TO URBAN EXPRESSWAYS

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## William Paul Corbett

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Norman $n$ duran Dean of the Graduate College

## PREFACE

During the decade of the 1960s, when Interstate Highway 80 was being built across the Allegheny Mountains near my hometown of Clarion, Pennsylvania, my father, Paul Corbett, and 1 began to follow the progress of the road. Many evenings and Sunday afternoons we drove to construction sites to examine the headway made clearing rights-of-way, grading and paving roadbeds, and erecting bridges. On one occasion we were probably in the first private vehicle to travel a section of the superhighway as Dad maneuvered our 1952 Ford around barricades to ride along a graded but unpaved segment of roadway. Also, during those years my parents regularly took our family on summer vacations. We always traveled to our destination by automobile, and in some cases we went to several places during the course of a trip. In so doing we rode on countless miles of state roads, city streets, and multilane superhighways.

As a result of these experiences, there developed for me a curiosity, even a fascination, with the location, construction, and maintenance of highways. Later, during the summer of 1970 , this preoccupation was enhanced when l served a brief period as a laborer with the Pennsylvania Department of Highways. As course work for the degree of Doctor of Philosophy in history at Oklahoma State University neared completion and it became necessary to select a dissertation topic, 1 realized the opportunity was at hand to satisfy my curiosity about the location, construction, and maintenance of highways. Because of my interest in Oklahoma history, 1 restricted the scope of the project to the state of Oklahoma.

The purpose of this dissertation is to provide a historical analysis and narrative of the development of a modern system of highways in Oklahoma. During a period of almost 300 years the major means of overland transportation evolved from. a network of Indian trails traversed by native Americans afoot or on horseback to a grid of modern roadways annually conveying millions of motorists to their intrastate and interstate destinations. Factors of national, regional, and local significance interacted to bring about this dynamic process of change and progress.

In preparing this study, 1 incurred many debts. While gathering resource material, 1 developed a deep respect and appreciation for knowledgeable and dedicated librarians and archivists. I received invaluable assistance from the staffs of the National Archives and Records Center, Washington, D.C., and the Federal Archives and Records Center, Fort Worth, Texas; from personnel at the Archives and Records Division, Oklahoma Department of Libraries, Oklahoma City, Oklahoma; from the staff of the Thomas Gilcrease Institute of American History and Art, Tulsa, Oklahoma; from Martha Blaine and Mary Lee Ervin of the Indian Archives Division, Oklahoma Historical Society, Oklahoma City, Oklahoma; from Mary Moran of the Newspaper Division, Oklahoma Historical Society; and from Jack Haley of the Western History Collections, University of Oklahoma, Norman, Oklahoma. A special thanks is due John B. Phillips and Vicki D. Phillips, documents librarians at the Edmon Low Library, Oklahoma State University, who assisted immeasurably by expertly securing vital research material. Also, officials of the Oklahoma Department of Transportation and the Oklahoma Turnpike Authority readily made available to me records held by their agencies.

Professional guidance and constructive criticism are elements essential to the completion of a study of this nature. To these purposes my graduate committee at Oklahoma State University gave their time and effort. I wish to express my appreciation to Dr. George F. Jewsbury, Dr. Richard C. Rohrs, Dr. James M. Smallwood, Sr., and Dr. Clifford A. L. Rich. In addition, Dr. Neil J. Hackett, Jr., readily agreed to take the place of Dr. Jewsbury when he departed on a sabbatical leave. Dr. LeRoy H. Fischer, chairman of my graduate committee, gave unselfishly of his expertise and exceptional talents throughout the entire preparation of the dissertation. He spent countless hours reading, editing, and enhancing the manucript. His personal example of hard work, scholarship, and professionalism provided a refreshing source of encouragement for which 1 am most grateful.

Colleagues and friends helped ease the sometimes burdensome task of this endeavor. Dr. Edwin E. Vineyard, president, Dr. Gerald E. Burson, dean of instruction, and Mr. Thomas L. Bryant, chairman of the Division of Social Sciences, Northern Oklahoma College, created an environment in which 1 could complete this study and furnished much special assistance. Dr. Herbert T. Hoover, a member of the History Department at the University of South Dakota, and Dr. Odie B. Faulk, a former member of the faculty at Oklahoma State University, carefully cultivated my interest in state and regional history. Dr. Bob L. Blackburn, director of publications, Oklahoma Historical Society, Mr. Steven K. Gragert, director of the Will Rogers Research Project, Oklahoma State University, Dr. Timothy A. Zwink, assistant professor of history, Northwestern Oklahoma State University, and their wives perpetrated necessary and timely distractions which enabled me to pursue this study with renewed vigor.

Finally, Teresa Downey, my secretary, expertly typed most of the initial drafts of the manuscript. Charlene Fries typed the final draft.

Personal relationships and family ties are the targets of the greatest strains but without a doubt are the best sources of encouragement during a project of this type. Mariam Grimm, the closest of personal friends, patiently listened to my remonstrations and then gently reminded me of the work at hand. My parents, S. Paul and Marybelle Corbett, never wavered in their support of my work. Because of their sacrifices in the past and because of their stalwart commitment to education, the completion of this dissertation is first and foremost a tribute to them. Despite all of the help from archivists, colleagues, friends, and family, I alone am responsible for all errors of fact and interpretation.

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## 1982 <br> MAP OF <br> OKLAHOMA'S <br> STATE HIGHWAY SYSTEM







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## CHAPTER I

INDIAN TRAILS

Native American inhabitants of present Oklahoma traversed the area by means of waterways and overland trails. Traveling by rivers or streams often proved more expedient than by footpaths or on horseback, but land routes were not as susceptible to drought or floods as the watercourses. As long as travelers obtained food, forage, fuel, and water, trails provided an adequate way of moving from one place to another. By the time non-Indians arrived in Oklahoma in significant numbers, many pathways crisscrossed the region. Some extended from the eastern woodlands to the western prairies, while others went from north to south through forest regions or followed buffalo tracks on the Great Plains. All of the routes served a definite purpose. They provided a means for acculturation, commerce, and warfare.

Indians who traveled through present Oklahoma encountered a variety of flora, fauna, and landforms. The South Canadian River valley became a dominant feature by providing an important east-west route for voyagers who moved over paths near its banks and encamped along its shores. From its confluence with the Arkansas River, about fifty miles west of the present Arkansas-Oklahoma state border, the South Canadian River leisurely meandered to the southwest, then to the northwest to the Texas Panhandle. The extreme eastern portion of the river flowed past the Ouachita Mountains, creating an accessible avenue around the rugged heavily
timbered highlands. Wild gravevines, native grasses, and hardwood trees thrived along numerous tributaries of the river to furnish ample supplies of fodder for beasts of burden and fuel for campfires. The area teemed with wildiffe. Bear, buffalo, deer, elk, and wild turkeys inhabited the wooded rolling hills, and skillful hunters easily procured fresh meat for meals.

After leaving the eastern woodlands, the South Canadian River valley passed through the Cross Timbers and invaded the short-grass prairies. The Cross Timbers served as a line of demarcation between the eastern woodlands and the western plains. Irregular in size and form, the area extended from northern Texas into southern and central Oklahoma. Rolling, eastward facing sandstone capped hills characterized the terrain, and the Cross Timbers acted as a barrier to travel. Sandy soil on the hillsides and tall prairie grasses in the lowlands slowed overland movement. Worse, dense thickets of underbrush and extensive compact stands of blackjack and post oak trees provided an even greater barrier to travelers. ${ }^{2}$

Once on the Great Flains, the South Canadian riverbed became much wider than in the east, the valley began a gentle rise as it continued westward, and the tributaries decreased in number. Trees ceased to exist as part of the general landscape, but cottonwoods grew along the river valley. Prairie grass carpeted the bottomland and an occasional grapevine hung from the trees. Great herds of antelope, buffalo, and deer came to the river to drink, while turtles and fish thrived in its tributaries. Thus, food, forage, water, and, to a lesser extent, fuel remained available to the traveler. Near the ninety-ninth meridan the valley turned due west and looped through three horseshoe shaped bends. The
last of these turns skirted the Antelope Hills, six buttes that rose abruptly above the plains, landmarks that indicated the proximity of the Texas-Oklahoma boundary. ${ }^{3}$

North of the South Canadian River valley and east of the Cross Timbers the terrain changed perceptively. Cuestas, a series of widely spaced asymmetrical ridges that sloped to the west but displayed a more severe eastern face, extended across most of the countryside. Prairies covered with native grasses that often grew three feet high shared the landscape with groves of ash, box elder, cottonwood, and elm trees, creating the image of a great wilderness park. Three major rivers coursed through the area. The Arkansas River marked the western extent of the ridges, while the Verdigris River drained the central portion. Farther east the Grand River separated this domain of cuestas, woodlots, and prairies from the Ozark Plateau, known also as the Ozark Mountains. Both the Verdigris and Grand rivers followed winding north-south watercourses and joined the Arkansas River at Three Forks, near present Muskogee. Indian trails traced the rises and bottomlands that bordered these waterways. The Ozark Plateau protruded into northeastern Oklahoma from its origin in other states to the east. Hickory and oak forests, occasionally interrupted by large grassy meadows, covered this rolling upland. Although bisected by the lllinois River, the area attracted few early travelers because of the rugged nature of the terrain. ${ }^{4}$

South of the South Canadian River and east of the Cross Timbers, the Ouachita Mountains represented the dominant.landform. Parallel sandstone ridges alternating with steep-sided valleys covered with mixed hardwood and pine forests made the region the most inaccessible and isolated part of Oklahoma. Rising to more than 2,500 feet above sea level, three
separate groups of mountains comprised the Ouachita chain. The San Bois, the Kiamichi, and the Winding Stair mountains stretched from north to south, respectively. Spring fed streams rose in their valleys and joined to form the Kiamichi, Little, and Mountain Fork rivers that flowed in a southerly direction to empty into the Red River. Other mountain brooks converged to create the Fourche Maline River that coursed easternly to the Poteau River and thence to the Arkansas River. Bear, buffalo, deer, wolves, and numerous game birds inhabited the forests. But the nature of the ter rain intimidated early wayfarers and later impeded the development of a modern highway system. Directly west and adjacent to the Ouachitas the Arbuckle Mountains rose to heights of 700 feet above the surrounding landscape. These rounded, boulder strewn, limestone-granite formations provided another barrier to travelers. ${ }^{5}$

West of the Cross Timbers buffalo grass carpeted the almost treeless undulating Great Plains. When adequately watered, the rich soil produced luxuriant grasses for animal fodder. Stands of cottonwood, elm, and willow trees grew along the rivers and streams as a source of fuel. Antelope, deer, and the frivolous prairie dog populated the short-grass prairies, while wild turkeys and other game birds nested throughout the region. Great herds of buffalo, also known as bison, roamed freely on the expansive grasslands and provided more than a source of food. As the herds grazed through the natural pasture, their excrement littered the plains like a cattleman's feedlot. When dried, ''buffalo chips" served as a satisfactory fuel for many prairie travelers. Migrating herds of these hairy animals also wore deep tracks into the virgin prairie, marking primitive but easily discerned roads. Buffalo trails
often provided the most direct route to the nearest watering place, and they generally followed the line of least resistance. ${ }^{6}$

Several important rivers drained the Great Plains. North of the South Canadian River valley the Salt Fork of the Arkansas, the Cimarron, and the North Canadian rivers trended easterly across the grasslands and served as landmarks to early travelers. The Salt Fork provided an additional attraction due to the large salt deposits accumulated near its banks. Indians and non-Indians alike went to the salt plains to secure stores of the coveted chemical. South of the South Canadian River valley, the North Fork of the Red River and the Washita River drained the region as they coursed to their confluence with the Red River. Isolated uplands provided some relief from the monotonous prairie vistas. The Glass Mountains, a series of ruddy buttes situated between the Cimarron and North Canadian rivers, marveled travelers when seams of translucent selenite sandwiched between layers of red earth reflected the sunlight. Along portions of the Cimarron River, gypsum escarpments provided a striking contrast to the surrounding terrain. Finally, to the southwest, the sharp granite peaks of the Wichita Mountains protruded from the surrounding tableland. ${ }^{7}$

As the short-grass prairie extended westward, its elevation increased rapidly, becoming the high plains. This type of landform enveloped all of the Oklahoma Panhandle. A strip of land 167 miles long and 34 miles wide, the Panhandle increased from east to west from 2,000 feet to more than 4,500 feet above sea level. The elevation caused no special problem for travelers, but the aridity of the area did. Annual rainfall averaged twenty inches or less, as overlanders moved cautiously from one source of potable water to another. Two main rivers coursed through the
area. The Cimarron River, sometimes reduced to a trickle, briefly appeared in the northwest corner, and Beaver Creek scarred almost the entire length of the Panhandle. Currant bushes, grapevines, and small plum trees grew alongside cottonwood, elm, and willow trees in the valleys of these streams and the ravines of their tributaries, but a flat treeless landscape continued to dominate the terrain. Deer and antelope grazed on the grasslands in the company of prairie dogs, owls, and rattlesnakes. The absence of an adequate water supply, however, provided a significant challenge to travelers who entered the vacant arid plains of the Panhandle. Thus, the variety of landforms that comprised Oklahoma both encouraged and impeded cross-country movement of goods and people. 8 The Wichita Indians were one of the first tribes contacted by Europeans in present Oklahoma, and they became an essential link in a great overland trading operation. By the early years of the eighteenth century the Wichita had concentrated in two villages. One was located along the Arkansas Riverinthe vicinity of present Haskell, Oklahoma. The other site--disputed by archaeologists and historians--existed on the Grand River near present Chelsea, Oklahoma, or in southeastern Kansas in present Wilson County. Known for their tatooed faces, the Panipiquet as the French called them, lived in villages of rounded earth and grass houses surrounded by dry moats and earthen fortifications. The men of the tribe possessed large herds of horses, and on these prized mounts they made their way across the plains to trade at Spanish villages in New Mexico. Wichita warriors also journeyed westward to do battle with their principal enemy, the eastern plains Apache. Armed with bows, arrows, and lances tipped with steel points and protected by leather armor, they valiantly challenged their plains rivals. To celebrate victories, the

Wichita frequently practiced the gruesome ritual of slaying captured Apaches and ingesting their hearts to insure continued bravery. ${ }^{9}$

In 1719, French emissaries arrived at the two villages, and their presence significantly altered the Wichita's way of life. The Frenchmen successfully negotiated a treaty of peace and commerce with the Indians. This agreement effectively made the Wichita middlemen for the Europeans in their trade with the plains Indians. As a result, while other tribes became more mobile by better adapting to the use of the horse, the Panipiquet retained a semi-sedentary culture. In 1747 , French agents negotiated an agreement between the Comanche and the Wichita. This pact further enhanced the role of the Panipiquet as traveling salesmen because the Comanche agreed to trade for French goods but only with their tatooed brethren. ${ }^{10}$

From their villages, which by 1749 were located on the Arkansas River in present Kay County, Oklahoma, the Wichita rode on to the plains to trade with the Comanche. The route of these expeditions probably extended along the Arkansas River valley and then west following its tributaries. The commodites they carried included guns, ammunition, knives, cloth, and vermilion. They exchanged these items for buffalo robes, other hides, and suet. When the trading sessions ended, the Wichita returned overland to their homes. There they awaited French traders who traveled up the Arkansas River by boat from Arkansas Post, in present southeast Arkansas. ${ }^{11}$

The Wichita prospered as distributors of trade goods until 1757 , when they abandoned the settlements along the Arkansas River. Two factors brought about the move. First, Osage war parties pushed into the domain of the Panipiquet, and they suffered extensive damages at the
hands of the invaders. Second, French traders from Arkansas Post decided to shift the emphasis of their mercantile endeavors to the Pawnee tribes of the Missouri River valley, eliminating the Wichita as a link in their overland trading operations. To escape the plundering Osage and to secure economic stability, the Panipiquet migrated south to the Red River. They built one village on the north side of the stream in present Jefferson County, Oklahoma, and constructed the other settlement directly across the river in present Montague County, Texas. By 1778, these two towns had become known as San Bernardo and San Teadoro, respectively. ${ }^{12}$

The Indians established contact with French coureurs de bois from Natchitoches, in present Louisiana, and soon regained their former prosperity as middlemen. Comanche tribesmen remained the Panipiquet's best customers, but the method of doing business changed. Because the villages were located on the western edge of the Cross Timbers, the Wichita gave up their role as traveling salesmen. Instead the Comanche journeyed overland from their domain on the Great Plains to trade at the twin towns. They brought the usual buffalo robes and other animal hides, but new commodities of increasing value became important items of barter. Emboldened by a reliable supply of guns, ammunition, and other implements of war provided by the Wichita, the Comanche fearlessly raided Spanish villages in New Mexico and attacked other tribes of Indians. When they traveled to San Bernardo and San Teadoro to trade, they drove before them herds of stolen Spanish horses and mules and numbers of prisoners, usually Apache. The Wichita readily accepted the livestock and Apache captives, as their French partners found lucrative markets for them among the plantation owners of Louisiana. ${ }^{13}$

By the middle of the nineteenth century French control of the Indian trade had disappeared, but the Wichita remained active in prairie commerce. In 1803, the Louisiana Purchase made present Oklahoma part of United States, which precipitated the decline of French influence. The migration of large numbers of white settlers to Texas, however, provided new economic opportunities for the Indians. By 1849, the frequency of depredations and the losses to Texans by marauding Indians prompted vigorous complaints by United States Indian agents in Texas and Indian Territory. The main route of the raiders followed a trail from the Wichita Mountains, where the Wichita Indians had relocated, eighty miles southeast to a ford on the Red River. Wichita encampments served as a rendezvous point for many parties returning from the south. At the villages raiders exchanged their treasures with Indians who lived farther north or east. The Wichita, moreover, probably received trade goods from Americans who operated outposts along the Red River. The Wichita played host to raiders and acted as middlemen until their influence declined in later decades. ${ }^{14}$

The Osage tribe of native Americans traveled extensively along overland routes throughout Oklahoma. A fierce warlike people who had few friends, they first were contacted by Europeans in the early eighteenth century. In 1719, French agents negotiated a treaty of peace and commerce with the Osage, whom they found living in villages along the Missouri and Osage rivers in present Missouri. French coureurs de bois readily established a lucrative trade in hides, horses, and slaves. The impact of this intercourse produced rapid changes in the Indians' culture. By 1750 , brass and iron kettles had replaced native pottery cooking vessels, while guns, metal knives, and axes had become essential
items. In particular, the demand for firearms reached important proportions because these weapons gave the Missouri Indians an unchallenged advantage over western tribes. Twice annually they left their riverside villages to sojourn on the Great Plains. They traveled west over welltrod trails through present Kansas to the Arkansas River, then south to the Great Salt Plains in north-central Oklahoma. There the Indians encamped to hunt buffalo. As a diversion, warriors frequently raided villages of other tribes living in the area. The Osage also roamed along the Arkansas River valley to murder and rob white traders. 15

In 1802, some Osage left their homes in present Missouri to live in what is now Oklahoma. That year Auguste Pierre Chouteau, a frontier merchant whose formal monopoly of Osage trade Spanish officials canceled, convinced a band, led by Big Foot, to move. They built their villages of round bark and skin covered huts in the vicinity of the Three Forks and became known as the Arkansas Osage. The location proved satisfactory to Big Foot's clan, for they lived closer to their hunting grounds on the Great Plains, resided within easy raiding distance of other tribes, and left behind the fear of depredations from encroaching eastern Indians. Within a few years more bands of Osage migrated to the region. The territory north and east of the Arkansas River became the undisputed domain of this proud, aggressive people. ${ }^{16}$

Close association with Chouteau and other white traders greatly influenced native lifestyles, but the Arkansas Osage continued the semiannual expeditions to the buffalo ranges. Usually in May and September, entire populations of villages deserted their homes to go on the hunt. They stayed away several months, returning in August to harvest the few vegetables they had planted and coming back in December to winter at the
permanent settlements. On the road the Osage camped each night and prepared a meal consisting primarily of meat leftover from the previous hunt. Cut into strips, braided, and dried when fresh, the main course soon acquired the consistency of boot leather and developed a decidedly rancid taste even after cooked in a metal pot. Each morning as the village stirred to life, the adults, both male and female, paid homage to the dead with mournful choruses of wailing and sobbing. That chore completed, they broke camp and resumed the journey. If a heavy rain or hail storm caught them in an open area, the Indians easily found shelter by sitting on the ground underneath their horses. 17

Upon reaching a suitable location near a good hunting place, the Osage established a village from which they operated for the entire length of their stay. A contemporary observer reported that one encampment consisted of 200 lodges populated by 1,500 warriors, their families, a similar number of dogs, and 3,000 horses. The careless habits of the natives soon created an unhealthful situation, especially in the summertime. Horse dung littered the grounds of the village, discarded meat rotted in the sun, and at one camp a pair of dead horses leisurely decomposed in the heat. Stench, maggots, and flies multiplied daily. Hardly the setting of an ideal summer vacation, this putrid atmosphere apparently little affected hunting activities or village routine. 18 Warfare against other tribes and attacks on non-Indians provided another major pastime. The sojourn on the Great Salt Plains repeatedly resulted in confrontations with neighboring tribesmen. In particular, the Osage took great pleasure in wreaking vengeance on the Pawnee Indians. To the south they traveled along the Big Osage War and Hunting Trail to raid Caddo villages for horses and to terrorize non-Indians in the region.

In 1823, near the Blue River a large war party besieged a group of twentyone white hunters from Arkansas Territory. They killed five of the woodsmen, beheading and otherwise mutilating the corpses. Along the Red River, the Arkansas Osage raided frontier farmsteads to steal cattle, horses, and even household furnishings. They did not restrict their depredations to long-range activities. Non-Indians who ventured near the homeland of the Osage frequently fell prey to pilferers. ${ }^{19}$ Because of their larcenous and murderous ways, the Osage, soon after settling in the Three Forks area, were "regarded by all white and red people in the quarter as a common peste [sic] to mankind. ${ }^{20}$

The influence of the Osage in the area contributed directly to opening several trails. The Osage Trace was one of the most important. The route left St. Louis, Missouri, and followed the Missouri River to the vicinity of present Jefferson City, Missouri. There it turned southwest to meander over the countryside until it connected with the Grand River. The trace then paralleled the Grand River valley to the location of the Osage villages in the Three Forks area. Over the trail traders brought commodities to the Indians, and the Osage carried pelts and hides to rendezvouses with frontier merchants. As a result, the Osage Trace became a vital link for the Indians of the Three Forks who depended heavily on manufactured trade items. The trail, moreover, led to saline springs as it passed through the Grand River valley. Easy access to a source of salt further enhanced the value of the Osage Trace and probably helped determine its location. ${ }^{21}$

Black Dog, an important Osage chief, founded another significant wilderness thoroughfare. Born near St. Louis in the latter part of the 1700s, Black Dog claimed his right to leadership from his father, also a
chief. Reputed to have been seven feet tall and to have weighed 300 pounds, he no doubt encountered few challengers to his regal position. To make the semiannual journey to the plains easier, Black Dog led a band of warriors who cut a path westward from present Baxter Springs, Kansas, to the Grand River near present Chetopa, Kansas. The trail then followed several streams to the vicinity of present Oxford, Kansas. Black Dog's band encamped there, but hunters forayed south to the Great Salt Plains to kill buffalo and to raid other Indians. When the hunt ended, they often returned by way of a southern route that traced across present northern Oklahoma. The trail crossed the Arkansas River a short distance north of present Kaw City, Oklahoma, then east to their permanent villages in what is today southeastern Kansas. ${ }^{22}$

About 1803, Black Dog moved his band of approximately 400 people to present Oklahoma. They located their new village, known as Pasuga, near another group of Osage led by Chief Cl ermont. Both of the towns were on the site of present Claremore, Oklahoma. No doubt tribesmen who preceded Black Dog's people into the area opened new trails or made extensive use of established ones. But the name of the gigantic chieftain became synonymous with the most important avenue from the Osage villages to the Great Plains. The route followed the watercourses of four streams. This new Black Dog Trail began along the banks of the Caney River, which traced northwest to the divide between that stream and Pond Creek. The track went over the divide and paralleled Pond Creek to the western edge of the Cross Timbers, where it crossed another ridge to Buck Creek. Buck Creek guided this primitive beltway to the buffalo ranges to the Arkansas River. The trail forded the Arkansas River and then ran due west along the Salt Fork to the Osage hunting ground. ${ }^{23}$

Two branches emanated from the Black Dog Trail. One continued to follow the Caney River north after the main route started west. This northern extension started westward with the Caney River and then coursed cross-country to join the main trail at Buck Creek. It may have been part of the trail used by Black Dog's Osage as a return route before they moved to present Oklahoma. The other branch provided a change of scenery, and perhaps a more direct route home from the plains. Near the former site of Uncas, Oklahoma, the pathway branched to the southwest. In the vicinity of present Hominy, Oklahoma, the route turned due east in a direct line to the permanent villages of the Osage. Over these trails the Indians made their way to and from the plains. Particularly in the summertime they returned to their eastern homes laden with buffalo hides and tongues. Although they feasted lavishly while encamped on the bison ranges, the Osage wasted much meat. They preferred to take home only those items valuable as objects of barter. Pierre Chouteau, their mentor, readily accepted the Indians' offerings, thus indicating the total dependence of the Osage on non-Indian manufactured goods. 24

The Black Dog Trail served a sanguinary ceremonial purpose as well. The Osage believed the spirit of a dead tribesmen, whether man, woman, or child, must be avenged by sacrificing the scalp of an enemy over the grave. The obligation of fulfilling this rite fell to a close relative of the deceased. Frequently other warriors joined the one chosen for the gruesome task to form a mourning party. The Black Dog Trail became the main artery for Osage mourning parties. Warriors advanced along the trail to the western plains, where they fell upon unsuspecting donors. Because the Osage enjoyed few friends among fellow native Americans, they
indiscriminately secured hairpieces from among various tribes of the western plains. 25

Not all important routes traveled by the Osage led to trading centers or terminated on the Great Plains. The Big Osage War and Hunting Trail, named by First Lieutenant James L. Dawson, a United States Army officer who reconnoitered the region in 1831 , served as an important north-south pathway. Originating near Black Dog's village of Pasuga, the trace ran southwest to the vicinity of present Broken Arrow, Oklahoma, and crossed the Arkansas River between present Bixby and Jenks, Oklahoma. Then it followed the eastern edge of the Cross Timbers to ford the South Canadian River south of its confluence with the Little River in present Hughes County, Oklahoma. The wilderness thoroughfare continued in a southerly direction through present Pontotoc, Johnson, and Bryan counties, Oklahoma, and crossed the Red River near the mouth of the Washita River. Large war parties and small bands of marauders followed the route to raid other tribes for horses and to terrorize white settlers. Osage travelers also used this route as the mainline to a favorite hunting place in present Pontotoc County. Known as Buffalo Valley, it teemed with bison during the season of their northern migration from Texas. Ample supplies of grass, water, and wood attracted large parties to the valley. Even Black Dog led his people there to hunt in the late spring and early summer months. The Big Osage War and Hunting Trail apparently enjoyed extensive use, for in some places it expanded to as many as five tracks abreast. ${ }^{26}$

Other trails, about which there is little information, crisscrossed the domain of the Osage. One such route originated in the vicinity of Pasuga village, coursed southwest to the area of present Tulsa, then
followed the north side of the Arkansas River to a ford at the mouth of Euchee Creek near present Sand Springs, Oklahoma. Once across the Arkansas River, the trail ran westward to the Cimarron River. Another pathway led west from the Osage villages to cross the Arkansas River in the vicinity of present Cleveland, Oklahoma. No doubt both of these arteries terminated at buffalo ranges on the Great Plains. A north-south trail believed used by Osage war parties followed a buffalo track through the Ouachita Mountains. At one point along the route a pile of stones served as a marker or monument. The landmark may have accumulated from warriors pitching small rocks at the site as a ceremonial rite when moving down the trail. The Osage probably used this pathway primarily for war parties. The rugged nature of the terrain posed a great obstacle to the movement of large hunting expeditions and their baggage. ${ }^{27}$

The influence of the Osage subsided rapidly when other tribes moved to Indian Territory. In 1825, Osage leaders signed a treaty with officials of the United States government ceding all of their land in Missouri and Arkansas. In return the Indians received a fifty-mile wide reservation that began twenty-five miles west of the Missouri state line and extended to the border of Mexico. As a result, they concentrated their settlements in the Grand and Verdigris river valleys. Pressure from eastern Indians, however, directly undermined their preeminent position in the region. The Indian Removal Act of 1830 forced the resettlement of almost 60,000 southeastern native Americans in the Arkansas River valley. Soon Cherokee, Chickasaw, Choctaw, and Creek tribesmen challenged and successfully reduced the power of the Osage. Eventually the Osage were removed to a reservation in Kansas. They continued the twice-yearly trips to the Great Plains and began to trade with bands of Comanche while
sojourning on the buffalo ranges. The last big hunt for the Osage occurred in the winter of 1873 . The previous year the tribe moved again, this time to a permanent reservation in north-central Indian Territory. During the summer and fall months of 1873 , tribesmen traveled west to the buffalo ranges, probably following the Black Dog Trail. The next year the Red River War erupted, and the Osage agent forbade his charges to go on the hunt. This policy was continued in 1875, effectively terminating the semiannual expeditions of the Osage over their great western trails. ${ }^{28}$

Plains Indians became the most mobile of the tribes of native Americans inhabiting Indian Territory. The horse provided this mobility and served as an essential part of their culture. Before the Spanish introduced horses on the western plains, native inhabitants of the region enjoyed little prosperity. The hunt consumed most of their time. Afoot, sometimes half-starved, they stealthily crept through woodlots to ambush unsuspecting deer or painstakingly built a corral of brush to surround a herd of antelope. Seldom did the horseless tribesmen travel far from his village. The horse transformed the native American of the Great Plains into a successful, efficient procurer of food and into an avid traveler. Buffalo became his primary source of sustenance and warfare his principal occupation. Numerous tribes of plains Indians followed the buffalo on their annual migration, and on a good day a skillful hunter could secure enough meat for his family for a year. Aside from food, these giant hairy animals of the plains provided clothing and shelter. Buffalo robes served as overcoats to shield against the cold of winter, and hides draped over wooden poles provided siding for lodges. Because of the horse and the attendant skills developed by its rider, the men of the plains tribes had more leisure time. As a result, they acquired
talents and reputations as accomplished warriors and raiders who ranged fearlessly throughout the Southwest. 29

Kiowa Indians became one of the important tribes to settle on the western plains of Indian Territory. During the eighteenth century Sioux and Northern Cheyenne warriors forced the Kiowa to leave their homeland in the Black Hills of present South Dakota. They migrated southward to the Arkansas River valley in present Kansas. From their new location they began to raid Comanche villages farther to the south and Spanish towns in Mexico. By 1800, the Kiowa had acquired large herds of horses. 30

About 1790, Comanche and Kiowa leaders consumated an agreement of peace and friendship that never would be broken. Following the treaty the Kiowa moved south of the Arkansas River and intensified their sorties into the northern provinces of Mexico. Frequently marauders rode as far west as the Colorado River and as far east as Matagorda Bay in present Texas. Sometimes they remained away from their home for as long as two years. In 1834, the Kiowa received an incentive to intensify their depredations. That year leaders of several western tribes went to Fort Gibson, Indian Territory, to attend a council called by officials of the United States government. When the meeting ended, about eighty trappers and traders accompanied the Kiowa to their villages on the upper Red and Washita rivers. The exchange of goods that followed apparently whetted the Indians' appetite and a lucrative trade developed. In 1835, Pierre Chouteau opened a trading post on the Canadian River about five miles northeast of present Purcell, Oklahoma. The Indians traveled to Chouteau's store to exchange their plunder for items they believed to be of value. 31 War parties followed a north-south route across the plains to Texas and the northern provinces of Mexico. The route veered southwestward from
the Arkansas River to the Wichita Mountains, then south to the Red River. Captives and livestock were the main objectives of the expeditions. Many of the prisoners taken helped to increase the population of the tribe, as the Kiowa commonly adopted both men and women captives. Stolen livestock served to replenish the Indians' herds, and traders in Indian Territory readily accepted the animals as valuable items of barter. In July of 1853, agents of the United States government met with Kiowa leaders and representatives of other plains tribes at Fort Atkinson, Nebraska Territory, to try to end these depredations. The Kiowa agreed to stop their forays into Texas and the Southwest, but the promise was shortlived. Raids continued, and sometimes the marauders brought back more than livestock and captives. In 1861, a Kiowa party returned from New Mexico contaminated with smallpox, which swept disastrously through their camps. ${ }^{32}$

Kiowa warriors remained a threat to life and property even after the United States Army established a presence in their homeland. Troopers assigned to Camp Supply, Indian Territory, spent most of their time guarding wagon trains that traversed the military roads from Fort Dodge, Kansas, to Camp Supply, and to the Indian agency at Darlington, Indian Territory, about 125 miles southeast of Camp Supply. Kiowa war parties menaced trains of freight wagons, raided herds of cattle, and murdered and robbed solitary teamsters who traveled without escort. Also, the Indians continued long-range depredations. In the summer of 1872 , a Kiowa party crossed the Red River into Texas and then swept through New Mexico stealing horses and mules, kidnapping women and children, and killing more than twenty people. Not until the end of the Red River campaign of 18741875 were the Kiowa finally confined to reservations. This enforced
restriction on their mobility brought a quick conclusion to the ilicit overland activities of the Kiowa. 33

The Comanche Indians shared the western plains with the Kiowa. They too rapidly adapted to the use of the horse and ventured great distances from their homes. One of the first contacts the Comanche had with Europeans was to act as a barrier to trade and travel. In the eighteenth century they successfully stopped penetration of the Arkansas and Missouri river valleys by French coureurs de bois who attempted to reach Spanish settlements in New Mexico. This action reflected no loyalty to the Spanish because Comanche warriors indiscriminately raided throughout the northern provinces of Mexico. When the United States acquired the region, authorities made determined efforts to halt depredations. In 1834, Brigadier General Henry Leavenworth and Colonel Henry Dodge led as a show of force a large expedition of United States Dragoons into the homeland of the Comanche between the Washita River and the North Fork of the Red River. They encountered a large band of mounted warriors armed with steel pointed lances, but no hostilities occurred. ${ }^{34}$

In July of 1835, the Comanche joined Kiowa and other tribes of plains Indians in a council with officials of the United States government at Camp Mason, Indian Territory. Camp Mason, located near present Purcell, Oklahoma, was established specifically for the treaty meeting. After several months of negotiations, the Comanche, along with the other bands present, agreed not to prey upon travelers in the region, to permit eastern Indians to hunt on the plains, and to cease their sorties into Mexico. The treaty lasted less than a year. By April of 1836, the Comanche had resumed their hostile activities. 35

Despite the failure of the treaty, American traders and Comanche warriors enjoyed a generally amicable relationship. In 1835, Pierre Chouteau established a post near Camp Mason. Until his death three years later, he conducted a successful commercial operation with the Comanche. Farther east near the site of Fort Holmes, a temporary position built by the dragoons in 1834 at the confluence of the Little and South Canadian rivers, the firm of Edwards and Shelton opened a trading post. Known as Edwards' Store, it became a focal point for intercourse with the Comanche. A well-traveled trail originated there and extended to the Colorado River in Texas. The route passed through present Pontotoc, Murray, Carter, and Jefferson counties, Oklahoma, to ford the Red River near the mouth of Beaver Creek. Comanche raiders not only conveyed livestock and other items of plunder over this thoroughfare, but they also did a brisk business in human beings. During the existence of the Republic of Texas, Comanche warriors took many captives. Some they kept, some they killed, and some they traded. 36

Frequently those captives bargained away found themselves at Edwards' Store. In February of 1839, a large Comanche war party attacked the ranch of Dr. Joseph W. Robertson on the Colorado River in Texas. The raid yielded the Indians, among other things, two black boys, Manuel and Aaron. Their captors took the lads up the trail to Edwards' Store. There James Edwards, the proprietor, bought one of the boys, and Jesse Chisholm, a mixed-blood Indian guide, trader, and son-in-law of Edwards, acquired the other one. Dr. Robertson traced the two blacks to the Little River trading post and appealed to the government of Texas to secure the return of his property. The fate of the two boys reached the highest councils of the United States government. During the tenure of Secretary
of State Abel P. Upshur their disposition became the topic of discussion at cabinet meetings. Eventually, in 1844, President John Tyler ordered Manuel and Aaron returned to Texas. In other cases the Comanche brought white prisoners up the trail from Texas to sell them to traders and other Indians. They in turn took the captives to Fort Gibson, Indian Territory, to collect the ransom frequently offered by relatives in Texas. Thus, Edwards' Store acted as a clearinghouse for Comanche captives. ${ }^{37}$

In 1849, the gold rush to California provided another boom for the Comanche. Thousands of adventurers flocked to Fort Smith, Arkansas, to embark on the overland journey to the gold fields. The main route, known as the California Road, followed the Arkansas River to the mouth of the South Canadian River, then west along the entire length of the South Canadian River. The sudden explosion in the number of people traveling to California created a seemingly insatiable market for draft animals. Enterpreneurs from Arkansas and Indian Territory went to the encampments of the Comanche to barter for mules and horses. The Indians had acquired herds numbering as many as 400 animals, and they readily cooperated with the traders. Military authorities speculated that the vast majority of the livestock came from raids on settlements in Mexico and Texas. Nevertheless, traders drove their illicit purchases back to way stations along the California Road to retail them to westward bound travelers. In some cases the Comanche bypassed the middlemen. At selected sites along the trail they approached groups of emigrants to barter their livestock for anything but money. Within two years the rush to California ended, and the Comanche returned to their traditional pursuits of hunting and raiding. By 1859, their depredations became so frequent as to stop trans-
continental mail service on the California Road through Indian Territory. Like their steadfast friends the Kiowa, the Comanche continued these activities until confined to reservations in the 1870 s. ${ }^{38}$

Once settled on reservations, the Indians underwent a process of forced acculturation instituted by the United States Office of Indian Affairs. A major means of changing the Indians' way of life included employing them on public works projects. In 1892, the Commissioner of Indian Affairs issued orders to superintendents of all reservations regfalding the construction and maintenance of roads and bridges. The commissioner's instructions called for dividing reservations into road districts and authorized superintendents to appoint one of the "most industrious, capable, intelligent, and progressive" natives supervisor of each district. In order to provide labor for the projects, male residents of the reservations between the ages of twenty-one and forty-five --including non-Indians married to Indians--automatically became liable for a maximum of five, eight-hour days of work on the roads each year. The directive contained no provision for compensation, and all workers furnished their own tools. Only government employees, missionaries, and teachers were exempt from the obligation, but those eligible could send a substitute when summoned for duty. These instructions differed little from the road laws in force at that time in Oklahoma Territory. 39

Activities at the Cheyenne-Arapaho Agency, the reservation of a former nomadic tribe of plains Indians, reflected the types of programs implemented. Laborers constructed a new wagon road from the agency at Darlington to El Reno, Oklahoma Territory, a distance of four and onehalf miles, and graded the dirt streets in Darlington. In 1899, agency employees cooperated with Canadian County officials to construct an iron
truss bridge across the North Canadian River. The county comrnissioners furnished the material, and Indian workers provided the labor. Construction of the bridge greatly increased accessibility to the reservation. Also, in 1899, Cheyenne-Arapaho laborers made 31 miles of new road, repaired an additional 44 miles, and logged 131 days of work on the projects. In 1902, officials of the Office of Indian Affairs decided to reduce the dependency of reservation dwellers on the issuance of rations by paying them wages for their work. Between January and April of 1902, George W. H. Stouch, the agent at Darlington, expended over $\$ 5,500$ in agency funds for wages for Indians employed on public works projects. He paid workers $\$ 1.25$ a day for an eight-hour shift. Apparently the primary purpose of the plan was to provide salaries for his Cheyenne-Arapaho charges rather than to effect long-range improvements. Laborers built a paltry 30 miles of new roads and improved only 36 miles while consuming 1,366 workdays on the projects. ${ }^{40}$

George S. Doane, the agent in charge of the Quapaw reservation in the northeast corner of Indian Territory, approached with missionary zeal the plan to use Indian labor to construct and maintain roads. He believed "a good road is a good civilizer" and badgered his charges to work on the roadways. The Indians, however, failed to share his enthusiasm. He experienced difficulty in raising working parties, and whites who lived on the reservation or who leased land from tribesmen refused to cooperate. Despite the opposition, Doane managed to complete several projects. In 1895, he reported the construction of 80 miles of new roads and the repair of 77 miles. All of these improvements were accomplished in 712 working days. As a result, he felt the roads on the reservation
compared favorably with those of neighboring states. Considering the absence of technological expertise and of centralized maintenance procedures that existed in most states at that time, Doane's claim probably was not exaggerated. Yet the Indians continued to resist his call for workers and his plea for good roads. Doane's replacement enjoyed even less success, and by 1898 most of the roads on the reservation had become barely passable. ${ }^{41}$

Indian trails that crossed present Oklahoma served several specific purposes. First, extensive commercial operations developed requiring a direct and accessible means for overland travel. Wichita Indians made regular tirps to the western plains to trade with the Comanche while the Osage Indians conveyed buffalo hides and tongues over the Black Dog Trail and its branches to use as barter for manufactured products. On the Great Plains the Kiowa and Comanche Indians became avid travelers in search of salable goods. Although less well-defined, western routes took them to Texas and the Southwest. Second, overland routes proved equally vital for another major occupation of the Indians, that of warfare. Wichita warriors returned over wilderness pathways with captives who frequently became the object of important cannibalistic rites. The fearless Osage traveled throughout the region to raid fellow native Americans and to prey upon non-Indians. Kiowa and Comanche warriors early adopted the use of the horse as an instrument of war, and they ventured far from their villages to attack other Indians and whites alike. Thus, native Americans of the region relied on an extensive system of trails for their commercial endeavors as well as for conveying war parties to and from their objectives.

Perhaps the greatest impact of overland trails involved the acculturation of native Americans. Beginning with their initial exposure to Europeans and Americans, the lifestyle of regional Indians became subject to external influences. For the Wichita and the Osage, early contact with non-Indians came from overland expeditions dispatched to seek out these tribes. The Wichita expanded the influence of the Europeans by becoming traveling salesmen, while the hunting trips of the Osage to the Great Plains evolved into expenditions to procure items for barter rather than to obtain meat for sustenence. Because the Kiowa and the Comanche effected greater mobility, they at first seemed less susceptible to foreign influences than the Osage or the Wichita. Yet the Comanche acquired goods from the Wichita, and the Kiowa proved receptive to white traders. In both instances the breakdown in culture began in part due to the accessibility of the Comanche and Kiowa to overland routes. Finally, roadways became direct objects of acculturation. During the late nineteenth century officials of the Office of Indian Affairs implemented a plan to use the construction and maintenance of roads as a "civilizer" for native Americans. Although the program enjoyed limited success, the intent of the projects was to have a settling effect on the Indians by making them work rather than to secure extensive improvements. As a result, overland routes greatly impacted on the traditional lifestyle of native Americans.
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## CHAPTER II

## EARLY EUROPEAN AND AMERICAN ROUTES

French, Spanish, and American adventurers invaded the plains, river valleys, and woodlands of Oklahoma during the eighteenth and nineteenth centuries. They represented a mixture of vocations: explorers, government officials, tourists, and traders. Some of these men made use of existing Indian trails, but others blazed new routes. As they traversed the countryside, pathfinders made observations regarding the resources of the territory, the nature of the terrain, and the accessibility of the region. The routes they traveled, whether for economic, official, personal, or scientific reasons, brought them in contact with a new land. French coureurs de bois entered present Oklahoma during the early eighteenth century. Bearers of the fleur-de-lis were drawn to the area by the promise of lucrative trade with Spanish settlements in New Mexico. Hostile Indians living in the wilderness between French outposts on the Mississippi River and Spanish towns in the Southwest became a major obstacle to realizing this goal. To overcome barriers posed by native Americans, French officials hoped to make peace with the offending tribes. Emissaries from Louisiana and lllinois ventured into Oklahoma to seek out Indian leaders to negotiate agreements of peace and commerce. The Wichita Indians became early targets of this frontier diplomacy. Ambassadors who came to treat with the Wichita provided some of the first records of travel by white men in present eastern Oklahoma.

Jean-Baptiste Benard de la Harpe was one of the earliest French travelers in the region. La Harpe came to North America in 1718 and received a grant of land on the south side of the Red River in present Bowie County, Texas. Initially he intended to trade with Spaniards in Texas, but war between France and Spain foiled his plans. Possessed with a desire for profit and encouraged by French officials in Louisiana, la Harpe decided to explore north of the Red River to establish peaceful relations with native Americans living there in order to open a route to New Mexico. On April 11, 1719, with three Indians, four coureurs de bois, two black servants, and twenty-two pack horses, he started north. Two days later, he crossed into present Oklahoma. The Indian guides discovered a trail that led to the northwest, and la Harpe decided to follow it. For several days they toiled along a circuitous path ascending and descending the steep-sided ridges of the Ouachita Mountains. Although their progress seemed painfully slow, the small troop found an abundant supply of game and suffered no real hardships. The only anxious moment occurred when a band of Osage warriors waylaid the party and demanded the scalps of la Harpe's native companions. He responded with a bellicose resolve "that there was not anyone but us [sic] Frenchmen who could get them [la Harpe's Indians] out of difficulty." Supported by three coureurs de bois armed with muskets, la Harpe refused to yield to the hostiles. The Osage relented and permitted them to pass. ${ }^{2}$

The expedition continued to follow Indian paths to the northwest, crossing several tributaries of the Arkansas River, and on September 3, approached a Wichita Indian settlement located approximately two miles northeast of present Haskell, Oklahoma. Forewarned of the arrival of the Frenchman, Wichita chiefs greeted him on the trail. They presented
him with a fine horse, and together they rode into the village. At least twelve tribes and sub-tribes had gathered at the encampment near the Arkansas River, and la Harpe wasted no time commencing negotiations. The trader easily adjusted to the role of frontier diplomat as he lavished gifts on his hosts, and consultations progressed at a satisfactory pace. Only one incident interrupted the proceedings. Near the end of laHarpe's ten-day visit, a lone Chickasaw Indian trader laden with British goods arrived at the camp. This bewildered wayfarer beat a hasty retreat after briefly appraising the situation. The discussions continued, with tribal headmen finally agreeing to an alliance of friendship and mutual protection. ${ }^{3}$

On September 13, la Harpe and his party departed for the Red River. Their return trip, however, did not proceed uneventfully. The expedition encamped on a tributary of the Arkansas River, probably the South Canadian River, for several days to obtain a supply of food. Once this chore was completed, they began the overland march in earnest. But misfortune seemed to dog their progress. Several of the horses drowned while crossing what la Harpe described as lakes, and the baggage the animals carried could not be retrieved. During the first week of October the party got lost in the Ouachita Mountains and wandered aimlessly for several days, losing the rest of their horses. Afoot and subsisting on smoked horse meat the little troop regained the trail and arrived at a friendly Indian village south of the Red River in mid-October. La Harpe had opened the way for further incursions into the Arkansas River valley, and the Wichita eventually became a vital link in a great overland trade scheme. Although he led another expedition up the Arkansas River in 1721 , he
never profited personally from these ventures. Two years later la Harpe went back to France, never to return to the Louisiana frontier. ${ }^{4}$

The same month and year la Harpe arrived at the Wichita encampment on the Arkansas River, another French expedition contacted a different band of the same tribe living either in present northeastern Oklahoma or present southeastern Kansas. The actual location of the site is disputed by historians, although enough evidence exists to suggest strongly that the expedition entered present Oklahoma. Like la Harpe's sojourn to the Arkansas River, the purpose of this incursion was to secure treaties of peace and commerce in order to open a direct route to the Southwest. In 1719, Le Moyne de Bienville, commandant general of Louisiana, ordered Claude Charles Dutisne, a thirty-year-old lieutenant in the Company of the West, to make contact with tribes that barred passage of French merchants to Santa Fe, New Mexico. For this important mission, Bienville had chosen a seasoned frontiersman. Dutisne arrived at Quebec, New France, in 1705, and subsequently served at several outposts in the Ohio country and in Louisiana. As a result, he became familiar with the languages and customs of native Americans. The young soldier also became an accomplished woodsman. In 1718, he led a troop of coureurs de bois overland from Mobile, Louisiana, to Quebec, New France. ${ }^{5}$

In late July or early August of 1719, Dutisne and his party embarked on their journey from Kaskaskia in the llinois country. They crossed the Mississippi River and headed west to the origin of the Osage River. There he stopped to negotiate a trade agreement with a band of Osage Indians. That task completed, Dutisne and an interpreter continued to the southwest to locate Wichita Indian villages. In September, he arrived at two Wichita settlements, probably situated on Pryor Creek
near present Chelsea, Oklahoma. Warned of the Frenchman's approach, the Wichita proved anything but hospitable. They feared Dutisne because Osage runners had led tribal headmen to believe he commanded a slaving party. Once this misunderstanding was resolved, negotiations got underway. Feasting and gift giving accompanied the talks, and on September 27 both sides agreed to an alliance of peace and friendship. To signify the peaceful completion of the parley Dutisne presented the Wichita with a fleur-de-lis. The young Frenchman hoped to continue westward to arrange similar agreements with tribes of plains Indians. Wichita warriors, however, after recounting tales of the savagery of the western tribes persuaded him to turn back. Although Dutisne failed to open a route to the Spanish Southwest, he established amicable relations with the wichita. ${ }^{6}$ Other agents continued the offensive begun by la Harpe and Dutisne. In 1739 or 1740 , Paul and Pierre Mallet, two French traders who had arrived at Santa Fe overland from the Missouri River, returned to Louisiana by following the South Canadian and Arkansas rivers. They encountered no difficulties with natives living along their line of march. As a result, the governor of Louisiana decided to try again to make contact with plains Indians. After the Mallets returned from Santa Fe, Bienville dispatched Fabre de la Bruyere, a French army officer, up the Arkansas and South Canadian rivers to negotiate treaties with the western tribes. Shallow water in the South Canadian River frustrated his mission. But several years later, in 1748 , a trio of traders, Luis Febre, Pedro Satren, and Joseph Miguel, traveled up the Arkansas River, west to the Comanche villages, and continued to Taos, New Mexico. Meanwhile French officials negotiated a treaty between the Wichita and Comanche that made the Wichita middlemen to their plains Indian neighbors. This agreement also
permitted safe passage through the domain of the Comanche by entrepreneurs traveling to Santa Fe. The French had finally achieved their goal of a direct artery to the Spanish Southwest by way of the Arkansas and Canadian rivers. This achievement was short-lived, however, as Spain gained control of Louisiana in $1762 .{ }^{7}$

Spanish frontier merchants marked the first road through present Oklahoma. Known as the Great Spanish Road to the Red River, it originated at Santa Fe, New Mexico, and terminated at Natchitoches, Louisiana. Although Spain acquired Natchitoches from France in 1762, traders from New Mexico probably used the roadway before that time to reach Spanish settlements in Texas. Teamsters departed from Santa Fe, drove their carts across the Texas Panhandle, and over the one hundredth meridian of longitude into present Roger Mills County, Oklahoma. The track turned south to follow the North Fork of the Red River to its confluence with the Red River. The Spaniards' route proceeded east along the north side of the Red River to the mouth of the Washita River. There it forded the Red River into Texas. ${ }^{\delta}$

Heavily laden wooden-wheeled carts jolted along the line of transit, cutting deep ruts into the virgin prairie roadbed. The indelible track which emerged insured long-term use of the route. During the Spanish era in the Southwest, it served an important commercial purpose as merchandise traversed the road in both directions. The successors of the Spanish, the Mexicans, continued to use the Great Spanish Road. In 1838, a supply of goods for Chihuahua, Mexico, came up the Red River by boat to the mouth of the Kiamichi River. From there a large Mexican wagon train conveyed the goods to their destination over part of the trail that paralleled the Red River. Twenty years later elements of the

First United States Cavalry pursued bands of Comanche warriors along this road. ${ }^{9}$

Spanish acquisition of Louisiana also promoted the development of overland routes in present northeastern Oklahoma. During the late 1700 s the area teemed with fur-bearing animals. Osage Indians frequented the vicinity of the Three Forks to hunt bear, beaver, buffalo, deer, lynx, mink, and otter. They passed through that district, moreover, while en route to attack other tribes and Spanish settlers living on the north Texas frontier. In 1794 , in an attempt to reduce the hostile activities of the Indians as well as centralize the traffic in furs, Baron de Carondelet, governor of Louisiana, granted a six-year monopoly of the Osage trade to Auguste and Pierre Chouteau, two prominent merchants from St. Louis. The Chouteau brothers constructed. Fort Carondelet in present Vernon County, Missouri, and began to cultivate commercial relations with the natives. Their business activities depended heavily upon use of the Osage Trace, the north-south Indian trail paralleling Grand River. Over this trail trappers transported furs to the Chouteaus' frontier outpost. The Chouteau brothers proved quite successful in dealing with the natives, gaining much praise from Spanish officials because their contact with the Indians seemed to decrease hostilities on the frontier. ${ }^{10}$

In 1800, the Chouteaus' contract expired, and they applied for another six-year lease. Spanish officials granted them only a four-year extension, and in 1802, revoked their license in favor of Manuel Lisa, another frontier fur merchant from St. Louis. Bitterly disappointed but hardly discouraged, Pierre Chouteau convinced a band of Osage Indians led by Chief Big Foot to move to the mouth of the Verdigris River. Nearby Chouteau built a trading post. He selected the location for several
reasons, but accessibility was the major factor. The Three Forks signaled the head of navigation for large boats on the Arkansas River, and the well-worn Osage Trace crossed the river there. Chouteau sent furs obtained from the Indians to New Orleans and St. Louis by these routes. The Osage Trace became a vital link to the fur markets, and trade goods arrived overland by pack trains from St. Louis. ${ }^{1}$

The Louisiana Purchase of 1803 ended control of the region by European powers, but the fur trade continued to prosper, enhancing the importance of the Osage Trace. Soon after American occupation of Louisiana, officials in Washington, D.C., prevailed upon Chouteau to persuade the Osage to return to their traditional lands in Missouri. The old French trader failed to convince the Indians to leave, but he withdrew his trading post from the mouth of the Verdigris River. In 1817, Colonel Auguste Pierre Chouteau, son of Pierre Chouteau, applied for and received a license to trade with native Americans living in the Three Forks area. He sent his agent, Joseph Revoir, to open a place of business on Grand River near present Salina, Oklahoma, on the river bank opposite the Osage Trace. Following the death of Revoir in 1821, Colonel Chouteau moved to the Grand River from Fort Osage, Missouri. He constructed a two story log house known as "La Saline" and began to build his business. Hard work, knowledge of the Osage language, and at least two Indian wives helped him establish a successful commercial operation. ${ }^{12}$

Chouteau purchased trade goods from operatives of the American Fur Company in St. Louis. They shipped items consigned to La Saline on riverboats to the head of navigation of the Osage River in Missouri. From there Chouteau's employees conveyed the supplies on pack animals and in wagons over the Osage Trace to the post on Grand River. As much
$\$ 20,000$ worth of merchandise annually moved overland from the Osage River to La Saline. The success of Chouteau's venture and the influx of other traders into the region fully established the Osage Trace as an important commercial route of lasting significance. ${ }^{13}$

Along with fur merchants, several American adventurers entered what is now Oklahoma during the first decades of the nineteenth century. First Lieutenant James B. Wilkinson, son of Brigadier General James Wilkinson, commander of the United States Army in Louisiana, led the first official American exploring expedition into Oklahoma. Between October and December of 1806, Wilkinson and five others made a calamitous descent of the Arkansas River from the Great Bend of the Arkansas to the mouth of the Poteau River. The lieutenant's party traveled mainly by canoe and actually contributed little to the development of overland transportation. Several years later officials in the War Department dispatched Major Stephen H. Long, an officer in the United States Army Corps of Topographical Engineers, to reconnoiter the Arkansas and Red rivers. On July 19, 1820, near present La Junta, Colorado, Long divided his command and ordered Captain John R. Bell to chart the course of the Arkansas River, while he sought the source of the Red River. 14

Captain Bell's contingent made an errant start which seemed to set the pace for the entire trip. The explorers mistook the Ninnescah River for the Salt Fork of the Arkansas River and spent several days trying to get on the right course. Bell's orders were to remain in sight of the river at all times, but he seemed intent on following the line of least resistance. Occasionally they hacked their way through the dense undergrowth bordering the watercourse. More frequently Bell elected to march along well-used Indian trails that often led the party away from the
river. Ninety degree heat and short rations increased the inconvenience of following the circuitous Indian paths. Yet members of the expedition made notes of the terrain, the native vegetation, and the river's course. But on August 30 , a final calamity befell the explorers when three disgruntled members of the party deserted. The scoundrels stole most of the journals, maps, and trade goods, along with the three best horses. 15 Six days later Bell's command arrived at the trading post of Hugh Glenn, an Indian trader who lived near the mouth of the Verdigris River. Glenn's employees treated the bedraggled contingent hospitably and supplied them with explicit directions for the shortest route to Fort Smith, Arkansas Territory. Still they managed to get lost. Finally, Bell and his men arrived at Fort Smith on September 9 with little to show for their efforts. ${ }^{16}$

Major Long fared much better than Bell, but Long made one colossal error: he followed the wrong river. After dividing the command in Colorado, he led his contingent of ten men south to the Texas Panhandle. There they followed a tributary of the South Canadian River--believing it to be a branch of the Red River--to the main stream. They pursued the South Canadian River east across the Texas Panhandle and entered present Oklahoma in mid-August of 1820. Because of the meandering course of the river, Long decided to follow buffalo trails. One member of the party noted the buffalo paths were "almost as conspicuous as the roads in the most populous parts of the United States." These trailways of the buffalo made the line of march easier than traversing the sandy river banks and invariably led the troops to supplies of fresh water. The terrain provided no real impediment, but gnats, ticks, and blowflies persecuted the pathfinders. At one evening meal blowflies so beseiged
the diners that before they could consume their food the table top was white with the eggs of the flies. Daytime temperatures that reached 100 degrees added to the inconvenience as the men perspired profusely becoming, as Long noted, "offensive to sight and smell." On September 10, Long and his nine companions arrived at the confluence of the Arkansas and South Canadian rivers, and only then did they realize their mistake. Three days later the party entered Fort Smith. Long had discovered no new route through Oklahoma, but he had accurately charted the course of the South Canadian River and had made copious notes on the availability of food, fuel, grass, and water. This record served an important use for future travelers. 17

Despite the absence of marked success by government expeditions in mapping their objectives, private individuals continued to rely on routes paralleling watercourses as guides for overland travel. On September 6, 1821, Jacob Fowler, a frontier trader from Kentucky, departed from Fort Smith on a journey to the foothills of the Rocky Mountains. Fowler planned to trap fur-bearing animals and to trade with the Indians. His party consisted of twenty-five mounted men and several pack horses and mules. They ascended the Arkansas River by riding along the north bank of the stream. At the confluence of the Arkansas and Verdigris rivers they turned north to follow the Verdigris River to the establishment of Hugh Glenn. There Fowler's men rested for several days in preparation for the westward journey. On September 25 , the party, led by Hugh Glenn but minus five members who decided to turn back, went up the Verdigris River to the Caney River. They followed the Caney River to a point where it intersected an Indian path. The trappers continued along the trail in a northwesterly direction until reaching the banks of the Arkansas River.

Fowler and his companions paralleled the east bank of that stream into Kansas. No doubt others knew of and used the route taken by the FowlerGlenn party, but the journey was remarkable for the ease with which it proceeded. ${ }^{8}$

The same year that Jacob Fowler made his relatively easy journey through Oklahoma another expedition suffered many privations pioneering a route along the Cimarron River. Thomas James, a trader from St. Louis, and John McKnight, his partner, planned to tap the lucrative markets of Santa Fe. With eleven men and $\$ 10,000$ in trade goods they left St. Louis in a keelboat on May 10, 182l. The party floated down the Mississippi River to its confluence with the Arkansas River, then up the Arkansas River to the Cimarron River. James hoped to continue as far west as possible on the Cimarron River, but low water and the prospect of no rain-it was August--convinced him to abandon the keelboat. At a nearby Osage village he traded for about two dozen pack horses, and, after caching the heavier merchandise, started west along the river. ${ }^{19}$

James seemed enthralled by some of the natural formations, but, when the traveling became difficult, he lost his enthusiasm for the scenery. Numerous salt deposits along the river and the luminescence of the Glass Mountains attracted the attention of members of the expedition. James marveled at riverside sand dunes, some of which he estimated to be 100 feet high, but despaired when pack horses sank to their breasts in the gritty stuff. The party left the watercourse of the Cimarron River for a more direct westerly route, but the scarcity of potable water became a serious problem. Upon arriving at the North Canadian River, the overlanders found only a dry streambed. James and McKnight then left their fellow travelers in search of water, but they had no luck. To quench
their thirst, the two men killed a buffalo and drank its blood. The search for water now became frantic, forcing the parched pathfinders to drink from small pools contaminated with buffalo dung. Sickened by the tainted water, James and McKnight rejoined their men, also ill from imbibing the polluted liquid. They continued to follow the dry bed of the North Canadian River until finally reaching a small springfed tributary. Revived and refreshed by the cool, clean, spring water, the traders resumed their trek. They reached Santa Fe on December 1, 1821. 20

While explorers and traders followed cross-country routes through present Oklahoma, others came to the area to settle along major overland arteries. In 1820, the United Foreign Missionary Society, a protestant missionary organization, sent a "mission family" of twenty-one members, including seven women, to eastern Indian Territory to open a Christian outpost among the Osage Indians. In February of 1821, the party arrived at a location on the west side of the Grand River approximately thirty miles north of its confluence with the Arkansas River. The missionaries selected a site on the Osage Trace and immediately began to erect buildings, to plant crops, and to befriend the natives. Known as Union Mission, the settlement boasted five cabins, a school house, a blacksmith shop, and several outbuildings by the end of the year. But suspicious Osage Indians were reluctant to send their children to the white teachers. Although the proselytizing progressed slowly, the mission became an important stopping place for travelers. ${ }^{21}$

Non-Indian immigrants moved down the Osage Trace in search of new lands. Some intended to settle along the Arkansas River while others pushed south to Texas, hoping to find a homestead in Stephen F. Austin's colony. The residents of Union Mission helped travelers ford the Grand

River during spring floods, and, when they could spare it, furnished food to needy passersby. Spiritual refreshment could also be found in ample supply. Immigrants sometimes called upon the Reverend Epaphras Chapman, a preacher on the staff, to deliver a sermon, and other members of the mission family readily distributed religious tracts. Even soldiers from Fort Gibson, Indian Territory, founded in 1824 , stopped at the mission to rest and to visit. ${ }^{22}$

Perhaps the person most in demand was Dr. Marcus Palmer, Union Mission's physician. He ministered to the medical needs of travelers, treating a variety of ailments. Probably the most common complaint was the vague malaise known as the ague. Apparently well equipped for the time, the doctor valued his establishment at $\$ 500$. Throughout the existence of Union Mission, its staff witnessed a variety of frontier characters parade past their doorstep: settlers bound for Texas, soldiers marching to frontier outposts, adventurers with no real destination, and drovers herding horses to northern markets. These overlanders found help and comfort willingly provided by the mission family. ${ }^{23}$

Many of the southbound immigrants on the Osage Trace elected to stop in southeastern Indian Territory rather than continue on to Texas. The Quapaw Indians had ceded their claim to the land in 1818, and the AdamsOnis Treaty with Spain in 1819 firmly established the Red River as the international boundary between the United States and Spanish Texas. But the zone between the Arkansas and Red rivers was not opened officially for settlement by whites. Nevertheless, frontier farmers built crude cabins in the river valleys and in the woodlands of the district. Accessibility, mild winters, fertile soil, and abundant game seemed to be the chief attractions of the area. By the early 1820 s an estimated 400 to

500 families lived there, and the vast majority arrived by overland routes. ${ }^{24}$

The isolation of the area and the absence of civil authority attracted a number of undesirable persons to that part of the frontier. On one occasion, at a wilderness community near the mouth of the Kiamichi River, residents gathered for a long-awaited tent meeting. Before the preachers could begin the service, a crowd of drunken roughnecks attacked the camp ground, chased away the preachers and congregation, and destroyed the makeshift speaker's platform. ${ }^{25}$

Personal curiosity and scientific inquiry drew another species of overlander to present Oklahoma during the early years of the nineteenth century. One of the first Americans to arrive to satisfy personal curiosity was George Champlin Sibley. In May of 1811, Sibley, government merchant and Osage Indian agent at Fort Osage, Missouri Territory, embarked on a trip to the western plains. Ostensibly the purpose of his sojourn was to secure peace between warring tribes of plains Indians, but actually he was motivated by a desire to see the Salt Plains, or Grand Saline, located southwest of the Arkansas River near present Cherokee, Oklahoma. An amateur mineralogist, Sibley had heard stories of great salt deposits on the plains, and he anxiously sought to verify the tales. His party of fifteen included a servant, two interpreters, and eleven Osage warriors. Sans Orielle, an Osage war chief and friend of the agent, led the contingent of Indians. The expedition traveled southwest from Fort Osage to the Arkansas River. They stopped at several Osage hunting camps along the way, the last near present Blackwell, Oklahoma, and received a hospitable welcome on all occasions. ${ }^{26}$

On June 23, Sibley, his party reduced to nine, turned due west toward the Salt Plains. A keen observer, he noted in great detail changes in landforms and the natural vegetation. The second day of their westward journey the terrain became hilly and the soil sandy. The party continued to follow the sun, and when Sibley topped the last of a series of sand hills, the Great Salt Plains loomed into view. No doubt his pulse quickened as they went down the hill, through a grove of cottonwoods, and across an intervening stream to the edge of the Grand Saline. A vast plain of red sand covered with a wafer thin crust of sleet-colored crystals glimmered under the bright June sun. Ten days of rain prior to Sibley's arrival had washed away much of the salt, and driftwood littered the tableland. But the sight enthralled him. He attempted to estimate the extent of the plain, but abandoned the idea due to the distortion caused by the shimmering effect of the reflection of sunlight by the snowlike covering. He collected samples and rode for some distance across the salt flats. ${ }^{27}$

The accessible supply of salt attracted buffalo to the site, and small groups of the animals dotted the plain. The novelty of a buffalo hunt on the Grand Saline overpoweringly appealed to Sibley's sense of adventure. Along with an Osage warrior, he charged what appeared to be a nearby herd of bison. The nature of the terrain so distorted the actual distance that Sibley and his companion rode more than a mile before reaching their quarry. The Indian hunter downed two of the beasts, but an alarm abruptly ended their sport. Sans Orielle's scouts had spotted a large enemy war party. The chief decided to depart to the northwest in search of an Osage hunting camp, and the following day they arrived at a friendly village without incident. ${ }^{28}$

Sibley next planned to visit another salt deposit known as the Rock Saline. This time the intrepid tourist made arrangements through Sans Orielle for a formidable covering party of ninety Osage warriors. On June 28, 1811, Sibley, his servant, and Sans Orielle rendezvoused with the escort and embarked on the journey to the Rock Saline. The column passed through broken country, a terrain dominated by red-clay ridges and gypsum escarpments interspersed with open prairies. To Sibley's amazement, herds of buffalo and wild horses grazed nonchalantly on the grassland. But on the morning of June 30 , as the party moved through a shallow valley, Sibley and his companions experienced an exciting spectacle. For more than thirty minutes a rumbling sound built to a near deafening crescendo, and then as many as 30,000 bellowing buffalo burst over the tops of the surrounding hills. Without hesitation the warriors attacked the rampaging animals. Gunfire and yells added to the din. The melee lasted only a short time, resulting in twenty-seven buffalo killed, several wounded, and two Indians injured when run over by stampeding beasts. Sibley found the experience unforgettable and recommended that it was even "'worth a journey from New York to see buffaloes . . . pouring from the hills into the vallies [sic]. ${ }^{29}$

The party continued on a southwesterly course and soon arrived at the Rock Saline. Located at the confluence of Buffalo Creek and the Cimarron River, about eight miles west of present Freedom, Oklahoma, the saline spread over a plan of approximately 5,000 acres abutting a rock cliff. Salt water springs flowed from the base of the cliff and saturated the flatland with their saline solution. The sun evaporated the water, leaving a blanket of white crystals. At one of the springs Sibley secured a souvenir. With a tomahawk he cut a piece of salt fifteen
inches square and dredged several lumps of the mineral from a small pool of water. Once again, the threat of trouble interrupted the visit. Osage scouts reported fresh signs of Comanche intruders, and almost the entire escort abandoned Sibley and his servant in pursuit of enemy scalps. After a stay of only three hours, Sans Orielle suggested that Sibley return to the hunting camp in Kansas, which he did. On July 5, Sibley left the Indian encampment for home and arrived at Fort Osage six days later. ${ }^{30}$

Eight years after Sibley's brief but eventful sojourn to the salt plains, a scientist of modest reputation ventured into Indian Territory. On April 24, 1819, Thomas Nuttall, an English-born naturalist, arrived at Fort Smith, Arkansas Territory. Nuttall had come to the United States eleven years earlier to seek a new life. As an apprentice printer in London, England, he had failed to make a living, so at the age of twentytwo he immigrated to Philadelphia, Pennsylvania. He possessed an aptitude for the natural sciences and studied botany under Dr. Benjamin S . Barton, a noted plant specialist. In 1818, assisted by several friends, Nuttall equipped himself for a journey to Indian Territory to examine its flora and fauna. ${ }^{31}$

In mid-May of 1819 , he joined a small detachment of soldiers led by the commanding officer of Fort Smith, Major William Bradford, on a trek to the mouth of the Kiamichi River. The purpose of Bradford's mission was to expel squatters settled on land belonging to the Osage Indians. Nuttall accompanied the soldiers at his own risk in order to see the countryside. For two days they moved south paralleling the Poteau River. On the afternoon of May 17 , the party ascended the Winding Stair Mountains, and at the summit turned on to a buffalo path. Continuing to the
southwest, they left the buffalo trail to blaze their own route through thickets of dense undergrowth, open stands of post oak and pine, and fields of native grasses. A rain storm and wood ticks added to the inconvenience of traveling through the trackless wilderness. 32

On the morning of May 22 , the party arrived at the home of William Styles. He seemed typical of the settlers Nuttall found living near the Kiamichi River. Styles came to his illegal frontier farmstead overland from Fort Smith. Accompanied by his wife, six children, and a blind ninety-year-old mother-in-law, he had literally dragged his wagon over the roadless Ouachita Mountains in search of a new home. He greeted Nuttall and the military men hospitably, and the travelers obtained from him breakfast, complete with fresh butter and milk. Bradford then began the process of informing the settlers of the vicinity to leave. Meanwhile, Nuttall explored the area, collecting specimens and taking notes. When the time for departure arrived, the botanist delayed to make further collections, and Major Bradford left him behind. Consequently, he spent three weeks among the settlers at the mouth of the Kiamichi River. ${ }^{33}$

On June 14, 1819, Nuttall and three others left the settlement for Fort Smith. The return journey was much more labored than the trip to the Kiamichi River. They became lost several times in labyrinths of canebrakes and thickets, and nearly were separated permanently from their horses when swarms of flies drove the animals away while the beleaguered travelers ate a noon meal. Finally, they found the Poteau River and arrived at Forth Smith about July 1 . After a second sojourn to the Cimarron River, Nuttall returned to the East by way of New Orleans. 34

Throughout the entire ordeal, Nuttall made copious and detailed notes regarding the terrain, vegetation, and wildife. He described the
meadows of the Poteau River valley and the almost treeless San Bois Mountains, which he likened in height to the Allegheny Mountains of western Pennsylvania. He identified outcroppings of coal and noted the inconsistency of the fertility of the soil. Wild flowers and other decorative creations of nature did not escape his scrutiny either. He detailed changes in the types of trees that grew along the routes he traveled, and, with a degree of amazement, recorded the presence of buffalo in the open fields of the mountainous areas. Nuttall's account provided one of the first accurate descriptions of the region by a trained eye, and his report attracted the attention of eastern colleagues. 35

Washington Irving became perhaps the most prominent American to visit Indian Territory during its infant years. A famous author and world traveler, Irving nurtured a passion to see the West. He left his native New York state accompanied by two friends, Count Albert-Alexandre de Portales, a nineteen-year-old Swiss aristocrat, and Charles J. Latrobe, Portales' English traveling companion. While crossing Lake Erie by steamboat, they befriended Judge Henry L. Ellsworth, one of three commissioners appointed by President Andrew Jackson to report on the removal of the Five Civilized Tribes. Part of Ellsworth's mission included orders to try to stop the fighting that had erupted between the resettled Indians and the tribes of plains Indians. When the commissioner invited Irving and the others to join him on his journey, they eagerly accepted. ${ }^{36}$

Early in September of 1832, the foursome arrived at St. Louis, Missouri, and commenced the overland journey to Indian Territory. At Independence, Missouri, they obtained the services of Auguste Pierre Chouteau as their guide. The party moved down the Osage Trace toward Fort Gibson. Irving and his friends stopped to visit the Reverend

William Vail at Union Mission, where Portales and Latrobe decided to stay for a few days. The author and Ellsworth went on to Fort Gibson, reaching there on October 8. Ellsworth discovered the other two commissioners had not arrived. Furthermore, Colonel Mathew Arbuckle, commanding officer of the post, already had dispatched a company of United States Mounted Rangers to locate the offending tribes of Indians. Somewhat disgusted with Arbuckle's arbitrary action, the commissioner demanded a detail of soldiers to escort him to the main body of troops. Irving requested permission to accompany the expedition, and Ellsworth obliged by appointing the author his temporary secretary. Irving gladly accepted, but his interest was purely that of the tourist. On October ll, with fifteen soldiers, two servants, and a surgeon, the two men left Fort Gibson. ${ }^{37}$

Irving's sojourn into the wilderness of present central Oklahoma lasted approximately one month. From Fort Gibson they made their way over a well-trod path on the north side of the Arkansas River. There they encountered Latrobe and Portales, who joined them. On October 12, the small party located the main body of troops near present Tulsa, Oklahoma. Irving seemed impressed by the Mounted Rangers, an all volunteer unit composed mainly of young men organized and led by Captain Jesse Bean of Independence, Arkansas Territory. The cosmopolitan New Yorker viewed the frontier experience of the youthful soldiers as a unique opportunity to develop "manliness, simplicity, and self-dependence" as opposed to other young Americans sent "abroad to grow luxurious and effeminate in Europe. ${ }^{138}$

The united force continued along the north side of the Arkansas River. In his unique and graphic style, Irving described the landscape,
imparting to his travelogue a genuine sense of appreciation for the beauty of a virgin, unspoiled land. Within a few days the company crossed the Arkansas River near the mouth of the Cimarron River in true frontier style. Pierre Beatte, one of Irving's servants, procured a dried buffalo hide from a nearby abandoned Osage hunting camp and fashioned it into a small boat. They loaded the tourist's baggage aboard and with lrving perched atop his possessions, Beatte took in his teeth a cord attached to the makeshift craft and swam across the river towing the vessel behind him. The fifty-one-year-old writer delighted in the experience, firing his shotgun as they crossed the river. ${ }^{39}$

The amusement, beauty, and relatively easy traveling Irving enjoyed along the watercourse of the Arkansas River turned to drudgery when the expedition entered the Cross Timbers. Once across the Arkansas River, the troop turned west to parallel the north side of the Cimarron River. Initially the terrain provided few obstacles, except when an errant grapevine unhorsed Irving while fording Stillwater Creek near present Mehan, Oklahoma. But on October 22,1832 , the expedition crossed the Cimarron River near present Coyle, Oklahoma, and plunged into the Cross Timbers. Unfamiliar with the extent of the tangled thickets, scrub oak trees, deep ravines, and rolling hills, Captain Bean decided to traverse it in a southwesterly direction in hope of locating tribes of plains Indians. For eight days the column struggled across the landscape, emerging onto a prairie near present Norman, Oklahoma. Bean ordered his command to encamp on the banks of the South Canadian River to replenish food supplies in order to continue the mission. 40

On the last day of October, Ellsworth and Bean decided to turn back to Fort Gibson. They based their decision on the scarcity of food, the
exhausted condition of the men, and the jaded appearance of the horses. The detachment struggled in a northeasterly direction through the Cross Timbers, finally to arrive at a farm near the mouth of the Verdigris River on November 7. There Ellsworth and Irving left Portales and Latrobe with the soldiers and went to Fort Gibson. Irving's adventure on the frontier ended three days later when he boarded a steamboat for New Orleans, Louisiana. He returned to his home near. Tarrytown, New York, and later recounted his experiences in Indian Territory in the book, A Tour on the Prairie, published in 1835.41

Another tourist traveled from western Europe to visit the plains of present north-central Oklahoma. In January of 1840, Victor Tixier arrived at New Orleans by ship. Tixier had studied medicine at Paris, France, and had suffered a peculiar accident. He cut one of his own fingers during a dissecting exercise. The wound failed to heal, and, subsequently, the young surgeon contracted a stubborn fever, forcing him to postpone his plans to practice medicine. As a diversion from his recent misfortune, he decided to visit the United States. On the steamship voyage up the Mississippi River from New Orleans to St. Louis, he met Paul Linguest Chouteau, son of the late Pierre Chouteau, who recommended the Frenchman visit the land of the Osage Indians. Chouteau arranged an introduction to Osage headmen for Tixier and three companions to accompany the Indians on their summer hunt. By early June, Tixier was encamped with the Osage at a village on the Verdigris River in southeastern Kansas. ${ }^{42}$

Tixier's travels with the Indians provided a series of unique experiences. The village of about 200 lodges moved west to the Arkansas River, and the warriors then sojourned south to their favorite hunting site near the Grand Saline. Tixier took part in the buffalo hunts, but he seemed
more interested in other aspects of the trip. The sudden appearance of a violent thunderstorm, complete with hail and lightning, amazed him. A less violent phenomenon of nature, fireflies, distracted him while standing guard one night during the threat of an attack by Pawnee Indians. He was appalled by the unsanitary conditions of the Indians' camp and disturbed by their penchant for wasting large quantities of buffalo meat. Tixier traveled with the Indians to the Grand Saline, and, like a typical tourist, marveled at the expanse of the salt plain. The Frenchman and his friends stayed with the Osage until August, when, with apparently no regret, they departed for Missouri. ${ }^{43}$

Many Europeans who came to present Oklahoma during the early eighteenth century traveled by overland routes. Motivated by profit, encouraged by government officials, and hoping to secure aland artery to Santa Fe, Jean Baptiste de la Harpe and Claude Charles Dutisne followed wilderness pathways to make contact with the Wichita Indians. When la Harpe's and Dutisne's successors finally opened an overland route to New Mexico, it followed the Arkansas and South Canadian rivers. The quest for a trans-Oklahoma route reflected the importance of the area to overland travel. The Spanish also enhanced development of cross country routes through present Oklahoma. In an effort to improve communications between New Mexico and Texas and Louisiana, the Spaniards opened the Great Spanish Road to the Red River, which provided a well-marked thoroughfare across the plains of present western Oklahoma.

American traders and explorers broadened the possibilities of overland transportation by their activities during the first decades of the nineteenth century. When Pierre Chouteau moved his trading post to the Three Forks, he established it near the Osage Trace in order to make use
of a direct avenue to the fur markets of St. Louis. The work of Major Stephen H. Long in charting the course of the South Canadian River provided valuable information for future travelers, and the experiences of the James-McKnight expedition along the Cimarron River dramatically demonstrated the dangers overlanders faced. Trails also served as routes for non-Indian immigrants to Oklahoma. Settlers streamed down the Osage Trace in search of farmsteads in southeastern Indian Territory and in Texas. Accessibility provided by the trace fostered development of a significant frontier institution when Union Mission located alongside the wilderness roadway. With American acquisition of the area, a new type of overlander ventured into present Oklahoma. The scientific investigator and the tourist traveled across the countryside to satisfy personal curiosities. A combination of scientific inquiry and innocent adventurism motivated the excursions of George Champlin Sibley and Thomas Nuttall, while Washington lrving reveled in the role of the tourist. Yet, with the exception of the Osage Trace and the Great Spanish Road to the Red River, no routes in the region resembled a passable road for wheeled vehicles. The arrival of the United States Army on the frontier of present Oklahoma inaugurated a period of planned road construction.

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CHAPTER III

ARMY ROAD BUILDERS

Officers and enlisted men of the United States Army built many miles of roads throughout Oklahoma during the nineteenth century. Although less glamorous than other frontier duties, the construction of overland routes became a principal responsibility of the soldiers. They cut arteries through the wilderness or marked tracks across the plains in order to insure an effective means of communication and transportation between the rear echelon and advanced posts. Over these byways moved men, material, and the mail. Moreover, military roads reflected significant aspects of national policy. These roadways were built to extend and to protect the frontier and to implement federal government plans regarding native Americans.

The first roads constructed in Oklahoma by the United States Army coincided with the opening of new outposts. In 1824, when hostilities between the Osage Indians of eastern Indian Territory and the Cherokee Indians living in western Arkansas Territory became critical, Colonel Mathew Arbuckle, commanding officer at Fort Smith, Arkansas Territory, received orders to move his command farther west. In April, Arbuckle removed his troops to a site on the Grand River three miles north of its confluence with the Arkansas River. There the men began to construct Cantonment Gibson, later designated Fort Gibson in honor of Colonel George Gibson, Commissary-General of the United States Army. The

Arkansas River became the primary route by which supplies reached the fort, but, because of seasonal floods and drought, it proved inadequate as a sole avenue to the post. Also, Cantonment Gibson's advanced location necessitated opening an alternate route to insure the safety of the garrison. At the request of the Secretary of War, Congress, in March of 1825, appropriated $\$ 10,000$ for the survey and construction of a road from Little Rock, Arkansas Territory, to Cantonment Gibson. ${ }^{1}$

Typical of similar legislation, the law required President John Quincy Adams to appoint three civilian commissioners to determine the route and authorized the use of troops to build the roadway. The President then delegated responsibility for the project to James Barbour, Secretary of War. Soon thereafter Henry W. Conway, the Arkansas territorial delegate to Congress, submitted to Barbour the names of three nominees to the commission. The Secretary of War approved Conway's nominations. In the fall of 1825, the commissioners, Benjamin Moore, Morgan Magness, and Edward McDonald, embarked upon their appointed duty. They began at Cantonment Gibson, pushing eastward through the forests and over the hills following the north side of the Arkansas River. The commissioners completed their unexpectedly arduous task by December. Even though they received three dollars a day for their work, the trail blazers agreed the wages were inadequate. Their efforts were sustained only by the "firm belief that the road when opened will be a very great advantage to this remote country. $"^{2}$

Construction of the road became the responsibility of the army. In March of 1826 , Colonel Arbuckle's superiors called upon him to furnish men from the garrison at Cantonment Gibson to open the wilderness highway. The colonel could not immediately comply with the directive. He
needed troops to complete construction of the fort. Furthermore, Arbuckle feared an outbreak of hostilities between tribes living within his jurisdiction, and he did not want to weaken his understrength force by detaching men for a public works project. Finally, he argued that soldiers should not be used to build the entire route, estimated at 270 miles, from Cantonment Gibson to Little Rock. Because keelboats navigated the Arkansas River to Fort Smith virtually year-round, only the portion of the road west of Fort $S m i t h$ required the attention of the army. Arbuckle's argument proved persuasive and his superiors withheld action for several months. ${ }^{3}$

In November of 1826 , work on the road began in earnest. In that month First Lieutenant James L. Dawson arrived at Cantonment Gibson. Dawson, a seven year veteran of the army, served as the post's assistant quartermaster, and in that capacity became responsible for insuring completion of the overland connection to Fort Smith. Schooled in the use of surveyor's tools, the twenty-six year old lieutenant retraced the right-of-way marked by the three civilian commissioners and determined a route along a less circuitous course. Dawson's survey reduced the distance to an estimated fifty miles--twelve miles shorter than the commis- : sioners' route--and he relocated the road to fordable sites on the many streams and rivers it crossed. With the support of Colonel Arbuckle, Dawson submitted revised plans to his superiors. Early in the spring of 1827, the Quartermaster General's office approved the new road and authorized bids for construction by civilian contractors of the highway east of Fort Smith. ${ }^{4}$

Construction got underway in the summer of 1827. Captain Pierce M. Butler, an infantry officer stationed at Cantonment Gibson, received the
assignment of supervising the project. Fifty-five men of the Seventh United States Infantry Regiment, part of the garrison at Cantonment Gibson, performed the manual labor. They used the most basic hand tools, and two wagons made at the fort served as the only wheeled vehicles available to them. Butler began at the cantonment and pushed the road southeast but north of the Arkansas River toward Fort Smith. Although detailed information about building the road apparently does not exist, the specifications probably did not differ much from those issued to civilian contractors for the Fort Smith-Little Rock leg of the route. These plans called for a roadbed sixteen feet in width, for stumps no higher than one foot in the roadway, and for causeways over marshy or boggy areas. The soldiers constructed no bridges across streams and rivers as no funds existed for such frills. In September of 1827 , Butler reported the road to Fort. Smith finished and open to traffic. Military responsibility for the wilderness thoroughfare did not end with its construction. For several years afterward, parties of soldiers marched out from Cantonment Gibson to fill ruts and improve the roadbed all along the right-of-way. ${ }^{5}$

A second military post founded in 1824 provided a focal point for additional road construction. In May of that year, Major Alexander Cummings led two companies of soldiers of the Seventh United States Infantry Regiment to a site on Gates Creek about ten miles north of the mouth of the Kiamichi River in southeastern Indian Territory. There Cummings' small force began to erect Cantonment Towson, named for Colonel Nathan Towson, Paymaster-General of the United States Army. The purposes of this fortification were twofold. First, it served as a site from which authorities hoped to maintain a close surveillance of native

Americans living in the area. Second, senior officers in the army envisioned it as a watchful outpost on the Mexican-American frontier. ${ }^{6}$

Because of Cantonment Townson's location deep within the domain of sometimes hostile Indian tribes and on the edge of a potentially dangerous international border, senior officers recognized the need for a reliable link with rear areas. The Red River provided the initial connection for Cantomment Towson to its supply base at Natchitoches, Louisiana. But the river was navigable only five months out of the year, and Natchitoches was 600 miles and fifty days downstream from the post. A direct land route to the Louisiana city could cut the river mileage in half, and contemporary tacticians believed the road could be traveled in eight or ten days in an emergency. Another factor entered into the decision to build an overland route to Cantonment Towson. The territorial delegate to Congress from Arkansas, Henry W. Conway, apparently with much public support, urged construction of a thoroughfare from Fort Smith to Cantonment Towson. Conway believed the road was necessary as a means of communication between the two posts, as well as a way by which Arkansas militiamen could rush to the frontier to protect their territory from invasion by Indians or a hostile foreign power. ${ }^{7}$

On March 3, 1827, the lobbying of senior military officers and delegate Conway bore fruit when Congress passed legislation enabling construction of a road from Fort Smith to the Arkansas-Louisiana border by way of Cantonment Towson. The law contained the usual provisions for a survey of the route, for the use of military labor, and for an appropriation to meet construction expenses. At the end of March, Brigadier General Thomas S. Jessup, Quartermaster-General of the United States Army, ordered First Lieutenant Francis Lee, assistant quartermaster at Fort Jessup,

Louisiana, to begin a survey from Cantonment Towson east to the ArkansasLouisiana border, then south to Natchitoches. Lee completed the survey at the end of July, and by mid-October a command of seventy-five men began clearing the right-of-way. The work party experienced several delays, as it did not finish the project until March of 1828. Completion of the Cantonment Towson-Natchitoches road provided a reliable link between the forward outpost and its chief source of supplies. ${ }^{8}$

The proposed road from Cantonment Towson to Fort Smith met with much less success than the leg to Natchitoches. In March of 1827, Brigadier General Jessup ordered First Lieutenant James L. Dawson at Cantonment Gibson to survey a right-of-way from Fort Smith to Cantonment Towson. Dawson experienced great difficulty complying with the directive. He had been placed in charge of securing civilian contractors for the Fort Smith to Little Rock highway. When one of the builders defaulted, he had to readvertise the project and select a new contractor. That unexpected interruption caused Dawson to fall behind on his quarterly quartermaster reports from Cantonment Gibson. The army bureaucracy hounded him until he took time to update the appropriate records. Finally, in September, Dawson prepared to go to Cantonment Towson, but he was stricken with a bowel-searing attack of "bilious fever." After several days of bedrest, the young lieutenant departed for the Red River, reaching his destination on October 25. Accompanied only by a civilian guide, plagued by the lingering effects of his illness, and periodically drenched by autumn rainstorms, Dawson blazed a trace through the forests and over the mountains between Cantonment Towson and Fort Smith in twentyeight days. He returned to Cantonment Gibson ill and somewhat dispirited at the end of November. ${ }^{9}$

Work began almost immediately, but circumstances arose to prevent completion of the project. Major Cummings, commanding officer at Cantonment Towson, assigned Company 1 of his command to build the roadway. The infantrymen erected a bridge across Gates Creek and began to lay out the roadbed along Dawson's trace toward Fort Smith. In March of 1828, Cummings halted work on the road because spring rains made further progress impossible. By that time the soldiers had completed thirteen miles of the roadway. Construction did not resume, however, when the rains stopped. Discharges from the companies of soldiers stationed at Cantonment Towson reduced the effective strength of the fort, and attempts to apprehend bands of raiding Indians received manpower priorities ahead of public works projects. Finally, the decision to close Cantonment Towson ended plans to complete the road. The isolated location of the fort and the garrison's failure to control Indian raids convinced senior officers in the War Department to abandon the post. In June of 1829, the depleted garrison withdrew to Fort Jessup, Louisiana. ${ }^{10}$

Removal of the Five Civilized Tribes of Indians from their traditional lands in the eastern part of the United States to Indian Territory contributed to resuming construction of a road between Fort Smith and Cantonment Towson. In September of 1830 , officials from the Office of Indian Affairs and selected leaders of the Choctaw tribe of Indians signed the Treaty of Dancing Rabbit Creek. This agreement called for resettlement of Choctaw Indians in a district between the Arkansas and Red rivers in southeastern Indian Territory. Consequently, Cantonment Towson was reactivated in November of 1830 , and Francis $W$. Armstrong, federal agent for the Choctaw, went to Indian Territory to prepare for the arrival of his charges. The next year Armstrong located his headquarters on
the south side of the Arkansas River about thirteen miles west of Fort Smith. He intended to move the Indians up the Arkansas River on boats to the agency, then allow them to disperse in a southwesterly direction overland toward Cantonment Towson. Moreover, Cantonment Towson was to serve as a center for distributing supplies to Choctaw tribesmen living in the extreme southern portion of their new domain. In order to bring these plans to fruition, Armstrong obtained permission from the Secretary of War to use soldiers from Fort Gibson to construct the road. 11

Before the troopers began their work, Armstrong hired Robert Bean, a frontiersman recognized for his knowledge of the area, and Jesse Chisholm, a local mixed-blood Indian trader, to lay out a trace from Fort Smith to Cantonment Towson. During February of 1832 , Bean and Chisholm marked a line for the road from Fort Smith to Horse Prairie, twenty miles west of Cantonment Towson. The next month, in compliance with a request from Agent Armstrong, Lieutenant Colonel James B. Many, the new commanding officer at Fort Gibson, ordered Captain John Stuart, an infantry officer, to select a detachment of soldiers to build the road to recently redesignated Fort Towson. ${ }^{12}$

Captain Stuart departed from Fort Gibson with misgivings about his assignment. His detail of two officers, one surgeon, and forty enlisted men seemed adequate, but bickering between his superiors and officials of the Office of Indian Affairs created problems. Colonel Many made available only two wagons, along with tools and rations for the men. He believed the Office of Indian Affairs should furnish additional transport and provisions. At Fort Smith, Stuart contacted the Choctaw agent. Armstrong contended the army was responsible for the whole operation and refused to provide any assistance. Finally, Stuart appealed to Jacob

Brown, superintendent of Choctaw immigration at Little Rock, for additional supplies. While awaiting a reply, he decided to commence building the road. 13

On March 28, 1832, the soldiers shouldered their rifles and marched off to a long and arduous task. They started on the west side of the Poteau River and worked in a southwesterly direction toward the Choctaw agency. Exchanging their firearms for axes and spades, the infantrymen made cuts in the banks of the Poteau River to ease access to the ford for wagons. Next they hacked through dense thickets of cane and green briars to open a right-of-way that varied from sixteen to twenty feet in width. Stuart reached the agency, later known as Skullyville, on April 15. Heavy rains began to plague the road builders and slowed their progress greatly. But Stuart kept the party moving. Most of the soldiers felled trees, removed boulders, and cut down creek banks, while about a fourth of the command had to be detailed to help get the supply wagons through the mud. At the end of the month the construction crew reached Cavanal Mountain, where they encamped to await the supply wagons. 14

The respite from their backbreaking chores was short-lived. Stuart soon had his men carving a circuitous trail over the wooded, steep-sided Winding Stair Mountains. Along one five mile stretch of a tributary of Fourche Maline Creek, the road crossed the stream twelve times. In another mountainous place, Stuart's crews worked four days on a one mile stretch of the road. The troops had no powder for blasting, so they used pry bars, sledge hammers, and blocks and tackles to remove large boulders. Aside from their toilsome labors, two new problems badgered the party. Food supplies began to run low, and friendly Indians warned
of Pawnee war parties in the area. Stuart contemplated turning back, but he felt personally responsible for the success of the mission. The captain decided to press on. To speed clearing of the roadway through the most difficult terrain, he ordered the roadbed reduced in width. As a precaution against attacks by hostile Indians, the soldiers built a sled fitted with gun racks which they kept near the front of the working party. Fortunately, no raiders attacked the road builders. But by June 16, when the soldiers completed the road, supplies were dangerously low. At Fort Towson, Stuart attempted to replenish his store of food, but the garrison could spare no provisions. Captain Stuart placed his men on half-rations and marched back to Fort Gibson, arriving there without incident on July 3.15

As Stuart marched his weary troops back to Fort Gibson, traffic began to pass over the new road. A supply train of thirty-three wagons, each drawn by six oxen, carried provisions for the Choctaw emigrants from the Arkansas River agency to Fort Towson. The wagons contained plows, rifles, food, and clothing, all articles promised to the Choctaws as part of the removal agreement. By August, at least two more supply trains had jolted over the rutted track to Fort Towson. The teamsters who traveled Stuart's road found it primitive at best. It lacked bridges, causeways, and fills, but despite these drawbacks, government agents continued to move supplies and Indians into the area. 16

A second avenue important to resettlement of the Choctaws reached Fort Towson from the east. This road, 230 miles in length, originated at Little Rock, Arkansas, ran southwest to Washington, Arkansas, and west to Fort Towson over the military road from Natchitoches. In 1831, in preparation for removal of the Choctaws, hasty improvements were made.

In particular, workers constructed a few bridges and tried to upgrade the roadbed on the segment of the route immediately east of Fort Towson. On December 29, 1831, the first large contingent of Indians left Little Rock. The train of forty-five wagons made its way slowly over the road. Below freezing temperatures, the absence of adequate clothing, and the swampy, boggy roadway east of fort Towson made the journey a miserable experience for the emigrants. 17

In later years the army improved overland connections with Fort Towson. In 1835 and 1836 , troopers of the Third United States Infantry Regiment made extensive repairs to the road leading east to Arkansas. The men widened the right-of-way, dug drains, built causeways, filled ruts, and erected many bridges. Three years later soldiers commanded by Major William G. Belknap opened an alternate route to Fort Smith. The new road went northeast from Fort Towson, generally following the east side of the Kiamichi River, over the Kiamichi Mountains, through the Winding Stair Mountains, and down the Poteau River valley. These improved conditions reduced the isolated nature of the outpost. By 1838 , letters arrived at the fort within twenty-five days of posting from eastern cities by mail delivered twice a week from Little Rock. ${ }^{18}$

During the spring and summer of 1834 , Brigadier General Henry Leavenworth, the new commanding officer at Fort Gibson, ordered a network of roads opened west from Fort Gibson and Fort Towson. As part of an attempt to insure peace between the newly arrived Five Civilized Tribes and the indigenous plains Indians, Leavenworth planned to lead the First United States Dragoon Regiment, a corps of mounted regulars, on a show of force into the domain of the plains Indians. To support his maneuvers, the general needed advanced supply bases, and these outposts
required roads over which wagons loaded with provisions could travel. Leavenworth ordered James L. Dawson, recently promoted to Captain, to build a road from Fort Gibson to the mouth of the Cimarron River, then south to the junction of the Little and South Canadian rivers. With two companies of the Seventh United States Infantry Regiment, Dawson began his task. The route he selected ran along the north side of the Arkansas River to its confluence with the Cimarron River. His men blazed trees in the wooded areas, drove stakes as markers on open ground, and built conical mounds of dirt four to seven feet in diameter as beacons along the trail. At the Cimarron River, Captain Dawson turned south to follow an old Osage Indian hunting trail to Little River, also marking it with blazed trees and conical mounds. ${ }^{19}$

Additional units from Fort Gibson and Fort Towson opened other roads for General Leavenworth. In May of 1834, Companies E, G, I, and K of the Seventh United States Infantry Regiment cut a right-of-way southwest from Fort Gibson to intersect Dawson's road at the Little River. From there it followed the Big Osage War and Hunting Trail to the confluence of the Red and Washita rivers. At Fort Towson, Companies A and C of the Third United States Infantry Regiment laid out a road due west to meet the Big Osage War and Hunting Trail at the Washita River. Leavenworth then ordered fortified positions constructed on these roads at the mouths of the Cimarron, Little, and Washita rivers as support bases for his foray onto the plains. These posts were known as Camp Arbuckle, Camp Holmes, and Camp Washita, respectively. On June 15, General Leavenworth led his 500 dragoons along the route southwest from Fort Gibson to the Washita River. From there the expedition turned west to seek out the plains Indians. Although Leavenworth died during the maneuvers, his second in
command, Colonel Henry Dodge, effected a successful show of force and managed to meet with leaders of several plains tribes. The dragoons, decimated by sickness and disease, returned to Fort Gibson in August. ${ }^{20}$

Protection of the frontier, another major concern for army officials, coincided with Indian removal. By the mid-1830s, several thousand native Americans from dozens of tribes had been forced to leave their traditional lands in the East. These displaced people were dispersed throughout the region west of a line from Fort Snelling, Minnesota Territory, to Fort Jessup, Louisiana. Understandably, this forced removal strained relations between Indians and whites. As a result, senior officers in the army recognized the potential for conflict on the frontier and moved to prevent violent outbreaks. The strategy involved the construction of a series of forts from Minnesota Territory to Louisiana. In July of 1836, Congress passed legislation appropriating money and authorizing army labor for construction of a road to connect the forts. ${ }^{21}$ An important segment of this new road stretched from Fort Leavenworth on the Missouri River, northwest of present Kansas City, Missouri, to the Arkansas River in Indian Territory. In the summer of 1836 , the Secretary of War appointed Colonel Stephen Watts Kearney, Major Thomas F. Smith, and Captain Nathan Boone commissioners to lay out a right-ofway and to select sites for new posts along the route. Following a reconnaissance of the area, the commissioners decided to commence the road at Fort Coffee, a post opened in 1834 on the south side of the Arkansas River about twenty miles southwest of Fort Smith. There the three men awaited the arrival of an engineer who would supervise the survey. ${ }^{22}$

In September of 1837, Charles Dimmick, an engineer employed by the War Department, reached Fort Coffee, and the survey began. Boone,

Kearney, and an escort of dragoons accompanied the engineer. Dimmick started the survey across the river from Fort Coffee and ran it thirty miles northeast toward the Arkansas border. About three miles from the state line he turned the right-of-way due north and paralleled the boundaries of Arkansas and Missouri the remainder of the distance in Indian Territory. His workers marked the line by blazing trees in forested areas and by making mounds of earth in open country. The first stretch of the route posed the greatest difficulties for the party. Undulating tree-covered ridges of the Ozark Mountains dominated the terrain. But Dimmick assured his superiors these obstacles could easily be surmounted when construction of the road began. After making their way through the Ozarks, the surveyors moved rapidly, completing the 286 mile project with their arrival at Fort Leavenworth on November $8 .{ }^{23}$

The decision to abandon Fort Coffee directly affected plans to build Dimmick's road. Soon after Congress authorized the survey of the military road, senior officers began to debate the prudence of opening the highway in Indian Territory in what they considered an exposed position. Also, advocates of a dual line of fortifications between Indian Territory and western Missouri and Arkansas began to pressure the army to change its plans. As a result, in July of 1838 , Fort Coffee was abandoned, and Fort Wayne, located on the lllinois River northwest of Fort Smith, was established. Soldiers opened the road between Fort Wayne and Fort Leavenworth, and in 1840, the Secretary of War recommended extending the roadway from Fort Wayne to Fort Smith. ${ }^{24}$

In order to protect better the increasing number of members of the Five Civilized Tribes in Indian Territory from marauding plains Indians, the army constructed additional roads and forts. In 1834, the Chickasaw
branch of the Five Civilized Tribes agreed to leave their traditional homeland in the East to live in south central Indian Territory, west of the holdings granted to the Choctaw Indians. Throughout the late 1830 s, the Chickasaws were removed, but they refused to locate any farther west than the Choctaw Nation until a fort was erected to protect them from an estimated 5,000 plains Indians living on or near their land. In 1841, A. M. M. Upshaw, agent for the Chickasaws, recommended construction of an outpost on the Washita River. Later that year Brigadier General Zachery Taylor, commander of the Second Military District, personally toured the area. He selected a site for a new post, to be named Fort Washita, approximately one and one-half miles north of the Washita River, about eighteen miles above its confluence with the Red River. The following year construction of Fort Washita began with the arrival of Company A, Second United States Dragoon Regiment, commanded by Captain George A. H. Blake. ${ }^{25}$

Overland routes provided the only reliable means of transportation and communication with Fort Washita. The army's quartermaster corps shipped tools and construction material not available locally to Fort Towson. From there teamsters conveyed these items eighty miles overland to the work site. The route the wagoners used likely followed the trace opened from Fort Towson for General Leavenworth in 1834, with a northern extension to the new outpost. A well-worn trail also ran from the vicinity of the Washita River to Fort Smith. This frontier highway passed over an easily traversed terrain northeast to the mouth of Gaines Creek on the South Canadian River. From there it followed the South Canadian River east to Arkansas. This route of approximately 157 miles could be traveled by wagons in ten days during dry weather. In 1849, Captain

Randolph B. Marcy, commander of a detachment of dragoons returning from Dona Anna, New Mexico Territory, ordered the Fort Washita-Fort Smith road mapped, measured, and surveyed. ${ }^{26}$

Two years later, Captain Marcy made another contribution to overland travel in Indian Territory. By 1850, large numbers of gold seekers bound for California were traversing the region. Some of the argonauts followed a southerly route through Indian :Territory to Texas, then west to the gold fields. Also, continued depredations against the Five Civilized Tribes by plains Indians and the illegal trading practices in Indian Territory by whites from Texas prompted federal authorities to act. In the summer of 1850 , Marcy received orders to construct a new post west of Fort Washita to protect travelers headed for California and to stop raids by plains Indians. Commanding troops of the Fifth United States Infantry Regiment, Captain Marcy left Fort Washita on August I. His column, including thirty-one teams of oxen and two pieces of ordnance, moved slowly to the northwest. Extremely hot temperatures, compounded by the lack of adequate supplies of water, felled many of the oxen and forced the expedition to travel at night. ${ }^{27}$

About three weeks after leaving Fort Washita, Marcy selected a site for the new outpost. Near Mustang Creek, within three miles of the route used by the California immigrants, the soldiers began to erect Camp Arbuckle, named for Brigadier General Mathew: Arbuckle. Before much work could be done on the post, Marcy received orders to remove his encampment to the southeast. In April of 1851, he picked another locale on Wild Horse Creek, about eight miles west of present Davis, Oklahoma, and there began construction of a permanent post designated Fort Arbuckle. From this frontier fortress, Marcy laid out a road to Texas. His route,
known as the Fort Arbuckle Road, ran southwest along the valley of wild Horse Creek, then south skirting the Arbuckle Mountains. Marcy's men blazed a trail through the Cross Timbers and cut down the banks of the large streams. Near the mouth of Beaver Creek, the Fort Arbuckle Road crossed the Red River into Texas. It continued southwest to terminate at Fort Belknap on the Clear Fork of the Brazos River. 28

The following year, Captain Marcy opened another route in southwestern Indian Territory. In May of 1852, Marcy and Captain George B. McClellan led a company of soldiers from the Fifth United States Infantry Regiment in search of the sources of the Red River. Their detachment, including several mule and horse drawn wagons, followed the North Fork of the Red River into the Texas Panhandle, then circled south to intersect the Red River. They moved east along the north side of the Red River, arriving in the vicinity of the Wichita Mountains in mid-July. At a Wichita Indian village near the mountains, Marcy successfully bartered for the release of a captured Mexican boy. This task accomplished, the expedition departed for Fort Arbuckle on July 24.29

As the party moved east, Marcy and McClellan's men marked out a route that would intersect the Fort Arbuckle Road. From the Wichita village, the soldiers moved unimpeded along the divide separating Rush and Wild Horse creeks. But the next day their line of march collided with the Cross Timbers. The infantrymen exchanged their rifles for axes and spades to hack through the dense thickets and to dig down the banks of creeks to enable wagons to ford them. Because of hot daytime temperatures, the men rose early in the morning and labored until noon. Their work was made easier when they discovered an old Indian trail. Wagons had apparently traversed the old track several years earlier, as the
hubs of the wheels had scraped the bark from the trees that crowded the side of the trail. After three days of battling the dense thickets and steep-sided streams, Marcy's expedition emerged from the Cross Timbers onto the Fort Arbuckle Road. The captain recorded that simultaneously the men gave a "shout of joy," as the Fort Arbuckle Road "seemed to them like greeting an old and familiar acquaintance." Marcy and his men then turned north to Fort Arbuckle. 30

In later years, the Fort Arbuckle Road continued to serve the civilian populace as well as the army. During the gold rush to Pike's Peak, Colorado, in 1859, large numbers of adventurers traveled over the route. In the spring of that year, a progression of would-be prospectors passed by the gates of the fort, headed north from Texas to Kansas to intersect western trails to Colorado. Some of the gold seekers organized into traveling companies, but many others went alone with their worldly possessions wrapped in a single bundle. They must have presented a pathetic sight, as a contemporary observer estimated that two-thirds of them would die before reaching their destination. 31

Following the Civil War, the army resumed construction of roads and forts in western Indian Territory. The purpose of the new outposts was to control the activities of the Cheyenne, Comanche, and Kiowa Indians, and to act as headquarters for Indian agencies. In May of 1868, Colonel Benjamin H. Grierson, commanding officer of the Tenth United States Cavalry Regiment, led companies of that unit, the Sixth United States Infantry Regiment, and a supply train on an expedition to select a location of a new fort in southwestern Indian Territory. Grierson's command left Fort Arbuckle and followed the road opened by Marcy in 1852 toward the Wichita Mountains. Heavy rains plagued the party, turning creek
bottoms into bogs and the prairie into a quagmire. In several places the infantrymen had to lay down a corduroy road to facilitate movement of the wagons. This mud-encrusted excursion lasted three weeks before returning to Fort Arbuckle. ${ }^{32}$

In January of 1869, Grierson led his Tenth United States Cavalry Regiment and other military units back to the vicinity of the Wichita Mountains. Near the bank of Cache Creek he designated the location of Fort Sill, named for Brigadier General Joshua W. Sill, a federal officer killed during the Civil War. Construction of the outpost began immediately. With the exception of trees felled for lumber in the Wichita Mountains and along Cache Creek, virtually all other building materials were transported overland to the site. Bricks, tools, and additional supplies of lumber came from Fort Arbuckle. Soldiers even dismantled the sawmill at Fort Arbuckle and moved it in wagons to a location along Cache Creek. In June, Major George A. Forsythe, an officer in the Ninth United States Cavalry Regiment, escorted two trains of twenty-five wagons each from Kansas to the new post. These vehicles carried tools, hardware, and a corps of skilled workers who supervised the intricate phases of construction. By 1871, most of the original buildings planned for the post were completed. 33

Because of its heavy dependence on overland transportation, roads soon emanated from Fort Sill like spokes from the hub of a wagon wheel. Overland arteries led south to Fort Richardson and Jacksboro, Texas, east to Fort Arbuckle and to Caddo in the Choctaw Nation, where by 1875 the Missouri, Kansas, and Texas Railroad had opened a station. A stage line ran northeast to Fort Reno, near present El Reno, Oklahoma, then on to Wichita, Kansas. Another trail headed west toward the Texas Panhandle. ${ }^{34}$

Accessibility posed no great problem for Fort Sill, but travelers who made the trip endured many privations. About 1875, an unidentified young lieutenant and his bride arrived at Caddo Station, on the Missouri, Kansas, and Texas Railroad, bound for his new duty station, Fort Sill. They secured passage in the Fort Sill Stage, a canvas topped buckboard drawn by a team of mules. Crowded into a near fetal position by the pile of mail sacks stacked on the floor of the coach, the passengers endured a jolting, bruising ride over a chuck-hole-filled track at the speed of four miles of per hour. The first evening the stage stopped at a rambling log cabin that doubled as relay station and wayside inn. Inside, the walls of the dining room were papered with pages from newspapers and magazines, liberally splattered with tobacco juice. There they received their supper on chipped plates: two eggs awash in grease and coffee the lieutenant described as "evidently brewed from charred sawdust.1135

Sleeping quarters reserved for the travelers rivaled the decor of the dining room. An iron bed, the head and foot of which leaned precariously inward, covered with a grimy quilt was the only piece of furniture. Two scraps of calico hung limply on either side of an open window through which swarmed squadrons of mosquitos to bombard the young couple. In spite of the discomfort, the weary pair reclined on the bed only to notice the stars in the darkened heavens flickering through holes in the roof. Early in the morning, the innkeeper awakened them for breakfast. They received the same fare as they had had for supper. For the lavish accommodations and sumptuous meals, the lieutenant paid eight dollars. After two more equally distressing nights in road houses and three more bone-
jarring days in the coach, the driver delivered them to the cow manure littered front yard of the Fort Sill Hotel. ${ }^{36}$

Not all overlanders to and from Fort Sill successfully completed their journey. On September 21, 1875, James Harris and his small son made their way south from the fort on the road to Texas. As they encamped that night, Aaron Wilson, a recently discharged soldier who had been living with a nearby band of Penateka Comanche Indians, approached the wagon. He asked for food and for permission to spend the night. Harris hospitably obliged the man. While they slept, Wilson murdered his host with an axe, shot the boy to death, and stole the dead man's team of horses. The murderer then returned to the Penateka village. The Indians did not approve of his deed, and they reported Wilson's actions to authorities at Fort Sill. Second Lieutenant Mat thew Leeper, Jr., and a small detachment of cavalrymen set out to investigate the incident. They arrested Wilson, who subsequently confessed to the heinous crime. Sent to Fort Smith, Arkansas, to stand trial, the former soldier was found guilty and hanged. 37

During the fall of 1368 , military authorities opened another outpost in western Indian Territory. In November of that year Lieutenant Colonel Alfred Sully, commanding a 1,100 man expedition sent against Indian tribes of the southern plains, arrived at the confluence of Wolf Creek and Beaver River in the northwestern part of the territory. Sully needed a depot to store and forward provisions to troops operating in the field against hostile natives. As a result, he established Camp Supply at the junction of the two waterways. Almost immediately the colonel ordered 250 of the 400 wagons in his command to Fort Dodge, Kansas, to
procure provisions for the new outpost. During December, another wagon train of equal size made the round trip from Camp Supply to Fort Dodge. ${ }^{38}$

The strategic importance of Camp Supply made it a center for overland transportation on the Great Plains of Indian Territory. To improve communications with Fort Dodge, officials at Camp Supply ordered surveyed a fixed route to the Kansas outpost. In May of 1869 , eleven men of the Third United States Infantry Regiment measured the distance and surveyed the terrain between Camp Supply and Fort Dodge. Then Ben Clark, a civilian guide stationed at Camp Supply, used the infantrymen's report to select a line of transit estimated to be twenty miles shorter than the trail used by Sully's teamsters. The ninety-six mile artery stretched due north from Camp Supply across the rolling plains to Fort Dodge. ${ }^{39}$ During the Indian wars on the southern plains the Camp Supply-Fort Dodge road served as a vital link supporting troops in the field. Tons of ammunition, clothing, food, forage, and weapons arrived overland at Camp Supply from the railhead at Fort Dodge. The quartermaster either stored the material or forwarded it to units encamped on the western plains of Indian Territory or in the Texas Panhandle. A particularly busy period occurred in the fall of 1874, when Colonel Nelson A. Miles and Major William R. Price began operating against hostile bands of Cheyenne, Comanche, and Kiowa Indians. Wagons rumbled over the road to Camp Supply transporting provisions and materials for the troops. Traffic on the road perhaps reached its height in October when 225 tons of supplies reached the outpost. The overland shipment of these materials contributed directly to the success of the army in the field. ${ }^{40}$ Civilian contractors hauled most of the freight and mail to the outpost. Due to the constant threat of attack by hostile Indians and the
absence of a reliable source of water, military escorts accompanied the wagon trains, adhering strictly to a four-day marching schedule. For the most part, the presence of heavily armed cavalrymen forestalled attacks on wagon trains by marauding bands of warriors. Escort duty and regular patrols along the Camp Supply-Fort Dodge road remained a routine activity for soldiers stationed at the northwestern Indian Territory outpost throughout the 1870 s. 41

Once travelers and freight reached Camp Supply, designated a fort in 1878, two other roads continued in a sourtherly direction. From Camp Supply a well-traveled track coursed fifty-eight miles to the southwest to Fort Elliott, near Sweetwater City in the Texas Panhandle. This route was not the primary supply line to the panhandle outpost, as a direct north-south trail connected it with Fort Dodge. But the Camp Supply-Fort Elliot road attracted buffalo hunters and other adventuresome types who preferred the route because of the frequency of good camping places. Also, civilian mail contractors operated almost exclusively over this road. 42

The second major roadway led from Camp Supply to the Darlington Agency. In September of 1869, Brinton Darlington, the federal agent for the Cheyenne and Arapaho Indians, located the headquarters for the reservation 125 miles southeast of Camp Supply near the North Canadian River. In May of the following year, removal of the Indians to the new agency began. To supply Darlington's charges with food and other necessary items, army wagoners and civilian teamsters opened a route along the south side of the North Canadian River to the agency. A shortage of wagons required numerous trips to obtain provisions for the agency, and apparently the track became readily discernible within a short period of
time. This road extended south from the agency to Fort Sill, thus providing Camp Supply with a roundabout connection to that important post. 43

Following the end of the Indian wars on the southern plains, troops at Fort Supply worked to improve roadways in the area. The roads to Fort Elliot and Fort Dodge continued to function as well-traveled arteries and remained in good condition. In 1885, soldiers at Fort Supply probably opened the last military road in Indian Territory. During the spring and summer months of that year troopers constructed a new road northwest to New Kiowa, Kansas. This route provided Camp Supply with a second connection to a railroad depot. 44

Construction of roads across Oklahoma in the nineteenth century by army roadbuilders served a twofold purpose. First, the wilderness highways provided a vital link--a lifeline in some cases--to advanced bases. Over these rutted tracks moved official dispatches, supplies, and replacements. Although some of the posts had access to water routes as well, in all cases military tacticians deemed imperative an overland artery between the frontier forts and the rear areas. Also, many of the army's outposts in Indian Territory could not have been established without first securing a reliable road to the site. This situation existed specifically in the opening of Fort Washita and Fort Sill.

Second, the ribbon of military roads that crisscrossed Indian Territory by the late 1800 s contributed directly to implementing significant federal government policies. Removal of the Choctaw tribe of Indians to Indian Territory provided the major impetus for opening or improving overland routes to Fort Towson. The westward extension of roadways that coincided with the founding of Fort Washita partially resulted from the removal of the Chickasaw tribe of Indians. Aside from expediting the
resettlement of displaced native Americans, military roads reflected strategies implemented to protect the frontier. As the frontier swept westward across Oklahoma, roads were opened, often in advance of new army posts. The work of Randolph B. Marcy exemplified the activities of army road builders in extending and protecting the frontier of Oklahoma by opening tracks through the wilderness. As a result, military roads in Oklahoma served the rudimentary, basic function of communication and transportation, and they reflected national policy regarding native Americans and the opening of the frontier.

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## INTERREGIONAL ROUTES

Four major interregional roadways converged on Indian Territory during the 1800s, making the area a focal point for overland transportation. The Texas Road, the Cimarron Cutoff of the Santa Fe Trail, the California road, and the route of the Butterfield Overland Mail Company received much notoriety and enjoyed extensive use. These overland arteries conveyed settlers to new frontiers, made possible the movement of goods to remote and sometimes lucrative markets, or improved communications between portions of the country separated by great distances. Because of the location of these interregional passageways, Indian Territory received much favorable publicity and became a less isolated appendage of the United States.

The Texas road stretched in a north-south direction through eastern Indian Territory. Northern segments of the wilderness thoroughfare entered Indian Territory south of present Baxter Springs, Kansas, and followed the old Osage Trace down the valley of the Grand River to the Three Forks. Crossing the Arkansas River near Fort Gibson, the route continued in a southwesterly direction to ford the North Canadian River near its mouth, and to intersect the South Canadian River south of present Eufaula, Oklahoma. The track twisted through woodlands and over hills to the site of Boggy Depot, southwest of present Atoka, Oklahoma, then on to the Red River, crossing that stream near present Colbert, Oklahoma. When Fort

Washita opened in 1842, a branch of the Texas Road was extended to that facility.

As noted in a previous chapter, non-Indians settled along the Osage Trace/Texas Road during early years of the nineteenth century. In 1821, Pierre August Chouteau opened La Saline trading post near the Texas Road, but on the opposite side of the Grand River. That same year emissaries from the United Foreign Missionary Society established Union Mission virtually astride the frontier roadway. Even small scale entrepreneurs found the location of the Osage Trace/Texas Road conducive to limited business activity. As early as 1815, Bernard R. Mouille, a frontier trader, began to exploit the mineral wealth of salt springs near the road. The springs, located ten miles northeast of present Mazie, Oklahoma, had been frequented by indigenous tribes of Indians years before the arrival of the white man. The presence of salt deposits probably influenced the location of the trail. Mouille later sold his holdings to Johnson Campbell and David Earheart. The springs bubbled forth a briny solution that even with the primitive methods employed by Campbell and Earheart produced 120 bushels of salt a week. Using the Texas Road and the Grand River, the men distributed their product to area residents. A dispute between the partners, however, abruptly ended the business. Early in 1819, Earheart and an accomplice killed Campbell. The murderers abandoned the salt works, and it remained out of production commercially for several years. ${ }^{2}$

The most significant aspect of the Texas Road involved the movement of people. Large numbers of immigrants passed over this route on the way to Texas, hence the name of the road. By 1822 , the first of hundreds of white-canvas-topped wagons jolted along the trail, carrying their
passengers to newly opened land in Mexican Texas held by Stephen $F$. Austin and other promoters. Many of the first settlers came from Arkansas and Missouri, but during the 1830 s and 1840 s residents of states as far away as lllinois, Indiana, and Kentucky joined the parade. The movement of hopeful settlers to the promised land south of the Red River increased annually, reaching a peak during the years just prior to the Civil War. In 1859, fifty to sixty wagons a day reportedly passed through North Fork Town, a trading community in the Creek Nation situated on the Texas Road. In that same year Captain Thomas J. Wood, a cavalry officer assigned to Fort Washita, observed a wagon train approximately two miles long headed south over the Texas Road. The captain also reported that between September 1 and November 1, 1859, no less than 3,000 people crossed the Red River into Texas. ${ }^{3}$

The Texas Road also conveyed prospective settlers to Indian Territory. In an attempt to secure peaceful and voluntary immigration of the Five Civilized Tribes to Indian Territory, the Secretary of War in 1828 authorized an expedition to escort representatives of the Five Civilized Tribes to their future homeland. The purpose of the excursion was to allow the party to see their new domain, and hopefully report favorably to fellow tribesmen. In October the forty-two man company, including representatives from the Chickasaw, Choctaw, and Creek nations, departed from St. Louis, Missouri. The Cherokee and Seminole tribes did not participate. Following the arrival of tribal representatives in Indian Territory, they slowly traversed the Texas Road on horseback. This leisurely trip along the road permitted tribesmen to observe the landscape firsthand. ${ }^{4}$

Gold seekers rushing to California in 1849-1850 made brief but heavy use of the Texas Road. Spring came early to Indian Territory because of the geographical location of the area. As a result, grass for grazing draft animals and weather suitable for traveling made Indian Territory a desirable departure point for adventurers anxious to get to the gold fields in California. Hundreds of prospectors flocked to Fort Smith and Van Buren, Arkansas, located on the Arkansas River adjacent to Indian Territory, during the winter of 1849-1850. In April of 1849, some of the first gold seekers left the Arkansas towns, along the military road to Fort Gibson, then turned south on the Texas Road. Parties composed of as many as fifteen wagons and others guiding strings of pack mules made their way to Fort Washita. There the overlanders organized into small mobile communities, electing officers and establishing regulations before moving on to the Red River. The abundance of animal fodder, the prevalence of good weather, and the presence of Choctaw and Chickasaw traders eager to do business with the argonauts, made the Texas Road a suitable route to California. ${ }^{5}$

The importance of the Texas Road as an interregional route continued until the 1870 s. During the Civil War both sides moved large numbers of men and tons of supplies up and down the trail. The single most significant battle of the war in Indian Territory was fought on the Texas Road. On July 17, 1863, Confederate and Union forces stretched their lines across the Texas Road to face each other near Honey Springs. The ensuing Battle of Honey Springs proved the turning point of the Civil War in Indian Territory. Union troopers routed the Confederates, thus insuring federal control of Indian Territory. Following the Civil War, reconstruction treaties imposed on the Five Civilized Tribes by the federal
government opened their domain to railroad builders. In 1872, the Missouri, Kansas, and Texas Railroad Company, the first railway to build across Indian Territory, laid tracks virtually paralleling the Texas Road. Completion of the railroad ended the role of the Texas Road as a mainstay of interregional travel through Indian Territory. ${ }^{6}$

Profit provided the impetus for opening an overland route to Santa Fe, New Mexico. About September 1, 1821, William Becknell, a trader from Franklin, Missouri, left Missouri for New Mexico. Accompanied by a small party of men and several pack horses loaded with approximately $\$ 300$ worth of goods, Becknell traversed the present state of Kansas in a southwesterly direction. Reaching the Arkansas River, he followed the watercourse west into the southeastern corner of the present state of Colorado. There he turned south over Raton Pass to Taos and on to Santa Fe, arriving there on November 16, 1821. Beckne.ll's bold intrusion into Mexican territory produced a financial windfall. The New Mexicans, isolated from the rest of their country, eagerly traded for his merchandise. In January of 1822 , he returned to Missouri, and immediately began to prepare a second expedition. ${ }^{7}$

In May, the intrepid entrepreneur began a return trip to Santa Fe. This time Becknell took with him twenty-one men and three wagons--the first vehicles to traverse the trail from Missouri to Santa Fe--loaded with about $\$ 5,000$ worth of goods. After reaching the Arkansas River, Becknell decided to seek a route more direct than the one over Raton Pass. He crossed the Arkansas River and headed south to the Cimarron River. Before reaching the river, his party ran out of drinking water. In order to quench their thirst, the men killed their dogs and cut the ears off of mules to drink the animals' blood. Desperate, one of the
traders shot a buffalo, and the party drank the contents of its stomach. These primitive, near Neanderthal methods, enabled the company to gain the banks of the Cimarron River. After filling their water casks, Becknell's party continued west through the northwest corner of the panhandle of present Oklahoma to San Miguel, New Mexico, approximately fifty miles east of Santa Fe. Becknell and his men then pressed on to Santa Fe, entering that city probably in July of 1822. Other frontier businessmen hoping to exploit the Santa Fe trade followed Becknell's trail, and the Cimarron Cutoff became a much used avenue to lucrative markets in the Southwest. 8

As trade with Santa Fe expanded and as use of the trail increased, politicians from Missouri secured federal aid to improve the route. In January of 1825, Thomas Hart Benton, a United States senator from Missouri, introduced a bill in Congress requesting funds to survey the Santa Fe Trail and to make treaties with Indians tribes living in its vicinity. Supported by the entire congressional delegation from Missouri, the bill passed Congress and became law in March of 1825. President John Quincy Adams appointed a three-man commission to execute the provisions of the statute. One of the commissioners, George Champlin Sibley, a long-time resident of the Missouri frontier, possessed great knowledge of the terrain and of the indigenous Indian tribes. The other appointees, Benjamin H. Reeves, the lieutenant-governor of Missouri, and Thomas Mather, a merchant from Kaskaskia, lllinois, joined Sibley at Fort Osage, Missouri. They selected John C. Brown, a highly esteemed surveyor, to oversee the technical aspects of their mission. The commissioners also hired a number of experienced frontiersmen to accompany them and acquired seven light blue horse-drawn wagons to carry supplies and equipment. ${ }^{9}$

On July 17, 1825, the expedition left Fort Osage. They pursued a southwesterly course, surveying the route and erecting earthen mounds as trail markers. Upon reaching the Arkansas River, the party moved west to the hundredth meridian, the border between Mexico and the United States, and halted to await permission from Mexican authorities to continue their work. On September 20, after a delay of nine days, Sibley, with eleven men and two of the wagons, decided to go on to Santa Fe, while the remainder of the group went back to Fort Osage to make a report. Sibley's party followed the Cimarron Cutoff. They crossed the Arkansas River near Chouteau's Island, marched directly south to the Cimarron River, and then moved along the sandy river bottom in a southwesterly direction, entering present Cimarron County, Oklahoma, on October 6. While in the present Oklahoma Panhandle, the men camped at Upper Spring, a reliable source of fresh water on the south side of the Cimarron River about eleven miles north of present Boise City, Oklahoma. At Upper Spring, the trail left the watercourse of the Cimarron River. Sibley's party also halted for the night at Cold Spring, sometimes known as Mire Spring, approximately eleven miles southwest of Upper Spring. Both landmarks became popular watering places for travelers making their way to and from the Southwest. The expedition left the panhandle east of Rabbit Ears Creek, a tributary of the North Canadian River in the northeast corner of the present state of New Mexico. According to records kept by Joseph Brown, the surveyor, the Cimarron Cutoff extended approximately fifty miles through the present Oklahoma Panhandle from Upper Spring to Rabbit Ears Creek. ${ }^{10}$

By 1831, the Cimarron Cutoff became the line of transit overwhelmingly favored by Santa Fe traders. Great caravans of wagons pressed
across the plains of Kansas to the Arkansas River and crossed the watercourse either at Lower Crossing, west of present Dodge City, Kansas, at the Middle Crossing, forty miles further upstream, or at the Upper Crossing at Chouteau's Island. Traders then endured the Cimarron Desert, or "water scrape," a barren fifty-mile stretch of land between the Arkansas and Cimarron rivers. Once in the Oklahoma Panhandle, traveling became easier. Reliable sources of potable water, sufficient growths of grass, and adequate amounts of fuel--wood or buffalo chips--made possible a journey plagued by few real privations. Wagon trains laden with cloth, firearms, metal products, and whiskey, frequently formed lines four to six vehicles abreast. Some places they cut a swath 400 feet wide. In 1834, an unusually heavy, prolonged rainfall loosened the soil along the track. Traders' wagons cut deep, indelible ruts, still visible today, across the present Oklahoma Panhandle. 11

The Cimarron Cutoff acquired strategic importance during the Mexican War. On August 7, 1843, General Antonio Lopez de Santa Anna of Mexico ordered customs officials at Taos to turn back United States traders bound for Santa Fe, stopping the Santa Fe trade. Santa Anna's move apparently was calculated to reduce American influence in the northern provinces of Mexico. Relations between the United States and Mexico continued to deteriorate until a general war broke out in the spring of
1846. In order to insure the conquest of New Mexico, President James K. Polk dispatched Colonel Stephen Watts Kearney, commander of the Army of the West, to Santa Fe. Kearney's troops traveled by way of Raton Pass, or Mountain Route, capturing Santa Fe without a fight on August $18,1846$. Through the summer reinforcements for the Army of the West assembled at Fort Leavenworth, Kansas. On August 12, Colonel Sterling Price,
commander of the Second Missouri Mounted Volunteer Regiment, left for Santa Fe. The following day elements of the Mormon Battalion, led by Captain James Allen, began their trek to New Mexico. These units, with the exception of two or three companies, marched along the Cimarron Cutoff to expedite their arrival in Santa Fe . Traders eager to reestablish commercial ties with the Southwest accompanied the soldiers. ${ }^{12}$

Warfare of another type often disrupted traffic on the Santa Fe Trail. Raids by hostile Indians on traders' caravans became a constant and severe problem from the earliest days of the Cimarron Cutoff. Warriors prized not only the cargoes of the freight wagons, but draft animals and the horses and mules acquired in New Mexico and herded back to Missouri. Actions by white men sometimes increased antagonism between the two races also. In the fall of 1828, a band of warriors attacked two traders near Corrumpa Creek on the Cimarron Cutoff in New Mexico. One of the men was killed instantly, and the other, Daniel Monroe, was left for dead. Shortly thereafter, an eastbound group of frontier merchants discovered the mortally wounded Monroe, and transported him as far as the Cimarron River, where he expired. They had just finished burying the man when a band of no more than seven mounted Indians appeared on the opposite bank of the stream. Obviously ignorant of the events that had transpired, and probably innocent of the murders, the natives started to approach the white men. Eager for revenge, the traders opened fire on the Indians, killing all but one of them. Incidents such as this helped create a feeling of distrust between whites and Indians along the Santa Fe Trail. ${ }^{13}$

Attacks upon traders occurred with greater frequency and the size of raiding parties increased as use of the Cimarron Cutoff rose. In July of

1831, an estimated 100 warriors, possibly Comanche, struck an encamped wagon train at Willow Bar, a popular stopping place in present Cimarron County, Oklahoma, about eighteen miles northeast of Upper Spring on the south side of the Cimarron River. The raid took place following the noon meal. Most of the teamsters were enjoying a siesta before resuming the trek down the trail. Shots fired by charging warriors aroused the drowsy wagoners, who managed to return fire. With a great deal of confusion, some of the men manned a small cannon that comprised part of the train's armament. The Indians, however, fled out of range, and all of the rounds fell short. Neither side suffered any casualties, but similar and more costly hit-and-run skirmishes became commonplace. ${ }^{14}$

Following the Mexican War, when New Mexico became partof the United States, federal authorities made a serious and somewhat effective attempt to stop depredations by Indians on the Cimarron Cutoff. In 1851, the army opened two outposts. Fort Union was located in New Mexico at the confluence of the Cimarron and Mountain routes of the trail, and Fort Atkinson was established on the north side of the Arkansas River, twentysix miles east of the Middle Crossing in the present state of Kansas. In August, Lieutenant Colonel Edwin V. Sumner, commander of the Ninth Military Department, ordered a company of the First United States Dragoon Regiment to patrol the 319 miles of the Cimarron Cutoff between the two posts. The cavalrymen, commanded by Captain James H. Carleton, moved along the trail at a deliberate pace. They did not escort wagon trains or pursue any marauders. They acted as a show of force, aiding only those travelers they encountered on the trail experiencing difficulties. Carleton's men made one round trip in 1851. Although not completely eliminating attacks by indigenous tribesmen on the wagon trains, Colonel

Sumner believed his tactics restrained some of the hostile Indians. The following year Sumner continued the patrols and increased their number. ${ }^{15}$

When the Civil War broke out in 1861, federal troops in New Mexico were confronted simultaneously by two monstrous tasks. Increasingly resentful of white encroachments upon their traditional domain, regional tribes of Indians rebelled in a concerted attempt to expel the unwelcome intruders. Confederate forces in Texas also organized for an invasion of New Mexico Territory. The Santa Fe Trail became the lifeline of Union forces in this isolated and neglected theater of war. In order to maintain a steady flow of supplies to his troops, Lieutenant Colonel Edward R. S. Canby, commanding officer of the Department of New Mexico, dispatched units of the First New Mexico Volunteer Regiment to guard wagon trains using the Cimarron Cutoff. Furthermore, Canby requested the commanding officer at Fort Larned, a post opened in 1859 on the Pawnee Fork of the Arkansas River in the present state of Kansas, to redirect all westbound wagon trains to the Mountain Route. Canby believed the longer, more northern trail would be less susceptible to attacks by Confederate troops. 16

Marauding bands of warriors posed the greatest threat to travelers on the Cimarron Cutoff. Their raids increased in frequency and ferocity. Because many regular units of the United States Army were siphoned away from New Mexico to fight the Civil War in the East, frontier forts quickly became understrength. Even when the Confederate threat to New Mexico subsided after the Battle of Glorieta Pass in March of 1862 , military officials could not contend adequately with the Indian uprising. Volunteer regiments and the remaining regular troops struggled to keep the Mountain Route open, but, by August of 1862 , manpower had been stretched
so thin that no troops were available to patrol the Cimarron Cutoff. The situation did not improve until 1864, when Brigadier General James H. Carleton, Canby's successor and a veteran of Santa Fe Trail duty, changed tactics. Carleton dispatched large numbers of troops to strategic locations along the trail to escort wagons as they moved to and from the Southwest. In August, he sent detachments to various points on the cutoff including eighty men dispatched to Upper Spring. The troops provided more protection for the caravans, but the raids continued. ${ }^{17}$

The next year Carleton implemented a scheduled escort service for overlanders. Starting in March of 1865 , soldiers left Fort Union and Fort Larned the first and fifteenth of each month, alternately traveling the Cimarron and Mountain routes. All wagons were forbidden to pass either fort without an escort, and each train was to have no fewer than 100 armed civilians in its company. Moreover, Carleton authorized the construction of temporary posts along the trail. In May, he ordered Lieutenant Colonel Christopher "Kit" Carson to erect a position at Cold Spring, in present Cimarron County, Oklahoma, on the Cimarron Cutoff. Carson, with three companies of New Mexico and California volunteers, marched to the waterhole. There his men constructed a 200 foot square earth and stone breastwork. Designated Camp Nichols, the outpost became a safe resting place for wagon trains, and patrols regularly left the post to search for hostile Indians. Carleton's plan proved effective, as the number of raids declined markedly. An end to depredations along the Santa Fe Trail, however, did not occur until the late 1860 s. During the winter of 1868-1869, Major General Philip H. Sheridan ordered troops into the field to battle warring tribes on the southern plains.

Sheridan's successful winter campaign defeated the hostiles and confined them to reservations, almost eliminating depredations on the Cimarron Cutoff. 18

Like the Texas Road, the Santa Fe Trail started to fade in importance when railroads began to build westward. By 1866 , the tracks of the Kansas Pacific Railroad reached Junction City, Kansas, and that frontier town became the eastern terminus of the Santa Fe Trail. Four years later the Kansas Pacific Railroad reached Kit Carson, Colorado. From the end of track in Colorado, teamsters hauled goods by way of the Mountain Route to New Mexico. Thus, the portion of the Santa Fe Trail in Kansas and the Cimarron Cutoff ceased to be an integral part of a major interregional route. Finally, in 1880, the Atchison, Topeka, and Santa Fe Railroad Company completed its line to Santa Fe, New Mexico, relegating the Mountain Route to a secondary role in overland travel. 19

A quest for new markets for American goods and the migration of thousands of gold seekers to California established a major east-west route across Indian Territory. In the spring of 1839 , Josiah Gregg, an eight-year veteran of the Santa Fe trade, decided to reach the interior of Mexico by a route other than the one from Missouri to New Mexico. During 1838 and 1839, the Republic of Mexico became embroiled in a dispute with the government of France, and the French navy blockaded Mexican ports on the Gulf of Mexico. Gregg correctly reasoned that the interior of Mexico, particularly Chihuahua, was starved for merchandise. To obtain an advantage in this trade, the savvy frontier merchant wanted to leave before his competitors. Because spring came earlier to Indian Territory than to the areas immediately to the north, he planned to follow the watercourse of the Arkansas and South Canadian rivers west to

New Mexico. Gregg's strategy was not new, for Indians, French traders, and Spanish explorers had made use of this route. ${ }^{20}$

On April 21, 1839, Gregg and his company began their journey from Van Buren, Arkansas, a small village on the Arkansas River east of the Indian Territory boundary. The expedition included fourteen freight wagons, each drawn by four teams of mules or oxen, two carriages, $\$ 25,000$ worth of trade goods, thirty-four men, and two small cannons mounted on a pair of wheels. Gregg's party traveled along the north side of the Arkansas River, probably following the Fort Smith-Fort Gibson military road, as far as present Webbers Falls, Oklahoma. There they crossed the Arkansas River and continued along the north bank of the South Canadian River. On May 2, the traders forded the North Canadian River, and upon reaching North Fork Town, a Creek Indian village, stopped to acquire a few additional supplies. The expedition then pushed westward in earnest. At the site of an abandoned trading post once operated by Auguste Pierre Chouteau, near present Purcell, Oklahoma, a company of forty dragoons overtook Gregg's party. Captain James M. Bowman, commander of the detachment, had been ordered to escort the traders to the Mexican border. ${ }^{21}$

Gregg's expedition encountered a few difficulties. Once while encamped in a heavily wooded area, several of the men decided to go hunting. At nightfall all returned except one, a "down easter" on his first trip west. After making an attempt to locate the fellow, the party bedded down for the night. The next morning the young man wandered into camp. Explaining his absence, he described a fierce encounter with a panther. But the pungent, unmistakable odor of a skunk reeking from his clothes and the broken stock of his gun revealed to his compatriots the true identity of the assailant. The party experienced some anxious
moments when a grass fire erupted in the midst of their camp. The conflagration spread from a fire carelessly built in an area surrounded by dry prairie grass. Forutnately, the wind blew flames away from the wagons and no serious damage occurred. Aside from these events and a peaceful conference with a band of Comanche warriors, the caravan moved west without incident along the divide between the North and South Canadian rivers. About June 5, 1839, they crossed into Mexican Territory and twenty days later entered Santa Fe. Gregg continued to Chihuahua, arriving there one month ahead of the competition. The next year he returned to the United States by blazing a route along the south side of the South Canadian River. Gregg readily recognized the advantages of the Indian Territory route, but he conceded the much better known Santa Fe Trail would retain a monopoly on commercial traffic to the Southwest. ${ }^{22}$

The gold rush to California in 1849-1850 established the South Canadian River route as a prominent and permanent thoroughfare across Indian Territory. As word spread of the riches of the gold regions, a horde of adventurers sought an expedient way to reach the Far West. Sensing an opportunity to enhance the business climate of their communities, merchants at Fort Smith and Van Buren, Arkansas, promoted the villages as the ideal point of departure for California. They distributed circulars and published contrived newspaper articles to attract prospectors to the South Canadian route. The virtues extolled by promoters included plenty of supplies at the towns, an abundance of water along the route, and a saving of two months of travel time by using the Indian Territory trail. In the spring of 1849 , gold seekers from all over the United States flooded both towns and the exodus to California began. ${ }^{23}$

One of the first groups to leave for the Far West was the Knickerbocker Exploring Company of New York. The sixty-five member party arrived at Fort Smith in mid-March. They brought with them wagons, luggage, and provisions, but the easterners procured most of their livestock at Fort Smith. Led by John A. N. Ebbetts, a thirty-three year old former employee of the American Fur Company, the Knickerbockers left Fort Smith on March 26. The group followed the military road along the south side of the Arkansas River to Skullyville, the location of the Choctaw agency. The train continued to parallel the Arkansas and South Canadian rivers until arriving opposite North Fork Town. There the entire party crossed to the north side of the South Canadian River and encamped at the village to replenish supplies. ${ }^{24}$

On April 5, the New Yorkers departed from North Fork Town along the trail blazed by Josiah Gregg on the north side of the stream. Progress was slow. Heavy rain turned the track into a quagmire, bogging wagons and making camping difficult. A cold north wind delivered a three inch snowfall on April 14 to add to the travelers' troubles. No wonder A. C. Russell, an immigrant from New Orleans who left Fort Smith about the same time as the Knickerbocker Company, dubbed the road from Fort Smith to Little River "the worst in the world." ${ }^{25}$

At the mouth of Little River, a tributary of the South Canadian River, the bedraggled company halted to build a bridge over the stream. The party then moved up river to the former site of Chouteau's trading post. The gold seekers recrossed the South Canadian River and soon entered the thick sod prairies of western Indian Territory. The route traversed the high, dry, open plains of the divide between the Washita and South Canadian rivers, enabling the wagon train to move as fast as
three miles per hour. When the Antelope Hills, six conical peaks near the one-hundredth meridian, came into view the travelers knew they had reached the Texas Panhandle. By June, the Knickerbockers were in Santa Fe. Except for the bad weather, the journey produced no other difficulties. All of the Indians they encountered were friendly, fodder for the draft animals was plentiful, and the route across the western prairie was described as "the best natural road they had ever seen in any part of the world. ${ }^{26}$

Almost all of the parties traveling over the California Road during the gold rush organized in the same manner. Before departing from Fort Smith or Van Buren, each group of argonauts elected officers and established bylaws. The leader often assumed the title of captain, and subalterns usually included lieutenants, a commissariat, treasurer, secretary, and a general council of several members of the association. Some of the companies required their fellow travelers to equip themselves with a minimum quantity of provisions, a specific number of draft animals, and a wagon of a fixed maximum capacity. One company, the Empire Mining Association, made extensive preparations, arriving at Van Buren with a twelve-man India-rubber lifeboat among their equipment. Some of the bylaws were informal agreements, but in many other cases elaborately written documents contained the rules of the road. The council of each party usually meted out punishment for the infraction of regulations. Thus organized, gold seekers began their trek "to see the elephant." As gold fever reached epidemic proportions, thousands of adventurers crowded the points of embarkation. The white-topped wagons and pack trains lined the California Road through Indian Territory. In June of 1849, the Seminole Indian agent, headquartered near present Sasakwa in Seminole

County, Oklahoma, estimated 1,500 to 2,000 immigrants passed by his post. ${ }^{27}$

Official interest in the Canadian River route occurred about the same time as the rush to California, and action by the federal government received great impetus from the gold seekers. Probably as early as 1848, senior officials in the United States Army began to consider the Indian Territory route as a supply line to forts in New Mexico and to other facilities in the Far West. Soon thereafter, ambitious politicians and enterprising merchants in Arkansas prevailed upon the army to provide troops to aid immigrants and to open a road. In January of 1849 , Solen Borland, a United States senator from Arkansas, contacted Secretary of War William L. Marcy. He requested that a military expedition assemble at Fort Smith to survey a road through Indian Territory as well as protect westward-bound prospectors. The Arkansas state legislature memorialized Congress for a military escort. Finally, a group of Fort Smith businessmen openly promoted a plan to lead a large expedition from Fort Smith to California. They too requested help from the army. The actions of politicians and promoters, however, probably weighed equally with the strategic value of a trans-Indian Territory road in Secretary Marcy's decision to send soldiers to Fort Smith. ${ }^{28}$

Assured of support from the army, John J. Dillard, J. R. Kanady, and John F. Wheeler, all Fort Smith businessmen, vigorously promoted a scheme to lead a mammoth expedition to California. By February of 1849 , they had received over 400 inquiries, and more were delivered with each mail. Within a month recruits began to arrive, and the Fort Smith and California Emigrating Company, as the three enterpreneurs named their venture, began to take shape. On March 28 , the membership assembled to elect

John Dillard captain and to select twelve councilmen. The membership also adopted a set of rules: no wagon was to weight more than one ton loaded; each member was to provide 150 pounds of flour, 100 pounds of bacon, 30 pounds of sugar, and 20 pounds of coffee; and every draft animal was to be properly shod. The regulations did not ignore personal hygiene. They required participants to carry three pounds of soap, and to change underwear at least once a week. By mid-April, 479 people had joined the Fort Smith and California Emigrating Company. The train included 75 wagons, 500 oxen and an equal number of horses and mules, a traveling forge, plus numerous other items. Once on the road, the caravan would stretch for three miles. 29

Meanwhile, the army had not been idle. In January of 1849, Adjutant General of the Army Roger Jones sent orders to Brigadier General Mathew Arbuckle, the chief military officer in Indian Territory, to provide troops to escort immigrants and to open a road. Army authorities decided to follow a course along the south side of the Arkansas and South Canadian rivers, a line of transit favoring the location of Fort Smith. Officials in the United States Bureau of Topographical Engineers ordered First Lieutenant James H. Simpson, an engineering officer, to Fort Smith to supervise the survey. Arbuckle appointed Captain Randolph B. Marcy, an officer in the Fifth United States Infantry Regiment stationed at Fort Towson, to command the escort. 30

General Arbuckle also dispatched Captain Frederick T. Dent, Fifth United States Infantry Regiment, to make a preliminary reconnaissance of the proposed right-of-way. Dent, accompanied by four enlisted men, left Fort Smith on March 11, 1849. A military road existed as far as the Choctaw Agency at Skullyville. From the agency they followed an Indian
trail known as the Delaware Trace to Gaines Creek, then they turned more to the west to skirt the south side of the South Canadian River. When fodder became scarce, Dent returned to Fort Smith, arriving there on March 24. Three days later he was back on the road again. This time the captain commanded a working party of twenty men from the Fifth United States Infantry Regiment. They were the vanguard of the larger force, and it'was these men who marked much of the trail through the wooded hill country that Marcy, Simpson, and the Forty-Niners would follow. Dent went as far as the eastern edge of the prairie. At a point opposite Chouteau's old trading post on the South Canadian River, he encamped to await Marcy. 31

On April 5, 1849, Captain Marcy led his contingent out of Fort Smith. The command consisted of thirty-two men from the Fifth United States Infantry Regiment, twenty-seven men from the First. United States Dragoon Regiment, a surgeon, eighteen wagons, a traveling forge, and a six-pound cannon. Marcy decided to depart without the immigrants in order to open the road to the western prairie. Once in open country, the captain planned to stop and wait for the civilian wagon train. Marcy's command, with a few exceptions, followed the route marked by Captain Dent. Rainy weather slowed the pace of the detachment, but the men made some improvements. They cut down the banks of streams to make them accessible to wagons, and the soldiers laid causeways as approaches to fords. When Marcy reached a point opposite the mouth of the Little River, he crossed the South Canadian River to visit Edward's Store. There he replenished supplies and hired Black Beaver, a Delaware Indian, to serve as guide and interpreter on the Great Plains. Recrossing the South Canadian River, the party moved rapidly toward Dent's camp, making as much as
thirty miles in one day. The terrain was flatter, more open, and less susceptible to boggy spots than the land in eastern Indian Territory. On May 4, Marcy joined Dent and encamped to await the immigrants. ${ }^{32}$ Approximately one week after Marcy left Fort Smith, the Fort Smith and California Emigrating Company commenced their journey. They followed the road opened by the troops as far as a point opposite North Fork Town. Most of the immigrants had become disenchanted with the new road opened by the army. Because of heavy rains, the trail quickly turned to axle-deep mud, and many of the travelers spent day after day up to their knees in bogs extracting wagons from a succession of quagmires. Camping, eating, and sleeping in a steady downpour did little to lighten their spirits either. Believing Gregg's old route a better way west, a majority of the members of the emigrating company voted to cross the South Canadian River at North Fork Town and follow the road on the north side of the river. The conditions they encountered actually were worse than those on the south side. When the caravan reached Edward's Store, they recrossed the South Canadian River. Finally, on May 18, the Fort Smith Company joined Marcy's detachment. The combined force continued its journey, traversing the prairie with much greater ease than their initial experience. They traveled a somewhat circuitous route upon the divide between the Washita and South Canadian rivers. The ground was hard and dry--almost like macadam, according to Marcy--and the wagons rolled along with little difficulty. A scarcity of wood caused some inconvenience but no real problem. An ample supply of water was found in the South Canadian River and its tributaries. Fodder for the animals was plentiful. On May 31, the caravan and escort passed the Antelope Hills, entering the Texas Panhandle. A month later the entire expedition
reached Santa Fe. Initially, the immigrants suffered great inconveniences, but no lives had been lost and another route west had been opened. ${ }^{33}$

Nine years after Marcy blazed a trail along the south side of the South Canadian River, the federal government made a concerted effort to improve the route. During the 1850 s authorities in the War Department and numerous members of Congress expressed a genuine desire to improve communications with the western territories and states. In 1853, Congress approved $\$ 150,000$ for six railroad surveys across the Great Plains to the Pacific Ocean. In that year Captain Amiel W. Whipple, an officer in the United States Army Corps of Topographical Engineers, conducted a survey through Indian Territory, retracing the route opened by Marcy in 1849. Congress, however, could not make a decision on the location of the transcontinental railroad. Five years after Whipple completed his work, officials in the War Department obtained an appropriation of \$50,000 for building bridges and improving stream crossings on the South Canadian route from Fort Smith to Albuquerque, New Mexico Territory. To supervise the planned improvements, John B. Floyd, Secretary of War, hired Edward F. Beale, a former Navy lieutenant who had been active in promoting the use of camels by the army in the Southwest, as superintendent of the project. ${ }^{34}$

Beale traveled from Washington, D.C., to Fort Smith, and there he began to assemble the expedition to Albuquerque. He recruited Jesse Chisholm, a mixed-blood Cherokee trader, and Dick, a Delaware Indian, as guides. The army provided an escort, and several civilian employees were hired. The entire expedition numbered about 130 men. To provide distractions from his daily duties, Beale took with him five greyhounds,
which he used to hunt deer. On October 28, 1858, the expedition left Fort Smith. They paralleled the south side of the Arkansas and South Canadian rivers to a location opposite North Fork Town. The superintendent then decided to divide his command. A small contingent continued along the south side of the river while Beale and the others traveled on the north side of the watercourse to Little River. There the two parties regrouped, forded the South Canadian River, and continued west over the prairie land along the south side of the river until leaving Indian Territory. The expedition consumed nine months in completing its trip to the Colorado River west of Albuquerque. In all about $1,422 \mathrm{miles}$ of roadway were improved. ${ }^{35}$

Aside from producing a detailed map of the route and a descriptive account of the trip, the expedition performed another significant task. Beale or his assistants supervised the construction of a series of bridges through Indian Territory. Workers constructed a wooden structure, approximately thirty-five yards long, across the San Bois River, and they erected another crossing at Little River. Eight other wooden bridges spanned lesser streams along the route. Especially on the plains, the bridges enabled the expedition to follow a line of march less circuitous than the divide between the South Canadian and Washita rivers. ${ }^{36}$

On November 15, moreover, Beale sent H. B. Edwards, his assistant and a civil engineer, back to Fort Smith to solicit contracts for constructing bridges more substantial than the wooden ones built by the expedition's crew. The superintendent specified new bridges for the Poteau, San Bois, and Little rivers as well as at Little San Bois and Long Town creeks. Initially, Edwards encountered some difficulties. The residents of Fort Smith and officials of the Butterfield Overland

Mail Company vigorously protested the planned location of the bridge over the Poteau River. Edwards expected to build it about ten miles upstream, but townspeople and mail company officials wanted the bridge located closer to Fort Smith. As a result, work on the Poteau River bridge was suspended. Three of the other four structures were completed and at least two of them provided a significant advance for overland transportation in Indian Territory. In the summer of 1859 , construction crews erected iron superstructures across the San Bois and Little rivers. The San Bois bridge, formerly located two and one-half miles west of present Keota, in Haskell County, and the Little River bridge, formerly situated approximately two miles from the mouth of the stream, were the first of the kind in the territory. Confederate troops destroyed both of the bridges during the Civil War. 37

The South Canadian River road remained an important east-west route throughout the balance of the nineteenth century. Lesser trails branched from it, and small villages grew up beside it. As Oklahoma developed a modern system of highways, the sometimes circuitous track of the South Canadian River route was abandoned. Only portions of Oklahoma Highway 31 through present Le Flore and Haskell counties, Oklahoma Highway 59 in present McClain County, and Oklahoma Highway 37 in present Caddo and Canadian counties, approximate for several miles the right-of-way of this once great thoroughfare across Indian Territory. 38

Controversy surrounded the location of the route of the Butterfield Overland Mail through Indian Territory. As early as 1850, Congress considered establishing a transcontinental mail line through Indian Territory. But either an absence of genuine interest or an upwelling of sectional differences delayed official action. Finally, in the spring of

1857, Aaron V. Brown, the Postmaster General of the United States, secured an amendment to the appropriations bill of the Post Office Department providing for federal subsidies for a transcontinental mail route. Brown, a native Tennessean with deep ties to the traditions of the South, favored a southern route. The law prohibited him from specifying a right-ofway, but it authorized the postmaster general to select a contractor, effectively permitting Brown to pick the line of transit of the mails. 39 John Butterfield, one of the bidders, submitted several proposals for the transcontinental mail, three of which crossed Indian Territory to Albuquerque. Postmaster Brown, apparently acting outside of the law, suggested a route farther to the south. He justified his action by citing the numerous lengthy delays on northern routes caused by winter snowstorms. After considering all bids, Brown selected one submitted by Butterfield and six associates. In September of 1857 , Butterfield and postal officials agreed to a contract calling for semi-weekly services between St. Louis, Missouri, and San Francisco, California, with an annual federal subsidy of $\$ 600,000$ for six years. The agreement permitted a maximum of twenty-five days for a one-way trip with service to commence September 16, 1858. 40

Butterfield began immediately to organize his operations. A native of Berne, New York, Butterfield had spent all of his adult life in the stagecoach business. An enterprising businessman, he had been one of the founders of the American Express Company. He relied upon his own background and the aid of his partners to make the Butterfield Overland Mail Company a successful venture. Experienced drivers, conductors, and supervisors were recruited from the East, as well as blacksmiths, harnessmakers, and veterinarians. Over 1,800 mules and horses were
purchased. Dozens of coaches were acquired, and several celerity wagons, a vehicle designed by Butterfield with a low center of gravity for runs over the roughest roads, were ordered. The route Butterfield contracted to operate extended for 2,800 miles. Leaving St. Louis, it headed southwest to Fort Smith, through southeastern Indian Territory to the Red River, west across Texas to El Paso, over a series of military roads in the Southwest to Los Angeles, and then north to San Francisco. ${ }^{41}$

The segment through Indian Territory, designated Division Three, involved about 200 miles of existing roadway in the Choctaw and Chickasaw nations. Stagecoaches followed the well-worn track from Fort Smith to Skullyville, Choctaw Nation, where Tandy Walker, a Choctaw leader, operated a relay station. From Walker's station the line ran in a southwesterly direction over a road initially established to expedite the immigration of Chickasaw Indians. About 1836, Captain Gaines P. Kingsbury, an officer in the First United States Dragoon Regiment, commanded a detachment of troopers who cleared a right-of-way through present Le Flore, Latimer, Pittsburg, and Atoka counties to a location on the Clear Boggy River that became known as Boggy Depot. At Boggy Depot the military road joined the Texas Road. The Butterfield Overland Mail followed the Texas Road south, entering the Chickasaw Nation after fording Island Bayou Creek. From there coaches traveled approximately thirteen miles to Colbert's Ferry, Chickasaw Nation, a location directly north of present Sherman, Texas, where black slaves poled wagons across the Red River on a long flat boat. Prior to starting service, representatives of the Butterfield Overland Mail Company contracted with citizens of the Choctaw and Chickasaw nations who lived along the road to operate twelve relay stations in Indian Territory. ${ }^{42}$

On September 16, 1858, the westbound mail departed from St. Louis. Three days later the stagecoach arrived at Fort Smith. After pausing approximately an hour and a half to change to a celerity wagon and to load the mail from Memphis, Tennessee, the driver urged his horses westward, across the Poteau River into the Choctaw Nation. Aboard the first westbound mail stage was Waterman L. Ormsby, a reporter for the New York Herald, and the only passenger. The twenty-three year old writer candidly commented on his trip through Indian Territory. Soon after entering the Choctaw Nation, Ormsby, overcome by fatigue--he had not slept for three days--napped until arriving at Walker's Station. Leaving the station, the route alternated from one of smooth passages over fields and river valleys to a crunching, bone-jarring ride through the mountains, which on one occasion pitched Ormsby to the floor of the coach. Accompanied by the conductor and the driver, who ran the horses at full speed regardless of the condition of the road, Ormsby took note of the countryside, of the people, and of the stage line's operation. Generally, he was favorably impressed with all three. ${ }^{43}$

The only unusual event occurred during the moonlit night of September 19. Near Blackburn's Station, a relay post approximately sixty miles from the Red River, the wagon crashed over a large bump and lurched to a halt. A loud, cracking noise indicated something had broken. Quickly inspecting the vehicle, the driver found no damage, but at the next stop a closer examination revealed the tongue of the wagon had been shattered. Ormsby caustically observed that it took more time to fix the broken singletree than the driver saved by traveling at breakneck speeds. At 10:10 a.m. on September 20, the mail coach containing its bruised passenger arrived at Colbert's Ferry thirty-four hours ahead of schedule. Ormsby continued
to San Francisco, entering that city after twenty-three days and twentythree hours of continuous riding. 44

For approximately two and one-half years the coaches of the Butterfield Overland Mail Company raced through southeastern Indian Territory. Opposition to the southern route, however, arose almost as soon as service was inaugurated. Several pieces of legislation surfaced in Congress to change the mail franchise to a route across the central plains. In 1860, a bill became law that provided for an additional mail line from Omaha, Nebraska Territory, to Placerville, California. This law did not affect the operation of the Butterfield Overland Mail, but sectional differences did. In December of 1860, South Carolina withdrew from the Union, and within weeks several other southern states followed her example. The postmaster general began to receive reports of harrassment of the mail in Missouri and Texas. As a result, on March 12, 1861, federal authorities transferred all operations of the Butterfield Overland Mail to the safer central plains route. 45

Interregional routes that stretched across Oklahoma in the nineteenth century contributed greatly to national development. Settlers and adventurers traveled the Texas Road and the California Road in their quest for new homes and newfound wealth. Merchants seeking profits and untapped markets traversed the Cimarron Cutoff of the Santa Fe Trail, taking trade goods to and from the Southwest. The route of the Butterfield Overland Mail Company through the Choctaw and Chickasaw nations proved an important link in a major attempt to upgrade transcontinental mail service. All of these overland arteries created closer bonds between the populated East and the far western possessions of the United States. By virtue of its location, Oklahoma played a pivotal role in
this phase of national development, and became a less isolated appendage of the United States.

Ample supplies of food, forage, water, and wood made traveling through Oklahoma easier than along other interregional routes of the West. The mild climate also enhanced the reputation of Oklahoma as a troublefree passageway for overlanders. As a result, many travelers wrote glowing reports of their journey through Indian Territory, and military officials viewed the area as strategically significant. Thus interregional overland routes helped create a positive image of Indian Territory.
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## CHAPTER V

## ROADWAYS OF THE FIVE CIVILIZED TRIBES

Roadways crisscrossed the countryside occupied by the nations of the Five Civilized Tribes in eastern Indian Territory and reflected several important trends in the development of the area. After arriving in their new homeland, tribal lawmakers made provisions for the construction and maintenance of overland routes. Roads fostered economic development as travelers through the nations and members of the Five Civilized Tribes relied upon roadways for business activities. Implementing the Dawes Act affected the customary scheme of locating highways, generating controversy among the residents of the nations. In particular, these factors influenced overland transportation in the Choctaw, Creek, and Cherokee nations.

In May of 1830, the Indian Removal Act inaugurated the process of relocating eastern tribes of native Americans in Indian Territory. The Choctaw Indians became one of the first tribes affected by the law. In September of 1830 , tribal leaders and officials representing the government of the United States concluded the Treaty of Dancing Rabbit Creek. This agreement required the Choctaws to surrender traditional homelands in Mississippi for a new domain in southeastern Indian Territory. To facilitate the removal of these people, bureaucrats in the Office of Indian Affairs called upon the United States Army to improve existing roads or to construct new overland routes in Indian Territory. As
related previously, soldiers and civilian contractors reworked roads from Washington, Arkansas Territory, to Fort Towson, Indian Territory. In the summer of 1832, Captain John Stuart commanded a detachment of soldiers who built a new road from Skullyville, Indian Territory, south to Fort Towson. Thousands of Choctaw Indians passed over these wilderness roadways to their new homeland, and the roads became important arteries for commerce and transportation throughout the existence of the Choctaw Nation.

The vast majority of Choctaws established farms among the hills and woodlands of southeastern Indian Territory. Soon footpaths and trails evolved linking rural residences with the nearest village. Over a period of time primitive pathways were widened to accommodate wagons, and a system of public roads began to emerge. None of the Indian roadways were surveyed, as most of them meandered about the countryside connecting one farmstead with another. Tribal leaders, however, made legal provisions for maintaining these arteries. As early as 1836, the Choctaw National Council enacted legislation prohibiting the obstruction of public roads. The law required farmers to open new routes when they plowed across existing roadways. Also, provisions of the ordinance called for the imposition of fines upon persons who blocked rights-of-way by felling trees. ${ }^{2}$

In 1848, the Choctaw National Council adopted a road law similar to legislation in many of the states. Tribal lawmakers passed a statute requiring residents of the Choctaw Nation to work on public roads six days each year without pay. A fine of fifty cents a day was to be levied against anyone who failed to fulfill this obligation. Six years later legislators revised the law, making all free males between the ages of
eighteen and fifty liable for service as maintenance crews. The statute extended the obligation to non-Indian residents of the Choctaw Nation, but it exempted from service teachers, students, and doctors. Responsibility for organizing laborers rested with county judges who in turn placed lighthorsemen, the tribal policemen, directly in charge of the men. Although many pre-Civil War travelers through the Choctaw Nation often remarked about the poor condition of roadways, authorities made efforts to enforce the law. But one major difficulty arose. Tribal officials possessed no means of forcing white non-citizen residents of the nation to comply with the law. As a result, most of the white noncitizens ignored it. This circumstance created feelings of animosity by Indians toward whites, and, subsequently, Choctaw citizens became increasingly reluctant to fulfill their obligations to work on the roads. ${ }^{3}$

Choctaw lawmakers never appropriated public funds for road construction or maintenance. Aside from enacting compulsory work laws, tribal leaders relied on private enterprise to provide a system of highways. Throughout the antebellum years, Indian legislators passed laws granting special privileges to individuals to erect toll bridges, build turnpikes, and operate ferries along major arteries. Laws passed in 1858, possibly in anticipation of increased traffic drawn to the area by John Butterfield's plan to run the overland mail through the Choctaw Nation, established a series of toll bridges, ferries, and turnpikes along the Fort Smith-Boggy Depot route. Operators received a six year lease on their concessions. The laws permitted them to charge fifty cents for each wagon drawn by four or more horses; twenty-five cents for each wagon drawn by one or two horses; five cents for a horse and rider; and one cent for each head of loose livestock. In all cases statutes exempted
citizens of the Choctaw Nation and the coaches of the Butterfield Overland Mail from paying the tolls. Thus, foreign travelers financed highway improvements, and for many concessionaires their facilities became a profitable enterprise. While toll bridges, ferries, and turnpi-kes proliferated along the most heavily traveled arteries, the majority of public highways in the Choctaw Nation remained a maze of meandering dirt tracks that skirted plowed fields and swerved around randomly erected fence rows. ${ }^{4}$

Centers of trade and commerce grew up along the main highways. The founding of Boggy Depot coincided directly with the opening of a road. In 1836, First Lieutenant Gaines P. Kingsbury, an army officer, laid out a trail to expedite removal of Chickasaw Indians to land reserved for them in the western portion of the Choctaw Nation. His route headed southwest from Fort Coffee, Choctaw Nation, for approximately 120 miles to meet the Texas Road. At a large natural pasture along the new track, near its intersection with the Texas Road and close to Clear Boggy River, he recommended a site for a depot from which supplies could be distributed to Indians. In 1837, a few families of Chickasaw immigrants settled in the area, and the open field served as a gathering place for the distribution of Chickasaw annuities. Later, mixed-blooded Indians and intermarried whites opened a few stores, and the community of Boggy Depot began to emerge. In 1849, gold seekers traveling the southern route to California brought a measure of prosperity to the village by patronizing local merchants. In that year a post office opened, and a mail stage commenced weekly services. As a result of the Choctaw-Chickasaw Treaty of 1855 , boundaries between the two tribes were redrawn, and Boggy Depot became a part of Pushmataha District of the Choctaw Nation. ${ }^{5}$

The town remained an important center until construction of the Missouri, Kansas, and Texas Railroad. During the Civil War, Confederate troops opened an outpost on approximately thirty acres of land in the southwest part of town. Soldiers built rows of log cabins for their dwellings, and from Boggy Depot forayed against Federal invaders of Indian Territory. Following the war, cattle drovers moved their herds through Boggy Depot on their way to markets in the north, and heavily laden ox-drawn freight wagons destined for forts in western Indian Territory lumbered along the main street. By the late 1860 s, the business district boasted a hotel, an apothecary, and a flagstone sidewalk along the north side of the main street. Additional activity accompanied construction of the railroad in 1871-1872, but it signaled the end of Boggy Depot. Surveyors located the Missouri, Kansas, and Texas Railroad right-of-way twelve miles east of town, and once the line was completed businesses began moving to locations closer to the tracks. Soon thereafter the local stage coach company stopped serving the dwindling community, and by the end of the century Boggy Depot was almost a ghost town. ${ }^{6}$

Plans to remove the Creeks to Indian Territory began simultaneously with activities surrounding Choctaw removal. In March of 1832 , leaders of the Creek Nation met with officials of the United States Department of War at Brown's Hotel in Washington, D.C. The treaty negotiated at this meeting provided for placing the Indians on land north of the Choctaw Nation and west of the Verdigris River in eastern Indian Territory. Clauses in the agreement permitted a five year grace period to allow Creeks to settle affairs in their traditional homeland in Alabama. In December of 1834, the first sizable group of Creeks, a band of 650 men, women, and children, to depart for the West left Alabama by boat. They
traveled to Little Rock, Arkansas Territory, and then trekked overland along the military road to Fort Gibson. On March $28,1835,469$ survivors arrived at the outpost. Most of these people moved a few miles west of the Verdigris River and began to establish their homes. Between the winter of 1835 and the spring of 1837, Creeks forcibly immigrated westward until approximately 15,045 members of the tribe were resettled in their new domain. ${ }^{7}$

Upon reorganizing tribal government, members of the Creek National Council commenced dealing with internal affairs. Statutes pertaining to public roads granted franchises to tribesmen to operate toll bridges and ferries at important river crossings. These laws aided overland transportation because most of the supplies destined for the Creek Nation arrived by steamboat at the Three Forks. From there teamsters transported the goods'over the South Canadian River Road, the Texas Road, or other arteries to their destination. Also, individuals journeying through the Creek Nation primarily traveled over the South Canadian River and Texas roads. The right to operate a toll bridge or a ferry apparently provided a lucrative income as tribal members frequently brought lawsuits against one another contesting possession of boat landings and river crossings. ${ }^{8}$

The intersection of major arteries spawned the development of trading centers in the Creek Nation. North Fork Town, founded about 1836, emerged as a community of Upper Creeks, the conservative, traditional band of the Creek tribe. The village sprang up between the North and South Canadian rivers where the Texas Road and a branch of the South Canadian River Road intersected. Residents of the area traded for goods delivered by freight wagons from steamboat landings at the Three Forks
at stores in North Fork Town operated by licensed white traders and mixed-blooded Creeks. ${ }^{9}$

Pre-Civil War migrations of settlers to Texas and of gold seekers to California boosted business for the owners of stores in North Fork Town. Merchants supplied travelers with ammunition, food, horses, and various other accoutrements. Many argonauts headed for the gold fields traded their cumbersome wagons for pack horses acquired by enterprising Creek and non-Indian businessmen from tribes of native Americans living in western Indian Territory. In 1853, a post office officially known as Micco was established, and North Fork Town became a regular stop for a regional stagecoach line. At its height, the population of the town approached 300 people. Following the Civil War, the village continued to serve residents and travelers until the construction of the Missouri, Kansas, and Texas Railroad. The railroad passed several miles west of town, and merchants moved their businesses to Eufaula, located closer to the railroad. North Fork Town declined rapidly, reflected by the closing of the post office in April of $1873 .{ }^{10}$

Members of the Cherokee tribe of Indians were among the first of the Five Civilized Tribes to abandon their eastern homeland. In 1816, small bands of full-blooded Cherokees voluntarily immigrated to northwestern Arkansas Territory, and a portion of their removal agreement granted them hunting rights in Indian Territory. Continued voluntary migration increased the size of the Cherokee community in Arkansas to several thousand people. Pressured by white settlers and by federal officials, the Arkansas Cherokees agreed to move further west. By terms of a treaty negotiated in 1828, the Arkansas bands moved into northeastern Indian. Territory. The vast majority of the tribe, however, remained in the East
until the 1830s. By the Treaty of New Echota, ratified in 1836 , selected leaders of the eastern branch of the Cherokee tribe agreed to abandon their homes in Georgia to settle among their western brethren. A large number of full-blooded eastern Cherokees, led by John Ross, refused to abide by the Treaty of New Echota. Determined to remove all of the Indians from Georgia, President Andrew Jackson ordered the army to transport Ross and his followers forcibly to Indian Territory. By 1839, virtually all Cherokee Indians had been resettled in their new homeland in the northeastern portion of Indian Territory.

Once established, the Cherokee National Council passed general legislation dealing with overland transportation. In 1849, lawmakers enacted a statute authorizing the national treasurer to grant licenses to ferry operators. Entrepreneurs who desired to open crossings on the Arkansas, South Canadian, and Grand rivers paid twenty-five dollars annually for the concession, while a ten dollar per year fee was charged boatmen on the lllinois and Verdigris rivers. The law set no maximum or minimum tolls but prohibited competing ferrymen from operating no closer than one-half mile from each other. Also, Cherokee legislators enacted a law similar to one passed by the Choctaws making the obstruction of a public thoroughfare illegal. Citizens were required to open detours around fences or plowed fields that crossed public roadways, and the statute permitted imposing fines of up to fifty dollars for violations of the act. ${ }^{12}$

The gold rush of 1849 prompted a cooperative attempt by citizens of the Cherokee Nation and residents of Van Buren, Arkansas, to improve public roads. In June, a delegation from Van Buren met with a group of Cherokees at the residence of David Vann, a tribal leader, in Sallisaw,

Cherokee Nation. They selected a joint committee of ten members to lay out a road from Van Buren to Webbers Falls, a Cherokee village on the west side of the Grand River near its confluence with the lllinois River, then west to the Creek Nation. Promoters hoped to enlist the aid of the Creeks in completing the road to Edward's Store on Little River. Obviously the intent of the plan was to divert gold seekers away from Fort Smith and the South Canadian River Road, thereby increasing the number of customers for goods offered by merchants at Van Buren and in the Cherokee Nation. The project, however, got no farther than the planning stage. ${ }^{13}$

Not immune to the "Gold Fever" that swept the country in 1849, Cherokee tribesmen's efforts to reach the mines of California fostered a new trail. Exhorted by editorials in the Cherokee Advocate, the national newspaper, and, no doubt, d.riven by their own desire for easy riches, Indian argonauts assembled at Grand Saline, near present Salina, Oklahoma, in the spring of 1849. A company of white gold seekers learned of the Indians' plan and traveled to Tahlequah to join them. In April, they held an organizational meeting, and the white majority succeeded in electing Lewis Evans of Evansville, Arkansas, captain of the company. On April 24, the 130 Indians and whites with their 40 wagons and 400 draft animals departed, heading northwest to Pryor Creek, where they encamped for the night. Four days later they crossed the Verdigris River northwest of present Claremore, Oklahoma, and continued on a northwest course between the Verdigris and Caney rivers. On May 12 , the travelers intersected the Santa Fe Trail where it crossed Turkey Creek in present Kansas. From there the immigrants turned west to follow the trail to Santa Fe, New Mexico Territory. Dubbed the Cherokee Trail, the route blazed by

Evans' argonauts became a popular line of travel for gold seekers from the immediate area. In 1850, more Indian and white parties bound for California departed from Tahlequah, the Cherokee capital, by way of the new route. The demand for supplies at Tahlequah became so great that the mercantile firm of Lorenzo Delano and Company opened an additional store to accommodate the overlanders. Moreover, military detachments used the road as a short cut from Fort Gibson to the Santa Fe Trail, and, in 1859, prospectors bound for the gold fields of Colorado journeyed along the Cherokee Trail. 14

Large numbers of overlanders traveling together seldom experienced immediate threats to their lives or property, but small groups sometimes fell prey to frontier felons. In July of 1849, four California-bound German immigrants departed from Fort Smith for the Cherokee Nation. They intersected the Cherokee Trail and turned north. As they pursued their course, a band of approximately twenty Comanche warriors driving a herd of mules joined the Germans. The Indians accompanied the foreigners for about three days, then each group went its own way. That night the Comanches returned to attack the encamped immigrants. A fusillade of arrows killed the unlucky fellow on guard, and the other three members of the party suffered grievous injuries. The raiders then stole virtually everything their victims possessed. For eight days the bewildered and bleeding Germans meandered south seeking aid. They had no food, but they survived by eating a small dog. Finally, the distressed trio encountered Thomas A. Aird, a frontier merchant, who provided some medical attention and secured for them a safe return to Fort Smith. ${ }^{15}$

Law breakers of another kind plyed their trade along the roads of the Cherokee Nation. Smugglers transported large quantities of whiskey,
a product much in demand but outlawed in Indian Territory, in wagons along a trail that paralleled the north side of the Arkansas River. By using this road, purveyors of illegal spirits avoided federal troops stationed at Fort Coffee, located on the south side of the Arkansas River, easier than in boats which passed in plain view of the outpost. At the confluence of the Arkansas and South Canadian rivers the whiskey was loaded into small boats and sent up the rivers to points of distribution. Indian agents sometimes became the target of outlaws. On at least one occasion Cherokee bandits planned to rob the Office of Indian Affairs agent for the Creeks of their annuity money. Throughout the pre-Civil War era local officials of the Office of Indian Affairs transported huge sums of silver coins over the roads of Indian Territory to their respective agencies with little or no protection. In 1857, a band of twenty Cherokee desperados plotted to rob the Creek agent of $\$ 200,000$ as he moved the money from Fort Smith to his agency near present Muskogee, Oklahoma. The plan failed when one of the would-be raiders neglected to arrive at the rendezvous. Fearing the missing member had betrayed them, the robbers canceled their plan. Later the gang sought out their compatriot and murdered him. 16

Most travelers experienced little difficulty using the public roads of Indian Territory during the pre-Civil War years. Probably the experience of Thomas M. Day, a collector for J. and H. Alexander Company, a Philadelphia, Pennsylvania, mercantile establishment, was the rule rather than the exception. In the fall of 1840, Day arrived by steamboat at Fort Gibson. The easterner secured a horse and journeyed to the trading post of Drew, Field, and Company, located on Bayou Menard, a tributary of the Arkansas River in the Cherokee Nation, to collect a $\$ 4,000$ bill.

Day received the money, half of it in silver weighing approximately 150 pounds, and he returned to Fort Gibson without incident. Arriving at the post, he discovered the Arkansas River had receded, halting steamboats at Fort Smith. This circumstance forced the collector to remain at Fort Gibson until the spring of 1841, when he purchased a rejected army mount at auction and started east toward Fort Smith. He traveled constantly except for one night he spent at the home of a Cherokee farmer. While on the road at night in wooded areas, the trail became so difficult to see that Day dismounted from his horse, led the animal with one hand, and felt for the rutted tracks of the roadway with the other. He arrived safety at Fort Smith, and eventually returned to Philadelphia with the money. 17

Following the Civil War, heavy traffic returned to the main arteries of Indian Territory. Cattle drovers made extensive use of the Texas Road as did overlanders traveling to Kansas, Missouri, and Texas. Natives who lived along the roadway supplied passersby with fodder and food. Citizens of the Indian nations continued to supplement their income by operating toll concessions. By 1870, there existed only one free bridge over a major river on the Texas Road. It was located on Clear Boggy River about a mile north of Boggy Depot. Otherwise, all along the entire route from Baxter Springs, Kansas, to Sherman, Texas, concessionaires operated ferries, toll bridges, and turnpikes, which occasioned much grumbling by the traveling public. One hapless overlander, a Texan, not only begrudgingly paid tolls for traveling through Indian Territory, but he was fined twice by law enforcement officials for misdeeds he committed. First, lawmen found him guilty of appropriating a fence rail for firewood, which entailed a seven dollar and fifty cents fine. Later, as he traveled
through the Choctaw Nation, one of his horses bit a pig, and the Texan was assessed one dollar punitive damages. 18

In the Choctaw Nation after the Civil War lawmakers resumed the practice of granting toll concessions. The Texas Road and the Fort Smith-Boggy Depot Road, the most heavily traveled routes through the Choctaw Nation, became the major targets of citizens requesting permission to erect toll facilities. Most concessions were granted for ten years. During the last decade of the nineteenth century, as the pace of population growth and economic activity quickened, residents received permission to erect barriers and charge travelers on roads formerly regarded as unprofitable. Although toll rates remained at antebellum levels, many operators applied for and obtained renewed charters. One man, James S. Johnston, who owned a toll bridge on Perryville Creek, received a charter in 1872, renewed it in 1882, and his former wife and heir renewed it again in $1892 .{ }^{19}$

Some enterprising Choctaws, either by accident or by design, realized advantages from laws governing public roads. In 1889, Lewis Lucas of San Bois County, Choctaw Nation, obtained permission to operate a ferry across the San Bois River where the Fort Smith-Eufaula Road crossed the watercourse. The next year he received a charter to turnpike the road five miles in both directions from the ferry landing. Lawmakers permitted Lewis to charge separate tolls for the turnpikes and for the ferry. Choctaw statutes authorized county judges to appoint two citizens to lay out and supervise the construction of public roads. In January of 1890 , R. J. Ward, a resident of Skullyville County, Choctaw Nation, was appointed road overseer by the local judge. Ward and co-workers opened a roadway from Skullyville northwest to Red Land Crossing on the Arkansas

River. Later Ward received a charter to operate a ferry at Red Land, the terminus of the road he helped construct. 20

Choctaw legislators also revived antebellum laws providing for the maintenance of public thoroughfares. Overseers appointed by the county judge or the county sheriff notified residents when and where to report. Available evidence indicates a weal th of court activity dealing with those who did not fulfill their obligation to work on the roads, but it yielded mixed results. In April of 1898 , C. J. Andersen, the judge of Wade County, Choctaw Nation, issued orders to sell the property of seven residents to raise money for fines because they refused to work. For some unknown reason, the sheriff failed to execute the warrants. In the November-December 1899 session of the Wade County court, thirty-eight delinquent laborers appeared before the judge. He continued or excused the cases of all but seven of the defendants, whom he fined. Perhaps the experience of road overseers in the vicinity of Tuskahoma, Choctaw Nation, was typical. Of forty-four men eligible for road work, thirtyfour received notification to report for duty, and twenty-five served the full six days. Three of the nine delinquents subsequently appeared in court. The judge excused two and fined the third man five dollars. Choctaw legislators provided the laws and local officials attempted to enforce them. But the statutes enjoyed less than wholehearted popular support. In fact, public roads in the Choctaw Nation reflected ittle evidence of regular maintenance. In some counties, when a roadway became impassable, it was abandoned and a new route opened. 21

In the Creek Nation road construction and maintenance followed a procedure similar to that of the Choctaw Nation. Creek lawmakers passed legislation requiring all physically able men to work on public roads
four days a year. District judges received authority to appoint a road master and to establish specific regulations regarding construction and upkeep. Those residents who failed to appear at the appointed time to help with road improvements were assessed a one dollar per day fine for each absence. Delinquents, however, often proved uncooperative. In the Muskogee District Court the overseer duly reported the absence of three men from the road gang. The judge levied a fine against the violators, but they simply refused to pay it. ${ }^{22}$

Enforcement of road laws sometimes produced discontent among those who faithfully answered the summons. In one case, E. H. Lerblanc, a judge of the Muskogee District Court, placed A. P. McKellop in charge of all roads leading away from the town of Muskogee for a distance of five miles. McKellop assembled a crew and went to work. When the overseer fined those who refused to work and kept the money, his men complained to the judge. They believed the fines should have been divided among the crew. No final disposition of the dispute appeared in the court records, but incidents such as this likely reduced public confidence in the overseer system. ${ }^{23}$

Creek lawmakers continued to grant toll concessions. One operator, Delilah Drew, was perhaps one of the most colorful toll collectors in the Creek Nation. A snuff-dipping Creek woman who had lived in Texas, Drew received a franchise for a toll bridge on Elk Creek on the Texas Road, northeast of present Checotah, Oklahoma, in March of 1872. At night she locked a gate across the bridge to prevent passersby from crossing without paying. They had to awaken Drew at her nearby home, and, she, in turn, charged them an extra fee. To thwart enterprising teamsters or travelers who attempted to bypass the bridge and ford the
stream, she had trenches dug in both banks making an approach to the creek impossible. In this case, private enterprise and public service enjoyed a curious blend. 24

The Cherokee Nation also resumed the policy of granting toll concessions to its citizens in the years following the Civil War. Toll bridges, ferries, and turnpikes along the Texas Road, the Fort Smith-Fort Gibson Road, and lesser routes leading to Arkansas proliferated. The terms of the charters varied little from the antebellum years. Tolls usually did not exceed fifty cents for a wagon and team, ten cents for a horse and rider, five cents for pedestrians, and one cent for each head of driven livestock. Most of the charters were granted indefinitely, but with a provision for termination if the operator failed to keep his facility in good repair. Granting so many toll concessions may have actually hindered additional overland transportation improvements. In order to reduce competition, most of the bridge charters forbade erecting another bridge within a specified distance of the original structure. The zones prohibiting new construction ranged from two to ten miles in either direction from the bridge. This practice retarded streamlining circuitous routes. ${ }^{25}$

Cherokee lesiglators adopted the practice of assessing toll operators a percentage of their gross revenues. Each year concessionaires were required to pay to the national treasury three percent of their collections. The financial statements submitted by toll keepers reflected the income derived from the various facilities. In 1875, Charlotte Beck reported that her turnpike, located on the road between Tahlequah, Choctaw Nation, and Maysville, Arkansas, produced $\$ 554.45$ in tolls. The bulk of this sum came from a fifty cent charge levied against the 1050 wagons that traversed the road. She paid $\$ 16.63$ to the national treasury
as an operator's fee. Eli Daugherty, another concessionaire, owned a bridge at Pryor Creek in Cooweescoowee District. A slightly more lucrative operation than Beck's, he collected over $\$ 1,300$ between November of 1874 and November of 1876. Daugherty dutifully reported his earnings and paid the surcharge. 26

Construction and maintenance of non-toll roads in the Cherokee Na tion relied on a combination of public initiative and work laws. In 1886, tribal lawmakers revised statutes to permit citizens to petition county judges for permission to open new roadways. A minimum of ten property holders through whose land the new arteries passed had to sign the petition. In some cases petitioners submitted a hand-drawn map of the right-of-way of the proposed route. Once the judge approved the plan, he appointed three overseers to mark a line of transit and to supervise construction. Petitioners frequently submitted names of individuals they wanted to serve as overseers, and lacal jurists generally acceded to their wishes. This action certainly encouraged cooperation between supervisors and those who provided the labor. Signers of the petition furnished draft animals, tools, and labor necessary to complete the project. No funds from the national treasury were appropriated for construction of public roads. 27

Work laws governed the procedure for maintaining public highways. County judges usually divided roadways into sections and appointed an overseer to supervise maintenance activities. Cherokee statutes required all able-bodied men between the ages of eighteen and fifty-five to volunteer ten days a year to work on the roads. The overseer had the responsibility of informing the residents of his district when to appear for duty, and he collected the one dollar per day fine from delinquents.

Aside from the lack of cooperation that might be expected in such endeavors, an additional problem plagued road masters. Non-citizen residents of the Cherokee Nation refused to work on the roads, claiming Cherokee law did not pertain to them. During the last decades of the nineteenth century many white men and their families became residents of the Cherokee Nation. These non-Indians had to acquire permits from the district clerk in order to live legally in the nation. When overseers recorded the names of delinquents, they specified the citizens from the noncitizens. Sometimes only two or three whites failed to cooperate, but in at least one district twenty-six non-citizens refused to respond to the overseer's call to duty. Usually, the district judges revoked their work permits and declared the white men intruders. District solicitors then reported the names of those who lost their permits to the Indian agent. Federal agents, however, took little or no action against the uncooperative white men. ${ }^{28}$

When public law failed, private initiative sometimes succeeded. In the vicinity of Peavine, Cherokee Nation, four prominent families instigated highway improvements. These community leaders, the Blackwoods, Crittendens, Walkingsticks, and Whitmires, hired local residents to work on the roads. They paid the laborers in produce raised on their farms, and sometimes a dance was held in the evening after completing improvements. But despite efforts to maintain public arteries, descending steep, ungraded hillsides proved a danger to both teamsters and their draft animals, while dirt roads frequently became impassable quagmires after rainstorms. On one occasion following a heavy downpour at Vinita, Cherokee Nation, the town wag buried a mannequin up to its neck in mud
along the roadside, an obvious reference to the condition of the streets of the town. 29

Limits placed on tribal authority and the allotment of Indian land affected highway construction and maintenance in Indian Territory. In 1887, Congress passed the Dawes Act permitting federal authorities to divide reservations into family farms for the Indians and to sell the surplus land. Although the holdings of the Five Civilized Tribes were exempt from this law, the Dawes Act precipitated the allotment of property of the Cherokee, Creek, Chickasaw, Choctaw, and Seminole Indians in Indian Territory. The Indian Appropriation Act of 1893 created the Dawes Commission to negotiate with members of the Five Civilized Tribes to obtain voluntary allotment of their holdings. When this tactic failed, Congress directed the Dawes Commission to allot land without securing the cooperation of tribesmen. In April of 1897 , the Choctaws, and their neighbors the Chickasaws, accepted a basic allotment contract known as the Atoka Agreement. The Seminoles, the smallest of the Five Civilized Tribes, followed suit the next year. Not until 1901, did the Cherokee and the Creek Indians relent to the pressures of federal officials to participate in the allotment program. Also, in 1898 , Congress passed the Curtis Act mandating the phasing out of tribal courts, the key element for enforcing road construction and maintenance laws in the Choctaw, Creek, and Cherokee nations. 30

Federal officials at Union Agency, the headquarters of the Office of Indian Affairs for the Five Civilized Tribes located at Muskogee, assumed responsibility for functions formerly administered by tribal authorities and aided the Dawes Commission in allotting land. Almost as soon as the allotment process began, Indian agents recognized a serious
problem. As surveyors marked off the section lines and as officials assigned farmsteads to Indians, tribesmen began to fence in their land along section lines, frequently obstructing the meandering system of roads that existed in the nations of the Five Civilized Tribes. In 1900 , J. Blair Shoenfelt, the agent in charge at Union Agency, received numerous complaints about the distruption of traffic along the arteries of Indian Territory. He requested his superiors to secure legislation establishing twenty foot wide tracts along both sides of section lines as rights-of-way for highways. Complaints increased as landowners continued to erect fences, and, in some cases, plow the old roadways to plant crops. Likewise, Shoenfelt persisted in his demand for statutory provisions for rights-of-way along section lines. Early in 1902 , members of the Dawes Commission and the leaders of the Cherokee and Creek nations negotiated an agreement concerning the lines of transit for public roads. The Creeks agreed to a right-of-way of twenty-five feet on both sides of the section line, and the Cherokees permitted a sixteen-and-one-half foot right-of-way on both sides of the section line. ${ }^{31}$

The following year the Office of Indian Affairs in Washington, D.C., promulgated guidelines for establishing public roads on reservations or through allotted land. These regulations required local residents to apply to their Indian agent for permission to open a road. In every case, except where physically impossible, all public arteries were to be established along section lines. At Union Agency the major problem in the Cherokee and Creek nations continued to be the obstruction of roadways by fence rows on section lines. Agent Shoenfelt warned tribesmen to open public rights-of-way, or he would take action against them. His threats proved empty, as he had no money to either open roads or to take
legal action against the offenders. As a result, a rather confused situation existed throughout the Cherokee and Creek nations in 1903. One exception occurred at Vinita, Cherokee Nation. There the commercial club, predecessor of the chamber of commerce, appointed overseers to build roads along section lines leading out of town. Merchants and overseers apparently secured the cooperation of local residents, as workers opened section line roadways in several directions from Vinita. ${ }^{32}$

When funding became available to enforce road statutes in the Cherokee and Creek nations, resistance stiffened. In November of 1903, the Comptroller of the Treasury ruled that officials of the Office of Indian Affairs could appropriate tribal funds held by the government to make road improvements. Early in 1904, Shoenfelt mailed more than 1,500 letters to Cherokee and Creek citizens informing them of the decision by the Comptroller of the Treasury and reiterated his threat to forcibly open section line roads. The Creeks responded by threatening a lawsuit against the Union Agency superintendent, claiming tribal funds could not be used for highway construction. Likewise, Cherokee Indians continued to refuse to obey Shoenfelt's directives. Absence of cooperation on the part of the Cherokees stemmed from more than just resistance to federal authority. Many of the Indian farmers could not afford the extra wire necessary to fence the rights-of-way, and some of them had crops planted across section lines. Nevertheless, Shoenfelt dispatched agents into fields to cut fences obstructing principal section line rights-of-way. Federal authorities also threatened to use Indian police to remove obstructions from public roadways on the farms of recalcitrant residents of the Cherokee and Creek nations. 33

Indian agents persisted in their duty despite the protests of landowners. In April of 1904, Congress appropriated $\$ 10,000$ for establishing roads and for paying damages to farmers where thoroughfares could not be located on sections lines. This appropriation plus the unswerving determination of federal officials to create a uniform road system began to overcome resistance offered by the Indians. By 1905, Dana H. Kelsey, Shoenfelt's successor at Union Agency, noted that "allotees and their tenants have generally throughout the two nations opened the section lines as public roads." Yet, in the same report the agent recorded 326 complaints against persons who failed to comply with the road law. Obviously many allotees still did not wholeheartedly support the routing of public thoroughfares through their land. The following year Kelsey and his employees supervised the opening of more section line rights-ofway as resistance declined. In 1907, the task continued. Between July and November of that year--the final months of the existence of Indian Territory--1,211 miles of section line roads were established. This rush of activity substantially located all principal overland routes on surveyed rights-of-way. 34

The other three nations of the Five Civilized Tribes, the Chickasaws, Choctaws, and the Seminoles, encountered a similar experience but at a slower pace. As late as 1905 , no provisions had been made for establishing section lines as public rights-of-way. By running fences along the section lines, allotees obstructed the meandering system of roads, but federal officials in Indian Territory soon prevailed upon their superiors to seek legislation to remedy this situation. Indian agents emphasized the importance of an organized system of highways to the development of the region and relayed to the Office of Indian Affairs
the difficulties that existed by not having statutory authority to open section line rights-of-way. In 1906, Congress enacted necessary legislation providing for sixteen foot wide rights-of-way on both sides of the section line. The law required tribal treasuries to pay the expenses incurred in establishing new roadways. By November of 1907, more than 1,500 miles of surveyed public roads were opened in the Chickasaw, Choctaw, and Seminole nations, but the work continued after Oklahoma statehood. 35

Throughout the existence of the Choctaw, Creek, and Cherokee nations, construction and maintenance of roadways received more than passing attention. Soon after each of the tribes settled in their new domain in Indian Territory, the national councils began the practice of making provisions for building and improving public overland routes. During the post-Civil War era the statutes were revised and strengthened as tribal courts received authority to oversee the enforcement of road laws. The weakness of this system, however, was its complete dependence upon voluntary labor which frequently proved unreliable. The disregard accorded tribal statutes by non-Indian residents of eastern Indian Territory further reduced the effectiveness of the laws.

Granting concessions for toll facilities provided a unique aspect to overland transportation in the nations of the Choctaw, Creek, and Cherokee Indians. Tribal legislators refused to appropriate funds for roadways, preferring to rely on private entrepreneurs to do the job. Throughout the nineteenth century toll bridges, ferries, and turnpikes proliferated in eastern Indian Territory. Many toll keepers profited from this practice while they furnished a much needed service to the traveling public. Moreover, commercial centers evolved at strategic
sites along major arteries. These communities sought the business of travelers as well as that of local residents.

The reduction of tribal authority and the allotment of Indian land during the late ni-neteenth and early twentieth centuriès seriously affected public roads. Tribal courts lost their authority to enforce road laws, and the traditional system of meandering roadways conflicted with section line surveys. Federal officials then embarked upon a successful plan to rectify this situation. Indian agents aided by federal legislation changed public roads, wherever practical, to conform to section line rights-of-way. Thus, as Oklahoma approached statehood, a basic foundation for a iform system of public roads began to emerge in the area occupied by the Five Civilized Tribes.

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## CHAPTER VI

## GOOD ROADS MOVEMENT

In May of 1902 , rivers overflowed their banks and streams erupted from their watercourses to carry away bridges and to wash out roads across Oklahoma Territory. Heavy spring rains caused widespread flooding, disrupting travel and transportation in rural areas. The flood of 1902 also produced a long-range effect. Farmers and merchants awakened to the necessity of building strong permanent highways that offered greater resistance to the whims of nature. In response to this need, various interest groups formed good roads associations and began fund raising drives. Yet local officials realized they could not accomplish their goals without skilled technical assistance. They called upon the Office of Public Roads, a division of the United States Department of Agriculture, for aid, and the agency responded. As a result, local interests effectively cooperated with federal authorities to improve highway transportation in rural Oklahoma.

Territorial statutes placed primary responsibility with townships for construction and maintenance of highways. Townships, municipal subdivisions of counties, were carved into road districts, and a road overseer was elected for each district. The law required overseers to erect guideposts, to maintain existing highways, and to open new routes, usually along section lines. By statute all section lines served as highway rights-of-way and became public roads when local residents successfully
petitioned the county commissioners. In order to finance improvements, counties and townships collected a general property tax and sometimes used funds derived from a duty on liquor licenses. Another type of levy provided most of the labor. Known as the road tax, it required all males between the ages of twenty-one and forty-five to donate four eighthour days each year to working the highways. If one did not make himself available or failed to send a substitute, he faced a five dollar a day fine for each absence. ${ }^{2}$

This method of constructing and maintaining public highways proved haphazard at best. The dirt, or mud, roads of the era required constant attention, and not many overseers possessed technical knowledge regarding drainage, roadbed construction, and surveying techniques. When summoned to work the roads, those eligible sometimes failed to appear, and often overseers balked at enforcing the law so as not to become unpopular in theit community. Furthermore, these functionaries served on a parttime basis and were permitted to work only twenty-five days a year at a rate of one dollar and fifty cents a day. In 1905, territorial lawmakers attempted to improve this system. At the suggestion of Joseph B. Thoburn, director of the Oklahoma Territorial Board of Agriculture, legislators created the full-time position of county engineer to replace overseers. Aside from streamlining road care, it meant a considerable saving for most counties. The measure mandated a salary of $\$ 1,000$ to $\$ 1,500$ annually for the engineer, while some counties paid as much as $\$ 4,500$ yearly to overseers. Because the law made appointment of an engineer optional, few counties filled the position as local officials refused to surrender any authority to a central supervisor. ${ }^{3}$

The general public expressed little confidence in the overseer system. For the estimated $\$ 3,000,000$ expended annually on highways, township residents realized few permanent improvements. Yet in many cases local populations grumbled benignly and accepted the negligence and incompetence of officials as a component of rural life. One jurisdiction, however, attempted to solve its road problem by taking a step backward when residents selected a teenage overseer as a spiteful rejection of an experienced incumbent. ${ }^{4}$

The situation that existed in Oklahoma Territory reflected a national problem. During the last decade of the nineteenth century bicycle clubs and farmers' organizations in many states worked to obtain a better system of highway construction and maintenance. As early as 1893, a good roads convention assembled in Washington, D.C., and from this meeting emerged the National Good Roads Association. Headquartered in St. Louis, Missouri, the National Good Roads Association promoted the cause for better highways and enjoyed the support of farm groups, railroads, businessmen's associations, and the press. In 1908, the question of good roads gained national political attention when the Democratic Party made the issue part of its platform. Concerned about local conditions and aware of national trends, many Oklahomans joined the campaign to get traffic out of the mud. ${ }^{5}$

Good roads associations in Oklahoma began at the local level, developing into territorial and later statewide organizations. Soon after the flood of 1902, A. C. Titus, a fruit grower from Crescent, Oklahoma Territory, founded the Sand Valley Good Roads Association in Logan County, the first in the territory. Titus and other enthusiasts encouraged the formation of more county associations, and newspapers promoted their
plan as essential for development of the region. In April of 1904, the first territorial good roads convention assembled at Guthrie, the territorial capital. Approximately 150 people attended the two-day meeting, including representatives from Indian Territory. Officers from the National Good Roads Association addressed the delegates, and the membership adopted resolutions in the form of proposed legislation to submit to territorial lawmakers. These measures supported the use of convict labor for building highways and endorsed a plan to create unified county maintenance districts to replace the cumbersome overseer system. Before departing, delegates elected a slate of officers and named their organization the Oklahoma-Indian Territory Good Roads Association. ${ }^{6}$

To cultivate public support for the good roads movement, the national office and various railroad companies cooperated to sponsor good roads trains. In the fall of 1904, William H. Moore, president of the National Good Roads Association, scheduled an excursion through Oklahoma Territory. The St. Louis and San Francisco Railway Company supplied the rolling stock, and the entourage included President Moore, Martin Dodge, director of the Office of Public Roads, government engineers, and other good roads officials. Also, the railroad cars carried equipment to build object-lesson roads--short stretches of improved highway constructed as demonstrations. 7

The train first stopped at Chandler, Oklahoma Territory. Members of the Chandler Commercial Club and the Lincoln County board of commissioners had requested that federal officials construct an object-lesson road. Because local enthusiasts failed to raise enough money for necessary materials, the demonstration was postponed. Nevertheless, R. M.

Richardson, secretary of the national organization, gave a well-received speech. He extolled the virtues of improved roads, which promised five to eight mile per hour speeds for horse-drawn wagons and rural free delivery of mail. An engineer from the Office of Public Roads presented a more technical lecture. ${ }^{8}$

On October 28, 1904, the good roads train reached Oklahoma City. Its arrival coincided with the second meeting of the Oklahoma-Indian Territory Good Roads Association. The highway promoters conducted a series of sparsely attended workshops, and workers constructed an object-lesson road. The following evening, however, the conference closed in a flurry of enthusiasm. A capacity audience crowded into the opera house to hear William H. Moore speak on the merits of sand-clay roads and to absorb W. Rolif Goit's lecture about the proper location of ditches. Moore judged the convention a success, and he felt the Oklahoma-Indian Territory association had become a stable organization with good leaders. ${ }^{9}$ During succeeding years the importance of the Oklahoma-Indian Territory Good Roads Association increased. The number of county organizations multiplied, and some extensive construction projects got underway. Through the influence of good road advocates, the Oklahoma Agricultural and Mechanical College at Stillwater added highway construction courses to its civil engineering program. Perhaps the most important and longrange achievement of the Oklahoma-Indian Territory Good Roads Association involved securing a provision in the new state constitution for a highway department. In December of 1906, the territorial organization held its annual conference at Muskogee, Indian Territory. The state constitutional convention had convened in Guthrie, and the committee on public roads was invited to attend the meeting at Muskogee. At the good roads
.conference, speakers called upon the committee to create a state department of highways. Later that month a delegation from the territorial good roads association went to Guthrie to meet again with the committee on public roads. These efforts bore fruit. Ratified in 1907 , the Constitution of the State of Oklahoma contained a provision for a department of highways. 10

Renamed the Oklahoma Good Roads Association at the Muskogee conference, the organization gained even greater prominence as a result of the zealous activities of its new president, Sidney Suggs. A newspaper publisher from Ardmore, Oklahoma, he became an energetic, visible, and vocal proponent of good roads. He eagerly accepted invitations to speak at meetings across the state, and on one occasion delivered his message from the pulpit of a church. Suggs traveled throughout the South to speak at conventions, and he lobbied members of the Oklahoma State Legislature to gain support for good road measures. In 1910, Governor Charles N. Haskell appointed the newspaperman inspector of public roads, an unpaid position with little real power. The next year lawmakers passed legislation to activate the constitutional provision for a highway department, and the governor appointed Suggs the first commissioner of the Oklahoma State Highway Department. 11

Other advocates of good roads not directly associated with the Oklahoma Good Roads Association provided persuasive arguments for public improvements. Frederick S. Barde, a free-lance newspaper reporter from Guthrie, produced a number of articles on the subject. Barde argued that good roads in rural areas doubled the value of property, facilitated the movement of farm produce, and fostered ''freer social intercourse'" with neighboring families. He advocated a state controlled system of highways,
and he ridiculed local officials who tenaciously guarded their patronage at the expense of the general public. Benjamin F. Yoakum, chairman of the board of directors of the Chicago, Rock Island, and Pacific Railroad, became another vigorous promoter of good roads. He readily admitted allweather highways increased the volume of business for his railroad, particularly in facilitating the movement of agricultural products to depots. Greater accessibility to railroads, Yoakum insisted, insured prosperity and reduced isolation for rural dwellers. He used the resources of the Rock Island Railroad to emphasize his comrnitment to good roads. In the fall of 1909, he sponsored a tour of several eastern states for selected good road supporters from Arkansas, Louisiana, Oklahoma, and Texas, to witness firsthand new building and maintenance techniques. ${ }^{12}$

Although conventions, speeches, legislation, and tours proved indispensable, the actual construction of improved highways demonstrated the concrete effect of the good roads movement. The first large-scale project in Oklahoma began near the Blaine County community of Watonga, approximately seventy miles northwest of Oklahoma City. Two roads served as main arteries over which farmers brought produce to Watonga. One highway entered the town from the west, the other from the south, and both passed over a terrain of sand hills, clay bottoms, and swampland. In dry weather the sandy portions became hub deep in dust, but following rainstorms the clay bottoms and swampy areas turned into impassable quagmires. Farmers frequently exhausted their draft animals and their abusive vocabulary trying to get to town. Rather than struggle against such adverse conditions, they often took their produce and their business to Geary, a longer trip over easier traveled roads. ${ }^{13}$

To make Watonga a more accessible marketplace, the city's commercial club held good roads meetings and began a fund raising drive. Also, John M. Tyler, the county clerk, contacted the Office of Public Roads in Washington, D.C., and asked that a government engineer be sent to examine the local situation. The Office of Public Roads had initiated a program of assigning civil engineers to municipalities willing to pay the expenses of the engineer and to provide all necessary machinery and materials for building roads. Officials in Washington approved Tyler's application and dispatched a member of the staff to Watonga. 14

On October 17, 1908, Pius M. Speicher, a government engineer, arrived in Watonga and immediately began preparations for upgrading the roads. He surveyed the rights-of-way and determined that a sand-clay type of construction seemed the most practical solution. Sand-clay roads were made by mixing wet sand and clay with a harrow and rolling the mixture to create a cement-like surface. This type of roadway proved satisfactory for rural wagon traffic and required minimal upkeep. But before applying the all-weather surface, Speicher had to surmount other problems. The undulating terrain required many cuts and fills, while the proximity of the North Canadian River, only two miles south of town, created drainage problems. Speicher consumed a month in preparing a construction plan, but he continued to receive enthusiastic support from county, township, and city officials. Some local residents, however, viewed the road building venture skeptically. To them it appeared to be another scheme to bilk the taxpayer, but their attitudes changed once work got underway. ${ }^{15}$

Within a month Speicher began to revamp the roads. Farmers comprised the majority of the work force. They received one dollar and eighty
cents a day for a nine hour shift, and those who furnished a team received an additional one dollar and twenty-five cents. The townships through which the roads passed made available the equipment they owned. Much of the machinery sat along the roads where it was last used, overgrown with weeds and covered with rust and dirt. Nevertheless, workers hand-loaded slot bottom wagons to make cuts through the sand hills, and teams of mules or horses strained at their harnesses to pull graders and scrapers to level fill dirt over the clay bottoms. As work progressed, popular and financial support for the project increased, enabling the Commercial Club of Watonga to raise money to purchase a rock crusher. This piece of equipment made possible the construction of a section of macadam--a crushed stone all-weather surface--over swampland on the road leading south from town. The Rock Island Railroad cooperated also. The district manager ordered a spur built free of charge to a nearby rock quarry to provide stone for the crusher. ${ }^{16}$

Absence of expertise became the greatest problem for the road builders. Speicher supervised much of the work, and he hired as foreman a former railroad employee who possessed a basic knowledge of construction techniques. But no one else seemed to know what to do. Speicher appealed to his superiors at the Office of Public Roads for help, and they dispatched an additional engineer. With the arrival of reinforcements, work continued at a steady pace. Still an occasional problem developed. When the Oklahoma State Board of Prison Control provided a ten-ton steam roller to lay the macadam surface, the inexperienced operator frequently drove it into the ditch. ${ }^{17}$

Activities of the Office of Public Roads engineers often extended beyond supervising construction. Speicher made several appearances
before local organizations to explain the purpose of his work. He negotiated with Rock Island Railroad officials for use of the spur, and he provided the only technical advice Watonga's city fathers received before purchasing the stone crusher. Officials from nearby towns often called on him. The mayor and other dignitaries from Geary, a small city several miles south of Watonga, took the engineer to their town to examine local roads and to solicit suggestions. Even academicians became interested in his work. In January of 1909, he traveled to the Oklahoma Agricultural and Mechanical College at Stillwater to deliver a lecture on the good roads movement.

The local Indian population also participated in good roads activities. As early as 1892 , the Office of Indian Affairs attempted to involve its charges in publicworks projects. Officials implemented this plan to provide a cash income for reservation families in lieu of issuing rations. The Cheyenne-Arapaho Reservation encompassed most of Blaine County, and the agent there paid wages to Indians employed on several public works projects, including roads. Because the two arteries being improved under the supervision of government engineers passed through land allotted to Indians, John Tyler and members of the Blaine County board of commissioners contacted the Office of Indian Affairs for aid in constructing the roads. Indian office officials obliged by making available $\$ 1,000$ for wages for Indians. No strangers to this type of work, Indians recruited from the local population joined whites already at work on the project. ${ }^{19}$

In March of 1909, workers completed the improvements. They had constructed three and one-half miles of roadway, which included more than a half-mile of macadam, at an approximate cost of $\$ 7,600$. Now it was
possible for farmers to move a ton and a half of corn with two horses over roadways that only a few months before required twice as many draft animals to haul half the load. Local citizens seemed quite satisfied with the results, and one contemporary observer praised Speicher in terms usually reserved to describe a religious experience. ${ }^{20}$

Another community imbued with the same progressive spirit as the residents of Watonga encountered an entirely different experience with its road improvement endeavors. At Chandler, Oklahoma, the county seat of Lincoln County located fifty miles east of Oklahoma City, local officials, farmers, and businessmen proposed to construct a thirty-one mile, east-west, hard surface highway. As a major cotton producing region, Lincoln County needed all-weather roads to facilitate transportation of this important cash crop to market. Project organizers planned to take advantage of a new law enacted by the Oklahoma State Legislature in March of 1909, when lawmakers gave counties and townships authority to create road improvement districts. This measure permitted several townships to join in forming one jurisdiction no larger than eighteen square miles to vote bond issues to finance seventy-five percent of the cost of highway improvements. The county was to pay the balance. Led by Hugh M. Johnson, a local banker and member of the Chandler Commercial Club, good roads enthusiasts held meetings in rural schoolhouses to explain the new law and to promote their plan. The local press also began a concerted effort to publicize the need for good roads, while the Chandler city council pledged its support to the campaign. Township officials arranged for the election, and on May 10 , 1909, voters approved a $\$ 180,000$ bond issue by a margin of three to one. ${ }^{21}$

Immediately H. B. Gilstrap, Chandler's postmaster, appealed to Bird S. McGuire, the United States congressman from Lincoln County, to use his influence to obtain an engineer from the Office of Public Roads. Gilstrap insisted the need for a government expert was imperative. Competent personnel must plan such a project, he reasoned, and the presence of an official from the Office of Public Roads assured local residents of the proper use of their money. McGuire contacted the director of the Office of Public Roads, and he responded by sending an application for engineering assistance to Gilstrap. Upon completion of the paper work, officials in Washington dispatched an engineer to Chandler. At the end of June, Pius Speicher arrived at the Lincoln county seat. ${ }^{22}$

Speicher found the situation far from ideal. In order to determine the exact value of bonds required to fund the project, a survey of the right-of-way was necessary. The county surveyor, an old man who apparently viewed Speicher as a threat to his job, refused to cooperate, and the county commissioners had no money to hire another surveyor. Speicher surmounted this obstacle by arranging for officers of the Oklahoma National Guard to conduct a preliminary study. Another problem developed when locating the route. Apparently a quarrel erupted between different political and economic interests in the county, and they failed to reach agreement on a definite line for the road. This division ran deep, as the county commissioners withdrew their pledge to pay part of the expense. Legal action further complicated matters. A suit filed in district court challenged the validity of signatures on the petition circulated in the spring that called for the road improvement election, but the judge dismissed the case. Perhaps encouraged by the decision of the district court or motivated by the desire for personal profit, Speicher resigned
from the Office of Public Roads to bid successfully as a private contractor to build the highway. Another lawsuit filed in district court--perhaps for political reasons--by J. F. Rea, the county clerk, challenged as unconstitutional portions of the road law of 1909. This action effectively ended the project, and the Oklahoma State Supreme Court did not rule in the case until 1911. 23

While the scheme for major highway improvements in Lincoln County failed, good roads enthusiasts in and around Lawton, Comanche County, Oklahoma, haphazardly succeeded. In late 1908, agitation for better roads began, and this activity gained impetus from two events. First, in November and December of 1908, Cache Creek, a tributary of the Red River southeast of Lawton, erupted from its banks, flooding approaches to steel bridges that spanned the stream. Teamsters, even travelers on horseback, coming from the east to Lawton or from the west away from the city could not reach the bridge. Thus all traffic to and from the east halted. Second, Joseph T. White, the postmaster of Lawton, received word that Comanche County had been selected as one of six counties in Oklahoma for implementation of rural free mail service. Begun on a limited experimental basis in 1893 , free mail delivery to rural residents expanded quickly. Within ten years 8,000 mail carriers traveled approximately 200,000 miles a day to reach nationwide nearly 5,000,000 postal patrons. The prospect of this modern convenience for Comanche County produced much excitement but was contingent upon establishing a system of passable roads, including improvement of approaches to bridges. 24

Organizational efforts to effect the necessary improvements got underway quickly. Members of the Lawton Chamber of Commerce, sensing the advantages gained from all-weather highways leading to their town,
formed the Comanche County Good Roads Association. They elected Postmaster White president and embarked upon a concerted effort to promote the good roads movement. Officers of the association distributed literature boosting their cause, and they sought public support by holding meetings throughout the county. The two newspapers published in Lawton wholeheartedly joined the campaign. The owners of one daily, the Lawton Constitution-Democrat, hired L. P. Barnes, a former newspaper editor, specifically to popularize the issue. Barnes toured the county presenting lectures emphasizing the need for improving overland transportation and encouraging the formation of local good roads chapters. ${ }^{25}$

Throughout the early months of 1909, the Comanche County Good Roads Association forged ahead with plans for public improvements. On January 7, members of the association met in the Lawton city hall and decided to seek the aid of a federal engineer to supervise the construction of an object-lesson road. Reports of satisfactory progress of a similar project in nearby Blaine County helped influence the membership's decision. Determining where to build the model road and deciding how to finance it became major problems. The Comanche County board of commissioners agreed to provide $\$ 3,000$ for improving Fort Sill Boulevard, a thoroughfare connecting Fort Sill with the city of Lawton. But the chamber of commerce wanted the stretch of road between the Cache Creek bridge and the Lawton city limits, a distance of about one mile, reconstructed. Haggling over the site of the project disrupted fund raising, but good roads supporters arranged for the use of machinery necessary for constructing a roadbed. Confident of success, J. F. Kilpatrick, a member of the local good roads association, filed a request in April of 1909 with the Office of Public Roads for an engineer. Federal authorities subsequently approved the
application, even though local officials had not yet agreed upon a construction site. ${ }^{26}$

These uncertain circumstances and a delegation from the Comanche County Good Roads Association welcomed Fay McClure, an Office of Public Roads engineer, to Lawton on the evening of July 11, 1909. The following day McClure toured the proposed sites. Fortunately, a committee composed of representatives of the various groups involved decided upon the Cache Creek-Lawton route as the location of the object-lesson road. The engineer, assisted by surveyors supplied by the good roads association, began to lay out the right-of-way. In the meantime, a shaky compromise for funding the project was reached. The Comanche County commissioners agreed to appropriate $\$ 1,000$ for the project, while farmers who lived near the road agreed to furnish 350 days of team work. ${ }^{27}$

On July 20 , construction of the road commenced. Handicapped by an unreliable work force and by hot, dry weather, McClure doggedly pushed the project toward completion. During the first week of construction many of the farmers failed to honor their commitment to work. Chided by articles in a local newspaper, laborers began to appear. The city of Lawton helped relieve the labor shortage by providing teams, teamsters, and wagons. Climatic conditions posed the greatestobstacle. On August 4, McClure suspended operations due to unbearable day time temperatures that he recorded as high as "sixteen degrees A. H. (Above Hades)." A drought ensued, further hampering construction when work resumed. There was not enough water to dampen adequately the subgrade of the roadbed to compact the material properly. Finally, the failure by local enthusiasts to secure funds to provide a gravel surface for the highway brought the project to an end on September 1. McClure and his crew had completed a
substantial roadbed from the bridge at Cache Creek west to the city limits of Lawton at the cost of $\$ 1,110.85$, but the project fell short of initial expectations of its promoters. ${ }^{28}$

The decision to use convicts from the state penitentiary on public highways made possible an extensive improvement project in Washita County in western Oklahoma. The National Good Roads Association long advocated employment of prison labor, and the Oklahoma Good Roads Association gave this issue a prominent place in its program. Sidney Suggs strongly supported convict labor for roads, and no doubt his presence at the state capitol helped secure the necessary legislation. As a section of the general road law of 1909, the measure authorized the Oklahoma State Board of Prison Control to transfer inmates to counties to work on public roads. Through the influence of Richard A. Billups, an Oklahoma state senator who represented Washita County, Governor Haskell agreed to send the first available prisoners to Washita County. Moreover, Billups enlisted the aid of Thomas P. Gore, a United States senator from Oklahoma, to secure an Office of Public Roads engineer. Gore contacted Vernon M. Peirce, acting director of the Office of Public Roads. Peirce responded by forwarding an application for engineering assistance to the Washita county commissioners. Upon completion of the paper work, Peirce assigned a staff member to Cordell, Oklahoma, the county seat of Washita County. ${ }^{29}$

The road through Washita County comprised part of a grand scheme to connect the region with Oklahoma City, approximately ninety miles to the east. As a result, county and township officials were anxious for the work to begin. On July 31, 1910, the first convicts, fifty blacks from the penitentiary at McAlester, Oklahoma, arrived at Cordell. Authorities moved them several miles east of town, where they built a road camp. Two
weeks later Walter J. Ward, an Office of Public Roads engineer, reached Cordell. Because the survey of the ri.ght-of-way was completed prior to his arrival, Ward began work on the road almost immediately. The county commissioners provided adequately for the project. They purchased tools, machinery, and fifty head of mules, but at first the work progressed slowly. The terrain consisted of low rocky hills through which the convicts blasted cuts, but a drought of several months turned the soil as hard as concrete, making it difficult to excavate. Reinforced by fifty additional prisoners, also blacks, the workers built cement culverts to facilitate drainage, filled gullies with rocks, and applied a sand-clay surface to the roadbed. By mid-January of 1911, they had completed fourteen miles of roadway east of Cordell. Authorities then moved the camp to commence the western segment of the road, but bad weather disrupted the daily routine. Winter rains turned construction sites into mud holes, and cold temperatures kept the convicts in camp for several days. When the weather cleared, work resumed, and in May officials declared the road finished. ${ }^{30}$

Although devised as a means of reducing the costof labor, this first experience with state convicts as highway builders in Oklahoma produced numerous difficulties. On a per mile basis, portions of the road constructed by prisoners cost more than sections of the highway built at Watonga where workers received wages. Administrative expenses absorbed fifty to sixty percent of the cost of the project. Such non-productive items as salaries for the warden and guards as well as the time and money involved in moving the camp became major disbursements. Additionally, caring for the men remained a constant expense. A.llowances for the prisoners hardly were lavish. The state furnished eighteen cents a day per
man for food (the county provided forty-two cents a day for the mules), but during periods of inactivity the men still had to be fed and guarded. Escapes, even if unsuccessful, disrupted the work schedule. At least three prisoners attempted to flee. Authorities captured two men at Enid, Oklahoma, several days after they ran away, and another died from gunshot wounds received in an attempted escape. Finally, the warden and a full complement of guards seldom accompanied the convicts to the work sites, frequently posting only two men to watch as many as eighty prisoners. This practice made discipline difficult to enforce and reduced the effectiveness of the workers. As a result of these shortcomings, Walter Ward suggested Oklahoma officials contact other states with greater experience with prison labor to get information for improving their system. However, George D. Marshall, Ward's successor, bluntly declared the project "a poor argument for convict labor."3l

Despite its problems, the project enjoyed considerable public support. County revenues provided much of the money for the first months of work, but, when funds became scarce, residents of townships along the right-of-way raised money for mule fodder. As state allocations for maintenance of the prisoners were depleted, township officials borrowed against anticipated tax revenues to feed the convicts. Finally, in March of 1911, members of the Cordell Commercial Club formed the Washita County Good Roads Association and assumed the entire expense of the prison camp, thus avoiding a work stoppage. 32

Prior to arrival of the convicts and the Office of Public Roads engineers, the highway west of Cordell was a rough rocky trail passable only by empty wagons. Much of the road east of town was routed through the often soggy bottomland of the Washita River. As a result of the
determination of local citizens, the exertions of the convicts, and the expertise of the Office of Public Roads engineers, the residents of Washita County obtained a centrally located, all-weather highway. Perhaps the local newspaper best described the importance of the road: 'What has been predicted as impossible has been made possible." 33

Local resources provided the money, machinery, and, in some cases, the manpower for improving early rural highways in Oklahoma. At Watonga, Chandler, Lawton, and Cordell, businessmen, politicians, and farmers recognized and supported the need for better roads. Three of the communities succeeded with their projects, while bickering and lawsuits prevented the residents of Lincoln County from realizing their grand plan for a modern thoroughfare. Also, the contributions of engineers from the Office of Public Roads proved invaluable. Between 1908 and 1911, they worked in at least a half dozen communities in Oklahoma, and in all cases the engineers were well-received. Unfortunately, within a few years after the completion of these projects a major problem arose. Some of the municipalities failed to maintain improved mileage properly, and roadbeds began to revert to their former condition. Yet communities had learned firsthand the importance of good roads to rural areas, and they would support future efforts for more sophisticated means of improving public highways. ${ }^{34}$

The good roads movement in Oklahoma produced several significant achievements. First, grass roots organizations emerged to promote the advantages of better highways, and the formation of the Oklahoma Good Roads Association coincided with similar activities on a national scale. These actions indicated the concern of Oklahomans for improving local conditions and their awareness of national trends. Second, good roads
activists made important long-range contributions. They secured the implementation of new college courses, they influenced the structure of Oklahoma's constitution, and they successfully lobbied lawmakers in the state legislature. Third, by publicizing their cause, good roads advocates fostered an interest that led to significant highway improvements in rural areas. A foundation had been laid for a program that would mature into a modern system of highway construction and maintenance.

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## OKLAHOMA STATE HIGHWAY DEPARTMENT:

FORMATIVE YEARS

Creation of an agency to direct the construction and maintenance of a nétwork of state highways for Oklahoma began in 1910. For a period of approximately fourteen years the newborn bureau experienced the growing pains that often accompany the birth of a public service. Inadequate funding, inexperienced employees, patronage, and political maneuvers characterized the infant years of the Oklahoma State Highway Department, making difficult concrete advances in overland transportation. Despite these problems, the dedication of a handful of individuals, the increase in the use of the automobile, and the expansion of federal aid programs prevailed to foster a foundation for a modern highway system.

Initial attempts to centralize construction and maintenance of highways began during the administration of Governor Charles N. Haskell. In October of 1910, Haskell appointed Sidney Suggs, president of the Oklahoma Good Roads Association and a newspaper publisher from Ardmore, Oklahoma, State Inspector of Highways. Suggs received no salary or expense account for his position, and possessed no authority to devise or implement policy. He single-handedly conducted a survey to examine the practices of local officials in making road improvements. Suggs found counties and townships throughout the state expended a total of nearly $\$ 3,000,000$ annually in tax revenues on $15,000 \mathrm{miles}$ of public roads.

But he also determined this vast sum produced virtually no permanent improvements. With seventy-seven counties subdivided into 882 townships, which in turn hired a total of 4,410 road overseers, there existed no standard provisions to account for expenditure of public funds, to employ qualified road builders, or for a unified system of planning. ${ }^{1}$

Suggs viewed the situation as wasteful and unproductive. He believed the only solution to the problem rested in the creation of a state agency to collect and dispense funds, to provide qualified construction and maintenance personnel, and to exercise authority in planning and building public roads. Furthermore, many taxpayers expressed to Suggs their dissatisfaction with contemporary practices. As a result, in his report to the Oklahoma State Legislature, the veteran newspaperman urgently recommended the creation of a state department of highways. ${ }^{2}$
. In January of 1911, the Oklahoma State House of Representatives' Committee on Roads and Highways began to work in earnest on a bill to establish a state department of highways. The legislation enjoyed widespread support among lawmakers, but a major problem developed over financing the agency. Initially, the bill required a twenty-five cent per horsepower levy on all automobiles. Legislators from Oklahoma County opposed this provision because approximately 25 percent of all autos in the state were owned by residents of the capital city and its environs. To opponents of the bill, this plan placed an unfair burden on owners of automobiles who lived in Oklahoma County. Despite heated debate and attempts to amend the measure, it passed the house and was sent to the state senate early in March. ${ }^{3}$

In the upper house the bill encountered a flurry of amendments and concerted opposition. The amendments ranged from serious proposals to
comic propositions. One article removed the requirement for a civil engineer to serve as commissioner of highways, and another reduced the salary of that position from $\$ 3,000$ to $\$ 2,500$ a year. A third change, obviously aimed at Suggs--a portly six-footer and an accomplished accor-dionist--restricted the weight of the commissioner to less than 150 pounds and prohibited playing of an accordion while on duty. But the greatest difficulty for the measure involved the twenty-five cent per horsepower tax on cars. Again, legislators from Oklahoma County opposed the provision, and they succeeded in defeating the bill eighteen to sixteen. Reassigned to a senate commission on roads and highways, the horsepower levy was omitted, and a one dollar per auto fee substituted in its place. The amended version passed the senate. In a joint housesenate conference committee supporters of the one dollar levy prevailed. Both houses approved the compromise measure, and the governor signed the bill into law on March 16, 1911. ${ }^{4}$

Hailed as an important step toward highway improvements for Oklahoma, the statute actually created an underfunded, almost powerless agency. The law provided no direct appropriation for the state highway department. The negative effect of county and township officials seeking to protect their power also seemed obvious because the highway department received no authority to build or maintain roads or bridges. The main function of the highway department was to collect information about road building and to establish standards for highway and bridge construction. Soon after the bill became law, Governor Lee Cruce, who succeeded Haskell in office in January of 1911, received numerous applications for the position of highway commissioner. The statute required the governor to select the chief of the new agency with the approval of the state senate.

Many of the applicants, one from as far away as Albany, New York, possessed educational backgrounds or experience as civil engineers or as road builders. Cruce surprised no one, however, when he appointed Sidney Suggs the first Oklahoma State Commissioner of Highways. Suggs had no experience in road construction or maintenance, but for several years he had vigorously and visibly promoted the good roads cause, a valuable asset to the fledgling department that needed publicity and popular support. Suggs enthusiastically accepted the appointment. ${ }^{5}$

As commissioner of highways, Suggs selected persons active in the good roads movement in Okl ahoma for his staff. He appointed Clark C. Hudson assistant commissioner, W. Rolif Goit, a former construction contractor, chief engineer, and Walter S. Gilbert secretary. Two divisions performed the limited duties of the bureau. An operating division began to collect statistical information, while the engineering division commenced devising standard designs for bridges, mapping roads, and estimating costs of construction. Yet, the major activity of the highway department remained that of a public relations agency. Between July of 1911 and November of 1912, Suggs spoke to no less than 31,000 people at 63 meetings to encourage the formation of good roads associations and to seek support for a unified state highway system. With the cooperation of the Oklahoma State Superintendent of Public Instruction, the highway department instituted the Educational Mile Project. This effort sought to educate high school students in the value of improved highways. Young men, supervised by engineers, received rudimentary on-the-job training inthe technique of laying out a road. Then volunteers worked to construct a stretch of roadway. The first Educational Mile Project took place in Seminole County, Oklahoma, probably in the fall of $1913 .{ }^{6}$

Suggs conducted a particularly vigorous campaign against the practice of township and county officials building so-called "tin bridges." These structures of steel or iron were built on a contract basis throughout the state by a select group of construction companies. Often made of cheap or inferior metal and erected with little or no engineering expertise, the bridges seldom proved satisfactory. Suggs alleged local officials had expended over $\$ 8,000,000$ on these contraptions since statehood, and fully one-third of that amount had been overcharges. The commissioner pressed for standard designs and for the use of concrete, steel reinforced concrete, or stone bridges. His outspoken attack on the "tin bridge gang" raised the ire of local functionaries and contractors alike. Their anger, or perhaps fear of reform, manifested itself in an attempt to abolish the highway department when the state legislature convened in 19̣13. The house of representatives passed a bill eliminating the agency, but fortunately the senate refused to approve the measure. ${ }^{7}$

Financial as well as political problems plagued the department of highways during Suggs' tenure as commissioner. The law creating the agency contained no appropriation for any expenses. Legislators expected the department to become self-supporting from money obtained by the sale of automobile licenses, but enforcing this levy proved extremely difficult. There existed no central listing of automobile owners, and officials of the department spent much time trying to develop an effective means for collecting fees. Even after devising a method for assessing motorists, a large number refused to abide by the law. By 1912, workers in the highway department estimated Oklahomans owned 6,524 cars, but they issued only 2,421 licenses. As a result, none of the employees of
the department received their full wages. Of the $\$ 3,750$ salary allowed for the commissioner for his first eighteen months in office, Suggs received only $\$ 545.95$ plus expenses. Gilbert and Goit absorbed their own expenses while on official business, and Hudson personally paid more than $\$ 2,700$ in postage, telephone, and stenographic bills. The Oklahoma Good Roads Association, a non-government citizens group, donated cash to the agency to help it meet financial obligations. By 1914, residents of the state had purchased approximately 15,000 cars, motorcycles, and trucks, while less than 9,000 owners bought a license. The absence of a stable source of income for the department greatly impaired its operation. ${ }^{8}$

To make the highway department a viable public service, Suggs urged a reordering of the agency. First, he pressed for the creation of a network of intrastate and interstate highways. Second, the commissioner worked to establish central control over disbursement of funds for construction work. Oklahoma numbered among fewer than a dozen of the fortyeight states permitting local authorities to build and repair major arteries. This dispersed method of construction and maintenance resulted in poor planning, wasted tax dollars, and, in some cases, an absence of cooperation between neighboring townships and counties. Finally, Suggs argued for adequate funding by the state to provide engineering expertise by the highway department for road construction. The conspicuous absence of technical skills at all levels of road building compounded greatly the problems of developing an effective system of highways. Unfortunately, Suggs ' pleas for reform fell on deaf ears. ${ }^{9}$

Despite limitations faced by the state highway department, employees of the agency played a prominent role in bringing improvements to overland
travel. One of the most important projects during the second decade of the twentieth century was the Meridian Postal Highway. In June of 1911, sponsors of this north-south interstate route gathered at Salina, Kansas, Manitoba! to lay plans for a Winnapeg, Ontario, to Galveston, Texas, highway commonly known as the Meridian Road. Closely paralleling the ninety-sixth meridian, it was to bisect the states of the Great Plains. The following year, during a meeting at Emporia, Kansas, delegates formed the Interstate Postal Highway Association, renamed the route the Interstate Postal Highway, and elected Sidney Suggs vice-president of the organization. ${ }^{10}$

Suggs and other employess of the Oklahoma State Highway Department worked to insure the success of the project in Oklahoma. The commissioner traveled to towns along the route to coordinate construction activities among the myriad of adjoining jurisdictions through which the road passed. Members of the engineering division of the highway department surveyed portions of the road in some counties. Also, Charles C. Colcord, an Oklahoma City developer, Robert Galbreath, a good roads enthusiast from Tulsa, and the Oklahoma City Chamber of Commerce combined their resources to provide a $\$ 2,500$ award fund. They turned the sum over to the highway department, and officials gave prizes to townships that constructed the best segments of the road. County and township authorities furnished the manpower, material, and money for building the highway, which probably amounted to improving existing section line roads. The 298mile route entered Oklahoma at the Chilocco Indian School in northern Kay County and zigzagged southward over dirt roads to Oklahoma City, generally following the course of present U.S. Highway 77. From Oklahoma City the highway continued southward to Davis, then east to Sulphur,
southeast through Mill Creek to Durant, with a final jog southwest to Colbert. There the road crossed the Red River into Texas. The completion of the project emphasized the interest of Oklahomans in improving overland transportation in their state and reflected the increasing interstate nature of highway travel. ${ }^{11}$

The progressive attitude of many Oklahomans toward upgrading roads provided the dominant influence in strengthening legislation pertaining to the state highway department. In January of 1914, the Oklahoma Good Roads Association held a mass meeting in Oklahoma City. At this convention delegates selected a five-member committee composed of supporters of the good roads movement and of state legislators, including Elmer Thomas, a state senator from Comanche County. They met periodically throughout the year, and by August the committee had written a bill to submit to the state legislature at its next session. When lawmakers • assembled at the capitol in January of 1915, Representative J. E. Lemon of Grant County, chairman of the house committee on roads and highways, guided the measure through committee. On the floor of the house, legislators added several amendments before passing it. Most of the extra provisions were aimed at combating state control of highway construction, maintenance, and funding. In the senate Thomas worked vigorously for passage of the bill. A boisterous, frequently acrimonious debate raged for three days, and, as in the house, legislators offered numerous amendments. On March ll, the senate finally enacted the legislation by a margin of thirty to thirteen. After two sessions in a conference committee, a compromise measure emerged that cleared both chambers on the eve of adjournment. Governor Robert L. Williams, an avid support of the bill, si:gned it into law. ${ }^{12}$

Provisions of the statute retained some portions of original legislation creating the state highway department, but other articles expanded the authority of the agency. The law empowered the commissioner of highways to establish standard construction and maintenance procedures, to furnish engineering services to local authorities, and to cooperate with federal officials on highway improvement projects. Moreover, appointment of a civil engineer to the position of Oklahoma State Highway Engineer brought a new measure of professionalism to the department. The most important articles, however, dealt with the creation of a state highway system and an improved method of raising revenue to support road building activities. County commissioners in each county were required to designate no less than 10 percent and no more than 15 percent of the total road mileage as state highways. These roadways had to connect with the major towns in the county, and they had to adjoin arteries of the state system in adjacent counties. New revenue measures provided for a central fund for road improvement projects. The law established a statewide one-fourth mill ad valorem tax on all property subject to such a levy. The method of assessing owners of automobiles changed also. A fifty-cent per horsepower registration fee was enacted, as well as fines and penalties for failure to obey the law. ${ }^{13}$

Yet local officials still clung tenaciously to their traditional prerogatives of selecting construction sites and disbursing funds. The law permitted county and township road overseers--with the approval of the state highway department--to decide which routes would receive priority for construction and maintenance. More important, the state kept only 10 percent of the revenue collected from the ad valorem tax and the vehicle registration fees. The balance was returned to the counties in
proportion to their contributions to the fund, and the boards of county commissioners reserved the right to expend the money as they deemed necessary. This law deeply disappointed ardent advocates for improving Oklahoma's roads through an expanded state highway department. But as Representative Lemon dourly remarked, the new statute was "better than nothing. ${ }^{14}$

Advocates of a centralized system of highway construction and maintenance in Oklahoma, and throughout the nation, received important support when Congress passed a road aid act. For many years special interest groups in Congress had agitated for federal aid to state highways. As early as 1907, congressmen introduced such legislation. The trend continued, climaxing with the appearance of sixty-two separate federal road aid bills in 1912. Differences between the groups supporting these measures prevented passage of a law. One faction, comprised of backers of automobile interests and advocates of a network of military roads, pressed for a connecting grid of interstate highways. A second lobby, representing rural and agricultural interests, desired to aid the construction of farm-to-market arteries. Finally, in 1916, the two parties reached a compromise and passed what became known as the Federal-Aid Road Act. This statute avoided constitutional controversy by specifying that appropriations had to be spent on routes used for transporting the mail. ${ }^{15}$

Federal and state cooperation provided the underpinning for the new law. As a grant-in-aid program, the act made available funds based on the area, population, and postal road mileage of each state. States, in turn, matched the federal subsidy dollar for dollar. The Office of Public Roads, an agency of the United States Department of Agriculture,
became responsible for administering the program. State highway departments submitted plans for prospective projects to the Office of Public Roads, and, upon approval, construction began. Only after completion of the work to the satisfaction of federal inspectors, would states receive their grant. For the fiscal years ending June $30,1917,1818$, and 1919, Congress earmarked a total of $\$ 690,834$ for Oklahoma. In the spring of 1917, the Oklahoma State Legislature passed a resolution appropriating matching funds. ${ }^{16}$

The generosity of state lawmakers did not end with provisions to secure federal funds. Because of the increase in the use of automobiles and the generally deplorable condition of the state's highways, good roads advocates obtained passage of a state grant-in-aid program. Provisions of the law set aside $\$ 1,000,000$ for each of the fiscal years 1918 and 1919, and stipulated that the money be spent only on roadways designated as part of the state highway network. The counties had to match the grants on a dollar-for-dollar basis. County commissioners applied to the state department of highways for funds, and, once approved, the money was made avai lable. ${ }^{17}$

Under the direction of George B. Noble, appointed commissioner of highways by Governor Robert L. Williams in 1915, the Oklahoma State Highway Department attempted to cope with its new responsibilities. The number of employees increased from four to twenty, and, after moving twice within one year, the agency permanently located in the basement of the capitol. Revenue receipts rose rapidly, as did the paperwork involved in registering vehicles and issuing prison-made license plates. Employees in the engineering division devised standard bridge construction plans, which they began to impose on county commissioners with some
success. The major function of the state highway department, however, became that of a clearinghouse for applications from the counties for state and federal aid. Although a state highway system of 3,560 miles of roads--including only 25 miles of hard surface thoroughfares--had been created in 1915, the agency still had no authority to build or maintain public roadways. Only in approving or disapproving plans submitted by county commissioners did the state highway department exert any influence over construction projects. 18

By 1918, federal dollars for state highways began to reach Oklahoma. The first federal aid project in the state subsidized construction of a steel bridge over the South Canadian River between Cleveland and McClain counties. Known as the New Castle Bridge, the 2,280 foot long by 18 foot wide structure replaced a privately owned toll ferry as the only means of croṣing the stream. Another federal aid project increased the mileage of paved roads. Contracts approved for funding made possible the application of a nine foot wide asphalt surface to the road between Miami and Afton in Ottawa County. This undertaking alone nearly doubled the mileage of hard surface roadways on the state highway system. ${ }^{19}$

One project in particular, the Williams Highway, named for Governor Williams, attracted the attention of the state's chief executive. Williams, a former resident of southeastern Oklahoma, helped secure funds for the construction and improvement of the roadway from Smithville in McCurtain County south to Bethel, Broken Bow, and Idabel. There existed a great need for the road. In July of 1918, Max L. Cunningham, the state highway engineer, attempted to reach Smithville from the Arkansas border following a rainstorm. His car became stuck in the mud, and he had to walk the remaining distance to town. In order to obtain federal money a
post office was created between Bethel and Broken Bow. This maneuver involved moving the post office from Sherwood, an out of the way village, to Hicks, a location on the road between Broken Bow and Bethel. Then the governor reached an "understanding" with two of three McCurtain County commissioners to vote to use state and local funds to build the road from Bethel northeast over a range of the Ouachita Mountains to Smithville. ${ }^{20}$

The governor's sole motivation seemed only to help the residents of McCurtain County. He received severe criticism, nonetheless, from the very people he intended to aid. Some who lived along the route complained about the seemingly slow pace at which the project unfolded. One group of Smithville residents, fearing the loss of mail delivery to their town, totally misconstrued the purpose of moving the post office from Sherwood to Hicks. They condemned the governor for attempting to eliminate postal service to Smithville. Williams became irate at the false accusations, and, in retrospect, regretted his participation in the project. The state highway engineer, however, forwarded plans to the regional office of the Bureau of Public Roads, formerly the Office of Public Roads, at Fort Worth, Texas. Federal authorities found no faultwith the proposal, and, in August of 1918, officials began soliciting bids for construction contracts. ${ }^{21}$

Despite the influx of federal dollars and the expansion of the state highway department's responsibilities, construction and maintenance work on arterial roads remained amateurish at best. Much of the problem arose from the lack of a coordinated, unified road improvement program. In most cases the county commissioners in each county vied with each other for whatever funds became available for their district. The state
possessed no authority to control the expenditure of money. A few county officials spent their allotments wisely, but in many more jurisdictions there occurred much careless waste. As a result of the local elections of 1916, almost two-thirds of the county commissioners failed to win reelection or chose not to run for office. Many of these lame-duck administrators occupied their time squandering funds on useless or illconceived road projects. When new commissioners came into office, they had to wait until September of 1917 until recently collected revenues became available. ${ }^{22}$

Graft as well as incompetence contributed to the occasionally chaotic highway situation that existed in Oklahoma. Laws passed by the legislature in 1915 required each county to employ an engineer certified by the state highway department to supervise all work. County engineers, theoretically, had charge of approving all bids concerning construction, maintenance, and equipment before county commissioners voted to pay for them. Sometimes officials did not scrupulously observe that part of the statute. On December 4, 1917, Garfield County commissioners ordered the arrest and incarceration of George W. Tidd, the county engineer and a member of the faculty of Phillips University, Enid, Oklahoma. The commissioners charged Tidd with unauthorized possession of county records. Actually, during the previous week Tidd had refused to approve claims against the county by a road machinery manufacturer for equipment he discovered did not exist. Moreover, the engineer made an inspection tour to check the progress of county road work, finding several of the projects either in unsatisfactory condition or exorbitantly priced. He disallowed payment of these claims as well. Commissioners pressed Tidd to approve the bogus bills, then tried to force him to resign, and, that
failing, ordered his arrest on fabricated charges. The persecuted public servant finally relinquished his position, but only after seeking an investigation by the state highway department. Subsequently, Max L. Cunningham, the state highway department engineer, determined that on a statewide basis the corruption in Garfield County was not unique. ${ }^{23}$

By 1920 , infatuation by Americans with the automobile had become firmly entrenched. In 1921 alone, Americans bought 1.6 million vehicles, and the purchasing preference of Oklahomans reflected this trend. In 1918, the Oklahoma State Highway Department registered over 127,000 vehicles, but three years later the highway department issued over 201,000 license tags. Thus, the skyrocketing use of state roads created a demand for more and better highways. Soon after Governor James B. A. Robertson took office in January of 1919, he proposed a grandiose longrange scheme to update the roadways of the state. ${ }^{24}$

Robertson called for the adoption of a $\$ 50,000,000$ bond issue to build 4,730 miles of hard-surface roads throughout the state. Such an undertaking required an amendment to the state constitution. This process involved a plebiscite. Early in April of 1919, Robertson plunged into a determined campaign to secure public acceptance of his program. He opened a bond drive headquarters on the fourth floor of the capitol, staffed it with state employees, and sent out a flurry of literature to judges, legislators, and businessmen seeking their support. In particular, public servants were encouraged to work for the bond issue. As an inducement to aid in the campaign, the governor's secretary, Henry Wood, confided to a member of the faculty of Northeastern Oklahoma State Normal School at Tahlequah that counties providing the highest percentage of
votes for the bonds would get first priority in receiving funds. Initially, Robertson's plan seemed to enjoy wide support. ${ }^{25}$

Almost as soon as the governor launched his campaign, an equally determined opposition party formed. Led by state senator Elmer Thomas, encouraged by other prominent Democrats, and aided by the Daily Oklahoman, the most widely ciruclated newspaper in the state, opponents of the bond issue began their attack. First, they charged passage of the measure would lead to tax increases to retire the bonds. Second, antibondsmen claimed at current costs the $\$ 50,000,000$ would build only onehalf of the 4,730 miles of proposed roadway. Third, John H. Wright, an Oklahoma City attorney, publicized his view that state laws prohibited expenditure of such funds within the limits of Oklahoma's 208 incorporated cities and towns. The Daily Oklahoman ran front page editorials against the governor's plan and buried supportive articles within the newspaper. Finally, two of the state's former chief executives, Cruce and Williams, labeled the plan as wasteful, confusing, and extravagant. ${ }^{26}$

As the campaign neared election day, some of Robertson's most loyal supporters began to back away from the issue. They saw his plan as well intended but poorly conceived and ill-timed. The voters were in no mood to support any issue that even hinted of a tax increase. Also, the power of the pen had taken a toll. Robert L. Knie, a state senator from Cordell, informed the governor of mass opposition to the measure in his district. Knie blamed local sentiment on the Daily Oklahoman when he wrote it "has the people's ideas poisoned against the bond issue." Moreover, a split developed within the Democratic Party. Campbell Russell, a member of the Oklahoma Corporation Commission, and Frank C. Carter, the state auditor, publicly opposed the bond issue. Carter's failure to
support the governor resulted in his expulsion from the Democratic Party. Voters made the final decision, however, and, on May 7, 1919, they disapproved the measure by more than 50,000 votes. 27

The turbulent and aggressive politics surrounding the bond issue pervaded the highway department throughout Robertson's administration. After receiving a deluge of applications, petitions, and testimonials from candidates for the office of state highway commissioner, the governor appointed his secretary, Henry Wood. Wood became the first of three persons to hold that post during Robertson's tenure in office. In most other states at the time, the head of the highway department received his appointment because of political connections rather than technical expertise. Oklahoma proved no different, but between 1911 and 1919, the commissioner's job remained remarkably stable, as only two men served in that capacity. Yet, the increase in the size of the staff of the department, the rapid rise in the availability of disposable funds, plus the demand for more and better roads combined to create a politically volatile situation. The highway department during the administration of Robertson reflected some of the worst examples of infighting, unprofessional behavior, and patronage abuses. 28

Most of the controversy swirled around the activities of Robert $C$. Terrell, the state highway engineer. Appointed to his post in February of 1920, Terrell, a civil engineer, clashed almost immediately with Ernest S. Alderman, the Bureau of Public Roads engineer assigned to Oklahoma City. Alderman's job was to oversee the expenditure of federal funds on state roads in Oklahoma and to recommend approval or disapproval of applications for subsidies made by the state highway department. Terrell complained to Thomas H. MacDonald, Director of the Bureau of

Public Roads, that Alderman had overstepped his authority by advising Bryan and Carter county officials about road projects. Upon investigation, federal authorities conceded Alderman probably acted outside his jurisdiction, but the infraction was minor. The inquiry also concluded that because of the state engineer's temperament, "it may be impossible to find a man who can deal with Mr. Terrell satisfactorily." Terrell continued to press the issue, demanding the removal of Alderman's superiors at district headquarters in Fort Worth. This incident raised the anger of the membership of the Oklahoma chapters of the American Association of Engineers and of the American Society of Civil Engineers who without reservation supported the Bureau of Public Roads' employees and condemned Terrell's actions as unprofessional. Thus, the relationship between federal and state authorities deteriorated to a less than harmonious status, contributing to delays in approval of funds for projects in Oklahoma. 29

Further conflict brewed between Henry Wood, the highway commissioner, and Terrell. The state engineer's unprofessional behavior and apparent high-handed treatment of county commissioners led to much criticism of the agency. Wood undeservedly bore the brunt of these attacks. In February of 1921, he ordered Terrell to resign. Terrell took his case to Governor Robertson, who advised the engineer not to quit. This action caused a flurry of political maneuvering. At the same time a committee of the Oklahoma State House of Representatives began to investigate the highway department. Their report became public record during the ruckus over Terrell's resignation. The inquiry indicated thousands of dollars had been paid for work not completed, or, as in the case of a bridge in Pushmataha County, never built. Legislators found, however, that Wood
had recovered most of the money once he discovered the errors. Another portion of the report revealed at least two state senators were on the highway department payroll--one for a period of eighteen months at \$250 per month--while serving in the legislature. The governor probably knew of these appointments, but his underlings suffered the consequences. On March 18, 1921, Robertson fired Wood, and five days later he forced Terrell to resign. To bring a degree of order to a chaotic situation the governor elevated Brent E. Clark, an engineer in the highway department, to commissioner, and Clark, with Robertson's approval, hired Ernest S. Alderman as the state highway engineer. ${ }^{30}$

Throughout the early years of the 1920s, federal participation in and influence on road building continued to increase. In 1920, the United States Department of War made available to the Bureau of Public Roads for construction purposes World War I surplus vehicles and equipment. Authorities in the Bureau of Public Roads decided to distribute these items to the states. During 1920, the Oklahoma State Highway Department received 489 trucks and cars, plus assorted types of machinery, as its share of surplus material. Highway department officials loaned or rented most of the equipment to counties for road construction and maintenance. The distribution of vehicles and the availability of equipment such as cement mixers, fuel tanks, shovels, and wheel barrows upgraded the machinery used in local jurisdictions. ${ }^{31}$

Federal dollars continued to flow to Oklahoma for highway projects. By 1922, the annual allotment of money from the national treasury for the Sooner State reached more than $\$ 1,750,000$. In that same year an estimated 400 workers and 300 teams of horses and mules labored on 36 federal aid projects valued at over $\$ 12,000,000$. Most of the construction
was concentrated in a small number of counties. Some contemporary observers blamed this situation completely on political favoritism. No doubt politics played a role in the selection of projects for subsidies, but the system for distributing funds in Oklahoma benefited the wealthier counties. Because the state highway department possessed no authority to build or maintain roads, those counties that raised the dollars to match federal and state grants got the money. As a result, many counties in need of improved highways never participated in the grant-inaid program. Nevertheless, the mileage of hard surface roadways increased markedly. By 1924, the state highway system included 227 miles of concrete and 63 miles of asphalt roads. 32

New legislation at the national level brought changes to highway administration. In 1921, advocates of federal aid to state highway departments secured congressional approval of another national road law. This statute authorized each state to designate, with the approval of the Bureau of Public Roads, 7 percent of its total highway mileage on which all federal money would be spent. The purpose of this act was to create a network of good interstate thoroughfares. As a reflection of increasing federal influence, the statute required a minimum width of eighteen feet for newly constructed roads and established a maximum federal contribution of $\$ 20,000$ per mile. Finally, the law remanded all construction, contracts, and plans to the direct supervision of the highway departments in the states. Oklahoma, and many other states, faced a revision of contemporary practices. 33

Federal officials prodded the states to make changes in their outmoded procedures. Throughout the early years of the 1920 s, engineers at the Fort Worth office of the Bureau of Public Roads stressed the
inadequacy of the Oklahoma State Highway Department. Circumstances in Oklahoma seemed no different than in Arkansas, Louisiana, and Texas, the other states served by the Fort Worth headquarters, but federal engineers complained of shoddy upkeep by county commissioners of completed federal aid projects in the Sooner State. Without proper maintenance improvements deteriorated, defeating the purpose of the program as intended by Congress. In fact, A. R. Losh, the Bureau of Public Roads' chief engineer for the region, declared the situation in Oklahoma completely unsatisfactory. Losh emphasized the need for a central agency to insure proper care for bridges and highways. 34

Oklahoma lawmakers responded slowly to new federal legislation and to recommendations of the Bureau of Public Roads. The most significant stumbling block to rapid changes in the highway department arose when impeachment proceedings were brought against Governor John C. Walton, who took office in January of 1923. Controversy erupted concerning Walton's reaction to activities of the Ku Klux Klan in Oklahoma. This potent issue absorbed the energies of the state's politicians and held the attention of the general public. Following impeachment and removal of the governor from office in the fall of 1923, officials once again turned their attention to the affairs of state. The situation regarding federal aid to Oklahoma's highways, however, had declined to the point that federal officials threatened to stop all subsidies until significant, substantial changes took place in administration and operation of the state highway department. 35

Martin E. Trapp, Walton's successor, made highway improvements the premier issue of his administration. Early in 1924, when a special session of the Oklahoma State Legislature assembled, the governor enlisted
the aid of Representative R. A. Singletary, a member of the Oklahoma Good Roads Association, and Clark Nichols, a senator from Eufaula, Oklahoma, to steer his proposal through the legislature. Trapp's plan, heartily endorsed by federal road men, called for a major revamping of the state highway program. First, the governor insisted upon the creation of a highway department with full authority to construct and maintain roads. Second, he proposed a three-cent per gallon sales tax on gasoline to support the reorganized department of highways. 36

In February of 1924, the two bills began their tortuous journey through the state legislature. To no one's surprise, major opposition to the measures arose from legislators who decried the trend toward centralization, and who fumed against reducing the power of local authorities. Moreover, objections were raised concerning distribution of revenue collected from the gasoline levy. The bills were amended and counterproposals were initiated. Both measures shuffled between the house and senate numerous times, gaining the approval of one body but not the other. Trapp refused to relent, relying on the deft maneuvering of Singletary and Nichols. By mid-March 1924, the two bills passed both chambers, and the governor signed them into law. 37

The measure reorganizing the state highway department contained sweeping changes. A three member Oklahoma State Highway Commission, comprised of no more than two office holders from the same political party appointed by the governor, assumed complete responsibility for the state highway system. They were empowered to employ engineers, purchase equipment, hire laborers, devise plans, as well as contruct and maintain roads designated as part of the state highway network. A highway construction and maintenance fund was created into which all taxes earmarked
for road improvements were deposited. Money from this account would be used for state projects and to match federal subsidies. The commissioners received authority to exercise the right of eminent domain in acquiring rights-of-way, and they were charged to "take whatever steps may be necessary to cause said state highway system to be constructed at the earliest possible time." The gasoline tax emerged from the legislature as a two-and-one-half cent per gallon levy. One cent was returned to the counties for road improvement projects, while the remainder was deposited in the construction and maintenance fund. A sound means now existed for the state of Oklahoma to embark on an expansive, organized highway building program. 38

Not all matters dealing with Oklahoma's highways involved serious issues. In Garfield County, Sheriff Ora A. Lincoln embarked upon a concerted campaign to stamp out the practice of young lovers using cars parked along county roads as a trysting place. Lincoln, accompanied by the county attorney, dutifully spent many nights patrolling byways near Enid, disrupting amorous couples and ordering them to take their mobile love nests elsewhere. In another incident in the fall of 1923 , a man arrived in Blackwell, Oklahoma, claiming to be Thomas H. MacDonald, Director of the Bureau of Public Roads. Impressed by the presence of such an important figure in their community, the city's dignitaries provided him with hotel accommodations, meals, and cashed several personal checks. They even took him on a tour of the county to observe road improvements projects. Sated by the generous hospitality of the locals, the imposter disappeared, leaving Blackwell's city fathers with a sizeable board bill, a handful of worthless checks, and, no doubt, many red faces. The antics of this accomplished con artist emphasized a
significant point: residents of this small north central Oklahoma town were well aware of the activities of the Bureau of Public Roads and of the important contributions made by the agency. 39

Creation of the Oklahoma State Highway Department involved the interaction of three key factors. First, individuals dedicated to improving overland transportation provided a driving force for political action and new legislation. Beginning with Sidney Suggs' promotional activities and culminating with Governor Martin Trapp's successful campaign for an effective highway department, a handful of public servants and politicians kept alive the cause for better roadways. Their success not only paved the way for new roads, but they significantly reduced the influence of local authorities in an area historically the preserve of county and township functionaries. The centralization of an important public service became a reality for Oklahomans. Second, by the early 1920s, the automobile had become a necessity for city dwellers and country folks alike. The motoring public demanded more and better roads, which resulted in heightened activity by government agencies. The state and federal government responded with grant-in-aid programs as well as bureaucratic machinery to implement highway improvement projects.

Finally, the role of the federal government proved crucial to establishing an effective department of highways for Oklahoma. Appropriations made by Congress for road construction encouraged the Oklahoma State Legislature to inaugurate its own grant-in-aid program. Equally important, employees of the federal Bureau of Public Roads increasingly exerted a positive influence for creating a highway department. Thus, the dedication of a few individuals, the proliferation of the automobile,
and the expansive influence of the federal government combined to form a
firm, permanent foundation for the Oklahoma State Highway Department.

## ENDNOTES

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## CHAPTER VIII

## OKLAHOMA STATE HIGHWAY DEPARTMENT:

MODERN PERIOD

Following the reorganization of the Oklahoma State Highway Department in 1924, the agency entered an era of growth and change. National events, public policy, and politicians influenced this process, sometimes not always in a positive way. Continued increase in the use of the automobile and an abundance of funds produced a period of rapid expansion inthe 1920 s and early 1930s. The years of the Great Depression brought cutbacks in spending and the need to provide work relief for the unemployed, resulting in reduced construction activity. World War II and the post-war period further exacerbated this problem. Use of the state's highways rose dramatically, but a shortage of machinery, men, and money fostered an equally rapid decline in the serviceability of the road system. During the late 1950 s and early 1960 s, intensified federal aid spawned a building boom, which subsided in the 1970 s due to inflation and reduced subsidies from the national government. Throughout most of these years, patronage and political maneuvering pervaded the agency. As a result, the Oklahoma State Highway Department endured a feast-andfamine cycle of development impeded or abated by spoils system politics. Between 1924 and 1933, financing construction and maintenance of the state's roadways achieved firm footing with the earmarking of specific revenues for the highway department. The gasoline tax, established
by the Oklahoma State Legislature in 1924, provided the principal source of funds for roads. First adopted in 1919 by the states of Colorado, New Mexico, and Oregon, the gasoline excise proved popular among motorists and all states had instituted such a levy by 1929. Oklahoma's gasoline tax started at a two and one-half cent per gallon rate, one cent of which was returned to the counties and the balance placed in the state highway construction and maintenance fund. In 1924, highway commissioners decided that no less than 75 percent of these monies should be used to construct new highways. Reflecting national trends, the sales of automobiles and the use of public roads increased rapidly in Oklahoma during the 1920s. To offset the demands for new and better roadways, state lawmakers responded by increasing the gasoline tax to three cents in 1925 and four years later raised the levy an additional penny. None of the increases were shared with the counties. By 1928, the gasoline tax produced $\$ 5,000,000$ annually for state coffers. ${ }^{1}$

A vehicle registration charge supplemented the agency's income. The highway department received only 40 percent of this fee, with the remainder divided between the counties and the state's general revenue fund. Legislators increased this surcharge as the number of vehicles in the state rose, and, by 1928, the highway department's share of vehicle registration fees equalled $\$ 2,000,000$ annually. Between 1924 and 1933, the highway department operated on a self-supporting basis, receiving no supplementary appropriation from general revenue funds. This trend was not unique to Oklahoma, as nationwide automobile and truck owners financed highway expansion projects by road user taxes. ${ }^{2}$

Federal funds for Oklahoma's highways provided a vital supplement to money raised by road user fees. Calculated according to area, mileage
of public roads, and population, the Sooner State received money from the national treasury for expenditures on roadways designated as part of the federal-aid system. Because of the large amount of Indian land in Oklahoma, the federal government paid 55 percent of the cost of projects not to exceed $\$ 16,659$ per mile, as opposed to dollar-for-dollar sharing ratio for states containing no tribal property. The Bureau of Public Roads supervised this program to insure compliance with rules and regulations. Sometimes federal and state officials failed to cooperate effectively. ${ }^{3}$

In the summer of 1930, the Oklahoma State Highway Department teetered on the brink of bankruptcy as commissioners rushed to complete an ambitious road building program. Their financial woes surfaced abruptly when federal authorities refused to approve vouchers for road work in Oklahoma because the highway department failed to adhere to standard procedures. .During June, $\$ 300,000$ of grant-in-aid money was withheld, and by mid-August over $\$ 800,000$ in payments due for various projects remained in federal hands. One obstacle to securing the money arose from the failure of state officials to provide the Bureau of Public Roads engineer in Oklahoma City with an accurate account of the amount of cement used in building concrete roads and bridges. This practice served as a means of insuring minimum standards for construction work. A second difficulty involved an inordinate number of clerical and mathematical errors in plans and estimates submitted by the Oklahoma State Highway Department to the Bureau of Public Roads. Correcting the error-filled reports consumed additional time, thus further delaying disbursal of federal funds. By the end of the year the difficulties were resolved, and federal money again began to flow into the state. C. E. Swain, the Bureau of Public Roads engineer stationed in Oklahoma City, attributed the source of
careless problems to the Oklahoma State Highway Commission's belief "that the rate of expenditure is a sufficient criterion of accomplishment. $11^{4}$

A final means of obtaining funds for road improvement projects involved a state-county cooperative program. Throughout the 1920s many counties Passed road bond issues. The dollars raised by these bonds provided a vital supplement to the state's road building program. When this money became available, the highway commission provided matching grants from the construction and maintenance fund. Then the combined revenue was used to improve rural routes on the state highway system. In western Oklahoma, joint state-county funding made possible the erection of numerous bridges. In some cases several counties cooperated in a joint venture. By June of 1927 , six of the seven counties through which U.S. Highway 81 passed raised sufficient funds to pave the road. As funding for the highway department increased and as workers completed improvements on hundreds of miles of roadways, the counties reduced their contributions for improving routes on the state system. By 1935, the practice virtually had ended. ${ }^{5}$

Rapid increases in the number of motor vehicles in Oklahoma--surpassing 500,000 by 1926--produced a financial windfall for the highway department. In 1929, all four sources of funds grossed $\$ 16,024,000$ while the following year total income exceeded $\$ 18,700,000$. Over 70 percent of this revenue came from the gasoline tax, and motor vehicle registration fees provided an additional 21 percent of the income. Most of this money returned to the motoring public. In 1931 and 1932, the department spent 72 percent of its income on new construction and nearly 18 percent on maintenance work. 6

From their headquarters in the basement of the state capitol, highway commissioners and the state highway engineer directed the operations of the state highway department. The first commission appointed in 1924 , headed by Cyrus S. Avery of Tulsa, established the basic organizational structure of the agency. Originally, divisions for bridge building, plans and surveys, and tests and materials provided necessary services. Later, officials created a construction division from the plans and surveys division. In 1929 and 1930, Chairman Lew H. Wentz streamlined and upgraded administrative procedures. Wentz secured the installation of new accounting equipment and received praises from representatives of the Bureau of Public Roads for effecting modern, centralized record keeping methods. As the responsibilities of the department multiplied and as specialization became a necessity, various highway commissions expanded existing divisions or created new ones. ${ }^{7}$

By 1927 , a field organization, little changed to the present, provided a means of supervising construction and maintenance. The state was divided into a number of divisions, ranging from six to nine depending upon the gubernatorial administration. A division engineer served as the chief of each jurisdiction, and several subordinate resident engineers directly supervised projects. Each division contained a complement of maintenance foremen, inspectors, and laborers. In 1930, the Oklahoma State Highway Department employed 2,800 workers who maintained a state system consisting of $6,418 \mathrm{miles}$ of roads. ${ }^{8}$

Additionally, in 1924, the Oklahoma State Highway Commission adopted a route numbering plan. Numbered consecutively from one to twenty-six, the designations reflected no indication of the orientation of the road. Every state road, even those later included in the U.S. Highway system,
received a number. This practice of double numbering no doubt created some confusion. For example, U.S. Highway 64 which entered the state at Moffett, Oklahoma, and stretched to the New Mexico border west of Kenton, Oklahoma, carried the designation Oklahoma Highway ll. Numbering the state's highways, however, brought order to a potentially chaotic situation. Workers erected sign posts along the roads, and at convenient intervals stenciled the number of the route on bridges, culverts, rocks, trees, and utility poles. The adoption of this numbering system made possible the publication of the first official state highway map in 1925.9

To prevent the development of an uncoordinated haphazard collection of interstate roadways, the Bureau of Public Roads sponsored a cooperative effort to establish a standardized national route numbering system. In 1925, William M. Jardine, United States Secretary of Agriculture, appointed the Joint Board of State Highway Officials to determine which thoroughfares to include in the new route designation system. Cyrus Avery represented Oklahoma on the board. Avery, moreover, served as a member of the five-man committee that assigned numbers to roads selected for the network. 10

In November of 1926, the Joint Board of State Highway Officials unveiled their plan at a national meeting of the American Association of State Highway Officials at Pinehurst, North Carolina. Designated U.S. Highways, the 96,626 miles of roads comprised a grid of interstate routes stretching from coast-to-coast and border-to-border. Odd numbers denoted north-south thoroughfares with even numbers assigned to east-west highways. The conference adopted the design of a standard U.S. Highway marker for use in all of the states. Initially, nine U.S. Highways
crisscrossed Oklahoma. They included U.S. Highways $64,66,70,73,75$, 77, 81, 266, and 271. These routes comprised 2,120 miles of the 5,787 miles of roads on the state highway system in 1926. Four years later two more state roadways received interstate designation with the creation of U.S. Highways 60 and 62. ${ }^{11}$

Maintenance of these newly designated routes became a primary responsibility of the Oklahoma State Highway Commission. Money for upkeep came from the construction and maintenance fund, but statutory restrictions placed a limit of 25 percent on allotments for maintenance. In 1924, the highway commission created the position of maintenance engineer within the construction division to coordinate a statewide program. He became responsible for twenty-six maintenance districts, each headed by a maintenance superintendent. Within a year the state highway department assumed from the counties maintenance of all roads on the state system at a cost of approximately $\$ 1,500,000$ per year. In 1927, the highway commission, directed by Henry W. Leininger of Lawton, reordered the maintenance districts to coincide with construction divisions and placed maintenance workers under the supervision of division engineers. This system remains intact today. ${ }^{12}$

Upkeep of the state's roadways operated on a patrol system. Each worker assigned to maintenance duty became responsible for a specific section of a state route. Depending upon the condition of the road, the length each man patrolled varied from eight miles on unimproved dirt roads to thirty miles on newly paved highways. During these early years, the highway department provided maintenance men with horse-drawn road graders, fresnos--an open-ended U-shaped scraper--and a plow. Workers furnished and cared for their own draft animals, wagons, and hand tools.

Ross Venable worked for the highway department as a maintenance man in 1925. He patrolled the first twelve miles of state roadway, later designated U.S. Highway 64, west of Forgan, Oklahoma. Venable carried a washtub in the road grader to put over his head during rain and hail storms, and, after each rain, he traveled his twelve miles to drain low places on the all-dirt road. He had six horses to care for, he worked six days a week, and he received no sick days or paid vacation. Venable's salary of six dollars a day included two dollars for horse feed. ${ }^{13}$

Mechanization of maintenance work took place as the mileage of paved and all-weather roadways increased. In 1928, highway commissioners purchased a small number of motorized road graders and started to use light trucks for maintenance work on hard-surface roads. By 1930, the now familiar yellow-painted equipment of the highway department became a common sight as workers operated more than 50 motorized road graders and 145 trucks. As late as 1935, however, horse-drawn equipment still maintained portions of the state's highway system. 14

Between 1924 and 1933, the single most important function of the Oklahoma State Highway Department involved the construction of a system of paved roads. Nationwide, automobile and truck sales skyrocketed. A building boom ensued, as the demand for paved roads far exceeded the capacity of government agencies to provide them. Oklahoma proved no different. In 1924, the state highway system included only 290 miles of hard surface roadway, and the highway commission contracted for $\$ 5,748,000$ in new construction. Within four years, Oklahomans motoring about the countryside in their Auburns, Hupmobiles, Overlands, Marmons, Moons, Pierce Arrows, or Whippetts encountered more than $1,100 \mathrm{miles}$ of paved roadways on the state system. By 1927 , new construction contracts
surpassed the $\$ 7,480,000$ mark. Because the highway commission relied upon county officials to provide matching funds, many improvements occurred at locations convenient to the counties with little consideration for building a continguous pattern of roadways. Yet, these projects proved popular with local constituents. In August of 1928, an estimated 5,000 residents of Hughes, McIntosh, Okfuskee, and Okmulgee counties gathered near Henryetta to celebrate completion of improvements to the road linking McAlester, Oklahoma, to Oklahoma City and Tulsa. The gathering, highlighted by a picnic and an Indian-style ball game, attracted United States Senator William B. Pine, Chief Justice of the Oklahoma State Supreme Court Frederick P. Branson, and members of the Oklahoma State Highway Commission. ${ }^{15}$

Not until 1930 did major paved thoroughfares exist in Oklahoma. On November 2, of that year, a large crowd assembled at Cushing, Oklahoma, to see Governor William J. Holloway and state highway commission chairman Lew $H$. Wentz officially open the last segment of newly constructed cement roadway between Oklahoma, City and Tulsa. The project began in 1922 when residents of Tulsa County approved a $\$ 680,000$ bond issue to match federal funds for paving a road from Tulsa city limits west to the Creek County line. During the next eight years, intervening jurisdictions secured funds to match federal and state grants. The 140 mile route followed a course directly west from Tulsa to Sand Springs, to Mannford, and then west and south to Oilton. From Oilton it ran due south to Drumright where the thoroughfare turned west to Cushing and Langston. At Langston the road veered southwest to Guthrie, then directly south to Edmond and Oklahoma City. This new roadway made possible a
three hour drive from Tulas to Oklahoma City compared to a six hour journey in good weather on all-dirt roads ten years earlier. ${ }^{16}$

Improving major interstate routes made overland travel through Oklahome more convenient. Paving U.S. Highway 77 provided a concrete passageway across the state. This route served as the main north-south avenue through the central plains states. In Oklahoma, the road followed the Old Meridian Postal Highway from the Kansas border near the Chilocco Indian School in Kay County to Oklahoma City. From Oklahoma City it passed through Norman, Lexington, Purcell, Wynnewood, Davis, Ardmore, and Marietta. South of Thackerville it crossed the Red River into Texas. Small scale improvements began in 1921 and 1922 when short stretches of pavement were built from Oklahoma City toward Edmond and Norman. In September of 1924, a more determined and extensive project commenced in the Arbuckle Mountains. Located in the south central part of the state in Murray County, these rounded granite slopes stood as a barrier to a direct line between the Dallas-Fort Worth, Texas, area and Oklahoma City. To alleviate the necessity of skirting the mountains, the highway commission contracted with officials of the Oklahoma State Penitentiary at McAlester for trustees to build a completely new road. While prisoners labored to open a winding two-lane concrete concourse over the Arbuckle Mountains, highway department officials authorized contracts with construction firms to pave the remainder of the road. By January of 1931, the entire 269 miles of U.S. Highway 77 through Oklahoma was paved and open to traffic. ${ }^{17}$
U.S. Highway 66, a counterpart to U.S. Highway 77, stretched east to west across the state. The road entered Oklahoma about four miles northeast of Quapaw, Ottawa County, and followed a southwesterly route
linking Vinita, Claremore, Tulsa, Bristow, Chandler, Edmond, and Oklahoma City. From Oklahoma City the highway ran west through Yukon, El Reno, Weatherford, Clinton, and Elk City. One-half mile west of Texola, Oklahoma, the roadway crossed into the Texas Panhandle. The segment through Oklahoma was part of a 2,400 mile route from Chicago, 111 inois , to Los Angeles, California. Because of the length of the route and the many local jurisdictions it passed through in Oklahoma, paving progressed slowly. By 1930 , most of the highway from Oklahoma City northeast to the Kansas border had been paved. But only 59 of the 168 miles from Oklahoma City west to the Texas boundary could be classified as hardsurface road. ${ }^{18}$

Delays in laying a concrete roadbed arose because of disagreements between federal, state, and local authorities concerning locating and funding the thoroughfare. Perhaps the best example of this situation existed at Calumet in Canadian County, Oklahoma. Original routing of U.S. Highway 66 carried it about eleven miles due west of $E l$ Reno where the road jogged five miles north to Calumet, twelve miles west to Geary, then six miles south, crossing the South Canadian River to turn west to Weatherford. Bureau of Public Roads officials proposed eliminating the twenty-three mile "Geary Loop" with a new fifteen mile stretch of road straight west to the South Canadian River, by-passing Calumet. Because state officials relied on Canadian County bond money to match federal grants and the citizens of Calumet had voted for the bonds, local authorities refused to accept the plan proposed by the Bureau of Public Roads. This incident and others like it retarded efforts to pave all of U.S. Highway 66, and not until 1936 was the entire length of the road through Okl ahoma hard-surfaced. 19
U.S. Highway 66 gained national fame as a prominent backdrop for part of John Steinbeck's book, Grapes of Wrath. Steinbeck portrayed the plight of displaced depression-era Oklahoma tenant farmers who traveled the road west to California with the hope of finding a better life. Although a novel, the book Steinbeck wrote recorded real life incidents. Gaines H. Stout, an employee of the Oklahoma State Highway Department from 1925 to 1966, worked along U.S. Highway 66 during the 1930s. As a member of a survey party, he frequently encountered families stranded by the roadside, out of gasoline and penniless. Usually a member of the highway crew would drive to the nearest town to purchase a few gallons of fuel for the hapless migrants, and the workmen would take up a collection, often totaling no more than two dollars, to help the troubled travelers continue their journey. ${ }^{20}$

A final significant undertaking of the Oklahoma State Highway Department between 1924 and 1933, involved a successful campaign to eradicate toll bridges on the state highway system. Beginning in 1924, officials within the state highway department instituted a procedure for eliminating these obstacles to overland traffic. Plans called for the construction of new bridges or the acquisition of existing toll facilities. State roadmen gave priority to the Red River, spanned by nineteen privately owned structures. By the end of 1926, the bridge connecting Frederick, Oklahoma, to Vernon, Texas, had been acquired from its owners. Following the consummation of an agreement between the Oklahoma and Texas state highway commissions, two jointly financed new bridges opened linking Hugo, Oklahoma, with Paris, Texas, and Randlette, Oklahoma, to Burkburnett, Texas. ${ }^{21}$

Despite the advances, private owners still controlled the crossings of the heaviest traveled routes connecting Oklahoma and Texas. These thoroughfares included U.S. Highways 75, 77, and 81, which entered the state south of the towns of Durant, Marietta, and Terral, Oklahoma, respectively. During the summer of 1928, a major state newspaper canvassed members of the Oklahoma State Legislature to ascertain their positions on the matter of free bridges, discovering a vast majority of lawmakers favored the issue. When the legislature assembled in 1929, members of the house and senate passed virtually unopposed two laws supporting the construction of free interstate bridges and prohibiting the extension of charters of toll bridge companies. ${ }^{22}$

In August, 1929, officials from the Oklahoma and Texas state highway commissions met to negotiate a joint construction agreement and within a year new bridges to parallel toll facilities on U.S. Highways 75, 77, and 81 were under contract. Almost as soon as officials of the highway department began planning new structures, toll operators sought injunctions and brought law suits against the states to halt construction. These legal maneuvers were overcome when Oklahoma and Texas sought and received approval from Congress for constructing bridges across the Red River. In most cases, this action solved peaceably the problem of legal impediments for construction of the bridges. A notable exception involved the Durant, Oklahoma-Dennison, Texas, bridge carrying U.S. Highway 75 across the Red River. ${ }^{23}$

When construction neared completion in the summer of 1931, officers of the Red River Bridge Company, proprietors of the toll bridge paralleling the new state structure, commenced legal action. The owners obtained injunctions from courts in Oklahoma and Texas prohibiting opening of the
free bridge. Joseph W. Bailey, Jr., legal counsel for the toll operators, and J. Berry King, Oklahoma State Attorney General, immediately began negotiating a settlement. In the meantime, Governor Ross $S$. Sterling of Texas dispatched four Texas Rangers to the site to enforce. the injunction on the south side of the river. On July 24 , William H. "Alfalfa Bill" Murray, governor of Oklahoma, who knew a legal settlement would be completed within a few days, declared martial law at the site and ordered two companies of the Oklahoma National Guard to force open the free bridge. A standoff ensued, but the "Dennison Bridge War" attracted national attention. Murray went to the bridge, inspected the troops, and made a series of bellicose statements. Adjutant General Charles F. Barnett, commander of the Oklahoma National Guard, reduced the effect of the governor's threats, however, when he valiantly ordered the officer in charge of the troops to "hold the fort but keep the cost down." On July 26, the bridge opened when a federal court judge in Houston, Texas, lifted the injunction. The presence of the guardsmen and Murray's antics had little real impact on the turn of events. ${ }^{24}$ The flurry of construction activity in Oklahoma occasioned by dynamic increases in the use of the automobile reached its peak in 1932. In that year the Oklahoma State Highway Commission awarded contracts in excess of $\$ 11,100,000$ for new construction. The commission also absorbed an additional 976 miles of roads on the state system, raising the total mileage to 7,371. Despite these advances, much work remained to be completed. A survey in 1930 indicated an average of 4,136 miles of paved road in each of the forty-eight states. At the same time, the Oklahoma state highway system consisted of $3,368 \mathrm{miles}$ of paving. By 1933 , twentynine of the state's seventy-seven counties still had no paved roads, and
eleven more had less than twenty-five miles of state maintained hardsurface highways. The effects of the Great Depression and World War II, moreover, retarded and then nearly halted development of the state highway system. 25

The era of the Great Depression produced two important changes for the highway department. First, to meet the immediate problem of unemployment caused by the collapse of the economy and the drought in Oklahoma, state highway department officials made plans to provide more employment on various projects. Instead of continuing to expand the mileage of paved roads, authorities implemented projects requiring large numbers of laborers. This tactic reflected a nationwide trend. Second, Oklahoma's governors and legislators of the period adopted the practice of diverting sources of revenue exclusively reserved for the highway department to meet financial obligations elsewhere. This practice, also adopted by many states, became a long-range problem affecting highway funds for many years. ${ }^{26}$

As early as the fall of 1930 , officials of the Bureau of Public Roads at Fort Worth, Texas, recognized the need for extensive spending by the Oklahoma State Highway Department to ease the problems of unemployment. C. E. Swain, the federal district engineer, urged his supervisors in Washington, D.C., to make available as soon as possible funds earmarked for expenditure in 1932. In 1931, the Oklahoma State Highway Department received an emergency allocation of $\$ 1,900,000$. The Oklahoma State Highway Commission, chaired by Sam R. Hawks of Buffalo, Oklahoma, then implemented plans for extensive grading and drainage projects requiring large numbers of laborers. This emphasis on putting people to work rather than expanding the state highway system was reflected by the
decline from preceding years in the amount of newly paved roads and an increase in the mileage of grading and drainage projects. ${ }^{27}$

Unfortunately, not all of these projects unfolded smoothly. Wrangling between local, state, and federal officials over the location of twelve miles of U.S. Highway 62 in an obscure part of the state temporarily squelched relief efforts. In 1930, residents of Harmon County approved a bond issue to help finance improvements to U.S. Highway 62. Provisions of the bond issue specified the exact route of the road through the county. The following year state officials accepted the bond money and prepared to construct the roadway with matching federal funds. Engineers of the Bureau of Public Roads objected to the route proposed in the bond issue because they believed it jogged unnecessarily through the town of Gould, Oklahoma. Hawks, J. F. McKeel, a member of the three-man highway commission then in office, and Governor Murray supported local residents and determined to proceed. Their blatant disregard for the objections of representatives of the Bureau of Public Roads prompted federal authorities to impound all highway funds for Oklahoma. Throughout the spring and summer of 1932 , over $\$ 5,100,000$ of regular highway aid and special allocations designated for work relief were withheld. In September, the Oklahoma State Supreme Court ruled against an injunction sought by Harmon County commissioners to stop construction of U.S. Highway 62 over the route favored by federal roadmen. This action cleared the way for the release of impounded appropriations, and by the end of the year sorely needed federal money once again reached Oklahoma. ${ }^{28}$

Major federal relief programs began to impact upon Oklahoma in 1933. Funds made available by the Reconstruction Finance Corporation, an agency created in January of 1932 during the administration of President

Herbert C. Hoover, were applied to highway construction. Laborers taken from rolls compiled by local employees of the Reconstruction Finance Corporation worked for construction companies awarded contracts by the highway commission. At a bridge project near Sawyer, Choctaw County, laborers received thirty cents an hour for a thirty hour work week. On other projects authorities tried to distribute employment among large numbers of workers by establishing a seven hour work day, five days a month, at a rate of two dollars a day. ${ }^{29}$

One of the most concerted efforts directed by the highway department to aid the unemployed and the poverty stricken occurred in northwestern Oklahoma. Provisions of the National Industrial Recovery Act, a law passed in June of 1933 as part of President Franklin D. Roosevelt's New Deal, earmarked funds to aid nine Midwestern and Great Plains states severely affected by drought conditions. Six counties in Oklahoma, Beaver, Cimmaron, Ellis, Harper, Texas, and Woodward, became eligible for a special allotment of $\$ 1,900,000$. Later, authorities added five more counties to the list. State highway department officials prepared plans for numerous grade and drainage projects and other work activities requiring large numbers of manual laborers. Private contractors supervised much of the construction, selecting employees from relief rolls. Skilled workers received sixty cents an hour and wages for the unskilled were forty cents an hour. The highway department also made plans to pave roads in drought-stricken areas. But Thomas H. MacDonald, Director of the Bureau of Public Roads, told H. N. Arnold, who became chairman of the Oklahoma State Highway Commission in February of 1933, that he "would not stand for use of cement on roads in the drought areas." This statement revealed the commitment of the federal government to use labor
intensive highway construction for direct relief. By December of 1933, road projects employed 600 men in the six county area, and that number grew as more local residents applied for employment. This particular program continued under the auspices of the Works Progress Administration, another New Deal agency created by the Roosevelt administration, until December of $1938 .{ }^{30}$

Other highway work relief projects affected virtually every county in the state. During 1933, the Oklahoma State Highway Department received more than $\$ 9,200,000$, aside from the special drought program, in Na tional Industrial Recovery Act funds for road work. None of this money required matching state funds. Draftsmen and planners at the state highway department headquarters in Oklahoma City worked extra shifts to produce a comprehensive program, and by the end of the year 156 separate projects for municipal, secondary, and federal-aid roadways had been approved by the Bureau of Public Roads. Edward McDonald, secretary of the state highway commission, speculated that potentially these programs could affect as many as 25,000 jobless Oklahomans. In 1936, the Works Progress Administration made available additional funds for Oklahoma. This grant-in-aid program required a state contribution of approximately 40 percent and the federal government paid the balance. Most Works Progress Administration sponsored activities involved grade, drainage, graveling, and bridge construction. By 1937, Works Progress Administration grants for highways in Oklahoma exceeded $\$ 4,000,000$ annually. As the nation began to recover from the Great Depression, particularly after the outbreak of World War II in 1939, the federal government reduced or discontinued many New Deal programs. Still, during the biennial
period of 1941-1942, Oklahoma received more than $\$ 900,000$ from the Works Projects Administration, successor to the Works Progress Administration. ${ }^{31}$

At the same time the highway department attempted to alleviate some of the unemployment in Oklahoma, a drastic cutback in state funds seemed to work at cross purposes to relief activities. Revenue from the gasoline tax and automobile registrations plummeted as Oklahomans reduced their consumption of fuel, purchased few new cars, and failed to register the ones they owned. During the first three months of 1933, income for the highway department fell 30 percent compared to the same period the year before. These circumstances strained maintenance budgets and severely limited plans for new construction. Salary reductions and releasing employees became standard procedures. This situation worsened when Governor Murray secured legislation diverting funds earmarked for the highway department. The state of 0klahoma owed approximately $\$ 6,000,000$ in outstanding warrants. To preserve the credit of the state, Murray and a majority of legislators reasoned so much progress had been made in the road construction program that the highway department could "slow down for a while." In April of 1933, lawmakers enacted a statute channeling 40 percent of the highway department's share of the gasoline tax to pay the warrants. The reductions of funds further impeded the department's ability to serve the public, and without money from the National Industrial Recovery Act there would have been no new construction in 1933. ${ }^{32}$

Once the warrants were retired, the full amount of the gasoline tax flowed into the coffers of the highway department. But the precedent for diversion set by the Murray administration continued to haunt the
road agency. In 1939, lawmakers reordered the apportionment of the gasoline tax by earmarking 5 percent of the levy for municipal roadways, reducing the highway department's share to 70 percent. Following World War II, the state highway department faced the problem of matching federal funds because of diversion, and, by 1955, the highway department received only 34 percent of road user revenues. This trend, with various alterations, continued to be reflected by the fact that by the mid-1960s 22 percent of road user taxes were earmarked for public schools and an additional 11 percent went to the state's general revenue fund. ${ }^{33}$

The outbreak of World War II produced conditions further reducing the effectiveness of the Oklahoma State Highway Department. A scarcity of machinery, manpower, and materials occurred attributing to a general deterioration of the state's highway system. In December of 1941, President Franklin D. Roosevelt suspended every federal-aid road project not advertised to contractors for bids. For the next four years all roadway improvement programs required the approval of the War Production Board, a federal agency established to assign priorities to materials essential to the war effort. As a result, an extremely limited construction program took place during the war years. In 1942, work on several partially completed bridges stopped due to a lack of structural steel, and the following year federal authorities halted twenty-four construction projects in Oklahoma they regarded as unnecessary. Furthermore, an absence of rubber products rendered some of the highway department's equipment inoperable. A manpower shortage aggravated the situation as young men entered the military service and others sought higher paying jobs in defense plants, lowering the department's field force by one-third. For fiscal year 1943, highway commissioners authorized contracts totaling
\$3,800,000 for new construction--the lowest figure in twenty-five years --yet during that same period highway department revenues produced a $\$ 6,600,000$ surplus. ${ }^{34}$

To support the war effort, the Oklahoma State Highway Department struggled to maintain its 8,900 miles of roadway and effect a few improvements. Much of the maintenance work took place in the vicinity of defense plants and military bases. The highway department received allotments from a special emergency access fund created by the federal government to provide money for new roads leading to military and civilian facilities vital to national defense. In some cases federal authorities directed state highway department officials to make specific improvements. During 1944, U.S. Highway 83, which crossed the Oklahoma Panhandle linking Amarillo, Texas, and Liberal, Kansas, underwent extensive renovation. These improvements resulted from the need to expedite the shipment of gasoline from Amarillo to a military airfield at Liberal. Although automobile traffic on the state's highways declined during the war years, the weight and number of trucks increased, causing more problems for an already overburdened maintenance force. One motorist who drove U.S. Highway 271 from Fort Smith, Arkansas, to McAlester, Oklahoma, complained he could go no faster than ten miles per hour because of the condition of the road. Other roads fell into disrepair, and by the end of the war there existed an obvious need for a massive reconstruction program. ${ }^{35}$

Even with the difficulties created for the highway department by the Great Depression and World War II, federal authorities introduced programs expanding state highway systems. In 1936, Congress enacted legislation providing grant-in-aid financing for farm-to-market roads,
rural free main delivery routes, and public school bus routes. The law designated these byways the Federal-Aid Secondary Road System and permitted state planners to select 10 percent of existing rural routes for inclusion in the program. In Oklahoma, this amounted to $10,000 \mathrm{miles}$ of roadways. Officials in the highway department, however, conducted a survey and discovered that only 4,600 miles of secondary routes carried sufficient traffic to merit the new type of aid. Provisions of the statute also mandated routes designated as part of the secondary system to not become the responsibility of the state highway department until state and federal funds were expended on the roadways. In 1941, the Oklahoma State Legislature raised the gasoline tax one and one-half cents to a total of five and one-half cents, channeling one-third of the new revenues to county commissioners for the secondary-aid system. As a result, by 1942 , only 390 miles of the 4,600 miles designated part of the FederalAid Secondary Road System had become the responsibility of the Oklahoma State Highway Department. ${ }^{36}$

As World War 11 came to a close and throughout the post-war period, the problems of the Oklahoma State Highway Department multiplied. To check inflationary pressures on the economy, particularly in regard to scarce construction materials, the administration of President Harry S Truman refused to increase substantially federal subsidies for highway building. When the Korean War broke out in 1950, Truman reduced federal road aid. In Oklahoma other factors compounded this situation. More tax diversions almost cost the state $\$ 3,000,000$ in federal aid in 1947. The highway department remained understaffed as wages offered by the agency for skilled technical personnel failed to keep pace with those of private industry. An increasing volume of truck and automobile traffic
continued to hammer away at damaged roadways, further crippling the highway system. 37

Mustering their meager resources, officials of the Oklahoma State Highway Department attempted to stem the deterioration of state roadways. Under the direction of Harry E. Bailey, appointed chief highway engineer in 1944, the agency spent more than $\$ 96,700,000$ for improvements between 1946 and 1950. This sum was used for improvements to approximately 12,300 miles of roadway, an expenditure of only $\$ 7,900$ per mile. Nationwide in 1949 alone, an estimated 60,000 miles of roadways were improved at an approximate expenditure of $\$ 28,000$ per mile. Oklahoma's highway monies were spread too thin throughout the system, and this situation continued into the 1950s. By 1955 , one-fifth of the 10,399 miles of roads on the state system remained unpaved. According to Johnston Murray, the state's chief executive from 1951-1955, the highway department of necessity operated on a "patch and piddle" basis. 38

In 1956, the administration of President Dwight D. Eisenhower markedly increased federal road aid to the states, and the Oklahoma State Highway Department began to emerge from the doldrums. In 1957 and 1958, federal grants for Oklahoma's primary road system increased eightfold, with lesser increments for secondary and urban federal-aid projects. The Oklahoma State Legislature made available appropriations from the general revenue fund to add to the department's share of road-user taxes to match these funds. A building boom ensued as each year available funds increased. The state highway system expanded to 11,800 miles of roadways by 1964. Ninety-two percent of these roads were paved, and new construction expenditures for 1963 and 1964 topped $\$ 75,600,000$. Although the mileage of the state highway system reflected only 11 percent of the
total mileage in the state, these thoroughfares carried approximately 90 percent of Oklahoma's motor vehicle traffic. In the mid-1960s the agency also entered the computer age. Several banks of computers were installed at the headquarters building in Oklahoma City to streamline payroll and inventory records as well as aid with planning and design projects. 39

The period of vigorous construction activity reached its peak in 1966. At the end of that year, federal authorities decided to reduce spending on highways. This decision came about as part of a larger plan to slow the impact of inflation on the entire economy. These cutbacks removed $\$ 8,900,000$ from Oklahoma's allotment of federal aid. One year later more budget reductions at the national level curtailed construction and planning activities. While the Oklahoma State Highway Department adjusted to diminished federal funds, international events produced additional difficulties. The Arab $0 i 1$ Embargo of 1973 dramatically drove up the price of petroleum products. These increases not only affected fuel costs, but also materials vital to construction such as asphalt and road oil. The general problem of inflation that plagued the entire country in the mid-1970s further reduced the effectiveness of the highway department. Between 1967 and 1975, the cost of construction and maintenance for Oklahoma's highways more than doubled. For the fiscal year 1974-1975, the Oklahoma State Highway Department received a $\$ 5,000,000$ budget increase, but that appropriation was not sufficient to keep pace with inflation. According to Richard A. Ward, director and chief engineer of the highway department, his agency was in the uncomfortable position of spending more money than ever before but providing fewer services for the motoring public. The fight against inflation remained a crucial problem for the highway department throughout the balance of the 1970s. 40

Reorganization of the Oklahoma State Highway Department became another key issue of the 1970s. In 1975, Governor David L. Boren appointed a fifteen member committee to evaluate the executive branch of state government. The following year members of the Special Commission on Reorganization of State Government submitted a report to the Oklahoma State Legislature. One of the proposals suggested converting the Oklahoma State Highway Department to a department of transportation. Lawmakers responded favorably to this recommendation, and, in September of 1976, legislation became effective creating the Oklahoma Department of Transportation. The major function of the new department remained the construction and maintenance of state roadways. Additional responsibilities, however, encompassed functions formerly performed by the Oklahoma Railroad Maintenance Authority and the Oklahoma Aeronautic Commission. Waterborne transportation entered into the scheme of reorganization as the statute authorized the Oklahoma Department of Transportation to act in an advisory capacity to several city and county port authorities located in the eastern part of the state. 41

Patronage, favoritism, and political maneuvering pervaded throughout the operations of the Oklahoma State Highway Department during most of this era of roller coaster development. Before the creation of the Oklahome State Highway Commission in 1924, governors of the state received requests and recommendations from legislators and others regarding employment of constituents or friends in the department. As the agency expanded due to the rise of the automobile and subsequent increases in funding, the highway department became ripe for political exploitation. Between 1924 and 1949, the state legislature altered the composition of the highway commission six times. All but one statute provided for
overlapping terms of from four to six years for each of the commissioners, with the intention of reducing the impact of political changes in the executive and legislative branches of government upon the board. But favoritism prevailed as highway commissioners averaged only two and one-half years in office. Continuity of policy became difficult if not impossible and wrangling between factions consumed much of the time of the commissioners. Furthermore, the Jacksonian attitude that anyone could serve the public, regardless of qualifications, prevailed in Oklahoma. Selection of employees for the highway department reflected political affiliation rather than ability or competence. These personnel policies impeded the agency in its functions. Thus, even though highway department officials often publicly disavowed the role of partisan politics in the agency, it in fact existed. ${ }^{42}$

Henry S. Johnston became governor of Oklahoma in January of 1927, and the first months of his administration involved a controversy damaging the role of professional roadmen in the highway department. John M. Page, the chief highway engineer since 1924, who had statutory authority to hire and fire employees, attempted to remove a district maintenance superintendent, A. P. Carmichael, from his post for practicing blatant political favoritism. Frank Carmichael, a member of the Oklahoma State House of Representatives from Beckham County, came to his brother's defense. He prevailed upon Johnston to release Page. The governor viewed positions in the highway department with significance only as the spoils of political victory. Johnston dismissed Page and discharged seven carefully trained district maintenance superintendents, along with many other employees. Party affiliation rather than competence dictated appointments made by the governor. The five-man highway commission created
by the legislature in January of 1927 at Johnston's insistence rubberstamped the governor's appointments. 43

Perhaps the most acrimonious and lengthy political duel involving the highway commission occurred during the administration of Governor Hilliam H. "Alfalfa Bill" Murray. Following the impeachment of Johnston in 1929, his successor, William J. Holloway, cooperated with the state legislature to reorder the Oklahoma State Highway Commission, creating a three-man board. Democratic leaders had promised the chairmanship to Republicans in exchange for their support in the ouster of Johnston. Therefore, the new law contained a provision limiting the commission to no more than two members of the same political party. Holloway dutifully appointed two Democrats to the board and named Lew H. Wentz, a prominent Republican and oil millionaire from Ponca City, chairman of the commission. Murray, who became governor in January of 1931 , harbored a deep personal hatred for Wentz and made no secret of his intention to replace him. Holloway's Democratic appointees promptly resigned, but Wentz, whose term did not expire until 1935, refused to step down. 44

There followed nearly two years of bickering and maneuvering as Wentz and Murray sparred with each other. The governor appointed Sam R. Hawks, his campaign manager, chairman of the highway commission, and J. F.McKell, a personal friend, to the board. These two men determined highway policy during the first half of Murray's administration, as Hawks dictated priorities for construction and maintenance and McKeel concurred. Wentz, in the meantime, tried to hold his job. Murray appointed Maude 0 . Thomas, a member of the board of regents of the Oklahoma College for Women, to succeed the Ponca Citian, and both served
simultaneously until Wentz obtained an injunction against the governor, preventing appointment of a replacement unless his term expired. 45

Finally, Murray prevailed upon lawmakers for help. Leaders of the Oklahoma State Legislature sensed an opportunity to gain control of the highway commission, and they consummated a deal with the governor. During the biennial legislative session of 1933, senate and house leaders introduced bills to create an entirely new four-man highway commission. The bill that became law required senate confirmation of all prospective candidates for the highway commission and approval of the final appointees. Other laws pertaining to the highway commission had contained such stipulations, but senate confirmation had only been perfunctory. This time senate leaders reserved the right to participate actively in the selection of highway commissioners. This provision made possible eventual legislative control of the highway department. Thus, Murray's conspiracy with state lawmakers to rid the highway commission of Wentz made the highway department the patronage bin of the Oklahoma State Senate. In retrospect in later years Murray regretted his action, but as the Lawton Constitution Democrat prophetically editorialized, "a fortyfour man senate will plunge the road building machinery deeper into the mire of politics than any governor." 46

Murray's abuse of the highway department for political purposes exceeded all of his predecessors and affected the agency at its lowest echelons. Following adjournment of the state legislature in the spring of 1931, chairman Hawks began the wholesale firing of employees. Hawks disavowed any political motivation for the mass dismissals--which reached a peak of 146 in one day on May 1 --and rationalized retrenchment as part of the governor's plan for economical government. Within a year, however,
the number of employees in the highway department swelled from approximately 2,000 to more than 6,000 . This circumstance prompted Frank $C$. Carter, the state auditor, to charge that highway employees were on the payroll to "sponsor political ambitions of a power mad chief executive." Murray paid little heed to his detractors. During June of 1934, one month before the gubernatorial primary, the highway department furnished employment for 10,200 persons, more than three times the number of workers in June of 1933. The governor's political enemies claimed he used employment in the highway department to buy votes for Thomas Anglin, Murray's favorite in the primary. Murray countered with claims that he no longer controlled the department, and state senators had padded the payroll to aid their own campaigns. A combination of these accusations probably approached the truth. 47

Evidence of graft and misuse of state property in the highway department also surfaced during the Murray administration. Soon after the governor appointed J. F. McKeel to the highway commission in 1931, the commissioners advertised for bids to purchase 800,000 barrels of cement, a contract worth $\$ 1,200,000$. Nine companies submitted bids, eight of which were lower than the offer made by the Oklahoma Portland Cement Company of Ada, Oklahoma. McKeel, a resident of Ada, once served as legal counsel for the firm. Before accepting any of the bids, McKeel and chairman Hawks attempted to negotiate a private contract with the Ada firm which exceeded the lowest bid by $\$ 86,900$. Wentz, meanwhile, successfully obtained an injunction against purchasing any cement. A compromise of sorts ended the controversy as a portion of the cement was purchased from the lowest bidders, both out-of-state firms, but the bulk of the material was supplied by the Oklahoma Portland Cement Company. Two years later,
in February of 1933, charges arose that employees of the highway department had used state-owned vehicles to solicit subscriptions to Governor. Murray's personal newspaper, the Blue Valley Farmer. Although the accusations were politically motivated, there appears to have been credence to the claims. ${ }^{48}$

By 1935, a state highway department dominated by politically minded legislators and governors had evolved. Hiring practices consisted of sending a prospective employee to the chief engineer, a division head, or a field engineer with instructions to fire someone else and to replace him with the new man. Education, skill, or ability to perform the job had no bearing on filling many positions within the department. The multi-member highway commissions adopted the practice of informally dividing the state into the number of districts equal to the membership of the commission. Then each commissioner sought funds for improvements in his district. This approach to administering the highway department made long-range comprehensive planning almost impossible. Locations of routes were based on political expediency rather than traffic surveys or economic necessity. Some of the commissioners, moreover, frequently made decisions requiring technical expertise they did not possess without consulting the engineering staff. These circumstances coupled with the uncertainty of tenure produced a high turnover of professional personnel. In 1935, the chief engineer of the lowa State Highway Department completed twenty-one and one-half years of service with that agency, while chief engineers of the Oklahoma State Highway Department averaged less than two and one-half years in office. A comparison of other engineering positions between the two departments reflected a similar disparity. Finally, the dependence of hourly workers on senatorial sponsorship undermined
loyalty and discipline throughout the organization. An extreme example of this circumstance occurred in one case when state funds became depleted and a wealthy state senator wrote personal checks to pay the wages of workers from his constituency. 49

Governors either gave up attempts to reform or operated comfortably within the system. In 1934, among promises made by Ernest W. Marland in his successful campaign for governor included a pledge to remove unnecessary state employees. The highway department became a prime target for Marland's reforms. But when Scott Ferris, chairman of the state highway commission, dismissed 400 employees, members of the state senate besieged his office to insist that their constituents be rehired. The governor soon relented, and he used employees of the agency to promote two unsuccessful campaigns for the United States Senate. In one instance he paid a 'hill-billy" band that accompanied him on a statewide speech making tour with funds from the highway department. When Robert S. Kerr became governor in 1943, he appointed France Paris, chairman of the Oklahoma Democratic Central Committee, head of the state highway commission. The United States Civil Service Commission rules this action a violation of the Hatch Act, a federal law passed in 1940 prohibiting state employees from engaging in political activities while holding office in a public agency receiving funds from the national government. Kerr initiated a lawsuit claiming the Hatch Act unconstitutional on grounds that it violated the sovereignty of the states. The United States Supreme Court unanimously ruled against the State of Oklahoma, and Paris relinquished his position with the Oklahoma Democratic Central Committee. At lower levels in the highway department, state officials ignored blatant violations of the Hatch Act. ${ }^{50}$

In 1946, Roy J. Turner, a native of Lincoln County, Oklahoma, and a wealthy oil man, made reorganization of the highway department a principal issue of his successful campaign for the governorship. Early in January of 1947 , before Turner took office, his supporters in the legislature submitted a bill to create an eight-man highway commission--one member from each congressional district--and to establish the position of state highway director to oversee the daily operations of the agency. The proposal made rapid progress in the state house of representatives, but members of the state senate objected to portions of the bill giving the highway director control of selecting construction and maintenance projects. Senator Homer Paul of Pauls Valley, perhaps fearing actual reform, charged the bill created a "commissar of road building in Oklahoma." Following a series of proposals and counterproposals, a compromise measure reducing the power of the highway director cleared both houses unanimously on January 22, 1947. 51

Regarded as a reform measure, the law contained a few significant changes. The Oklahoma State Highway Commission ceased to function as a full-time board, its members holding monthly meetings and receiving expense money only. The statute required initial appointees to serve staggered terms with their successors to receive appointments of eight years. A state highway director, required to be a professional engineer, took charge of the entire operation of the agency, with the responsibility of reporting to the highway commission. But much skepticism by reformminded lawmakers surrounded passage of the law. It did nothing to remove the problems of patronage that plagued the agency. The persons selected by the governor for the new board reflected this circumstance. Six of the eight members had served as former state legislators, former members
of other state commissions, or as county campaign managers for Turner. Appointment of the state highway director, moreover, produced a controversy that lasted several months. 52

To no one's surprise, Turner recommended and the new highway commission appointed Harry E. Bailey director of the Oklahoma State Highway Department. Bailey had served as a district highway engineer, a member of the state highway commission, city manager of Oklahoma City, and was holding the post of chief highway engineer when elevated to the director's job. But the new director had many political enemies, and articles published by several newspapers exposing the high cost of road building in the state prompted an investigation by the Oklahoma State House of Representatives. Hearings begun in January of 1947 , revealed the cost of construction and maintenance of the state highway system exceeded expenses for comparable work in Arkansas, Kansas, Missouri, and Texas by 33 percent. Additional testimony exposed an unusually high rate of turnover among professional personnel. The Texas State Highway Department had forty-four technical employees with twenty-five years of service and nineteen district engineers with equal tenure. The Oklahoma State Highway Department had only two technical employees with twenty-five years of service and no district engineers in that category. During the hearings Bailey readily admitted political pressure primarily influenced hiring practices, as well as planning, construction, and maintenance projects. In April of 1947 , the investigating committee released a report recommending changes to rectify the situation, including the adoption of a merit system. State legislators, however, failed to act. The house of representatives passed a resolution calling for the creation of a merit system, but the senate refused to consider the issue. A meager
training program was instituted for construction inspectors, but it served more as window dressing than as a solution to an acute problem. ${ }^{53}$

A poignant, disgusting display of the mixture of politics and public service pervading the highway department occurred in the summer of 1947. On the afternoon of June ll, Virgil B. Medlock, a state senator from Lawrence, Pontotoc County, arrived at division headquarters in Ada. Medlock sought out W. Roy Grace, division engineer. He found Grace in the machine shop, and following a brief, heated exchange, assaulted the man, striking him twice and knocking him to the ground. Medlock accused the engineer of unfairly harassing the senator's twenty appointees who worked in the Ada division. The real source of the altercation ran much deeper. When Grace became division engineer in 1944, he received the support of state senator Allen G. Nichols of Wewoka. In the election of 1946, Grace backed Nichols in an unsuccessful bid for reelection against Medlock. The victorious senator then began a campaign to get Grace fired. Tensions heightened, and the fisticuffs at the machine shop resulted. Of the seven senators who claimed patronage rights at Ada, Medlock had been the most troublesome. For several months prior to the incident the engineer endured a series of personal threats and intimidating telephone calls perpetrated by Medlock. Highway Director Bailey and Governor Turner publicly supported Grace and refused to accede to Medlock's demands for dismissal of the engineer. But no criminal charges were filed against the senator and the story soon disappeared from public view. This incident reflected how much control state senators exercised within the highway department and an absence of real concern for public service. ${ }^{54}$

Politics as usual persisted in the Oklahoma State Highway Department throughout the balance of the 1940 s and the entire decade of the 1950s. During the months Bailey appeared before the house committee investigating the highway department to decry the abuses of politicians and the effects of patronage, he continued to hire or retain employees primarily upon recommendations of state lawmakers. This brand of favoritism went beyond employment within the agency. Officials of the highway department compiled a list of newspapers statewide who supported Governor Turner during his primary campaign. These newspapers received legal advertisements by the highway department for contracts and bids. Such practices continued unabated. Attitudes changed little, typified by a remark made by Oklahoma State Senator President Pro Tempore James C. Nance, 'You can't take politics out of government. You can't take politics out of the people of Oklahoma. ${ }^{155}$

Not until passage of the Merit System Act, a sorely needed reform measure sponsored by Governor J. Howard Edmondson in 1959, did meaningful change take place. For the highway department, the implementation of the merit system began in April of 1960. The practice established required qualifying examinations only for those employees of two years or less seniority. Several years passed before personnel selected through the merit system replaced politically appointed holdovers. Continuous changes at the top levels of the agency reflected the political environment in which the highway department operated. Throughout the 1960s and the 1970s, few of the highway commissioners completed the eightyear terms. No doubt some left their positions for personal reasons, but spoils system politics still enshrouded the commission. The post of highway director continued to be filled on a revolving-door basis.

Between 1965 and 1971, no less than four men occupied that position. By 1972, stability finally seemed to reach the director's office. In that year Governor David Hall appointed Richard A. Ward, a career employee of the department, director and chief engineer of the Oklahoma State Highway Department. Ward remains in that position. For 3,000 rank-and-file highway department employees the merit system brought job security. State legislators no longer exercise the blatant patronage practices of the past, and a change in gubernatorial administrations does not precipitate mass dismissals of engineers, technicians, and laborers. ${ }^{56}$

Three major factors influenced the growth and development of the Oklahoma State Highway Department between 1924 and 1976. First, national events fostered either expansion or contraction of the role of the highway department. The rise of the automobile, fluctuations in the economy, and crises of international proportions impacted the agency. Demands of motorists for better roads during the prosperous years of the 1920 s and 1930s helped to produce an unprecedented period of road building in Oklahoma. The Great Depression restrained development of the state's roadway system, and in later years inflationary pressures on the economy handicapped the agency. World War II, and, to a lesser extent, the Arab $0 i 1$ Embargo created conditions retarding or curtailing activities of Oklahoma's highway department. Second, federal and state policy greatly impacted the development of the highway department. Federal aid programs fueled building booms in the 1920s, 1930s, 1950s, and 1960s, and generally state funding of the highway system followed the federal pattern. Diversion of state monies begun in the 1930s, however, worked against federal appropriations, and during World War II and the post-war period exaggerated the impact of reduced subsidies from the national government.

Allocations from the state's general revenue fund, starting in the 1950 s, began to offset problems generated by diversion.

An entrenched, nearly impregnable patronage system provided the third major factor affecting the growth and development of the Oklahoma State Highway Department. While the agency became more and more important as a public service to the residents of the state, governors and particularly state legislators successfully stifled the creation of a professional highway department. By padding payrolls, influencing highway locations, and sponsoring incompetent employees, politicians wasted tax money and undermined the primary purpose of the state highway department. Many politicians viewed the agency merely as a source of patronage rather than a public service. The influence of politics occasioned a high turnover of essential professional personnel, and frustrated wellintentioned employees. Thus, the blame for most of the shortcomings of the Oklahoma State Highway Department rested with the state's politicians. During the decade of the 1970 s, however, implementation of the merit system and the lengthy tenure of a competent public servant as director and chief engineer of the Oklahoma State Highway Department began to reverse nearly fifty years of detrimental patronage practices.
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## CHAPTER IX

## SUPERHIGHWAYS: TURNPIKES, INTERSTATE HIGHWAYS, AND URBAN EXPRESSWAYS


#### Abstract

Innovations in highway transportation took place in Oklahoma during the thirty year period following World War ll. The introduction of new types of overland arteries occurred as the result of factors familiar to the growth and development of the general state highway system. Demands for better roads, increases in motor vehicle use, and policies made at the national level initiated the drive for a network of superhighways. In Oklahoma, an additional circumstance arose to provide a unique aspect to construction of limited access multiple lane roadways. While the volume of traffic expanded and decisions by federal authorities brought about the Interstate Highway network and urban expressways, private interests cooperated with public officials to secure a system of turnpikes. Thus, Oklahoma emerged as a national leader in toll road construction. These superhighways spanned the state, making Oklahoma an integral part of a great interstate highway grid and providing convenient intrastate travel for the motoring public.

Businessmen from Oklahoma City and Tulsa gave impetus to the construction of the first turnpike in Oklahoma. In January of 1947, representatives of the engineering firm of Howard, Needles, Tammen, and Bergendoff, a company with offices in Kansas City, Missouri, and New York City, presented to leading officials of the Oklahoma City Chamber of


Commerce unsolicited blueprints for a tollway between Oklahoma City and Tulsa. The plan favorably impressed directors of the capital city chamber, and they contacted their counterparts in Tulsa. In February, a combined delegation from the two metropolises met with Governor Roy J. Turner. Edward K. Gaylord of Oklahoma City, publisher of the Daily Oklahoman and Oklahoma City Times newspapers, and John Dunkin of Tulsa, a department store executive, acted as spokesmen for the group. They prevailed upon Turner to sponsor legislation during the current session of the Oklahoma State Legislature to make possible construction of a toll road between the two cities. '

A definite need existed to improve the overland link connecting Oklahoma City and Tulsa. U.S. Highway 66, a tortuous narrow road marked by a deteriorating driving surface, steep grades, narrow bridges, and "coffin curves," served as the main route between the two urban centers. The increasing volume of traffic along the 108 -mile stretch of highway passed through thirteen towns and averaged about thirty-six miles per hour. Moreover, chances for significant repairs to U.S. Highway 66 by the Oklahoma State Highway Department appeared remote at best. Aside from the immediate need to upgrade the primary overland artery from Oklahoma City to Tulsa, a national trend affected promotion of a turnpike. In 1940, the Pennsylvania Turnpike, the first major modern toll road in the United States, opened to traffic and became an unqualified success. The following year legislation appeared in the Oklahoma State Senate proposing an Oklahoma City-Tulsa toll road patterned after the Pennsylvania Turnpike, but the bill made no headway. During the postwar era officials of the Pennsylvania Turnpike Commission began to expand their tollway, and other eastern states developed plans to construct
multi-lane limited access roadways with private funds. Business leaders from Oklahoma City and Tulsa stressed the advantage of building a modern road between the two metropolises and emphasized the feasibility of constructing the highway at no expense to the tax-paying public. Governor Turner reluctantly agreed to consider the issue. ${ }^{2}$

Before the governor acted, pro-turnpike lawmakers in the Oklahoma State Senate introduced a bill authorizing the construction of an Oklahoma City-Tulsa toll road and creating a turnpike agency. This proposal enjoyed the support of a majority of senators but encouraged determined opposition by legislators from Lincoln and Creek counties, the two jurisdictions through which the toll road had to pass between Oklahoma City and Tulsa. Boyd Cowden of Chandler, Lincoln County, and Everett S. Collins of Sapulpa, Creek County, led the fight against the measure. Their arguments were founded upon the belief that towns along U.S. Highway 66 bypassed by the limited access tollway would suffer an adverse irreparable economic impact. Despite the efforts of Cowden, Collins, and others, the bill passed the senate by one vote more than the required majority on April 3, 1947. Ten days later, Governor Turner, a native of Lincoln County, publicly announced support for the turnpike, and he lobbied members of the Oklahoma State House of Representatives to secure favorable action for the measure. The house version of the bill passed on April 23. Following joint conference committee meetings, the final form became law at the end of the month. ${ }^{3}$

The statute contained necessary provisions for Oklahoma's first turnpike. To oversee construction and operation of the roadway, the law established the Oklahoma Turnpike Authority composed of the governor and one representative appointed by him from Creek, Lincoln, Oklahoma, and

Tulsa counties. Each member, except the governor, served a staggered term with successors appointed for eight years, and they received no salary, only expenses for their work. Additionally, the law specified funds for construction must be derived from the sale of bonds issued by the Oklahoma Turnpike Authority, and the state of Oklahoma accepted no responsibility for financial obligations it encumbered. Once the bonds were redeemed the highway became a free road and part of the Oklahoma state highway system. To mollify opponents of the turnpike, the enabling act required construction to start within two years after the legislation became effective and specified planners locate the road within onehalf mile of the city limits of Bristow, Chandler, Sapulpa, and Stroud. These towns were the principal communities through which U.S. Highway 66 passed between Oklahoma City and Tulsa. A companion piece of legislation named the toll road the Turner Turnpike. Little controversy accompanied this bill as opponents of the project wanted the governor to receive blame for the roadway and proponents wished to honor the state's chief executive for his support. ${ }^{4}$

Governor Turner acted quickly to get the toll road underway. In June of 1947, he called upon Stanley R. Draper, manager of the Oklahoma City Chamber of Commerce, to aid him in organizing a meeting of representatives from six cities along the proposed route. The governor intended to ask community leaders to raise $\$ 50,000$ to finance preliminary engineering studies. On July l, representatives from Bristow, Chandler, Oklahoma City, Sapulpa, Stroud, and Tulsa convened at the governor's office in the state capitol. The chambers of commerce of Oklahoma City, Sapulpa, and Tulsa pledged a total of $\$ 48,000$ for the initial survey, while the other three communities refused to participate. This sum,
with promises of more from Oklahoma City and Tulsa, proved sufficient to commence the project. Next, Turner named the first members of the Oklahoma Turnpike Authority. He selected Joe R. Jarboe, a livestock operator from Tulsa, Ralph P. Matthews, a Sapulpa newspaper publisher, J. Wiley Richardson, an Oklahoma City merchant, and Paul Wilson, a banker from Stroud. Richardson served as chairman of the board, and Wilson became the secretary-treasurer. Ironically, one of the first people to benefit from creation of the Oklahoma Turnpike Authority was its most determined opponent. For an annual fee of $\$ 500$, Wilson secured a surety bond from insurance man/state senator Boyd Cowden of Chandler. ${ }^{5}$

Selection of an engineering company to conduct the preliminary study became the first order of business. In August of 1947, members of the Oklahoma Turnpike Authority held their initial meeting and subsequently chose the firm of Cloverdale and Colpett, consulting engineers from New York City. While employees of Cloverdale and Colpett prepared plans for the toll road, members of the turnpike board inspected the operations of other major tollway agencies. They toured the facilities of the Maine Turnpike, the Merritt Parkway in Connecticut, and the Pennsylvania Turnpike. Despite this auspicious beginning, problems soon plagued the turnpike trustees. First, reports filed by Cloverdale and Colpett revealed a potentially inadequate traffic count to make the turnpike financially self-sufficient. Members of the turnpike authority regarded the Cloverdale and Colpett survey as incomplete. They released the firm from its contract and commissioned DeLeuw, Cather and Company of Chicago, lllinois, to conduct a more extensive investigation. Results of work completed by the New York firm rekindled opposition to the turnpike. When the Oklahoma State Legislature convened in January of 1949, bills appeared in
both houses to repeal the turnpike enabling act. Again senators Cowden of Chandler and Collins of Sapulpa led the opposition, and the Turner administration seemed content to allow the law to lapse. But in March, engineers employed by DeLeuw, Cather and Company released a detailed report substantiating the feasibility of a toll road. Governor Turner once again marshalled his forces and secured passage of a new turnpike bill extending the $1 i$ fe of the project for two more years. ${ }^{6}$

Plans submitted by employees of DeLeuw, Cather and Company proposed the construction of a modern high-speed roadway. They called for 92.9 miles--later reduced to 88 miles--of four-lane, limited access, divided highway, with curves no greater than one degree and grades no steeper than 3 percent. Speeds on the highway would average fifty miles per hour for cars and forty-five miles per hour for trucks, reducing driving time from Tulsa to Oklahoma City by about one hour. In Tulsa, the turnpike would commence in the southwestern part of the city, on the west side of the Arkansas River near Fifty-First Street at a locale known as Red Fork, connecting it with the city's first proposed urban bypass. At the south end of the turnpike the superhighway stopped in northeastern Oklahoma City near One Hundred Twentieth Street at a site known as Witcher. This location placed the end of the road four miles south of the intersection of U.S. Highways 66 and 77 , and in the path of Oklahoma City's first metropolitan expressway. Designers estimated total cost of the project at $\$ 35,000,000$. Intermediate interchanges were planned at Bristow, Chandler, Sapulpa, and Stroud. Survey crews began to lay out the route in 1950, but not without difficulty. In Lincoln County farmers forbid workers to enter their land, and members of the Oklahoma Turnpike Authority refused to press the issue until tempers cooled. At
other locations along the right-of-way preparations continued without interruption. 7

Financing construction of the turnpike produced another challenge for supporters of the toll road. Plans called for selling revenue bonds on the open market to the lowest bidders. In 1949, a reduced demand for municipal bonds produced interest rates above the 4 percent maximum allowed by the turnpike enabling act. As a result, Governor Turner attempted to obtain a loan from the Reconstruction Finance Corporation with the tollway bonds as security. Turner traveled to Washington, D.C., to meet with federal officials, but he failed to reach a satisfactory agreement. Then in January of 1950, the New Jersey Turnpike Commission successfully sold an issue of bonds, signaling a revival of the municipal bond market. During the year, a total of $\$ 129,000,000$ worth of toll road bonds were sold, among them the first series issued for the Turner Turnpike. ${ }^{8}$

In April of 1950, the Oklahoma Turnpike Authority solicited bids for its bonds. The authority advertised for sale an issue of $\$ 31,000,000$ and several major financial houses submitted offers. The following month members of the turnpike board accepted a proposal tendered by a syndicate of four financial firms from New York City and San Antonio, Texas. They based their offer on an average interest rate of 3.43 percent for a period of forty years. Legal challenges, however, delayed consummation of the deal. The Lincoln County board of commissioners, the Chandler School Board, and forty individuals sought an injunction against the sale of the bonds, claiming construction of the toll road unconstitutional. They carried their cause to the United States Supreme Court, but in October the justices refused to hear the case. At the end
of November, members of the Oklahoma Turnpike Authority traveled to New York City to accept a check for $\$ 31,000,000$. (In June of 1952 , the authority sold a second issue of $\$ 7,000,000$ without incident.) With contruction of the superhighway assured, Harry E. Bailey left his position as director of the Oklahoma State Highway Department to serve as general manager of the Oklahoma Turnpike Authority, and William D. Hoback, also an employee of the state highway department, became chief engineer. They established headquarters in the Forty-Fifth Infantry Division Armory in Oklahoma Gity. ${ }^{9}$

The Oklahoma Turnpike Authority awarded the first construction contract, based on competitive bidding, in December of 1950. Late in the afternoon of December 20 , approximately 500 people gathered at a site one mile north of Sapulpa to witness inauguration of the project. Governor Turner accepted a gold plated shovel from Nancy Klingensmith, a Sapulpa High School senior who had been selected Miss Turner Turnpike. Following a brief ceremony, which included sprinkling soil on the ground obtained from states that already had turnpikes, the governor turned the first shovel full of dirt. Turner, ailing from a sore throat, made a few remarks and the event concluded. 10

During the next two years, ninety-one contracts were let for construction of the Turner Turnpike. Yet, a series of problems plagued the progress of the roadway. In August of 1951, 0. O. Owens, president of the Nabob Oil Company of Tulsa, obtained an injunction against the Oklahoma Turnpike Authority to prevent acquisition of one-half mile of right-of-way west of Bristow in Creek County. Owens' firm planned a water flood repressuring project for oil wells located on land through which the right-of-way passed. He refused to accept payment of $\$ 3,170$ offered
to him by the authority and stationed armed guards at the lease. In subsequent court action, a Creek County district judge appointed a threeman commission to reappraise the Nabob property. The trio, including a man hostile to the turnpike, valued the thirty-acre tract at $\$ 5,153,250$. Bailey rejected the appraisal, and legal counsel for the turnpike agency began the process of obtaining a trial to settle the dispute. Finally, in February of 1952, a jury awarded Nabob 0il Company $\$ 23,400$ for the right-of-way, which the Oklahoma Turnpike Authority agreed to pay. Owens refused to relent. Not until Creek County sheriff's officers served the oil man with a writ of assistance did he vacate the land. Owens' tactics slowed construction of the roadway and may have cost the Oklahoma Turnpike Authority $\$ 3,000$ in interest on the bonds for each day of de11 lay.

At Sapulpa, community leaders insisted the tollway run through the main business district of the town. Led by Ralph P. Matthews, vice chairman of the Oklahoma Turnpike Authority, they predicated their demands upon a promise made by Governor Turner to locate the roadway in the central part of the city. Representatives of DeLeuw, Cather and Company cautioned against routing the highway through the business district. It would cost as much as $\$ 400,000$ more than the right-of-way along the north side of Sapulpa favored by the engineers and defeat the purpose of a streamlined highway. In June of 1951, Governor Johnston Murray, who had succeeded Turner in January, and every member of the Oklahoma Turnpike Authority except Joe Jarboe of Tulsa disregarded the engineers' warnings and voted to support a line of transit through the downtown area. Work on the project began, but, in February of 1952 , representatives of the bond underwriters strenuously objected to the business
district route when engineers revealed it added $\$ 650,000$ to the cost of the road. Governor Murray and members of the Oklahoma Turnpike Authority suddenly lost enthusiasm for the in-town location and agreed to a new route north of the city. This delay, entailing the procuring of useless rights-of-way, revisions of contracts, and expenditures for work already completed, wasted approximately $\$ 1,000,000$ of the turnpike agency's funds. ${ }^{12}$

Complications concerning building materials produced additional difficulties. As early as the fall of 1950, designers predicted shortages of structural steel for bridges and reinforcement rods for cement work. The federal government had placed restrictions on the distribution of steel products in order to insure an ample amount of the material for national defense purposes. Once construction of the Turner Turnpike began, the fears of planners were realized. Delays in shipments of steel slowed work on the superhighway, and eventually supplies were reduced to a trickle. A strike by steel workers in the summer of 1952 virtually ended all deliveries to turnpike contractors. Fortunately, engineers anticipating this problem converted bridge designs to use pre-stressed concrete beams, a recent innovation in highway construction, and through the efforts of Congressman Victor Wickersham, who represented Oklahoma's sixth district, federal authorities released a sufficient supply of structural steel to permit work to continue. ${ }^{13}$

Selection of a suitable driving surface for the turnpike generated a feud between asphaltic concrete and portland cement concrete interests. In the spring of 1951, Glenn Rippey, representing the Portland Cement Association, appeared before the Oklahoma Turnpike Authority to protest adoption of a subgrade for the road that appeared to favor an asphaltic
concrete pavement. Rippey contended specifications for grading and. drainage were inadequate to support a portland cement concrete road, thus excluding portland cement concrete contractors from bidding on turnpike projects. As a result, the turnpike trustees suspended letting bids for subgrade and paving contracts. Members of the tollway board conducted a series of hearings to allow Rippey and Bernard Gray, president of the Asphalt Institute, to present their cases. Also, they commissioned General Manager Bailey to conduct an independent study. Bailey's investigation indicated maintenance costs for the more flexible asphaltic concrete surface would be about 1 percent less than.portland cement concrete. Additionally engineers for DeLeuw, Cather and Company asserted the subgrade was suitable for application of either driving surface. The Oklahoma Turnpike Authority agreed to advertise for bids for both types of pavement, and in October accepted an offer for asphaltic concrete, approximately $\$ 405,000$ below the lowest bid for portland cement concrete. In August of the following year workmen began paving the eighty-eight mile, four-lane highway, and the entire route was surfaced with asphaltic concrete. 14

Despite the plethora of problems, actual construction of the highway brought an economic boom to the towns along the route. By the end of 1951, over fifty-six contractors employed more than 1,000 laborers who pushed the turnpike over the rolling rocky hills covered with blackjack and scrub undergrowth. DeLeuw, Cather and Company established their headquarters at Stroud and drew a portion of their fifty employees from the local populace. A large influx of workers not residents of the immediate area affected the towns bordering the turnpike. Housing shortages quickly developed, and schools became overcrowded. But merchants
in virtually every type of business reported a brisk increase in sales as contractors and their employees purchased merchandise in the communities near the construction zone. Even local financial firms reaped a benefit. The First National Bank of Chandler recorded the largest number of deposits in the history of the institution. This positive aspect of constructing the highway near those towns helped allay much opposition to the turnpike. ${ }^{15}$

Members of the Oklahoma Turnpike Authority resolved numerous administrative responsibilities prior to opening the tollway. Following consultation with representatives of the bond underwriters the turnpike's trustees established a charge of $\$ 1.40$ for passenger cars traveling the entire length of the road. Tolls for larger vehicles and shorter trips were derived from this levy. In the fall of 1952, the authority began accepting applications for tollbooth attendants. Over 800 persons applied for 40 openings. Once selected, the new employees received classroom instruction about courtesy to motorists, Oklahoma history, state recreational sites, and tourist facilities. Also, William D. Hoback, chief engineer of the Oklahoma Turnpike Authority, organized a maintenance department. He began by hiring thirty additional employees and by purchasing new equipment. Finally, on April 30, 1953, a group of broadcasters, insurance agents, journalists, and law enforcement officers traveled the entire length of the new superhighway. They acted as consultants for determining a maximum speed limit for the road. A forty mile per hour minimum speed limit had already been established. The committee recommended a seventy mile per hour maximum speed limit, which the Oklahoma Turnpike Authority adopted. ${ }^{16}$

At 9:00 a.m. on Saturday, May 16, 1953, day-long ceremonies commenced to mark the official opening of the Turner Turnpike. Close cooperation between the governor, the Oklahoma Turnpike Authority, and the chambers of commerce of Tulsa and Oklahoma City insured large crowds at the functions. Simultaneously former governor Turner and Governor Murray dedicated the turnpike at the Oklahoma City and Tulsa termini, respectively. Then they led a caravan of hundreds of motorists toward Stroud, midpoint on the tollway, for additional festivities. There about 7,500 onlookers applauded as Murray and Turner cut a ribbon to signify completion of the road. Near the Stroud interchange dignitaries, including two members of the Pennsylvania Turnpike Commission, mounted a speaker's platform to review a parade of bands, beauty queens, horse-drawn vehicles, and diesel trucks. Fireworks accompanied the parade, and a few anxious moments occurred when fragments from exploding skyrockets rained down on the pavement near the speaker's stand. Although contractors worked throughout the summer completing detailed tasks and the concession area did not open until the end of the year, the much debated, much delayed $\$ 38,000,000$ turnpike commenced operation. ${ }^{17}$

Three days after the formal opening of the superhighway, an inauguration of a different type took place. Oklahoma Highway Patrol Trooper Mayes Lowry issued the first speeding ticket to a motorist on the Turner Turnpike. Lowry arrested Ralph Montgomery of New Orleans, Louisiana, and cited him for driving at speeds in excess of ninety-five miles per hour. Remarked Lowry of the incident, "l thought it [Montgomery's automobile] was a new-type jet car or low flying plane. "18

During its first year of operation, the Turner Turnpike proved a greater success than the most ardent advocates anticipated. The number
of vehicles to travel the toll road exceeded predictions by 500,000 , and revenues increased by more than $\$ 260,000$ above original forecasts. Traffic surveys revealed this unexpected but welcome circumstance occurred due to a rapid rise in the volume of motorists entering or leaving the tollway at intermediate interchanges. A study by the Oklahoma State Tax Commission substantiated claims by the turnpike's proponents that the road would benefit towns along its route. From May of 1953 to February of 1954, retail sales at Bristow, Chandler, Sapulpa, and Stroud exceeded by more than $\$ 2,800,000$ transactions of the same period in 1952 and 1953 . Additionally, the toll road appeared to be a safe high-speed roadway. Only five fatal accidents occurred during the first twelve months of operation, reflecting a fatality rate of 4.25 per $100,000,000$ miles traveled compared to a national rate of 7.30 per $100,000,000$ miles. ${ }^{19}$

National trends in transportation, the condition of Oklahoma's highways, and the efforts of Governor Murray made possible expansion of the state's turnpike system. Declining federal subsidies for road building in the early 1950 s combined with rapidly increasing automobile and truck traffic forced states to seek alternative means of financing sorely needed modern roadways. Also, in many states the highway departments did not possess the means, financially or otherwise, to keep pace with demands placed upon their road systems. As a result, several states resorted to construction of toll roads, evidenced by the sale of nearly $\$ 500,000,000$ worth of turnpike bonds in 1952 alone. Oklahoma proved no different. While the state highway system deteriorated and the volume of traffic rose precipitously, the Oklahoma State Highway Department failed to respond adequately to the situation. Before completion of the Turner Turnpike, and as opposition to toll roads appeared to subside,

Governor Murray mounted a vigorous campaign to secure the construction of privately financed superhighways for Oklahoma. 20

When the Oklahoma State Legislature assembled for the biennial session in January of 1953, Governor Murray sponsored legislation authorizing additional toll roads. The two proposals included a reorganization of the Oklahome Turnpike Authority and construction of three new turnpikes: Tulsa to the Missouri border near Joplin, Missouri; Oklahoma City to Wichita Falls, Texas; and Oklahoma City to the Kansas boundary. Opposition arose from legislators and their constituents who lived in the counties targeted for tollways. In particular, lawmakers from Delaware and Ottawa counties in the northeastern part of the state objected strenuously. Their arguments, a refrain of those who opposed the Turner Turnpike, foresaw the ruin of small businessmen located along U.S. Highway 66. Murray regarded these objections as irrelevant. He considered turnpikes as a means of reducing the volume of interstate traffic upon deteriorating, tax supported, free roadways. Additionally, the governor recognized toll roads as a relatively painless way of providing superhighways because no tax dollars paid for . them. The bills cleared the Oklahoma State House of Representatives, but a turbulent debate took place in the Oklahoma State Senate as proponents of tollways worked to eliminate amendments that seriously altered the legislation. When the measures came to a vote, sign carrying anti-turnpike demonstrators packed the senate gallery, some leaning over the railing to shout at lawmakers on the floor. By a margin of twenty-seven to seventeen the bills passed, and Governor Murray signed them into law on May 7, 1953. 21

Opponents of the turnpikes did not allow the issue to rest after the legislature adjourned. They formed the Oklahoma Free Roads Association and began circulating petitions calling for a referendum on the tollway laws.

In September of 1953, Lyman B. Beard, mayor of Muskogee and president of the Oklahoma Free Roads Association, submitted petitions to the Oklahoma Secretary of State containing sufficient signatures to require popular approval of the statutes. Supporters of this action, including Ralph Matthews, a member of the Oklahoma Turnpike Authority, held public meetings and purchased advertising in newspapers, on radio, and on television to rally voters to their cause. ${ }^{22}$

Governor Murray and other supporters of the turnpikes readily accepted the challenge posed by the Oklahoma Free Roads Association. The pro-turnpike faction formed the Citizens Turnpike Association, and Ralph McMullen, a newspaper publisher from Blackwell, Oklahoma, became its director. Murray and McMullen devised an extensive campaign. The governor traveled across the state making speeches as well as appearing on radio and television programs to promote the turnpikes. The Oklahoma Safety Council, the state's major newspapers, and the mayors of Lawton, Oklahoma City, and Tulsa became proponents of the toll roads. Murray exerted political pressure to generate acceptance for his cause. Letters were written to every county commissioner and to all county clerks in the state to solicit their support. In some cases he took direct action. In November of 1953, he fired Ralph Matthews from the Oklahoma Turnpike Commission, and, in January of 1954, one week before the election, he removed Jack Sapp, secretary of the Dewey County election board, from his post for actively working against the toll road referendum. On January 26, about one-third of the state's electorate braved icy roads and sleet storms to go to the polls to approve the turnpike statutes. The referendum passed by a 40,000 vote margin. The success of Governor Murray's campaign not only made possible the construction of two new
tollways, but effectively ended opposition to future expansion of the system. ${ }^{23}$

Between 1954 and 1975, bonds were sold and construction was completed on five more turnpikes. Engineers designing the roads followed a consistent pattern. Each superhighway consisted of a four-lane limited access roadway, with twelve feet wide driving lanes, fifteen feet wide grass medians between opposing lines of traffic, and portland cement concrete driving surfaces. Two of the three toll roads authorized in 1953 were built. The Will Rogers Turnpike, linking Tulsa with Joplin, Missouri, opened in 1957, and the H. E. Bailey Turnpike, connecting Oklahoma City with Wichita Falls, Texas, received its first customers in April of 1964. Section A of the Indian Nations Turnpike, from Henryetta to McAlester, Oklahoma, commenced operating in January of 1966, and in the fall of 1969, officials of the Oklahoma Turnpike Authority dedicated the Muskogee Turnpike, designed to streamline traffic from Tulsa southeast to the Webbers Falls interchange on Interstate Highway 40. The following year Section B of the Indian Nations Turnpike, running from McAlester to Hugo, Oklahoma, went into operation. Five years later, the first vehicles passed through the toll plazas of the Cimarron Turnpike, a sixty-eight mile long east-west superhighway connecting Tulsa with Interstate Highway 35. At present the Oklahoma turnpike system consists of 486.9 miles of roads, the third largest state network of tollways in the United States and the most extensive west of the Mississippi River. ${ }^{24}$

Administration and operation of the state's toll roads rested with the Oklahoma Turnpike Authority. Legislation approved in 1953 created a six-man statewide governing board. Drawn from the state's six congressional districts and appointed by the governor, the members serve eight-
year terms and may be reappointed. Governors became ex-officio members. Unlike the Oklahoma State Highway Commission, the composition of the Oklahoma Turnpike Authority remained relatively stable. One member, John Kilpatrick of Oklahoma City, elected chairman of the Oklahoma Turnpike Authority in 1981, completed twenty years on the board. Professional engineers managed the daily operations of the toll roads. In 1950, Harry E. Bailey became the first general manager of Oklahoma's turnpikes and he remained in office until January of 1955. William D. Hoback succeeded Bailey, assuming the dual role of general manager and chief engineer. During Hoback's twenty-five years as operational head of the state's toll roads, the system expanded dramatically. In 1980, the veteran tollway administrator retired, and Earl D. Piersall, Hoback's administrative assistant, replaced him. Initially, legislators and individuals recommended constituents or friends to officials for employment with the Oklahoma Turnpike Authority, but implementation of the Merit System Act eventually extended coverage to the 453 rank-and-file workers. Stability at the upper levels of management and the absence of publicized scandals characterized the operation of the Oklahoma Turnpike Authority. These two circumstances prevailed because of the restricted scope of the agency's activities and because no large sums of tax dollars were involved. 25

Careful financial management became a crucial responsibility of employees of the Oklahoma Turnpike Authority. As a semi-independent department of state government, the agency received no direct appropriations from the legislature. Initially, bond underwriters required revenues from the toll roads to equal one and one-half times the annual debt service. When income surpassed projections, financial advisers agreed to
reduce the reserve requirement to one and one-fourth times the annual debt payment. In 1959, the Oklahoma Turnpike Authority acquired an additional source of income to supplement tolls when the legislature created the Motor Fuels Tax Trust Fund. This fund derived its revenue from the gasoline tax collected at service stations operated by concessionaires on the turnpikes. At first legislators specified a maximum yearly limit of $\$ 1,000,000$, but, in 1965 , they raised the annual rate to $\$ 3,000,000$. To streamline management of the turnpike network and to provide for the construction of more toll roads, officials revamped the agency's financial structure in 1965. Consultants hired by the agency's trustees recommended consolidation of revenues of all existing and future toll roads, except the Will Rogers Turnpike, and to refinance the bond issues of the Turner, H. E. Bailey, and Indian Nations Section A turnpikes. The following year the Oklahoma Turnpike Authority sold a new series of bonds totaling $\$ 186,000,000$ due to be redeemed in the year 2006. Bonds for the Will Rogers Turnpike, a highly profitable roadway producing $\$ 10,000,000$ in annual revenues, will be paid in 1984, eight years ahead of schedule. The refinancing agreement, however, prohibited any of the toll roads from becoming free highways until all turnpike bonds are redeemed. ${ }^{26}$

A major shortcoming of the Oklahoma Turnpike Authority has been overexpansion. This situation became painfully evident with completion of the Cimarron Turnpike in 1975. In 1965, the Oklahoma State Legislature enacted a statute authorizing construction of a toll road from Tulsa west to Interstate Highway 35. Because interest rates fovered above the maximum permitted by law, no bonds were sold and the road remained in the planning stages. Then in 1971, Governor David Hall, a lawyer from Tulsa, began a push to build the highway. He secured legislation raising
the maximum interest rate to match the current bond market, and by December the Oklahoma Turnpike Authority sold the issue totaling $\$ 74,000,000 .{ }^{27}$

When completed, the roadway made possible a four-lane limited access highway from east of Enid, Oklahoma, to Catoosa, a riverport east of Tulsa. Also, an eight and one-half mile spur provided ready access to Stillwater, Oklahoma, site of Oklahoma State University. Engineers who planned the tollway estimated $5,056,000$ vehicles would use the road by 1980, returning yearly revenues of $\$ 2,400,000$. But the optimistic projections of planners failed to materialize. In 1980, only 2,690,000 vehicles traveled the Cimarron Turnpike, and by periodically increasing the tolls revenues reached $\$ 2,200,000$. Oklahoma turnpike officials blamed the disappointing results on Governor Hall's political motivations in securing construction of the roadway, failure of cities served by the highway to fulfill adequately promised promotional campaigns, and implementation of the fifty-five mile per hour speed limit. Poor planning, moreover, contributed to the turnpike's troubles. While the road was under construction, the Oklahoma State Highway Department commenced and completed a massive project to upgrade Oklahoma State Highway 51, a twoland road paralleling the tollway. Traffic surveys reflected the impact of the improved free road. In 1981, traffic on the Cimarron Turnpike averaged 683 vehicles per day, while portions of Oklahoma State Highway 51 east of Stillwater averaged 4,000 vehicles daily. Revenues from profitable toll roads, therefore, must be applied to service the increased debt incurred by construction of the Cimarron Turnpike. ${ }^{28}$

Promotion and construction of a national system of interstate highways by the federal government coincided with the turnpike movement in Oklahoma. As early as 1944, Thomas H. MacDonald, director of the Bureau
of Public Roads, and his colleagues in Washington, D.C., produced plans for a contiguous network of cross-country superhighways. MacDonald and others foresaw the need to provide for increased postwar traffic, and, more important, to markedly improve the nation's overland transportation system. The bureau chief prevailed upon Congress, and the Federal Highway Act of 1944 contained provisions for a 40,000 mile national system of Interstate Highways. Federal lawmakers, however, refused to appropriate any money for the scheme and delegated most of the planning to state highway departments. The following year MacDonald ordered all state highway departments to submit to his office plans for the national system of Interstate Highways. Federal road men sifted through the proposals and produced provisional layouts for a $37,680 \mathrm{mile}$ system of roadways. But postwar problems prohibited implementation of the project. State highway departments struggled to maintain existing overburdened roadways with limited funds, and officials in the administration of President Harry S Truman expressed little immediate interest in promoting costly highway expansion. 29

When Dwight D. Eisenhower became President of the United States in 1953, advocates of an interstate highway system gained a champion for their cause. In April of 1954, Eisenhower presided at a meeting at the White House in which he proposed to overhaul the federal road building program. He believed only the national government could provide the funds needed to construct the superhighways required to accommodate modern traffic, and he regarded the automobile as a means of "greater convenience, greater happiness, and greater standard of living' for most Americans. Thus, according to the President, the federal government should greatly increase spending for roads. National defense, a second
and equally important factor, affected the promotion of the interstate highway system. Eisenhower, the former Supreme Commander of Allied Forces in Europe during World War II, recognized the vital importance to the military of a modern efficient network of roadways. In July, 1954, at the annual conference of state governors, the President's position was made public. During the congressional session of 1955 , the administration proposed federal-aid highway legislation for a national system of interstate roads, but squabbling among various interest groups halted action on the bill. The following year congressmen George Fallon and Hale Boggs introduced legislation on behalf of the Eisenhower administration providing for a system of interstate highways. In June of 1956, the measure cleared both houses of Congress. 30

The Federal-Aid Highway Act of 1956 contained a twofold program for making possible the long-sought interstate roadway system. First, the statute provided for a 41,000 mile national system of Interstate Highways to connect major metropolitan centers. Specific planning was delegated to a cooperative effort between the Bureau of Public Roads and the various state highway departments. As a grant-in-aid program, the federal government provided 90 percent of the cost of construction and the states paid the balance. The act allotted $\$ 25,000,000,000$ for the project to be expended between 1956 and 1969. A second feature of the law established the Federal Highway Trust Fund as the source of money for the Interstate Highway System. Increases in federal fuel taxes and the levy on vehicle tires comprised the major portion of revenue for the fund. Congress intended the Interstate Highway program to be selfsupporting, drawing all necessary monies from the Federal Highway Trust

Fund on a pay-as-you-go basis. Subsequent legislation enlarged the mileage of the system and made available supplementary appropriations. ${ }^{31}$

Employees of the Bureau of Public Roads and representatives of the American Association of State HIghway Officials cooperated to produce guidelines to insure mandatory minimum standards in all the states for the interstate highway system. These specifications required a limited access roadway with twelve foot wide driving lanes, ten foot wide shoulders, variable width medians, and a roadbed designed to last twenty years. Obstructions such as railroad grade crossings were prohibited, and commercial enterprises were forbidden to locate within rights-of-way. All east-west routes received even numbers, and odd numbers designated north-south arteries. Two digits indicated through roads while three digits marked urban bypasses or business loops. Authorities adopted a red, white, and blue shield as the official marker for Interstate Highways, as well as mandating placement, color, and size of lettering on informational signs located along the roadway. Responsibility for acquiring rights-of-way, developing plans, letting construction contracts, and maintaining completed roadways rested entirely with state highway departments. In November of 1956, a newly constructed segment of superhighway conforming to Interstate Highway standards west of Topeka, Kansas, opened to traffic. The eight-mile stretch of multi-lane roadway designated part of Interstate Highway 70 became the first completed portion of this mammoth project. ${ }^{32}$

Coordination with expansion of the Interstate Highway system in Kansas inaugurated Oklahoma's participation in the program. The Kansas Turnpike, completed in 1957, had been absorbed into the Interstate Highway network as part of Interstate Highway 35, a superhighway eventually
connecting Laredo, Texas, with Duluth, Minnesota. The four-lane toll road ended at the Kansas-Oklahoma border five miles north of Braman, Kay County, Oklahoma. In June of 1957, the Oklahoma State Highway Department completed plans and awarded contracts for extension of Interstate Highway 35 to intersect U.S. Highway 177 near Braman. While work on the highway progressed, motorists traveling south detoured over an asphalt and sand Kay County road. On busy days, many southbound drivers leaving the Kansas Turnpike became confused, turned the wrong way, and found themselves in an oat field belonging to Amos Switzer, a Kay County farmer. These unintentional intrusions by bewildered motorists, who promptly turned around in the field, forced Switzer to sell his cattle because he could not keep the animals on his property due to frequent damage to fences. The aggravated agrarian estimated more than 500 cars helped turn his field into a rutted, unwanted cul-de-sac. One misguided motorist, Millard Simpson, governor of Wyoming, brought additional publicity to Switzer's plight when the chief executive and his wife joined the legion of drivers who inadvertently turned into the farmer's field. In April of 1958, contractors completed work on the roadway, and the four mile stretch of Interstate Highway 35 from the Kansas border to Braman became the first part of the Interstate Highway system in Oklahoma opened to traffic. ${ }^{33}$

Construction of the balance of Interstate Highway 35 through the state continued at an uneven pace. The Oklahoma State Highway Department awarded contracts and construction companies pushed the roadway across the wheat fields and through the Cross Timbers region between Oklahoma City and Braman without serious delay. On January 11, 1963, officials opened to traffic the last segment of the northern portion of Interstate

Highway 35. From Purcell, Oklahoma, a town thirty-five miles south of Oklahoma City, to the Red River progress on the superhighway slowed and finally stopped. Engineers from the Oklahoma State Highway Department selected a line of transit providing the most direct route from Oklahoma City south toward the Dallas-Fort Worth, Texas, area. Bureau of Public Roads officials concurred with the plan, but residents in almost every town along U.S. Highway 77 between Purcell and the Red River objected strenuously. The proposed right-of-way bypassed those communities to the east: In particular, businessmen believed the project portended economic disaster as travelers would no longer pass through their towns. Local chamber of commerce members, mayors, and individuals wrote their congressmen and federal officials protesting the proposed route and demanding a relocation of the right-of-way to parallel U.S. Highway 77 as close as possible. ${ }^{34}$

State politicians also became involved in the controversy. In the spring of 1963, state lawmakers from constituencies affected by the projected route secured passage of a statute prohibiting the expenditure of state funds on Interstate HIghway 35 if it did not pass one mile west of Wayne, Paoli, Pauls Valley, and Wynnewood and one mile east of Davis, Oklahoma. This act abruptly ended all planning activities by the state highway department for the southern part of Interstate Highway 35. Negotiations between local, state, and federal officials plus the threat by Governor Henry L. Bellmon to seek construction of a turnpike in place of the free superhighway eventually produced a compromise satisfactory to the parties involved. But the Oklahoma State Highway Department could not continue until legislators repealed the restrictive statute. When
state lawmakers assembled for the biennial session of 1965, they revoked the law and work resumed once again. 35

Construction of the southern leg of Interstate Highway 35 produced additional challenges for road builders. The Arbuckle Mountains stood as a solid stone barrier to completion of the roadway, but, in 1967, crews of the Amis Construction Company of Oklahoma City began carving a roadbed through the rounded granite slopes. Workmen drilled holes to the depth of thirty feet, packed them full of ammonium nitrate--a mixture similar to lawn fertilizer--and detonated the charges with electric current. Repeating this process, workers blasted a six-mile long trench at one point to a depth of 150 feet through the bowels of the mountains, removing more than $3,200,000$ cubic yards of material. When completed, the cut through the Arbuckle Mountains provided a roadbed with a long, wide, gradually sloping 4 percent uphill grade as opposed to the twisting, narrow 5 percent inclines on nearby U.S. HIghway 77. Contractors not impeded by obstacles of nature finished other portions of the roadway ahead of schedule. In February of 1971, Governor David Hall presided at ceremonies near Wynnewood opening the final segment of the superhighway. Completion of Interstate Highway 35 provided a 236 mile, northsouth, four-lane thoroughfare through the center of the state. ${ }^{36}$

Construction of Interstate Highway 40, a second part of the new national network designated for Oklahoma, coincided with Interstate Highway 35 . An east-west route stretching from the Arkansas border about ten miles east of Muldrow, Oklahoma, to the Texas Panhandle, it comprised a segment of a transcontinental superhighway running from Winston-Salem, North Carolina, to Barstow, California. By March of 1958, the Oklahoma State Highway Commission had awarded contracts in excess of $\$ 14,900,000$,
and work had begun on the initial phases of the project. Builders seemed to progress at a faster pace in the western part of the state than in eastern sections, probably because of the ease of grading and paving the relatively unobstructed terrain. For ten years construction crews labored to erect bridges and to lay a four-lane ribbon of concrete across the midsection of the state. By the summer of 1969 , only two incomplete parts remained along the 324 mile length of the road. Contractors closed these gaps, one between Warner and Checotah, Oklahoma, and the other from Sayre, Oklahoma, to the Texas Panhandle, by the end of 1975.37

The third Interstate Highway designated for Oklahoma came into existence with virtually no new construction. Part of the Federal-Aid Highway Act of 1956 permitted the inclusion of toll roads in the network. In 1958, the Oklahoma Turnpike Authority successfully petitioned officials of the Bureau of Public Roads to select the Will Rogers and the Turner turnpikes as the southern end of Interstate Highway 44 . The road provided a link between St. Louis, Missouri, where Interstate Highways 55 and 70 intersected, and Oklahoma City, the junction of Interstate Highways 35 and 40. Two years later officials of the Oklahoma Turnpike Authority and the OKlahoma State Highway Department sought to secure for the H. E. Bailey Turnpike, then in the planning stages, designation as part of Interstate Highway 44. But federal authorities refused that and subsequent requests because of statutory mileage limitations placed upon the entire system. 38

Construction of Interstate Highways throughout Oklahoma failed to produce the undesirable effects predicted by residents along the rights-of-way. Despite delays, Oklahoma led the nation in percent of allotted interstate roadway mileage completed, a total of 803 miles--including
urban expressways in Tulsa and Oklahoma City--costing $\$ 675,000,000$. Economic impact surveys conducted at various locations along Interstate Highways 35 and 40 reflected a trend typical of other states participating in the program. After construction crews moved away from an area the economy of towns located near work sites experienced a slight decline, and the opening of the thoroughfare immediately affected roadside businesses on parallel highways. This situation proved true particularly at cafes, motels, restaurants, and service stations along U.S. Highway 77, which paralleled the entire length of Interstate Highway 35, and U.S. Highway 66, which shadowed Interstate Highway 40 through western Oklahoma. Some of these businessmen quit while others relocated to sites near interchanges. Many new service oriented businesses appeared adjacent to the rights-of-way, providing additional employment for the immediate area. Also, streets in the towns bypassed by the interstates became less congested, reducing the number of automobile accidents, the amount of transient traffic, and producing a climate some store owners claimed actually drew more local shoppers into their communities more frequently than before construction of the superhighways. As a result, towns located adjacent to the interstates recovered from a brief economic decline and resumed normal or accelerated growth patterns. ${ }^{39}$

Construction of urban expressways coincided with building turnpikes and Interstate Highways. The major impetus for the program emanated from the federal government. During the late 1930s, urban and highway planners began to recognize the need to streamline traffic in metropolitan areas. The concept of the modern expressway emerged as a means of conveying outlying residents to downtown businesses and as a way of efficiently routing through traffic past congested city streets. Officials
of the Bureau of Public Roads advocated federal aid for such projects, and they secured an appropriation of $\$ 125,000,000$ to subsidize urban planning by state highway departments as part of the Federal-Aid Highway Act of 1944. Oklahoma's share of the money amounted to $\$ 1,156,000$ annually for three years, but officials of the state highway department procrastinated. Attempting to maintain the existing system of roadways overtaxed the agency, and employees within the department possessed little expertise in this specialized field of highway engineering. Urban projects required a great deal of advance planning, large outlays of money in geographically small areas, and support from the communities affected by new construction. 40

This last factor played a key role in inaugurating an urban expressway program for Tulsa. The northeastern Oklahoma city received a headstart in expressway planning when officials of the Bureau of Public Roads selected it as the site of a pilot project. Following passage of the Federal-Aid Highway Act of 1944, federal roadmen in cooperation with the Bureau of the Census conducted a door-to-door origin and destination survey to determine the driving habits of Tulsans. When this information became available, city officials in 1945 successfully influenced state lawmakers to enact legislation permitting municipaliites of more than 5,000 population to issue bonds for improvements to arterial streets. That year Tulsans approved a $\$ 3,000,000$ bond issue, and, in 1946, the firm of Cochran, Wood, and Craig, consulting engineers, began devising plans to streamline the flow of metropolitan traffic. Their final report, submitted in June of 1947, included a proposal for a four-lane divided highway originating at the intersection of U.S. Highway 66 and FiftyFirst Street in southwest Tulsa, crossing the Arkansas River, paralleling

Fifty-First Street east to Memorial Road, then north along Memorial Road to a junction with U.S. Highway 66 and Oklahoma State Highway 33 . In January of 1948, members of the Tulsa City Commission and the municipal planning board enthusiastically adopted the study. 41

Although Tulsa led the way in planning a major modern urban highway in Oklahoma, controversies complicated construction of the road. Officials of the Bureau of Public Roads approved the initial blueprint for the expressway, but opponents of the project, including Mayor Roy Lundy and one of the city's two principal newspapers, convinced voters to defeat a bond issue for funds to support building the road. A second proposal submitted to the Bureau of Public Roads by the state highway department failed to gain the consent of federal roadmen because of inadequate rights-of-way. Finally, in July of 1950, members of the Tulsa Chamber of Commerce and the city's new mayor, George H. Stoner, mounted a successful campaign securing passage of a $\$ 1,400,000$ bond issue for the Fifty-First Street Bypass. Regulations promulgated by the Oklahoma State Highway Department required municipalities to obtain all rights-of-way for urban projects with their own funds. The bond issue passed in July provided the necessary money to begin to acquire the 175 foot wide right-of-way mandated by the Bureau of Public Roads. During the summer and fall of 1950 , the state highway commission awarded contracts and work began on a new four-lane bridge across the Arkansas River at Fifty-First Street. Also, construction started on the bypass west of the Arkansas River three and one-half miles to the Tulsa city limits, near the terminus of the Turner Turnpike. Workers completed the bridge and roadway in 1953.42

Legal problems and construction procedures retarded progress of the roadway east of the Arkansas River. Businessmen and residents along the proposed right-of-way sought injunctions and brought lawsuits against the City of Tulsa to halt acquisition of land for the superhighway. In May of 1951, federal engineers altered the original plan of the roadway, implementing a diagonal line of transit from near the junction of FiftyFirst Street and Yale Avenue northeast to intersect U.S. Highway 66 in the vicinity of One Hundred Twenty-Ninth East Avenue and Admiral Place. This change gave rise to even more legal problems, and for almost four years the vast majority of the project lay dormant. By the fall of 1954 , the courts had cleared their dockets of cases involving the Fifty-First Street Bypass, renamed Skelly Drive in honor of Tulsa oilman William G. Skelly, and the state highway department let contracts for road work. Some of the construction companies, however, were committed to other projects simultaneously, resulting in erratic work schedules. One firm, the Standard Paving Company of Tulsa, finished its part of the project within the 140 working days stipulated in the contract, but fifteen months elapsed between issuance of the work orders and the completion date. Another contractor, Brewer and McMichael of Holdenville, Oklahoma, completed within 119 working days a job it was allotted 200 days to finish, but total time from beginning to end was 382 days. 43

By November of 1958, the entire twenty miles of Skelly Drive was opened to traffic. No ceremonies marked the occasion, and no dignitaries lauded the efforts of planners, politicians, or workers. The predominant attitude among public officials seemed to be one of relief. Nevertheless, the $\$ 11,600,000$ roadway markedly improved Tulsa's metropolitan road system. It served as a direct link between the Will Rogers and Turner
turnpikes, and as such was designated part of Interstate Highway 44. Motorists driving from Joplin, Missouri, to Oklahoma City by way of the toll roads and Skelly Drive made the trip on 203 miles of limited access, divided, four-lane highways and encountered no traffic lights. Thus, through travelers no longer threaded their way along Tulsa's city streets. For residents of the city and its environs the expressway made the downtown area readily accessible, provided a convenient crosstown route, and eased the strains of suburban commuters. 44

The rapidly multiplying number of vehicles using Tulsa's streets and recognition of future highway needs by local officials generated the impetus for an expressway master plan. Traffic surveys conducted in 1954 and 1956 indicated that major metropolitan arteries were already overburdened. Enactment of the Federal Highway Act of 1956 provided additional momentum by making available federal funds on a 90 percent-10 percent matching basis for construction of urban expressways included in the Interstate Highway system. In 1957, the Tulsa Metropolitan Area Planning Commission, composed of representatives from the City of Tulsa and surrounding Tulsa County, adopted a twenty year master plan. Local authorities had cooperated closely with officials of the Oklahoma State Highway Department and the Bureau of Public Roads in devising their blueprint, hoping to avoid future bureaucratic entanglements, when implementing the program. Plans called for the construction of a series of expressways serving all parts of Tulsa with extensions into Tulsa County and nearby communities. Construction of a second bypass through west Tulsa and near the central business district received priority from local, state, and federal planners. Designated Interstate Highway 244 , the proposed route actually consisted of two expressways. One, the Red Fork

Expressway, originated near the intersection of Skelly Drive and the north gate of the Turner Turnpike. It proceeded approximately five miles in a northeasterly direction through west Tulsa and across the Arkansas River to a junction with the second bypass, the Crosstown Expressway. This superhighway closely paralleled Admiral Place due east for eleven miles to merge with Interstate Highway 44.45

To bring these plans to fruition, local officials once again called upon the residents of the City of Tulsa and Tulsa County to approve a $\$ 4,825,000$ bond issue. Expressway construction guidelines still required local jurisdictions to supply money for purchase of rights-of-way. Vigorously supported by the Tulsa Chamber of Commerce and the Tulsa Tribune, the bond issue enjoyed much positive publicity, and no real opposition emerged. City officials also endorsed the measure. George E. Norvell, Tulsa's mayor, made an election night television appearance urging residents to support the bond issue. On October 22, 1957, city and county voters trooped to the polls and approved the bond issue by a resounding 80 percent majority. By the end of the year engineering contracts had been awarded, and preliminary work on the project began. 46

Significant political changes at the state level further fueled urban projects in Tulsa. Channeling state and federal funds to Tulsa County for construction of expressways required cooperation with and support from the Oklahoma State Highway Commission and the governor's office. Oklahoma City, the state capitol, and surrounding Oklahoma County, Tulsa's principal rival for road money, traditionally received preferential treatment from the state highway commission. When Governor Raymond D. Gary left office in January of 1959, highway work valued at more than $\$ 20,000,000$ was underway in Oklahoma County while contracts in Tulsa

County amounted to $\$ 950,000$. As a stronghold of the Republican Party in a state dominated by Democrats, the City of Tulsa and Tulsa County received only minimal consideration from state politicos. This situation changed dramatically when J. Howard Edmondson, an attorney from Tulsa, succeeded Gary in the governorship. Edmondson appointed Harold Stuart, a Tulsan, the first resident of that city to serve on the Oklahoma State Highway Commission in fourteen years. Henry L. Bellmon, a Republican who became governor in 1963, and his successor, Dewey F. Bartlett, another Republican and oil millionaire from Tulsa, continued the practice revived by Edmondson. The presence of these men on the Oklahoma State Highway Commission, as well as governors with personal and political ties to Tulsa, helped steer construction funds to Tulsa city and county metropolitan road projects. ${ }^{47}$

With adequate outside funding, a favorable political climate, and a new $\$ 23,500,000$ bond issue, Tulsa's expressway system developed rapidly. Work continued in earnest on the Red Fork Expressway, and, in 1965, construction began on the Crosstown Expressway. Within five years much of Interstate Highway 244 had opened to traffic. In the meantime, engineers commenced designing and construction crews started building eight other superhighways. Planners envisioned these roadways as feeder routes leading from the central city to suburban communities. In July of 1960, construction began on the Broken Arrow Expressway, a fourteen mile, fourlane, limited access route extending from downtown Tulsa southeast to Broken Arrow, Oklahoma. By 1968, all but one mile of the road was open to traffic. Right-of-way squabbles, reordered priorities, and reduced funds forced officials to hold in abeyance construction of the last mile
through the central city. In 1977, the final phase of work started and, in November of 1981, the last mile opened to traffic. ${ }^{48}$

This road not only linked a suburban community with the downtown district, but by intersecting three other expressways it enabled travelers to readily reach or pass through virtually any part of the metropolitan region. The southeastern end of the highway, moreover, connected with the Muskogee Turnpike near Broken Arrow. Building the Broken Arrow Expressway also reflected the expense of urban road construction. The thirteen miles from Broken Arrow to central Tulsa cost $\$ 10,250,000$, while delays and inflation pushed the bill for the last mile to $\$ 5,600,000$. Construction of a well planned, integrated system of expressways like Skelly Drive, the Crosstown Expressway, and the Broken Arrow Expressway, gained for Tulsa recognition as national leader in urban highway development. Currently, other superhighways in Tulsa are under construction. When finished, they will provide the metropolitan zone with 160 miles of modern urban expressways, the most extensive system in the state. 49 Challenged by preparations made by Tulsans to construct an urban expressway system, government and civic leaders at Oklahoma City promoted a program to streamline metropolitan traffic. In 1947, officials of the Oklahoma State Highway Department contracted with the firm of Guy B. Treat, consulting engineers, to prepare plans for a network of urban expressways. Treat presented his study to the Oklahoma City council in January of the following year, and they approved his findings. He proposed the construction of two diagonal routes and a bypass. The diagonal highways would originate in the downtown business district and radiate to the southeastern and southwestern portions of the city. The proposed bypass involved rerouting U.S. Highway 66 from city streets to a four-
lane limited access highway starting at Northeast Sixty-Third Street and Eastern Avenue and terminating at Northwest Fifty-Fourth Street and May Avenue. Officials prepared to submit Treat's plan for the bypass to the Bureau of Public Roads for funding, but acquisition of rights-of-way temporarily stalled the project. 50

Municipal officials called upon the Oklahoma City of Chamber of Commerce to aid in obtaining the rights-of-way. Stanley R. Draper, general manager of the chamber of commerce and an aggressive promoter of Oklahoma City, responded immediately. Much of the line of transit of the proposed bypass followed the route of Grand Boulevard. In 1909, Will H. Clark, a member of the Oklahoma City Parks Board, conceived of the idea of a parkway completely encircling the city. Subsequently, city fathers purchased a 28 mile long, 200 foot wide right-of-way for the road. Most of the parkway was never constructed, but the city retained the property. Draper assumed the task of acquiring land in the path of the expressway owned by private interests. Through the chamber of commerce he borrowed money to buy 149 acres of land, insuring construction of the first leg of the roadway. To prevent future delays, Draper secured rights-of-way as soon as construction plans were approved. He obtained easements at no cost through one and one-half miles of property owned by Edna D. Classen, widow of Anton Classen, an early developer of Oklahoma City. The chamber manager also arranged financing for the purchase of additional acreage and negotiated several no cost easements with civic minded citizens. Later, revenues raised by the sale of bonds voted by the residents of the city were used to reimburse the chamber of commerce. ${ }^{51}$

Draper's vigorous tactics permitted construction to proceed at a rapid pace. In October of 1949, the state highway commission awarded a
contract to the W. E. Logan and Sons Construction Company of Muskogee, Oklahoma, for the initial segment of the U.S. Highway 66 Bypass. Extending from the intersection of Eastern Avenue and Northeast Sixty-Third Street west to Lincoln Boulevard, the 1.7 mile stretch of roadway became the first completed section of four-lane highway in the state when opened to traffic one year later. In September of 1950, workmen broke ground on the second portion of the expressway which connected Lincoln Boulevard to Classen Boulevard near Northwest Fiftieth Street. The last two parts of the route, one from Classen Boulevard to May Avenue and Northwest FiftyFourth Street and the other from Eastern Avenue northeast to Foundary Avenue near Northeast Sixty-Third Street, were under contract by the end of 1950. The latter section joined a project undertaken by the Oklahoma State Highway Department to provide a four-lane access road to the south terminus of the Turner Turnpike at Witcher. When finished in 1955 , the 6.5 mile urban superhighway became known as the Northeast Expressway. 52

Although acquisition of rights-of-way and obtaining funds for the Northeast Expressway provided no real problems, controversies concerning construction of the road cast a shadow over the project. Cracks developed in completed sections of the driving surface in the summer of 1952 , and, during the biennial session of the Oklahoma State Legislature in 1953, lawmakers demanded an explanation. In February, the Oklahoma State House of Representatives named an eleven-man committee to investigate the W. E. Steelman Construction Company, a subcontractor, and the inspection division of the Oklahoma State Highway Department. Charges of deliberately failing to meet paving specifications and of drunken inspectors were leveled at the firm and the state agency. C. A. Stoldt, director of the state highway department, defended his employees, and
evidence presented by officials of the Bureau of Public Roads indicated the highway met all contract requirements. Engineers attributed cracks in the asphaltic concrete pavement to dry weather. Two months later, however, an additional controversy arose when a twenty-seven foot long segment of pavement collapsed, dropping four feet below the subgrade. Legislators once again heaped criticism on the contractor and the highway department, disregarding claims that heavy rains had weakened the foundation of the highway, precipitating the cave-in. Despite these difficulties, funds and rights-of-way were obtained to expaned the Northeast Expressway. 53

To serve the growing volume of through traffic better, planners decided to relocate part of U.S. Highway 66 over a new 1 imited access road. Branching from the Northeast Expressway near Belle Isle Lake between Pennsylvania Avenue and ${ }^{\circ}$ Classen Boulevard, the roadway ran southwest to the intersection of North Youngs Avenue and Northwest Thirty-Ninth Street. From there designers converted Northwest Thirty-Ninth Street into a multiple access four-lane roadway west to its intersection with Grand Boulevard. State highway commissioners let contracts for this project in June of 1953, and within two years work neared completion. By routing U.S. Highway 66 over this southern leg of the Northeast Expressway, travelers proceeded relatively unimpeded around the northern outskirts of the city. 54

Between 1955 and 1965, three additional expressways progressed from the drawing board to early phases of construction. In January of 1956, state highway commissioners awarded contracts for construction of the first section of the Raymond Gary Expressway, a limited access northsouth route to carry U.S. Highway 77 around the eastern edge of Oklahoma

City to the city limits of Moore, Oklahoma. Before the fourteen mile long highway was completed, it was absorbed into the interstate highway network and designated part of Interstate Highway 35. The Tinker Diagonal, a second urban superhighway, intersected the Raymond Gary Expressway near Reno Street and Eastern Avenue, extending approximately four miles southeast to Tinker Air Force Base at Midwest City, Oklahoma. A third route, the Stanley Draper Expressway, stretched in a east-west direction from the intersection of the Raymond Gary Expressway and the Tinker Diagonal along the southern limits of Oklahoma City's central business district. A unique feature of this road involved the construction of almost two miles of elevated roadway, which opened to traffic in January of 1966. Both the Tinker Diagonal and the Stanley Draper Expressway were incorporated into the Interstate Highway system as part of Interstate Highway 40 prior to completion. Inclusion of these routes as portions of the two-digit numbered interstate highway network ended their official designation as urban expressways. 55

Presently the only officially designated urban expressway in Oklahoma City is Interstate Highway 240. As early as 1956, engineers foresaw the need for a four-lane limited access loop around the southern and western sections of Oklahoma City. These plans called for the highway to originate at the intersection of Southwest Seventy-Fourth Street and Raymond Gary Expressway, parallel Southwest Seventy-Fourth Street west to near Independence Avenue, and north to follow the right-of-way of Grand Boulevard to a junction with the southern leg of the Northeast Expressway. This project remained in various stages of preparation until 1969 , when the Oklahoma State Highway Commission accepted bids from constractors to begin construction. Subsequent expansion of the project extended
the southern segment east to intersect Interstate Highway 40 near South Henney Road in Oklahoma County, and planners decided to include most of the Northeast Expressway as part of Interstate Highway 240 . In 1977 and 1978, construction workers began completely rebuilding the old Northeast Expressway from Northwest Thirty-Ninth Street east to Northeast SixtyThird Street and Eastern Avenue. Recent completion of this massive project has provided residents and through travelers with convenient access to urban main streets or a bypass around the metropolitan area. 56

Additional urban superhighway construction in Oklahoma City has focused on the moribund Central Expressway. Designated Interstate Highway 235 and designed as a six-lane limited access roadway, its proposed right-of-way stretches from the southern end of the Broadway Extension in north Oklahoma City southeast to a junction with Interstate Highways 35 and 40 near Southeast Fifteenth Street. From its inception, controversy engulfed the project. Acquisition of the right-of-way involved displacing approximately 500 people $1 i v i n g$ in the decaying, low income, predominantly black Harrison-Walnut section of the city. These particular circumstances provoked a rash of civil rights lawsuits against the Oklahoma Department of Transportation, and, in 1979, state officials signed a conciliation agreement prepared by federal authorities. This document required state officers to insure that relocated residents of the Harrison-Walnut neighborhood recieved an equal opportunity to obtain mortgages, home improvement loans, interest subsidies, and insurance. Implementation of this plan further slowed progress on the roadway. An additional stumbling block emerged in the fall of 1981. Residents of Edgemere Park, an upper-middle class section of the city, brought a lawsuit against the Oklahoma Department of Transportation demanding
protection from noise pollution and other "quality of life" factors once the road is completed. As a result of these delays, the cost of the Central Expressway has doubled to $\$ 200$ million with the most optimistic projections for construction to begin in 1983.57

Three major factors significantly influenced the construction of superhighways in Oklahoma. First, planners at national and state levels recognized the need to accommodate the geometrically increasing number of vehicles using major overland arteries. Second, federal officials who foresaw the need for interstate highways and urban expressways successfully pressed for federal dollars to assist the states with major road building projects. Once the money became available, state and local authorities assumed the bulk of responsibility in planning and constructing the roads. In Oklahoma, the state highway department quickly embraced the Interstate Highway system, and, despite setbacks, led the nation in the percentage of superhighways completed. At Tulsa, farsighted community leaders battled stubborn political opposition as well as overcame legal and construction problems to inaugurate a metropolitan road system which eventually gained national acclaim. Also, in Oklahoma City government and civic leaders cooperated to institute an urban road building program.

The third factor, combining private enterprise with public service, created for Oklahoma a system of toll roads. The turnpike network came about in response to the demands of private interests for a superhighway connecting Tulsa and Oklahoma City. Traffic patterns and a favorable bond market justified construction of the Turner Turnpike, and the subsequent success of this roadway prompted campaigns to build additional toll roads. Financed by private funds and maintained at no expense to
taxpayers, the turnpikes fulfilled a vital service which public agencies were unable or unwilling to provide. All of these superhighways, the turnpikes, the Interstate Highways, and urban expressways, eased the burdens of travel, accommodated the growing number of vehicles, while efficiently routing interstate and intrastate travelers to their destinations.

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## CHAPTER X

## OKLAHOMA'S HIGHWAYS IN RETROSPECT

For almost three hundred years a dynamic process took place resulting in the development of a system of highways for Oklahoma. Whether pertaining to the movement of goods and people from an Indian village to the buffalo range or from one major modern metropolitan center to another, travelers required an efficient network of routes to convey them to their destinations. As the nature and number of overland travelers changed and as modes of transportation progressed from horseback to highspeed automobiles, quiet wilderness trails evolved into multilane concrete thoroughfares. During this process several factors emerged as major determinants effecting the development of trails and roads in Okl ahoma.

Tradition determined the location of trails used by native Americans in present Oklahoma. The constant quest for the essentials of life--food, clothing, and shelter--required tribes such as the Wichita and the Osage to make pilgrimages to the buffalo ranges of the Great Plains. At regular and predictable times of the year whole villages packed their baggage to follow pathways through wooded areas, along stream beds, and across prairies to reach the hunting grounds. These trails, blazed by hunting parties and worn by continuous use, delivered the overlanders to the buffalo herds. Warfare and trading activities, two other traditional pursuits of tribes native to present Oklahoma, also required extensive use
of wilderness thoroughfares. Osage mourning parties trekked westward to prey upon whatever unfortunate enemy appeared in their path, andwarriors roamed throughout the region attacking Indians and white men alike. The semi-sedentary Wichita became traveling salesmen as they frequented the buffalo ranges to trade with fellow native Americans as well as to hunt.

Introduction of the horse to native American society revolutionized the lifestyle of many tribesmen. Particularly the Kiowa and Comanche, who dwelt on the Great Plains, readily adapted to this new means of mobility. As accomplished horsemen, Kiowa and Comanche hunters easily procured supplies of food, clothing, and shelter from the buffalo herds, removing the specter of starvation that stalked them before the horse. These tribesmen became well traveled, following trails from present Oklahoma into the Southwest to raid other bands of Indians and to wreak havoc upon white settlers. Returning from their extensive travels, warriors made use of timeworn pathways to deliver plunder to friendly traders for goods necessary to continue a nomadic way of life.

Ironically many overland routes used by native American hunters, traders, and warriors served as a means of disrupting traditional lifestyles. The first French explorers to arrive in present Oklahoma secured the services of native guides and followed Indian trails to their destinations. Expeditions led by Jean Baptiste de la Harpe and Charles Clause Dutisne extended French influence into the region by making use of overland travel. These men, and others, not only sought to trade with native tribes, but also they were part of a larger scheme. Rivalry between France and Spain throughout much of the eighteenth century for control of the Southwest occasioned the dispatching of overland expeditions as a means of securing an effective presence in the region. While European
powers sparred with each other, an acculturation process began. NonIndian traders introduced to tribesmen foreign goods and modes of behavior the natives soon adopted. Many of these items and their purveyors arrived in present Oklahoma by winding their way along overland routes such as the Osage Trace. As a result, the traditional lifestyle of native Americans in the region began to decline as they became increasingly dependent upon commercial ties established with non-Indians. By the 1760 s the presence of Europeans and the importance of cross country travel to them was reflected by the opening of the first road in present Oklahoma, the Great Spanish Road to the Red River.

In 1803, the Louisiana Purchase signaled the end of European influence in the region and introduced a new permanent force affecting the development of overland travel. The government of the United States took a keen interest in its frontier possessions. Soon after the acquisition of Louisiana, numerous official and unofficial expeditions composed of American military men and frontier entrepreneurs entered present Oklahoma. These adventurers explored, mapped, and traveled existing pathways. But the creation of a garrison at Fort Gibson established a facility that for many years served as the locale for the dissemination and enforcement of federal policies in Indian Territory. Specifically, military authorities realized the necessity of tying frontier fortifications to rear areas. At Fort Gibson officers and enlisted men extended this policy into Indian Territory by building a road from their outpost to Fort Smith, Arkansas Territory. This wilderness highway became the first product of what would evolve as a major driving force in the development of overland routes in present Oklahoma: the pervasive influence of the federal government.

Throughout the nineteenth century a system of overland routes spread across Indian Territory. Almost every road came into existence as a result of plans and policies derived by officials in Washington, D.C. Military expeditions seeking to meet with tribes of native Americans living in western Indian Territory blazed trails and cleared rights-of-way sufficient to accommodate wagons. The removal of the Five Civilized Tribes to Indian Territory inaugurated extensive road building activity. Expansion of the frontier, most notably accomplished by the erection of a series of strategically located army outposts across Indian Territory, spawned the location and construction of a network of connecting roadways. Officers and enlisted men from units stationed in Indian Territory performed virtually all work necessary to accomplish this task. During the same period national trends affected the determination of policies adopted by the federal government. Frontier merchants from Missouri who wanted to tap the lucrative markets of Santa Fe, New Mexico, obtained federal aid in achieving their aims. Congressmen from Missouri secured an appropriation to survey and mark the Santa Fe Trail. A portion of this famous roadway, the Cimarron Cutoff, snaked across the present Oklahoma Panhandle. Argonauts swept up by the gold fever of 1849 swarmed to villages in western Arkansas to begin the trek to California. People demanded and gained support from the national government in the form of a military detachment that opened a new road along the South Canadian River while escorting the gold seekers. Several years later, realizing the need to establish a firm overland link between the East and the Far West, federal officials dispatched Edward F. Beale to Indian Territory to supervise improvements to the South Canadian River Road. Finally, decisions made by federal authorities to implement direct
overland mail service between St. Louis, Missouri, and San Francisco, California, affected the development of transportation. Although the Butterfield Overland Mail made use of existing roadways through Indian Territory, it brought notoriety to the region and fostered improvements for overland transportation in Indian Territory, but in each case the national government played the key role.

An exception to the pervasive influence of the federal government in road construction and maintenance activities emerged with the relocation of the Five Civilized Tribes of Indians to Indian Territory. Soon after the arrival of the Indians in their new homeland, leaders reorganized tribal governments. The national legislatures of the Cherokee, Choctaw, and Creek nations enacted laws dealing with building and upkeeping public roads. The statutes were based upon the principle of private enterprise as they mandated the operation of toll bridges, turnpikes, and toll ferries. This practice proved extremely successful as entrepreneurs quickly obtained concessions all along major routes crisscrossing eastern Indian Territory. As overland traffic through the nations of the Five Civilized Tribes increased following the Civil War, the number of toll facilities proliferated. Although many of these concessions were established on roads built by the United States Army, federal authorities did not interfere with tribal policies. Also, native lawmakers enacted a series of mandatory road work laws to aid in the maintenance of public thoroughfares. These statutes spawned mixed results since tribal authorities experienced difficulties enforcing the laws among white non-citizen residents of the Indian republics. The methods adopted by the governments of the Five Civilized Tribes, nevertheless,
produced a system of roads that compared favorably with overland routes in neighboring states and territories.

During the early years of the twentieth century, as Oklahoma evolved from territorial status to statehood, three major factors that would affect modern highway development in Oklahoma began to emerge. First, national trends in the form of the Good Roads Movement, an outgrowth of the Progressive Era, reached the towns and farmsteads of Oklahoma. Second, individuals determined to improve public transportation in Oklahoma organized good roads associations and successfully promoted their cause. Third, federal programs encouraged these activities. Throughout most of the first two decades of the twentieth century the momentum created by the Good Roads Movement and the tireless efforts of individuals such as Sidney Suggs accounted for most of the progress in road construction and maintenance. The construction of object-lesson roads, the introduction of college-level civil engineering courses, and, most significantly, the inclusion of a provision for ahighway department in the state's constitution can be attributed directly to the Good Roads Movement and to the initiative exerted by concerned individuals.

The formative years of the Oklahoma State Highway Department witnessed a continuation of these three factors. The increasing number of motor vehicles on the roads became the discernible national trend affecting the construction and maintenance of highways. Oklahomans, like other Americans, quickly adopted the use of cars and trucks, and in the process motorists demanded better highways. Officials and politicians in Washington, D.C., responded by enacting grant-in-aid programs for the states, thus inaugurating the vital financial role the national government would play in highway development. In Oklahoma, governors and
legislators worked to implement central control of the construction and maintenance of major arteries by strengthening the infant highway depart-. ment. County commissioners, striving to retain their traditional hold on road improvements, succeeded in keeping centralization to a minimum until circumstances arose forcing a change. Federal authorities brought pressure on state officials to reorder the highway department, and Governor Martin E. Trapp took the initiative to secure the appropriate legislation. Laws passed in 1924 provided the foundation for a modern highway department as well as implementing tax measures to give the agency a stable source of income. Again, national trends, federal policies, and individual initiative combined to bring change to highway construction and maintenance procedures in Oklahoma.

Reorganization of the state highway department in 1924 signaled the beginning of the modern period of highway development for Oklahoma. From that time to the present the underlying current of national trends and events plus federal policy determined the activities of the road agency in regard to Oklahoma's general highway system. Positive individual initiative lost its effectiveness as national agencies such as the Bureau of Public Roads obtained greater oversight than ever before over the activities of the state highway department. Certainly men like Cyrus S. Avery, the first chairman of the Oklahoma State Highway Commission, and Lew H. Wentz, who served on the board from 1929-1933, were men of vision. But increasingly the state highway department acquired a mode of operation typical of any bureaucratic agency, developing routine and standardized procedures that required functionaries rather than dynamic individuals. The geometrically multiplying number of vehicles in the 1920 s, the effects of the Great Depression of the 1930s, the homefront response
necessitated by World War 11 in the 1940s, the revitalization of vehicular traffic in the 1950 s and 1960s, and the problems produced by inflation in the 1970s were national trends and events contributing to the feast-and-famine cycle of operation of the Oklahoma State Highway Department. Moreover, federal policy concerning the allocation of money and the implementation of regulations regarding the use of those funds in part determined the ways the state highway department responded to national events as they affected Oklahoma.

Negative individual initiative impacted immensely upon the operations of the Oklahoma State Highway Department. As the agency grew in the amount of money it controlled and in the number of jobs it provided, the highway department became ripe for abuses by dispensers of patronage. Beginning in 1927, when Governor Henry S. Johnston discharged several well-qualified professional and technical employees for political reasons, wholesale hirings and firings accompanied each change at the governor's office and at the state legislature. These practices developed because individuals in the executive and legislative branches of state government preferred to use the highway department as a means of securing votes and of retaining popularity rather than establishing a viable, vital, non-partisan public service. Aside from patronage, politicians influenced planning, maintenance, and construction activities, while members of the highway commission divided the state into private fiefdoms. These procedures frustrated professional personnel and discouraged dedicated workers, producing major shortcomings within the agency. Only in recent years have attempts been made to rectify the situation by implementing the merit system and by retaining experienced personnel.

Superhighways in Oklahoma evolved separately from the state's general road system. But national trends, federal policy, and positive individual initiative provided the impetus for building these roads. Initiatives by businessmen in Tulsa and Oklahoma City as well as the construction of toll roads in other states provided a driving force to bring about the first turnpike in Oklahoma. Simultaneously community leaders in Tulsa and Oklahoma City spearheaded a movement to take advantage of a new federal program to inaugurate a system of urban expressways for their cities. Finally, in the mid-1950s the national government imposed upon Oklahoma and the other forty-seven contiguous states a system of multilane, limited access, Interstate Highways. The underlying reason for all of these projects was the increasing volume of traffic and the desire to meet future highway needs. In responding to these circumstances, superhighway construction in Oklahoma kept pace with or remained ahead of similar projects in other states.

Evolution of a system of highways for Oklahoma encompassed a longterm dynamic process. The transformation of overland routes from wilderness trails to urban expressways reflected not only improvements in transportation, but the growth and development of Oklahoma from a traditional homeland for tribes of native Americans to a vital modern agriculturalindustrial component of the American nation. Factors of local, regional, and national significance provided the impetus for this process, but, as in the past, events of a similar nature will continue to affect the development of highways in Oklahoma to bring further growth and change in the future to the state.

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