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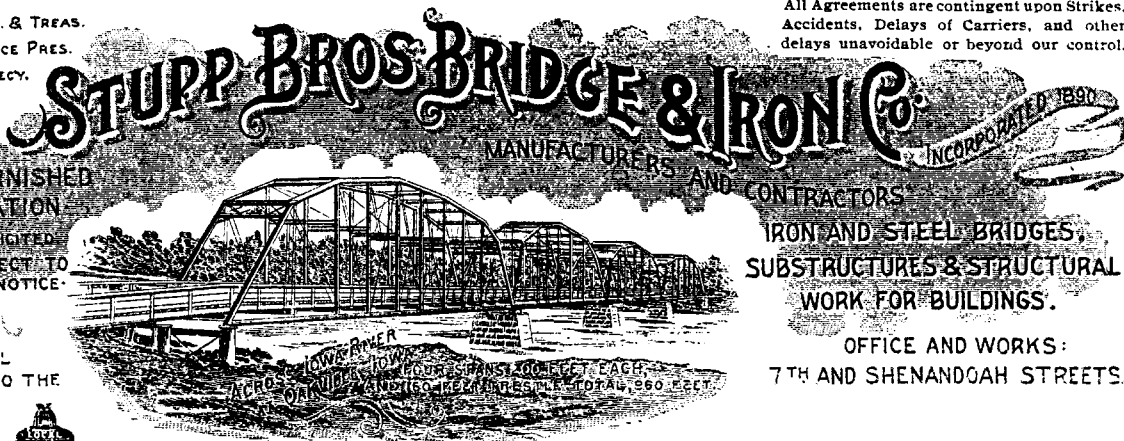
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*St. Louis, Oct. 2nd, 1903*

# MISSOURI HISTORIC BRIDGE INVENTORY

## DRAFT INVENTORY REPORT

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# INTRODUCTION

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Undertaken for the Missouri Highway and Transportation Department (MHTD) with the cooperation of the Missouri State Historic Preservation Office (SHPO) and the Federal Highways Administration (FHWA), this study presents a historical inventory and evaluation of vehicular bridges currently in use in the state, county and municipal road systems of Missouri. It is intended to serve as a cultural resource management tool for both short- and long-term decision-making. By inventorying bridges on a statewide basis, the study provides a data base and the contextual background by which individual structures may be evaluated for historical and technological significance. This will aid long-range policy and funding decisions at the outset of the planning process and allow enlightened review of proposed maintenance, rehabilitation and replacement projects. Additionally, it will help to guide mitigation measures for construction projects in the future that will affect eligible structures. This study is directed to three objectives:

To inventory several types of vehicular bridges, giving descriptions of structural configuration and dimensions, present state of integrity and physical condition, location and ownership, with pertinent historical and engineering data.

To present a historical overview of bridge development and construction.

To assess all bridges in the inventory for relative significance and potential eligibility for the National Register of Historic Places (NRHP) based on historical and technological significance from a comprehensive viewpoint.

The study encompasses almost 11,000 bridges and grade separations, encompassing several structural types erected before 1951: concrete slab, concrete girder, concrete arch, timber stringer, timber truss, metal stringer, metal girder, metal truss, metal arch, suspension, and masonry arch. Generally not included are railroad bridges, bridges in private ownership and those that have been dismantled or permanently closed to vehicular traffic. There are exceptions, however, and several noteworthy vacated or privately owned bridges have been included.

The study is comprised of three components—inventory, synthesis and evaluation. As the first phase, the inventory began with a compilation of an initial study group of bridges taken from a computer listing of all 24,000 state and local structures. The computer file contained data relating to location, ownership and structural capacity but did not contain historical information beyond date of construction. Using records from the computer and MHTD's Structural Inventory and Appraisal (SI&A), the list was assembled and individual structures evaluated preliminarily for significance by structural type and date of construction. For budgetary and logistical reasons, it was deemed advisable to reduce the survey's scope at the outset to a more manageable and meaningful number. Given the immense number of bridges in Missouri, this initial reduction of the number of inventoried structures allowed the study to concentrate on the truly important structures without carrying all the baggage of the unimportant bridges.

The collection of bridges that passed this first evaluation is termed the field survey sample. Pointing the direction for the entire project, the selection of the field survey sam-

ple was the first and most crucial step in the continuous winnowing process aimed toward compilation of a list of NRHP-eligible bridges. From an administrative standpoint, the selection process was equally important for what it excluded, for the group of bridges excluded from the field survey sample was far larger than the included group. It was also more vulnerable. Unlike the field survey sample, which remained the center of attention throughout the inventory, the excluded bridges immediately passed from the study. To insure that no significant bridges were overlooked, the selection criteria were carefully crafted to be generous to the cultural resource, responsive to budgetary concerns and consistent with sound scholarship.

Since the purpose of the historic bridge inventory is to identify structures of National Register significance, the selection process is governed by National Register Criteria A, B and C, which establish a broad framework for assessing a bridge's historical, technological and aesthetic importance. These criteria, however, are very general pronouncements. To be effectively applied, they have been translated into specific criteria relevant for the study group. Through initial research and analysis, the consultant reached four general conclusions that had a bearing on the selection of the field survey sample.

First, unlike most other states, the era of state-sponsored, standardized bridge engineering did not commence in Missouri until fairly recently. Although the Missouri legislature attempted to foster standardized bridge construction on the county level with the passage of the Hawes Law in 1917, the Centennial Road Law in 1921 and subsequent legislation, most local governments largely eschewed the program throughout the historic period, apparently relying on bridge plans developed by private companies or county engineers. As a result, the state features a wide variety of structural types, built using differing standards over an extended period of time. Standard truss designs promulgated by the Missouri State Highway Department are abundantly evident, the most common of which is the riveted Warren pony truss with verticals at alternating panel points. But these stand—sometimes literally—beside other bridge configurations that have been generated by private sources. Statewide bridge trends thus tend to be general, linked more to national industry trends than to and state-directed policy.

To represent the full diversity of bridge construction in Missouri, the field survey sample included all pre-1920 bridges that retained structural integrity. The 1920 cutoff date was designed primarily to include the major developments of steel and concrete technologies that occurred in the 1910s and to provide a practical limitation to the inventory parameters. Although firm construction dates are few of the SI&A Plate 14 reports, pre-1920 bridges—especially trusses—can often be identified on the basis of the SI&A photographs, which reveal distinguishing characteristics (e.g., light, pin-connected construction; non-standard detailing of web members, non-standard truss type).

Second, through trusses, in both pin-connected and rigid-connected form, constitute the single most technologically significant structural type among Missouri's vehicular bridges. With the exception of the Eads Bridge, all of the Missouri and Mississippi River structures from the historic period consist of long-span through trusses. Through trusses as a group comprise the longest spans in the state, and, for most counties, they are the most substantial bridges erected. The oldest through trusses are exceeded in age by only a handful of Bowstring arch-trusses and timber covered bridges (themselves eligible). In order to establish a complete data base for this important structural type, all through trusses identified in the initial study group were included in the field survey sample.



Third, certain pre-1951 bridge types in Missouri are sufficiently rare and technologically significant that all surviving examples merited investigation. Like through trusses, without surveying the total population of these types, it would be difficult later in the project to develop a historical and technological context for their evaluation. Admittedly, "rareness" is, to certain extent, a subjective judgement. For the purpose of this study, however, it seemed reasonable to define a rare bridge type as one that represents only about one percent or less of the total initial study group. Such rare types include:

steel arches	steel cable suspension bridges
steel deck trusses	concrete and steel rigid frames
truss leg bedsteads	concrete arches
Bowstring arch-trusses	stone masonry arches
timber trusses	welded girders and stringers
anomalous pony trusses (Camelback, Parker, double-intersection Warren, polygonal Warren, kingpost, etc.)	

Fourth, other states' historic bridge inventories have often overlooked "mundane" bridge types, such as standard steel girders and stringers, concrete slabs and girders and timber stringers. It was deemed unwise to dismiss such structures out of hand, especially since they represent about 75 percent of the initial study group. Instead, the inventory identified all examples of notable bridge engineering, including beam and slab structures. To this end, the consultant analyzed typological data to develop criteria for identifying those bridges of "common" type that challenged the conventional engineering limits of their time, especially in regard to multiplicity and length of span. These findings are listed on the following page under "Special Criteria". When applied to beams bridges in the initial study group, these criteria identified a group of truly noteworthy structures, representing less than one percent of a general type in the master sample.

Interpreting National Register Criteria A, B and C in light of broad historical and technological patterns of the initial study group, the consultant formulated the "general" and "specific" selection criteria listed below. General Criteria apply equally to all unaltered bridges in the initial study group. Special Criteria have relevance only for stipulated bridge types.

#### **General Selection Criteria for Bridges:**

- 1) Contributes to an understanding of the broad historical patterns of transportation and development on a state, regional or local level (especially applicable for original structures on such major transportation routes as the Lincoln Highway, or across such waterways as the Missouri and Mississippi rivers).
- 2) Embodies noteworthy architectural design or ornamentation.
- 3) Embodies non-standard design or unconventional engineering for the period (see also Specific Selection Criteria below).
- 4) Embodies the work of an important engineer, architect, fabricator or contractor (Missouri-based persons and firms, e.g., Kansas City engineer J.A.L. Waddell, are given particular consideration.)
- 5) Constructed prior to 1920.
- 6) Represents a "rare" bridge type, defined as constituting one percent or less of the initial study group.

### Special Selection Criteria for Bridges:

- 1) Pin- and rigid-connected through truss: all.
- 2) Steel arch, steel deck truss, steel cable suspension bridge, concrete and steel rigid frames, truss leg bedstead, concrete arch, Bowstring arch-truss, stone masonry arch, timber truss, welded girder and stringer, anomalous pony truss: all.
- 3) Timber stringer: ten or more spans, with the longest span length at least 25 feet.
- 4) Concrete slab: ten or more spans, with the longest span at least 35 feet in length.
- 5) Concrete girder: ten or more spans, with the longest span at least 50 feet in length.
- 6) Steel stringer or girder: ten or more spans or contains an individual span at least 100 feet in length.
- 7) Pony truss: span length at least 100 feet.

This methodology was compiled to produce an Inventory Plan, which was presented to the sponsoring agencies early in the course of the inventory. Following approval of the Inventory Plan, the consultant commenced full-scale fieldwork. This fieldwork involved archival research for each bridge included in the field survey sample and on-site documentation of all bridges considered possibly eligible for NRHP. The research methodology involved collection of primary and secondary source material to determine construction dates, designers, fabricators, contractors and the circumstances around the bridges' construction.

This research entailed the use of MHTD and SHPO archival and inventory material, biennial reports of the State Highway Commission, records of the county boards of supervisors, newspaper and magazine articles, original drawings, contracts, agreements and legislation, records from other government and archival sources and oral interviews. The synthesis component of the study involved collection of information from primary and secondary sources to assemble an overview of bridge and transportation trends in Missouri. The Overview relates many of Missouri's important bridges to territorial and state bridge construction trends.

The final component is evaluation. Using the data compiled during the inventory, the bridges were evaluated separately within the context of the overview and compared for relative historical and/or technological importance, using a numerical rating system developed for this inventory. Each bridge was categorized into one of three groups according to potential eligibility for NRHP. This report presents the draft findings of the Missouri Historic Bridge Inventory. These findings will be presented to an Advisory Committee for review and comment and ratification of a final listing of National Register eligible structures.

# OVERVIEW

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Lisa M. Schoch

## 1. NATURAL CHALLENGES TO BRIDGE DESIGN

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Extensive waterways, a diverse climate and contrasting geographic regions comprise Missouri's predominant challenges to bridge design. With the Mississippi River forming its eastern boundary and the Missouri River creating boundaries for the northern and southern parts of Missouri, the state's most important and abundant natural resource is, not surprisingly, water.<sup>1</sup> Historically, both rivers were considered unnavigable, and that reputation is well-founded. The Missouri's changing sandy channels, steep grade and rapid current define its temperament. Additionally, high bluffs, disintegrating banks and wide floodplains prevented the construction of suitable docks along the Missouri. Conditions on the Mississippi River were similar.<sup>2</sup> Other minor rivers, coursing through all regions of the state, contribute to Missouri's water-rich landscape as well. The northwest's Platte and Grand Rivers, north central and northeast's Chariton and Salt rivers, the Osage River of the southwest, the 250-mile Meramec River outside St. Louis, and southern Missouri's Current, Black, St. Francis and White Rivers complete Missouri's secondary river system.<sup>3</sup> Along with countless tributaries, Missouri's water resources include some of the world's largest springs and an extensive groundwater system.<sup>4</sup>

Missouri's climate varies according to region. Considered to have a "continental" climate, Missouri endures continual changes in weather. Located in the mid-section of the continent, it is the recipient of cold air from Canada, warm, moist air from the gulf and dry air from the West. Average annual rainfall differs according to region as well. The northwest generally receives 34 inches, while the southeastern average is 50 inches.<sup>5</sup> Vegetation is also characterized by regional diversity. Originally thick forests covered two-thirds of the state, while prairie grasses took up the other third. In fact, settlers were compelled to travel by river due to the "impenetrable forests" and "vast prairies" of early Missouri.<sup>6</sup>

Geographically, Missouri has four sections, all with unique qualities. Each region is a result of geologic events—arching and uplifting of bedrock, weathering and erosion and glacial spreading—that left soils composed primarily of silt loam. Northeastern Missouri is hilly and contains the limestone hills that border the Mississippi River. The northwest has loessal hills bordering the Missouri River, while the southeast has the limestone plateaus of the eastern Ozarks, valleys of the St. Francis Mountains and the fertile land of the bootheel region. Southwestern Missouri encompasses the Ozark mountains and the unglaciated western plains. Elevations range from 245 to 1,772 feet above sea level. Unusual features of Missouri's landscape include a sophisticated network of caves and its history of earthquakes.<sup>7</sup>

Bridge design depends on the integrity of the banks upon which structures rest, the predictability of the waterways they cross and outdoor temperature fluctuations. The Missouri and Mississippi Rivers' predisposition toward flooding and their sheer size prevented bridge construction until well into the late 19th century. Bridges for smaller

rivers and streams were easier to design, but had to withstand problems with flooding and rainfall as well. In 1856, for example, every bridge in Linn County, with the exception of one, was washed away by heavy rainfall.<sup>8</sup> Temperature variations also challenge bridge structures, expanding and contracting in extreme heat and cold. Depending on the region, temperatures in Missouri can range from a winter low of 16 degrees to a summer high of 100 degrees.<sup>9</sup> Clearly, Missouri's diverse environmental features provided unique challenges for bridge builders and ultimately, the designs they constructed.

## **2. EVOLUTION OF TRANSPORTATION IN MISSOURI: LAND AND WATER**

Land transportation in Missouri developed slowly. The earliest trails were established by both animals and Indian tribes who inhabited the region on and off from 12,000 B.C. to 1835 A.D. Deer, buffalo and other wildlife made trails along ridges and stream valleys that were eventually adopted as warpaths and travel routes by numerous Indian tribes. French and Spanish explorers utilized the same trails in their surveys of the area.<sup>10</sup> During the French occupation, roads were built to accommodate the lead mining industry in the southeast and the first permanent settlement, Ste. Genevieve, in the early 1700s. In 1772, under Spanish rule, a road between the recently established St. Louis and the site of St. Charles was etched out. The El Camino Real or King's Highway was established around 1789 by the Spaniards, who needed a military route between St. Louis and New Madrid.<sup>11</sup>

After the Louisiana Purchase in 1803, and the Lewis & Clark exploration of this region from 1804-1806, settlement in the Missouri region increased. Consequently, the need for roads was apparent.<sup>12</sup> In July 1806 officials of the territory of Louisiana enacted a law whereby if the court of quarter sessions received a road petition signed by twelve or more citizens, it was required to appoint a person to survey the proposed route. Following the survey, road districts were established, and supervisors placed in charge of maintenance. By June 1808 the legislature passed a law for the laying of roads between Ste. Genevieve, Cape Girardeau and New Madrid. A law passed in 1814 by the General Assembly of the Missouri Territory established that jurisdiction over roads shifted from road districts to the county courts.<sup>13</sup>

The first territorial roads included Boon's Lick Trail and the Salt River Road. Boon's Lick Trail was the first east-west highway across the territory of Missouri. Known as the hub of the Far West, by 1819 this road reached Fort Osage and in 1825 President John Quincy Adams directed three commissioners to continue it to Santa Fe. The Salt River Road stretched from St. Charles to Palmyra.<sup>14</sup> After Missouri achieved statehood in 1820, the complexion of land transportation changed. So much time was expended authorizing roads during early statehood that the legislature finally decided to assign the county courts that responsibility. Differentiation between state and county roads also occurred. State roads were supposed to be 60 feet wide, while county roads were expected to be 40 feet wide.<sup>15</sup>

Road development during the initial years of statehood involved both improvements of roads statewide and of connections to areas outside the state. By 1819 a stagecoach route extended from St. Louis to Louisville, Kentucky. Post routes between county seats

and towns were widespread by 1821. Military roads and United States roads connected Missouri with other states. A wagon road from Council Bluffs, Iowa, to Chariton was established by General Atkinson in 1820. In 1823, a military road from Council Bluffs, to Liberty, Missouri, opened as well. By fall 1820 a national road from Virginia to the Mississippi River was being planned; Missouri was an intended destination.<sup>16</sup> The most lucrative of the newly established routes were the Santa Fe Trail and the Oregon Trail, created in 1820-21. Both trails originated in Independence, Missouri: the Santa Fe stretching south 775 miles to New Mexico, the Oregon Trail covering 2,020 miles to Fort Vancouver at the mouth of the Columbia River. While the Santa Fe Trail initiated some of Missouri's most profitable trade and business, the Oregon Trail served to open the American West to settlers.<sup>17</sup>

As the state grew, the demand for better roads also grew. Even though the General Assembly passed a great deal of road legislation in the forty years leading to the Civil War, very little improvement of roads actually took place. Most of the roadwork was left to local communities.<sup>18</sup> In the late 1830s and early 1840s, charters were granted to turnpike companies authorizing the sale of stock to build macadamized toll roads. Unfortunately, the roads were short and very expensive to construct. When the depression hit in 1837, many companies were forced to pull out of the venture. Others, however, requested that their charters be extended. Nevertheless, no roads were built or improved during that period.

Once the depression ended, a new all-weather road design emerged. Plank roads were both cheap and easy to construct, especially with the enormous timber supply. From 1849 to 1855, plank road construction hit its peak. During that time, 49 plank road companies were incorporated, although only seventeen actually constructed any roads. The longest plank road ran from Ste. Genevieve through Farmington to Iron Mountain—a total of 42 miles. Other roads were constructed as well, and companies were told that they could collect tolls after five miles had been constructed. By 1855, however, the plank road craze ended. Tolls never did cover the cost of construction or maintenance, and the planks themselves easily deteriorated and could not withstand heavy rains or flooding. Nevertheless, the plank road years are considered Missouri's first effort at a good roads movement.<sup>19</sup>

Meanwhile, water transportation evolved relatively quickly. The initial European exploration of the Missouri region was conducted in 1670 by French and Spanish colonial explorers, traders and government officials who used canoes and pirogues to transport furs and other trade items on the rivers. Keelboats emerged when larger quantities of freight—most could transport between 15 and 30 tons—were transported. The introduction of steamboats further advanced water transportation capabilities. The first steamboat on the Mississippi River—the New Orleans—made the trip from Pittsburgh to New Orleans despite the New Madrid earthquake of 1811, which was so powerful it changed the current of the river. In 1819 the Independence determined that the Missouri River was navigable. Even though there were navigation hazards presented by both the Mississippi and Missouri Rivers, the steamboat proved an effective means by which new settlers reached the area.<sup>20</sup> Ferries were also an important feature of water travel. Dating as far back as 1780, ferries transported travellers and freight over numerous rivers and streams throughout the state.<sup>21</sup>

Prior to 1850, few enduring bridges were constructed in Missouri. Although they were considered more advantageous than ferries, lack of funding and rudimentary designs

prevented widespread bridge construction prior to 1850.<sup>22</sup> The earliest known bridge in the state crossed what was then known as the Petite Riviere (now Mill Creek) and was noted in the St. Louis town laws in 1782. In 1798, ferryman Francois Wideman built the first recorded toll bridge over Joachim Creek near Herculaneum. Another bridge, constructed in 1802 by lead miner Moses Austin, crossed Mine a Breton Creek. According to a crude circa 1819-20 map of St. Louis, the Petite Riviere bridge appears to be a stone arch.<sup>23</sup> The specific designs of the other bridges is not known; most likely they were pile and beam timber structures, or depending on the size of the creeks, a "felled trunk with the top hewn flat that was laid across a stream from bank to bank."<sup>24</sup>

In 1823, when the military road from Council Bluffs to Liberty was constructed, twenty-four soldiers of the Sixth Regiment of the U.S. Infantry built along this route nineteen bridges of round logs and log pen abutments covered with poles and split timber. Averaging 35 to 85 feet long and 15 to 20 feet high, these bridges were built with the road in forty days. Even though they were the longest line of bridges west of the Mississippi at the time, they were of poor quality and quickly deteriorated.<sup>25</sup>

Bridges were not even acknowledged in the territory's laws until 1814, when it was stipulated that male citizens and slaves from age 16 to 45 years construct bridges over smaller streams, while the county would fund bridge building over larger streams. Few bridges, however, were actually built under this act. A subscription bridge, the Herculaneum Bridge over Joachim Creek, was one of a few built before Missouri achieved statehood in 1821. In 1820, Congress initiated the 3% Fund, which drew 3 percent from the sale of public land in Missouri for public road and canal improvement; in 1828 Governor John Miller requested that the legislature put the 3 percent solely toward the construction of durable bridges.<sup>26</sup> Within a year \$3,000 in interest from this fund was set aside for the construction of bridges and levees across the big swamp on the border of Cape Girardeau and Scott counties. A public bridge code appeared in Missouri in 1825. This code essentially assigned each county jurisdiction over bridge construction and maintenance. Bridges costing \$25 or more were built by the county; those less than \$25 by the county or local road districts. If private citizens subscribed half of the cost of a bridge on a county road, the county had to pay the remaining cost. The code also bestowed the courts with the authority to levy a county bridge tax, which would not surpass 50 percent of the county's overall tax.<sup>27</sup>

Both the 1814 and the 1825 laws encouraged predominantly local involvement in funding and construction of bridges throughout the state. The result was a handful of decent structures, with the majority of bridges mediocre in quality until the 1850s and 1860s. By 1833, the legislature passed the Road and Canal Fund Law, which subdivided the profits of the 3 percent fund between the counties. Under this act, locals were essentially given control of state money for road and bridge improvement. From 1833-1859, \$520,000 was distributed to the counties under the Road and Canal Fund law.<sup>28</sup>

The emergence of toll bridges in the late 1820s also influenced the numbers of bridges built in the state. Legislation enabling the construction of toll bridges emerged as early as 1828. Everything from horses, mules, cattle and people were charged. Toll privileges usually lasted only twenty years, and by the 1840s and 1850s all parts of the state (with the exception of southwest Missouri and the Ozarks) had toll bridges. It is not certain exactly how many toll bridges were built in the 1830s-50s, but it is known that the public did not want bridges if it meant they would have to pay taxes for the construction; they would rather take the ferry. At the same time, toll operators did not

want to invest in an area unless they could be assured of sufficient population for both profit and safety purposes.<sup>29</sup>

Bridges were necessary to the success of both Missouri's water and land transportation systems. Originally crudely built, locally maintained structures, Missouri's bridges eventually became an integral part of early road legislation. The territorial period and the early years of statehood provided a framework of legislation initiatives that at least acknowledged the need for bridges. Eventually the development of innovative designs, the use of stronger building materials and the harnessing of the Mississippi and Missouri Rivers catapulted Missouri's once parochial bridge system into the national spotlight.

### 3. FROM WOOD TO STEEL: DEVELOPMENT OF DESIGN AND MATERIALS IN THE 19TH CENTURY

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Bridge building in the United States was significantly altered by the advancement of new designs. In 1803-04, Theodore Burr, known to have had the greatest influence on timber bridge construction, built the first bridge combining numerous king post trusses with a wooden arch; in 1806 he patented the design, thus strengthening timber bridge construction.<sup>30</sup> In 1820 Ithiel Town, one of Burr's competitors, patented a design comprised of a lattice of diagonal wood pieces. Most Town lattices were used in wooden structures, although some wrought iron structures were built later. The first design to combine both wood and wrought iron was patented by William Howe in 1840. The Howe truss utilizes metal verticals in tension and wooden diagonals in compression. Early railroad bridges and some covered wagon bridges used this design.<sup>31</sup>

In the 1850s and 1860s, the development of Missouri's bridges was influenced by two trends: the construction of sturdy wooden bridges and of railroad bridges. Covered wagon bridges appeared in the 1850s. One of the oldest bridges, the Old Tabo Bridge, was built near Dover before the Civil War, during which time it had been the object of Confederate plans to burn the bridge in the raid on Missouri. Eventually the bridge was destroyed by flood.<sup>32</sup> Another early bridge, built between 1851-1852 across Perche creek west of Columbia on the Boon's Lick Road, was "weatherboarded," had walnut planking, white pine shingles and stone abutments. Contrary to popular belief, covered bridge roofs were not there to protect bridge traffic; rather, its function was to protect the structure from inclement weather and harsh temperatures. Although they were constructed throughout the state, covered bridges were most common in the older counties of central and northeast Missouri.<sup>33</sup>

Missouri's collection of covered bridges has dwindled considerably. Currently only four still stand. Of these, three employ the Howe Truss: the Burfordville Covered Bridge (CAPE12), constructed in 1858 in Cape Girardeau County; the Sandy Creek Covered Bridge (JEFF05), 1872, in Jefferson County and; the Locust Creek Covered Bridge (LINN20), 1868, in Linn County.<sup>34</sup> The Union Covered Bridge (MONR32), built in 1871, in Monroe County utilized the Burr Arch.<sup>35</sup> The use of wood in bridges was soon to become less common. Overall problems with wooden structures included suscep-

tibility to fire, rain and flooding. Later, wood was found to be an inferior material for use in railroad bridge designs.<sup>36</sup>

In the 1840s, new bridge designs signalled a shift from the use of wood to the use iron and steel. In 1844 Thomas and Caleb Pratt patented the Pratt truss, a design not popular with timber bridge construction but often used in combination bridges.<sup>37</sup> The Pratt truss is characterized by vertical components in compression and diagonals in tension. Franklin County's Short's Ford Bridge (FRAN17), was constructed in 1888. A pinned-Pratt truss, the structure represents one of the few remaining bridges of this design to predate the twentieth century. The pinned Pratt was easily the most common bridge type erected in Missouri from the 1870s through 1910.

A derivative of the Pratt—the Parker truss—features a polygonal top chord. Most of Missouri's pin-connected Parkers were constructed between 1900 and 1935.<sup>38</sup> Another Pratt derivative, the Camelback truss features an five-faceted upper chord. Constructed between 1899 and 1917, Missouri's collection of existing pinned Camelback through trusses numbers seven. The oldest of these, the Elam Bend Bridge (GENT15) in Gentry County, was built in 1895. The Baltimore and Pennsylvania truss designs were also related to the Pratt and were used extensively by railroad companies.<sup>39</sup> A handful of these structures, built in the first decades of the twentieth century, exist in Missouri.

Other bridge designs emerged as well. Well-known bridge engineer Squire Whipple patented a truss that employed the Pratt design but achieved longer spans by lengthening the diagonals so that they traversed two panels. Whipple also introduced the bowstring arch-truss bridge: an arch bridge where the deck is suspended from the top chord so that the verticals are in tension.<sup>40</sup> Constructed in 1871, the Georgia City Bridge (JASP20) in Jasper County is the oldest existing bowstring in the state. The Warren truss, patented in 1848 by two British engineers, has alternating diagonals in either tension or compression, and vertical components that strengthen the structure. Missouri's Warren trusses were constructed almost exclusively within the first half of the twentieth century.

By the 1860s Missouri's 1825 bridge code had begun to revived bridge building in the state through the use of bridge tax that became a permanent part of the tax list. The emergence of the iron and steel industries in the Midwest at this time also changed the complexion of Missouri's bridges. Opposition to the construction of bridges over the Mississippi and Missouri Rivers by steamboat companies did not obstruct construction of the first bridges over those rivers. Soon iron and steel bridge designs appeared in Missouri's counties.<sup>41</sup>

The iron age in America lasted from 1850 to 1890. Originally introduced in the United States in 1803 by Thomas Paine, wrought iron could be used in both compression and tension in bridge designs.<sup>42</sup> The first iron bridges of note were both railroad and highway bridges. The Hannibal bridge crossed the Mississippi River into Quincy, Illinois. Authorized by an act of Congress in 1866 and opened in 1871, the Hannibal bridge was one of the first Missouri bridges to cross the Mississippi River for railway passage. Its substructure consisted of masonry piers, while the superstructure was entirely of wrought iron except for its cast iron top chords. The Louisiana Bridge over the Mississippi River was opened in 1873 for the Chicago and Alton railroad. Like the Hannibal bridge, its piers were all masonry, with the superstructure composed almost entirely of wrought iron.<sup>43</sup>



The advent of steel bridges in Missouri also marked the introduction of steel to the nation. Steel had been around for centuries, but its exorbitant cost limited extensive use. Even though it was stronger than iron, which meant that "pound for pound" less was needed, it was still too expensive for exclusive use in bridge structures. The earliest effort to fabricate steel began in 1856 in England, where Henry Bessemer patented a system in which "air was blown through molten cast iron to remove the impurities that made iron brittle"; the result was a softer steel. Bessemer steel was originally produced in the United States in 1865 by Winslow, Griswold and Holley. Another steel fabrication method was developed by the German William Siemens, who in 1844 patented a "regenerative furnace in which the hot gasses of combustion were used over again to heat the air blast." Steel was not produced in this furnace for over seventeen years after Siemens patented the process; at that time Frenchmen Pierre-Emile Martin and his father produced the first steel using Siemens' process (with Siemens' permission). The "Siemens-Martin Process" as it came to be known, became the basis for modern steel production. Some engineers argued that steel was a dangerous bridge material, and because early manufacturing was largely without quality controls, it was difficult to produce vast amounts with any sort of "uniform qualities." Adjustments in metallurgy, however, brought about widespread use of steel by 1890; the "age of iron" had ended.<sup>44</sup>

Missouri produced the nation's first steel bridges. Built between 1867 and 1874, the Eads Bridge (originally referred to as the St. Louis Bridge) spans the Mississippi River, connecting St. Louis, Missouri, with East St. Louis in Illinois. A steel arch bridge, the Eads features two decks, "granite faced limestone piers", and, including its approaches, has an overall length of 6,442 feet. Originally designed and constructed for railway use, the Eads was known for its innovative building techniques and features.<sup>45</sup> Although it was not entirely steel, the Eads was one of the first to employ that material extensively in its structure. It was also the first bridge to use the pneumatic caisson method to found the bridge's piers on bedrock, which ranged from 172 to 197 feet below the water's surface. In its design, the Eads was the earliest to utilize the cantilever construction method, hollow tubular chord members and alloy steel as a building material.<sup>46</sup>

The structure was designed and constructed by James Buchanan Eads, a man with a limited formal education but a natural gift for engineering, an inventive mind and practical experience of the river's disposition gained from working as a purser on a Mississippi steamboat. From the very start the construction of the Eads was plagued with difficulties. The pneumatic caisson method caused an illness known as the "bends" in many of the workers; by the time the bridge's piers were in place in 1871, fifteen men had died, and many others were crippled. Other problems, such as Eads' health and his demanding personality, conflicts with steamboat operators, and difficulties with rupturing arch ribs, characterized the construction years.<sup>47</sup>

The earliest all-steel bridge in Missouri and the United States was the Glasgow Bridge, built in 1879 by the Chicago and Alton Railroad. The superstructure featured five spans of 314.6 feet each; the first three through spans elevated fifty feet above the water's surface, while the last two deck spans were positioned below at the elevation required for the rail tracks. The steel used in the Glasgow bridge was produced through the "Hay process," increasing the steel's carbon content and thus its tensile strength.<sup>48</sup>

The bridge's total length, with approaches, was 3,577 feet. Eight hundred thousand tons of steel developed by A.F. Hay of Burlington, Iowa, were used in the structure, and the total cost was \$500,000. Despite its importance to the proliferation of railroad transportation, and its role in developing the town of Slater, Missouri, along the rail-

way, the Glasgow Bridge lasted less than twenty years. Increased train weights and speeds necessitated a new bridge. In 1899 the trusses were replaced with heavier spans; in 1923 a highway bridge were built next to the railroad bridge.<sup>49</sup>

Despite developments in fixed-span bridge design and the emergence of steel, some communities still invested in alternative bridge types that were not only cheap but were also simple to construct. Inexpensive but often hazardous, pontoon and swinging bridges were popular in Missouri in the 1880s and 1890s. Early pontoon bridges were composed of a series of wooden boats or barges tied together, fastened to the shore with cables and kept in place with anchors sunk into the sand. Most of these bridges enjoyed short lives, due to high water levels and heavy loads. Due to early accidents with the bridges, many towns opted not to invest in the pontoon design; thus, their popularity diminished. The last pontoon in Missouri was in St. Charles and was quickly threatened by strong breezes, roots on the riverbed and drift.

Swinging or "swingin" bridges employed the simple suspension design. Suspended by cables, these bridges swung over the water, moving with every change in weather. The first of these was built across the Osage river near Warsaw, Missouri. Known as the "old middle bridge" this structure was 600 feet long, with a span of 480 feet. By 1913, the already condemned bridge collapsed under the weight of a herd of cattle. Although five more were built in the Warsaw area, swinging bridges were generally not permanent structures.<sup>50</sup>

The prevalence of large, expensive and innovative bridges in Missouri's growing metropolitan areas and the existence of lower quality bridges in the smaller communities is not a surprising factor. It does, however, indicate that bridge design and construction was not consistent throughout the state. As late as 1890, for instance, pontoon and swinging bridges of crude design were being built in smaller, less affluent regions of the state, such as Warsaw in Benton County. Composed of wood, these bridges were built at a time when iron and steel were emerging as the primary building material in most new bridges. The shifts in bridge design and construction did not occur overnight and were not as immediately widespread as they might seem. The shift from wood to steel in Missouri was a gradual process, whereby large cities such as St. Louis became home to the nation's first steel bridge, while smaller communities were slower to employ the latest building materials. Nevertheless, Missouri could easily boast about its many "firsts" in bridge design and construction.

## 4. THE INFLUENCE OF RAILROADS

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The introduction of the railroad to the United States not only revolutionized transportation, it also revolutionized bridge design. Until railroads arrived, bridge design was largely unprofessional and inconsistent. Railroad bridges demanded more sophisticated designs and more durable materials than had previously been employed in regular bridge building. In the words of J.A.L. Waddell, railroads "began the real development of bridge engineering."<sup>51</sup> The very first railway bridge, built by the Baltimore and Ohio Railroad in Monoquay in 1830, was a wooden trussed arch design. Until 1840, most railway bridges were constructed by Burr and featured the Town and Long lattices; after

1840 the Howe truss became the standard design.<sup>52</sup> The railroad and traffic "viaduct" emerged as one of the more commonly used railroad designs.

Most bridge builders up to 1840 were carpenters who categorized bridge construction as a trade. Yet, as railroad traffic proliferated, it became clear that wood was an inadequate material for railway bridges and that a higher standard of bridge design was necessary. In 1845 the first iron railway bridge was constructed by the Philadelphia and Reading Railroad. Between 1850 and 1860, bridge design became more standardized as professional engineers began to design bridges for the railroads. During this decade a host of innovative designs were applied to bridge construction. These included the first pin-connected bridges, iron bridges and suspension bridges. By the 1860s, long-span railway truss bridges appeared.<sup>53</sup> Railroad bridges necessitated standardized and more sophisticated bridge design and helped to determine the best material for bridge construction. Eventually, precedents set in railroad bridge design and construction influenced the later construction and design of the nation's highway bridges.<sup>54</sup>

By the 1890s, the American Society of Engineers debated the relative advantages of iron and steel for use in railway bridges. In a professional paper, Waddell stated that steel would eventually become the material of choice for railway bridge construction, a position that initiated strong disagreement. Several of his colleagues pointed out that some major railroads still refused to use steel in their bridges, that steel was weaker than wrought iron and dangerous for use in railway bridges.<sup>55</sup> Other engineers said that the life of a railway bridge was not contingent upon the actual iron or steel, but by "the ability of the bridge to withstand the steadily increasing loads imposed upon it."<sup>56</sup> By that time, most bridge engineers considered wood to be a temporary material and steel to be permanent. Some engineers stated that the permanence of steel depended upon the continually changing speeds and weights of railroad traffic.<sup>57</sup>

In Missouri, agitation for railroads began in 1836, when delegates from eleven counties met in St. Louis to propose the construction of two rail lines and to appeal to Congress for 800,000 acres of land to accommodate these lines. The legislature incorporated eighteen railroad companies before the depression of 1837. Although many railroad companies were chartered, financial problems prevented actual construction until 1851, when the Pacific Railroad began building a line in St. Louis. By the next year, that railroad was accommodating passenger travel to Cheltenham.<sup>58</sup> Railroads marked a turning point in the development of Missouri. While the steamboat and early trails initiated settlement and trade to areas along the rivers, the railroads enlarged that area to encompass more inland regions. By the end of the Civil War, Missouri River and Mississippi River trade was in decline, and as communities developed around the railroads, river communities also went into decline.<sup>59</sup>

Bridges accommodating both railways and roadways were common in Missouri. Noteworthy early railroad and highway bridges include the aforementioned Hannibal, Eads and Glasgow Bridges. Often competition between towns determined where and when railroads and their corresponding bridges would be built. The Kansas City Bridge over the Missouri River was the center of a rivalry between Leavenworth and Kansas City. Prior to the Civil War, both cities started railroads to Cameron, Missouri, but the war postponed both projects. After the war, both cities appealed to eastern interests to raise money for the project. Eventually Kansas City's belief that its future depended on the project motivated its civic leaders to convince the railroad that Kansas City was the better site for the railroad and the railway bridge.<sup>60</sup>

One of the most famous of the railroad bridges, Kansas City's Armor, Swift, Burlington (A.S.B.) Bridge (JACK05) sported a unique double-deck, vertical-lift structure that, like its predecessors, carried railroad and highway traffic. Originally, the bridge carried railroad traffic on its lower deck and automobile traffic on its upper deck. In order to circumvent navigational conflicts on the Missouri River, the bridge's 428 foot lift span rises to facilitate clearance for barges. While the lift mechanism interrupts railroad service, highway traffic could continue. In the 1880s well-known engineer J.A.L. Waddell was originally commissioned to design the bridge, and at that time masonry piers were built. By 1894, construction was halted due to the economic depression, and funding for the bridge was uncertain. In 1907, however, after the site came under the authority of the Burlington Railroad and the Armour and Swift meatpacking plant, Waddell was once again asked to design the bridge. The bridge was completed in 1911.<sup>61</sup>

St. Louis' Merchants' Bridge was originally built to "break the railway monopoly on the Eads Bridge."<sup>62</sup> Authorized in 1887 and opened in May 1890 the bridge was located 2½ miles above the Eads Bridge. A double-track, three-span Pennsylvania truss, the Merchants Bridge has an overall length of 13,760 feet. Its superstructure was built by the Union Bridge Company and is composed entirely of steel. Like the Eads, its piers were implanted using the pneumatic caisson method.<sup>63</sup>

The Merchants Bridge was designed by George Morison, whose introduction to engineering in 1867 took place on the Kansas City Bridge (Chief Engineer Octave Chanute) over the Missouri River. This experience led Morison to pursue a lifelong career in bridge design and engineering. Although most of his early bridges were composed of iron, Morison was considered a "pioneer in the use of steel" in bridge construction.<sup>64</sup> Another of Morison's Missouri bridges, the Bellefontaine Bridge, was completed in 1893. The product of the Chicago, Burlington and Quincy Railroad's interest in accessing St. Louis from its northern main line, the Bellefontaine Bridge is a four-span, steel, pin-connected Baltimore through truss.<sup>65</sup>

In addition to compelling the adoption of steel over iron, railroads also introduced many new building concepts, such as the viaduct. The history of the viaduct closely followed the evolution of the railroad bridge, except that viaducts carried railroads over roadways, valleys, or other railroads instead of rivers or creeks. Originally based on wood trestles, viaducts became more elaborate as the "depths of the ravines or depressions to be crossed increased."<sup>66</sup> Viaducts were also used to accommodate railroad grade separations and were predominantly found in large urban centers, where pedestrian, highway and railroad traffic often coincided.

## 5. MISSOURI'S LATE 19TH AND EARLY 20TH CENTURY BRIDGES AND THEIR BUILDERS

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Missouri's bridge-scape was the product of national, regional and local bridge building companies. By the late 19th century, truss bridge technology was fostered by various private bridge companies located primarily in the northeastern and midwestern United States.<sup>67</sup> Fabricating specific truss designs, these companies sold their products to cities,

counties and railroads for use in bridge construction. Despite criticism regarding the quality of their fabrication, most of these companies produced high quality products. Toward the end of the 19th century, standardization of bridge design was evolving, and economic competition between bridge companies initiated takeovers and closures of bridge companies. At the same time, steel emerged over wrought iron as the material of choice for bridge construction.<sup>68</sup> Directories from the turn of the century indicate that the bridge industry had achieved more sophistication than the early days of bridge building displayed. Kansas City's Hoyer Directory for 1907 indicated that bridge construction was becoming more specialized when it listed separately bridge companies, contractors, engineers, iron and bridge work.<sup>69</sup>

The American Bridge Company exemplified the shift in both bridge design and bridge companies. Originally formed in 1870 in Chicago by Lucius B. Boomer, by 1878 the company was forced to sell out. The company's former vice president and secretary administered it until 1885, when Chicago Forge and Bolt Company leased and eventually bought the company. In 1891, the American Bridge Works leased the company from Chicago Forge, and in 1895 they purchased it. In 1900, it was sold to J.P. Morgan's American Bridge Company. Officially incorporated in April 1900, Morgan's American Bridge Company was only independent for a little under a year, at which time the United States Steel Corporation acquired the majority of the company's stock. Twenty-four companies were bought and incorporated into the new American Bridge Company within a year of U.S. Steel's acquisition of the stock.<sup>70</sup>

The most prominent of the national builders in Missouri included the Wrought Iron Bridge Company, the King Iron Bridge Company and the American Bridge Company. The Wrought Iron Bridge Company, based in Canton, Ohio, was originally organized in 1864 by David Hammond and incorporated in 1871.<sup>71</sup> It was the first company to construct wrought iron highway bridges and erected 237,000 feet of bridges in thirty states, Canada and Mexico; these included truss, arch, swing and plate bridges as well as iron piers. By 1885, the company had built thirteen bridges in Missouri. Among these was Jasper County's Georgia City Bridge (JASP20), a bowstring arch-truss constructed in 1871. Other bridges built by the Wrought Iron Bridge Company included Jasper County's Galesburg Bridge (JASP18), built in 1886, Buchanan County's Contrary Creek Bridge (BUCH26), built in 1888, and the Crooked River Bridge in Ray County (RAY015), constructed in 1889. Bridges constructed by the Wrought Iron Bridge Company were also found in Greene, Hickory, Lewis, Polk and Saline Counties. The majority of these were built at the close of the 19th century and were pinned Pratt through trusses.<sup>72</sup>

King Iron Bridge and Manufacturing of Cleveland, Ohio contributed to Missouri's bridge building efforts as well. Zenas King began in the bridge industry in 1858 as an employee of Cincinnati's Mosley and Company (1856-1861). In 1861 he and Peter Frees began their own business building boilers and bridges. After a few years, however, this partnership was terminated, but King decided to start his own company. The King Iron Bridge and Manufacturing Company was incorporated in 1871, and in 1893 it became the King Bridge Company. King formed affiliate companies in Iola and Topeka, Kansas, but they were both shortlived; the Iola company lasted from 1871-72, while the Topeka company from 1872-73.<sup>73</sup> In its catalog for 1858-1884, the company boasted of its superior wrought iron and combination bridge designs. The catalog also listed some of the company's 5,000+ bridges which included structures in Audrain, Bates, Caldwell, Clay, Daviess, Grundy, Henry, Holt, Lafayette and various other Missouri counties. The company's work was prevalent in states throughout the eastern, north-

eastern and even southeastern parts of the country.<sup>74</sup> Currently, only a few of the bridges produced by the King Iron Bridge and Manufacturing Company exist in Missouri. These include the Short's Ford Bridge (FRAN17) in Franklin County and Neosho Bridge (NEWT17) in Newton County.

Other nationally known companies worked in Missouri as well. Bridges constructed by the American Bridge Company included the Cairo Bridge (MISS01), which spanned the Mississippi River between Cairo, Illinois and the bootheel of Missouri. While the contract for the substructure was awarded to the Missouri Valley Bridge and Iron Company of Leavenworth, Kansas, the American Bridge Company fabricated the steel superstructure. The Cape Girardeau Bridge (CAPE05) in Cape Girardeau County was another product of the American Bridge Company. The American Bridge Company was also indirectly involved in Missouri's bridge building through the companies it had absorbed. The Wrought Iron Bridge Company, whose work was widespread in Missouri, became part of the American Bridge Company in 1900. Other larger companies outside of Missouri, although not as prolific as the aforementioned companies, constructed bridges in the state as well. These included the Chicago Bridge and Iron Company, Wisconsin Bridge and Iron Company, Mt. Vernon Bridge Company of Mt. Vernon, Ohio and Western Bridge Company. Often, larger companies collaborated with both local and regional companies in construction.

The most prominent bridge builders in Missouri were those of regional and local companies. Regional companies with the most success in Missouri included the Canton Bridge Company of Canton, Ohio, the Illinois Steel Bridge and Iron Company, and Missouri Valley Bridge and Iron of Leavenworth, Kansas. Organized in 1891, the Canton Bridge Company started with capital of \$150,000. Although it was not one of the largest bridge building plants in America, it was considered one of the most complete. Like many large bridge companies, Canton Bridge maintained affiliate offices in other cities: Albany, New York, Kansas City, Missouri, Columbus and Toledo, Ohio, and Indianapolis, Indiana. Each of these affiliates were responsible for operations in certain regions of the nation. For example, J.W. Hoover, agent for the Kansas City office (the Western office) was responsible for bridge building opportunities in all states west of the Mississippi. The mother company relied on these agents to secure contracts throughout the country. Canton Bridge Company was blessed with an experienced and talented staff at the turn of the century. Many of the employees of the main office had worked with other national bridge companies. Then vice president David Hammond even patented a combination bridge design, built the first steel bridge in Stark County and was considered the "daddy" of Ohio's steel bridge building tradition.<sup>75</sup>

The Canton Bridge Company's specialty was "highway bridges for the smaller country streams" although it was prepared to construct bridges of varying designs and sizes.<sup>76</sup> By 1902 the company had built 6000 bridges throughout the country. In addition to its bridge building capabilities, Canton Bridge Company also produced structural steel work for buildings and railways.<sup>77</sup> Canton was responsible for numerous pinned Pratt trusses throughout Missouri, one of the more noteworthy of these being the Koehler's Ford Bridge (COLE03) in Cole County.

Other regional companies flourished in Missouri as well. The Illinois Steel Bridge Company of Jacksonville, Illinois, constructed bridges (pinned Pratt, riveted lattice bedsteads) throughout Carroll, Knox, Putnam and Scotland Counties. Constructed in 1908, the Lambeth Bridge (LACL07) in Laclede County was one of Illinois Steel Bridge's more

notable bridges. A steel, seven panel, pin-connected Pratt through truss, the Lambeth was composed of Illinois Steel's pin-connected Pratt truss design, and steel rolled by Carnegie to construct the bridge's three spans. Missouri Valley Bridge and Iron erected pinned Pratts, Parkers and other bridge designs in numerous counties. Two bowstring arch-trusses, Lick Fork Creek Bridge (DAVI13) and the Steel's Fish Trap Bridge (SALI31) represent this company's more notable structures. The work of the Massillon Bridge Company of Massillon, Ohio was also evident in Missouri.

The Midland Bridge Company was formed in the mid 1890s by Freygang and Trocon of Kansas City. Although its history is somewhat incomplete, the company appears to have been formally incorporated in Augusta, Maine, in July 1920, but maintained its offices in Kansas City around 1901 or 1902. A.A. Trocon was listed as one of the owners of the Midland Bridge Company in a St. Charles newspaper in 1904.<sup>78</sup> Specializing in the design, construction and even repair of wooden, iron, steel and concrete bridges, the company appears to have existed in Missouri until the mid-1920s, when they terminated their Missouri business license. Several truss bridges by Midland exist in western Missouri, and that most of the bridges were built between 1910 and 1920. The Old St. Charles Bridge in St. Charles is Midland's most notable creation.<sup>79</sup>

Bridges by local companies were more prevalent than those of national or regional companies. Stupp Brothers Bridge and Iron Company, Dildine Bridge Company, Kansas City Bridge Company and Missouri Bridge and Iron Company were the most productive local companies. Stupp Brothers Bridge and Iron Company was originally formed in 1859 by John Stupp. After 1879, his sons continued the business. The firm built iron and steel bridges for railways, city and county highways by contract. It also produced bridge parts for other contractors, and even manufactured wrought iron and steel work for buildings. With its main offices in St. Louis, Stupp Brothers Bridge and Iron Company also had firms in Kansas City and in Iowa City, Iowa.<sup>80</sup>

The Dildine Bridge Company was a family firm as well. A businessman in Cameron, Missouri, J.C. Dildine worked at Stupp Brothers and was general manager of the Canton Bridge Company before joining his brother in Cameron, Missouri, at Dildine Bridge and Construction Company, a firm that produced 300 tons of steel each month after it moved to Hannibal. By 1914 Dildine returned to Cameron and started the Cameron Bridge Company; the firm did contract work in both concrete and steel bridges and fabrication of bridge structures. Dildine eventually patented designs for a steel bridge and a concrete culvert.<sup>81</sup>

Often local companies dominated the bridge building industry by constructing large quantities of typical bridge types in one or two specific counties. The Dildine Bridge Company was active in numerous Missouri counties. Between 1890 and 1910 it constructed approximately sixty bridges (mostly pinned Pratts and half-hip ponies) in Dekalb County. Between 1898 and 1910, Dildine constructed around fourteen bridges in Clinton County. One of these, the Little Platte River Bridge (CLIN18), is a steel, five-panel, rigid connected Baltimore bedstead truss: the only one left of the six in Missouri that utilized this design. The Kansas City Bridge Company built twenty-two bridges (riveted Warrens and Pratts, steel stringers) in Carroll County alone. Fourteen bridges existing in Cooper County were also built by the Kansas City Bridge Company. Their bridges were common in other counties as well. Builder Robert E. Bates constructed twenty-two (steel stringers, riveted Pratts) in Carroll County as well. In Callaway County, Stupp Brothers Bridge and Iron Company built twenty bridges from 1909 to

1913. The St. Joseph Bridge Building Company, was organized in January 1871 by thirteen St. Joseph residents.<sup>82</sup> The Pan-American Bridge Company of Moberly, Missouri constructed about fourteen bridges (riveted Warren trusses) in Chariton County.

Individual builders were also active in Missouri. The most prominent included A.M. Blodgett, Maurice E. Gillioz and J.A. Dice. A.M. Blodgett, according to Hoye's Directory, was both an engineer and builder of bridges. After coming to Kansas City in 1879, he became vice-president of the Kansas City Bridge Company. Later he was associated with E.I. Farnsworth in bridge contracting. His company, A.M. Blodgett Construction, was located in Kansas City and built bridges in Cooper, Linn, Livingston, Mac-on, Saline and Vernon Counties in the first decade of the twentieth century. He was also responsible for constructing several bridges over the Kaw River and the waterworks tunnel under the Kaw.<sup>83</sup>

Maurice E. Gillioz of Monett, Missouri, was responsible for the construction of numerous bridges throughout the state. Gillioz was a native Missourian who started a construction business, the Gillioz Company, in 1914. The company was responsible for constructing both buildings and bridges.<sup>84</sup> Gillioz's wide variety of bridge work was evident in Adair, Barry, Franklin, Iron, Lawrence, Lincoln, Pettis, Shannon and Vernon counties. Riveted Prattis, Warrens and Parkers, as well as steel stringers and concrete structures exemplified Gillioz' work between 1916 and 1947. One of his more distinctive structures is the Current River Bridge (SHAN01) in Shannon County. A concrete open spandrel arch, the bridge features three 130-foot open spandrel arches, bordered on each end by 60-foot filled spandrel arches. Completed in 1924, the bridge spans the Current River north of Round Spring.

Kansas City engineer J.A.L. Waddell was an important force in bridge design in Missouri and all over the United States, Canada and Mexico. Born in Ontario in 1854, Waddell enjoyed an eclectic engineering career before starting his own firm in Missouri. His resume included drafting, engineering field work for the Canadian Pacific Railway, an assistant professorship in rational and technical mechanics at Renasselaer Polytechnic Institute, a professorship in civil engineering at the Imperial University of Japan, and chief engineer of Raymond and Campbell, bridge builders. In 1887, he began a private practice in Kansas City, in 1899 his firm became the partnership of Waddell & Hedrick, and in 1906, Waddell & Harrington. Although not as prolific in Missouri as other local companies, Waddell was known for his extensive technical reports and publications regarding bridge design and construction.<sup>85</sup>

One of Waddell's designs, the Old St. Charles Bridge, was composed of four Pennsylvania through truss spans, a deck truss, plate girder, deck girder, I-beam and continuous deck girder approach spans. Known as the city of St. Charles' first durable highway bridge across the Missouri River, the Old St. Charles was built between 1902 and 1904. Waddell designed the bridge while he was part of the firm Waddell and Herick. The Midland Bridge Company of Kansas City fabricated the superstructure. Not considered one of Waddell's more impressive structures, in the context of his other works, the Old St. Charles is most notable for its approaches, built on horizontal and vertical curves, and for the fact that it was built across the temperamental Missouri River.<sup>86</sup>

Waddell's associate, John Lyle Harrington, was also an important bridge engineer in Missouri. Harrington was born in Lawrence, Kansas, in 1868. With degrees in Civil Engineering from Kansas University and McGill University (Montreal, Canada), Har-



rington soon gained experience working as an engineer with bridge companies and railways throughout the country. Between 1907 and 1914 he went into business with Waddell, thus forming one of the "leading firms of its kind in the West."<sup>87</sup> Harrington was a senior partner in Harrington, Howard and Ash from 1914 to 1928.

Although his relationships with both of these firms ended on less than positive terms, with these companies Harrington was involved in the construction of bridges at Bellefontaine, Boonville, Waverly and Kansas City.<sup>88</sup> The Boonville Bridge, constructed in 1922-24 between Cooper and Howard Counties, was the result of local agitation for a highway bridge across the Missouri River. A rigid-connected Pennsylvania through truss with three rigid-connected Parker through trusses on its northern end, and a 10-span concrete deck girder approach on its southern end, the Boonville Bridge was designed by Harrington, Howard and Ash. The Missouri Valley Bridge Company and the Mt. Vernon Bridge Company won the contracts for the superstructure and the substructure respectively. The bridge was completed in 1924 with an overall length of 2666 feet, and remains an excellent example of steel truss construction. Between 1912 and 1917, Harrington, Howard and Ash was also responsible for the construction of these Kansas City structures: the Paseo Overpasses (**JACK45** and **JACK46**), the Central Avenue Viaduct, the Kaw River Bridge at Central Avenue, the Municipal Wharf and the Twenty-Third Street Viaduct (**JACK30**).<sup>89</sup>

Some builders specialized exclusively in a particular bridge design. J.A. Dice, whose work appeared primarily in the 1920s and early 1930s, built steel cable suspension bridges in several Missouri counties. Although suspension bridges have been around since 1840, their construction has been relatively infrequent.<sup>90</sup> Dice, whose company was based in Warsaw, Missouri, was a "self-educated engineer who scorned the use of transit and level."<sup>91</sup> Dice used very unorthodox engineering methods. He would visually assess streams and other crossings, and then decided where the "tie-in spots for the cables."<sup>92</sup> Then his assistants would row across the stream, indicate the cable locations and construction would begin. Dice himself estimated that he built at least 40 suspension bridges throughout Missouri's Ozarks.<sup>93</sup>

One of only ten remaining Dice bridges, the Klenken Bridge (**COOP16**) of Cooper County was constructed between 1929 and 1930. The bridge is composed of a roadway suspended from two main cables of parallel strand galvanized wires encircled with spiral strands. Each main cable is attached to wire suspender cables. The planks of the steel I-beam floor are attached to the suspenders' additional ends. Dice was awarded the contract to construct the 200-foot bridge for a cost of \$6200. With steel components rolled by the Illinois Steel Company and floor beams and stringers by Jones and Laughlin Steel Company, the bridge was built largely without the aid of structural analysis. The Kaiser Bridge (**MARIO1**) and the Maries River Bridge (**MARIO2**) in Maries County were also designed by Dice and constructed in 1930 and 1928 respectively. Steel cable suspension bridges with timber towers, the two lightweight structures contrasted with the increasingly popular concrete bridge designs introduced at that time.

Missouri's bridge building industry from the late 19th to the early 20th centuries clearly illustrates shifts in both design and building materials. Manifest in this period was the move from iron to steel in bridge components, as well as the prominence of national companies specializing in, and thus standardizing bridge design. The emergence of designers, such as George S. Morison, J.A.L. Waddell and John Lyle Harrington, whose bridge building techniques reached far beyond the confines of Missouri,

also indicated that bridge building, unlike its origins in Missouri suggest, was becoming both a lucrative and expanding business nationwide. Still in the hands of private engineers and businessman, the bridge industry of the late 19th and early 20th century was soon to experience a more state and federal involvement in bridge design, construction and maintenance throughout Missouri.

## 6. GOVERNMENT INVOLVEMENT IN BRIDGE BUILDING

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Government involvement in the improvement of Missouri's roads and bridges formally began in 1808, when the Council of the Upper Louisiana under Governor Meriwether Lewis enacted legislation to "lay out a road with a sixty foot right of way."<sup>94</sup> Between 1814 and 1825 road laws included provisions for bridge construction and maintenance, but these tasks were considered a local responsibility.<sup>95</sup> Prior to 1890 Missouri's roads were "a source of annoyance and inconvenience;" the prevalence of mud often deterred travel. In 1898, however, the complexion of Missouri's transportation shifted as the St. Louis Motor Carriage Company began to manufacture automobiles. Although these early machines were crude, they did create a demand "for faster and more convenient highway transportation."<sup>96</sup>

Unfortunately, while the automobile industry improved, the quality of Missouri's roads did not. A lack of state and federal initiative toward road improvement was largely to blame for these conditions. Primarily a local effort, the improvement and maintenance of roads was inconsistent at best. This resulted in a campaign for legislation supporting a "uniform state system of highways."<sup>97</sup> By August 1906, the movement for a better highway network was boosted by Governor Folk's proclamation calling for a good roads convention. The "Good Roads Society" and other groups encouraged more state involvement in the road system. Nevertheless, direct state involvement in road improvement did not emerge until 1907, when the 44th General Assembly passed bills for the creation of an office of county highway engineer, the appointment of a state highway engineer, state regulation and registration of motor vehicles and a state road fund for construction costs. An initial appropriation of \$500,000 was made in support of this legislation. Not long after the legislation was passed, Curtis Hill was appointed to the office of state highway engineer; Hill's responsibility included popularizing a good roads movement, advising the county highway engineers and administering the state aid fund.<sup>98</sup>

From 1908 to 1921, the development of both a highway system and an organ by which to administer it evolved slowly. A combination of local and state organizations as well as legislation brought about gradual changes in the system. What emerged was a series of legislative initiative that not only improved the administration and quality of the highway system, but also brought about standardization of Missouri's bridge system. In order to facilitate better communication between individual county highway engineers, the Highway Engineers Association was established in 1908. By 1910 this organization expanded to include county court members, road district members, county commissioners and city engineers. In 1911 talk of a cross-state highway from Kansas City to St. Louis, originally bandied about during Governor Folk's tenure, re-emerged under the

governorship of Herbert Hadley. At this time, the state's road system was supervised by State Highway Engineer Curtis Hill.<sup>99</sup>

A series of interstate trails connecting cities in Iowa, Missouri and Minnesota was established in 1911. Covering 503 miles, the trails not only connected the county seat towns and cities along the route, they also became part of the primary road systems in those three states. By 1915 the Jefferson Highway Association was formed in New Orleans. With the Interstate Trail system comprising portions of its route, the Jefferson Highway included Baton Rouge, Alexandria and Shreveport, Louisiana; Muskogee, Oklahoma; Joplin, Kansas City and St. Joseph, Missouri; Des Moines, Iowa; St. Paul and Minneapolis, Minnesota; and Winnipeg, Canada.<sup>100</sup> Well into the 1920s the State Highway Department reported improvements on portions of the Jefferson Highway.<sup>101</sup>

In 1913 the 47th General Assembly passed "an act creating a state highway department, providing for a state highway commissioner and deputy and defining their duties...."<sup>102</sup> This act eliminated the office of the State Highway Engineer and shifted responsibility for highway issues from the Agriculture Department to the newly appointed State Highway Commissioner.<sup>103</sup> County highway boards were also set up in each county. Under these new laws, the State Highway Commissioner evaluated inter-county seat highways for possible designation as state roads. Additionally, the law enabled the state highway engineer to establish a network of county seat connecting highways.<sup>104</sup>

By 1914, although considerable improvements had been made, automobile technology far exceeded improvements on the state's roads. Legislative initiatives from 1916 through 1921, however, further solidified the state and federal role in Missouri's transportation system. In 1916 Congress acknowledged the need for a more efficient road network that connected states. The result was the Federal Aid Highways Act, signed by President Woodrow Wilson in 1916. The Federal Aid Highways Act provided federal appropriations to states based on their area, population and postal road mileage. States in turn were required to match federal funds.<sup>105</sup> Although it originally provided for "the construction of rural post roads," this essentially covered the "reconstruction and improvement" of any public roads over which U.S. mail was being carried. Some \$5 million was appropriated for the first fiscal year's work on roads and \$1 million for surveys, construction and maintenance of roads and trails necessary to communities within or adjacent to national forests. The act also included a section that outlined the state's responsibility to "maintain the roads constructed under the provisions of this Act." The most important aspect of the 1916 Federal Aid Highways Act was "that the United States shall aid the States in the construction of rural post roads, and for other purposes." This marked the first federal aid toward the improvement of state roads.<sup>106</sup>

The state legislature enacted the Hawes Law in 1917 both to carry out the conditions of the Federal Aid Highways Act and to create a bipartisan state highway board that could appoint a highway engineer. The four-member board not only modernized existing road laws, it also ordered surveys for 3500 miles of state roads to be extended by 500 miles of road annually and standardized road width to 40 feet. The newly appointed state highway engineer became responsible for establishing standard markings and guideboards on state roads and preparing reports regarding road and bridge construction. The Hawes Act also established a state road fund—federal road funds absorbed into state treasuries.<sup>107</sup> By June 1917 a temporary road system was approved by the Highway Board. A total of \$400,000 was appropriated by the 49th General Assembly for "the construction of permanent road and bridge improvements during the biennial period."

According to the statutes, permanent improvements included "the construction of concrete piers or concrete abutments and building approaches for steel bridges...."<sup>108</sup>

A \$200,000 appropriation in June 1917 was distributed between various counties, according to their assessed valuation. A maximum of \$6,000 was allotted for each county. In 1917 279 construction plans and requests, totaling \$193,960.53, were submitted to the state. A similar scenario occurred in 1918. By that time, however, each county better prepared its applications, and as the Highway Board decided not to throw all state aid toward state roads, each county received more individual aid.<sup>109</sup> In 1919 the McCullough-Morgan amendments to the Hawes Law increased the mileage of the Missouri state highway system, provided survey and road dragging expenses, contributed \$1200 per mile on fifty miles of road in each county and appointed a state superintendent of highways to serve as ex-officio secretary of the board.<sup>110</sup>

The Hawes Act did not give state highway boards the authority to initiate road work; instead counties and road districts continued to match federal funds. The McCullough-Morgan amendment, on the other hand, bestowed more authority in the hands of state highway boards. This necessarily brought about the expansion of the highway board. Divided into six sections with a division engineer in charge of each section, the Missouri State Highway Department then endeavored to enlist county support through bond issues. By 1920 over \$21 million was voted for road improvement in 59 counties. In that same year, even though vehicle registration reached 295,046, only 10% of the state's designated 7630 miles of proposed roadways were constructed. A \$60 million bond issue designated by voters in 1920 was passed in order to "speed up improvements."<sup>111</sup>

The Centennial Road Law of 1921 was enacted in commemoration of the 100th anniversary of Missouri's statehood. Essentially reaffirming the provisions of the Hawes Law and the McCullough-Morgan amendments, the Centennial Road Law also appointed a geologist and a chief engineer and placed in the Highway Commission's lap the responsibility of administering the state's roads.<sup>112</sup> Congress passed the Federal Highway Act of 1921 to once again cement the government's role in state highway development. Under this act, state legislators who had approved appropriations met biannually to devise budgets. The 1921 Federal Aid Highway Act removed the relative inaction evidenced in earlier federal legislation.<sup>113</sup> After the passage of both the Centennial Road Law and the Federal Aid Highway Act, the Missouri State Highway Department expanded to include separate bureaus of construction, maintenance, equipment, audits, tests and bridges.<sup>114</sup>

The creation of a separate bridge bureau only strengthened the Missouri State Highway Department's efforts to expand and standardize both bridge design and maintenance. As early as 1918, the Highway Department acknowledged the need for more "technical" bridge and culvert designs. A drafting room was set up within the Highway Department for "the preparation of bridge and culvert designs."<sup>115</sup> Creating plans for all new bridges on state roads, the department noted the importance of standardization in state bridge design. Since most of the state's bridges had been built by "rule of thumb methods," the Highway Department hoped to rectify poor designs with bridge engineering that was "a specialized branch of engineering requiring a knowledge of mechanics and the strength of materials."<sup>116</sup> Nevertheless, unlike other states, which focused on intensive bridge replacement programs, the Missouri Highway Department's early reports do not indicate a similar trend.

## 7. CONCRETE BRIDGES IN THE EARLY TWENTIETH CENTURY

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Even before the state highway department was established, concrete had been used in bridge design in Missouri and elsewhere. Although concrete masonry was a new concept in bridge design and construction of the early twentieth century, it had existed since the second century, B.C., when the Romans invented hydraulic cement for use in their structures. After the fall of Rome, however, the art of concrete construction was lost for nearly 1000 years. By 1824 Englishman Joseph Aspdin developed an artificial cement composed of calcinate mixture of limestone and clay; this mixture was referred to as Portland cement. In 1871 David O. Saylor patented his own version of Portland cement and even constructed a plant in Copely, Pennsylvania.<sup>117</sup> Contemporary cement is produced when refined broken limestone is burned to form calcium oxide. Mixed with water, this concoction forms cement, which is either water-soluble (non-hydraulic) or combined with silica and alumina becomes impermeable to water (hydraulic).

The first use of concrete in bridge construction took place in the 16th century, when British engineer George Semple built Dublin's Essex Bridge using a natural hydraulic cement. The first use of concrete in the U.S. was in the foundations of the Erie Railroad's Starrucca Viaduct, completed in 1848. The Cleft Ridge Park Bridge (1871) was the earliest American bridge composed of concrete. A pedestrian bridge, the Cleft Ridge Park Bridge was only 31 feet long. Concrete was chosen because the bridge was largely a decorative structure and because it was cheaper and easier to manipulate than stone. The earliest concrete bridges were of plain or mass concrete, which exhibits the same structural features as stone: good compressive qualities but no tensile strength. The arch, a compressive configuration, was originally the only concrete bridge design.<sup>118</sup>

Efforts to combat problems with the tensile weakness of pure concrete resulted in the use of various reinforcements. Combining concrete with the tensile strength of iron and eventually steel, reinforced concrete is not only more durable, but also more economical. The concrete shields the iron or steel from corrosion and decreases the amount of metal needed for construction.<sup>119</sup> The origins of reinforced concrete extend back to 1854, when Englishman William B. Wilkinson patented a system for "imbedding a grid of wire rope in a concrete slab." After that, experimentation with the concept flourished. In the 1860s patents were made for various reinforced components. When Frenchman Josef Monier invented a method of reinforcement with wire mesh, other innovations in this field took place.<sup>120</sup>

Experiments with various reinforcement styles in the United States included patents in the reinforced concrete arch and bar reinforcement (by S. Bissell in 1881). The first reinforced concrete bridge in the United States, the Alvord Lake Bridge, was built in 1889 by Ernest L. Ransome in San Francisco's Golden Gate Park. Soon thereafter Joseph Melan proposed that Monier's theory of wire mesh reinforcement was insufficient for concrete arch construction. He suggested a method of parallel metal I-beams embedded in the concrete which resulted in a composite structure; a metal arch with a concrete cover. Fritz Von Emperger introduced Melan's system to the United States in 1893 and the face of concrete bridge construction.<sup>121</sup> A controversial design, the Luten arch, represented yet another interpretation of the concrete arch. An 1894 civil engineering student at the University of Michigan, Daniel B. Luten patented several improved

concrete arch designs. A handful of concrete spans in Missouri employ Emperger (STLC11) and Luten (CLAY11, CLAY20, CLAY22, BUCH08 AND BUCH09) patented features.

Missouri features a variety of reinforced concrete bridges, most of which were built in the first three decades of the twentieth century. Private, municipal, county and state governments were responsible for designing and constructing these bridges. Through the 1930s, private builders and bridge companies continued to work under county contracts. Municipal officials often funded, constructed and maintained urban bridges. State involvement in bridge design and construction became more prevalent in the early twentieth century, after the formation of the Missouri Highway Department and its bridge department. In 1920 the state bridge department prepared plans for 185 new bridge designs, to be built at a total cost of \$1,341,528. Twenty-one new concrete culvert designs, twenty-four designs of concrete superstructures, thirteen steel designs with concrete floors, and numerous designs for concrete and slab girders, steel trusses, etc. were approved by the U.S. Bureau of Public Roads. Standards for concrete designs were published and distributed to county officials for reference.<sup>122</sup>

Concrete arches comprise some of the earliest examples of concrete bridges in Missouri. The state's concrete arches can be divided into three groups: rural bridges, generally short to medium span with little detailing and primitive formwork, built mostly in the first two decades of the twentieth century; rural spans of the 1920s and 1930s, predominantly built by the state highway department; and urban bridges (mostly in St. Louis, St. Joseph and Kansas City), which have more decorative features and are generally the oldest arches in the state.

The Five Mile Creek Bridge (AUDR07) of Audrain County was constructed in 1901, presumably by a local builder. Composed of an open spandrel arch and a continuous rib that merges with concrete abutments and wingwalls, this 31-foot bridge represents one of the state's earliest examples of empirical concrete design. In 1903 the bridge over River des Peres in Forest Park in St. Louis represented one of the state's first reinforced concrete structures. A concrete arch bridge, this structure was significant for its use of corrugated bar reinforcement, a material being pushed commercially on concrete bridge designers. The bridge's cement was composed of one part Portland cement, two parts sand and four parts broken limestone. The corrugated bars were embedded within the concrete to create, as the concrete company stated, a "high elastic limit, which is desirable in steel-concrete construction."<sup>123</sup>

Variations on the arch design were often employed in urban bridges. The Kingshighway Boulevard Viaduct, constructed in 1912, was at that time one of the largest and most expensive viaducts ever built in St. Louis and one of the longest in the nation. Plans for this structure began in the late 19th century, with actual construction beginning in 1891. At that time, the city of St. Louis maintained nine viaducts (mostly of iron), twelve bridges over the River des Peres (iron and steel), and the railroad companies in St. Louis owned and maintained eight viaducts. Intended to be a grade separation, carrying the recently widened Kingshighway over the St. Louis and San Francisco and Missouri Pacific Railroad, a shortlived timber/steel structure was built to ease immediate traffic problems. Five years later, when the bridge department realized the inadequacy of the first structure, they made plans for a replacement.<sup>124</sup>

Although the City of St. Louis had built concrete structures before (mostly over the River des Peres), none compared in size to the Kingshighway Viaduct. With a total length of 1856 feet, the viaduct had three primary spans over the rail tracks, with smaller span arches and solid filled sloped approaches on both sides. No concrete arches constructed in Missouri were as long as the Kingshighway Viaduct's primary arches, which were designed by city staff engineer A.C. Janni. The two outside arches extended 140 feet, while the center arch was 170 feet. All three were open spandrels, with continuous arch rings reaching the 44-foot width of the viaduct.<sup>125</sup> Other St. Louis structures, the Bellerive Park Bridge (STLC09, 1918), Carondelet Park Bridge (STLC03, 1913) and McKinley Bridge (STLC13, 1902) employed the arch design as well. Concrete arch structures built throughout Missouri between 1900 and into the 1930s indicated the popularity of that design.

Concrete deck girders were popular in the teens and late 1920s in Missouri. A notable deck girder, Buchanan County's Great Western Viaduct (BUCH36) was constructed in 1927 by St. Joseph's Carrother and Huggins Contractors. Important to the development of St. Joseph's urban park system, this structure was designed by W.G. Fowler, a former draftsman of the state highway commission. The viaduct crossed the Chicago-Great Western Railway tracks to connect Krug Park with the rest of the city's park system. A six-rib concrete deck girder, the bridge features concrete abutments and wingwalls, spill through piers and concrete guardrails with square concrete balusters. The roadway is cantilevered from spandrels on tapered concrete brackets. Buchanan County featured a number of significant deck girders, including the King Hill Underpass (BUCH39) and Eleventh Street Underpass (BUCH37). Throughout the 1920s and 1930s, the Bureau of Bridges constructed numerous deck girders in Missouri's counties. Although most these were not structurally significant, they indicate the state's growing involvement in bridge design and construction.

Despite their relative structural insignificance, concrete slabs were built in abundance throughout Missouri. Some counties, such as Lawrence, primarily featured concrete slabs. In 1920 Lawrence County issued its specifications for the construction of two concrete slabs and an I-beam bridge with concrete floor. By the 1920s, the bulk of Missouri's concrete bridges were built by the state bureau of bridges. Other insignificant designs, including box and arch culverts, were built in abundance by the state as well. Although concrete was an innovative building material, it was often employed in some of the state's least memorable structures.

## 8. BRIDGES OF THE 1920s

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Motivated by the recently passed Centennial Road Law (1921), which designated a state highway system, the newly formed state bridge bureau worked to implement a more efficient bridge system in Missouri throughout the 1920s. Legislative initiatives during the 1920s fueled the Bureau of Bridges' program. The most effective of these, Proposition No. 5, was passed in 1925 to generate more revenue through increased sales of road bonds, increased automobile fees and gasoline taxes. Passed in 1928, Proposition No. 3 effectively accelerated road construction through a road bond issue of \$75 million, after monies generated by Proposition No. 5 were expended.<sup>126</sup> The result of the

passage of Proposition No. 3, a state constitutional amendment prevented the use of road funds for anything other than highway purposes. This amendment protected the funds from non-highway agencies, thus making Missouri the first state to restrict use of highway funds. The 1927 Painter-McCrawley Act provided for both a bipartisan highway commission in each county and for the construction of a supplementary state highway system.<sup>127</sup>

Standardization and creation of bridge designs, the organization of a bridge maintenance system, the elimination of railroad grade separation, the construction of a number of highway bridges and an overall increase in structures built throughout the state comprised the bureau of bridge's agenda. Statistics indicate that the bureau of bridges produced 35 new designs in 1918; by 1922, 293 new designs had been developed. These numbers continued to increase yearly.<sup>128</sup>

In 1922 the Bureau of Bridges' primary responsibilities included "preparing bridge specifications, standard and special plans and designs; estimating cost of structures; checking shop drawings; checking change orders and occasionally inspecting bridge sites and bridge construction work."<sup>129</sup> The 293 new designs in 1922 included some basic structures with minor alterations in length and other variable features: concrete slabs, I-beams, steel trusses, box culverts, through and deck girders, steel spans, wood pile trestles and low water bridges.<sup>130</sup>

In 1924, along with its regular responsibilities, the bureau also developed 555 new designs, revised the standard bridge specifications and began to inspect steel used in other state projects. A loading change adopted by the Bureau of Bridges and approved by the Bureau of Public Roads decreased the average cost of bridge building; a saving of 17% on concrete slabs and 10% on steel trusses was reported.<sup>131</sup>

Until 1927 upkeep of the increasing numbers of state bridges was non-existent. Even though most of the bridges were fairly new, officials noticed that "the bridges were not getting the required amount of attention in regard to their maintenance."<sup>132</sup> The result was a program in which every state bridge was inspected yearly, and in case of floods more than that. Written reports regarding the amounts of repair and the estimated costs were submitted as part of this program. In an effort to further standardize the bridge system, number plates were placed on all state built bridges. Each plate identified the bridge and provided the design number so that files pertaining to the bridges could easily be accessed.<sup>133</sup>

While the Bureau of Bridges created a more efficient state bridge system between 1922 and 1928, it was also involved in the construction of some of the state's most significant bridges. Not surprisingly, most of the state bridge projects of the 1920s were part of the push to improve the highway system. Between 1920 and 1922, the bridge department was involved in preparing special designs for bridges specifically linked to road projects. By 1922 the state's plans for a highway system that connected each county seat catalyzed a number of Missouri River bridge projects. Many of these were recognized by the highway commission and were expected to be funded by federal aid. The state bridge department worked with local officials to fund bridge projects by matching the local appropriations. Four of the most significant projects proposed in 1922 were Saline County's Glasgow Bridge (SALI01), Cooper/Howard County's Boonville Bridge (HOWA01), Carroll County's Waverly Bridge (CARRO2) and Ray County's Lexington Bridge (RAY001).<sup>134</sup>



Construction of the Glasgow, Boonville, Waverly and Lexington bridges began in 1922 and most were completed between 1924 and 1925. Each of the bridges employed simply supported trusses on concrete "dumb bell" piers, which require steel reinforcement and less concrete. All four bridges also featured considerable lengths: Glasgow with five truss spans from 224 to 343 feet; Boonville with three spans at 420 feet and three at 280 feet; Waverly with six truss spans from 145 to 420 feet; and Lexington with eleven truss spans from 208 to 411 feet. Each of these bridges was significant in some way to the development of Missouri's state highway system.<sup>135</sup>

The Boonville Bridge was the result of years of town boosting for a direct road between St. Louis and Kansas City. Optional routes were built through Boonville and Glasgow. A rivalry began when these two towns competed for the privilege of building the first bridge for the highway to traverse. The Boonville Bridge opened in 1924.<sup>136</sup> The Lexington Bridge, dedicated in November 1925, carried state highway No. 13 and is a connection between State Highway Nos. 8, 10, 20, 2 and 12. A riveted polygonal Warren through truss, the Lexington Bridge was known as the "largest and costliest free highway bridge over the Missouri River between St. Louis and Kansas City."<sup>137</sup> The Waverly Bridge, a riveted Pennsylvania through truss, was dedicated on July 15, 1925. Chairman of the tourist committee of the Automobile Club Sam Ramsey stated that Waverly was "one of the most necessary links in the Missouri highways chain."<sup>138</sup>

In 1927 the state began construction on four more bridges: the Black River bridge in Butler County, the Gasconade River Bridge in Maries County, the Osage River Bridge in Benton County, and the Current River Bridge (RIPL01) in Ripley County. These structures, like the four Missouri River bridges built earlier by the state, displayed some interesting design features. The Gasconade employed a cantilever design, and was at that time the only one of its kind in the state system. The Current River Bridge at the time of its construction was the longest bridge in the state system (with the exception of the four bridges over the Missouri River).<sup>139</sup> At least seven more bridges significant to the development of the state's highway system were designed and construction started in 1928. These included the Missouri River Bridge at St. Joseph, the Osage River Bridge in St. Claire County, bridges over the North and South Forks of the Spring River in Jasper County, the bridge over the Grand River in Carroll-Chariton Counties, the Pomme de Terre River Bridge (GREN02) in Greene County and the Stouts Creek Bridge (IRON07) in Iron County.<sup>140</sup>

While the railroad bridge embodied the highest standards of design, construction and maintenance at the turn of the century, by the 1920s, the improved highway system demanded "bridge structures of reliable and permanent character."<sup>141</sup> The highway bridge, a relatively recent phenomenon, represented some of the state's most notable structures. Missouri's bridge system in the 1920s was dominated by the State Highway Commission's involvement. In addition to using unusual bridge designs, such as the cantilever, the Bureau of Bridges also utilized many older designs in its effort to improve Missouri's transportation.

## 9. THE DEPRESSION ERA AND BRIDGE BUILDING

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The Missouri State Highway Commission continued its plans for a better highway system into the 1930s, despite the economic depression that gripped the nation through that decade. In fact, Missouri's state highway system actually benefitted from relief funds provided by New Deal legislation enacted during the Great Depression. Known as the state road program, the effort to expand and improve Missouri's highways in 1930 included plans to complete the primary and secondary road systems set up in the Centennial Road Law, to add 300 miles of state roads, construct traffic relief roads in the larger urban centers, build supplemental state roads in various counties and make road connections to the state's parks. Roadside improvements were also part of the plan.<sup>142</sup>

Despite its lofty goals, the Highway Commission also acknowledged that it had a "road problem" by 1930. With 110,500 miles of road covering 68,727 square miles, the state still needed to improve nearly 95 percent of these roads. Estimating that 85 percent of these roads only required minimal improvements, the commission reported that it would still cost nearly three-quarters of a billion dollars to complete the road project.<sup>143</sup>

Funding for Missouri's state highway system came from three principal sources: basic revenues, which included automobile registration, license and gasoline fees; incidental revenues, consisting of bus fees, interest on bank balances, bond interest and other state funds; and advanced revenues, including federal aid refunds, bond proceeds, flood relief funds, forestry relief funds and PWA refunds. In 1930 alone, these funds totaled \$43 million. Each of these sources provided funds for specific years. Flood relief funds, for instance, were received between 1935 and 1937. PWA funds were provided in 1935 and 1938 only. Trust fund refunds from the National Recovery and Works Progress acts were used from 1933 through 1940.<sup>144</sup>

Throughout the Great Depression, Missouri was a regular recipient of New Deal relief funding. Between 1930 and 1932, Congress appropriated a total of \$200 million for these purposes. Of these funds, Missouri received over \$6.1 million. In accordance with the National Recovery Act of 1933, Congress allotted \$400 million for construction of public highways and related activities; Missouri's allotment totaled \$12.1 million. Also as part of the National Recovery Act, the President granted funds for the completion of public works projects. Missouri received \$1.1 million for its PWA projects. In 1934 the passage of the Hayden-Cartwright Road Act enabled Congress to allot \$200 million to the states for the Emergency Public Works Highway Program. Of this allotment, Missouri acquired \$6.2 million. The Federal Emergency Relief Administration (FERA) also provided for \$730,224 in the construction of Missouri's "farm to market" roads. In 1935, the state received more federal funding. From the Emergency Relief Appropriation Act, Missouri received \$6 million in works program highway funds and funds for the works program grade crossing funds.<sup>145</sup>

Funding for the state highway system had a direct impact on the Bureau of Bridges, who developed a new set of designs to accommodate recent plans to construct the supplementary highway system. While the same roadway width of 20 feet between curbs was used in the supplementary system, loading was decreased from 15 ton to 10 ton trucks. For economic reasons, creosoted pile bents were used in foundations where piling could be used. Light concrete bents were also used, and standard designs were developed for timber and steel beam spans with both concrete and timber floors and for

concrete beam and slab spans. Special designs were also necessary for the traffic relief program in St. Louis and Kansas City. Stream crossings, railroad grade separations and highway intersections required innovative designs. Different roadway widths, and in the case of highway grade separations, the passage of traffic from one highway to another, presented interesting challenges to the Bureau of Bridges.<sup>146</sup>

In addition to preparing new designs, the Bureau of Bridges throughout the 1930s repaired many of the state's existing bridges, extending and widening them to conform to the new highway system. In an effort to construct more durable and efficient structures, the Bureau began in 1930 to study stream flow measurements and eventually rain measurements. Having built a total of 38 stream and rain gaging stations, the Bureau was able to study smaller streams and measure rain in regions not checked by the Weather Bureau.<sup>147</sup>

The elimination of grade crossings was also an important part of the Bureau of Bridges' agenda for the 1930s. By the end of 1930, nearly 62 grade separation structures had been constructed. In some instances, grade crossings were eliminated by the relocation of roads, but the remaining crossings required separation structures.<sup>148</sup> With the use of a WPA grant, the Bureau of Bridges was able to finance the majority of its grade separations. Between 1921 and 1936, the state constructed or had contracts for 292 grade separations, 211 of which were financed in part by the railroads involved.<sup>149</sup>

Special bridge maintenance was also conducted during the 1930s. Placing steel plates on and painting of the A.S.B. bridge, painting the Lexington Bridge, putting navigational lights on the Boonville, Glasgow and Waverly Bridges as part of their special maintenance program. Other types of maintenance included sandblasting, installation of bridge plates, refloorings and deck re-surfacings.<sup>150</sup>

Bridges during the 1930s featured both old and new designs. Some designs were developed specifically for improvement of existing bridges; other designs were created for new structures. Most of the state's significant bridges consisted of variations on steel superstructures with concrete substructures. Cantilevers, steel I-beams, trusses, rigid-frame spans and concrete deck girders and arches were prominent designs. Although some cantilevers were built in the 1920s, they became more popular in the 1930s and accommodated some of the state's larger scale structures. While most of the medium-span through trusses built at this time employed the rigid-connected Pratt and Parker configuration, most of the pony trusses and cantilever through trusses over the Missouri and Mississippi Rivers employed Warren webs.

Many impressive Missouri highway bridges were designed by the Bureau of Bridges during the 1930s and were an integral part of the state highway system. A cantilevered through truss, the 1229 foot long Niangua River Bridge (**CAMD01**) in Camden County featured three 343-foot spans and was erected by the Wisconsin Bridge and Iron Company. Employing the uncommon cantilevered design, the Niangua River Bridge was constructed in 1930 to carry Route 54 northwest of Lebanon. Other state-built bridges included the Eminence Bridge (**SHAN04**), a concrete open spandrel arch consisting of three 110-foot spans and three 25-foot concrete deck girder approaches. Crossing the Current River near Eminence, the bridge carries State Highway Route 19; it was constructed in 1933 by List & Clark Construction. The Round Spring Bridge (**SHAN03**) in Shannon County was designed by the Bureau of Bridges in 1930. A skewed, open spandrel arch, the bridge's superstructure consists of a single 150-foot arch flanked by seven

50-foot skewed concrete deck girder approach spans. The bridge is located in one of Missouri's most scenic stretches of highway—State Highway 19. C.F. Johnson and Sons were awarded the construction contract in April 1930 and completed the bridge that year for \$70,000.

Large scale Mississippi River bridges were constructed despite the Depression. Marion County's Quincy Memorial Bridge (**MARN03**) and Mark Twain Memorial Bridge (**MARN02**) were built in 1930 and 1936 respectively. The Quincy Bridge, a riveted Baltimore through truss, carried both highway and railroad traffic; it was "dedicated to the memory of the men and women who served our country in the Armed Forces...." The Kelly-Atkinson Construction Company completed the bridge in June 1930.

The Mark Twain Memorial Bridge was constructed by the Mt. Vernon Bridge Company between 1934 and 1936. A riveted cantilever through truss, the Mark Twain Memorial Bridge over the Mississippi River was built by the city of Hannibal in cooperation with the Hannibal Chamber of Commerce. Additional funding came from the Missouri State Highway Commission, the Illinois State Department of Public Works and Builders and Pike County, Illinois. The bridge was funded by a public works administration loan and grant as well.<sup>151</sup> The result of years of planning on the part of Hannibal residents, the Mark Twain Memorial Bridge ultimately became an important "link of the eastern and western sections of a great transcontinental highway."<sup>152</sup> It was dedicated by President Franklin D. Roosevelt in September 1936.<sup>153</sup>

Urban development continued in the 1930s. In 1935, Kansas City began a campaign that involved "conquering the wilderness of the Blue Valley with viaducts and trafficways." A map of the plan displayed a series of viaducts and bridges over the Blue River, which was at that time "a barrier holding back development of the valley." At that time plans for a long viaduct over the Blue River were underway. A contract for the construction of a 1639 foot viaduct over the river and railroad tracks for the Twenty-third Street trafficway was to be awarded by the Missouri Highway Commission as well.<sup>154</sup> A number of steel rigid frame viaducts were built in Kansas City during the 1930s. The Winner Road structures (**JACK06**, **JACK07** and **JACK08**) were all built in 1934 by well-known bridge builder M.E. Gillioz.

Bridge building in the depression era was both innovative and prolific. The campaign for a better state highway system, coupled with federal relief funds contributed to the increase in bridges built and to the emergence of new designs. Federal and state involvement in both the highway and bridge system signalled a definite departure from the predominance of the late nineteenth century private bridge industry.

## 10. BRIDGE CONSTRUCTION IN THE 1940s

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Bridge design and construction in the 1940s was temporarily hindered by World War II. Shortages in steel and other materials necessary for the war effort led to the use of "unreinforced concrete and specially designed timber structures."<sup>155</sup> Salvaged materials were used in the maintenance of many bridges. Plans for the highway system were also transformed by the war effort. As a result of the Federal Highway Act of 1940, Nation-

al Defense Highways and the Strategic Highway Network shifted emphasis from state highway improvements to the use and maintenance of only those roads considered strategically important. In most cases regular improvements of the state highway system took a back seat to federal-aid projects deemed valuable to the national defense.<sup>156</sup> Work on the supplementary state road system (so pivotal to the development of the highway system of the 1930s) was almost entirely halted during the war.<sup>157</sup>

The numbers of bridges actually constructed during and after the war fluctuated greatly. Between 1938 and 1940, designs and contracts were prepared for 211 bridges. Between 1942 and 1944 only 13 bridges were planned. The post-war period indicates a rise in the numbers of bridges. From 1944 to 1946 designs were made for 53 structures, but from 1946 to 1948 a total of 303 new bridges were planned.<sup>158</sup> Despite the rise in bridge construction, shortages of equipment, labor and building materials extended well into the post-war period. Delays in the building of necessary bridges were common throughout the 1940s.<sup>159</sup>

Some pre-war bridges exhibited designs that were rarely used during the war due to material shortages. The St. Francis River Bridge (WAYN01), constructed in pre-war 1941, is a steel, 8-panel rigid connected Warren through truss designed by the Missouri State Highway Commission in 1940. Constructed in 1941 by the George W. Condon Company, the St. Francis River Bridge is a typical of the Missouri State Highway Commission's long-span truss design. The bridge on Route 5 over the MKT Railroad tracks (HOWA02) in Howard County was built before the state began to cut its yearly bridge output. Built around 1940, this concrete deck girder viaduct consisted of nineteen concrete deck girder spans. Concrete bents on concrete piles formed the foundations to the 1462-foot bridge.<sup>160</sup>

Despite wartime shortages, steel was still used in some structures, especially the large viaducts built in Kansas City. Rigid connected Warren pony trusses such as Wayne County's St. Francis River Bridge (WAYN01) and Horse Creek Bridge (VERN02) in Vernon County were also built in the 1940s. A handful of steel stringers were evident, although most of them were built in the postwar years.

Concrete continued to be popular throughout the 1940s, although structures employing that material were less frequent than those of the 1920s and 1930s. Several concrete open spandrel arches, and a few concrete rigid frames were built in the postwar period. Compared to previous decades, including the depression-ridden 1930s, Missouri's bridge building in the 1940s was postponed by the war effort. At the same time, the bridges that were built in the 1940s reflected the innovative spirit of the Bureau of Bridges as it worked around wartime limitations.

## 11. CONCLUSION

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By the end of World War II, Missouri's bridge building policy was still being impacted by the war. Prices for building materials were still outrageous, and most materials were still unavailable. New personnel not only increased the number of bridges designed, but also revived maintenance of structures essentially neglected during the war.<sup>161</sup>

Nationwide, bridge design was influenced by the introduction of a new building material—prestressed concrete. The development of this method began in 1888 when a man named Jackson from San Francisco "applied controlled stresses to concrete by tensioning mild steel rods." The concept of applying prestressing to concrete beams had been around since the advent of reinforced concrete, when controversy arose over the existence of cracks induced by bending stresses. J. Mandl proposed the idea of countering those flexural stresses through prestressing.<sup>162</sup> According to Carl W. Condit, "prestressing is a method of inducing a controlled stress in the member during construction in order to counteract undesirable stresses resulting from the imposition of a working load." Typically, controlled stress is exerted by imbedded cables stretched against end plates.<sup>163</sup>

In 1903 the renowned French engineer Eugene Freyssinet began to experiment with the idea of modifying structural forces and deflections caused by loads. Between 1907 and 1912, he applied these ideas to concrete arch bridges and concluded that "long-term deformations of prestressed concrete were predictable and could be reduced" by using concrete and steel of high quality. Prestressed concrete became increasingly popular in twentieth century Europe until World War II. With many of Europe's bridges destroyed and steel production was greatly limited, prestressed concrete became the choice material for bridge construction in that region.<sup>164</sup>

The introduction of prestressed concrete in the United States took place in Philadelphia in 1949, when the Walnut Lane Bridge was constructed. Since that time, the use of prestressed concrete has grown remarkably. In both bridge and building construction, prestressed concrete was versatile and durable. Although most prestressed concrete is used only west of the Mississippi for climatic reasons, it is certain that Missouri's post-1950 bridges included some of prestressed concrete.<sup>165</sup>

As the majority of Missouri's bridges dated back to the late nineteenth and early twentieth century, replacement became an inevitability. Early wooden covered bridges and various trusses and arches were replaced by newer, more durable designs as the twentieth century wore on. Some of the state's most significant bridges, such as the Eads in St. Louis, still stand as reminders of Missouri's impressive bridge building tradition. Known for their innovative designs and their use of new materials, Missouri's bridges represent a microcosm of the evolution of bridge design and construction nationally and globally.

## 12. ENDNOTES

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# STRUCTURE TYPES

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On the following pages are lists of the bridges included in the field survey sample, organized by structure type. Within each structure type is a brief discussion and a listing of all of the included bridges within the type.

# PRATT TRUSSES

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Patented in 1844 by Thomas and Caleb Pratt, the Pratt design was characterized by upper chords and vertical members acting in compression and lower chords and diagonals that acted in tension. Its parallel chords and equal panel lengths resulted in standardized sizes for the verticals, diagonals and chord members, making fabrication and assembly relatively easy. In the highly competitive bridge manufacturing industry, in which efficiency equated with profit, Pratt trusses received almost universal use. "The Pratt truss is the type most commonly used in America for spans under two hundred and fifty feet in length," noted bridge engineer J.A.L. Waddell wrote in 1916. "Its advantages are simplicity, economy of metal, and suitability for connecting to the floor and lateral systems."

A subtype of the venerable Pratt pony truss, the Pratt half-hip configuration was also marketed extensively by Midwestern bridge companies in the late 19th and early 20th centuries. The half hip's primary advantage as a structural type was that, by eliminating the vertical members at the hip connections, it was more materially conservant than the standard Pratt. Its disadvantage was that it was generally limited to short-span applications: typically 30-60 feet. But Missouri's myriad small streams lent themselves to this range, and, as a result, thousands of single-span half-hip ponies were erected across the state.

Virtually all of the major regional fabricators manufactured full-hip and half-hip Pratt trusses and marketed them extensively to Missouri's counties in the late 19th and early 20th centuries. As a result, the Pratt truss received almost universal use during the state's most frenetic bridge construction period. More Pratts were erected during this stage than all other truss types combined, and today, despite a terrible attrition of old iron and steel spans, the Pratts remain the most populous truss type. In Missouri, Pratt trusses employed pinned connections until around 1915, when rigid connections began to supersede the older technology. Private bridge companies used both structural types during the transitional period of the early 1910s. The adoption of the riveted Pratt configuration by the state highway department for its through truss effectively ended pinned connections around 1920. After that time, MSHD-designed Pratt through trusses were erected at medium-span crossings throughout the state. Numerous examples of this design remain today.

## PIN-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JEFF07	J-158	Windsor Harbor Bridge	1875	1-124'	Keystone Bridge Company	77 listed
CASS66	none	Clark Bridge	1880	1-	Missouri Valley B&I Company	58 possible
NEWT17	384001.2	Neosho Bridge	1882	1-136'	King Iron Bridge Company	52 possible
BART10	432002.8	Moody Ford Bridge	1884	1- 75'	Missouri Valley B&I Company	53 possible
BATE40	648000.3	Papinville Bridge	1884	1-116'	Kansas City Bridge & Iron Co.	51 possible
CALL28	340002.1	Berry's Ford Bridge	1884	1-153'	Missouri Valley B&I Company	56 possible
CASS55	534002.2	Grand River Bridge	1884	1- 64'	Osage Bridge & Iron Works	33 non-eligible
VERN14	336002.0	Young's Ford Bridge	1884	1-100'	St. Louis B&I Company	58 possible
LINC18	350000.3	Moscow Mills Bridge	1885	1-177'	Raymond and Campbell	61 possible
PETT05	130001.8	Longwood Bridge	1885	1-100'	King and Twiss	51 possible
BUCH40	386501.9	Parker Road Bridge	c1885	1- 80'		27 non-eligible
PETT09	237002.0	Brown's Spring Bridge	c1885	2- 85'	City Light & Traction Co.	58 possible



# PIN-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
WORT02	103001.0	Marlowe Creek Bridge	c1885	1- 90'	CB&Q Railroad bridge crew	43 possible
DAVI23	315003.4	Grindstone Creek Bridge	1886	1-120'	Missouri Valley B&I Company	56 possible
JASP18	218000.2	Galesburg Bridge	1886	1-130'	Wrought Iron Bridge Company	56 possible
WASH02	013003.7	Kingston Ford Bridge	1886	1-166'	St. Louis Bridge & Iron Co.	56 possible
JEFF01	J-24	Morse Mill Bridge	1887	1-180'	H.W. Sebastian and Company	58 possible
LINC14	216000.6	Frenchman's Bluff Bridge	1887	1-200'	King Iron Bridge Company	65 possible
BOON07	093000.8	Hinkson Creek Bridge	1888	1-103'	H.W. Sebastian and Company	56 possible
BUCH26	187001.4	Contrary Creek Bridge	1888	1-133'	Wrought Iron Bridge Company	40 non-eligible
CALD36	342002.8	Cox Ford Bridge	1888	1-114'	King Iron Bridge Company	53 possible
FRAN17	F-190	Short's Ford Bridge	1888	1-194'	King Iron Bridge Company	60 possible
SALI34	368002.5	Boat Yard Ford Bridge	1888	1-150'	Kansas City Bridge & Iron Co.	56 possible
RAY015	257001.6	Crooked River Bridge	1889	1-102'	Wrought Iron Bridge Company	51 possible
BUCH28	206000.4	Contrary Creek Bridge	c1890	1-100'		22 non-eligible
CALD35	341000.9	Shoal Creek Bridge	c1890	1-112'	King Iron Bridge Company	42 non-eligible
CASS22	194000.4	Massey Creek Bridge	c1890	1- 85'		34 non-eligible
CASS35	361000.6	East Fork Bridge	c1890	1- 72'	Kansas City Bridge Company	37 non-eligible
GRUN15	082001.2	Medicine Creek Bridge	c1890	1-100'		21 non-eligible
JOHN11	216003.4	Waupler Bridge	c1890	1- 78'		32 non-eligible
KNOX39	289001.8	South Fabius River Bridge	c1890	1- 80'		16 non-eligible
NODA07	010001.4	Mill Creek Bridge	c1890	1- 80'		25 non-eligible
HICK01	026000.7	Rough Hollow Bridge	1891	1-180'	Wrought Iron Bridge Company	50 possible
JASP23	321000.6	Merrick Ford Bridge	1891	1-150'	MO Valley Bridge & Iron Work	55 possible
JOHN15	264000.6	Murray Ford Bridge	1891	1- 80'	John Bridgewater	44 possible
PETT20	423001.7	Dresden Bridge	1891	1-120'	George E. King Bridge Co.	51 possible
SHEL01	017001.3	McCully Bridge	1891	1-150'		31 non-eligible
VERN17	466001.8	Kelly Ford Bridge	1891	1- 80'	Chicago Bridge & Iron Co.	50 possible
DAVI25	321002.5	Grand River Bridge	1892	1-180'	Dildine Bridge Company	53 possible
AUDR11	341000.3	Fisher Bridge	1893	1-116'	Massillon Bridge Company	40 non-eligible
DAVI27	330000.9	Sampson Creek Bridge	1893	1-100'	Dildine Bridge Company	39 non-eligible
LINC15	319000.3	Chain of Rocks Bridge	1893	1-190'	St. Louis Bridge & Iron Co.	57 possible
OSAG03	075000.3	Westphalia Bridge	1893	1-145'	Kansas City Bridge Company	59 possible
RALL12	220000.4	Butler Ford Bridge	1893	1-100'	St. Louis B&I Company	50 possible
CALD41	359000.8	Shoal Creek Bridge	1894	1-124'	John Dildine and Company	52 possible
DEKA24	193001.1	Lost Creek Bridge	1894	1- 80'	Dildine Bridge Company	52 possible
LEWI27	276002.0	Maywood Bridge	1894	1-140'	St. Louis Bridge & Iron Co.	53 possible
LEWI19	167001.5	Buck Horn Bridge	1894	1-100'	St. Louis Bridge & Iron Co.	50 possible
NODA46	426000.8	Platte River Bridge	1894	1- 80'	Massillon Bridge Company	50 possible
CEDA07	095000.1	Caplinger Mill Bridge	1895	2-120'	Chicago Bridge & Iron Co.	78 eligible
LEWI26	268002.0	Gilead Bridge	1895	1- 84'	Wrought Iron Bridge Company	50 possible
MONI02	004003.1	Lupus Bridge	1895	1-111'	Kansas City Bridge Company	50 possible
PLAT20	175000.8	Cordon's Ferry Bridge	1895	1-150'	Missouri Valley B&I Company	46 non-eligible
SALI37	390000.8	Finney Creek Bridge	1895	1- 80'	Wrought Iron Bridge Company	46 non-eligible
ATCH06	039001.3	West High Creek Bridge	c1895	1-105'		25 non-eligible
CARR57	407000.1	Santa Fe Railroad Overpass	c1895	1-162'	Edge Moor Iron Works	31 non-eligible
JASP24	359000.9	Center Creek Bridge	c1895	1-110'		25 non-eligible
JOHN12	220001.7	Granger Ford Bridge	c1895	1-136'	re-erec.by Standard Br. Co. 192929	non-eligible
MERC03	033000.1	West Fork Little River Bridge	c1895	1-100'		15 non-eligible
MERC05	051R00.7	Weldon Fork Bridge	c1895	1-120'		22 non-eligible
CEDA19	none	Kennedy Ford Bridge	1896	2-100'	Wrought Iron Bridge Company	33 non-eligible
GREN19	054012.7	Hackney Mill Bridge	1896	2-100'	Wrought Iron Bridge Company	52 determ. non-elig.
LEWI05	060002.3	Lime Kiln Bridge	1896	1-100'	Wrought Iron Bridge Company	50 possible
WARR05	023000.5	Steinhagen Bridge	1896	2- 85'	J.S. McCleary and Sons	48 possible

# PIN-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CLAR27	317002.4	Fox Slough Bridge	1897	1-108'	James B. Diver & Company	49 possible
LAWR04	178000.0	Bowers Mill Bridge	1898	1-120'	Kansas City Bridge Company	53 possible
LEWI17	152000.3	Pollock Ford Bridge	1898	1-100'	Massillon Bridge Company	50 possible
MARN12	118001.6	Terrill Ford Bridge	1898	1-104'	Kansas City Bridge Company	45 non-eligible
MARN04	012000.7	Lyell Ford Bridge	1898	1- 94'	Kansas City Bridge Company	45 non-eligible
POLK13	306002.2	Aldrich Bridge	1898	1-100'	Wrought Iron Bridge Company	32 non-eligible
ADAI13	223000.1	Sloan Point Bridge	1899	1-122'	Theodore Moyer	42 non-eligible
CLAR20	184000.6	Vermillion Bridge	1899	1- 85'	James B. Diver & Company	43 non-eligible
DEKA23	177000.8	Grindstone Creek Bridge	1899	1-100'	Dildine Bridge Company	45 non-eligible
LEWI21	207001.7	La Grange Bridge	1899	1-110'	Massillon Bridge Company	45 non-eligible
MERC04	044002.3	West Fork Bridge	1899	1-108'	Dildine Bridge Company	38 non-eligible
SALI16	165002.3	Salt Fork Bridge	1899	1-120'	Central Bridge Company	51 possible
BOLL16	203003.1	Gipsy Bridge	1900	1-117'	Stupp Brothers B&I Company	37 non-eligible
LEWI25	264001.6	Bangert Bridge	1900	1- 90'	Wrought Iron Bridge Company	41 non-eligible
BUCH35	386500.1	Cook Road Bridge	c1900	1- 80'		16 non-eligible
JACK55	S245B11	Kenneth Road Bridge	c1900	1-100'		26 non-eligible
MARN07	070002.0	Hester Bridge	c1900	1-128'		28 non-eligible
MERC17	163001.5	Wildcat Creek Bridge	c1900	1- 86'		26 non-eligible
MERC23	284000.7	Medicine Creek Bridge	c1900	1- 80'		21 non-eligible
POLK11	279000.8	Orleans Bridge	c1900	1-150'		34 non-eligible
SALI39	408001.0	Blackwater River Bridge	c1900	1-100'		26 non-eligible
ANDR27	337000.0	Daily Bridge	1901	1-100'	J.H. Sparks	51 possible
BUTL09	399002.7	Miller Bridge	1901	1-100'	Interstate Bridge Company	39 non-eligible
CALD44	372000.5	Shoal Creek Bridge	1901	1-120'	J.H. Sparks	46 non-eligible
FRAN11	F-56	Labadie Creek Bridge	1901	1- 96'	Stupp Brothers Bridge & Iron	37 non-eligible
MONI01	001001.1	Petite Saline Bridge	1901	1-128'	Kansas City Bridge Company	51 possible
CLIN21	325001.4	Castile Creek Bridge	1902	1-100'	Dildine Bridge Company	45 non-eligible
DADE06	333000.9	Comet Bridge	1903	1-110'	Canton Bridge Company	43 non-eligible
RAY016	289001.3	Crooked River Bridge	1908	1-120'	Kansas City Bridge Company	48 non-eligible
RAY018	369002.6	Hall Stone Bridge	1908	1-106'	Kansas City Bridge Company	48 non-eligible
BOON04	010021.9	County Line Bridge	1909	1- 90'	Missouri B&I Company	43 non-eligible
CHRI04	209001.5	Riverside Bridge	1909	2-100'	Canton Bridge Company	45 non-eligible
MILL04	096001.5	Hoecker Bridge	1909	1-120'	Missouri B&I Company	46 non-eligible
MONT16	269000.6	Morrow Bridge	1909	1-140'	Missouri B&I Company	44 non-eligible
NODA27	251R01.0	102 River Bridge	1909	1-140'		36 non-eligible
RALL08	181001.6	Lick Creek Bridge	1909	1- 95'	Stupp Brothers B&I Company	45 determ. eligible
SCHU05	012001.4	Chariton River Bridge	1909	1-112'	Illinois Steel Bridge Company	42 non-eligible
BOON03	010021.7	Vaughn Bridge	1910	1- 95'	Stupp Brothers; county crew	39 non-eligible
CALL18	201001.3	Cedar Creek Bridge	1910	1-112'	Stupp Brothers B&I Company	43 non-eligible
MONR23	357001.7	Middle Fork Bridge	1910	1-102'	Decatur Bridge Company	37 non-eligible
MONR26	450001.2	Crooked Creek Bridge	1910	1- 90'		31 non-eligible
PLAT18	160000.4	Bee Creek Bridge	1910	1-112'	Missouri Valley B&I Company	41 non-eligible
SAFR07	175001.8	Barnhouse Ford Bridge	1910	1-100'	Stupp Brothers B&I Company	43 non-eligible
SALI33	366000.4	Scott & Cooney Ford Bridge	1910	1-120'	Illinois Steel Bridge Company	30 determ. non-elig.
SHEL12	320001.4	Conboy Bridge	1910	1-100'	Pan-American Bridge Company	37 non-eligible
ATCH18	137000.3	West Tarkio Creek Bridge	c1910	1- 90'		21 non-eligible
ATCH34	276000.8	Deadman's Hollow Bridge	c1910	1-100'		27 non-eligible
ATCH49	463002.5	Tarkio River Bridge	c1910	1- 90'		27 non-eligible
ATCH55	501000.8	Little Tarkio Creek Bridge	c1910	1-102'		27 non-eligible
BATE35	547003.3	M. des Cygnes R. Bridge	c1910	1-125'		31 non-eligible
CLAR11	116001.6	North Wyaconda R. Bridge	c1910	1-112'		23 non-eligible
CLAR32	358000.6	Wyaconda River Bridge	c1910	1-120'		31 non-eligible

# PIN-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DALL02	X 195	Niangua River Bridge	c1910	1-130'		27 non-eligible
DAVI28	349003.1	Big Creek Bridge	c1910	1-102'	Dildine Bridge Company	33 non-eligible
DAVI30	355002.4	Big Creek Bridge	c1910	1- 98'	Dildine Bridge Company	35 non-eligible
GENT04	061000.5	Middle Fork Bridge	c1910	1-120'		26 non-eligible
GRUN13	076001.7	Medicine Creek Bridge	c1910	1-108'		25 non-eligible
HOLT05	012000.2	Tarkio River Bridge	c1910	1-100'		27 non-eligible
HOLT24	126000.5	Squaw Creek Bridge	c1910	1-120'		30 non-eligible
LINC13	175002.5	Cuivre River Bridge	c1910	1-130'		28 non-eligible
LINC17	335002.1	Cuivre River Bridge	c1910	1-120'		28 non-eligible
LINN09	246000.7	Locust Creek Bridge	c1910	1-120'		23 non-eligible
MERC06	052000.0	West Fork Bridge	c1910	1- 75'		20 non-eligible
MARN08	072000.2	South Fabius River Bridge	c1910	1-150'		32 non-eligible
MARN10	114000.9	North River Bridge	c1910	1-130'		30 non-eligible
MARN15	174000.4	North River Bridge	c1910	1-136'		28 non-eligible
MONI11	254000.7	North Moreau Creek Bridge	c1910	1-108'		27 non-eligible
NODA06	003000.2	Middle Mill Creek Bridge	c1910	1- 78'		25 non-eligible
PEMI01	105000.0	Bridge	c1910	1-100'		25 non-eligible
SCOL05	024000.1	Little Fox River Bridge	c1910	1-100'		25 non-eligible
STOD07	521000.0	Capps Road Bridge	c1910	1-120'	Vincennes Bridge Company	38 non-eligible
CEDA12	250001.7	Edsall Ford Bridge	1911	1-120'	Canton Bridge Company	46 non-eligible
COLE03	031000.8	Koehler's Ford Bridge	1911	1-140'	Canton Bridge Company	54 possible
FRAN18	F-191	Little Meramec River Bridge	1911	1-110'	Stupp Brothers Bridge & Iron	43 non-eligible
LEWI29	308000.2	James Ford Bridge	1911	1-104'	Decatur Bridge Company	37 non-eligible
PETT18	393500.1	Washington Avenue Viaduct	1911	1-105'		36 non-eligible
POLK06	079001.1	Cedar Bluff Bridge	1911	1-118'	Canton Bridge Company	41 non-eligible
RALL06	116001.9	Spencer Creek Bridge	1911	1-120'	Stupp Brothers B&I Company	43 non-eligible
SACL06	262002.3	Pape Bridge	1911	1- 95'	Standard Bridge Company	39 non-eligible
BOLL15	203002.8	Fish Trap Ford Bridge	1912	1-112'	Stupp Brothers B&I Company	33 non-eligible
CHRI05	249000.3	Green Bridge	1912	1-120'	Canton Bridge Company	39 non-eligible
DADE07	348000.3	Lunsford Ford Bridge	1912	1- 88'	Canton Bridge Company	41 non-eligible
FRAN04	F-6	Big Berger Creek Bridge	1912	1-115'	Stupp Brothers Bridge & Iron	43 non-eligible
MONR09	175000.6	Coal Bank Bridge	1912	1-112'	Decatur Bridge Company	35 non-eligible
MONR11	209002.6	Cedar Bluff Bridge	1912	1-112'	Decatur Bridge Company	31 non-eligible
POLK10	253001.4	Bear Creek Bridge	1912	1-100'	Canton Bridge Company	41 non-eligible
TANE06	201000.1	Hollister Bridge	1912	1-100'	Canton Bridge Company	46 non-eligible
ANDR10	048000.0	Leach Mills Bridge	1913	1- 70'	A.S. Seybert	44 non-eligible
COOP17	231001.3	Streit Ford Bridge	1913	1-140'	Kansas City Bridge Company	46 possible
HOLT38	257001.6	Leach Mill Bridge	1913	1- 72'	A.S. Seybert	37 non-eligible
JOHN08	167001.3	Burns Bridge	1913	1- 90'	Western Bridge Company	34 non-eligible
MILL05	146000.4	Singer Bridge	1913	1-120'	Missouri Bridge & Iron Co.	44 non-eligible
STOD03	056000.8	Well's Ford Bridge	1913	1-100'	Vincennes Bridge Company	35 non-eligible
WAYN03	031002.2	Montgomery Ford Bridge	1913	1-100'	Vincennes Bridge Company	31 non-eligible
CHRI07	292002.2	Jenkins Ford Bridge	1914	1-100'	Canton Bridge Company	39 non-eligible
CLAR10	110002.3	Beard Bridge	1914	1-105'	George H. Turner	37 non-eligible
DOUG03	209003.0	Rome Bridge	1914	2-100'	J.H. Murray	50 possible
MARN21	289000.7	South Fabius River Bridge	1914	1-110'	Dildine Bridge Company	41 non-eligible
MONR01	018001.5	Cook's Ford Bridge	1914	1-112'	Decatur Bridge Company	29 non-eligible
OREG03	223000.2	Crow Ford Bridge	1914	1-100'	East St. Louis Bridge Company	40 non-eligible
DOUG04	283001.4	Dean Ford Bridge	1915	2- 96'	J.H. Murray	50 possible
FRAN19	F-207	McGuire Ford Bridge	1915	1-100'	Vincennes Bridge Company	41 non-eligible
MACD05	249000.5	Powell Bridge	1915	1-140'	East St. Louis B&I Company	46 possible
OSAG01	W 350	Koeltztown Bridge	1915	2-100'	Missouri Bridge & Iron Co.	44 non-eligible

## PIN-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
OSAG04	078000.0	Holterman Bridge	1915	2-150'	Kansas City Bridge Company	55 possible
STON03	141000.0	McCall Ford Bridge	1915	1-155'	Fred L. Appleby	48 possible
BARR09	451000.3	Flat Creek Bridge	c1915	1-102'		32 non-eligible
GRUN06	042000.9	Honey Creek Bridge	c1915	1-105'	Illinois Steel Bridge Company	27 non-eligible
HOLT33	165000.1	Tarkio River Bridge	c1915	1-100'		27 non-eligible
LINC09	117000.3	Silex Bridge	c1915	1-140'		30 non-eligible
LINC11	130003.0	Briscoe Bridge	c1915	1-100'		27 non-eligible
NODA26	231R00.4	Platte River Bridge	c1915	1-120'		30 non-eligible
NODA28	254000.8	102 River Bridge	c1915	1-150'		32 non-eligible
NODA30	262000.3	Norvey Creek Bridge	c1915	1- 80'		27 non-eligible
NODA49	474001.2	102 River Bridge	c1915	1-108'		27 non-eligible
COLE01	001000.2	Moniteau Creek Bridge	1916	1-140'	Kansas City Bridge Company	46 non-eligible
BOLL07	099002.5	Perkin's Ford Bridge	1917	1-130'		34 non-eligible
CEDA15	287000.2	Low Brown Ford Bridge	1917	1-125'	Canton Bridge Company	44 non-eligible
LEWI18	165001.2	Lay Bridge	1918	1-100'	Dildine Bridge Company	41 non-eligible
WASH03	086004.0	Haefner Bridge	1918	2-100'	R.L. Miller	39 non-eligible
LIVI07	322000.8	Shoal Creek Bridge	1919	1-100'	Kansas City Bridge Company	41 non-eligible
CHRI06	262002.8	Reed Ford Bridge	c1920	1-140'	Pioneer Construction Company	34 non-eligible
JACK76	399500.1	Santa Fe RR Overpass	c1920	1-163'		30 non-eligible
MACO26	358000.5	Santa Fe RR Overpass	c1920	1-150'		21 non-eligible
MARN09	110001.2	North River Bridge	c1920	1-100'		25 non-eligible
SACL09	373000.1	Nichols Ford Bridge	1922	1-160'	Pioneer Construction Company	48 possible
GASC06	181000.3	Miller's Ford Bridge	1925	1-120'	St. Louis Construction Co.	31 non-eligible
STOD06	452004.0	St. Francis River Bridge	c1925	1-180'	SL&SF Railroad Bridge Crew	29 non-eligible
AUDR10	278500.3	Clark Street Viaduct	1928	1-130'	railroad bridge crew	30 non-eligible
PHLO2	Z 828	Jerome Bridge	1928	4-125'	Missouri Valley B&I Company	52 determ. elig.
JOHN28	594001.0	Quick City Bridge	1929	1-200'	Standard Bridge Company	50 determ. elig.
JEFF04	J-55	Blackwell Bridge	1930	3-140'	L.W. Fitzpatrick/Stupp Bros. B&I	48 possible
LINN02	X 480	Locust Creek Bridge	1939	1-125'	D.A. Peery	41 non-eligible

## PIN-CONNECTED PRATT THROUGH TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DADE01	H 4	South Greenfield Overpass	1925	1-130'	Kelly and Underwood	71 determ. elig.

## PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BATE42	none	Elk Fork Bridge	1884	1- 60'	Missouri Valley B&I Company	47 possible
PLAT15	016000.1	Iatan Bridge	1885	1- 50'	Missouri Valley B&I Company	51 possible <i>95m0</i>
BATE06	041002.1	Mormon Fork Bridge	1886	1- 53'	Missouri Valley B&I Company	51 possible
BATE23	435002.1	Mulberry Creek Bridge	1886	1- 60'	Missouri Valley B&I Company	41 non-eligible
LINC10	118000.3	Mill Creek Bridge	1887	1- 67'	St. Louis B&I Company	57 possible <i>5m</i>
BART03	086000.3	Dry Wood Creek Bridge	c1890	1- 50'	Missouri Valley B&I Company	27 non-eligible
CASS14	149001.1	Crawford Creek Bridge	c1890	1- 55'	Kansas City Bridge & Iron Co.	35 non-eligible
JASP28	697001.2	Jenkins Creek Bridge	1884	1- 80'	Wrought Iron Bridge Company	54 possible
SALI29	325002.1	Pierre Fleche Creek Bridge	1891	1- 70'	Massillon Bridge Company	51 possible
DEKA12	082000.1	Lost Creek Bridge	1893	1- 60'	Dildine Bridge Company	48 possible

# PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
LAWR13	517001.4	Baugh Ford Bridge	1894	1- 60'	Kansas City Bridge Company	48 possible
WARR03	004001.3	Camp Creek Bridge	1894	1- 70'	Farnsworth & Blodgett	53 possible
DEKA09	074000.2	Lost Creek Bridge	1895	1- 40'	Dildine Bridge Company	34 non-eligible
GENT13	412004.2	Willow Creek Bridge	1895	1- 40'	Dildine Bridge Company	48 possible
VERN27	717002.3	County Line Bridge	1895	1- 70'	Missouri Valley B&I Company	51 possible
VERN24	657001.4	McCarty Creek Bridge	c1895	1- 60'	Missouri Valley B&I Company	40 non-eligible
CALL37	443002.3	Loutre River Bridge	1896	1- 80'	J.S. McCleary & Son	48 possible
LEWI07	068002.0	Agee Bridge	1897	1- 80'	Wrought Iron Bridge Company	53 possible
MACO27	382000.6	Mussel Fork Bridge	1897	1- 70'	Farnsworth & Blodgett	50 possible
NODA22	188000.5	Honey Creek Bridge	1897	1- 40'	Youngstown Bridge Company	41 non-eligible
BATE39	628000.9	Camp Branch Bridge	1898	1- 50'	Youngstown Bridge Company	39 non-eligible
CLAR04	029R00.7	Wilson Bridge	1898	1- 80'	James B. Diver Bridge Co.	55 possible
CLAR14	148001.2	Holmes Bridge	1898	1- 80'	James B. Diver Bridge Co.	44 non-eligible
BATE13	248000.1	Johnstown Bridge	1899	1- 70'	Kansas City Bridge Company	50 possible
BATE31	501002.2	Walnut Creek Bridge	1899	1- 75'	Kansas City Bridge Company	44 non-eligible
BATE32	509003.0	Walnut Creek Bridge	1899	1- 76'	Missouri Valley B&I Company	33 non-eligible
HOWA13	085002.0	Moniteau Creek Bridge	1899	1- 80'	Wrought Iron Bridge Company	55 possible
ADAI11	159000.1	Capps Bridge	1900	1- 70'	Fair Williams Bridge & Mfg. Co.	44 non-eligible
BATE15	310000.3	East Mound Creek Bridge	1900	1- 40'		31 non-eligible
DEKA30	220001.1	Lost Creek Bridge	1900	1- 70'	Dildine Bridge Company	40 non-eligible
LINN03	063000.6	Locust Creek Bridge	1900	1- 80'	A.M. Blodgett	41 non-eligible
BOLL08	118000.8	Dry Creek Bridge	c1900	1- 60'		23 non-eligible
DEKA13	083000.3	Lost Creek Bridge	c1900	1- 40'	Dildine Bridge Company	36 non-eligible
HENR15	338000.9	Deepwater Creek Bridge	c1900	1- 70'		29 non-eligible
HOWA15	087002.0	Prairie Fork Bridge	c1900	1- 70'	Wrought Iron Bridge Company	37 non-eligible
JACK50	S142B31	Elm Avenue Bridge	c1900	1- 36'		12 non-eligible
JACK66	243500.1	Little Blue River Bridge	c1900	1- 45'		15 non-eligible
NODA45	420000.3	Honey Creek Bridge	c1900	1- 50'		26 non-eligible
NODA50	496000.5	Big Slough Bridge	c1900	1- 40'		21 non-eligible
NODA61	654000.2	Bridge	c1900	1- 50'		26 non-eligible
NODA84	890000.7	Jenkins Creek Bridge	c1900	1- 40'		21 non-eligible
NODA92	985000.1	Clear Creek Bridge	c1900	1- 50'		26 non-eligible
SALI10	129001.5	Finney Creek Bridge	c1900	1- 40'		26 non-eligible
BATE09	124000.6	Little Deer Creek Bridge	1901	1- 50'	J.W. Hoover	41 non-eligible
CLAR05	036002.2	Linn Creek Bridge	1901	1- 50'	James B. Diver Bridge Co.	35 non-eligible
HARR14	296000.6	Big Creek Bridge	1901	1- 80'	Dildine Bridge Company	46 non-eligible
ANDR22	207000.5	Agee Creek Bridge	1902	1- 40'	John Clark	37 non-eligible
LINN14	406000.1	Long Branch Creek Bridge	1902	1- 60'	John Gilligan Bridge Company	44 non-eligible
NODA24	209001.3	Norvey Creek Bridge	1902	1- 60'	Sparks and Kinney	44 non-eligible
NODA33	315001.1	Muddy Creek Bridge	1902	1- 40'		31 non-eligible
NODA90	969000.4	Long Branch Bridge	1902	1- 40'	Sparks and Kinney	39 non-eligible
CALD04	023002.0	Brushy Creek Bridge	1903	1- 80'	Canton Bridge Company	42 non-eligible
DEKA25	195001.5	Branscombe Bridge	1903	1- 60'	Dildine Bridge Company	40 non-eligible
JASP09	006000.7	Blackberry Creek Bridge	1903	1- 64'	J.H. Sparks	44 non-eligible
MARN05	043000.9	Whitaker Ford Bridge	1903	1- 85'	Dildine Bridge Company	48 non-eligible
MERC21	262001.7	East Honey Creek Bridge	1903	1- 40'	Dildine Bridge Company	41 non-eligible
MONT13	198001.4	Whetstone Creek Bridge	1903	1- 80'	Missouri Bridge & Iron Co.	48 non-eligible
BENT08	252000.4	Turkey Creek Bridge	1904	1- 95'	Dildine Bridge Company	35 non-eligible
CALD28	307000.2	Little Otter Creek Bridge	1904	1- 60'	J.H. Sparks	44 non-eligible
CARR17	133000.7	Hurricane Creek Bridge	1904	1- 60'	Frank Yehle	40 non-eligible
CLAR28	319000.7	Honey Creek Bridge	1904	1- 67'	James B. Diver & Company	40 non-eligible

# PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DEKA20	160000.7	Big Muddy Creek Bridge	1904	1- 50'	Dildine Bridge Company	37 non-eligible
LEWI08	071002.0	Hargis Ford Bridge	1904	1- 90'	James B. Diver & Company	46 non-eligible
LEWI11	122000.7	Risk Bridge	1904	1- 75'	McCohn and Vernon	42 non-eligible
LINN15	421000.7	East Yellow Creek Bridge	1904	1- 90'	John Gilligan Bridge Company	45 non-eligible
MONR24	405000.8	Edwards Ford Bridge	1904	1- 60'	Decatur Bridge Company	42 non-eligible
NODA57	628000.9	Mozingo Creek Bridge	1904	1- 40'		33 non-eligible
RALL09	185001.6	Morowitz Bridge	1904	1- 67'	Stupp Brothers B&I Company	41 non-eligible
ADAI05	004000.8	Danforth Bridge	1905	1- 68'	Fair Williams B&M Company	42 non-eligible
CALL38	444001.6	Loutre River Bridge	1905	1- 75'	Illinois Bridge & Iron Co.	38 non-eligible
WORT06	174002.1	Savacool Bridge	1905	1- 44'	M.D. Haas	37 non-eligible
ANDR17	143000.2	Bridge	c1905	1- 45'		26 non-eligible
ANDR29	375000.7	Dillon Creek Bridge	c1905	1- 56'		25 non-eligible
BATE04	023001.5	Mormon Fork Bridge	c1905	1- 70'		29 non-eligible
BUCH26	166000.0	Whitehead Creek Bridge	c1905	1- 62'		29 non-eligible
CLAR17	170001.6	Fox River Bridge	c1905	1- 82'		33 non-eligible
CLAR18	173000.3	McCoy Bridge	c1905	1- 48'		26 non-eligible
GREN25	115020.5	Wilson Creek Bridge	c1905	1- 60'	Canton Bridge Company	39 non-eligible
HOWA17	108001.3	Bonne Femme Creek Bridge	c1905	1- 80'		31 non-eligible
LEWI12	127001.1	Sugar Creek Bridge	c1905	1- 80'		33 non-eligible
MERC02	025001.7	Brush Creek Bridge	c1905	1- 65'	Dildine Bridge Company	24 non-eligible
MERC20	246001.2	Muddy Creek Bridge	c1905	1- 70'	Dildine Bridge Company	29 non-eligible
NODA15	098000.8	Clear Creek Bridge	c1905	1- 40'		21 non-eligible
NODA20	167000.7	Norvey Creek Bridge	c1905	1- 84'		31 non-eligible
NODA56	577000.2	White Cloud Creek Bridge	c1905	1- 75'		29 non-eligible
NODA80	853000.3	Elkhorn Creek Bridge	c1905	1- 50'		25 non-eligible
PUTN18	300000.5	Wildcat Creek Bridge	c1905	1- 48'	Canton Bridge Company	29 non-eligible
RAND02	064002.1	Mud Creek Bridge	c1905	1- 54'	Canton Bridge Company	30 non-eligible
VERN10	271002.4	Melton Creek Bridge	c1905	1- 75'	Canton Bridge Company	39 non-eligible
CARR34	274000.1	AT&SF Railroad Overpass	1906	1- 80'	AT&SF Railroad	43 non-eligible
CARR74	640000.2	County Line Bridge	1906	1- 80'	R.G. Culbertson	46 non-eligible
CEDA05	063000.1	Stump Ford Bridge	1906	1- 63'	Canton Bridge Company	51 possible
DADE09	421000.1	Antioch Bridge	1906	1- 75'	Canton Bridge Company	44 non-eligible
JACK48	S137B31	Rhinehart Road Bridge	1906	1-100'	Interstate Bridge Company	46 non-eligible
LINN10	247000.5	Bridge	1906	1- 60'	John Gilligan Bridge Company	44 non-eligible
LINN12	297001.0	Parsons Creek Bridge	1913	1- 60'	Monarch Engineering Company	38 non-eligible
MONI05	098001.4	Reiden Ford Bridge	1906	1- 70'	Interstate Bridge Company	44 non-eligible
MONT18	283000.6	Prairie Fork Bridge	1906	1- 80'	Missouri Bridge & Iron Co.	46 non-eligible
NODA08	030000.6	Mass Branch Bridge	1906	1- 50'	county work force	37 non-eligible
DAVI40	465000.6	Honey Creek Bridge	1907	1- 40'	Dildine Bridge Company	43 non-eligible
HOWA25	211001.0	Bonne Femme Creek	1907	1- 80'	Pan-American Bridge Company	46 non-eligible
KNOX09	084001.6	Parish Bridge	1907	1- 84'	Ottumwa Bridge Company	40 non-eligible
MACO39	517000.2	Middle Fork Bridge	1907	1- 70'	A.M. Blodgett	46 non-eligible
NODA11	073000.3	Wolf Creek Bridge	1907	1- 65'	J.H. Sparks	40 non-eligible
NODA36	329001.0	Bridge	1907	1- 60'	J.H. Sparks	40 non-eligible
NODA59	646000.3	Long Branch Bridge	1907	1- 40'	county work force	37 non-eligible
SCOL04	010000.9	Johnson Bridge	1907	1- 60'	D.C. Ripley	40 non-eligible
SCOL22	221000.9	Hale Bridge	1907	1- 40'	Midland Bridge Company	43 non-eligible
ANDR24	272000.9	Third Fork Bridge	1908	1- 56'	Standard Bridge Company	39 non-eligible
GRUN46	360002.8	Hickory Creek Bridge	1908	1- 50'	N. Missouri Construction Co.	37 non-eligible
MERC19	244000.7	Muddy Creek Bridge	1908	1- 70'	Dildine Bridge Company	46 non-eligible
NODA78	821000.2	Florida Creek Bridge	1908	1- 65'	Standard Bridge Company	42 non-eligible
POLK04	007000.8	Humansville Bridge	1908	1- 80'	Marcus Bridge & Iron Company	42 non-eligible

# **PIN-CONNECTED PRATT PONY TRUSS**

Inv. No.	MHTD	Structure name	date	spans	builder	rating
POLK09	181000.2	Piper Creek Bridge	1908	1- 70'	Marcus Bridge & Iron Company	42 non-eligible
PUTN11	186000.8	Petty Bridge	1908	1- 80'	Canton Bridge Company	44 non-eligible
SACL05	184000.2	State Ford Bridge	1908	1- 62'	Standard Bridge Company	46 non-eligible
WORT04	140R00.3	East Fork Bridge	1908	1- 64'	Midland Bridge Company	44 non-eligible
MONR12	210000.2	Bee Creek Bridge	1908	1- 75'		34 non-eligible
SULL13	323001.7	Maggart Bridge	1908	1- 75'	Canton Bridge Company	42 non-eligible
CARR28	230000.1	Big Creek Bridge	1909	1- 50'	Leavenworth Bridge Company	35 non-eligible
CARR40	310001.5	Wakenda Creek Bridge	1909	1- 72'	Illinois Steel Bridge Company	42 non-eligible
CLIN09	089000.4	Deer Creek Bridge	1909	1- 50'	Dildine Bridge Company	41 non-eligible
DAVI06	044003.6	Little Creek Bridge	1909	1- 40'	Dildine Bridge Company	41 non-eligible
HOWA16	088001.5	Prairie Fork Creek Bridge	1909	1- 64'	Pan-American Bridge Company	42 non-eligible
KNOX10	118001.4	Baker Bridge	1909	1- 50'	J.K. Johnston	37 non-eligible
KNOX24	183001.9	Creed-Davis Bridge	1909	1- 35'	E.L. Davis	32 non-eligible
PUTN10	181001.0	Shadden Bridge	1909	1- 60'	Illinois Steel Bridge Company	44 non-eligible
PUTN13	227000.1	Margrove Bridge	1909	1- 60'	Midland Bridge Company	44 non-eligible
CALL21	250000.7	Wainscott Creek Bridge	1910	1- 48'	Stupp Brothers B&I Company	39 non-eligible
CARR46	344000.5	McCroskie Creek Bridge	1910	1- 50'	R.G. Culbertson	30 non-eligible
CASS29	300000.6	Price and Colburn Bridge	1910	1- 80'	George Bird	40 non-eligible
CLAR23	276000.9	Riney Bridge	1910	1- 70'	George H. Turner	38 non-eligible
FRAN05	F-31	Bucklick Creek Bridge	1910	1- 45'	Stupp Brothers Bridge & Iron	
HENR05	181000.6	Tebo Creek Bridge	1910	1- 82'	Canton Bridge Company	44 non-eligible
HOWA18	113000.0	Sulphur Creek Bridge	1910	1- 50'	Pan-American Bridge Company	37 non-eligible
KNOX40	289002.0	Hamilton Bridge	1910	1- 75'	Walters Brothers	40 non-eligible
MONR25	446000.7	Roney Ford Bridge	1910	1- 80'		36 non-eligible
PIKE06	023000.2	South Spencer Creek Bridge	1910	1- 80'	Midland Bridge Company	44 non-eligible
PIKE08	060000.6	Bradley Ford Bridge	1910	1- 80'	Decatur Bridge Company	36 non-eligible
RALL15	279000.1	Al's Tavern Bridge	1910	1- 60'	Stupp Brothers B&I Company	44 non-eligible
RAY005	076001.8	Bisbee Bridge	1910	1- 80'	Kansas City Bridge Company	44 non-eligible
SCHU15	175000.5	Bridge	1910	1- 40'	Illinois Steel Bridge Company	41 non-eligible
SCHU18	240000.7	Brush Creek Bridge	1910	1- 60'	Illinois Steel Bridge Company	44 non-eligible
SULL03	062002.7	McNealey Bridge	1910	1- 80'	Canton Bridge Company	44 non-eligible
ADAI12	176000.8	Billy Creek Bridge	c1910	1- 68'		30 non-eligible
ANDR05	014000.9	Arapahoe Creek Bridge	c1910	1- 45'		25 non-eligible
ANDR07	027002.0	Arapahoe Creek Bridge	c1910	1- 40'		25 non-eligible
ANDR09	040000.0	Pedlar Creek Bridge	c1910	1- 40'		25 non-eligible
ANDR12	067000.4	Lincoln Creek Bridge	c1910	1- 40'		25 non-eligible
ANDR13	077000.6	Lincoln Creek Bridge	c1910	1- 50'		16 determ. non-elig.
ANDR18	150000.3	Kellogg Branch Bridge	c1910	1- 40'		25 non-eligible
ANDR23	209001.6	Crooked Creek Bridge	c1910	1- 45'		25 non-eligible
ANDR28	374000.1	Dillon Creek Bridge	c1910	1- 50'		25 non-eligible
ANDR33	422000.2	Mill Creek Bridge	c1910	1- 45'		25 non-eligible
ATCH09	056000.1	Rose Branch Bridge	c1910	1- 40'		20 non-eligible
ATCH10	068001.1	High Creek Bridge	c1910	1- 40'		25 non-eligible
ATCH14	110000.4	Middle Tarkio Creek Bridge	c1910	1- 60'		28 non-eligible
ATCH22	146000.7	Rock Creek Bridge	c1910	1- 60'		28 non-eligible
ATCH22	147000.2	Rock Creek Bridge	c1910	1- 80'		30 non-eligible
ATCH24	167000.5	Rock Creek Bridge	c1910	1- 70'		28 non-eligible
ATCH26	208000.4	Bridge	c1910	1- 40'		25 non-eligible
ATCH27	223000.1	Rock Creek Bridge	c1910	1- 60'		28 non-eligible
ATCH28	230001.3	Cow Branch Bridge	c1910	1- 50'		25 non-eligible
ATCH36	305001.7	Long Branch Bridge	c1910	1- 52'		25 non-eligible
ATCH38	312001.3	Squaw Creek Bridge	c1910	1- 40'		25 non-eligible

# PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
ATCH46	416000.4	Bridge	c1910	1- 70'		28 non-eligible
ATCH50	481001.5	Little Tarkio Creek Bridge	c1910	2- 72'		30 non-eligible
ATCH54	491000.8	Tarkio Creek Bridge	c1910	1- 50'		25 non-eligible
AUDR04	098001.0	Youngs Creek Bridge	c1910	1- 55'		25 non-eligible
AUDR06	196000.3	Youngs Creek Bridge	c1910	1- 75'		28 non-eligible
BART04	086000.9	Shiloh Bridge	c1910	1- 70'		20 non-eligible
BART09	417000.6	North Fork Bridge	c1910	1- 70'		23 non-eligible
BATE38	624000.2	Sycamore Branch Bridge	c1910	1- 40'		25 non-eligible
BUCH25	174000.2	Whitehead Creek Bridge	c1910	1- 73'		28 non-eligible
CALD03	007000.3	Long Branch Bridge	c1910	1- 45'		18 non-eligible
CALD46	406000.6	Long Creek Bridge	c1910	1- 60'		28 non-eligible
CALL19	211002.6	Dry Creek Bridge	c1910	1- 66'		30 non-eligible
CALL22	253000.7	Little Auxvasse Creek Bridge	c1910	1- 68'		28 non-eligible
CASS06	078001.3	Big Creek Bridge	c1910	1- 80'		30 non-eligible
CASS08	112000.4	Big Creek Bridge	c1910	1- 60'		28 non-eligible
CASS18	170004.1	Massey Creek Bridge	c1910	1- 55'		25 non-eligible
CASS34	347000.5	East Fork Bridge	c1910	1- 70'		28 non-eligible
CHAR11	091000.7	Fork Creek Bridge	c1910	1- 60'		28 non-eligible
CHAR14	146000.9	Elm Creek Bridge	c1910	1- 60'		30 non-eligible
CLAR15	151001.0	Little Fox River Bridge	c1910	1- 80'		30 non-eligible
CLAR16	164001.6	Fox River Bridge	c1910	1- 80'		32 non-eligible
CLAR25	305000.4	Fox River Bridge	c1910	1- 50'		33 non-eligible
CLAR26	312001.2	Sugar Creek Bridge	c1910	1- 50'		28 non-eligible
CLAR34	373000.8	Honey Creek Bridge	c1910	1- 58'		26 non-eligible
CLIN04	029001.7	Castile Creek Bridge	c1910	1- 45'	Dildine Bridge Company	30 non-eligible
CLIN05	031000.9	Castile Creek Bridge	c1910	1- 60'	Dildine Bridge Company	38 non-eligible
CLIN11	115001.6	Little Platte River Bridge	c1910	1- 50'	Dildine Bridge Company	30 non-eligible
CLIN16	129000.5	Little Shoal Creek Bridge	c1910	1- 42'	Dildine Bridge Company	30 non-eligible
COOP08	026000.4	Bridge	c1910	1- 60'		30 non-eligible
COOP10	070000.0	Petite Saline Creek Bridge	c1910	1-100'		25 non-eligible
DAVI11	121001.8	Clear Creek Bridge	c1910	1- 60'	Dildine Bridge Company	38 non-eligible
DAVI14	172000.6	Bear Branch Bridge	c1910	1- 53'	Dildine Bridge Company	35 non-eligible
DAVI16	207000.7	Dog Creek Bridge	c1910	1- 40'	Dildine Bridge Company	35 non-eligible
DAVI17	208001.1	Dog Creek Bridge	c1910	1- 50'	Dildine Bridge Company	35 non-eligible
DAVI32	364000.9	Cypress Creek Bridge	c1910	1- 80'	Dildine Bridge Company	40 non-eligible
DAVI34	396000.7	Pilot Grove Creek Bridge	c1910	1- 40'	Dildine Bridge Company	35 non-eligible
DAVI35	420001.1	Big Muddy Creek Bridge	c1910	1- 40'	Dildine Bridge Company	35 non-eligible
DEKA27	211001.1	Grindstone Creek Bridge	c1910	1- 64'	Dildine Bridge Company	34 non-eligible
DEKA34	267000.2	Castile Creek Bridge	c1910	1- 60'	Dildine Bridge Company	38 non-eligible
DEKA45	328001.9	Little Third Fork Bridge	c1910	1- 64'	Dildine Bridge Company	34 non-eligible
DEKA51	356000.2	Little Third Fork Bridge	c1910	1- 70'	Dildine Bridge Company	38 non-eligible
GENT06	105000.3	Martin Branch Bridge	c1910	1- 60'		28 non-eligible
HARR03	005000.3	Lotts Creek Bridge	c1910	1- 60'		28 non-eligible
HARR06	147001.9	Big Muddy Creek Bridge	c1910	1- 70'		28 non-eligible
HARR07	163000.3	Big Creek Bridge	c1910	1- 72'		28 non-eligible
HARR18	359000.2	Big Creek Bridge	c1910	1- 80'		30 non-eligible
HENR04	179000.3	Tebo Creek Bridge	c1910	1-100'	Canton Bridge Company	36 non-eligible
HENR08	193003.0	Sand Creek Bridge	c1910	1- 75'	Canton Bridge Company	31 non-eligible
HENR10	205000.5	Tebo Creek Bridge	c1910	1- 80'	Canton Bridge Company	36 non-eligible
HENR18	490001.8	Deepwater Creek Bridge	c1910	1- 60'	Canton Bridge Company	34 non-eligible
HOLT06	030002.8	Little Tarkio Creek Bridge	c1910	1- 70'		28 non-eligible
HOLT07	034000.6	Little Tarkio Creek Bridge	c1910	1- 60'		28 non-eligible



# PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
HOLT10	049001.3	Minnesoto Valley Creek Bridge	c1910	1- 40'		20 non-eligible
HOLT11	057000.2	Middle Branch Bridge	c1910	1- 40'		20 non-eligible
HOLT13	072000.7	Bridge	c1910	1- 40'		25 non-eligible
HOLT15	088000.8	Whig Valley Creek Bridge	c1910	1- 55'		25 non-eligible
HOLT16	089001.6	Whig Valley Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT17	106000.5	Squaw Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT18	107000.5	Squaw Creek Bridge	c1910	1- 80'		30 non-eligible
HOLT19	108000.8	Middle Branch Bridge	c1910	1- 60'		28 non-eligible
HOLT20	111000.7	Squaw Creek Bridge	c1910	1- 75'		28 non-eligible
HOLT22	116002.4	Davis Creek Bridge	c1910	1- 50'		25 non-eligible
HOLT23	119001.0	Davis Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT25	127001.7	Squaw Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT27	131002.7	Wildcat Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT28	134R01.0	Wildcat Creek Bridge	c1910	1- 50'		25 non-eligible
HOLT29	135000.8	Wildcat Creek Bridge	c1910	1- 50'		25 non-eligible
HOLT30	145001.7	Little Tarkio Creek Br Bridge	c1910	1- 45'		20 non-eligible
HOLT31	148500.1	Grand Avenue Creek Bridge	c1910	1- 40'		20 non-eligible
HOLT32	148500.2	Grand Avenue Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT36	243000.8	Hog Creek Bridge	c1910	1- 50'		25 non-eligible
HOLT37	247000.8	Hickory Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT39	280000.5	Rock Creek Bridge	c1910	1- 50'		25 non-eligible
HOLT40	291001.4	Grand Avenue Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT41	292000.6	Kimsey Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT43	301R01.1	Kimsey Creek Bridge	c1910	1- 75'		28 non-eligible
HOLT44	321000.9	Mill Creek Bridge	c1910	1- 75'		28 non-eligible
HOLT46	328000.0	Schlottz Branch Bridge	c1910	1- 40'		20 non-eligible
JACK69	243502.3	Bridge	c1910	1- 37'		25 non-eligible
JASP25	566000.6	Jenkins Creek Bridge	c1910	1- 60'		28 non-eligible
KNOX47	344002.0	Salt River Bridge	c1910	1- 80'		30 non-eligible
KNOX49	351001.8	Salt River Bridge	c1910	1- 80'		30 non-eligible
LAFA05	184001.1	Little Tabo Creek Bridge	c1910	1- 65'		28 non-eligible
LINN07	180001.1	Bear Creek Bridge	c1910	1- 45'		27 non-eligible
LINN08	201000.3	Long Branch Bridge	c1910	1- 45'		25 non-eligible
MACO13	111000.2	Bear Creek Bridge	c1910	1- 50'		26 non-eligible
MACO25	349001.2	Mussel Fork Bridge	c1910	1- 60'		28 non-eligible
MACO35	462000.8	Middle Fork Bridge	c1910	1- 50'		27 non-eligible
MACO38	513001.6	Middle Fork Bridge	c1910	1- 60'		28 non-eligible
NEWT09	090003.5	Jenkins Creek Bridge	c1910	1- 80'		30 non-eligible
NEWT18	395500.2	Ottawa Street Bridge	c1910	1- 50'		27 non-eligible
NODA01	A37000.6	Turkey Creek Bridge	c1910	1- 40'		20 non-eligible
NODA10	069001.6	Clear Creek Bridge	c1910	1- 40'		25 non-eligible
NODA54	560000.2	Florida Creek Bridge	c1910	1- 40'		20 non-eligible
NODA55	560000.6	Florida Creek Bridge	c1910	1- 70'		28 non-eligible
NODA58	643000.6	Long Branch Bridge	c1910	1- 40'		25 non-eligible
NODA63	655R01.4	Platte River Bridge	c1910	2- 80'		32 non-eligible
NODA66	694000.2	Wildcat Creek Bridge	c1910	1- 50'		25 non-eligible
NODA68	701000.3	Wildcat Creek Bridge	c1910	1- 65'		28 non-eligible
NODA71	776000.1	Jenkins Creek Bridge	c1910	1- 40'		25 non-eligible
NODA73	780000.7	Coal Creek Bridge	c1910	1- 40'		20 non-eligible
NODA75	795000.1	Elkhorn Creek Bridge	c1910	1- 40'		25 non-eligible
NODA76	798000.7	Elkhorn Creek Bridge	c1910	1- 70'		28 non-eligible
NODA86	893000.4	Jenkins Creek Bridge	c1910	1- 60'		28 non-eligible

# PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
NODA89	941000.7	Bridge	c1910	1- 50'		25 non-eligible
PERR01	042000.0	Bridge	c1910	1- 45'		25 non-eligible
PETT17	383000.9	Elk Fork Bridge	c1910	1- 60'		28 non-eligible
PUTN05	082001.6	East Locust Creek Bridge	c1910	1- 48'		27 non-eligible
RAY014	249002.6	Crooked River Bridge	c1910	1- 80'		30 non-eligible
SACL01	020R02.0	Monegaw Creek Bridge	c1910	1- 46'	Standard Bridge Company	33 non-eligible
SACL08	362002.0	Bridge	c1910	1- 46'	Standard Bridge Company	33 non-eligible
SAGE07	043000.6	Terre Bleue Creek Bridge	c1910	1- 70'		28 non-eligible
SALI27	311001.0	Camp Creek Bridge	c1910	1- 60'		28 non-eligible
SCHU04	006000.7	Thief Creek Bridge	c1910	1- 60'		30 non-eligible
SCHU06	022000.9	Bridge	c1910	1- 40'	Illinois Steel Bridge Company	33 non-eligible
SCHU07	040001.3	North Fabius River Bridge	c1910	1- 60'	Illinois Steel Bridge Company	36 non-eligible
SCHU11	131001.2	Bridge	c1910	1- 40'	Illinois Steel Bridge Company	33 non-eligible
SCHU14	172000.6	Elm Creek Bridge	c1910	1- 50'	Illinois Steel Bridge Company	33 non-eligible
SCHU16	238000.3	South Fork Bridge	c1910	1- 60'	Illinois Steel Bridge Company	36 non-eligible
SCHU17	239002.8	South Fork Bridge	c1910	1- 80'		30 non-eligible
SCHU20	260001.0	Brush Creek Bridge	c1910	1- 60'		28 non-eligible
SCHU21	270003.4	Brushy Creek Bridge	c1910	1- 48'	Illinois Steel Bridge Company	28 non-eligible
SCHU23	274000.9	Chariton River Bridge	c1910	1- 80'	Illinois Steel Bridge Company	38 non-eligible
SCOL09	055001.7	Little Fox River Bridge	c1910	1- 55'		33 non-eligible
SCOL11	089001.1	South Wyaconda River Bridge	c1910	1- 44'	Illinois Steel Bridge Company	33 non-eligible
SCOL16	146000.7	South Wyaconda River Bridge	c1910	1- 70'	Illinois Steel Bridge Company	36 non-eligible
SCOL19	188000.7	Middle Fabius River Bridge	c1910	1- 48'	Illinois Steel Bridge Company	28 non-eligible
SCOL26	295000.5	Tobin Creek Bridge	c1910	1- 48'	Illinois Steel Bridge Company	33 non-eligible
SCOL30	375000.4	Middle Fabius River Bridge	c1910	1- 70'	Illinois Steel Bridge Company	38 non-eligible
SCOL31	376000.8	Fabius River Bridge	c1910	1- 70'		28 non-eligible
SCHU19	256001.9	North Fork Bridge	c1910	1- 60'	Illinois Steel Bridge Company	36 non-eligible
SULL07	200R01.4	Locust Creek Bridge	c1910	1- 80'		30 non-eligible
SULL12	322000.4	Little Yellow Creek Bridge	c1910	1- 45'		22 non-eligible
SULL15	344002.0	Mussel Creek Bridge	c1910	1- 80'	Canton Bridge Company	40 non-eligible
SULL16	385001.1	Locust Creek Bridge	c1910	1- 50'	Canton Bridge Company	33 non-eligible
WARR08	085004.3	Charrette Creek Bridge	c1910	1- 85'		34 non-eligible
WORT01	060R01.5	X Branch Bridge	c1910	1- 50'	Midland Bridge Company	25 non-eligible
WORT08	254000.3	Sand Creek Bridge	c1910	1- 40'	Midland Bridge Company	25 non-eligible
WORT10	266R00.3	Grand River Bridge	c1910	1- 60'	Midland Bridge Company	28 non-eligible
WRIG01	268000.9	Wolf Creek Bridge	c1910	1- 60'		28 non-eligible
ATCH11	071001.7	West High Creek Bridge	1911	1- 40'		29 non-eligible
BATE22	419000.5	Mulberry Creek Bridge	1911	1- 70'	Vincennes Bridge Company	42 non-eligible
CALL20	237002.2	Murphy Bridge	1911	1- 75'	Stupp Brothers B&I Company	46 non-eligible
CASS23	213000.6	Lusher Bridge	1911	1- 40'	Western Bridge Company	35 non-eligible
CEDA14	277000.9	Horse Creek Bridge	1911	1- 80'	Canton Bridge Company	44 non-eligible
CLAR09	090001.1	Dumas Bridge	1911	1- 60'	George H. Turner	38 non-eligible
CLAR30	328002.2	Wilson Bridge	1911	1- 45'	George H. Turner	35 non-eligible
DADE02	047000.9	McArthur Bridge	1911	1- 86'	Western Bridge Company	42 non-eligible
DEKA32	241000.9	Lost Creek Bridge	1911	1- 60'	Dildine Bridge Company	34 non-eligible
JASP22	248000.8	Little Spring River Bridge	1911	1- 60'		32 non-eligible
KNOX14	150001.4	Beal Fletch Bridge	1911	1- 60'	Walters Brothers	38 non-eligible
KNOX25	187000.3	Seeger Bridge	1911	1- 85'	Martin Kiesow	40 non-eligible
RALL11	202002.0	Menefee Ford Bridge	1911	1- 85'	Stupp Brothers B&I Company	48 possible
CALL25	304000.1	Youngs Creek Bridge	1912	1- 46'	Stupp Brothers B&I Company	34 non-eligible
CHAR19	278001.4	Salt Creek Bridge	1912	1- 65'		34 non-eligible

# **PIN-CONNECTED PRATT PONY TRUSS**

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MONT07	115002.6	Bear Creek Bridge	1912	1- 65'	Missouri Bridge & Iron Co.	23 non-eligible
SULL02	051001.3	Crumpacker Bridge	1912	1- 75'	Dildine Bridge Company	37 non-eligible
SULL05	128001.6	Jones Bridge	1912	1- 75'	Illinois Steel Bridge Company	38 non-eligible
COOP11	140000.0	Billingsville Bridge	1913	1-100'	Kansas City Bridge Company	44 non-eligible
HARR16	319R02.8	Panther Creek Bridge	1913	1- 45'	county work force	26 non-eligible
KNOX38	282001.3	Pleasant Valley Bridge	1913	1- 75'	Walters & Son	38 non-eligible
KNOX57	399001.6	Pflum Bridge	1913	1- 90'	Walters & Son	40 non-eligible
MISS03	110000.0	Maple Slough Bridge	1913	1- 50'	Vincennes Bridge Company	41 non-eligible
MONR30	564000.2	Patterson Bridge	1913	1- 70'	Decatur Bridge Company	38 non-eligible
RALL14	241002.3	Hutchinson Bridge	1913	1- 60'	Miller & Borcharding	37 non-eligible
SCOL07	042001.2	Lionberger Bridge	1913	1- 45'	Illinois Steel Bridge Company	35 non-eligible
SULL09	275001.3	Dewitt Bridge	1913	1- 75'	Canton Bridge Company	38 non-eligible
CLAR13	128002.5	Cama Bridge	1914	1- 68'	George H. Turner	38 non-eligible
CEDA18	446003.1	Ball Ford Bridge	1914	1- 60'	Canton Bridge Company	40 non-eligible
KNOX08	072001.8	Sallee Bridge	1914	1- 80'	Martin Kiesow	40 non-eligible
STOD04	137001.0	Bridge	1914	1- 50'	county work force	27 non-eligible
CEDA13	267000.7	Snag Creek Bridge	1915	1- 48'	Canton Bridge Company	39 non-eligible
CHRI10	382000.4	Hawkins Ford Bridge	1915	2- 80'	Canton Bridge Company	32 non-eligible
CHRI11	433000.4	Red Bridge	1915	3- 86'	Canton Bridge Company	52 possible
HARR17	339000.9	Trail Creek Bridge	1915	1- 54'	Kansas City Bridge Company	25 non-eligible
KNOX07	057000.1	Brown Bridge	1915	1- 70'	Walters Brothers	38 non-eligible
MARN22	291000.2	Grassy Creek Bridge	1915	1- 67'	Dildine Bridge Company	39 non-eligible
ANDR11	062001.0	Bridge	c1915	1- 45'		20 non-eligible
ANDR21	206002.7	Crooked Creek Bridge	c1915	1- 40'		20 non-eligible
ATCH37	309001.2	Squaw Creek Bridge	c1915	1- 40'		25 non-eligible
ATCH45	378000.2	Little Tarkio Creek Bridge	c1915	1- 74'		28 non-eligible
ATCH48	453000.4	Tarkio River Bridge	c1915	1- 90'		32 non-eligible
CALD38	350000.8	Log Creek Bridge	c1915	1- 54'		25 non-eligible
CALD48	442002.4	Crooked River Bridge	c1915	1- 80'		30 non-eligible
CAPE12	210002.5	Little Whitewater River Bridge	c1915	1- 80'		26 non-eligible
CASS09	117000.5	Camp Creek Bridge	c1915	1- 55'		25 non-eligible
CASS45	407000.4	Camp Creek Bridge	c1915	1- 68'		28 non-eligible
CASS58	564000.5	Eight Mile Creek Bridge	c1915	1- 55'		25 non-eligible
CASS60	587001.2	Sugar Creek Bridge	c1915	1- 60'		28 non-eligible
HENR22	547000.5	Spruce Creek Bridge	c1915	1- 80'	Canton Bridge Company	36 non-eligible
LINN13	405001.7	West Yellow Creek Bridge	c1915	1- 60'		28 non-eligible
LINN19	473000.2	BN Railroad Overpass	c1915	1- 60'		30 non-eligible
MERC22	282003.0	Medicine Creek Bridge	c1915	1- 80'		30 non-eligible
MISS02	094000.7	Bridge	c1915	1- 70'		28 non-eligible
MISS04	173001.3	Glory Bayou Bridge	c1915	1- 50'	Vincennes Bridge Company	35 non-eligible
NODA12	090000.3	Clear Creek Bridge	c1915	1- 60'		28 non-eligible
NODA19	120000.4	Clear Creek Bridge	c1915	1- 40'		21 non-eligible
NODA21	183000.5	Honey Creek Bridge	c1915	1- 40'		20 non-eligible
NODA29	254001.7	Norvey Creek Bridge	c1915	1- 80'		33 non-eligible
NODA31	269000.6	Bridge	c1915	1- 40'		20 non-eligible
NODA35	323R00.8	Mill Creek Bridge	c1915	1- 85'		25 non-eligible
NODA38	349000.9	Sand Creek Bridge	c1915	1- 50'		26 non-eligible
NODA41	382000.7	Bridge	c1915	1- 50'		25 non-eligible
NODA44	398001.8	Long Branch Bridge	c1915	1- 40'		21 non-eligible
NODA65	692000.7	Wildcat Creek Bridge	c1915	1- 65'		28 non-eligible
NODA70	769000.2	White Cloud Creek Bridge	c1915	1- 85'		30 non-eligible

## PIN-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
NODA74	783000.2	Elkhorn Creek Bridge	c1915	1- 40'		20 non-eligible
NODA87	897001.7	Owl Creek Bridge	c1915	1- 80'		31 non-eligible
PUTN09	147000.9	Bridge	c1915	1- 48'	Illinois Steel Bridge Company	30 non-eligible
PUTN12	198001.1	Husted Bridge	c1915	1- 80'	Illinois Steel Bridge Company	38 non-eligible
SALI07	041000.0	Muddy Creek Bridge	c1915	1- 36'		20 non-eligible
SCHU09	092001.1	Middle Fabius River Bridge	c1915	1- 60'	Illinois Steel Bridge Company	31 non-eligible
SCOL28	369000.0	Middle Fabius River Bridge	c1915	1- 75'		28 non-eligible
WORT03	116000.3	Middle Fork Bridge	c1915	2- 80'		21 non-eligible
CHAR18	212001.2	Clark Branch Bridge	1916	1- 70'		34 non-eligible
VERN22	625003.3	County Line Bridge	1916	1- 60'	Canton Bridge Company	42 non-eligible
CEDA16	309003.4	County Line Bridge	1917	1- 60'	Canton Bridge Company	42 non-eligible
HARR24	640000.3	Polecat Creek Bridge	1917	1- 50'	Dildine Bridge Company	35 non-eligible
JEFF02	J-48	Kingston Slough Bridge	1917	1- 80'	Miller & Borcharding	46 non-eligible
CASS38	382000.8	Eight Mile Creek Bridge	1918	1- 50'	Western Bridge Company	35 non-eligible
HARR22	574001.0	Sugar Creek Bridge	1918	1- 60'	Dildine Bridge Company	38 non-eligible
CASS65	659000.1	Massey Creek Bridge	1919	1- 70'	Kansas City Bridge Company	42 non-eligible
CHRI08	306000.8	Roberts Ford Bridge	1919	2- 80'	Pioneer Construction Company	42 non-eligible
HOLT34	233000.7	Kunkel Mill Bridge	1919	1- 65'	Kansas City Bridge Company	42 non-eligible
PETT07	161002.5	Muddy Creek Bridge	1919	1- 90'	Midland Bridge Company	46 non-eligible
SCOL15	140001.1	Lindberger Bridge	1919	1- 60'	Illinois Steel Bridge Company	38 non-eligible
DAVI29	350001.2	Big Goose Creek Bridge	c1920	2- 60'		24 non-eligible
GENT14	465001.0	Bridge	c1920	1- 50'		23 non-eligible
MONT09	131000.2	Bear Creek Bridge	1930	1- 70'	Missouri Bridge & Iron Co.	40 non-eligible

## PIN-CONNECTED PRATT HALF-HIP PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
NODA79	845000.3	Bridge	c1880	1- 65'		35 non-eligible
DEKA52	376000.4	Jordan Creek Branch Bridge	1893	1- 35'	Dildine Bridge Company	52 possible
DEKA56	391001.7	Castile Creek Bridge	1893	1- 30'	Dildine Bridge Company	46 possible
BART05	104000.9	Minor Bridge	1894	1- 75'	Wrought Iron Bridge Company	32 non-eligible
DEKA19	139000.3	Lost Creek Bridge	1894	1- 60'	Dildine Bridge Company	51 possible
DEKA38	299000.3	Little Third Fork Bridge	1894	1- 60'	Dildine Bridge Company	49 non-eligible
DEKA37	298000.1	Little Third Fork Bridge	1895	1- 40'	Dildine Bridge Company	46 possible
DEKA54	391000.9	Castile Creek Bridge	1895	1- 40'	Dildine Bridge Company	46 possible
IRON08	101000.4	Stouts Creek Bridge	c1895	1- 60'		30 non-eligible
MACO40	519000.4	Middle Fork Bridge	c1895	1- 60'	Farnsworth & Blodgett	42 non-eligible
MONT18	287002.7	Dry Fork Bridge	c1895	1- 46'		18 non-eligible
HOWA21	161002.0	Adams Fork Bridge	1896	1- 50'	Wrought Iron Bridge Company	43 non-eligible
NEWT19	427000.9	North Indian Creek Bridge	1896	1- 48'	Wrought Iron Bridge Company	46 possible
CLIN20	291001.5	Roberts Branch Bridge	1898	1- 40'	Dildine Bridge Company	43 non-eligible
DEKA26	196000.1	Lost Creek Bridge	1898	1- 40'	Dildine Bridge Company	39 non-eligible
DEKA40	305000.6	Little Third Fork Bridge	1898	1- 60'	Dildine Bridge Company	42 non-eligible
DEKA47	336000.8	Third Fork Bridge	1899	1- 60'	Dildine Bridge Company	42 non-eligible
MONI12	258002.1	Bridge	1898	1- 30'	Kansas City Bridge Company	47 non-eligible
CARR42	322000.7	Turkey Creek Bridge	1899	1- 60'	Kansas City Bridge Company	46 non-eligible
FRAN20	F-224	South Fork Bridge	1899	1- 40'	Stupp Brothers Bridge & Iron	42 non-eligible
DAVI19	245000.5	Smith Branch Bridge	c1900	1- 30'	John Dildine Bridge Company	31 non-eligible
DEKA15	115000.1	Lost Creek Bridge	c1900	1- 40'	Dildine Bridge Company	29 non-eligible

# PIN-CONNECTED PRATT HALF-HIP PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DEKA55	391001.1	Bover Bridge	c1900	1- 40'	Dildine Bridge Company	27 non-eligible
JACK68	243501.4	Mouse Creek Bridge	c1900	1- 50'		26 non-eligible
NEWT14	327001.0	Willow Branch Bridge	c1900	1- 44'	Canton Bridge Company	29 non-eligible
CALD27	305001.2	Otter Creek Bridge	1901	1- 50'	J.H. Sparks	43 non-eligible
DEKA39	304000.8	Little Third Fork Bridge	1901	1- 60'	Dildine Bridge Company	40 non-eligible
GREN26	119019.2	Roundtree Ford Bridge	1901	1- 48'	American Bridge Company	41 non-eligible
NEWT21	533001.0	Mason Spring Creek Bridge	1901	1- 50'	Canton Bridge Company	41 non-eligible
WARR13	155000.2	Charrette Creek Bridge	1901	1- 23'	American Bridge Company	36 non-eligible
BUCH19	104000.1	Malden Creek Bridge	1902	1- 60'	J.H. Sparks	40 non-eligible
DEKA06	043000.5	Bridge	1902	1- 30'	Dildine Bridge Company	32 non-eligible
WARR10	106001.4	Clay Branch Bridge	1902	1- 40'	Stupp Brothers B&I Company	41 non-eligible
ADAI16	360001.6	Eitel Bridge	1903	1- 30'	J.H. Mooney	37 non-eligible
GASC04	056000.6	Richland Creek Bridge	1903	1- 42'	Stupp Brothers B&I Company	43 non-eligible
MERC15	160002.2	Muddy Creek Bridge	1903	1- 70'	Dildine Bridge Company	46 non-eligible
DEKA16	124000.9	Lost Creek Bridge	1904	1- 60'	Dildine Bridge Company	40 non-eligible
HOWA24	200000.2	Doxies Creek Bridge	1904	1- 56'		31 non-eligible
LAF07	211000.1	Bear Creek Bridge	1904	1- 50'	Midland Bridge Company	39 non-eligible
NODA60	652001.1	Long Branch Bridge	1904	1- 41'		28 non-eligible
SCOL14	126000.2	North Fork Bridge	1904	1- 42'	John Martin & Company	37 non-eligible
CASS64	632001.6	Creighton Bridge	1905	1- 45'	George Bird	37 non-eligible
GRUN29	179000.8	Old Raccoon Creek Bridge	1905	1- 50'	Midland Bridge Company	36 non-eligible
CALD21	264001.7	Crooked River Bridge	c1905	1- 50'		26 non-eligible
CLAR06	075001.3	Fox River Bridge	c1905	1- 66'		29 non-eligible
DEKA02	014000.3	Third Fork Bridge	c1905	1- 60'	Dildine Bridge Company	35 non-eligible
DEKA04	034001.5	Little Third Fork Bridge	c1905	1- 30'	Dildine Bridge Company	27 non-eligible
DEKA05	036000.4	Little Third Fork Bridge	c1905	1- 60'	Dildine Bridge Company	35 non-eligible
DEKA44	328001.3	Morgan Branch Bridge	c1905	1- 40'	Dildine Bridge Company	32 non-eligible
DEKA53	380000.2	Bridge	c1905	1- 30'	Dildine Bridge Company	27 non-eligible
GREN28	144022.5	Pearson Creek Bridge	c1905	1- 45'		26 non-eligible
HOWA05	019002.5	Bonne Femme Creek Bridge	c1905	1- 40'		20 non-eligible
KNOX03	008001.4	South Fabius River Bridge	c1905	1- 60'		29 non-eligible
RALL10	200001.5	Spencer Creek Bridge	c1905	1- 50'	Stupp Brothers B&I Company	19 non-eligible
GREN11	020024.5	Little Pomme de Terre R. Bridge	1906	1- 60'	Canton Bridge Company	46 non-eligible
DEKA08	069001.6	Lost Creek Bridge	1907	1- 40'	Dildine Bridge Company	37 non-eligible
DEKA11	081000.6	Lost Creek Bridge	1907	1- 60'	Dildine Bridge Company	40 non-eligible
JACK74	304000.3	Sni-A-Bar Creek Bridge	1907	1- 56'	Kansas City Bridge Company	45 non-eligible
SALI23	263000.8	Bear Creek Bridge	1907	1- 68'	county work force	42 non-eligible
SULL17	417002.0	Mock Bridge	1907	1- 60'	Canton Bridge Company	42 non-eligible
CALD16	207000.9	Bridge	1908	1- 40'	Standard Bridge Company	38 non-eligible
DADE08	370001.4	Garren Ford Bridge	1908	1- 65'	Western Bridge Company	40 non-eligible
PUTN06	085002.0	Montgomery Bridge	1908	1- 48'	Canton Bridge Company	39 non-eligible
SALI20	217001.1	Edmonson Creek Bridge	1908	1- 45'	county work force	39 non-eligible
CEDA10	202R00.2	Silver Creek Bridge	c1908	1- 50'	Canton Bridge Company	38 non-eligible
PUTN04	070000.5	Demery Bridge	1909	1- 48'	Canton Bridge Company	37 non-eligible
PUTN08	127003.2	Drury Bridge	1909	1- 42'	Midland Bridge Company	36 non-eligible
PUTN14	253001.5	Bradshaw Bridge	1909	1- 48'	Midland Bridge Company	43 non-eligible
SULL11	321000.1	Holloway Bridge	1909	1- 50'	Canton Bridge Company	39 non-eligible
CASS17	165000.0	Crawford Creek Bridge	1910	1- 60'	Canton Bridge Company	40 non-eligible
CASS20	191000.2	Massey Creek Bridge	1910	1- 75'	Western Bridge Company	38 non-eligible
DADE10	471001.4	Everton Bridge	1910	1- 50'	Canton Bridge Company	33 non-eligible
MONR28	552000.5	Crooked Creek Bridge	1910	1- 64'		32 non-eligible
ADAI17	410001.9	Bridge	c1910	1- 30'		25 non-eligible

## PIN-CONNECTED PRATT HALF-HIP PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BATE08	104000.2	Elk Fork Bridge	c1910	1- 60'	Vincennes Bridge Company	40 non-eligible
BATE19	359000.1	Bones Branch Bridge	c1910	1- 30'		20 non-eligible
CALD08	088000.4	Lick Fork Bridge	c1910	1- 44'		21 non-eligible
CALD10	115001.8	Otter Creek Bridge	c1910	1- 50'		25 non-eligible
CALD11	118001.9	Otter Creek Bridge	c1910	1- 60'		28 non-eligible
CALD19	239000.1	Bridge	c1910	1- 50'		26 non-eligible
CALD47	407000.2	Long Creek Bridge	c1910	1- 60'		28 non-eligible
CASS07	109000.0	Duncan Creek Bridge	c1910	1- 65'		28 non-eligible
CASS19	187000.2	Town Creek Bridge	c1910	1- 25'		20 non-eligible
CASS31	329001.3	East Branch Bridge	c1910	1- 70'		28 non-eligible
CASS61	592001.9	Joslin Branch Bridge	c1910	1- 50'		28 non-eligible
DALL04	310000.7	Dousinberry Creek Bridge	c1910	1- 40'	Canton Bridge Company	30 non-eligible
DEKA21	160002.5	Big Muddy Creek Bridge	c1910	1- 37'	Dildine Bridge Company	30 non-eligible
GRUN05	022001.9	Woods Creek Bridge	c1910	1- 60'		28 non-eligible
GRUN08	051000.7	Honey Creek Bridge	c1910	1- 44'		20 non-eligible
GRUN21	110000.8	No Creek Bridge	c1910	1- 45'		25 non-eligible
HARR23	597002.3	Sampson Creek Bridge	c1910	1- 60'		28 non-eligible
HOLT14	086000.6	Highly Creek Bridge	c1910	1- 62'		28 non-eligible
HOLT21	115000.3	Davis Creek Bridge	c1910	1- 48'		25 non-eligible
HOLT48	336002.4	Forbes Creek Bridge	c1910	1- 45'		20 non-eligible
HOWA05	019002.5	Bonne Femme Creek Bridge	c1910	1- 40'		20 non-eligible
LEWI10	107003.5	Rayl Bridge	c1910	1- 66'		30 non-eligible
NODA23	196R00.5	Honey Creek Bridge	c1910	1- 40'		25 non-eligible
NODA53	534000.7	Sand Creek Bridge	c1910	1- 40'		25 non-eligible
PULA06	061001.8	Little Tavern Creek Bridge	c1910	1- 60'		29 non-eligible
PUTN17	291000.4	Wildcat Creek Bridge	c1910	1- 48'	Canton Bridge Company	29 non-eligible
PUTN22	432001.7	Medicine Creek Bridge	c1910	1- 48'	Canton Bridge Company	29 non-eligible
SCOL23	266001.1	Allen Creek Bridge	c1910	1- 40'	Illinois Steel Bridge Company	33 non-eligible
SULL04	119000.2	North Spring Creek Bridge	c1910	1- 40'	Canton Bridge Company	28 non-eligible
SULL06	140000.9	Yellow Creek Bridge	c1910	1- 45'	Canton Bridge Company	30 non-eligible
SULL14	341001.6	Bridge	c1910	1- 44'	Canton Bridge Company	35 non-eligible
BATE07	081000.8	Mormon Fork Bridge	1911	1- 45'	Vincennes Bridge Company	41 non-eligible
BATE16	316001.6	Bones Branch Bridge	1911	2- 60'	Vincennes Bridge Company	46 non-eligible
GRUN32	209000.3	West Wolf Creek Bridge	1911	1- 50'	Canton Bridge Company	34 non-eligible
LAWR10	342000.2	Walnut Street Bridge	1911	1- 62'		34 non-eligible
POLK05	049000.7	County Line Bridge	1911	1- 50'	Canton Bridge Company	43 non-eligible
CASS42	393001.7	Camp Creek Bridge	1912	1- 48'	Canton Bridge Company	37 non-eligible
CLAY06	N213B31	Fishing River Bridge	1912	1- 38'	Kansas City Bridge Company	39 non-eligible
SALI09	084000.4	Pass Branch Bridge	1913	1- 60'	county work force	44 non-eligible
SALI30	327000.4	Pierre Fleche Creek Bridge	1915	1- 60'	county work force	32 determ. non-elig.
CASS25	230001.7	Wolf Creek Bridge	c1915	1- 50'		25 non-eligible
DAVI08	065001.1	Hickory Creek Bridge	c1915	1- 32'	Dildine Bridge Company	35 non-eligible
HENR11	239000.6	Fields Creek Bridge	c1915	1- 68'	Canton Bridge Company	36 non-eligible
WRIG02	342001.8	Bridge	c1915	1- 60'		21 non-eligible

## RIGID-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CHAR30	499000.1	Chariton River Bridge	1906	1-100'	Pan-American Bridge Company	51 possible
GRUN23	132001.0	Muddy Creek Bridge	1912	1-120'	county work force	45 possible

# RIGID-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
RAY008	167001.4	Crooked River Bridge	1912	1-100'	Kansas City Bridge Company	47 possible
JASP13	114001.9	Hille's Ford Bridge	1913	1-120'	Fred L. Appleby	47 possible
GENT03	026000.5	West Fork Bridge	c1920	1-140'		23 non-eligible
PLAT15	130000.0	Platte River Bridge	c1920	2-160'	KCCC&SJ Railroad	32 non-eligible
BART08	276001.8	Winton Bridge	1921	1-100'	Concrete & Steel Constr. Co.	33 non-eligible
CALL44	521004.7	Little Auxvasse Creek Bridge	1922	1-100'	Pope Construction Co.	43 possible
CAPE01	G 467R	Millersville Bridge	1923	2-120'	Muskogee Contracting Co.	41 non-eligible
CAPE02	G 514R	Byrds Creek Bridge	1923	1-100'	Muskogee Contracting Co.	36 non-eligible
GENT01	F 324R	Middle Fork Bridge	1923	1-100'	Illinois Steel Bridge Company	34 non-eligible
JACK01	G 363R1	Little Blue River Bridge	1923	1-100'	W.A. Ross Company	34 non-eligible
KNOX01	G 453	Edina Bridge	1923	1-140'	W.H. and G.H. Turner	41 non-eligible
LAF01	G 387	Horseshoe Creek Bridge	1923	1-100'	Cook-O'Brien Construction Co.	38 non-eligible
LAWR07	272001.0	Spencer Bridge	1923	1-100'	Baker and Koontz	38 non-eligible
SCOT01	G 438R	North Cut Ditch Bridge	1923	1-100'	Glen E. Stoner	36 non-eligible
STON01	G 447R	Railey Creek Bridge	1923	1-110'	M.E. Gillioz	40 non-eligible
DENT01	G 537R	Gladden Creek Bridge	1924	1-100'	Wilson Construction Company	38 non-eligible
IRON06	G 879	Big Creek Bridge	1924	1-100'	J.W. Wilson	38 non-eligible
JEFF10	192500.1	Herculeum Bridge	1924	1-100'	Vincennes Bridge Company	35 non-eligible
MAD101	G 443R	Castor River Bridge	1924	3-100'	Vincennes Bridge Company	39 non-eligible
PETT21	451002.7	Muddy Creek Bridge	1924	1-120'	M.E. Gillioz	41 non-eligible
SAFR09	270006.1	Big River Bridge	1924	1-120'	Public Works Construction Co.	41 non-eligible
SALI42	476001.9	Blackwater River Bridge	1924	2-120'	C.T. Fogle	43 non-eligible
BATE01	G 864	Miami Creek Bridge	1925	1-100'	McNerny & Hallett	38 non-eligible
CHAR07	031000.0	Locust Creek Bridge	1925	1-100'	Pan American Bridge Company	28 non-eligible
MILL01	H 119	Saline Creek Bridge	1925	1-120'	Fogleman and Davidson	41 non-eligible
MONT01	H 213	Mineola Bridge	1925	1-100'	Pope Construction Company	36 non-eligible
VERN08	229001.3	Marmaton River Bridge	1925	1-140'	R.H. Harper Construction Co.	41 non-eligible
BUCH14	056000.5	Platte River Bridge	c1925	1-100'		23 non-eligible
CALD29	307002.5	Shoal Creek Bridge	c1925	1-120'		26 non-eligible
CLAR12	125001.6	North Wyaconda River Bridge	c1925	1-140'		26 non-eligible
CLAR19	174000.1	Fox River Bridge	c1925	1-140'		28 non-eligible
CLAR33	367000.4	Wyaconda River Bridge	c1925	1-140'		28 non-eligible
NODA77	802000.8	Elkhorn Creek Bridge	c1925	1- 80'		23 non-eligible
NODA91	972R00.8	Platte River Bridge	c1925	1-140'		26 non-eligible
BART06	186001.1	Light Plant Bridge	1926	1-100'	Concrete & Steel Constr. Co.	33 non-eligible
CHAR01	H 520R	Mussel River Bridge	1927	1-100'	George W. Condon	36 non-eligible
DAVI01	H 752	Big Creek Ditch Bridge	1928	1-140'	Pioneer Construction Company	41 non-eligible
MACD02	H 792A	Lanagan Bridge	1928	3-110'	W.A. Ross Construction Co.	41 non-eligible
NODA03	H 840R	102 River Bridge	1928	1-120'	George W. Condon	41 non-eligible
JACK15	Y 148	Sni-A-Bar Creek Bridge	1929	1-130'		33 non-eligible
MONR10	205002.5	Cutright Bridge	1929	1-120'	Dildine Bridge Company	40 non-eligible
SALI35	369001.0	Nelson Bridge	1929	1-150'	Kansas City Bridge Company	42 non-eligible
SALI41	439001.5	Sweet Springs Bridge	1929	1-140'	Kansas City Bridge Company	38 non-eligible
BOLL02	J 103	Zalma Bridge	1930	1-100'	Millers Garage & Constr. Co.	38 non-eligible
BARR01	J 382	Jenkins Bridge	1930	3-120'	Martin Wunderlich	44 non-eligible
CALD02	J 340R	Log Creek Bridge	1930	1-110'	Chernus Construction Company	34 non-eligible
DAVI02	J 146R	Grand River Bridge	1930	3-140'	Pioneer Construction Company	44 non-eligible
JACK51	S146B31	Dodson Bridge	1930	1-122'		28 non-eligible
LEWI01	J 359R	North Fabius River Bridge	1930	1-128'	Martin Wunderlich	41 non-eligible
OREG01	H 289A	Thayer Viaduct	1930	1-150'	M.S. Carter & Company	51 possible
DAVI38	455000.7	Big Muddy Creek Bridge	c1930	1-150'		28 non-eligible

## RIGID-CONNECTED PRATT THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
LAWR05	201000.2	Spring River Bridge	c1930	1-100'		23 non-eligible
MONI06	110001.8	Straight Fork Bridge	c1930	1-100'		23 non-eligible
SALI40	408001.5	Blackwater River Bridge	c1930	1- 80'		23 non-eligible
CEDA01	H 623	Cedar Creek Bridge	1931	1-110'	McKerney and Newton	38 non-eligible
GRUN03	K 943	Trenton Viaduct	1931	1-160'	CRI&P Railroad	38 non-eligible
MADI03	J 521	St. Francis River Bridge	1931	1-140'	E.W. Deering	36 non-eligible
SAGE03	J 745	Establishment Creek Bridge	1931	2-120'	W.F. Fogleman	41 non-eligible
ANDR02	K 84	Platte River Bridge	1932	1-120'	Fred M. Clark and Sons	41 non-eligible
JACK16	Z 901	Blue River Bridge	1932	1-120'	F.H. Freeto	41 non-eligible
JACK43	S115B41	Little Blue Road Bridge	1932	1-120'		28 non-eligible
MARN01	K 73	North River Bridge	1932	4-130'	Vincennes Bridge Company	47 non-eligible
NODA04	S 511	Nodaway River Bridge	1932	1-120'	Pittsburgh-Des Moines Stl.Co.	46 non-eligible
SALI06	040001.8	Salt Fork Bridge	1932	1- 80'	Kansas City Bridge Company	35 non-eligible
SCHU02	K 26	Chariton River Bridge	1932	1-120'	Pittsburgh-Des Moines Steel Co.	43 non-eligible
TEXA01	J 617	Big Creek Bridge	1932	1-120'	Massman Construction Co.	41 non-eligible
ADAI02	K 23	Chariton River Bridge	1933	1-100'	M.E. Gillioz	38 non-eligible
HARR02	J 655	Thompson River Bridge	1933	1-140'	Fred M. Clark and Son	41 non-eligible
JEFF08	K 294R	Joachim Creek Bridge	1933	1-120'	M.E. Gillioz	45 non-eligible
NODA05	S 918	Nodaway River Bridge	1933	1-120'	Maxwell Construction Company	41 non-eligible
BUCH07	T 365	Platte River Bridge	1934	1-120'	Martin Wunderlich	41 non-eligible
COLE11	229001.0	Moreau River Bridge	1934	1-140'	Drexel Construction Company	39 non-eligible
SCOL01	K 186	North Fabius River Bridge	1934	3-140'	Ebbe Construction Company	44 non-eligible
JASP05	T 425	Center Creek Bridge	1935	1-140'	J.M. Roark	39 non-eligible
JASP06	T 426	Spring River Bridge	1935	1-140'	J.M. Roark	39 non-eligible
LAWR01	H 787	StL&SF Railroad Overpass	1935	1-120'		35 non-eligible
SAGE05	X 393R	Mississippi Riv. Channel Bridge	1935	2-180'		37 non-eligible
WASH01	J 987	Cedar Creek Bridge	1935	1-120'	Lay Construction Company	41 non-eligible
BARR05	110900.4	StL&SF RR Overpass	1936	1-110'	J.C. Ault	38 non-eligible
MADI04	T 71	St. Francis River Bridge	1936	2-120'	James R. Hancock	38 non-eligible
SCOL02	T 74R	Wyaconda River Bridge	1936	1-120'	Vaughn Construction Company	39 non-eligible
SAGE04	X 67	Auxvasse River Bridge	1936	1-140'	C.H. Atkinson Paving Company	39 non-eligible
GENT02	F 331R	East Fork Bridge	1937	1-110'	C.H. Atkinson Paving Company	36 non-eligible
CAPE09	151001.0	Bridge	1938	1-120'		33 non-eligible
LINC02	K 334	Lost Creek Bridge	1938	1-110'	M.E. Gillioz	42 determ. non-elig.
NODA42	383001.8	102 River Bridge	1938	1-100'		25 non-eligible
MONT02	J 39R	Loutre River Bridge	1943	1-120'	L.V. Hites Construction Co.	45 non-eligible
STOD01	P 56	Bridge	1951	1-120'	Chappel Construction Company	37 non-eligible

## RIGID-CONNECTED PRATT THROUGH TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JACK22	S030B12	Bluff Street Bridge	1915	1-160'	Kansas City Terminal Railway	52 possible
ATCH01	G 355R	Big Tarkio River Bridge	1923	1-140'	W.R. Larsen	53 possible
BUCH11	045001.6	102 River Bridge	c1925	1-150'		42 non-eligible
HOLT01	H 457R	Little Tarkio Ditch Bridge	1926	1-120'	George W. Condon	47 non-eligible
SULL01	J 772	Medicine Creek Bridge	1932	1-140'	Gerard Knutson Constr. Co.	52 determ. non-elig.
LINC03	K 340	Sandy Creek Bridge	1938	1-120'	R.B. Potashnick	52 determ. non-elig.
LINC04	K 341	McLeans Branch Bridge	1938	1-110'	R.B. Potashnick	49 non-eligible



## RIGID-CONNECTED PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CALD40	353000.8	Log Creek Bridge	1908	1- 80'	Dildine Bridge Company	53 possible
VERN25	679000.6	Clear Creek Bridge	1908	1- 60'	A.M. Blodgett	51 possible
CARR15	122000.9	Bridge Creek Bridge	1909	1- 65'	R.E. Bates	47 possible
CALL36	411000.8	Deardorff Bridge	1911	1- 45'	Stupp Brothers B&I Company	36 non-eligible
CARR50	365R02.3	Shootman Creek Bridge	1911	1- 50'	R.G. Culbertson	35 non-eligible
CARR56	393000.3	Little Wakenda Creek Bridge	1911	1- 45'	R.G. Culbertson	30 non-eligible
SALI15	152000.8	Dicks Branch Bridge	1911	1- 80'	Kansas City Bridge Company	44 non-eligible
JOHN16	272003.7	Kassing Bridge	1912	1- 75'	A.E. Shorthill Company	32 non-eligible
JOHN27	592003.5	Panther Creek Bridge	1912	1- 50'	A.E. Shorthill Company	33 non-eligible
MONI09	161000.7	Dry Fork Bridge	1912	1- 65'	Kansas City Bridge Company	42 non-eligible
SALI32	353001.0	Napton Bridge	1912	1-100'	Kansas City Bridge Company	44 non-eligible
CARR62	496000.6	Weatherholt Bridge	1913	1- 70'	R.G. Culbertson	38 non-eligible
LINN01	U0550002	BN Railroad Overpass	1913	1- 34'		33 determ. non-elig.
RAY007	156001.2	Crooked River Bridge	1913	1- 80'	county work force	40 non-eligible
RAY011	220000.2	Fishing River Bridge	1913	1- 80'	county work force	40 non-eligible
RAY013	244003.4	Crooked River Bridge	1913	1- 80'	county work force	40 non-eligible
MILL03	011000.2	Calhoun Bridge	1914	1- 80'	Kansas City Bridge Company	46 non-eligible
SACL02	050R00.6	Coopers Creek Bridge	1914	1- 60'	Standard Bridge Company	40 non-eligible
ANDR04	007001.0	Arapahoe Creek Bridge	c1915	1- 90'		32 non-eligible
CLAY25	293000.3	Fishing River Bridge	1916	1- 70'	Kansas City Bridge Company	42 non-eligible
COOP19	258001.3	Otter Creek Bridge	1920	1- 70'	Kansas City Bridge Company	40 non-eligible
SACL07	348003.2	Weaubleau Bridge	1920	1- 75'	Pioneer Construction Company	36 non-eligible
CALL43	521000.6	Middle River Bridge	1922	2- 50'	Riley & Bailey Constr. Co.	36 non-eligible
MONR06	094000.8	County Line Bridge	1922	1- 45'	Dildine Bridge Company	30 non-eligible
BART02	080001.5	Black Bridge	1924	1- 80'	J.W. Hagney	34 non-eligible
ADAI14	269003.6	Salt River Bridge	c1925	1-100'		28 non-eligible
JACK63	147000.6	Blue Branch Bridge	c1925	3- 50'		30 non-eligible
LEWI20	183002.7	North Fabius River Bridge	c1925	1-104'		32 non-eligible
RALL07	128001.1	Turkey Creek Bridge	c1925	1-100'		28 non-eligible
MONR17	303000.6	Mud Creek Bridge	1930	1-100'	Martin Wunderlich	28 non-eligible
ADAI07	019003.0	Chariton River Bridge	c1930	1-100'		28 non-eligible
CALD43	368001.2	Shoal Creek Bridge	c1930	1-100'		28 non-eligible
DAVI41	557001.0	Cypress Creek Bridge	c1930	1-102'		28 non-eligible
SHEL08	290000.3	Walkersville Bridge	c1930	1-100'		28 non-eligible
SHEL09	300000.3	Salt River Bridge	c1930	1-110'		33 non-eligible
ATCH12	091001.1	West Tarkio Creek Bridge	c1940	1-100'		26 non-eligible
ATCH13	105000.6	West Tarkio Creek Bridge	c1940	1-100'		26 non-eligible
JASP07	X 435	Spring River Bridge	1949	1-100'	Joseph L. Pohl	37 non-eligible

## RIGID-CONNECTED PRATT PONY TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CARR26	214002.1	Big Creek Bridge	1919	1- 60'	Kansas City Bridge Company	72 eligible
ATCH16	114000.3	West Tarkio Creek Bridge	c1940	1-100'		46 non-eligible

## RIGID-CONNECTED THREE-WEB PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MONR19	331000.2	Fairgrounds Bridge	1924	1- 80'	Dildine Bridge Company	72 eligible

# **RIGID-CONNECTED PRATT HALF-HIP PONY TRUSS**

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BATE26	466000.1	Possum Branch Bridge	1900	1- 30'	Pittsburgh Bridge Company	36 non-eligible
BATE30	496001.7	Soap Creek Bridge	1908	1- 30'	Kansas City Bridge Company	36 non-eligible
BOLL12	165500.1	Crooked Creek Bridge	1908	2- 60'		28 non-eligible
CALL29	362001.9	Maddox Branch Bridge	1910	1- 65'	Stupp Brothers B&I Company	42 non-eligible
STLO17	096044.8	Quinette Road Bridge	1913	1- 70'	Miller and Borcharding	42 non-eligible
DENT03	034001.4	Dry Fork Bridge	c1915	1-100'		30 non-eligible
GRUN07	047000.2	West Honey Creek Bridge	c1915	1- 40'		20 non-eligible
SCOL13	120000.1	North Fabius River Bridge	c1915	1- 60'		28 non-eligible
PUTN21	413000.3	East Walnut Creek Bridge	1917	1- 50'	A.L. Greenberg Iron Company	33 non-eligible

# PRATT TRUSS SUBTYPES

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From the standard, straight-chorded Pratt configuration, a variety of long-span structural subtypes developed in the late 19th century. The most common of these was the Parker truss. Developed in the 1800s by C.H. Parker, the Parker truss was characterized by upper chords and vertical members that acted in compression and lower chords and diagonals acting in tension. In this it resembled the venerable Pratt and was, in fact, universally regarded by civil engineers as a Pratt subtype. J.A.L. Waddell in his influential **Bridge Engineering** gave the Parker only passing mention in his discussion of truss types, stating: "[The Pratt's] chords are not necessarily parallel, but may be inclined. This latter form is frequently known as the Parker truss."

The inclined upper chords afforded a degree of efficiency in long span trusses, where bending moment stresses at mid-span greatly exceed the sheer stresses at the ends. The Parker's drawback was that, unlike the straight-chorded Pratt truss, the polygonal chords necessitated different-length verticals and diagonals at each panel, increasing its fabrication costs somewhat. Because trusses were generally priced on the basis of their superstructural steel weight, the lighter overall weight of a polygonal-chord truss more than offset the slight increase in fabricating costs in spans greater than 160 feet. In the highly competitive bridge industry, this economy equated directly with profit, and pin-connected Parkers superseded straight-chorded Pratts for long-span applications after the turn of the century, as bridge companies marketed them more aggressively to the counties. Missouri's earliest remaining Parker truss, the Schell City Bridge between Bates and Vernon Counties, dates to 1900; the two dozen other Parkers date from that time up to around 1933. These range in span length from 142 to 210 feet.

A Camelback truss is a Parker with five facets in its upper chord. With its distinctive profile, the Camelback configuration was disdained by many engineers (including Waddell, who called it "uncompromisingly ugly") for its tendency under certain conditions to reverse compressive and tensile forces acting on individual members. As a result, Camelback trusses never received widespread acceptance. Relatively few were ever built on Missouri's roads, and only a few remain in place today, in both through and pony configurations.

The Whipple truss resembles the Pratt in its array of compression and tension members. Its primary difference lies in its diagonals, which extend over two panels. Patented in 1847 by venerable civil engineer Squire Whipple, the Whipple (or double-intersection Pratt) truss was a popular choice for longer span crossings—generally in excess of 150 feet—between 1850 and 1900. Although more costly than the single-paneled Pratt, this variation provided greater lateral support for the diagonals, a critical consideration in deep, long-span trusses. Whipple trusses were never built in abundance in Missouri, and today only three remain in place. One of these, the Chouteau Bridge in Kansas City, is perhaps the last of what was once a series of pinned Whipple railroad bridges over the Missouri River; it ranks among the state's most important extant bridges.

As the pin-connected Whipple truss had been the industry standard for long-span crossings in the 1880s and 1890s, the Pennsylvania (or Petit) truss was the standard long-

## PIN-CONNECTED PARKER THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
COOP14	202000.0	Bryant Bottom Bridge	1908	1-210'	Missouri Bridge & Iron Co.	60 possible
COOP18	238002.0	Otterville Ford Bridge	1908	1-160'	Missouri Bridge & Iron Co.	50 possible
FRAN06	F-32	Steiner's Ford Bridge	1908	1-180'	Missouri Bridge & Iron Co.	57 possible
LINC16	333001.4	Old Monroe Bridge	1908	1-200'	Joliet Bridge and Iron Co.	55 possible
LAF06	208001.7	Davis Creek Bridge	c1910	1-150'		32 non-eligible
NODA48	456R01.1	Platte River Bridge	c1910	1-150'		38 non-eligible
BOLL04	032000.5	Whitewater River Bridge	1913	1-170'	Miller & Borcharding	48 possible
COOP15	211000.0	Shakleton Ford Bridge	1913	1-160'	Kansas City Bridge Company	48 possible
POLK08	159000.3	Francka Ford Bridge	1913	1-160'	Canton Bridge Company	48 possible
BARR08	341001.6	Star City Bridge	c1915	1-142'		36 non-eligible
COLE05	047002.8	Robinson's Ferry Bridge	1916	1-170'	Kansas City Bridge Company	53 possible
REYN01	083001.4	Hunt's Farm Bridge	1917	3-180'	Miller & Borcharding	56 possible
CEDA06	068000.8	Metcalf Bridge	1919	1-145'	Pioneer Construction Company	51 possible
LINN11	247000.8	Locust Creek Bridge	c1925	1-160'		30 non-eligible
TEXA03	520002.6	Mason Bridge	1926	1-152'	Concrete & Steel Constr. Co.	42 non-eligible
JOHN07	153001.5	Blackwater River Bridge	1929	1-200'	Standard Bridge Company	49 possible
HICK02	090001.0	Dorman Bridge	c1933	1-200'		35 non-eligible

## RIGID-CONNECTED PARKER THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JASP17	202002.0	Purcell Bridge	1912	1-148'	Blodgett Construction Company	51 possible
FRAN07	F-33	Horstkamp Ford Bridge	1915	1-150'	Vincennes Bridge Company	51 possible
GREN32	407522.0	River Road Bridge	1922	1-160'	M.E. Gillioz	57 possible
LACL01	G 245	Gasconade River Bridge	1922	2-160'	Riley and Bailey Constr. Co.	59 possible
DUNK01	G 433R	St. Francis River Bridge	1923	1-140'	M.E. Gillioz	47 non-eligible
PULA09	206001.5	Devils Elbow Bridge	1923	2-160'	Riley and Bailey Constr. Co.	50 possible
COOP01	G 366	Lamine River Bridge	1924	1-180'	Haller and Davis	46 non-eligible
SAFR08	269002.6	Big River Bridge	1924	1-150'	Public Works Construction Co.	45 non-eligible
CLAR21	257002.2	Wyaconda River Bridge	c1925	1-160'		30 non-eligible
NODA52	526000.8	Nodaway River Bridge	c1925	1-225'		41 non-eligible
STLO15	U3875452	Gravois Road Bridge	1925	2-200'	Vincennes Bridge Company	47 non-eligible
CART01	G 712A1	Van Buren Bridge	1926	12-200'	M.E. Gillioz	65 determ. elig.
GREN29	148024.4	James River Bridge	1926	1-150'	M.E. Gillioz	44 non-eligible
SAGE01	H 63	Auxvasse River Bridge	1926	1-140'	Public Works Construction Co.	39 non-eligible
SAGE02	H 64	Saline Creek Bridge	1926	1-150'	Public Works Construction Co.	39 non-eligible
LAF02	J 25R	Sni-A-Bar Creek Bridge	1929	1-200'	Clinton Bridge Works	49 non-eligible
MARN23	304000.7	Taylor Bridge	1929	1-200'	Chermus Construction Co.	43 non-eligible
JOHN29	610000.4	Big Creek Bridge	c1930	1-160'		30 non-eligible
MARN06	051001.8	South Fabius River Bridge	c1930	1-140'		25 non-eligible
LEWI02	J 982	Canton Bridge	1932	1-180'	Hartmann/Clark Brothers	47 non-eligible
PULA02	J 802	Gasconade River Bridge	1932	1-200'	Maxwell Construction Company	47 non-eligible
BUTL12	428000.3	Hendrickson Bridge	1933	2-200'	Service Construction Company	45 non-eligible
COOP03	K 236	Lamine River Bridge	1933	1-200'	Carruthers and Crouch	50 possible
LACL03	S 326	Osage Fork Bridge	1933	1-150'	Deering and Davidson	39 non-eligible
LACL04	S 327	Gasconade River Bridge	1933	2-150'	George W. Condon	44 non-eligible
LINC01	J 975R	Cuivre River Bridge	1933	1-180'	M.E. Gillioz	51 possible
PLAT02	K 266R	Platte River Bridge	1933	3-180'	Snyder & Johnson	48 possible
WAYN02	J 935	Leeper Bridge	1933	2-180'	List & Clark Construction Co.	52 possible
OREG02	K 272	Riverton Bridge	1934	1-200'	M.E. Gillioz	51 possible

truss configuration after the turn of the century. Its name derived from extensive use in the 19th century by the Pennsylvania Railroad, the Pennsylvania truss was patented in 1875 as a refinement of the standard Pratt truss. Pennsylvania trusses featured vertical compression members and two-panel diagonals in tension, like the Whipple trusses they superseded. The primary differences lay in the substitution of a polygonal upper chord for economy of materials and the addition of sub-struts or sub-ties. These relatively short diagonal members served to provide lateral support for the diagonals and stiffen the truss under heavy moving loads. Like most truss types in this country, Pennsylvanias were pioneered by the railroads and were later used to carry vehicular traffic.

The first polygonal-chorded bridge over the Mississippi river—the Merchants' Railroad Bridge at St. Louis, completed in 1890—was a Pennsylvania truss. Three other pinned Pennsylvanias, the McKinley and MacArthur Bridges over the Mississippi River and the St. Charles Bridge over the Missouri River, feature similar long spans. Between 1900 and 1920, Missouri's counties built a small number of pinned Pennsylvania trusses at long-span crossings of the Salt, Meramec and other rivers; twelve of these remain in place. Like the Pratt truss, the Pennsylvania experienced a shift from pinned connections to riveted in the 1910s. During the bridge boom of the 1920s, fifteen of the eighteen fixed-span highway bridges built over the Missouri River along its length featured rigid-connected Pennsylvania trusses. Almost identical, they varied only in span lengths, which were determined largely by the spans of previous railroad bridges at those points. Five long-span riveted Pennsylvania trusses can today be found in Missouri over the Missouri and Mississippi Rivers.

All of these truss types can be found today in Missouri in pin-connected form, numbering among the longest pinned bridges remaining in Missouri. Several riveted Parker and Camelback trusses are still in existence, almost all attributable to the state highway department. The department employed riveted Parker trusses for its long-span crossings in the 1920s and 1930s, resulting in the construction of numerous examples of this latter structural type. The highway department also experimented briefly with 100-foot Baltimore trusses in the early 1920s but soon abandoned the type as less efficient than Pratt trusses; one of these remains today. In the 1950s the highway department adopted the riveted Camelback through truss as its standard long-span steel bridge, and three of these are today found in the inventory. As generally long-span trusses, these Pratt subtypes have suffered a tremendous attrition in recent years, until relatively few examples remain in use today.

#### PIN-CONNECTED PARKER THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BATE36	576002.5	Schell City Bridge	1900	1-175'	A.M. Blodgett	58 possible
FRAN24	F-424	Noser Mill Bridge	1902	1-190'	Midland Bridge Company	54 possible
CRAW04	141001.2	Sappington Bridge	1904	1-200'	Stupp Brothers B&I Company	63 possible
JEFF03	J-51	Vineland Bridge	1906	1-190'	Joliet Bridge and Iron Company	55 determ. elig.
BATE34	547002.6	Water Works Bridge	1907	1-110'	Kansas City Bridge Company	49 possible
BOON06	093000.7	Moon Valley Bridge	1907	1-170'	Kansas City Bridge Company	48 possible
COOP04	W 304	Turley Bridge	1907	1-170'	Kansas City Bridge Company	47 possible
BATE18	356001.4	Bridge	1908	1-150'	Kansas City Bridge Company	46 determ. non-elig.
COOP07	025000.0	Dicks Bridge	1908	2-160'	Kansas City Bridge Company	53 possible

## RIGID-CONNECTED PARKER THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
PULA03	K 203	Gasconade River Bridge	1934	2-150'	List & Clark Construction Co.	47 non-eligible
STLO08	K 458	Meramec River Bridge	1936	2-220'	F.T. O'Dell	51 possible
BUCH04	K 673	CRI&P Railroad Overpass	1937	1-150'	List & Clark Construction Co.	41 non-eligible
BARR02	K 770	Flat Creek Bridge	1938	1-170'	J.C. Ault	41 non-eligible
CAPE09	151001.0	Bridge	1938	1-120'		33 non-eligible
CASS02	L 23R	CRI&P Railroad Overpass	1948	1-260'	Perry McGlone Construction Co.	39 non-eligible

## RIGID-CONNECTED PARKER THROUGH TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
STLO06	K 205	Meramec River Bridge	1934	2-210'	Samuel Kraus Company	75 eligible

## PIN-CONNECTED CAMELBACK THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
GENT15	469001.0	Elam Bend Bridge	1895	1-160'	St. Joseph Bridge & Iron Co.	68 determ. elig.
SHEL03	126000.1	South Fabius River Bridge	1899	1-170'		48 determ. non-elig.
LEWI03	053002.1	Slate Bank Ford Bridge	1902	1-100'	James B. Diver Bridge Co.	58 possible
NEWT28	none	Jolly Mill Bridge	1905	1- 90'	James B. Diver Bridge Co.	38 non-eligible
DAVI26	329001.1	Sampson Creek Bridge	c1910	1-140'	John Dildine Bridge Company	47 non-eligible
DAVI31	359000.6	Big Creek Bridge	c1910	1-160'	John Dildine Bridge Company	50 possible
NEWM01	101R02.8	St. John's Bayou Bridge	1917	1-140'	Vincennes Bridge Company	54 possible

## PIN-CONNECTED CAMELBACK PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MONT06	079002.2	Morris Ford Bridge	1930	1- 90'	Missouri Bridge & Iron Co.	72 eligible
MONT11	190000.6	Little Loutre Bridge	1930	1- 90'	Missouri Bridge & Iron Co.	72 eligible

## RIGID-CONNECTED CAMELBACK THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
GENT08	182R01.5	Grand River Bridge	c1950	1-160'		44 non-eligible
OZAR01	K 817R	Bull Shoals Lake Bridge	1952	10-180'	Maxwell Bridge Company	63 possible
TANE04	J 952R	Swan Creek Bridge	1952	2-180'	Porter-Dewitt Construction Co.	61 possible

## RIGID-CONNECTED CAMELBACK PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
WARR06	026000.6	Indian Camp Creek Bridge	1918	1- 80'	county work force	50 possible
ATCH29	231001.4	Cow Branch Bridge	c1920	1- 80'		38 non-eligible
ATCH30	232000.8	Cow Branch Bridge	c1920	1- 80'		38 non-eligible
CLIN17	152000.6	Little Platte River Bridge	c1920	1-100'		38 non-eligible
KNOX30	254000.7	Bradford Bridge	c1920	1- 90'		38 non-eligible
LINN18	443000.5	East Yellow Creek Bridge	c1920	1- 80'		40 non-eligible
ANDR06	027000.9	Arapahoe Creek Bridge	c1925	1- 80'		44 non-eligible
ANDR08	029000.6	Arapahoe Creek Bridge	c1925	1-100'		44 non-eligible
ATCH23	148R00.2	Rock Creek Bridge	c1925	1- 80'		23 non-eligible

### RIGID-CONNECTED CAMELBACK PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
HOLT08	040000.9	Little Tarkio Creek Bridge	c1925	1- 50'		33 non-eligible
HOLT09	049001.0	Minnesota Valley Creek Bridge	c1925	1- 80'		38 non-eligible
DADE04	196000.5	Hulston Mill Bridge	1927	1-108'	Ed W. Appleby	52 possible
ATCH47	438R00.1	Mill Creek Bridge	1928	1- 80'		24 non-eligible
BOON05	010022.7	Hart Creek Bridge	c1930	1- 80'		45 non-eligible
CARR41	313001.3	Wakenda Creek Bridge	1946	1-125'		41 non-eligible

### PIN-CONNECTED PENNSYLVANIA THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
<i>Gone</i> STLO07	K 239R2	St. Charles Bridge	1904	5-420'	Midland Bridge Company	74 determ. elig.
PIKE05	018001.8	Eagle's Nest Bridge	1907	1-295'	Missouri Bridge & Iron Co.	72 eligible
<i>Refined</i> LINC16	333001.4	Old Monroe Bridge	1908	1-200'	Joliet Bridge and Iron Co.	55 possible
RALL04	089001.0	Bailey Ford Bridge	1910	1-230'	Stupp Brothers B&I Company	67 possible
<i>Refined</i> STLC16	none	McKinley Bridge	1910	3-517'	Missouri Valley B&I Company	72 eligible
WAYN04	069000.5	Wappapello Bridge	1911	1-210'	Stupp Brothers B&I Company	67 possible
CALL26	316002.2	Bryan Bridge	1912	1-180'	Missouri Bridge & Iron Co.	65 possible
WAYN05	090001.1	Duncan Ford Bridge	1913	1-190'	Vincennes Bridge Company	63 possible
<i>Refined</i> CRAW05	211000.0	Bird's Nest Bridge	1915	1-250'	Miller & Borcharding	60 possible
<i>Gone</i> FRAN23	F-420	Hartmann's Ford Bridge	1916	1-250'	Miller & Borcharding	61 possible
FRAN14	F-72	Withington Ford Bridge	1917	2-200'	Miller & Borcharding	63 possible
STLC15	none	MacArthur Bridge	1917	3-668'	American Bridge Company	71 eligible

### RIGID-CONNECTED PENNSYLVANIA THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
HOWA01	G 56R1	Boonville Bridge	1922	3-420'	Missouri Valley Bridge	75 eligible
CARR02	G 54R	Waverly Bridge	1925	6-416'	Wisconsin B&I Company	72 eligible
SALI01	G 69R	Glasgow Bridge	1925	5-343'	Mt. Vernon Bridge Company	70 eligible
PIKE04	K 932R	Champ Clark Bridge	1928	5-420'	Wisconsin B&I Company	72 eligible
HOLT02	L 97	Rulo Bridge	1939	2-375'	Kansas City Bridge Company	65 listed

### PIN-CONNECTED WHIPPLE THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CALD32	324001.9	Bonanza Bridge	1883	1-187'		66 eligible
DAVI24	317000.8	Grand River Bridge	1883	1-180'	Kansas City Bridge & Iron Co.	78 eligible
CLAY08	S007B12	Chouteau Bridge	1887	3-404'	Keystone Bridge Works	97 eligible

### RIGID-CONNECTED BALTIMORE THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CHRI09	328500.1	McCracken Street Bridge	1922	2-100'	Pioneer Construction Company	73 eligible

# BOWSTRING ARCH-TRUSSES

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The bowstring arch-truss was the iron span of choice for Missouri counties in the late 1860s and 1870s. Developed and patented by Squire Whipple in 1840, bowstrings were marketed extensively throughout the Midwest by such industry giants as the King Bridge Company, the Wrought Iron Bridge Company and the Missouri Valley Bridge and Iron Company. These often-patented bridge forms featured a wide range of span lengths, economical fabrication cost and relatively quick erection.

The proliferation of the bowstring corresponded with the initial development of Missouri's road system; as a result, perhaps thousands of these prototypical iron spans were erected throughout the state. The bowstring had some rather severe structural flaws, however, relating primarily to lateral stability of the arches, and it was largely superseded by the pin-connected truss in the early 1880s. Despite this, some bowstrings were still erected in Missouri in the 1880s, although the number dwindled precipitously by the decade's end. Almost all of Missouri's bowstrings have since been replaced or demolished. Now only a half-dozen bowstrings remain in place, most of which have been closed to traffic.

## BOWSTRING THROUGH ARCH-TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JASP20	223002.7	Georgia City Bridge	1871	1-120'	Wrought Iron Bridge Company	86 determ. elig.
CALD26	303000.4	Otter Creek Bridge	1875	1-110'	Missouri Valley B&I Company	76 eligible
DAVI13	154000.3	Lick Fork Bridge	1876	1-100'	Missouri Valley B&I Company	76 eligible
SALI31	351000.5	Steel's Fish Trap Bridge	1882	1-100'	Missouri Valley B&I Company	76 eligible

## BOWSTRING PONY ARCH-TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CASS28	299000.3	Grand River Bridge	c1875	1- 98'	Missouri Valley B&I Company	81 eligible
MACO28	384000.4	Hair's Ford Bridge	c1880	1- 80'	George E. King Bridge Co.	74 eligible



# KINGPOST TRUSSES

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The kingpost's origins are ancient and obscure. Its symmetrical triangular form lent itself naturally to timber roof framing, where the truss was first used in the Middle Ages. In 1570 Italian architect Andrea Palladio described a simple kingpost truss bridge in his general treatise on architecture, *I quattro libri della architettura*; he attributed its source to well-established antecedents. Using Palladio's work (translated into English in 1742) and their own empirical designs, early American carpenters constructed kingpost bridges at minor crossings throughout the East. The technology spread westward to Missouri with the pioneers in the early 19th century. As a result, uncounted timber kingposts were built on the region's early roads. The truss form remained the same as its construction evolved from the vernacular to the industrial in the 19th century, with the principle changes involving the materials used: timber, timber/iron, iron, steel.

The kingpost's simplicity and straightforward determination of stresses in the individual members made it an ideal subject to illustrate bridge design. Squire Whipple delineated a kingpost truss in his 1847 essay on bridge building, the first such work to rationalize bridge design using scientific principles. Similarly, Merriman and Jacoby, in their *Text-Book on Roofs and Bridges* [1906], and J.A.L. Waddell, in his *Bridge Engineering* [1916]—two of the most influential bridge engineering texts of their time—employed the kingpost to illustrate the principals of static design. "The secret of economical and efficient truss arrangement lies in the panel system," stated Merriman and Jacoby, "which may be regarded as having been developed from the king-post truss."

These texts used the kingpost because the stresses within it are easily rationalized. The bridge companies that marketed kingposts used them because they were materially conservant, economically manufactured and quickly erected. By definition a short-span structural type, the kingpost pony truss has suffered a tremendous attrition of its members, as the county and state highway departments have replaced them with more substantial steel and concrete beam bridges. Resultingly, of the thousands of kingposts that once carried vehicular traffic in Missouri, only a relative few remain today in both pin-connected and rigid-connected form.

## PIN-CONNECTED KINGPOST PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
COOP21	333001.3	Moniteau Creek Bridge	1899	1- 25'	A.M. Blodgett	59 possible
DEKA18	131002.5	Grindstone Creek Bridge	1901	1- 25'	Dildine Bridge Company	57 possible
SALI22	245000.4	Rock Creek Bridge	1901	1- 30'	Stupp Brothers B&I Company	57 possible
CASS32	338000.7	Russell Bridge	1905	1- 24'	George Bird	48 possible
CASS36	364000.4	Prewitt Bridge	c1905	1- 32'	George Bird	46 possible

### RIGID-CONNECTED KINGPOST PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
LEWI16	150000.8	Relker Bridge	1903	1- 35'	Missouri Bridge & Iron Co.	58 possible
CLIN03	018001.2	McGuire Branch Bridge	c1905	1- 36'	Dildine Bridge Company	44 non-eligible
DAVI03	017002.0	Cypress Creek Bridge	c1910	1- 40'	Dildine Bridge Company	53 possible

### WELDED KINGPOST PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BARR10	561000.9	Shoal Creek Bridge	1959	1- 25'	county work force	32 non-eligible

# BEDSTEAD TRUSSES

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The bedstead truss enjoyed widespread popularity in Missouri in the late 19th and early 20th centuries. It is characterized by a single "leg" that functioned as both endpost and support at each corner. Bedsteads were marketed extensively to Missouri's counties in the 19th century by such industry giants and the Wrought Iron Bridge Company and the King Iron Bridge and Manufacturing Company as an inexpensive alternative to simply supported pony trusses. With their inherently short spans, they were well-suited for the numerous small stream crossings on the county road system. Like pony trusses, bedsteads employed both pinned and riveted connections and a variety of web configurations, with the pinned Pratt type predominating.

The combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stresses in the lower legs. They were thus prone to buckling under the pressure of the earth fill of the abutments or corrosion of the legs. These weaknesses have tended to make bedsteads the target for repair and replacement projects in subsequent years. Typically, the deteriorating legs are cut off and the truss placed on a new substructure. Alternatively, they are replaced altogether. As a result, few bedsteads remain in place in the country today.

Missouri is the notable exception to this national trend. With almost 200 bedsteads of all configurations included in the statewide inventory (and many others excluded), Missouri probably has more of this structural type than any other state. These are attributable in the 20th century to virtually all the state's most prolific bridge fabricators, including the Canton Bridge Company, the Kansas City Bridge Company, the Dildine Bridge Company and Stupp Brothers Bridge and Iron Company. The widespread distribution of bedsteads and the large numbers of both pinned and riveted configurations indicates that they were embraced almost universally by Missouri's counties. The bedstead had largely fallen from favor with engineers by the time that the state highway department adopted its standard designs around 1920, and did not make it into the department's design roster. Still, some riveted bedsteads were apparently built by the counties after this date. Although they have suffered considerable attrition in recent years, bedsteads still number among Missouri's most common structural type built between the 1890s and 1910s.

## PIN-CONNECTED PRATT BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MACO34	454000.6	Bridge	1890	1- 32'	Farnsworth & Blodgett	50 possible
VERN26	699000.6	Clear Creek Bridge	1893	1- 80'	Missouri Valley B&I Company	56 possible
VERN23	632000.5	Moundville Bridge	1894	1- 50'	Farnsworth & Blodgett	51 possible
LEWI06	061000.6	Hilbert Branch Bridge	1895	1- 35'	Wrought Iron Bridge Company	36 non-eligible
LEWI15	134002.2	Kirschbaum Bridge	1895	1- 40'	Massillon Bridge Company	36 non-eligible
SALI08	065000.7	Salt Branch Bridge	1895	1- 50'	Massillon Bridge Company	47 possible
MACO09	067001.6	East Fork Bridge	1896	1- 40'	Farnsworth & Blodgett	48 possible
CASS56	540000.8	App Bridge	1897	1- 40'	Farnsworth & Blodgett	37 non-eligible

# **PIN-CONNECTED PRATT BEDSTEAD**

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MACO07	054000.6	Middle Fork Bridge	1897	1- 32'	Scoven and Haynes	39 non-eligible
MACO17	142002.2	Middle Fork Bridge	1897	1- 40'	Farnsworth and Blodgett	48 possible
LEWI23	246004.0	Grassy Creek Bridge	1898	1- 40'	St. Louis Bridge & Iron Co.	48 possible
MERC12	122002.5	West Medicine Creek Bridge	1899	1- 40'	Dildine Bridge Company	48 possible
DAVI10	114000.5	Clear Creek Bridge	1900	1- 40'	John Dildine Bridge Company	41 non-eligible
DAVI15	198001.7	Marrowbone Creek Bridge	1900	1- 60'	John Dildine Bridge Company	44 non-eligible
FRAN09	F-51	Labadie Bottoms Bridge	1900	1- 60'	Stupp Brothers Bridge & Iron	38 non-eligible
LEWI04	055002.1	Reddish Branch Bridge	1900	1- 40'	Massillon Bridge Company	29 non-eligible
SALI14	151001.5	Dicks Branch Bridge	1900	1- 30'	Stupp Brothers B&I Company	41 non-eligible
CASS16	162001.2	Crawford Creek Bridge	c1900	1- 45'	S.B. Coutts	32 non-eligible
KNOX02	004001.2	South Fabius River Bridge	c1900	1- 42'		26 non-eligible
LIVI08	337001.2	Rattlesnake Creek Bridge	c1900	1- 32'		15 non-eligible
MACO02	031000.8	Bridge	c1900	1- 40'		26 non-eligible
MACO05	048002.4	Richland Creek Bridge	c1900	1- 40'		26 non-eligible
MACO36	464001.2	Bridge	c1900	1- 40'		28 non-eligible
MACO41	526000.5	Middle Fork Bridge	c1900	1- 60'		29 non-eligible
SALI38	391001.0	Buck Branch Bridge	c1900	1- 30'		21 non-eligible
DEKA03	026001.0	Bridge	1901	1- 43'	Dildine Bridge Company	32 non-eligible
LINN06	164000.1	West Yellow Creek Bridge	1901	1- 60'	John Gilligan Bridge Company	42 non-eligible
LINN17	434001.5	East Yellow Creek Bridge	1901	1- 55'	John Gilligan Bridge Company	42 non-eligible
LIVI05	193000.0	Muddy Creek Bridge	1901	1- 64'	Dildine Bridge & Constr. Co.	51 possible
SALI12	146000.3	Finney Creek Bridge	1901	1- 45'	A.M. Blodgett	41 non-eligible
CEDA09	170000.6	Sullivan Ford Bridge	1902	1- 33'	American Bridge Company	39 non-eligible
LINN16	423R01.3	East Yellow Creek Bridge	1902	1- 60'	John Gilligan Bridge Company	42 non-eligible
MACO16	139001.9	Ely Branch Bridge	1902	1- 40'	A.M. Blodgett	36 non-eligible
MONR08	117000.2	Milligan Creek Bridge	1902	1- 42'		26 non-eligible
HARR11	264R00.5	Big Muddy Creek Bridge	1903	1- 40'	Dildine Bridge Company	36 non-eligible
KNOX33	270002.5	Fowler Bridge	1903	1- 36'	J.K. Johnston	36 non-eligible
PETT01	039002.2	Sterling Bridge	1903	1- 40'	A.M. Blodgett	41 non-eligible
PETT15	371000.4	Camp Creek Bridge	1903	1- 40'	A.M. Blodgett	41 non-eligible
SALI19	189000.3	West Cow Creek Bridge	1903	1- 45'	Kansas City Bridge Company	41 non-eligible
BOON02	010016.2	County Line Bridge	1904	1- 40'	Canton Bridge Company	39 non-eligible
CALD05	032000.2	Sheep Creek Bridge	1904	1- 70'	J.H. Sparks	44 non-eligible
CALD07	075001.2	Tom Creek Bridge	1904	1- 50'	Canton Bridge Company	40 non-eligible
CALD23	279001.5	North Mud Creek Bridge	1904	1- 50'	J.H. Sparks	38 non-eligible
CALD30	316000.7	Cottonwood Creek Bridge	1904	1- 50'	J.H. Sparks	38 non-eligible
CALD31	324000.6	Tom Creek Bridge	1904	1- 60'	Canton Bridge Company	44 non-eligible
CALD42	359001.8	Mill Creek Bridge	1904	1- 50'	J.H. Sparks	44 non-eligible
KNOX21	169001.4	Davis Bridge	1904	1- 36'	Illinois Steel Bridge Company	34 non-eligible
KNOX52	370002.3	Coe Bridge	1904	1- 50'	American Bridge Company	34 non-eligible
MACO32	406000.9	Puzzle Creek Bridge	1904	1- 30'	A.M. Blodgett	41 non-eligible
MACO46	606000.7	Middle Fork Bridge	1904	1- 50'	A.M. Blodgett	41 non-eligible
PIKE11	262001.2	Hagan Ford Bridge	1904	1- 60'	Missouri Bridge and Iron Co.	46 non-eligible
SACL04	182000.6	Campbell Branch Bridge	1904	1- 40'	A.M. Blodgett	39 non-eligible
BENT06	093000.5	Barkers Creek Bridge	1905	1- 48'	Kansas City Bridge Company	43 non-eligible
CALD15	205000.0	Mud Creek Bridge	1905	1- 50'	J.H. Sparks	39 non-eligible
CALD18	227000.6	North Mud Creek Bridge	1905	1- 45'		26 non-eligible
CALD24	295000.8	North Mud Creek Bridge	1905	1- 54'	J.H. Sparks	47 non-eligible
CARR21	169000.5	Turkey Creek Bridge	1905	1- 42'	Frank Yehle	37 non-eligible
CASS12	140000.6	Templeton Bridge	1905	1- 40'	George Bird	37 non-eligible

# PIN-CONNECTED PRATT BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DUNK03	087000.2	Bridge	1905	1- 48'	Missouri Bridge & Iron Co.	41 non-eligible
KNOX28	219002.0	Fisher Bridge	1905	1- 36'	Illinois Steel Bridge Company	36 non-eligible
KNOX53	378001.8	Deer Bridge	1905	1- 36'	Illinois Steel Bridge Company	34 non-eligible
AUDR12	562000.2	Cuivre River Bridge	c1905	1- 64'		29 non-eligible
CALD25	299001.0	Bridge	c1905	1- 40'		28 non-eligible
CALL04	020000.1	Auxvasse Branch Bridge	c1905	1- 60'		22 non-eligible
CASS05	073000.6	Bridge	c1905	1- 60'		29 non-eligible
CASS33	342001.4	Eight Mile Creek Bridge	c1905	1- 34'	Western Bridge Company	32 non-eligible
CASS40	386000.3	Camp Creek Bridge	c1905	1- 40'		25 non-eligible
CASS43	394001.0	Crooked Creek Bridge	c1905	1- 40'		26 non-eligible
CASS48	450000.5	Big Creek Bridge	c1905	1- 50'	Western Bridge Company	35 non-eligible
CASS50	480000.2	Walnut Creek Bridge	c1905	1- 30'	Western Bridge Company	32 non-eligible
CASS53	511001.0	South Fork Bridge	c1905	1- 70'		11 non-eligible
CASS54	530000.2	Black Creek Bridge	c1905	1- 35'		26 non-eligible
CASS62	605001.7	Lick Creek Bridge	c1905	1- 50'		29 non-eligible
CASS63	606001.7	Lick Creek Bridge	c1905	1- 40'		26 non-eligible
CHAR05	009001.1	Big Brushy Creek Bridge	c1905	1- 48'		31 non-eligible
MACO30	403001.6	Bridge	c1905	1- 40'		23 non-eligible
PETT11	298000.2	Bridge	c1905	1- 45'		26 non-eligible
PETT14	364000.3	Bridge	c1905	1- 38'	A.M. Blodgett	18 non-eligible
RAND01	057001.8	Hoover Creek Bridge	c1905	1- 40'	Canton Bridge Company	28 non-eligible
RAND07	206000.4	Chariton River Bridge	c1905	1- 60'	Canton Bridge Company	29 non-eligible
RAY006	103000.8	South Mud Creek Bridge	c1905	1- 40'		21 non-eligible
VERN05	127001.6	Little Creek Bridge	c1905	1- 48'		28 non-eligible
CASS49	470001.4	Panther Creek Bridge	1906	1- 45'	Western Bridge Company	37 non-eligible
CASS52	488000.2	Harding Creek Bridge	1906	1- 45'	Western Bridge Company	36 non-eligible
JASP14	175000.5	Buck Branch Bridge	1906	1- 60'	Vincennes Bridge Company	40 non-eligible
KNOX41	296001.2	Metzgar Bridge	1906	1- 36'	Illinois Steel Bridge Company	34 non-eligible
BENT03	045000.2	County Line Bridge	1907	1- 60'	Kansas City Bridge Company	46 non-eligible
BENT05	088001.6	Spangberg Ford Bridge	1907	1- 48'	Kansas City Bridge Company	43 non-eligible
DAVI21	289001.8	Little Creek Bridge	1907	1- 40'	John Dildine Bridge Company	36 non-eligible
SHEL02	020002.2	Black Creek Bridge	1907	1- 45'	Pan-American Bridge Company	39 non-eligible
SHEL14	333000.5	Jordan Bridge	1907	1- 80'	Michelmann Steel Constr. Co.	44 non-eligible
BOLL11	160002.0	Clubb Creek Bridge	1908	1- 38'	Stupp Brothers B&I Company	30 non-eligible
CARR30	247000.9	Shootman Creek Bridge	1908	1- 60'	Midland Bridge Company	42 non-eligible
CARR39	300000.8	Turkey Creek Bridge	1908	1- 50'	Frank Yehle	39 non-eligible
SHEL13	321001.2	Gillis Bridge	1908	1- 80'	Michelmann Steel Constr. Co.	48 possible
HENR06	191000.7	Tebo Creek Bridge	1909	1- 50'	Canton Bridge Company	42 non-eligible
KNOX04	024001.3	Moore Bridge	1909	1- 47'	John Moore	37 non-eligible
HARR08	170001.1	Big Creek Bridge	1910	1- 70'	county work force	40 non-eligible
KNOX11	123000.1	Kinney Bridge	1910	1- 50'	Walters Brothers	35 non-eligible
KNOX12	129002.2	McCann Bridge	1910	1- 60'	J.K. Johnston	38 non-eligible
KNOX43	298001.1	Sweet Oak Bridge	1910	1- 70'	Walters Brothers	38 non-eligible
KNOX51	355000.2	Ralls Bridge	1910	1- 45'	Walters Brothers	30 non-eligible
RAND03	065000.4	Bond Bridge	1910	1- 60'	Pan-American Bridge Company	38 non-eligible
SCOL33	391000.1	Bridge	1910	1- 50'	Illinois Steel Bridge Company	41 non-eligible
ADAI09	042000.6	Salt River Bridge	c1910	1- 35'		27 non-eligible
CASS04	058001.1	Middle Creek Branch Bridge	c1910	1- 45'		25 non-eligible
CASS24	217000.1	Coldwater Creek Bridge	c1910	1- 55'		25 non-eligible
CASS26	265000.8	Wolf Creek Bridge	c1910	1- 40'		25 non-eligible

## PIN-CONNECTED PRATT BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DAVI04	025002.8	Hickory Creek Bridge	c1910	1- 25'	John Dildine Bridge Company	30 non-eligible
DAVI20	282000.7	Owl Creek Bridge	c1910	1- 40'	John Dildine Bridge Company	35 non-eligible
DAVI22	304001.0	Muddy Creek Bridge	c1910	1- 40'	John Dildine Bridge Company	35 non-eligible
HARR10	229R01.5	Big Creek Bridge	c1910	1- 70'		30 non-eligible
HOWA08	053001.5	Moniteau Creek Bridge	c1910	1- 54'		28 non-eligible
HOWA11	061001.6	Moniteau Creek Bridge	c1910	1- 50'		28 non-eligible
KNOX32	265002.2	Little Fabius River Bridge	c1910	1- 45'		25 non-eligible
LEWI22	228001.9	Troublesome Creek Bridge	c1910	1- 40'		25 non-eligible
PERR02	047000.1	Laurent Creek Bridge	c1910	1- 45'		25 non-eligible
RAND04	090000.9	Mud Creek Bridge	c1910	1- 42'	Pan-American Bridge Company	27 non-eligible
RAND05	149000.7	Elk Fork Bridge	c1910	1- 60'	Pan-American Bridge Company	30 non-eligible
RAY010	191003.3	Lick Creek Bridge	c1910	1- 56'		28 non-eligible
SCOL06	029001.2	North Fork Bridge	c1910	1- 48'	Illinois Steel Bridge Company	33 non-eligible
SCOL18	166001.6	North Wyaconda River Bridge	c1910	1- 60'	Illinois Steel Bridge Company	36 non-eligible
SCOL20	189000.2	Middle Fabius River Bridge	c1910	1- 60'	Illinois Steel Bridge Company	36 non-eligible
SHEL05	171001.8	Kirby Bridge	c1910	1- 60'		28 non-eligible
AUDR03	050000.1	Bridge	c1910	1- 45'		25 non-eligible
AUDR13	633000.7	Loutre River Bridge	c1910	1- 50'		25 non-eligible
CALD45	383001.5	Shoal Creek Bridge	c1910	1- 50'		29 non-eligible
KNOX35	272002.1	Mason Bridge	1911	1- 42'	Upright & Luke	30 non-eligible
MONR04	071001.5	Long Branch Bridge	1911	1- 60'	Illinois Steel Bridge Company	42 non-eligible
SCOL21	208001.6	Strosnider Bridge	1911	1- 64'	Illinois Steel Bridge Company	36 non-eligible
SCOL17	153001.8	South Wyaconda River Bridge	1912	1- 60'	Illinois Steel Bridge Company	40 non-eligible
CALL06	043001.0	Boyd Bridge Number 2	1913	1- 50'	Missouri B&I Company	42 non-eligible
KNOX50	353000.1	Fraley Bridge	1913	1- 48'	Walters Brothers	30 non-eligible
HOWA06	024001.1	Bonne Femme Creek Bridge	1913	1- 50'	Massillon Bridge & Struct. Co.	40 non-eligible
HOWA09	056001.1	Moniteau Creek Bridge	1913	1- 70'	Pan-American Bridge Co.	44 non-eligible
HOWA10	061001.1	Moniteau Creek Bridge	1913	1- 60'	Pan-American Bridge Company	39 non-eligible
HARR21	566000.7	Fox Creek Bridge	1914	1- 40'	county work force	30 non-eligible
KNOX54	385000.7	Hall Bridge	1914	1- 48'	Walters & Son	30 non-eligible
HARR19	368000.3	Big Creek Bridge	1915	1- 80'	Dildine Bridge Company	45 non-eligible
KNOX18	166000.5	Rekus Bridge	1915	1- 42'	Charles Baker	30 non-eligible
DAVI07	052000.2	Tombstone Creek Bridge	c1915	1- 40'	John Dildine Bridge Company	35 non-eligible
JOHN04	106001.7	Walnut Creek Branch Bridge	c1915	1- 32'		20 non-eligible
KNOX17	165000.4	Bridge Creek Bridge	c1915	1- 46'	Illinois Steel Bridge Company	25 non-eligible
KNOX44	304001.2	Troublesome Creek Bridge	c1915	1- 56'		25 non-eligible
KNOX58	408002.0	Bridge	c1915	1- 35'		20 non-eligible
DAVI33	380000.7	Hickory Creek Bridge	1916	1- 50'		32 non-eligible

## RIGID-CONNECTED PRATT BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CARR04	007001.8	Cottonwood Creek Bridge	1904	1- 28'	Interstate Bridge Company	46 non-eligible
CARR45	337R00.2	McGill Creek Bridge	1904	1- 33'	Interstate Bridge Company	44 non-eligible
MACO29	388001.4	Little Brush Creek Bridge	1905	1- 36'	Dildine Bridge Company	41 non-eligible
CLIN13	123001.3	Shoal Creek Bridge	c1910	1- 36'	John Dildine Bridge Company	35 non-eligible
MONR07	112000.5	Middle Grove Bridge	1914	1- 56'	Decatur Bridge Company	37 non-eligible

## RIGID-CONNECTED WARREN BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MONR27	547001.2	Combs Bridge	1904	1- 40'	Decatur Bridge Company	46 possible
MONR20	334000.8	Glover Bridge	1905	1- 45'	Pan-American Bridge Company	46 possible
MONR31	589000.8	County Line Bridge	1905	1- 48'	Pan-American Bridge Company	46 possible
CARR08	060000.9	Bridge	1906	1- 40'	Frank Yehle	40 non-eligible
MONR21	342001.1	Otter Creek Bridge	1907	1- 48'	Pan-American Bridge Company	30 non-eligible
PETT03	119000.2	Chamberlain Bridge	1907	1- 70'	Midland Bridge Company	50 determ. non-elig.
CARR23	196R00.4	Bridge	1909	1- 40'	Kansas City Bridge Company	49 non-eligible
CARR20	160000.3	Turkey Creek Bridge	1910	1- 40'	R.E. Bates	38 non-eligible
CHAR17	201000.8	Clark Branch Bridge	1910	1- 45'	Pan-American Bridge Company	40 non-eligible
CHAR10	085001.1	Van Dosen Branch Bridge	1912	1- 40'	Pan-American Bridge Company	43 non-eligible
CHAR12	122001.5	Bridge	1912	1- 45'	Pan-American Bridge Company	38 non-eligible

## RIGID-CONNECTED POLYGONAL WARREN BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
LIV09	465002.4	Campbell Creek Bridge	1906	1- 50'	W.O. Graham	64 possible

## RIGID-CONNECTED BALTIMORE BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CLIN18	255000.5	Little Platte River Bridge	1906	1- 90'	John Dildine Bridge Company	76 eligible

## RIGID-CONNECTED LATTICE BEDSTEAD

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CALD39	351001.3	Tub Creek Bridge	1904	1- 24'	Canton Bridge Company	47 non-eligible
CALD06	041001.6	Bridge	1905	1- 30'	J.H. Sparks	44 non-eligible
CALD17	215000.3	North Mud Creek Bridge	c1905	1- 32'	Canton Bridge Company	43 non-eligible
CALD22	268000.9	Crooked River Bridge	c1905	1- 30'	Canton Bridge Company	43 non-eligible
FRAN15	F-89	Brown Branch Bridge	c1905	1- 36'	Stupp Brothers Bridge and Iron	32 non-eligible
SCOL08	044000.7	Mankopf Bridge	1906	1- 36'	Interstate Bridge Company	32 non-eligible
KNOX34	271000.7	Noblett Bridge	1907	1- 36'	Ottumwa Bridge Company	32 non-eligible
SHEL06	176001.7	Tannehill Bridge	1907	1- 30'	G.T. Meredith	32 non-eligible
SHEL10	307000.5	Turney Bridge	1907	1- 28'	Pan-American Bridge Company	32 non-eligible
FRAN22	F-405	Spring Creek Bridge	1908	1- 34'	Stupp Brothers Bridge & Iron	35 non-eligible
WARR09	099001.7	Loutre Slough Bridge	1908	1- 30'	Stupp Brothers B&I Company	43 non-eligible
KNOX24	183001.9	Creed-Davis Bridge	1909	1- 36'	E.L. Davis	32 non-eligible
WARR11	116000.3	Water Run Creek Bridge	1909	1- 30'	Stupp Brothers B&I Company	38 non-eligible
SHEL04	127000.2	Jones Branch Bridge	1909	1- 36'	Michelmann Steel Constr. Co.	35 non-eligible
ANDR32	418000.8	Caples Creek Bridge	c1910	1- 45'	Illinois Steel Bridge Company	33 non-eligible
GRUN20	097000.3	Little No Creek Bridge	c1910	1- 35'		20 non-eligible
KNOX37	281000.8	Coon Creek Bridge	c1910	1- 32'	Illinois Steel Bridge Company	20 non-eligible
KNOX42	297000.5	Million Creek Bridge	c1910	1- 36'	Illinois Steel Bridge Company	26 non-eligible
SCOL27	367000.3	Tobin Creek Bridge	c1910	1- 34'	Illinois Steel Bridge Company	33 non-eligible
SCOL29	371000.1	Indian Creek Bridge	c1910	1- 36'	Illinois Steel Bridge Company	33 non-eligible
SCOL32	378000.3	Indian Creek Bridge	c1910	1- 34'	Illinois Steel Bridge Company	33 non-eligible

# **RIGID-CONNECTED LATTICE BEDSTEAD**

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CHAR21	365001.2	Palmer Creek Bridge	1911	1- 36'	Pan-American Bridge Company	37 non-eligible
CHAR23	377000.3	Palmer Creek Bridge	1911	1- 30'	Pan-American Bridge Company	37 non-eligible
KNOX06	027000.1	Kiley Bridge	1911	1- 36'	Walters Brothers	30 non-eligible
KNOX13	144001.6	Vaughn Bridge	1911	1- 36'	Walters Brothers	30 non-eligible
KNOX29	239000.8	Little Fabius River Bridge	1911	1- 36'	Illinois Steel Bridge Company	22 non-eligible
KNOX31	264001.0	Noblett Bridge	1911	1- 36'	Upright & Luke	30 non-eligible
SHEL15	379001.5	Maupin Bridge	1911	1- 36'	Decatur Bridge Company	33 non-eligible
KNOX20	169001.0	Hax Bridge	1912	1- 36'	Walters Brothers	30 non-eligible
SCOL34	427000.3	Million Bridge	1912	1- 40'	Illinois Steel Bridge Company	37 non-eligible
KNOX16	164000.2	Norton Bridge	1914	1- 36'	Walters & Son	30 non-eligible
MONT05	022000.1	Little Loutre Creek Bridge	1914	1- 36'	Missouri Bridge & Iron Co.	39 non-eligible
KNOX23	183000.6	Bridge Creek Bridge	c1915	1- 35'	Illinois Steel Bridge Company	25 non-eligible



# DECK TRUSSES

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Prior to 1940, numerous through and pony truss bridges were built on roads and highways throughout Missouri. Deck trusses—in which the roadway is carried by the truss's upper chords—were built far less often, owing to the relatively flat nature of Missouri's waterways. The cities and counties almost never built deck trusses, and the state highway department used deck trusses only under special conditions in which under-truss clearance was not a factor. Never very common, this truss type has suffered the same sort of attrition as the other types in recent bridge replacements, until fewer than ten deck trusses are known to remain statewide. Significantly all but one of these are primary system structures built between 1921 and 1936. Of the remaining deck trusses in Missouri, three are simply supported Warrens, two simply supported Pratts, and two are long-span cantilevered trusses over the Lake of the Ozarks. These latter two spans are among the more distinguished of MSHD's truss designs.

## RIGID-CONNECTED PRATT DECK TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
STOD08	553001.1	Bridge	c1950	1- 80'		43 non-eligible

## RIGID-CONNECTED WARREN DECK TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CALL01	F 485R	Auxvasse Creek Bridge	1921	2- 80'	Riley & Bailey Construction Co.	60 possible
STLO05	J 421	Meramec River Bridge	1932	3-130'	Frazier-Davis Construction Co.	63 possible
BUTL01	K 263R	Poplar Bluff Viaduct	1934	1-130'	Regenhardt Construction Co.	63 possible
JACK09	K 608R	Intercity Viaduct	1936	1-147'	M.E. Gillioz	63 possible

## RIGID-CONNECTED WARREN CANTILEVER DECK TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CAMD04	K 961R	Hurricane Deck Bridge	1935	3-463'	W.A. Ross Con./Stupp Brothers	76 eligible
CAMD03	K 510A	Niangua River Bridge	1936	2-315'	W.A. Ross Construction Co.	70 eligible <i>gone</i>

# WARREN TRUSSES

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Patented in 1848 by Captain James Warren and Theobald Monzani, the Warren truss in its classic form features a web configuration that relies on simple triangulation for its rigidity. "The term Warren truss or Warren girder was originally applied only to the particular case of the Triangular truss in which the web triangles are all equilateral; but later writers generally use the name for any triangular truss," noted bridge engineer J.A.L. Waddell stated in his 1916 **Bridge Engineering**. "As there is no special advantage in making the web triangles equilateral, there does not appear to be any good *raison d'être* for the use of the true Warren type." Warrens were built sparingly in the 19th century, a period in which the pin-connected Pratt dominated the bridge industry. Only three of these early spans have survived in Missouri in pinned form.

After about 1910, however, rigid-connected Warren pony trusses began to supersede earlier pinned Pratt configurations for use on short- to intermediate span highway bridges. Although these bridges displayed variations in their web configurations—some were "pure" Warren configurations without verticals, others had verticals at all or alternate panel points—virtually all of these early Warren trusses featured straight upper chords. Fabricated by the Kansas City Bridge Company, the Midland Bridge Company and others, these trusses were built throughout the state in the years before the adoption of standard plans by MSHD.

A noteworthy variation on the standard Warren truss is found in Missouri that combines attributes of Warren and Pratt web configurations. The diagonals and verticals function like a Warren web, using simple triangulation for structural strength, but the end posts are sloped shallowly like a Pratt. Fifteen of these bridges have been identified by the inventory—all located in southeast or central Missouri and virtually all built between circa 1915 and 1930 by St. Louis bridge builders Miller and Borcharding. (The firm's two principals, R.L. Miller and Louis Borcharding, split from each other in 1917 and continued erecting trusses independently.) One unique structure, the Hargrove Bridge in Butler County, combines two Pratt/ Warren trusses to form a small-scale swing-span bridge.

The Missouri State Highway Department used riveted Warren configurations for its pony trusses almost from the time the agency developed its first bridge standards in the late 1910s. Structurally straightforward and versatile, these ubiquitous trusses were erected by the hundreds throughout the state in span lengths ranging from 40 to 100 feet. Fabricated from essentially the same drawings, their superstructures were virtually identical. The earliest remaining example of these, the Carrollton Bridge in Carroll County, dates to 1919; numerous later examples of various span lengths can be found in the statewide inventory. In the early 1930s the highway department designed Warren trusses with polygonal upper chords, a variation that was more materially conservant than the straight-chorded Warren for long-span applications. Relatively few of these latter Warren subtypes were built during the decade, due more to their extreme span length than to their utility. Less than fifteen of these polygonal Warren pony trusses have been identified as extant by the statewide bridge inventory, all built between 1932 and 1940 and all spanning 100 feet or more.

### PIN-CONNECTED WARREN THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CALD13	181001.9	Henkin's Ford Bridge	1887	1-125'	King Bridge Company	72 eligible
CALD14	204001.2	Mud Creek Bridge	1887	1- 90'	King Bridge Company	67 possible

### PIN-CONNECTED WARREN PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
SULL08	228001.3	Mewmaw Bridge	1908	1- 45'	county work force	64 possible

### RIGID-CONNECTED POLYGONAL WARREN THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
RAY001	G 55R	Lexington Bridge	1925	7-408'	Kansas City Bridge Co.	86 eligible

### RIGID-CONNECTED POLYGONAL WARREN THROUGH TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
WAYN01	J 21R	St. Francis River Bridge	1941	1-170'	George W. Condon	62 possible

### RIGID-CONNECTED WARREN PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
RAY004	013001.2	Brushy Creek Bridge	1904	1- 60'	Kansas City Bridge Company	51 possible
LIVI02	035000.5	Clear Creek Bridge	1906	1- 42'	A.M. Blodgett	48 possible
LIVI06	207000.0	Muddy Creek Bridge	1906	1- 50'	W.O. Graham	48 possible
CHAR28	463001.4	Middle Fork Bridge	1907	1- 50'	Kansas City Bridge Company	48 possible
CARR27	224001.0	Bridge	1908	1- 48'	Midland Bridge Company	46 non-eligible
PETT19	405000.8	Schmeltzer Bridge	1908	1- 42'	Midland Bridge Company	41 non-eligible
CHAR08	066000.7	Long Branch Bridge	1910	1- 40'	Pan American Bridge Company	37 non-eligible
CHAR09	074000.6	Locust Branch Bridge	1911	1- 50'	Pan-American Bridge Company	35 non-eligible
CHAR29	482000.3	Muncas Creek Bridge	1911	1- 40'	Pan-American Bridge Company	35 non-eligible
MONI07	122000.9	Smiths Fork Bridge	1911	1- 40'	Missouri Bridge & Iron Co.	39 non-eligible
CHAR22	373000.8	Bridge	1912	1- 40'	Pan-American Bridge Company	37 non-eligible
CHAR24	385000.7	Long Branch Bridge	1912	1- 60'	Pan-American Bridge Company	35 non-eligible
MONI08	155002.1	Bridge	1912	1- 40'	Kansas City Bridge Company	39 non-eligible
CALL09	071002.2	Dunlap Bridge	1913	1- 76'	Stupp Brothers B&I Company	39 non-eligible
JASP12	091001.2	Blackberry Creek Bridge	1913	1- 50'	Illinois Steel Bridge Company	37 non-eligible
PUTN16	279003.0	Buster Bridge	1913	1- 60'	Illinois Steel Bridge Company	37 non-eligible
CALL07	057000.2	Kennon Bridge	1914	1- 40'	county work force	34 non-eligible
BENT09	356000.3	Bentonville Bridge	c1915	1- 80'	Kansas City Bridge Company	40 non-eligible
CHAR16	173001.0	Jones Branch Bridge	1916	1- 40'	Vincennes Bridge Company	34 non-eligible
CHAR27	440000.2	Bridge	1916	1- 35'	Vincennes Bridge Company	39 non-eligible
MONT12	191000.5	Browne Bridge	1916	1- 65'	Missouri Bridge & Iron Co.	42 non-eligible
CRAW03	038000.7	Bridge	1917	1- 42'	Miller & Borcharding	34 non-eligible
GRUN31	201001.2	Hickory Creek Bridge	1917	1- 48'	Illinois Steel Bridge Company	34 non-eligible
MACO23	321001.2	Chariton River Bridge	1917	1- 50'	Illinois Steel Bridge Company	35 non-eligible
CARR01	F 404	Carrollton Bridge	1919	1-100'	Kansas City Bridge Company	56 possible
BOLL01	G 688R	Patton Bridge	1923	2- 80'	C.P. O'Reilly & Company	52 possible
LAWR08	272001.8	Turnback Creek Bridge	1923	3- 70'	Baker and Koontz	49 possible

### RIGID-CONNECTED WARREN PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
REYN02	391000.1	Sinking Creek Bridge	1923	3- 60'	Cooper's Constr. Service Co.	49 possible
WAYN06	200000.6	Clark Creek Bridge	1924	2- 90'		39 non-eligible
RALL05	094002.1	Spencer Creek Bridge	1925	2- 80'	Louis Rich Construction Co.	40 non-eligible
MONI13	298000.2	Smiths Creek Bridge	c1925	2- 50'		25 non-eligible
STOD05	452001.1	Bridge	c1925	1-114'	SL&SF Railroad Bridge Crew	22 non-eligible
ANDR01	J 201	Rosendale Bridge	1930	1-100'	Fred M. Clark	43 non-eligible
CASS59	577001.5	Grand River Bridge	c1930	1-100'		28 non-eligible
TEXA02	J 665	Jacks Fork Bridge	1931	2-100'	Kelly and Underwood	45 non-eligible
BUCH02	K 33	102 River Bridge	1932	3- 90'	Gerard Knutson	46 non-eligible
GRUN02	J 771	West Medicine Creek Bridge	1932	1-100'	Ebbe Construction Company	41 non-eligible
WORT11	281001.9	Middle Fork Bridge	1932	1-100'	Graham Brothers	43 non-eligible
ADAI03	K 304	Mussel Fork Bridge	1933	1-100'	M.E. Gillioz	43 non-eligible
ADAI04	K 305	Mussel Fork Bridge	1933	1-100'	M.E. Gillioz	43 non-eligible
BUCH06	S 787	Castile Creek Bridge	1934	1-100'	Martin Wunderlich	43 non-eligible
CLAY01	K 108A	Fishing River Bridge	1933	3-100'	Davis Construction Company	46 non-eligible
CLAY07	S 818	Clear Creek Bridge	1934	1-100'	Otto W. Knutson	43 non-eligible
HOLT03	T 104	Big Tarkio Creek Bridge	1934	1-100'	T.J. Morris	43 non-eligible

### RIGID-CONNECTED WARREN PONY TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BENT02	021001.0	Flat Creek Bridge	1913	1- 36'	county work force	61 possible
CHAR02	H 667	Doxie Creek Bridge	1929	5-100'	McGlone and Walesby	67 determ. elig.
ATCH02	J 176	Tarkio Creek Bridge	1930	5- 90'	George W. Condon Company	61 possible
LIVI01	S 639	Shoal Creek Bridge	1933	1-100'	Amos Melberg	63 possible
PHEL01	X 8	Bourbeuse River Bridge	1934	2-100'	James R. Hancock	65 possible

### RIGID-CONNECTED POLYGONAL WARREN PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
WORT07	251001.0	Lotts Creek Bridge	c1920	1- 80'		45 non-eligible
LACL02	J 881	Osage Fork Bridge	1933	3-100'	Kelly and Underwood	59 possible
FRAN03	J 959	Big Boeuf Creek Bridge	1934	1-100'	James R. Hancock	46 non-eligible
BATE02	T 279R	Rich Hill Bridge	1935	1-100'	Otto W. Knutson	47 non-eligible
BATE03	T 280	M. des Cygnes River Bridge	1935	1-110'	Otto W. Knutson	51 possible
LAFA08	266001.5	Davis Creek Bridge	c1940	1- 96'		41 non-eligible
NODA69	741000.0	102 River Bridge	1946	1-100'		33 non-eligible
STLO14	U3875130	Hall's Ferry Road Bridge	1947	1- 80'	J.S. Alberici	46 non-eligible
CEDA03	X 190	Cedar Creek Bridge	1949	1-110'	Ben D. Prater	48 non-eligible

### RIGID-CONNECTED POLYGONAL WARREN PONY TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
PIKE01	K 317R	Calumet Creek Bridge	1936	1-100'	Deering and Davidson	58 possible
PIKE03	K 487R	Noix Creek Bridge	1936	1-100'	Otto W. Knutson	58 possible
ANDR03	L 202A	102 River Bridge	1947	1-120'	Clark and Runquist Constr. Co.	64 possible
VERN02	X 186	Horse Creek Bridge	1948	1-110'	M.E. Gillioz	63 possible

# RIGID-CONNECTED PRATT/WARREN PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CALL27	327000.2	Logan Creek Bridge	1911	1- 50'	Stupp Borthers B&I Company	54 possible <i>ad</i>
BUTL11	416000.4	Pike Creek Bridge	1915	1- 40'	Miller & Borcharding	49 possible
GASC03	036002.0	Bridge	c1915	1- 40'	Miller & Borcharding	33 non-eligible
BUTL03	014001.2	Smith Bridge	1916	1- 76'	Miller & Borcharding	50 possible
FRAN12	F-57	Fiddle Creek Bridge	1920	1- 50'	county crew	50 possible
FRAN16	F-136	Cedar Fork Bridge	1920	1- 50'	R.L. Miller	50 possible
FRAN21	F-284	Bridge	1920	1- 80'	county work force	52 possible <i>good</i>
BOLL10	146001.5	Bridge	c1920	1- 45'	R.L. Miller	38 non-eligible
BOLL13	183001.5	Bridge	c1920	1- 50'	R.L. Miller	41 non-eligible
BOLL14	188002.5	Slagle Creek Bridge	c1920	1- 40'	R.L. Miller	41 non-eligible
BUTL02	008000.4	Cane Creek Bridge	c1920	1- 40'	Miller and Borcharding	37 non-eligible
BUTL10	412A00.2	Ten Mile Creek Bridge	c1920	1- 40'	Miller and Borcharding	37 non-eligible
CAPE08	141001.3	Bridge	c1920	1- 45'	R.L. Miller	33 non-eligible
MONI10	246001.0	Bridge	c1925	1- 46'		36 non-eligible
BUTL07	169000.7	Bridge	1930	1- 54'	county work force	40 non-eligible

# RIGID-CONNECTED PRATT/WARREN PONY SWING TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BUTL06	159000.3	Hargrove Bridge	1917	2- 50'	Miller & Borcharding	78 listed

# CANTILEVER TRUSSES

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The technique of building out from either end of a bridge and joining in the middle—cantilevering—is an ancient one. In principle a cantilevered beam or truss distributes stresses in much the opposite way as does a comparable simply supported structure. Held aloft at both ends by piers or abutments, a simply supported bridge deflects downward toward the middle when loaded so that the lower chord is convex under a positive bending moment. A cantilever bridge, on the other hand, is supported at only one end and must therefore be counterbalanced by a second member extending in the opposite direction from the pier. A cantilever span bends so that the upper surface or chord is convex in a state of negative bending. The distribution of tensile and compressive forces is therefore reversed. In a simple truss the top chord is in compression and the bottom in tension; the top chord of a cantilever truss is in tension and the bottom chord in compression.

The distribution of bending moment is also reversed. The maximum bending occurs at mid-span on a simple truss and at the anchored end, over the support, on a cantilever. As literal manifestations of stress analysis, trusses reflect this with eloquent simplicity. Polygonal-chorded simple trusses are deepest at the center, placing the greatest cross-section of steel to resist the greatest bending moment. Conversely, the web depths of cantilevered trusses tend to be greatest at the piers.

Cantilever trusses built in the 19th century were related to each other more in method of construction than in web configuration, and as a result they displayed a wide array of shapes, especially in the formative years. The first large-scale cantilever truss bridge built in America was the Kentucky river Bridge of the Cincinnati Southern Railroad, erected from a design by Charles Shaler Smith and L.F.G. Bouscaren in 1876-77. Other major cantilevers soon followed, with increasingly longer spans. Cantilever bridges typically had three spans: a main center span (comprised of two cantilever arms that held a center suspended span), with an anchor span at either end. These were usually found in through truss configurations, although cantilevered deck trusses were also built with regularity.

Built in locations that made falseworks impractical or that required extremely long spans (such as crossings over wide, navigable rivers such as the Missouri and Mississippi), cantilevers also had significant drawbacks. They were by nature less rigid than simple trusses, limiting their use primarily to highway bridges. They also tended to cost more to erect than simple trusses. Bridge engineer J.A.L. Waddell criticized this bridge form harshly, saying: "About the time that cantilevers came into vogue, certain bridge designers entertained a wild idea to the effect that the new type involved some special virtue or feature of excellence or else that it was economic at first cost; because many cantilever bridges were built in places where simple-span structures would have been far better and cheaper."

Cantilevering suited itself well to bridge construction on the Mississippi and Missouri Rivers. Congress had required that each bridge over the rivers be either a low-level, moderate-span structure with a movable truss over the main channel, or a high, fixed-

span bridge with relatively long spans. Faced with severe limitations on the grades of their bridge approaches, railroad engineers almost always designed river-level structures. Additionally, rail traffic tended to be intermittent, allowing the railroads to operate swing-span or lift-span bridges (such as the A.S.B. Bridge in Kansas City) efficiently. But for vehicular bridges, which carried continuous traffic and which could use much steeper approaches, the engineers preferred fixed spans held high over the rivers. Cantilevering these structures allowed them to design relatively long, fixed-span trusses that were materially conservant. Further, by eliminating the need for falseworks over the rivers, the engineers could avoid obstructing river navigation and could erect the superstructures without concern for the highly changeable conditions on the river below.

The first highway truss over the Mississippi River below the Twin Cities was a cantilever truss. Designed by Horace E. Horton and completed in 1887, this sinewy iron structure spanned the river at Dubuque, Iowa. Three other cantilever trusses over the upper Mississippi followed within five years. A number of cantilever truss were erected over the Mississippi and Missouri rivers in Missouri in the 1920s and 1930s. These employed riveted connections and Pratt or Warren web configurations. Several of these, engineered by Sverdrup and Parcel of St. Louis, became virtually that firm's standard great river bridge design, featuring remarkably similar web profiles. Cantilevering is a long-span truss construction technique, and, not surprisingly, all of Missouri's cantilever highway bridges are large-scale structures located over navigable rivers. Among the state's most outstanding and distinctive large-scale steel bridges, they are all considered possibly or definitely eligible for the National Register.

#### RIGID-CONNECTED CANTILEVER THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CAPE05	K 948R1	Cape Girardeau Bridge	1928	2-671'	American Bridge Company	66 possible
MISS01	K 950R	Cairo Bridge	1929	4-700'	American Bridge Company	71 eligible
MONT03	K 226A	Hermann Bridge	1929	7-400'	Kansas City Struct. Stl. Co.	71 eligible
STLO18	none	Chain of Rocks Bridge	1929	10-700'	Union Bridge and Constr. Co.	77 eligible
MARN03	L 99R	Quincy Memorial Bridge	1930	2-628'	Kelly-Atkinson Const. Co.	75 eligible
CAMD01	J 296R	Niangua River Bridge	1931	3-343'	Wisconsin Bridge and Iron Co.	54 determ. elig.
GASC01	K 974	Gasconade Bridge	1931	3-276'	C.P. O'Reilly Constr. Co.	65 determ. elig.
MILL02	J 719	Osage River Bridge	1932	2-200'	Industrial Construction Company	53 possible
PLAT04	K 456R	Fairfax Bridge	1935	3-475'	Kansas City Bridge Company	62 possible
WARR01	K 969	Washington Bridge	1936	5-475'	Stupp Brothers B&I Company	72 eligible
MARN02	K 931A1	Mark Twain Memorial Bridge	1936	3-562'	Mt. Vernon Br Co/Union Br Co	75 eligible
BUCH05	K 697R	Atchison Bridge	1938	2-474'	Wisconsin Bridge & Iron Co.	61 possible
CLAR03	K 918	St. Francisville Bridge	1937	3-228'	F.W. Whitehead	62 listed
ATCH03	L 98	Brownville Bridge	1939	2-420'	Bethlehem Steel Company et al.	73 listed
SALI03	K 999R	McDaniel Memorial Bridge	1939	3-475'	Massman Construction Co.	72 eligible
JACK13	L 568R1	Liberty Bend Bridge	1947	2-460'		52 possible

# TWO-ANGLE TRUSSES

One feature that most of Missouri's truss bridges share is the configuration of its web members, particularly the upper chords and endposts. These typically employ two back-to-back channels, joined with lacing or cover or batten plates to form a box beam. A small number of trusses in the state employ an alternate configuration, with two back-to-back angles used in lieu of the box beam. The advantage of this is considerably lower cost of materials. These so-called two-angle trusses have been used in Missouri since at least 1908, but the majority of those found in the inventory date from the 1920s through the 1940s. The general lack of information for them in county records suggests that the trusses were being purchased by the counties directly from fabricators such as the Chillicothe Iron Works and erected using force account labor. Two-angle trusses are invariably rigid-connected and employ the typical array of Pratt and Warren web configurations.

## RIGID-CONNECTED TWO-ANGLE PARKER THROUGH TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
ATCH31	264001.0	Tarkio River Bridge	c1910	1-130'		45 non-eligible
ANDR31	392002.2	Mace Creek Bridge	c1925	1-120'		46 non-eligible
GRUN22	113000.5	Honey Creek Bridge	c1925	1-120'	county work force	51 possible
GRUN34	239001.2	Honey Creek Bridge	c1925	1-130'	county work force	51 possible
GRUN38	280000.1	Medicine Creek Bridge	c1925	1-180'	county work force	55 possible
GRUN35	251001.5	Honey Creek Bridge	1926	1-130'	county work force	53 possible

## RIGID-CONNECTED TWO-ANGLE PRATT PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DEKA22	177000.5	Grindstone Creek Bridge	c1925	1- 60'		34 non-eligible
ANDR30	377000.3	Dillon Creek Bridge	c1925	1- 60'		32 non-eligible
ATCH26	203001.9	Bridge	c1925	1- 60'		32 non-eligible
ATCH32	265000.3	Bridge	c1925	1- 65'		41 non-eligible
ATCH33	275001.2	Deadman's Hollow Bridge	c1925	1- 60'		36 non-eligible
ATCH40	343001.9	Little Tarkio Creek Bridge	c1925	1- 60'	Inland Steel Company	28 non-eligible
ATCH62	530000.5	Minnesota Valley Creek Bridge	c1925	1- 60'		34 non-eligible
CALD37	349000.7	Long Creek Bridge	c1925	1- 60'		30 non-eligible
JACK59	072000.9	Santa Fe Railroad Overpass	c1925	1- 53'		33 non-eligible
PLAT17	138003.0	Jowler Creek Bridge	c1925	1- 60'		32 non-eligible
DAVI36	422R01.0	Pilot Grove Creek Bridge	1947	1- 60'	Chillicothe Iron Works	37 non-eligible

## RIGID-CONNECTED TWO-ANGLE WARREN PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
HARR12	268000.0	Big Muddy Creek Bridge	c1920	1- 42'		22 non-eligible
CLIN19	256000.9	Little Platte River Bridge	c1920	1-108'		44 non-eligible
BATE10	169000.7	Miami Creek Bridge	c1925	1- 38'		39 non-eligible
GRUN42	344000.2	Wolf Creek Bridge	1956	1- 48'	county work force	28 non-eligible



## RIGID-CONNECTED TWO-ANGLE CAMELBACK PONY TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
ANDR19	164001.0	Bridge	c1925	1- 80'		43 non-eligible
ANDR26	276001.1	Muddy Creek Bridge	c1925	1- 70'		43 non-eligible
ATCH04	025002.0	High Creek Bridge	c1925	1- 90'		34 non-eligible
ATCH05	029000.6	High Creek Bridge	c1925	1- 90'		34 non-eligible
ATCH07	044000.2	McElroy Creek Bridge	c1925	1- 80'		34 non-eligible
ATCH08	045001.0	High Creek Bridge	c1925	1- 90'		34 non-eligible
ATCH17	124000.5	Middle Tarkio Creek Bridge	c1925	1- 90'		34 non-eligible
ATCH20	145R01.1	Rock Creek Bridge	c1925	1- 70'		29 non-eligible
ATCH35	291000.3	Tarkio River Branch Bridge	c1925	1- 70'		32 non-eligible
ATCH39	343000.7	Little Tarkio Creek Bridge	c1925	1- 70'	Inland Steel Company	32 non-eligible
ATCH42	365000.6	Little Tarkio Creek Bridge	c1925	1- 50'	Inland Steel Company	29 non-eligible
ATCH43	371000.1	Tarkio Creek Bridge	c1925	1- 90'	Inland Steel Company	34 non-eligible
ATCH44	375000.2	Little Tarkio Creek Bridge	c1925	1-100'		30 non-eligible
ATCH52	485000.8	Little Tarkio Creek Bridge	c1925	1-100'		41 non-eligible
ATCH53	490000.9	Tarkio Creek Bridge	c1925	1- 70'		34 non-eligible
ATCH56	502000.7	Hickory Branch Bridge	c1925	1-100'		41 non-eligible
ATCH57	512000.0	Minnesota Valley Creek Bridge	c1925	1- 80'		36 non-eligible
ATCH58	522000.9	Little Tarkio Creek Bridge	c1925	1-100'		41 non-eligible
ATCH59	524000.5	East Little Tarkio Creek Bridge	c1925	1-100'		41 non-eligible
ATCH60	525000.2	Little Tarkio Creek Bridge	c1925	1- 80'		36 determ. non-elig.
ATCH61	526000.3	Little Tarkio Creek Bridge	c1925	1- 70'		34 non-eligible
HENR14	329001.0	Deer Creek Bridge	c1925	1- 80'	county work force	48 non-eligible
HOLT26	128000.3	Minnesota Valley Creek Bridge	c1925	1- 80'		40 non-eligible
PLAT11	006000.4	Sugar Creek Bridge	c1925	1-130'		45 non-eligible
RAY012	239000.4	Crooked River Bridge	c1925	1- 80'		43 non-eligible
BUCH30	273001.7	Contrary Creek Bridge	c1930	1- 80'	St. Joseph Struct. Stl. Works	34 non-eligible
GENT05	066000.5	Middle Fork Bridge	c1930	1-100'		37 non-eligible
HOWA19	121000.0	Sulphur Creek Bridge	c1940	1- 82'		34 determ. non-elig.
CLAY10	046000.4	Clear Creek Bridge	c1940	1-100'		37 non-eligible

## RIGID-CONNECTED TWO-ANGLE CAMELBACK PONY TRUSS, SKEWED

Inv. No.	MHTD	Structure name	date	spans	builder	rating
ATCH51	481002.7	Little Tarkio Creek Bridge	c1925	1- 84'		36 non-eligible

# SUSPENSION BRIDGES

Bridge builder J.A. Dice [1866-1947] built over thirty wire suspension bridges between 1895 and 1940 in central Missouri. A throwback to the craftsman tradition of bridge building, Dice had no formal training in civil engineering and, in fact, no schooling at all beyond the fourth grade. He was 29 years old in 1895 when he worked on the construction of a long-span wire suspension bridge over the Osage River at Warsaw. The Warsaw bridge formed the prototype for virtually all of the Dice suspension spans to follow. These bridges represent a significant facet of vehicular bridge construction in Missouri. They were built during a period in which bridge construction across the country was dominated by rationally based engineering and marked by the promulgation of design standards by state and federal highway agencies. In a reversion to vernacular practice of the early and mid-19th century, Dice eschewed detailed structural analysis in designing his bridges. In building them, he referred only in passing to contract drawings. Instead he relied on empirical design principles and construction techniques developed in the success-and failure-of preceding structures. Still, he employed such contemporary technologies as galvanized wire and prefabricated, rolled steel components. Surveyed and aligned by eye, designed by experience and built by hand from manufactured parts, these bridges span between craftsman traditions and industrial technology.

This is both their success and their failure. Because Dice built his lightweight suspension spans empirically using easily obtained materials and hand labor, they cost substantially less than comparable steel truss spans. This proved beneficial to counties and road districts seeking to economize on road and bridge construction. Dice's bridges are breathtakingly light, however, and most have aged poorly. Today ten of Dice's bridges remain in place, with varying degrees of physical integrity.

Other bridge builders, such as the Kansas City Bridge Company and the Midland Bridge Company, also constructed suspension bridges in Missouri during the early 20th century, but none of these latter structures is known to remain. The only vehicular suspension bridge in the inventory not attributable to Dice is a span over the Little Niangua River in Camden County, built from an experimental design by the Missouri State Highway Department in the 1930s.

## SUSPENSION BRIDGE

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MILL11	274001.7	Glaize Bridge	1922	1-414'	J.A. Dice	66 possible
MILL06	156001.2	Kemma Bridge	1924	1-167'	J.A. Dice	46 non-eligible
MILL08	199000.7	Brumley Bridge	c1925	1-216'	J.A. Dice	52 possible
MILL09	222001.8	Buetcher Bridge	c1925	1-140'	J.A. Dice	52 possible
MILL10	264000.2	Mill Creek Bridge	c1925	1- 96'	J.A. Dice	44 non-eligible
MILL07	181001.2	Boeckman Bridge	1926	2-160'	J.A. Dice	46 de-listed
BENT10	445500.2	Upper Bridge	1928	1-600'	Midland Erection Co.; J.A. Dice	73 eligible
MARIO2	none	Maries River Bridge	1928	1-150'	local force account labor	54 possible
COOP16	223000.4	Klenklen Bridge	1930	1-210'	J.A. Dice	58 determ. elig.
MARIO1	029003.0	Kaiser Bridge	1930	1-200'	local force account labor	54 determ. elig.
CAMD05	S 391	Little Niangua River Bridge	1933	3-225'	Clinton Bridge Works	77 eligible

# TIMBER TRUSSES

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It is not known how many covered bridges were built in Missouri. Popularly built between 1865 and 1890, hundreds were erected by local carpenters and contractors for the counties. The subsequent attrition has been intense, however, and today only four remain in place in the state. Among Missouri's earliest bridges, these celebrated spans feature typical timber/iron detailing and employ standard Howe and Burr trusses. All have been individually listed in the National Register and are today the centerpieces for state parks.

## COVERED TIMBER HOWE TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CAPE13	275000.1	Burfordville Covered Bridge	1858	1-130'	Joseph Lansmon	83 listed
LINN20	none	Locust Creek Covered Bridge	1868	1-150'	Bishop and Eaton	74 listed
JEFF05	J-102	Sandy Creek Bridge	1886	1- 75'	Henry Steffin	71 listed

## COVERED TIMBER BURR ARCH-TRUSS

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MONR32	none	Union Covered Bridge	1871	1-125'	Joseph C. Elliot	79 listed

# STEEL BEAM BRIDGES

Steel beam bridges, encompassing both stringers and girders, are the most rudimentary type of all-metal span. Steel stringer bridges are comprised of series of parallel beams—typically rolled I-beams—that extend the length of the span. Economically built from easily obtainable materials, stringer bridges began to replace short-span trusses for county roadway use in the late 1890s. Although they were built in abundance, only one of these 19th century spans, the Brush Creek Bridge in Moniteau County, has been identified by the statewide inventory. Such is the degree of bridge attrition in Missouri. Steel stringer construction picked up considerable impetus after the turn of the century, with the greater availability of rolled steel I-beam members. By the time the state highway department adopted the stringer as one of its standard short-span bridge designs, stringers had all but supplanted trusses for metal bridges under 40 feet in length. The highway department's designs, and similar stringer configurations commissioned by the cities and counties, found widespread acceptance in the 1920s and 1930s, and are continued to be built today. As a result, thousands of I-beam steel stringer bridges have been constructed in Missouri, and many remain in place today.

Girders employ a similar technology, substituting two or more deep-profile beams for the series of relatively shallow stringers. Rolled steel girders were built infrequently by Missouri's counties in the 1910s, due largely to the unavailability of sufficiently deep I-beams before 1928; plate girders, in both deck and through configurations, were used somewhat more frequently in the 1920s and 1930s. The state highway department maintained standard plans for plate girders and used them regularly for medium- and long-span river crossings and grade separations. Through the 1930s and 1940s, the department designed and built progressively longer steel beam bridges, using both rolled and plate girders in through and deck configurations. This culminated at the end of the decade with spans around 150 feet. Other longer girders had been built elsewhere in the country, but for Missouri, this represented a noteworthy technological feat.

## STEEL STRINGER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MONI03	056001.2	Brush Creek Bridge	1895	1- 26'	Kansas City Bridge Company	50 possible
FRAN25	F-425	Noser Mill Bridge	1902	4- 19'	Midland Bridge Company	54 possible
MERC10	086R01.8	Irwin Creek Bridge	1902	1- 30'	Dildine Bridge Company	41 non-eligible
MERC24	301000.1	Bridge	1902	1- 26'	Dildine Bridge Company	36 non-eligible
PULA07	089000.2	Burlington Northern Overpass	1902	3- 50'	Burlington Northern Railroad	43 non-eligible
BATE27	484003.8	Panther Creek Bridge	1903	1- 30'	Midland Bridge Company	36 non-eligible
BATE28	495001.6	South Double Branch Bridge	1903	1- 30'	Midland Bridge Company	36 non-eligible
CALL05	027001.4	Four Mile Branch Bridge	1905	3- 25'	Illinois Bridge & Iron Co.	33 non-eligible
DADE05	214002.3	Odell Bridge	1905	7- 20'	Canton Bridge Company	48 possible
GRUN40	310000.6	Medicine Creek Bridge	1905	1- 25'	Midland Bridge Company	36 non-eligible
KNOX19	167001.2	Cain Bridge	1906	2- 28'	J.K. Johnston	32 non-eligible
PETT02	074000.5	McClure Bridge	1906	2- 20'	Midland Bridge Company	43 non-eligible
PETT12	331000.2	Bridge	1906	2- 17'	Midland Bridge Company	43 non-eligible
VERN18	479000.7	Clear Creek Bridge	1906	5- 30'	A.M. Blodgett	45 non-eligible
VERN21	571000.7	Bridge	1906	3- 24'	A.M. Blodgett	44 non-eligible

# STEEL STRINGER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
WARR04	008000.4	Bailey Branch Bridge	1906	1- 24'	Stupp Brothers B&I Company	38 non-eligible
CALL24	265001.9	Bridge	1907	1- 21'	Illinois Bridge and Iron Co.	32 non-eligible
CARR12	103000.1	Bridge	1907	1- 30'	R.G. Culbertson	32 non-eligible
GRUN14	079000.2	Little No Creek Bridge	1907	1- 28'	county work force	30 non-eligible
GRUN33	235000.3	Bachelor Branch Bridge	1907	1- 24'	county work force	32 non-eligible
GRUN36	260000.2	Crooked Creek Bridge	1907	1- 26'	county work force	32 non-eligible
KNOX46	336000.6	Newkirk Bridge	1907	1- 28'	Dildine Bridge Company	36 non-eligible
MERC07	073001.4	Duncan Bridge	1907	1- 24'	Dildine Bridge Company	36 non-eligible
MERC11	092R00.3	Stone Bridge	1907	1- 30'	Dildine Bridge Company	41 non-eligible
VERN11	301000.0	Douglas Branch Bridge	1907	3- 21'	county work force	40 non-eligible
VERN15	360001.6	Green Branch Bridge	1907	4- 20'	county work force	40 non-eligible
CARR16	122001.4	Bridge Creek Bridge	1908	1- 34'	R.E. Bates	32 non-eligible
CARR19	144000.3	Bridge	1908	1- 30'	R.E. Bates	32 non-eligible
CARR51	367000.7	Bridge	1908	1- 28'	Kansas City Bridge Company	36 non-eligible
CARR55	389000.6	Bridge	1908	1- 28'	Kansas City Bridge Company	36 non-eligible
CARR60	438000.1	Big Creek Bridge	1908	1- 30'	R.G. Culbertson	32 non-eligible
CARR63	503000.8	Booker Slough Bridge	1908	3- 22'	Kansas City Bridge Company	44 non-eligible
CARR65	523001.9	Bridge	1908	1- 32'	Kansas City Bridge Company	36 non-eligible
CARR66	530001.8	Bridge	1908	1- 30'	Kansas City Bridge Company	36 non-eligible
MERC09	086000.1	Little Muddy Creek Bridge	1908	1- 30'	Dildine Bridge Company	41 non-eligible
VERN13	305000.3	Bridge	1908	3- 24'	county work force	40 non-eligible
VERN19	543001.1	Bridge	1908	4- 24'	county work force	41 non-eligible
CARR05	015000.9	Bridge	1909	1- 30'	R.E. Bates	32 non-eligible
CARR07	050000.4	Bridge	1909	1- 31'	R.G. Culbertson	30 non-eligible
CARR13	107000.4	Hurricane Creek Bridge	1909	1- 26'	R.E. Bates	32 non-eligible
CARR18	142000.2	Burr Oak Creek Bridge	1909	1- 31'	Midland Bridge Company	36 non-eligible
CARR22	177001.6	Bridge	1909	1- 24'	R.E. Bates	32 non-eligible
CARR61	453002.7	Bridge	1909	1- 28'	Kansas City Bridge Company	36 non-eligible
CARR69	559000.6	Bridge	1909	1- 24'	Midland Bridge Company	36 non-eligible
CARR71	619000.4	Bridge	1909	1- 34'	Kansas City Bridge Company	36 non-eligible
CARR72	621000.5	Bridge	1909	1- 28'	Kansas City Bridge Company	36 non-eligible
CARR73	623000.4	Bridge	1909	1- 28'	Kansas City Bridge Company	36 non-eligible
GRUN30	200000.4	Hickory Creek Bridge	1909	1- 24'	county work force	32 non-eligible
GRUN47	372000.4	Gees Creek Bridge	1909	1- 26'	county work force	32 non-eligible
MERC18	222000.3	West Muddy Creek Bridge	1909	1- 30'	Dildine Bridge Company	41 non-eligible
PUTN07	087000.2	Brown Bridge	1909	1- 30'	Canton Bridge Company	34 non-eligible
VERN06	136001.5	Ladies Branch Bridge	1909	3- 24'	county work force	40 non-eligible
VERN20	547000.5	McKill Creek Bridge	1909	5- 24'	county work force	41 non-eligible
BATE12	226000.3	Elkhart Branch Bridge	1910	1- 30'	Western Bridge Company	30 non-eligible
CALL02	019001.7	Bridge	1910	1- 20'	Stupp Brothers B&I Company	34 non-eligible
CALL03	019002.2	Auxvasse Branch Bridge	1910	1- 27'	Stupp Brothers B&I Company	34 non-eligible
CALL08	071001.5	Bridge	1910	1- 28'	Stupp Brothers B&I Company	34 non-eligible
CALL11	103000.2	Bridge	1910	2- 14'	Stupp Brothers B&I Company	29 non-eligible
CALL31	364001.9	Houfs Creek Bridge	1910	1- 23'	Stupp Brothers B&I Company	34 non-eligible
CALL35	406001.8	Hunt Branch Bridge	1910	1- 30'	county work force	34 non-eligible
CALL41	465000.9	Bridge	1910	1- 30'	Stupp Brothers B&I Company	34 non-eligible
CARR24	202000.1	Bridge	1910	1- 26'	R.E. Bates	30 non-eligible
CARR31	256000.5	Hurricane Creek Bridge	1910	1- 24'	R.E. Bates	30 non-eligible
CARR32	261000.7	Wolf Creek Bridge	1910	1- 35'	R.E. Bates	30 non-eligible
CARR38	293001.4	Sand Branch Bridge	1910	1- 32'	R.E. Bates	30 non-eligible

# STEEL STRINGER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CARR59	424000.4	Bridge	1910	1- 30'	R.E. Bates	30 non-eligible
CARR67	547001.2	Miller Branch Bridge	1910	1- 27'	Kansas City Bridge Company	34 non-eligible
CARR70	594001.3	Bridge	1910	1- 26'	Kansas City Bridge Company	34 non-eligible
GRUN37	273000.1	Bridge	1910	1- 36'	county work force	32 non-eligible
KNOX56	397001.5	Million Branch Bridge	1910	1- 27'	Thomas Upright	30 non-eligible
BENT01	012000.3	Persimmon Fork Bridge	1911	1- 24'	county work force	30 non-eligible
CARR09	093000.8	Rock Branch Bridge	1911	1- 25'	R.E. Bates	30 non-eligible
CARR36	289000.6	Bridge	1911	1- 30'	Kansas City Bridge Company	30 non-eligible
CARR47	349000.3	Fish Pond Creek Bridge	1911	1- 36'	Kansas City Bridge Company	34 non-eligible
CARR58	407000.6	Bridge	1911	1- 28'	R.E. Bates	30 non-eligible
GRUN09	056000.2	Honey Creek Bridge	1911	1- 28'	county work force	30 non-eligible
GRUN41	320001.5	Crooked Creek Bridge	1911	1- 30'	county work force	32 non-eligible
KNOX05	025000.2	Schragge Bridge	1911	1- 36'	Walters Brothers	30 non-eligible
MONI04	092001.6	Schmidt Creek Bridge	1911	1- 30'	Kansas City Bridge Company	39 non-eligible
NEWT07	086001.7	Dry Branch Bridge	1911	1- 24'	Western Bridge Company	30 non-eligible
CALL12	109000.5	Booker Bridge	1912	1- 25'	Stupp Brothers B&I Company	34 non-eligible
CALL39	444002.5	Covington Bridge	1913	1- 23'	county work force	34 non-eligible
CARR43	330000.5	McCroskie Creek Bridge	1912	1- 36'	R.E. Bates	30 non-eligible
COOP09	067001.8	Bridge	1912	1- 22'	Kansas City Bridge Company	34 non-eligible
GRUN12	070001.1	Big No Creek Bridge	1912	1- 22'	county work force	30 non-eligible
GRUN45	357000.2	Gees Creek Bridge	1912	1- 28'	county work force	30 non-eligible
MONR14	233001.3	Briar Creek Bridge	1912	1- 34'	Decatur Bridge Company	28 non-eligible
SCOL03	005R00.4	Tucker Bridge	1913	1- 32'	G.M. Woodruff	30 non-eligible
CALL33	387000.5	Buckner Bridge	1913	1- 30'	county work force	34 non-eligible
CALL34	395000.8	McPheeters Bridge	1913	1- 28'	county work force	34 non-eligible
GRUN11	066001.5	Big No Creek Bridge	1913	1- 28'	county work force	30 non-eligible
CARR10	100000.2	Bridge	1914	1- 30'	Frank Yehle	30 non-eligible
CARR14	117000.2	Hurricane Creek Bridge	1914	1- 30'	R.E. Bates	30 non-eligible
CARR29	238000.8	Shootman Creek Bridge	1914	1- 29'	M.E. Grant	30 non-eligible
GRUN44	352000.1	Stevens Branch Bridge	1914	1- 24'	county work force	30 non-eligible
JOHN13	250000.3	Todd Bridge	1914	1- 24'	Western Bridge Company	30 non-eligible
PUTN03	070000.4	Bridge	1914	1- 34'	L.H. Elson	32 non-eligible
SACL03	056R01.9	Gallinipper Bridge	1914	1- 30'	Standard Bridge Company	37 non-eligible
CEDA04	022002.5	Little Alder Creek Bridge	1915	1- 28'	Canton Bridge Company	37 non-eligible
GRUN19	089003.0	Bridge	1915	1- 22'	county work force	32 non-eligible
BARR04	043000.7	Hudson Creek Bridge	1916	2- 20'	M.E. Gillioz	37 non-eligible
CHAR15	158001.2	Jones Branch Bridge	1916	1- 29'	Vincennes Bridge Company	41 non-eligible
HENR09	200000.4	Bridge	1916	1- 30'	county work force	30 non-eligible
CEDA08	117000.1	Keich Ford Bridge	1917	1- 28'	county work force	35 non-eligible
MONT10	154000.6	Palmer Bridge	1917	1- 30'	county work force	35 non-eligible
MONT15	210000.3	McCarty Bridge	1917	2- 15'	county work force	37 non-eligible
CARR48	349001.2	McCroskie Creek Bridge	1918	1- 30'		24 non-eligible
DAVI37	435000.1	Brushy Creek Branch Bridge	1918	1- 23'		24 non-eligible
CLIN10	104000.3	Little Platte River Bridge	1918	1- 27'	St. Joseph Struct. Steel	30 non-eligible
BOLL05	032002.6	Whitewater River Bridge	1919	1- 24'		24 non-eligible
DAVI05	044002.8	Little Creek Bridge	1919	1- 40'		24 non-eligible
SALI17	172000.5	Rock Creek Bridge	1919	1- 27'	county work force	30 non-eligible
BART01	077000.1	Daugherty Bridge	1921	1- 30'	Gonterman	26 non-eligible
HENR23	567000.6	Truman Lake Bridge	1930	18-26'	O.O. Fuller	40 non-eligible
HENR24	567001.0	Truman Lake Bridge	1930	15-25'	O.O. Fuller	40 non-eligible

## STEEL STRINGER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
DEKA01	J 777	Grindstone Creek Bridge	1931	12-20'	H.C. Botsford	42 non-eligible
SCHU01	K 25	Chariton River Bridge	1932	14-25'	Pittsburgh-Des Moines Steel Co.	42 non-eligible
ADA101	K 22	Chariton River Bridge	1933	13-30'	M.E. Gillioz	42 non-eligible
DUNK02	K 838	Bridge	1939	12-30'	Fred Weber Jr./C.H. Atkinson	40 non-eligible
PLAT06	K 754R	Highway 92 Viaduct	1939	16-50'	Fred M. Clark and Son	45 non-eligible
HOWA03	K 936	MKT Railroad	1941	6-100'	Otto W. Knutson	41 non-eligible
JACK52	S147B21	Troost Avenue Viaduct	1943	10-56'	List and Weatherly	48 possible
RAY003	K 900	Henrietta Viaduct	1946	12-78'	J.D. Tobin Construction Co.	43 determ. non-elig.
GREN04	X 710	James River Bridge	1947	4-100'	F.D. Choate Constr. Company	43 non-eligible
CRAW02	X 758	Meramec River Bridge	1948	3-105'	Atkinson-Windle Company	42 non-eligible
SAGE06	X 421	Saline Creek Bridge	1948	3-105'	W.J. Menefee Construction Co.	37 non-eligible

## STEEL ROLLED DECK GIRDER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JASP10	067000.5	Coon Creek Bridge	1910	2- 27'		40 possible
CALD49	028000.8	West Sheep Creek Bridge	1922	1- 35'	Bean and Company	36 possible

## STEEL PLATE DECK GIRDER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JACK19	S026B33	Lexington Avenue Viaduct	1901	5- 95'	Central Electric Railway Co.	51 possible
SALI05	027001.6	Muddy Creek Bridge	1907	1- 35'	county work force	47 possible
SALI04	025000.9	Muddy Creek Bridge	1910	1- 35'	county work force	47 possible
SALI11	142001.0	Finney Creek Bridge	1911	1- 30'	Illinois Steel Bridge Company	47 possible
SALI13	150000.5	Dicks Branch Bridge	1912	1- 30'	county work force	47 possible
GREN22	068001.3	Ash Grove Overpass	1915	1- 36'	Canton Bridge Company	45 non-eligible
JACK29	S052B11	Oak Street Viaduct	1931	12-100'		37 non-eligible
STLO04	J 217	Wabash Railroad Overpass	1935	3- 66'	Skrainka Construction Co.	44 non-eligible
CLAY02	K 647	Fishing River Bridge	1936	1-100'	Otto W. Knutson	38 non-eligible
JACK39	S082B33	Blue Parkway Viaduct	1936	14-105'	List Construction Company	47 possible
JACK42	S106B12	63rd Street Viaduct	1936	6-140'	W.A. Ross Constr. Company	50 possible
JACK27	S048B11	East 23rd Street Viaduct	1938	18-110'	Wisconsin Bridge & Iron Co.	51 possible
GREN03	K 818	Little Sac River Bridge	1939	1-110'	Otto W. Knutson	43 non-eligible
JACK20	S028B31	Grand Avenue Viaduct	1940	14-109'	J.A. Tobin Constr. Company	41 non-eligible
JACK26	S047B21	Manchester Trafficway	1940	4-100'	Kansas City Bridge Company	43 non-eligible
STLO10	K 795R	Clayton Road Overpass	1941	3-123'	Blackwell Corporation	38 non-eligible
SALI02	G 518R2	Blackwater River Bridge	1948	3-115'	C.E. Maxwell and Son	36 non-eligible
CAPE06	L 297R	Bridge	1949	3-150'	R.B. Potashnick	51 possible
CASS01	H 453R1	Archie Bridge	1951	3-140'	Knutson-Gould Construction Co.	38 non-eligible
PLAT07	L 354R1	Platte River Bridge	1951	3-115'	Maxwell Bridge Company	38 non-eligible

# STEEL PLATE THROUGH GIRDER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
MERC16	162000.0	C&NW Railroad Overpass	1901	1- 66'	Chicago and North Western RR	36 non-eligible
SALI25	299000.7	Fish Creek Bridge	1910	1- 35'	county work force	55 possible
BOLL03	K 663	Whitewater River Bridge	1936	3-100'	Kelly and Underwood	57 possible
GRUN04	T 899	Weldon River Bridge	1936	3-105'	Bushman Construction Co.	57 possible
JASP11	072000.1	Hawthorne Drive Viaduct	1936	1-100'	Neyer Construction Company	54 possible
PIKE02	K 322	Ramsey Creek Bridge	1936	1-100'	Martin Wunderlich	54 possible
PLAT04	K 491	Bear Creek Bridge	1936	1-100'	Mike Haase	54 possible
PLAT05	K 698	Weston Viaduct	1936	1-115'	Mike Haase/Oscar H. Schmidt	54 possible
PULA05	T 474	Gasconade River Bridge	1936	1-105'	George W. Condon Company	54 determ. non-elig.
BUCH03	K 590	U.S. Highway 59 Overpass	1937	7-115'	Sandy Hites	60 possible
CAPE04	K 768	Castor River Bridge	1938	3-110'	Condon, Cunningham, Lemmon	54 possible
CAPE06	L 297R	Ditch No. 2 Bridge	1949	3-150'	R.B. Potashnick	53 possible



# STEEL RIGID FRAMES

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Steel rigid-frame bridges were developed in the late 19th century and marketed extensively to the counties by bridge fabricators as the bedstead truss. Due primarily to their structural shortcomings, bedsteads largely fell from favor soon after the turn of the century in virtually all of the country except Missouri. Eventually even Missouri counties stopped buying bedsteads. The rigid-frame design remained dormant in the state until the highway department revived it in the early 1930s with a limited number of urban viaducts and overpasses. But MSHD's use of rigid frames proved shortlived before World War II, limited primarily to Kansas City and St. Louis, and the department never adopted it as a structural standard. The only remaining examples in Missouri of this rather esoteric structural type are three Jackson County structures built in 1934 and the Chouteau Avenue Viaduct in St. Louis.

## STEEL RIGID FRAME

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JACK06	K 392R	Winner Road Bridge	1935	3-130'	M.E. Gillioz	69 possible
JACK07	K 393R	Winner Road Viaduct	1935	8- 46'	M.E. Gillioz	61 possible
JACK08	K 394R	Winner Road Viaduct	1935	17-76'	M.E. Gillioz	66 possible
STLC10	400.08	Chouteau Avenue Viaduct	1937	3-103'	Chase Construction Company	64 possible

# CONCRETE SLABS

With its deck and superstructure poured integrally in a single flat sheet, the simple slab is the most rudimentary of the concrete bridge types. A few concrete slabs were built by the counties or by railroads after the turn of the century, but it was not until 1920 when the state highway department adopted the slab as one of its short-span bridge standards that the structural type found widespread acceptance. Thousands of MSHD slabs were built throughout the state, and numerous examples remain in place today.

## CONCRETE SLAB

Inv. No.	MHTD	Structure name	date	spans	builder	rating
BATE14	263001.3	Bones Branch Bridge	1908	2- 15'	county work force	34 non-eligible
JASP27	685002.1	Bridge	1908	1- 22'		28 non-eligible
BARR03	023000.1	Dry Branch Bridge	1912	1- 29'	A.P. Hagedorn	30 non-eligible
GREN21	065015.9	Yeakley Bridge	1913	1- 24'	Canton Bridge Company	32 non-eligible
GREN10	018006.4	Bridge	1914	2- 17'	Canton Bridge Company	46 possible
NEWT03	Z 210	Spring Branch Bridge	1914	2- 17'	Concrete & Steel Const. Co.	31 non-eligible
BOLL06	045002.5	Whitewater River Bridge	1915	7- 14'	county work force	41 non-eligible
LAWR03	091000.8	Sac River Bridge	1915	4- 18'	Fred L. Appleby	46 possible
AUDR01	028000.4	Bridge	c1915	1- 21'		26 non-eligible
GREN12	021004.0	Bridge	1916	2- 14'	W.W. Simmons	39 non-eligible
LAWR12	477001.5	Bridge	1916	2- 22'	Canton Bridge Company	46 possible
LAWR18	796000.2	Bridge	1916	2- 13'	Canton Bridge Company	41 non-eligible
JASP15	179001.0	Miller Ford Bridge	1917	5- 32'	Fred L. Appleby	42 non-eligible
JEFF09	104500.2	Mississippi Avenue Overpass	1917	5- 21'	St. Louis and Santa Fe Railroads	31 non-eligible
SAFR06	149000.2	Bridge	1917	2- 13'	road district work force	37 non-eligible
MORG03	079001.0	Straight Fork Bridge	1918	3- 11'		32 non-eligible
POLK07	129000.9	Campbell Creek Bridge	1918	2- 23'	road district work force	32 non-eligible
POLK12	286002.1	Coffman Branch Bridge	1918	1- 20'	special road district force	32 non-eligible
LAWR06	251000.6	Henson Bridge	1919	4- 16'	Ira Patton	39 non-eligible
NEWT12	220501.1	Jackson Avenue Bridge	1919	8- 17'		32 non-eligible
SCOT03	066000.3	Henderson Branch Bridge	1919	1- 20'	Stanford Madden	47 possible
LAWR17	560000.6	Adams Ford Bridge	1920	4- 25'	M.E. Gillioz	41 non-eligible
NEWT23	611000.8	Stella Bridge	1920	4- 20'	Concrete & Steel Constr. Co.	33 non-eligible
LAWR02	082001.0	Johnson Bridge	1923	1- 23'	John Newberry	20 non-eligible

# CONCRETE GIRDERS

The state highway department formed the impetus for concrete construction in the 1920s, designing and building numerous short-span concrete deck girders as primary or approach spans on bridges. Although the concrete deck girder was a mainstay structural type in the 1920s, 1930s and 1940s—due entirely to MSHD—relatively few concrete girder bridges in Missouri pre-date the highway department period, because the counties were slow to embrace reinforced concrete for construction of vehicular bridge superstructures in the 1910s.

Through girders, in which the structural reinforcing was incorporated into widened guardrails, were more uncommon than deck girders. The advantage of this structural type was that it required less clearance between the roadway and the high water mark than did the deck girder. Its disadvantages were that it required slightly more material than the deck girder and it was not as flexible: with the structural members above the deck, the through girder could not be widened later. Ultimately the disadvantages outweighed the advantages, and the through girder was phased out of common use in Missouri by the late 1910s.

Most of the state's remaining concrete girder bridges are relatively short, single-span structures over minor watercourses. A few urban viaducts use deck girders in multiple-span configurations; most of these have been altered subsequently by deck widenings and/or guardrail replacements.

## CONCRETE DECK GIRDER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CLAY09	U1370131	Wildwood Avenue Overpass	1907	1- 31'		29 non-eligible
JACK10	K 653R1	Rock Creek Bridge	1911	3- 60'	Metro Street Railway Co.	39 non-eligible
LAWR14	531001.1	Honey Creek Bridge	1914	2- 26'	T.A. Miller	45 possible
LAWR15	531001.2	Honey Creek Bridge	1914	1- 24'	T.A. Miller	45 possible
LAWR16	531001.4	Spring River Bridge	1914	2- 20'	T.A. Miller	44 possible
STLC02	230.01	Arsenal Street Overpass	1914	3- 31'	John B. Turner	48 possible
STLC05	230.04	Columbia Avenue Overpass	1914	3- 31'	John B. Turner	48 possible
ADAI08	036000.8	Wayman Bridge	1915	1- 30'	Carter and Hughes	45 possible
FRAN27	U4300004	Church Street Bridge	1915	1- 25'	Missouri Construction Company	42 non-eligible
ADAI15	280000.3	Bridge	c1915	1- 24'	Carter and Hughes	20 non-eligible
JACK31	S055B21	31st Street Overpass	1916	3- 50'		39 non-eligible
COLE10	218000.1	Cole Junction Bridge	1917	3- 40'	Pope Construction Company	50 possible
GREN09	017011.9	Sycamore Bridge	1917	4- 35'	Matthews and Sturdevant	55 possible
HENR07	193000.6	Newman Bridge	1917	3- 32'	Canton Bridge Company	54 possible
JACK24	S030B42	Beardsley Street Viaduct	1917	16-40'		33 non-eligible
LAWR11	362002.9	Lister Ford Bridge	1917	3- 34'	Fred L. Appleby	52 possible
STLC04	230.03	Chouteau Avenue Viaduct	1917	30-38'		41 non-eligible
STLC06	240.01	Broadway Viaduct	1917	15-25'		41 non-eligible
MADI05	110000.1	Rock Creek Bridge	1919	1- 40'		47 possible
NEWT05	026004.5	Tipton Ford Bridge	1918	14-50'	Concrete & Steel Constr. Co.	60 possible
LAWR09	342000.1	Elm Street Bridge	1919	3- 35'	M.E. Gillioz	44 non-eligible

## CONCRETE DECK GIRDER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
SCOT02	043000.5	Ramsey Branch Bridge	1919	1- 32'	Stanford Madden	47 possible
COOP22	030003.7	Thomas Branch Bridge	1920	1- 36'	Pope Construction Company	46 possible
CAPE10	162001.2	Bridge	c1920	1- 21'		26 non-eligible
JACK30	S053B21	23rd Street Viaduct	1921	36-97'	A.S. Hecker	39 non-eligible
FRAN13	F-59	Tavern Creek Bridge	c1925	1- 33'		50 possible
GREN07	U4075046	Benton Avenue Viaduct	1927	26-53'	M.E. Gillioz	42 non-eligible
GREN08	U4075047	Grant Avenue Viaduct	1927	30-56'	List & Weatherly Const. Co.	42 non-eligible
JASP19	220501.7	Joplin Creek Bridge	1927	12-55'		39 non-eligible
BUCH36	386500.2	Great Western Viaduct	1927	3- 35'	Carrother and Huggins	51 possible
BUCH37	386500.6	Eleventh Street Underpass	1927	1- 42'		53 possible
BUCH38	386500.8	Eighteenth Street Underpass	1927	1- 30'	Whitham Construction Co.	41 non-eligible
BUCH39	386501.4	King Hill Overpass	1927	3- 44'	Whitham Construction Co.	51 possible
STLC07	260.03	Kingshighway Viaduct	1927	9- 42'	Bailey and McMahon	50 possible
JASP04	H 311	Highway 71 Viaduct	1928	13-45'	List and Weatherly	45 non-eligible
HOWA02	K 744	MKT Railroad Bridge	1939	19-54'	Carrothers and Crouch	51 possible
JASP08	U2205001	Seventh Street Viaduct	1940	12-55'		39 non-eligible

## CONCRETE THROUGH GIRDER

Inv. No.	MHTD	Structure name	date	spans	builder	rating
RALL03	071000.1	Ilasco Bridge	1910	2- 20'	Portland Cement Company	57 possible
GREN18	052009.4	Cave Springs Bridge	1915	1- 36'	Canton Bridge Company	56 possible
GREN20	065015.5	Sac River Bridge	1915	1- 32'	Canton Bridge Company	56 possible
LAFA04	Y 845	Dyer Rock Creek Bridge	1917	1- 24'	Vermillion Brothers	36 non-eligible
AUDR08	227000.5	Little Scull Lick Creek Bridge	c1920	1- 30'		32 non-eligible
AUDR09	266002.2	Scattering Fork Bridge	c1920	1- 22'		25 non-eligible
NEWT27	715000.3	Dry Branch Bridge	c1920	1- 30'		30 non-eligible
MARN18	249002.2	Bear Creek Bridge	1921	1- 40'	county work force	57 possible
SALI43	477000.1	Eastwood Road Overpass	1923	3- 35'	Missouri Pacific Railroad	59 possible

# CONCRETE FILLED SPANDREL ARCHES

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Unlike many Midwestern states, Missouri did not employ reinforced concrete extensively for construction of vehicular bridge superstructures in the 1910s. The various counties and, to a lesser extent, the state highway department continued to prefer steel for bridge superstructures well after concrete had received widespread acceptance elsewhere. This, combined with subsequent attrition, has resulted in a relatively small number of concrete bridges that exist today from this formative period. Of the more than 13,000 pre-1951 bridges identified in Missouri by the statewide historic bridge inventory, only about 85 are filled spandrel concrete arches. These break down into roughly three equal groups: arches built to carry urban streets, those built by the state highway department in the 1920s and 1930s to carry highways and those built by the counties at rural county road crossings.

The first group contains Missouri's oldest concrete arch bridge, the Franklin Bridge in St. Louis, a filled spandrel arch that appears to employ the Melan patent for its reinforcing. "Melan's system, introduced in America in 1893, was used extensively in highway bridges and in some pedestrian spans," stated David Plowden in *Bridges: The Spans of North America*. "It can be said to have heralded a new and unimaginative era of bridge design." In spite of the economy and structural advantages of a system like [San Francisco engineer Ernest] Ransome's, engineers grasped at Melan's system in which they saw a safe compromise. It was another step in the emancipation of concrete from the traditions of stone masonry, but it did not free it entirely." The Franklin Bridge was, to be sure, a modest step. With a 46-foot span, it could almost as well been built using unreinforced concrete. But the step was a significant one, for it marked one of the earliest attempts at reinforced concrete bridge construction in America. Another St. Louis arch, the McKinley Bridge is distinguished as one of the formative steps in America of square-bar reinforcing.

Patterned loosely after the Melan design and patented in 1905, the filled spandrel arch of Daniel Luten was promoted to western Missouri's counties by the Topeka Bridge and Construction Company, which functioned as a licensee to Luten, designing and building Luten's patented arches under a patent royalty agreement. Missouri's Luten arches are both modest and late in their construction, but are noteworthy nonetheless for their representation of this early concrete technology.

Far more numerous than these proprietary arches are the concrete arches built from unpatented designs. Several of these were constructed in the first part of the 20th century, but it was not until 1919 when the state highway department delineated standard arch plans that this structural type found widespread acceptance at rural road crossings. MSHD's arch design featured an elliptical profile and resembled Daniel Luten's patented filled spandrel arch. Concrete arches lent themselves well to urban bridges, because they were more stable under load than steel bridges and presented a more aesthetic appearance than trusses. For this reason, many of the most noteworthy filled spandrel arches are urban bridges, built as part of the park systems of Kansas City and St. Louis. Although more durable than steel trusses, concrete filled spandrel arches have undergone a substantial attrition of their number in recent years, the result of which is that most of the hundreds of arches built in Missouri have been demolished.

## CONCRETE MELAN ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
STLC11	600.03	Franklin Bridge	1898	1- 46'		70 eligible

## CONCRETE LUTEN ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CLAY11	049001.6	New Hope Creek Bridge	1919	2- 43'	Topeka Bridge and Iron Co.	64 possible
CLAY22	354000.2	Williams Creek Bridge	1920	2- 48'	Topeka Bridge and Iron Co.	54 possible
CLAY20	153001.3	Wilkerson Creek Bridge	1921	1- 60'	Topeka Bridge and Constr. Co.	62 possible
BUCH08	W 444	Bee Creek Bridge	1922	1- 50'	Topeka Bridge and Constr. Co.	58 possible
BUCH09	Y 10	Brady Branch Bridge	1922	3- 27'	Topeka Bridge and Constr. Co.	58 possible

## CONCRETE FILLED SPANDREL ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
STLC13	600.07	McKinley Bridge	1902	1- 46'	Louisiana Purchase Exposition	56 possible <i>NE</i>
JACK47	S131B21	Hillcrest Road Bridge	1906	2- 20'	Midland Bridge Company	50 possible
JACK67	243500.5	Little Blue River Bridge	1911	1- 40'	Midland Bridge Company	48 possible
JACK72	297000.4	Marble Creek Bridge	1911	1- 43'	J.C. Brown	47 possible
JACK73	302000.6	Sni-A-Bar Creek Bridge	1911	1- 50'	Illinois Steel Bridge Company	49 possible
LAF03	L 90R	Graham Branch Bridge	1911	1- 28'		32 non-eligible
JACK14	Y 24	Sni-A-Bar Creek Bridge	1912	1- 45'	Illinois Steel Bridge Company	50 possible
JASP26	628000.7	Johnson Arch Bridge	1912	1- 80'	MO Valley Bridge & Iron Works	56 possible <i>NE</i>
GREN06	U4075029	Zoo Park Bridge	1913	1- 20'	Canton Bridge Company	35 non-eligible
JACK41	S084B11	Raytown Road Bridge	1913	1- 40'	Mulholland Construction Co.	42 non-eligible
STLC03	230.02	Carondolet Park Bridge	1913	1- 95'	John V. Boland	54 possible
MACD06	311003.1	State Line Bridge	1914	2- 29'		24 non-eligible
BUCH27	191000.2	Bridge	1916	1- 24'		26 non-eligible
BUCH20	116000.4	Jenkins Creek Bridge	1917	1- 50'		34 non-eligible
JACK45	S128B11	Paseo Overpass	1917	1- 63'	Hannenkratt and Murno	56 determ. elig.
JACK46	S128B12	Paseo Overpass	1917	1- 63'	Hannenkratt and Murno	56 determ. elig. <i>50'</i>
GREN27	128003.9	Sac River Bridge	1918	1- 45'	Pioneer Construction Company	49 possible
JACK36	S080B22	Woodland Avenue Bridge	1918	1- 75'	Burt L. Elmer	38 non-eligible
STLC09	400.01	Bellerive Park Bridge	1918	1- 94'	Herkoltz and Herchert	51 possible <i>DD</i>
JASP29	699002.5	Jones Creek Bridge	1919	1- 20'		24 non-eligible
NEWT08	089002.4	Jones Creek Bridge	1919	1- 26'	Concrete & Steel Constr. Co.	30 non-eligible
NEWT26	713000.6	Granby Bridge	1919	5- 43'	Concrete & Steel Constr. Co.	53 possible
NEWT04	008000.3	Fillmore Bridge	1920	4- 66'	Concrete & Steel Constr. Co.	55 possible <i>NE</i>
JACK18	S026B32	Cliff Drive Overpass	1920	1- 82'	H.B. Thompson	53 possible
BUCH22	117002.3	Wolf Pen Creek Bridge	c1920	1- 27'		18 non-eligible
CLAY23	247500.9	Rush Creek Bridge	c1920	1- 26'		21 non-eligible
CLIN07	058000.7	Grindstone Creek Bridge	c1920	1- 25'		18 non-eligible
GASC05	134002.0	Bridge	c1920	1- 30'	county work force	23 non-eligible
JACK32	S078B31	50th Street Bridge	c1920	2- 36'		34 non-eligible
JASP16	196001.7	Spring River Bridge	c1920	1- 52'		21 non-eligible
NEWT24	655001.3	Sycamore Creek Bridge	c1920	1- 50'		26 non-eligible
PLAT08	N236B11	Interurban Road Bridge	c1920	2- 52'		19 non-eligible
PLAT09	N237B32	Interurban Road Bridge	c1920	2- 26'		16 non-eligible
PLAT16	136001.7	Jowler Creek Bridge	c1920	2- 48'		30 non-eligible

# CONCRETE FILLED SPANDREL ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
RAY018	351002.4	Rolling Creek Bridge	c1920	1- 30'		20 non-eligible
SAFR04	125000.6	Taylor Branch Bridge	c1920	1- 23'		25 non-eligible
SAFR05	132000.1	East Main Street Bridge	c1920	3- 33'		28 non-eligible
CLAY03	N111B21	Shoal Creek Bridge	1921	1- 55'	Phillips Contracting Co.	49 possible
CLAY12	070002.1	Carroll Creek Bridge	1921	1- 42'	Phillips Contracting Company	49 possible
CLAY22	247500.7	Campbell Drive Bridge	1921	1- 40'		26 non-eligible
IRON02	F 990	Townsend Branch Bridge	1922	1- 40'	St. Louis Bridge & Supply Co.	47 possible NBT
IRON03	F 991	Gum Spring Branch Bridge	1922	1- 40'	St. Louis Bridge & Supply Co.	47 possible
IRON04	F 992	East Fork Bridge	1922	1- 40'	St. Louis Bridge & Supply Co.	47 possible
STLC14	600.08	Old Stable Bridge	1922	1- 38'		46 possible
STLO01	F 180R1	Mattese Creek Bridge	1922	1- 50'	Unit Construction Company	39 non-eligible
VERN01	F 815R	Fly Creek Bridge	1922	1- 60'	R.R. Littrell	44 determ. non-elig.
IRON05	G 269R	Reeds Creek Bridge	1923	1- 50'	J.P. Sparks	37 determ. non-elig.
PLAT01	F 151	Mitchell Creek Bridge	1923	1- 30'	L.A. Woods Construction Co.	47 possible
PULA01	G 455A	Waynesville Bridge	1923	5- 80'	Koss Construction Company	50 possible
SALI44	477000.2	Eastwood Road Bridge	1923	3- 90'	M.E. Gillioz	59 possible
STLO02	G 681R	Deer Creek Bridge	1923	1- 70'	E.C. Johnson	37 non-eligible
GREN05	U4075021	Olive Street Bridge	1924	1- 21'		25 non-eligible
SHAN01	G 804A	Current River Bridge	1924	5-130'	M.E. Gillioz	57 possible
CRAW01	H 117R	Meramec River Bridge	1925	5-110'	Federal Bridge Company	54 possible Jan 0
OZAR02	253000.3	Barren Fork Bridge	1925	3- 80'	Republic Concrete Constr. Co.	49 possible
CALD01	H 27R	Log Creek Bridge	1925	1- 60'	Land Construction Company	36 non-eligible
POLK01	H 21A	Barren Creek Bridge	1925	1- 80'	A.A. Davis Construction Co.	43 non-eligible
CALL16	155500.6	East Tenth Street Bridge	c1925	1- 25'		11 non-eligible
CALL17	155500.7	East Eighth Street Bridge	c1925	1- 21'		11 non-eligible
BUCH10	Z 336	Bridge	c1925	1- 21'		18 non-eligible
BUCH41	386502.2	Bridge	c1925	1- 32'		18 non-eligible
COLE06	069001.6	Wears Creek Bridge	c1925	1- 36'		20 non-eligible
JACK65	212502.3	Wilson Street Bridge	c1925	1- 45'		31 non-eligible
STLO03	H 990R	Two Mile Creek Bridge	1930	1- 60'	W.C. McNeely Construction Co.	37 non-eligible
FRAN10	F-52	Labadie Creek Bridge	c1930	1- 31'		27 non-eligible
LACL05	T 408	Spring Creek Bridge	1934	3- 37'	L.G. Barcus	41 non-eligible
LACL06	T 409	Mill Race Bridge	1934	1- 27'	L.G. Barcus	28 non-eligible
JACK35	S080B21	Paseo Boulevard Bridge	c1935			14 non-eligible
JASP21	228000.7	Bridge	c1935	1- 32'		18 non-eligible

# CONCRETE OPEN SPANDREL ARCHES

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By 1910 four concrete arches had been built in America with span lengths exceeding 175 feet. One feature that they all shared was their open spandrel configuration. For shorter spans, engineers typically employed the filled spandrel arch, with the roadway supported by earth fill poured over the continuous arch ring. Engineers of the time could not accurately calculate the stresses with earth fill over the arch ring. They did not know the exact amount of horizontal thrust on the ring caused by the fill, and the weight of the earth could be variable by the truckload and by season. They were therefore reluctant to commit to long-span design without clear stress analysis. The principal justification for open spandrel arches, however, was the immense weight of earth fill for large arches, which would necessitate the design of an unnecessarily massive and expensive structure.

The earliest open spandrel arches featured single, relatively thin arch ribs that extended continuously over the width of the bridge. Around 1910 engineers began to experiment with multi-rib designs that used several individual ribs in lieu of continuous ribs. There were several advantages to this structural form. First, less material was used for the individual ribs. Additionally, the floor of a multiple-rib bridge could be supported by a single row of columns on each rib, whereas on the continuous spandrel design several rows of columns or even continuous walls were necessary to distribute the weight of the deck evenly over the arch rib. Finally, on ribbed arch bridges, the outer edges of the floor could be cantilevered beyond the outside ribs, allowing for narrower sub-deck configurations with narrower and more economical abutments.

Only one continuous-rib arch remains in place in Missouri—a small-scale bridge built in Audrain County in 1901. Several later ribbed arches can be found. These are represented by a handful of urban bridges (primarily in St. Louis and Kansas City) and a sizable number of rural highway bridges designed by the Missouri State Highway Department. The former group contained Missouri's two most significant concrete viaducts—the Kingshighway Viaduct in St. Louis and the Twelfth Street Trafficway in Kansas City. Completed in 1911 with a span length of 170 feet, the Kingshighway structure ranked among the longest concrete arches in America at the time. It has recently been demolished. Completed in 1914, The Twelfth Street Trafficway employs an exceedingly rare double-deck through arch; it remains in use today.

More numerous than the urban structures are the open spandrel arches built by MSHD. In the mid-1920s the highway department developed plans for two-ribbed open spandrel arches of varying spans. With their cantilevered deck and fluted pylons and the arch corners, these structures closely resembled one another, differing only in length and detailing and, in some cases, the degree of skew. For whatever reason, MSHD concentrated its open spandrel arches in the Ozarks region of southern Missouri, and some of the state's most noteworthy examples of this bridge type can be found in Greene, Douglas, Stone and Taney counties.



## CONCRETE CONTINUOUS RIB OPEN SPANDREL ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
AUDR07	197000.1	Five Mile Creek Bridge	1901	1- 30'	county work force (prob.)	64 possible

## CONCRETE RIBBED OPEN SPANDREL ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
CLAY16	137000.6	Garland Street Bridge	1917	1- 68'	Western Bridge Company	52 possible
JACK37	S080B31	Troost Avenue Bridge	1917	1- 75'	Fox Redpath Constr. Co.	47 possible
JACK28	S051B31	27th Street Viaduct	1917	7-120'	McMillan Contracting Co.	63 possible
CLAY15	137000.5	Marietta Street Bridge	c1920	1- 72'		31 non-eligible
JACK38	S081B41	Sebree Bridge	1923	8- 80'		47 possible
SHAN02	H 79	Sinking Creek Bridge	1925	3- 80'	Public Works Construction Co.	50 possible
TANE01	H 39	Bull Creek Bridge	1925	3- 80'	C.T. Fogle	51 possible
GREN01	H 123A	Sac River Bridge	1926	3-100'	A.P. Poirot	50 possible
BUCH42	386502.5	Whitehead Creek Bridge	1927	1- 30'	W.A. Abrams	46 possible
CLIN01	H 653R	Plattsburg Bridge	1927	1- 64'	Mike Haas	34 non-eligible
STON04	H 404	Y Bridge	1927	5-100'	Koss Construction Company	74 listed
GREN02	H 636	Pomme de Terre River Bridge	1928	3-100'	M.E. Gillioz	50 possible
IRON07	H 393	Stouts Creek Bridge	1928	1-123'	Republic Concrete Constr. Co.	45 non-eligible
JASP02	H 278	Kendricktown Bridge	1928	1- 80'	List and Weatherly	45 non-eligible
JASP03	H 279	Spring River Bridge	1928	3-122'	List and Weatherly	50 possible
FRAN01	H 996R1	Meramec River Bridge	1929	5-105'	M.E. Gillioz	57 possible
JACK40	S083B31	Sni-A-Bar Road Overpass	1929	1-128'	List Construction Co.	38 non-eligible
MACD01	H 780	Anderson Bridge	1929	3-100'	M.E. Gillioz	54 possible
COOP02	J 72	Lamine River Bridge	1930	1-120'	Yancey Construction Company	47 non-eligible
NEWT01	J 349	Redings Mill Bridge	1930	3- 90'	M.E. Gillioz	48 determ. non-elig.
SHAN03	J 420	Round Spring Bridge	1930	1-150'	C.F. Johnson and Son	53 possible
CALL15	155500.2	Stinson Creek Bridge	c1930	1- 67'		20 non-eligible
DALL01	J 782	Bennett Springs Bridge	1931	2-105'	Martin Wunderlich	49 possible
DOUG01	J 748	Twin Bridge	1932	3-100'	Glen E. Stoner	50 possible
DOUG02	J 749	Twin Bridge	1932	2-100'	Glen E. Stoner	49 possible
FRAN02	J 872	Pacific Overpass	1932	1- 71'	Gaines Brothers	40 non-eligible
TANE02	J 705R	Branson Bridge	1932	5-195'	H.H. Carrothers	61 possible
TANE03	J 952	Swan Creek Bridge	1932	1-150'	M.E. Gillioz	53 possible
SHAN04	K 209	Eminence Bridge	1933	3-110'	List & Clark Construction Co.	50 possible
TANE05	S 848	Bradleyville Bridge	1933	1- 50'	J.A. Kerr	47 non-eligible
PULA04	L 35	Big Piney River Bridge	1943	3-100'	Maxwell Construction Company	50 possible
IRON01	F 646R	Big Creek Bridge	1946	2-100'	M.E. Gillioz	45 non-eligible
POLK03	T 532	Pomme de Terre River Bridge	1946	1-100'	Atkinson-Windle Company	47 non-eligible

## CONCRETE DOUBLE-DECK OPEN SPANDREL THROUGH ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JACK21	S030B11	Twelfth Street Trafficway	1914	46'-140'	Graff Construction Co.	77 eligible

# CONCRETE RIGID FRAMES

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Developed by Westchester County, New York, in the early 1920s, the concrete rigid frame bridge became especially popular for federal relief projects during the 1930s. Both picturesque and practical, the flat or elliptically arched designs appealed to proponents of urban beautification. The Missouri State Highway Department used the concrete rigid frame sparingly in urban overpass situations, never adopting this structural type as a state standard. Only seven concrete rigid frame bridges have been identified by the statewide bridge inventory, all of which are in either St. Louis or Kansas City.

## CONCRETE RIGID FRAME

Inv. No.	MHTD	Structure name	date	spans	builder	rating
JACK53	S153B22	Bannister Road Overpass	1931	1- 37'		54 possible
60-1 STLC01	K 468	Highway 40 Underpass	1935	1- 56'	Powers Thompson Constr. Co.	58 possible
STLO11	K 854	Highway 40 Underpass	1941	2- 61'	Atkinson-Windle Company	50 possible
STLO12	K 861	Highway 40 Underpass	1944	2- 62'	Isreal Brothers	50 possible
STLO13	L 53R1	Highway 231 Overpass	1947	2- 66'	Latta Constr. Co. et al.	55 possible
JACK11	L 249	Ramp F Overpass	1949	1- 53'	Bushman Construction Co.	51 possible
JACK12	L 253	Broadway Overpass	1950	1- 50'	Bushman Construction Co.	51 possible

# CONCRETE CULVERTS

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Concrete culverts were built by the tens of thousands throughout Missouri in the first three decades of the 20th century. Featuring both box and arch configuration, they were used at the myriad drainage ditch crossings on the state's county road system. Few of these culverts have the requisite 20-foot overall length to be considered bridges by today's definition, and fewer yet display attributes to be included in the field survey sample. As a result, only a few culverts are included here. In reality, they mark only a minute sampling of the state's most common drainage structure.

## CONCRETE ARCH CULVERT

Inv. No.	MHTD	Structure name	date	spans	builder	rating
PIKE07	029001.5	Little Peno Creek Culvert	c1900	3- 16'	St. Louis & Hannibal RR	37 non-eligible
DADE03	141000.7	Coyne Ford Culvert	1911	2- 11'	Luigi Perlatti	32 non-eligible
POLK17	502000.3	Town Branch Culvert	1911	2- 11'	county work force	31 non-eligible
NEWT06	026004.6	Culvert	c1920	8- 9'		27 non-eligible
NEWT10	209000.2	Cedar Creek Culvert	c1920	4- 9'		22 non-eligible
NEWT11	214001.3	Baynham Branch Culvert	c1920	4- 9'		22 non-eligible
NEWT25	708000.7	Five Mile Creek Culvert	c1920	3- 9'		33 non-eligible
POLK15	347500.2	Culvert	c1920	3- 7'		31 non-eligible
VERN16	382002.5	Culvert	c1920	2- 11'		20 non-eligible
WEBS01	100000.5	Pantry Creek Culvert	c1920	2- 15'		20 non-eligible
DALL03	109000.3	Culvert	1922	2- 13'		26 non-eligible
DENT04	389500.1	Second Street Culvert	c1925	1- 22'		29 non-eligible
NEWT15	382200.1	Shoal Creek Culvert	c1925	4- 10'		32 non-eligible
NEWT16	382200.2	Culvert	c1925	2- 11'		30 non-eligible
BENT04	079001.2	Culvert	c1930	2- 10'	county work force	13 non-eligible
MORG02	078001.3	Culvert	c1930	2- 11'		20 non-eligible
STLO16	052500.3	Black Creek Culvert	c1930	1- 28'		29 non-eligible
PETT16	375000.5	Coon Creek Culvert	1953	2- 12'	Howard Construction Company	29 non-eligible

# STONE MASONRY ARCHES

Stone is a common, indigenous building material, used often in Missouri for substructures under steel, even concrete, bridges. This use has not been limited to the 19th century, as is found in some states. Stone substructures can be found under bridges erected as late as the 1930s in Missouri. However, true stone arches, once a common early bridge type, are now relatively rare in the state, due largely to subsequent attrition. A dozen stone arch bridges have been identified in Missouri by the statewide bridge inventory. Because these structures have tended to be small-scale and vernacular in design, built by local stonemasons, their documentation in county records has been difficult to locate.

## STONE MASONRY ARCH

Inv. No.	MHTD	Structure name	date	spans	builder	rating
FRAN26	U4300003	Washington Street Bridge	c1890	1- 30'		44 non-eligible
PIKE09	151000.1	Frankford Railroad Bridge	c1890	1- 25'	St. Louis & Hannibal RR	35 non-eligible
JACK56	042700.1	Blue Ridge Overpass	1906	1- 70'	Forrester-Swenson Constr. Co.	63 possible
BUTL04	049002.2	Culvert	c1920	2- 12'		30 non-eligible
BUTL05	049002.3	Culvert	c1920	2- 12'		30 non-eligible
VERN04	086001.7	Bridge	c1920	2- 14'		31 non-eligible
OSAG02	Y 198	Rich Fountain Bridge	1925	2- 16'	Fred Schimmle	50 possible
BART07	234500.1	Culvert	c1930	3- 6'		22 non-eligible
CAMD06	178000.7	Bridge	c1930	1- 24'		29 non-eligible
MACD03	181000.9	Bridge	c1935	1- 38'		44 non-eligible
SAFR03	053000.2	Terre Bleue Bridge	1935	9- 30'	Civilian Conservation Corps	50 possible
NEWT02	Y 160	Silver Creek Bridge	1939	1- 20'		28 non-eligible

# EVALUATION

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The central feature of the bridge inventory is the evaluation of individual structures for relative historical and/or technological significance. In this, each structure from the inventory is assessed for its representation of bridge industry trends. Because the inventory is intended as a cultural resource management document to be used in processes (bridge replacement and rehabilitation) that have federal involvement through the Federal Highway Administration, significance is therefore gauged by eligibility for the National Register of Historic Places. Its evaluation is guided generally by the standards outlined in 36 CFR Part 60.

These criteria have been written in purposefully vague terms, favoring the general over the specific, because they are aimed toward a broad range of sites and situations. The determination of eligibility for NRHP requires, in part, the application of three criteria. (A fourth criterion—whether the resource has yielded, or is likely to yield, information important in prehistory or history—is applied principally to archeological properties and is not really germane to this discussion.) The NRHP criteria are applied to properties that may possess regional, statewide or national significance. Additionally, the evaluation questions whether the property has retained a sufficient integrity of location, design, setting, materials, workmanship, feeling and association. The criteria pertinent to bridge evaluation defined properties that are NRHP eligible as:

- Criterion A:** resources that are associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B:** resources that are associated with the lives of persons significant in our past.
- Criterion C:** resources that embody the distinctive characteristics of a type, period or method of construction, of that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Applied liberally, Criterion A could be used to encompass virtually every bridge in Missouri from the historical period as potentially eligible for NRHP, because almost every bridge is associated with the broad pattern of transportation. This is, in turn, integrally linked with the themes of development, commerce and settlement. Transportation has unquestionably made "a significant contribution to the broad patterns of our history." And as elements of nationwide roadway networks, bridges are representative resources important to the people that cross them, at least on a local level. Thus, all bridges are historically significant to the transportation theme on at least a local level.

But to select all from an array of choices is not to select at all. To insert a degree of discrimination into this consideration with regard to bridges, Criterion A has traditionally been interpreted to mean structures which have been at least regionally important. The question to ask with regard to Criterion A is typically this: Has the bridge contributed in a meaningful way to the settlement and development of a geographically definable area? Has the bridge facilitated major passage to or through a region, or has

the access it has allowed created settlement and development of any sizeable district, region or portion of land?

Criterion C is the one under which the majority of bridges in America have been determined eligible for NRHP. Like Criterion A, bridges evaluated by the liberal use of Criterion C may all be considered significant, either as representative examples of relatively common structural types or as rare or unique examples of unusual or anachronistic bridge configurations. It can be said that all bridges "embody the distinctive characteristics of a type, period or method of construction." As a pragmatic matter, therefore, Criterion C is typically employed more restrictively to winnow the group of similar resources to a meaningful list. Rather than look simply to typicality or uniqueness as indicators of significance, evaluation under this criterion also depends on identifying aspects of bridges that make them stand out among their groups (i.e., earliest or oldest examples of type, longest span, longest total length, unusual structural or architectural detailing, etc.). By evaluating the bridges in this fashion, the important bridges can be gleaned from a large number of similar resources.

To aid the assessment, a numerical rating system has been developed. Patterned after previously developed systems and fine-tuned during the course of the project, it assigns numerical values to the different aspects of significance as defined by the National Register. The rating divides into three essentially equal categories: level of documentation, technological significance and general significance. The first is documentation. With a maximum of 30 points assigned, it is considered to be an important quality, allowing the structure to be traced to a specific time, builder and place of origin. Documentation requires hard evidence in the form of primary source references to the bridge's construction or physical evidence—the most obvious form of which would be a builder's plate on the bridge itself. Construction dates for bridges not documented definitively have been estimated from MHTD or county bridge files or comparison with similar documentable spans. The components of documentation are construction date and builder, and assessment is biased toward older bridges and those erected by in-state contractors. When the construction date has been estimated, one-half value is given. No points are assigned to bridges for which the builder is unknown. Compilation of a list of documented structures forms a bridge chronology in the state, from which individual bridges may be evaluated and, if undocumented in this inventory, perhaps documented with future research. Because of this, a premium is placed on traceability of the bridges' origins. Following is the value assignment for the documentation category:

#### DOCUMENTATION (maximum 30 points)

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##### Date of Construction

Pre -1890	15
1890-1899	12
1909-1912	10
1913-1919	8
1920-1939	4
Post-1940	0

(Add 5 points for earliest documented example or significant later example of type. When date is estimated, one-half value is assigned.)

## Builder

Important Missouri builder . . . . .	10
Important out-of-state builder . . . . .	8
Unimportant Missouri builder . . . . .	6
Unimportant out-of-state builder . . . . .	4
Builder unknown . . . . .	0

The second category is technological significance, with a maximum of 40 points assigned. In this, rarity of structural type, dimensions and detailing are considered. Multiple spans are given points as unusual applications of engineering achievement and community investment. Similarly, span length is considered, with the longest spans of like bridges given points as usually the most important investments from the communities which they serve and as indicators of a higher level of technology. The longest-span example of each structural type is assigned an additional 5 points.

One of the most important considerations for evaluation is the number of surviving examples of type in the state. On the assumption that rarity equates with significance, more points are assigned for unique or uncommon bridge configurations, less to commonly represented types. This bias helps to insure that examples from all of the engineering types in Missouri be noted for preservation. Finally, special structural or architectural features are given consideration for technological or aesthetic notability. Following is the value assignment for technological significance:

## TECHNOLOGICAL SIGNIFICANCE (maximum 40 points)

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Number of Spans (point for each when 2 or more) . . . . .	4 (max.)
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### Length of individual spans

Pratt through truss 120' or greater. . . . .	3
Pratt through truss 150' or greater. . . . .	5
Other through truss 150' or greater . . . . .	3
Other through truss 180' or greater . . . . .	5
Pony truss 60' or greater. . . . .	3
Pony truss 80' or greater. . . . .	5
Bedstead or bowstring 50' or greater. . . . .	3
Bedstead or bowstring 70' or greater. . . . .	5
Steel stringer or girder 40' or greater . . . . .	3
Steel stringer or girder 60' or greater . . . . .	5
Concrete or stone filled spandrel arch 40' or greater . . . . .	3
Concrete or stone filled spandrel arch 60' or greater . . . . .	5
Concrete open spandrel arch 80' or greater . . . . .	3
Concrete open spandrel arch 100' or greater . . . . .	5
Concrete slab or girder 30' or greater . . . . .	3
Concrete slab or girder 50' or greater . . . . .	5
Timber stringer 30' or greater . . . . .	5
Suspension bridge 150' or greater . . . . .	5

### Geometry/configuration

1-4 surviving examples of type in Missouri . . . . .	20
5-10 surviving examples of type in Missouri . . . . .	14
11-20 surviving examples of type in Missouri . . . . .	8
21-40 surviving examples of type in Missouri . . . . .	4
Greater than 40 examples of type in Missouri . . . . .	0

### Special Features

Patented features . . . . .	2
Decorative or distinctive elements . . . . .	2
Unusual builder or dedication plate . . . . .	2

The third category—general significance and integrity—is weighed equally with technological significance, with a maximum total of 40 points. This category takes into consideration the structure's historical significance and structural, site and locational integrity. Historical significance relates the bridge to broader settlement, government and transportation themes and rates something apart from its engineering merits. Structural integrity questions whether the bridge functions as originally intended or has been substantially altered through subsequent construction. Deck replacement is in most cases considered a maintenance procedure and not a structural alteration. Site integrity relates to the immediate setting around the bridge. And locational integrity looks at whether the bridge remains in its original setting or has been moved. Because some bridge superstructures are by nature moveable and relocation is a significant aspect of bridge history, moved spans are not heavily penalized in this rating. Following is the value assignment for the general significance category:

### GENERAL SIGNIFICANCE / INTEGRITY (maximum 35 points)

#### Historical Significance

National significance . . . . .	20
State significance . . . . .	15
Regional significance . . . . .	10
Significance minimal or undetermined . . . . .	0

#### Structural Integrity

Original super- and substructure intact . . . . .	8
Superstructure intact and substructure altered . . . . .	4
Superstructure altered or braced . . . . .	1
Bridge substantially altered, damaged, or widened . . . . .	0

#### Site Integrity

Excellent . . . . .	5
Good . . . . .	3
Fair . . . . .	1
Poor or unknown . . . . .	0



### Locational Integrity

Original location . . . . .	5
New location, moved pre-1945 . . . . .	3
New location, moved post-1945 or unknown . . . . .	0

(Add 2 points for a setting conducive for a consideration of preservation in place (e.g., proximity to state park, refuge, recreation area, historic district, active historical group).

After the winnowing process through application of the numerical criteria, several bridges emerged with similar, but not outstanding, significance. To address this, a three-tier system was employed to describe the bridges' NRHP potential. The categories are:

**Category 1 (eligible):** bridge which are unique or rare examples of technologically important types or have exceptional historical or representational value from larger bridge groups.

**Category 2 (possibly eligible):** bridges which are good early examples of their types or are notable variations from classical configurations; bridges which have some historical yet limited technological significance.

**Category 3 (not eligible):** bridges which are typical later examples of common structural types and which have minimal historical significance; bridges which have been substantially altered.

The distinction between Categories 1 and 2 became exceedingly fine at times when no clear-cut examples emerged from a particular structural grouping. The cutoff between the possibly eligible bridges and those determined not eligible was more sharply defined. The numerical system ranges from 1 to 110, and the general cutoff guidelines were set at:

70 - 110 points	Category 1 (eligible)
50 - 69 points	Category 2 (potentially eligible)
1 - 49 points	Category 3 (not eligible)

This numerical system was not intended to be a hard-line arbiter of National Register eligibility, but rather to provide general guidelines for consideration. To arrive at a definitive list of National Register-eligible bridges in Missouri, the preliminary findings of the statewide inventory will be presented to an Advisory Group made up of representatives of the Missouri Highway and Transportation Department, the Missouri State Historic Preservation Office and the Federal Highways Administration. On the following pages are summary listings of the 10,987 bridges that comprise the initial survey group.

COUNTY	PRIMARY		SECONDARY/URBAN/OTHER		COMBINED TOTAL	NRHP
	INCLUDED	EXCLUDED	INCLUDED	EXCLUDED		
Adair	4	32	10	61	107	1
Andrew	3	10	25	83	121	2
Atchison	3	28	56	23	110	3
Audrain	0	38	11	101	150	1
Barry	2	17	8	57	90	1
Barton	0	26	10	69	105	1
Bates	3	27	35	105	170	8
Benton	0	16	9	43	68	2
Bollinger	3	34	14	33	84	3
Boone	0	29	8	12	49	2
Buchanan	8	28	19	19	74	9
Butler	1	43	11	50	105	4
Caldwell	2	7	41	57	117	8
Callaway	1	3	34	36	74	6
Camden	4	10	1	4	19	4
Cape Girardeau	5	49	5	78	137	4
Carroll	4	42	62	175	283	7
Carter	1	19	0	2	22	1
Cass	2	38	47	67	154	4
Cedar	2	23	17	32	74	3
Chariton	2	21	23	94	140	4
Christian	0	8	9	20	37	2
Clark	1	19	25	71	116	3
Clay	3	23	14	74	114	7
Clinton	1	18	15	28	62	1
Cole	0	15	6	18	39	3
Cooper	4	16	13	44	77	10
Crawford	2	33	3	14	52	3
Dade	1	20	9	93	123	3
Dallas	2	22	1	19	44	1
Daviess	2	28	35	112	177	7
DeKalb	1	19	39	84	143	9
Dent	1	27	2	7	37	0
Douglas	2	23	2	14	41	4
Dunklin	2	64	1	41	108	0
Franklin	3	32	23	54	112	12
Gasconade	1	24	4	42	71	1
Gentry	2	31	9	129	174	2
Greene	5	41	22	124	192	8
Grundy	4	11	31	59	105	5
Harrison	1	43	19	131	194	0
Henry	0	45	14	91	150	1
Hickory	0	15	2	25	42	1
Holt	3	24	39	64	130	1
Howard	3	17	15	40	75	3
Howell	0	38	0	37	75	0
Iron	7	35	1	20	63	3
Jackson	6	26	56	98	186	29

COUNTY	PRIMARY		SECONDARY/URBAN/OTHER		COMBINED TOTAL	NRHP
	INCLUDED	EXCLUDED	INCLUDED	EXCLUDED		
Jasper	4	41	24	138	207	10
Jefferson	1	28	8	84	121	5
Johnson	0	30	11	99	140	3
Knox	1	23	50	58	132	0
Laclede	6	22	1	28	57	3
Lafayette	4	25	4	63	96	1
Lawrence	1	53	16	91	161	9
Lewis	2	16	24	34	76	9
Lincoln	5	21	9	19	54	6
Linn	1	35	16	144	197	1
Livingston	1	22	6	85	114	5
McDonald	2	33	4	19	58	2
Macon	0	34	21	82	137	5
Madison	3	32	1	35	71	1
Maries	0	20	2	16	38	2
Marion	3	21	15	36	77	3
Mercer	1	17	20	104	142	1
Miller	2	25	9	47	83	4
Mississippi	1	31	3	13	48	1
Moniteau	0	11	13	40	64	3
Monroe	0	17	24	70	111	5
Montgomery	3	22	15	41	81	3
Morgan	0	12	2	44	58	0
New Madrid	0	57	1	16	74	1
Newton	0	47	27	73	147	5
Nodaway	3	43	70	126	242	1
Oregon	2	30	1	12	45	2
Osage	2	13	2	32	49	3
Ozark	1	10	1	18	30	2
Pemiscot	0	52	1	80	133	0
Perry	0	12	3	38	53	0
Pettis	0	30	16	94	134	3
Phelps	2	19	0	36	57	2
Pike	4	25	6	71	106	5
Platte	7	26	9	40	82	6
Polk	2	29	12	62	104	1
Pulaski	5	10	4	11	30	3
Putnam	0	17	17	122	156	0
Ralls	0	22	12	33	67	5
Randolph	0	20	6	15	41	0
Ray	2	32	15	70	119	5
Reynolds	0	22	2	7	31	2
Ripley	0	28	0	30	58	0
St. Charles	1	30	9	42	82	1
St. Clair	0	16	9	50	76	1
St. Francois	0	25	6	53	84	1
Ste. Genevieve	6	14	1	13	34	0
St. Louis	14	24	5	100	133	9

COUNTY	PRIMARY INCLUDED	EXCLUDED	SECONDARY/URBAN/OTHER INCLUDED	EXCLUDED	COMBINED TOTAL	NRHP
St. Louis City	1	1	15	21	38	13
Saline	3	22	34	60	119	15
Schuyler	2	28	17	46	93	1
Scotland	2	21	28	82	131	0
Scott	1	43	2	10	56	2
Shannon	4	13	0	14	31	4
Shelby	0	25	13	48	86	1
Stoddard	1	77	7	32	117	0
Stone	1	9	2	10	22	2
Sullivan	1	32	15	63	111	1
Taney	5	19	1	4	29	4
Texas	2	32	1	44	79	0
Vernon	2	24	23	149	198	8
Warren	1	24	10	15	50	5
Washington	1	43	2	22	68	1
Wayne	2	60	4	49	115	4
Webster	0	26	1	35	62	0
Worth	0	14	9	48	71	1
Wright	0	30	2	25	57	0
<b>TOTAL</b>	<b>228</b>	<b>3,020</b>	<b>1,574</b>	<b>6,165</b>	<b>10,987</b>	<b>399</b>

Total pre-1951 bridges: 10,987  
 Total National Register possibly eligible bridges: 399 [3.6%]  
 Total National Register non-eligible bridges: 10,588 [96.4%]

# SUMMARY LISTING

## ADAIR COUNTY

ADAI01	K 22	Chariton River Bridge	1933	steel stringer	42 non-eligible
ADAI02	K 23	Chariton River Bridge	1933	riveted Pratt through truss	38 non-eligible
ADAI03	K 304	Mussel Fork River Bridge	1933	riveted Warren pony truss	43 non-eligible
ADAI04	K 305	Mussel Fork River Bridge	1933	riveted Warren pony truss	43 non-eligible
ADAI05	004000.8	Danforth Bridge	1905	pinned Pratt pony truss	42 non-eligible
ADAI06	019002.6	Blackbird Creek Bridge		(replaced)	
ADAI07	019003.0	Chariton River Bridge	c1930	riveted Pratt pony truss	28 non-eligible
ADAI08	036000.8	Wayman Bridge	1915	concrete deck girder	45 possible
ADAI09	042000.6	Salt River Bridge	c1910	pinned Pratt bedstead	27 non-eligible
ADAI10	091004.1	Fabius River Bridge		(replaced)	
ADAI11	159000.1	Capps Bridge	1900	pinned Pratt pony truss	44 non-eligible
ADAI12	176000.8	Billy Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
ADAI13	223000.1	Sloan Point Bridge	1899	pinned Pratt through truss	42 non-eligible
ADAI14	269003.6	Salt River Bridge	c1925	riveted Pratt pony truss	28 non-eligible
ADAI15	280000.3	Bridge	c1915	concrete deck girder	20 non-eligible
ADAI16	360001.6	Eitel Bridge	1903	pinned Pratt half-hip pony truss	37 non-eligible
ADAI17	410001.9	Bridge	c1910	pinned Pratt half-hip pony truss	25 non-eligible
ADAI18	423000.6	Taylor Bridge		(replaced)	
ADAI19	424000.8	Darr Bridge		(replaced)	
ADAI20	430001.1	Long Bridge		(destroyed)	
ADAI21	440000.9	Indian Creek Bridge		(replaced)	

## ANDREW COUNTY

ANDR01	J 201	Rosendale Bridge	1930	riveted Warren pony truss	43 non-eligible
ANDR02	K 84	Platte River Bridge	1932	riveted Pratt through truss	41 non-eligible
ANDR03	L 202A	102 River Bridge	1947	riveted polyg. Warren pony truss	64 possible
ANDR04	007001.0	Arapahoe Creek Bridge	c1915	riveted Pratt pony truss	32 non-eligible
ANDR05	014000.9	Arapahoe Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR06	027000.9	Arapahoe Creek Bridge	c1925	riveted Camelback pony truss	44 non-eligible
ANDR07	027002.0	Arapahoe Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR08	029000.6	Arapahoe Creek Bridge	c1925	riveted Camelback pony truss	44 non-eligible
ANDR09	040000.0	Pedlar Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR10	048000.0	Leach Mill Bridge	1913	pinned Pratt through truss	44 non-eligible
ANDR11	062001.0	Bridge	c1915	pinned Pratt pony truss	20 non-eligible
ANDR12	067000.4	Lincoln Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR13	077000.6	Lincoln Creek Bridge	c1910	pinned Pratt pony truss	16 non-eligible
ANDR14	080001.4	White Cloud Creek Bridge		(replaced)	
ANDR15	092001.0	Cawood Bridge		(replaced)	
ANDR16	096000.6	Hickory Creek Bridge		(replaced)	
ANDR17	143000.2	Bridge	c1905	pinned Pratt pony truss	26 non-eligible
ANDR18	150000.3	Kellogg Branch Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR19	164001.0	Bridge	c1925	2-angle Camelback pony truss	43 non-eligible
ANDR20	198001.9	Fish Trap Bridge		(replaced)	
ANDR21	206002.7	Crooked Creek Bridge	c1915	pinned Pratt pony truss	20 non-eligible
ANDR22	207000.5	Agee Creek Bridge	1902	pinned Pratt pony truss	37 non-eligible
ANDR23	209001.6	Crooked Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR24	272000.9	Third Fork Bridge	1908	pinned Pratt pony truss	39 non-eligible

## ANDREW COUNTY (cont.)

ANDR25	275001.3	Muddy Creek Bridge		(replaced)	
ANDR26	276001.1	Muddy Creek Bridge	c1925	2-angle Camelback pony truss	43 non-eligible
ANDR27	337000.0	Daily Bridge	1901	pinned Pratt through truss	51 possible
ANDR28	374000.1	Dillon Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ANDR29	375000.7	Dillon Creek Bridge	c1905	pinned Pratt pony truss	25 non-eligible
ANDR30	377000.3	Dillon Creek Bridge	c1925	2-angle Pratt pony truss	32 non-eligible
ANDR31	392002.2	Mace Creek Bridge	c1925	2-angle Parker through truss	46 non-eligible
ANDR32	418000.8	Caples Creek Bridge	c1910	lattice bedstead	33 non-eligible
ANDR33	422000.2	Mill Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible

## ATCHISON COUNTY

ATCH01	G 355R	Big Tarkio River Bridge	1923	riveted Pratt through truss	53 possible
ATCH02	J 176	Tarkio Creek Bridge	1930	riveted Warren pony truss	61 possible
ATCH03	L 98	Brownville Bridge	1939	riveted cantilever through truss	73 listed
ATCH04	025002.0	High Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH05	029000.6	High Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH06	039001.3	West High Creek Bridge	c1895	pinned Pratt through truss	25 non-eligible
ATCH07	044000.2	McElroy Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH08	045001.0	High Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH09	056000.1	Rose Branch Bridge	c1910	pinned Pratt pony truss	20 non-eligible
ATCH10	068001.1	High Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ATCH11	071001.7	West High Creek Bridge	1911	pinned Pratt pony truss	29 non-eligible
ATCH12	091001.1	West Tarkio Creek Bridge	c1940	riveted Pratt pony truss	26 non-eligible
ATCH13	105000.6	West Tarkio Creek Bridge	c1940	riveted Pratt pony truss	26 non-eligible
ATCH14	110000.4	Middle Tarkio Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
ATCH15	112000.8	Middle Tarkio Creek Bridge		(replaced)	
ATCH16	114000.3	West Tarkio Creek Bridge	c1940	pinned Pratt pony truss	46 non-eligible
ATCH17	124000.5	Middle Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH18	137000.3	West Tarkio Creek Bridge	c1910	pinned Pratt through truss	21 non-eligible
ATCH19	143001.4	Rock Creek Bridge		(replaced)	
ATCH20	145R01.1	Rock Creek Bridge	c1925	riveted Camelback pony truss	29 non-eligible
ATCH21	146000.7	Rock Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
ATCH22	147000.2	Rock Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
ATCH23	148R00.2	Rock Creek Bridge	c1925	riveted Camelback pony truss	23 non-eligible
ATCH24	167000.5	Rock Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
ATCH25	203001.9	Bridge	c1925	2-angle Pratt pony truss	32 non-eligible
ATCH26	208000.4	Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ATCH27	223000.1	Rock Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
ATCH28	230001.3	Cow Branch Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ATCH29	231001.4	Cow Branch Bridge	c1920	riveted Camelback pony truss	38 non-eligible
ATCH30	232000.8	Cow Branch Bridge	c1920	riveted Camelback pony truss	38 non-eligible
ATCH31	264001.0	Tarkio River Bridge	c1920	2-angle Parker through truss	45 non-eligible
ATCH32	265000.3	Bridge	c1925	2-angle Pratt pony truss	41 non-eligible
ATCH33	275001.2	Deadman's Hollow Bridge	c1925	2-angle Pratt pony truss	36 non-eligible
ATCH34	276000.8	Deadman's Hollow Bridge	c1910	pinned Pratt through truss	27 non-eligible
ATCH35	291000.3	Tarkio River Bridge	c1925	2-angle Camelback pony truss	32 non-eligible
ATCH36	305001.7	Long Branch Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ATCH37	309001.2	Squaw Creek Bridge	c1915	pinned Pratt pony truss	25 non-eligible
ATCH38	312001.3	Squaw Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ATCH39	343000.7	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	32 non-eligible
ATCH40	343001.9	Little Tarkio Creek Bridge	c1925	2-angle Pratt pony truss	28 non-eligible

## ATCHISON COUNTY (cont.)

ATCH41	357001.6	Little Tarkio Creek Bridge		(replaced)	
ATCH42	365000.6	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	29 non-eligible
ATCH43	371000.1	Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH44	375000.2	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	30 non-eligible
ATCH45	378000.2	Little Tarkio Creek Bridge	c1915	pinned Pratt pony truss	28 non-eligible
ATCH46	416000.4	Bridge	c1910	pinned Pratt pony truss	28 non-eligible
ATCH47	438R00.1	Mill Creek Bridge	1928	riveted Camelback pony truss	24 non-eligible
ATCH48	453000.4	Tarkio River Bridge	c1915	pinned Pratt pony truss	32 non-eligible
ATCH49	463002.5	Tarkio River Bridge	c1910	pinned Pratt through truss	27 non-eligible
ATCH50	481001.5	Little Tarkio Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
ATCH51	481002.7	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	36 non-eligible
ATCH52	485000.8	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	41 non-eligible
ATCH53	490000.9	Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH54	491000.8	Tarkio Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
ATCH55	501000.8	Little Tarkio Creek Bridge	c1910	pinned Pratt through truss	27 non-eligible
ATCH56	502000.7	Hickory Branch Bridge	c1925	2-angle Camelback pony truss	41 non-eligible
ATCH57	512000.0	Minnesota Valley Ck. Bridge	c1925	2-angle Camelback pony truss	36 non-eligible
ATCH58	522000.9	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	41 non-eligible
ATCH59	524000.5	E. Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	41 non-eligible
ATCH60	525000.2	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	36 non-eligible
ATCH61	526000.3	Little Tarkio Creek Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH62	530000.5	Minnesota Valley Ck. Bridge	c1925	2-angle Camelback pony truss	34 non-eligible
ATCH63	555400.4	Rock Creek Bridge		(replaced)	

## AUDRAIN COUNTY

AUDR01	028000.4	Bridge	c1915	concrete slab	26 non-eligible
AUDR02	028001.4	Saling Creek Bridge		(replaced)	
AUDR03	050000.1	Bridge	c1910	pinned Pratt bedstead	25 non-eligible
AUDR04	098001.0	Youngs Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
AUDR05	122000.6	Youngs Creek Bridge		(replaced)	
AUDR06	196000.3	Youngs Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
AUDR07	197000.1	Five Mile Creek Bridge	1901	concrete open spandrel arch	64 possible
AUDR08	227000.5	Little Skull Lick Creek Bridge	c1920	concrete through girder	32 non-eligible
AUDR09	266002.2	Scattering Fork Bridge	c1920	concrete through girder	25 non-eligible
AUDR10	278500.3	Clark Street Viaduct	1928	pinned Pratt through truss	30 non-eligible
AUDR11	341000.3	Fisher Bridge	1893	pinned Pratt through truss	40 non-eligible
AUDR12	562000.2	Cuivre River Bridge	c1905	pinned Pratt bedstead	29 non-eligible
AUDR13	633000.7	Loutre River Bridge	c1910	pinned Pratt bedstead	25 non-eligible

## BARRY COUNTY

BARR01	J 382	Jenkins Bridge	1931	riveted Pratt through truss	44 non-eligible
BARR02	K 770	Flat Creek Bridge	1938	riveted Parker through truss	41 non-eligible
BARR03	023000.1	Dry Branch Bridge	1912	concrete slab	30 non-eligible
BARR04	043000.7	Hudson Creek Bridge	1916	steel stringer	37 non-eligible
BARR05	110900.4	SL&SF Railway Overpass	1936	riveted Pratt through truss	38 non-eligible
BARR06	312000.1	Jenkins Ford Bridge	1909	pinned Pratt through truss	55 possible
BARR07	324000.4	Flat Creek Bridge	c1905	pinned Pratt through truss	12 non-eligible
BARR08	341001.6	Star City Bridge	c1915	pinned Parker through truss	36 non-eligible
BARR09	451000.3	Flat Creek Bridge	c1915	pinned Pratt through truss	32 non-eligible
BARR10	561000.9	Shoal Creek Bridge	1959	welded kingpost pony truss	32 non-eligible

## BARTON COUNTY

BART01	077000.1	Daugherty Bridge	1921	steel stringer	26	non-eligible
BART02	080001.5	Black Bridge	1924	riveted Pratt pony truss	34	non-eligible
BART03	086000.3	Dry Wood Creek Bridge	c1890	pinned Pratt pony truss	27	non-eligible
BART04	086000.9	Shiloh Bridge	c1910	pinned Pratt pony truss	20	non-eligible
BART05	104000.9	Minor Bridge	1894	pinned Pratt half-hip pony truss	32	non-eligible
BART06	186001.1	Light Plant Bridge	1926	riveted Pratt through truss	33	non-eligible
BART07	234500.1	Culvert	c1930	stone arch culvert	22	non-eligible
BART08	276001.8	Winton Bridge	1921	riveted Pratt through truss	33	non-eligible
BART09	417000.6	North Fork Bridge	c1910	pinned Pratt pony truss	23	non-eligible
BART10	432002.8	Moody Ford Bridge	1884	pinned Pratt through truss	53	possible

## BATES COUNTY

BATE01	G 864	Miami Creek Bridge	1925	riveted Pratt through truss	38	non-eligible
BATE02	T 279R	Rich Hill Bridge	1935	riveted polyg. Warren pony truss	47	non-eligible
BATE03	T 280	M. des Cygnes River Bridge	1935	riveted polyg. Warren pony truss	51	possible
BATE04	023001.5	Mormon Fork Bridge	c1905	pinned Pratt pony truss	29	non-eligible
BATE05	032001.3	Mormon Fork Bridge	1884	pinned Pratt pony truss	49	possible
BATE06	041002.1	Mormon Fork Bridge	1886	pinned Pratt pony truss	51	possible
BATE07	081000.8	Mormon Fork Bridge	1911	pinned Pratt half-hip pony truss	41	non-eligible
BATE08	104000.2	Elk Fork Bridge	c1910	pinned Pratt pony truss	40	non-eligible
BATE09	124000.6	Little Deer Creek Bridge	1901	pinned Pratt pony truss	41	non-eligible
BATE10	169000.7	Miami Ditch Bridge	c1925	2-angle Warren pony truss	39	non-eligible
BATE11	187002.7	Miami Creek Bridge	1904	pinned Pratt through truss	45	non-eligible
BATE12	226000.3	Mound Creek Bridge	1910	steel stringer	30	non-eligible
BATE13	248000.1	Johnstown Bridge	1899	pinned Pratt pony truss	50	possible
BATE14	263001.3	Bones Branch Bridge	1908	concrete slab	34	non-eligible
BATE15	310000.3	East Mound Creek Bridge	1900	pinned Pratt pony truss	31	non-eligible
BATE16	316001.6	Bones Branch Bridge	1911	pinned Pratt half-hip pony truss (replaced)	46	non-eligible
BATE17	344001.7	Gillum Creek Bridge				
BATE18	356001.4	Bridge	1908	pinned Parker through truss	46	determ. non-elig.
BATE19	359000.1	Bones Branch Bridge	c1910	pinned Pratt half-hip pony truss	20	non-eligible
BATE20	363R02.3	Miami Creek Bridge	1906	pinned Pratt through truss (replaced)	43	non-eligible
BATE21	365000.3	Bell's Mill Bridge				
BATE22	419000.5	Mulberry Creek Bridge	1911	pinned Pratt pony truss	42	non-eligible
BATE23	435002.1	Mulberry Creek Bridge	1886	pinned Pratt pony truss	41	non-eligible
BATE24	460003.1	Bridge	1908	pinned Pratt through truss (replaced)	43	non-eligible
BATE25	460004.1	Haymakers Ford Bridge				
BATE26	466000.1	Possum Branch Bridge	1900	riveted Pratt half-hip pony truss	36	non-eligible
BATE27	484003.8	Panther Creek Bridge	1903	steel stringer	36	non-eligible
BATE28	495001.6	South Double Branch Bridge	1903	steel stringer	36	non-eligible
BATE29	496001.4	Bridge	1908	pinned Pratt through truss	43	non-eligible
BATE30	496001.7	Soap Creek Bridge	1908	riveted Pratt half-hip pony truss	36	non-eligible
BATE31	501002.2	Walnut Creek Bridge	1899	pinned Pratt pony truss	44	non-eligible
BATE32	509003.0	Walnut Creek Bridge	1899	pinned Pratt pony truss (replaced)	33	non-eligible
BATE33	547001.0	Bridge				
BATE34	547002.6	Water Works Bridge	1907	pinned Parker through truss	49	possible
BATE35	547003.3	M. des Cygnes River Bridge	c1910	pinned Pratt through truss	31	non-eligible
BATE36	547004.0	Bridge	1908	pinned Pratt through truss	38	non-eligible
BATE37	576002.5	Schell City Bridge	1900	pinned Parker through truss	58	possible
BATE38	624000.2	Sycamore Branch Bridge	c1910	pinned Pratt pony truss	25	non-eligible
BATE39	628000.9	Camp Branch Bridge	1898	pinned Pratt pony truss	39	non-eligible



## BATES COUNTY (cont.)

BATE40	648000.3	Papinville Bridge	1884	pinned Pratt through truss	51 possible
BATE41	648001.2	Bridge	1908	pinned Pratt through truss	39 non-eligible
BATE42	none	Elk Fork Bridge	1884	pinned Pratt pony truss	47 possible

## BENTON COUNTY

BENT01	012000.3	Persimmon Fork Bridge	1911	steel stringer	30 non-eligible
BENT02	021001.0	Flat Creek Bridge	1913	riveted Warren pony truss, skewed	61 possible
BENT03	045000.2	County Line Bridge	1907	pinned Pratt bedstead	46 non-eligible
BENT04	079001.2	Culvert	c1930	concrete arch culvert	13 non-eligible
BENT05	088001.6	Spangberg Ford Bridge	1907	pinned Pratt bedstead	43 non-eligible
BENT06	093000.5	Barkers Creek Bridge	1905	pinned Pratt bedstead	43 non-eligible
BENT07	175000.1	Cole Camp Creek Bridge	1909	pinned Pratt through truss	48 non-eligible
BENT08	252000.4	Turkey Creek Bridge	1904	pinned Pratt pony truss	35 non-eligible
BENT09	356000.3	Bentonville Bridge	c1915	riveted Warren pony truss	40 non-eligible
BENT10	445500.2	Upper Bridge	1928	wire cable suspension bridge	73 eligible

## BOLLINGER COUNTY

BOLL01	G 688R	Patton Bridge	1923	riveted Warren pony truss	52 possible
BOLL02	J 103	Zalma Bridge	1930	riveted Pratt through truss	38 non-eligible
BOLL03	K 663	Whitewater River Bridge	1936	steel plate through girder	54 possible
BOLL04	032000.5	Whitewater River Bridge	1913	pinned Parker through truss	48 possible
BOLL05	032002.6	Bridge	1919	steel stringer	24 non-eligible
BOLL06	045002.5	Whitewater River Bridge	1915	concrete slab	41 non-eligible
BOLL07	099002.5	Perkin's Ford Bridge	1917	pinned Pratt through truss	34 non-eligible
BOLL08	118000.8	Dry Creek Bridge	c1900	pinned Pratt pony truss	23 non-eligible
BOLL09	124002.4	Laflin Bridge	1908	pinned Pratt through truss	46 non-eligible
BOLL10	146001.5	Bridge	c1920	riveted Pratt/Warren pony truss	38 non-eligible
BOLL11	160002.0	Clubb Creek Bridge	1908	pinned Pratt bedstead	30 non-eligible
BOLL12	165500.1	Crooked Creek Bridge	1908	riveted Pratt half-hip pony truss	28 non-eligible
BOLL13	183001.5	Bridge	c1920	riveted Pratt/Warren pony truss	43 non-eligible
BOLL14	188002.5	Slagle Creek Bridge	c1920	riveted Pratt/Warren pony truss	38 non-eligible
BOLL15	203002.8	Fish Trap Ford Bridge	1912	pinned Pratt through truss	33 non-eligible
BOLL16	203003.1	Gipsy Bridge	1900	pinned Pratt through truss	37 non-eligible

## BOONE COUNTY

BOON01	010006.B	Butler Bridge	1905	pinned Pratt through truss	43 non-eligible
BOON02	010016.2	County Line Bridge	1904	pinned Pratt bedstead	39 non-eligible
BOON03	010021.7	Vaughn Bridge	1910	pinned Pratt through truss	39 non-eligible
BOON04	010021.9	County Line Bridge	1909	pinned Pratt through truss	43 non-eligible
BOON05	010022.7	Hart Creek Bridge	c1930	riveted Camelback pony truss	45 non-eligible
BOON06	093000.7	Moon Valley Bridge	1907	pinned Parker through truss	48 possible
BOON07	093000.8	Hinkson Creek Bridge	1888	pinned Pratt through truss	56 possible
BOON08	093000.9	Rock Quarry Bridge	c1905	pinned Pratt through truss	28 non-eligible

## BUCHANAN COUNTY

BUCH01	G 856	Garrettsburg Bridge	(replaced)	
BUCH02	K 33	102 River Bridge	1932	riveted Warren pony truss 46 non-eligible
BUCH03	K 590	U.S. Highway 59 Overpass	1937	steel plate through girder 60 possible
BUCH04	K 673	CRI&P Railroad Overpass	1937	riveted Parker through truss 41 non-eligible
BUCH05	K 697R	Atchison Bridge	1937	riveted cantilever through truss 62 possible
BUCH06	S 787	Castile Creek Bridge	1934	riveted Warren pony truss 43 non-eligible
BUCH07	T 365	Platte River Bridge	1934	riveted Pratt through truss 41 non-eligible
BUCH08	W 444	Bee Creek Bridge	1922	concrete Luten arch 58 possible
BUCH09	Y 10	Brady Branch Bridge	1922	concrete Luten arch 58 possible
BUCH10	Z 336	Bridge	c1925	concrete arch culvert 18 non-eligible
BUCH11	045001.6	102 River Bridge	c1925	riveted Pratt through truss 42 non-eligible
BUCH12	045001.8	Platte River Bridge	(replaced)	
BUCH13	055003.3	Platte River Bridge	(replaced)	
BUCH14	056000.5	Platte River Bridge	c1925	riveted Pratt through truss 23 non-eligible
BUCH15	056002.1	James Branch Bridge	(replaced)	
BUCH16	063000.2	Bridge	(replaced)	
BUCH17	064000.6	Bridge	(replaced)	
BUCH18	083000.8	Muddy Creek Bridge	(replaced)	
BUCH19	104000.1	Malden Creek Bridge	1902	pinned Pratt half-hip pony truss 40 non-eligible
BUCH20	116000.4	Jenkins Creek Bridge	1917	concrete filled spandrel arch 34 non-eligible
BUCH21	117001.7	Malden Creek Bridge	(replaced)	
BUCH22	117002.3	Wolf Pen Creek Bridge	c1920	concrete arch culvert 18 non-eligible
BUCH23	160001.1	Whitehead Creek Bridge	(replaced)	
BUCH24	166000.0	Whitehead Creek Bridge	(replaced)	
BUCH25	174000.2	Whitehead Creek Bridge	c1910	pinned Pratt pony truss 28 non-eligible
BUCH26	187001.4	Contrary Creek Bridge	1888	pinned Pratt through truss 45 possible
BUCH27	191000.2	Bridge	1916	concrete filled spandrel arch 26 non-eligible
BUCH28	206000.4	Contrary Creek Bridge	c1890	pinned Pratt through truss 22 non-eligible
BUCH29	224001.6	Bridge	(replaced)	
BUCH30	273001.7	Contrary Creek Bridge	c1930	2-angle Camelback pony truss 34 non-eligible
BUCH31	290000.8	Willis Bridge	(replaced)	
BUCH32	297000.5	Bee Creek Bridge	(replaced)	
BUCH33	352000.8	Malden Creek Bridge	(replaced)	
BUCH34	359000.2	Malden Creek Bridge	(replaced)	
BUCH35	386500.1	Cook Road Bridge	c1900	pinned Pratt through truss 16 non-eligible
BUCH36	386500.2	Great Western Viaduct	1927	concrete deck girder 51 possible
BUCH37	386500.6	Eleventh Street Underpass	1927	concrete deck girder 53 possible
BUCH38	386500.8	Eighteenth Street Underpass	1927	concrete deck girder 41 non-eligible
BUCH39	386501.4	King Hill Overpass	1927	concrete deck girder 51 possible
BUCH40	386501.9	Parker Road Bridge	c1885	pinned Pratt through truss 27 non-eligible
BUCH41	386502.2	Bridge	c1925	concrete filled spandrel arch 18 non-eligible
BUCH42	386502.5	Whitehead Creek Bridge	1927	concrete open spandrel arch 46 possible

## BUTLER COUNTY

BUTL01	K 263R	Poplar Bluff Viaduct	1934	riveted Warren deck truss 63 possible
BUTL02	008000.4	Cane Creek Bridge	c1920	riveted Pratt/Warren pony truss 37 non-eligible
BUTL03	014001.2	Smith Bridge	1916	riveted Pratt/Warren pony truss 50 possible
BUTL04	049002.2	Culvert	c1920	stone arch culvert 30 non-eligible
BUTL05	049002.3	Culvert	c1920	stone arch culvert 30 non-eligible
BUTL06	159000.3	Hargrove Bridge	1917	Pratt/Warren pony swing span 78 listed
BUTL07	169000.7	Bridge	1930	riveted Pratt/Warren pony truss 40 non-eligible

## BUTLER COUNTY (cont.)

BUTL08	372000.0	Roxie Road Bridge	1906	pinned Pratt through truss	39	non-eligible
BUTL09	399002.7	Miller Bridge	1901	pinned Pratt through truss	39	determ. non-elig.
BUTL10	412A00.2	Ten Mile Creek Bridge	c1920	riveted Pratt/Warren pony truss	37	non-eligible
BUTL11	416000.4	Pike Creek Bridge	1915	riveted Pratt/Warren pony truss	49	possible
BUTL12	428000.3	Hendrickson Bridge	1933	riveted Parker through truss	45	non-eligible

## CALDWELL COUNTY

CALD01	H 27R	Log Creek Bridge	1925	concrete filled spandrel arch	36	non-eligible
CALD02	J 340R	Log Creek Bridge	1930	riveted Pratt through truss	34	non-eligible
CALD03	007000.3	Long Branch Bridge	c1910	pinned Pratt pony truss	18	non-eligible
CALD04	023002.0	Brushy Creek Bridge	1904	pinned Pratt bedstead	42	non-eligible
CALD05	032000.2	Sheep Creek Bridge	1904	pinned Pratt bedstead	44	non-eligible
CALD06	041001.6	Bridge	1905	lattice bedstead	44	non-eligible
CALD07	075001.2	Tom Creek Bridge	1904	pinned Pratt bedstead	40	non-eligible
CALD08	088000.4	Lick Fork Bridge	c1910	pinned Pratt half-hip pony truss	21	non-eligible
CALD09	099000.7	Lick Fork Bridge		(replaced)		
CALD10	115001.8	Otter Creek Bridge	c1910	pinned Pratt half-hip pony truss	25	non-eligible
CALD11	118001.9	Otter Creek Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
CALD12	127000.8	Cottonwood Creek Bridge		(replaced)		
CALD13	181001.9	Henkin's Ford Bridge	1887	pinned Warren through truss	72	eligible
CALD14	204001.2	Mud Creek Bridge	1887	pinned Warren through truss	67	possible
CALD15	205000.0	Mud Creek Bridge	1905	pinned Pratt bedstead	39	non-eligible
CALD16	207000.9	Bridge	1908	pinned Pratt half-hip pony truss	38	non-eligible
CALD17	215000.3	North Mud Creek Bridge	c1905	lattice bedstead	43	non-eligible
CALD18	227000.6	North Mud Creek Bridge	1905	pinned Pratt bedstead	26	non-eligible
CALD19	239000.1	Bridge	c1910	pinned Pratt half-hip pony truss	26	non-eligible
CALD20	243000.5	Mud Creek Bridge		(replaced)		
CALD21	264001.7	Bridge	c1905	pinned Pratt half-hip pony truss	26	non-eligible
CALD22	268000.9	Bridge	c1905	lattice bedstead	43	non-eligible
CALD23	279001.5	North Mud Creek Bridge	1904	pinned Pratt bedstead	38	non-eligible
CALD24	295000.8	North Mud Creek Bridge	1905	pinned Pratt bedstead	47	non-eligible
CALD25	299001.0	Bridge	c1905	pinned Pratt bedstead	28	non-eligible
CALD26	303000.4	Otter Creek Bridge	1875	Bowstring through arch-truss	76	eligible
CALD27	305001.2	Otter Creek Bridge	1901	pinned Pratt half-hip pony truss	43	non-eligible
CALD28	307000.2	Little Otter Creek Bridge	1904	pinned Pratt pony truss	44	non-eligible
CALD29	307002.5	Shoal Creek Bridge	c1925	riveted Pratt through truss	26	non-eligible
CALD30	316000.7	Cottonwood Creek Bridge	1904	pinned Pratt bedstead	38	non-eligible
CALD31	324000.6	Tom Creek Bridge	1904	pinned Pratt bedstead	44	non-eligible
CALD32	324001.9	Bonanza Bridge	1883	pinned Whipple through truss	66	eligible
CALD33	327000.1	Bridge		(replaced)		
CALD34	337000.6	Tom Creek Bridge		(replaced)		
CALD35	341000.9	Shoal Creek Bridge	c1890	pinned Pratt through truss	34	non-eligible
CALD36	342002.8	Cox Ford Bridge	1888	pinned Pratt through truss	53	possible
CALD37	349000.7	Long Creek Bridge	c1925	2-angle Pratt pony truss	30	non-eligible
CALD38	350000.8	Log Creek Bridge	c1915	pinned Pratt pony truss	25	non-eligible
CALD39	351001.3	Tub Creek Bridge	1904	lattice bedstead	47	non-eligible
CALD40	353000.8	Log Creek Bridge	1908	riveted Pratt pony truss	53	possible
CALD41	359000.8	Shoal Creek Bridge	1894	pinned Pratt through truss	52	possible
CALD42	359001.8	Mill Creek Bridge		(replaced)		
CALD43	368001.2	Shoal Creek Bridge	c1930	riveted Pratt pony truss	28	non-eligible
CALD44	372000.5	Shoal Creek Bridge	1901	pinned Pratt through truss	46	non-eligible

## CALDWELL COUNTY (cont.)

CALD45	383001.5	Shoal Creek Bridge	c1910	pinned Pratt bedstead	29	non-eligible
CALD46	406000.6	Long Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
CALD47	407000.2	Long Creek Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
CALD48	442002.4	Crooked River Bridge	c1915	pinned Pratt pony truss	30	non-eligible
CALD49	028000.8	West Sheep Creek Bridge	1922	steel deck girder	36	possible

## CALLAWAY COUNTY

CALL01	F 485R	Auxvasse Creek Bridge	1921	riveted Warren deck truss	55	possible
CALL02	019001.7	Bridge	1910	steel stringer	34	non-eligible
CALL03	019002.2	Auxvasse Branch Bridge		(replaced)		
CALL04	020000.1	Auxvasse Branch Bridge	c1905	pinned Pratt bedstead	22	non-eligible
CALL05	027001.4	Four Mile Branch Bridge	1905	steel stringer	33	non-eligible
CALL06	043001.0	Boyd Bridge Number 2	1913	pinned Pratt bedstead	42	non-eligible
CALL07	057000.2	Kennon Bridge	1914	riveted Warren pony truss	34	non-eligible
CALL08	071001.5	Bridge	1910	steel stringer	34	non-eligible
CALL09	071002.2	Dunlap Bridge	1913	riveted Warren pony truss	39	non-eligible
CALL10	094000.8	Stinson Creek Bridge	1905	pinned Pratt bedstead	35	non-eligible
CALL11	103000.2	Bridge	1910	steel stringer	29	non-eligible
CALL12	109000.5	Booker Bridge	1912	steel stringer	34	non-eligible
CALL13	125000.3	Owl Creek Bridge	c1910	riveted Pratt pony truss	25	non-eligible
CALL14	151000.1	Dry Fork Bridge	1910	riveted Pratt pony truss	39	non-eligible
CALL15	155500.2	West Seventh Street Bridge	c1930	concrete open spandrel arch	20	non-eligible
CALL16	155500.6	East Tenth Street Bridge	c1925	concrete filled spandrel arch	11	non-eligible
CALL17	155500.7	East Eighth Street Bridge	c1925	concrete filled spandrel arch	11	non-eligible
CALL18	201001.3	Cedar Creek Bridge	1910	pinned Pratt through truss	43	non-eligible
CALL19	211002.6	Dry Creek Bridge	c1910	pinned Pratt pony truss	30	non-eligible
CALL20	237002.2	Murphy Bridge	1911	pinned Pratt pony truss	46	non-eligible
CALL21	250000.7	Wainscott Creek Bridge	1910	pinned Pratt pony truss	39	non-eligible
CALL22	253000.7	Little Auxvasse Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
CALL23	256000.3	Little Auxvasse Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
CALL24	265001.9	Bridge	1907	steel stringer	32	non-eligible
CALL25	304000.1	Youngs Creek Bridge	1912	pinned Pratt pony truss	34	non-eligible
CALL26	316002.2	Bryan Bridge	1912	pinned Pennsylvania through truss	65	possible
CALL27	327000.2	Logan Creek Bridge	1911	riveted Warren/Pratt pony truss	54	possible
CALL28	340002.1	Berry's Ford Bridge	1884	pinned Pratt through truss	56	possible
CALL29	362001.9	Maddox Branch Bridge	1910	riveted Pratt half-hip pony truss	42	non-eligible
CALL30	364000.7	Muir Bridge		(replaced)		
CALL31	364001.9	Houfs Creek Bridge	1910	steel stringer	34	non-eligible
CALL32	375001.8	Vandiver Bridge		(replaced)		
CALL33	387000.5	Buckner Bridge	1913	steel stringer	34	non-eligible
CALL34	395000.8	McPheeters Bridge	1913	steel stringer	34	non-eligible
CALL35	406001.8	Hunt Branch Bridge	1910	steel stringer	34	non-eligible
CALL36	411000.8	Deardorff Bridge	1911	riveted Pratt pony truss	36	non-eligible
CALL37	443002.3	Loutre River Bridge	1896	pinned Pratt pony truss	48	possible
CALL38	444001.6	Loutre River Bridge	1905	pinned Pratt pony truss	38	non-eligible
CALL39	444002.5	Covington Bridge	1913	steel stringer	34	non-eligible
CALL40	454002.4	Loutre River Bridge	1907	pinned Pratt pony truss	39	non-eligible
CALL41	465000.9	Bridge	1910	steel stringer	34	non-eligible
CALL42	482000.6	Crows Fork Creek Bridge	1911	pinned Pratt pony truss	46	non-eligible
CALL43	521000.6	Middle River Bridge	1922	riveted Pratt pony truss	36	non-eligible
CALL44	521004.7	Little Auxvasse Creek Bridge	1922	riveted Pratt through truss	43	possible

## CAMDEM COUNTY

CAMD01	J 296R	Niangua River Bridge	1931	riveted cantilever through truss	54	determ. elig.
CAMD02	J 832	Grand Glaize Bridge		(removed)		
CAMD03	K 510A	Niangua River Bridge	1936	riveted cantilever Warren deck truss	70	eligible
CAMD04	K 961R	Hurricane Deck Bridge	1935	riveted cantilever Warren deck truss	76	eligible
CAMD05	S 391	Little Niangua River Bridge	1933	steel cable suspension bridge	77	eligible
CAMD06	178000.7	Bridge	c1930	stone arch	29	non-eligible

## CAPE GIRARDEAU COUNTY

CAPE01	G 467R	Millersville Bridge	1923	riveted Pratt through truss	41	non-eligible
CAPE02	G 514R	Byrds Creek Bridge	1923	riveted Pratt through truss	36	non-eligible
CAPE03	K 27	Bridge		(replaced)		
CAPE04	K 768	Castor River Bridge	1939	steel plate through girder	54	possible
CAPE05	K 948R1	Cape Girardeau Bridge	1928	riveted cantilevered through truss	66	possible
CAPE06	L 297R	Bridge	1949	steel plate deck girder	53	possible
CAPE07	069500.1	Cape La Croix Creek Bridge		(replaced)		
CAPE08	141001.3	Bridge	c1920	riveted Pratt/Warren pony truss	33	non-eligible
CAPE09	151001.0	Bridge	1938	riveted Pratt through truss	33	non-eligible
CAPE10	162001.2	Bridge	c1920	concrete deck girder	26	non-eligible
CAPE11	210002.5	Little Whitewater River Bridge	c1915	pinned Pratt pony truss	26	non-eligible
CAPE12	275000.1	Burfordville Covered Bridge	1858	covered timber Howe truss	83	listed

## CARROLL COUNTY

CARR01	F 404	Carrollton Bridge	1919	riveted Warren pony truss	56	possible
CARR02	G 54R	Waverly Bridge	1926	riveted Pennsylvania through truss	72	eligible
CARR03	K 999R	McDaniel Memorial Bridge	1939	riveted cantilever through truss	63	possible
CARR04	007001.8	Cottonwood Creek Bridge	1904	riveted Pratt bedstead truss	46	possible
CARR05	015000.9	Bridge	1909	steel stringer	32	non-eligible
CARR06	039000.7	Bunch Hollow Bridge		(replaced)		
CARR07	050000.4	Bridge	1910	steel stringer	30	non-eligible
CARR08	060000.9	Bridge	1906	riveted Warren bedstead	40	non-eligible
CARR09	093000.8	Rock Branch Bridge	1911	steel stringer	30	non-eligible
CARR10	100000.2	Bridge	1914	steel stringer	30	non-eligible
CARR11	100001.0	Bridge		(replaced)		
CARR12	103000.1	Bridge	1907	steel stringer	32	non-eligible
CARR13	107000.4	Hurricane Creek Bridge	1909	steel stringer	32	non-eligible
CARR14	117000.2	Hurricane Creek Bridge	1914	steel stringer	30	non-eligible
CARR15	122000.9	Bridge Creek Bridge	1909	riveted Pratt pony truss	47	possible
CARR16	122001.4	Bridge Creek Bridge	1908	steel stringer	32	non-eligible
CARR17	133000.7	Hurricane Creek Bridge	1904	pinned Pratt pony truss	40	non-eligible
CARR18	142000.2	Burr Oak Creek Bridge	1909	steel stringer	36	non-eligible
CARR19	144000.3	Bridge	1908	steel stringer	32	non-eligible
CARR20	160000.3	Turkey Creek Bridge	1910	riveted Warren bedstead	38	non-eligible
CARR21	169000.5	Turkey Creek Bridge	1905	pinned Pratt bedstead	37	non-eligible
CARR22	177001.6	Bridge	1909	steel stringer	32	non-eligible
CARR23	196R00.4	Bridge	1909	riveted Warren bedstead	49	non-eligible
CARR24	202000.1	Bridge	1910	steel stringer	30	non-eligible
CARR25	211000.8	Bridge		(replaced)		

# CARROLL COUNTY (cont.)

CARR26	214002.1	Big Creek Bridge	1919	riveted Pratt pony truss, skewed	72	eligible
CARR27	224001.0	Bridge	1908	riveted Warren pony truss	46	non-eligible
CARR28	230000.1	Bridge	1909	pinned Pratt pony truss	35	non-eligible
CARR29	238000.8	Shootman Creek Bridge	1914	steel stringer	30	non-eligible
CARR30	247000.9	Shootman Creek Bridge	1908	pinned Pratt bedstead	42	non-eligible
CARR31	256000.5	Hurricane Creek Bridge	1910	steel stringer	30	non-eligible
CARR32	261000.7	Wolf Creek Bridge	1910	steel stringer	30	non-eligible
CARR33	266002.3	Mud Creek Bridge		(replaced)		
CARR34	274000.1	AT&SF Railroad Overpass	1906	pinned Pratt pony truss	43	non-eligible
CARR35	286000.9	Bridge	1909	steel stringer	32	non-eligible
CARR36	289000.6	Bridge	1911	steel stringer	30	non-eligible
CARR37	292R00.1	Sand Branch Bridge	1909	steel stringer	32	non-eligible
CARR38	293001.4	Sand Branch Bridge	1910	steel stringer	30	non-eligible
CARR39	300000.8	Turkey Creek Bridge	1908	pinned Pratt bedstead	39	non-eligible
CARR40	310001.5	Wakenda Creek Bridge	1909	pinned Pratt pony truss	42	non-eligible
CARR41	313001.3	Wakenda Creek Bridge	1946	riveted Camelback pony truss	41	non-eligible
CARR42	322000.7	Turkey Creek Bridge	1899	pinned Pratt half-hip pony truss	46	non-eligible
CARR43	330000.5	McCroskie Creek Bridge	1912	steel stringer	30	non-eligible
CARR44	336000.1	McGill Creek Bridge	1909	steel stringer	36	non-eligible
CARR45	337R00.2	McGill Creek Bridge	1904	riveted Pratt bedstead	44	non-eligible
CARR46	344000.5	McCroskie Creek Bridge	1910	pinned Pratt pony truss	30	non-eligible
CARR47	349000.3	Fish Pond Creek Bridge	1911	steel stringer	34	non-eligible
CARR48	349001.2	McCroskie Creek Bridge	1918	steel stringer	24	non-eligible
CARR49	358000.5	Bridge	1909	steel stringer	32	non-eligible
CARR50	365R02.3	Shootman Creek Bridge	1911	riveted Pratt pony truss	35	non-eligible
CARR51	367000.7	Bridge	1908	steel stringer	36	non-eligible
CARR52	373001.2	Little Wakenda Creek Bridge		(replaced)		
CARR53	375003.2	Bridge		(replaced)		
CARR54	388000.4	Bridge	1909	steel stringer	32	non-eligible
CARR55	389000.6	Bridge	1908	steel stringer	36	non-eligible
CARR56	393000.3	Little Wakenda Creek Bridge	1911	riveted Pratt pony truss	30	non-eligible
CARR57	407000.1	Santa Fe Railroad Overpass	c1895	pinned Pratt through truss	31	non-eligible
CARR58	407000.6	Bridge	1911	steel stringer	30	non-eligible
CARR59	424000.4	Bridge	1910	steel stringer	30	non-eligible
CARR60	438000.1	Bridge	1908	steel stringer	32	non-eligible
CARR61	453002.7	Bridge	1909	steel stringer	36	non-eligible
CARR62	496000.6	Weatherholt Bridge	1913	riveted Pratt pony truss	38	non-eligible
CARR63	503000.8	Booker Slough Bridge		(replaced)		
CARR64	514001.1	Moss Creek Bridge	1905	pinned Pratt pony truss	40	non-eligible
CARR65	523001.9	Bridge	1908	steel stringer	36	non-eligible
CARR66	530001.8	Bridge	1908	steel stringer	36	non-eligible
CARR67	547001.2	Miller Branch Bridge	1910	steel stringer	34	non-eligible
CARR68	548002.2	Becker Bridge		(replaced)		
CARR69	559000.6	Bridge	1909	steel stringer	36	non-eligible
CARR70	594001.3	Bridge	1910	steel stringer	34	non-eligible
CARR71	619000.4	Bridge	1909	steel stringer	36	non-eligible
CARR72	621000.5	Bridge	1909	steel stringer	36	non-eligible
CARR73	623000.4	Bridge	1909	steel stringer	36	non-eligible
CARR74	640000.2	County Line Bridge	1906	pinned Pratt pony truss	46	non-eligible

## CARTER COUNTY

CART01 G 712A1 Van Buren Bridge 1924 riveted Parker and Pratt through truss 65 determ. elig.

## CASS COUNTY

CASS01	H 453R1	Archie Bridge	1951	steel plate deck girder	38	non-eligible
CASS02	L 23R	CRI&P Railroad Overpass	1948	riveted Parker through truss	39	non-eligible
CASS03	016000.7	West Fork Bridge		(replaced)		
CASS04	058001.1	Bridge	c1910	pinned Pratt bedstead	25	non-eligible
CASS05	073000.6	Bridge	c1905	pinned Pratt bedstead	29	non-eligible
CASS06	078001.3	Big Creek Bridge	c1910	pinned Pratt pony truss	30	non-eligible
CASS07	109000.0	Duncan Creek Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
CASS08	112000.4	Big Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
CASS09	117000.5	Camp Creek Bridge	c1915	pinned Pratt pony truss	25	non-eligible
CASS10	126001.7	East Creek Bridge		(replaced)		
CASS11	139000.1	Strasburg Bridge		(replaced)		
CASS12	140000.6	Templeton Bridge	1905	pinned Pratt bedstead	37	non-eligible
CASS13	141001.4	East Creek Bridge		(replaced)		
CASS14	149001.1	Crawford Creek Bridge	c1890	pinned Pratt pony truss	35	non-eligible
CASS15	154001.6	Big Creek Bridge		(replaced)		
CASS16	162001.2	Crawford Creek Bridge	c1900	pinned Pratt bedstead	32	non-eligible
CASS17	165000.0	Crawford Creek Bridge	1910	pinned Pratt half-hip pony truss	40	non-eligible
CASS18	70004.1	Massey Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
CASS19	187000.2	Town Creek Bridge	c1910	pinned Pratt half-hip pony truss	20	non-eligible
CASS20	191000.2	Massey Creek Bridge	1910	pinned Pratt half-hip pony truss	38	non-eligible
CASS21	193001.0	Hall Bridge		(replaced)		
CASS22	194000.4	Massey Creek Bridge	c1890	pinned Pratt through truss	34	non-eligible
CASS23	213000.6	Lusher Bridge	1911	pinned Pratt pony truss	35	non-eligible
CASS24	217000.1	Coldwater Creek Bridge	c1910	pinned Pratt bedstead	25	non-eligible
CASS25	230001.7	Wolf Creek Bridge	c1915	pinned Pratt bedstead	25	non-eligible
CASS26	265000.8	Wolf Creek Bridge	c1910	pinned Pratt bedstead	25	non-eligible
CASS27	282000.4	Camp Creek Bridge		(replaced)		
CASS28	299000.3	Grand River Bridge	c1875	Bowstring pony arch-truss	81	eligible
CASS29	300000.6	Price and Colburn Bridge	1910	pinned Pratt pony truss	40	non-eligible
CASS30	329000.9	Wolf Creek Bridge		(destroyed)		
CASS31	329001.3	East Branch Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
CASS32	338000.7	Russell Bridge	1905	pinned kingpost pony truss	48	possible
CASS33	342001.4	Eight Mile Creek Bridge	c1905	pinned Pratt bedstead	32	non-eligible
CASS34	347000.5	East Fork Bridge	c1910	pinned Pratt pony truss	28	non-eligible
CASS35	361000.6	East Fork Bridge	c1890	pinned Pratt through truss	37	non-eligible
CASS36	364000.4	Prewitt Bridge	1905	pinned kingpost pony truss	46	possible
CASS37	369000.6	East Fork Bridge		(replaced)		
CASS38	382000.8	Eight Mile Creek Bridge	1918	pinned Pratt pony truss	35	non-eligible
CASS39	385000.5	Camp Creek Bridge		(replaced)		
CASS40	386000.3	Camp Creek Bridge	c1905	pinned Pratt bedstead	25	non-eligible
CASS41	392001.1	Campbell Bridge		(replaced)		
CASS42	393001.7	Camp Creek Bridge	1912	pinned Pratt half-hip pony truss	37	non-eligible
CASS43	394001.0	Crooked Creek Bridge	c1905	pinned Pratt bedstead	26	non-eligible
CASS44	402002.2	Camp Creek Bridge		(destroyed)		
CASS45	407000.4	Camp Creek Bridge	c1915	pinned Pratt pony truss	28	non-eligible
CASS46	413001.2	Clear Creek Bridge		(replaced)		
CASS47	438000.4	Sugar Creek Bridge		(replaced)		

## CASS COUNTY (cont.)

CASS48	450000.5	Big Creek Bridge	c1905	pinned Pratt bedstead	35	non-eligible
CASS49	470001.4	Panther Creek Bridge	1906	pinned Pratt bedstead	37	non-eligible
CASS50	480000.2	Walnut Creek Bridge	c1905	pinned Pratt bedstead	32	non-eligible
CASS51	485002.8	Harless Creek Bridge		(replaced)		
CASS52	488000.2	Harding Creek Bridge	1906	pinned Pratt bedstead	36	non-eligible
CASS53	511001.0	South Fork Bridge	c1905	pinned Pratt bedstead	11	non-eligible
CASS54	530000.2	Black Creek Bridge	c1905	pinned Pratt bedstead	26	non-eligible
CASS55	534002.2	Grand River Bridge	1884	pinned Pratt through truss	33	non-eligible
CASS56	540000.8	App Bridge	1897	pinned Pratt bedstead	37	non-eligible
CASS57	558002.0	Eight Mile Creek Bridge		(replaced)		
CASS58	564000.5	Eight Mile Creek Bridge	c1915	pinned Pratt pony truss	25	non-eligible
CASS59	577001.5	Grand River Bridge	c1930	riveted Warren pony truss	28	non-eligible
CASS60	587001.2	Sugar Creek Bridge	c1915	pinned Pratt pony truss	28	non-eligible
CASS61	592001.9	Joslin Branch Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
CASS62	605001.7	Lick Creek Bridge	c1905	pinned Pratt bedstead	29	non-eligible
CASS63	606001.7	Lick Creek Bridge	c1905	pinned Pratt bedstead	26	non-eligible
CASS64	632001.6	Creighton Bridge		(replaced)		
CASS65	659000.1	Massey Creek Bridge	1919	pinned Pratt pony truss	42	non-eligible
CASS66	none	Clark Bridge	1880	pinned Pratt through truss	58	possible

## CEDAR COUNTY

CEDA01	H 623	Cedar Creek Bridge	1931	riveted Pratt through truss	38	non-eligible
CEDA02	H 963	Sac River Bridge		(replaced)		
CEDA03	X 190	Cedar Creek Bridge	1949	riveted polyg. Warren pony truss	48	non-eligible
CEDA04	022002.5	Little Alder Creek Bridge	1915	steel stringer	37	non-eligible
CEDA05	063000.1	Stump Ford Bridge	1906	pinned Pratt half-hip pony truss	51	possible
CEDA06	068000.8	Metcalf Bridge	1919	pinned Parker through truss	51	possible
CEDA07	095000.1	Caplinger Mill Bridge	1895	pinned Pratt through truss	78	eligible
CEDA08	117000.1	Keich Ford Bridge	1917	steel stringer	35	non-eligible
CEDA09	170000.6	Sullivan Ford Bridge	1902	pinned Pratt bedstead	39	non-eligible
CEDA10	202R00.2	Silver Creek Bridge	c1908	pinned Pratt half-hip pony truss	38	non-eligible
CEDA11	244000.3	Owens Mill Bridge	1906	pinned Pratt through truss	43	non-eligible
CEDA12	250001.7	Edsall Ford Bridge	1911	pinned Pratt through truss	46	non-eligible
CEDA13	267000.7	Snag Creek Bridge	1915	pinned Pratt pony truss	39	non-eligible
CEDA14	277000.9	Horse Creek Bridge	1911	pinned Pratt pony truss	44	non-eligible
CEDA15	287000.2	Low Brown Ford Bridge	1917	pinned Pratt through truss	44	non-eligible
CEDA16	309003.4	County Line Bridge	1917	pinned Pratt pony truss	42	non-eligible
CEDA17	318000.5	Potter Ford Bridge	1905	pinned Pratt through truss	41	non-eligible
CEDA18	446003.1	Ball Ford Bridge	1914	pinned Pratt pony truss	40	non-eligible
CEDA19	none	Kennedy Ford Bridge	1896	pinned Pratt through truss	33	non-eligible

## CHARITON COUNTY

CHAR01	H 520R	Mussel River Bridge	1927	riveted Pratt through truss	36	non-eligible
CHAR02	H 667	Doxie Creek Bridge	1929	riveted Warren pony truss, skewed	67	determ. elig.
CHAR03	J 728	Mussel Fork Bridge		(replaced)		
CHAR04	J 729	Bridge		(replaced)		
CHAR05	009001.1	Big Brushy Creek Bridge	c1905	pinned Pratt bedstead	31	non-eligible
CHAR06	024003.8	Yellow Creek Bridge	1934	riveted polyg. Warren pony truss	52	possible



## CHARITON COUNTY (cont.)

CHAR07	031000.0	Locust Creek Bridge	1925	riveted Pratt through truss	28	non-eligible
CHAR08	066000.7	Long Branch Bridge	1910	riveted Warren pony truss	37	non-eligible
CHAR09	074000.6	Locust Branch Bridge	1911	riveted Warren pony truss	35	non-eligible
CHAR10	085001.1	Van Dosen Branch Bridge	1912	riveted Warren bedstead	43	non-eligible
CHAR11	091000.7	Fork Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
CHAR12	122001.5	Bridge	1912	riveted Warren bedstead	38	non-eligible
CHAR13	126001.9	Puzzle Creek Bridge	1904	pinned Pratt through truss	39	non-eligible
CHAR14	146000.9	Elm Creek Bridge	c1910	pinned Pratt pony truss	30	non-eligible
CHAR15	158001.2	Jones Branch Bridge	1916	steel stringer	41	non-eligible
CHAR16	173001.0	Jones Branch Bridge	1916	riveted Warren pony truss	34	non-eligible
CHAR17	201000.8	Clark Branch Bridge	1910	riveted Warren bedstead	40	non-eligible
CHAR18	212001.2	Clark Branch Bridge	1916	pinned Pratt pony truss	34	non-eligible
CHAR19	278001.4	Salt Creek Bridge	1912	pinned Pratt pony truss	34	non-eligible
CHAR20	280001.5	Salt Creek Bridge		(replaced)		
CHAR21	365001.2	Palmer Creek Bridge	1911	lattice bedstead	37	non-eligible
CHAR22	373000.8	Bridge	1912	riveted Warren pony truss	37	non-eligible
CHAR23	377000.3	Palmer Creek Bridge	1911	lattice bedstead	37	non-eligible
CHAR24	385000.7	Long Branch Bridge	1911	riveted Warren pony truss	35	non-eligible
CHAR25	409000.9	Chariton River Bridge		(replaced)		
CHAR26	423000.3	Bridge		(replaced)		
CHAR27	440000.2	Bridge	1916	riveted Warren pony truss	39	non-eligible
CHAR28	463001.4	Middle Fork Bridge	1907	riveted Warren pony truss	48	possible
CHAR29	482000.3	Muncas Creek Bridge	1911	riveted Warren pony truss	35	non-eligible
CHAR30	499000.1	Chariton River Bridge	1906	riveted Pratt through truss	51	possible
CHAR31	534000.1	Mussel Fork Bridge		(replaced)		

## CHRISTIAN COUNTY

CHRI01	126000.0	Frazier Ford Bridge		(replaced)		
CHRI02	143001.0	Blue Springs Bridge		(replaced)		
CHRI03	187000.4	Riverdale Bridge	1906	pinned Pratt through truss	45	determ. non-elig.
CHRI04	209001.5	Riverside Bridge	1909	pinned Pratt through truss	45	non-eligible
CHRI05	249000.3	Green Bridge	1912	pinned Pratt through truss	39	non-eligible
CHRI06	262002.8	Reed Ford Bridge	c1920	pinned Pratt through truss	34	non-eligible
CHRI07	292002.2	Jenkins Ford Bridge	1914	pinned Pratt through truss	39	non-eligible
CHRI08	306000.8	Roberts Ford Bridge	1919	pinned Pratt pony truss	42	non-eligible
CHRI09	328500.1	McCracken Street Bridge	1922	riveted Baltimore through truss	73	eligible
CHRI10	382000.4	Hawkins Ford Bridge	1915	pinned Pratt pony truss	32	non-eligible
CHRI11	433000.4	Red Bridge	1915	pinned Pratt pony truss	52	possible

## CLARK COUNTY

CLAR01	K 182	Lee City Bridge		(replaced)		
CLAR02	K 563	Fox River Bridge		(replaced)		
CLAR03	K 918	St. Francisville Bridge	1937	riveted cantilever through truss	62	determ. elig.
CLAR04	029R00.7	Wilson Bridge	1898	pinned Pratt pony truss	55	possible
CLAR05	036002.2	Linn Creek Bridge	1901	pinned Pratt pony truss	35	non-eligible
CLAR06	075001.3	Fox River Bridge	c1905	pinned Pratt half-hip pony truss	29	non-eligible
CLAR07	077000.9	Sutherland Branch Bridge		(replaced)		

## CLARK COUNTY (cont.)

CLAR08	078000.3	Sherwood Bridge		(replaced)	
CLAR09	090001.1	Dumas Creek Bridge	1911	pinned Pratt pony truss	38 non-eligible
CLAR10	110002.3	Beard Bridge	1914	pinned Pratt through truss	37 non-eligible
CLAR11	116001.6	North Wyaconda River Bridge	c1910	pinned Pratt through truss	23 non-eligible
CLAR12	125001.6	North Wyaconda River Bridge	c1925	pinned Pratt through truss	26 non-eligible
CLAR13	128002.5	Cama Bridge	1914	pinned Pratt pony truss	38 non-eligible
CLAR14	148001.2	Holmes Bridge	1898	pinned Pratt pony truss	44 non-eligible
CLAR15	151001.0	Little Fox River Bridge	c1910	pinned Pratt pony truss	30 non-eligible
CLAR16	164001.6	Fox River Bridge	c1910	pinned Pratt pony truss	32 non-eligible
CLAR17	170001.6	Fox River Bridge	c1905	pinned Pratt pony truss	33 non-eligible
CLAR18	173000.3	McCoy Bridge	c1905	pinned Pratt pony truss	26 non-eligible
CLAR19	174000.1	Fox River Bridge	c1925	riveted Pratt through truss	28 non-eligible
CLAR20	184000.6	Vermillion Bridge	1899	pinned Pratt through truss	43 non-eligible
CLAR21	257002.2	Wyaconda River Bridge	c1925	riveted Parker through truss	30 non-eligible
CLAR22	264001.2	Wyaconda River Bridge		(replaced)	
CLAR23	276000.9	Riney Bridge	1910	pinned Pratt pony truss	38 non-eligible
CLAR24	304001.3	Cameron Bridge		(replaced)	
CLAR25	305000.4	Fox River Bridge	c1910	pinned Pratt pony truss	33 non-eligible
CLAR26	312001.2	Sugar Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
CLAR27	317002.4	Fox Slough Bridge	1897	pinned Pratt through truss	49 possible
CLAR28	319000.7	Honey Creek Bridge	1904	pinned Pratt pony truss	40 non-eligible
CLAR29	326002.1	Fabius River Bridge		(replaced)	
CLAR30	328002.2	Wilson Bridge	1911	pinned Pratt pony truss	35 non-eligible
CLAR31	335001.0	Shaffer Creek Bridge		(replaced)	
CLAR32	358000.6	Wyaconda River Bridge	c1910	pinned Pratt through truss	31 non-eligible
CLAR33	367000.4	Wyaconda River Bridge	c1925	riveted Pratt through truss	28 non-eligible
CLAR34	373000.8	Honey Creek Bridge	c1910	pinned Pratt pony truss	26 non-eligible

## CLAY COUNTY

CLAY01	K 108A	Fishing River Bridge	1933	riveted Warren pony truss	46 non-eligible
CLAY02	K 647	Fishing River Bridge	1936	steel plate deck girder	38 non-eligible
CLAY03	N111B21	Shoal Creek Bridge	1921	concrete filled spandrel arch	49 possible
CLAY04	N133B21	Small Creek Bridge		(replaced)	
CLAY05	N213B31	Big Shoal Creek Bridge		(replaced)	
CLAY06	N213B31	Fishing River Bridge	1912	pinned Pratt half-hip pony truss	39 non-eligible
CLAY07	S 818	Clear Creek Bridge	1933	riveted Warren pony truss	43 non-eligible
CLAY08	S007B12	Chouteau Bridge	1887	pinned Whipple through truss	97 eligible
CLAY09	U1370131	Wildwood Avenue Overpass	1907	concrete deck girder	29 non-eligible
CLAY10	046000.4	Clear Creek Bridge	c1940	2-angle Camelback pony truss	37 non-eligible
CLAY11	049001.6	New Hope Creek Bridge	1919	concrete Luten arch	64 possible
CLAY12	070002.1	Carroll Creek Bridge	1920	concrete filled spandrel arch	49 possible
CLAY13	137000.1	North Thompson Ave. Bridge		(replaced)	
CLAY14	137000.2	South Thompson Ave. Bridge		(replaced)	
CLAY15	137000.5	Marietta Street Bridge	c1920	concrete open spandrel arch	31 non-eligible
CLAY16	137000.6	Garland Street Bridge	1917	concrete open spandrel arch	52 possible
CLAY17	153001.3	Wilkerson Creek Bridge	1921	concrete Luten arch	62 possible
CLAY18	247500.1	Richfield Street Overpass		(replaced)	
CLAY19	247500.7	Campbell Drive Bridge	1921	concrete filled spandrel arch	26 non-eligible
CLAY20	247500.9	Rush Creek Bridge	c1920	concrete filled spandrel arch	21 non-eligible
CLAY21	293000.3	Fishing River Bridge	1916	riveted Pratt pony truss	42 non-eligible
CLAY22	354000.2	Williams Creek Bridge	1920	concrete Luten arch	54 possible

## CLINTON COUNTY

CLIN01	H 653R	Plattsburg Bridge	1927	concrete open spandrel arch	34 non-eligible
CLIN02	J 245	Shoal Creek Bridge		(replaced)	
CLIN03	018001.2	McGuire Branch Bridge	c1905	riveted kingpost pony truss	44 non-eligible
CLIN04	029001.7	Castile Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
CLIN05	031000.9	Castile Creek Bridge	c1910	pinned Pratt pony truss	38 non-eligible
CLIN06	032000.2	Castile Creek Bridge		(replaced)	
CLIN07	058000.7	Grindstone Creek Bridge	c1920	concrete filled spandrel arch	18 non-eligible
CLIN08	072002.8	Shoal Creek Bridge		(replaced)	
CLIN09	089000.4	Deer Creek Bridge	1909	pinned Pratt pony truss	41 non-eligible
CLIN10	104000.3	Little Platte River Bridge	1918	steel stringer	30 non-eligible
CLIN11	115001.6	Little Platte River Bridge	c1910	pinned Pratt pony truss	30 non-eligible
CLIN12	118001.5	Little Platte River Bridge		(replaced)	
CLIN13	123001.3	Shoal Creek Bridge	c1910	riveted Pratt bedstead	35 non-eligible
CLIN14	124001.7	Shoal Creek Bridge		(replaced)	
CLIN15	126000.4	Little Shoal Creek Bridge		(replaced)	
CLIN16	129000.5	Little Shoal Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
CLIN17	152000.6	Little Platte River Bridge	c1915	riveted Camelback pony truss	38 non-eligible
CLIN18	255000.5	Little Platte River Bridge	1906	riveted Baltimore bedstead	76 eligible
CLIN19	256000.9	Little Platte River Bridge	c1920	2-angle Warren pony truss	44 non-eligible
CLIN20	291001.5	Roberts Branch Bridge	1898	pinned Pratt half-hip pony truss	43 non-eligible
CLIN21	325001.4	Castile Creek Bridge	1902	pinned Pratt through truss	45 non-eligible

## COLE COUNTY

COLE01	001000.2	Moniteau Creek Bridge	1916	pinned Pratt through truss	46 non-eligible
COLE02	031000.7	Bridge		(replaced)	
COLE03	031000.8	Koehler's Ford Bridge	1911	pinned Pratt through truss	54 possible
COLE04	039000.1	Rock House Ford Bridge		(replaced)	
COLE05	047002.8	Robinson's Ferry Bridge	1916	pinned Parker through truss	53 possible
COLE06	069001.6	Wears Creek Bridge	c1925	concrete filled spandrel arch	20 non-eligible
COLE07	078003.4	Herbrandt Creek Bridge	1917	concrete slab	34 non-eligible
COLE08	092002.4	Rising Creek Bridge	1926	concrete spandrel arch	28 non-eligible
COLE09	165001.9	McCannis Ford Bridge	1902	pinned Pratt through truss	42 non-eligible
COLE10	218000.1	Cole Junction Bridge	1917	concrete deck girder	50 possible
COLE11	229001.0	Moreau River Bridge	1934	riveted Pratt through truss	39 non-eligible

## COOPER COUNTY

COOP01	G 366	Lamine River Bridge	1924	riveted Parker through truss	46 non-eligible
COOP02	J 72	Lamine River Bridge	1930	concrete open spandrel arch	47 non-eligible
COOP03	K 236	Lamine River Bridge	1933	riveted Parker through truss	50 possible
COOP04	W 304	Turley Bridge	1907	pinned Parker through truss	47 possible
COOP05	002000.7	Bridge	1906	steel stringer	36 non-eligible
COOP06	003001.7	Bridge	c1910	pinned Pratt pony truss	20 non-eligible
COOP07	025000.0	Dicks Bridge	1908	pinned Parker through truss	53 possible
COOP08	026000.4	Bridge	c1910	pinned Pratt pony truss	30 non-eligible
COOP09	067001.8	Bridge	1912	steel stringer	34 non-eligible
COOP10	070000.0	Petite Saline Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
COOP11	140000.0	Billingsville Bridge	1913	pinned Pratt pony truss	44 non-eligible
COOP12	156000.6	Roberts Ford Bridge		(replaced)	

## COOPER COUNTY (cont.)

COOP13	173002.9	Cordry Bridge		(replaced)	
COOP14	202000.0	Bryant Bottom Bridge	1908	pinned Parker through truss	60 possible
COOP15	211000.0	Shakleton Ford Bridge	1913	pinned Parker through truss	48 possible
COOP16	223000.4	Klenklen Bridge	1930	steel cable suspension bridge	58 determ. elig.
COOP17	231001.3	Streit Ford Bridge	1913	pinned Pratt through truss	46 possible
COOP18	238002.0	Otterville Ford Bridge	1908	pinned Parker through truss	50 possible
COOP19	258001.3	Otter Creek Bridge	1920	riveted Pratt pony truss	40 non-eligible
COOP20	314000.5	Cotton Bridge	1923	riveted Pratt pony truss	42 non-eligible
COOP21	333001.3	Moniteau Creek Bridge	1899	pinned kingpost pony truss	59 possible
COOP22	030003.7	Thomas Branch Bridge	1920	concrete deck girder	46 possible

## CRAWFORD COUNTY

CRAW01	H 117R	Meramec River Bridge	1925	concrete filled spandrel arch	54 possible
CRAW02	X 758	Meramec River Bridge	1948	steel stringer	42 non-eligible
CRAW03	038000.7	Bridge	1917	riveted Warren pony truss	34 non-eligible
CRAW04	141001.2	Sappington Bridge	1904	pinned Parker through truss	63 possible
CRAW05	211000.0	Bird's Nest Bridge	1915	pinned Pennsylvania through truss	60 possible

## DADE COUNTY

DADE01	H 4	South Greenfield Overpass	1924	pinned Pratt through truss, skewed	61 determ. elig.
DADE02	047000.9	McArthur Bridge	1911	pinned Pratt pony truss	42 non-eligible
DADE03	141000.7	Coyne Ford Culvert	1911	concrete arch culvert	32 non-eligible
DADE04	196000.5	Hulston Mill Bridge	1927	riveted Camelback pony truss	52 possible
DADE05	214002.3	Odell Bridge	1910	steel stringer	48 possible
DADE06	333000.9	Comet Bridge	1903	pinned Pratt through truss	43 non-eligible
DADE07	348000.3	Lunsford Ford Bridge	1912	pinned Pratt through truss	41 non-eligible
DADE08	370001.4	Garren Ford Bridge	1908	pinned Pratt half-hip pony truss	40 non-eligible
DADE09	421000.1	Antioch Bridge	1906	pinned Pratt pony truss	44 non-eligible
DADE10	471001.4	Everton Bridge	1910	pinned Pratt half-hip pony truss	33 non-eligible

## DALLAS COUNTY

DALL01	J 782	Bennett Springs Bridge	1931	concrete open spandrel arch	49 possible
DALL02	X 195	Niangua River Bridge	c1910	pinned Pratt through truss	27 non-eligible
DALL03	109000.3	Culvert		(replaced)	
DALL04	310000.7	Dousinberry Creek Bridge	c1910	pinned Pratt half-hip pony truss	30 non-eligible

## DAVISS COUNTY

DAVI01	H 752	Big Creek Ditch Bridge	1928	riveted Pratt through truss	41 non-eligible
DAVI02	J 146R	Grand River Bridge	1930	riveted Pratt through truss	44 non-eligible
DAVI03	017002.0	Cypress Creek Bridge	c1910	riveted kingpost pony truss	53 possible
DAVI04	025002.8	Hickory Creek Bridge	c1910	pinned Pratt bedstead	30 non-eligible
DAVI05	044002.8	Little Creek Bridge	1919	steel stringer	24 non-eligible
DAVI06	044003.6	Little Creek Bridge	1909	pinned Pratt pony truss	41 non-eligible
DAVI07	052000.2	Tombstone Creek Bridge	c1915	pinned Pratt bedstead	35 non-eligible
DAVI08	065001.1	Hickory Creek Bridge	c1915	riveted Pratt half-hip pony truss	35 non-eligible

## DAVIESS COUNTY (cont.)

DAVI09	110R01.1	Muddy Creek Bridge		(replaced)	
DAVI10	114000.5	Clear Creek Bridge	1900	pinned Pratt bedstead	41 non-eligible
DAVI11	121001.8	Clear Creek Bridge	c1910	pinned Pratt pony truss	38 non-eligible
DAVI12	135000.2	Grand River Bridge		(replaced)	
DAVI13	154000.3	Lick Fork Bridge	1876	Bowstring through arch-truss	76 eligible
DAVI14	172000.6	Bear Branch Bridge	c1910	pinned Pratt pony truss	35 non-eligible
DAVI15	198001.7	Marrowbone Creek Bridge	1900	pinned Pratt bedstead	44 non-eligible
DAVI16	207000.7	Dog Creek Bridge	c1910	pinned Pratt pony truss	35 non-eligible
DAVI17	208001.1	Dog Creek Bridge	c1910	pinned Pratt pony truss	35 non-eligible
DAVI18	216000.6	Marrowbone Creek Bridge		(replaced)	
DAVI19	245000.5	Smith Branch Bridge	c1900	pinned Pratt half-hip pony truss	31 non-eligible
DAVI20	282000.7	Owl Creek Bridge	c1910	pinned Pratt bedstead	35 non-eligible
DAVI21	289001.8	Little Creek Bridge	1907	pinned Pratt bedstead	36 non-eligible
DAVI22	304001.0	Muddy Creek Bridge	c1910	pinned Pratt bedstead	35 non-eligible
DAVI23	315003.4	Grindstone Creek Bridge	1886	pinned Pratt through truss	56 possible
DAVI24	317000.8	Grand River Bridge	1883	pinned Whipple through truss	78 eligible
DAVI25	321002.5	Grand River Bridge	1892	pinned Pratt through truss	53 possible
DAVI26	329001.1	Sampson Creek Bridge	c1910	pinned Camelback through truss	47 possible
DAVI27	330000.9	Sampson Creek Bridge	1893	pinned Pratt through truss	39 non-eligible
DAVI28	349003.1	Big Creek Bridge	c1910	pinned Pratt through truss	33 non-eligible
DAVI29	350001.2	Big Goose Creek Bridge	c1920	riveted Pratt pony truss	24 non-eligible
DAVI30	355002.4	Big Creek Bridge	c1910	pinned Pratt through truss	35 non-eligible
DAVI31	359000.6	Big Creek Bridge	c1910	pinned Camelback through truss	50 possible
DAVI32	364000.9	Cypress Creek Bridge	c1910	pinned Pratt pony truss	40 non-eligible
DAVI33	380000.7	Hickory Creek Bridge	1916	pinned Pratt bedstead	32 non-eligible
DAVI34	396000.7	Pilot Grove Creek Bridge	c1910	pinned Pratt pony truss	35 non-eligible
DAVI35	420001.1	Big Muddy Creek Bridge	c1910	pinned Pratt pony truss	35 non-eligible
DAVI36	422R01.0	Pilot Grove Creek Bridge	1947	2-angle Pratt pony truss	37 non-eligible
DAVI37	435000.1	Bushy Creek Bridge	1918	steel stringer	24 non-eligible
DAVI38	455000.7	Big Muddy Creek Bridge	c1930	riveted Pratt through truss	28 non-eligible
DAVI39	458000.1	Grand River Bridge		(destroyed)	
DAVI40	465000.6	Honey Creek Bridge	1907	pinned Pratt pony truss	43 non-eligible
DAVI41	557001.0	Cypress Creek Bridge	c1930	riveted Pratt pony truss	28 non-eligible
DAVI42	574000.8	Big Muddy Creek Bridge		(replaced)	
DAVI43	586000.0	Grand River Bridge		(destroyed)	

## DEKALB COUNTY

DEKA01	J 777	Grindstone Creek Bridge	1931	steel stringer	42 non-eligible
DEKA02	014000.3	Third Fork Bridge	c1905	pinned Pratt half-hip pony truss	35 non-eligible
DEKA03	026001.0	Bridge	1901	pinned Pratt bedstead	32 non-eligible
DEKA04	034001.5	Little Third Fork Bridge	c1905	pinned Pratt half-hip pony truss	27 non-eligible
DEKA05	036000.4	Little Third Fork Bridge	c1905	pinned Pratt half-hip pony truss	35 non-eligible
DEKA06	043000.5	Bridge	1902	pinned Pratt half-hip pony truss	32 non-eligible
DEKA07	044000.6	Third Fork Bridge		(replaced)	
DEKA08	069001.6	Lost Creek Bridge	1907	pinned Pratt half-hip pony truss	37 non-eligible
DEKA09	074000.2	Lost Creek Bridge	1895	pinned Pratt pony truss	34 non-eligible
DEKA10	078000.5	Lost Creek Bridge		(replaced)	
DEKA11	081000.6	Lost Creek Bridge	1907	pinned Pratt half-hip pony truss	40 non-eligible
DEKA12	082000.1	Lost Creek Bridge	1893	pinned Pratt pony truss	48 possible

# DEKALB COUNTY (cont.)

DEKA13	083000.3	Lost Creek Bridge	c1900	pinned Pratt pony truss (replaced)	36 non-eligible
DEKA14	108001.1	Lost Creek Bridge	c1900	pinned Pratt pony truss	29 non-eligible
DEKA15	115000.1	Lost Creek Bridge	1904	pinned Pratt half-hip pony truss (replaced)	40 non-eligible
DEKA16	124000.9	Lost Creek Bridge			
DEKA17	129000.0	Lost Creek Bridge			
DEKA18	131002.5	Grindstone Creek Bridge	1901	pinned kingpost pony truss	57 possible
DEKA19	139000.3	Lost Creek Bridge	1894	pinned Pratt half-hip pony truss	51 possible
DEKA20	160000.7	Big Muddy Creek Bridge	1904	pinned Pratt pony truss	37 non-eligible
DEKA21	160002.5	Big Muddy Creek Bridge	c1910	pinned Pratt half-hip pony truss	30 non-eligible
DEKA22	177000.5	Grindstone Creek Bridge	c1925	2-angle Pratt pony truss	34 non-eligible
DEKA23	177000.8	Grindstone Creek Bridge	1899	pinned Pratt through truss	45 non-eligible
DEKA24	193001.1	Lost Creek Bridge	1894	pinned Pratt through truss	52 possible
DEKA25	195001.5	Branscombe Bridge	1903	pinned Pratt pony	40 non-eligible
DEKA26	196000.1	Lost Creek Bridge	1898	pinned Pratt half-hip pony truss	39 non-eligible
DEKA27	211001.1	Grindstone Creek Bridge	c1910	pinned Pratt pony truss (replaced)	34 non-eligible
DEKA28	215003.7	Bridge		(replaced)	
DEKA29	215004.2	Grindstone Creek Bridge			
DEKA30	220001.1	Lost Creek Bridge	1900	pinned Pratt pony truss (replaced)	40 non-eligible
DEKA31	227000.7	Grindstone Creek Bridge			
DEKA32	241000.9	Lost Creek Bridge	1911	pinned Pratt pony truss (replaced)	34 non-eligible
DEKA33	260000.9	Bridge			
DEKA34	267000.2	Castile Creek Bridge	c1910	pinned Pratt pony truss (replaced)	38 non-eligible
DEKA35	278000.8	Lost Creek Bridge		(replaced)	
DEKA36	296000.8	Bridge			
DEKA37	298000.1	Little Third Fork Bridge	1895	pinned Pratt half-hip pony truss	46 possible
DEKA38	299000.3	Little Third Fork Bridge	1894	pinned Pratt half-hip pony truss	49 possible
DEKA39	304000.8	Little Third Fork Bridge	1901	pinned Pratt half-hip pony truss	40 non-eligible
DEKA40	305000.6	Little Third Fork Bridge	1898	pinned Pratt half-hip pony truss (replaced)	42 non-eligible
DEKA41	312000.4	Third Fork Bridge		(replaced)	
DEKA42	322001.1	Morgan Branch Bridge		(replaced)	
DEKA43	322002.2	Little Third Fork Bridge		(replaced)	
DEKA44	328001.3	Morgan Branch Bridge	c1905	pinned Pratt half-hip pony truss	32 non-eligible
DEKA45	328001.9	Little Third Fork Bridge	c1910	pinned Pratt pony truss (replaced)	34 non-eligible
DEKA46	330000.4	Bridge			
DEKA47	336000.8	Third Fork Bridge	1899	pinned Pratt half-hip pony truss (replaced)	42 non-eligible
DEKA48	338001.3	Bridge		(replaced)	
DEKA49	342000.4	Third Fork Bridge		(replaced)	
DEKA50	347000.5	Bridge		(replaced)	
DEKA51	356000.2	Little Third Fork Bridge	c1910	pinned Pratt pony truss	38 non-eligible
DEKA52	376000.4	Bridge	1893	pinned Pratt half-hip pony truss	52 possible
DEKA53	380000.2	Bridge	c1905	pinned Pratt half-hip pony truss	27 non-eligible
DEKA54	391000.9	Castile Creek Bridge	1895	pinned Pratt half-hip pony truss	46 possible
DEKA55	391001.1	Bover Bridge	c1900	pinned Pratt half-hip pony truss	27 non-eligible
DEKA56	391001.7	Bridge	1893	pinned Pratt half-hip pony truss (replaced)	46 possible
DEKA57	422000.4	Lost Creek Bridge		(replaced)	
DEKA58	453000.9	Wamsley Creek Bridge		(replaced)	
DEKA59	458001.6	Grindstone Creek Bridge		(replaced)	
DEKA60	463000.7	Wamsley Creek Bridge		(replaced)	
DEKA61	464000.1	Wamsley Creek Bridge		(replaced)	
DEKA62	479000.2	Bridge		(replaced)	
DEKA63	480001.2	Brushy Creek Bridge		(replaced)	

## DENT COUNTY

DENT01	G 537R	Gladden Creek Bridge	1924	riveted Pratt through truss	38 non-eligible
DENT02	H 363	Meramec River Bridge		(replaced)	
DENT03	034001.4	Dry Fork Bridge	c1915	pinned Pratt half-hip pony truss	30 non-eligible
DENT04	389500.1	Second Street Culvert	c1925	concrete arch culvert	29 non-eligible

## DOUGLAS COUNTY

DOUG01	J 748	Twin Bridge	1931	concrete open spandrel arch	50 possible
DOUG02	J 749	Twin Bridge	1931	concrete open spandrel arch	49 possible
DOUG03	209003.0	Rome Bridge	1914	pinned Pratt through truss	50 possible
DOUG04	283001.4	Dean Ford Bridge	1915	pinned Pratt through truss	50 possible

## DUNKLIN COUNTY

DUNK01	G 433R	St. Francis River Bridge	1923	riveted Parker through truss	47 non-eligible
DUNK02	K 838	Bridge	1939	steel stringer	40 non-eligible
DUNK03	087000.2	Bridge	1905	pinned Pratt bedstead	41 non-eligible

## FRANKLIN COUNTY

FRAN01	H 996R1	Meramec River Bridge	1930	concrete open spandrel arch	57 possible
FRAN02	J 872	Pacific Overpass	1932	concrete open spandrel arch	40 non-eligible
FRAN03	J 959	Big Boeuf Creek Bridge	1934	riveted polyg. Warren pony truss	46 non-eligible
FRAN04	F-6	Big Berger Creek Bridge	1912	pinned Pratt through truss	43 non-eligible
FRAN05	F-31	Bucklick Creek Bridge	1910	pinned Pratt pony truss	40 non-eligible
FRAN06	F-32	Steiner's Ford Bridge	1908	pinned Parker through truss	57 possible
FRAN07	F-33	Horstkamp Ford Bridge	1915	riveted Parker through truss	51 possible
FRAN08	F-46	Noelker's Ford Bridge	1908	pinned Pratt through truss	47 non-eligible
FRAN09	F-51	Labadie Bottoms Bridge	1900	pinned Pratt bedstead	38 non-eligible
FRAN10	F-52	Labadie Creek Bridge	c1930	concrete filled spandrel arch	27 non-eligible
FRAN11	F-56	Labadie Creek Bridge	1901	pinned Pratt through truss	37 non-eligible
FRAN12	F-57	Fiddle Creek Bridge	1920	riveted Pratt/Warren pony truss	50 possible
FRAN13	F-59	Tavern Creek Bridge	c1925	concrete deck girder	50 possible
FRAN14	F-72	Withington Ford Bridge	1917	pinned Pennsylvania through truss	70 eligible
FRAN15	F-89	Brown Branch Bridge	c1905	lattice bedstead	32 non-eligible
FRAN16	F-136	Cedar Fork Bridge	1920	riveted Pratt/Warren pony truss	50 possible
FRAN17	F-190	Short's Ford Bridge	1888	pinned Pratt through truss	60 determ. elig.
FRAN18	F-191	Little Meramec River Bridge	1911	pinned Pratt through truss	43 non-eligible
FRAN19	F-207	McGuire Ford Bridge	1915	riveted Pratt through truss	41 non-eligible
FRAN20	F-224	South Fork Bridge	1899	pinned Pratt half-hip pony truss	42 non-eligible
FRAN21	F-284	Little Bourbeuse Bridge	1920	riveted Pratt/Warren pony truss	52 possible
FRAN22	F-405	Spring Creek Bridge	1908	lattice bedstead	35 non-eligible
FRAN23	F-420	Hartmann's Ford Bridge	1916	pinned Pennsylvania through truss	62 possible
FRAN24	F-424	Noser Mill Bridge	1880	pinned Parker through truss	54 possible
FRAN25	F-425	Noser Mill Bridge	1902	steel stringer	54 possible
FRAN26	U4300003	Washington Street Bridge	c1890	stone masonry arch	44 non-eligible
FRAN27	U4300004	Church Street Bridge	1915	concrete deck girder	42 non-eligible

## GASCONADE COUNTY

GASC01	K 974	Gasconade Bridge	1931	riveted cantilever through truss	65	determ. elig.
GASC02	010000.1	Frene Creek Bridge		(replaced)		
GASC03	036002.0	Bridge	c1915	riveted Pratt/Warren pony truss	33	non-eligible
GASC04	056000.6	Richland Creek Bridge	1903	pinned Pratt half-hip pony truss	43	non-eligible
GASC05	134002.0	Bridge	c1920	concrete filled spandrel arch	23	non-eligible
GASC06	181000.3	Miller's Ford Bridge	1925	pinned Pratt through truss	31	non-eligible

## GENTRY COUNTY

GENT01	F 324R	Middle Fork Bridge	1923	riveted Pratt through truss	34	non-eligible
GENT02	F 331R	East Fork Bridge	1937	riveted Pratt through truss	36	non-eligible
GENT03	026000.5	West Fork Bridge	c1920	riveted Pratt through truss	23	non-eligible
GENT04	061000.5	Middle Fork Bridge	c1910	pinned Pratt through truss	26	non-eligible
GENT05	066000.5	Middle Fork Bridge	c1930	2-angle Camelback pony truss	37	non-eligible
GENT06	105000.3	Martin Branch Bridge	c1910	pinned Pratt pony truss	28	non-eligible
GENT07	123000.2	Big Muddy Creek Bridge	c1905	pinned Pratt through truss	28	non-eligible
GENT08	182R01.5	Grand River Bridge	c1950	riveted Camelback through truss	44	non-eligible
GENT09	220000.6	East Fork Bridge		(replaced)		
GENT10	283000.3	Wildcat Creek Bridge		(replaced)		
GENT11	308000.3	Wildcat Creek Bridge		(replaced)		
GENT12	337000.3	Island City Bridge		(replaced)		
GENT13	412004.2	Lost Creek Bridge	1895	pinned Pratt pony truss	48	possible
GENT14	465001.0	Bridge	c1920	pinned Pratt pony truss	23	non-eligible
GENT15	469001.0	Elam Bend Bridge	1895	pinned Camelback through truss	68	determ. elig.

## GREENE COUNTY

GREN01	H 123A	Sac River Bridge	1926	concrete open spandrel arch	50	possible
GREN02	H 636	Pomme de Terre River Bridge	1928	concrete open spandrel arch	50	possible
GREN03	K 818	Little Sac River Bridge	1939	steel plate deck girder	43	non-eligible
GREN04	X 710	James River Bridge	1947	steel stringer	43	non-eligible
GREN05	U4075021	Olive Street Bridge	1924	concrete filled spandrel arch	25	non-eligible
GREN06	U4075029	Zoo Park Bridge	1913	concrete filled spandrel arch	35	non-eligible
GREN07	U4075046	Benton Avenue Viaduct	1927	concrete deck girder	42	non-eligible
GREN08	U4075047	Grant Avenue Viaduct	1927	concrete deck girder	42	non-eligible
GREN09	017011.9	Sycamore Bridge	1917	concrete deck girder	55	possible
GREN10	018006.4	Bridge	1914	concrete slab	46	possible
GREN11	020024.5	Little Pomme de Terre R. Bridge	1906	pinned Pratt half-hip pony truss	46	non-eligible
GREN12	021004.0	Bridge	1916	concrete slab	39	non-eligible
GREN13	033004.3	Baker/Hawkins Bridge		(replaced)		
GREN14	035011.1	John's Mill Bridge		(replaced)		
GREN15	043004.8	Killingsworth Bridge		(replaced)		
GREN16	044012.3	Johnson Ford Bridge		(replaced)		
GREN17	052008.8	Cave Springs Bridge		(replaced)		
GREN18	052009.4	Cave Springs Bridge	1915	concrete through girder	56	possible
GREN19	054012.7	Hackney Mill Bridge	1896	pinned Pratt through truss	52	determ. non-elig.
GREN20	065015.5	Sac River Bridge	1915	concrete through girder	56	possible
GREN21	065015.9	Yeakley Bridge	1913	concrete slab	32	non-eligible



## GREENE COUNTY (cont.)

GREN22	068001.3	Ash Grove Overpass	1915	steel plate deck girder	45	non-eligible
GREN23	084000.7	Spring Branch Bridge		(replaced)		
GREN24	088009.9	Bigbee Ford Bridge		(replaced)		
GREN25	115020.5	Wilson Creek Bridge	c1905	pinned Pratt pony truss	39	non-eligible
GREN26	119019.2	Roundtree Ford Bridge	1901	pinned Pratt half-hip pony truss	41	non-eligible
GREN27	128003.9	Sac River Bridge	1918	concrete filled spandrel arch	49	possible
GREN28	144022.5	Pearson Creek Bridge	c1905	pinned Pratt half-hip pony truss	26	non-eligible
GREN29	148024.4	James River Bridge	1926	riveted Parker through truss	44	non-eligible
GREN30	151009.8	Dry Sac River Bridge		(replaced)		
GREN31	156013.3	Wilson Creek Bridge		(replaced)		
GREN32	407522.0	River Road Bridge	1923	riveted Parker through truss	57	possible

## GRUNDY COUNTY

GRUN01	F1093R1	Honey Creek Bridge		(replaced)		
GRUN02	J 771	West Medicine Creek Bridge	1932	riveted Warren pony truss	41	non-eligible
GRUN03	K 943	Trenton Viaduct	1931	riveted Pratt through truss	38	non-eligible
GRUN04	T 899	Weldon River Bridge	1936	steel plate through girder	57	possible
GRUN05	022001.9	Woods Creek Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
GRUN06	042000.9	Honey Creek Bridge	c1915	pinned Pratt through truss	27	non-eligible
GRUN07	047000.2	West Honey Creek Bridge	c1915	riveted Pratt half-hip pony truss	20	non-eligible
GRUN08	051000.7	Honey Creek Bridge	c1910	pinned Pratt half-hip pony truss	20	non-eligible
GRUN09	056000.2	Honey Creek Bridge	1911	steel stringer	30	non-eligible
GRUN10	058000.8	Big No Creek Bridge		(replaced)		
GRUN11	066001.5	Big No Creek Bridge	1913	steel stringer	30	non-eligible
GRUN12	070001.1	Big No Creek Bridge	1912	steel stringer	30	non-eligible
GRUN13	076001.7	Medicine Creek Bridge	c1910	pinned Pratt through truss	25	non-eligible
GRUN14	079000.2	Little No Creek Bridge	1907	steel stringer	30	non-eligible
GRUN15	082001.2	Medicine Creek Bridge	c1890	pinned Pratt through truss	21	non-eligible
GRUN16	083001.2	Medicine Creek Bridge		(replaced)		
GRUN17	087002.5	Bridge		(replaced)		
GRUN18	089002.0	Medicine Creek Bridge		(replaced)		
GRUN19	089003.0	Bridge	1915	steel stringer	32	non-eligible
GRUN20	097000.3	Little No Creek Bridge	c1910	lattice bedstead	20	non-eligible
GRUN21	110000.8	No Creek Bridge	c1910	pinned Pratt half-hip pony truss	25	non-eligible
GRUN22	113000.5	Honey Creek Bridge	c1925	2-angle Parker through truss	51	possible
GRUN23	132001.0	Muddy Creek Bridge	1912	riveted Pratt through truss	45	possible
GRUN24	140000.4	Old Weldon River Bridge		(replaced)		
GRUN25	161001.7	Grand River Bridge		(replaced)		
GRUN26	161002.0	Thompson River Bridge		(replaced)		
GRUN27	167000.6	Sugar Creek Bridge		(replaced)		
GRUN28	169003.4	Furnace Creek Bridge		(replaced)		
GRUN29	179000.8	Old Raccoon Creek Bridge	1905	pinned Pratt half-hip pony truss	36	non-eligible
GRUN30	200000.4	Hickory Creek Bridge	1909	steel stringer	32	non-eligible
GRUN31	201001.2	Hickory Creek Bridge	1917	riveted Warren pony truss	34	non-eligible
GRUN32	209000.3	West Wolf Creek Bridge	1911	pinned Pratt half-hip pony truss	34	non-eligible
GRUN33	235000.3	Bachelor Branch Bridge	1907	steel stringer	32	non-eligible
GRUN34	239001.2	Honey Creek Bridge	c1925	2-angle Parker through truss	51	possible
GRUN35	251001.5	Honey Creek Bridge	1926	2-angle Parker through truss	53	possible
GRUN36	260000.2	Crooked Creek Bridge	1907	steel stringer	32	non-eligible

## GRUNDY COUNTY (cont.)

GRUN37	273000.1	Bridge	1910	steel stringer	32	non-eligible
GRUN38	280000.1	Medicine Creek Bridge	c1925	2-angle Parker through truss (replaced)	55	determ. non-elig.
GRUN39	282002.4	Black Oak Branch Bridge				
GRUN40	310000.6	Medicine Creek Bridge	1905	steel stringer	36	non-eligible
GRUN41	320001.5	Crooked Creek Bridge	1911	steel stringer	32	non-eligible
GRUN42	344000.2	Wolf Creek Bridge	1956	2-angle Warren pony truss (replaced)	28	non-eligible
GRUN43	347000.9	Kemp Bridge				
GRUN44	352000.1	Stevens Branch Bridge	1914	steel stringer	30	non-eligible
GRUN45	357000.2	Gees Creek Bridge	1912	steel stringer (replaced)	30	non-eligible
GRUN46	360002.8	Hickory Creek Bridge				
GRUN47	372000.4	Gees Creek Bridge	1909	steel stringer	32	non-eligible

## HARRISON COUNTY

HARR01	F 595	East Big Creek Bridge		(replaced)		
HARR02	J 655	Thompson River Bridge	1933	riveted Pratt through truss	41	non-eligible
HARR03	005000.3	Lotts Creek Bridge	c1910	pinned Pratt pony truss (replaced)	28	non-eligible
HARR04	023000.4	Big Creek Bridge		(replaced)		
HARR05	059000.7	Indian Creek Bridge				
HARR06	147001.9	Big Muddy Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HARR07	163000.3	Big Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HARR08	170001.1	Big Creek Bridge	1910	pinned Pratt bedstead (replaced)	40	non-eligible
HARR09	188000.2	Brush Creek Bridge				
HARR10	229R01.5	Big Creek Bridge	c1910	pinned Pratt bedstead	30	non-eligible
HARR11	264R00.5	Big Muddy Creek Bridge	1903	pinned Pratt bedstead	36	non-eligible
HARR12	268000.0	Big Muddy Creek Bridge	c1920	2-angle Warren pony truss (replaced)	22	non-eligible
HARR13	290R00.9	Big Creek Bridge				
HARR14	296000.6	Big Creek Bridge	1901	pinned Pratt pony truss (replaced)	46	non-eligible
HARR15	313000.4	Panther Creek Bridge				
HARR16	319R02.8	Panther Creek Bridge	1913	pinned Pratt pony truss	26	non-eligible
HARR17	339000.9	Trail Creek Bridge	1915	pinned Pratt pony truss	25	non-eligible
HARR18	359000.2	Big Creek Bridge	c1910	pinned Pratt pony truss	30	non-eligible
HARR19	368000.3	Big Creek Bridge	1915	pinned Pratt bedstead	45	non-eligible
HARR20	436002.6	Big Creek Bridge	1905	pinned Pratt through truss	43	non-eligible
HARR21	566000.7	Fox Creek Bridge	1914	pinned Pratt bedstead	30	non-eligible
HARR22	574001.0	Sugar Creek Bridge	1918	pinned Pratt pony truss	38	non-eligible
HARR23	597002.3	Sampson Creek Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
HARR24	640000.3	Polecat Creek Bridge	1917	pinned Pratt pony truss	35	non-eligible
HARR25	641001.5	Big Creek Bridge	c1905	pinned Pratt through truss	24	non-eligible
HARR26	687001.0	Big Creek Bridge	c1905	pinned Pratt through truss	27	non-eligible

## HENRY COUNTY

HENR01	046002.1	Norris Creek Bridge		(replaced)		
HENR02	100001.7	Wades Creek Bridge		(replaced)		
HENR03	118000.5	Tebo Creek Bridge		(replaced)		
HENR04	179000.3	Tebo Creek Bridge	c1910	pinned Pratt pony truss	36	non-eligible
HENR05	181000.6	Tebo Creek Bridge	1910	pinned Pratt pony truss	44	non-eligible
HENR06	191000.7	Tebo Creek Bridge	1909	pinned Pratt bedstead	42	non-eligible
HENR07	193000.6	Newman Bridge	1917	concrete deck girder	54	possible

## HENRY COUNTY (cont.)

HENR08	193003.0	Sand Creek Bridge	c1910	pinned Pratt pony truss	31 non-eligible
HENR09	200000.4	Bridge	1916	steel stringer	30 non-eligible
HENR10	205000.5	Tebo Creek Bridge	c1910	pinned Pratt pony truss	36 non-eligible
HENR11	239000.6	Fields Creek Bridge	c1915	pinned Pratt half-hip pony truss	36 non-eligible
HENR12	246001.0	South Grand River Bridge		(destroyed)	
HENR13	280001.3	Montrose Lake Bridge		(replaced)	
HENR14	329001.0	Deer Creek Bridge	c1925	2-angle Camelback pony truss	48 non-eligible
HENR15	338000.9	Deepwater Creek Bridge	c1900	pinned Pratt pony truss	29 non-eligible
HENR16	365000.7	Sparrow Foot Creek Bridge	c1910	pinned Pratt bedstead	31 non-eligible
HENR17	484000.9	Marshall Creek Bridge	1925	rivet 2-angle Pratt pony truss	37 non-eligible
HENR18	490001.8	Deepwater Creek Bridge	c1910	pinned Pratt pony truss	34 non-eligible
HENR19	491000.2	Bear Creek Bridge	c1915	pinned Pratt pony truss	34 non-eligible
HENR20	523000.2	Bear Creek Bridge		(replaced)	
HENR21	544000.9	Deepwater Creek Bridge		(replaced)	
HENR22	547000.5	Spruce Creek Bridge	c1915	pinned Pratt pony truss	36 non-eligible
HENR23	567000.6	Truman Lake Bridge	1931	steel stringer	40 non-eligible
HENR24	567001.0	Truman Lake Bridge	1931	steel stringer	40 non-eligible

## HICKORY COUNTY

HICK01	026000.7	Rough Hollow Bridge	1891	pinned Pratt through truss	50 possible
HICK02	090001.0	Dorman Bridge	c1920	pinned Parker through truss	35 non-eligible

## HOLT COUNTY

HOLT01	H 457R	Little Tarkio Ditch Bridge	1926	riveted Pratt through truss, skewed	47 non-eligible
HOLT02	L 97	Rulo Bridge	1938	riveted Pennsylvania through truss	65 listed
HOLT03	T 104	Big Tarkio Creek Bridge	1934	riveted Warren pony truss	43 non-eligible
HOLT04	006001.5	Corning Bridge		(replaced)	
HOLT05	012000.2	Tarkio River Bridge	c1910	pinned Pratt through truss	27 non-eligible
HOLT06	030002.8	Little Tarkio Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT07	034000.6	Little Tarkio Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT08	040000.9	Little Tarkio Creek Bridge	c1925	riveted Camelback pony truss	33 non-eligible
HOLT09	049001.0	Minnesota Valley Ck. Bridge	c1925	riveted Camelback pony truss	38 non-eligible
HOLT10	049001.3	Minnesota Valley Ck. Bridge	c1910	pinned Pratt pony truss	20 non-eligible
HOLT11	057000.2	Middle Branch Bridge	c1910	pinned Pratt pony truss	20 non-eligible
HOLT12	062001.7	Squaw Creek Bridge		(replaced)	
HOLT13	072000.7	Bridge	c1910	pinned Pratt pony truss	25 non-eligible
HOLT14	086000.6	Highly Creek Bridge	c1910	pinned Pratt half-hip pony truss	28 non-eligible
HOLT15	088000.8	Whig Valley Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
HOLT16	089001.6	Whig Valley Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT17	106000.5	Squaw Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT18	107000.5	Squaw Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
HOLT19	108000.8	Middle Branch Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT20	111000.7	Squaw Creek Bridge	c1915	pinned Pratt pony truss	28 non-eligible
HOLT21	115000.3	Davis Creek Bridge	c1910	pinned Pratt half-hip pony truss	25 non-eligible
HOLT22	116002.4	Davis Creek Bridge	c1910	pinned Pratt pony truss	25 non-eligible
HOLT23	119001.0	Davis Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT24	126000.5	Squaw Creek Bridge	c1910	pinned Pratt through truss	30 non-eligible
HOLT25	127001.7	Squaw Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
HOLT26	128000.3	Minnesota Valley Ck. Bridge	c1925	2-angle Camelback pony truss	40 non-eligible

## HOLT COUNTY (cont.)

HOLT27	131002.7	Wildcat Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT28	134R01.0	Wildcat Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
HOLT29	135000.8	Wildcat Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
HOLT30	145001.7	Little Tarkio Creek Bridge	c1910	pinned Pratt pony truss	20	non-eligible
HOLT31	148500.1	Grand Avenue Creek Bridge	c1910	pinned Pratt pony truss	20	non-eligible
HOLT32	148500.2	Grand Avenue Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT33	165000.1	Tarkio River Bridge	c1915	pinned Pratt through truss	27	non-eligible
HOLT34	233000.7	Kunkel Mill Bridge	1919	pinned Pratt pony truss	42	non-eligible
HOLT35	234001.5	Kimsey Creek Bridge		(replaced)		
HOLT36	243000.8	Hog Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
HOLT37	247000.8	Hickory Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT38	257001.6	Leach Mill Bridge	1913	pinned Pratt through truss	37	non-eligible
HOLT39	280000.5	Rock Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
HOLT40	291001.4	Grand Avenue Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT41	292000.6	Kimsey Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT42	300001.8	Kimsey Creek Bridge		(replaced)		
HOLT43	301R01.1	Kimsey Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT44	321000.9	Mill Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
HOLT45	324000.0	Mill Creek Bridge		(replaced)		
HOLT46	328000.0	Schlottz Branch Bridge	c1910	pinned Pratt pony truss	20	non-eligible
HOLT47	336000.9	Easter Creek Bridge		(replaced)		
HOLT48	336002.4	Forbes Creek Bridge	c1910	pinned Pratt half-hip pony truss	20	non-eligible
HOLT49	348000.8	Smith Creek Bridge		(replaced)		

## HOWARD COUNTY

HOWA01	G 56R1	Boonville Bridge	1924	riveted Pennsylvania through truss	75	eligible
HOWA02	K 744	New Franklin Viaduct	1940	concrete deck girder viaduct	51	possible
HOWA03	K 936	MKT Railroad Overpass	1941	steel plate deck girder	41	non-eligible
HOWA04	013001.5	Batts Creek Bridge		(replaced)		
HOWA05	019002.5	Bonne Femme Creek Bridge	c1910	pinned Pratt half-hip pony truss	20	non-eligible
HOWA06	024001.1	Woods Bridge	1913	pinned Pratt bedstead	40	non-eligible
HOWA07	036000.6	Tippett Bridge		(replaced)		
HOWA08	053001.5	Moniteau Creek Bridge	c1910	pinned Pratt bedstead	28	non-eligible
HOWA09	056001.1	Moniteau Creek Bridge	1913	pinned Pratt bedstead	44	non-eligible
HOWA10	061001.1	Moniteau Creek Bridge	1913	pinned Pratt bedstead	39	non-eligible
HOWA11	061001.6	Moniteau Creek Bridge	c1910	pinned Pratt bedstead	28	non-eligible
HOWA12	067000.7	Means Ford Bridge		(replaced)		
HOWA13	085002.0	Drake Bridge	1899	pinned Pratt pony truss	55	possible
HOWA14	086001.9	Jones Bridge		(replaced)		
HOWA15	087002.0	Prairie Fork Bridge	c1900	pinned Pratt pony truss	37	non-eligible
HOWA16	088001.5	Prairie Fork Bridge	1909	pinned Pratt pony truss	42	non-eligible
HOWA17	108001.3	Bonne Femme Creek Bridge	c1905	pinned Pratt pony truss	31	non-eligible
HOWA18	113000.0	Sulphur Creek Bridge	1910	pinned Pratt pony truss	37	non-eligible
HOWA19	121000.0	Sulphur Creek Bridge	c1940	2-angle Camelback pony truss	34	non-eligible
HOWA20	125000.5	Sulphur Creek Bridge		(replaced)		
HOWA21	161002.0	Adams Fork Bridge	1896	pinned Pratt half-hip pony truss	43	non-eligible
HOWA22	178003.0	Bonne Femme Creek Bridge		(replaced)		
HOWA23	196000.4	Greggs Creek Bridge		(replaced)		
HOWA24	200000.2	Doxies Creek Bridge	1904	pinned Pratt half-hip pony truss	31	non-eligible
HOWA25	211001.0	Bonne Femme Creek Bridge	1907	pinned Pratt pony truss	46	non-eligible

## IRON COUNTY

IRON01	F 646R	Big Creek Bridge	1946	concrete open spandrel arch	45 non-eligible
IRON02	F 990	Townsend Branch Bridge	1922	concrete filled spandrel arch	47 possible
IRON03	F 991	Gum Spring Branch Bridge	1922	concrete filled spandrel arch	47 possible
IRON04	F 992	East Fork Bridge	1922	concrete filled spandrel arch	47 possible
IRON05	G 269R	Reeds Creek Bridge	1923	concrete filled spandrel arch	37 determ. non-elig.
IRON06	G 879	Big Creek Bridge	1924	riveted Pratt through truss	38 non-eligible
IRON07	H 393	Stouts Creek Bridge	1928	concrete open spandrel arch	45 non-eligible
IRON07	101000.4	Stouts Creek Bridge	c1895	pinned Pratt half-hip pony truss	30 non-eligible

## JACKSON COUNTY

JACK01	G 363R1	Little Blue River Bridge	1923	riveted Pratt through truss	34 non-eligible
JACK02	H 76R	Big Blue River Bridge		(replaced)	
JACK03	J 526	Blue River Bridge	1933	steel through arch	73 eligible
JACK04	J 926R	Big Blue River Bridge		(replaced)	
JACK05	K 229R4	A.S.B. Bridge	1911	riveted Baltimore vertical-lift truss	82 eligible
JACK06	K 392R	Winner Road Bridge	1935	steel rigid frame	69 possible
JACK07	K 393R	Winner Road Viaduct	1935	steel rigid frame	61 possible
JACK08	K 394R	Winner Road Viaduct	1935	steel rigid frame	66 possible
JACK09	K 608R	Intercity Viaduct	1904	steel deck truss	63 possible
JACK10	K 653R1	Rock Creek Bridge	1911	concrete deck girder	39 non-eligible
JACK11	L 249	Ramp F Overpass	1949	concrete rigid frame	51 possible
JACK12	L 253	Broadway Overpass	1950	concrete rigid frame	51 possible
JACK13	L 568R1	Liberty Bend Bridge	1947	riveted cantilever through truss	52 possible
JACK14	Y 24	Sni-A-Bar Creek Bridge	1912	concrete filled spandrel arch	50 possible
JACK15	Y 148	Sni-A-Bar Creek Bridge	1929	riveted Pratt through truss	33 non-eligible
JACK16	Z 901	Blue River Bridge	1932	riveted Pratt through truss	41 non-eligible
JACK17	SO26B31	Gladstone Boulevard Overpass	1898	steel two-hinge deck arch	73 eligible
JACK18	SO26B32	Cliff Driver Overpass	1920	concrete filled spandrel arch	53 possible
JACK19	SO26B33	Lexington Avenue Viaduct	1901	steel plate deck girder	51 possible
JACK20	SO28B31	Grand Avenue Viaduct	1940	steel plate deck girder	41 non-eligible
JACK21	SO30B11	Twelfth Street Trafficway	1914	double-deck concrete arch/girder	77 eligible
JACK22	SO30B12	Bluff Street Bridge	1915	riveted Pratt through truss, skewed	69 determ. elig.
JACK23	K 653R1	Rock Creek Bridge	1911	concrete deck girder	39 non-eligible
JACK24	SO30B42	Beardsley Road Viaduct	1917	concrete deck girder	33 non-eligible
JACK25	SO36B32	Truman Road Bridge		(replaced)	
JACK26	SO47B21	Manchester Trafficway	1940	steel plate deck girder	43 non-eligible
JACK27	SO48B11	East 23rd Street Viaduct	1938	steel plate deck girder	51 possible
JACK28	SO51B31	27th Street Viaduct	1917	concrete open spandrel arch	63 eligible
JACK29	SO52B11	Oak Street Viaduct	1931	steel plate deck girder	37 non-eligible
JACK30	SO53B21	23rd Street Viaduct	1921	concrete deck girder	39 non-eligible
JACK31	SO55B21	31st Steet Overpass	1916	concrete deck girder	39 non-eligible
JACK32	SO78B31	50th Street Bridge	c1920	concrete filled spandrel arch	34 non-eligible
JACK33	SO79B32	Main Street Bridge		(replaced)	
JACK34	SO80B11	Prospect Avenue Bridge		(replaced)	
JACK35	SO80B21	Paseo Boulevard Bridge	c1935	concrete filled spandrel arch	14 non-eligible
JACK36	SO80B22	Woodland Avenue Bridge	1918	concrete filled spandrel arch	38 non-eligible
JACK37	SO80B31	Troost Avenue Bridge	1917	concrete open spanrel arch	47 possible
JACK38	SO81B41	Sebree Bridge	1924	concrete open spandrel arch	47 possible
JACK39	SO82B33	Blue Parkway Viaduct	1936	steel plate deck girder	47 possible

## JACKSON COUNTY (cont.)

JACK40	SO83B31	Sni-A-Bar Road Overpass	1929	concrete open spandrel arch	38 non-eligible
JACK41	SO84B11	Raytown Road Bridge	1913	concrete filled spandrel arch	42 non-eligible
JACK42	S106B12	63rd Street Viaduct	1936	steel plate deck girder	50 possible
JACK43	S115B41	Little Blue Road Bridge	1932	riveted Pratt through truss	28 non-eligible
JACK44	S121B21	Gregory Boulevard Bridge		(replaced)	
JACK45	S128B11	Paseo Overpass	1917	concrete filled spandrel arch	56 determ. elig.
JACK46	S128B12	Paseo Overpass	1917	concrete filled spandrel arch	56 determ. elig.
JACK47	S131B21	Hillcrest Road Bridge	1906	concrete filled spandrel arch	50 possible
JACK48	S137B31	Rhinehard Road Bridge	1904	pinned Pratt pony truss	46 non-eligible
JACK49	S140B41	Noland Road Bridge		(replaced)	
JACK50	S142B31	Elm Avenue Bridge	c1900	pinned Pratt pony truss	12 non-eligible
JACK51	S146B31	Dodson Bridge	1930	riveted Pratt through truss	28 non-eligible
JACK52	S147B21	Troost Avenue Viaduct	1943	rolled steel deck girder	48 possible
JACK53	S153B22	Bannister Road Overpass	1931		54 possible
JACK54	SO53B21	23rd Street Viaduct	1921	concrete deck girder	39 non-eligible
JACK55	S245B11	Kenneth Road Bridge	c1900	pinned Pratt through truss	26 non-eligible
JACK56	042700.1	Blue Ridge Overpass	1906	stone filled spandrel arch	63 possible
JACK57	053000.6	Little Blue River Bridge		(replaced)	
JACK58	070001.8	Bridge		(replaced)	
JACK59	072000.9	Santa Fe Railroad Overpass	c1925	2-angle Pratt pony truss	33 non-eligible
JACK60	105000.4	Fire Prairie Creek Bridge		(replaced)	
JACK61	127000.4	Sni-A Bar-Creek Bridge		(replaced)	
JACK62	141001.0	Blue Branch Bridge		(replaced)	
JACK63	147000.6	Blue Branch Bridge	c1930	riveted Pratt pony truss	30 non-eligible
JACK64	212500.4	Bridge		(removed)	
JACK65	212502.2	Wilson Street Bridge	c1925	concrete filled spandrel arch	31 non-eligible
JACK66	243500.1	Little Blue River Bridge	c1900	pinned Pratt pony truss	15 non-eligible
JACK67	243500.5	Little Blue River Bridge	1911	concrete filled spandrel arch	48 possible
JACK68	243501.4	Mouse Creek Bridge	c1900	pinned Pratt half-hip pony truss	26 non-eligible
JACK69	243502.3	Bridge	c1910	pinned Pratt pony truss	25 non-eligible
JACK70	243502.4	View High Road Bridge		(replaced)	
JACK71	264001.0	Sni-A-Bar Creek Bridge			
JACK72	297000.4	Marble Creek Bridge	1911	concrete filled spandrel arch	47 non-eligible
JACK73	302000.6	Sni-A-Bar Creek Bridge	1911	concrete filled spandrel arch	49 possible
JACK74	304000.3	Sni-A-Bar Creek Bridge	1907	pinned Pratt half-hip pony truss	45 non-eligible
JACK75	338002.5	Bridge		(replaced)	
JACK76	399500.1	Santa Fe Railroad Overpass	c1920	pinned Pratt through truss	30 non-eligible

## JASPER COUNTY

JASP01	H 274	Dry Fork Bridge		(replaced)	
JASP02	H 278	Kendricktown Bridge	1928	concrete open spandrel arch	45 non-eligible
JASP03	H 279	Spring River Bridge	1928	concrete open spandrel arch	50 possible
JASP04	H 311	Highway 71 Viaduct	1928	concrete deck girder	45 non-eligible
JASP05	T 425	Center Creek Bridge	1935	riveted Pratt through truss	39 non-eligible
JASP06	T 426	Spring River Bridge	1935	riveted Pratt through truss	39 non-eligible
JASP07	X 435	Spring River Bridge	1949	riveted Pratt pony truss	37 non-eligible
JASP08	U2205001	Seventh Street Viaduct	1940	concrete deck girder	39 determ. non-elig.
JASP09	006000.7	Blackberry Creek Bridge	1903	pinned Pratt pony truss	44 non-eligible
JASP10	067000.5	Coon Creek Bridge	1910	steel rolled deck girder	40 possible

## JASPER COUNTY (cont.)

JASP11	072000.1	Hawthorne Drive Viaduct	1936	steel plate through girder	54 possible
JASP12	091001.2	Blackberry Creek Bridge	1913	riveted Warren pony truss	37 non-eligible
JASP13	114001.9	Hille's Ford Bridge	1913	riveted Pratt through truss	47 possible
JASP14	175000.5	Buck Branch Bridge	1906	pinned Pratt bedstead	40 non-eligible
JASP15	179001.0	Miller Ford Bridge	1917	concrete slab	42 non-eligible
JASP16	196001.7	Spring River Bridge	c1920	concrete filled spandrel arch	21 non-eligible
JASP17	202002.0	Purcell Bridge	1912	riveted Parker through truss	51 possible
JASP18	218000.2	Galesburg Bridge	1886	pinned Pratt through truss	56 possible
JASP19	220501.7	Joplin Creek Viaduct	1929	concrete deck girder	39 non-eligible
JASP20	223002.7	Georgia City Bridge	1871	Bowstring through-arch truss	86 determ. elig.
JASP21	228000.7	Bridge	c1935	concrete filled spandrel arch	18 non-eligible
JASP22	248000.8	Little Spring River Bridge	1911	pinned Pratt pony truss	32 non-eligible
JASP23	321000.6	Merrick Ford Bridge	1891	pinned Pratt through truss	55 possible
JASP24	359000.9	Center Creek Bridge	c1895	pinned Pratt through truss	25 non-eligible
JASP25	566000.6	Jenkins Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
JASP26	628000.7	Johnson Arch Bridge	1912	concrete filled spandrel arch	56 possible
JASP27	685002.1	Bridge	1908	concrete slab	28 non-eligible
JASP28	697001.2	Jenkins Creek Bridge	1885	pinned Pratt pony truss	54 possible
JASP29	699002.5	Jones Creek Bridge	1919	concrete filled spandrel arch	24 non-eligible

## JEFFERSON COUNTY

JEFF01	J-24	Morse Mill Bridge	1887	pinned Pratt through truss	58 possible
JEFF02	J-48	Kingston Slough Bridge	1917	pinned Pratt pony truss	46 non-eligible
JEFF03	J-51	Vineland Bridge	1906	pinned Parker through truss	55 determ. elig.
JEFF04	J-55	Blackwell Bridge	1931	pinned Pratt through truss	48 possible
JEFF05	J-102	Sandy Creek Bridge	1886	timber covered Howe truss	71 listed
JEFF06	J-114	Klondike Road Bridge		(replaced)	
JEFF07	J-158	Windsor Harbor Bridge	1875	pinned Pratt through truss	77 listed
JEFF08	K 294R	Joachim Creek Bridge	1934	riveted Pratt through truss	45 non-eligible
JEFF09	104500.2	Mississippi Avenue Overpass	1917	concrete slab	31 non-eligible
JEFF10	192500.1	Herculaneum Bridge	1924	riveted Pratt through truss	35 non-eligible

## JOHNSON COUNTY

JOHN01	081001.2	McMahan Bridge		(replaced)	
JOHN02	089002.2	North Fork Bridge		(replaced)	
JOHN03	095000.3	Honey Creek Bridge		(replaced)	
JOHN04	106001.7	Bridge	c1915	riveted Pratt bedstead	20 non-eligible
JOHN05	110001.0	Brown Bridge		(replaced)	
JOHN06	153000.6	Blackjack Creek Bridge		(replaced)	
JOHN07	153001.5	Blackwater River Bridge	1929	pinned Parker through truss	49 possible
JOHN08	167001.3	Burns Bridge	1913	pinned Pratt through truss	34 non-eligible
JOHN09	186001.2	Brush Creek Bridge		(replaced)	
JOHN10	214001.1	Blackwater River Bridge		(replaced)	
JOHN11	216003.4	Waupler Bridge	c1890	pinned Pratt through truss	32 non-eligible
JOHN12	220001.7	Granger Ford Bridge	1929	pinned Pratt through truss	29 non-eligible
JOHN13	250000.3	Todd Bridge	1914	steel stringer	32 non-eligible
JOHN14	254000.1	Blackwater River Bridge		(replaced)	

## JOHNSON COUNTY (cont.)

JOHN15	264000.6	Murray Ford Bridge	1891	pinned Pratt through truss	44 possible
JOHN16	272003.7	Kassing Bridge	1912	riveted Pratt pony truss	32 non-eligible
JOHN17	274000.4	McFarland Bridge		(replaced)	
JOHN18	314000.8	Lost Creek Bridge		(replaced)	
JOHN19	361000.6	Spence Bridge		(replaced)	
JOHN20	378001.9	Post Oak Creek Bridge		(replaced)	
JOHN21	388000.8	Bundley Bridge		(replaced)	
JOHN22	392000.3	Giersig Bridge		(replaced)	
JOHN23	448000.4	Clear Creek Bridge		(replaced)	
JOHN24	527001.5	Hildebrand Bridge		(replaced)	
JOHN25	547000.7	Hogan Fork Bridge		(replaced)	
JOHN26	550001.9	Hogan Fork Bridge		(replaced)	
JOHN27	592003.5	Panther Creek Bridge	1912	riveted Pratt pony truss	33 non-eligible
JOHN28	594001.0	Quick City Bridge	1929	pinned Pratt through truss	50 determ. elig.
JOHN29	610000.4	Big Creek Bridge	c1930	riveted Parker through truss	30 non-eligible

## KNOX COUNTY

KNOX01	G 453	Edina Bridge	1923	riveted Pratt through truss	41 non-eligible
KNOX02	004001.2	South Fabius River Bridge	c1900	pinned Pratt bedstead	26 non-eligible
KNOX03	008001.4	South Fabius River Bridge	c1905	pinned Pratt half-hip pony truss	29 non-eligible
KNOX04	024001.3	Moore Bridge	1909	pinned Pratt bedstead	37 non-eligible
KNOX05	025000.2	Schragge Bridge	1911	steel stringer	30 non-eligible
KNOX06	027000.1	Kiley Bridge	1911	lattice bedstead	30 non-eligible
KNOX07	057000.1	Brown Bridge	1915	pinned Pratt pony truss	38 non-eligible
KNOX08	072001.8	Sallee Bridge	1914	pinned Pratt pony truss	40 non-eligible
KNOX09	084001.6	Parish Bridge	1907	pinned Pratt pony truss	40 non-eligible
KNOX10	118001.4	Baker Bridge	1909	pinned Pratt pony truss	37 non-eligible
KNOX11	123000.1	Kinney Bridge	1910	pinned Pratt bedstead	35 non-eligible
KNOX12	129002.2	McCann Bridge	1910	pinned Pratt bedstead	38 non-eligible
KNOX13	144001.6	Vaughn Bridge	1911	lattice bedstead	30 non-eligible
KNOX14	150001.4	Beal Fletch Bridge	1911	pinned Pratt pony truss	38 non-eligible
KNOX15	157000.2	Goodwin Bridge		(replaced)	
KNOX16	164000.2	Norton Bridge	1914	lattice bedstead	30 non-eligible
KNOX17	165000.4	Bridge Creek Bridge	c1915	pinned Pratt bedstead	25 non-eligible
KNOX18	166000.5	Rekus Bridge	1915	pinned Pratt bedstead	30 non-eligible
KNOX19	167001.2	Cain Bridge	1906	steel stringer	32 non-eligible
KNOX20	169001.0	Hax Bridge	1912	lattice bedstead	30 non-eligible
KNOX21	169001.4	Davis Bridge	1904	pinned Pratt bedstead	34 non-eligible
KNOX22	176001.0	Luke Bridge		(replaced)	
KNOX23	183000.6	Bridge Creek Bridge	c1915	lattice bedstead	25 non-eligible
KNOX24	183001.9	Creed-Davis Bridge	1909	pinned Pratt pony truss	32 non-eligible
KNOX25	187000.3	Seeger Bridge	1911	pinned Pratt pony truss	40 non-eligible
KNOX26	192000.6	Seaman Bridge	1906	pinned Pratt through truss	41 non-eligible
KNOX27	195000.3	Forest Spring Bridge		(replaced)	
KNOX28	219002.0	Fisher Bridge	1905	pinned Pratt bedstead	36 non-eligible
KNOX29	239000.8	Little Fabius River Bridge	1911	lattice bedstead	22 non-eligible
KNOX30	254000.7	Bradford Bridge	c1920	riveted Camelback pony truss	38 non-eligible
KNOX31	264001.0	Noblett Bridge	1911	lattice bedstead	30 non-eligible
KNOX32	265002.2	Little Fabius River Bridge	c1910	pinned Pratt bedstead	25 non-eligible



## KNOX COUNTY (cont.)

KNOX33	270002.5	Fowler Bridge	1903	pinned Pratt bedstead	36 non-eligible
KNOX34	271000.7	Noblett Bridge	1907	lattice bedstead	32 non-eligible
KNOX35	272002.1	Mason Bridge	1911	pinned Pratt bedstead (replaced)	30 non-eligible
KNOX36	273000.1	Bishop Bridge			
KNOX37	281000.8	Coon Creek Bridge	c1910	lattice bedstead	20 non-eligible
KNOX38	282001.3	Pleasant Valley Bridge	1913	pinned Pratt pony truss	38 non-eligible
KNOX39	289001.8	South Fabius River Bridge	c1890	pinned Pratt through truss	16 non-eligible
KNOX40	289002.0	Hamilton Bridge	1910	pinned Pratt pony truss	40 non-eligible
KNOX41	296001.2	Metzgar Bridge	1906	pinned Pratt bedstead	34 non-eligible
KNOX42	297000.5	Million Creek Bridge	c1910	lattice bedstead	26 non-eligible
KNOX43	298001.1	Sweet Oak Bridge	1910	pinned Pratt bedstead	38 non-eligible
KNOX44	304001.2	Troublesome Creek Bridge	c1915	pinned Pratt bedstead (replaced)	25 non-eligible
KNOX45	321001.9	Rose Bridge			
KNOX46	336000.6	Newkirk Bridge	1907	steel stringer	36 non-eligible
KNOX47	344002.0	Salt River Bridge	c1910	pinned Pratt pony truss (replaced)	30 non-eligible
KNOX48	351000.1	Saling Branch Bridge			
KNOX49	351001.8	Salt River Bridge	c1910	pinned Pratt pony truss	30 non-eligible
KNOX50	353000.1	Fraleigh Bridge	1913	pinned Pratt bedstead	30 non-eligible
KNOX51	355000.2	Ralls Bridge	1910	pinned Pratt bedstead	30 non-eligible
KNOX52	370002.3	Coe Bridge	1904	pinned Pratt bedstead	34 non-eligible
KNOX53	378001.8	Deer Bridge	1905	pinned Pratt bedstead	34 non-eligible
KNOX54	385000.7	Hall Bridge	1914	pinned Pratt bedstead (replaced)	30 non-eligible
KNOX55	390000.4	Rich Bridge			
KNOX56	397001.5	Million Branch Bridge	1910	steel stringer	30 non-eligible
KNOX57	399001.6	Pflum Bridge	1913	pinned Pratt pony truss	40 non-eligible
KNOX58	408002.0	Bridge	c1915	pinned Pratt bedstead	20 non-eligible

## LACLEDE COUNTY

LACL01	G 245	Gasconade River Bridge	1924	riveted Parker through truss	59 possible
LACL02	J 881	Osage Fork Bridge	1933	riveted Warren pony truss	59 possible
LACL03	S 326	Osage Fork Bridge	1933	riveted Parker through truss	39 non-eligible
LACL04	S 327	Gasconade River Bridge	1933	riveted Parker through truss	44 non-eligible
LACL05	T 408	Spring Creek Bridge	1934	concrete filled spandrel arch	41 non-eligible
LACL06	T 409	Mill Race Bridge	1934	concrete filled spandrel arch	28 non-eligible
LACL07	212000.7	Lambeth Bridge	1908	pinned Pratt through truss	53 possible

## LAFAYETTE COUNTY

LAF01	G 387	Horseshoe Creek Bridge	1923	riveted Pratt through truss	38 non-eligible
LAF02	J 25R	Sni-A-Bar Creek Bridge	1929	riveted Parker through truss	49 non-eligible
LAF03	L 90R	Graham Branch Bridge	1911	concrete filled spandrel arch	32 non-eligible
LAF04	Y 845	Dyer Rock Creek Bridge	1917	concrete through girder (replaced)	56 possible
LAF05	184001.1	Little Tabo Creek Bridge			
LAF06	208001.7	Davis Creek Bridge	c1910	pinned Parker through truss	32 non-eligible
LAF07	211000.1	Bear Creek Bridge	1904	pinned Pratt half-hip pony truss	39 non-eligible
LAF08	266001.5	Davis Creek Bridge	c1940	riveted polyg. Warren pony truss	41 non-eligible
LAF09	426000.3	Sni-A-Bar Creek Bridge	c1895	pinned Pratt pony truss	22 non-eligible

## LAWRENCE COUNTY

LAWR01	H 787	StL&SF Railroad Overpass	1935	riveted Pratt through truss	35 non-eligible
LAWR02	082001.0	Johnson Bridge	1923	concrete slab	20 non-eligible
LAWR03	091000.8	Sac River Bridge	1915	concrete slab	46 possible
LAWR04	178000.0	Bowers Mill Bridge	1898	pinned Pratt through truss	53 possible
LAWR05	201000.2	Spring River Bridge	c1930	riveted Pratt through truss	23 non-eligible
LAWR06	251000.6	Henson Bridge	1919	concrete slab	39 non-eligible
LAWR07	272001.0	Spencer Bridge	1923	riveted Pratt through truss	38 non-eligible
LAWR08	272001.8	Turnback Creek Bridge	1923	riveted Warren pony truss	49 possible
LAWR09	342000.1	Elm Street Bridge	1919	concrete deck girder	44 non-eligible
LAWR10	342000.2	Walnut Street Bridge	1911	pinned Pratt half-hip pony truss	34 non-eligible
LAWR11	362002.9	Lister Ford Bridge	1917	concrete deck girder	52 possible
LAWR12	477001.5	Bridge	1916	concrete slab	46 possible
LAWR13	517001.4	Baugh Ford Bridge	1894	pinned Pratt pony truss	48 possible
LAWR14	531001.1	Honey Creek Bridge	1914	concrete deck girder	45 possible
LAWR15	531001.2	Honey Creek Bridges	1914	concrete deck girder	45 possible
LAWR16	531001.4	Spring River Bridge	1914	concrete deck girder	44 possible
LAWR17	560000.6	Adams Ford Bridge	1920	concrete slab	41 non-eligible
LAWR18	796000.2	Bridge	1916	concrete slab	41 non-eligible

## LEWIS COUNTY

LEWI01	J 359R	North Fabius River Bridge	1930	riveted Pratt through truss	41 non-eligible
LEWI02	J 982	Canton Bridge	1932	riveted Parker through truss	47 non-eligible
LEWI03	053002.1	Slate Bank Ford Bridge	1902	pinned Camelback through truss	58 possible
LEWI04	055002.1	Reddish Branch Bridge	1900	pinned Pratt bedstead	29 non-eligible
LEWI05	060002.3	Lime Kiln Bridge	1896	pinned Pratt through truss	50 possible
LEWI06	061000.6	Hilbert Branch Bridge	1895	pinned Pratt bedstead	36 non-eligible
LEWI07	068002.0	Agee Bridge	1897	pinned Pratt pony truss	53 possible
LEWI08	071002.0	Hargis Ford Bridge	1904	pinned Pratt pony truss	46 non-eligible
LEWI09	093000.1	Boudreau Bridge		(replaced)	
LEWI10	107003.5	Rayl Bridge	c1910	pinned Pratt half-hip pony truss	30 non-eligible
LEWI11	122000.7	Risk Bridge	1904	pinned Pratt pony truss	42 non-eligible
LEWI12	127001.1	Sugar Creek Bridge	c1905	pinned Pratt pony truss	33 non-eligible
LEWI13	127002.1	Sugar Creek Bridge	c1905	pinned Pratt through truss	28 non-eligible
LEWI14	128000.5	Uht Bridge		(replaced)	
LEWI15	134002.2	Kirschbaum Bridge	1895	pinned Pratt bedstead	36 non-eligible
LEWI16	150000.8	Relker Bridge	1903	riveted kingpost pony truss	58 possible
LEWI17	152000.3	Pollock Ford Bridge	1898	pinned Pratt through truss	50 possible
LEWI18	165001.2	Lay Bridge	1918	pinned Pratt through truss	41 non-eligible
LEWI19	167001.5	Buck Horn Bridge	1894	pinned Pratt through truss	50 possible
LEWI20	183002.7	North Fabius River Bridge	c1925	riveted Pratt pony truss	32 non-eligible
LEWI21	207001.7	La Grange Bridge	1899	pinned Pratt through truss	45 non-eligible
LEWI22	228001.9	Troublesome Creek Bridge	c1910	pinned Pratt bedstead	25 non-eligible
LEWI23	246004.0	Grassy Creek Bridge	1898	pinned Pratt bedstead	48 possible
LEWI24	256001.7	Grassy Creek Bridge		(replaced)	
LEWI25	264001.6	Bangert Bridge	1900	pinned Pratt through truss	41 non-eligible
LEWI26	268002.0	Gilead Bridge	1895	pinned Pratt through truss	50 possible
LEWI27	276002.0	Maywood Bridge	1894	pinned Pratt through truss	53 possible
LEWI28	285001.3	Durgens Creek Bridge		(replaced)	
LEWI29	308000.2	James Ford Bridge	1911	pinned Pratt through truss	37 non-eligible

## LINCOLN COUNTY

LINC01	J 975R	Cuivre River Bridge	1933	riveted Parker through truss	51 possible
LINC02	K 334	Lost Creek Bridge	1938	riveted Pratt through truss	42 determ. non-elig.
LINC03	K 340	Sandy Creek Bridge	1938	riveted Pratt through truss, skewed	41 determ. non-elig.
LINC04	K 341	McLeans Branch Bridge	1938	riveted Pratt through truss, skewed	49 non-eligible
LINC05	L 844	Little Sugar Creek Culvert	1941	multiplate steel arch culvert	26 non-eligible
LINC06	009002.2	Moss Ford Bridge		(replaced)	
LINC07	078002.0	Big Lead Creek Bridge		(replaced)	
LINC08	111002.0	Big Lead Creek Bridge		(replaced)	
LINC09	117000.3	Silex Bridge	c1915	pinned Pratt through truss	30 non-eligible
LINC10	118000.3	Mill Creek Bridge	1887	pinned Pratt pony truss	57 possible
LINC11	130003.0	Briscoe Bridge	c1915	pinned Pratt through truss	27 non-eligible
LINC12	165002.2	Dameron Bridge		(replaced)	
LINC13	175002.5	Cuivre River Bridge	c1910	pinned Pratt through truss	28 non-eligible
LINC14	216000.6	Frenchman's Bluff Bridge	1887	pinned Pratt through truss	65 possible
LINC15	319000.3	Chain of Rocks Bridge	1893	pinned Pratt through truss	57 possible
LINC16	333001.4	Old Monroe Bridge	1908	pinned Parker through truss	55 possible
LINC17	335002.1	Cuivre River Bridge	c1910	pinned Pratt through truss	28 non-eligible
LINC18	350000.3	Moscow Mills Bridge	1885	pinned Pratt through truss	61 possible

## LINN COUNTY

LINN01	U0550002	Burlington RR Overpass	1913	riveted Pratt pony truss	33 non-eligible
LINN02	X 480	Locust Creek Bridge	1939	pinned Pratt through truss	41 non-eligible
LINN03	063000.6	Locust Creek Bridge	1900	pinned Pratt pony truss	41 non-eligible
LINN04	075001.0	Lowes Branch Bridge		(replaced)	
LINN05	121002.2	East Yellow Creek Bridge		(replaced)	
LINN06	164000.1	West Yellow Creek Bridge	1901	pinned Pratt bedstead	42 non-eligible
LINN07	180001.1	Bear Creek Bridge	c1910	pinned Pratt pony truss	27 non-eligible
LINN08	201000.3	Long Branch Bridge	c1910	pinned Pratt pony truss	25 non-eligible
LINN09	246000.7	Locust Creek Bridge	c1910	pinned Pratt through truss	23 non-eligible
LINN10	247000.5	Bridge	1906	pinned Pratt pony truss	44 non-eligible
LINN11	247000.8	Locust Creek Bridge	c1925	pinned Parker through truss	30 non-eligible
LINN12	297001.0	Parsons Creek Bridge	1913	pinned Pratt pony truss	38 non-eligible
LINN13	405001.7	West Yellow Creek Bridge	c1915	pinned Pratt pony truss	28 non-eligible
LINN14	406000.1	Long Branch Bridge	1902	pinned Pratt pony truss	44 non-eligible
LINN15	421000.7	East Yellow Creek Bridge	1904	pinned Pratt pony truss	45 non-eligible
LINN16	423001.3	East Yellow Creek Bridge	1902	pinned Pratt bedstead	42 non-eligible
LINN17	434001.5	East Yellow Creek Bridge	1901	pinned Pratt bedstead	42 non-eligible
LINN18	443000.5	East Yellow Creek Bridge	c1920	riveted Camelback pony truss	40 non-eligible
LINN19	473000.2	Burlington RR Overpass	c1915	pinned Pratt pony truss	30 non-eligible
LINN20	none	Locust Creek Covered Bridge	1868	covered timber Howe truss	74 listed

## LIVINGSTON COUNTY

LIVIO1	S 639	Shoal Creek Bridge	1933	riveted Warren pony truss	63 possible
LIVIO2	035000.5	Clear Creek Bridge	1906	riveted Warren pony truss	48 possible
LIVIO3	080500.1	Fair Avenue Bridge		(replaced)	
LIVIO4	150000.7	Medicine Creek Bridge		(replaced)	
LIVIO5	193000.0	Muddy Creek Bridge	1901	pinned Pratt bedstead	51 possible
LIVIO6	207000.0	Muddy Creek Bridge	1906	riveted Warren pony truss	48 possible
LIVIO7	322000.8	Shoal Creek Bridge	1919	pinned Pratt through truss	41 determ. non-elig.

## LIVINGSON COUNTY (cont.)

LIVI08	337001.2	Rattlesnake Creek Bridge	c1900	pinned Pratt bedstead	15 non-eligible
LIVI09	465002.4	Campbell Creek Bridge	1906	riveted polyg. Warren bedstead	64 possible

## McDONALD COUNTY

MACD01	H 780	Anderson Bridge	1929	concrete open spandrel arch	54 possible
MACD02	H 792A	Lanagan Bridge	1928	riveted Pratt through truss	41 non-eligible
MACD03	181000.9	Bridge	c1935	stone arch	44 non-eligible
MACD04	209000.1	Anderson Bridge	1908	pinned Pratt through truss	34 determ. non-elig.
MACD05	249000.5	Powell Bridge	1915	pinned Pratt through truss	46 possible
MACD06	311003.1	State Line Bridge	1914	concrete filled spandrel arch	24 non-eligible

## MACON COUNTY

MACO01	029002.2	Cherry Ford Bridge		(replaced)	
MACO02	031000.8	Bridge	c1900	pinned Pratt bedstead	26 non-eligible
MACO03	033000.1	Buck Creek Bridge		(replaced)	
MACO04	044003.2	Bridge		(replaced)	
MACO05	048002.4	Richland Creek Bridge	c1900	pinned Pratt bedstead	26 non-eligible
MACO06	049000.8	Richland Creek Bridge		(replaced)	
MACO07	054000.6	Middle Fork Bridge	1897	pinned Pratt bedstead	39 non-eligible
MACO08	063000.9	Richland Creek Bridge		(replaced)	
MACO09	067001.6	East Fork Bridge	1896	pinned Pratt bedstead	48 possible
MACO10	067003.0	Long Branch Bridge		(replaced)	
MACO11	089001.7	Bear Creek Bridge		(replaced)	
MACO12	104000.8	Bear Creek Bridge		(replaced)	
MACO13	111000.2	Bear Creek Bridge	c1910	pinned Pratt pony truss	26 non-eligible
MACO14	118000.8	Bear Creek Bridge		(replaced)	
MACO15	120001.1	Bear Creek Bridge		(replaced)	
MACO16	139001.9	Ely Branch Bridge	1902	pinned Pratt bedstead	36 non-eligible
MACO17	142002.2	Middle Fork Bridge	1897	pinned Pratt bedstead	48 possible
MACO18	152002.2	Bridge		(replaced)	
MACO19	159001.2	Middle Fork Bridge		(replaced)	
MACO20	190A00.4	Ten Mile Creek Bridge		(replaced)	
MACO21	297000.7	Sweezer Creek Bridge		(replaced)	
MACO22	300002.0	Evans Bridge		(replaced)	
MACO23	321001.2	Chariton River Bridge	1917	riveted Warren pony truss	35 non-eligible
MACO24	323000.6	Bridge		(replaced)	
MACO25	349001.2	Mussel Fork Bridge	c1910	pinned Pratt pony truss	28 non-eligible
MACO26	358000.5	Santa Fe RR Overpass	c1890	pinned Pratt through truss	21 non-eligible
MACO27	382000.6	Mussel Fork Bridge	1897	pinned Pratt pony truss	50 possible
MACO28	384000.4	Hair's Ford Bridge	c1880	Bowstring pony arch-truss	74 eligible
MACO29	388001.4	Little Brush Creek Bridge	1905	riveted Pratt bedstead	41 non-eligible
MACO30	403001.6	Bridge	c1905	pinned Pratt bedstead	23 non-eligible
MACO31	405001.1	Bridge		(replaced)	
MACO32	406000.9	Puzzle Creek Bridge	1904	pinned Pratt bedstead	41 non-eligible
MACO33	409001.2	Hammock's Mill Bridge		(replaced)	
MACO34	454000.6	Bridge	1890	pinned Pratt bedstead	50 possible
MACO35	462000.8	Middle Fork Bridge	c1910	pinned Pratt pony truss	27 non-eligible

## MACON COUNTY (cont.)

MACO36	464001.2	Bridge	c1900	pinned Pratt bedstead (replaced)	28 non-eligible
MACO37	480000.9	Bridge		(replaced)	
MACO38	513001.6	Middle Fork Bridge		(replaced)	
MACO39	517000.2	Middle Fork Bridge	1907	pinned Pratt pony truss	46 non-eligible
MACO40	519000.4	Middle Fork Bridge	c1895	pinned Pratt half-hip pony truss	42 non-eligible
MACO41	526000.5	Middle Fork Bridge	c1900	pinned Pratt bedstead (replaced)	29 non-eligible
MACO42	527001.2	Middle Fork Bridge		(replaced)	
MACO43	533000.1	Bridge		(replaced)	
MACO44	540001.3	Bridge		(replaced)	
MACO45	587000.7	East Fork Bridge		(replaced)	
MACO46	606000.7	Middle Fork Bridge	1904	pinned Pratt pony truss	41 non-eligible

## MADISON COUNTY

MADI01	G 443R	Castor River Bridge	1924	riveted Pratt through truss (replaced)	39 non-eligible
MADI02	G 700R	Castor River Bridge			
MADI03	J 521	St. Francis River Bridge	1931	riveted Pratt through truss	36 non-eligible
MADI04	T 71	St. Francis River Bridge	1936	riveted Pratt through truss	38 non-eligible
MADI05	110000.1	Rock Creek Bridge	1919	concrete deck girder	47 possible

## MARIES COUNTY

MARI01	029003.0	Kaiser Bridge	1930	steel cable suspension bridge	54 determ. elig.
MARI02	none	Maries River Bridge	1928	steel cable suspension bridge	54 possible

## MARION COUNTY

MARN01	K 73	North River Bridge	1932	riveted Pratt through truss	47 non-eligible
MARN02	K 931A1	Mark Twain Memorial Bridge	1936	riveted cantilever through truss	75 eligible
MARN03	L 99R	Quincy Memorial Bridge	1930	riveted Baltimore through truss	75 eligible
MARN04	012000.7	Lyell Ford Bridge	1898	pinned Pratt through truss	45 non-eligible
MARN05	043000.9	Whitaker Ford Bridge	1903	pinned Pratt pony truss	48 non-eligible
MARN06	051001.8	South Fabius River Bridge	c1930	riveted Parker through truss	25 non-eligible
MARN07	070002.0	Hester Bridge	c1900	pinned Pratt through truss	28 non-eligible
MARN08	072000.2	South Fabius River Bridge	c1910	pinned Pratt through truss	32 non-eligible
MARN09	110001.2	North River Bridge	c1920	pinned Pratt through truss	25 non-eligible
MARN10	114000.9	North River Bridge	c1910	pinned Pratt through truss (replaced)	30 non-eligible
MARN11	116001.9	North River Bridge			
MARN12	118001.6	Terrill Ford Bridge	1898	pinned Pratt through truss (replaced)	45 non-eligible
MARN13	159002.8	Leggett Ford Bridge			
MARN14	160000.4	Voepke Ford Bridge	1907	pinned Pratt through truss	42 non-eligible
MARN15	174000.4	North River Bridge	c1910	pinned Pratt through truss	28 non-eligible
MARN16	195001.8	North River Bridge	1905	pinned Pratt through truss (replaced)	45 non-eligible
MARN17	228001.7	South River Bridge			
MARN18	249002.2	Bear Creek Bridge	1921	concrete through girder (replaced)	57 possible
MARN19	259001.3	Rock Cut Bridge		(replaced)	
MARN20	274001.0	Withers Mill Bridge		(replaced)	
MARN21	289000.7	South Fabius River Bridge	1914	pinned Pratt through truss	41 non-eligible
MARN22	291000.2	Grassy Creek Bridge	1915	pinned Pratt pony truss	39 non-eligible
MARN23	304000.7	Taylor Bridge	1929	riveted Parker through truss	43 non-eligible

## MERCER COUNTY

MERC01	L 73	Princeton Overpass	1942	timber stringer	33 non-eligible
MERC02	025001.7	Brush Creek Bridge	c1905	pinned Pratt pony truss	24 non-eligible
MERC03	033000.1	West Fork Little River Bridge	c1895	pinned Pratt through truss	15 non-eligible
MERC04	044002.3	West Fork Bridge	1899	pinned Pratt through truss	38 non-eligible
MERC05	051R00.7	Weldon Fork Bridge	c1895	pinned Pratt through truss	22 non-eligible
MERC06	052000.0	West Fork Bridge	c1910	pinned Pratt through truss	20 non-eligible
MERC07	073001.4	Duncan Bridge	1907	steel stringer (replaced)	36 non-eligible
MERC08	079001.6	Little Muddy Creek Bridge			
MERC09	086000.1	Little Muddy Creek Bridge	1908	steel stringer	41 non-eligible
MERC10	086R01.8	Irwin Creek Bridge	1902	steel stringer	41 non-eligible
MERC11	092R00.3	Stone Bridge	1907	steel stringer	41 non-eligible
MERC12	122002.5	West Medicine Creek Bridge	1899	pinned Pratt bedstead	48 possible
MERC13	145000.3	West Medicine Creek Bridge		(replaced)	
MERC14	153001.2	Muddy Creek Bridge		(replaced)	
MERC15	160002.2	Muddy Creek Bridge	1903	pinned Pratt half-hip pony truss	46 non-eligible
MERC16	162000.0	C&NW RR Overpass	1901	steel plate through girder	36 non-eligible
MERC17	163001.5	Wildcat Creek Bridge	c1900	pinned Pratt through truss	26 non-eligible
MERC18	222000.3	West Muddy Creek Bridge	1909	steel stringer	41 non-eligible
MERC19	244000.7	Muddy Creek Bridge	1908	pinned Pratt pony truss	46 non-eligible
MERC20	246001.2	Muddy Creek Bridge	c1905	pinned Pratt pony truss	29 non-eligible
MERC21	262001.7	East Honey Creek Bridge	1903	pinned Pratt pony truss	41 non-eligible
MERC22	282003.0	Medicine Creek Bridge	c1915	pinned Pratt pony truss	30 non-eligible
MERC23	284000.7	West Medicine Creek Bridge	c1900	pinned Pratt through truss	21 non-eligible
MERC24	301000.1	Bridge	1902	steel stringer	36 non-eligible

## MILLER COUNTY

MILL01	H 119	Saline Creek Bridge	1925	riveted Pratt through truss	41 non-eligible
MILL02	J 719	Osage River Bridge	1933	riveted cantilever through truss	53 possible
MILL03	011000.2	Calhoun Bridge	1914	riveted Pratt pony truss	46 non-eligible
MILL04	096001.5	Hoecker Bridge	1909	pinned Pratt through truss	46 non-eligible
MILL05	146000.4	Singer Bridge	1913	pinned Pratt through truss	44 non-eligible
MILL06	156001.2	Kemna Bridge	1924	steel cable suspension bridge	46 non-eligible
MILL07	181001.2	Boeckman Bridge	1926	steel cable suspension bridge	46 de-listed
MILL08	199000.7	Brumley Bridge	c1925	steel cable suspension bridge	52 possible
MILL09	222001.8	Buetcher Bridge	c1925	steel cable suspension bridge	52 possible
MILL10	264000.2	Mill Creek Bridge	c1925	steel cable suspension bridge	44 non-eligible
MILL11	274001.7	Glaize Bridge	1922	steel cable suspension bridge	66 possible

## MISSISSIPPI COUNTY

MISS01	K 950R	Cairo Bridge	1929	riveted cantilevered through truss	71 eligible
MISS02	094000.7	Bridge	c1915	pinned Pratt pony truss	28 non-eligible
MISS03	110000.0	Maple Slough Bridge	1913	pinned Pratt pony truss	41 non-eligible
MISS04	173001.3	Glory Bayou Bridge	c1915	pinned Pratt pony truss	35 non-eligible

## MONITEAU COUNTY

MONI01	001001.1	Petite Saline Bridge	1901	pinned Pratt through truss	51 possible
MONI02	004003.1	Lupus Bridge	1895	pinned Pratt through truss	50 determ. elig.
MONI03	056001.2	Brush Creek Bridge	1895	steel stringer	50 possible
MONI04	092001.6	Schmidt Creek Bridge	1911	steel stringer	39 non-eligible
MONI05	098001.4	Reiden Ford Bridge	1906	pinned Pratt pony truss	44 non-eligible
MONI06	110001.8	Straight Fork Bridge	c1930	riveted Pratt through truss	23 non-eligible
MONI07	122000.9	Smiths Fork Bridge	1911	riveted Warren pony truss	39 non-eligible
MONI08	155002.1	Bridge	1912	riveted Warren pony truss	39 non-eligible
MONI09	161000.7	Dry Fork Bridge	1912	riveted Pratt pony truss	42 non-eligible
MONI10	246001.0	Bridge	c1925	riveted Pratt/Warren pony truss	36 non-eligible
MONI11	254000.7	North Moreau Creek Bridge	c1910	pinned Pratt through truss	26 non-eligible
MONI12	258002.1	Bridge	1898	pinned Pratt half-hip pony	47 non-eligible
MONI13	298000.2	Smiths Creek Bridge	c1925	riveted Warren pony truss	25 non-eligible

## MONROE COUNTY

MONR01	018001.5	Cook's Ford Bridge	1914	pinned Pratt through truss	29 non-eligible
MONR02	024000.1	Santa Fe Bridge		(replaced)	
MONR03	036001.7	Long Branch Bridge		(replaced)	
MONR04	071001.5	Long Branch Bridge	1911	pinned Pratt bedstead	42 non-eligible
MONR05	093000.6	Tulip Bridge		(replaced)	
MONR06	094000.8	County Line Bridge	1922	riveted Pratt pony truss	30 non-eligible
MONR07	112000.5	Middle Grove Bridge	1914	riveted Pratt bedstead	37 non-eligible
MONR08	117000.2	Milligan Creek Bridge	1902	pinned Pratt bedstead	26 non-eligible
MONR09	175000.6	Coal Bank Bridge	1912	pinned Pratt through truss	35 non-eligible
MONR10	205002.5	Cutright Bridge	1929	riveted Pratt through truss	40 non-eligible
MONR11	209002.6	Cedar Bluff Bridge	1912	pinned Pratt through truss	31 non-eligible
MONR12	210000.2	Bee Creek Bridge	1908	pinned Pratt pony truss	34 non-eligible
MONR13	230000.5	Range Line Bridge	1905	pinned Pratt through truss	37 non-eligible
MONR14	233001.3	Briar Creek Bridge	1912	steel stringer	28 non-eligible
MONR15	268002.6	Alexander Bridge		(replaced)	
MONR16	275001.8	Elk Fork Bridge		(replaced)	
MONR17	303000.6	Mud Creek Bridge	1930	riveted Pratt pony truss	28 non-eligible
MONR18	324000.5	Legrand Bridge		(replaced)	
MONR19	331000.2	Fairgrounds Bridge	1924	riveted 3-web Pratt pony truss	72 possible
MONR20	334000.8	Glover Bridge	1905	riveted Warren bedstead	46 possible
MONR21	342001.1	Otter Creek Bridge	1907	riveted Warren bedstead	30 non-eligible
MONR22	353000.6	Miles Bridge		(replaced)	
MONR23	357001.7	Middle Fork Bridge	1910	pinned Pratt through truss	37 non-eligible
MONR24	405000.8	Edwards Ford Bridge	1904	pinned Pratt pony truss	42 non-eligible
MONR25	446000.7	Roney Ford Bridge	1910	pinned Pratt pony truss	36 non-eligible
MONR26	450001.2	Crooked Creek Bridge	1910	pinned Pratt through truss	31 non-eligible
MONR27	547001.2	Combs Bridge	1904	riveted Warren bedstead	46 possible
MONR28	552000.5	Crooked Creek Bridge	1910	pinned Pratt half-hip pony truss	32 non-eligible
MONR29	556002.3	Clear Creek Bridge		(replaced)	
MONR30	564000.2	Patterson Bridge	1913	pinned Pratt pony truss	38 non-eligible
MONR31	589000.8	County Line Bridge	1905	riveted Warren bedstead	46 possible
MONR32	none	Union Covered Bridge	1871	covered timber Burr arch-truss	79 listed

## MONTGOMERY COUNTY

MONT01	H 213	Mineola Bridge	1925	riveted Pratt through truss	36	non-eligible
MONT02	J 39R	Loutre River Bridge	1943	riveted Pratt through truss	45	non-eligible
MONT03	K 226A	Hermann Bridge	1930	riveted cantilever through truss (replaced)	71	eligible
MONT04	018001.0	Coal Branch Bridge	1914	lattice bedstead	39	non-eligible
MONT05	022000.1	Little Loutre Creek Bridge	1930	pinned Camelback pony truss	72	eligible
MONT06	079002.2	Morris Ford Bridge	1912	pinned Pratt pony truss (replaced)	23	non-eligible
MONT07	115002.6	Bear Creek Bridge	1930	pinned Pratt pony truss	40	non-eligible
MONT08	125000.4	Watkins Bridge	1917	steel stringer	35	non-eligible
MONT09	131000.2	Bear Creek Bridge	1930	pinned Camelback pony truss	72	eligible
MONT10	154000.6	Palmer Bridge	1916	riveted Warren pony truss	42	non-eligible
MONT11	190000.6	Little Loutre Bridge	1903	pinned Pratt pony truss (replaced)	48	non-eligible
MONT12	191000.5	Browne Bridge		(replaced)		
MONT13	198001.4	Whetstone Creek Bridge	1909	pinned Pratt through truss	44	non-eligible
MONT14	210000.3	McCarty Bridge	1906	pinned Pratt pony truss	46	non-eligible
MONT15	251000.4	Camp Creek Bridge	c1895	pinned Pratt half-hip pony truss	18	non-eligible
MONT16	269000.6	Morrow Bridge				
MONT17	283000.6	Prairie Fork Bridge				
MONT18	287002.7	Dry Fork Bridge				

## MORGAN COUNTY

MORG01	K 641R	Moreau River Bridge		(replaced)		
MORG02	078001.3	Culvert	c1930	concrete arch culvert	20	non-eligible
MORG03	079001.0	Straight Fork Bridge	1918	concrete slab	32	non-eligible

## NEW MADRID COUNTY

NEWM01	101R02.8	St. John's Bayou Bridge	1917	pinned Camelback through truss	54	possible
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## NEWTON COUNTY

NEWT01	J 349	Redings Mill Bridge	1930	concrete open spandrel arch	48	determ. non-elig.
NEWT02	Y 160	Silver Creek Culvert	1939	stone masonry arch culvert	28	non-eligible
NEWT03	Z 210	Spring Branch Bridge	1914	concrete slab	31	non-eligible
NEWT04	008000.3	Fillmore Bridge	1919	concrete filled spandrel arch	55	possible
NEWT05	026004.5	Tipton Ford Bridge	1918	concrete deck girder	60	possible
NEWT06	026004.6	Culvert	c1920	concrete arch culvert	27	non-eligible
NEWT07	086001.7	Dry Branch Bridge	1911	steel stringer	30	non-eligible
NEWT08	089002.4	Jones Creek Bridge	1919	concrete filled spandrel arch	30	non-eligible
NEWT09	090003.5	Jenkins Creek Bridge	c1910	pinned Pratt pony truss	30	non-eligible
NEWT10	209000.2	Cedar Creek Culvert	c1920	concrete arch culvert	22	non-eligible
NEWT11	214001.3	Baynham Branch Culvert	c1920	concrete arch culvert	22	non-eligible
NEWT12	220501.1	Jackson Avenue Bridge	1919	concrete slab (replaced)	32	non-eligible
NEWT13	312000.2	Clear Creek Bridge				
NEWT14	327001.0	Willow Branch Bridge	c1900	pinned Pratt half-hip pony truss	29	non-eligible
NEWT15	382200.1	Culvert	c1925	concrete arch culvert	32	non-eligible
NEWT16	382200.2	Culvert	c1925	concrete arch culvert	30	non-eligible
NEWT17	384001.2	Neosho Bridge	1882	pinned Pratt through truss	52	possible
NEWT18	395500.2	Ottawa Street Bridge	c1910	pinned Pratt pony truss	27	non-eligible
NEWT19	427000.9	North Indian Creek Bridge	1896	pinned Pratt half-hip pony truss	46	possible
NEWT20	459001.4	Capps Creek Bridge	1906	pinned Pratt through truss	40	non-eligible
NEWT21	533001.0	Mason Spring Creek Bridge	1901	pinned Pratt half-hip pony truss	41	non-eligible



## NEWTON COUNTY (cont.)

NEWT22	598003.0	South Indian Creek Bridge	1903	pinned Pratt through truss	43	non-eligible
NEWT23	611000.8	Stella Bridge	1920	concrete slab	33	non-eligible
NEWT24	655001.3	Sycamore Creek Bridge	c1920	concrete filled spandrel arch	26	non-eligible
NEWT25	708000.7	Five Mile Creek Culvert	c1920	concrete arch culvert	33	non-eligible
NEWT26	713000.6	Granby Bridge	1919	concrete filled spandrel arch	53	possible
NEWT27	715000.3	Dry Branch Bridge	c1920	concrete through girder	30	non-eligible
NEWT28	none	Jolly Mill Bridge	1905	pinned Camelback through truss	38	non-eligible

## NODAWAY COUNTY

NODA01	A37000.6	Turkey Creek Bridge	c1910	pinned Pratt pony truss (replaced)	20	non-eligible
NODA02	H 698R	Nodaway River Bridge	1928	riveted Pratt through truss	41	non-eligible
NODA03	H 840R	102 River Bridge	1932	riveted Pratt through truss	46	non-eligible
NODA04	S 511	Nodaway River Bridge	1933	riveted Pratt through truss	41	non-eligible
NODA05	S 918	Nodaway River Bridge	c1910	pinned Pratt through truss	25	non-eligible
NODA06	003000.2	Middle Mill Creek Bridge	c1890	pinned Pratt through truss	25	non-eligible
NODA07	010001.4	Mill Creek Bridge	1906	pinned Pratt pony truss (replaced)	37	non-eligible
NODA08	030000.6	Mass Branch Bridge	c1910	pinned Pratt pony truss	25	non-eligible
NODA09	064000.8	Clear Creek Bridge	1907	pinned Pratt pony truss	40	non-eligible
NODA10	069001.6	Clear Creek Bridge	c1915	pinned Pratt pony truss (replaced)	28	non-eligible
NODA11	073000.3	Wolf Creek Bridge	c1905	pinned Pratt pony truss (replaced)	21	non-eligible
NODA12	090000.3	Clear Creek Bridge	1907	pinned Pratt through truss (replaced)	39	non-eligible
NODA13	095000.4	Clear Creek Bridge	c1915	pinned Pratt pony truss	21	non-eligible
NODA14	098000.2	Clear Creek Bridge	c1905	pinned Pratt pony truss	31	non-eligible
NODA15	098000.8	Clear Creek Bridge	c1915	pinned Pratt pony truss	20	non-eligible
NODA16	105001.4	Bridge	1897	pinned Pratt pony truss	41	non-eligible
NODA17	106000.3	South Fork Bridge	c1910	pinned Pratt half-hip pony truss	25	non-eligible
NODA18	116000.8	South Fork Bridge	1902	pinned Pratt pony truss (replaced)	44	non-eligible
NODA19	120000.4	Clear Creek Bridge	c1915	pinned Pratt through truss	30	non-eligible
NODA20	167000.7	Norvey Creek Bridge	1909	pinned Pratt through truss	36	non-eligible
NODA21	183000.5	Honey Creek Bridge	c1915	pinned Pratt through truss	32	non-eligible
NODA22	188000.5	Honey Creek Bridge	c1915	pinned Pratt pony truss	33	non-eligible
NODA23	196R00.5	Honey Creek Bridge	c1915	pinned Pratt through truss	27	non-eligible
NODA24	209001.3	Norvey Creek Bridge	c1915	pinned Pratt pony truss (replaced)	20	non-eligible
NODA25	223001.5	Honey Creek Bridge	1902	pinned Pratt pony truss (replaced)	31	non-eligible
NODA26	231R00.4	Platte River Bridge	c1915	pinned Pratt pony truss	25	non-eligible
NODA27	251R01.0	102 River Bridge	1907	pinned Pratt pony truss (replaced)	40	non-eligible
NODA28	254000.8	102 River Bridge	c1915	pinned Pratt pony truss (replaced)	26	non-eligible
NODA29	254001.7	Norvey Creek Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA30	262000.3	Norvey Creek Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA31	269000.6	Bridge	c1915	pinned Pratt pony truss (replaced)	20	non-eligible
NODA32	302000.0	Muddy Creek Bridge	1902	pinned Pratt pony truss (replaced)	31	non-eligible
NODA33	315001.1	Muddy Creek Bridge	c1915	pinned Pratt pony truss	25	non-eligible
NODA34	322R00.7	Mill Creek Bridge	1907	pinned Pratt pony truss (replaced)	40	non-eligible
NODA35	323R00.8	Mill Creek Bridge	c1915	pinned Pratt pony truss (replaced)	26	non-eligible
NODA36	329001.0	Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA37	346000.1	Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA38	349000.6	Sand Creek Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA39	356000.1	Muddy Creek Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA40	373000.9	White Cloud Creek Bridge	c1915	pinned Pratt pony truss (replaced)	25	non-eligible
NODA41	382000.7	Bridge	c1915	pinned Pratt pony truss	25	non-eligible

# **NODAWAY COUNTY (cont.)**

NODA42	383001.8	102 River Bridge	1938	riveted Pratt through truss	25	non-eligible
NODA43	387R00.4	102 River Bridge		(replaced)		
NODA44	398001.8	Long Branch Bridge	c1915	pinned Pratt pony truss	21	non-eligible
NODA45	420000.3	Honey Creek Bridge	c1900	pinned Pratt pony truss	26	non-eligible
NODA46	426000.8	Platte River Bridge	1894	pinned Pratt through truss	50	possible
NODA47	439000.3	Honey Creek Bridge		(replaced)		
NODA48	456R01.1	Platte River Bridge	c1910	pinned Parker through truss	38	non-eligible
NODA49	474001.2	102 River Bridge	c1915	pinned Pratt through truss	27	non-eligible
NODA50	496000.5	Big Slough Bridge	c1910	pinned Pratt pony truss	21	non-eligible
NODA51	511000.5	Florida Creek Bridge		(replaced)		
NODA52	526000.8	Nodaway River Bridge	c1925	riveted Parker through truss	27	non-eligible
NODA53	534000.7	Sand Creek Bridge	c1910	pinned Pratt half-hip pony truss	25	non-eligible
NODA54	560000.2	Florida Creek Bridge	c1910	pinned Pratt pony truss	20	non-eligible
NODA55	560000.6	Florida Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
NODA56	577000.2	White Cloud Creek Bridge	c1905	pinned Pratt pony truss	29	non-eligible
NODA57	628000.9	Mozingo Creek Bridge	1904	pinned Pratt pony truss	33	non-eligible
NODA58	643000.6	Long Branch Bridge	c1910	pinned Pratt pony truss	25	non-eligible
NODA59	646000.3	Long Branch Bridge	1907	pinned Pratt pony truss	37	non-eligible
NODA60	652001.1	Long Branch Bridge	1904	pinned Pratt half-hip pony truss	28	non-eligible
NODA61	654000.2	Bridge	c1900	pinned Pratt pony truss	26	non-eligible
NODA62	655001.4	Platte River Bridge	1904	pinned Pratt through truss	33	non-eligible
NODA63	655R01.5	Platte River Bridge	c1910	pinned Pratt pony truss	32	non-eligible
NODA64	657002.2	Platte River Bridge		(replaced)		
NODA65	692000.7	Wildcat Creek Bridge	c1915	pinned Pratt pony truss	28	non-eligible
NODA66	694000.2	Wildcat Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
NODA67	697000.9	Wildcat Creek Bridge	c1905	pinned Pratt through truss	25	non-eligible
NODA68	701000.3	Wildcat Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
NODA69	741000.0	102 River Bridge	1946	riveted polyg. Warren pony truss	33	non-eligible
NODA70	769000.2	White Cloud Creek Bridge	c1915	pinned Pratt pony truss	30	non-eligible
NODA71	776000.1	Jenkins Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
NODA72	777R00.2	Jenkins Creek Bridge	c1907	pinned Pratt through truss	29	non-eligible
NODA73	780000.7	Coal Creek Bridge	c1910	pinned Pratt pony truss	20	non-eligible
NODA74	783000.2	Elkhorn Creek Bridge	c1915	pinned Pratt pony truss	20	non-eligible
NODA75	795000.1	Elkhorn Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
NODA76	798000.7	Elkhorn Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
NODA77	802000.8	Elkhorn Creek Bridge	c1925	riveted Pratt through truss	23	non-eligible
NODA78	821000.2	Florida Creek Bridge	1908	pinned Pratt pony truss	42	non-eligible
NODA79	845000.3	Bridge	c1890	pinned Pratt half-hip pony truss	35	non-eligible
NODA80	853000.3	Elkhorn Creek Bridge	c1905	pinned Pratt pony truss	25	non-eligible
NODA81	870000.9	Jenkins Creek Bridge		(replaced)		
NODA82	872000.1	Elkhorn Creek Bridge		(replaced)		
NODA83	877000.6	Elkhorn Creek Bridge		(replaced)		
NODA84	890000.7	Jenkins Creek Bridge	c1900	pinned Pratt pony truss	21	non-eligible
NODA85	890001.1	Jenkins Creek Bridge		(replaced)		
NODA86	893000.4	Jenkins Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
NODA87	897001.7	Owl Creek Bridge	c1915	pinned Pratt pony truss	31	non-eligible
NODA88	916000.2	White Cloud Creek Bridge	1904	pinned Pratt through truss	39	non-eligible
NODA89	941000.7	Bridge	c1910	pinned Pratt pony truss	25	non-eligible
NODA90	969000.4	Long Branch Bridge	1902	pinned Pratt pony truss	39	non-eligible
NODA91	972000.8	Platte River Bridge	c1925	riveted Pratt through truss	26	non-eligible
NODA92	985000.1	Clear Creek Bridge	c1900	pinned Pratt pony truss	26	non-eligible

## OREGON COUNTY

OREG01	H 289A	Thayer Viaduct	1930	pinned Pratt through truss	51 possible
OREG02	K 272	Riverton Bridge	1934	riveted Parker through truss	51 possible
OREG03	223000.2	Crow Ford Bridge	1914	pinned Pratt through truss	40 non-eligible

## OSAGE COUNTY

OSAG01	W 350	Koeltztown Bridge	1915	pinned Pratt through truss	44 non-elig.
OSAG02	Y 198	Rich Fountain Bridge	1925	stone masonry arch	50 possible
OSAG03	075000.3	Westphalia Bridge	1893	pinned Pratt through truss	59 possible
OSAG04	078000.0	Holterman Bridge	1915	pinned Pratt through truss	55 possible

## OZARK COUNTY

OZAR01	K 817R	Bull Shoals Lake Bridge	1952	riveted Camelback through truss	63 possible
OZAR02	253000.3	Barren Fork Bridge	1925	concrete filled spandrel arch	51 possible

## PEMISCOT COUNTY

PEMI01	105000.0	Bridge	c1910	pinned Pratt through truss	25 non-eligible
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## PERRY COUNTY

PERR01	042000.0	Bridge	c1910	pinned Pratt pony truss	25 non-eligible
PERR02	047000.1	Laurent Creek Bridge	c1910	pinned Pratt bedstead	25 non-eligible
PERR03	142000.4	Omette Creek Bridge	c1905	pinned Pratt through truss	30 determ. non-elig.

## PETTIS COUNTY

PETT01	039002.2	Sterling Bridge	1903	pinned Pratt bedstead	41 non-eligible
PETT02	074000.5	McClure Bridge	1906	steel stringer	43 non-eligible
PETT03	119000.2	Chamberlain Bridge	1907	riveted Warren pony truss (replaced)	50 determ. non-elig.
PETT04	123003.7	Trickem Bridge			
PETT05	130001.8	Longwood Bridge	1885	pinned Pratt through truss (replaced)	51 possible
PETT06	160002.4	Reave's Ford Bridge			
PETT07	161002.5	Muddy Creek Bridge	1919	pinned Pratt pony truss (replaced)	46 non-eligible
PETT08	208002.4	Overstreet Bridge			
PETT09	237002.0	Brown's Spring Bridge	c1885	pinned Pratt through truss (replaced)	58 possible
PETT10	276000.4	Donahoe Bridge			
PETT11	298000.2	Bridge	c1905	pinned Pratt bedstead	26 non-eligible
PETT12	331000.2	Bridge	1906	steel stringer (replaced)	43 non-eligible
PETT13	348000.8	Rieke Bridge			
PETT14	364000.3	Bridge	c1905	pinned Pratt bedstead	18 non-eligible
PETT15	371000.4	Camp Creek Bridge	1903	pinned Pratt bedstead	41 non-eligible
PETT16	375000.5	Coon Creek Culvert	1953	concrete arch culvert	29 non-eligible
PETT17	383000.9	Elk Fork Bridge	c1910	pinned Pratt pony truss	28 non-eligible
PETT18	393500.1	Washington Avenue Viaduct	1911	pinned Pratt through truss	36 non-eligible
PETT19	405000.8	Schmeltzer Bridge	1908	riveted Warren pony truss	41 non-eligible
PETT20	423001.7	Dresden Bridge	1891	pinned Pratt through truss	51 possible
PETT21	451002.7	Muddy Creek Bridge	1924	riveted Pratt through truss	41 non-eligible

## PHELPS COUNTY

PHEL01	X 8	Bourbeuse River Bridge	1934	riveted Warren pony truss, skewed	65 possible
PHEL02	Z 828	Jerome Bridge	1928	pinned Pratt through truss	52 determ. elig.

## PIKE COUNTY

PIKE01	K 317R	Calumet Creek Bridge	1936	rivet polyg. Warren pony truss, skew	58 possible
PIKE02	K 322	Ramsey Creek Bridge	1936	steel plate through girder	54 possible
PIKE03	K 487R	Noix Creek Bridge	1936	rivet polyg. Warren pony truss, skew	58 possible
PIKE04	K 932R	Champ Clark Bridge	1928	riveted Pennsylvania through truss	72 eligible
PIKE05	018001.8	Eagle's Nest Bridge	1907	pinned Pennsylvania through truss	72 eligible
PIKE06	023000.2	South Spencer Creek Bridge	1910	pinned Pratt pony truss	44 non-eligible
PIKE07	029001.5	Little Peno Creek Bridge	c1900	concrete arch culvert	37 non-eligible
PIKE08	060000.6	Bradley Ford Bridge	1910	pinned Pratt pony truss	36 non-eligible
PIKE09	151000.1	Frankford Railroad Bridge	c1890	stone arch	35 non-eligible
PIKE10	252001.5	Indian Creek Bridge		(replaced)	
PIKE11	262001.2	Hagan Ford Bridge	1904	pinned Pratt bedstead	46 non-eligible

## PLATTE COUNTY

PLAT01	F 151	Mitchell Creek Bridge	1923	concrete filled spandrel arch	47 possible
PLAT02	K 266R	Platte River Bridge	1933	riveted Parker through truss	48 possible
PLAT03	K 456R	Fairfax Bridge	1935	riveted cantilever through truss	62 possible
PLAT04	K 491	Bear Creek Bridge	1936	steel plate through girder	54 possible
PLAT05	K 698	Weston Viaduct	1936	steel plate through girder	54 possible
PLAT06	K 754R	Highway 92 Viaduct	1939	steel stringer	45 non-eligible
PLAT07	L 354R1	Platte River Bridge	1951	steel plate deck girder	38 non-eligible
PLAT08	N236B11	Interurban Road Bridge	c1920	concrete filled spandrel arch	19 non-eligible
PLAT09	N237B32	Interurban Road Bridge	c1920	concrete filled spandrel arch	16 non-eligible
PLAT10	003000.9	Sugar Creek Bridge		(replaced)	
PLAT11	006000.4	Sugar Creek Bridge	c1920	2-angle Camelback pony truss	45 non-eligible
PLAT12	016000.1	Iatan Bridge	1885	pinned Pratt pony truss	51 possible
PLAT13	024000.9	Bear Creek Bridge		(replaced)	
PLAT14	053002.7	Bee Branch Bridge		(replaced)	
PLAT15	130000.0	Platte River Bridge	c1920	riveted Pratt through truss	32 non-eligible
PLAT16	136001.7	Jowler Creek Bridge	c1920	concrete filled spandrel arch	30 non-eligible
PLAT17	138003.0	Jowler Creek Bridge	c1920	2-angle Pratt pony truss	32 non-eligible
PLAT18	160000.4	Bee Creek Bridge	1910	pinned Pratt through truss	41 non-eligible
PLAT19	173001.5	Platte River Bridge		(replaced)	
PLAT20	175000.8	Cordon's Ferry Bridge	1895	pinned Pratt through truss	46 non-eligible

## POLK COUNTY

POLK01	H 21A	Barren Creek Bridge	1925	concrete filled spandrel arch	43 non-eligible
POLK02	H 863	Pomme de Terre River Bridge		(replaced)	
POLK03	T 532	Pomme de Terre River Bridge	1946	concrete open spandrel arch	47 non-eligible
POLK04	007000.8	Humansville Bridge	1908	pinned Pratt pony truss	42 non-eligible
POLK05	049000.7	County Line Bridge	1911	pinned Pratt half-hip pony truss	43 non-eligible
POLK06	079001.1	Cedar Bluff Bridge	1911	pinned Pratt through truss	41 non-eligible

## POLK COUNTY (cont.)

POLK07	129000.9	Campbell Creek Bridge	1918	concrete slab	32	non-eligible
POLK08	159000.3	Francka Ford Bridge	1913	pinned Parker through truss	48	possible
POLK09	181000.2	Piper Creek Bridge	1908	pinned Pratt pony truss	42	non-eligible
POLK10	253001.4	Bear Creek Bridge	1912	pinned Pratt through truss	41	non-eligible
POLK11	279000.8	Orleans Bridge	c1900	pinned Pratt through truss	34	non-eligible
POLK12	286002.1	Coffman Branch Bridge	1918	concrete slab	32	non-eligible
POLK13	306002.2	Aldrich Bridge	1898	pinned Pratt through truss	32	non-eligible
POLK14	319000.5	Morrisville Bridge		(replaced)		
POLK15	347500.2	Culvert	c1920	concrete arch culvert	31	non-eligible
POLK16	463001.7	Hinkle Ford Bridge		(replaced)		
POLK17	502000.3	Town Branch Culvert	1911	concrete arch culvert	31	non-eligible

## PULASKI COUNTY

PULA01	G 455A	Waynesville Bridge	1923	concrete filled spandrel arch	50	possible
PULA02	J 802	Gasconade River Bridge	1932	riveted Parker through truss	47	non-eligible
PULA03	K 203	Gasconade River Bridge	1934	riveted Parker through truss	47	non-eligible
PULA04	L 35	Big Piney River Bridge	1942	concrete open spandrel arch	50	possible
PULA05	T 474	Gasconade River Bridge	1937	steel plate through girder	47	non-eligible
PULA06	061001.8	Little Tavern Creek Bridge	c1910	pinned Pratt half-hip pony truss	29	non-eligible
PULA07	089000.2	Burlington Northern Overpass	1902	steel stringer	43	non-eligible
PULA08	195002.8	Ross Ford Bridge	1908	pinned Pratt through truss	48	non-eligible
PULA09	206001.5	Devils Elbow Bridge	1923	riveted Parker through truss	50	possible

## PUTMAN COUNTY

PUTN01	003002.2	Medicine Creek Bridge		(replaced)		
PUTN02	060000.5	Berry Bridge		(replaced)		
PUTN03	070000.4	Bridge	1914	steel stringer	32	non-eligible
PUTN04	070000.5	Demery Bridge	1909	pinned Pratt half-hip pony truss	37	non-eligible
PUTN05	082001.6	East Locust Creek Bridge	c1910	pinned Pratt pony truss	27	non-eligible
PUTN06	085002.0	Montgomery Bridge	1908	pinned Pratt half-hip pony truss	39	non-eligible
PUTN07	087000.2	Brown Bridge	1909	steel stringer	34	non-eligible
PUTN08	127003.2	Drury Bridge	1909	pinned Pratt half-hip pony truss	36	non-eligible
PUTN09	147000.9	Bridge	c1915	pinned Pratt pony truss	30	non-eligible
PUTN10	181001.0	Shadden Bridge	1909	pinned Pratt pony truss	44	non-eligible
PUTN11	186000.8	Petty Bridge	1908	pinned Pratt pony truss	44	non-eligible
PUTN12	198001.1	Husted Bridge	c1915	pinned Pratt pony truss	38	non-eligible
PUTN13	227000.1	Margrove Bridge	1909	pinned Pratt pony truss	44	non-eligible
PUTN14	253001.5	Bradshaw Bridge	1909	pinned Pratt half-hip pony truss	43	non-eligible
PUTN15	278000.3	Lick Creek Bridge		(replaced)		
PUTN16	279003.0	Buster Bridge	1913	riveted Warren pony truss	37	non-eligible
PUTN17	291000.4	Wildcat Creek Bridge	c1910	pinned Pratt half-hip pony truss	29	non-eligible
PUTN18	300000.5	Wildcat Creek Bridge	c1905	pinned Pratt pony truss	29	non-eligible
PUTN19	332000.2	Herndon Bridge		(replaced)		
PUTN20	412000.4	Dickson Bridge		(replaced)		
PUTN21	413000.3	East Walnut Creek Bridge	1917	riveted Pratt half-hip pony truss	33	non-eligible
PUTN22	432001.7	Bridge	c1910	pinned Pratt half-hip pony truss	29	non-eligible

## RALLS COUNTY

RALL01	033000.9	Shiel Bridge	(replaced)		
RALL02	051000.1	Bear Creek Bridge	(replaced)		
RALL03	071000.1	Ilasco Bridge	1910	concrete through girder	58 possible
RALL04	089001.0	Bailey Ford Bridge	1910	pinned Pennsylvania through truss	67 possible
RALL05	094002.1	Spencer Creek Bridge	1925	riveted Warren pony truss	40 non-eligible
RALL06	116001.9	Spencer Creek Bridge	1911	pinned Pratt through truss	43 non-eligible
RALL07	128001.1	Turkey Creek Bridge	c1925	riveted Pratt pony truss	28 non-eligible
RALL08	181001.6	Gill Bridge	1909	pinned Pratt through truss	45 determ. elig.
RALL09	185001.6	Morowitz Bridge	1904	pinned Pratt pony truss	41 non-eligible
RALL10	200001.5	Spencer Creek Bridge	c1905	pinned Pratt half-hip pony truss	19 non-eligible
RALL11	202002.0	Menefee Ford Bridge	1911	pinned Pratt pony truss	48 possible
RALL12	220000.4	Butler Ford Bridge	1893	pinned Pratt through truss	50 possible
RALL13	234000.5	Rohr/Galloway Bridge	(replaced)		
RALL14	241002.3	Hutchison Bridge	1913	pinned Pratt pony truss	37 non-eligible
RALL15	279000.1	Al's Tavern Bridge	1910	pinned Pratt pony truss	44 non-eligible

## RANDOLPH COUNTY

RAND01	057001.8	Hoover Creek Bridge	c1905	pinned Pratt bedstead	28 non-eligible
RAND02	064002.1	Mud Creek Bridge	c1905	pinned Pratt pony truss	30 non-eligible
RAND03	065000.4	Bond Bridge	1910	pinned Pratt bedstead	38 non-eligible
RAND04	090000.9	Mud Creek Bridge	c1910	pinned Pratt bedstead	27 non-eligible
RAND05	149000.7	Elk Fork Bridge	c1910	pinned Pratt bedstead	30 non-eligible
RAND06	194001.2	Dark Creek Bridge	(replaced)		
RAND07	206000.4	Chariton River Bridge	c1905	pinned Pratt bedstead	29 non-eligible
RAND08	237000.2	Jacoby Bridge	(replaced)		
RAND09	343001.0	Sugar Creek Bridge	(replaced)		
RAND10	363001.3	Renick Bridge	(replaced)		

## RAY COUNTY

RAY001	G 55R	Lexington Bridge	1925	riveted Warren through truss	86 eligible
RAY002	J 190R	Crooked River Bridge	(replaced)		
RAY003	K 900	Henrietta Viaduct	1946	steel stringer	43 determ. non-elig.
RAY004	013001.2	Brushy Creek Bridge	1904	riveted Warren pony truss	53 possible
RAY005	076001.8	Bisbee Bridge	1910	pinned Pratt pony truss	44 non-eligible
RAY006	103000.8	South Mud Creek Bridge	c1905	pinned Pratt bedstead	21 non-eligible
RAY007	156001.2	Crooked River Bridge	1913	riveted Pratt pony truss	40 non-eligible
RAY008	167001.4	Crooked River Bridge	1912	riveted Pratt pony truss	47 possible
RAY009	168000.2	Hendrix Bridge	(replaced)		
RAY010	191003.3	Lick Creek Bridge	c1910	pinned Pratt bedstead	28 non-eligible
RAY011	220000.2	Fishing River Bridge	1913	riveted Pratt pony truss	40 non-eligible
RAY012	239000.4	Crooked River Bridge	c1925	2-angle Camelback pony truss	43 non-eligible
RAY013	244003.4	Crooked River Bridge	1913	riveted Pratt pony truss	40 non-eligible
RAY014	249002.6	Crooked River Bridge	c1910	pinned Pratt pony truss	30 non-eligible
RAY015	257001.6	Crooked River Bridge	1889	pinned Pratt through truss	51 possible
RAY016	289001.3	Crooked River Bridge	1908	pinned Pratt through truss	48 non-eligible
RAY017	351002.4	Rolling Creek Bridge	c1920	concrete filled spandrel arch	20 non-eligible
RAY018	369002.6	Hall Stone Bridge	1908	pinned Pratt through truss	48 non-eligible
RAY019	376000.8	Oinck Bridge	1904	pinned Pratt through truss	51 possible

## REYNOLDS COUNTY

REYN01	083001.4	Hunt's Farm Bridge	1917	pinned Parker through truss	56 possible
REYN02	391000.1	Sinking Creek Bridge	1923	riveted Warren pony truss	49 possible

## ST. CHARLES COUNTY

STCH01	J 1000	Daniel Boone Bridge	1937	riveted cantilever through truss	61 possible
STCH02	K 984R1	Clark Bridge		(replaced)	
STCH03	SCC 172	Bergfeld Bridge	1910	pinned Pratt half-hip pony truss	42 non-eligible
STCH04	SCC 174	Frey Ford Bridge	1908	pinned Pratt through truss	43 non-eligible
STCH05	SCC 176	Peruque Creek Bridge	c1915	pinned Pratt pony truss	20 non-eligible
STCH06	SCC 178	Peruque Creek Bridge	c1915	pinned Pratt through truss	27 non-eligible
STCH07	SCC 230	Schluersburg Bridge	1913	riveted Pratt through truss	46 determ. non-elig.
STCH08	SCC 262	Camp Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible
STCH09	SCC 269	Camp Creek Bridge	c1925	riveted Camelback pony truss	36 non-eligible
STCH10	SCC 274	Bridge	c1890	pinned Pratt pony truss	25 non-eligible
STCH11	SCC 388	Karrenbrock Mill Bridge	1909	pinned Pratt through truss	41 non-eligible

## ST. CLAIR COUNTY

SACL01	020R02.0	Monegaw Creek Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SACL02	050R00.6	Coopers Creek Bridge	1914	riveted Pratt pony truss	40 non-eligible
SACL03	056R01.9	Gallinipper Bridge	1914	steel stringer	37 non-eligible
SACL04	182000.6	Campbell Branch Bridge	1904	pinned Pratt bedstead	39 non-eligible
SACL05	184000.2	State Ford Bridge	1908	pinned Pratt pony truss	46 non-eligible
SACL06	262002.3	Pape Bridge	1911	pinned Pratt through truss	39 non-eligible
SACL07	348003.2	Weaubleau Bridge	1920	riveted Pratt pony truss	36 non-eligible
SACL08	362002.0	Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SACL09	373000.1	Nichols Ford Bridge	1922	pinned Pratt through truss	48 possible

## ST. FRANCOIS COUNTY

SAFR01	Y 658	Loughboro Ford Bridge		(replaced)	
SAFR02	Z 534	Bannon Branch Bridge		(replaced)	
SAFR03	053000.2	Terre Bleue Bridge	1935	stone arch / steel stringer	50 possible
SAFR04	125000.6	Bridge		(replaced)	
SAFR05	132000.1	East Main Street Bridge	c1920	concrete filled spandrel arch	28 non-eligible
SAFR06	149000.2	Bridge	1917	concrete slab	37 non-eligible
SAFR07	175001.8	Barnhouse Ford Bridge	1910	pinned Pratt through truss	43 non-eligible
SAFR08	269002.6	Big River Bridge	1924	riveted Parker through truss	45 non-eligible
SAFR09	270006.1	Big River Bridge	1924	riveted Pratt through truss	41 non-eligible

## STE. GENEVIEVE COUNTY

SAGE01	H 63	Auxvasse River Bridge	1926	riveted Parker through truss	39 non-eligible
SAGE02	H 64	Saline Creek Bridge	1926	riveted Parker through truss	39 non-eligible
SAGE03	J 745	Establishment Creek Bridge	1931	riveted Pratt through truss	41 non-eligible
SAGE04	X 67	Auxvasse River Bridge	1936	riveted Pratt through truss	39 non-eligible
SAGE05	X 393R	Mississippi Riv. Channel Bridge	1935	riveted Pratt through truss	37 non-eligible
SAGE06	X 421	Saline Creek Bridge	1948	continuous steel stringer	37 non-eligible
SAGE07	043000.6	Terre Bleue Creek Bridge	c1910	pinned Pratt pony truss	28 non-eligible

## ST. LOUIS CITY

STLC01	K 468	U.S. Highway 40 Viaduct	1935	concrete rigid frame	58 possible
STLC02	230.01	Arsenal Street Viaduct	1914	concrete deck girder	48 possible
STLC03	230.02	Carondelet Park Bridge	1913	concrete filled spandrel arch	54 possible
STLC04	230.03	Chouteau Avenue Viaduct	1917	concrete deck girder	41 non-eligible
STLC05	230.04	Columbia Avenue Viaduct	1914	concrete deck girder	48 possible
STLC06	240.01	Broadway Viaduct	1917	concrete deck girder	41 non-eligible
STLC07	260.03	Kingshighway Viaduct	1927	concrete deck girder	50 possible
STLC08	260.07	Eads Bridge	1874	steel/iron deck arch	97 eligible
STLC09	400.01	Bellerive Park Bridge	1918	concrete filled spandrel arch	51 possible
STLC10	400.08	Chouteau Avenue Viaduct	1937	steel plate rigid frame	64 possible
STLC11	600.03	Franklin Bridge	1898	concrete Melan arch	70 eligible
STLC12	600.04	Lafayette Bridge	c1888	steel three-hinge deck arch	32 non-eligible
STLC13	600.07	McKinley Bridge	1902	concrete filled spandrel arch	56 possible
STLC14	600.08	Old Stable Bridge	1922	concrete filled spandrel arch	46 possible
STLC15	none	MacArthur Bridge	1917	pinned Pennsylvania through truss	71 eligible
STLC16	none	McKinley Bridge	1910	pinned Pennsylvania through truss	72 eligible

## ST. LOUIS COUNTY

STLO01	F 180R1	Mattese Creek Bridge	1922	concrete filled spandrel arch	39 non-eligible
STLO02	G 681R	Deer Creek Bridge	1923	concrete filled spandrel arch	37 non-eligible
STLO03	H 990R	Two Mile Creek Bridge	1930	concrete filled spandrel arch	37 non-eligible
STLO04	J 217	Wabash Railroad Overpass	1935	steel plate deck girder viaduct	44 non-eligible
STLO05	J 421	Meramec River Bridge	1932	riveted Warren deck truss	63 possible
STLO06	K 205	Meramec River Bridge	1934	riveted Parker through truss, skewed	75 eligible
STLO07	K 239R2	St. Charles Bridge	1904	pinned Pennsylvania through truss	64 determ. elig.
STLO08	K 458	Meramec River Bridge	1936	riveted Parker through truss	51 possible
STLO09	K 637R	Meramec River Bridge	1940	cantilevered tied arch	76 eligible
STLO10	K 795R	Highway 40 Overpass	1941	steel plate deck girder	38 non-eligible
STLO11	K 854	Highway 40 Underpass	1941	concrete rigid frame	50 possible
STLO12	K 861	Highway 40 Underpass	1944	concrete rigid frame	50 possible
STLO13	L 53R1	Highway 231 Overpass	1947	concrete rigid frame	55 possible
STLO14	U3875130	Hall's Ferry Road Bridge	1947	riveted polyg. Warren pony truss	46 non-eligible
STLO15	U3875452	Gravois Road Bridge	1925	riveted Parker through truss	47 non-eligible
STLO16	052500.3	Black Creek Culvert	1930	concrete arch culvert	29 non-eligible
STLO17	096044.8	Quinette Road Bridge	1913	riveted Pratt half-hip pony truss	42 non-eligible
STLO18	none	Chain of Rocks Bridge	1929	riveted cantilever through truss	77 eligible

## SALINE COUNTY

SALI01	G 69R	Glasgow Bridge	1925	riveted Pennsylvania through truss	70 eligible
SALI02	G 518R2	Blackwater River Bridge	1948	continuous steel plate deck girder	36 non-eligible
SALI03	K 999R	McDaniel Memorial Bridge	1939	riveted cantilever through truss	72 eligible
SALI04	025000.9	Muddy Creek Bridge	1910	steel plate deck girder	47 possible
SALI05	027001.6	Muddy Creek Bridge	1907	steel plate deck girder	47 possible
SALI06	040001.8	Salt Fork Bridge	1932	riveted Pratt through truss	35 non-eligible
SALI07	041000.0	Muddy Creek Bridge	c1915	pinned Pratt pony truss	20 non-eligible
SALI08	065000.7	Salt Branch Bridge	1895	pinned Pratt bedstead	47 possible
SALI09	084000.4	Pass Branch Bridge	1913	pinned Pratt half-hip pony truss	44 non-eligible



## SALINE COUNTY (cont.)

SALI10	129001.5	Finney Creek Bridge	c1900	pinned Pratt pony truss	26 non-eligible
SALI11	142001.0	Finney Creek Bridge	1911	steel plate deck girder	47 possible
SALI12	146000.3	Finney Creek Bridge	1901	pinned Pratt bedstead	41 non-eligible
SALI13	150000.5	Dicks Branch Bridge	1912	steel plate deck girder	47 possible
SALI14	151001.5	Dicks Branch Bridge	1900	pinned Pratt bedstead	41 non-eligible
SALI15	152000.8	Dicks Branch Bridge	1911	riveted Pratt pony truss	44 non-eligible
SALI16	165002.3	Salt Fork Bridge	1899	pinned Pratt through truss	51 possible
SALI17	172000.5	Rock Creek Bridge	1919	steel stringer (replaced)	30 non-eligible
SALI18	178001.0	Rock Creek Bridge			
SALI19	189000.3	West Cow Creek Bridge	1903	pinned Pratt bedstead	41 non-eligible
SALI20	217001.1	Edmonson Creek Bridge	1908	pinned Pratt half-hip pony truss (replaced)	39 non-eligible
SALI21	218000.5	Salt Branch Bridge			
SALI22	245000.4	Rock Creek Bridge	1901	pinned/rivet Kingpost pony truss	57 possible
SALI23	263000.8	Bear Creek Bridge	1907	pinned Pratt half-hip pony truss (replaced)	42 non-eligible
SALI24	281001.0	Fish Creek Bridge			
SALI25	299000.7	Fish Creek Bridge	1910	steel plate through girder (replaced)	55 possible
SALI26	309001.0	Camp Creek Bridge			
SALI27	311001.0	Camp Creek Bridge	c1910	pinned Pratt pony truss (replaced)	28 non-eligible
SALI28	322000.3	Pierre Fleche Creek Bridge			
SALI29	325002.1	Pierre Fleche Creek Bridge	1891	pinned Pratt pony truss	51 possible
SALI30	327000.4	Pierre Fleche Creek Bridge	1915	pinned Pratt half-hip pony truss	32 non-eligible
SALI31	351000.5	Steel's Fish Trap Bridge	1875	Bowstring through arch-truss	76 eligible
SALI32	353001.0	Napton Bridge	1912	riveted Pratt pony truss	44 non-eligible
SALI33	366000.4	Scott & Cooney Ford Bridge	1910	pinned Pratt through truss	40 non-eligible
SALI34	368002.5	Boat Yard Ford Bridge	1888	pinned Pratt through truss	56 possible
SALI35	369001.0	Nelson Bridge	1929	riveted Pratt through truss (replaced)	42 non-eligible
SALI36	388000.2	Blackwater River Bridge			
SALI37	390000.8	Finney Creek Bridge	1895	pinned Pratt through truss	46 non-eligible
SALI38	391001.0	Buck Branch Bridge	c1900	pinned Pratt bedstead	21 non-eligible
SALI39	408001.0	Blackwater River Bridge	c1900	pinned Pratt through truss	26 non-eligible
SALI40	408001.5	Blackwater River Bridge	c1930	riveted Pratt through truss	23 non-eligible
SALI41	439001.5	Sweet Springs Bridge	1929	riveted Pratt pony truss	38 non-eligible
SALI42	476001.9	Blackwater River Bridge	1924	riveted Pratt through truss	43 non-eligible
SALI43	477000.1	Eastwood Road Overpass	1923	concrete through girder, shewed	59 possible
SALI44	477000.2	Eastwood Road Bridge	1923	concrete filled spandrel arch	59 possible

## SCHUYLER COUNTY

SCHU01	K 25	Chariton River Bridge	1932	steel stringer	42 non-eligible
SCHU02	K 26	Chariton River Bridge	1932	riveted Pratt through truss	43 non-eligible
SCHU03	002000.1	Mock Bridge	1904	pinned Pratt through truss	40 non-eligible
SCHU04	006000.7	Thief Creek Bridge	c1910	pinned Pratt pony truss	30 non-eligible
SCHU05	012001.4	Chariton River Bridge	1909	pinned Pratt through truss	42 non-eligible
SCHU06	022000.9	Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SCHU07	040001.3	North Fabius River Bridge	c1910	pinned Pratt pony truss (replaced)	36 non-eligible
SCHU08	068000.5	Bridge			
SCHU09	092001.1	Middle Fabius River Bridge	c1915	pinned Pratt pony truss (replaced)	31 non-eligible
SCHU10	097001.1	North Fabius River Bridge			
SCHU11	131001.2	North Fabius Branch Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SCHU12	155001.5	Middle Fabius River Bridge		(replaced)	

SCHU13	158001.1	Middle Fabius River Bridge	(replaced)	
SCHU14	172000.6	Elm Creek Bridge	c1910	pinned Pratt pony truss
SCHU15	175000.5	Bridge	1910	pinned Pratt pony truss
SCHU16	238000.3	South Fork Bridge	c1910	pinned Pratt pony truss
SCHU17	239002.8	South Fork Bridge	c1910	pinned Pratt pony truss
SCHU18	240000.7	Brush Creek Bridge	1910	pinned Pratt pony truss
SCHU19	256001.9	North Fork Bridge	c1910	pinned Pratt pony truss
SCHU20	260001.0	Brush Creek Bridge	c1910	pinned Pratt pony truss
SCHU21	270003.4	Brushy Creek Bridge	c1910	pinned Pratt pony truss
SCHU22	274000.1	Waldo Bridge	1903	pinned Pratt through truss
SCHU23	274000.9	Chariton River Bridge	c1910	pinned Pratt pony truss
				33 non-eligible
				41 non-eligible
				36 non-eligible
				30 non-eligible
				44 non-eligible
				36 non-eligible
				28 non-eligible
				28 non-eligible
				48 possible
				38 non-eligible

## SCOTLAND COUNTY

SCOL01	K 186	North Fabius River Bridge	1934	riveted Pratt through truss	44 non-eligible
SCOL02	T 74R	Wyaconda River Bridge	1936	riveted Pratt through truss	39 non-eligible
SCOL03	005R00.4	Tucker Bridge	1913	steel stringer	30 non-eligible
SCOL04	010000.9	Johnson Bridge	1907	pinned Pratt pony truss	40 non-eligible
SCOL05	024000.1	Little Fox River Bridge	c1910	pinned Pratt through truss	25 non-eligible
SCOL06	029001.2	North Fork Bridge	c1910	pinned Pratt bedstead	33 non-eligible
SCOL07	042001.2	Lionberger Bridge	1913	pinned Pratt pony truss	35 non-eligible
SCOL08	044000.7	Mankopf Bridge	1906	lattice bedstead	32 non-eligible
SCOL09	055001.7	Little Fox River Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SCOL10	083000.4	North Fabius River Bridge	(replaced)		
SCOL11	089001.1	South Wyaconda River Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SCOL12	108000.4	Flick Bridge	(replaced)		
SCOL13	120000.1	North Fabius River Bridge	c1915	riveted Pratt half-hip pony truss	28 non-eligible
SCOL14	126000.2	North Fork Bridge	1904	pinned Pratt half-hip pony truss	37 non-eligible
SCOL15	140001.1	Linderberger Bridge	1919	pinned Pratt pony truss	38 non-eligible
SCOL16	146000.7	South Wyaconda River Bridge	c1910	pinned Pratt pony truss	36 non-eligible
SCOL17	153001.8	South Wyaconda River Bridge	1912	pinned Pratt bedstead	40 non-eligible
SCOL18	166001.6	North Wyaconda River Bridge	c1910	pinned Pratt bedstead	36 non-eligible
SCOL19	188000.7	Middle Fabius River Bridge	c1910	pinned Pratt pony truss	28 non-eligible
SCOL20	189000.2	Middle Fabius River Bridge	c1910	pinned Pratt bedstead	36 non-eligible
SCOL21	208001.6	Strosnider Bridge	1911	pinned Pratt bedstead	36 non-eligible
SCOL22	221000.9	Hale Bridge	1907	pinned Pratt pony truss	43 non-eligible
SCOL23	266001.1	Allen Creek Bridge	c1910	pinned Pratt half-hip pony truss	33 non-eligible
SCOL24	283000.8	Bridge	(replaced)		
SCOL25	287000.8	Tobin Creek Bridge	(replaced)		
SCOL26	295000.5	Tobin Creek Bridge	c1910	pinned Pratt pony truss	33 non-eligible
SCOL27	367000.3	Tobin Creek Bridge	c1910	lattice bedstead	33 non-eligible
SCOL28	369000.0	Middle Fabius River Bridge	c1915	pinned Pratt pony truss	28 non-eligible
SCOL29	371000.1	Indian Creek Bridge	c1910	lattice bedstead	33 non-eligible
SCOL30	375000.4	Middle Fabius River Bridge	c1910	pinned Pratt pony truss	38 non-eligible
SCOL31	376000.8	Fabius River Bridge	c1910	pinned Pratt pony truss	28 non-eligible
SCOL32	378000.3	Indian Creek Bridge	c1910	lattice bedstead	33 non-eligible
SCOL33	391000.1	Bridge	1910	pinned Pratt bedstead	41 non-eligible
SCOL34	427000.3	Million Bridge	1912	lattice bedstead	37 non-eligible
SCOL35	428001.3	Vassar Hill Bridge	(replaced)		
SCOL36	435000.2	Smith Bridge	1912	lattice bedstead	37 non-eligible

## SCOTT COUNTY

SCOT01	G 438R	North Cut Ditch Bridge	1923	riveted Pratt through truss	36 non-eligible
SCOT02	043000.5	Ramsey Branch Bridge	1919	concrete deck girder	47 possible
SCOT03	066000.3	Henderson Branch Bridge	1919	concrete slab	47 possible

## SHANNON COUNTY

SHAN01	G 804A	Current River Bridge	1924	concrete filled spandrel arch	57 possible
SHAN02	H 79	Sinking Creek Bridge	1925	concrete open spandrel arch	50 possible
SHAN03	J 420	Round Spring Bridge	1930	concrete open spandrel arch	53 possible
SHAN04	K 209	Eminence Bridge	1933	concrete open spandrel arch	50 possible

## SHELBY COUNTY

SHEL01	017001.3	McCully Bridge	1891	pinned Pratt through truss	31 non-eligible
SHEL02	020002.2	Black Creek Bridge	1907	pinned Pratt bedstead	39 non-eligible
SHEL03	126000.1	South Fabius River Bridge	1899	pinned Camelback through truss	48 determ. non-elig.
SHEL04	127000.2	Jones Branch Bridge	1909	lattice bedstead	35 non-eligible
SHEL05	171001.8	Kirby Bridge	c1910	pinned Pratt bedstead	28 non-eligible
SHEL06	176001.7	Tannehill Bridge	1907	lattice bedstead	32 determ. non-elig.
SHEL07	231001.0	Clear Creek Bridge		(replaced)	
SHEL08	290000.3	Walkersville Bridge	c1930	riveted Pratt pony truss	28 non-eligible
SHEL09	300000.3	Salt River Bridge	c1930	riveted Pratt pony truss	33 non-eligible
SHEL10	307000.5	Turney Bridge	1907	lattice bedstead	32 non-eligible
SHEL11	310000.2	Hammett Bridge		(replaced)	
SHEL12	320001.4	Conboy Bridge	1910	pinned Pratt through truss	37 non-eligible
SHEL13	321001.2	Gillis Bridge	1908	pinned Pratt bedstead	48 possible
SHEL14	333000.5	Jordan Bridge	1907	pinned Pratt bedstead	44 non-eligible
SHEL15	379001.5	Maupin Bridge	1911	lattice bedstead	33 non-eligible
SHEL16	392000.9	Kidwell Bridge		(replaced)	

## STODDARD COUNTY

STOD01	P 56	Bridge	1951	riveted Pratt through truss	37 non-eligible
STOD02	052000.0	Proffer Road Bridge	1906	pinned Pratt through truss	40 non-eligible
STOD03	056000.8	Well's Ford Bridge	1913	pinned Pratt through truss	35 non-eligible
STOD04	137001.0	Bridge	1914	pinned Pratt pony truss	27 non-eligible
STOD05	452001.1	Bridge	c1925	riveted Warren pony truss	22 non-eligible
STOD06	452004.0	St. Francis River Bridge	c1925	pinned Pratt through truss	29 non-eligible
STOD07	521000.0	Capps Road Bridge	c1910	pinned Pratt through truss	38 non-eligible
STOD08	553001.1	Bridge	c1950	riveted Pratt deck truss	43 non-eligible

## STONE COUNTY

STON01	G 447R	Railey Creek Bridge	1923	riveted Pratt through truss	40 non-eligible
STON02	133000.3	Hootentown Bridge		(replaced)	
STON03	141000.0	McCall Ford Bridge	1915	pinned Pratt through truss	48 possible
STON04	H 404	Y Bridge	1926	concrete open spandrel arch	74 listed

## SULLIVAN COUNTY

SULL01	J 772	Medicine Creek Bridge	1932	riveted Pratt through truss, skewed	55	determ. non-elig.
SULL02	051001.3	Crumpacker Bridge	1912	pinned Pratt pony truss	37	determ. non-elig.
SULL03	062002.7	McNealey Bridge	1910	pinned Pratt pony truss	44	non-eligible
SULL04	119000.2	North Spring Creek Bridge	c1910	pinned Pratt half-hip pony truss	28	non-eligible
SULL05	128001.6	Jones Bridge	1912	pinned Pratt pony truss	38	non-eligible
SULL06	140000.9	Yellow Creek Bridge	c1910	pinned Pratt half-hip pony truss	30	non-eligible
SULL07	200R01.4	Locust Creek Bridge	c1910	pinned Pratt pony truss	30	non-eligible
SULL08	228001.3	Mewmaw Bridge	1908	pinned Warren pony truss	64	possible
SULL09	275001.3	Dewitt Bridge	1913	pinned Pratt pony truss	38	non-eligible
SULL10	308000.7	Cook School Bridge		(replaced)		
SULL11	321000.1	Holloway Bridge	1909	pinned Pratt half-hip pony truss	39	non-eligible
SULL12	322000.4	Little Yellow Creek Bridge	c1910	pinned Pratt pony truss	22	non-eligible
SULL13	323001.7	Maggart Bridge	1908	pinned Pratt pony truss	42	non-eligible
SULL14	341001.6	Bridge	c1910	pinned Pratt half-hip pony truss	35	non-eligible
SULL15	344002.0	Mussel Creek Bridge	c1910	pinned Pratt pony truss	40	non-eligible
SULL16	385001.1	Locust Creek Bridge	c1910	pinned Pratt pony truss	33	non-eligible
SULL17	417002.0	Mock Bridge	1907	pinned Pratt half-hip pony truss	42	non-eligible
SULL18	435000.1	Jack Hill Bridge		(replaced)		

## TANEY COUNTY

TANE01	H 39	Bull Creek Bridge	1926	concrete open spandrel arch	51	possible
TANE02	J 705R	Branson Bridge	1932	concrete open spandrel arch	61	possible
TANE03	J 952	Swan Creek Bridge	1932	concrete open spandrel arch	53	possible
TANE04	J 952R	Swan Creek Bridge	1952	riveted Camelback through truss	61	possible
TANE05	S 848	Bradleyville Bridge	1933	concrete open spandrel arch	47	non-eligible
TANE06	201000.1	Hollister Bridge	1912	pinned Pratt through truss	46	non-eligible

## TEXAS COUNTY

TEXA01	J 617	Big Creek Bridge	1932	riveted Pratt through truss	41	non-eligible
TEXA02	J 665	Jacks Fork Bridge	1931	riveted Warren pony truss	45	non-eligible
TEXA03	520002.6	Mason Bridge	1926	pinned Parker through truss	42	non-eligible

## VERNON COUNTY

VERN01	F 815R	Fly Creek Bridge	1922	concrete filled spandrel arch	44	determ. non-elig.
VERN02	X 186	Horse Creek Bridge	1948	riveted polyg. Warren pony truss	63	possible
VERN03	083000.0	Schell City Bridge	1900	pinned Parker through truss	58	possible
VERN04	086001.7	Bridge	c1920	stone masonry arch culvert	31	non-eligible
VERN05	127001.6	Little Creek Bridge	c1905	pinned Pratt bedstead	28	non-eligible
VERN06	136001.5	Ladies Branch Bridge	1909	steel stringer	40	non-eligible
VERN07	218002.2	Marmaton River Bridge	c1905	pinned Pratt through truss	34	non-eligible
VERN08	229001.3	Marmaton River Bridge	1925	riveted Pratt through truss	41	non-eligible
VERN09	251000.8	Bridge		(replaced)		
VERN10	271002.4	Melton Creek Bridge	c1905	pinned Pratt pony truss	39	non-eligible
VERN11	301000.0	Douglas Branch Bridge	1907	steel stringer	40	non-eligible
VERN12	301001.4	Caton Ford Bridge		(replaced)		

## VERNON COUNTY (cont.)

VERN13	305000.3	Bridge	1908	steel stringer	40	non-eligible
VERN14	336002.0	Young's Ford Bridge	1884	pinned Pratt through truss	58	possible
VERN15	360001.6	Green Branch Bridge	1907	steel stringer	40	non-eligible
VERN16	382000.5	Culvert	c1920	concrete arch culvert	20	non-eligible
VERN17	466001.8	Kelly Ford Bridge	1891	pinned Pratt through truss	50	possible
VERN18	479000.7	Clear Creek Bridge	1906	steel stringer	45	non-eligible
VERN19	543001.1	Bridge	1908	steel stringer	41	non-eligible
VERN20	547000.5	McKill Creek Bridge	1909	steel stringer	41	non-eligible
VERN21	571000.7	Bridge	1906	steel stringer	44	non-eligible
VERN22	625003.3	County Line Bridge	1916	pinned Pratt pony truss	42	non-eligible
VERN23	632000.5	Moundville Bridge	1894	pinned Pratt bedstead	51	possible
VERN24	657001.4	McCarty Creek Bridge	c1895	pinned Pratt pony truss	40	non-eligible
VERN25	679000.6	Clear Creek Bridge	1908	pinned Pratt pony truss	51	possible
VERN26	699000.6	Clear Creek Bridge	1893	pinned Pratt bedstead	56	possible
VERN27	717002.3	County Line Bridge	1895	pinned Pratt pony truss	51	possible

## WARREN COUNTY

WARR01	K 969	Washington Bridge	1934	riveted cantilever through truss (replaced)	72	determ. elig.
WARR02	Z 678	Lake Creek Bridge	1894	pinned Pratt pony truss	53	possible
WARR03	004001.3	Camp Creek Bridge	1906	steel stringer	38	non-eligible
WARR04	008000.4	Bailey Branch Bridge	1896	pinned Pratt through truss	48	possible
WARR05	023000.5	Steinhagen Bridge	1918	riveted Camelback pony truss (replaced)	50	possible
WARR06	026000.6	Indian Camp Creek Bridge	c1910	pinned Pratt pony truss	34	non-eligible
WARR07	028000.2	Hollman Ford Bridge	1908	lattice bedstead	43	non-eligible
WARR08	085004.3	Charrette Creek Bridge	1902	pinned Pratt half-hip pony truss	41	non-eligible
WARR09	099001.7	Loutre Slough Bridge	1909	lattice bedstead	38	non-eligible
WARR10	106001.4	Clay Branch Bridge	1905	pinned Pratt through truss	50	possible
WARR11	116000.3	Water Run Creek Bridge	1901	pinned Pratt half-hip pony truss	36	non-eligible
WARR12	133000.2	West Point Bridge				
WARR13	155000.2	Charrette Creek Bridge				

## WASHINGTON COUNTY

WASH01	J 987	Cedar Creek Bridge	1935	riveted Pratt through truss	41	non-eligible
WASH02	013003.7	Kingston Ford Bridge	1886	pinned Pratt through truss	56	possible
WASH03	086004.0	Haefner Bridge	1918	pinned Pratt through truss	39	non-eligible

## WAYNE COUNTY

WAYN01	J 21R	St. Francis River Bridge	1941	riveted Warren through truss, skewed	62	possible
WAYN02	J 935	Leeper Bridge	1933	riveted Parker through truss	52	possible
WAYN03	031002.2	Montgomery Ford Bridge	1913	pinned Pratt through truss	31	non-eligible
WAYN04	069000.5	Wappapello Bridge	1911	pinned Pennsylvania through truss	67	possible
WAYN05	090001.1	Duncan Ford Bridge	1913	pinned Pennsylvania through truss	63	possible
WAYN06	200000.6	Clark Creek Bridge	1924	riveted Warren pony truss	39	non-eligible

## WEBSTER COUNTY

WEBS01	100000.5	Pantry Creek Culvert	c1920	concrete arch culvert	20	non-eligible
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## WORTH COUNTY

WORT01	060R01.5	X Branch Bridge	c1910	pinned Pratt pony truss	25	non-eligible
WORT02	103001.0	Marlowe Creek Bridge	c1885	pinned Pratt through truss	43	possible
WORT03	116000.3	Middle Fork Bridge	c1915	pinned Pratt pony truss	21	non-eligible
WORT04	140R00.3	East Fork Bridge	1908	pinned Pratt pony truss	44	non-eligible
WORT05	171000.8	Little Rock Creek Bridge		(replaced)		
WORT06	174002.1	Savacool Bridge	1905	pinned Pratt pony truss	37	non-eligible
WORT07	251001.0	Lotts Creek Bridge	c1920	riveted Camelback pony truss	45	non-eligible
WORT08	254000.3	Sand Creek Bridge	c1910	pinned Pratt pony truss	25	non-eligible
WORT09	258R00.1	Lotts Creek Bridge		(replaced)		
WORT10	266R00.3	Grand River Bridge	c1910	pinned Pratt pony truss	28	non-eligible
WORT11	281001.9	Middle Fork Bridge	1932	riveted Warren pony truss	43	non-eligible

## WRIGHT COUNTY

WRIG01	268000.9	Wolf Creek Bridge	c1910	pinned Pratt pony truss	28	non-eligible
WRIG02	342001.8	Bridge	c1910	pinned Pratt half-hip pony truss	21	non-eligible

# INVENTORY DATA

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On the following pages are data for the individual counties and bridges. The counties are grouped by Highway District and listed alphabetically within each District. Each county is given a summary listing, which lists all of the bridges from the initial study group, dividing them into those that have been included in the field survey sample and those that have been excluded. Field-surveyed bridges—those that were documented in situ—are indicated. Each county listing is followed by data forms for all of the bridges in that county that were included in the field survey sample.