Oklahoma Historic Bridge Update for Metal Truss, Masonry Arch, and Concrete Arch Bridges Constructed through 1980

Prepared for

Oklahoma Department of Transportation

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Executive Summary

The Oklahoma Department of Transportation (ODOT) Cultural Resources Program retained Mead & Hunt, Inc. to complete a historic bridge update for metal truss, masonry arch, and concrete arch roadway bridges constructed in Oklahoma through 1980 to assist ODOT in complying with federal preservation regulations that require the Federal Highway Administration (FHWA) and ODOT to consider historic bridges during project planning.

Section 1 of this document provides an introduction discussing the background of the project, an overview of the bridge population, and how the National Register of Historic Places (NRHP) Criteria for Evaluation were applied. Section 2 includes state-level historic themes that relate to the construction and use of bridges in which a bridge may possess significance for its associative values under NRHP *Criterion A: History*. Section 3 provides a description of the types and subtypes of truss, masonry arch, and concrete arch bridges within the study, including their distinctive design features for consideration under NRHP *Criterion C: Engineering*. Section 4 provides an overview of data collection and analysis techniques and processes used. Section 5 presents the NRHP Criteria for Evaluation, describing how to evaluate significance and assess integrity for the bridges within the study. Section 6 encompasses application of the NRHP Criteria for Evaluation, describing how each were applied, and presenting summarized study results.

This document includes three appendices. Appendices A and B contain tabular lists of NRHP eligibility recommendations for the 348 metal truss, masonry arch, and concrete arch bridges, with Appendix A organized by county and Appendix B organized by bridge type. Bridges found to possess significance and that retain integrity are recommended eligible for listing in the NRHP for review and concurrence by the FHWA, the Oklahoma State Historic Preservation Officer (SHPO), and ODOT. Appendix C provides individual Oklahoma Historic Bridge Inventory Forms prepared for each of the bridges in the study.

Twenty-one of the 348 bridges evaluated were previously listed in the NRHP; one was listed under *Criterion A* only, six under *Criterion C* only, and 14 under both *Criteria A* and *C*. Mead & Hunt recommended additional areas of significance for four of the 21 previously-listed bridges. Additionally, the study found 164 bridges eligible for the NRHP. Of those 164 bridges, eleven were found eligible under *Criterion A* only, 99 under *Criterion C* only, and 54 under both *Criteria A* and *C*. The remaining 163 bridges were recommended not eligible for the NRHP.

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1. Introduction

A. Purpose and background

This project allows the Oklahoma Department of Transportation (ODOT) to facilitate regulatory reviews of proposed bridge projects. Applicable federal regulations include Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended, 36 CFR Part 800) and Section 4(f) of the U.S. Department of Transportation Act (U.S. DOT Act) of 1966 (as amended, 23 CFR Part 774).

This report was preceded by ODOT's two previous statewide bridge studies on metal truss bridges and masonry and concrete arch bridges. In 1993 ODOT completed a historic bridge survey titled *Spans of Time*, which evaluated these bridge types for National Register of Historic Places (NRHP) eligibility under *Criterion C* in the area of engineering. This survey effort documented and evaluated 1,555 bridges, with 171 determined eligible for listing in the NRHP under *Criterion C*. A re-evaluation was completed by ODOT in 2007 that also evaluated these bridge types for NRHP eligibility under *Criterion C* in the area of engineering. This study documented and evaluated 1,061 bridges, with 213 determined eligible for listing in the NRHP under *Criterion C*. This project builds upon the previous studies to evaluate these bridge types under all of the NRHP criteria, for bridges constructed through 1980.

B. Overview of the survey population

ODOT provided a list of metal truss and masonry and concrete arch bridges that have dates of construction through 2018 in the National Bridge Inventory (NBI) inspection data. Some bridges with construction dates after 1980 were included in the initial study population because ODOT often changes the date of construction in the NBI inspection data when a bridge is relocated. These bridges were reviewed to determine their actual date of construction and then evaluated if the date was 1980 or earlier. Mead & Hunt requested additional bridge data and subsequent lists sent by ODOT removed some bridges and added others. Prior to fieldwork, Mead & Hunt removed some bridges from the overall study pool because they were confirmed to be nonextant or to have been built after 1980. See Section 4.A for more info regarding development of the survey population and evaluation methods. Lists of all bridges, organized by county and by type, are included in this update in Appendices A and B. The bridge lists include NRHP eligibility recommendations.

C. Other bridge studies

Additional bridge studies include the *Oklahoma Route 66: Survey of Roadbed Documentation Project (1926-1970), A Survey of Integral Structures (*Route 66 Study*)* and *Oklahoma Historic Bridge Survey: Depression-Era Works Program Bridges and Road-Related Resources* (Depression-Era Study). Bridges in the Route 66 Study, which was completed by the Oklahoma Route 66 Association for the SHPO, have been evaluated under *Criterion A* in the area of Transportation for their association with Route 66. Any metal truss or masonry or concrete arch bridges on former Route 66 were evaluated for the criteria and themes outlined in this report. Bridges in ODOT's Depression-era Study have been evaluated under *Criterion C* and also *Criterion A* in the area of Government/Politics and under *Criterion C* in the area of Engineering; any metal truss or masonry or concrete arch bridges in this study were evaluated under *Criterion A* for other themes and areas of significance. The Depression-Era Study did not re-evaluate bridges that were previously determined eligible. Mead & Hunt evaluated these bridges for *Criterion A*

significance in the area of Government/Politics for association with federal depression-era programs applying the methodology developed for the Depression-Era Study.

D. Bridges less than 50 years in age

The 50-year age guideline of the NRHP allows historical perspective in which to evaluate the significance of properties. The timeframe for this project extends to 1980, resulting in bridges less than 50 years in age but that will reach the 50-year age guideline of the NRHP in the near future. For the purposes of the study, bridges less than 50 years in age in 2020 were evaluated under the regular NRHP Criteria for Evaluation and were not required to possess exceptional importance under NRHP *Criteria Consideration G, Properties that have achieved significance within the past 50 years*.

2. Historic Themes Related to Bridges in Oklahoma

This section presents state-level historic themes related to the construction and use of bridges under NRHP *Criterion* A. The areas of *Criterion A* significance that are most likely to apply to Oklahoma bridges are Transportation, Community Planning and Development, and Conservation.[1]

Research for development of historic themes encompassed review of existing contextual material such as the previous ODOT historic bridge studies, including the 1993 *Spans of Time* and the 2007 update, plus the Depression-Era Study. Other sources consulted include the Oklahoma Route 66 Roadbed Documentation Project (1926-1970), A survey of Roadbed and Integral Structures, (The Oklahoma Route 66 Association, 2002), Oklahoma Historical Society historic contexts by region and theme, Gateway to Oklahoma History, and *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, as well as other sources listed in the Bibliography of this report.

A. Transportation

The area of significance of Transportation relates to major trends to improve Oklahoma's transportation network, including the construction of bridges. While an individual bridge is not likely to derive significance individually simply due to its presence within a network of interconnected resources, it may have significance as an important crossing for reasons that are associated with events or trends that stand out within the larger transportation network, and that make a significant contribution to the broad patterns of history. Transportation themes relate to important developmental periods in Oklahoma transportation history and are discussed individually below.

(1) Early Oklahoma vehicular truss and arch bridges, 1900-1915

Railroads were the first to build bridges in Oklahoma on a large scale in the 1870s, which helped to propel advances in metal truss technology. Fueled by railroad expansion, steel companies developed uniform components, such as rolled beams and plates, that enabled mass production of standardized metal truss bridge designs. Specific bridges were shipped by rail and assembled on-site, such as the 1909 Pratt through truss over Bear Creek in Logan County (NBI No. 03140; Structure No. 42N3270E0830002), which was fabricated by the Canton Bridge Company of Canton Ohio. While in rare instances railroad bridges added a lane to accommodate vehicles, the increasing population and automobile use drove demand for proper vehicular bridges. Before the 1910s the state and federal government had no involvement or responsibility in bridge construction. In both Oklahoma Territory, which encompassed the western portion of present-day Oklahoma, and Indian Territory, in the eastern portion of the state, most local authorities or tribes could not afford such expensive bridge projects. As a result, private individuals or corporations were authorized by local authorities and tribes to construct the earliest vehicular bridges, charging a fee to all who used them.[2]

[1] Several areas of significance and related themes were considered but research did not support a direct and important historical association with individual bridge construction. Areas and themes included: Social History/Civil Rights, and Entertainment/Recreation.

[2] Joseph King, "Spans of Time, The Earliest Roads and Bridges," *Oklahoma Department of Transportation*, 1993, http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/earlyrb.htm; Mead & Hunt, Inc., *Bridging the Mighty Red, Red River Crossings Between Oklahoma and Texas* (Prepared for the Oklahoma Department of Transportation, 2017), 56.

With statehood in 1907, road and bridge construction were placed under local government control. As counties organized, new commissioners faced numerous challenges, including tight budgets, limited technical knowledge, and mounting public pressure for improvements. Appointing a county engineer was optional, and commissioners utilized a range of solutions in meeting bridge needs. Some counties, such as Kay and Nowata, had abundant local material and skilled stonemasons, which resulted in construction of stone arch bridges. The National Register-listed Opossum Creek bridge in Nowata County (NBI No. 02873; Structure No. 53N4120E0040000), built by local contractor Enoch McCormick in 1913, is one of the best examples of a stone arch bridge in Oklahoma. Counties could also save money by authorizing private individuals or corporations to construct a bridge and recoup the cost through tolls over time. Several of these toll bridges were later acquired or replaced by the state.[3]

Counties often purchased prefabricated steel truss spans from bridge building companies. Initially, some counties sent a representative to inspect a bridge manufacturers' facility, and place orders if all was satisfactory. As business increased, salesmen from the bridge companies, known as "territory men," traveled to Oklahoma counties to assess a site and help with bridge selection from illustrated catalogues. Over 100 primarily midwestern bridge companies were active in Oklahoma, and two of the companies established plants in the state: the Jacob B. Klein Iron and Foundry Company (later renamed the Robberson Steel Company) and the Boardman Company were operating in Oklahoma City by 1910. Other companies producing truss spans in the state include the Oklahoma Ironworks in Tulsa and the Muskogee Ironworks.[4] With passage of the Federal Aid Road Act of 1916 and the Federal Aid Highway Act of 1921, control of engineering design and bridge construction was gradually removed from the counties and private bridge-building companies and standardized under the supervision of professional engineers at the state level by the mid-1920s.[5]

(2) Named auto trails in Oklahoma, 1900-1929

Early Oklahoma roads were generally unimproved, and at the turn of the century road development was heavily influenced by private groups, composed of local, state, or regional associations that cooperated in the designation, promotion, and improvements of regional and cross-country routes. Road promoters and boosters determined a route (often over existing local roads), gave it a commemorative name, and formed an association, such as the Ozark Trail Association, to promote the route.[6] These groups also lobbied state, federal, and local governments to cooperatively plan and construct roads. Local commercial clubs, business

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[3] Joseph King, "Spans of Time, The Drive for Good Roads," *Oklahoma Department of Transportation*, 1993, http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/driveforroads.htm; Joseph King, "Spans of Time, A New Era in Bridge Building," *Oklahoma Department of Transportation*, 1993, http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/newera.htm.

[4] King, "Spans of Time, A New Era in Bridge Building."

[5] Mead & Hunt, Inc., *Oklahoma Depression-Era Bridges and Road-Related Resources, 1933-1945: Historic Context and National Register of Historic Places Evaluation* (Prepared for the Oklahoma Department of Transportation, August 2016), Section 2, 4, http://www.odotculturalresources.info/uploads/6/6/6/2/6662788/150428a_final_report_august_2016.pdf.

[6] Richard Weingroff, "From Names to Numbers: The Origins of the U.S. Numbered Highway System," *U.S. Department of Transportation, Federal Highway Administration*, November 18, 2015, https://www.fhwa.dot.gov/infrastructure/numbers.cfm.

associations, automobile clubs, and merchants often contributed labor and funds to bring major roads through their towns and improve local roads and bridges. By 1902 numerous groups were involved in road promotion nationally, including the Good Roads Association (which had national and state/local presences). For example, a local Good Roads Association was established in Logan County, Oklahoma, that same year, and the Oklahoma Indian Territory Good Roads Association (later renamed Territorial Oklahoma Good Roads Association) established in 1904 flourished under Sidney Suggs and later Cyrus Avery.[7]

Between 1907 (statehood) and 1914 a lack of funds handicapped the newly created Oklahoma Highway Department (OHD), allowing private groups to play an important role in road and bridge building. State and local Good Roads Associations raised tens of thousands of dollars for infrastructure improvements during a period when bridge building was still largely a municipal or county responsibility. Private groups also raised funds to fill the gap between state funds and construction costs or provided matching funds for federal aid. During this period several named auto trails and other rural roads across Oklahoma were established, improved, and maintained by the efforts of private citizens, civic groups, auto clubs, and Good Roads Associations. Those providing regional and transcontinental connections included the Ozark Trail, and the Jefferson, Dallas-Canadian-Denver, Meridian, Star, Albert Pike, Postal, and Lee-Bankhead Highways.[8]

Beginning in 1915 increased state and federal support gradually lessened the role of private groups, although maintenance remained a local and county responsibility into the early 1920s. Good roads associations and other booster groups shifted support to maintenance and marking routes. In 1924 the state assumed responsibility for Oklahoma's road and bridge maintenance. Some bridges constructed to carry named auto trails were also funded through early state and federal initiatives, such as the Parker through truss at Idabel (NBI No. 01353; Structure No. 45N4620E2120004), constructed in 1923 to carry the Bankhead Highway. The establishment of the numbered U.S. Highway System in 1926 further diminished the role of private groups, which faded in Oklahoma by 1929.[9]

(3) Early state and federal support of bridges in Oklahoma, 1907-1924

The OHD was created with statehood in 1907 and was staffed by 1911. Although automobile usage in the state had grown to 6,500 vehicles in 1912, Oklahoma ranked last among the states in paved-road mileage; as a result, pressure grew to improve the state's roads. In the years immediately following the creation of the OHD, Oklahoma bridges continued to be either private, profit-making investments or locally funded projects. Engineering services were provided by established bridge-building companies.[10] Good Roads leader and highway department advocate Sidney Suggs was the first appointed road

[7] Dianna Everett, "Good Roads Association," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=GO009. Note: Sidney Suggs was a Good Roads leader and the first Commissioner of the Oklahoma Highway Department. Cyrus Avery was also a Good Roads leader and was appointed to the Oklahoma Highway Commission in 1923.

[8] Dianna Everett, "Highways," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=HI004.

[9] Everett, "Highways."

[10] Mead & Hunt, Inc., *Oklahoma Depression-Era Bridges and Road-Related Resources, 1933-1945: Historic Context and National Register of Historic Places Evaluation*, Section 2, page 3.

commissioner of the OHD. Despite early challenges including a lack of adequate appropriations, Suggs envisioned six initial "main-line" highways as part of the first state highway system: five north-south connecting Kansas and Texas and one east-west connecting Arkansas to the Texas Panhandle (see Figure 1). The OHD planned 2,400 miles of roadway by 1914; however, bridge construction remained under local control. Early bridge efforts of the OHD focused on developing standard plans for culverts and bridges, including steel truss and concrete arch designs.[11]

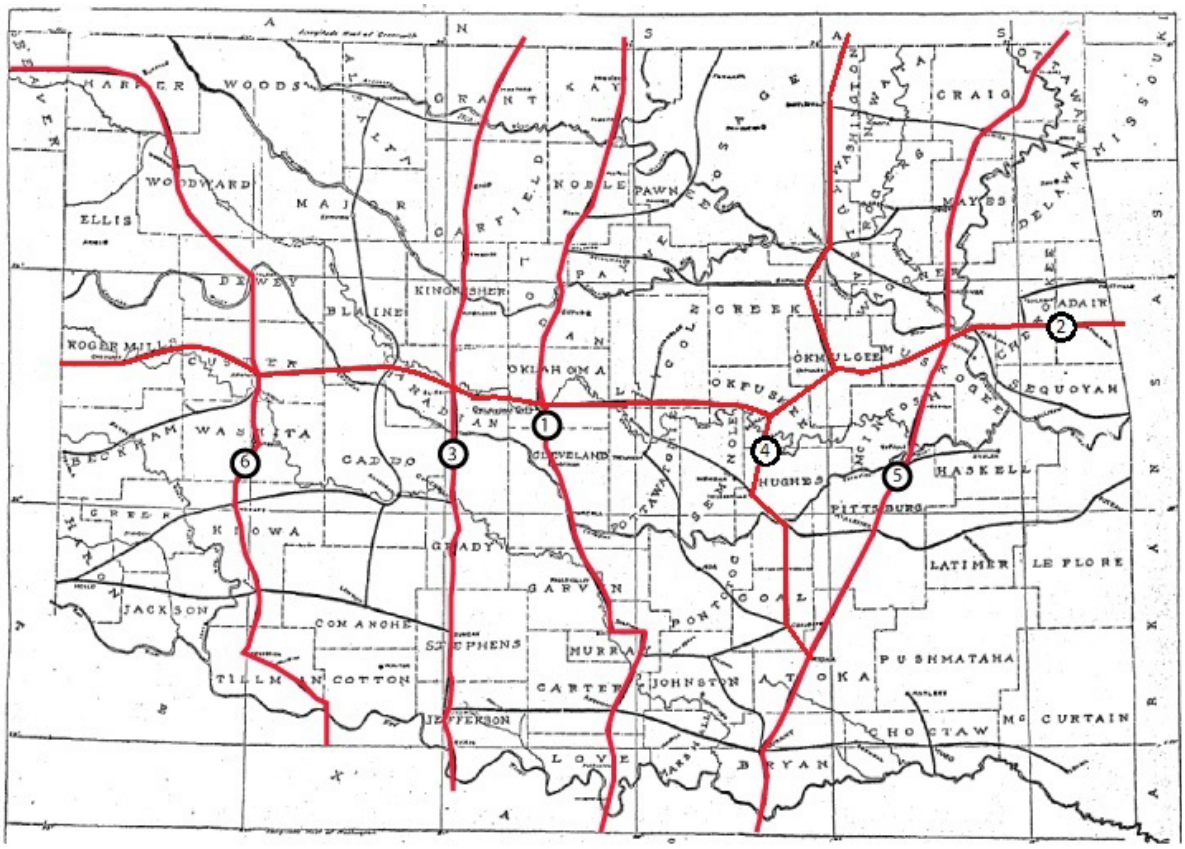

Figure 1. 1913 map of proposed state highways, shown in red.[12]

Support for Oklahoma road and bridge funding received a boost in 1915, when the legislature created a central fund fueled by license fees to pay for road improvement projects, and allocated a portion of property tax to finance road construction.[13] With passage of the Federal Aid Road Act of 1916, federal and state efforts began to interact and provide the beginnings of a coordinated highway program that extended from the national level to the OHD and continued through to counties. The federal program required a 50/50 funding match from the state and project approval from the federal Bureau of Public Roads (BPR). The first federal aid project in the state was the construction of the Newcastle Bridge (no

[11] Everett, "Highways"; Oklahoma State Highway Commission, *Biennial Report of Department of Highways, State of Oklahoma* (Oklahoma City, Okla.: Oklahoma State Highway Department, January 1, 1913), 50.

[12] Oklahoma State Highway Commission, *Biennial Report of Department of Highways, State of Oklahoma*, 1.

[13] Bob Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma* (United States of America: Oklahoma Heritage Association, 2011), 11.

longer extant) carrying State Highway (SH) 9 over the South Canadian River; although construction began in 1917, a series of problems delayed completion until 1923. Nearly one-third of the first 20 federal aid projects in Oklahoma were bridge projects. The State of Oklahoma also developed a state-aid program to assist counties with road funding with a comparable dollar match. Although the new efforts were soon disrupted by World War I, road and bridge work moved ahead in Oklahoma.[14]

The Federal Highway Act of 1921 provided additional support by authorizing each state to designate seven percent of its total highway mileage on which all federal dollars would be spent. The resulting Federal Aid Highway System consisted of a network of primary roads connecting major population centers of the country, and a network of secondary roads connecting state population centers. Minimum standards were established for new construction receiving funding, and construction, contracts, and plans were placed under the direct supervision of the highway departments in the states. Control of engineering design and bridge construction was gradually removed from the counties and private bridge-building companies, and standardized under the supervision of professional engineers at the state level.[15] State engineers, in turn, were increasingly accountable to engineers at the federal level who were establishing national design standards. OHD engineers designed mainly steel or concrete bridges, and standardized plans were available for superstructures while substructures were customized according to each site.[16] Concrete use in bridge construction was not as extensive in Oklahoma as in neighboring states, due in part to material costs and periodic skilled labor shortages. Even so, several concrete arch bridges were constructed in the 1920s, including the open spandrel concrete arch Memorial Bridge (NBI No. 01352; Structure No. 74E0188N3950005), constructed in 1923 as part of Oklahoma Federal Aid Project No. 101 in Washington County.[17]

Passage of the federal aid legislation in 1916 and 1921 greatly expanded the OHD's work. As the state assumed a larger role over the counties, Oklahoma, like many other states, experienced political wrangling and infighting worsened by poor legislation, inadequate funding, and, at times, incompetence. Further handicapping progress on the state highway system, state and federal grants were awarded only to wealthy counties that could make the 50/50 match as opposed to poorer counties where the funds were most needed. In addition, the lack of a consistent centralized maintenance program often negated newly funded road improvements.[18] In 1924 the Oklahoma legislature reorganized the OHD into a three-member highway commission, thereafter known as the Oklahoma Highway Commission (OHC), and authorized a gas tax to fund road and bridge projects. The newly strengthened state program could

[14] Mead & Hunt, Inc., *Oklahoma Depression-Era Bridges and Road-Related Resources, 1933-1945: Historic Context and National Register of Historic Places Evaluation*, Section 2, 3; Mead & Hunt, Inc., *Bridging the Mighty Red, Red River Crossings Between Oklahoma and Texas*, 162–63.

[15] Mead & Hunt, Inc., *Oklahoma Depression-Era Road-Related Resources and Bridges, 1933-1945*, Section 2, 4.

[16] Oklahoma State Highway Commission, *Annual Report of the State Highway Commission, For The Years 1919 to 1924 Inclusive* (Oklahoma City, Okla.: Oklahoma State Highway Department, January 1, 1925), 17–18.

[17] Joseph King, "Spans of Time, The Shifting Direction of Bridge Building," *Oklahoma Department of Transportation*, 1993, http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/shiftingdir.htm.

[18] Joseph King, "Spans of Time, The State Road System and Federal Aid," *Oklahoma Department of Transportation*, 1993, http://www.okladot.state.ok.us/hqdiv/p-r-div/spansoftime/roadsystem.htm; William Paul Corbett, "Oklahoma Highways: Indian Trails to Urban Expressways" (Oklahoma State University, 1982), 213–14.

interact with the federal program to provide a rational system of funding and engineering review from the federal to the state to the local level, and the reorganized highway commission reduced politicization of the program.[19]

(4) U.S. Highways in Oklahoma, 1926-1956

By 1925 Oklahoma highways consisted of a confusing network of named highways, many of which were cosigned with numbered State Highways laid out by the OHD. In 1926 the American Association of State Highway Officials (AASHO, later the American Association of State Highway and Transportation Officials [AASHTO]), along with a joint board of BPR and state highway officials (Joint Board), developed a national highway numbering system for a network of interstate roads, known as U.S. Highways, to provide uniform routing and signage across the nation.[20] Cyrus Avery of Tulsa, a Good Roads leader and acting commissioner of the OHC, served on the federal Joint Board when the numbered U.S. routes were determined and was instrumental in the evolution of the Ozark Trail Highway to U.S. Highway 66 (Route 66).[21] In all, nine interstate highways were designated in Oklahoma that largely followed State Highway and former named highway routes (see Table 1 and Figure 2).[22]

Table 1. Initial U.S. Highways in Oklahoma

U.S. Highway Designation	Former Named Highway	State Highway (SH)
64		SH 1
62, 66	Ozark Trail	SH 7 and SH 3
70	Lee Bankhead Highway	SH 5
73	Jefferson Highway	SH 6
75		Portions of SH 12
77	Kansas-Oklahoma-Texas Highway	SH 4
81	Meridian Highway	SH 2
266		SH 9
271	Choctaw Trail	Portions of SH 3 and 23

[19] Mead & Hunt, Inc., *Oklahoma Depression-Era Bridges and Road-Related Resources, 1933-1945: Historic Context and National Register of Historic Places Evaluation*, Section 2, 4.

[20] Weingroff, "From Names to Numbers: The Origins of the U.S. Numbered Highway System."

[21] Dianna Everett, "Avery, Cyrus Stevens (1871-1963," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=AV003.

[22] Everett, "Highways."

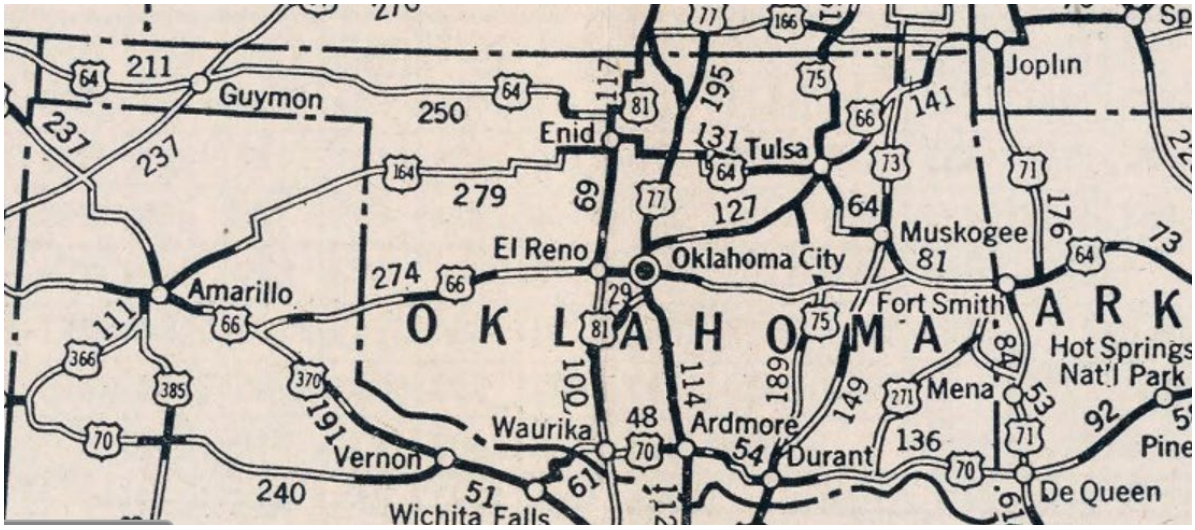

Figure 2. 1931 map of U.S. Highways in Oklahoma.[23]

In 1927 less than 300 miles of roadway in Oklahoma were paved. As designated, U.S. Highways in the state often zig-zagged through the countryside following existing roads and section lines, and surfacing ranged from unimproved to paved segments, largely in or near urban areas. The OHC focused on surfacing the state's primary transportation network, as well as developing straighter and more direct alignments over time, which may have required new bridges. Evolving design standards for these new State Highway and U.S. Highway routes may have led to wider bridges that were less prone to flooding and had greater load capacity. For example, the 1930 Pratt through truss bridge (NBI No. 03226; Structure No. 72N4035E0435006) carrying US 169 over Horsepen Creek in Tulsa County reflects two important changes in Oklahoma bridge design: an increased roadway from 20 to 22 feet, and design loading increased 20 percent.[24] In addition, the OHC methodically eliminated Oklahoma's remaining private toll bridges through transfer to state ownership or replacement with new state-owned bridges. The free bridge carrying US 69/75 over the Red River at Colbert completed in 1931 (no longer extant) is an example of how new U.S. Highway bridges provided free crossings for the expanding population of automobile owners.[25]

U.S. Highways and bridges played an important role in shaping U.S. and Oklahoma's commerce and cultural development from 1926 to 1948. This generally north-south and east-west network brought traffic into the main streets of communities across America, leading to commercial growth and touristic development. Route 66 stood out initially for its diagonal route, connecting Chicago to Los Angeles, and

[23] "Paving and Road Distances on the United States Highways" (Denver: Clason Map Company, 1931), David Rumsey Historical Map Collection, https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~314001~90082766:Paving-and-road-distances-on-the-Un?sort=pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no&qvq=q:named%20highways;sort:pub_list_no_initialsort%2Cpub_date%2Cpub_list_no%2Cseries_no;lc:RUMSEY~8~1&mi=4&trs=54.

[24] Oklahoma State Highway Commission, *Report of the State Highway Commission. for the Years 1929 to 1930 Inclusive* (Oklahoma City, Okla.: Oklahoma State Highway Commission, 1930), 57.

[25] Corbett, "Oklahoma Highways: Indian Trails to Urban Expressways," 233–40; Clyde Hall, *Selected Short Papers on Bridges over Red River Connecting Grayson County, Texas, and Southern Oklahoma*, March 1996, 21.

eventually became the most celebrated highway in Oklahoma.[26] Like other U.S. Highways, some bridges along Route 66 were pre-existing and others, such as the Bridgeport Bridge (NBI No. 04085; Structure No.0902 0000 X) north of Hinton over the South Canadian River, were constructed as improvements to the route over time. Spanning a total 3,994 feet, the 38-span Camelback pony truss bridge was the longest bridge in the entire southwestern United States when it was completed in 1933.[27] Bridges along Route 66 and other U.S. Highways were important for their role within the U.S. Highway system that served as the commercial and tourist life-blood in Oklahoma, until it was replaced by limited-access freeways between 1956 and 1970.[28]

(5) Grade-separation bridges in Oklahoma, 1900-1946

Eliminating dangerous at-grade railroad crossings became a major focus of local, state, and federal highway personnel and the public during the first half of the twentieth century. As in many states, at-grade railroad crossings in Oklahoma generally consisted of wooden crossbuck signs, without gates, bells, lights, or other devices to alert motorists that a train was approaching. When relocation was not an option, grade-separation structures offered a safe alternative but were often considered too costly. Bridges such as the 1907 closed spandrel concrete arch Rodeo Road Bridge (NBI No. 00075; Structure No. 07E2110N3710001) over the Union Pacific Railroad in Durant reflect early local efforts to deal with this public safety issue. Early federal road building legislation, such as the Post Office Department Appropriations Bill of 1912 and the Federal Aid Road Act of 1916, included limited provisions for safety improvements at railroad crossings; however, the issue was largely managed at the state level through a process of negotiation with the railroad companies through the 1920s. The percentage of railroad share varied from state to state and was generally 50 percent but could be higher. Urban grade-separation projects could be funded through city ordinances or city/state/railroad partnerships.[29] One example of a city/railroad partnership is the Court Street Katy Railroad Overpass (NBI No. 00042; Structure No. 51E0871N4290000) in Muskogee, which was constructed from recycled spans in 1905 as a joint venture of the Missouri, Kansas, and Texas Railroad and the City of Muskogee. In rural areas projects were dealt with by the state and the railroads, and by 1925 the OHC constructed approximately 50 grade-separation bridges.[30] Some state bridges spanned multiple obstacles, such as the 1927 Warren deck truss bridge (NBI No. 01940; Structure No. 67N3632E1270000) carrying US 270 over Wewoka Creek and the Chicago, Rock Island and Pacific Railroad (now Union Pacific Railroad) in Seminole County.

Under the constraints of the Depression years, the OHC created a grade-separation program that prioritized locations for different solutions, ranging from new bridges to relatively inexpensive flashing

[26] For evaluation of roadside resources along Route 66 in Oklahoma, please see the *Route 66: Survey of Roadbed and Integral Structures* report.

[27] Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 60–61.

[28] Michael Cassity, "Route 66," *The Encyclopedia of Oklahoma History and Culture*, 66, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=RO037.

[29] Federal Highway Administration, "FHWA Handbook, Railroad-Highway Grade Crossing Handbook" revised second edition (August 2007), http://safety.fhwa.dot.gov/xings/com_roaduser/07010/sec01.htm; *Proceedings, American Road Builders Association Meeting, Report of Committee on Highway Intersections and Grade-Crossing Elimination* (New Orleans, La.: American Road Builders Association, January 11, 1937), 77.

[30] Oklahoma State Highway Commission, *Report of the State Highway Commission for the Years 1925 to 1926 Inclusive* (Oklahoma City, Okla.: Oklahoma State Highway Commission, 1927), 124.

signals, with bridges being only part of the larger and more comprehensive program. The OHC prioritization policy in the 1930s was to identify locations with a record of "an excessive number of accidents or where future developments in the highway system or traffic increase appear to warrant the expenditure involved." Early in the program locations were selected because of safety needs, but also to meet work-relief needs. Several federal New Deal programs provided funds earmarked for grade-separation projects, and while Oklahoma completed 108 structures between 1933 and 1945, very few if any are truss or arch bridge types.[31]

After World War II at-grade crossing elimination efforts continued, although initially at reduced levels. In the 1944-1946 biennium the OHC constructed two overpasses and resumed work on several projects that were suspended during the war.[32] Efforts were aided by the Federal-Aid Highway Act of 1944, which made the first provisions for a national Interstate Highway System, including bearing the entire cost of highway grade-crossing hazard elimination with federal funds. In 1956 the newly established National System of Interstate and Defense Highways included design criteria for Interstate Highways requiring elimination of railroad crossings for all through lanes.[33]

(6) Military and strategic network in Oklahoma, 1900-1955

Throughout the twentieth century the U.S. military influenced the construction and development of bridges and roads in Oklahoma. Even before statehood, military roads connected frontier forts, such as Fort Sill at present-day Lawton, to other forts, like Fort Arbuckle to the east, and points outside Indian Territory. Early military roads and trails were often precursors of auto trails and highways. For example, a portion of the Ozark Trail, later SH 7, and Route 66 followed the same general corridor as the western portion of a military road extending from Fort Sill to Fort Smith, Arkansas. Established during the Indian Wars in 1869, Fort Sill hosted the School of Fire (Artillery) in the 1910s and trained more than 50,000 soldiers at Fort Sill during World War I.[34] Difficulties in transporting soldiers and equipment to and from military bases illustrated the generally poor state of U.S. roads and fueled support of an interconnected network of hard-surfaced roads for national defense purposes. After World War I, the OHD gained more than 400 military-surplus trucks and equipment for road improvements.[35]

In the mid-1930s military training facilities and defense industries were established in Oklahoma, and existing bases were revived and expanded. During World War II, the state had approximately 27 Army training facilities including Will Rogers Field and Tinker Field, located southwest and east of Oklahoma City, respectively, and Fort Gruber, located east of Muskogee. Existing bases like Fort Sill expanded, and new industries such as Douglas Aircraft established plants in Oklahoma City and Tulsa to produce planes

[31] Oklahoma State Highway Commission, *Biennial Report of Department of Highways, State of Oklahoma*, for the years 1933 through 1945; Oklahoma State Highway Commission, *Report of the State Highway Commission. for the Years 1929 to 1930 Inclusive*, 55.

[32] Oklahoma State Highway Commission, *Report of the Oklahoma State Highway Commission for the Fiscal Years 1944-45 and 1945-46* (Oklahoma City, Okla.: Oklahoma State Highway Commission, 1946), 82–83.

[33] Federal Highway Administration, "FHWA Handbook, Railroad-Highway Grade Crossing Handbook," 6–7.

[34] Lance Janda, "Fort Sill," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=FO038.

[35] Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 22.

and munitions for the war effort. As the U.S. shifted its economy to prepare for entry into World War II, New Deal programs instrumental in Oklahoma's road and bridge building progress ended.[36]

In 1939 the Public Roads Administration and the War Department designated a special system of interstate and interregional highways as a strategic network to move troops and supplies. Within the network, routes designated of primary importance provided direct connections between cities and military facilities or vital defense industries. Highways within the network were required to meet minimum design requirements of roadway surface and shoulder widths, and bridge loadings to handle heavy and fast-moving equipment. The primary strategic highway routes in Oklahoma included U.S. Routes 66 and 77, plus U.S. Routes 266 and 64 east of Oklahoma City. Also in 1939, the Federal-Aid National Highway Act made federal funding available for highway work deemed essential to national defense without the need for state matching funds, and the Defense Act of 1941 made additional "emergency" funds available for road construction. For example, historic flooding damaged the SH 33 bridge (no longer extant) over the Neosho River between Locust Grove and Choteau in 1943. From Choteau, U.S.69/SH 2 connected to Muscogee carrying heavy defense-related traffic. Due to its extreme importance to the war effort, the War Department approved the use of new steel to rebuild the bridge.[37]

In the post-World War II years, military and strategic influence on Oklahoma's transportation system continued. Many Oklahoma military installations closed but several remained active through the Cold War.[38] Buoyed with renewed state revenues and federal aid, the OHC began the task of repairing worn and neglected roads and bridges across the state. Federal legislation supported creation of a national limited-access transportation network that was conceived and designed for a dual purpose: to move troops and equipment in times of war, and to facilitate freight and passenger traffic to meet the demands of the growing population. The Federal Aid Highway Act of 1944 established a system of Interstate Highways, which was met with Department of Defense approval in 1947. Legislation enabling funding and construction of the Dwight D. Eisenhower National System of Interstate and Defense Highways, known as the Interstate Highway System, was authorized with the Federal Aid Highway Act of 1956.[39]

(7) New connections and regional expansion, 1900-1955

Early Oklahoma bridges provided important new connections within a developing transportation network, and in some cases opened remote areas to growth. As Oklahoma's population and economy grew in the early twentieth century, bridges gave farmers and ranchers better access to vital railroad lines and allowed for reliable travel to county seats and market centers. Between 1900 and 1907 the population of

[36] Brad Agnew, "World War II.," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=WO025; Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 77–78.

[37] Agnew, "World War II."; Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 80.

[38] Some Oklahoma military bases subsequently closed from the 1980s-present day. Active Bases in OK: Altus Air Force Base, Altus, OK; Tinker Air Force Base, OKC, OK; Vance Air Force Base, Enid, OK; Fort Sill Army Base, Lawton, OK; McAlester Ammunition Army Base, McAlester, OK

[39] "Highway History: Interstate Highway System - The Myths," *U.S. Department of Transportation Federal Highway Administration*, accessed February 5, 2019, https://www.fhwa.dot.gov/interstate/interstatemyths.cfm; Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 92.

Oklahoma and Indian Territories increased 78 percent, with a total population of almost 1.5 million.[40] In turn, the increased numbers of farmers, ranchers, and rural town dwellers drove the call for better roads and bridges in Oklahoma in order to move crops to market and facilitate business between towns.[41] Oklahoma's topography and natural features, such as wide rivers and mountainous terrain, sometimes presented barriers to trade and expansion. New bridges often helped overcome these barriers as transportation networks were improved to provide safer and more efficient connections throughout the state. As a result, the region's trade networks and populations in previously remote areas of the state expanded.

In some portions of the state, wide rivers such as the Arkansas, Canadian, and Red Rivers presented significant transportation challenges. The mighty Red River defines much of Oklahoma's southern border with Texas, and its crossings provided important interstate connections that facilitated trade and growth of communities along the river. As with many rivers in the state, ferries provided the first crossings over the Red River and bridges represented a significant upgrade in the transportation network. Further, toll bridges dominated the Red River until they were gradually purchased or replaced by 1940.[42] For example, the SH 79 at Red River bridge in Jefferson County (no longer extant), constructed in 1939, provided a free link between two major oil-producing and agricultural areas in northern Texas and central Oklahoma. The 21-span, camelback, pony truss bridge opened both areas to increased development and provided a new connection between farms and industrial areas and markets.[43]

Prior to statehood, Oklahoma Territory contained more roads and bridges than Indian Territory. Thus, more infrastructure was needed in eastern Oklahoma as counties organized and the OHD began transportation planning. River embankments in the eastern part of the state, with soft edges or jagged boulders, required more effort to build bridges compared with the underlying rock of western streams. In addition to the challenge of rivers, the mountainous terrain in the southeast portion of the state presented other logistical challenges.[44] Bridges such as the 1919 Parker through truss (NBI No. 00725; Structure No. 32N3804E1400007) carrying Walnut Street/N3894 over the South Canadian River in Hughes county at Calvin which was celebrated for linking several counties previously disconnected by the river.

In the 1920s and 1930s the OHC made progress on bridge construction in southeast Oklahoma to connect previously isolated areas with the rest of the state. However, even in the mid-twentieth century the Kiamichi Mountains in the southeast remained isolated. The Chocktaw Nation built the Indian Highway, a road between Talihina and Honobia, to provide more direct and reliable connections.

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[40] Bureau of the Census, *Population of Oklahoma and Indian Territory 1907* (Washington, D.C.: Department of Commerce, U.S. Bureau of Census, 1907), 7, https://www2.census.gov/prod2/decennial/documents/1907pop_OK-IndianTerritory.pdf.

[41] Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 4.

[42] Mead & Hunt, Inc., *Bridging the Mighty Red, Red River Crossings Between Oklahoma and Texas*, 73.

[43] This bridge was listed in the NRHP under *Criterion A* for significance in the area of Transportation (specifically relating to its ties to regional economic development) and under *Criterion C* for significance in the area of Engineering. The bridge was listed in the NRHP on December 20, 1996.

[44] Burke, *ODOT 100, Celebrating the First 100 Years of Transportation in Oklahoma*, 163.

Constructed in 1953, the camelback pony truss spanning the Little River in LeFlore County (NBI No. 13111; Structure No. 40N4550E1710004) provides access to the remote interior valleys of the Kiamichi Mountains.

(8) Oil Production, 1905-1931

The oil industry in Oklahoma was first drilled for commercial purposes in 1896, prior to statehood.[45] Located near Bartlesville in what is now Washington County, the Nellie Johnstone No. 1 was the first commercially profitable well, and eventually became one of the largest producing wells in the state.[46] The excitement of this new industry encouraged prospectors and landholders to analyze large swaths of land for potential purchase and well development, with investors from all over the country funding the efforts in hopes of substantial returns.[47] The economic prospects of the petroleum industry encouraged the federal government to grant statehood to Oklahoma just eleven years later, in 1907.[48] Oil production increased to an annual peak in 1927 at 278 million barrels, with fluctuations since that time due to variable market pressures or depletions of reserves.[49]

During the first quarter of the twentieth century, oil drilling was responsible for substantial development in various oil-rich areas of Oklahoma, even if some wells were short-lived. During this "boom" period, downtowns grew and the state saw a substantial influx of people working at the wells and those seeking to strike it rich.[50] While many individuals lived at oil company camps through the 1940s, the 1920s saw an increase in automobile ownership that allowed for some of the labor force to commute to the wells from nearby towns.[51] Where new fields were established or existing ones prospered, nearby boomtowns followed. The major oil fields during these early decades included the Burbank Oil Field, the Cushing Oil Field, the Garber Oil Field, the Glenn Pool Oil Field, the Healdton Oil Field, the Oklahoma City Oil Field, and the Seminole Oil Field.[52]

Infrastructural changes were critical to solving the logistical challenges of this labor influx, with traffic congestion cause by oil field laborers and those participating in the secondary industries that followed. Local and state governments established new highways and ordered replacement of existing bridges with wider crossings. One example is a 1929 bridge (NBI No. 02360; Structure No. 67N3560E1310007) near Bowlegs, constructed in reaction to the sudden traffic congestion in the area around the Seminole Oil

[45] Dan Boyd, "Oil and Gas Production," in *Historical Atlas of Oklahoma*, Fourth ed. (Norman, Okla.: University of Oklahoma Press, 2006), 28.

[46] Boyd, "Oil and Gas Production," 28.

[47] Bobby D. Weaver, "Glenn Pool Field," *The Encyclopedia of Oklahoma History and Culture*, n.d., https://www.okhistory.org/publications/enc/entry.php?entry=GL007.

[48] Boyd, "Oil and Gas Production," 28.

[49] Boyd, "Oil and Gas Production," 28.

[50] Weaver, "Glenn Pool Field"; Bobby D. Weaver, "Oil-Field Culture," *The Encyclopedia of Oklahoma History and Culture*, n.d., https://www.okhistory.org/publications/enc/entry.php?entry=OI003.

[51] Weaver, "Oil-Field Culture."

[52] Boyd, "Oil and Gas Production," 29.

Fields, which had experienced major oil strikes one year earlier.[53] Bridge construction that exhibits this direct association with the development of the oil industry, such as new bridges needed to accommodate the influx of automobile traffic, may possess significance under the theme of oil production.

B. Community Planning and Development

The area of significance of Community Planning and Development relates to trends in the efforts of Oklahoma's municipal leaders to shape infrastructure and architectural development across the state. An individual bridge is not likely to derive significance individually simply for being part of a planned improvement within a network of interconnected resources. However; it may have significance as an important crossing that is distinguished within the larger transportation system for reasons that are associated with an important event, trend, or movement – such as the early twentieth century City Beautiful or Modernism.

(1) Bridges related to the City Beautiful Movement or urban planning initiatives in Oklahoma, 1900-1960

Bridges may possess significance under the theme of community planning and development for their association with city planning movements and initiatives such as the City Beautiful Movement in the early-to-mid-twentieth century and suburban development in the mid-twentieth century.

A comprehensive approach to city planning came out of the City Beautiful Movement that began in the late nineteenth century. This movement sought to amend social issues in the nation's cities through beautification, which included improvements to architecture, utility and transportation systems, and landscape design to inspire civic pride. For example, the 1911 construction of a closed spandrel concrete arch bridge (NBI No. 14357;Structure No. 55D3095E1020003) carrying Grand Boulevard over Deep Fork Creek in Oklahoma City was part of an early park system expansion and beautification initiative.[54] Tulsa city leaders also embraced the City Beautiful aesthetic as reflected in the 1917 concrete open-spandrel arch 11th Street Bridge (extant but no longer in use), which originally featured a classical balustrade and Victorian-era lighting.[55] By 1923 the expanding city had a newly created commission charged with developing a city plan for "directing growth that Tulsa may become a city beautiful."[56] Many other Oklahoma communities, including Chickasha, Bristow, Edmond, Enid, Norman and Seminole, adopted City Beautiful ideals as they planned infrastructure improvements. Although the movement peaked nationally by 1910, it remained popular in Oklahoma through 1940.[57] Early research indicates that bridges over Town Branch Creek in Tahlequah may represent late examples of City Beautiful Movement

[53] "Highway Outlet Furnished Thru R. R. Overpass," *Seminole County News*, June 9, 1927.

[54] Joseph King, "Spans of Time," *Oklahoma Department of Transportation*, 1993, Stone and Concrete Bridges, http://www.odot.org/hqdiv/p-r-div/spansoftime/newera.htm.

[55] National Park Service, "11th Street Arkansas River Bridge, Tulsa, Oklahoma," *Route 66: Discover Our Shared Heritage Travel Itinerary*, n.d., https://www.nps.gov/nr/travel/route66/11th_street_arkansas_river_bridge_tulsa.html.

[56] *Manufacturer's Record, Exponent of America*, 18th–26th ed., vol. 83 (Baltimore, MD: Manufacturers Record Publishing Co, 1923), 80.

[57] Cynthia Savage, "City Beautiful Movement," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=CI007.

influences. Both bridges (NBI No. 09765; Structure No. 11E0764N4510003 and NBI No. 09766; Structure No. 11E0761N4510004) were constructed in 1941 in a civic park and feature closed spandrel concrete designs with decorative railings.[58]

Continued population growth within cities and expansion of suburban areas also influenced roadway and bridge construction. Some areas of Oklahoma saw tremendous growth just prior to and following World War II, with new industry and housing needs driving infrastructure development. Bridge construction related to broad urban and regional planning initiatives, such as bridges opening new areas for suburban development, may also possess significance under the theme of community planning and development.

(2) Historically all-Black Towns

Bridges may have played an important role in the establishment and development of Oklahoma's all-Black towns. During settlement of Oklahoma and Indian Territories following the Civil War, African Americans often acquired land together to foster economic opportunity and personal protection. All-Black towns generally formed to support agricultural activity, to provide a market for farmers to bring crops, and were often located along a rail line to provide access to outside markets. These towns were predominantly or completely African American incorporated communities with autonomous black city governments, with white or Native American residents in the minority. Some were only in existence for a short duration while others grew and developed a full range of services, including churches, newspapers, and schools.[59]

Oklahoma gained a reputation as a place where African Americans could exercise the right of self-determination, and the Land Run of 1889 spurred migration for those seeking opportunities and refuge from oppression. While some settlers hoped for an all-black state, others worked for a better future through promotion of all-black towns. Land developer, lawyer and immigration promoter, E.P. McCabe helped to establish Langston in 1890, which became the site of Langston University, the state's only historically black university.[60]

By 1920 there were over fifty established all-black towns and communities in Oklahoma. These towns offered escape from Jim Crow discrimination and many prospered in the early twentieth century; however, the Great Depression took a toll on most of them, forcing residents to leave Oklahoma in search of work.[61] Today only thirteen historically all-Black towns remain.[62]

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[58] "Town Branch Creek Bridge," *Bridgehunter.Com*, accessed November 15, 2019, http://bridgehunter.com/ok/cherokee/97660000000000; "Town Branch Creek Bridge," *Bridgehunter.Com*, accessed November 15, 2019, http://bridgehunter.com/ok/cherokee/97660000000000.

[59] Larry O'Dell, "All-Black Towns," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=AL009; "Oklahoma's All-Black Towns," *The Black Towns Project*, accessed February 5, 2019, http://allblacktowns.blogspot.com/.

[60] O'Dell, "All-Black Towns"; Martin Dann, "From Sodom to the Promised Land: E.P. McCabe and the Movement for Oklahoma Colonization," *Kansas Historical Quarterlies* XL, no. 3 (Autumn 1974): 370–78.

[61] O'Dell, "All-Black Towns."

[62] "Gallery: The 13 Historic All-Black Towns That Remain in Oklahoma," *Tulsa World*, February 28, 2020, https://www.tulsaworld.com/news/state-and-regional/gallery-the-historic-all-black-towns-that-remain-in-oklahoma/collection_7d1d7b5d-662c-54a0-a072-bc560fdf6756.html#2.

C. Conservation

The area of significance of Conservation is related to large-scale transportation improvements to facilitate water development undertakings and reclamation efforts to impound water for irrigation, hydroelectric power, and recreation. A bridge that directly facilitated the construction of a water development project, or one constructed as a result of impoundment, may have significance under this theme.

(1) Dam- and impoundment-related structures in Oklahoma, 1900-1980

In the early twentieth century cycles of flooding and drought wreaked havoc on Oklahoma's natural resources, resulting in serious economic impacts. Even before statehood, leaders recognized the benefits of controlling streams and rivers through dam construction to prevent flooding, irrigate crops and produce hydroelectricity. Most lakes in the state are man-made, and the oldest—Talawanda Lake No. 1, constructed in 1902—initially provided water for the city of McAlester. At the time municipalities, other agencies, farmers, and other landowners built numerous small lakes and ponds; however, large dam construction was largely beyond the financial reach of these groups.[63] Federal assistance came in 1902, when Congress created the U.S. Reclamation Service (later renamed Bureau of Reclamation, USBR) to "construct and maintain irrigation works for the storage, diversion and development of waters" for the irrigation of arid lands in the western states and territories (including Oklahoma). In 1909 the Rivers and Harbors Act extended these responsibilities to include flood control, power development, irrigation, and drainage, as well as regulating wharves and terminals.[64] Large reclamation projects often included construction of culverts and bridges to access the site, and some designs incorporated a bridge into the dam structure along the crest. In other cases, a bridge became associated with a subsequent impoundment.

Oklahoma's interest in irrigation surged in the early 1930s, when severe drought reduced areas of the state to a dust bowl, which compounded the existing economic difficulties. Depression-era federal programs created in-part to address water and soil conservation include the 1933 Civilian Conservation Corps (CCC) and the 1935 Works Progress Administration (later became the Works Projects Administration, WPA). The CCC put young men to work conserving state and federal lands, and including a focus on soil conservation efforts and projects included terracing, grading, planting, and dam construction. [65] Likewise, the WPA put thousands of Oklahomans to work constructing, reconstructing, or improving roads, bridges, culverts and dams, and also provided financial backing for large water reclamation projects. In 1937 WPA funds were authorized to construct a hydroelectric dam on the Neosho (also called Grand) River. Completed in 1941, the Pensacola Dam is the largest hydroelectric dam in the state, and the longest multiple-arch dam in the country, and also features a two-lane bridge (NBI No.

[63] Kenneth Johnson, "Lakes and Reservoirs," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entry=LA010.

[64] David P. Billington, Donald C. Jackson, and Martin V. Melosi, "The History of Large Federal Dams: Planning, Design, and Construction in the Era of Big Dams" (U.S. Department of the Interior, Bureau of Reclamation, 2005), 29, 34.

[65] The National Emergency Council, *Report of the Proceedings of the Statewide Coordination Meeting of Federal Agencies Operating in Oklahoma* (Oklahoma City, Okla.: National Emergency Council, April 22, 1936), 14-H; Keith L. Bryant and John Braeman, *Oklahoma and the New Deal*, vol. 2 (Columbus, Ohio: Ohio University Press, 1975), 173–76; Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (New York: Oxford University Press, 1979), 133–34.

27569; Structure No. 4916 1450 X) over the spillway.[66] Reallocation of federal funds to the war effort led to termination of depression-era programs in 1942.[67]

Oklahoma reclamation projects spearheaded by the USBR and the U.S. Army Corps of Engineers (USACE) slowed during World War II; however, the nation's golden age of large dam building occurred during the late 1940s and 1950s based on the numbers of structures completed. Founded in 1939, the USACE Tulsa District provided engineering support to military installations and civil projects in Oklahoma and areas of neighboring Kansas, Arkansas, and Texas. Initial work included design and construction work on authorized lakes (Canton, Optima, and Hulah); completing studies leading to authorization of Mannford (Keystone), Oologah, Tenkiller Ferry, and Wister Lakes; and continued cooperation on work for Grand Lake, which was under construction.[68] The USACE and USBR completed several impoundment projects in Oklahoma between the mid-1940s and 1980, and bridges may have been constructed as part of the larger project, or as a result of the impoundment, which necessitated new connections. Major projects include the Denison Dam on the Red River completed in 1944 by the USACE, which resulted in the creation of Lake Texoma. The largest lake in the USACE Tulsa District, Texoma is a major regional recreation draw and is critical in flood control and hydroelectrical power production. [69] As a result of the dam backing up the Washita River (a tributary of the Red River), the 4,942-foot Roosevelt Bridge (NBI No. 10965; Structure No. 0706 0000 X) carrying US 70 over the Washita River was constructed in 1948. The bridge consists of a 250-foot Warren through truss and 86 steel girder and stringer approach spans.

[66] Glen Roberson, "Grand River Dam Authority," *The Encyclopedia of Oklahoma History and Culture*, accessed February 5, 2019, https://www.okhistory.org/publications/enc/entry.php?entryname=GRAND%20RIVER%20DAM%20AUTHORITY.

[67] Perry H. Merrill, "Roosevelt's Forest Army: A History of the Civilian Conservation Corps, 1933-1942" (Montpelier, Vermont, 1981), 164.

[68] "History of the Tulsa District," *US Army Corps of Engineers, Tulsa District*, accessed February 5, 2019, https://www.swt.usace.army.mil/About/History/.

[69] "History of the Tulsa District."

3. Oklahoma Metal Truss and Masonry and Concrete Arch Types and Subtypes

This study encompasses metal truss and masonry and concrete arch bridge types. The bridge type and subtype descriptions provided below are adapted from the 1993 *Spans of Time: Oklahoma Historic Highway Bridges* and the 2007 *Oklahoma Historic Bridge Survey Phase 1* reevaluation of *Spans of Time*, unless otherwise noted. Additional material on the character-defining features of the bridge types and subtypes can be found in Table 3, located at the end of this section. Table 3 was informed by research and evaluation of information gathered during fieldwork.

A. Pony truss

In a pony truss bridge, the travel surface passes through trusses that are not connected above the deck at the top chord. Pony trusses are designed to carry relatively light loads and feature generally shorter span lengths.

(1) King post pony truss

One of the earliest and simplest bridge types, the king post pony truss is formed by a simple triangular shape, with a single vertical member connecting the bottom chord to the inclined posts that form a top chord. Easily fashioned and sufficiently sturdy at small crossings, the type remained an option as a steel bridge for small crossings into the twentieth century.

(2) Pratt pony truss

Pratt pony trusses have vertical beams that are heavier and carry compressive forces, and diagonal beams that are lighter and carry tensile forces. The diagonal beams are inclined outward from the center, pointing toward the ends of the truss, and most often one or more diagonals inclined in the opposite direction will form an “X” pattern in the center of the truss. In lengths between 50 and 100 feet, the Pratt pony truss enjoyed wide acceptance as a reliable and uncomplicated span in the years preceding World War I. The type could also be found in the inventory of all national and most regional builders, thus making it readily available and promptly shipped to construction sites. Pratt ponies represent the work of many significant builders in the state, including the prominent Oklahoma City firm the Boardman Company, and a few strictly regional companies whose structures are scarce.

(3) Pratt half-hip pony truss

Pratt half-hip pony trusses are Pratt pony trusses with a modification. Unlike a standard Pratt, a half-hip Pratt has no vertical at the juncture of the top chord and the inclined end post, and the end post is made more perpendicular. In other words, it has no hip vertical. This configuration simplifies the structure and requires less metal, reducing the cost without diminishing strength or longevity. This subtype was a popular choice with Oklahoma counties. Half-hip Pratts came from the shops of truss companies well represented in the state.

(4) Pratt (small three-panel) pony truss

One type that appeared in Oklahoma in shorter span lengths (generally less than 50 feet) was a parallel chord Pratt pony with only two verticals dividing it into three panels. This configuration gives the

appearance of a lengthened version of the king post pony truss. As a Pratt, however, it has diagonal tension members. Strictly utilitarian and lightly made for cost savings, this subtype was purchased by Oklahoma counties prior to World War I.

(5) Parker pony truss

Parker pony trusses are another modification of the Pratt design. Parker pony trusses have a polygonal, or curved, top chord instead of the flat top chord of a standard Pratt. Like the Pratt, vertical members are in compression, while diagonals are in tension and inclined outward from the center pointing toward the ends of the truss, and most often one or more diagonals inclined in the opposite direction will form an "X" pattern in the center of the truss. The curved shape of the Parker's top chord requires less metal and reduces the weight of the span, making it somewhat more economical than its counterpart with a parallel chord. This concept contributed to making the Parker a popular design for large through trusses. As a pony truss design, however, it seemed to fill the need for spans of 85 to 110 feet and provided greater rigidity because of its riveted connections. Based on its use in Oklahoma, the Parker pony had a relatively brief period of use, from approximately 1908 to 1915. Where Parker pony trusses have been documented in Oklahoma, they did not come from the state's major bridge builders

(6) Camelback pony truss

Camelback pony trusses are also a curved top chord variant of the Pratt design. While the Parker has a smoothly curving top chord composed of numerous small angles, the camelback pony truss has precisely five angles in the top chord, often giving it a more sharply angular appearance. Engineers liked the characteristic five-angle top chord as it permitted greater standardization and better predictability on how the structure would behave in service. As with other polygonal top chords, this design made possible longer spans and more economical use of metal. The OHD, recognizing these advantages, made extensive use of camelback ponies, building hundreds of them on the State Highway System. Most of them followed standard specifications, which the OHD began to draft in the early 1920s for spans of varying lengths. Builders found the greatest use for the 80-foot and 100-foot span designs. All of the OHD standard plans specified riveted connections, making pinned camelbacks rare by comparison.

A powerful demonstration of the strength and versatility of the standard-design camelback pony occurred in 1933, when the state constructed its longest bridge (NBI No. 04085; Structure No. 0902 0000 X) — 3,944 feet—by making use of thirty-eight 100-foot-long camelback pony spans to carry Route 66 over the South Canadian River. In 1939 twenty-one 100-foot camelback spans formed the SH 79 bridge (no longer extant) over the Red River near Waurika in Jefferson County. This bridge employed heavier weight laced channel beams and I-beams for structural members.

(7) Truss leg bedstead pony truss

A truss leg bedstead pony truss has endposts that are vertical, rather than inclined. The endposts extend below the bottom chord into the stream bed or bank to support the bridge, making the bridge virtually self-supporting. The verticals and diagonals follow the Pratt pattern, with verticals in compression and diagonals in tension inclined outward from the center, pointing toward the ends of the truss, and most often one or more diagonals inclined in the opposite direction forming an "X" pattern in the center of the truss. A simple variation from the ordinary Pratt pony truss meant most bridge-building companies active

in Oklahoma could provide truss leg besteads. Oklahoma bedsteads generally had the vertical supports made of angles riveted together by lacing bars, rolled steel channels for the top chords, and eyebars for the bottom chord. A standard diagonal consists of eyebar and the counter was formed from cylindrical eyebar.

The Pratt bedstead pony found considerable favor within Oklahoma counties, improving rural roads in the early twentieth century. County commissioners found the bedstead appealing for its self-supporting characteristic, saving them from making a costly substructure. With this subtype, the abutment could be simplified to the point where it was merely a timber or metal plate to form a connection with the bank and reduce sloughing. The same characteristics that helped sell the bedstead to the counties could also become weaknesses. Bedstead trusses were vulnerable to floods and could become rickety and unsafe if not strengthened with bracing or with legs set in concrete or rock-filled tubes.

(8) Warren with verticals pony truss

The Warren pony is a common truss subtype in Oklahoma. The basic design is formed by diagonal members making a series of equilateral triangles that carry both compressive and tensile forces. The primary diagonal members are often supplemented with vertical members to provide additional bracing and reduce the length of unsupported chord between diagonals. Although invented in England during the 1840s, the Warren truss did not reach its full potential until much later. With its distinctive triangular design between the chords, giving the appearance of elongated "Ws" in the web, it performed best when made of steel, not the iron structural material available at the time of its invention. Steel permitted stronger, more resilient diagonals, which in the Warren subtype were alternately subjected to tension and compression by the weight of passing loads. Pin-connected Warren trusses are considered unusual. Pinned versions of this truss experienced greater wear at mid-span, a cause for concern among engineers. That problem, however, could be avoided with rivets. Thus, another technical advancement, the portable riveting machine that could be taken into field, contributed to the wider acceptance of the Warren. The length of Warren pony truss spans generally varied between 40 and 80 feet, though some were built in longer spans. The subtype proved ideally suited for service on secondary routes and other moderately traveled roads in Oklahoma. The principal private bridge building companies in the state could supply this type, for which the OHD made standard plans in the 1920s.

(9) Warren with polygonal top chord pony truss

In a modification of the basic Warren design, Warren with polygonal top chord pony trusses have a top chord that is curved instead of flat. The curved top chord achieved greater length and more economy without sacrificing strength; a polygonal chord Warren could be built up to 140 feet as a rule. Never a standard OHD design, most examples of this type originated in the counties between 1909 and 1920. The typical structural plan employed channel beams for the top chord, braced angle in the bottom chord, and laced angles for diagonals. Gusset plates reinforced the joints on most of these spans.

(10) Warren bedstead pony truss

Another type of bedstead pony truss, with vertical endposts that extend below the bottom chord to support the bridge, is the Warren bedstead pony truss. Like a Warren with verticals pony truss, there are verticals along with diagonals that carry both compressive and tensile forces and form a “W” pattern. The

Warren bedstead pony subtype also shares the general advantage of truss leg spans, with the endposts extending below the deck directly into a substructure. Many bridge companies operating in Oklahoma included this type in their structural inventories.

B. Through truss

In through truss bridges, the travel surface passes through trusses connected by bracing at the upper chords. In the mid-to-late nineteenth and early twentieth centuries, through truss bridge design evolved to carry increasingly heavy loads and to span longer distances.

(1) Warren with verticals through truss

Warren with verticals through trusses have diagonals in a characteristic “W” pattern that serve as the primary structural members, supplemented with vertical members to provide bracing and with inclined end posts. The Warren design never matched the popularity of the Pratt design and its derivatives for through spans.

(2) Warren with polygonal top chord through truss

In a modification of the Warren with verticals design, Warren with polygonal top chord through truss bridges have a top chord with a polygonal curve rather than being flat. This subtype retains the characteristic diagonals in a “W” pattern, verticals, inclined end posts, and a curved top chord. The only example in Oklahoma is the 4,943-foot long Roosevelt Bridge (NBI No. 10659; Structure No. 0706 0000 X), constructed in 1945 to span Lake Texoma in Marshall County.

(3) Pratt through truss

Pratt through trusses have vertical beams in compression and diagonal beams that are in tension and inclined outward from the center, pointing toward the ends of the truss, and most often one or more diagonals inclined in the opposite direction forming an “X” pattern in the center of the truss. In the Pratt through design, the top chord, end posts, and central verticals are usually heavier members to resist compressive forces and are often composed of channels connected with lacing. The bottom chord, hip verticals, diagonals, and counters are lighter and more flexible as tensile members. Round or square eyebars were a typical choice for bottom chords and hip verticals in pin-connected versions of this design. Counters, which help support live loads on a bridge, generally consisted of eyebars fitted with turnbuckles so the span could be tightened in the field. Pratt through trusses were generally connected with pins before 1920 and with rigid connections after that point. Fewer riveted examples remain as the Pratt through truss design had nearly reached the end of its popularity by the time rigid connections came into widespread use.

(4) Modified Pratt through truss

A modified Pratt through truss, unlike a standard Pratt, has horizontal struts in the center panels which extend from the verticals to the adjacent diagonals; these center panels also contain diagonals that do not extend the full length of the panel, but instead end at the horizontal struts. These modifications resulted from the development of standard designs by OHD engineers for use of principal highways with heavier and faster traffic. Subdividing the truss panels with additional members gave the modified design greater

strength and support to handle the increasing number of automobiles and trucks including heavy oilfield equipment.

(5) Parker through truss

Parker through trusses are a modification of the Pratt through design. Parker through trusses have a polygonal, or curved, top chord instead of the flat top chord of a standard Pratt. Vertical beams are in compression and diagonal beams are in tension and inclined outward from the center, pointing toward the ends of the truss, and most often one or more diagonals inclined in the opposite direction form an "X" pattern in the center of the truss. The polygonal shape of the top chord made possible longer spans, better distribution of stresses in the structure, and kept the truss depth greatest where necessary at mid-span and shallow towards the ends. Engineer C.H. Parker developed the design in the 1870s for spans over 200 feet although builders, including those in Oklahoma, frequently employed it for lengths of 140 to 225 feet. Until World War I, Oklahoma truss fabricators generally preferred pinned joint connections, with riveted connections becoming typical in the 1920s and 1930s even as the bridge type diminished in popularity. Earlier pinned versions were supplied by the major bridge companies, with the Kansas City Bridge Company, Missouri Valley Bridge & Iron, and Canton Bridge Company predominating in Oklahoma. When it came to building major bridges in Oklahoma during the formative years of the state's road system, builders chose Parker through trusses for their strength and efficiency, although the polygonal top chord also lent it a graceful air not present in other subtypes. When constructed out of heavier materials, the Parker through also found acceptance as a railroad bridge.

(6) Modified Parker through truss

The Parker through truss, a Pratt with a curved top chord, also has a modified version. In the modified Parker through truss, the center panels have horizontal struts that extend from a vertical to the adjacent diagonal; these center panels also contain diagonals that do not extend the full length of the panel, but instead end at the horizontal strut. The subdivided panels supply more stiffness to major structural elements and more support for the floor system.

(7) Camelback through Truss

Camelback through trusses are also a curved top chord variant of the Pratt design. While the Parker has a more smoothly curving top chord, the camelback through truss has a top chord of exactly five angles. Oklahoma's only example of this subtype is located over the South Canadian River near Wanette (NBI No. 00070; Structure No. 63D3342E1446000). It was built in 1906 to carry the Santa Fe Railroad and displays the heavyweight members required for the great stresses of rail service.

(8) Modified Camelback through truss

Modified Camelback through trusses are a curved top chord variant of the modified Pratt design. Oklahoma has two examples of this subtype: one example constructed in 1920 is located over Rush Creek in Garvin county (NBI No. 23251; Structure No. 25N3248E1570003). The other example (NBI No. 03230; Structure No. 57N3522E0280007) was constructed in 1930 and crosses Salt Creek in Osage county.

(9) K through truss

The last major truss type introduced to Oklahoma was the K through truss, designated by the OHC for use in standard designs from the 1930s into the early 1950s. A K through truss, with a curved top chord, is a modification from the Parker design in which some of the panels have diagonals that form a "K" pattern. This modification afforded more strength and economy and also allowed for greater span length. Builders also liked how the K through design reduced secondary stresses and made simpler the task of erecting a large bridge in the field. The riveted K through truss became a familiar sight on primary roads, with span lengths varying from 140 to 210 feet.

C. Deck truss

In a deck truss bridge, the trusses are underneath the travel surface, instead of to the sides of and above the deck as in pony and through trusses. The deck truss made a good choice in cases where enough room existed below the bridge for its truss and where builders desired a more open bridge without the confining side panels of a pony or through truss. In fact the deck truss permitted engineers to have a wider roadway at somewhat less expense than with a comparable through truss, providing other site conditions made a deck truss design feasible. When the deck truss was constructed, it was in almost all cases a Warren truss design, with or without supplemental vertical members. The remaining deck trusses in Oklahoma feature riveted connections.

D. Mixed truss

In previous ODOT historic bridge surveys, the term Mixed truss was used to describe any combination of two or more different truss types in the same bridge. Often, the combination consists of one or more through trusses flanked by shorter pony trusses. For this study, bridges were classified by their main span type and configuration.

E. Concrete deck arch

In this bridge type, a concrete arch, or series of arches, located below the travel surface supports the loads transmitted from the bridge deck. By the early 1900s bridge engineers were realizing the value of concrete as a building material for highway bridges. Concrete's strength in bearing the compressive weight of loads had long been established but the development of reinforced concrete during the late nineteenth and early twentieth centuries allowed concrete to also provide tensile strength. Bent or twisted steel bars eventually became the preferred technique for reinforcement. In comparison with metal bridges, concrete did not rust and never required painting. Concrete arch bridges, however, also presented some problems. They required a fair amount of work on the site, including erecting falsework and making molds, needed transportation to move bulky materials, and demanded careful consideration of the bearing quality of the soil for laying foundations. These reasons, along with a shortage of skilled workers, unsuitability of arches for streams with low banks, and an unwillingness to break with the proven dependability of steel trusses, accounted for Oklahoma making less use of this type than in many other parts of the U.S. between 1900 and 1930.

The concrete arch had its greatest utility in Oklahoma for culverts and small spans. Most extant bridges of this type have a length of 40 feet or less. Although historical records do not shed much light on this bridge

type in Oklahoma, it seems clear that virtually all were built by local contractors. Since few localities had standards for construction at that time, these spans often reveal inferior workmanship, slight attention to detail, and inferior materials. Nonetheless, some fine examples of concrete arch bridges remain in the state, reflecting both the standard and functional arches as well as ones with more architectural and decorative touches.

F. Concrete through arch

In this bridge type, the concrete arch, or series of arches, originates below the travel surface and the arch crown extends above it. The roadway is within the arch and vertical members (cables or beams) in tension between the arch crown and floor beams support the deck.

(1) Rainbow arch

This subtype, the concrete arch, or series of arches, support the bridge deck by way of vertical ties between the arch crown and the floor beams. The rainbow arch design was a popular variation on the reinforced-concrete arch, particularly in the 1910s and 1920s. It is believed that only two examples of this type were constructed in Oklahoma. The one remaining example is the 1917 rainbow arch bridge (NBI No. 00032; Structure No. 63N3410E1180003) that spans Squirrel Creek in Pottawatomie County.

(2) Ogee arch

In this variation, an ogee, or double-curve consisting of a concave and convex shape, form the arch. As with other through arch designs, the travel surface within the arch is supported by vertical ties between the arch crown and floor beams. This variation was utilized in one pedestrian bridge, the 1971 ogee arch structure (NBI No. 18043; Structure No. 72E0613N3930005) that spans W. 23rd Street in Tulsa, Tulsa County.

G. Other concrete arch configurations

Some bridges in the study pool are not strictly arches, although they have arch-like features and have been categorized with arches in the past. The *Slab with Integral Arch Combination* type consists of a span with a combination deck arch and slab. Spans are short and the arch appears truncated. This type was widely used in Ottawa County in the 1930s. The *Arched Girder* type consists of a girder with an arched shape, also known as a variable depth girder. The *Arched Rigid Frame* type describes a rigid frame, where super structure and sub structure are rigidly connected to act as a continuous unit, with an arched shape. These bridges are typically cast monolithically.

H. Masonry deck arch

In this type, which is also called stone arch, an arch constructed entirely of stone masonry below the travel surface supports the loads transmitted from the bridge deck. The success and cost-effectiveness of concrete and steel spans relegated masonry arch structures to a minor role in Oklahoma. In many places stone was used for construction of smaller culverts or for building bridge abutments. While stone was a durable and attractive material, masonry bridges required a handy source of supply and a fair amount of labor, including skilled workers. Those bridges that were built often originated at the local level. County

officials wanting permanent and low-maintenance structures to cross minor streams sometimes contracted for masonry bridges when the material and a qualified work force were available.

Popular in some areas of Oklahoma prior to statehood, construction of masonry arch bridges revived during the 1930s as a consequence of Depression-era work-relief programs. Federal programs often focused on road and bridge projects, and Oklahoma benefited from this emphasis. Depression-era programs also included renovation of existing stone bridges on scenic highways in the Arbuckle Mountains and nearby Lake Murray. Depression-era work-relief efforts include specific agencies such as the Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) as well as additional funding sources such as the National Recovery Work Relief program.

I. Summary of bridges in the survey update study

Table 2 starting on the next page provides a summary of bridges in the update study and includes bridge type, number extant, years in use in Oklahoma, character-defining features, and type-specific distinctive characteristics.

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Concrete arch – General				
Concrete deck arch: Closed Spandrel	59	1900-1960	Closed spandrel, concrete deck arch, the arch ring, barrel, and the spandrel wall.	Early use for this type: pre-1915 construction. Exceptional main span length for this type: greater than 50 feet
Concrete deck arch: Open Spandrel	2	1920-1940	Open spandrel, concrete deck arch, arch ring, barrel, and spandrel wall.	This is a rare bridge type.
Concrete through arch	2	Rainbow arch: 1910-1920 Ogee arch: 1971	Concrete arches above the roadway that carry the load, bottom chord, floor beams, railing, and piers or abutments.	This is a rare bridge type. Includes two subtypes: rainbow and ogee. The form of these subtypes is unusual and represents an overall design aesthetic.
Other concrete arch	20	1935-1945	Concrete bridges with an arched girder, or combination of concrete deck arch and slab.	None.
Masonry deck arch	8	1910-1960	Closed spandrel, stone masonry deck arch; arch ring, barrel, and the spandrel wall; and abutments/ wingwalls.	This is a rare bridge type. Early use for this type: pre-1915 construction.

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Steel truss – General				
King post pony	1	1900-1920	Triangular shape: Two inclined end posts and single vertical post (the king post) that subdivides the triangle.	This is a rare bridge type.
Pratt pony	50	1900-1970	Heavier vertical beams and lighter diagonal beams. Often diagonals form “X” pattern at center of truss. Inclined end post and flat top chord.	Early use for this type: pre-1915 construction. Connection type: - Examples with pinned connections. - Pre-1915 examples of riveted connections. - Pre-1915 examples of shop-riveted/field-bolted connections. Early use of standard plans: constructed 1921-1924 (OHD standardized plans for this type were first issued in 1921).
Pratt half-hip pony	10	1900-1920	Characterized by inclined end posts that do not extend the length of a full panel. Flat top chord.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: examples with pinned connections.
Pratt (small 3-panel) pony	2	1900-1950	Pratt pony truss with only two verticals and inclined end posts forming three panels.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: examples with pinned connections.

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Parker pony	1	1910-1950	Verticals in compression; diagonals in tension and inclined outwards. Often diagonals form "X" at center of truss. Inclined end posts. Polygonal top chord.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: pre-1915 example of all-riveted connections. Early use of standard plans: constructed 1938-1941. (OHC standardized plans for this type were first issued in 1938.)
Camelback pony	48	1910-1960	A variation of the Pratt design with an angular curved top chord consisting of exactly five beams. Inclined end posts.	Early use for this type: pre-1915 construction. Connection type: - Pre-1915 example of all-riveted connections. - Pre-1915 example of shop riveted/field bolted connections. Early use of standard plans: constructed 1921-1924. (OHD standardized plans for this type were first issued in 1921.)
Truss leg bedstead pony	2	1900-1960	Variation of Pratt type with vertical end posts that extend below the bottom chord into the embankment steam bed or bank to support the bridge. Often diagonals form "X" at center. Flat top chord.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: example of pinned connections.

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Warren with verticals pony	59	1900-1960	Diagonal beams in a "W" pattern carry compressive and tensile forces. Verticals serve as bracing. Inclined end posts.	Early use for this type: pre-1915 construction. Connection type: - Pre-1915 example of all-riveted connections. - Pre-1915 example of shop riveted/field bolted connections. Exceptional main span length for this type: greater than 90 feet.
Warren with polygonal top chord pony	4	1900-1950	A variation of the Warren with Verticals type has a curved top cord rather than a flat one. Inclined end posts.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: - Example of pre-1915 all-riveted connections. - Example of pre-1915 shop riveted/field bolted connections.
Warren bedstead pony	2	1910-1950	Variation of Warren with Verticals type with vertical end posts that extend below the bottom chord into the stream bed or bank embankment. Flat top chord.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: example of pinned connections.

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Warren with verticals through	1	1910-1920	Diagonal beams in a "W" pattern carry compressive and tensile forces. Verticals serve as bracing. Inclined end posts. Flat top chord.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: example of pinned connections.
Warren with verticals polygonal top chord	1	1940-1950	Diagonals in a "W" pattern, verticals as bracing, and a polygonal top chord.	This is a rare bridge type.
Pratt through	16	1900-1950	Heavier vertical beams in compression and lighter diagonal beams in tension. Often diagonals form "X" pattern at center of truss. Inclined end post. Flat top chord.	Early use for this type: pre-1915 construction. Connection type: Example of pinned connections Example of pinned/riveted connections Pre-1915 example of all-riveted connections Pre-1915 example of shop riveted/field bolted connections. Early use of standard plans: constructed 1921-1924. (OHD standardized plans for this type were first issued in 1921).
Modified Pratt through	18	1920-1930	Variation of Pratt type; center panels have horizontal struts extending from verticals to adjacent diagonals, and diagonals that end at the horizontal struts. Flat top chord.	Early use of standard plans: constructed 1921-1924. (OHD standardized plans for this type were first issued in 1921).

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Parker through	15	1900-1960	Heavier vertical beams in compression and lighter diagonal beams in tension. Often diagonals form “X” pattern at center of truss. Inclined end posts. Polygonal top chord.	Early use for this type: pre-1915 construction. Connection type: - Example of pinned connections. - Example of pinned and riveted connections. Early use of standard plans: constructed 1921-1924. (OHD standardized plans for this type were first issued in 1921.) Exceptional main span length for this type: 210 feet or greater.
Modified Parker through	4	1920-19450	Center panels have: horizontal struts extending from a vertical to the adjacent diagonal and diagonals that do not extend the full length of the panel, but instead end at the horizontal strut. Polygonal top chord.	This is a rare bridge type.
Camelback through	1	1900-1920	A variation of the Pratt type with an angular polygonal top chord consisting of exactly five beams.	This is a rare bridge type. Early use for this type: pre-1915 construction. Connection type: example of pinned connections.

Table 2. Summary of bridges in the bridge survey update study

Bridge type	**Total extant built prior to 1980**	**Oklahoma range of years in use** (based on analysis of *Spans of Time* and field survey)	**Character-defining features**	**Significant type-specific distinctive characteristics**
Modified Camelback through	2	1930-1950	A curved top chord variant of the modified Pratt design.	This is a rare bridge type.
K through	16	1930-1960	Verticals in compression; diagonals in tension and inclined outwards. Center panels have diagonals which form a "K" pattern. Polygonal top chord.	This is a rare bridge type. Early use of standard plans: constructed 1931-1934. (OHC standardized plans for this type were first issued in 1931.)
Deck truss – General				
Warren	1	1935-1930	Truss is located below the bridge deck. Diagonal beams in a "W" pattern carry compressive and tensile forces.	This is a rare bridge type.
Warren with Verticals	3	1925-1970	Truss is located below the bridge deck. Diagonal beams in a "W" pattern carry compressive and tensile forces. Verticals serve as bracing.	This is a rare bridge type. Early use of standard plans: constructed 1926-1929. (OHC standardized plans for this type were first issued in 1926).

4. Data Collection and Analysis

A. Pre-Field Activities

(1) Study Pool Population

(a) Initial ODOT NBI information

In February 2019 ODOT provided initial NBI bridge data in an Excel spreadsheet. The files listed metal truss, concrete arch, and masonry arch bridges under ODOT oversight based on the agency's NBI records. Subsequent Excel lists and Google Earth layers sent by ODOT removed some bridges and added others. Between February and November 2019, Mead & Hunt received data for a total of 434 bridges. Prior to fieldwork, Mead & Hunt examined the lists and removed 30 bridges because they were confirmed to be nonextant or to have been built after 1980. Using this refined dataset, a total of 404 bridges remained in the study pool for further examination during field survey. The NBI data was accepted as correct unless additional research or field survey resulted in updated information.

(b) Additional study pool bridges

During planning and field survey, Mead & Hunt identified 37 additional truss and arch bridges that were included in ODOT's *Spans of Time* update from 2007 but either did not have NBI numbers or had incorrect main span type in the current NBI records. These bridges, often noted in the 2007 report as "No Number" bridges, therefore were not included in the baseline ODOT materials used for developing the initial study pool. Of the 37 bridges, 13 were found to be extant and likely in vehicular service or otherwise under ODOT oversight for historic preservation regulatory purposes. Mead & Hunt added the 13 bridges to the study pool for survey and evaluation.

(c) Applicability of NRHP criteria

Item 37 in NBI inspection data sorts bridges into five categories of NRHP eligibility status (see Table 3). Nearly all bridges already listed in the NRHP or previously determined eligible for the NRHP (categories 1 and 2) were solely evaluated under *Criterion C*. This study evaluated additional significance and NRHP eligibility under the other three NRHP criteria. The remaining bridges (categories 3, 4, and 5) were evaluated under all four NRHP criteria.

Table 3. Number of bridges in the bridge survey update study and applicable evaluation criteria

Initial NRHP eligibility status (per ODOT NBI Item 37[70])	Number of bridges in category	Applicable evaluation criteria
1 - Listed	16	Evaluate under *Criteria A*, *B*, *D* if not in Nomination (previously evaluated under *Criterion C*)
2 - Eligible	78 (eligible under *Criterion C* only) [71]	*Criteria A, B, D* (previously evaluated under *Criterion C*)
3 - Possibly eligible	1	*Criteria A, B, C, D*
4 - Historic significance not determinable	131[72]	*Criteria A, B, C, D*
5 - Not eligible*	191	*Criteria A, B, C, D*
Total	**417**	

** Includes 34 bridges identified in NBI with post-1980 construction dates.*

(2) Spreadsheet development

Mead & Hunt developed a spreadsheet to compile and analyze data on study pool bridges. The spreadsheet aggregated information from relevant ODOT NBI data items, previous ODOT historic bridge inventories, and field survey findings. The project team also recorded areas of significance, integrity considerations, and NRHP eligibility in the spreadsheet. Information from the spreadsheet was exported to create the project inventory tables and individual Historic Bridge Inventory Forms, which are included as Appendices A through C of this report.

B. Field survey

Most of the field survey took place between December 2019 and March 2020, with multiple teams of two historians. Initial field survey efforts were centered on northeast Oklahoma, with its concentration of historic truss and arch bridges, with subsequent survey work moving south and west across the state. due to access issues and travel restrictions. A few bridges in the study pool were surveyed in June 2020; field survey for these bridges had been delayed due to access restrictions.

Field survey teams used an iPad tablets to enter bridge information. Each team was able to track progress and upload bridge information in near-real-time via mobile Wi-Fi hotspot. Survey teams used ESRI Collector map layers to navigate to each bridge site and verify accuracy of locational information. They recorded bridge data using ESRI Survey123, with data directly uploaded to project databases while in the field. The survey included high-resolution digital photography of each bridge and its vicinity, with onboard Global Positioning System (GPS) units recording locational/directional information for each image. At least 10 images were taken of each bridge, following guidelines outlined in ODOT and SHPO

[70] The eligibility status of 10 of the 12 Additional Study Pool bridges was determined from Spans of Time and previous determinations of eligibility.

[71] One exception is the 21st Street Bridge in Tulsa (NBI No. 20866; Structure No. 72E0612N3940001), which was reevaluated under *Criterion C*.

[72] NBI No. 32474; Structure No. 45E1980N46900P7 has a construction date of 2017 and has no NRHP determination in NBI data provided by ODOT.

field survey manuals and Mead & Hunt historic bridge survey protocols. During field survey, 69 additional bridges were removed from the study pool because they were confirmed to be nonextant. A total of 348 bridges remained in the study pool for evaluation.

C. Research sources

A wide range of research sources were consulted to assist in development of historical themes and in evaluation of study pool bridges. These sources included:

- Previous bridge studies: Spans of Time, 1993 and 2007 update, Route 66 Study, and Depression-Era Study.
- Recent ODOT bridge inspection reports, obtained from ODOT Bridge Division.
- Information for about 120 bridges not on the state highway system, obtained from bridge inspection files at ODOT Field Divisions. Level of information varied among divisions and individual bridges, but often included older inspection reports, as-built construction plans, and/or photographs.
- As-built plans for a few bridges on the state highway system, obtained from Division offices and the ODOT plans library.
- OHD/OHC commission reports, issued between 1911 and 1953.
- OHD/OHC standard plans for metal truss and concrete arch bridges, provided by ODOT historians.
- County highway maps for Oklahoma counties, dated 1936-1940.
- State highway maps from 1917 to 1980.
- Other historical maps, including USGS topographic quadrangles.
- NRHP nomination and/or HAER documentation forms for selected individual bridges and historic districts.
- Relevant websites such as Wes Kinsler's Oklahoma Bridges (okbridges.wkinsler.com), Bridgehunter (bridgehunter.com), and Nathan Holth's Historic Bridges (historicbridges.org).
- Secondary online and written sources, such as the Encyclopedia of Oklahoma History and Culture (https://www.okhistory.org/publications/encyclopediaonline) and the Historical Atlas of Oklahoma.

In specific instances, Mead & Hunt historians conducted local newspaper research to clarify a bridge's construction date, builder, or modifications over time. A bibliography of consulted sources is included at the conclusion of this report.

D. Data discrepancies

In some cases, bridge data from different sources did not agree. The most common discrepancies were construction date and span type. Limited bridge specific research utilizing the sources listed above was conducted to verify data. Generally, for discrepancies between ODOT/NBI data, that from Spans of Time/ODOT was accepted over NBI data unless research proved otherwise.

In other cases, bridge data did not agree with field observations. During fieldwork, if NBI/ODOT data did not match the observed structure's technology (a later date, such as 1960, given a pin-connected truss), then a circa date was assigned based on professional judgement and subsequent research. Once confirmed, any construction dates in question were updated accordingly. Span type discrepancies were resolved based on field observations.

5. NRHP Criteria for Evaluation

A. Overview

The NRHP evaluation criteria as outlined in the NRHP bulletins *How to Apply the National Register Criteria for Evaluation* and *How to Complete the National Register Registration Form* have been customized to evaluate Oklahoma's metal truss, masonry arch, and concrete arch bridges constructed through 1980.

The NRHP employs four criteria for evaluation: *A*, *B*, *C*, and *D*. *Criterion A* and *Criterion B* involve associative value, *Criterion C* involves design or construction value, and *Criterion D* involves information value. This section provides a discussion of *Criteria A* and *C* applied to metal truss, masonry arch, and concrete arch bridges in Oklahoma through 1980. These two criteria are most likely to apply to bridges. The last section discusses *Criteria B* and *D*, which generally are unlikely to apply to bridges.

B. Evaluating significance under *Criterion A*

Bridges may possess significance under *Criterion A* for an association with important events or trends that have made a significant contribution to the broad patterns of Oklahoma history. To be eligible under *Criterion A*, bridges must have an important and direct association with the event or trend that is deemed to be significant in local, state or national history. Important state and regional historic themes that a bridge may derive significance are described in Section 2 and relate to events and trends within the areas of significance of Transportation, Community Planning and Development, and Conservation.

To possess significance under *Criterion A*, bridges are required to convey a direct relationship to an important event or trend through physical or documentary evidence; an indirect, speculative or inferred relationship is not adequate to support significance under *Criterion A*. For example, a bridge may be located along a highway that provided access during an important period in the development and expansion of an industry deemed important in the state's history. However, within the larger context of the entire length of the highway, an individual bridge is not likely to have individually played an important and direct role in the development of the industry. For an individual bridge to possess a direct and important association, physical evidence must clearly demonstrate that its role, individually, was related to an event or trend deemed significant in one or more areas of significance. Such evidence will typically be demonstrated by documentation of a specific program, project, or other trends or event related to the theme and will not be speculative.

Historic themes are organized by its corresponding area of significance followed by a set of rationale statements as examples of the type of association that may demonstrate a direct and important association.

(1) Transportation

The area of significance of Transportation relates to major trends to improve Oklahoma's transportation network, including the construction of bridges. While an individual bridge is not likely to derive individual significance simply due to its presence within the state's transportation network, it may have significance by providing direct access via an important transportation crossing and is distinguishable from other

similar bridges or crossings of lesser importance. Transportation themes relate to important developmental periods in Oklahoma transportation history and include:

Early Oklahoma vehicular truss and arch bridges, 1900-1915
Early truss and arch bridges were built prior to state and federal programs and standards and may represent important early crossings that provided critical access points for major travel ways within the state. A direct association with an important statewide, regional, or local trend or program related to this theme may be shown for bridges if they meet one of the following conditions:

- The first structure to span a river or other feature or initial upgrade at a former ferry site at a crossing deemed critical for subsequent transportation development in the state, thereby distinguishing itself as more important than other similar crossings. Merely being the first structure to cross a river or other feature is not enough to possess significance.

- Constructed by an individual or local government prior to passage of the Federal Aid Road Act of 1916, reflecting early efforts to span waterways and other features prior to state and/or federal financial support or design guidance. Early examples of these bridges reflect the earliest era of bridge construction and reflect the work of local governments and individuals to provide transportation solutions.

Named auto trails in Oklahoma, 1900-1929
Bridges constructed to carry named auto trails may represent important private efforts to improve regional and cross-country auto trails that passed through Oklahoma in the early twentieth century. Improvements along these routes represent important trends related to the Good Roads Movement that facilitated and improved travel and led to further development. A direct association with an important national, statewide, regional, or local trend or program related to this theme may be shown by bridges if they meet one of the following conditions:

- Constructed with private support specifically to carry a named highway.

- The construction date of the bridge should coincide within the first several years of the designation and promotion of a named highway.

Early state and federal bridge support in Oklahoma, 1907-1924
Bridges constructed after creation of the OHD in 1907 (during its gradual assumption of road and bridge design, construction, and maintenance) and the earlier federal aid programs (the Federal Aid Road Act of 1916 and the Federal Aid Highway Act 1921) reflect the increasing role of state and federal programs, an important theme in transportation. A direct association with an important national or state trend related to this theme may be demonstrated if bridges meet the following condition:

- An early example constructed by the state between the formation of the OHD and just after the Federal Aid Road Act of 1916 and Federal Aid Highway Act of 1921, reflecting the early period of state and federal initiatives that subsequently resulted in the construction of large numbers of structures across the state.

U.S. Highways in Oklahoma 1926-1956
Establishment of the U.S. Highway System in 1926 signaled increasing interstate connectivity and highway uniformity, as well as federal support, as part of the new national network of highways. However, a bridge does not possess significance for mere association to an early U.S. Highway. A direct association with an important statewide, regional, or local trend related to this theme may be shown if bridges meet the following condition:

- Constructed specifically to carry a U.S. Highway. The construction date of the bridge should coincide within the first several years of the designation of the U.S. Highway.

Grade-separation bridges in Oklahoma, 1900-1946
Grade-separation structures represent local, state, and federal efforts and initiatives to eliminate dangerous intersections of highways and railroads. A direct association with an important statewide, regional, or local trend related to this theme may be shown if bridges meet the following condition:

- Represents an early (pre-1933) example for its role in improving transportation safety.

Examples of grade-separation bridges with significance in the areas of Transportation and Politics/Government for their association with federal initiatives of New Deal Depression-era programs have already been identified.[73] After the New Deal programs ended, programs to construct grade-separation structures were well established and later grade-separation bridges will typically not derive significance for improving transportation safety under *Criterion A*.

Military and strategic network in Oklahoma, 1900-1955
Since before statehood, military presence and defense needs have shaped Oklahoma's transportation network, including bridge construction. A direct association with an important statewide, regional, or local trend related to this theme may be shown if bridges meet one of the following conditions:

- Specifically constructed to establish or improve access to a mission-critical military facility.

- Specifically constructed to facilitate strategic access deemed critical for national defense.

New connections and regional expansion, 1900-1955
Many bridges in the subject period may have significance for opening an area for settlement or regional expansion because they overcame challenging topography, such as steep riverbanks or wide rivers. A direct and important statewide, regional, or local trend related to this theme may be shown if bridges meet the following condition:

- Provided the first permanent crossing that accessed a previously isolated inaccessible area of the state, which facilitated regional growth and expansion.

[73] A comprehensive evaluation of Oklahoma Bridges under this area of significance can be found in *Oklahoma Historic Bridge Survey: Depression-Era Works Program Bridges and Road-Related Resources*.

Oil Production, 1905-1931
Bridges in the subject period may have significance for association with oil production in the state, as a response to the need for infrastructural upgrades to accommodate a population influx cause by a "boom" near a major oil field. A direct association with an important statewide, regional, or local trend related to this theme may be shown if bridges meet all of the following conditions:

- Located near a major oil field, including Glen Pool Field, Cushing-Drumright Field, Healdton-Hewitt Field, Garber Field, Burbank Field, Greater Seminole Field, and Oklahoma City Field; and
- Specifically constructed to accommodate automobile traffic to/from oil fields; and
- Constructed during the period of establishment and early development of the oil field.

(2) Community Planning and Development
The area of significance of Community Planning and Development relates to major trends in community planning initiatives, including infrastructure improvements such as bridge construction. A bridge does not possess significance for a mere association with planning or development initiatives. However, it may have significance as an important crossing if physical evidence clearly demonstrates that its role, individually, was related to events or trends that made a significant contribution to the broad patterns of history and distinguish themselves from other similar bridges.

City Beautiful Movement or urban planning initiatives in Oklahoma, 1900-1960
Bridges constructed as part of community planning and development initiatives were part of a larger program of infrastructure improvement that may have provided crossings that had important effects on the physical development of communities. Bridges constructed as part of societal movements, such as City Beautiful, represent reform philosophy-driven infrastructure improvements that may have been an important source of civic pride and identity. A direct association with an important statewide, regional, or local trend related to this theme may be shown if bridges meet one of the following conditions:

- Constructed as part of an urban planning initiative or municipal infrastructure project to solve a particular problem and offered a solution that led to important changes to the subsequent physical development of the community.
- Constructed as an important component that stands out within a larger City Beautiful architectural and/or landscape planning initiative. These bridges may also have features that would also be evaluated under *Criterion C*.

All-Black Towns in Oklahoma, 1900-1940
All-Black towns represent a unique chapter in Oklahoma and national history. Bridges constructed that enabled the establishment, acted as a gateway bridge, or made a significant contribution to the development of an all-black town may have played an important role in their individual community. A direct association with this theme may be shown if bridges meet one of the following conditions:

- Bridges constructed as gateway bridges providing direct access to, or providing a crossing within, an All-Black town.

- Documentary evidence that it served as an instrumental link in the All-Black town's establishment and development.

(3) Conservation

The area of significance of Conservation relates to large-scale efforts to manage natural resources in Oklahoma, such as water development undertakings and reclamation efforts intended to impound water for irrigation and hydroelectric power. Bridges constructed as a component of water development, or as a result of impoundment, are not significant for a mere association to the larger project in which they are but one component; however, a bridge may possess significance as an important crossing if physical evidence clearly demonstrates that its role, individually, was related to themes under this area and that the bridge is distinguished from other similar bridges.

Dam- and impoundment-related structures in Oklahoma, 1900-1980

Numerous projects across the state are associated with important state and regional undertakings to manage natural resources. The more common type includes water reclamation, which also required transportation improvements to facilitate access for their completion and operations. A direct association with an important statewide, regional, or local trend related to this theme may be shown if bridges meet one of the following conditions:

- Designed by the Bureau of Reclamation or U.S. Army Corps of Engineers and served as an integral component or provided critical access for the management of natural resources and is distinguishable due to its function and/or location.

- Directly facilitated a water development project and served as an integral component or provided critical access for the management of natural resources and is distinguishable due to its function and/or location.

- Constructed as the result of an important water impoundment project and provided primary access in a region and is distinguishable due to its function and/or location.

A bridge under this theme is more likely to possess significance as a component of a larger road improvement/water impoundment project, or as a bridge constructed specifically in response to a larger road improvement/water impoundment project, than as an individual bridge construction project.

(4) Government/Politics

Previously determined-eligible bridges in Depression-era Study, 1932-1945

Federally funded programs provided financial support and put thousands of Oklahoman's back to work building roads and bridges across the state during the Great Depression. The Depression-era study investigated bridges for an association with federal depression-era programs, thus have significance in

the area of Government/Politics. For a bridge to have significance under this area of significance, the Depression-era Study methodology directs that one of the following conditions be met:

- Must have a direct and documented association with one of the Depression-era federal relief programs.

- Must have been financed (wholly or in part), designed, or constructed by or under the supervision of one of the federal relief programs.

C. Evaluating significance under *Criterion C*

Criterion C applies to bridges that are significant in the area of Engineering for their design and/or construction, including such considerations as engineering features and aesthetic treatment. Oklahoma bridges are most likely to have significance under *Criterion C,* because bridges are engineered structures and there are many types of trusses in which design evolved to carry increasing loads over longer spans. Further, stone masonry arch bridges in the state represent local skills and materials in transportation solutions, and concrete arch bridges reflect design evolution and engineering advances seen in both small and monumental designs.

The considerations of *Criterion C* are discussed in this section. A bridge may possess significance if it meets the requirements outlined. The NRHP definition of each requirement is followed by an expanded discussion of its application to Oklahoma's truss and arch bridges of the subject period.

A bridge will generally possess significance under *Criterion C* for design and construction features related to its superstructure and not its substructure and safety features alone. For example, in the design of a steel Camelback through truss bridge, the potential significance is associated with the members that form the truss superstructure, not the abutments and piers that form the substructure, or the safety features such as railings.

The three considerations of *Criterion C* that apply to bridges are presented below.

(1) Distinctive characteristics of a type, period, or method of construction

Distinctive design or construction characteristics include patterns of features common to a particular bridge type, variations of features within bridge types, and evolutions/transitions that illustrate an important variation within an established bridge type. Bridges that possess significance include those that:

- Illustrate the early use of a type in Oklahoma.

- Represent distinctive design features of a type or subtype.

- Possess significant type-specific distinctive characteristics or aesthetic treatments.

- Demonstrate innovative or complex technological solutions related to the site.

- Introduce or apply new materials, designs, and technologies.
- Exhibit evolution or variation within a bridge type.
- Represent an example of a rare bridge type in Oklahoma.

More information on bridge types and subtypes may be found in Section 3. For more information on bridge type-specific distinctive characteristics, see Table 2.

(2) High artistic value

This aspect of *Criterion C* considers bridges that were designed with outstanding architectural style as expressed in their overall form, aesthetic treatment, or applied ornamentation. Most Oklahoma bridges are utilitarian and the intentional application of ornamentation or other aesthetic treatments is typically limited. However, several concrete arch and masonry arch bridges across the state are exceptions. A bridge will have high artistic value when its combination of decorative features is able to convey overall aesthetic value. Significance is displayed through the presence of multiple decorative features such as spandrel panel detailing, arch ring, decorative railings, and light standards, or other features. A single decorative feature is generally not sufficient to convey significance for high artistic value. Examples may include bridges that display an overall design aesthetic and specific design features that exemplify the City Beautiful aesthetic, Art Deco or Moderne styles, or the Rustic style.

(3) Work of a master

This aspect of *Criterion C* considers bridges that express substantial evidence of the distinguishing characteristics of a master's important work. A bridge may represent the work of an important engineer, designer, fabricator, or builder recognized either nationally or in Oklahoma. A bridge recognized for its significance as the work of an engineering master needs to be distinguishable from others in its characteristic style and quality. This high standard requires both the presence of a recognized engineering master and a bridge that clearly reflects that master's characteristic work.

More than 100 bridge builders/designers are listed in the 1993 *Spans of Time,* and identifying a recognized engineering master from within the list could require more intensive research on a bridge-specific basis. However, a focused look at association with Oklahoma-based bridge and iron/steel companies revealed seven companies, which are listed in Table 4. A bridge may have significance as a rare surviving example of an Oklahoma bridge building company if research confirms a clear and direct association with one of the companies listed below, or another confirmed Oklahoma building company.

Table 4. Oklahoma-based bridge builders and fabricators

Company Name	Location
Boardman Company	Oklahoma City
E. F. Fike & Son	Tulsa
J.B. Klein Iron and Foundry	Oklahoma City
Muskogee Iron Works	Muskogee
Oklahoma Bridge Company	Oklahoma City

Table 4. Oklahoma-based bridge builders and fabricators

Company Name	Location
Patterson Steel Company	Tulsa
Tway, R.R.	Oklahoma City

(4) Early use of standard plans

This aspect of *Criterion C* considers bridges that represent early use of state standard plans developed by the OHD/OHC. A bridge will have significance under this theme if it meets the following:

- Evaluation confirms it is an example of an established state standard plan, including structure length.
- It is constructed within three years of the file date of the first state standard plans for the bridge type/subtype.

D. *Criterion B* and *Criterion D*

Criterion B recognizes bridges that illustrate the important achievements of a person who was significant in the past. Under this criterion, bridges must be compared to other properties associated with the work of the individual to identify those that best represent a person's historic contributions. According to the NRHP bulletin *How to Apply the National Register Criteria for Evaluation*, architects, artisans, artists, and engineers are often best represented by their works, which are evaluated for significance under *Criterion C*.[74] Therefore, the significant works of engineers or bridge-building firms are generally evaluated for significance under *Criterion C*, not *Criterion B*, and it is very unlikely that bridges from the subject period are significant under *Criterion B*. During field survey, efforts were taken to identify persons associated to the bridge that would warrant further research.

Criterion D is most often applied to archaeological properties. Within the context of bridge construction Criterion D can apply to methods of construction or important design features that cannot be learned from extant bridges. Since the design and construction of bridges is well known and this information can be obtained for the structure itself and the plans and standards developed for the design and construction of the bridge type, it is unlikely that bridges from the subject period would be eligible under *Criterion D*. However, abutments of nonextant bridges may be present next to existing bridges, and these remnants may contain information potential regarding the previous crossings. During field survey, efforts were taken to identify earlier abutments at bridge locations; earlier abutments require a separate evaluation for information potential as an archaeological site since the focus of this study is extant bridges.

E. Integrity requirements for NRHP eligibility

According to the NRHP bulletin *How to Apply the National Register Criteria for Evaluation*, integrity is the ability of a property to convey its significance.[75] To be eligible for the NRHP, a truss or arch bridge must

[74] National Park Service, *How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: Department of the Interior, 1997), 16.

[75] National Park Service, *How to Apply the National Register Criteria for Evaluation*, 44.

possess significance under one of more criteria noted in the previous discussion, and must also retain integrity. The evaluation of integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its significance.

Historic integrity should be distinguished from structural (or functional) integrity. Structural integrity describes a bridge's original design and its ability to function; a bridge may retain structural integrity yet have little or no historic integrity. On the other hand, a bridge may retain historic integrity while not having structural integrity.

Within the concept of integrity, the evaluation criteria recognize seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity, a property will always possess several, and usually most, of the aspects. The seven aspects of integrity are:

- *Design – The combination of elements that create the form, plan, space, structure, and style of a property.*

  Design refers to the physical features that make up the structure. In bridges, changes in design often are closely related to changes in materials.

- *Materials – The physical elements that were used in the original design and construction of a property.*

  Bridge materials (concrete, steel, masonry) are used in a structure's design and construction. Bridge materials are intimately connected with design.

- *Workmanship – The physical evidence of the crafts used in the construction of a property.*

  Workmanship and crafts reflect the labor and skill of artisans. With the increasing standardization and industrialization of bridge design and construction during the twentieth century, the use of workmanship became rare and is unlikely to be a significant aspect of integrity for most bridges of the subject period. However, masonry arch bridges constructed during this period may exhibit workmanship, as seen in hand labor, tooling, and joinery.

- *Location – The place where the historic property was constructed or the place where the historic event occurred.*

  Location refers to the specific place where a bridge was built or an event occurred.

- *Setting – The physical environment of a historic property.*

  Setting refers to the character of the place in which the bridge achieved its significance. Setting often reflects the basic physical conditions under which a bridge was built and the functions it was intended to serve.

- *Feeling – A property's expression of the aesthetic or historic sense of a particular period of time.*

  The aspect of feeling results from the presence of physical features that, taken together, convey the bridge's historic character.

- *Association – The direct link between an important historic event or person and a historic property.*

  A bridge retains association if it is the place where the important event or activity occurred and is sufficiently intact to convey that relationship to an observer.

An important part of establishing integrity is determining whether a bridge retains the essential physical features that are character defining and enable it to convey its historic identity. This process involves the following steps: (1) defining the character-defining features related to significance, (2) determining which aspects of integrity are important to the bridge's significance and if they are present, and (3) determining if the features are retained and visible enough to convey significance. The amount of change to a bridge needs to be weighed against its engineering and historical significance in making eligibility recommendations. In some cases, alterations during the structure's historical period may contribute to its significance and thus would not lead to an assessment of a loss of integrity.

Different aspects of integrity affect the eligibility of a structure in different ways, depending on how each relates to the property's significance. Therefore, the assessment of integrity for *Criterion A* differs from the assessment for *Criterion C*. Since *Criteria B* and *D* are not expected to apply, they are not addressed. A discussion of the aspects of integrity and their relationship to *Criteria A* and *C* follows. Examples of the types of alterations that may result in a loss of integrity and render a structure not eligible for listing in the NRHP are included.

(1) Assessing integrity related to *Criterion A*

Criterion A relates to the significance of a structure gained through its historical associations. Therefore, integrity aspects of location, setting, feeling, and association play an important role in conveying the structure's significance. As a result, these aspects of integrity are often weighed more heavily in the assessment of a structure's overall historic integrity under *Criterion A*. Integrity aspects of design, workmanship, and materials are also important, but alterations that affect these aspects may not result in the same level of diminished integrity. Table 5 summarizes examples of alterations and provides guidance on their relative importance to the loss of historic integrity for a structure to be eligible under *Criterion A*.

Table 5. Assessment of historic integrity under *Criterion A*

Category	Item	Examples
Location, setting, feeling, and association	***Extensive alteration*** These alterations lead to an overall loss of historic integrity that renders a structure not eligible under *Criterion A*.	• Relocated, where relocation clearly separates structure from context of historic theme (e.g., bridge is significant for its relationship due its associative value and relocation severs that association).

Table 5. Assessment of historic integrity under *Criterion A*

Category	Item	Examples
		• Widened superstructure with additional travel lanes not representing the evolution of a transportation route and historic theme. • Extensive overall loss of historic integrity due to cumulative alterations.
	Alterations These alterations were evaluated on a case-by-case basis. Depending on the degree of alteration and number of alterations, the cumulative effect may lead to an overall loss of historic integrity that render a structure not eligible under *Criterion A*; however, one of these alterations taken alone generally does not render a structure not eligible.	• Relocated superstructure, where relocation site may possess some elements of historic theme (e.g., bridge is significant as gateway and is relocated to another gateway site). • Rural bridge has been encroached upon with development or other features that diminish its ability to convey its association with the historic theme. • Lengthened superstructure. • Replacement of main members (not in-kind) integral to superstructure.
Materials, workmanship, and design	***Minor alterations*** These alterations must be evaluated on a case-by-case basis. Depending on the degree of alteration and number of alterations, the cumulative effect may lead to an overall loss of historic integrity that renders a structure not eligible under *Criterion A*; however, one of these alterations taken alone generally does not render a structure not eligible.	• Replacement of features/materials (not in-kind) that are not main members. • Change in railing/parapet, including replacement or loss.

(2) Assessing integrity related to *Criterion C*

Since *Criterion C* relates to the engineering and/or architectural significance of a structure, the integrity aspects of design, workmanship, and materials are typically the most important aspects of historic integrity when evaluating a bridge under *Criterion C*. This is because they allow a structure to convey its physical features and characterize the type, period, or method of construction. A change of location or setting may result in diminished integrity under *Criterion C* when the design of the bridge appears to have been influenced by the immediate environment or site conditions. Table 6 summarizes examples of alterations and their relative importance to the loss of historic integrity for a structure eligible under *Criterion C.*

Table 6. Assessment of historic integrity under *Criterion C*

Category	Item	Examples
	Extensive alterations These alterations lead to an overall loss of historic integrity that renders a structure not eligible under *Criterion C*.	• Superstructure replacement. • Replacement of main members (not in-kind) integral to superstructure. • Widening of the structure. • Lengthening of the superstructure. • Multiple, substantial, individual alterations creating cumulative effect on integrity.
Materials, workmanship, and design	***Alterations*** These alterations must be evaluated on a case-by-case basis. Depending on the degree of alteration and number of alterations, the cumulative effect may lead to an overall loss of historic integrity that render a structure not eligible under *Criterion C*; however, one of these alterations taken alone generally does not render a structure not eligible.	• Added main members (not in-kind). • Replacement of features/materials (not in-kind) that are not main members. • Change in railing/parapet, including replacement or loss.
Location, setting, feeling, and association	***Inappropriate relocation*** When taken alone, this loss of integrity generally will not render a structure not eligible.	• Relocated superstructure.

6. Application of Evaluation Criteria

A. Overview

For evaluation of study pool bridges, Mead & Hunt developed screening criteria and thresholds to evaluate bridges based on the evaluation methodology laid out in Section 5. These thresholds were determined through analysis of bridge data and research sources as described in Section 4. Specific methods for application of those thresholds and screening criteria are described in this section.

B. *Criterion A*

(1) Transportation

(a) Early Oklahoma Truss and Arch Bridges, 1900-1915

Screening methods for significance under this theme began with sorting the project spreadsheet to identify bridges constructed prior to 1916. Additional analysis identified bridge plate presence and whether the bridge plate text indicated local bridge construction. Consideration was given whether a bridge spanned a major river, which could indicate a significant crossing. This approach identified approximately 35 examples with potential for significance under this theme. Additional bridge-specific research was conducted for these examples to determine whether each bridge was financed and constructed at the local level, thus establishing a clear and direct association with this theme. Documentary evidence was required to verify the direct association with private or local government support; if documentary evidence was not discovered, no significance under this theme was assigned.

Inaccessibility of county offices during the COVID-19 pandemic severely limited county records research. Instead, information from local newspapers available online was used as the primary source to provide evidence, along with bridge plates or inscriptions, and county-level research conducted in the 1993 Spans of Time. Subsequent focused research in a specific county or for a specific bridge may identify the documentary evidence required to verify the direct association.

(b) Named auto trails in Oklahoma, 1900-1929

This theme focused on named auto trails with regional or transcontinental connections. Screening methods for significance under this theme began with plotting linear named auto routes in ArcGIS, using historic maps to identify alignments for the following roads, determined to have the greatest importance as major regional or transcontinental routes:

- Ozark Trail
- Jefferson Dallas-Canadian-Denver Highway
- Meridian Highway
- Star Highway
- Albert Pike Highway
- Postal Highway
- Lee-Bankhead Highway
- King of Trails

A 2.5-mile buffer was delineated around each named auto trail route and bridges located within the 2.5-mile buffer were identified using GIS. Mead & Hunt historians identified a date range of the heyday of each respective auto trail and screened to reveal bridges constructed within the date range. From this analysis, 39 bridges were initially identified and 23 were removed from further consideration for potential significance upon closer examination. Additional bridge-specific research was conducted on the remaining bridges including online newspaper and archival research to establish a direct association with an important named auto route.

(c) Early state and federal support of bridges in Oklahoma, 1907-1924

Screening methods for significance under this theme began with a sort of the project spreadsheet by date for those bridges constructed between 1907 and 1924. A sort was done for bridge plate presence and whether text within indicated state or federal aid programs. Approximately 30 examples were initially identified as potentially having significance under this theme. Additional bridge-specific research conducted included online newspaper and archival research. Biennial Oklahoma Department/Commission reports were used to determine whether each bridge was constructed as part of a state or federal aid project, thus establishing a clear and direct association with this theme. Documentary evidence was required to verify the direct association with early state and federal government support; if this was not discovered, significance under this theme was not assigned.

Inaccessibility of county offices during COVID-19 pandemic severely limited county records research. Instead, in addition to the sources noted above, information from local newspapers available online was used as an additional primary source to provide evidence, as well as the county-level research conducted in the 1993 Spans of Time. Subsequent focused research in a specific county or for a specific bridge may identify the documentary evidence required to verify the direct association.

(d) U.S. Highways in Oklahoma, 1926-1956

Screening methods for significance under this theme began with a sort of the project spreadsheet by date for those bridges constructed between 1926 and 1956. To determine which of these was constructed specifically to carry a named highway-turned U.S. Highway or new U.S. Highway, the following highways were plotted in GIS:

- Ozark Trail – US-66
- Lee Bankhead Highway – US-70
- Jefferson Highway – US-73
- Kansas-Oklahoma-Texas Highway – US-77
- Meridian Highway – US-81
- Choctaw Trail – US-271
- US-64/SH-1; US-75/SH-6
- US-266/SH-9.

Mead & Hunt historians used highway designation records and State Highway maps to determine the date of initial designation for each highway. Bridges within a one-mile buffer were identified using GIS.

Additional bridge-specific research was conducted online to identify bridges with a clear and direct association with a U.S. Highway, within the first three years of its designation.

(e) Grade-separation bridges in Oklahoma, 1900-1946

Screening methods for significance under this theme began with a sort of the master database to identify bridges with railroads in Feature Crossed or Facility Carried fields in ODOT NBI data. Only 6 examples were identified, and all were constructed prior to 1920. These bridges have significance as early grade-separation structures in Oklahoma and for the role they played in safety improvement. No further bridge-specific research was needed.

(f) Military and strategic network in Oklahoma, 1900-1955

Screening criteria for significant bridges under this theme was based on two separate avenues of analysis. The first analysis compared the location of study pool bridges with locations of major military installations in the state, and did not yield any bridges with potential for significance.

A subsequent analysis screened for bridges with for association with highways having military or strategic importance immediately prior to and during World War II. Screening methods for significance under this theme began with a sort of the project database to identify bridges constructed between 1939 and 1945 on the following highways in Oklahoma:

- US-64, US-66
- US-73, US-75
- US-266

Further examination of study pool bridges using GIS to identify those within approximately two miles of a strategic highway did not yield results. No study pool bridges associated with this theme are extant and no further bridge-specific research was needed.

(g) New connections and regional expansion, 1900-1955

Multiple screening methods were used to identify bridges with potential for significance under this theme. Initial screening methods for this theme limited analysis to bridges constructed in 1940 or earlier, based on Oklahoma developmental and transportation patterns. An initial screening method sorted the project spreadsheet to identify pre-1941 bridges spanning major rivers. Additional bridge-specific research was conducted to determine whether these were the first bridges at each location and to determine if they opened a region or area for development. A second screening method identified county-owned bridges constructed during the period of significance. Locations of these bridges were compared against USGS maps from the early 1900s and county highway maps from 1936 in an effort to establish growth and development that resulted from the bridge construction. No bridges were identified through either screening method.

During field survey and NRHP evaluation, Mead & Hunt historians identified two bridges with potential significance, A bridge near Pauls Valley was found to not possess significance as is was not associated with early local or regional development or connectivity. The 1953 Little River Bridge (NBI No. 13111; Structure No. 40N4550E1710004) in LeFlore County was found to be significant for its associations with

the Indian Highway constructed in the mid-twentieth century through the Ouachita Mountains by the Choctaw Nation.

(h) Oil production, 1905-1931

Screening methods for bridges that possess significance under this theme started with establishing the location of early important oil-producing fields in Oklahoma during the period of significance. Utilizing the *Historical Atlas of Oklahoma*, locations of the following fields were plotted in GIS:

- Glenn Pool Field
- Cushing-Drumright Field
- Healdton-Hewitt Field
- Garber Field
- Burbank Field
- Greater Seminole Field (including Bowlegs, Searight, Earlsboro, Little River)
- Oklahoma City Field

A 10-mile buffer area around each oil field was created and bridges within the buffer were plotted on the GIS map. Bridges near each oil field were filtered by date range to identify those whose construction were directly related to the field's establishment. A total of 13 bridges were identified as located within ten miles of an oil field and constructed from one year prior to three years after its establishment. Additional online newspaper research was conducted to verify bridges with a clear and direct association with oil field development.

(2) Community Planning and Development

(a) City Beautiful and planning initiatives in Oklahoma, 1900-1960

Of the bridges in the study pool, truss bridges were generally not considered for significance under the City Beautiful/Planning Initiatives theme. Truss bridges typically lack details such as decorative railings, light fixtures, or other stylistic features. Field survey teams were instructed to note if any truss bridges exhibited decorative detailing or similar design considerations.

Screening methods for significance under this theme began with a sort of the master database to identify masonry or concrete arch bridges constructed between 1900 and 1960. Additional sorts identified bridges displaying classical decorative details as identified during field survey. Some bridges were identified during the initial theme research or during research of other themes. Initially 15 bridges were identified, and additional bridge-specific newspaper and archival research was conducted online to identify bridges with a clear and direct association with local City Beautiful initiatives or other planning initiatives.

(b) Historically All-Black Towns, 1900-1940

Screening methods for significance under this theme began with a sort of the project spreadsheet to identify bridges constructed between 1900 and 1940. An *Encyclopedia of Oklahoma* article "All-Black Towns" identified 44 towns established between 1881 and 1940 with a map showing their locations within the state. A comparison in GIS between bridges in our study pool and a layer containing ghost towns in Oklahoma showed there are no bridges associated with the following five non-extant towns: Wybark,

Liberty, Bookertee, Boggy Bend and Taft. To screen the remaining 39 towns/townsites, a GIS layer of our study pool was compared to maps of all-black town locations from the *Encyclopedia of Oklahoma* and *The Black Towns Project* website. Two bridges in our survey pool are located within approximately 1 mile of an extant (formerly) all-black town. Additional bridge-specific research did not reveal a clear and direct association with the establishment or development of either community.

(3) Conservation

(a) Dam and Impoundment-related structures in Oklahoma, 1900-1980

Screening methods for significance under this theme began with a sort of the project spreadsheet by owner, to identify those bridges constructed by the Bureau of Reclamation or U.S. Army Corps of Engineers as identified in ODOT NBI data. Another sort was done to identify bridges located at or close to dams or impoundments. A few bridges were identified during initial theme research, and others were flagged for potential significance under this theme during fieldwork. Initially, 14 bridges were identified and six of these were previously listed in National Register historic districts. Additional bridge-specific research was conducted online to identify bridges with a clear and direct association with this theme.

C. *Criterion C: Design/Construction*

(1) Distinctive characteristics of a type, period, or method of construction.

Screening methods for Criterion C significance began with identification of distinguishing bridge characteristics that signal engineering significance. These characteristics include rarity of type and configuration, early use/construction date, connection types, main span length, overall structure length, and degree of skew. Specific thresholds for each characteristic were developed through comparisons among study pool bridges in Oklahoma, as well as examination of similar thresholds used for evaluation of truss and arch bridges in other states.

Bridges were considered to be a rare bridge type/configuration if there were fewer than 11 extant examples statewide. K-truss bridges are an exception: with 16 examples, they are a somewhat more common truss configuration in Oklahoma but are considered a rare truss configuration nationally. See Table 7 for a summary of threshold examples. The characteristics of each bridge evaluated for *Criterion C* significance were assessed against these threshold values to identify potential significance. Bridges with potential significance were flagged for further analysis and an examination of photographs and limited bridge-specific research was conducted to confirm.

Table 7. Summary of threshold examples

Threshold type	Significance
Rarity of bridge type/configuration	Fewer than 11 examples (except K-truss, considered rare with 16 examples)
Early Use	Pre-1915 construction date
Connection type: Pinned	Rare and unusual connection type, all bridges with this connection type
Connection type: All-Riveted	Pre-1915 use of this connection type
Connection type: Shop-Riveted/field bolted	Pre-1915 use of this connection type
Main span length	Main span configuration specific (see Table 2)

Table 7. Summary of threshold examples

Threshold type	Significance
Overall structure length	Main span configuration specific (see Table 2)
Standard plans	Construction date within three years of the first issuance of a state standard plan for the bridge type/configuration.
Skew	Greater than 45 degrees

(2) High artistic value

Screening methods for this area of *Criterion C* significance began with sorts of the master database to identify any artistic details noted in the additional bridge details field, followed by an examination of individual bridge photographs. Decorative elements identified on truss bridges include curved portal braces, curved plaques, and decorative railings; however, truss bridges are highly utilitarian in nature and no examples were identified that possessed significance for this theme.

Several concrete arch bridges were identified with decorative details, such as classical balustrade, decorative parapet, incised panels on spandrel walls or wing walls, arch ring details, voussoirs, or decorative light standards. Bridges with multiple decorative details were generally considered to possess significance for high artistic value, while those having only one decorative detail did not exhibit significance.

(3) Work of a master

The 1993 Spans of Time inventory identified more than 100 bridge builders, designers, and fabricators. The intensive, bridge-specific research needed to identify and recognize an engineering master from within the list is outside the scope of this project. However, research and evaluation under this study focused on association with Oklahoma-based bridge and ironwork companies. Screening for this area of significance began with study of Spans of Time, and a sort of the database, to identify Oklahoma bridge companies and those bridges constructed by them. Some bridges were identified through screening methods related to another theme or area of significance. Additional bridge-specific research was conducted online to identify bridges with a clear and direct association with this theme.

D. *Criteria B* and *D*

(1) *Criterion B*

To identify potential *Criterion B* significance for associations with significant persons, the project team examined the 50 study pool bridges with plates or plaques. These features often list local politicians or other important figures at the time of the bridge's construction. During field survey, Mead & Hunt historians recorded text on each bridge plate or plaque. The text from each plate was analyzed for clues regarding *Criterion B* significance. However, no person or persons warranting further research were identified.

(2) *Criterion D*

As noted in Section 5.D, abutments of nonextant bridges may be present underneath or next to existing bridges, and these remnants may contain information potential regarding the previous crossings. During field survey, evidence of earlier abutments was recorded. During form production, information about

earlier abutments were noted in Field 41, *Additional Bridge Details*, of the Oklahoma Bridge Survey Form. This information may provide a basis for later evaluation of the bridge's location for significance under *Criterion D*. However, this study did not include *Criterion D* evaluation.

E. Summary of results

The summary of results for the Oklahoma Historic Bridge Survey update is provided below. Eligibility results for individual bridges are provided in Appendix A (organized by county and NBI bridge number) and Appendix B (organized by bridge type and subtype). Inventory forms for evaluated Oklahoma bridges are provided in Appendix C.

Of the 417 bridges included in the study pool, 69 were found during field survey to be nonextant, constructed outside the study period, or misclassified as a truss or arch. These bridges were removed, reducing the list of bridges evaluated to 348. Of the 348 bridges evaluated, 185 were significant and retained sufficient integrity to be individually eligible for the National Register, as shown in Table 8.

Table 8. Eligibility recommendations

Bridge Type	Population in study pool	Eligible and listed	Not eligible
Concrete Arch	82	36	46
Masonry Arch	8	8	0
Truss	257	141	116
Other (Stringer Multi-beam or Girder)	1	0	1
Total	**348**	**185**	**163**

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Appendix A. National Register of Historic Places Eligibility Recommendations (organized by county)

Appendix A. List of NRHP Recommendations by County

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Atoka	01140	03E1660N3930003	E1660 N BOGGY CREEK	Pratt Pony Truss	1920	Eligible (C)
Atoka	02156	03N3825E1900005	N3825 (S OLD HWY) CLEAR BOGGY CREEK	Modified Pratt Through Truss	1928	Eligible (A)
Atoka	12353	03N3933E1770002	MILLER RD LITTLE CHICKASAW CREEK	Pratt Pony Truss	1950	Not eligible
Beckham	00402	05N1740E1260007	N1740 TURKEY CREEK	Concrete Closed Spandrel Deck Arch	1915	Not eligible
Beckham	01743	0504 0278SXF	I-40 FRONTAGE RD. TIMBER CREEK	Modified Pratt Through Truss	1926	Eligible (A, C)
Beckham	03815	0522 0343 X	S.H. 34 N. FORK OF RED RIVER	Camelback Pony Truss	1932	Eligible (C)
Blaine	00289	06N2690E0800004	N2690 CREEK	Concrete Closed Spandrel Deck Arch	1912	Eligible (A, C)
Blaine	00450	06N2510E0820008	N2510 WEAVERS CREEK	Pratt Through Truss	1915	Eligible (C)
Blaine	00460	06E0660N2480002	E0660 N. CANADIAN RIVER	Pratt Through Truss	1915	Eligible (C)
Bryan	00059	07N3651E2197000	UP R.R. 0716C UNDER	Concrete Closed Spandrel Deck Arch	1906	Eligible (A, C)
Bryan	00075	07E2110N3710001	FAU 3610(RODEO RD. UP R.R. UNDER	Concrete Closed Spandrel Deck Arch	1907	Eligible (A, C)
Bryan	01205	07E2090N3900007	E2090 SULPHUR CREEK	Warren with Verticals Pony Truss	1924	Not eligible
Bryan	01210	07N3650E2190009	0716C SAND CREEK	Pratt Pony Truss	1921	Eligible (A, C)
Bryan	01219	07E2080N3830005	E2080 CADDO CREEK	Modified Pratt Through Truss	1921	Eligible (A, C)
Bryan	01221	07E2090N3800003	E2090 BLUE RIVER	Modified Pratt Through Truss	1921	Eligible (A, C)
Bryan	01363	07E2089N3720008	UP R.R. ALABAMA ST. UNDER	Concrete Closed Spandrel Deck Arch	1907	Eligible (A, C)
Bryan	03805	07N3748E2042000	0746C (OLD US 69) BLUE RIVER	K-Truss Through Truss	1932	Eligible (C)
Bryan	05468	07E2115N3910006	E2110 SULPHUR CREEK	Camelback Pony Truss	1937	Not eligible
Bryan	06427	07N3705E2150009	N3705 ISLAND BAYOU CREEK	Warren with Verticals Pony Truss	1912	Eligible (A, C)
Bryan	06440	07E2030N3700004	E2030 LITTLE BLUE CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Bryan	06466	07N3712E2227001	0728C WEBB CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Bryan	06474	07D2018N3720005	D2018 LITTLE BLUE RIVER	Pratt Pony Truss	1938	Not eligible
Bryan	06591	0720 0001 X	S.H. 78 RED RIVER	K-Truss Through Truss	1938	Listed (A, C)
Bryan	10965	0706 0000 X	U.S. 70 LAKE TEXOMA(ROOSEVELT)	Warren with Polygonal Top Chord Through Truss	1945	Eligible (A, C)
Caddo	03081	08E1020N2490003	0804C CREEK	Pratt Pony Truss	1930	Listed (A, C)
Caddo	03107	08E1020N2520001	0804C CREEK	Camelback Pony Truss	1930	Listed (A, C)
Caddo	07290	08E1341N2650005	IRR FAU 2140 (CENT WASHITA RIVER(CENTRAL)	Camelback Pony Truss	1939	Not eligible
Caddo	09192	08N2560E1300009	IRR N2560 COBB CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Canadian	00502	09E1030N2850006	E1030 (ELM ST) Six Mile Creek	Warren with Verticals Pony Truss	1917	Not eligible
Canadian	01633	09N2830E1000003	N2830 N. CANADIAN RIVER	Modified Pratt Through Truss	1924	Eligible (A, C)
Canadian	04085	0902 0000 X	U.S. 281 S. CANADIAN RIVER	Camelback Pony Truss	1933	Listed (A, C)

Appendix A. List of NRHP Recommendations by County

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Carter	00116	10E1980N3310004	MCCLAIN RD. CREEK	Warren with Verticals Pony Truss	1909	Eligible (C)
Carter	04943	10N3280E1970009	HEDGES RD CREEK	Concrete Closed Spandrel Deck Arch	1936	Not eligible
Carter	N/A	10 NO NUMBER	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Cherokee	09765	11E0764N4510003	E0764 (CHOCTAW) Talequah Creek	Concrete Arched Rigid Frame	1941	Eligible (A, C)
Cherokee	09766	11E0761N4510004	E0761 (SHAWNEE ST. Talequah Creek	Concrete Arched Rigid Frame	1941	Eligible (A, C)
Cherokee	13529	1125 0050 X	S.H. 100 DRY CREEK	K-Truss Through Truss	1955	Eligible (A, C)
Choctaw	00716	12E2010N4040008	FAS 1217 MUDDY BOGGY CREEK	Pratt Through Truss	1919	Eligible (C)
Choctaw	16634	1216 1652 X	S.H. 109 KIAMICHI RIVER	K-Truss Through Truss	1965	Eligible (C)
Cleveland	03024	14N3160E1170001	DOUGLAS BLVD. West Elm Creek	Warren with Verticals Pony Truss	1930	Eligible (C)
Cleveland	05274	14N3120E1200006	N PORTER AVE LITTLE RIVER	Concrete Closed Spandrel Deck Arch	1937	Not eligible
Cleveland	06106	14N3180E1210001	72ND AVE NE ROCK CREEK	Concrete Closed Spandrel Deck Arch	1938	Not eligible
Comanche	00060	16E1570N2710001	E1570 BEAVER CREEK	Warren with Verticals Pony Truss	1906	Eligible (C)
Comanche	00068	16E1579N2510005	E1579 (CITY ST.) MEDICINE CREEK	Warren with Verticals Pony Truss	1906	Eligible (A, C)
Comanche	00195	16E1560N2640005	E1560 Ninemile Beaver Creek	Pratt Half-Hip Pony Truss	1910	Eligible (C)
Comanche	00700	1670 0108 X	S.H. 115 CREEK	Concrete Slab with integral arch configurations	1919	Not eligible
Comanche	02522	16E1750N2520003	1640C CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Comanche	03217	16E1656N2390007	FAS 1620C POST OAK CREEK	Camelback Pony Truss	1930	Eligible (A)
Comanche	03809	16E1650N2430005	1620C W CACHE CREEK	Camelback Pony Truss	1932	Eligible (A)
Comanche	05007	16E1650N2470009	1622C BLUE BEAVER CREEK	Camelback Pony Truss	1936	Not eligible
Comanche	16456	16E1690N2580001	IRR E1690 CREEK	Camelback Pony Truss	c.1930	Not eligible
Comanche	16766	16E1690N2580007	IRR E1690 CACHE CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Comanche	18699	16E1640N2700003	IRR E1640 BEAVER CREEK	Warren with Verticals Pony Truss	c.1920	Not eligible
Comanche	19008	16N2560E1690002	N2560 (SHERIDAN) WOLF CREEK	Camelback Pony Truss	c.1930	Not eligible
Comanche	19339	16N2620E1500009	IRR 1662C CREEK	Camelback Pony Truss	c.1940	Not eligible
Craig	00120	18N4260E0120007	N4260 Big Creek	Warren with Polygonal Top Chord Pony Truss	1909	Eligible (C)
Craig	00321	18N4290E0030001	1834C BIG CREEK	Concrete Closed Spandrel Deck Arch	1912	Eligible (C)
Craig	00355	18E0266N4430001	E0266 LITTLE CABIN CREEK	Camelback Pony Truss	1913	Eligible (A, C)
Craig	02852	18E0050N4460004	E0050 MUD CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Craig	04953	18N4270E0090002	1832C E FORK BIG CREEK	Warren with Verticals Pony Truss	1936	Not eligible
Creek	00368	19E0880N3710009	E0880 WEST FORK SANDY CREEK	Warren with Verticals Pony Truss	1914	Not eligible
Creek	00388	19E0820N3700002	E0820 CATFISH CREEK	Pratt Pony Truss	1914	Eligible (C)

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County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Creek	00649	19N3830E0860000	N3830 BROWNS CREEK	Pratt Pony Truss	1918	Not eligible
Creek	00711	19E0667N3890005	E0667 TSU R.R. UNDER	Concrete Closed Spandrel Deck Arch	1919	Eligible (A)
Creek	00972	19N3610E0800007	N3610 LITTLE DEEP FORK CREEK	Warren with Verticals Pony Truss	1920	Not eligible
Creek	01084	19E0930N3730007	E0930 SANDY CREEK	Warren with Verticals Pony Truss	1920	Not eligible
Creek	01400	19N3670E0910001	N3670 SALT CREEK	Warren with Verticals Pony Truss	1924	Not eligible
Creek	01406	19N3650E0940002	N3650 DEEP FORK CANADIAN RIV.	Pratt Through Truss	1924	Eligible (C)
Creek	01410	19N3820E0900008	N3820 DEEP FORK CREEK	Camelback Pony Truss	1924	Eligible (C)
Creek	01619	19E0750N3770002	E0750 POLECAT CREEK	Pratt Through Truss	c.1910	Eligible (C)
Creek	01631	19N3704E0910009	N3704 DEEP FORK RIVER	Pratt Through Truss	c.1910	Eligible (C)
Creek	01884	19E0790N3590000	E0790 LITTLE DEEP FORK CREEK	Warren with Verticals Pony Truss	1927	Eligible (C)
Creek	03716	19E0750N3750002	E0750 ROWLAND CREEK	Pratt Half-Hip Pony Truss	c.1915	Eligible (C)
Creek	22592	19E0820N3630009	E0820 LITTLE DEEP FORK CREEK	Pratt Pony Truss	c.1925	Not eligible
Creek	23963	19E0713N3600002	1ST ST. TIGER CREEK	Concrete Closed Spandrel Deck Arch	1936	Eligible (C)
Creek	31174	19N3711E0810008	N3711 CREEK	Masonry Closed Spandrel Deck Arch	1940	Eligible (A, C)
Custer	03192	2004 0411SXF	I-40 FRONTAGE RD. BEAR CREEK	Pratt Pony Truss	1930	Eligible (A)
Delaware	03091	21N4670E0320005	N4670 HONEY CREEK	Warren with Verticals Pony Truss	1930	Not eligible
Delaware	03224	21D0579N4660001	D0579 FLINT CREEK	Camelback Pony Truss	1930	Not eligible
Dewey	00401	22N2050E0780001	N2050 West Barnitz Creek	Concrete Closed Spandrel Deck Arch	1915	Not eligible
Garfield	00039	24N2950E0570006	N2950 SKELETON CREEK	Camelback Pony Truss	c.1935	Not eligible
Garfield	00205	24N2960E0560002	N2960 Bitter Creek	Pratt Pony Truss	1910	Eligible (C)
Garfield	00510	24N2890E0480008	N2890 Hackberry Creek	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Garfield	01395	24E0430N2900002	E0430 CREEK	Concrete Closed Spandrel Deck Arch	1924	Eligible (A, C)
Garfield	01396	24E0430N2900004	E0430 CREEK	Concrete Closed Spandrel Deck Arch	1924	Eligible (A, C)
Garfield	05394	24E0410N2760009	E0410 CREEK	Concrete Closed Spandrel Deck Arch	1919	Not eligible
Garfield	26051	24N3090E0390009	N3090 CREEK	Concrete Closed Spandrel Deck Arch	1917	Not eligible
Garfield	26934	24E0340N3060005	E0340 CREEK	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Garvin	09476	25N3055E1580005	2548C RUSH CREEK	Modified Parker Through Truss	1940	Eligible (C)
Garvin	09791	25N3170E1710000	N3170 (2554C) WILD HORSE CREEK O'FLOW	Pratt Pony Truss	1941	Not eligible
Garvin	23251	25N3248E1570003	N3248 (WALNUT ST.) RUSH CREEK	Modified Camelback Through Truss	1946	Eligible (C)
Grady	01076	26E1340N2900006	E1340 EAST BITTER CREEK	Pratt Half-Hip Pony Truss	1913	Eligible (A, C)
Grady	01615	26N2837E1420006	N2837 LITTLE WASHITA RIVER	Pratt Pony Truss	1925	Not eligible

Appendix A. List of NRHP Recommendations by County

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Grady	02780	26E1350N2820001	E1350 (FRISCO AVE) ROCK HOLLOW CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Grady	03108	26E1370N2890009	E1370 East Bitter Creek	Camelback Pony Truss	1930	Not eligible
Grady	03142	26E1425N2840000	2622C LITTLE WASHITA RIVER	Camelback Pony Truss	1930	Not eligible
Grady	07276	26N2838E1350002	N2838 (4TH ST) Line Creek	Concrete Arched Girder	1939	Eligible (C)
Grady	07277	26N2837E1350002	N2837 (6 ST) TONY HOLLOW CREEK	Concrete Arched Girder	1939	Eligible (C)
Grady	19023	26N2940E1470002	N2940 ROARING CREEK	Camelback Pony Truss	c.1935	Not eligible
Grady	25118	26N2990E1550001	N2990 CREEK	Warren with Verticals Pony Truss	1927	Eligible (C)
Grant	03129	27E0200N2920001	E0200 CREEK	Camelback Pony Truss	1926	Eligible (A)
Grant	09454	27E0260N2930003	E0260 WILD HORSE CREEK	Pratt Pony Truss	1940	Not eligible
Grant	09494	27N3057E0230006	N3057 POND CREEK	Camelback Pony Truss	1940	Not eligible
Hughes	00725	32N3804E1400007	N3804 S. CANADIAN RIVER	Parker Through Truss	1919	Eligible (A, C)
Hughes	01190	32N3920E1220001	N3920 CREEK	Concrete Closed Spandrel Deck Arch	1921	Not eligible
Hughes	01200	32E1200N3930000	E1200 FISH CREEK	Warren with Verticals Pony Truss	1921	Eligible (C)
Hughes	01204	32E1270N3780008	E1270 Graves Creek	Warren with Verticals Pony Truss	1921	Eligible (C)
Hughes	01310	32N3740E1430003	N3740 LEADER CREEK	Concrete Closed Spandrel Deck Arch	1923	Not eligible
Hughes	04991	32D3846E1540013	D3846 CANEY BOGGY CREEK	Modified Pratt Through Truss	1936	Not eligible
Hughes	11123	32E1382N3720009	3218C LITTLE RIVER	K-Truss Through Truss	1949	Eligible (C)
Hughes	14178	32N3690E1390006	N3690 LITTLE RIVER	K-Truss Through Truss	1958	Eligible (C)
Hughes	28637	32N3770E1290006	N3770 ELM CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Jackson	00356	33E1670N2010001	E1670 BITTER CREEK	Warren with Verticals Pony Truss	1913	Eligible (A, C)
Jackson	02459	33N1930E1720001	N1930 Gypsum Creek	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Jackson	05763	33E1600N2010003	E1600 Bitter Creek	Concrete Closed Spandrel Deck Arch	1938	Not eligible
Jackson	06343	33E1630N1880009	E1630 COTTONWOOD CREEK	Warren Deck Truss	1938	Eligible (C)
Jackson	07332	3320 0219 X	S.H. 5 SANDY CREEK	Camelback Pony Truss	1939	Not eligible
Jefferson	02267	34E2070N2970008	E2070 BAKER CREEK	Warren with Verticals Pony Truss	1929	Not eligible
Jefferson	04534	34N3010E2030003	3444C MAJOR Unnamed Creek	Camelback Pony Truss	1935	Not eligible
Johnston	00512	35N3630E1920001	N3630 CREEK	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Johnston	00630	35E1810N3480004	3544C ROCK CREEK	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Johnston	09478	35E1956N3450004	E1956 TURKEY CREEK	Modified Parker Through Truss	1940	Eligible (C)
Kay	01630	36N3140E0030006	N3140 CHIKASKIA RIVER	Concrete Closed Spandrel Deck Arch	1925	Eligible (C)
Kay	25555	36E0120N3270004	E0120 Duck Creek	Masonry Closed Spandrel Deck Arch	1910	Eligible (C)

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Kingfisher	00466	37E0790N2710007	E0790 OTTER CREEK	Concrete Closed Spandrel Deck Arch	1916	Not eligible
Kingfisher	01199	37E0850N2730000	E0850 CREEK	Concrete Closed Spandrel Deck Arch	1921	Eligible (C)
Kingfisher	02163	37E0760N2870007	E0760 KINGFISHER CREEK	Pratt Through Truss	1929	Eligible (C)
Kingfisher	08251	37N2980E0650002	N2980 COTTONWOOD CREEK	Concrete Closed Spandrel Deck Arch	1940	Not eligible
Kingfisher	15452	37E0590N2840008	E0590 BUFFALO CREEK	Concrete Closed Spandrel Deck Arch	1917	Not eligible
Kingfisher	N/A	37 NO NUMBER 3	BOWMAN AVE CREEK	Concrete Closed Spandrel Deck Arch	1916	Not eligible
Kiowa	00297	38N2280E1310009	N2280 CREEK	Concrete Closed Spandrel Deck Arch	1913	Eligible (A, C)
Kiowa	00469	38E1550N2310001	IRR E1550 East Otter Creek	Warren with Verticals Pony Truss	1916	Not eligible
Kiowa	00690	38E1630N2290009	IRR E1630 CREEK	Concrete Closed Spandrel Deck Arch	1919	Not eligible
Kiowa	01027	38N2380E1330004	N2380 CREEK	Concrete Closed Spandrel Deck Arch	1920	Not eligible
Kiowa	01208	38E1630N2300003	IRR E1630 Deep Red Creek	Concrete Closed Spandrel Deck Arch	1921	Not eligible
Kiowa	03760	38D2285E1640010	D2285 DEEP RED CREEK	Camelback Pony Truss	1930	Eligible (A)
Latimer	09492	39D1444N4362002	D1444 FORCHE MALINE CREEK	Parker Through Truss	1923	Eligible (A, C)
Le Flore	01170	40E1296N4707000	FAU 1492 (COUNTRY POTEAU RIVER	Parker Through Truss	1920	Eligible (A, C)
Le Flore	06415	40N4787E1528000	4084C CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Le Flore	09204	40D4538E1545018	D4538 BUZZARD CREEK	Pratt Pony Truss	1940	Not eligible
Le Flore	09528	40N4580E1600004	4044C KIAMICHI RIVER	Warren with Verticals Through Truss	c.1915	Eligible (C)
Le Flore	09817	40E1590N4530001	E1590 FRAZIER CREEK	Pratt Pony Truss	1941	Not eligible
Le Flore	09820	40N4640E1292003	4054C BRAZIL CREEK	Warren with Verticals Pony Truss	c.1920	Not eligible
Le Flore	10961	4014 2530 X	U.S. 271 FOURCHE MALINE CREEK	K-Truss Through Truss	1948	Eligible (C)
Le Flore	12641	4011 0084 X	U.S. 270 CASTON CREEK	Modified Pratt Through Truss	1920	Not eligible
Le Flore	12847	40E1395N4710003	E1395 POTEAU RIVER	Parker Through Truss	1926	Not eligible
Le Flore	13111	40N4550E1710004	IRR N4550 LITTLE RIVER	Camelback Pony Truss	1953	Eligible (A)
Le Flore	16747	40N4645E1625001	4044C KIAMICHI RIVER	Camelback Pony Truss	c.1930	Not eligible
Lincoln	00309	41E0990N3510002	E0990 ROBINSON CREEK	Pratt Pony Truss	1912	Eligible (C)
Lincoln	00310	41N3570E0860007	N3570 SALT CREEK	Pratt Pony Truss	1921	Eligible (C)
Lincoln	00313	41E0820N3490004	E0820 RANCH CREEK	Warren Bedstead Pony Truss	1912	Not eligible
Lincoln	00319	41E0960N3550005	E0960 DEER CREEK	Truss Leg Bedstead Pony Truss	1912	Eligible (C)
Lincoln	00372	41E0820N3450004	E0820 WEST BEAVER CREEK	Warren with Verticals Pony Truss	1914	Eligible (C)
Lincoln	00379	41E1050N3500005	E1050 ROBINSON CREEK	Warren with Polygonal Top Chord Pony Truss	1914	Eligible (C)
Lincoln	00382	41N3450E1020003	N3450 QUAPAW CREEK	Pratt Pony Truss	1909	Eligible (A, C)

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Lincoln	00389	41N3410E0950007	N3410 KICKAPOO CREEK	Pratt Pony Truss	1923	Eligible (C)
Lincoln	01048	41E0840N3510002	E0840 FOUR MILE CREEK	Pratt (Small 3-Panel) Pony Pony Truss	1920	Eligible (C)
Lincoln	01056	41N3530E0740008	IRR E3530 WILD HORSE CREEK	Warren with Verticals Pony Truss	1924	Not eligible
Lincoln	01107	41E0840N3500003	E0840 NORTH BRANCH CREEK	Pratt Pony Truss	1913	Eligible (A, C)
Lincoln	01391	41E1040N3530001	E1040 CREEK	Concrete Closed Spandrel Deck Arch	1924	Eligible (C)
Lincoln	01405	41N3503E0880001	4166C DRY CREEK	Modified Pratt Through Truss	1924	Not eligible
Lincoln	01412	41N3370E0920002	N3370 DEEP FORK RIVER	Pratt Through Truss	1924	Not eligible
Lincoln	02304	41E1040N3500004	E1040 ROBINSON CREEK	Pratt Pony Truss	1929	Eligible (A)
Lincoln	02334	41E1038N3370008	E1038 BRUSH CREEK	Camelback Pony Truss	1929	Not eligible
Lincoln	02412	41N3440E0910001	N3440 CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Lincoln	03800	4124 0157 X	S.H. 66 BUS. CAPTAIN CREEK	Camelback Pony Truss	1932	Listed (A)
Lincoln	23723	41N3450E1020006	N3450 SAND CREEK	Pratt Pony Truss	c.1925	Not eligible
Lincoln	26834	41N3503E0900005	SLWC R.R. N3503 UNDER	Concrete Closed Spandrel Deck Arch	1917	Eligible (A)
Lincoln	N/A	41 NO NUMBER	OLD U.S. 66 CREEK	Warren with Verticals Pony Truss	1928	Eligible (A, C)
Logan	00173	42E0740N3230009	E0740 SOLDIER CREEK	Warren with Verticals Pony Truss	1910	Not eligible
Logan	00377	42E0650N3150007	E0650 CREEK	Pratt Pony Truss	1914	Eligible (C)
Logan	00475	42E0610N3110002	E0610 WEST BEAVER CREEK	Pratt Pony Truss	1910	Eligible (A, C)
Logan	00948	42E0800N3010009	E0800 CREEK	Pratt Half-Hip Pony Truss	1920	Eligible (C)
Logan	00949	42E0800N3020001	E0800 BOGGY CREEK	Pratt Half-Hip Pony Truss	1920	Eligible (C)
Logan	00997	42E0730N3180000	E0730 ANTELOPE CREEK	Pratt (Small 3-Panel) Pony Pony Truss	1920	Eligible (C)
Logan	01057	42N3220E0800009	N3220 BEAR CREEK	Pratt Half-Hip Pony Truss	1915	Eligible (A, C)
Logan	01628	42N3020E0640002	N3020 SKELETON CREEK	Modified Pratt Through Truss	1925	Not eligible
Logan	03139	42N3250E0820002	N3250 BEAR CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Logan	03140	42N3270E0830002	N3270 BEAR CREEK	Pratt Through Truss	1908	Eligible (C)
Logan	03181	42N3280E0830004	HARRAH RD. BEAR CREEK	Camelback Pony Truss	1930	Not eligible
Logan	04911	42E0610N3140009	E0610 EAST BEAVER CREEK	Warren with Verticals Pony Truss	1936	Not eligible
Logan	09396	42E0840N3280009	E0840 BEAR CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Logan	12444	42E0780N3120008	FAU 3540 (COLLEGE COTTONWOOD CREEK	Pratt Pony Truss	1950	Not eligible
Logan	15161	42N3120E0710000	N3120 SKELETON CREEK	Camelback Pony Truss	1960	Not eligible
Love	00537	4314 0270 X	S.H. 77 SCENIC CREEK	Masonry Closed Spandrel Deck Arch	c.1936	Listed (A, C)
Love	N/A	43 NO NUMBER 1	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)

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Love	N/A	43 NO NUMBER 2	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Love	N/A	43 NO NUMBER 3	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Major	23462	47N2542E0500005	N2542 CREEK	Pratt Pony Truss	c.1930	Not eligible
Marshall	10565	4806 0176 X	S.H. 32 HAUANI CREEK	Camelback Pony Truss	1946	Not eligible
Marshall	28837	48N3580E2080007	TEXHOMA PARK ROAD ROOSTER CREEK	Parker Through Truss	1939	Not eligible
Mayes	00730	49N4310E0510005	N4310 CREEK	Concrete Closed Spandrel Deck Arch	1920	Not eligible
Mayes	01109	49E0350N4250009	4902C PRYOR CREEK	Camelback Pony Truss	1920	Not eligible
Mayes	10314	49N4270E0470009	N4270 SEMINOLE CREEK	Pratt Pony Truss	1945	Not eligible
Mayes	27569	4916 1450 X	S.H. 28 PENSACOLA DAM	Concrete Open Spandrel Deck Arch	1940	Listed (C), Eligible (A)
McClain	01932	44N3095E1340006	N3095 WALNUT CREEK	Pratt Through Truss	1927	Eligible (C)
McClain	16137	44E1410N3030000	E1410 CRINER CREEK	Camelback Pony Truss	c.1950	Not eligible
McClain	26321	44N3120E1430005	N3120 TURKEY CREEK	Warren with Verticals Pony Truss	1927	Eligible (C)
McCurtain	01353	45N4620E2120004	IRR 4560C LITTLE RIVER	Parker Through Truss	1923	Eligible (A, C)
McCurtain	09531	45D4710E1770002	D4710 BIG EAGLE CREEK	Parker Through Truss	1929	Not eligible
McCurtain	13124	4506 1645 X	S.H. 3 GLOVER RIVER	K-Truss Through Truss	1953	Eligible (C)
McCurtain	16795	45N4540E1810002	IRR N4540 SILVER CREEK	Warren with Verticals Deck Truss	1966	Eligible (C)
McIntosh	08092	46E1190N4060005	E1190 WALLACE CREEK	Concrete Closed Spandrel Deck Arch	1940	Not eligible
McIntosh	08329	46N4010E1220007	N4010 CREEK	Concrete Closed Spandrel Deck Arch	1940	Not eligible
Muskogee	00042	51E0871N4290000	FAU 6784 CALLAHAN UP R.R. UNDER	Pratt Through Truss	1905	Eligible (A, C)
Muskogee	00190	51E0990N4260006	FAS 5108 BUTLER CREEK	Warren with Verticals Pony Truss	1910	Eligible (C)
Muskogee	00262	51N4160E1000008	N4160 CREEK	Warren with Verticals Pony Truss	1911	Eligible (A, C)
Muskogee	00280	51N4120E0910006	5142C Cane Creek	Parker Pony Truss	1911	Eligible (A, C)
Muskogee	02056	51N4200E0910006	5146C PECAN CREEK	Warren with Verticals Pony Truss	1911	Eligible (A, C)
Muskogee	02274	51E0850N4380004	E0850 CREEK	Warren with Verticals Pony Truss	1911	Eligible (A, C)
Muskogee	02285	51N4140E0940005	N4140 CLOUD CREEK	Warren with Verticals Pony Truss	1929	Not eligible
Muskogee	02286	51N4260E0970001	N4260 BUTLER CREEK	Warren with Verticals Pony Truss	1914	Eligible (A, C)
Muskogee	03352	51N4180E0990005	5144C CREEK	Warren with Verticals Pony Truss	1931	Not eligible
Noble	00204	52N3220E0380007	N3220 RED ROCK CREEK	Pratt Pony Truss	1918	Eligible (C)
Noble	00394	52N3130E0450009	N3130 BLACK BEAR CREEK	Pratt Pony Truss	1914	Eligible (C)
Noble	04493	52E0490N3160003	E0490 CREEK	Concrete Closed Spandrel Deck Arch	1935	Not eligible
Nowata	02873	53N4120E0040000	N4120 OPOSSUM CREEK	Masonry Closed Spandrel Deck Arch	1913	Listed (C), Eligible (A)

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Nowata	03201	53N4135E0080008	N4135 HICKORY CREEK	Modified Pratt Through Truss	1930	Not eligible
Nowata	03223	53N4190E0190006	N4190 Big Creek	Parker Through Truss	1910	Eligible (A, C)
Nowata	26679	53N4190E0210005	N4190 KENTUCKY CREEK	Concrete Unknown Deck Arch	1940	Not eligible
Okfuskee	02085	54E1020N3710004	E1020 WALNUT CREEK	Warren with Verticals Pony Truss	1928	Not eligible
Okfuskee	04236	54N3787E0960000	5450C DEEP FORK RIVER	Camelback Pony Truss	1934	Not eligible
Okfuskee	09159	54E1050N3680002	E1050 CREEK	Warren with Verticals Pony Truss	c.1925	Not eligible
Oklahoma	01416	55E1035N2990004	N. OVERHOLSER DR N. CANADIAN RIVER	Modified Parker Through Truss	1924	Listed (A, C), Eligible (A)
Oklahoma	14357	55D3095E1020003	NE GRAND BLVD. DEEP FORK CREEK	Concrete Closed Spandrel Deck Arch	1911	Eligible (A, C)
Oklahoma	22458	55E0890N3030006	E0890(WATERLOO RD) CREEK	Concrete Closed Spandrel Deck Arch	c.1930	Not eligible
Okmulgee	00108	5620 1717 X	S.H. 56 OKMULGEE CREEK	Masonry Closed Spandrel Deck Arch	1909	Listed (C)
Okmulgee	01211	56E0900N3910001	5608C ADAMS CREEK	Pratt Pony Truss	1922	Eligible (A, C)
Okmulgee	02982	56N3944E0910000	N3944 FLAT ROCK CREEK	Warren with Verticals Pony Truss	1930	Eligible (A)
Okmulgee	12486	56E1125N4000005	IRR 5682C N. CANADIAN RIVER	K-Truss Through Truss	1951	Eligible (C)
Osage	00329	57N3740E0240005	N3740 (LYNN AVE) BIRD CREEK	Masonry Closed Spandrel Deck Arch	1912	Eligible (A, C)
Osage	00482	57N3533E0300002	N3533 SALT CREEK	Warren with Polygonal Top Chord Pony Truss	1916	Eligible (C)
Osage	01135	57E0320N3830008	IRR FAS 5757 CREEK	Truss Leg Bedstead Pony Truss	1909	Eligible (A, C)
Osage	01409	57D0185N3560002	D0185 SALT CREEK	Pratt Through Truss	1924	Eligible (C)
Osage	01607	57E0350N3540002	E0350 GRAYHORSE CREEK	Concrete Closed Spandrel Deck Arch	1925	Eligible (C)
Osage	01900	57D0230N3400002	D0230 CREEK	Concrete Closed Spandrel Deck Arch	1927	Eligible (C)
Osage	02139	57D0079N3910004	D0079 MISSON CREEK	Pratt Through Truss	1924	Not eligible
Osage	03044	57E0390N3580009	5740C SYCAMORE CREEK	Warren with Verticals Pony Truss	1930	Not eligible
Osage	03205	57E0217N3520002	5714C SALT CREEK	Camelback Pony Truss	1930	Not eligible
Osage	03215	57N3790E0260005	N3790 BIRD CREEK	Pratt Through Truss	1930	Not eligible
Osage	03230	57N3522E0280007	5722C SALT CREEK	Modified Camelback Through Truss	1930	Eligible (C)
Osage	04484	57N3700E0410001	N3700 Claremore Creek	Warren with Verticals Pony Truss	1935	Not eligible
Osage	04585	57D3910E0090001	D3910 CANEY RIVER	Parker Through Truss	c.1915	Eligible (C)
Osage	04593	5734 1529 X	S.H. 99 POND CREEK	K-Truss Through Truss	1935	Eligible (C)
Osage	04601	5734 1748 X	S.H. 99 CANEY RIVER	K-Truss Through Truss	1935	Eligible (C)
Osage	04934	57N3530E0020007	CR4725 SPRING CREEK	Pratt Pony Truss	1936	Not eligible
Osage	04960	57D0185N3560001	D0185 CREEK	Pratt Pony Truss	1936	Not eligible
Osage	05015	57N3820E0050007	N3820 POND CREEK	Parker Through Truss	1936	Not eligible

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Osage	06552	57N3825E0060005	5756C BIRCH CREEK	Warren with Polygonal Top Chord Pony Truss	1936	Eligible (A, C)
Osage	09261	57E0340N3700005	E0340 HOMINY CREEK	Pratt Pony Truss	1940	Not eligible
Osage	09333	57N3540E0240008	IRR 5724C LITTLE CHIEF CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Osage	09367	57D0030N3830008	D0030 TURKEY CREEK	Pratt Pony Truss	1940	Not eligible
Osage	09372	57N3700E0400006	N3700 CREEK	Camelback Pony Truss	1940	Not eligible
Osage	09529	5712 0189 X	S.H. 18 SALT CREEK	K-Truss Through Truss	1940	Eligible (C)
Osage	10963	57N3768E0010006	5752C CANEY RIVER	Parker Through Truss	1948	Eligible (C)
Osage	11602	57D3825E01810P7	OSAGEHILLS PARK RD CREEK	Concrete Closed Spandrel Deck Arch	1933	Eligible (C)
Osage	23273	57D0187N3764006	D0187 CREEK	Camelback Pony Truss	1930	Not eligible
Ottawa	00699	58E0120N4590004	IRR E0120 CREEK	Concrete Slab with integral arch configurations	1919	Not eligible
Ottawa	03114	58E0010N4530006	IRR E0010 FOUR MILE CREEK	Pratt Pony Truss	1930	Not eligible
Ottawa	04924	58E0100N4500006	OLD U.S. 59 Windy Creek	Concrete and Masonry Slab and Arch Combination	c.1915	Eligible (A, C)
Ottawa	06066	58N4510E0110006	IRR N4510 CREEK	Concrete Slab with integral arch configurations	1938	Not eligible
Ottawa	06312	58N4530E0110006	N4530 CREEK	Concrete Slab with integral arch configurations	1938	Not eligible
Ottawa	06313	58N4530E0110009	N4530 CREEK	Concrete Slab with integral arch configurations	1938	Not eligible
Ottawa	06604	58N4590E0170001	N4590 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06612	58N4520E0190002	N4520 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06613	58N4520E0190004	IRR N4520 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06614	58N4520E0190005	N4520 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06895	58E0140N4550001	IRR E0140 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06898	58E0180N4560004	IRR E0180 CREEK	Concrete and Masonry Slab and Arch Combination	c.1920	Not eligible
Ottawa	07084	58E0190N4510009	E0190 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	07273	58E0020N4530003	E0020 FOUR MILE CREEK	Pratt Pony Truss	1939	Not eligible
Ottawa	10197	58E0160N4580005	IRR 5818C CREEK	Concrete Slab with integral arch configurations	1945	Not eligible
Pawnee	01417	59E0350N3450007	E0350 ARKANSAS RIVER	Parker Through Truss	1927	Eligible (C)
Pawnee	01877	59E0530N3580009	E0530 RANCH CREEK	Pratt Half-Hip Pony Truss	c.1915	Eligible (C)
Pawnee	02186	59E0530N3570009	E0530 CREEK	Masonry Closed Spandrel Deck Arch	1905	Eligible (C)
Pawnee	02219	59N3390E0440001	N3390 TURKEY CREEK	Pratt Half-Hip Pony Truss	c.1920	Eligible (C)
Pawnee	02238	59E0360N3460002	E0360 CREEK	Pratt Half-Hip Pony Truss	1917	Eligible (C)
Pawnee	02241	59E0510N3510009	E0510 CREEK	Warren with Verticals Pony Truss	1922	Not eligible
Pawnee	03663	59E0450N3580007	E0450 HARPER CREEK	Warren with Verticals Pony Truss	1919	Not eligible

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Pawnee	06571	59E0467N3480003	E0467 BLACK BEAR CREEK	Camelback Pony Truss	1938	Eligible (A, C)
Payne	01055	60N3300E0530009	COUNTRY CLUB LN. LONG BRANCH CREEK	Pratt Half-Hip Pony Truss	1910	Listed (C)
Payne	01747	60E0690N3440003	92ND ST. (E0690) BIG CREEK	Modified Pratt Through Truss	1926	Not eligible
Payne	02996	60E0600N3190002	E0600 STILLWATER CREEK	Warren with Verticals Pony Truss	1926	Eligible (C)
Payne	03130	60E0630N3450001	19TH ST. COUNCIL CREEK	Pratt Pony Truss	1930	Not eligible
Payne	03204	60E0685N3410003	86TH ST. STILLWATER CREEK	Warren with Verticals Pony Truss	1962	Eligible (C)
Payne	04527	60E0610N3270002	E0610 STILLWATER CREEK	Pratt Pony Truss	1935	Not eligible
Payne	09783	60N3280E0610002	N3280 STILLWATER CREEK	Warren with Verticals Pony Truss	1941	Not eligible
Payne	10928	60N3570E0680007	OAKGROVE RD EUCHEE CREEK	Pratt Pony Truss	1948	Not eligible
Payne	12464	60N3310E0610009	SANGRE RD. STILLWATER CREEK	Camelback Pony Truss	1950	Not eligible
Payne	22325	60E0715N3360005	122ND ST (E0715) LOST CREEK	Camelback Pony Truss	c.1935	Not eligible
Payne	23023	60E0610N3280002	E0610 NORTH STILLWATER CREEK	Camelback Pony Truss	1937	Not eligible
Payne	24137	60E0730N3510009	E. ESECO RD. COTTONWOOD CREEK	Camelback Pony Truss	1940	Not eligible
Payne	29053	60N3536E0620003	MAIN STREET CREEK	Concrete Closed Spandrel Deck Arch	1931	Not eligible
Payne	29543	60N3440E0610008	N3440 COUNCIL CREEK	K-Truss Through Truss	1936	Eligible (A, C)
Payne	30391	60E0690N3360000	E0690 (92ND ST.) LOST CREEK	Warren with Verticals Pony Truss	c.1925	Not eligible
Pittsburg	01635	61E1478N4170005	E1478 BRUSHY CREEK	Warren with Verticals Deck Truss	1925	Eligible (C)
Pontotoc	01634	62E1538N3530006	E1538 SANDY CREEK	Modified Pratt Through Truss	1925	Not eligible
Pontotoc	30322	62N3568E1550007	N3568 WINTERSMITH CREEK	Concrete Closed Spandrel Deck Arch	1934	Listed (A, C)
Pontotoc	N/A	62 NO NUMBER N	WINTERSMITH DR CREEK	Concrete Closed Spandrel Deck Arch	1934	Listed (A, C)
Pontotoc	N/A	62 NO NUMBER S	WINTERSMITH DR CREEK	Concrete Closed Spandrel Deck Arch	1934	Listed (A, C)
Pottawatomie	00032	63N3410E1180003	RANGELINE RD. SQUIRREL CREEK	Concrete Rainbow Arch	1917	Listed (A, C)
Pottawatomie	00070	63D3342E1446000	D3342 (6374C) S. CANADIAN RIVER	Camelback Through Truss	1906	Listed (C)
Pottawatomie	01217	63N3320E1420005	N3320 POND CREEK	Modified Pratt Through Truss	1922	Not eligible
Pottawatomie	08956	63E1070N3390004	E1070 SOUTH QUAPAW CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Pottawatomie	09149	63E1410N3350000	6338C CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Pottawatomie	09525	63N3416E1330005	N3416 SALT CREEK	Modified Pratt Through Truss	1929	Not eligible
Pushmataha	13930	6416 0751 X	S.H. 3 KIAMICHI RIVER	K-Truss Through Truss	1957	Eligible (C)
Rogers	01753	66E0332N4260002	E0332 PRYOR CREEK	Modified Pratt Through Truss	1926	Listed (C), Eligible (A)
Rogers	02978	66N4150E0430002	N4150 SWEETWATER CREEK	Pratt Pony Truss	1930	Not eligible
Rogers	13688	6602 0368EX	S.H. 66 NB BIRD CREEK & RD. UNDER	K-Truss Through Truss	1956	Eligible (C)

Appendix A. List of NRHP Recommendations by County

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Seminole	01938	67N3560E1350006	N3560 SALT CREEK	Camelback Pony Truss	1927	Not eligible
Seminole	01940	67N3632E1270000	E3632 Wewoka Creek & UP RR Under	Warren with Verticals Deck Truss	1927	Eligible (A, C)
Seminole	02360	67N3560E1310007	N3560 LITTLE RIVER	Modified Pratt Through Truss	1929	Eligible (A, C)
Seminole	03711	67N3540E1390001	N3540 SANDY CREEK	Warren with Verticals Pony Truss	1932	Not eligible
Seminole	06537	67E1160N3540006	E1160 TURKEY CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Seminole	09193	67N3530E1350002	N3530 CREEK	Pratt Pony Truss	1940	Not eligible
Seminole	17856	67N3530E1340004	N3530 SALT CREEK	Warren with Verticals Pony Truss	c.1930	Not eligible
Sequoyah	09813	68E1020N4560007	IRR 6808C PINHOOK CREEK	Masonry Closed Spandrel Deck Arch	1941	Eligible (A, C)
Stephens	09522	69E1740N2730006	6918C LITTLE BEAVER CREEK	Camelback Pony Truss	1940	Not eligible
Texas	13814	70N1040E0310001	N1040 HACKBERRY CREEK	Modified Pratt Through Truss	c.1925	Eligible (C)
Tillman	00453	71E1690N2140001	E1690 OTTER CREEK	Warren with Verticals Pony Truss	1915	Eligible (C)
Tillman	00940	71E1650N2220008	E1650 OTTER CREEK	Pratt Pony Truss	1914	Eligible (C)
Tillman	01130	71N2450E1870005	FAS 7121 Deep Red Creek	Warren with Verticals Pony Truss	1920	Not eligible
Tillman	09521	71E1730N2280009	FAS 7102 DEEP RED CREEK	Camelback Pony Truss	1940	Not eligible
Tillman	26703	71N2390E1850003	N2390 JACK CREEK	Camelback Pony Truss	c.1935	Not eligible
Tulsa	00122	72E0790N4000007	E0790 (201 S) SNAKE CREEK	Pratt Through Truss	1909	Eligible (A, C)
Tulsa	00331	72E0490N3950008	7220C(106 ST. N) BIRD CREEK	Parker Through Truss	1912	Eligible (A, C)
Tulsa	01052	72E0450N3930008	E0450 (5 TH ST.) CREEK	Pratt Pony Truss	c.1925	Not eligible
Tulsa	01169	72E0490N3950000	7220C(106 ST. N) HOMINY CREEK	Parker Through Truss	1923	Eligible (C)
Tulsa	02887	72N4010E0440000	7206C Cherry Creek	Warren Bedstead Pony Truss	1930	Eligible (C)
Tulsa	03226	72N4035E0435006	OLD U.S. 169 HORSE PEN CREEK	Modified Pratt Through Truss	1930	Eligible (C)
Tulsa	03237	72E0430N4040007	OLD U.S. 169 CREEK	Camelback Pony Truss	1930	Not eligible
Tulsa	03238	72E0430N4040001	OLD U.S. 169 CANEY RIVER	Modified Parker Through Truss	1930	Eligible (C)
Tulsa	05039	72E0500N3950003	E0500 (96 ST. N) BIRD CREEK	Pratt Through Truss	c.1890	Eligible (C)
Tulsa	08750	72N4065E0710002	N4065 (185 E) BROKEN ARROW CREEK	King Post Pony Truss	c.1910	Eligible (C)
Tulsa	10907	72N3957E0610006	N3957 (YORKTOWN) CROW CREEK	Concrete Closed Spandrel Deck Arch	1948	Eligible (C)
Tulsa	13369	72E0618N3950003	E0618(E.29TH.ST.) CROW CREEK	Concrete Closed Spandrel Deck Arch	1955	Eligible (C)
Tulsa	18043	72E0613N3930005	PEDESTRIAN E0610 (W 23 ST) UNDER	Concrete Ogee Through Arch	1971	Eligible (C)
Tulsa	20866	72E0612N3940001	FAU 8340 (21 ST.) ARKANSAS RIV. & RIVERSID	Concrete Girder	1932, recon	Not eligible
Tulsa	N/A	72 PRIVATE	OAK DR JOE CREEK	Parker Through Truss	1909	Eligible (C)
Washington	01352	74E0188N3950005	E0188 (COMANCHE AV CANEY RIVER	Concrete Open Spandrel Deck Arch	1923	Eligible (A, C)

Appendix A. List of NRHP Recommendations by County

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Washington	03016	74N3990E0390004	N3990 SAUNDERS CREEK	Warren with Verticals Pony Truss	1918	Not eligible
Washington	03095	74N4030E0390009	N4030 LACY CREEK	Pratt Pony Truss	c.1915	Eligible (C)
Washington	03137	74N4025E0300007	N4025 TIMBER LAKE CREEK	Pratt Pony Truss	1911	Eligible (A, C)
Washington	03138	74N3980E0320009	N3980 NORTH FORK	Camelback Pony Truss	1930	Not eligible
Washington	03708	74N4000E0360009	7452C BEAVEN CREEK	Pratt Pony Truss	1932	Not eligible
Washington	03734	74N4000E0380009	7452C SAUNDERS CREEK	Camelback Pony Truss	1932	Not eligible
Washington	05521	7413 0165 X	S.H. 123 CANEY RIVER	K-Truss Through Truss	1937	Eligible (A, C)

Appendix B. National Register of Historic Places Eligibility Recommendations (organized by bridge type)

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Comanche	03217	16E1656N2390007	FAS 1620C POST OAK CREEK	Camelback Pony Truss	1930	Eligible (A)
Grant	03129	27E0200N2920001	E0200 CREEK	Camelback Pony Truss	1926	Eligible (A)
Kiowa	03760	38D2285E1640010	D2285 DEEP RED CREEK	Camelback Pony Truss	1930	Eligible (A)
Le Flore	13111	40N4550E1710004	IRR N4550 LITTLE RIVER	Camelback Pony Truss	1953	Eligible (A)
Craig	00355	18E0266N4430001	E0266 LITTLE CABIN CREEK	Camelback Pony Truss	1913	Eligible (A, C)
Beckham	03815	0522 0343 X	S.H. 34 N. FORK OF RED RIVER	Camelback Pony Truss	1932	Eligible (C)
Creek	01410	19N3820E0900008	N3820 DEEP FORK CREEK	Camelback Pony Truss	1924	Eligible (C)
Comanche	03809	16E1650N2430005	1620C W CACHE CREEK	Camelback Pony Truss	1932	Eligible (A)
Pawnee	06571	59E0467N3480003	E0467 BLACK BEAR CREEK	Camelback Pony Truss	1938	Eligible (A, C)
Lincoln	03800	4124 0157 X	S.H. 66 BUS. CAPTAIN CREEK	Camelback Pony Truss	1932	Listed (A)
Caddo	03107	08E1020N2520001	0804C CREEK	Camelback Pony Truss	1930	Listed (A, C)
Canadian	04085	0902 0000 X	U.S. 281 S. CANADIAN RIVER	Camelback Pony Truss	1933	Listed (A, C)
Bryan	05468	07E2115N3910006	E2110 SULPHUR CREEK	Camelback Pony Truss	1937	Not eligible
Caddo	07290	08E1341N2650005	IRR FAU 2140 (CENT WASHITA RIVER(CENTRAL)	Camelback Pony Truss	1939	Not eligible
Comanche	05007	16E1650N2470009	1622C BLUE BEAVER CREEK	Camelback Pony Truss	1936	Not eligible
Comanche	16456	16E1690N2580001	IRR E1690 CREEK	Camelback Pony Truss	c.1930	Not eligible
Comanche	19008	16N2560E1690002	N2560 (SHERIDAN) WOLF CREEK	Camelback Pony Truss	c.1930	Not eligible
Comanche	19339	16N2620E1500009	IRR 1662C CREEK	Camelback Pony Truss	c.1940	Not eligible
Delaware	03224	21D0579N4660001	D0579 FLINT CREEK	Camelback Pony Truss	1930	Not eligible
Garfield	00039	24N2950E0570006	N2950 SKELETON CREEK	Camelback Pony Truss	c.1935	Not eligible
Grady	03108	26E1370N2890009	E1370 East Bitter Creek	Camelback Pony Truss	1930	Not eligible
Grady	03142	26E1425N2840000	2622C LITTLE WASHITA RIVER	Camelback Pony Truss	1930	Not eligible
Grady	19023	26N2940E1470002	N2940 ROARING CREEK	Camelback Pony Truss	c.1935	Not eligible
Grant	09494	27N3057E0230006	N3057 POND CREEK	Camelback Pony Truss	1940	Not eligible
Jackson	07332	3320 0219 X	S.H. 5 SANDY CREEK	Camelback Pony Truss	1939	Not eligible
Jefferson	04534	34N3010E2030003	3444C MAJOR Unnamed Creek	Camelback Pony Truss	1935	Not eligible
Le Flore	16747	40N4645E1625001	4044C KIAMICHI RIVER	Camelback Pony Truss	c.1930	Not eligible
Lincoln	02334	41E1038N3370008	E1038 BRUSH CREEK	Camelback Pony Truss	1929	Not eligible
Logan	03181	42N3280E0830004	HARRAH RD. BEAR CREEK	Camelback Pony Truss	1930	Not eligible
Logan	15161	42N3120E0710000	N3120 SKELETON CREEK	Camelback Pony Truss	1960	Not eligible
Marshall	10565	4806 0176 X	S.H. 32 HAUANI CREEK	Camelback Pony Truss	1946	Not eligible

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Mayes	01109	49E0350N4250009	4902C PRYOR CREEK	Camelback Pony Truss	1920	Not eligible
McClain	16137	44E1410N3030000	E1410 CRINER CREEK	Camelback Pony Truss	c.1950	Not eligible
Okfuskee	04236	54N3787E0960000	5450C DEEP FORK RIVER	Camelback Pony Truss	1934	Not eligible
Osage	03205	57E0217N3520002	5714C SALT CREEK	Camelback Pony Truss	1930	Not eligible
Osage	09372	57N3700E0400006	N3700 CREEK	Camelback Pony Truss	1940	Not eligible
Osage	23273	57D0187N3764006	D0187 CREEK	Camelback Pony Truss	1930	Not eligible
Payne	12464	60N3310E0610009	SANGRE RD. STILLWATER CREEK	Camelback Pony Truss	1950	Not eligible
Payne	22325	60E0715N3360005	122ND ST (E0715) LOST CREEK	Camelback Pony Truss	c.1935	Not eligible
Payne	23023	60E0610N3280002	E0610 NORTH STILLWATER CREEK	Camelback Pony Truss	1937	Not eligible
Payne	24137	60E0730N3510009	E. ESECO RD. COTTONWOOD CREEK	Camelback Pony Truss	1940	Not eligible
Seminole	01938	67N3560E1350006	N3560 SALT CREEK	Camelback Pony Truss	1927	Not eligible
Stephens	09522	69E1740N2730006	6918C LITTLE BEAVER CREEK	Camelback Pony Truss	1940	Not eligible
Tillman	09521	71E1730N2280009	FAS 7102 DEEP RED CREEK	Camelback Pony Truss	1940	Not eligible
Tillman	26703	71N2390E1850003	N2390 JACK CREEK	Camelback Pony Truss	c.1935	Not eligible
Tulsa	03237	72E0430N4040007	OLD U.S. 169 CREEK	Camelback Pony Truss	1930	Not eligible
Washington	03138	74N3980E0320009	N3980 NORTH FORK	Camelback Pony Truss	1930	Not eligible
Washington	03734	74N4000E0380009	7452C SAUNDERS CREEK	Camelback Pony Truss	1932	Not eligible
Pottawatomie	00070	63D3342E1446000	D3342 (6374C) S. CANADIAN RIVER	Camelback Through Truss	1906	Listed (C)
Ottawa	04924	58E0100N4500006	OLD U.S. 59 Windy Creek	Concrete and Masonry Slab and Arch Combination	c.1915	Eligible (A, C)
Ottawa	06898	58E0180N4560004	IRR E0180 CREEK	Concrete and Masonry Slab and Arch Combination	c.1920	Not eligible
Grady	07276	26N2838E1350002	N2838 (4TH ST) Line Creek	Concrete Arched Girder	1939	Eligible (C)
Grady	07277	26N2837E1350002	N2837 (6 ST) TONY HOLLOW CREEK	Concrete Arched Girder	1939	Eligible (C)
Cherokee	09765	11E0764N4510003	E0764 (CHOCTAW) Talequah Creek	Concrete Arched Rigid Frame	1941	Eligible (A, C)
Cherokee	09766	11E0761N4510004	E0761 (SHAWNEE ST. Talequah Creek	Concrete Arched Rigid Frame	1941	Eligible (A, C)
Creek	00711	19E0667N3890005	E0667 TSU R.R. UNDER	Concrete Closed Spandrel Deck Arch	1919	Eligible (A)
Lincoln	26834	41N3503E0900005	SLWC R.R. N3503 UNDER	Concrete Closed Spandrel Deck Arch	1917	Eligible (A)
Blaine	00289	06N2690E0800004	N2690 CREEK	Concrete Closed Spandrel Deck Arch	1912	Eligible (A, C)
Bryan	00059	07N3651E2197000	UP R.R. 0716C UNDER	Concrete Closed Spandrel Deck Arch	1906	Eligible (A, C)
Bryan	00075	07E2110N3710001	FAU 3610(RODEO RD. UP R.R. UNDER	Concrete Closed Spandrel Deck Arch	1907	Eligible (A, C)
Bryan	01363	07E2089N3720008	UP R.R. ALABAMA ST. UNDER	Concrete Closed Spandrel Deck Arch	1907	Eligible (A, C)
Garfield	01395	24E0430N2900002	E0430 CREEK	Concrete Closed Spandrel Deck Arch	1924	Eligible (A, C)

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Garfield	01396	24E0430N2900004	E0430 CREEK	Concrete Closed Spandrel Deck Arch	1924	Eligible (A, C)
Kiowa	00297	38N2280E1310009	N2280 CREEK	Concrete Closed Spandrel Deck Arch	1913	Eligible (A, C)
Oklahoma	14357	55D3095E1020003	NE GRAND BLVD. DEEP FORK CREEK	Concrete Closed Spandrel Deck Arch	1911	Eligible (A, C)
Craig	00321	18N4290E0030001	1834C BIG CREEK	Concrete Closed Spandrel Deck Arch	1912	Eligible (C)
Creek	23963	19E0713N3600002	1ST ST. TIGER CREEK	Concrete Closed Spandrel Deck Arch	1936	Eligible (C)
Kay	01630	36N3140E0030006	N3140 CHIKASKIA RIVER	Concrete Closed Spandrel Deck Arch	1925	Eligible (C)
Kingfisher	01199	37E0850N2730000	E0850 CREEK	Concrete Closed Spandrel Deck Arch	1921	Eligible (C)
Osage	01607	57E0350N3540002	E0350 GRAYHORSE CREEK	Concrete Closed Spandrel Deck Arch	1925	Eligible (C)
Osage	01900	57D0230N3400002	D0230 CREEK	Concrete Closed Spandrel Deck Arch	1927	Eligible (C)
Osage	11602	57D3825E01810P7	OSAGEHILLS PARK RD CREEK	Concrete Closed Spandrel Deck Arch	1933	Eligible (C)
Tulsa	10907	72N3957E0610006	N3957 (YORKTOWN) CROW CREEK	Concrete Closed Spandrel Deck Arch	1948	Eligible (C)
Tulsa	13369	72E0618N3950003	E0618(E.29TH.ST.) CROW CREEK	Concrete Closed Spandrel Deck Arch	1955	Eligible (C)
Lincoln	01391	41E1040N3530001	E1040 CREEK	Concrete Closed Spandrel Deck Arch	1924	Eligible (C)
Carter	N/A	10 NO NUMBER	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Love	N/A	43 NO NUMBER 1	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Love	N/A	43 NO NUMBER 2	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Love	N/A	43 NO NUMBER 3	SH 77S CREEK	Concrete Closed Spandrel Deck Arch	1936	Listed (A, C)
Pontotoc	30322	62N3568E1550007	N3568 WINTERSMITH CREEK	Concrete Closed Spandrel Deck Arch	1934	Listed (A, C)
Pontotoc	N/A	62 NO NUMBER N	WINTERSMITH DR CREEK	Concrete Closed Spandrel Deck Arch	1934	Listed (A, C)
Pontotoc	N/A	62 NO NUMBER S	WINTERSMITH DR CREEK	Concrete Closed Spandrel Deck Arch	1934	Listed (A, C)
Beckham	00402	05N1740E1260007	N1740 TURKEY CREEK	Concrete Closed Spandrel Deck Arch	1915	Not eligible
Carter	04943	10N3280E1970009	HEDGES RD CREEK	Concrete Closed Spandrel Deck Arch	1936	Not eligible
Cleveland	05274	14N3120E1200006	N PORTER AVE LITTLE RIVER	Concrete Closed Spandrel Deck Arch	1937	Not eligible
Cleveland	06106	14N3180E1210001	72ND AVE NE ROCK CREEK	Concrete Closed Spandrel Deck Arch	1938	Not eligible
Comanche	02522	16E1750N2520003	1640C CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Craig	02852	18E0050N4460004	E0050 MUD CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Dewey	00401	22N2050E0780001	N2050 West Barnitz Creek	Concrete Closed Spandrel Deck Arch	1915	Not eligible
Garfield	00510	24N2890E0480008	N2890 Hackberry Creek	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Garfield	05394	24E0410N2760009	E0410 CREEK	Concrete Closed Spandrel Deck Arch	1919	Not eligible
Garfield	26051	24N3090E0390009	N3090 CREEK	Concrete Closed Spandrel Deck Arch	1917	Not eligible
Garfield	26934	24E0340N3060005	E0340 CREEK	Concrete Closed Spandrel Deck Arch	1918	Not eligible

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Grady	02780	26E1350N2820001	E1350 (FRISCO AVE) ROCK HOLLOW CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Hughes	01190	32N3920E1220001	N3920 CREEK	Concrete Closed Spandrel Deck Arch	1921	Not eligible
Hughes	01310	32N3740E1430003	N3740 LEADER CREEK	Concrete Closed Spandrel Deck Arch	1923	Not eligible
Jackson	02459	33N1930E1720001	N1930 Gypsum Creek	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Jackson	05763	33E1600N2010003	E1600 Bitter Creek	Concrete Closed Spandrel Deck Arch	1938	Not eligible
Johnston	00512	35N3630E1920001	N3630 CREEK	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Johnston	00630	35E1810N3480004	3544C ROCK CREEK	Concrete Closed Spandrel Deck Arch	1918	Not eligible
Kingfisher	00466	37E0790N2710007	E0790 OTTER CREEK	Concrete Closed Spandrel Deck Arch	1916	Not eligible
Kingfisher	08251	37N2980E0650002	N2980 COTTONWOOD CREEK	Concrete Closed Spandrel Deck Arch	1940	Not eligible
Kingfisher	15452	37E0590N2840008	E0590 BUFFALO CREEK	Concrete Closed Spandrel Deck Arch	1917	Not eligible
Kingfisher	N/A	37 NO NUMBER 3	BOWMAN AVE CREEK	Concrete Closed Spandrel Deck Arch	1916	Not eligible
Kiowa	00690	38E1630N2290009	IRR E1630 CREEK	Concrete Closed Spandrel Deck Arch	1919	Not eligible
Kiowa	01027	38N2380E1330004	N2380 CREEK	Concrete Closed Spandrel Deck Arch	1920	Not eligible
Kiowa	01208	38E1630N2300003	IRR E1630 Deep Red Creek	Concrete Closed Spandrel Deck Arch	1921	Not eligible
Lincoln	02412	41N3440E0910001	N3440 CREEK	Concrete Closed Spandrel Deck Arch	1930	Not eligible
Mayes	00730	49N4310E0510005	N4310 CREEK	Concrete Closed Spandrel Deck Arch	1920	Not eligible
McIntosh	08092	46E1190N4060005	E1190 WALLACE CREEK	Concrete Closed Spandrel Deck Arch	1940	Not eligible
McIntosh	08329	46N4010E1220007	N4010 CREEK	Concrete Closed Spandrel Deck Arch	1940	Not eligible
Noble	04493	52E0490N3160003	E0490 CREEK	Concrete Closed Spandrel Deck Arch	1935	Not eligible
Oklahoma	22458	55E0890N3030006	E0890(WATERLOO RD) CREEK	Concrete Closed Spandrel Deck Arch	c.1930	Not eligible
Payne	29053	60N3536E0620003	MAIN STREET CREEK	Concrete Closed Spandrel Deck Arch	1931	Not eligible
Tulsa	20866	72E0612N3940001	FAU 8340 (21 ST.) ARKANSAS RIV. & RIVERSID	Concrete Girder	1932, recon	Not eligible
Tulsa	18043	72E0613N3930005	PEDESTRIAN E0610 (W 23 ST) UNDER	Concrete Ogee Through Arch	1971	Eligible (C)
Washington	01352	74E0188N3950005	E0188 (COMANCHE AV CANEY RIVER	Concrete Open Spandrel Deck Arch	1923	Eligible (A, C)
Mayes	27569	4916 1450 X	S.H. 28 PENSACOLA DAM	Concrete Open Spandrel Deck Arch	1940	Listed (C), Eligible (A)
Pottawatomie	00032	63N3410E1180003	RANGELINE RD. SQUIRREL CREEK	Concrete Rainbow Arch	1917	Listed (A, C)
Ottawa	07084	58E0190N4510009	E0190 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Comanche	00700	1670 0108 X	S.H. 115 CREEK	Concrete Slab with integral arch configurations	1919	Not eligible
Ottawa	00699	58E0120N4590004	IRR E0120 CREEK	Concrete Slab with integral arch configurations	1919	Not eligible
Ottawa	06066	58N4510E0110006	IRR N4510 CREEK	Concrete Slab with integral arch configurations	1938	Not eligible
Ottawa	06312	58N4530E0110006	N4530 CREEK	Concrete Slab with integral arch configurations	1938	Not eligible

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Ottawa	06313	58N4530E0110009	N4530 CREEK	Concrete Slab with integral arch configurations	1938	Not eligible
Ottawa	06604	58N4590E0170001	N4590 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06612	58N4520E0190002	N4520 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06613	58N4520E0190004	IRR N4520 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06614	58N4520E0190005	N4520 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	06895	58E0140N4550001	IRR E0140 CREEK	Concrete Slab with integral arch configurations	1939	Not eligible
Ottawa	10197	58E0160N4580005	IRR 5818C CREEK	Concrete Slab with integral arch configurations	1945	Not eligible
Nowata	26679	53N4190E0210005	N4190 KENTUCKY CREEK	Concrete Unknown Deck Arch	1940	Not eligible
Tulsa	08750	72N4065E0710002	N4065 (185 E) BROKEN ARROW CREEK	King Post Pony Truss	c.1910	Eligible (C)
Cherokee	13529	1125 0050 X	S.H. 100 DRY CREEK	K-Truss Through Truss	1955	Eligible (A, C)
Payne	29543	60N3440E0610008	N3440 COUNCIL CREEK	K-Truss Through Truss	1936	Eligible (A, C)
Washington	05521	7413 0165 X	S.H. 123 CANEY RIVER	K-Truss Through Truss	1937	Eligible (A, C)
Bryan	03805	07N3748E2042000	0746C (OLD US 69) BLUE RIVER	K-Truss Through Truss	1932	Eligible (C)
Choctaw	16634	1216 1652 X	S.H. 109 KIAMICHI RIVER	K-Truss Through Truss	1965	Eligible (C)
Hughes	11123	32E1382N3720009	3218C LITTLE RIVER	K-Truss Through Truss	1949	Eligible (C)
Hughes	14178	32N3690E1390006	N3690 LITTLE RIVER	K-Truss Through Truss	1958	Eligible (C)
Le Flore	10961	4014 2530 X	U.S. 271 FOURCHE MALINE CREEK	K-Truss Through Truss	1948	Eligible (C)
McCurtain	13124	4506 1645 X	S.H. 3 GLOVER RIVER	K-Truss Through Truss	1953	Eligible (C)
Okmulgee	12486	56E1125N4000005	IRR 5682C N. CANADIAN RIVER	K-Truss Through Truss	1951	Eligible (C)
Osage	04593	5734 1529 X	S.H. 99 POND CREEK	K-Truss Through Truss	1935	Eligible (C)
Osage	04601	5734 1748 X	S.H. 99 CANEY RIVER	K-Truss Through Truss	1935	Eligible (C)
Osage	09529	5712 0189 X	S.H. 18 SALT CREEK	K-Truss Through Truss	1940	Eligible (C)
Pushmataha	13930	6416 0751 X	S.H. 3 KIAMICHI RIVER	K-Truss Through Truss	1957	Eligible (C)
Rogers	13688	6602 0368EX	S.H. 66 NB BIRD CREEK & RD. UNDER	K-Truss Through Truss	1956	Eligible (C)
Bryan	06591	0720 0001 X	S.H. 78 RED RIVER	K-Truss Through Truss	1938	Listed (A, C)
Creek	31174	19N3711E0810008	N3711 CREEK	Masonry Closed Spandrel Deck Arch	1940	Eligible (A, C)
Osage	00329	57N3740E0240005	N3740 (LYNN AVE) BIRD CREEK	Masonry Closed Spandrel Deck Arch	1912	Eligible (A, C)
Sequoyah	09813	68E1020N4560007	IRR 6808C PINHOOK CREEK	Masonry Closed Spandrel Deck Arch	1941	Eligible (A, C)
Kay	25555	36E0120N3270004	E0120 Duck Creek	Masonry Closed Spandrel Deck Arch	1910	Eligible (C)
Pawnee	02186	59E0530N3570009	E0530 CREEK	Masonry Closed Spandrel Deck Arch	1905	Eligible (C)
Love	00537	4314 0270 X	S.H. 77 SCENIC CREEK	Masonry Closed Spandrel Deck Arch	c.1936	Listed (A, C)

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Okmulgee	00108	5620 1717 X	S.H. 56 OKMULGEE CREEK	Masonry Closed Spandrel Deck Arch	1909	Listed (C)
Nowata	02873	53N4120E0040000	N4120 OPOSSUM CREEK	Masonry Closed Spandrel Deck Arch	1913	Listed (C), Eligible (A)
Garvin	23251	25N3248E1570003	N3248 (WALNUT ST.) RUSH CREEK	Modified Camelback Through Truss	1946	Eligible (C)
Osage	03230	57N3522E0280007	5722C SALT CREEK	Modified Camelback Through Truss	1930	Eligible (C)
Tulsa	03238	72E0430N4040001	OLD U.S. 169 CANEY RIVER	Modified Parker Through Truss	1930	Eligible (C)
Garvin	09476	25N3055E1580005	2548C RUSH CREEK	Modified Parker Through Truss	1940	Eligible (C)
Johnston	09478	35E1956N3450004	E1956 TURKEY CREEK	Modified Parker Through Truss	1940	Eligible (C)
Oklahoma	01416	55E1035N2990004	N. OVERHOLSER DR N. CANADIAN RIVER	Modified Parker Through Truss	1924	Listed (A, C), Eligible (A)
Atoka	02156	03N3825E1900005	N3825 (S OLD HWY) CLEAR BOGGY CREEK	Modified Pratt Through Truss	1928	Eligible (A)
Beckham	01743	0504 0278SXF	I-40 FRONTAGE RD. TIMBER CREEK	Modified Pratt Through Truss	1926	Eligible (A, C)
Bryan	01219	07E2080N3830005	E2080 CADDO CREEK	Modified Pratt Through Truss	1921	Eligible (A, C)
Bryan	01221	07E2090N3800003	E2090 BLUE RIVER	Modified Pratt Through Truss	1921	Eligible (A, C)
Canadian	01633	09N2830E1000003	N2830 N. CANADIAN RIVER	Modified Pratt Through Truss	1924	Eligible (A, C)
Seminole	02360	67N3560E1310007	N3560 LITTLE RIVER	Modified Pratt Through Truss	1929	Eligible (A, C)
Texas	13814	70N1040E0310001	N1040 HACKBERRY CREEK	Modified Pratt Through Truss	c.1925	Eligible (C)
Tulsa	03226	72N4035E0435006	OLD U.S. 169 HORSE PEN CREEK	Modified Pratt Through Truss	1930	Eligible (C)
Rogers	01753	66E0332N4260002	E0332 PRYOR CREEK	Modified Pratt Through Truss	1926	Listed (C), Eligible (A)
Hughes	04991	32D3846E1540013	D3846 CANEY BOGGY CREEK	Modified Pratt Through Truss	1936	Not eligible
Le Flore	12641	4011 0084 X	U.S. 270 CASTON CREEK	Modified Pratt Through Truss	1920	Not eligible
Lincoln	01405	41N3503E0880001	4166C DRY CREEK	Modified Pratt Through Truss	1924	Not eligible
Logan	01628	42N3020E0640002	N3020 SKELETON CREEK	Modified Pratt Through Truss	1925	Not eligible
Nowata	03201	53N4135E0080008	N4135 HICKORY CREEK	Modified Pratt Through Truss	1930	Not eligible
Payne	01747	60E0690N3440003	92ND ST. (E0690) BIG CREEK	Modified Pratt Through Truss	1926	Not eligible
Pontotoc	01634	62E1538N3530006	E1538 SANDY CREEK	Modified Pratt Through Truss	1925	Not eligible
Pottawatomie	01217	63N3320E1420005	N3320 POND CREEK	Modified Pratt Through Truss	1922	Not eligible
Pottawatomie	09525	63N3416E1330005	N3416 SALT CREEK	Modified Pratt Through Truss	1929	Not eligible
Muskogee	00280	51N4120E0910006	5142C Cane Creek	Parker Pony Truss	1911	Eligible (A, C)
Hughes	00725	32N3804E1400007	N3804 S. CANADIAN RIVER	Parker Through Truss	1919	Eligible (A, C)
Latimer	09492	39D1444N4362002	D1444 FORCHE MALINE CREEK	Parker Through Truss	1923	Eligible (A, C)
Le Flore	01170	40E1296N4707000	FAU 1492 (COUNTRY POTEAU RIVER	Parker Through Truss	1920	Eligible (A, C)
McCurtain	01353	45N4620E2120004	IRR 4560C LITTLE RIVER	Parker Through Truss	1923	Eligible (A, C)

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County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Nowata	03223	53N4190E0190006	N4190 Big Creek	Parker Through Truss	1910	Eligible (A, C)
Tulsa	00331	72E0490N3950008	7220C(106 ST. N) BIRD CREEK	Parker Through Truss	1912	Eligible (A, C)
Osage	04585	57D3910E0090001	D3910 CANEY RIVER	Parker Through Truss	c.1915	Eligible (C)
Osage	10963	57N3768E0010006	5752C CANEY RIVER	Parker Through Truss	1948	Eligible (C)
Pawnee	01417	59E0350N3450007	E0350 ARKANSAS RIVER	Parker Through Truss	1927	Eligible (C)
Tulsa	01169	72E0490N3950000	7220C(106 ST. N) HOMINY CREEK	Parker Through Truss	1923	Eligible (C)
Tulsa	N/A	72 PRIVATE	OAK DR JOE CREEK	Parker Through Truss	1909	Eligible (C)
Le Flore	12847	40E1395N4710003	E1395 POTEAU RIVER	Parker Through Truss	1926	Not eligible
Marshall	28837	48N3580E2080007	TEXHOMA PARK ROAD ROOSTER CREEK	Parker Through Truss	1939	Not eligible
McCurtain	09531	45D4710E1770002	D4710 BIG EAGLE CREEK	Parker Through Truss	1929	Not eligible
Osage	05015	57N3820E0050007	N3820 POND CREEK	Parker Through Truss	1936	Not eligible
Lincoln	01048	41E0840N3510002	E0840 FOUR MILE CREEK	Pratt (Small 3-Panel) Pony Pony Truss	1920	Eligible (C)
Logan	00997	42E0730N3180000	E0730 ANTELOPE CREEK	Pratt (Small 3-Panel) Pony Pony Truss	1920	Eligible (C)
Logan	01057	42N3220E0800009	N3220 BEAR CREEK	Pratt Half-Hip Pony Truss	1915	Eligible (A, C)
Grady	01076	26E1340N2900006	E1340 EAST BITTER CREEK	Pratt Half-Hip Pony Truss	1913	Eligible (A, C)
Comanche	00195	16E1560N2640005	E1560 Ninemile Beaver Creek	Pratt Half-Hip Pony Truss	1910	Eligible (C)
Creek	03716	19E0750N3750002	E0750 ROWLAND CREEK	Pratt Half-Hip Pony Truss	c.1915	Eligible (C)
Logan	00948	42E0800N3010009	E0800 CREEK	Pratt Half-Hip Pony Truss	1920	Eligible (C)
Logan	00949	42E0800N3020001	E0800 BOGGY CREEK	Pratt Half-Hip Pony Truss	1920	Eligible (C)
Pawnee	01877	59E0530N3580009	E0530 RANCH CREEK	Pratt Half-Hip Pony Truss	c.1915	Eligible (C)
Pawnee	02219	59N3390E0440001	N3390 TURKEY CREEK	Pratt Half-Hip Pony Truss	c.1920	Eligible (C)
Pawnee	02238	59E0360N3460002	E0360 CREEK	Pratt Half-Hip Pony Truss	1917	Eligible (C)
Payne	01055	60N3300E0530009	COUNTRY CLUB LN. LONG BRANCH CREEK	Pratt Half-Hip Pony Truss	1910	Listed (C)
Custer	03192	2004 0411SXF	I-40 FRONTAGE RD. BEAR CREEK	Pratt Pony Truss	1930	Eligible (A)
Lincoln	02304	41E1040N3500004	E1040 ROBINSON CREEK	Pratt Pony Truss	1929	Eligible (A)
Bryan	01210	07N3650E2190009	0716C SAND CREEK	Pratt Pony Truss	1921	Eligible (A, C)
Lincoln	00382	41N3450E1020003	N3450 QUAPAW CREEK	Pratt Pony Truss	1909	Eligible (A, C)
Lincoln	01107	41E0840N3500003	E0840 NORTH BRANCH CREEK	Pratt Pony Truss	1913	Eligible (A, C)
Logan	00475	42E0610N3110002	E0610 WEST BEAVER CREEK	Pratt Pony Truss	1910	Eligible (A, C)
Okmulgee	01211	56E0900N3910001	5608C ADAMS CREEK	Pratt Pony Truss	1922	Eligible (A, C)
Washington	03137	74N4025E0300007	N4025 TIMBER LAKE CREEK	Pratt Pony Truss	1911	Eligible (A, C)

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County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Atoka	01140	03E1660N3930003	E1660 N BOGGY CREEK	Pratt Pony Truss	1920	Eligible (C)
Comanche	16766	16E1690N2580007	IRR E1690 CACHE CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Creek	00388	19E0820N3700002	E0820 CATFISH CREEK	Pratt Pony Truss	1914	Eligible (C)
Garfield	00205	24N2960E0560002	N2960 Bitter Creek	Pratt Pony Truss	1910	Eligible (C)
Hughes	28637	32N3770E1290006	N3770 ELM CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Lincoln	00309	41E0990N3510002	E0990 ROBINSON CREEK	Pratt Pony Truss	1912	Eligible (C)
Lincoln	00310	41N3570E0860007	N3570 SALT CREEK	Pratt Pony Truss	1921	Eligible (C)
Lincoln	00389	41N3410E0950007	N3410 KICKAPOO CREEK	Pratt Pony Truss	1923	Eligible (C)
Logan	00377	42E0650N3150007	E0650 CREEK	Pratt Pony Truss	1914	Eligible (C)
Logan	03139	42N3250E0820002	N3250 BEAR CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Logan	09396	42E0840N3280009	E0840 BEAR CREEK	Pratt Pony Truss	c.1910	Eligible (C)
Noble	00204	52N3220E0380007	N3220 RED ROCK CREEK	Pratt Pony Truss	1918	Eligible (C)
Noble	00394	52N3130E0450009	N3130 BLACK BEAR CREEK	Pratt Pony Truss	1914	Eligible (C)
Tillman	00940	71E1650N2220008	E1650 OTTER CREEK	Pratt Pony Truss	1914	Eligible (C)
Washington	03095	74N4030E0390009	N4030 LACY CREEK	Pratt Pony Truss	c.1915	Eligible (C)
Caddo	03081	08E1020N2490003	0804C CREEK	Pratt Pony Truss	1930	Listed (A, C)
Atoka	12353	03N3933E1770002	MILLER RD LITTLE CHICKASAW CREEK	Pratt Pony Truss	1950	Not eligible
Bryan	06474	07D2018N3720005	D2018 LITTLE BLUE RIVER	Pratt Pony Truss	1938	Not eligible
Creek	00649	19N3830E0860000	N3830 BROWNS CREEK	Pratt Pony Truss	1918	Not eligible
Creek	22592	19E0820N3630009	E0820 LITTLE DEEP FORK CREEK	Pratt Pony Truss	c.1925	Not eligible
Garvin	09791	25N3170E1710000	N3170 (2554C) WILD HORSE CREEK O'FLOW	Pratt Pony Truss	1941	Not eligible
Grady	01615	26N2837E1420006	N2837 LITTLE WASHITA RIVER	Pratt Pony Truss	1925	Not eligible
Grant	09454	27E0260N2930003	E0260 WILD HORSE CREEK	Pratt Pony Truss	1940	Not eligible
Le Flore	09204	40D4538E1545018	D4538 BUZZARD CREEK	Pratt Pony Truss	1940	Not eligible
Le Flore	09817	40E1590N4530001	E1590 FRAZIER CREEK	Pratt Pony Truss	1941	Not eligible
Lincoln	23723	41N3450E1020006	N3450 SAND CREEK	Pratt Pony Truss	c.1925	Not eligible
Logan	12444	42E0780N3120008	FAU 3540 (COLLEGE COTTONWOOD CREEK	Pratt Pony Truss	1950	Not eligible
Major	23462	47N2542E0500005	N2542 CREEK	Pratt Pony Truss	c.1930	Not eligible
Mayes	10314	49N4270E0470009	N4270 SEMINOLE CREEK	Pratt Pony Truss	1945	Not eligible
Osage	04934	57N3530E0020007	CR4725 SPRING CREEK	Pratt Pony Truss	1936	Not eligible
Osage	04960	57D0185N3560001	D0185 CREEK	Pratt Pony Truss	1936	Not eligible

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County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Osage	09261	57E0340N3700005	E0340 HOMINY CREEK	Pratt Pony Truss	1940	Not eligible
Osage	09367	57D0030N3830008	D0030 TURKEY CREEK	Pratt Pony Truss	1940	Not eligible
Ottawa	03114	58E0010N4530006	IRR E0010 FOUR MILE CREEK	Pratt Pony Truss	1930	Not eligible
Ottawa	07273	58E0020N4530003	E0020 FOUR MILE CREEK	Pratt Pony Truss	1939	Not eligible
Payne	03130	60E0630N3450001	19TH ST. COUNCIL CREEK	Pratt Pony Truss	1930	Not eligible
Payne	04527	60E0610N3270002	E0610 STILLWATER CREEK	Pratt Pony Truss	1935	Not eligible
Payne	10928	60N3570E0680007	OAKGROVE RD EUCHEE CREEK	Pratt Pony Truss	1948	Not eligible
Rogers	02978	66N4150E0430002	N4150 SWEETWATER CREEK	Pratt Pony Truss	1930	Not eligible
Seminole	09193	67N3530E1350002	N3530 CREEK	Pratt Pony Truss	1940	Not eligible
Tulsa	01052	72E0450N3930008	E0450 (5 TH ST.) CREEK	Pratt Pony Truss	c.1925	Not eligible
Washington	03708	74N4000E0360009	7452C BEAVEN CREEK	Pratt Pony Truss	1932	Not eligible
Muskogee	00042	51E0871N4290000	FAU 6784 CALLAHAN UP R.R. UNDER	Pratt Through Truss	1905	Eligible (A, C)
Tulsa	00122	72E0790N4000007	E0790 (201 S) SNAKE CREEK	Pratt Through Truss	1909	Eligible (A, C)
Osage	01409	57D0185N3560002	D0185 SALT CREEK	Pratt Through Truss	1924	Eligible (C)
Blaine	00450	06N2510E0820008	N2510 WEAVERS CREEK	Pratt Through Truss	1915	Eligible (C)
Blaine	00460	06E0660N2480002	E0660 N. CANADIAN RIVER	Pratt Through Truss	1915	Eligible (C)
Choctaw	00716	12E2010N4040008	FAS 1217 MUDDY BOGGY CREEK	Pratt Through Truss	1919	Eligible (C)
Creek	01406	19N3650E0940002	N3650 DEEP FORK CANADIAN RIV.	Pratt Through Truss	1924	Eligible (C)
Creek	01619	19E0750N3770002	E0750 POLECAT CREEK	Pratt Through Truss	c.1910	Eligible (C)
Creek	01631	19N3704E0910009	N3704 DEEP FORK RIVER	Pratt Through Truss	c.1910	Eligible (C)
Kingfisher	02163	37E0760N2870007	E0760 KINGFISHER CREEK	Pratt Through Truss	1929	Eligible (C)
Logan	03140	42N3270E0830002	N3270 BEAR CREEK	Pratt Through Truss	1908	Eligible (C)
McClain	01932	44N3095E1340006	N3095 WALNUT CREEK	Pratt Through Truss	1927	Eligible (C)
Tulsa	05039	72E0500N3950003	E0500 (96 ST. N) BIRD CREEK	Pratt Through Truss	c.1890	Eligible (C)
Lincoln	01412	41N3370E0920002	N3370 DEEP FORK RIVER	Pratt Through Truss	1924	Not eligible
Osage	02139	57D0079N3910004	D0079 MISSON CREEK	Pratt Through Truss	1924	Not eligible
Osage	03215	57N3790E0260005	N3790 BIRD CREEK	Pratt Through Truss	1930	Not eligible
Osage	01135	57E0320N3830008	IRR FAS 5757 CREEK	Truss Leg Bedstead Pony Truss	1909	Eligible (A, C)
Lincoln	00319	41E0960N3550005	E0960 DEER CREEK	Truss Leg Bedstead Pony Truss	1912	Eligible (C)
Tulsa	02887	72N4010E0440000	7206C Cherry Creek	Warren Bedstead Pony Truss	1930	Eligible (C)
Lincoln	00313	41E0820N3490004	E0820 RANCH CREEK	Warren Bedstead Pony Truss	1912	Not eligible

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Jackson	06343	33E1630N1880009	E1630 COTTONWOOD CREEK	Warren Deck Truss	1938	Eligible (C)
Osage	06552	57N3825E0060005	5756C BIRCH CREEK	Warren with Polygonal Top Chord Pony Truss	1936	Eligible (A, C)
Craig	00120	18N4260E0120007	N4260 Big Creek	Warren with Polygonal Top Chord Pony Truss	1909	Eligible (C)
Lincoln	00379	41E1050N3500005	E1050 ROBINSON CREEK	Warren with Polygonal Top Chord Pony Truss	1914	Eligible (C)
Osage	00482	57N3533E0300002	N3533 SALT CREEK	Warren with Polygonal Top Chord Pony Truss	1916	Eligible (C)
Bryan	10965	0706 0000 X	U.S. 70 LAKE TEXOMA(ROOSEVELT)	Warren with Polygonal Top Chord Through Truss	1945	Eligible (A, C)
Seminole	01940	67N3632E1270000	E3632 Wewoka Creek & UP RR Under	Warren with Verticals Deck Truss	1927	Eligible (A, C)
McCurtain	16795	45N4540E1810002	IRR N4540 SILVER CREEK	Warren with Verticals Deck Truss	1966	Eligible (C)
Pittsburg	01635	61E1478N4170005	E1478 BRUSHY CREEK	Warren with Verticals Deck Truss	1925	Eligible (C)
Okmulgee	02982	56N3944E0910000	N3944 FLAT ROCK CREEK	Warren with Verticals Pony Truss	1930	Eligible (A)
Bryan	06427	07N3705E2150009	N3705 ISLAND BAYOU CREEK	Warren with Verticals Pony Truss	1912	Eligible (A, C)
Comanche	00068	16E1579N2510005	E1579 (CITY ST.) MEDICINE CREEK	Warren with Verticals Pony Truss	1906	Eligible (A, C)
Jackson	00356	33E1670N2010001	E1670 BITTER CREEK	Warren with Verticals Pony Truss	1913	Eligible (A, C)
Lincoln	N/A	41 NO NUMBER	OLD U.S. 66 CREEK	Warren with Verticals Pony Truss	1928	Eligible (A, C)
Muskogee	00262	51N4160E1000008	N4160 CREEK	Warren with Verticals Pony Truss	1911	Eligible (A, C)
Muskogee	02056	51N4200E0910006	5146C PECAN CREEK	Warren with Verticals Pony Truss	1911	Eligible (A, C)
Muskogee	02274	51E0850N4380004	E0850 CREEK	Warren with Verticals Pony Truss	1911	Eligible (A, C)
Muskogee	02286	51N4260E0970001	N4260 BUTLER CREEK	Warren with Verticals Pony Truss	1914	Eligible (A, C)
Carter	00116	10E1980N3310004	MCCLAIN RD. CREEK	Warren with Verticals Pony Truss	1909	Eligible (C)
Cleveland	03024	14N3160E1170001	DOUGLAS BLVD. West Elm Creek	Warren with Verticals Pony Truss	1930	Eligible (C)
Comanche	00060	16E1570N2710001	E1570 BEAVER CREEK	Warren with Verticals Pony Truss	1906	Eligible (C)
Creek	01884	19E0790N3590000	E0790 LITTLE DEEP FORK CREEK	Warren with Verticals Pony Truss	1927	Eligible (C)
Grady	25118	26N2990E1550001	N2990 CREEK	Warren with Verticals Pony Truss	1927	Eligible (C)
Hughes	01200	32E1200N3930000	E1200 FISH CREEK	Warren with Verticals Pony Truss	1921	Eligible (C)
Hughes	01204	32E1270N3780008	E1270 Graves Creek	Warren with Verticals Pony Truss	1921	Eligible (C)
Lincoln	00372	41E0820N3450004	E0820 WEST BEAVER CREEK	Warren with Verticals Pony Truss	1914	Eligible (C)
McClain	26321	44N3120E1430005	N3120 TURKEY CREEK	Warren with Verticals Pony Truss	1927	Eligible (C)
Muskogee	00190	51E0990N4260006	FAS 5108 BUTLER CREEK	Warren with Verticals Pony Truss	1910	Eligible (C)
Payne	02996	60E0600N3190002	E0600 STILLWATER CREEK	Warren with Verticals Pony Truss	1926	Eligible (C)
Payne	03204	60E0685N3410003	86TH ST. STILLWATER CREEK	Warren with Verticals Pony Truss	1962	Eligible (C)
Tillman	00453	71E1690N2140001	E1690 OTTER CREEK	Warren with Verticals Pony Truss	1915	Eligible (C)

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Bryan	01205	07E2090N3900007	E2090 SULPHUR CREEK	Warren with Verticals Pony Truss	1924	Not eligible
Bryan	06440	07E2030N3700004	E2030 LITTLE BLUE CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Bryan	06466	07N3712E2227001	0728C WEBB CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Caddo	09192	08N2560E1300009	IRR N2560 COBB CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Canadian	00502	09E1030N2850006	E1030 (ELM ST) Six Mile Creek	Warren with Verticals Pony Truss	1917	Not eligible
Comanche	18699	16E1640N2700003	IRR E1640 BEAVER CREEK	Warren with Verticals Pony Truss	c.1920	Not eligible
Craig	04953	18N4270E0090002	1832C E FORK BIG CREEK	Warren with Verticals Pony Truss	1936	Not eligible
Creek	00368	19E0880N3710009	E0880 WEST FORK SANDY CREEK	Warren with Verticals Pony Truss	1914	Not eligible
Creek	00972	19N3610E0800007	N3610 LITTLE DEEP FORK CREEK	Warren with Verticals Pony Truss	1920	Not eligible
Creek	01084	19E0930N3730007	E0930 SANDY CREEK	Warren with Verticals Pony Truss	1920	Not eligible
Creek	01400	19N3670E0910001	N3670 SALT CREEK	Warren with Verticals Pony Truss	1924	Not eligible
Delaware	03091	21N4670E0320005	N4670 HONEY CREEK	Warren with Verticals Pony Truss	1930	Not eligible
Jefferson	02267	34E2070N2970008	E2070 BAKER CREEK	Warren with Verticals Pony Truss	1929	Not eligible
Kiowa	00469	38E1550N2310001	IRR E1550 East Otter Creek	Warren with Verticals Pony Truss	1916	Not eligible
Le Flore	06415	40N4787E1528000	4084C CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Le Flore	09820	40N4640E1292003	4054C BRAZIL CREEK	Warren with Verticals Pony Truss	c.1920	Not eligible
Lincoln	01056	41N3530E0740008	IRR E3530 WILD HORSE CREEK	Warren with Verticals Pony Truss	1924	Not eligible
Logan	00173	42E0740N3230009	E0740 SOLDIER CREEK	Warren with Verticals Pony Truss	1910	Not eligible
Logan	04911	42E0610N3140009	E0610 EAST BEAVER CREEK	Warren with Verticals Pony Truss	1936	Not eligible
Muskogee	02285	51N4140E0940005	N4140 CLOUD CREEK	Warren with Verticals Pony Truss	1929	Not eligible
Muskogee	03352	51N4180E0990005	5144C CREEK	Warren with Verticals Pony Truss	1931	Not eligible
Okfuskee	02085	54E1020N3710004	E1020 WALNUT CREEK	Warren with Verticals Pony Truss	1928	Not eligible
Okfuskee	09159	54E1050N3680002	E1050 CREEK	Warren with Verticals Pony Truss	c.1925	Not eligible
Osage	03044	57E0390N3580009	5740C SYCAMORE CREEK	Warren with Verticals Pony Truss	1930	Not eligible
Osage	04484	57N3700E0410001	N3700 Claremore Creek	Warren with Verticals Pony Truss	1935	Not eligible
Osage	09333	57N3540E0240008	IRR 5724C LITTLE CHIEF CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Pawnee	02241	59E0510N3510009	E0510 CREEK	Warren with Verticals Pony Truss	1922	Not eligible
Pawnee	03663	59E0450N3580007	E0450 HARPER CREEK	Warren with Verticals Pony Truss	1919	Not eligible
Payne	09783	60N3280E0610002	N3280 STILLWATER CREEK	Warren with Verticals Pony Truss	1941	Not eligible
Payne	30391	60E0690N3360000	E0690 (92ND ST.) LOST CREEK	Warren with Verticals Pony Truss	c.1925	Not eligible
Pottawatomie	08956	63E1070N3390004	E1070 SOUTH QUAPAW CREEK	Warren with Verticals Pony Truss	1940	Not eligible

Appendix B. List of NRHP Recommendations by Bridge Type

County	NBI Number	Structure Number	Facility Carried Feature Intersected	Bridge Type and Configuration	Year Built	NRHP Eligibility
Pottawatomie	09149	63E1410N3350000	6338C CREEK	Warren with Verticals Pony Truss	1940	Not eligible
Seminole	03711	67N3540E1390001	N3540 SANDY CREEK	Warren with Verticals Pony Truss	1932	Not eligible
Seminole	06537	67E1160N3540006	E1160 TURKEY CREEK	Warren with Verticals Pony Truss	1938	Not eligible
Seminole	17856	67N3530E1340004	N3530 SALT CREEK	Warren with Verticals Pony Truss	c.1930	Not eligible
Tillman	01130	71N2450E1870005	FAS 7121 Deep Red Creek	Warren with Verticals Pony Truss	1920	Not eligible
Washington	03016	74N3990E0390004	N3990 SAUNDERS CREEK	Warren with Verticals Pony Truss	1918	Not eligible
Le Flore	09528	40N4580E1600004	4044C KIAMICHI RIVER	Warren with Verticals Through Truss	c.1915	Eligible (C)

Appendix C. Oklahoma Historic Bridge Inventory Forms