Indian Territory stretched from the Canadian River south to the Red River, which became a border of the new territory with the Trade and Intercourse Act of 1834.⁵⁶ Removal proceeded in three waves from 1831 to 1833, during which time more than 10,000 Choctaw people were forcibly removed to the new land. The journey was grueling, and hundreds died as a result of harsh weather and the federal government's inadequate planning and provisions.⁵⁷ This was the first of many native journeys on what is now called the Trail of Tears. Even after they arrived, the Choctaw people's cultural upheaval and land disputes were long from over.

The Chickasaw Nation also entered negotiations with the federal government following the Removal Act; however, multiple delegations sent west were unable to find suitable land

for relocation. In the meantime, the tribe faced increasing encroachment of white settlers in their homeland of western Tennessee and northern Mississippi. Finally, through the 1837 Treaty of Doaksville, the Chickasaw negotiated with the Choctaw Nation to cohabit their land in Indian Territory. Emigration parties made the journey in 1837 and 1838 and, almost from the beginning, endured considerable misunderstandings and conflict with the Choctaw in Indian Territory. By 1855 the Chickasaw established a separate tribal government and gained their own territory west of the Choctaw along the Red River.



Figure 25. The Choctaw and Chickasaw Tribes resettled in Indian Territory on the banks of the Red River, such as this stretch of shoreline encompassing present-day Bryan County, Oklahoma, and Grayson County, Texas.

While the Choctaw and Chickasaw Tribes' resettlement and subsequent development took place along the Red River, they did not actually cross the waterway during resettlement. One small band of Cherokees from east Texas did ford the Red River in 1839 as part of their tribe's removal to the northern part of Indian Territory.⁵⁸ Throughout the territory, land that had been intermittently occupied by different European traders and native tribes, many of them nomadic, became home to tens of thousands of displaced Native Americans in permanent agricultural settlements. Early Anglo-American settlers and merchants, such as prominent area

trader Holland Coffee, moved to the Texas side of the Red River as native resettlement advanced in the 1830s.⁵⁹ The Caddo and Wichita Tribes, who had long occupied stretches of the Red River between Texas and Oklahoma, were displaced and eventually designated reservation land in the Wichita-Caddo-Delaware Reservation in the Washita River valley in 1859.⁶⁰

Each of the Five Tribes (which included the Choctaw, Chickasaw, Cherokee, Creek, and Seminole Nations) had a centralized government and operated a school system. The Choctaw Tribe was a leader in education among native groups, opening 12 schools by 1838, and the Chickasaw Nation established five boarding schools by 1859.⁶¹ Several of these institutions were located along the Red River, and some of them, such as the Bloomfield Academy for Girls, originally ran as part of Christian missions (see Figure 26).⁶² Following the Civil War the school systems of the Five Tribes became autonomous.⁶³ The Five Tribes also forged their own transportation networks within Indian Territory and beyond. The Texas Road, sometimes called the Preston Road for the town of Preston on the Texas side of the river, was part of a trail originally forged by the Osage Tribe in the early 1800s and revived after

the Mexican War in the 1840s. The larger route stretched from Austin's Colony in southeast Texas north through present-day Dallas, crossing the Red River and cutting through both Chickasaw and Choctaw lands on its path to Kansas and Missouri.⁶⁴



Figure 26. The Bloomfield Academy for Girls in Chickasaw Territory, founded in 1852 and shown here in 1914, was located close to the Red River near current-day Colbert, Oklahoma. (Courtesy of the Oklahoma Historical Society.)

During the Civil War the Choctaw and Chickasaw were among several Native American nations that aligned with the Confederacy, which depended on the Red River as a major transportation artery. When the Union prevailed in 1865, the United States Government insisted that the Native Americans' Confederate allegiance nullified all previous treaties. As a result of newly drawn agreements, the Choctaw and Chickasaw forfeited a large parcel of jointly held land west of the 98th meridian.⁶⁵

Meanwhile, the indigenous peoples of the Southern Plains resisted increasing federal pressure to move to Indian Territory. These nomadic, buffalo-hunting cultures, encompassing members of the Kiowa, Comanche, Apache, Arapaho, and Cheyenne Tribes, numbered approximately

8,000 by the mid-nineteenth century.⁶⁶ A long, violent struggle culminated with the Red River War of 1874, which took place between native peoples and the United States Army along the upper stretches of the river in the Texas Panhandle. Finally, the leading Comanche chief surrendered and the last of the Comanche, Kiowa, and Apache Tribes moved to a reservation on former Choctaw and Chickasaw land west of the 98th meridian.⁶⁷ The Red River formed the southern boundary of the Comanche, Kiowa, and Apache reservation.

Military Outposts

The confrontations of the Red River War highlight another important presence along the river in the nineteenth century: the American military. Forts throughout the area encouraged western immigration with the military acting as a buffer between Anglo settlers and native peoples. The army also became a middle party between the federal government and native tribes in Indian Territory, enforcing treaty provisions throughout the region. Important forts in the area of the Red River included Fort Towson and Fort Washita in present-day Oklahoma. Fort Towson, founded in 1824 about 6 miles north of the river in current-day Choctaw County, Oklahoma, was initially an outpost at what was then the United States-Mexico border. Soldiers there and at Fort Washita, located on the major Washita tributary about 18 miles north of the Red River in present-day Bryan County, Oklahoma, also moderated relations between the resettled Choctaw, Chickasaw, and Plains Tribes.⁶⁸ Confederate soldiers occupied both forts during the Civil War, using the Red River to transport troops, food, and supplies throughout the region. Preston, Texas, near Rock Bluff Crossing, was briefly the site of a United States Army supply depot from 1851 to 1853. During that time the depot supported Randolph Marcy's expedition to find the source of the Red River.⁶⁹

In addition to overseeing the region's political climate, military outposts were also centers of development and transportation. Fort Towson, for example, was located on the Fort Smith-Fort Towson Road, which transported supplies and militia and also became a significant route for settlement and trade through Indian Territory.⁷⁰ These early roads, which were the precursors to later rail lines and highways, laid an important foundation for infrastructure along the Red River.

HOLLAND COFFEE TRADING POST

Holland Coffee was a prominent trader and negotiator along the western frontier of the Red River in the 1830s and 1840s. He and his partner, Silas Coville, along with other associates, arrived in Indian Territory by 1834 and opened several trading posts over the following decade. These included three in present-day Oklahoma: one in Tillman County, where the Prairie Dog Town Fork and North Fork of the river split; one in Jefferson County near the site of the Wichita twin village on the north bank of the river; and one in Cotton County along Cache Creek. By 1837 Coffee established his trading post at Preston Bend in Grayson County, Texas (formerly part of Fannin County), where the Washita tributary drains into the Red River.⁷¹ This area became known as Coffee's Station.⁷²

Coffee played an important role in the politics of the region. He was well known as an intermediary between American settlers and Native American tribes throughout the Red River basin. On several occasions he negotiated for the release of captives from native groups. Coffee also contributed to the 1835 Treaty of Camp Holmes, a peace resolution between the Plains Native Americans and the United States. Eventually he became an Indian Agent under the United States government and served in the



Figure 27. Location of Coffee's Trading House at Preston Bend, 1841. (Courtesy of the Texas State Library and Archives Commission.)

Republic of Texas's House of Representatives.⁷³ In addition to being a political figure, Coffee was also an entrepreneur who helped to develop the area around his trading post, Coffee's Station, into the early settlement of Preston, Texas, which was platted in 1845.⁷⁴ He and his wife, Sophia Sattenfield Porter, founded the Glen Eden Plantation on an expanse of farmland in Preston, where they also ran a Red River ferry crossing that was used heavily for immigration. Some historians believe that a band of Mormons that arrived in Preston by way of the Red River in 1845, after the assassi-

nation of their leader Joseph Smith, assisted with the construction of a large log home at Glen Eden.⁷⁵

Though Coffee was a shrewd businessman and politician, surviving many "close calls" in the fast-and-loose frontier days, his brashness ultimately got the best of him. His niece's husband, Charles Galloway, killed him in a brawl on October 1, 1846. Even so, his legacy lives on as a pioneer who forged the way for early settlement along the Red River.⁷⁶

Waterway Transportation

From the time of early settlement, steamboat landings and ferries were established throughout Texas and Oklahoma where major trails crossed the Red River. They connected local and regional centers, creating trade and transportation networks between Indian Territory, Texas, and commercial hubs downstream. Steamboats and ferries carried goods and people to markets far and wide, and their history reflects the importance of the Red River to culture and exchange in the region.

Steamboats

Until the mid-nineteenth century the Great Raft, a monumental 165-mile logjam along the Red River through northern Louisiana, impeded the navigation of large commercial boats in the river's upper reaches. For this reason steamboat navigation on the Red River lagged behind its progress on the Arkansas River through Indian Territory. By the 1830s, however, steamboat operators devised ways to bypass the raft through secondary waterways in order to reach upper Red River settlements.⁷⁷ The inaugural voyage of the Steamship Enterprise brought supplies from Natchitoches, Louisiana, to Fort Towson.⁷⁸ Between 1833 and 1838 the federal government supported the clearing of the Great Raft; while it was not completely removed until the turn of the century, this greatly improved Red River navigation and forged the way for greater commercial activity along the waterway.⁷⁹

Commercial boat traffic on the Red River peaked in the mid-to-late nineteenth century. By 1853 there were 12 steamboat landings along the Red River in Indian Territory with Fort Towson remaining the most prominent commercial center. Large cotton plantations, including a number owned by Choctaw and Chickasaw natives in Indian Territory, relied on the river to distribute products to markets downstream in Louisiana. Boating season lasted from December to July, and over time corn, fur, and pecans supplemented cotton as common regional exports.⁸⁰ Robert M. Jones, a prominent member of the Choctaw Nation, managed six plantations in the region including one, Lake West, that spanned nearly 5,000 acres near Oberlin, Oklahoma, on the Red River. Jones relied on

the labor of approximately 225 slaves to run his plantations; he owned more slaves than any other person in Indian Territory. He also operated two steamboats that traveled up and down the river shipping his agricultural products to New Orleans.⁸¹

This type of commercial activity thrived until the 1890s, when railroads built alongside the Red River became the main means of freight transport.⁸² One final, fledgling commercial venture brought a steamboat, the Annie P., to Denison, Texas, in 1905. It only made two trips between Shreveport and Denison, carrying supplies including plows and grindstones up the river and returning with 350 bales of cotton.⁸³ After this, the era of steamboats on the upper Red River was effectively over. Ferries, however, which were their counterparts in waterway travel, lasted well into the twentieth century.



Figure 28. The Annie P. traveled up the Red River from Shreveport, Louisiana, to Denison, Texas, in 1905. (Courtesy of Murphy Library Special Collections, University of Wisconsin-La Crosse.)

THE STEAMBOAT HEROINE

The Steamboat Heroine was a 140-foot-long, 160-ton, side-wheel paddleboat constructed in New Albany, Indiana, in 1832. It was one of the very first steamboats to travel up the Red River following the clearing of the Great Raft and was supposed to deliver supplies to the United States Army at Fort Towson in present-day Choctaw County. These included 500 barrels of flour, 240 barrels of salt pork, and soap. Even though the raft had been cleared, conditions on the river were still poor, and vessels encountered low water levels and debris throughout the channel. On May 6, 1838, while traveling from Jonesborough, Texas, to its destination in Indian Territory, the Steamboat Heroine got caught on a log and sunk. Its passengers escaped with their lives, and some of the supplies were salvaged, but the boat was a total loss. Soon after, the river changed its course, and the vessel was buried for more than a century and a half under a pasture and forgotten to history.⁸⁴

In the 1990s flooding once again altered the course of the Red River and the stern of the Steamboat Heroine became exposed above the waterline. It was discovered by a local resident, who notified authorities. Funded through a Transportation Enhancement grant



Figure 29. Anthropologists in diving gear prepare to explore the Steamboat Heroine wreck in the Red River in 2003.⁸⁶ (Courtesy of the Oklahoma Historical Society and the Institute of Nautical Archaeology at Texas A&M University.)

administered by the Oklahoma Department of Transportation, a team of researchers from Texas A&M University and the Oklahoma Historical Society traveled to the site for several years to excavate the wreck, including artifacts that sunk with the boat. They found tools, shoes, barrels, water pipes, medicine bottles, and other artifacts that tell the unique story of life on an 1830s steamboat. In fact, the Steamboat Heroine is the earliest vessel of its kind that researchers have studied, and the only known shipwreck in Oklahoma.⁸⁵



Figure 30. Marine artist Peter Rindlisbacher painted this image of the Steamboat Heroine based on historical documentation including excavation records and a three-dimensional model of the boat. (Courtesy of Peter Rindlisbacher/the Oklahoma History Center.)

Ferries

The first known ferry boats along the Red River emerged in the 1830s and 1840s. James Tyson established ferry service at Rock Bluff Crossing on the Shawnee Trail in these years, and tribal governments in Indian Territory began to issue licenses to native ferry operators.⁸⁷ Many crossings developed at natural fords that had long been used by the area's early inhabitants. The boats themselves were generally flat, floating rafts or barges. Travelers drove their team and wagon down a carefully graded approach and up a ramp onto the ferry. Operators then guided the ferry across the river using a cable strung between the banks or, if the water was low, a long pole.

Fees varied from crossing to crossing. At one point the average fare in Texas amounted to four to six cents per head for cattle, about 10 cents for a person on foot, 25 cents for a horse and rider, and one to two dollars for wagons.⁸⁸ By comparison, in 1884 Chickasaw ferry operator William Worthington charged 10 cents for live-stock, 10 cents for a person on foot, 25 cents for a horse and rider, and 50 cents for wagons; all of these prices were set by the Chickasaw government.⁸⁹ The climate and geography of the Red River often posed a challenge for ferry voyages, and high water could spell delays or disaster. Nevertheless, travelers depended on fords and ferries in the pre-bridge era.



Figure 31. Red River ferries around the turn of the twentieth century in Jefferson, Love, Marshall, and Bryan Counties.



Figure 32. This undated photograph of a ferry boat on the Kiamichi River in Oklahoma shows how a typical turn-of-the-century ferry would have appeared. (Courtesy of the Oklahoma Historical Society.)

Perhaps the most prominent ferry crossing on the Red River was Colbert Station, which Chickasaw native Benjamin Franklin Colbert began in 1853 close to what was then the Texas Road and Shawnee Trail. It was located south of present-day Colbert, where US Highway (US) 69/75 now crosses the Red River just east of Lake Texoma. Colbert had to petition the Chickasaw Nation Tribal Council in order to establish the ferry crossing. Their decree not only gave him permission to do so, but also described several stipulations to maintain the ferry on behalf of the tribal government:

Be it enacted by the Legislature of the Chickasaw Nation, that B.F. Colbert is hereby authorized to open and keep up a ferry across the Red River...he is hereby authorized to fence in the landing on this side of the river with a good rail fence, and he shall be allowed the privilege of putting up a gate...

[He] shall be required to keep at all times good boats and trusty and efficient boatmen for the accommodation of the traveling public...

[He] shall for the privilege granted in the first section of this act, at all times, keep the road leading to the ferry in good travelling order and condition, and also keep the ferry landing in good and proper order...

*[He] is hereby required to have a list of his rates of charges printed and posted up in a conspicuous place near his ferry...*⁹⁰

By all accounts Colbert followed these terms and maintained a successful ferry service through the late nineteenth century. Thousands of people immigrated to Texas via the crossing, and the Butterfield Overland Mail Route forded the Red River at this location.⁹¹ In 1858 *New York Herald* reporter Waterman Ormsby rode along for the Butterfield's first transcontinental journey and described the crossing of what he called the "wide, shallow and muddy Red River," marveling at the efficiency of Colbert's operation:

*Mr. Colbert, the owner of the station and of the ferry, is a half-breed Indian of great sagacity and business tact. He is a young man, not quite thirty, I should judge...He has owned and run this ferry five years and has had excellent patronage...His boat is simply a sort of raft, pushed across the shallow stream by the aid of poles...*⁹²

This success was, in part, made possible by significant slave labor, which was at the center of the regional economy in the antebellum era. At Colbert's Ferry, slaves guided the ferry boat, graded banks on both sides of the river to assist with crossings, and worked on extensive surrounding farmland. Ormsby reported that Colbert owned approximately 25 slaves in 1858.⁹³ Colbert went on to build several toll bridges at this site through the late-nineteenth and early twentieth centuries, extending his business enterprise even after ferries had been replaced by the automobile.

Though Colbert's Ferry was perhaps the most well-known Red River ferry, there were countless other crossings between Texas and Oklahoma. For example, at least 20 ferries ran between Grayson County, Texas, and what is now Bryan County, Oklahoma. These included the Willis Ferry; Toomey's Ferry at the mouth of the Washita tributary; Baer's Ferry, which was located at the site of present-day Denison Dam and known for its involvement in bootleg whiskey; Carpenter's Bluff Ferry; Ferguson Ferry, which led to Bonham Texas; Bryant's Ferry, run by a Choctaw; and Snow's Ferry.⁹⁴ Other notable ferries along the river included the Shawneetown Ferry near Idabel, Oklahoma, in the southeast part of the state, which linked a group of five plantations along the Red River to trade networks in Texas. In addition, the Bon Ton Ferry, later known as Hooks Ferry, transported produce from the Red River basin in southeast Oklahoma to Texas trading posts.⁹⁵ Ferries remained important forms of transportation, linking Texas and Oklahoma along the Red River, into the twentieth century. At the same time that waterway transportation emerged throughout the river basin, overland trails also developed and grew.



Figure 33. Site of a former ferry crossing on the Red River 20 miles west of Idabel, Oklahoma, in 1953. (Courtesy of the Oklahoma Historical Society.)

Overland Transportation

Nineteenth-Century Trails

In the 1840s and 1850s settlement on both sides of the Red River was in full swing. Regional commerce and trade drove the development of infrastructure throughout the region. The main method of moving goods was via wagon. Pulled by mules or oxen, freight wagons could carry heavy loads but, in turn, made slow progress. Nevertheless, they served an important role in nineteenth-century transportation, traveling early roads to move products between rural communities and larger cities.⁹⁶

Several significant early roads crossed the Red River between Texas and Indian Territory. Trammel's Trace and the Texas Road, described above,

connected Texas settlements with more established communities in Arkansas, Missouri, and Kansas, forging the way for freight commerce and immigration. In 1844 the Republic of Texas established the Central National Road, which was to run from Dallas north to the Kiomatia crossing on the Red River in the vicinity of Pecan Point and Jonesborough, where it would link up with other trails in Indian Territory. The Texas Congress hired a five-man team to survey the road, clear trees and debris, and build bridges, decreeing a standard width for the roadbed at 30 feet and bridges at 15 feet. Though it was soon usurped by other routes, including the Texas Road, the Central National Road successfully linked northeastern Texas with what was then the western American frontier by way of the Red River.⁹⁷



Figure 34. Settlers crossing the Red River into old Greer County, Oklahoma, in 1887. (Courtesy of the Museum of the Western Prairie.)

Along with established roads, another important mark of regional infrastructure was the arrival of the mail. From 1858 to 1861 the Butterfield Overland Mail Route ran through Indian Territory and Texas, crossing the Red River via Colbert's Ferry on its long journey from St. Louis, Missouri, to San Francisco, California (see Figure 35). The Butterfield offered mail service and brought through passengers to Texas and other southwestern states via stagecoach, covering its 2,800-mile journey in 25 days or less and costing passengers \$200 one way or 10 cents per mile.⁹⁸ Stations stood approximately 12 to 18 miles apart along the route. Driving southwest through Indian Territory, the Butterfield Stage stopped at a string of stations through the Choctaw Nation before crossing onto Chickasaw land to ford the Red River at Colbert's Ferry in what is now Bryan County.⁹⁹ The Butterfield changed routes in 1861 with the onset of the Civil War and was soon made obsolete when the transcontinental railroad was completed in 1869.¹⁰⁰ For the two-and-one-half years that it ran, however, the route facilitated communication and immigration across the American frontier, including at its important crossing on the Red River.

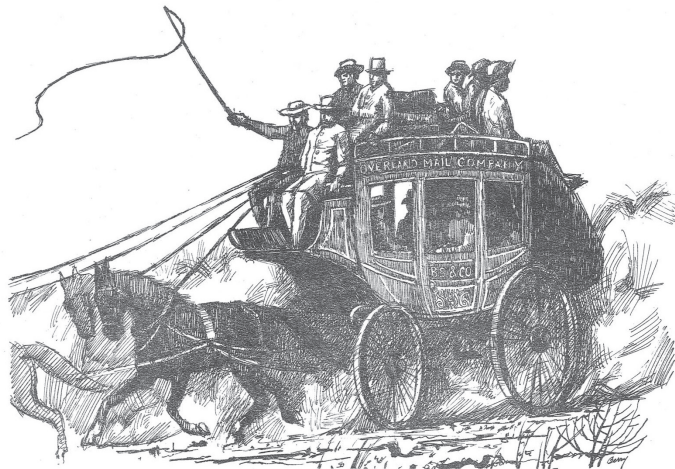


Figure 35. Undated sketch of the Butterfield Overland Mail Stage, which crossed the Red River at Colbert's Ferry. (Courtesy of the *Southwestern Historical Quarterly*.)

Cattle Drives

Annual cattle drives from Texas to northern markets constituted a major regional economic force in the mid-to-late nineteenth century. The drives took place along three main routes that moved steadily west over time: the Shawnee Trail, the Chisholm Trail, and the Western Trail (see Figure 36). Each of these paths crossed the Red River between Texas and Indian Territory, forging important connections between the two regions.

Several important factors contributed to the rise of cattle drives in this region. The cattle themselves were a uniquely strong breed, the Texas Longhorn, which originated when the cattle of Spanish colonists mixed with British livestock off of the American Gulf Coast.¹⁰¹ Longhorn herds thrived and multiplied in the grasslands of central and south Texas as cattle drives began in the 1840s and 1850s. In the counties of northeast Texas, which were closest to early trailheads, the total number of cattle more than tripled from 27,000 in 1845 to 82,000 in 1855.¹⁰² Ranchers abandoned many of these herds during the Civil War; when they returned to their posts years later they found large groups of half-wild cattle roaming the plains. While Texas had plenty of land and livestock after the war, the state's economy was suffering. Meanwhile, large markets for beef existed in the northeastern part of the United States. Entrepreneur and livestock dealer Joseph McCoy devised a plan to connect Texas cattle to northern markets via a railroad-loading center in Abilene, Kansas. Drives from Texas to Abilene began in 1867, marking the beginning of a 20-year heyday for cattle trails in the region.¹⁰³

The Shawnee Trail, early 1840s – 1868

The Shawnee Trail was the earliest and easternmost of the three main cattle trails. Likely named either for a Shawnee village on the northern Texas border or the Shawnee Hills in central Oklahoma, it began in the 1840s and traced parts of the Texas Road.¹⁰⁴ The route ran from the Texas towns of Austin, Waco, and Dallas, generally following the alignment of present-day I-35, and continued through Oklahoma along the route of modern-day US 69 to eastern destinations, including Baxter Springs and Kansas City, Kansas, and Sedalia, Missouri.

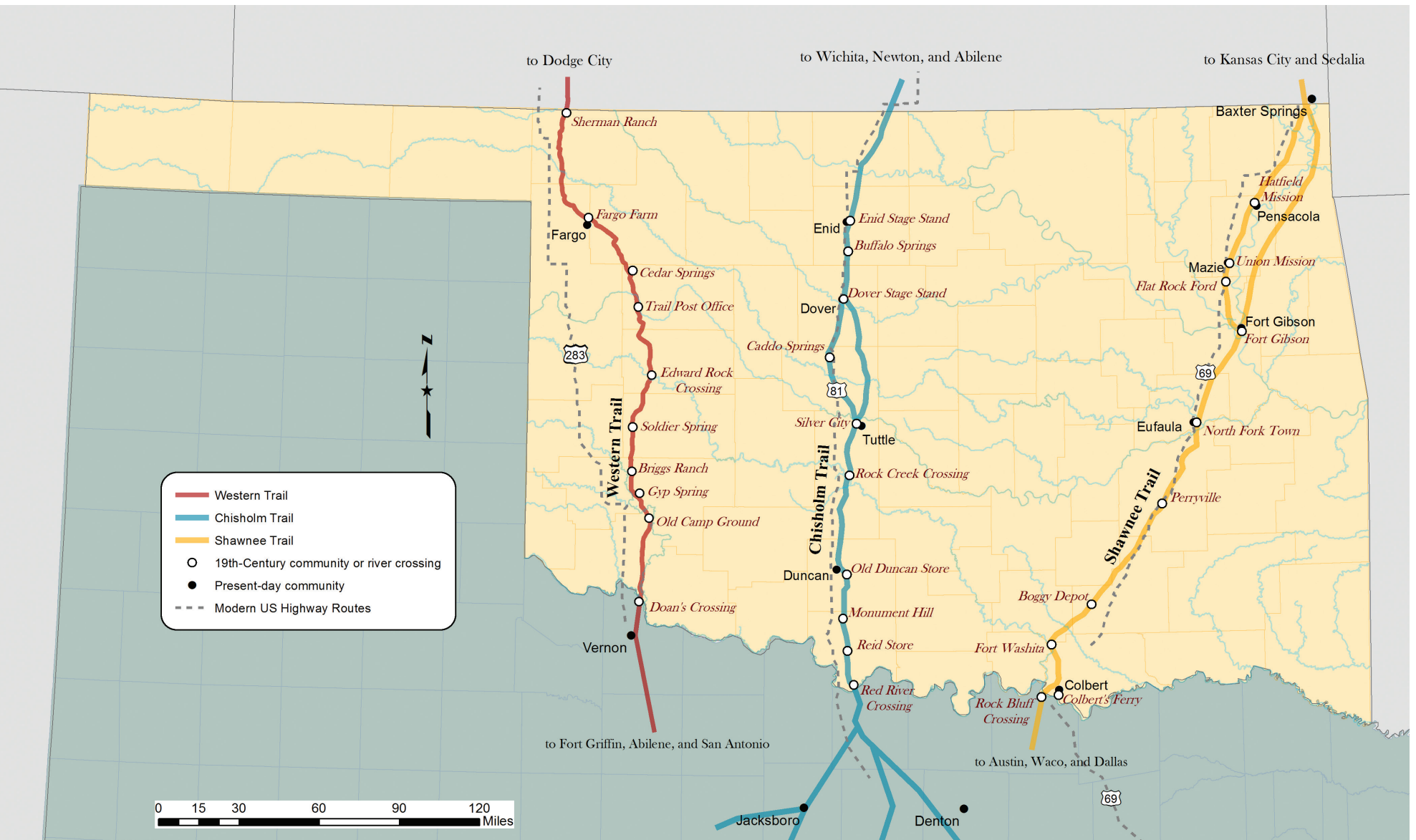


Figure 36. Locations of the three major nineteenth-century cattle trails through Oklahoma.

The trail crossed the Red River at Rock Bluff, located near the former site of Preston, Texas, which is now submerged by Lake Texoma. Rock Bluff benefitted from a natural limestone chute that eased crossing for large herds of cattle, whether or not water levels were high.¹⁰⁵ Preston became a boisterous frontier town, and significant traffic by way of the Shawnee Trail strengthened connections between the two sides of the Red River.¹⁰⁶



Figure 37. Photo of an Oklahoma cattle drive in 1905. Though it dates to a period after the major Longhorn trails, this image captures the look and feel of a cattle drive on the Oklahoma landscape. (Courtesy of the Oklahoma Historical Society.)

Until just after the Civil War, the Shawnee Trail was the main route for Texas Longhorn cattle drives. Several issues arose, however, that led to its demise. The central problem was the encroachment of western settlement, particularly in Missouri and Kansas. Increasingly, herds of cattle were trampling pioneer farmers' land and ruining their crops. When farmers put up fences, they acted as barriers on the trails and drivers could not move cattle along. Even worse, the Texas herds carried a species of diseased tick that had no effect on them but was deadly to the Midwestern livestock they encountered on the drives. The fatal sickness, called "Texas fever," was devastating for pioneer farmers. By the mid-1860s quarantine laws outlawing Longhorns in Missouri and eastern Kansas meant that cattle drives had to move west. Meanwhile, Joseph

McCoy built a new railhead in Abilene, Kansas, to ship livestock to eastern markets. These factors combined to become the impetus for the Chisholm Trail.¹⁰⁷

The Chisholm Trail, 1867 – 1884

The Chisholm Trail is the best known of the Texas cattle trails; in fact, other trails are often erroneously referred to as the Chisholm.¹⁰⁸ It was named after Jesse Chisholm, a member of the Cherokee Tribe who was removed to Indian Territory on the Trail of Tears. He became active in trading and Native American politics throughout the region.¹⁰⁹ In 1865 Chisholm and others forged a wagon route from central Oklahoma to northeast Kansas that became the northern portion of the Chisholm Trail.¹¹⁰

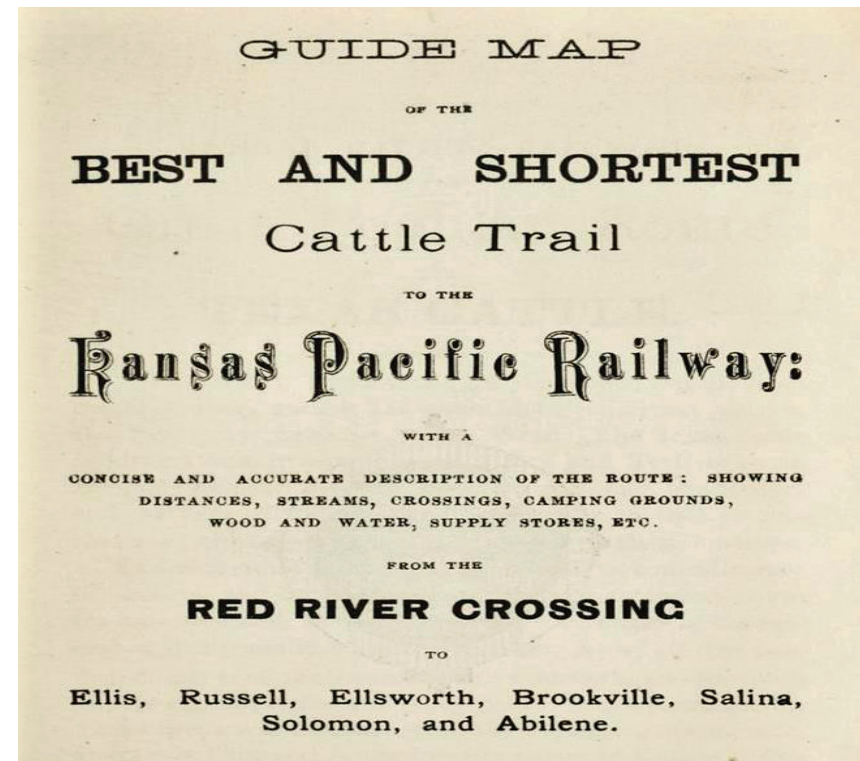


Figure 38. Title page from "Guide Map of the Great Texas Cattle Trail from Red River Crossing to the Old Reliable Kansas Pacific Railway," published in 1875 to encourage use of the Chisholm Trail.



Figure 39. A reenactment of a Longhorn cattle drive in 1966. (Courtesy of the Oklahoma Historical Society.)

The route followed the older Shawnee Trail through much of south and central Texas. At Waco, it split from the Shawnee and continued north and west, through modern-day Fort Worth. The Chisholm Trail crossed the river at Red River Station, located approximately 100 miles northwest of Fort Worth, into what is now southern Jefferson County, Oklahoma. From there, the route continued due north through Indian Territory to central Kansas railheads including Wichita, Newton, and Abilene. For most of its run through northern Texas, across central Oklahoma, and into the heart of Kansas, the trail followed the alignment of modern-day US 81.¹¹¹

Cattle drivers found that the Chisholm Trail had numerous benefits over its predecessor, the Shawnee. According to one 1875 guide map, its advantages were “freedom from the petty annoyances of settlers...a wider range, an abundance of grass and water, [and] increased shipping facilities” (see Figure 38).¹¹² Drivers benefitted from a band of tallgrass prairie that extended north through Oklahoma. This grass had great nutritional value and helped the Longhorns gain weight during their journey. The rolling, open terrain along this stretch was also easy to navigate.¹¹³ Under these favorable conditions, an increasing number of cattle traversed the Chisholm Trail to Kansas each season, with a peak population during 1871 of more than 600,000.¹¹⁴

River crossings presented some of the greatest challenges on these ever-growing cattle drives. The Red River was prone to sudden floods, which could leave areas of quicksand after the water level had returned to normal.¹¹⁵ At one point during the 1871 season there were approximately 60,000 cattle waiting to cross into Indian Territory at Red River Station due to flooding. When one of the herds stampeded, it took over a week to identify and separate the cattle.¹¹⁶ Despite these conditions, Longhorn drives continued on the Chisholm Trail through the mid-1880s.

Ultimately, the Chisholm Trail succumbed to settlement that continued to move westward. Farmers and ranchers marked their land with barbed wire fencing, which open-range cattle were not able to traverse. New railheads emerged as quarantine laws prohibited Texas Longhorns east of the settlement line. These changes paved the way for the Western Trail, the last of the great cattle trails between Texas and Oklahoma.

The Western Trail, 1874 – 1893

In 1874 rancher John T. Lytle forged the Western Trail when he drove 3,500 head of cattle from southern Texas to northwestern Nebraska. It became a feasible path for Longhorn drives after 1875, when the Red River War forced the last of the Plains tribes—who had been hostile to American encroachment—onto reservations in Indian Territory. Their removal afforded safe passage for cattle and trail hands, and by 1879 the Western Trail was the most-used livestock route out of Texas.¹¹⁷ All-in-all more than two million Longhorns traveled the path, fording the Prairie Dog Town Fork of the Red River at Doan’s Crossing (see Figure 40).

The Western Trail originated in San Antonio, Texas. It entered Indian Territory approximately 65 miles northwest of Wichita Falls, Texas, at Doan’s Crossing, and crossed into what is now southeastern Jackson County, Oklahoma. The trail continued north to the growing railhead at Dodge City, Kansas, which earned the nickname “the Queen of the Kansas Cow Towns.”¹¹⁸ It generally followed the route of current-day US 283, heading north through western Oklahoma.

Cattle drivers found that the Western Trail offered many of the same benefits that the Chisholm Trail had 10 years earlier. The route avoided encroaching settlement and offered open grazing lands for Longhorns on their journey north. In 1876 trail hand Lewis Warren Neatherlin kept a journal of his passage that described the everyday details of life on the trail. His account of crossing the Red River is matter-of-fact but reveals the importance of the water level and the way the trail followed the north fork of the river through southwest Oklahoma:

May 17: Still raining this morning...The ground being very wet and heavy, we made a short drive, and camped in the valley of the Red River. . .

May 18: After a long talk with the inspector, I give him a due bill and we crossed the Red River. Very wide and sandy but very little water. We took dinner on the bank of the North Fork of Red River, 2 miles from where we crossed the main river. The Trail lay on the west side of the north fork all afternoon, and we camped near it tonight.¹¹⁹



Figure 40. Doan's Crossing in 1890. (Courtesy of the Museum of the Western Prairie.)

Two years after Neatherlin's party crossed the Red River, Jonathan Doan and his cousin Corwin Doan founded a trading post just south of the waterway to cater to increasing cattle drives, as well as waves of settlers, Native Americans, and buffalo hunters that crossed between Texas and Indian Territory. The family lived in two cabins while their store occupied an adobe building (which is now a Recorded Texas Historic Landmark), and later a larger wood structure. By the 1880s Doansville, as it became known, boasted a hotel, school, and saloon.¹²⁰ Even during the height of the Western Trail, however, the end of the cattle drives loomed.

In 1878 the St. Louis, Iron Mountain and Southern Railroad was extended to meet the Texas and Pacific Railroad at Texarkana, connecting Texas to the Chicago stockyards and making it possible to ship Longhorn cattle directly to the north and east.¹²¹ Moreover, an 1885 Kansas quarantine law forbid Texas livestock drives from passing through the state. While some drivers continued on to destinations further north and west or exploited loopholes in the statute, this legislation ultimately ended the Texas cattle drives by the early 1890s.¹²² For half a century, overland trails including those used for Native American removal, early settlement,

trade, mail, and cattle drives linked the two sides of the Red River between Texas and Oklahoma.

From the crossings of this region's first American settlers to the upheaval of Native American removal, the increasing movement of produce and goods via steamboat and ferry, and the massive drives of the Texas cattle trails, the Red River was a vital center of transportation during the nineteenth century. Even before railroad and automobile bridges spanned the Mighty Red, millions of people and animals crossed the river, forging the way for what became major highways and bridges in the years to come.



Figure 41. The Doansville Store at an important crossing on the Red River along the Western Trail.

RED RIVER LORE

One of the most enduring pieces of Red River pop culture is the song “Red River Valley,” which in its original nineteenth-century version actually referred to the Red River of the North that flows between Minnesota and North Dakota, and into Canada.¹²³ By the 1920s the tune migrated south: a version recorded by Hugh Cross and Riley Puckett in 1927 became part of a canon of romanticized western songs, and many generations hummed along to the lyrics, “Just remember the Red River Valley/ and the cowboy who loved you so true.” “Red River Valley” was used to dramatic effect in the award-winning movies *The Grapes of Wrath* (1940) and *The Last Picture Show* (1971). Countless artists have covered it, including Gene Autry, Marty Robbins, Pete Seeger, Jo Stafford, and George Strait. In fact, the song was so well-loved that it became something of a cliché in country music. On his 1966 comedy album “Everybody Loves a Nut,” Johnny Cash wrote and recorded a song called “Please Don’t Play Red River Valley.”

The Red River also served as a backdrop for several films. Gene Autry’s western *Red River Valley*, featuring a recording of the titular song, was released in 1936. The most well-known Red River movie, however, is John Wayne’s 1948 feature-length *Red River*, directed and produced by Howard Hawks. A fiction-



Figure 42. Theatrical poster for the 1948 film *Red River*. (Courtesy of doctormacro.com.)

al account of the first cattle drive along the Chisholm Trail, *Red River* dramatically interprets the cowboys’ journey north to Kansas in 1865 while drawing out themes of settlement, tensions with nearby Native Americans and

Mexicans, and ranching on the western frontier. The film was nominated for two Academy Awards and is widely recognized as one of the classic films of the western genre.¹²⁴

CHAPTER 4

Railroad Development and Crossings of the Red River

Yesterday a train of sixteen cars of cattle from Red River City, or Denison [Texas], as the new city at the terminus of the road in Texas is called, passed through Parsons [Kansas], under contract to be unloaded at St. Louis in five days from time of starting. They had to drive two days out of the five; also a rest of twelve hours at Schell City [Missouri]. This road during the last fifteen days of this month has shipped 499 carloads of cattle, 375 carloads of coal, 170 carloads of material from the A. T. and S. F. Railroad and about 300 cars of merchandise for Texas. Immigration to Texas is increasing rapidly. Eight trains pass this place daily, averaging eighteen cars per train. Tonight the track is within twenty-three miles of Red River. This road will ship 30,000 bales of cotton into St. Louis this year.

Dispatch to the St. Louis Republican describing rail traffic on the first railroad to cross the Red River between Texas and Oklahoma, dated September 20, 1872.¹²⁵

In the autumn of 1872, an observer described a new rail line approaching completion. The new line was to be the first railroad crossing of the Red River and would run from Denison, Texas, north to Kansas. Before it was even completed, over 1,000 freight cars traveled its tracks. Replacing slow and costly wagon freight, the railroad enabled communities in the Red River Valley to transport cattle, cotton, and other goods north in a matter of days rather than weeks. The railroads provided the region's first high-speed transportation network, and new towns sprang up wherever new rail lines were constructed.

Railroads had a profound impact on transportation and community development in the Red River Valley in the late nineteenth and early twentieth centuries. This chapter summarizes the chronology of railroad development in Oklahoma and northern Texas, discusses the companies who constructed the various railroad crossings along the Red River, and provides information on the technology that enabled these bridges to support the weight of heavy rail traffic.

Railroad Development in the Late 1800s and Early 1900s

Early Railroad Development

In the years after the Civil War, Anglo settlers continued to move westward into what is now Oklahoma and Texas. At the time, the frontier economy was based largely on cattle, cotton, wheat, and other agricultural products. Railroads played a vital role in the cattle economy and cattlemen drove animals overland from Texas through Indian Territory to Kansas, where the nearest railheads were located along the Kansas Pacific Railway, 100 miles north of the border between Kansas and Indian Territory. Although the Atchison, Topeka & Santa Fe (AT&SF) brought the railroad within 50 miles of the Kansas/Indian Territory border in 1871, cattle trails continued to serve as the main means of moving livestock and people through Indian Territory into the 1880s.¹²⁶

Despite substantial railroad development in neighboring Missouri and Kansas, as well as southeastern Texas, Indian Territory did not have any railroad mileage in 1870.¹²⁷ This lack of railroad development was due in part to the terms of government treaties with the various Native American tribes who had been forcibly removed to the region prior to the Civil War.¹²⁸ The treaty with the Choctaw and Chickasaw of 1866, for example, contained stipulations that only one north-south and one east-west railroad were to be permitted.¹²⁹ While the Choctaw Nation swiftly began to promote the construction of two railroads through its lands under these stipulations, the neighboring Chickasaw Nation refused to consent and, as a result, neither project was able to proceed.¹³⁰

Just before the ratification of the 1866 treaty, however, Congress passed a law granting permission to construct a railroad across Indian Territory to the first of three Kansas railroad companies to reach the territory's northern border.¹³¹ Circumventing further negotiation with the tribes, the passage of the act immediately ignited a race between three railroad companies: the Union Pacific, Southern Branch; the Kansas & Neosho Valley; and the Leavenworth, Lawrence & Fort Gibson.¹³² The Union Pacific, Southern Branch (later known as the Missouri, Kansas and Texas, or "Katy") emerged as the victor on June 6, 1870. Over the next two years the Katy construction crews pushed south, and the first passenger train crossed the Red River into Texas on Christmas Day in 1872.¹³³ The Houston & Texas Central built north to Denison the following year, and the Katy became the link connecting Texas's railroad system to the national network (see Figure 43).¹³⁴

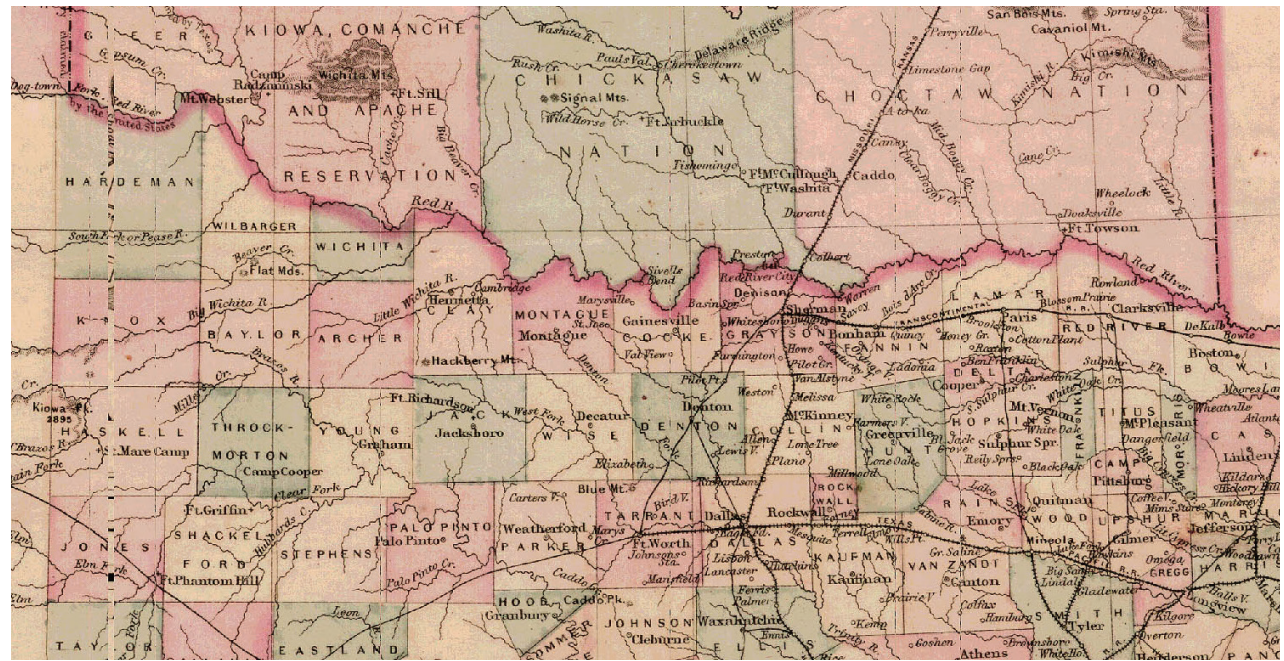


Figure 43. Railroad development in the Red River Valley, 1876. (Courtesy of the Texas State Library and Archives Commission.)

Although the new rail line provided the first high-speed route from Texas through what is now Oklahoma, it did little to improve transportation in the area. The line passed through the eastern portion of Indian Territory on lands held by the Cherokee, Creek, Choctaw, and Chickasaw Nations. However, the residents of Indian Territory derived little benefit. Discriminatory rates made it less expensive to purchase a ticket through the territory than to a point within it. As a result, passenger and freight traffic originating within the territory was minimal, and a Katy manager was known to grumble that the corridor might as well have been built “through two hundred miles of tunnel.”¹³⁵

The Katy remained the only railroad to cross the Red River between Texas and Indian Territory for the next decade. Due to legal and financial challenges, including the economic Panic of 1873, little additional railroad development occurred in the region for nearly a decade. When

Congress finally granted approval for right-of-way for additional railroads in Indian Territory in the 1880s, more companies began to construct north-south routes, including the St. Louis and San Francisco (“Frisco”) and the Gulf, Colorado and Santa Fe (GC&SF).¹³⁶ By 1889 additional rail lines began to push south from the well-developed network in southern Kansas, and the Katy, Frisco, and GC&SF all crossed the Red River to connect with the existing rail system in northeastern Texas.¹³⁷

On the Texas side of the river, railroad development was also accelerating. By the late 1870s the Texas & Pacific Railroad extended west from Arkansas through Paris, Bonham, and Sherman, where it connected to the Houston & Texas Central.¹³⁸ In 1878 Fort Worth was the western limit of rail travel in northern Texas, but in the decade that followed areas farther west saw a boom in railroad construction, including the westward expansion of the Texas & Pacific and the construction of the Fort Worth & Denver City Railroad. By 1889 northern Texas had a robust rail network, and east-west lines ran parallel to the Red River for the length of the Texas-Indian Territory border.

The railroads that crossed the Red River linked Texas with the expanding urban centers in Kansas and Missouri. Several of the main north-south rail corridors across the Red River followed the route of earlier overland trails, underscoring the importance of these corridors and crossings. The route of the Katy generally followed the old Texas Road and Shawnee Trail, which crossed the Red River near Colbert and continued northeast to Fort Gibson, following the Grand River into southeastern Kansas.¹³⁹ Anticipating future development, in 1889 the Chicago, Kansas and Nebraska Railway (a subsidiary of the Rock Island) secured right-of-way to build a railroad along the route of the Chisholm Trail, which entered Indian Territory in Grant County and ran south through Enid and Kingfisher to Duncan, crossing the river near Red River Station.¹⁴⁰ Ten years later the Kansas City, Mexico and Orient (KCM&O) built a line through the western portion of Oklahoma, crossing the Red River at Elmer, not far from Doan’s Crossing on the Western Trail.¹⁴¹ In all three instances the railroads crossed the river less than two miles from an established ford, wagon bridge, or ferry.

In the case of the Katy, the location of the Red River crossing was carefully orchestrated, and ferry owner Benjamin Franklin Colbert was instrumental in the railroad company’s selection of a bridge site. Colbert’s ferry did brisk business as the railroad’s construction progressed south. At that time most freight in the region traveled overland by wagon, and these wagons relied on ferries to cross the river. In addition to the usual local traffic and loose livestock, as the railhead crept closer Colbert saw a surge in freight wagons bringing supplies to the railroad crews. He soon ferried more than 200 wagons per day, adding a second boat to keep up with demand. When the Katy’s surveyors reached the Red River, Colbert reportedly guided them to a suitable bridge site nearby and allowed them to camp on the grounds of his plantation, eager for the benefits of a railroad depot near his property.¹⁴² Ironically, the completion of the first railroad bridge marked the beginning of the decline in wagon-based freight travel. Although local passenger traffic continued to use the ferry, enterprises such as Colbert’s would one day become obsolete. Ferryman John Malcolm, who helped operate Colbert’s ferry during the bridge’s construction, recalled the immediate decline in ferry traffic as freight began moving by rail instead:

Along towards Fall travel became very heavy and the railroad bridge was nearing completion. Christmas came and the first passenger train went across on Christmas afternoon, 1872. Soon after that all freight wagons stopped and our travel was cut [in] half.¹⁴³

Settlement and Railroad Expansion

The railroad expansion boom of the late nineteenth century helped open new areas for more intensive ranching and farming, and in turn the increasing number of settlers attracted more railroads. The final decade of the nineteenth century saw a series of land rushes in what is now Oklahoma as the federal government opened new areas to settlement by non-Native Americans. The Indian Appropriations Act of 1889 made land available in the area of central Oklahoma that is now Kingfisher, Logan, Canadian, Oklahoma, Payne, and Cleveland Counties. The following year, the 1890 Oklahoma Organic Act separated the western half

of Indian Territory into a separate entity known as Oklahoma Territory, comprised of the lands ceded to the United States Government by the Five Tribes after the Civil War. In the years that followed, the federal government gradually allowed non-Native Americans to settle on lands formerly occupied by over a dozen different tribes (see Figure 44).

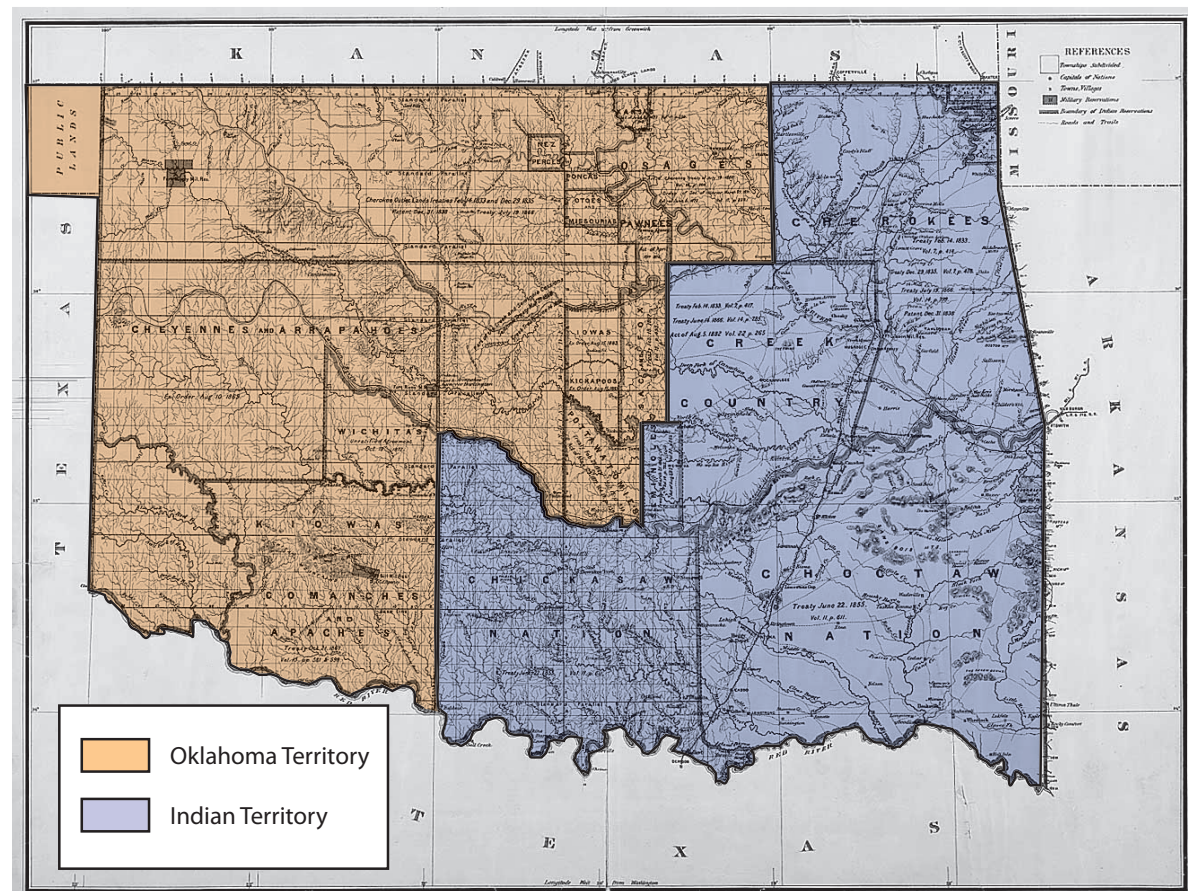


Figure 44. Map of Oklahoma and Indian Territories after the 1890 Organic Act. (From the National Archives and Records Administration.)

Railroads brought people and supplies to these newly opened areas, and existing towns along new rail corridors prospered. Railroad companies and land speculators also platted new communities at station stops. Each wave of settlement continued to swell the populations of towns along the rail lines. A station agent for the Rock Island line described the boom period in Hennessy, located on what was then the only railroad line in the western portion of the Territory:

The grounds around the depot were used for beds. Hotel facilities were lacking, stores were sold out of groceries, merchants could not ship in goods fast enough to supply the demands. After the opening [of the land in northwestern Oklahoma in 1890], Hennessy commenced to grow rapidly and in a short time, it had several thousand inhabitants and substantial residences and store buildings were built rapidly.

- S.R. Overton, Rock Island Agent¹⁴⁴

In the early phases of railroad development, lines often passed through areas where land was not yet being farmed, and therefore no produce could be exported. In some areas, such as the Tulsa vicinity, trains ran seasonally; cattle were shipped in during the spring to graze, then shipped out to market in August.¹⁴⁵ The railroads themselves generated local business, purchasing cordwood and other supplies from settlers and providing a cash income, which could otherwise be difficult to come

by on the frontier.¹⁴⁶ Since an empty freight car represented a financial loss to the railroad, in some instances railroad companies took more direct action to increase outgoing freight as well. In 1890 the Rock Island line shipped seed wheat from Kansas to Hennessy, allowing local farmers to pay for it at harvest time. The railroad then bought the resulting

wheat the following year and shipped it out to sell. Within six years, the amount of wheat had increased exponentially; from the 12,000 bushels of seed in 1890, the 1896 harvest yielded 1.5 million bushels, “all of which was shoveled into cars for shipment by the farmers themselves.”¹⁴⁷ Although substantial Anglo settlement had occurred several decades earlier on the Texas side of the Red River, the arrival of the railroad had a profound impact on population growth and agricultural patterns. Until the 1870s most farmers in north-central Texas raised crops and livestock for domestic use or local markets. Subsequent railroad development in the region allowed farmers to produce cash crops such as cotton, which could be shipped to distant markets by rail. The rich soil of the bottomlands encouraged more settlers to flock to the area, and several of the counties along the Red River saw their populations triple between 1870 and 1900 as the region shifted into cotton-based monoculture.¹⁴⁸

North-south railroad links allowed cattle, cotton, and other agricultural products to move to markets much faster than cattle trails and the primitive roads used by wagons and stagecoaches. As a result, transportation and trade in the late nineteenth century centered on railroads rather than overland routes. Initially cattlemen were reluctant to ship cattle by rail; the major drives had moved west, using the Chisholm and Great Western Trails, and the Katy ran some distance east of Texas cattle country. This attitude shifted quickly, and by the fall of 1873 a New York correspondent reported that 1,200 live cattle were shipped north on the Katy from Denison each day. Fearful of the competition, the Kansas Pacific Railway published a trail guide to convince cattlemen that it was still more economical to drive their animals north along the Chisholm Trail rather than ship via the Katy. In addition to missing the “nutritious grasses of Kansas,” the guide claimed that the animals would lose weight aboard the train.¹⁴⁹

As railroad expansion pushed further west in Texas, ranchers relied on rail service to move animals to market rather than the laborious overland drives. Less than 20 years after the Katy’s arrival in Texas, the great cattle drives across Oklahoma had become practically obsolete. Rail transit was exponentially faster, contrary to the Kansas Pacific’s suggestion that animals might waste away during a long transit. The experience of rancher C.B. Campbell of Minco, Oklahoma, illustrates the incredi-

ble speed with which livestock could be moved by rail. After the Rock Island line reached Minco in 1890, Campbell shipped 14 cars of cattle to Kansas City late in the afternoon, and the animals arrived at 6 o’clock the following morning. In comparison, a Grady County resident spent 12 days driving several hundred hogs from Lucile, Oklahoma, north to the Kansas line.¹⁵⁰

Not all of the newcomers to Oklahoma and Indian Territories had easy access to rail lines. After the Chicago, Rock Island & Pacific (Rock Island) Railroad was completed from Kansas to the Red River in 1890, it remained the westernmost rail service in either Territory for nearly 10 years. Settlers in the vast area west of the corridor had to haul wheat and livestock to the nearest rail stop, sometimes a journey of over one week.¹⁵¹ Desperate communities sometimes competed to lure new railroad construction, offering railroad companies “bonuses” of tens of thousands of dollars. In one instance, frustrated small-town businessman Ed Peckham spent five years agitating for a railroad before he was able to convince the Frisco to construct a line to his hometown of Blackwell, Oklahoma. When the line was complete and the Frisco was uninterested in extending it any further south or west, Peckham took matters into his own hands. Envisioning a line extending through Enid and on to Vernon, Texas, Peckham enlisted a local newspaperman to help champion the cause. With financing from a Kansas banker, Peckham eventually incorporated the Enid, Blackwell & Southwestern Railway and constructed his line as planned, helping to provide the first rail access in parts of southwestern Oklahoma. Although the Frisco had declined to build the line, the corporation was interested enough in the fully realized project to purchase the new line before it was even completed.¹⁵²

Larger railroad companies acquired many branch lines in this manner, gobbling up smaller lines built by local promoters. Major companies also created numerous subsidiaries to construct branch lines, and many of these were later acquired outright. Between the efforts of citizens such as Ed Peckham and the workings of national corporations, railroads eventually stretched throughout the region. Thirty years after the first Katy locomotive crossed the Red River, a robust system of railroad lines linked Texas and Oklahoma.

Red River Crossings

Crossing History

In the early decades of the twentieth century new railroad development crisscrossed the Oklahoma and Indian Territories. In addition to the major north-south through lines of the Rock Island, Frisco, and GC&SF, east-west lines also spanned the region. These various inter-state lines linked to a web of shorter regional lines as well; in 1901 these were largely concentrated in Oklahoma Territory in the area around Oklahoma City and Enid.¹⁵³ Within a few years railroads added more mileage in Indian Territory, and by 1906 Muskogee sat at the nexus of eight radiating branches. A concentration of shorter regional railways linked Sequoyah and Le Flore Counties with neighboring Arkansas as well. Most lines that crossed the Red River continued to the Dallas-Fort Worth area, where northeastern Texas's heaviest railroad development was centered. Rail lines also ran east-west parallel to the river, passing through the communities of Wichita Falls, Sherman, Paris, and Denison, which served as regional hubs where travelers could transfer between several lines. When Oklahoma achieved statehood in 1907, no fewer than seven rail lines crossed the Red River between Oklahoma and Texas (see Figure 46), at sites near Eldorado (Frisco), Davidson (Frisco), Terral (Rock Island), Thackerville (GC&SF), Colbert (Katy and Frisco), and Hugo (Frisco). By 1910 this number had grown to 10, with additional crossings at Elmer (KCM&O), Devol (Katy), and Hendrix (Missouri, Oklahoma & Gulf [MO&G]). The following section provides a brief construction chronology of the crossings and the lines that used them.

Missouri, Kansas and Texas ("Katy")

Originally chartered in 1865 as the Union Pacific Railway Company, Southern Branch, the Missouri, Kansas and Texas was intended to provide a continuous line linking agricultural areas in southeastern Kansas with New Orleans, a major shipping port.¹⁵⁴ Taking its nickname from the "K" and "T," it became known popularly as the "Katy." Completed to Denison, Texas, in 1872, the Katy entered Craig County just south of Chetopa, Kansas, and roughly followed the line of the old Texas Trail from Muskogee to Denison, Texas. The railroad crossed the Red River at Colbert, near the site of the existing ferry crossing.¹⁵⁵ By 1924 a second Katy branch ran from Wellington, in the Texas Panhandle, to Wichita Falls through southwestern Oklahoma. Passing through Harmon, Jackson, and Tillman Counties via Altus, the branch line crossed the Red River at Devol, connecting to Wichita Falls.

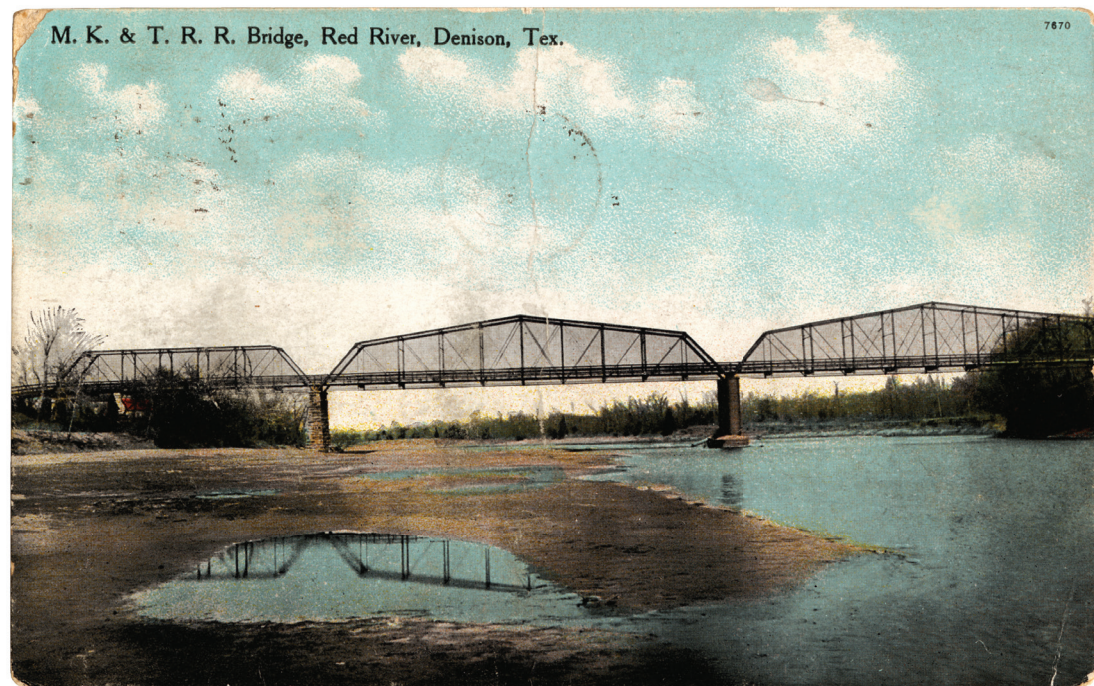


Figure 45. Katy bridge over the Red River near Colbert, Oklahoma, postcard postmarked 1911. (Courtesy of the University of Houston Libraries.)

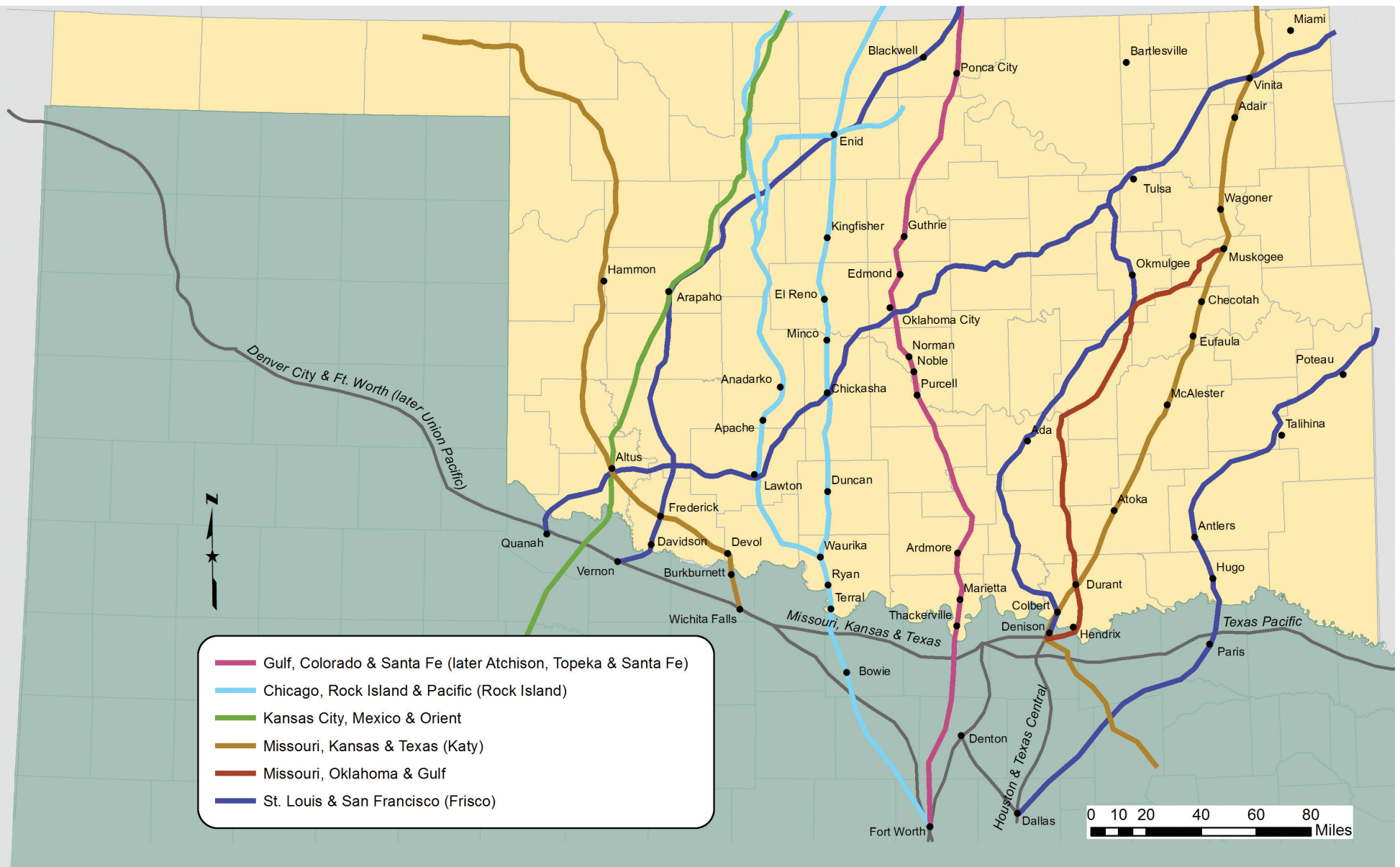


Figure 46. Selected railroads in Oklahoma and Texas with Red River crossings and connections, 1872-1910.

Gulf, Colorado & Santa Fe (GC&SF)

Chartered in 1873, the GC&SF was originally intended to link Galveston, Texas, with Santa Fe, New Mexico, bypassing Galveston's major commercial rival, Houston. Construction began at Galveston in 1875, and by 1881 the line reached as far north as Fort Worth. Attempting to secure access to profitable stands of pine timber in East Texas, the AT&SF acquired the GC&SF in 1886, providing a much-needed monetary infusion. Construction continued north the following year, and in 1887 the tracks were extended from Fort Worth to Purcell, located in Indian Territory, to connect with the existing southbound AT&SF line.¹⁵⁶ The GC&SF tracks crossed the Red River into Oklahoma in Love County approximately 4 miles south of Thackerville, and the line was eventually known as the AT&SF from Kansas to Texas.¹⁵⁷



Figure 47. GC&SF bridge south of Thackerville, Love County, Oklahoma, undated photo. (Courtesy of the Fred M. and Dale M. Springer Archives.)

St. Louis & San Francisco ("Frisco")

After negotiating with the Choctaw Nation, the St. Louis and San Francisco (commonly known as the "Frisco") obtained permission to extend an existing line from Fort Smith, Arkansas, through the Choctaw Nation's lands in what is now southeastern Oklahoma. The federal government passed a bill authorizing construction in 1882, and the line was completed in 1887.¹⁵⁸ Crossing the Red River south of Grant in what is now Choctaw County, the Texas portion of the line was known as the Paris and Great Northern Railroad, and provided a connection to the Texas & Pacific Railroad at Paris.¹⁵⁹ In addition to the Fort Smith-Paris line, the Frisco gradually constructed and acquired a number of other lines through Oklahoma and Indian Territories, and by 1907 controlled three additional lines that crossed the Red River to Quanah, Vernon, and

Denison. Construction of each of these three lines was begun by other companies, including the Atlantic and Pacific; Blackwell, Enid & Southwestern Railway; and the St. Louis, Oklahoma & Southern.¹⁶⁰

The Frisco's second Red River crossing incorporated a failed Atlantic and Pacific Railroad line intended to connect St. Louis, Missouri, to San Francisco, California. The Atlantic and Pacific Railroad laid tracks west from Missouri and entered Indian Territory at Vinita in 1871. The railroad failed to receive land grants in Indian Territory, and construction halted at Vinita. The Frisco acquired the Atlantic and Pacific in 1876 and began extending the line to Tulsa and Red Fork in 1881-1882.¹⁶¹ Known as the Chickasha-Quanah Branch, construction continued southwest to Oklahoma City in 1898 and crossed the Red River near Quanah, Texas, in 1903.¹⁶²

The Frisco acquired a third crossing with the purchase of the St. Louis, Oklahoma & Southern line in Indian Territory. Organized in 1895, the St. Louis, Oklahoma & Southern constructed a line extending south to Denison, Texas, from the existing Frisco corridor near Sapulpa, Oklahoma. Work initially proceeded slowly, as no definite route was selected, but in 1899 the company received an infusion of capital and began final route surveys the following January. Construction began almost immediately and proceeded in such a hurry that the crews followed close behind the surveying engineers. The route crossed the Red River using the Katy bridge at Colbert; completed in March 1901, the line was acquired by the Frisco several months later.¹⁶³ The Frisco purchased Blackwell resident Ed Peckham's Blackwell, Enid & Southwestern Railway in March 1903, adding this fourth and final Red River crossing to its network.¹⁶⁴

Chicago, Rock Island & Pacific (Rock Island)

Originally founded as the Chicago and Rock Island in 1851, through a succession of expansions and mergers the company was reorganized in 1880 as the Chicago, Rock Island & Pacific. Anticipating future development as the frontier moved westward, the Rock Island incorporated a subsidiary known as the Chicago, Kansas & Nebraska Railroad in 1885, and the following year began construction surveys for lines running south and west. The north-south line followed the old Chisholm Trail from Wichita, Kansas, into Indian Territory to the North Canadian River, then ran due south to Fort Worth, Texas.¹⁶⁵ The line was completed to the Red River in 1890, crossing south of Terral, Oklahoma, and between 1892 and 1894 construction pushed south to reach Fort Worth.¹⁶⁶

The Rock Island expanded its territory to cover a substantial swath of the United States over the course of the late nineteenth and early twentieth centuries. During this period the company constructed and acquired a large amount of railroad mileage in Oklahoma, although the bridge at Terral remained the Rock Island's only Red River crossing between Oklahoma and Texas. A parallel branch line added in the early 1900s split off from the main north-south corridor at Enid and rejoined the main line at Waurika, north of the Red River bridge.¹⁶⁷

Kansas City, Mexico and Orient (KCM&O)

Known as the Kansas City, Mexico and Orient, the line began as an ambitious project to create an overland link between Kansas City, Missouri, and the Pacific coast of Mexico. The projected route stretched southwest from Kansas City, Missouri, through Kansas, Oklahoma, and Texas to reach Topolobampo, Mexico, which railroad promoter Arthur E. Stilwell claimed was 400 miles closer to Kansas City than any other Pacific port. Chartered in 1900, the line incorporated a portion of an earlier route, previously chartered as the Colorado Valley Railway company in 1897. The KCM&O was authorized to construct a route from San Angelo, Texas, to the Red River. Construction crews reached the Red River in 1909, crossing it in eastern Jackson County, Oklahoma, just south of Elmer. From there the corridor ran north and connected with a line to Wichita, Kansas.¹⁶⁸

Missouri, Oklahoma & Gulf (MO&G)

One of Oklahoma's numerous smaller regional lines, the Missouri, Oklahoma & Gulf was the only one to construct a Red River crossing without being immediately acquired by one of the larger companies. Chartered in 1904, the MO&G began building a line from Muskogee to Denison the same year. The line was completed to Denison in 1910, and the company erected a large metal truss bridge across the Red River at Carpenter's Bluff, near Hendrix, Oklahoma. Like the Katy bridge at Colbert, this bridge was located at the site of a ferry crossing established c.1850.¹⁶⁹

Railroad Bridge Technology

The railroad crossings in the Red River Valley benefitted from several preceding decades of rapid improvement in bridge-building technology. Railroad expansion in the second half of the nineteenth century helped to propel advances in metal truss bridge design as engineers sought the most economical methods of supporting ever-heavier trains and loads. Fueled in part by railroad demand in the decades after the Civil War, advances in technology enabled the United States steel production to increase from 16,000 tons in 1865 to almost 5 million tons in 1892.¹⁷⁰ With more high-quality steel available at better prices, railroad companies were often at the forefront of bridge technology.

The railroads in Oklahoma and northeast Texas developed during this period, and a number of the bridges constructed across the Red River are examples of metal truss bridges. The unpredictable nature of the Red River, with its frequent floods, posed a hazard to the bridges that crossed it; while major crossings sometimes utilized simple timber trestles, these were prone to washouts and railroads typically improved such structures to a truss to avoid failure.¹⁷¹ Metal truss bridges provided a strong structure that could be assembled quickly, and a number of the Red River bridges are examples of the tall, heavy, steel and iron through-trusses that became popular in the late nineteenth century. Truss bridges were particularly appealing in frontier areas because they could be fabricated in specialized shops in eastern and midwestern cities and shipped to the bridge site partially assembled.

While metal truss bridges were already used to carry vehicular traffic elsewhere in the United States, the frontier nature of Oklahoma and Indian Territories meant that the arrival of the railroad often prompted the construction of the first metal truss bridges in a given location. Along the Red River, a number of railroad crossings were located in the same general vicinity of early overland trail fords, and several were constructed in the vicinity of ferry crossings or early bridges that handled pedestrian and animal-drawn vehicular traffic. The Katy bridge at Colbert and the MO&G bridge at Carpenter's Bluff are two instances in which a railroad bridge was erected at the site of an earlier ferry location.

The Carpenter's Bluff Bridge is an uncommon example of a combined railroad and vehicular bridge, and illustrates the impact that bridges could have on communities. Prior to 1910 a ferry was the only local means of crossing the Red River between Carpenter's Bluff, Texas, and Hendrix, Oklahoma. When the MO&G arrived it constructed a new metal bridge consisting of five Pratt through-truss spans and two deck trusses, and was sturdily built to guard against the frequent floods in the area. In addition to carrying rail traffic, the bridge was built with a shelf along one side to support an attached plank wagon bridge (see Figure 48).¹⁷² The new bridge was a dramatic advance for local transportation, and the ferry that had run more or less continuously at that location since the 1850s soon ceased.¹⁷³



Figure 48. Carpenter's Bluff Bridge between Hendrix, Bryan County, Oklahoma, and Grayson County, Texas, in 1964; the wagon shelf on the left side is attached to the railroad bridge. (Courtesy of the Oklahoma Historical Society.)

The introduction of rail travel in the region created a profound shift in the way that people and goods moved through the Red River valley, dramatically reducing the time and effort it took to travel between Texas and Oklahoma. Railroads remained vital to the economies of both states well into the twentieth century. Although some bridges have been replaced over time, the majority of the Red River railroad crossings established during the boom period of railroad construction in the region continue to serve active rail corridors. When floods destroyed some early bridges, railroad companies rebuilt as necessary, and several turn-of-the-century trusses still carry traffic today (see Red River Bridge Profiles). The Red River railroad bridges played an important role in the movement of cattle, freight, and long-distance passenger traffic. For most local residents traveling between riverside communities, however, ferries continued to serve as the main method of transportation until the dawn of the twentieth century, when the advent of the automobile created the demand for vehicular bridges at important crossings.

Railroad companies changed the landscape of transportation in the Red River Valley, constructing the first bridges over the Red River. Rail travel turned a journey of weeks into one of days or even hours. Communities sprang up along newly developed rail corridors, and towns competed to attract new lines. Some of the earliest routes paralleled important overland trails, and many crossed the river near existing fords and ferries. While residents still relied on ferries for local travel until the dawn of the automobile age, railroads served as a vital lifeline to urban centers and coastal ports.

TRUSS BRIDGE DESIGN

Truss bridges rely on the structural strength of the triangle to carry loads. The use of trusses to support roofs dates to Medieval times or perhaps earlier, but was later adapted into bridge designs. The ancient concept of the truss uses straight pieces of timber or metal to form triangles of various sizes; together these triangles form a rigid panel on either side of the bridge roadway. Pony truss bridges use a small truss on either side of the travel lane, while through trusses have overhead connecting members for additional strength. Both pony and through truss bridges support the floor of the bridge from above, while a deck truss is located beneath the floor and supports it from below (see Figure 49).

A truss consists of horizontal top and bottom chords, connected by vertical and diagonal members arranged in a specific pattern. Over time, engineers began to develop patented truss designs using particular arrangements of the individual members, and each of these designs forms a distinctive shape. Truss bridges were commonly used in the Red River region from the late nineteenth century until after World War II, and most of the railroad bridges in Texas and Oklahoma are variations on one of two designs, the Pratt and Warren truss.

Drawings adapted from the Historic American Engineering Record, National Park Service, Trusses: A Study by the Historic American Engineering Record (Washington, D.C.: Montgomery C. Meigs Original Chapter of the Society for Industrial Archeology, National Museum of History and Technology, Smithsonian Institution, 1976).

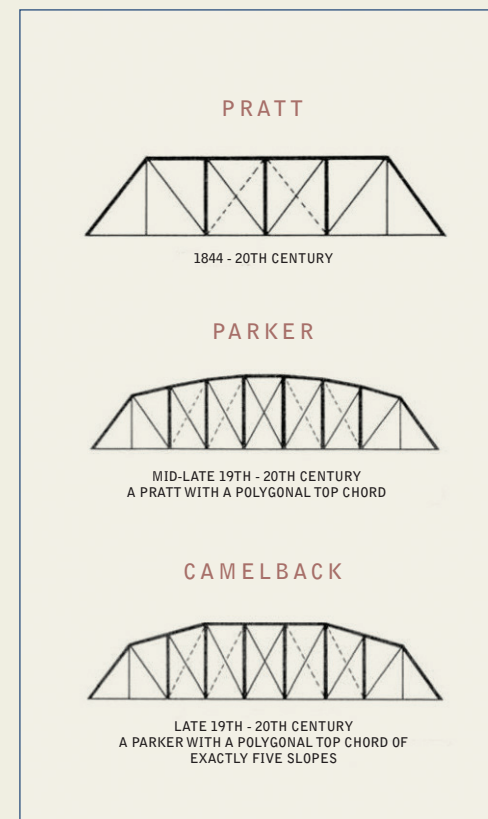
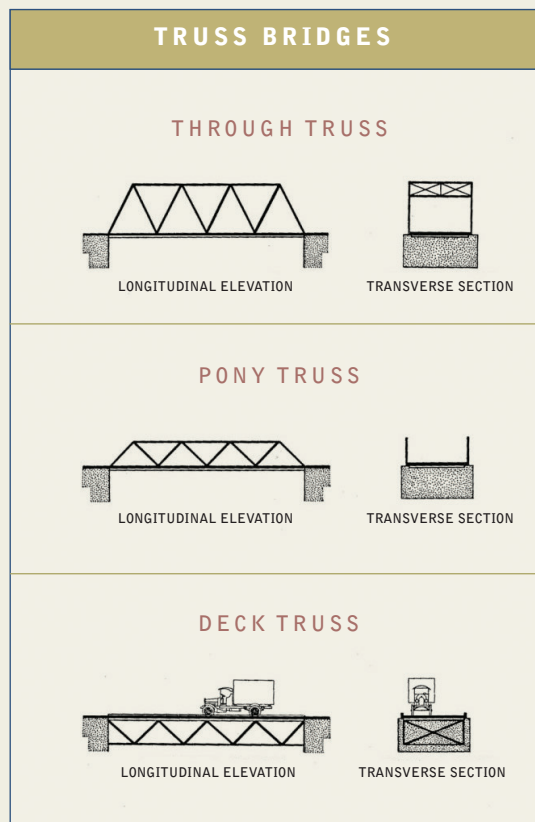




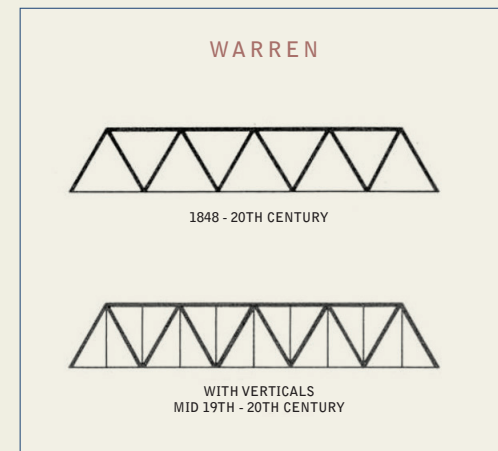
Figure 49. Pratt through truss carrying the former GC&SF near Thackerville, Oklahoma.

Caleb and Thomas Pratt patented the Pratt truss in 1844. Although originally built using a combination of wood and metal members, by the late nineteenth century the all-metal version had become one of America's most popular bridge types. Two design variations, the Parker and Camelback trusses, are essentially the same as the Pratt, but with top chords that are not parallel to the bottom chord. Railroad companies also favored variations known as the Baltimore truss and Pennsylvania truss, which added additional bracing for each of the main diagonal members. The Pratt and its variations dominated bridge construction until the Warren truss came into common use.¹⁷⁴

Developed by Belgian and English engineers, the Warren truss became popular in the early twentieth century. Unlike the Pratt truss, which uses diagonals and verticals arranged in the same direction on either side of the center of the truss, the Warren truss relies primarily on the diagonal members. The truss uses a distinctive pattern of alternating diagonals, creating a "W" shape (see Figure 50); some variations of the Warren truss include the addition of verticals, and this type may also have a polygonal top chord similar to a Parker or Camelback truss.¹⁷⁵



Figure 50. Warren truss with verticals and a polygonal top chord, carrying the former Frisco line (now the Kiamichi Railroad) over the Red River near Arthur City, Texas .



For more information on truss bridges, visit the Oklahoma Department of Transportation and Texas Department of Transportation historic bridge websites at: <http://www.odotculturalresources.info/bridges.html> and <http://www.txdot.gov/inside-txdot/division/environmental/historic-bridge.html>.

CHAPTER 5

Early Toll Bridges and Highway Bridges

A modern Horatio, Adj. Gen. W.W. Sterling of Texas says: "They shall not pass," and he backs up his statement with the rifle he is holding to prevent motorists from using the free bridge over the Red River, connecting Oklahoma and Texas.

Caption, front page, Corsicana Daily Sun, 22 July, 1931.



Figure 51. Texas Rangers barricade the Denison-Durant Bridge, 1931. (Courtesy of the Oklahoma Historical Society.)

On July 20, 1931, the commanding officer of the Texas Rangers barricaded a highway bridge that was meant to carry motorists across the Red River between Denison, Texas, and Durant, Oklahoma (see Figure 51). At the time, the governors of Texas and Oklahoma were engaged in a political standoff over whether drivers should be allowed to use a new free bridge or the nearby toll bridge. State highway departments had been established in both Texas and Oklahoma in the 1910s, but many bridges connecting state routes on either side of the river had been constructed as toll bridges along earlier routes. Into the 1930s these bridges were still privately owned and charged a fee to anyone who wished to cross, and many residents on both sides of the river were anxious for the states to provide free bridges. This photograph appeared on the front page of a local newspaper in Corsicana, Texas, over 130 miles south of the bridge in question, but the story spread to the national news before it was resolved.

The conflict over the Denison-Durant Bridge highlights the shift from the early years of automobile travel, characterized by private enterprise, to an era in which state governments provided free transportation facilities to encourage commerce and ease of movement. This chapter discusses the development of early automobile roads between Oklahoma and Texas, including a number of important national and international touring routes and the bridges that carried them across the Red River. The chapter also provides a brief history of both the Texas and Oklahoma highway departments and the impact the new State Highway Systems had on transportation in the Red River Valley.

Better Roads and Better Bridges

Toll bridges

Until the 1870s, fords and ferries were the only means of crossing the unpredictable Red River. As the Red River Valley attracted more intensive agriculture and denser settlement in the late nineteenth century, the population of communities grew, and ranchers, farmers, and other residents on both sides of the river needed safer and more reliable ways to cross back and forth. Although railroads handled much of the long-distance freight travelling across the river, local residents and travelers continued to rely on ferries at the numerous crossings without bridges. As the population increased, so too did commerce between Texas and Indian Territory, and residents of the area began to demand a more dependable alternative to the existing ferries and fords. Until the 1910s the state and federal governments had no involvement or responsibility in bridge construction, and most local authorities could not afford to pay for such an expensive project. As a result, private individuals or corporations constructed the earliest vehicular bridges, charging a fee to all who wished to cross.¹⁷⁶

Ferry owner Benjamin Franklin Colbert constructed the earliest known example of a wagon toll bridge across the Red River near the present-day community of Colbert in Bryan County, Oklahoma, providing the first all-weather crossing for wagons and livestock. Soon after the Katy railroad bridge was completed in 1872, Colbert decided to replace his ferry with a bridge and traveled to Washington, D.C., to obtain a charter to build a bridge at the ferry site. The 577-foot-long bridge was completed in 1875, but was destroyed less than a year later when a flood washed out the Katy bridge upstream and Colbert's ferry soon resumed operation.¹⁷⁷ Years later, undeterred by the loss of the first bridge, Colbert and several partners formed the Red River Bridge Company and constructed a second toll bridge in 1892. This three-span, steel truss bridge carried wagons, and eventually automobiles, until it too was destroyed by a flood in 1908.¹⁷⁸ Colbert's ferry resumed service again until a third toll bridge was built at the same site in 1915, which continued to carry traffic into the early 1930s.¹⁷⁹

The rise of the automobile continued to increase demand for bridges, and bridge owners at popular crossings (located along heavily traveled highways) could bring in a substantial amount of revenue. Typical toll rates from the 1910s onward were \$1 for automobiles and wagons (roughly equivalent to \$12-14 today), while pedestrians could cross for a dime.¹⁸⁰ Poor roads leading to and from river crossings spelled the demise of some early toll bridges, but others became extremely profitable as major routes were improved and traffic increased.¹⁸¹ By the early twentieth century numerous toll bridges crossed the Red River, and soon became a subject of controversy.

Good Roads Movement

Public interest in formal, government-led road building began to take hold with the national Good Roads Movement beginning in the 1880s. Initially driven by recreational cyclists during the bicycle craze of the 1890s, proponents of "Good Roads" demanded roads that were passable year-round, surfaced with firm gravel or some type of pavement, and adequately maintained. While this seems like a low standard today, turn-of-the-century roads were often crudely constructed and infrequently maintained, and in some cases were not usable year-round when rains turned them into mud.¹⁸² The Good Roads Movement and its demand for high-quality roads soon found supporters among farmers and rural residents as well, who struggled to bring crops, goods, and livestock to market on poor-quality roads. The drive for road improvement received another boost with the introduction of the mass-produced Ford Model T in 1908. Initially, owning an automobile was a luxury only for the wealthy, and in 1904 just over 55,000 vehicles were in use across the United States. The Model T made automobile ownership accessible to many more Americans, and the number of car owners soon skyrocketed to approximately 500,000 by 1910 and over 2.3 million by 1916.¹⁸³ Although the first motor vehicle did not arrive in Oklahoma Territory until 1905, within six years Oklahomans owned 9,000 automobiles, a per capita ownership rate on par with the nation as a whole.¹⁸⁴

The growing use of automobiles for pleasure travel and trade increased the need and demand for both improved roads and reliable all-weather river crossings. Many Oklahoma and Texas counties organized Good Roads Associations, which were affiliated with larger state-wide associations. Both the state and county associations took an extremely active role in early road construction; county organizations sometimes helped to secure highway surveys through their counties, and in some cases Oklahoma's Good Roads Association advanced "actual cash" for the state highway department to survey and construct roads in the early years of its existence.¹⁸⁵

Transcontinental and Regional Highways

In the early years of automobile tourism, drivers did not have the luxury of a unified system of clearly marked highways. In addition to Good Roads organizations concerned with road improvement, dozens of private associations formed to promote particular routes for cross-country and regional tourist travel. These associations designated their routes with grand-sounding names and marked them with distinctive, colorful signage. Some groups published their own magazines with descriptions of the various tourist opportunities along the way. Named auto trails were usually comprised of segments of existing roads, which could range from paved thoroughfares to rough section-line roads.¹⁸⁶ National and regional auto trail associations sought improvements to these roads, partnering with local boosters in the communities along the route. Although some initially believed the highways would be of little benefit to the average citizen, supporters were quick to dispel the notion that only automobile owners could use them. As one Decatur, Texas, newspaper proclaimed of the Meridian Highway:

*...it will be a road for all the people, and the humblest man with a yoke of oxen will have the same right and privilege of traveling the road as the bloated capitalist in his ten thousand dollars worth of buzz wagon.*¹⁸⁷

Several of the nation's early named highways were east-west routes that ran from coast to coast. However, a branch route of the Bankhead Highway was the only long-distance, east-west route to pass through Oklahoma, extending through the Red River Valley between Broken Bow and Hollis (but did not cross the Red River into Texas). Other routes spanned the nation from north to south, and several of the major auto trails between the Canadian border and the Gulf of Mexico crossed the Red River between Oklahoma and Texas (see Figure 52). These included the Jefferson Highway, which ran from Winnipeg to New Orleans, and the Meridian Highway, which ran from Winnipeg to the Rio Grande at Laredo. Because touring routes generally incorporated existing local roads, some segments were concurrently designated as part of multiple touring routes. Until the 1920s the majority of named highways used toll bridges to cross the Red River between Oklahoma and Texas. The limited number of river crossings also meant that several bridges carried multiple auto trails, including those at Burkburnett, Terral, Thackerville, and particularly Colbert, where a single toll bridge carried one inter-state and two international auto trails by 1917.¹⁸⁸

The Oklahoma Highway Commission (OHC) was established in 1911, and the Texas Highway Department (THD) in 1917*. With the establishment of these organizations, many named auto trails and other local roads were incorporated into numbered State Highway Systems. In the mid-1920s transportation officials created the numbered US Highway System still in use today; many of the most heavily used auto trails were incorporated into this system and their earlier names faded from use. The following section contains a brief discussion of a number of named routes that crossed the Red River between Oklahoma and Texas, including their later evolution into State and US Highways.

*While the official names (and therefore acronyms) for these agencies changed over the years, this report refers to them as the THD and OHC throughout for simplicity's sake.

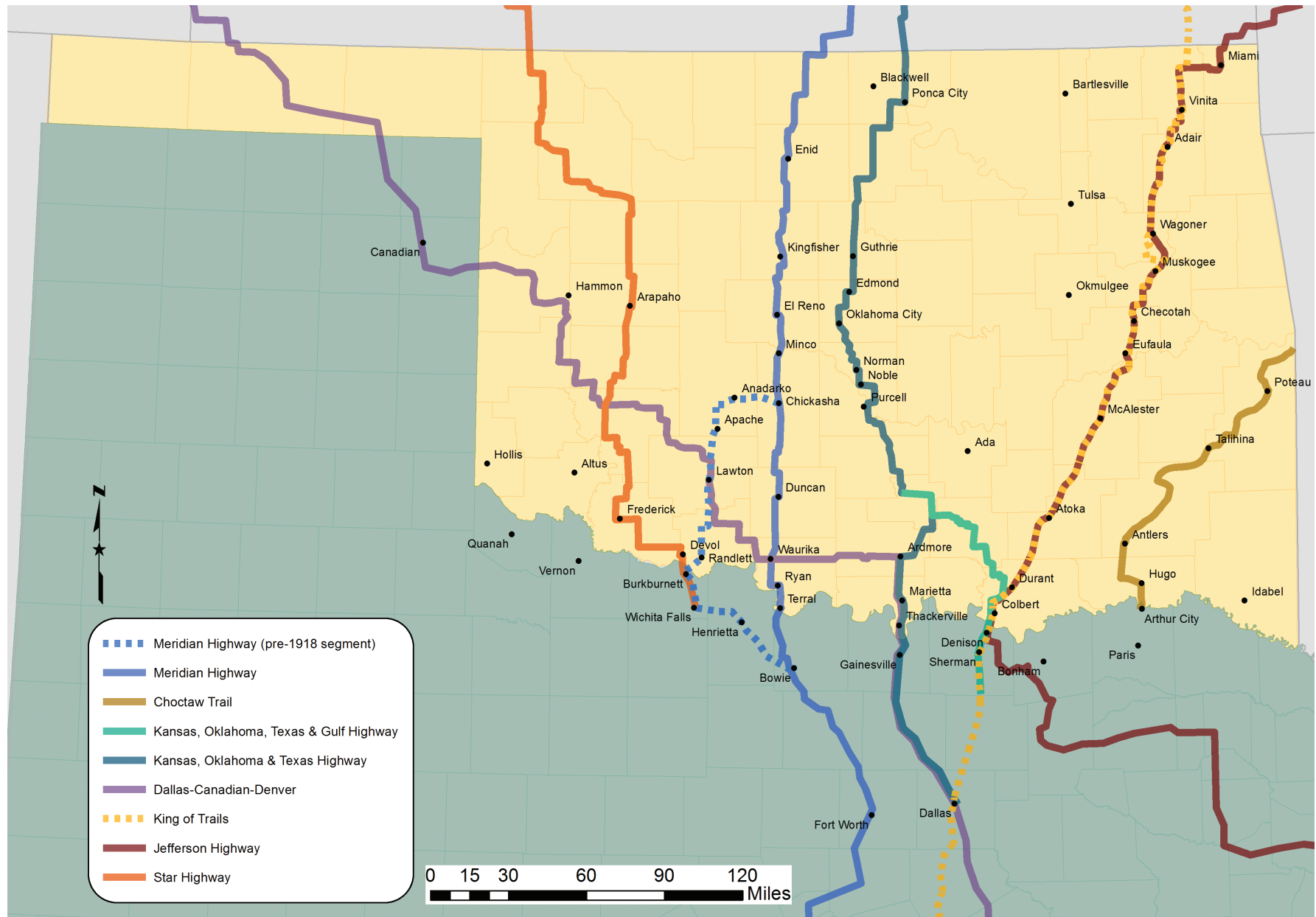
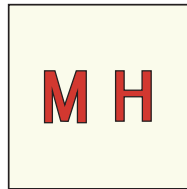


Figure 52. Map showing major early highways through Oklahoma and north Texas in the years before 1926.

Meridian Highway/US 81

Kansas resident and Good Roads proponent John C. Nicholson became the leader of the newly formed Meridian Road Association in 1911. Nicholson envisioned an international north-south route stretching from Canada to Mexico, and individual states along the route soon founded their own co-operative associations to promote the route.¹⁸⁹ The route of the Meridian Highway generally followed the 98th meridian (a longitude line passing close to Kingfisher and Duncan, Oklahoma, and Bowie, Texas), and was signed for the entire distance from Winnipeg to the Rio Grande by 1921, although not all portions of the road had yet been improved.¹⁹⁰



The Meridian Highway entered Oklahoma south of Caldwell, Kansas, and traveled through Enid, Chickasha, and Lawton. It crossed the Red River between Randlett, Oklahoma, and Burkburnett, Texas, to continue to Wichita Falls, Fort Worth, Austin, and on to Laredo. The highway traversed a well-used corridor through the Red River Valley, and generally followed the same route as both the Chisholm Trail and the Rock Island railroad corridor.

With the establishment of Oklahoma's State Highway System in 1911, SH 2 followed roughly the same route as the Meridian Highway, but while the Meridian crossed the Red River via the bridge at Burkburnett, SH 2 was routed from the Kansas border to Terral (then still a ferry crossing). Although Oklahoma's SH 2 eliminated the Lawton-Burkburnett-Wichita Falls-Bowie leg, Texas designated its own SH 2 in 1917 using the prior routing.¹⁹¹ In 1918 the construction of a new toll bridge at Terral provided drivers with an alternative leg of the Meridian Highway from Chickasha to Terral, rejoining the main line at Bowie, Texas.¹⁹² Although the Meridian Highway designation continued to include the Burkburnett crossing and Wichita Falls-Bowie segment until the early 1920s, by 1924 the official route was signed through Terral. The Texas SH 2 designation added a second branch to incorporate the Bowie-Terral leg until 1926, when Texas also eliminated the Wichita Falls-Bowie segment.¹⁹³

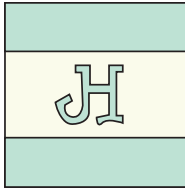


Figure 53. Inset showing Meridian Highway crossings of the Red River in the 1910s and 1920s. Modern US Highway alignments are shown for reference.

In 1926 both Oklahoma and Texas SH 2 roads were incorporated as part of US 81, which ran from Pembina, North Dakota, to Laredo, Texas, and the Lawton-Bowie leg became part of US 277 and US 287 (see Figure 53).

Jefferson Highway/US 69/75

Road enthusiasts formed the Jefferson Highway Association in 1915, intending to create a north-south transcontinental route from Winnipeg to New Orleans.¹⁹⁵ Organizers did not plan the exact route immediately, waiting until they could determine how many existing highways could be linked up, but improvements in the northern states were underway by 1916, when Oklahoma delegates at the highway association's annual convention pressed the organization to route the new highway through the state.¹⁹⁶ Anxious for the economic benefits of a major touring route through their state, the Oklahomans displayed what one witness described as "enthusiasm enough to build the highway from Canada down."¹⁹⁷



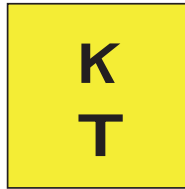
The Jefferson Highway enabled drivers to travel from the northern pine forests to the Gulf coast, living up to its slogan, "From Pine to Palm."¹⁹⁸ The highway entered Oklahoma near Miami, passed through Muskogee, McAlester, Atoka, and Durant, before crossing the Red River at Colbert and continuing on to Denison and Sulphur Springs. The route continued east, crossing the Texas border between Marshall, Texas, and Shreveport, Louisiana.¹⁹⁹ Like the Meridian Highway, the Jefferson Highway travelled along a corridor used by several older transportation routes. The highway generally followed the line of the Katy rail corridor and earlier Shawnee Trail/Texas Road, and like these predecessor routes, used the crossing at Colbert.²⁰⁰ At the adoption of the US Highway System in the mid-1920s, the route was designated as US 73 (now US 69) from the Kansas border to Atoka, and as US 75 from Atoka to Denison (see Figure 54).²⁰¹



Figure 54. Inset showing where the Jefferson Highway and King of Trails crossed the Red River in the 1910s and 1920s. Modern US Highway alignments are shown for reference.

King of Trails/US 75

In July 1917 road boosters from Kansas, Oklahoma, and Missouri formed the King of Trails Association. Established a few years after the Jefferson Highway, the King of Trails also linked Winnipeg with Texas and was viewed by some early road boosters as a rival to the Jefferson.²⁰² The King of Trails Association planned its highway to be located along “natural lines of travel,” linking population centers of 1,000 or more along what they perceived to be the shortest and best route.²⁰³



Within Oklahoma, much of the King of Trails route was concurrent with the Jefferson Highway, and both trails crossed the Red River at Colbert using the toll bridge constructed in 1915.²⁰⁴ The King of Trails route then continued to Denison, Dallas, San Antonio, and the Texas coast.²⁰⁵ After the establishment of the US Highway System, US 75 was designated from the Canadian border to Galveston, Texas, and the portion between the Kansas-Oklahoma border and Denison, Texas, follows the route of the King of Trails (see Figure 54).

Dallas-Canadian-Denver

Created in 1917, the Dallas-Canadian-Denver (D.C.D.) Highway ran from Dallas, Texas, to Denver, Colorado, via Canadian, Texas. The highway used portions of existing routes between Canadian and Denver (including segments of the Santa Fe Trail and National Park to Park Highway) and the Gulf Coast at Galveston (via the Henry Exall Highway).²⁰⁶ The highway ran northwest-southeast through the Texas Panhandle, entering Oklahoma from Canadian and passing through Hammon, Lawton, Waurika, and Ardmore. The highway then turned south to cross the Red River at Thackerville and re-entered Texas through Gainesville on the way to Dallas.²⁰⁷ The route did not receive a unified state or US Highway designation, although later numbered highways, including US 70 between Waurika and Ardmore and US 77 between Ardmore and Gainesville, follow short segments of the D.C.D. route (see Figure 55).



Figure 55. Inset showing the Dallas-Canadian-Denver Highway where it crossed the Red River in the 1910s and 1920s. Modern US Highway alignments are shown for reference.

Other Named Auto Trails

In addition to the transcontinental and inter-regional auto trails, numerous lesser-known routes were designated across the country. These routes were typically shorter in length and sometimes served as an informal spur or branch alignment for more successful trails. Several followed the same alignment as other more well-known routes through Oklahoma and northern Texas. Other named auto trails that crossed the Red River between Oklahoma and Texas included:

Highway Name	Termini	Route	Red River Crossing
Choctaw Trail	Fort Smith, Arkansas, to Arthur City, Texas	From Fort Smith through Poteau and Hugo, Oklahoma, to Arthur City ²⁰⁸	Hugo-Paris ²⁰⁹
Southwest Trail	Chicago, Illinois, to Wichita Falls, Texas	Same as the Meridian Highway from the Kansas border to Wichita Falls ²¹⁰	Randlett-Burkburnett ²¹¹
Mineral Wells Trail	Branch of the Meridian Highway leading to Mineral Wells, Texas	Same as the Meridian Highway from Waurika to Bowie ²¹²	Terral-Ringgold
Star Highway	Dodge City, Kansas, to Fort Worth, Texas	From Santa Fe Trail in Dodge City through Arapaho and Frederick, Oklahoma, to Fort Worth ²¹³	Devol ²¹⁴
Kansas Oklahoma & Texas Highway	Florence, Kansas, to Dallas, Texas	From north of Ponca City, Oklahoma, through Oklahoma City, Ardmore, Gainesville, and Dallas ²¹⁵	Thackerville
Kansas, Oklahoma, Texas and Gulf	Florence, Kansas, to Dallas, Texas	Same as the Kansas Oklahoma & Texas from Florence to Davis, Oklahoma, then continued to Dallas via Denison, and McKinney, Texas ²¹⁶	Colbert ²¹⁷

Just as nineteenth-century communities had hoped the railroad would pass through, residents of roadside communities now hoped to benefit from both the improved transportation system and the commerce associated with increased tourist traffic on a named highway. In many cases, local merchants, commercial clubs, and business associations attempted to lure trail associations by providing funding and labor to upgrade the portion of the highway that passed through their town. Along the Red River between Texas and Oklahoma, bridges formed a vital link in these long-distance routes and it was only natural that auto trail promoters would designate routes across existing bridges.

The Good Roads boosters living in the vicinity of Henrietta, Texas, were among those who hoped to attract a major highway, and believed that a new bridge was the best way to do so. In the early 1910s the route was not yet finalized and several communities attempted to stake their claim to the highway by constructing a bridge. The early route used the Burkburnett toll bridge to reach Wichita Falls, and by 1912 residents of Henrietta and Bowie feared that they would be bypassed and lose potential tourist and commercial trade. All three communities were located along existing east-west named highways (see Figure 56), and Henrietta and Bowie demanded that the citizens of Wichita Falls put pressure on the Meridian Highway organizers to route the new highway through all three towns before turning south on its way to Fort Worth. Both Bowie and Henrietta threatened to build new bridges across the Red River to divert the highway route; Bowie planned a new bridge at Terral, near the Rock Island railroad crossing, while Henrietta proposed a bridge between Charlie and Walters.²¹⁸

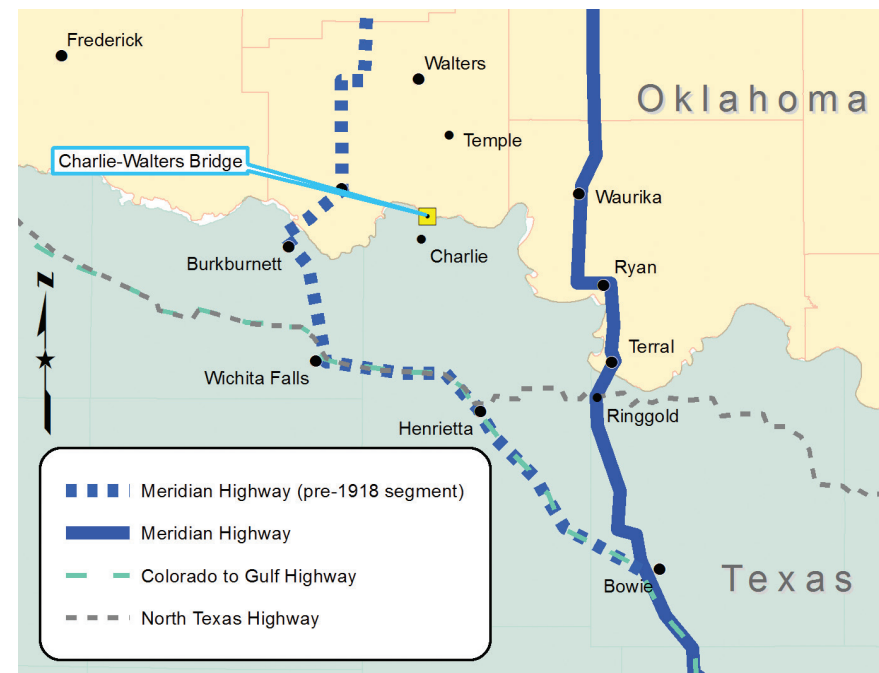


Figure 56. Inset showing the locations of various proposed Meridian Highway crossings of the Red River during the 1910s.

The Wichita Falls Chamber of Commerce resolved to stay out of the fray, and soon after, the people of Henrietta made good on their threat.²¹⁹ The Interstate Good Roads Association, a group of citizens of Cotton County, Oklahoma, and Wise, Montague, and Clay Counties in Texas, organized their own bridge company in January 1913 and began to raise funds for the construction of a Charlie-Walters bridge. The Meridian Highway was expected to bring prosperity to any community it passed through, and at that time many people anticipated that the federal government would take over the road and pave its entire length. The Interstate Good Roads Association intended to improve a section of road between Fort Worth and Fort Sill in advance of an inspection visit by a congressional committee, and hoped that a new bridge would help convince officials to incorporate this road segment into the final alignment, bypassing Burk Burnett and Wichita Falls.²²⁰ Although the bridge was completed, the Meridian Highway never crossed it; in addition to the Charlie-Walters Bridge, hopeful citizens constructed other bridges near Byers and later at Terral. The highway was eventually rerouted to bypass Wichita Falls, but ultimately used the bridge at Terral to continue on to Bowie, bypassing Henrietta as well.



Figure 57. Charlie-Walters Bridge, 1937, looking north toward Oklahoma. (Courtesy of the Texas State Library and Archives Commission.)

Suspension Toll Bridges

With its wide, shifting banks and unpredictable water levels, the Red River posed a particular challenge to those eager to construct toll bridges. Suspension bridges provided a favorable solution for toll bridge companies seeking an inexpensive means to span the long crossings. Today many people associate this bridge type with iconic structures like San Francisco's Golden Gate Bridge, but the same engineering principles were once widely applied to smaller bridges throughout the Red River Valley as well. With their tall piers and gracefully curving cables, these bridges were both aesthetically pleasing and economical to build, and seven were constructed across the Red River between 1914 and 1928.²²¹ The lightweight bridges had a tendency to sway from side to side, and several of the seven Red River suspension bridges met their ends when one or more of the anchors came loose, either by accident or due to flooding. In the decades that followed, suspension bridges were gradually replaced by more modern truss and trestle spans. Today all seven have been destroyed, and many replaced by newer structures, with only the occasional ruin of a concrete pier to mark the location of the earlier bridge.

The Byers Bridge, constructed in 1914 near what is now SH 79, was the first suspension bridge to cross the Red River. Promoters hoped it would carry traffic on the newly designated Meridian Highway, although the Meridian's organizers ultimately selected a different crossing. The Terral Toll Bridge Company erected the second suspension bridge across the Red River in 1917 and the eastern leg of the Meridian Highway crossed at that location. The Terral Bridge was over 1,800 feet long with a posted load limit of 5 tons.



Figure 58. The Terral toll bridge between Terral, Oklahoma, and Ringgold, Texas, undated photo. (Courtesy of the Texas Department of Transportation.)

With the exception of the Terral toll bridge, a single company constructed many of the other suspension bridges across the Red River. The expanding oil industry, focused in the western portion of the Red River Valley in the early twentieth century, prompted demand for more bridges. An explosion of oilfield development began with the discovery of the Petrolia Field in 1906, followed by the opening of the enormous Burkburnett and Electra oil fields. Oil and gas extraction continued on both sides of the Red River into the 1930s, increasing traffic in the area.²²³ After the original Byers Bridge was destroyed by a tornado in 1923, the Dallas-based Austin Bridge Company saw an opportunity to profit from the crossing and swiftly began work on a replacement bridge.²²⁴ The Austin Bridge Company, through its subsidiary known as the Southern Toll Bridge Company, constructed another suspension bridge between Nocola, Texas, and Oscar, Oklahoma, in 1924. Three years later the company built two more, located near Telephone, Texas, and Sowell's Bluff, Oklahoma (Bonham-Durant), although these were located in sparsely populated areas and toll revenues were never high. Other suspension bridges were located between St. Jo, Texas, and Courtney, Oklahoma (Airline Bridge), and at the Idabel-Clarksville crossing.

A number of these bridges carried Oklahoma and Texas State Highways in the 1910s and 1920s, but the suspension bridge fell out of favor by the late 1920s, when the THD and OHC began removing tolls on State Highway bridges.* In the years that followed, several of the Red River suspension bridges were replaced with sturdier structures, and others were made obsolete by new free bridges built nearby in the early 1930s. Some suspension toll bridges were purchased by the states of Oklahoma and Texas, while others were destroyed and never rebuilt. The Byers Bridge continued to carry traffic until 1938, when it was destroyed by a flood; by this time a free bridge was already under construction to

carry nearby SH 79.²²⁵ The Sowell's Bluff Bridge, at the location of today's SH 78, became a free bridge in the early 1930s and was destroyed by a storm in January 1934. The Telephone suspension bridge, also in Bryan County, remained a private toll bridge until its collapse in 1940.

Table 2. Suspension bridges across the Red River.

Bridge Name	Years in Service	Status
Byers (Meridian) Bridge	1914-1938	Destroyed, not replaced – the free SH 79 bridge was completed nearby the following year
Terral Bridge	1917-1931	Removed and replaced by free bridge 1931
Nocona Bridge	1924-1950	Destroyed, not replaced
Airline Bridge	1927-1933	Destroyed, originally located about 1 ½ miles east of the Illinois Bend Bridge (SH 89 in Oklahoma, FM 677 in Texas)
Bonham-Durant (Sowell's Bluff) Bridge	1927-1934	Destroyed, replaced by SH 78 Bridge in 1938
Telephone (Bryan-Fannin) Bridge	1927-1940	Destroyed, not replaced
Idabel-Clarksville Bridge	1928-1933	Destroyed by flood in 1933, not replaced until SH 37 bridge built in 1950



Figure 59. Inset showing the locations of early-twentieth-century suspension toll bridges across the Red River between Texas and Oklahoma.

SUSPENSION BRIDGE DEVELOPMENT AND TECHNOLOGY

Once a familiar sight along the Red River between Oklahoma and Texas, the concept of the suspension bridge dates back many centuries. Early Spanish explorers found that the indigenous people of the Andes Mountains in South America used rope suspension bridges. The people living in what are now Tibet, India, and China also used structures suspended from ropes and chains to cross steep river valleys.²²⁶ Beginning in the early nineteenth century, suspension bridges in the United States used cables twisted together from many small strands of wire.²²⁷ The earliest of these bridges had cables made from iron wire, but by the 1880s steel wire was the standard for suspension bridge construction.²²⁸

Unlike other bridge types that support a roadway from below using a truss, trestle, or girder to carry the load, suspension bridges rely on a pair of parallel cables from which the roadway is literally suspended. The main cables are draped over the tops of towers or piers and anchored at each end. Short sections of cable known as “hangers” are attached to the main cable and support the bridge deck. The weight of traffic pushes down on the deck and compresses the piers; to counterbalance this force, the main cables must be pulled tight and anchored securely.



Figure 60. Nocona Bridge between Nocona, Texas, and Ringling, Oklahoma, undated photo. (Courtesy of the Texas Department of Transportation.)

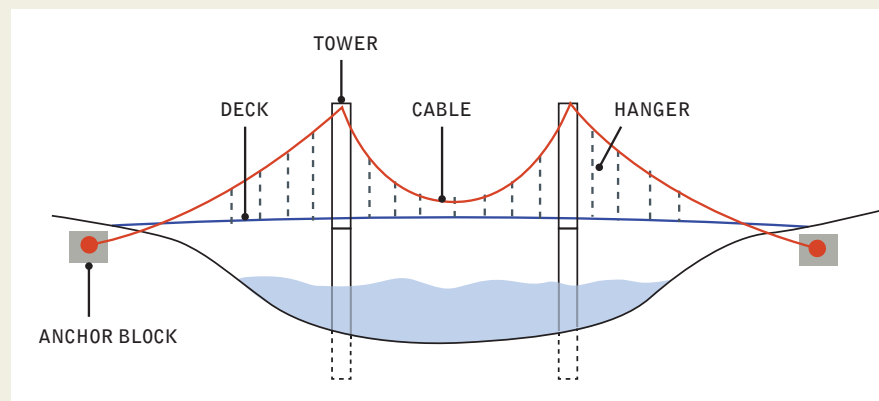


Figure 61. Diagram of a typical suspension bridge.

State Highway Department Era

State Highway Systems

Prior to the 1910s the roads in Oklahoma and northern Texas were largely a hodgepodge of dirt and gravel roads built by landowners, counties, and other entities, and no formal system existed. Auto trail associations championed inter-state and regional routes and succeeded in improving a number of highways, but the vast majority of the state's roads were crudely built and poorly drained; mud made them impassable for wagons and automobiles during periods of rain, frustrating travelers and residents alike. A unified State Highway System finally came to the Red River Valley in the 1910s after the establishment of OHC and the THD, but it would take decades of construction work and legal wrangling to provide free, modern bridges at every highway crossing of the Red River.

The Oklahoma state legislature created the OHC in 1911, but as its first commissioner, Sidney Suggs, noted rather pointedly, "I regret, probably more than anyone else, that the law did not authorize or direct this office to build a foot of road in the state, nor did it provide any funds for such purpose."²²⁹

Although the OHC eventually received authority and funding to build roads, it was initially forced to operate on a small budget of \$9,000 drawn from automobile registration fees. Suggs nevertheless drew up a plan for a system of highways that would link every county seat in the state. At the time, Suggs estimated that with the use of 500 convict laborers, it would take five years to bring every inch of the system up to standards. Although the "good graded and drained dirt road" he envisioned as this standard hardly resembles today's State Highways, it was a marked improvement over the existing conditions in 1911.

Suggs's plan also included an important caveat: he assumed that the counties would fund and construct the bridges and culverts on the portions of the highways within their boundaries.²³⁰ The OHC developed standard designs for highway bridges and culverts, which were sent to county and local road officials throughout Oklahoma. For all crossings

up to 70 feet, the standard plans called for concrete arch culverts and bridges, and metal trusses were recommended for larger spans.²³¹ In a state where wooden trestles, swaying suspension bridges, and ferries were the only options at many river crossings, this was the first attempt to provide a higher standard for the important crossings that carried the State Highways. Nevertheless, the Red River crossings continued to use privately owned toll bridges for nearly 15 years.

The proposed highway system designated six so-called "Main Line" routes, which represented the most important travel corridors despite making up only two percent of the total road mileage. Of these six main highways, four ran from the Kansas line to the Red River (see Figure 62), making connections to highways on the Texas side that would soon become Texas State Highways as well. These four Oklahoma highways followed the same corridors used by several named highways, rail lines, and overland trails:

- Route No. 1 (Later SH 4 and US 77) – From the Kansas line north of Ponca City to the Red River crossing via the toll bridge at Thackerville, this route followed the same corridor as the GC&SF Railroad and the Oklahoma, Texas and Gulf Highway.²³² Oklahoma SH 4 later linked to Texas SH 40, which continued through Gainesville to Denton and Dallas.
- Route No. 3 (Later SH 2 and US 81) – From Caldwell, Kansas, through El Reno and Waurika, this highway followed the same route as the old Chisholm Trail, Rock Island Railroad, and the Meridian Highway, and crossed the Red River using the toll bridge at Terral.²³³ On the Texas side of the river, this was soon designated SH 2 as well, and continued through Fort Worth to San Antonio and Laredo.



- Route No. 5 (Later SH 6 and US 69) – From Miami through Muskogee, McAlester, and Durant, this highway followed the same route as the Shawnee Trail, Katy Railroad, and Jefferson Highway, and crossed the Red River at the Colbert toll bridge. Texas SH 6 continued south to Dallas, Houston, and Galveston.
- Route No. 6 (Later SH 14 and US 183) – From Buffalo to Arapaho, Cordell, and Frederick (following the Frisco Railroad between Arapaho and Frederick), the route was originally planned to cross at Burkburnett, but instead crossed at Davidson, continuing to Vernon via Texas SH 28.²³⁴

Although the THD was established in 1917, counties retained much of the power to govern road building efforts for several years. The THD developed a tentative system of 22 State Highways in 1917, but the onset of World War I delayed the start of any real effort. In 1919, however, Texas formally designated 38 State Highways, including seven routes running south from Red River crossings and forming a connection with the Oklahoma system (see Figure 64).²³⁵ By the mid-1920s eight of Oklahoma's 31 major highways crossed the Red River to connect with the Texas Highway System via bridges at Davidson (which carried two routes), Terrel-Ringgold, Thackerville, Colbert, Burkburnett-Randlett, Hugo-Paris, and Woodville-Preston.²³⁶ In addition to Sidney Suggs's four early "Main Line" routes, four other State Highways also crossed the river:

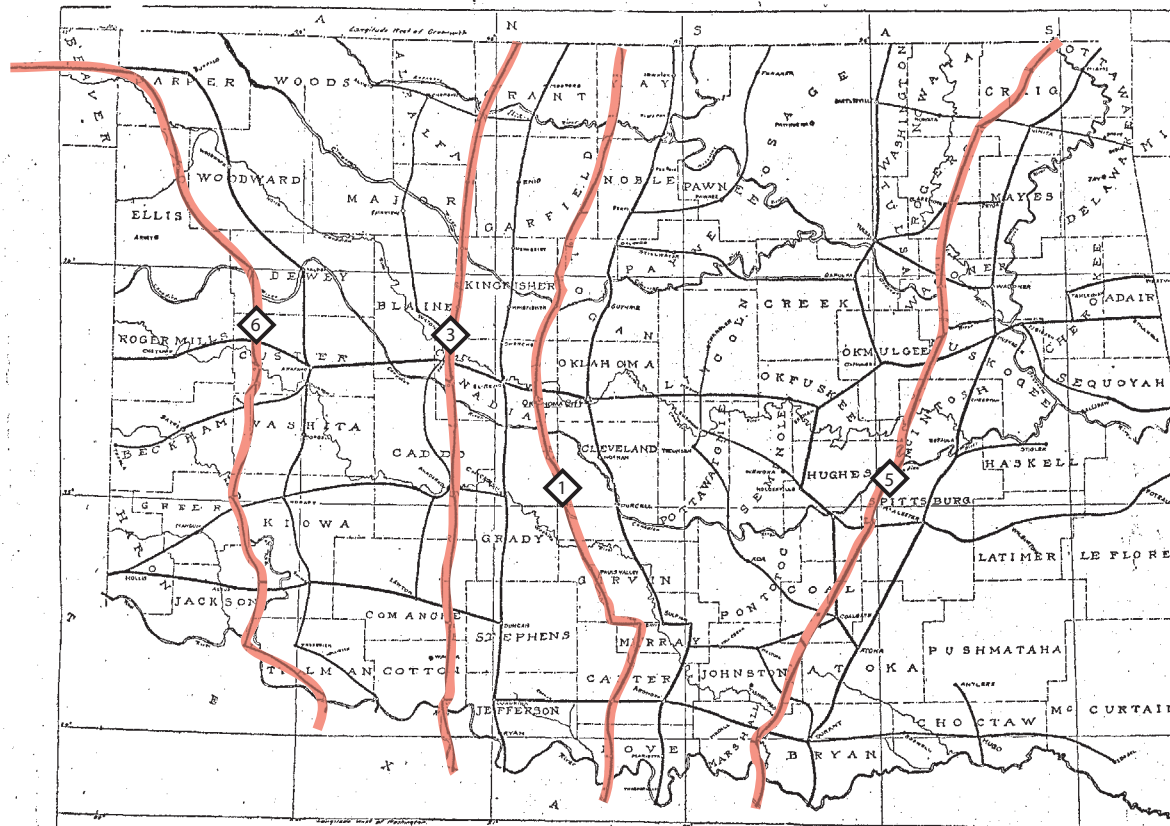
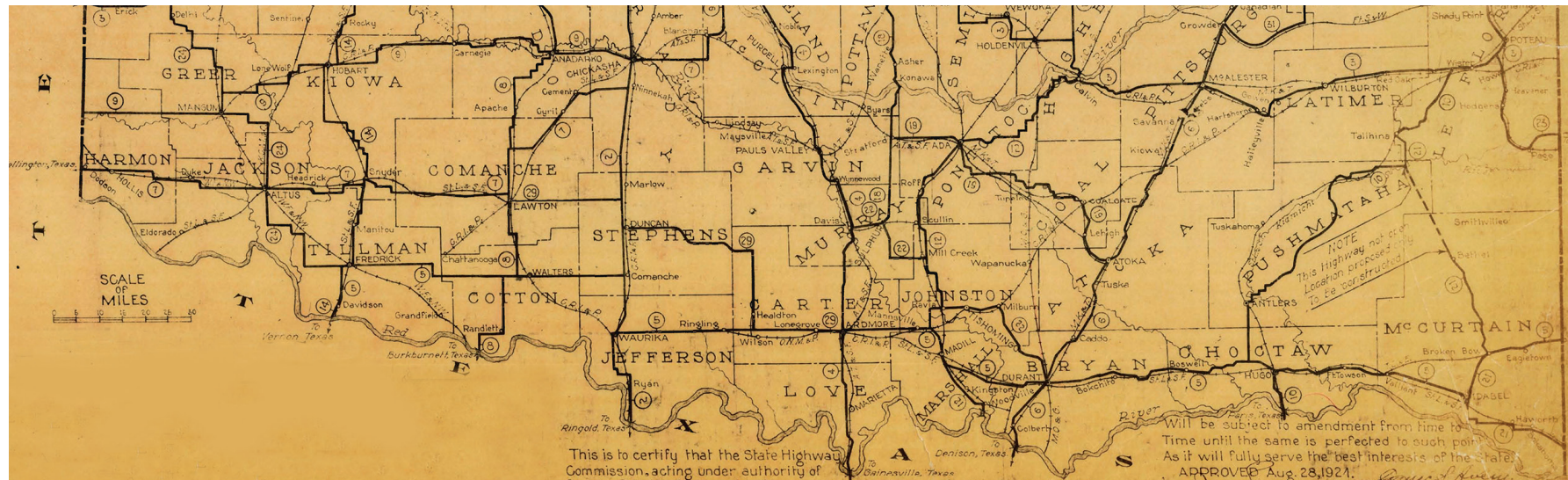


Figure 62. Proposed Oklahoma State Highway System, 1913, showing routes across the Red River in red. (Courtesy of the Oklahoma Department of Transportation.)

- Oklahoma SH 5/Texas SH 28 – Running from Broken Bow west to the bridge at Davidson (concurrent with SH 14), this route incorporated the eastern portion of the Bankhead Highway's Oklahoma branch line segment and continued across the Red River to Vernon, Texas, and west across much of northern Texas.
- Oklahoma SH 8/Texas SH 30 – Known as the "Cherokee-Lawton Road" in Oklahoma, SH 8 ran north-south, following the western branch of the Rock Island Railroad. The highway crossed into Texas at the Burkburnett toll bridge to continue through Wichita Falls and San Angelo to the Texas/Mexico border at Del Rio.



Figures 63 and 64. Oklahoma State Highway Map, 1921 (top) and Texas State Highway Map, 1919 (bottom), details showing segments along the Red River basin. (Courtesy of Oklahoma Department of Transportation [top] and Texas State Library and Archives Commission [bottom]).

- Oklahoma SH 10/Texas SH 39 – Known as the “OK Scenic Route,” Oklahoma SH 10 ran through the eastern part of the state from Joplin, Missouri, south to Poteau, then followed a route similar to the Choctaw Trail through Antlers and Hugo. The route crossed the Red River south to Paris, Texas, then continued on to Commerce and Greenville.
- SH 12 – Part of a Nebraska-to-Texas auto trail known as the “Capitol Route,” this highway ran from Copan south to Tulsa, Ada, and Madill, and crossed the Red River on the toll bridge between Woodville and Preston to continue to Denison, Texas, as SH 91, where it provided a connection to Texas SH 6.



Free Bridges

As the road system improved and automobile traffic increased, the public grew more vocal in demanding free bridges on State Highways. Throughout the 1910s and 1920s Oklahoma and Texas continued to allow private companies to build and operate toll bridges, and the State Highway Systems initially relied on these privately owned toll bridges to cross the Red River (see Figure 65).²³⁷ The crossing fee could be a hardship for those who needed to travel frequently between communities, and during the Great Depression one toll bridge owner reportedly forced penniless travelers to chop firewood in order to pay their way.²³⁸ Along the Red River the toll bridges also represented a financial barrier to interstate commerce; toll operators in 1930 typically charged passenger vehicles \$1 to cross, and rates were even higher for commercial traffic.²³⁹ In response to public demand, free highway bridges became an important focus of legislation and construction efforts on both sides of the Red River.²⁴⁰ Both Texas and Oklahoma passed legislation in the late 1920s that empowered the states to build new interstate free bridges and purchase existing toll bridges and make them free, but it would be no simple matter.²⁴¹ Bridge owners were reluctant to give up such a lucrative business; in 1925 alone owners collected \$180,000 in tolls, the equivalent of nearly \$2.5 million today.²⁴²

Figure 65. Entrance to toll bridge on Texas SH 2 (later US 81) near Ringgold, Texas, in 1923. (Courtesy of the Texas Department of Transportation.)

The first free bridges over the Red River between Oklahoma and Texas opened in 1926, but it took over a decade for both states to acquire or replace all the toll bridges along the border.²⁴³ Financed as a joint project by both Oklahoma and Texas, a new free bridge was completed between Hugo and Paris in October 1926, replacing the earlier washed-out toll bridge.²⁴⁴ The Hugo-Paris Bridge was a steel truss structure with a 16-foot-wide roadway and wooden deck, designed to carry trucks with a maximum weight of 15 tons (see Figure 66). The bridge connected Oklahoma SH 2 and Texas SH 24, both of which were part of the US 271 designation. The OHC saw the new Hugo-Paris Bridge as the first step in the right direction, and “hoped that this will lead to the eventual freeing of the remaining toll bridges now spanning the Red River at each of the important interstate crossings.”²⁴⁵



Figure 66. Hugo-Paris free bridge, c.1930. (Courtesy of the Texas Department of Transportation.)

The same year, the OHC purchased a toll bridge that was already under construction between Davidson, Oklahoma, and Vernon, Texas, making it a free bridge as well. The Davidson Bridge, which carried SH 5, was an all-wood trestle, a type of bridge that uses many short, closely spaced spans (see Figure 67); each span was made of creosoted wood piles with fir decking and flooring. At the time it was the largest highway bridge in the state of Oklahoma, made up of 187 trestle spans and with an extraordinary length of 5,423 feet.²⁴⁶ An example of more sturdy construction than many other timber trestles, it survived extreme flood conditions the year it was built, and was the only pile bridge that remained on the Red River in 1926.²⁴⁷

Construction began on a third free bridge in the summer of 1926.²⁴⁸ Another joint project between Oklahoma and Texas, the new bridge on SH 8 between Burkburnett, Texas, and Randlett, Oklahoma, was the first bridge designed and built to carry the increasing loads of mid-1920s traffic.²⁴⁹ While the Davidson Bridge was a light, wooden pile structure, the new Burkburnett Bridge was a concrete pile trestle, the first of several that would one day span the Red River.²⁵⁰

The OHC and THD continued to focus on freeing Red River crossings in the late 1920s, particularly the toll bridges at Terral, Thackerville, and Colbert, which carried the greatest amount of traffic.²⁵¹ In January 1930 there were 17 toll and three free bridges across the Red River, although some of these crossings carried local roads rather than State Highways.²⁵² The THD and OHC planned a cooperative program to replace four toll bridges on the State Highway System with free bridges between 1929 and 1931.²⁵³ The joint program included the purchase of the Woodville-Preston toll bridge in 1930, which was opened for free use, and construction of new bridges at Colbert, Thackerville, and

Terral.²⁵⁴ The new Terral-Ringgold Bridge, built to carry US 81, was nearly 2,000 feet long and featured thirteen 144-foot K-truss spans, a particular bridge type favored by Oklahoma bridge engineers.²⁵⁵ The same year, new bridges were planned at two crossings at Eldorado (Quanah-Eldorado) and Elmer (Altus-Vernon), and construction began on free bridges at Colbert and Thackerville.²⁵⁶ The opening of the free bridge at Colbert the following year created a debacle that brought the Red River Valley to the front page of national newspapers and effectively ended the toll bridge era in the region.



Figure 67. Trestle bridge at Davidson, undated photo. (Courtesy of the Texas State Library and Archives Commission.)

THE RED RIVER BRIDGE WAR

During the campaign to provide free bridges between Oklahoma and Texas, the new free bridge between Denison and Durant sparked a controversy. The legal fight went all the way to Washington, D.C., and officials were forced to call in both the Oklahoma National Guard and Texas Rangers in the battle that ensued. Although attempts had been made to purchase the old Colbert toll bridge, no agreement was reached and in May 1930 construction began on a new free bridge just over a half-mile upstream of the old bridge. The Red River Bridge Company, owners of the toll bridge, viewed this as unconstitutional; with nine years left in their operating charter, they believed the construction of a parallel, free bridge would wrongfully deprive them of income from tolls, and sought compensation.²⁵⁷ The Red River Bridge Company entered into an agreement with the State of Texas to compensate them for this loss; the company was allowed to increase its toll rates during the construction period, and when the free bridge opened, Texas would pay the Red River Bridge Company an additional \$60,000.²⁵⁸

The free bridge was completed in summer of 1931, but conflict arose even before it could be opened to traffic. The Red River Bridge Company had not yet received compensation and brought a suit in federal court to prevent the opening of the free bridge. The court is-



Figure 68. Governor Murray of Oklahoma observing National Guard troops at the bridge in 1931. (Courtesy of the Oklahoma Historical Society.)

sued an injunction forcing the THD to close the free bridge, and the THD erected barricades to prevent traffic from crossing. Oklahoma had not been a party to the agreement with the bridge company, and in response to the barricade, Oklahoma Governor “Alfalfa Bill” Murray directed OHC crews to remove the barricades and instead block access to the Oklahoma side of the toll bridge. For 12 hours traffic crossed the new free bridge, until Texas Governor Ross Sterling sent a group of Texas Rangers to rebuild the barricade and keep the bridge closed.

The story soon reached beyond local news to national newspapers, and in a countermove Governor Murray ordered the Oklahoma National Guard to maintain the toll bridge barricade. After several weeks of conflict during which both the toll and free bridges were closed, the Texas legislature introduced a bill that would enable the bridge company to sue the state for damages; satisfied, the bridge company withdrew its complaint and a judge lifted the injunction. The free bridge opened for traffic on July 2, 1931, and crowds of onlookers cheered as the barriers were thrown aside. An impromptu parade of vehicles and pedestrians crossed the bridge, among them a caravan of auto tourists who had been travelling the Jefferson “Palm to Pine” Highway and found themselves on the Texas side of the bridge in the midst of the conflict.²⁵⁹



Figure 69. Oklahoma National Guardsmen block access to the Colbert toll bridge, July 27, 1931. (Courtesy of the Oklahoma Historical Society.)

With the resolution of the Denison-Durant “bridge war” in 1931 and the completion of the Quanah-Eldorado and Altus-Vernon bridges the following year, by the end of 1932 the Texas and Oklahoma highway departments provided free bridges across the Red River on nearly every State Highway. Oklahoma’s SH 57 was the sole exception, where the Idabel-Clarksville suspension bridge continued to carry traffic, but the route had only recently been added to the highway system and was not a high-volume crossing.²⁶⁰ A total of nine free bridges carried State Highways across the Red River (see Figure 70).²⁶¹

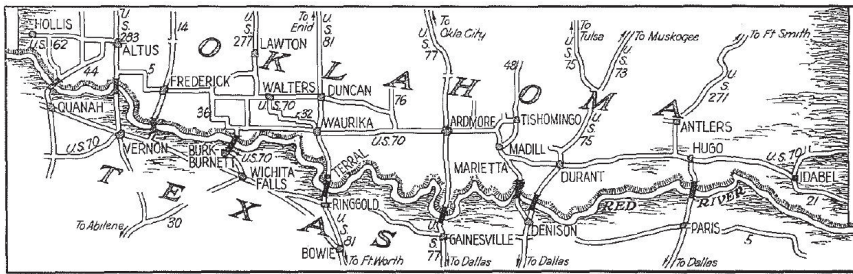


Figure 70. Map showing nine free bridges along the Red River between Oklahoma and Texas, 1932. (Courtesy of the Oklahoma Department of Transportation.)

Even as free bridges became commonplace on State Highways, a number of privately owned bridges continued to carry local roads across the Red River into the late 1930s (see Figure 71). The Charlie-Walters toll bridge was purchased by both states in 1933 and made free, briefly carrying Oklahoma SH 65 and Texas SH 148. Several toll bridges remained on county or local roads, including the Nocona, Hollis, and Telephone (Honey Grove-Boswell) bridges. In April 1939 the Oklahoma state legislature appropriated funds to purchase additional toll bridges, including two that were not on the State Highway System: the Nocona suspension bridge in Jefferson County and the Hollis Bridge, a pony truss in Harmon County; both were made free.²⁶² Oklahoma and Texas replaced the Byers and Bonham suspension toll bridges with new free truss bridges in the late 1930s, and with the 1940 collapse of the Telephone toll bridge residents of the Red River Valley could move freely between Texas and Oklahoma at any of the remaining bridge crossings.

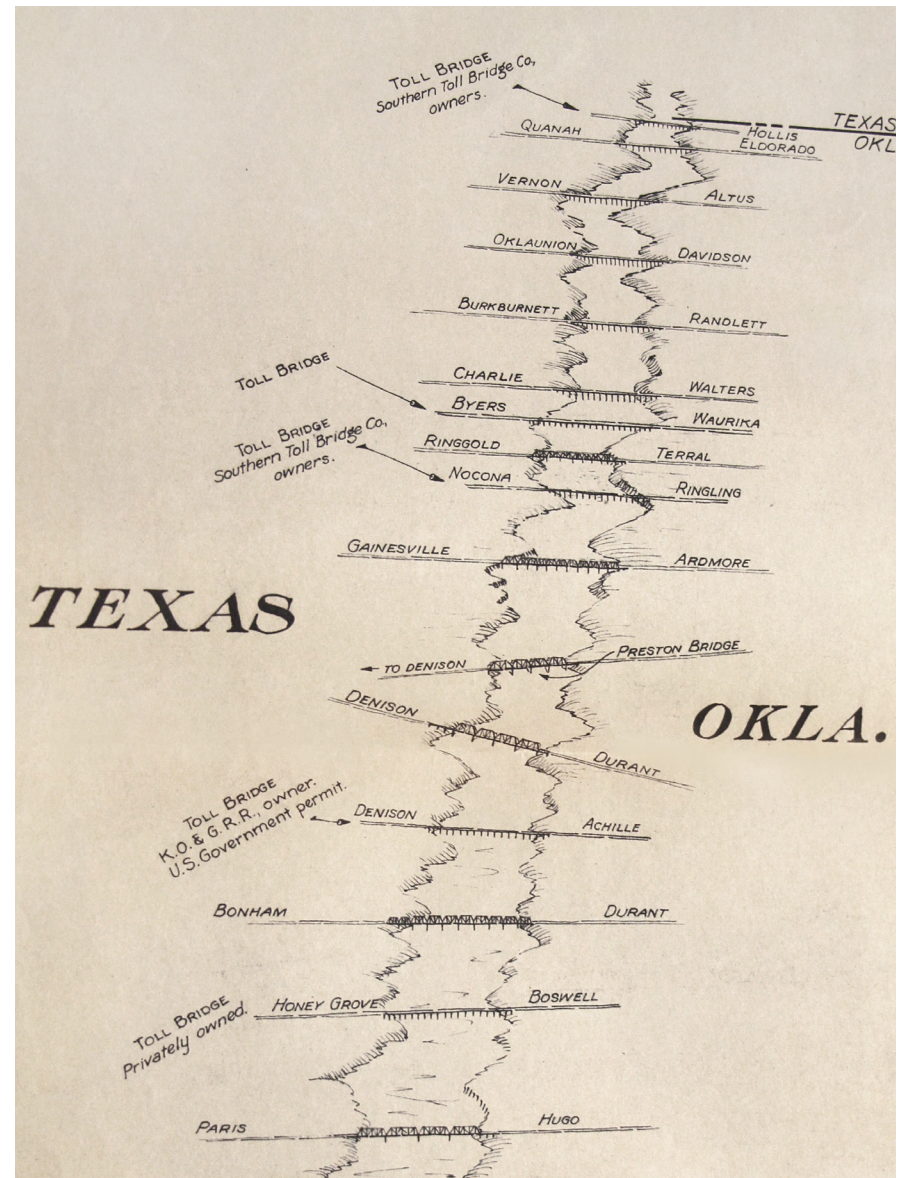


Figure 71. The automobile bridges across the Red River c.1938, showing 11 free bridges and five remaining toll bridges. (Courtesy of the Texas State Library and Archives Commission.)

LATER FERRIES

Even as early automobile bridges began to emerge between Texas and Oklahoma, many people continued to cross the Red River via ferry. Ferries stationed at convenient intervals along the river could carry people, vehicles, and horses across the waterway. By one account, the typical ferry could accommodate three automobiles or one wagon and team. Cars cost 50 to 75 cents while a person could cross in a skiff for 15 cents; after World War I the typical cost rose to one dollar for an automobile, 75 cents for a wagon and team, and 25 cents for a horse and rider.²⁶³ The journey across the river, powered by a cable and winch that pulled the ferry across, took between five and 15 minutes.²⁶⁴ Notable ferries that ran into the mid-twentieth century include the Willis Ferry at what is now the west side of Lake Texoma and Tuck's Ferry, located nearby about 8 miles southeast of Marietta, Oklahoma. Occasionally a ferry became an alternative crossing when a bridge failed, such as the Idabel-Clarksville suspension bridge, destroyed by a flood in 1933, or the Bonham-Durant truss bridge, which was partially washed out in 1941 and could not be replaced until after World War II.²⁶⁵ In this way, ferries were part of the transportation network across the Red River well into the automobile age.



Figure 72. Automobiles on the Albion Ferry between Idabel, Oklahoma, and Clarksville, Texas, in 1953. (Courtesy of the Oklahoma Historical Society.)



State Highway Department Bridge Types

As automobile traffic increased over the first half of the twentieth century, bridge design had to evolve to meet new demands. The unpredictability of the Red River meant that early bridges were constantly in danger of washouts and many were short-lived. In the 1910s and 1920s, to save on cost, the highway departments generally left existing narrow, poorly designed, or obsolete bridges on highways if the bridge was strong enough to support traffic.²⁶⁶ By the early 1930s this practice had changed; bridges had to become larger and sturdier to carry larger vehicles. Increasing use of concrete rather than wood or stone for trestles, piers, and abutments meant that bridges also became more permanent. The completion of the Denison Dam in 1944 also provided much needed flood control in the Red River Valley downstream, undoubtedly saving many bridges from eventual destruction.

From the moment of their creation, the State Highway Systems in Texas and Oklahoma could barely keep pace with ever-growing traffic volumes and increasing vehicle size. By the late 1930s Oklahomans drove over 6 million miles per day on State Highways, and large vehicles included tractor-trailers of up to 45 tons.²⁶⁷ This was a substantial increase in weight traveling over early suspension bridges rated for 5-ton trucks, or even the lightweight truss bridges of the 1910s and early 1920s, designed for 15-ton trucks. In the 1930s standards for bridges considered “heavy traffic” required them to be able to support the weight of two 15-ton trucks simultaneously.²⁶⁸ Standard bridge plans also called for wider decks than in previous years, increasing from 20 to 22 feet.²⁶⁹

To provide more modern bridges, highway department bridge engineers used a variety of different designs, including I-beam and girder spans, concrete trestles, and trusses. A number of pre-World War II bridges over the Red River used K-truss spans, a type of through truss whose verticals and diagonals were arranged in a K shape. Although Oklahoma bridge engineers favored the K-truss, their Texas counterparts did not, and the border bridges are some of the few examples used in Texas.²⁷⁰

In general, truss spans were more common in the eastern half of the Red River Valley, and bridges might be made up of over a dozen shorter trusses.²⁷¹ To the west, trestle spans were needed for the wide, shallow crossings and shifting banks. The Eldorado and Altus-Vernon trestle bridges both represented departures from the usual building methods, and used creosoted wood pile trestles to support I-beam spans with a concrete deck.²⁷² A hybrid of the old and new types of trestle design, these bridges provided a substantial cost savings over concrete trestles and were almost as sturdy.²⁷³

K-TRUSS BRIDGES

In recent years, the Oklahoma Department of Transportation has worked to creatively document and preserve K-truss bridges, reflecting their importance to Oklahoma's transportation heritage. Entire spans of the K-truss bridge that once carried US 66 over Bird Creek in Rogers County have been relocated to Rogers Point Park in the city of Catoosa. An interpretive exhibit is planned for the site. Through bridge marketing, the SH 11 at Hominy Creek Bridge in Tulsa County will be adopted by a private citizen in Skiatook. Other K-truss bridges have been bypassed and left in place, such as the SH 101 at Lee Creek Bridge in Sequoyah County. K-truss bridges requiring replacement, such as SH 78 at Red River, have received comprehensive archival documentation.



Figure 73. The SH 78 at Red River Bridge in 2013, showing the distinctive K-truss configuration used for many of Oklahoma's highway truss bridges constructed in the 1930s and 1940s .

Bank protection came into greater use during this period, and was particularly important on rivers such as the Red with wide, shallow beds and low sandy banks. With little timber to hold the banks, the sandy soil washed away easily, leading to the demise of a number of earlier bridges across the Red River. In previous decades, engineers would simply construct longer bridges, adding anywhere from 50 to 500 feet of additional length to ensure that the abutments were safe from erosion and the river's changing course. By the late 1930s practices had changed, and Texas and Oklahoma used corrugated metal rip rap at abutments and angle iron and wires to trap sand and protect banks.²⁷⁴ In the early 1940s a major federal flood-control construction project in the Red River Valley finally helped to tame the unpredictable waters of the Muddy Red. This came at a cost to some residents in the area west of Denison. The construction of an enormous earthen dam near Denison created Lake Texoma, and as the reservoir began to fill, the towns of Woodville and Preston were flooded and the old bridge between them was removed.

Despite the ongoing economic hardship of the Great Depression, cooperative projects between the THD and OHC made use of funding from New Deal-era relief programs. These funds helped to finance the construction of several new crossings in the late 1930s, including the Bonham Bridge on SH 78 (see Figure 74) and another bridge on SH 79 between Waurika and Petrolia, Texas. Despite this progress, residents of some communities such as Idabel and Willis remained without any bridge at all until the 1950s. Major highway development would have to wait until the end of World War II, however, as wartime restrictions limited most construction to essential defense-related projects.

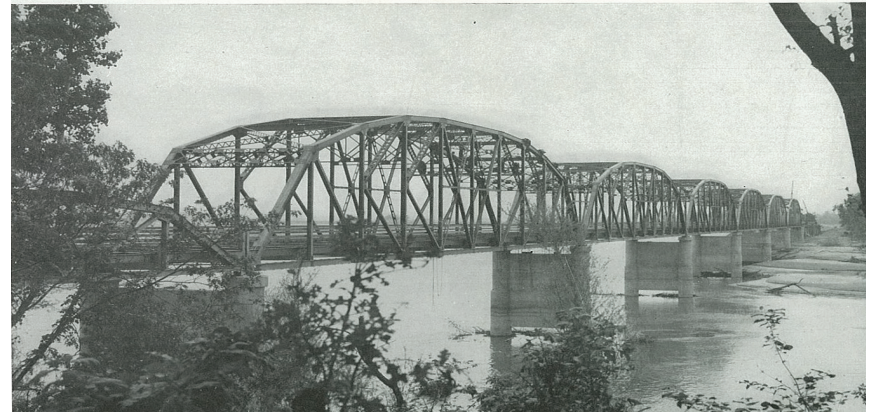


Figure 74. The Bonham Bridge over the Red River between Bryan County, Oklahoma, and Fannin County, Texas, (photographed c.1938) was one of 543 Texas emergency projects built using funds authorized by the National Industrial Recovery Act. (Courtesy of the Oklahoma Department of Transportation.)

The rise of the automobile in the early 1900s provided the impetus for substantial transportation improvements in the Red River Valley. While private citizens and organizations were responsible for development of the earliest highways and bridges in the region, newly established state highway departments soon took the lead. Wagon trails grew into automobile roads, and these dusty routes were eventually replaced by a network of paved highways, the forerunner of the system we use today.

BONNIE AND CLYDE

Notorious gangsters Bonnie Parker and Clyde Barrow made a memorable visit to the Salt Fork of the Red River in the Texas Panhandle on June 10, 1933. While attempting to drive their Ford coupe across the river, Clyde missed a detour sign and accidentally sped off a bluff directly into the dry river bed. Bonnie's leg was badly burned in the crash. A local family, the Pritchards, witnessed the accident and attempted to help Bonnie, Clyde, and their accomplice, W.D. Jones; however, the episode deteriorated when the Wellington, Texas, sheriff and police chief arrived. The three fugitives kidnapped the officers, sped off in a stolen car, and eventually left them tied to a tree near Sayre, Oklahoma. Law enforcement did not catch Bonnie and Clyde until 1934, when Louisiana police killed them in an ambush.²⁷⁵ An Official Texas Historical Marker, located in a park along US 83 on the north side of the river, now commemorates Bonnie and Clyde's "Red River Plunge".

Figure 75. Bonnie Parker and Clyde Barrow in front of an automobile, undated photo. (Courtesy of the Dallas History and Archives Division, Dallas Public Library.)



CHAPTER 6

Road System Expansion

“Our unity as a nation is sustained by free communication of thought and by easy transportation of people and goods. The ceaseless flow of information throughout the Republic is matched by individual and commercial movement over a vast system of interconnected highways crisscrossing the country and joining at our national borders with friendly neighbors to the north and south.

Together, the united forces of our communication and transportation systems are dynamic elements in the very name we bear—United States. Without them, we would be a mere alliance of many separate parts.”

*President Dwight D. Eisenhower
February 22, 1955*

President Eisenhower was a strong advocate of the vast system of high-speed highways we now know as the Interstate Highway System. Eisenhower understood that connection fostered both unity and commerce; in signing the legislation authorizing the system, he set in motion a vast construction project that would take decades to complete and fundamentally change the way Americans travel. The decades after World War II saw an incredible rise in automobile travel, and while the Interstate Highway System ultimately became the highest standard for highway construction, state highway departments also strove to improve the highway systems under their authority.

Transportation improvement initiatives at the state and federal level had an impact on the Red River Valley, where more than a dozen State, U.S., and Interstate Highways crossed the river between Texas and Oklahoma. This chapter discusses the ongoing development and expansion of the Texas and Oklahoma State Highway Systems, upgrades to existing crossings, and culminates with the completion of the Interstate Highway bridges linking the two states.

Post-World War II Highway System Development

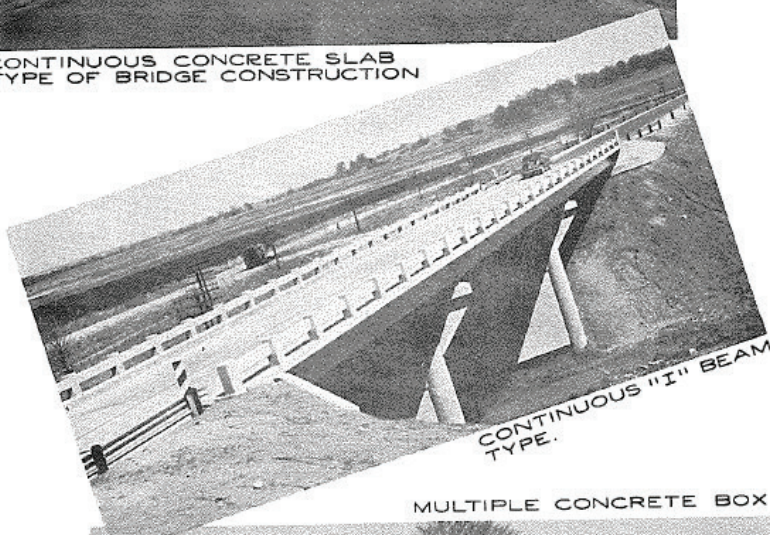
In the years after World War II, the nation prospered as the economy boomed, and Americans were driving farther and faster than ever before. Oklahoma and Texas faced the same challenges as many other states, as automobile ownership and use soon doubled nationwide. Drivers demanded safer, more efficient, modern highways to handle faster traffic and heavier truck freight. Most of Oklahoma’s principal highways and bridges were built in the 1920s and 1930s, and by the early 1950s were unable to handle the traffic volume, truck load, and typical highway speed.²⁷⁶ Highway designs changed to incorporate limited-access expressways and divided highways, and many of the more heavily used routes were widened and expanded to four-lane highways during the post-World War II (postwar) period. This created a problem at many river crossings, where the existing bridges were barely wide enough to carry two lanes of traffic. In some cases the older bridges were simply replaced, while in other cases new parallel structures were built so that each bridge could carry two lanes of one-way traffic.



CONTINUOUS CONCRETE SLAB
TYPE OF BRIDGE CONSTRUCTION

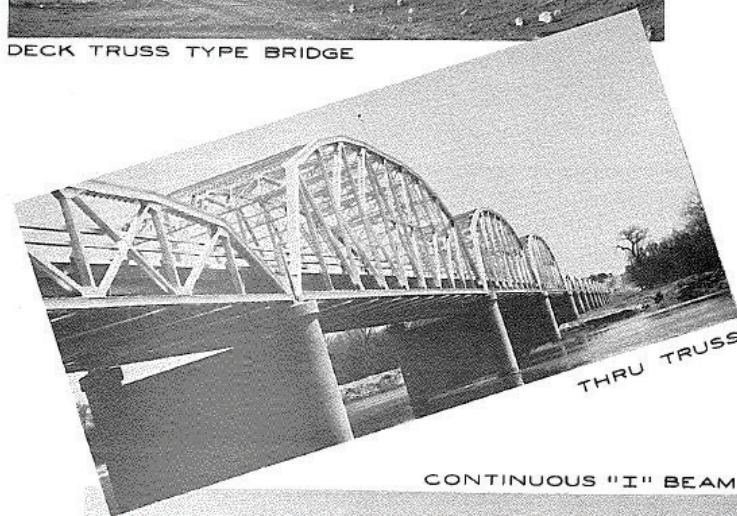
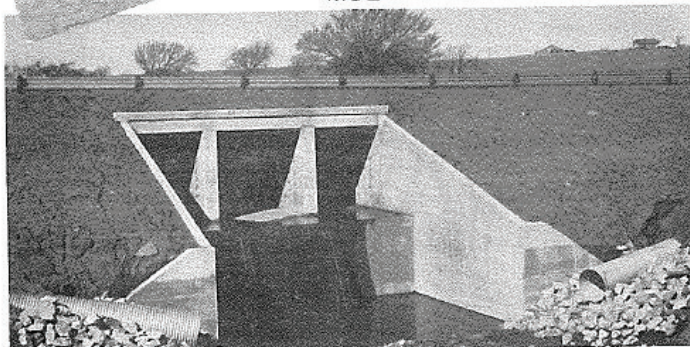


DECK TRUSS TYPE BRIDGE



CONTINUOUS "I" BEAM
TYPE.

MULTIPLE CONCRETE BOX



THRU TRUSS

CONTINUOUS "I" BEAM

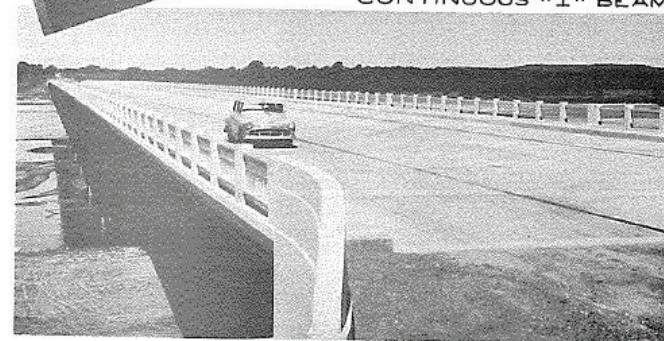


Figure 76. Typical bridge designs present on the Oklahoma highway system in the early 1950s, many of which are still familiar to today's drivers.
(Courtesy of the Oklahoma Department of Transportation.)

In the years after World War II a wave of highway improvement swept across the United States as the nation began to recover from wartime shortages of funds and materials. In 1950 the OHC completed the largest highway construction program it had ever undertaken, but more work remained to be done.²⁷⁷ Cooperative projects between the OHC and THD through the 1950s and 1960s continued to expand existing Red River crossings and provided new bridges at several locations.



Figure 77. Construction of parallel bridge at the Hugo-Paris crossing in 1954; Frisco railroad bridge at left. (Courtesy of the Oklahoma Historical Society.)

New Bridges for Old Crossings

Seven US Highways were among the routes that crossed the Red River between Texas and Oklahoma, and several of these were targeted for capacity expansion projects in the 1950s. Most of the Red River highway bridges constructed in the 1920s and 1930s were steel truss bridges, which cannot easily be widened. To solve the problem, Texas and Oklahoma constructed parallel structures adjacent to the Hugo-Paris Bridge, Gainesville-Ardmore (Thackerville) Bridge, and Colbert Bridge. In 1954-1955 the existing Hugo-Paris Bridge, a Parker truss that carried US 271, received a new deck and a parallel steel beam structure was added immediately west of the truss bridge (see Figure 77).²⁷⁸ The new bridge carried two lanes of southbound traffic, while both lanes of the truss bridge carried northbound traffic. Although the truss structure was later

removed and replaced by a prestressed concrete girder span to the east, the piers of the earlier bridge are still visible between the northbound and southbound bridges today. The 1931 truss bridge at Thackerville received similar treatment in 1957, when a plate girder span was added to carry the northbound lanes of US 77.²⁷⁹

The free bridge built in 1931 at Colbert continued to carry US 69/75 over the Red River, and in 1957 the THD prepared plans for a “companion” bridge.²⁸⁰ As with the Hugo-Paris Bridge, the new US 69/75 bridge was constructed between the old free bridge and the adjacent railroad bridge (see Figure 78). The new steel plate girder bridge was completed in 1958. The paired highway bridges served until 1995, when both the 1931 and 1958 structures were demolished to make way for a new pair of bridges, each of which carries two lanes of traffic. Today, one of the small approach spans to the free bridge can be seen in the community of Colbert, where it was relocated to a park.²⁸¹



Figure 78. Red River crossing at Colbert, Oklahoma, 1961, view facing south with 1908 Katy railroad bridge at left, 1931 free bridge at right, and 1958 highway bridge in center (both highway bridges have since been removed). (Courtesy of the Oklahoma Historical Society.)

Postwar improvements to the highway system in the Red River Valley also led to the construction of new bridges at Idabel, Harris, and Willis, and the addition of the Hollis toll bridge to the highway system. The Idabel-Clarksville crossing that carried what is now SH 37 had been without a bridge since the collapse of the toll suspension bridge in 1933, forcing locals to rely on one of several nearby ferries. In 1950 the OHC and THD jointly programmed a new steel girder bridge at Idabel.²⁸² When completed in 1954, the new bridge made it possible for local residents to travel between Oklahoma and Texas once again without having to use a ferry, enter Arkansas, or travel over 40 miles west to use the Hugo-Paris Bridge.²⁸³ In 1961 a new Red River bridge was constructed about 20 miles southeast of Idabel, linking Harris, Oklahoma, with DeKalb, Texas, and carrying the newly designated US 259.²⁸⁴

The postwar period also saw the completion of the long-awaited Willis Bridge across Lake Texoma, providing a new highway connection between Oklahoma and Texas. A ferry had been in operation at the Willis crossing since the 1880s, but in the 1940s proposed plans for a highway bridge had to be postponed due to the onset of World War II. The ferry continued to operate until 1947, but funding difficulties plagued the project and the planned bridge remained unbuilt after the war. With no way to cross into Texas, residents began to move away, businesses closed, and the town withered.²⁸⁵ Appeals for a bridge finally reached President Eisenhower in 1955, who approved an order to provide a highway bridge across Lake Texoma. Much to the relief of the local population, construction began in 1958 (see Figure 80) and the structure was completed in 1960.²⁸⁶ The roadway carried by the bridge was designated as SH 99 until the late 1960s, when the highway was redesignated US 377 from Denton, Texas, north to Drumright, Oklahoma.

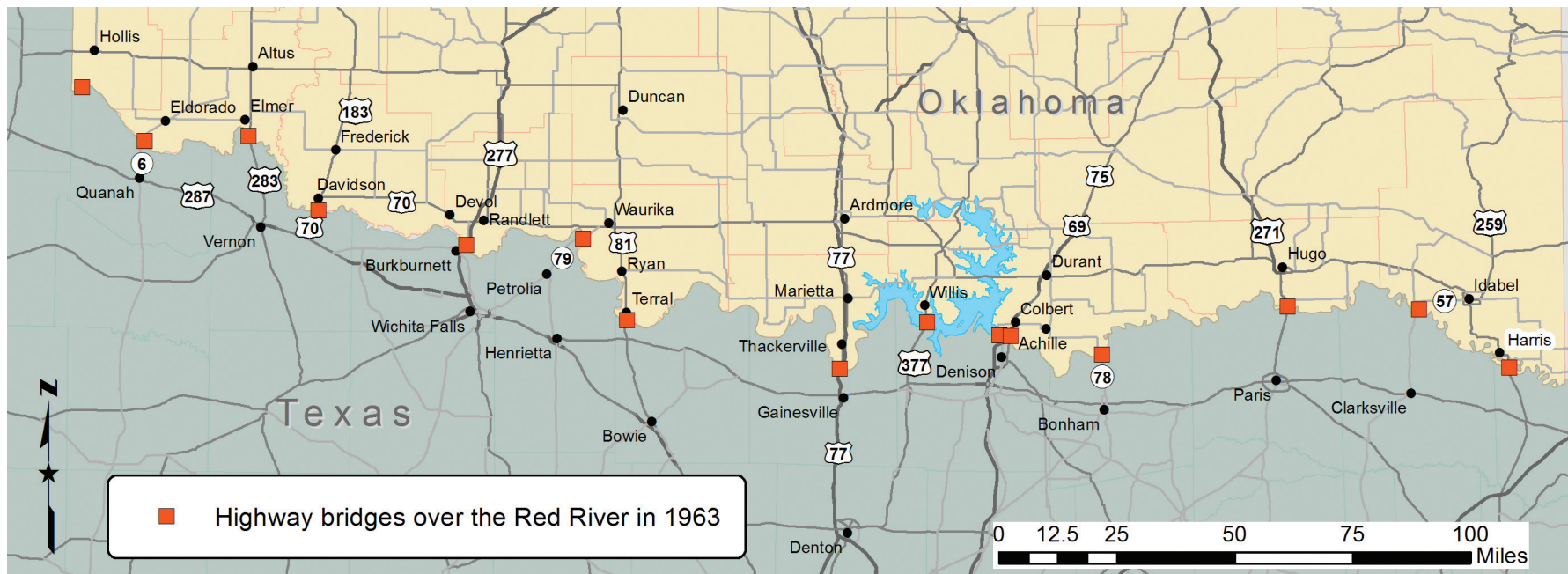


Figure 79. Detail showing the locations of highway bridges that crossed the Red River between Oklahoma and Texas in 1963.



Figure 80. Long-awaited bridge under construction at Willis, Oklahoma, in 1960; the old channel of the river is 60 feet below the surface of Lake Texoma. (Courtesy of the Oklahoma Historical Society.)

Decades after the end of the toll bridge era, Oklahoma found a new purpose for the former toll bridge located in Harmon County and designated SH 30 running south from the community of Hollis to the Red River. The new route incorporated the old Hollis Bridge, a pony truss structure that had been built as a toll bridge in 1926. The bridge carried SH 30 from 1957 until 1970, when the roadway reverted to local control.²⁸⁷ The truss bridge was recently removed, and a modern bridge now carries Hollis Road across the river.

The 1960s ushered in a new chapter for yet another Red River crossing. The Texas & Pacific Railroad (T&P), which had acquired the MO&G railroad bridge at Carpenter's Bluff, no longer needed the bridge and abandoned the tracks. The T&P donated the bridge to Bryan and Grayson Counties in 1965, and both counties collaborated to convert the bridge into a combination automobile and pedestrian bridge in 1966. The rails were removed and replaced with a concrete slab deck (see Figure 81), which was then opened to vehicular use, while the old wagon shelf served as a pedestrian walkway.²⁸⁸



Figure 81. Workers installing a new concrete deck to allow cars to use the railroad portion of the Carpenter's Bluff Bridge in 1982. (Courtesy of the Oklahoma Historical Society.)

The Interstate System and the Red River

The Interstate Highway System, a staple of our transportation system, is the result of decades of planning and construction. As a young army officer in 1919, President Eisenhower experienced the largely sub-par conditions of the nation's early transcontinental highways during a cross-country drive with a military truck convoy. Years later, during World War II, Eisenhower was highly impressed by the Autobahn, Germany's system of modern, high-speed highways connecting population centers.²⁸⁹ Recognizing the vital importance of such a system of uniform, modern highways for defense purposes, he was a strong advocate of the Interstate Highway System in the postwar period. Although earlier planning and legislation laid the groundwork, the Federal-Aid Highway Act of 1956 finally provided the funds to construct a national system of highways built to a uniform, modern standard, connecting the nation's principal cities and industrial centers.

The nationwide system would take decades to complete; construction of Oklahoma and Texas segments began in the late 1950s and continued into the 1970s. Although in many states the Interstate Highway System was built from scratch, in Oklahoma and Texas some portions of the new system incorporated segments of existing US Highways, including US 77 and, later, US 277. Minimum Interstate Highway standards called for four 12-foot travel lanes, meaning that even the newer bridges built for the US Highways were not wide enough to carry the new highway.²⁹⁰ The same Red River crossings near Thackerville and Burkburnett that previously carried gravel highways across lightweight toll bridges were once again improved to carry a new type of traffic.

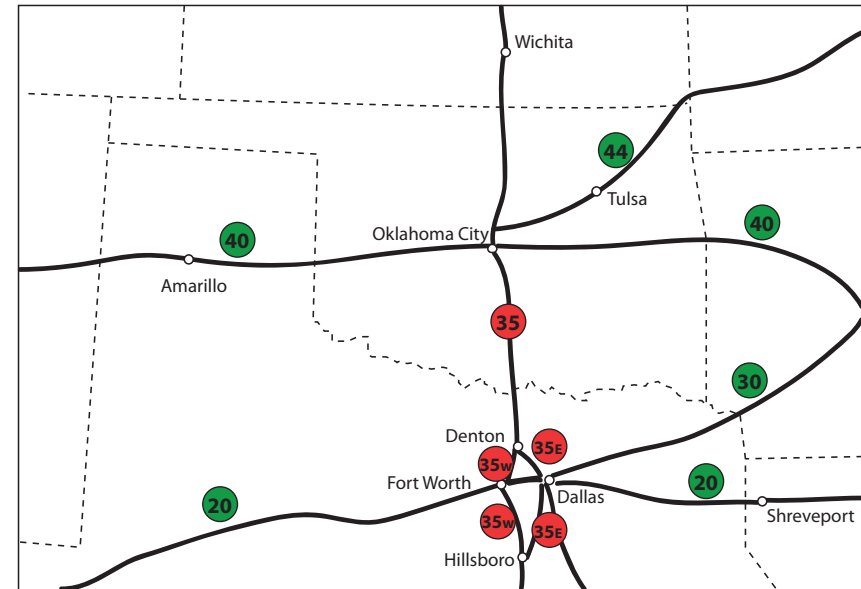


Figure 82. Official route numbering for the Interstate Highway System as adopted by the American Association of State Highway Officials (AASHO), 1957.

As the only north-south route through Oklahoma included in the original designated system, I-35 runs from the Mexican border at Laredo to Duluth, Minnesota. I-35 is co-signed with US 77 north of Denton, Texas, and enters Oklahoma south of Thackerville. The route crosses the Red River at the same location used by US 77 and earlier named highways including the Dallas-Canadian-Denver Highway and the Kansas, Oklahoma & Texas Highway. The interstate alignment then separates from US 77 and continues to parallel the earlier highway through much of Oklahoma. By 1963 construction of the I-35 segment between Gainesville, Texas, and Marietta, Oklahoma, had progressed a short distance north of the Red River. The 1957 plate girder bridge continued to carry northbound traffic and the older truss span was removed and replaced by a new steel girder bridge to carry southbound traffic.²⁹¹ When construction was complete in 1965, the paired bridges carried both co-signed highways across the Red River (see Figure 83).²⁹²



Figure 83. Interstate bridges carrying I-35 and US 77 near Thackerville, Oklahoma.

The initial designation of Interstate Highway routes provided only one Red River crossing between Oklahoma and Texas, and did not include the portion of I-44 southwest from Oklahoma City to the Red River. To provide a faster route between Oklahoma City and Wichita Falls, Texas, the Oklahoma legislature instead authorized a new turnpike in 1953. Known as the H.E. Bailey Turnpike, construction on the route began in 1961, and a new bridge carrying the southbound lanes over the Red River was added in that year. The old bridge, built in 1927, continued to carry the northbound traffic and the highway opened in 1964.²⁹³ Oklahoma transportation officials hoped the new highway would be designated as an Interstate Highway, but the old Burkburnett Bridge was a major obstacle to this goal. Only 19 feet wide, it was too narrow to conform to the standards set for the Interstate Highway System.²⁹⁴ Additional improvements to the turnpike began in the 1970s, and the 1927 bridge was demolished to make way for a new northbound bridge in 1976.²⁹⁵ The new bridge opened to traffic in August 1978; with the Bailey Turnpike up to Interstate Highway standards, the route was soon incorporated into I-44, which is concurrent with US 277 where it crosses the Red River between Randlett, Oklahoma, and Burkburnett, Texas.²⁹⁶ The opening ceremony featured a 30-vehicle convoy. At the head of the parade, an antique Ford Model “A” broke the ceremonial ribbon (see Figure 84). Thus, the

last link in the most modern transportation network was opened by the type of vehicle that once helped create the early demand for automobile highways and bridges, propelling the decades of progress that culminated in the highway system we experience today.



Figure 84. Opening of the northbound bridge carrying Bailey Turnpike/US 277 (now I-44) over the Red River at Randlett, August 21, 1978. (Courtesy of the Oklahoma Historical Society.)

The decades after World War II saw great advances in transportation in the Red River Valley as existing bridges were improved and replaced and a number of new crossings were added. The last of the ferries were gradually phased out, and modern steel and concrete bridges carried upgraded State and US Highways across the river. Many of these represent the continuation of older named highways like the Meridian and Jefferson Highways. The Interstate Highway System represents the most recent phase in this development. This ambitious project took decades to complete, and gave rise to many of the engineering and safety standards we take for granted today. Located near crossings that were used by earlier roads, ferries, or trails, the two Interstate routes across the Red River between Oklahoma and Texas are the culmination of over a century of progress. Today more than two dozen bridges cross the Mighty Red between the two states, and together these structures help to demonstrate the evolution of transportation in the region.

RED RIVER RIVALRY

The Red River Rivalry, also known as the Red River Showdown or the Red River Shootout, is an annual football game between long-time rivals, the University of Oklahoma's Sooners and the Longhorns of The University of Texas at Austin. The first matchup between the two teams took place in Austin in 1900, before Oklahoma even gained statehood. In that game Texas won by a whopping 28-2 margin, but in 1903 the two teams tied and by 1905 Oklahoma won the game 2-0.²⁹⁷ As of 2016, Texas leads the overall series record with 61 wins in 111 contests. Oklahoma has won the game 45 times, with 5 ties. Since 1929 the game has been played at the approximate halfway point between the two campuses, the Cotton Bowl Stadium in Dallas, during the Texas State Fair in October.²⁹⁸ The fairground atmosphere adds a layer of spectacle to the game that has made it a fan favorite for many years. One Oklahoman, now in her 70s, remembers camping along the highway to watch cars heading to Dallas for the big game:

*There wasn't an Interstate 35 back then so all of this traffic had to go by our house which was right on the highway... We always had a big Texas Longhorn sign upside down and we would get cheers and waves. As a little kid it didn't get much bigger than that for me.*²⁹⁹

Today, the Red River Showdown still captures a longstanding and spirited rivalry between the two states on either side of the Red River.



Figures 85 and 86. The trophy for the winning team is a gold (formerly bronze) 10-gallon hat. These images show the 1955 trophy, which Oklahoma took home, and the Texas team celebrating when they won the golden hat in 2009. (Courtesy of the Oklahoma Historical Society and University of Texas Athletics.)





Figure 87. The Sooners score a touchdown in the 1990 Red River Rivalry game. (Courtesy of the Oklahoma Historical Society.)



Figure 88. The Longhorns sack Oklahoma's quarterback in the 2005 game. (Courtesy of University of Texas Athletics.)

CONCLUSION

Crossing the Red River was an important undertaking throughout history and remains so today. While the modes of transportation and cultures on either river bank evolved through time, the waterway has always been a border, and its crossings, in turn, became thriving zones of connection, conflict, and exchange.

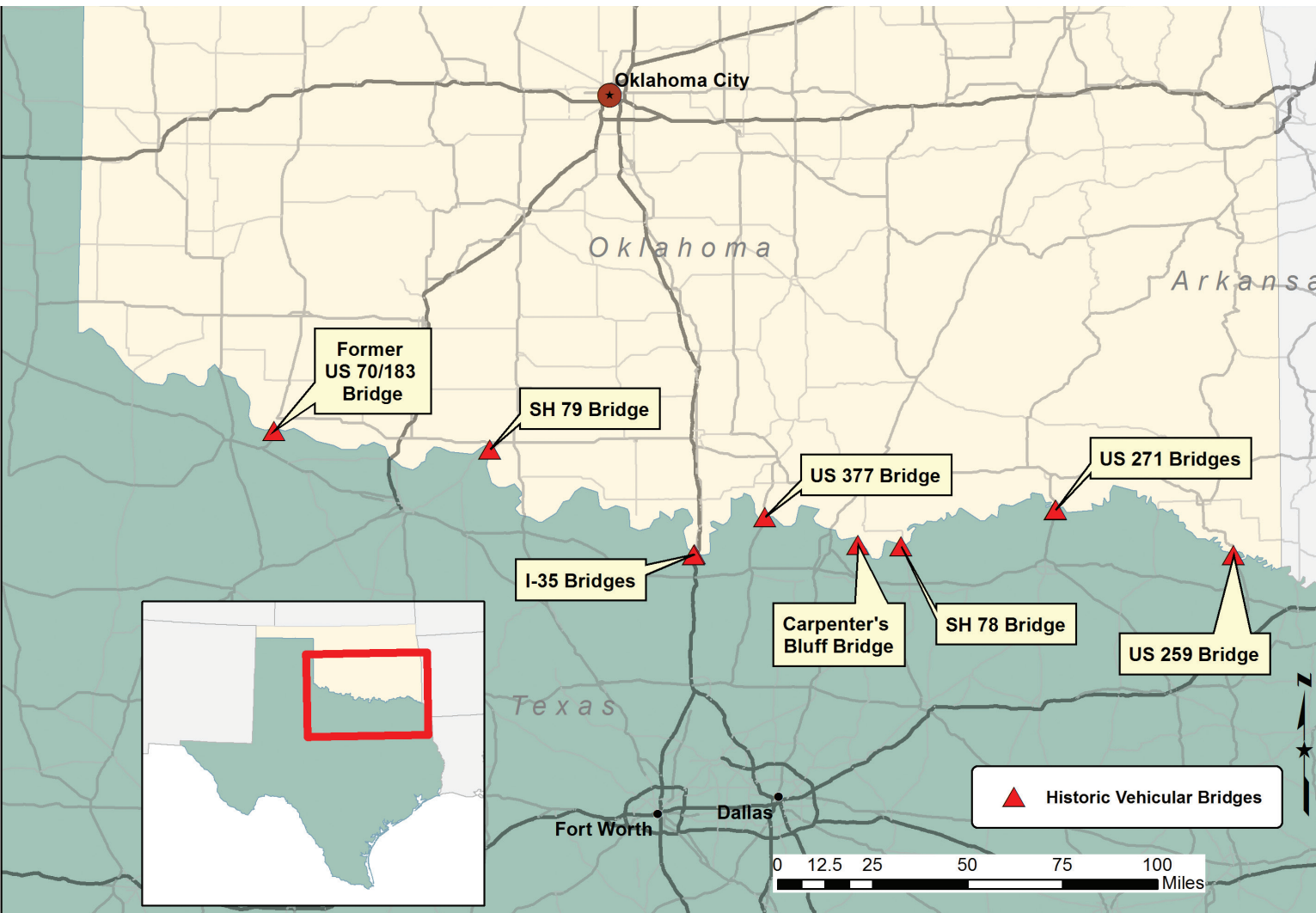


Figure 89. Kiamichi (former Frisco) railroad bridge over the Red River between Choctaw County, Oklahoma, and Lamar County, Texas, parallel to US 271.

This publication followed the development of Red River crossings through time. It began with early native peoples and Spanish and French explorers, who traversed the waterway before formal crossings were established. As American settlers and displaced Native American tribes arrived, early trails became well-worn routes; before long, Longhorn cattle drives crossed the Mighty Red. Steamboats and ferries also plied the waterway, followed by railroads, which drove the construction of some of the first permanent bridges across the river. The rise of the automobile brought vehicular bridges and, as Interstate Highways first appeared following World War II, modern highway bridges replaced older spans. As a whole, these crossings reflect the development of transportation, culture, and the economy on either side of the Red River.

Today the Red River is a border between the states of Oklahoma and Texas. Oklahoma has a unique history that grows out of its long status as Indian Territory; Oklahomans have earned the reputation of being deeply connected to the land and also committed to modern innovation in energy production and other sectors. Texas, meanwhile, is known for its size, geographic and demographic diversity, and history of economic growth that reaches from its prominence in early cattle ranching through its role as a leader of industry today. These two states, while unique, also share a great deal of cultural heritage. For hundreds of years Red River crossings have acted as gateways for people, goods, and ideas to flow between the two regions. This publication celebrates the bridges—both real and intangible—that connect Oklahoma and Texas. These crossings will benefit the people of both states for generations to come.

RED RIVER BRIDGE PROFILES



Historic vehicular bridges crossing the Red River are featured on the following pages. The bridge descriptions are arranged in order of the bridge's location on the Red River, from west to east. Information provided for each bridge includes bridge type, year built, National Register eligibility status, and location. Each bridge profile also includes a narrative description, historical background, and summary of the bridge's significance. These bridges were extant as of 2016.

Figure 90. Location map of extant historic vehicular bridges crossing the Red River.

FORMER US 70/183 BRIDGE

BRIDGE TYPE: Continuous steel I-beam

YEAR BUILT: 1939

**NATIONAL REGISTER OF
HISTORIC PLACES STATUS:** Unknown

LOCATION: Former US 70/183 over the Red River, between Davidson, Oklahoma, and Oklaunion, Texas. Tillman County (Oklahoma) and Wilbarger County (Texas)

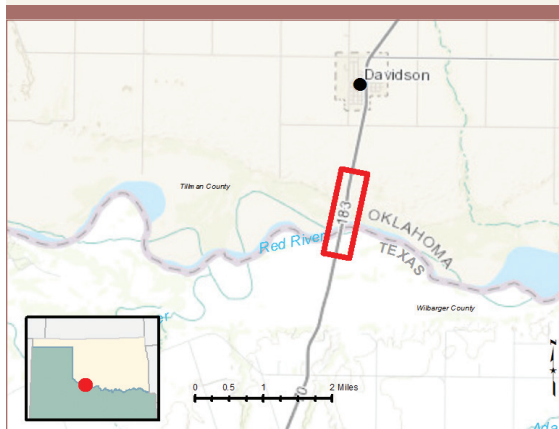


Figure 91. Location map of former US 70/183 Bridge over the Red River.



Figure 92. View of former US 70/183 Bridge over the Red River in 2015.

DESCRIPTION

The former US 70/183 Bridge was constructed in 1939 through a joint effort by the OHC and the THD. The superstructure consists of a 28-span, continuous, steel I-beam bridge. Each of the spans is 195 feet long and consists of three longitudinal steel I-beams with stiffeners attached with rivets. The bridge has a concrete deck and a 24-foot-wide roadway.³⁰⁰

Its railing consists of a single concrete rail with post design, concrete brackets along the outer edge of the railing beneath the deck, and an integrated concrete curb. The substructure consists of concrete abutments and piers. A prestressed concrete girder bridge located immediately east of the 1939 bridge currently carries US 70/183. The 1939 bridge remains in place as a monument but is not open to vehicular traffic.

HISTORICAL BACKGROUND

Permanent settlement along this stretch of the Red River began in the mid-1800s. Historically, agriculture played a dominant role in the local economy with crops like cotton, corn, wheat, and oats. Wilbarger County, Texas, was organized in 1881 and Tillman County, Oklahoma, was established in 1907. In 1901 the Blackwell, Enid and Southwestern Railway constructed a bridge over the Red River about one mile west of current US 70/183.³⁰¹ A private toll bridge operated at the current bridge site in 1925 and was jointly purchased by the states of Oklahoma and Texas and converted to a free bridge. The treated timber pile trestle had 187 spans and each span was 29 feet long with a roadway width of 18 feet. The bridge facilitated the movement of agricultural goods from farms on either side of the Red River.³⁰² Floods caused a partial collapse of the timber bridge in 1935. Destroyed portions of the bridge were reconstructed and were again repaired in 1937.

In 1939 the timber bridge was replaced with the continuous steel beam structure now present adjacent to US 70/183. The steel beam bridge remained in use with no alterations until the mid-1990s, when a prestressed concrete beam bridge was constructed just east of the old structure.³⁰³ The 1939 bridge was left in place as a monument with pedestrian access. Barriers were placed at both bridge ends to block vehicular access to the structure.



Figure 93. Former 1925 timber trestle bridge (now replaced), undated photo. (Courtesy of the Texas Department of Transportation.)

SIGNIFICANCE

The former US 70/183 Bridge represents a large and significant engineering project jointly completed by the OHC and THD that displays great technical achievement in its overall length across the expansive Red River channel compared to other bridges of its type and period of construction. The bridge also facilitated regional economic and agricultural development in the region as it provided a free, all-weather connection between Tillman County, Oklahoma, and Wilbarger County, Texas.

SH 79 BRIDGE

BRIDGE TYPE: Steel Camelback pony truss

YEAR BUILT: 1939

**NATIONAL REGISTER OF
HISTORIC PLACES STATUS:** Listed

LOCATION: SH 79 over the Red River,
between Waurika, Oklahoma and Byers,
Texas. Jefferson County (Oklahoma) and
Clay County (Texas)

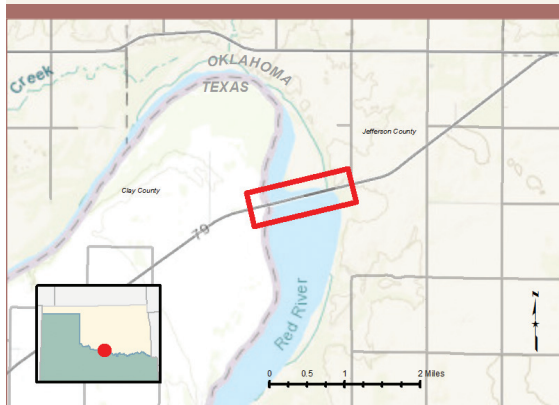


Figure 94. Location map of SH 79 Bridge over the Red River.



Figure 95. View of SH 79 Bridge over the Red River in 2015.

DESCRIPTION

The SH 79 Bridge is a 21-span, steel, Camelback pony truss with one steel I-beam approach span at each end. The bridge was built in 1939 and spans between Jefferson County, Oklahoma, and Clay County, Texas. Each individual truss span is 100 feet long and the west approach span is 61 feet long while the east approach span is 52 feet long. The roadway is 24 feet wide with 1-foot, 6-inch-wide sidewalks on both sides.³⁰⁴

The Camelback truss consists of steel members in triangular configurations with vertical members in compression and diagonals in tension and a five-sloped polygonal top chord. Truss members are connected with rivets. This Camelback pony truss was designed using OHC 1.5E-100 pony truss standard plan and the approach spans follow OHC IB-6 steel beam standard plan. In addition to the characteristic trusses above the deck, the bridge also has a system of steel floor beams, stringers, and lateral bracing below the deck.³⁰⁵

Railings consist of a pair of horizontal I-section members mounted on I-section vertical posts. The railings are described in plans as “hand rails” but function as rub rails to protect the truss from vehicular impact. Each end post has three ornamental inscribed vertical lines on the interior and exterior sides and each interior post has a single ornamental inscribed vertical line on either side as well. Modern metal beam guard extends beyond the approach spans. The bridge has a concrete deck with bituminous overlay. The substructure consists of reinforced-concrete abutments and 25 identical concrete piers or bents.³⁰⁶

Each approach span is constructed of seven I-beam stringers. A series of riveted steel diaphragms extends between the stringers. Approach span railings are comprised of a single rectangular concrete rail carried on rectangular concrete posts.³⁰⁷

HISTORICAL BACKGROUND

Permanent settlement in the area began circa 1880 with the construction of major rail lines that connected farms and ranches with national markets. Some of the earliest railroads in the area included the Fort Worth and Denver City Railway

through Clay County in 1882, the Chicago, Rock Island and Pacific Railway constructed in 1892, and a short line of the Wichita Falls and Oklahoma Railway from Wichita Falls northeast to Byers in northern Clay County in 1904, which followed the eventual alignment of SH 79.³⁰⁸ Local economies in both Jefferson and Clay Counties relied on agriculture, primarily corn and cotton cultivation, as well as cattle ranching. The discovery of oil in the first decades of the twentieth century also led to industrial growth in petroleum-related manufacturing and service industries in northwest Texas and southwest and central Oklahoma.³⁰⁹

Sustained expansion of petroleum and agricultural activities led to a need for improved transportation facilities to handle increased commercial and industrial traffic. Automobile and truck traffic greatly expanded in the early 1900s creating a need for improved roads and bridges.³¹⁰ Early vehicular bridges built between approximately 1914 and 1917 across the Red River were privately owned and tolled.³¹¹ The Byers Bridge, also known as the 98th Meridian Bridge, was located about 6 miles northwest of the present SH 79 Bridge; the Charlie Bridge was located a few miles further west and the Ryan Bridge was located several miles southeast of the SH 79 Bridge; the Burk Burnett-Randlett Bridge was situated about 25 miles west of present-day SH 79; and the Terral-Ringgold Suspension Toll Bridge on the Meridian Highway (later US 81) was located about 20 miles southeast of the present-day SH 79 Bridge. The design of the Red River toll bridges, with their light suspension or wooden trestle spans, were not well-suited for heavier traffic and were subject to damage during flood events.³¹²



Figure 96. SH 79 Bridge over the Red River, undated photo. (Courtesy of Texas Department of Transportation.)

By the late 1920s public pressure was building in both Oklahoma and Texas to have free interstate bridges, through the purchase of older toll bridges or construction of new structures. Legislation passed in the late 1920s in both Texas and Oklahoma authorized coordination and payment arrangements between the states to provide free interstate bridges. New free bridges were soon constructed between Randlett, Oklahoma, and Burkburnett, Texas, and between Terral, Oklahoma, and Ringgold, Texas.³¹³ In the early 1930s the OHC and THD began planning for a new Red River bridge near the Wichita Falls and Oklahoma Railway Bridge. The new crossing, oriented on a northeast-southwest alignment, was meant to provide a more direct connection between Waurika and Wichita Falls and the major highways that passed through both cities.³¹⁴

By early 1934 OHC and THD engineers were in consultation regarding the bridge's eventual location. OHC staff completed preliminary engineering studies in coordination with the THD; however, the OHC lacked sufficient state-match funding to immediately construct the bridge and the project was shelved for over three years. Preliminary engineering and planning resumed in early 1938, with the OHC, THD, and BPR engineers jointly selecting a bridge location about one mile north of the railroad bridge. The plans also provided for a 26-span steel beam relief bridge, to be located just southwest of the main bridge on the Texas side of the river. The OHC was responsible for preparation of bridge plans, specifications, and estimates, with the THD providing review and approval. Each state was responsible for half the cost of construction. OHC engineers began drafting plans by June 1938.³¹⁵

The construction contract was awarded to Brooks

and Dahlgren, Inc. of Oklahoma City, which had submitted the low bid of \$345,188.50. The bridge's truss spans were fabricated by Virginia Bridge & Iron Company of Roanoke, Virginia. Construction began on January 2, 1939.³¹⁶

Work on the SH 79 Bridge and the nearby relief bridge was completed on September 11, 1939, and the bridge was formally brought into service in February 1940. The project's cost, including both bridges, was \$356,029.75.³¹⁷

Since its completion in 1939 few alterations have been made to the bridge. Erosion control and bank protection projects were undertaken in the 1950s and again in the early 1980s to prevent the Red River from washing out the banks and compromising the structural integrity of the bridge. General cleaning and repainting of the bridge took place in 1962-1964 and the early 1990s. It was listed in the National Register of Historic Places (NRHP) in 1996. This bridge was scheduled for replacement as of 2017.³¹⁸

SIGNIFICANCE

The SH 79 Bridge represents a large and significant engineering project jointly completed by the OHC and THD that displays great technical achievement in its overall length across the expansive Red River channel compared to other bridges of its type and period of construction. While the Camelback pony truss was a relatively common bridge type in Oklahoma during the 1920s and 1930s, it is considered a rare bridge type in Texas. The bridge also facilitated major regional economic development in southwest and south-central Oklahoma and in northwest Texas, as it provided a free, all-weather connection between major oil-producing and agricultural areas in central Oklahoma and the Wichita Falls area in Texas.

I-35 BRIDGES

BRIDGE TYPE: Steel plate girders (northbound and southbound I-35 Bridges)

YEAR BUILT: 1957 (widened 1984) – Northbound I-35; 1965 (widened 1984) – Southbound I-35

NATIONAL REGISTER OF HISTORIC PLACES STATUS: Not eligible

LOCATION: I-35 over the Red River, between Thackerville, Oklahoma, and Gainesville, Texas. Love County (Oklahoma) and Cooke County (Texas)

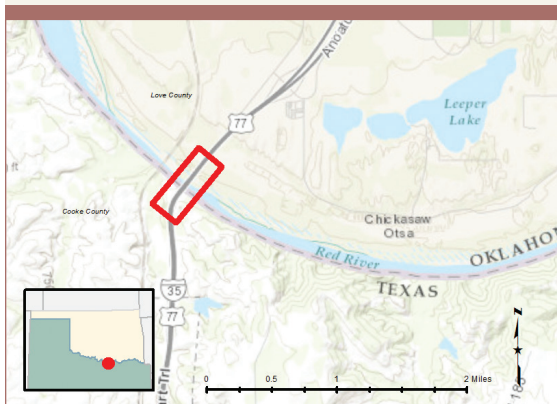


Figure 97. Location map of I-35 Bridges over the Red River.



Figure 98. View of Northbound I-35 Bridge over the Red River in 2015.

DESCRIPTION

The Northbound I-35 Bridge is a 12-span, steel, plate girder structure with a total length of approximately 1,273 feet. The original highway bridge was built in 1957 to carry traffic across the Red River. In 1984 the structure was widened.³¹⁹ The widened structure consists of five longitudinal steel plate girders with stiffeners that rest on bearings. Steel bracing between the girders stabi-

lizes the structure. The bridge has a corrugated metal deck with concrete overlay and a concrete barrier railing with attached metal guardrail at each end. The substructure consists of concrete abutments and solid concrete piers with an integrated concrete column added when the bridge was reconstructed and widened.



Figure 99. View of Southbound I-35 Bridge over the Red River in 2015.

The Southbound I-35 Bridge is also a 12-span, steel, plate girder structure with a total length of approximately 1,275 feet. The earliest permanent bridge at this location was a toll bridge built in 1919. In 1931 Oklahoma and Texas constructed a free truss bridge to replace the toll bridge.³²⁰ With the construction of a parallel structure in 1957, the 1931 bridge continued to serve southbound I-35 traffic until 1965, when it was replaced by the current bridge. In 1984 the Southbound I-35 Bridge was widened.³²¹ The current bridge features six longitudinal steel plate girders with stiffeners that rest on bearings. The girders are stabilized with steel bracing. The deck and railing are identical to the Northbound I-35 Bridge. The substructure consists of concrete abutments and solid concrete piers; the 1984 widening of the structure is evidenced by an integrated concrete column on the outside of each pier. The 1931 piers and south abutment are reused on the current bridge.

HISTORICAL BACKGROUND

The Shawnee Trail was the earliest of the main cattle trails that crossed the Red River and generally followed the alignment of present-day I-35. Euro-American settlement along this segment of the Red River began in the mid-1800s. Cooke County, Texas, was established in 1848 and its present boundaries were created in 1857. Love County, Oklahoma, was established some years later in 1907. Early crossings of the Red River in the vicinity of the I-35 bridges were ferries. Brown's Ferry crossed the Red River to the west of the I-35 bridges. Other nearby ferries included the Thacker and Watts Ferries, located further upstream to the north, and Tuck's Ferry, located downstream approximately 8 miles southeast of Marietta, Oklahoma. Tuck's Ferry was operated by John Martin Tuck between 1888 and 1932.³²²

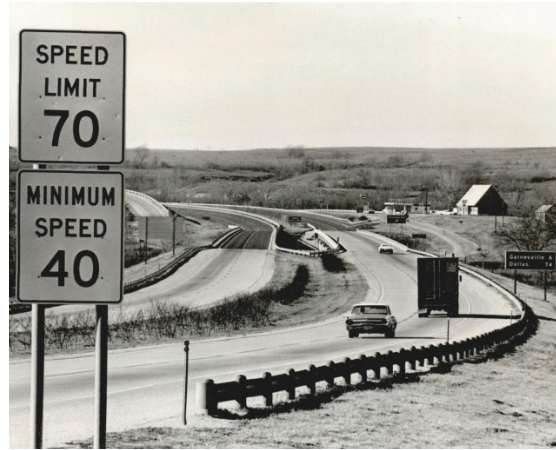


Figure 100. Looking south toward the I-35 Bridges in 1971. (Courtesy of the Oklahoma Historical Society.)

In 1918 a 1,087-foot-long toll bridge was constructed to cross the Red River at this location. The bridge consisted of five steel truss main spans, a steel beam approach span on its south end, and a timber trestle approach span on its north end.³²³ During the named auto trail period, the bridge carried the Kansas Oklahoma & Texas and the Denver-Canadian-Dallas routes, as well as local traffic. In 1926 US Highway (US) 77 was designated, crossing the Red River at this location.³²⁴ By 1930 the OHC determined that the toll bridge was too light and narrow for modern traffic and had plans to replace the bridge. A free bridge across the Red River at this location opened in 1931. The bridge was completed in April 1931 as part of Federal Aid Project No. 588. It had a 22-foot roadway and consisted of two 36-foot, steel, I-beam approach spans and seven 210-foot, steel, through K-truss main spans.³²⁵

In 1957 a new northbound bridge was constructed just west of the 1931 truss bridge. As originally constructed, the new bridge consisted of three 424-foot, continuous plate girder spans on steel piling with a 28-foot roadway. The older truss bridge was converted to one-way traffic, serving the southbound lanes of I-35.³²⁶

The 1931 truss bridge was replaced in 1965 with a continuous steel plate girder bridge that originally consisted of three spans of approximately 424 feet each and a 33-foot-wide roadway. The 1931 piers and south abutment were reused as substructure elements for this bridge. In 1984 the northbound bridge was widened and its deck was fully replaced. The southbound bridge was also widened at that time. The widening of these structures is evident by the additional column added to each of the piers.³²⁷

SIGNIFICANCE

The Northbound and Southbound I-35 Bridges represent the post-World War II era of bridge construction along the Red River. At the time of their construction, the bridges enabled continued travel between Oklahoma and Texas and served as an efficient and important solution for crossing the Red River and meeting modern traffic needs.

US 377 BRIDGE

BRIDGE TYPE: Steel girder

YEAR BUILT: 1960

**NATIONAL REGISTER OF
HISTORIC PLACES STATUS:** Not eligible

LOCATION: US 377 over the Red River,
between Willis, Oklahoma, and Gordon,
Texas. Marshall County (Oklahoma) and
Grayson County (Texas)

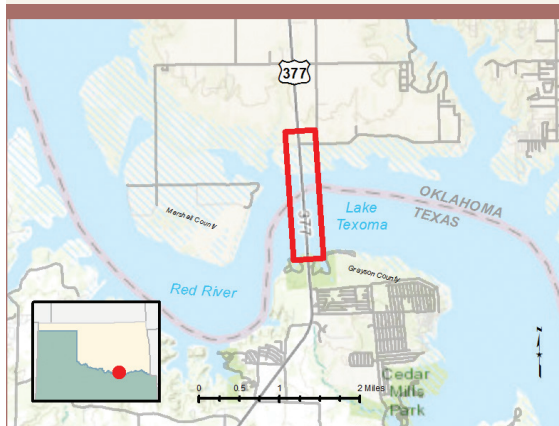


Figure 101. Location map of US 377 Bridge over the Red River.



Figure 102. View of US 377 Bridge over the Red River in 2015.

DESCRIPTION

The US Highway (US) 377 Bridge, known as the Willis Bridge, is a 30-span steel girder structure with a total length of 5,426 feet. This bridge was completed in 1960 to carry vehicular traffic over the Red River (Lake Texoma) and is comprised of 26 steel plate girder spans that range in length from 130 to 200 feet long and four 90-foot, continuous, steel I-beam approach spans.³²⁸ Each span of the superstructure features four longitudinal steel girders with welded connector plates and

steel diaphragms. The plate girder spans are cantilevered and most are variable depth. Although the horizontal detail along the outside of the girders and above the piers appears to be decorative to the casual observer, these horizontal details are in fact longitudinal stiffeners used to strengthen the thin plate girders across the span. The bridge has an exterior, three-rail, tubular steel railing and an interior concrete barrier to protect pedestrians on the bridge. The two-lane bridge is approximately 28 feet wide with a concrete deck and concrete

overlay. The substructure consists of concrete abutments and wing walls and concrete piers placed at regular intervals across the river. This structure crosses Lake Texoma between Gordonville, Texas, and Madill, Oklahoma. Topography surrounding the bridge is relatively flat.

HISTORICAL BACKGROUND

Preston Bend was an early settlement along the Red River and gradually emerged as an important shipping and travel stop along the river in the 1850s. It was also the northern terminus for Preston Road, an early Texas trail that extended north from Austin to the Red River. The earliest crossings of the Red River in the vicinity of the US 377 Bridge included cattle drives through the crossing at Preston Bend in the 1860s. The Chisholm and Shawnee Trails also passed through the area. In 1872 the Houston and Texas Central Railroad reached the county with a station in Sherman and the Houston and Texas Central Railroad established a stop at Denison.³²⁹ In what became Marshall County, the St. Louis, Oklahoma, and Southern Railway had a north-south line by 1901 and the Arkansas and Choctaw Railway, which eventually became part of the St. Louis and San Francisco Railroad in 1907,³³⁰ had an east-west line by 1903. Marshall County was established in 1907. Both sides of the Red River remained agricultural throughout the late nineteenth and early twentieth centuries, and railroad facilitated the distribution of products within the region.

Local trader and entrepreneur Holland Coffee operated a ferry near present-day Preston Bend by the 1840s.³³¹ A steel truss toll bridge, operated by the Preston Bridge Company in Woodville, Oklahoma, was built over the Red River at Preston Bend in 1920. The bridge was purchased by the States of Texas and Oklahoma in 1930 and converted to use as a free bridge.³³² The bridge

was removed in the mid-1940s, with the impoundment of Lake Texoma and inundation of the Preston Bend area. The Preston-Woodville Bridge was located about 12 miles east of the current US 377 Bridge.³³³

By 1930 the Willis Ferry crossed the Red River near the present-day US 377 bridge. Other nearby ferries established by this time included the Stillhouse Ferry to the west and the Henderson Ferry to the east.³³⁴ The U.S. Army Corps of Engineers began developing Lake Texoma in 1938 to control flooding along the Red River and also generate electrical power and provide irrigation to surrounding agricultural areas. Construction of the Denison Dam and the reservoir, with a 1,250-mile shoreline, provided jobs for numerous people and also introduced new recreational opportunities for area residents. By 1940 several bridges were in place across the Red River downstream from the Denison Dam. The federal government planned to construct a bridge at Willis to replace the ferry after completion of Denison Dam. However, plans were stalled in 1943 when the war effort halted the use of steel for the bridge. Lake Texoma was completed in 1944 and the Willis Ferry made its last crossing in 1947.³³⁵

This location on the Red River remained isolated for the next 16 years, with no crossing between the two states across Lake Texoma and no all-weather roads on either side of the river. Plans for the Willis Bridge eventually resumed and construction began in 1958. The new bridge was dedicated on October 30, 1960. Its construction included 12,364 cubic yards of concrete and 10.5 million pounds of structural steel. The bridge design also had to account for fluctuations in the reservoir and it was built 14 feet above the spillway elevation. At a cost of \$4 million and a

length of nearly 5,500 feet across Lake Texoma, the Willis Bridge was an engineering achievement and served as an important crossing to reestablish travel between Oklahoma and Texas at this location.³³⁶



Figure 103. The US 377 Bridge under construction in 1960. (Courtesy of the Oklahoma Historical Society.)

SIGNIFICANCE

The US 377 Bridge was the first permanent crossing at this location and represents the post-World War II era of bridge construction along the Red River. At the time of its construction the bridge reestablished travel between Oklahoma and Texas and served as an efficient and important solution for crossing Lake Texoma. Its design and construction was an important engineering achievement in that its design accounted for fluctuations in reservoir levels and had to span a significant distance—5,425 feet—across Lake Texoma.

CARPENTER'S BLUFF BRIDGE

(RED RIVER MIXED TRUSS BRIDGE)

BRIDGE TYPE: Steel through truss

YEAR BUILT: 1910

**NATIONAL REGISTER OF
HISTORIC PLACES STATUS:** Eligible

LOCATION: Carpenter's Bluff Road over
the Red River, 1.5 Miles South of Hendrix,
Oklahoma. Bryan County (Oklahoma) and
Grayson County (Texas)

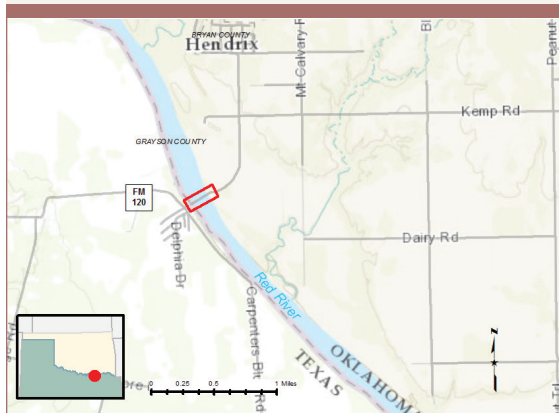


Figure 104. Location map of the Carpenter's Bluff Bridge over the Red River.



Figure 105. View of Carpenters Bluff Bridge and its truss spans in 2012.



Figure 106. View of the Carpenter's Bluff Bridge over the Red River in 2012.

DESCRIPTION

The Carpenter's Bluff Bridge is a seven-span steel structure that consists of two steel plate girder approach spans and five Pratt through truss main spans. The total length of the structure is approximately 1,115 feet and the longest truss span is 190 feet.³³⁷ The superstructure features riveted connections, overhead bracing, and built-up truss members with v-lacing. The bridge also has a three-rail steel pipe railing and a steel deck with a concrete deck overlay. The one-lane bridge is approximately 12 feet wide. On its east side the structure features a cantilevered "wagon shelf,"

basically a suspended extension of the main bridge, that consists of a 12-foot-wide steel-frame projection with timber plank deck. The wagon shelf is supported by cantilevered Warren trusses underneath the deck. The substructure consists of concrete abutments and wing walls as well as eight massive solid concrete piers placed at intervals across the river.

This structure was originally designed and engineered as a railroad bridge. The railroad tracks were removed and a concrete deck was added to the bridge as part of its conversion to a one-lane

vehicular crossing in 1965. Otherwise, the bridge displays no other significant alterations since its construction in 1910.³³⁸ The wagon shelf on the east side of the bridge is deteriorated but remains intact; the wagon shelf is currently barricaded and closed to pedestrian, vehicular, and bicycle traffic for safety reasons.

The area surrounding the bridge is undeveloped with native vegetation and steep drop-offs to the Red River.



Figure 107. View of "wagon shelf" that provided an extra lane on the bridge in 2015.

HISTORICAL BACKGROUND

This location has been the site of a crossing over the Red River since the mid-nineteenth century. A ferry crossing was established at this location c.1850 by Thomas Carpenter. Carpenter also operated a blacksmith shop and maintenance station near the crossing. The ferry remained the only means for crossing the river for nearly 60 years and small communities developed within its vicinity on both sides of the Red River, including Bloomfield Academy, Carpenters Bluff, Kemp, and Hendrix.³³⁹ By the early 1900s officials with the Missouri, Oklahoma, & Gulf Railroad Company



Figure 108. View of Carpenter's Bluff Bridge over the Red River in 2012.

determined that a rail line across the state border and south through Grayson County, Texas, connecting to existing rail lines including the Texas & Pacific and the Houston & Texas Central Railroads, would lead to increased freight rates for shipments from coal mines near McAlester, Oklahoma. The new rail line was under construction by 1910 and entered Texas near the small town of Carpenter's Bluff.³⁴⁰ Also known as the Red River Mixed Truss Bridge, the Carpenters Bluff Bridge was constructed that same year at an estimated cost of \$80,000. Originally, its masonry piers used rock quarried nearby in Texas and had an elliptical design to withstand substantial flooding that had plagued the area in preceding years (the masonry piers have since been covered or replaced with concrete). The new bridge also featured an extra lane attached to the outside of the bridge, known as a "wagon shelf," to serve pedestrians, those on horseback, and horse-drawn carriages. Secondary sources and historic mapping indicate that by 1940 the bridge served as a toll bridge. A toll was collected for use of the "wagon shelf"; a roundtrip toll for a wagon with less than four animals was 25 cents and pedestrians were charged 5 cents. Due to its double lane configuration, the bridge could simultaneously serve both commercial and domestic traffic.³⁴¹

The Kansas, Oklahoma, & Gulf Railway Company assumed ownership of the railroad and bridge in 1921 and maintained ownership until 1965, at which time the company stopped operating in Texas due to declining levels of usage. After a brief period of ownership by the Texas & Pacific Railroad, the bridge was deeded to Grayson and Bryan Counties. Under direction of county commissioners, the rails were removed and the bridge was converted for vehicular traffic and opened for free public use in 1965.³⁴² At the time of publica-



Figure 109. Carpenter's Bluff Bridge, 1927. (Courtesy of Texas Department of Transportation.)

tion, construction of a new bridge was planned for Carpenter's Bluff, with the historic truss bridge to be bypassed and left in place.

SIGNIFICANCE

The Carpenter's Bluff Bridge was the first bridge crossing at this location and represents an important transition period from ferry crossings to bridges along the Red River. The bridge served as an important and more efficient solution to crossing the Red River at this location and simultaneously accommodated multiple modes of transportation.

SH 78 BRIDGE

BRIDGE TYPE: Steel truss bridge with through K-truss and Camelback pony truss spans

YEAR BUILT: 1938

NATIONAL REGISTER OF HISTORIC PLACES STATUS: Listed

LOCATION: SH 78 over the Red River, north of Bonham, Texas. Bryan County (Oklahoma) and Fannin County (Texas)

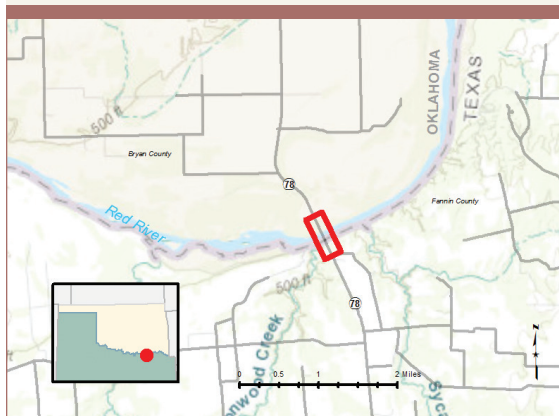


Figure 110. Location map of SH 78 Bridge over the Red River.



Figure 111. View of SH 78 Bridge over the Red River in 2015.

DESCRIPTION

The SH 78 at Red River Bridge (SH 78 Bridge) is a 12-span structure comprised of K-truss through truss main spans and Camelback pony truss approach spans. Completed in 1938, this bridge carries SH 78 over the Red River, between Bryan County, Oklahoma and Fannin County, Texas. The eight K-truss spans are each 210 feet long and each of the two Pratt pony truss approach spans on either end of the bridge is 100 feet long.³⁴³

The superstructure is comprised of eight identical K-truss through truss main spans and two Pratt pony truss approach spans on either end. Trusses consists of steel members in varying triangular configurations with vertical and diagonal mem-

bers that carry compressive and tensile forces to keep the bridge in place. K-truss spans are named for the characteristic “K” shape formed by the vertical and diagonal steel members in subdivided truss panels that enable the structure to transfer equal amounts of loading to all of its individual members. The K-truss spans have polygonal top chords and also feature overhead bracing and connections are riveted. The Camelback pony truss approach spans feature riveted connections and their truss configurations feature diagonal members in tension and vertical members in compression.³⁴⁴ The superstructure for each truss span also consists of steel floor beams and stringers with riveted connections as well as a concrete deck and a railing with a pair of horizontal steel I-section

members mounted on I-section vertical posts. The bridge substructure consists of reinforced-concrete abutments and concrete piers with round columns and pier caps.³⁴⁵ The structure crosses the Red River between Bonham, Texas and Achille, Oklahoma, and the surrounding landscape is undeveloped with thick foliage along the riverbank.³⁴⁶

HISTORICAL BACKGROUND

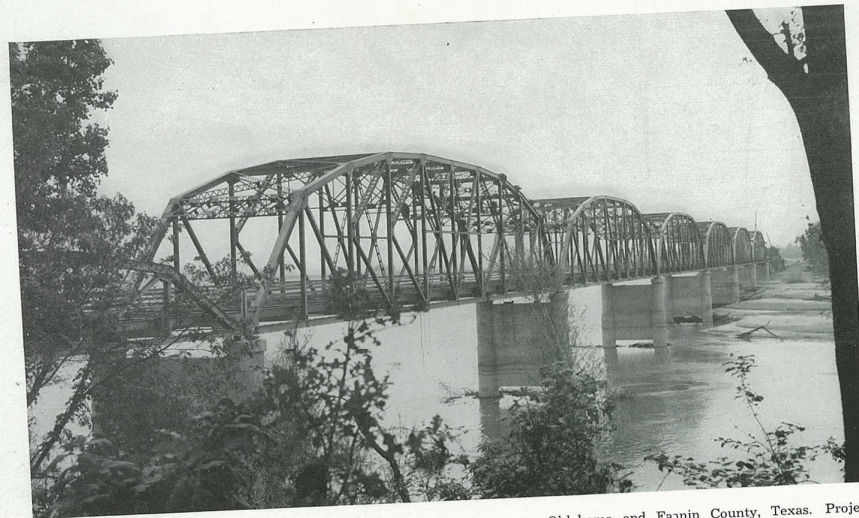
Exploration along the Red River in the vicinity of the SH 78 Bridge began in the 1600s and eventually led to permanent settlement and the establishment of transportation corridors throughout the region. The earliest known crossings of the Red River near or in the vicinity of the SH 78 Bridge stimulated population growth in pres-

ent-day Bryan and Fannin Counties. The Texas Road, a principal immigration route to Texas in the mid-nineteenth century that traversed the Red River at Rock Bluff crossing, was a natural ford located about 40 miles west of the SH 78 Bridge. Colbert Station, a ferry crossing located 30 miles upstream from the SH 78 Bridge in what is now Bryan County, was established in 1853 near the town of Colbert.³⁴⁷ Between 1858 and 1861 the Butterfield Overland Mail route ran through Choctaw Nation and present-day Bryan County in the late 1850s on its way to California, crossing the Red River near this juncture.³⁴⁸ Railroads were the preferred method for transporting people and goods by the 1870s and facilitated economic growth in the area through 1920. The

Missouri, Kansas and Texas ("Katy") line crossed the Red River at approximately the location of Colbert Station and was the first north-south railroad through Indian Territory and the first passenger train to cross the Red River into Texas. The Katy served as an important early link between the east-west rail corridors from St. Louis west through Kansas and the Texas & Pacific Railway in Dallas. Towns like Durant and Calera were founded along the line in what became Bryan County.³⁴⁹ The St. Louis and San Francisco ("Frisco") Railway, which also crossed the river near Colbert Station, was extended to cross the Red River near Colbert Station in 1901. These crossings, all located west of the SH 78 Bridge in Bryan County, provided long-haul railroads that stimulated the expansion of agriculture and industry in the region.³⁵⁰

Car and truck traffic between Bryan and Fannin Counties greatly expanded in the early 1900s and brought the need for improved roads and bridges. Early vehicular bridges across the Red River were privately owned and tolled since their construction and maintenance were beyond the means of local governments. Many early Red River toll bridges were light suspension or wooden trestle spans reflecting the desire to cut costs. The original crossing of the Red River at this location was a suspension toll bridge that opened in 1927. The 1,595-foot, \$80,000 Bonham-Durant Bridge, also known as the Sowell's Bluff Bridge, was constructed by the Austin Bridge Company and located at the site of the current SH 78 Bridge. The Sowell's Bluff Bridge collapsed during a storm in 1934 when heavy winds snapped its cables.³⁵¹

Figure 112. SH 78 Bridge over the Red River, photo from the OHC's 1938 *Biennial Report*. (Courtesy of Oklahoma Department of Transportation.)



Bonham Bridge over Red River on State Highway No. 299, Bryan County, Oklahoma and Fannin County, Texas. Project No. NRS 955.
(Photo by courtesy of U. S. Bureau of Public Roads)

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BIENNIAL REPORT

The Sowell's Bluff Bridge was jointly replaced by the Texas and Oklahoma highway departments beginning in 1938 with the current free bridge. The OHC was responsible for replacing the bridge and the THD was responsible for review and approval. The OHC bridge engineers chose the standard through K-truss design in addition to camelback pony approach spans. The K-truss design with diagonal truss members was chosen because engineers believed it was less prone to buckling to ensure the bridge lasted longer than the previous suspension bridge. For interstate projects such as this, Oklahoma and Texas typically split construction and maintenance expenditures. In this case their costs were almost completely reimbursed through the National Industrial Recovery Act (NIRA) of 1933, which allocated Depression-era federal work-relief monies, including a significant amount for highway construction projects.³⁵²

Bridge engineers at the OHC chose standard plans for the eight, 210-foot, K-truss through spans and four, 100-foot, camelback pony truss approach spans—two on each of the north and south sides—that would comprise the SH 78 Bridge. The K-truss was popular in Oklahoma for its efficiency and strength. Meanwhile, the K-truss was not used as frequently in Texas. Most Texas examples, in fact, were built for interstate crossings with Oklahoma. The engineers calculated two different estimates depending on the type of piers (caisson or open) that would be used. They submitted plans to the Bureau of Public Roads (BPR), which approved them with full funding in October 1936.³⁵³

The construction contract was awarded to the Kansas City Bridge Co. of Oklahoma City, which had submitted the low bid of \$335,510 for the open pier construction. The bridge's truss spans were fabricated by the Illinois Steel Bridge Company of Jacksonville, Illinois.³⁵⁴

The 1996 NRHP Nomination for the bridge notes that, because of NIRA regulations, "all carpentry work and painting had to be performed without the use of power tools, such as mechanical saws and electric drills." This stipulation was a common requirement for Depression-era federal relief work and meant that projects proceeded at a slower-than-normal rate. Moreover, Red River flooding and high water plagued the project and particularly the construction of the north abutment in 1937 and 1938. The river, which had begun to change its course, was threatening the viability of the bridge. Engineers determined that a series of permeable steel jetties would be installed to protect the river bank around the bridge. A contract was awarded to the Kellner Jetties Company of Topeka, Kansas, in March 1938, and by April 18 main construction on the bridge had halted while the jetties, which ultimately totaled 3,500 feet and cost \$61,103, were built. NIRA funding covered this construction as part of the overall bridge project. Workers finished the jetties by the end of July, and the bridge was completed on October 20, 1938. The total cost for the bridge, not including the jetties, was \$360,242.³⁵⁵ The SH 78 Bridge was dedicated on March 16, 1939.

The north embankment and Oklahoma approach roadway to the SH 78 Bridge were washed away on June 14, 1941. The initial gap between the roadway and the north end of the bridge was 600 feet, but it continued to grow as large slabs of earth continued to slough off of the river bank. By

July the gap had grown to 1,500 feet and a ferry was installed to facilitate river crossings. Repair work was delayed until the end of World War II because the highway was not a military road and steel shortages limited available materials.³⁵⁶ In May 1945 the OHC, THD, and BPR jointly awarded the rehabilitation of the Oklahoma approach roadway to the Amis Construction Company of Oklahoma City. Bank protection, grading, and gravel was installed and funded as Federal Aid Project (FAP) 1024-A-(1) between July 1945 and June 1946. Since 1945 few alterations have been made to the SH 78 Bridge. General cleaning and repainting took place in 1951-1952 and 1984.³⁵⁷ The bridge was listed in the NRHP in 1996. This bridge was scheduled for replacement as of 2017.

SIGNIFICANCE

The SH 78 Bridge was completed in 1938 with eight through K-truss main spans, each with a length of 210 feet, and four Camelback pony truss approach spans, each with a length of 100 feet, and an overall structure length of 2,108 feet. The structure, length, and overall magnitude of the SH 78 Bridge represent a large project completed under the OHC, indicating a significant commitment of funding and comparatively great technical achievement compared to other bridges of its type and period of construction along the Red River. Although K-trusses were relatively common in Oklahoma from the 1930s to the early 1950s, they are considered a rare bridge type in Texas. The SH 78 Bridge is the only remaining example of a highway bridge with K-truss main spans in Texas. The bridge also represents the impact of New Deal federal relief work on public infrastructure in Depression-era Oklahoma. It was built using National Industrial Recovery Act (NIRA) funding, which supported road and bridge construction across Oklahoma and Texas.

US 271 BRIDGES

BRIDGE TYPE: Steel girder (Southbound US 271); Prestressed concrete girder (Northbound US 271)

YEAR BUILT: 1955 (Southbound US 271); 1970 (Northbound US 271)

NATIONAL REGISTER OF HISTORIC PLACES STATUS: Not eligible

LOCATION: US 271 over the Red River, just north of Arthur City, Texas. Choctaw County (Oklahoma) and Lamar County (Texas)

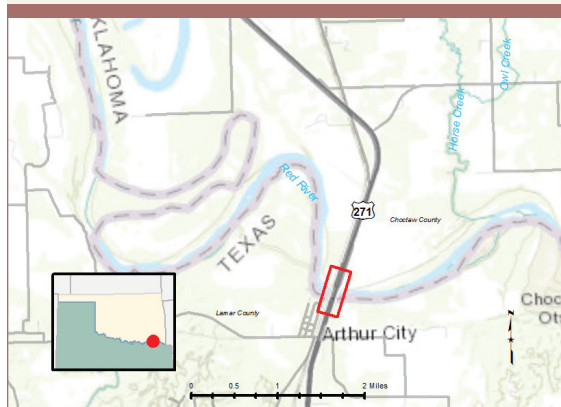


Figure 113. Location map of US 271 Bridges over the Red River.



Figure 114. View of Southbound US 271 Bridge over the Red River in 2015.

DESCRIPTION

The Southbound US Highway (US) 271 Bridge is a nine-span, steel girder structure with a total length of 914 feet. This bridge was completed in 1955 to carry southbound traffic on US 271 over the Red River and is comprised of nine steel I-beam spans, each about 100 feet in length.³⁵⁸ Each span of the superstructure features five longitudinal, rolled steel girders with riveted steel diaphragms. The roadway is approximately 28 feet wide with a concrete deck and concrete sidewalks. The bridge's railings are composed of steel posts, steel channel bottom rail, and steel tubular pipe top rail.

The Northbound US 271 Bridge is a nine-span prestressed concrete girder structure with a total length of 904 feet. This bridge was completed in 1970 to replace a previous bridge at the site and carry northbound traffic on US 271 over the Red River.³⁵⁹ The bridge is comprised of nine prestressed concrete beam spans, each about 100 feet in length. Each span of the superstructure features five longitudinal, prestressed concrete girders with concrete diaphragms. The roadway is approximately 33 feet wide and has a concrete parapet with single steel pipe rail on top. The bridge has a concrete deck and bituminous overlay.



Figure 115. View of Northbound US 271 Bridge over the Red River in 2015.

The substructures for both bridges consist of concrete abutments and solid concrete piers placed at regular intervals across the river. The bridges carry US 271 over the Red River, between Hugo, Oklahoma and Paris, Texas. Topography surrounding the bridges is undeveloped with a relatively steep slope down to the riverbank.

HISTORICAL BACKGROUND

Boats served as an early means of transportation along the Red River, but it was railroads that helped expand agricultural and ranching activities as well as the local lumber industry. Early railroads built in Lamar County included the Texas and Pacific Railroad in 1875; the Gulf, Colorado, and Santa Fe Railway in 1887; and the Paris and Great Northern in 1888 that connected with the St. Louis and San Francisco Railroad (Frisco Railroad) at the Red River.³⁶⁰ The Frisco Railroad built a line through Choctaw County in 1902, and the Kiamichi Railroad Company built east-west and north-south lines through the county as well.



Figure 116. A c.1926 photograph showing the steel through truss toll bridge (now replaced) and Frisco Railroad Bridge. (Courtesy of Texas Department of Transportation.)



Figure 117. 1926 toll bridge (now replaced), undated photo. (Courtesy of the Texas Department of Transportation.)

Early crossings of the Red River in the vicinity of present-day US 271 included a ferry just west of Arthur City at Franklin.³⁶¹ Around 1888 the Paris and Great Northern Railroad built a bridge across the Red River near the US 271 to connect its line stretching north from Paris, Texas, to the Frisco Railroad on the Oklahoma side. The small Paris and Great Northern Railroad merged with the Frisco Railroad on June 1, 1928, and continued to operate rail traffic across the bridge until at least 1961.³⁶² In 1920 the Paris-Hugo Bridge Company built a steel truss vehicular toll bridge adjacent to the Frisco railroad bridge. The bridge, designed by Waddell & Son of Kansas City, partially collapsed about a year later when its piers were undermined. The Oklahoma Highway Department and Lamar County, Texas, purchased the bridge in 1925. A reconstructed bridge, using parts of the old bridge as well as a new steel truss main span, was opened the following year and put into service on the Oklahoma and Texas state highway systems as a free bridge.³⁶³ That bridge was

maintained and re-decked several times over the course of 29 years. No other vehicular bridges or crossings between Lamar County and Choctaw County existed at that time but a 1940 highway map indicates that a toll ferry was located in the vicinity of this crossing, northwest of nearby Garrett's Bluff.³⁶⁴ The current southbound US 271 Bridge was completed in July 1955 and the previous truss bridge was converted for use by northbound traffic. The current Northbound US 271 bridge was completed in August 1970, replacing the 1920s-era truss bridge.³⁶⁵

SIGNIFICANCE

The US 271 bridges represent the post-World War II era of bridge construction along the Red River. They have served as an important and efficient crossing for vehicular traffic between Hugo, Oklahoma, and Paris, Texas, that facilitated the transfer of agricultural and industrial goods between Oklahoma and Texas at this location.

US 259 BRIDGE

BRIDGE TYPE: Continuous steel girder

YEAR BUILT: 1961

**NATIONAL REGISTER OF
HISTORIC PLACES STATUS:** Not eligible

LOCATION: US 259 over the Red River,
between Idabel, Oklahoma, and De Kalb,
Texas. McCurtain County (Oklahoma) and
Bowie County (Texas)

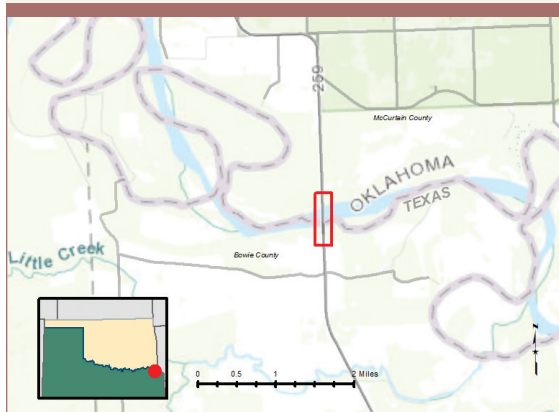


Figure 118. Location map of US 259 Bridge over the Red River.



Figure 119. View of US 259 Bridge over the Red River in 2015.

DESCRIPTION

The US Highway (US) 259 Bridge is a 20-span continuous steel girder structure with a total length of approximately 2,007 feet. This bridge was designed and constructed for vehicular traffic in 1961. Each span of the superstructure features five longitudinal steel girders with riveted connector plates and steel diaphragms.³⁶⁶ The bridge has a single-rail steel barrier railing and a concrete deck with concrete overlay and raised concrete curbs. The two-lane bridge is approximately 31 feet wide. The substructure consists of abutments and wing walls and solid concrete piers placed at regular intervals across the river. The bridge is located between Idabel, Oklahoma, and De Kalb, Texas, in an undeveloped and mountainous region with native vegetation and a relatively gentle grade that slopes down to the Red River.

HISTORICAL BACKGROUND

Early Euro-American settlement along the Red River was underway by the mid-1800s. Bowie County was established by the Republic of Texas in 1840. Texas's entry into the United States sparked further settlement on both sides of the river. Most settlers were from Arkansas and Texas and established subsistence farming on both sides of the river. Cotton and corn were two agricultural mainstays in the area, in addition to a flourishing timber industry. In 1902 a branch of the Frisco Railroad was established along the north side of the river in the area that became McCurtain County in 1907. Construction of the railroad resulted in the establishment of towns along the Oklahoma line, including Idabel and Haworth.³⁶⁷

Historic state highway maps indicate that by 1933 a free ferry operated across the Red River at this approximate location and continued until at least 1941. SH 11 extended north from De Kalb, Texas, to the Red River by 1933 and connected to a local, undesignated road on the Oklahoma side. Historic mapping indicates that another toll ferry was located approximately 20 miles to the east between Woodstock, Texas, and Foreman, Arkansas.³⁶⁸ Texas SH 26 was designated in 1939 and extended due north from De Kalb, Texas, toward the Red River along the former SH 11 corridor.³⁶⁹ However, the road stopped short of crossing the river. SH 26 was realigned to the west in 1961 and the present-day US 259 Bridge was constructed as part of that project. During construction, historic highway maps indicate that the Clear Lake Toll Ferry continued to operate at this location to carry traffic while the bridge was constructed. Presumably once the entire project was done the route was designated US 259 in 1962 following completion of the bridge. An analysis of historic maps indicates that the new alignment was intended to provide a more direct route between De Kalb and northeast Texas with Idabel in southeast Oklahoma.³⁷⁰ The present-day US 259 Bridge was an integral part of improving this route for a more direct and efficient connection.

In the late 1960s McCurtain County expanded economically due to the continued success of its forest industries. The US 259 Bridge served as an important crossing of the Red River and facilitated the movement of industrial and agricultural products between Oklahoma and Texas and the expansion of McCurtain County's forest industries in the post-World War II period.³⁷¹

SIGNIFICANCE

The US 259 Bridge was the first permanent crossing at this location and represents the post-World War II era of bridge construction along the Red River. The bridge served as an important and efficient solution for crossing the Red River at this location and provided a more direct route between De Kalb and Idabel and the surrounding communities. The structure also facilitated the economic expansion of McCurtain County's forest industries in the late 1960s, as well as the transfer of industrial and agricultural goods between Oklahoma and Texas.

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FIGURE	CREDIT	FIGURE	CREDIT
Cover	Looking across the Red River from Bryan County, Oklahoma, to Grayson County, Texas, with a view of the Denison-Durant vehicular and railroad bridges, August 28, 1951. [Photograph 2012.201.B0106.0792], Photograph, August 28, 1951, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc253009 . Photo cropped and colorized.	12	Photograph, 1932, Photo Library, Image No. Cla-Ida_01, Texas Department of Transportation.
1	Bob Albright, [Photograph 2012.201.B0259.0695], February 19, 1971, The Gateway to Oklahoma History, Oklahoma Historical Society, http://gateway.okhistory.org/ark:/67531/metadc352480/m1/1/sizes/m?q=red%20river%20bridge .	14-15	Spain, Ministry of Education, Culture, and Sport, General Archive of the Indies, R[i]o de San Andrés de Galve, ES.41091.AGI/27.17//MP-MEXICO, 90. España. Ministerio de Educación, Cultura, y Deporte. Archivo General de Indias. R[i]o de San Andrés de Galve. ES.41091.AGI/27.17//MP-MEXICO, 90.
3	Derived from publicly available Commission for Environmental Cooperation Ecoregion Level 3 data provided by the Environmental Protection Agency.	17	Joseph B. Thoburn, <i>Caddo Earth House Mound</i> , Photograph, January 1914, Oklahoma Historical Society Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc231592/ .
5	[Photograph 2012.201.B0152.0165], Photograph, August 25, 1944, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc319357/ .	19	Irwin & Mankins, <i>Wichita Grass Huts</i> , Photograph, Unknown, Oklahoma Historical Society Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc229627/ . Photo cropped.
6	[Photograph 2012.201.B0152.0155], Photograph, 1957, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc324267/ .	21	[Photograph 2012.201.B1292.1103], Photograph, June 30, 1966, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc643447/ . Photo cropped.
7	Morris E. Sparlin, [Photograph 2012.201.B0152.0154], Photograph, February 26, 1946, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc326104/ .	22	[Photograph 2012.201.B1092.0818], Photograph, 1972, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc539513/ . Photo cropped.
8	[Photograph 2012.201.B1092.0813], Photograph, 1936, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc552915/ .	23	John Arrowsmith and William Bollaert, "Map of Texas" (London: John Arrowsmith, 1841), Library of Congress, https://www.loc.gov/item/2002627151 . Map cropped and modified.
9	Map prepared by Mead & Hunt, Inc. using United States Geological Survey, "Denison Quadrangle," 1:125,000 ([Washington, D.C.:] United States Department of the Interior, 1901).	24	F.C. Baker and J. Eppinger, "Map of Texas 1851" (N.p.: General Land Office, 1851), https://www.tsl.texas.gov/cgi-bin/aris/maps/maplookup.php?mapnum=0942 .

FIGURE	CREDIT	FIGURE	CREDIT
26	<i>Chickasaw Nation's Bloomfield Academy</i> , Photograph, 1914, Oklahoma Historical Society Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc229135/ . Photo cropped and modified.	33	[<i>Photograph 2012.201.B1092.0822</i>], Photograph, 1953, Oklahoma Publishing Company Photography Collection, Oklahoma Historical Society - Gateway to Oklahoma History, http://gateway.okhistory.org/ark:/67531/metadc544000/ . Photo cropped.
27	Richard S. Hunt and Jesse F. Randel, "Karte von Texas 1839" (N.p.: Matthew Rieger, 1841), https://www.tsl.texas.gov/cgi-bin/aris/maps/maplookup.php?mapnum=3938 . Map cropped.	34	"Emigrants Crossing the Red River on Their Way to Old Greer Co.," 1887, 1976. 194.003, Museum of The Western Prairie. Photo cropped.
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FIGURE	CREDIT	FIGURE	CREDIT
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FIGURE	CREDIT	FIGURE	CREDIT
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FIGURE	CREDIT	FIGURE	CREDIT
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