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HISTORIC THEMES FOR THE EVALUATION OF KENTUCKY HIGHWAY BRIDGES

1780-1940

December 28, 1991
Revised 4/6/92
Revised 7/15/92

by

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AND
COMMISSIONER OF HIGHWAYS

December 11, 1995

Ms. Judy Lindsey-Foster
MDOT/OES
Station No. 16
Augusta, Maine 04333

Dear Ms. Lindsey-Foster:

SUBJECT: Historic Bridge Survey Information

The KTC completed the initial historic bridge survey in 1982 and published it. The project was carried out by in-house staff who evaluated approximately 450 of the state's oldest bridges based on a review of bridge inventory files. The survey identified 70 iron and concrete bridges with sufficient engineering and architectural significance to be declared eligible for the National Register of Historic Places. The survey was accepted by the SHPO.

In 1988 the 1982 survey was updated by a study carried out by a consulting firm which identified another 30 bridges as eligible for engineering reasons. SHPO concurrence was not obtained due to concern about a focus on Criteria C "design" approach to significance with little or no research on Criteria A--Association with Events--significance.

Earlier this year, we accepted proposals and selected a consulting firm which will develop a Criteria A focused re-evaluation of bridges. Historic Contexts will be developed which provide a context for evaluating bridges at a state, regional and local level. A search of the Inventory of State and County maintained bridges turned up 2000 + which are 45 years or older (box culverts less than 30 feet in width were excluded). The study will give more attention to county maintained bridges than have the previous studies, which is good since so many of the older, one-lane, usually deficient bridges are county maintained. We want to look at W.P.A. bridges, early state toll bridge program bridges, and other 20th century types which have been given limited attention in the past. This project is anticipated to cost \$200,000 and will take the consultant two years to complete. (A copy of a memorandum prepared by the consultant is attached for your information. It should not be reproduced or distributed.)

Please feel free to call me at (502) 564-7250 if you wish to discuss this further.

Very truly yours,

Robert M. Polsgrove
Historic Preservation Coordinator
Division of Environmental Analysis

RMP/AL
cc: C. S. Raymer
D. W. Lambert
J. L. Mettill, Jr.

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I. INTRODUCTION

The purpose of this study is to provide an overview of historic themes with which highway bridges in the state of Kentucky can have significant associations and to suggest guidelines for the evaluation of the integrity of highway bridges. The historic themes will aid in the assessment of a highway bridge's ability to meet National Register Criterion A which is an association "with events that have made a significant contribution to the broad patterns of our history" (National Park Service, 1991: 12). Two previous studies on bridges have dealt with Criterion B or an association "with the lives of a persons significant in our past" and Criterion C or physical characteristics which "embody the distinctive characteristics of a type, period, or method of construction, or 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 " (National Park Service, 1991: 14 and 17). The conclusions of these studies are contained in the two volumes of A Survey of Truss, Suspension, and Arch Bridges in Kentucky done for the Kentucky Department of Transportation in 1982 and 1988. In the present study, brief summaries of the technological changes in bridge construction appear at the beginning of each historic time period chapter.

The two previous studies and the present one are limited to highway bridges from the period from 1780 to 1940 built to carry wagons, automobiles, trollies, and trucks. A topic not included

in the scope of the contract for this study concerns the post-1940 highway bridges. These bridges need to be surveyed to determine which ones meet Criteria Consideration G by virtue of having exceptional importance (National Park Service, 1991: 41).

Bridges associated with railroads are included in this study only in the cases where the railroads built the bridges or viaducts as part of separation of grade projects. A statewide inventory and context for railroad bridges would be useful in evaluating their significance. Archival material from the files of the Louisville and Nashville Railroad is located in the Special Collections Section of University of Louisville Library.

Within this study, the information on the historic themes related to highway bridges is organized into three historic time periods: 1780-1840; 1841-1911; and 1912-1940. The period from 1780-1840 is the era of wood truss bridge construction. The year 1841 was chosen as a significant date because of the invention of the Whipple "Iron Bowstring Arch" which signaled the beginning of the metal truss era. In 1912, Kentucky's state highway department was organized and initiated new era in transportation for the state.

At the beginning of each chapter on a time period, titles of themes which could serve as a basis for potential historic bridge contexts are listed in the order in which the brief theme descriptions appear in the text which follows. To determine the historic themes, the consultant reviewed materials on bridges gathered by the Kentucky Heritage Council and the Kentucky Department of Transportation. A print-out of the 279 bridges in

the county survey files of the Kentucky Heritage Council was obtained and the individual forms on bridges examined for references to historic themes. The two volumes of the Kentucky Department of Transportation statewide surveys of bridges meeting Criteria B and C were also reviewed for references to historic themes. Numerous histories of the state as a whole were checked to develop an outline of the history of transportation during the time periods studied. On a regional basis, the sections on transportation were examined both in The Bluegrass Cultural Landscape Study by Christine Amos and The Pennyryle Cultural Landscape by Charles E. Martin done for the Kentucky Heritage Council. Both regional studies were completed under contract to the Kentucky Heritage Council.

A literature search was conducted in the Margaret King Library of the University of Kentucky, the Library of the Kentucky Historical Society in Frankfort, Townsend Room at the Crabb Library at Eastern Kentucky University, Centre College Library, University of Louisville Library, the Lexington Public Library, the Kentucky Room at the Department for Libraries and Archives in Frankfort, the Kenton County Public Library in Covington, and the Louisville Free Public Library. Many county histories were scanned for information about bridges significant in local history, but most county histories contained little or no information about local transportation networks or bridges. Historic maps were consulted to learn about the development of late eighteenth and nineteenth century roads. The local history indexes of the Lexington Public Library, the Kenton County Public

Library and the Louisville Free Public Library were used to gain access to newspaper articles about events or legislation which influenced bridge construction. All references consulted are listed in the Bibliography in Chapter VI, with shorter time period specific bibliographies at the end of each chapter.

For the twentieth century, twelve of the biennial reports from 1912 to 1940 published by the Kentucky Department of Transportation were reviewed. All but two of the biennial reports were found in the private library of Jim Havens, the retired Director of Research for the Department of Transportation, who is writing a book on the history of transportation in Kentucky and served as an invaluable resource in understanding the history of twentieth century transportation in Kentucky.

A computer-search of the state records related to transportation in the Kentucky Room of the Department for Libraries and Archives yielded the indexes to the Works Progress Administration. The county-by-county list of the bridges built or considered by the depression era agency which was obtained from the microfilm copies of indexes and is included in Appendix B. The consultant also met with Joe Brent of the Kentucky Heritage Council who is working on Context for the New Deal Era Construction in Western Kentucky.

The consultant reviewed historic bridge studies from Montana, Ohio, Pennsylvania, South Carolina and West Virginia to see how historic bridges were evaluated in other states. In general, these bridge studies from other states focused almost

entirely on bridges associated with engineering rather than historic events.

II. METHODOLOGY

In 1976, the United States Department of Transportation published a report entitled A Nation in Motion which outlined the possible significant historic themes with which bridges could be associated. The themes identified in the report for Criterion A include the following: association with or affecting the outcome of an historical event; significant as a cultural symbol; completing or altering an important route; commemorative of an historical event; leading to the development of an important market, product, or development of a region; site of an important event; representing an important event in the history of transportation; and construction through significant or unusual funding mechanisms. For Criterion B, the report noted association with an engineer of considerable renown. For Criterion C, bridges' significance related to an innovation in bridge technology (first, last, longest, shortest, highest, etc. of a bridge type) or an emphasis on aesthetics. The above-mentioned themes, for National Register Criteria B and C, related to technology, design, and engineering, were the focus of the two previous volumes of the statewide bridge study.

*Incorrect
Citation*

The literature search for the current study focused on historic themes for Criterion A. To meet Criterion A, a bridge must be associated with a single event in local, state, or national history such as a Civil War battle or with a pattern of events, repeated activities, or historic trends related to the bridge's construction or use such as the dramatic growth of the community of Covington as a result of improved access via the

Roebeling Bridge to Cincinnati. The bridge must have an important association with the event or historic trend which can be documented through accepted means of historic research (National Park Service, 1991: 12).

Methodology for Determining Historic Associations for Bridges

Historic associations of bridges must be verified by the historical record or physical evidence. According to National Register criteria, a property is not eligible if its association with an event or series of events is based on speculation or if it is associated with an event or events whose historic importance is unclear within the broad patterns or theme with which it is associated. All bridges are not significant for the theme of transportation in the same way that buildings historically in commercial use must be shown to have been significant in commercial history of a geographical area (National Park Service, 1991: 12).

Date of construction, waterway or topographical feature spanned, funding mechanism, original owners and users, and history of the transportation route on which the bridge is located must be known prior to a determination of significance. Initial documentation must verify that the current bridge did exist at the time of a specific event or series of events. All bridges should be cross-referenced in the bridge survey files of the Division of Environmental Analysis (Kentucky Transportation Cabinet) and the county survey files of Kentucky Heritage Council. For bridges built after the establishment of the forerunner of the Kentucky Department of Transportation (KYDOT)

in 1912, the bridge's construction date, funding source, and purpose may be listed in the appendices of the agency's biennial reports, in the KYDOT Bridge Archives, or in the files of the Bridge Maintenance Division. Bridges built prior to 1912 could have been built by the county or as toll bridges by private individuals or companies. In both situations, information about the bridge's date of construction and circumstances may be found in the Order Books of the County Fiscal Court in which the bridge is located or local newspaper accounts. If a pre-1912 bridge is now maintained by the state, there may also be information about the bridge in the records of the Bridge Maintenance Division. *

Level of Significance

Once the documentation concerning the construction of the bridge is complete, its association with the historic time period and themes must be determined. Then the level of significance or geographic area, whether it be local, state, or national, for which a bridge is important must be established. Local significance usually indicates a geographic area within the boundaries of the state or a community, town, city, or county, or other regional area.

A bridge with local significance helps us understand the history of an area through documentation of the events which led to its placement in one particular location instead of another. To gauge the effect of the bridge, it is necessary to know the conditions before and after the bridge's construction. The bridge's construction may have facilitated expansion of the community into areas which were previously inaccessible.

Industrial or agricultural production may have increased due to the bridge's facilitation of the movement of raw materials and finished goods within a county or region to shipping points or markets. For such effects to be significant, they must be supported by census tracts demonstrating population gains in the areas assumed to be affected and plats showing the physical growth.

Bridges with state significance help us understand the history of the state as a whole by illuminating the statewide impact of events associated with the bridge's construction. Individual bridges could be the result of specific legislative acts of the General assembly such as the Murphey Toll Bridge Act or part of an multi-year state highway program and represent the completion of a link in intrastate systems such as the roads to connect county seats. The bridges could be part of a group of construction projects initiated by federal legislation, but given priority and supervision by state agencies such as the WPA and PWA bridges.

Bridges with national significance help us understand the history of the nation by illustrating events associated with themes in the history of the nation. By virtue of parts of Kentucky's boundaries having been delineated by four rivers, some bridges have approaches in two different states. Such bridges may be significant to state or local history, but not necessarily have national significance.

Integrity

For a bridge to qualify for the National Register, it must

not only be associated with an important historic theme, but must also retain integrity. Integrity is defined by the National Park Service as the "ability of a property to convey its significance" (National Park Service, 1991: 44). To retain historic integrity, a bridge will possess some degree of the seven aspects of integrity: location, setting, design, materials, workmanship, association, and feeling. Integrity as it applies to bridges under criterion A has different implications depending on whether the historic association is to a specific event such as a battle or series of events such as growth of an area. In association with a single event which is very time specific, the visual aspects of integrity such as design and materials carry more weight and importance than in the cases where the association is a series of events which may occur over a long period of time. Location and setting are significant for any interpretation of Criterion A. Bridges which have been moved and no longer relate to their original setting, including both the natural and man-made elements, have lost considerable integrity. *

Location and Setting

Since location of a bridge is the place where the historic event took place or relates directly to the bridge's function as a transportation crossing, it is very important to the integrity of the bridge. For association with both the single event and series of events, location and setting are significant. Bridges which have been moved have lost association with the conditions, waterways, ravines, or grade separations from other forms of transportation that they were designed to span. Alterations to

land use, topography, and vegetation, destruction of buildings, and the introduction of modern intrusions constitute a considerable loss of integrity and bridges in these situations do not meet National Register criteria.

The natural features of the setting are also important for the single event because the terrain will often answer the question as to why an event occurred where it did perhaps as a strategic crossing due to the steepness of the surrounding terrain or the swampiness of the area. The man-made features of the setting include single buildings or groups of buildings which together with the bridge may form a complex with a common function. The Shortway Bridge in Covington-Newport was built by a streetcar company adjacent to its maintenance facilities in Newport to provide access to Covington across the Licking River.

Design, Materials, and Workmanship

In general, the considerations of integrity which deal with design, materials, and workmanship tend to be more significant for bridges which are being considered under Criterion C. For Criterion A, it is important that the qualities listed above are sufficiently intact to insure that the item under consideration is a structure and not a remnant of a bridge and therefore a site. Structures are distinguished from buildings by the National Park Service as "functional constructions made usually for purposes other than creating human shelter. Structures nominated to the National Register must include all of the extant basic structural elements. Parts of structures cannot be considered eligible if the whole structure remains" (National Park Service,

1991: 4). Bridge abutments without the deck or superstructure or a bridge which has lost its historic configuration or pattern of organization through deterioration or demolition is usually considered a ruin and categorized as a site.

Bridges must be examined on-site to determine the extent of alteration which has occurred since the period of significance. The essential features of the bridge, abutments, piers, and trusses must be intact and most of the historic materials present. The records of the Bridge Archives and Division of Bridge Maintenance note changes and repairs made during the state's ownership of a bridge. Documentation must verify that the bridge now standing on the site is substantially the same bridge in terms of materials and design which existed at the time of a specific event or series of events. Since visualization or recall of a specific event is an important part of the association, substantial physical changes to a bridge over time through the incorporation of substantial amounts of new materials for bracing or extensions to accommodate additional volume or tonnage of traffic could result in a loss of integrity.

Association and Feeling

Association implies a direct and significant link between the bridge and the event or events. The bridge which is standing there now must be the one in place when the events occurred. The physical features described under setting and location contribute to feeling to the extent that a historical contemporary of the event would recognize the bridge as it exists today.

III. THEMES FOR THE PERIOD 1780-1840

Summary of Themes

The following themes discussed in the text which follows could be developed into historic contexts with which to evaluate bridges built during the period from 1780 to 1840.

Bridge Technology: Wood Truss Construction

Federal Legislative Initiative for the National Road

Influence of Virginia Laws on Kentucky Road Construction

Kentucky Laws and the Wilderness Road

Construction of Privately-Owned Turnpikes

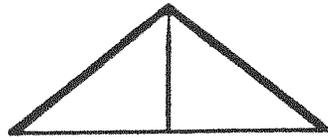
Roads Funded by Lotteries

Roads Funded by the State Board of Internal Improvements

Bridge Technology: Wood Truss Construction

No standing bridges from this period are catalogued in the previous bridge studies, but contemporary accounts describe simple parallel wood trusses laid on stone abutments to span narrow streams. The earliest wood bridge truss form is the king post or an A-frame which has a central vertical support to add strength by the creation of two triangles. King post trusses had a potential for spanning 20 to 60 feet. A variation of the king post, the queen post, lengthens the bridge truss by having two vertical supports. After 1804, Burr arch trusses which combined multiple king posts with an arch were used in bridges to span 50 to 175 feet (KYDOT, 1982: 13-14). See Exhibit 1, "Early Nineteenth Century Bridge Truss Types" which follows.

Exhibit 1: Early Nineteenth Century Bridge Truss Types

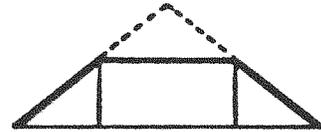


KING POST

(WOOD)

A TRADITIONAL TRUSS TYPE WITH ITS ORIGINS IN THE MIDDLE AGES.

LENGTH: 20-60 FEET
6-18 METERS

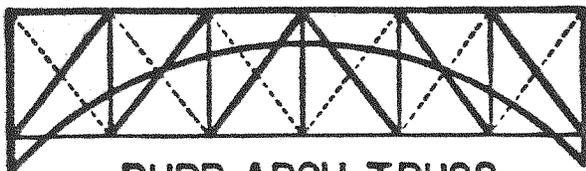


QUEEN POST

(WOOD)

A LENGTHENED VERSION OF THE KING POST.

LENGTH: 20-80 FEET
6-24 METERS

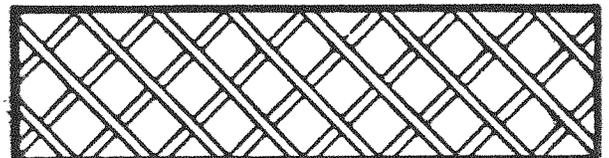


BURR ARCH TRUSS

1804-LATE 19TH CENTURY
(WOOD)

COMBINATION OF A WOODEN ARCH WITH A MULTIPLE KING POST. (ARCH ALSO COMBINED WITH LATER WOODEN TRUSSES).

LENGTH: 50-175 FEET
15-50 METERS



TOWN LATTICE

1820-LATE 19TH CENTURY
(WOOD)

A SYSTEM OF WOODEN DIAGONALS WITH NO VERTICALS. MEMBERS TAKE BOTH COMPRESSION AND TENSION

LENGTH: 50-220 FEET
15-66 METERS

Source: A Survey of Truss, Suspension, and Arch Bridges in Kentucky; (KYDOT:1982), p.26.

Federal Legislative Initiative for the National Road

The National Road, also referred to as the Cumberland Road, was envisioned by George Washington in the late eighteenth century as a means of connecting the coastal states with the new territories developing west of the Allegheny Mountains. George Washington did not live to see the road developed, but the idea continued to be advocated by Albert Gallatin, Henry Clay, Thomas Jefferson, and James Madison.

1801: Albert Gallatin wrote a letter to Congress setting forth the advantages that would accrue to the nation from the construction of macadam roads. A Congressional committee was formed to formulate a plan of action in regard to the establishment of a National Road.

1802: The act enabling the people of Ohio to form a state government contained a provision that "One-twentieth of the net proceeds of the lands lying within said State (Ohio) sold by Congress shall be applied to the laying out and making public roads leading from the navigable waters emptying into the Atlantic, to the Ohio, to the said state and through the same, such roads to be laid out under the authority of Congress, with the consent of the several states through which the roads shall pass." Prior to the passage of this act, all roads in the country had been chartered and financed publicly or privately by the states. States' rights advocates argued against the concept of the National Road because they did not feel that the federal government had the constitutional right to take over a transportation function previously in the hands of the states

(Shank, 1988: 38-39). States through which the National Road would pass were to be compensated through the proceeds from the sale of public lands in prospective states.

1805: Thomas Jefferson appointed a committee to investigate the various routes into Ohio from the east coast seaports. The committee recommended that the road be built from Cumberland, Maryland, on the Potomac, in a northwesterly direction, across Pennsylvania and what is now West Virginia to connect with the Ohio River at Wheeling.

1817: John C. Calhoun introduced a bill to finance the National Road through the dividends from the United States Bank. He reasoned that such a road would afford the interior of the country the same advantages as the coastal regions in the movement of raw materials and finished goods.

1822: An act was passed authorizing the collection of tolls on the National Road for its maintenance. President Monroe vetoed the law since he felt that Congress could not assume sovereignty of land without an amendment to the Constitution.

1828: The Kentucky legislature recommended to Congress that it fund the extension of the National Road from Zanesville through Maysville, and Lexington. In the spring of 1828, the bill passed the House of Representatives, but was defeated in the Senate.

1830: Albert Gallatin, the Secretary of State was a leader in the movement for the Zanesville to Maysville Road. He advocated building roads from the major eastern seaports to the interior of the country to facilitate military movements so that

the exposed seaports could be protected in the event of hostilities. He also felt that the interstate thoroughfares would cement the states together through an intermingling of trade. The Kentucky Legislature chartered the section from Maysville to Lexington in 1828.

1830: On May 15, 1830, a bill authorizing the United States to subscribe \$150,00 of stock in the Maysville-Lexington Road passed the Senate 24 to 18 and the House of Representatives 102 to 84. On May 27, 1830, President Andrew Jackson vetoed legislation for the Zanesville Trace, arguing that the federal government had no authority to maintain or extend the National Road. The building and maintenance of the National Road reverted to the states.

The State of Kentucky matched a local subscription raised by the citizens of Maysville and 31 miles of the turnpike were built (Collins, 1882: 539).

1857: The United States Postmaster was authorized to establish mail service with the eastern termini on the Mississippi and the western in San Francisco. He chose Memphis and St. Louis.

Influence of Virginia Laws on Kentucky Road Construction

Until Kentucky's statehood in 1792, the Virginia laws dictated the form of the first Kentucky roads. The Act of Virginia in 1748 declared that all roads to or from the courthouse of each county, mills, and ferries were to be kept well-cleared of woods, bushes, and other obstructions. Roots and stumps were to be well-grubbed up for a width of 30 feet. The

Act of Virginia of 1785 which was in effect during the settlement of Kentucky and re-enacted in Kentucky in 1797 said that the opening of new roads and the alignments of existing roads were to be done by surveyors appointed by the county courts. Farmers appealed to the county courts to open roads to connect mills, markets, and warehouses. Road improvements were financed by county funds and contributions of tools and labor by landowners along the route which was laid out by a county-appointed surveyor. All male-laboring persons 16 years or older faced a fine if they did not give three days toward the road work on yearly basis or send someone else to work in their place. In the absence of a bridge at a stream crossing on a public road, mill dams were required to be built at a width of 12 feet with bridges over the pier-head and flood gate (Collins, 1882: 537; Kerr, 1922: 492). The road alignments often reflected the financial interests of the county magistrates. In Madison County, Green Clay requested numerous surveys of roads through his property to connect his various commercial interests (Ellis, 1985: 34).

Kentucky Laws and the Wilderness Road

During the period, the Kentucky General Assembly tended to favor funding for navigation over road improvements. On December 14, 1793, the legislature appointed road commissioners to receive subscriptions in money, labor, or property to raise funds for a wagon road between Frankfort and Cincinnati. The road was deemed to be of public utility and its route lay in "unsettled country which can not be cleared in the usual manner by county courts".

On December 12, 1794, the legislature appointed commissioners to raise the funds for the clearing of a road from the Madison County Courthouse at Milford to Hazel Patch on the road from Crab Orchard to Powell Valley.

In a third act on December 19, 1795, before any work had been accomplished on the Milford to Hazel Patch section of the Wilderness Road, the General Assembly designated that a wagon road commence in the neighborhood of Crab Orchard and terminate at the top of Cumberland Mountain where the present road to Virginia passes. The latter road was to be paid out of the state treasury and opened the summer of 1796. Since the Milford road remained unopened, a state appropriation was made to improve it and it opened in the summer of 1797 (Collins, 1882: 537). In 1795, the legislature also designated that one-half of the tolls collected from travelers passing along the Old Wilderness Road were to be used to improve the road and to convert it from a trail to a wagon road (Kerr, 1922: 723).

An act passed in 1801, dictated that public roads between county seats or to salt works were to be 30 feet wide. On December 13, 1802, an act was passed to open a road from Mt. Sterling or Paris to the Big Sandy River to communicate with Greenbrier in Virginia. The road was built by subscription and was the first appropriation for a specific sum for road purposes (Collins, 1882: 538).

In 1811, a lottery was held to build the first macadamized road in Kentucky between Maysville and Washington.

In 1815-1816, a law was passed by the Kentucky General

Assembly to aid in the construction and repair of the small roads branching off the Wilderness Road.

Construction of Privately-Owned Turnpikes

Businessmen in Lexington, anxious about the commercial growth of rival businesses in Cincinnati and Louisville due to the improvements in river navigation, promoted road construction. In 1817, two private turnpike companies were incorporated. The Lexington to Louisville Road was managed by several small companies, each of which had a section of the road: Lexington-Frankfort; Frankfort-Shelbyville; Shelbyville-Louisville. The other company was the Lexington to Maysville Road which passed through Paris and Washington (Kerr, 1922: 723). In 1818, a road was completed from Mt. Sterling through Prestonsburg to the interior of Virginia (Kerr, 1922: 724).

The period from 1820 to 1828 was a lean time for internal improvements in Kentucky due to financial hard times. In 1821, the state appropriated funds for the state road from Lexington to Nashville due to the "thinness" of the population in the area and quantity of labor needed to put the road in proper repair (Collins, 1882: 538). An act in December of 1822 was passed with appropriations for the county courts of Boone, Campbell, Mason, and Garrard to keep major roadways in good repair. Garrard County was responsible for maintaining the road opposite the mouth of Hinkston Creek on the Kentucky River. In his annual message to the legislature of 1826-27, Governor Joseph Desha strongly supported macadamized roads and improvements to the Lexington to Maysville and Lexington to Louisville Roads. In

January of 1827, the state subscribed to the Maysville-Lexington link of the interstate highway when the road was reincorporated. In 1828, nine new turnpike companies emerged with the return of prosperity (Kerr, 1922: 723-724).

Roads Funded by Lotteries

In 1822-23, the General Assembly permitted a lottery to be held for the opening of a road from the Beaver Iron Works to Prestonsburg. The lottery was justified as an aid to the iron industry. In 1831, several counties received land grants from the state, which the local governments could sell to raise funds for roads. Under this program, 2,000 acres went to Casey County and several land warrants were given to Clay and Perry Counties (Kerr, 1922: 724).

Roads Funded by the State Board of Internal Improvement

Another financial panic in the 1830's brought all businesses to a halt. Internal improvements were seen by politicians as a way to stimulate the state's economy and to supply the funds denied by the veto of President Andrew Jackson. Thus, the State Board of Internal Improvements was created in Kentucky in 1835. It consisted of the Governor and four other members whose duties included the employment of competent engineers to survey turnpikes and streams; coordination of river and road transportation; and subscriptions of stock for the state in projects which the board deemed worthwhile (Kerr, 1922: 725).

With the establishment of the Board of Internal Improvements and the prospect of state aid, private turnpike companies proliferated. The General Assembly was flooded with applications

for turnpike charters. The state subscribed to more than half of the stock in the following turnpikes: Louisville and Nashville; Frankfort, Versailles, and Lexington; Lexington, Georgetown and Covington; Lexington and Winchester; Richmond and Lexington; Danville, Lancaster, and Nicholasville; Lexington, Harrodsburg and Perryville. The remaining stock in these private companies was bought by the residents along the road and the local governments of the counties through which they ran ("The Origin, History, and Compositions of Kentucky's Famous Roads", 1899: 16).
Lexington became a highway hub with seven turnpikes by 1839 (Van Hook, 1964: 204).

Not in
Bibli

Research Checklist for 1780-1840

1. Determine date or era of bridge through an on-site examination of bridge construction techniques and materials.
2. Check Kentucky Heritage Council County Survey and National Register Files and KYDOT Bridge Inventory for listing of bridge.
3. Contact KYDOT Bridge Maintenance Division and/or KYDOT Bridge Archives for date of construction, materials, repairs, and current condition of bridge.
4. In county courthouse review County Order Books from era for local ordinances passed authorizing expenditures for materials and construction of bridge and/or abutments, and persons involved in the construction. Review courthouse records for Articles of Incorporation for local turnpike companies. Check deed indexes acquisition or leasing of right-of-ways and stream crossings for the turnpikes and

other agreements related to bridge construction and/or maintenance.

5. In local or regional library, check on local history index for possible newspaper references to bridges during era.

Lexington Public Library: Lexington Herald; Lexington Leader; Kentucky Gazette 1787 to present.

Kenton County Public Library, Covington: northern

Kentucky newspapers 1835-1860; 1860-1926; 1984-present.

6. Map collections at state and regional universities for maps cited below in bibliography.

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Books

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IV. THEMES FOR THE PERIOD 1841-1911

Summary of Themes

The following themes discussed in the text which follows could be developed into historic contexts with which to evaluate bridges built during the period from 1841 to 1911.

Bridge Technology: Metal Truss Construction

Late Nineteenth Century Federal Legislative Initiatives

Private Turnpike Construction

Civil War

Publically-Owned Turnpikes

Bridge Technology: Metal Truss Construction

The use of cast iron and wrought iron facilitated significant engineering innovations in the design of bridges. Squire Whipple's "Iron Bowstring Arch", patented in 1841, used both cast and wrought iron for bridges with spans of less than 200 feet. In 1844, Thomas and Caleb Pratt designed a bridge truss which used vertical wood members for compression posts and diagonal wrought iron members to carry the tension between the horizontal top and bottom chords (KYDOT, 1982: 17). See Exhibit 2: "Nineteenth Century Metal Bridge Truss Types" on the following page. The Pratt truss was developed in 1844 using wooden compression posts, but was modified over the decades for the use of cast iron, wrought iron, and finally steel. It was the most popular late nineteenth and early twentieth century bridge truss type used in Kentucky. Variations of the design included the Double Intersection Pratt and the Pratt Half Hip.

In Kentucky, before the establishment of the Kentucky

Department of Highways, the local units of government were responsible for contracting new bridges. Local governments selected bridges from bridge company catalogues on the basis of economics and the requirements of span length and load weight. The metal truss bridge was popular because of the simplicity of field construction and the standardization of the basic structural steel parts by the bridge manufacturers. Virtually unknown before 1880, the number of bridge companies increased dramatically from 1880 to 1889, but many of the smaller companies consolidated to form larger companies by 1900 (KYDOT, 1982: 18).

By 1880, cast iron was replaced by wrought iron, a material superior for both compression or tension in bridge construction. Wrought iron was then phased out in favor of steel by 1895. Steel had virtually the same appearance as iron, but was stronger and subject to better quality control (KYDOT, 1982: 17).

The Warren through truss named after James Warren who patented the design in 1848 had diagonal members which were alternatively placed in tension as a load passed over the bridge. The oldest standing bridge of this type is the Clay's Ferry Bridge built in 1869 on US 25 over the Kentucky River between Fayette and Madison counties.

In the Bowstring Arch patented by Squire Whipple in 1841, the arched top chord was anchored against the abutments and placed in compression. The deck was suspended from the arch by vertical rods placed in tension. The bowstring arch bridges in Kentucky range in length from 59 to 148 feet. The oldest example of a bowstring arch bridge identified in the 1982 study was built

in 1877 at Falls of Rough in Grayson County.

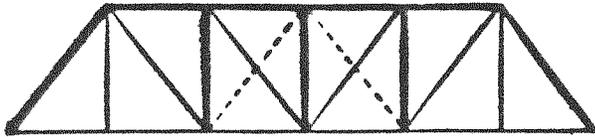
Other bridge types used during the era were Baltimore and Pennsylvania trusses, modifications of the Pratt truss named for their extensive use on the Baltimore and Ohio and Pennsylvania Railroads. Introduced in the early 1870's, with arched top chords and additional substruts, the Baltimore and Pennsylvania trusses were capable of greater spans than had previously been possible with the original Pratt truss (KYDOT, 1982: 50).

In suspension bridges, the masonry towers (compression unit) supported the main cable (tension member) which passed over the tower and was anchored on each end of the bridge. On large suspension bridges, a stiffening truss was placed on or below the bridge deck to distribute the moving loads evenly along the length of the bridge. The stiffening truss also steadied the bridge against winds. The earliest example was the Covington and Cincinnati Bridge over the Ohio River which was completed in 1866 and had a span of 1647 feet (KYDOT, 1982: 60).

The structural design of cantilever truss spans was based on balance and counterbalance of anchor arms, cantilever arms, and suspended arms. The anchor arms were secured on both ends to an abutment or pier and counterbalance the cantilever arms. The Central Bridge between Newport and Cincinnati built in 1890 over the Ohio River was the earliest highway cantilever truss in Kentucky.

See Exhibit 2: "Late Nineteenth Century Bridge Truss Types" on the following page.

Exhibit 2: Late Nineteenth Century Bridge Truss Types

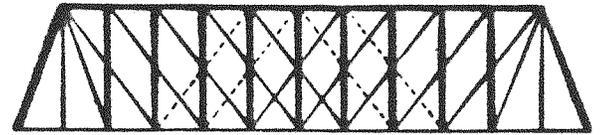


PRATT

1844 - 20TH CENTURY

DIAGONALS IN TENSION, VERTICALS IN COMPRESSION, (EXCEPT FOR HIP VERTICALS ADJACENT TO INCLINED END POSTS).

LENGTH: 90-250 FEET
27-75 METERS

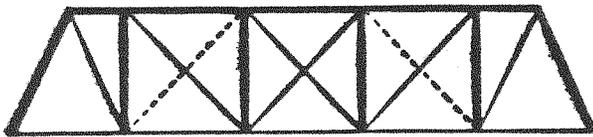


DOUBLE INTERSECTION PRATT

1847 - 20TH CENTURY

(WHIPPLE, WHIPPLE-MURPHY, LANVILLE)
AN INCLINED END POST PRATT WITH DIAGONALS THAT EXTEND ACROSS TWO PANELS.

LENGTH: 70-300 FEET
21-90 METERS

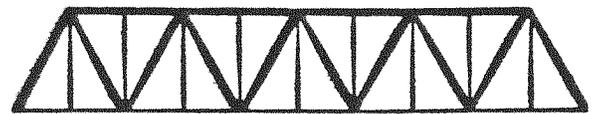


PRATT HALF-HIP

LATE 19TH-EARLY 20TH CENTURY

A PRATT WITH INCLINED END POSTS THAT DO NOT HORIZONTALLY EXTEND THE LENGTH OF A FULL PANEL.

LENGTH: 80-150 FEET
24-45 METERS

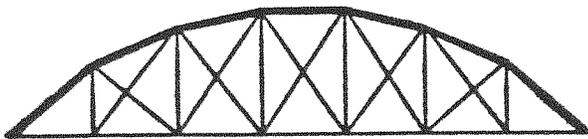


WARREN

WITH VERTICALS
MID 19TH-20TH CENTURY

DIAGONALS CARRY BOTH COMPRESSIVE AND TENSILE FORCES. VERTICALS SERVE AS BRACING FOR TRIANGULAR WEB SYSTEM.

LENGTH: 80-400 FEET
24-120 METERS

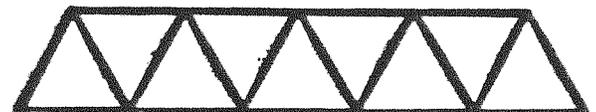


BOWSTRING ARCH-TRUSS

1840 - LATE 19TH CENTURY

A TIED ARCH WITH THE DIAGONALS SERVING AS BRACING AND THE VERTICALS SUPPORTING THE DECK.

LENGTH: 50-130 FEET
15-40 METERS

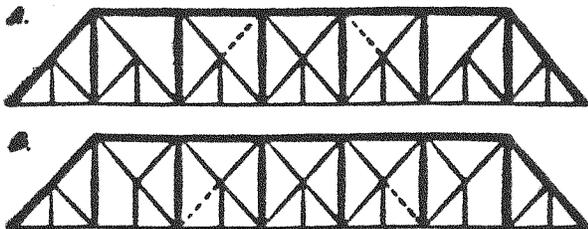


WARREN

1848 - 20TH CENTURY

TRIANGULAR IN OUTLINE, THE DIAGONALS CARRY BOTH COMPRESSIVE AND TENSILE FORCES. A TRUE WARREN TRUSS HAS EQUILATERAL TRIANGLES.

LENGTH: 80-400 FEET
24-120 METERS

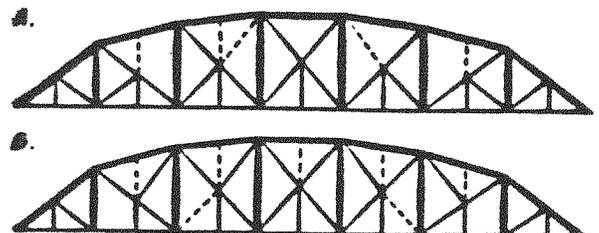


BALTIMORE (PETIT)

1871 - EARLY 20TH CENTURY

A. A PRATT WITH SUB-STRUTS.
B. A PRATT WITH SUB-TIES.

LENGTH: 250-600 FEET
75-180 METERS



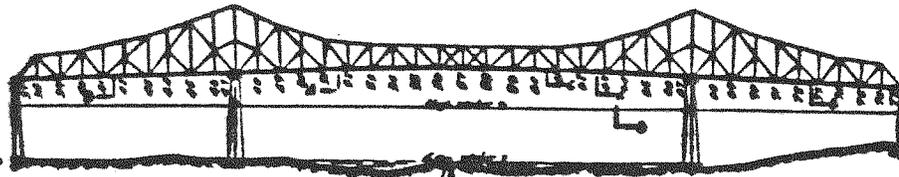
PENNSYLVANIA (PETIT)

1875 - EARLY 20TH CENTURY

A. A PARKER WITH SUB-STRUTS.
B. A PARKER WITH SUB-TIES.

LENGTH: 250-600 FEET
75-180 METERS

Exhibit 2 cont.



NEWPORT-COVINGTON



**COVINGTON-CINCINNATI
SUSPENSION**

Source: A Survey of Truss, Suspension, and Arch Bridges in Kentucky; (KYDOT:1982), p.26, 27, 28; Kentucky Historic Bridge Survey Forms 30 and 34.

Late Nineteenth Century Federal Legislative Initiatives

Office of Road Inquiry: 1893

The Office of Road Inquiry was established as a part of the U.S. Department of Agriculture. The agency had the responsibility of conducting tests and experiments on the different methods of road building and distributed the results of the tests to the states.

Bureau of Public Roads: 1893

The Federal Bureau of Public Roads was established in 1893 during the Progressive Era that led to federal legislation between 1912 and 1921. It was accompanied by a political consensus about road building that lasted until the depression. The public's trust in "experts" as logical leaders in the situation gave engineers much credibility in the early years of the bureau (Seely, 1987: 5).

Since Kentucky's Fourth State Constitution prohibited the state from establishing a highway fund, a highway amendment was adopted in the Fourth Constitution in 1909. The legislation provided the funds for road building and the creation of the Kentucky Department of Roads in 1912 (Bauhger, 1962: 294).

Private Turnpike Construction

The interest in the incorporation of turnpike companies was strong in the 1840's and 1850's, fluctuating with the state's prosperity and competing with river navigation improvements for legislative approval and funding. During the Civil War turnpike activity ceased (Kerr, 1922: 723). The turnpikes gradually gained the upper hand and navigation on the tributaries of the Ohio

River began to decline. (Van Hook, 1964: 234).

By the time of the Civil War nearly all of Kentucky's roads were under private control. Exceptions to toll fees were made for widows, funeral processions, and ministers. Very little, if any, of the profit from the turnpikes was spent on maintenance. As a consequence, roads were often impassable. The poor condition of the roads made travel and trade costly. Farmers and merchants were frustrated with the turnpike conditions, and became advocates of the expansion of the railroad lines (Clark, 1950: 181-182).

Civil War

From a survey of accounts of engagements and skirmishes during the Civil War in Kentucky in The War of the Rebellion: A Compilation of the Records of the Union and Confederate Armies, it appears that railroad trestles and ferries were considered more strategic than turnpike bridges. Louisville served as one of the supply centers for the Union Army, and the L&N Railroad with its lines through central and southwestern Kentucky was used to ship union troops and supplies. The railroads, especially trestles, were perennial targets of the Confederate Army in its operations in Kentucky.

John Hunt Morgan's raids through Kentucky focused on the destruction of Union supply and communication lines. During the "Christmas Raid" in December 1862, his men burned 2,290 feet of L&N bridges including the Bacon Creek and Nolin Creek Bridges in the vicinity of Muldraugh Hills. They also burned cross ties and telegraph poles, heated and twisted rails, and wound telegraph

wires around trees. As a result of the raid, the L&N Railroad was closed down for five weeks (Ramage, 1986: 138-140). During the "Great Raid" in June and July of 1863, Morgan and his men burned the L&N Railroad trestle over the Rolling Fork, 25 miles south of Louisville (Ramage, 1986: 166). In the "Last Kentucky Raid" in June 1864, bridges were burned on the Louisville and Frankfort Railroad and Kentucky Central Railroad. Union troops defending Keller's Bridge, a railroad trestle over the Licking River approximately 2 miles south of Cynthiana, surrendered to Morgan on June 11, 1864 after a six hour battle.

Instructions on capturing ferries and queries as to whether or not an army had burned ferries behind them are noted frequently in officers' reports of engagements in Kentucky in The War of the Rebellion. During the campaigns in central Kentucky, the Boonesborough and Clay's Ferries on the Kentucky River are mentioned frequently in the dispatches. On May 6, 1863, there was an accident at the Waitsborough Ferry on the Cumberland River when the ferry boats were upset by turbulent waters and 30 Union soldiers drowned.

Pickets were usually posted on bridges away from the main encampment to serve as lookouts. Skirmishes occurred when the pickets were challenged as in the case of Wilson's pursuit of Cluck's Confederate troops in February 1863 at Stoner's and Slate Creek Bridges between Winchester and Mt. Sterling (War of the Rebellion, 1886:I, XXIII, 51-52).

Some engagements did occur at bridges. On September 26, 1861, General F.K. Zollicoffer's Confederate forces encountered a

federal force of approximately 600 men at the Laurel Bridge and drove them away. The Confederate forces captured the Union camp and baggage left in the vicinity of the bridge (War of the Rebellion, 1886: I, XXIII, 202-203).

Control of a bridge over a deep river with limited fords coupled with a terrain advantage enabled smaller forces to win encounters with larger ones. During the "Great Raid" of June and July 1863, Morgan's men estimated to number 5,000 were repulsed on July 4, 1863 after three and one-half hour engagement with a force of 200 Union men from the Twenty-Fifth Michigan who were housed in a stockade at the Green River bridge at Tebbs Bend (Ramage, 1986: 163; War of the Rebellion, 1886: I, XXIII, 646-647).

During the Civil War period, there were no bridges over the Ohio River along the Kentucky border. A bridge between Covington and Cincinnati was promoted as early as 1828, but construction was not actually started until 1856, halted during the Civil War and finished in 1866. In September 1862, General Lew Wallace used the federal earthworks in the hills of northern Kentucky to defend Cincinnati against Confederate General Henry Heth's force of 12,000 men. Nearly 60,000 "irregulars or squirrel hunters" from Ohio and Indiana armed with their pistols, shotguns, and sporting rifles crossed the Ohio River on a hastily constructed pontoon bridge to man the breastworks and rifle pits south of Covington and Newport. Heth withdrew on September 11 without an engagement (Hartman: np). During the "Great Raid" in the summer of 1863, Morgan commandeered steamships to transport his men

across the Ohio River to Indiana in the vicinity of Brandenburg. In Louisville, the Louisville Bridge Company was chartered by the Kentucky Legislature in 1856, but no progress had been made when the Civil War began. In 1862, the Union Army built two pontoon bridges across the Ohio River to facilitate the flow of troops and supplies. The first bridge in the vicinity of Louisville was built for the L&N Railroad in 1867 (Kramer, 1979: 47).

Publically-Owned Turnpikes

The constant movement of troops and supply trains over the roads during the Civil War left many of the turnpikes in terrible condition. By the end of the war, many of the original turnpike stockholders were dead or had suffered financial misfortunes. As a result, the turnpike stocks were thrown on the market and bought as investments by businessmen, whose objective according to one author, was a "game to beat the state". The new owners of the turnpikes succeeded in getting special amendments to the turnpike charters which changed the voting rights of the stockholders and reduced the state's control. The new owners bled the roads for the dividends ("The Origin, History, and Composition of Kentucky's Famous Roads", 1899: 16).

After the Civil War, renewed interest in turnpike construction led to a situation in which "turnpike fever again became epidemic and everyone wanted a road" (Kerr, 1922: 723). Accounts of the sales of turnpikes were a frequent feature in the newspapers of the day as in the case of R.F. Johnson selling to Peter Crane the Lexington-Russell-Cynthiana Turnpike for \$8,000 in 1877 (Daily Press, February 15, 1877: 4). Turnpike managers

declared dividends ranging from 2% on the stock of the Winchester to Lexington Road in 1862 to 4% in 1866 on the stock of the Newtown Road (Observer and Reporter, January 15, 1862: 3; Observer and Reporter, June 6, 1866: 3).

During the 1880's and 1890's, the turnpikes began to pass from private to public hands. The transition was not always a peaceful one. "Night Riders" composed of groups of farmers angered by the conditions of the roads smashed gates and burned toll houses. The counties had to assume the responsibility for the "liberated" turnpikes' maintenance because the state was prohibited from establishing highway funds by the Fourth State Constitution in 1891. The lack of funds for road maintenance in most counties meant that there were few good rural roads in Kentucky prior to World War I. In the rural areas all activities had to be cancelled, including school and church, in the winter due to the condition of the roads (Baugher, 1962: 293).

"Free Turnpikes" became a hot political issue. In Fayette County, the August 1890 election was a contest over the proposal to make the turnpikes free. A majority of the voters chose candidates who were in favor of the abolition of tollgates ("The August Election", August 5, 1890: 5). It was necessary to have a bill passed in the Kentucky General Assembly to enable the counties to purchase, lease, or free the turnpikes (Lexington Morning Transcript, May 4, 1892: 1).

During 1897, the Lexington newspaper articles chronicled the purchase of the Harrodsburg, Versailles, Richmond turnpikes. By December 1897, there was only one pay toll gate left in Fayette

County on the Keene Road. A newspaper account of one of the fiscal court meetings in which turnpikes were purchased commented " thus the vexed free turnpike question is in a fair way to be settled forever in this county without bloodshed or breaches of the peace and in manner entirely just to all concerned" ("More Pikes Bought: Harrodsburg Pike Becomes the County's Property, Richmond to Follow", Lexington Herald, July 16, 1897: 5).

Research Checklist for 1841-1911

1. Determine date or era of bridge through an on-site examination of bridge construction techniques and materials.
2. Check Kentucky Heritage Council County Survey and National Register Files and KYDOT Bridge Inventory for listing of bridge.
3. Contact KYDOT Bridge Maintenance Division and/or KYDOT Bridge Archives for date of construction, materials, repairs, and current condition of bridge.
4. In county courthouse review County Order Books from era for local ordinances passed authorizing expenditures for materials and construction of bridge and/or abutments, and persons involved in the construction. Review courthouse records for Articles of Incorporation for local turnpike companies. Check deed indexes acquisition or leasing of right-of-ways and stream crossings for the turnpikes and other agreements related to bridge construction and/or maintenance.
5. In local or regional library, check on local history index for possible newspaper references to bridges during era.

Lexington Public Library: Lexington Herald; Lexington Leader; Kentucky Gazette 1787 to present.

Kenton County Public Library, Covington: northern Kentucky newspapers 1835-1860; 1860-1926; 1984-present.

6. Map collections at state and regional universities for maps cited below in bibliography.
7. Sanborn Fire Insurance Maps for Communities in Kentucky (Appendix 4)

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Maps

Appendix D: Kentucky Fire Insurance Maps: Sanborn Map Company.

Asher and Adams. Kentucky and Tennessee, 1872.

Beers, D.G. and Company. Map of Bourbon County, Kentucky. Philadelphia: Beers and Lanagan, 1877.

Beers, D.G. and Company. Map of Boyle and Mercer Counties, Kentucky. Philadelphia: Beers and Lanagan, 1876.

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V. THEMES FOR THE PERIOD 1912-1940

Summary of Themes

The following themes discussed in the text which follows could be developed into historic contexts with which to evaluate bridges built during the period from 1912 to 1940.

- Bridge Technology: Metal and Concrete Truss Construction
- Federal Aid to Highways
- Department of Public Roads and State Aid to Highways
- "Good Roads Policy"
- Development of "Through Routes"
- Use of Convict Labor for Transportation Projects 1915-1922
- Adaptive Reuse of Railroad and Trolley Bridges
- Rail and Automobile Separation of Grade Projects
- Bridges Built by Hydroelectric Companies
- Private Toll Bridge Construction
- Murphey Toll Bridge Act (1928)
- New Deal Programs (1933-1943)

Bridge Technology: Metal and Concrete Truss Construction

By the 1920's, the number of bridge companies operating in Kentucky was reduced as a result of the growing influence of the Kentucky Department of Highways. By 1930, with the exception of very long spans, the Department of Highways was building most of the highway bridges which were either steel truss, suspension, reinforced concrete, or cantilevered spans.

One form of steel truss used between 1901 and 1920 was the Camelback, a Pratt truss with polygonal top chord and five slopes

which allowed for greater strength and longer spans than the plain version of the Pratt truss (KYDOT, 1982: 48). The Parker truss was similar in form to the Camelback, but had more than five chords. Most of the Parker truss bridges in the inventory were built between 1927 and 1936. The Warren pony truss was also used, primarily between 1920 and 1940.

Suspension bridges had masonry towers (compressive unit) which supported the main cable (tension member) which passed over the tower and was anchored at each end of the bridge. On large suspension bridges, a stiffening truss was usually placed on or below the deck to distribute the moving loads evenly along the length of the bridge and reinforces the bridge against winds. The Maysville-Aberdeen Bridge built in 1931 had a span of 1990 feet across the Ohio River. "Swinging" suspension bridges without the stiffening truss were also built in the eastern section of the state. An example is the Pauley Bridge built by the WPA in 1940 north of Pikeville.

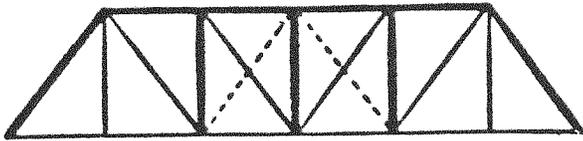
Concrete had been used for towers, anchorages, approaches, piers, and abutments during the early twentieth century. From 1920 to 1940, KYDOT built hundreds of concrete deck girder bridges. Concrete has high natural compressive strength, but low tensile strength. When steel reinforcing rods are set into concrete, the tensile strength is increased. Three types of concrete bridges were built in Kentucky during the era: concrete deck arch, open spandrel deck arch, and open spandrel through arch.

Thirty-five concrete deck arch bridges are noted in the 1982

bridge inventory. Included was the three-span concrete deck arch bridge in Whitley county which is 355 feet long. An open spandrel concrete arch bridge built in 1927 at Olive Hill in Grayson County has three arched spans, each measuring approximately 100 feet each. Another bridge in Pineville, the Cumberland Ford Bridge, has two 150-foot concrete arches. (KYDOT, 1982: 69-70). Only one open spandrel through arch bridge, built at Prestonsburg in 1910 has been inventoried.

Cantilever truss spans were based on the balance and counterbalance of anchor arms, cantilever arms, and suspended arms. The anchor arms were secured on both ends to an abutment or pier and counterbalance the cantilever arms. The Louisville Municipal bridge between Louisville and Jeffersonville spans 5750 feet and was built in 1929. See Exhibit 3: "Twentieth Century Bridge Truss Types" on the following page.

Exhibit 3: Twentieth Century Bridge Truss Types

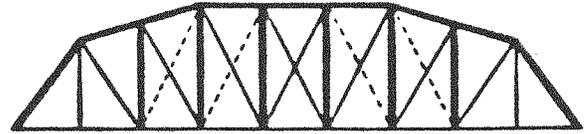


PRATT

1844 - 20TH CENTURY

DIAGONALS IN TENSION, VERTICALS IN COMPRESSION, (EXCEPT FOR HIP VERTICALS ADJACENT TO INCLINED END POSTS)

LENGTH: 30-250 FEET
9-75 METERS

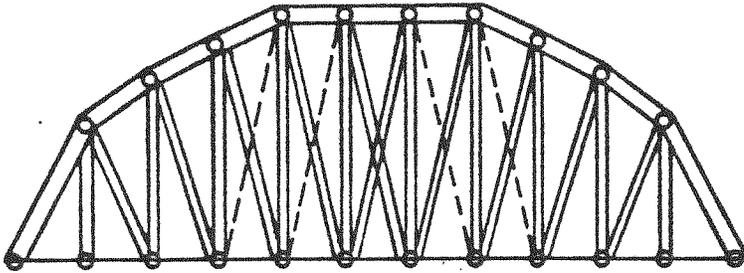


CAMELBACK

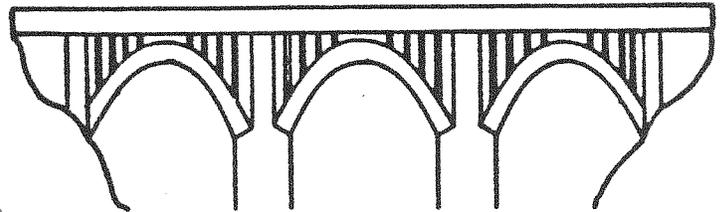
LATE 19TH-20TH CENTURY

A PARKER WITH A POLYGONAL TOP CHORD OF EXACTLY FIVE SLOPES.

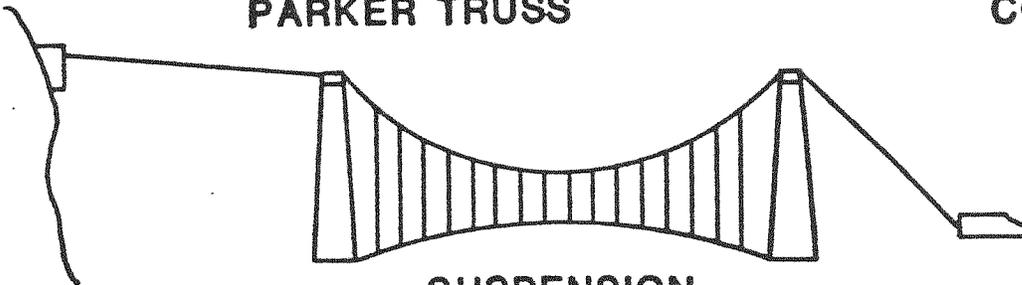
LENGTH: 100-300 FEET
30-90 METERS



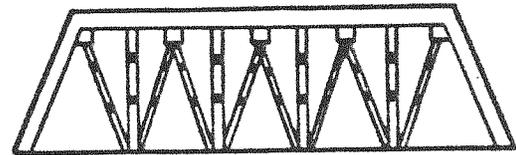
PARKER TRUSS



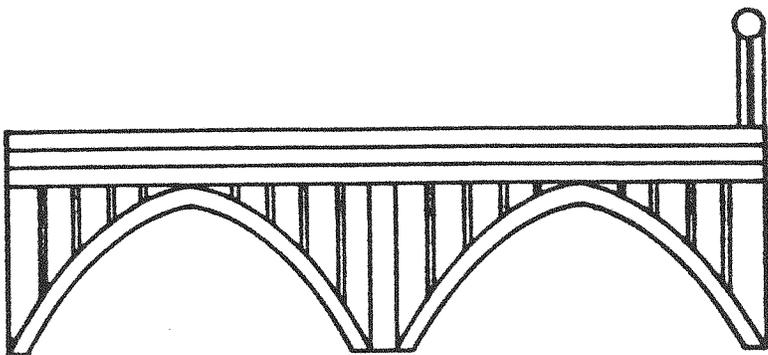
**OPEN SPANDREL
CONCRETE ARCH**



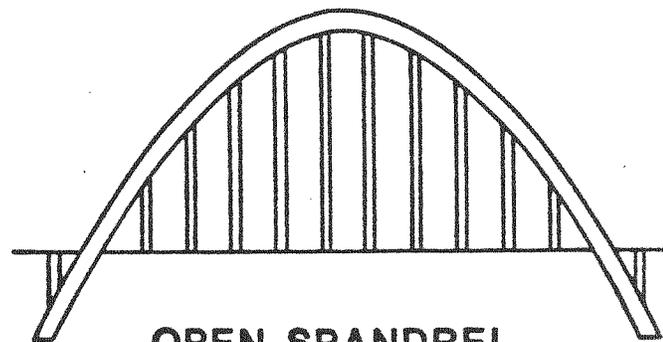
SUSPENSION



WARREN PONY



CONCRETE DECK ARCH



**OPEN SPANDREL
CONCRETE THROUGH ARCH**



1 of 2 identical cantilever spans

**6 SPAN CANTILEVER TRUSS
MUNICIPAL LOUISVILLE**

Federal Aid to Highways

1916: The Federal-Aid Road Act was passed which required states to establish highway departments and to provide up 50% of the costs of road construction to counties.

1921: The 1916 Act was amended to allow states to designate 7% of their roads as interstate (primary) or inter-county (secondary) for federal aid. The act also increased the maintenance responsibilities of the state.

1932-1940: New Deal Programs

1934: The Federal Highway Act earmarked 1.5% of the states federal monies for the planning of future transportation needs.

1936: The Hayden-Cartwright Act allowed states to apply federal money to "secondary or feeder roads, including farm-to-market roads, rural free delivery mail routes, and public school bus routes".

1939: The Public Roads Administration moved to Federal Works Administration. In 1949, the agency was transferred to the Department of Commerce and in 1966, the Department of Transportation was established.

1944: Special money was appropriated for urban areas and interstate highways.

Department of Public Roads and State Aid to Highways

Section 2, Chapter 16 of the Acts on 1912 of the Kentucky General Assembly created the Department of Public Roads. Robert C. Terrill was appointed by the Governor to be the Commissioner. The demands for bridge work made it necessary to employ a bridge engineer. As a temporary measure, Professor W.J. Carrel from the

University of Kentucky was appointed to fill the position. The funds for construction of highways and operation of the department were to come from a license tax on automobiles. The department provided aid to counties for surveying, location of new roads, and relocation of existing roads. The counties were to provide chain men, rod men, and axe men to aid in the survey work. Prior to the enactment of the law, the work in the counties was performed without reference to any other county's transportation plans and followed no general plan. The new law systemized the road work, but in many counties, the public officials were prone to hold onto the old system.

There was also an effort to correct the problems created by the counties' practice of allowing bridge companies to design and erect bridges. "Prior to the enactment of the present road law ... methods pursued in letting bridges was in the main crude. That in most instances the services of an engineer were omitted and the county officials either appropriated a sum of money that they imagined would be sufficient or else requested bridge companies who were interested in selling steel to furnish plans and estimates of cost. In many cases, the counties paid many times the cost for engineering services in excess length of bridges and poor construction" (First Biennial Report of the Department of Public Roads July 1, 1912 to November 1, 1913: 8).

The Department of Public Roads developed a set of 25 *
standard bridge designs. Examinations were scheduled to secure and certify county road engineers for each county. The Department inspected bridges and recommended the replacement of those which

proved to be unsound.

State Aid Law of 1914

The State Aid Law passed by the Kentucky General Assembly in 1914 increased the powers and duties of the Department of Public Roads and provided more funding through a tax assessment of \$.05 per \$100.00 of property. The State Aid Law was developed to enhance the inter-county road system through the connection of county seats. The work was estimated to take ten years to complete and include 6,400 miles of public roads.

The law became operative in 1915. By March of 1915, 104 counties had requested aid from the state and the department began construction of the roads.

Some counties were slow to avail themselves of the services of the bridge department due its being a radical departure from the old system of bridge contract letting. The policy of the department on all State Aid projects was to build all bridges of permanent nature up to a span of 300 feet. In the biennial report from the period, it noted that "the department regrets that bridges throughout the state are not being properly painted at regular intervals and consequently most bridges must be replaced after 30 years of service" (Second Biennial Report: 103). The report also noted difficulties in the maintenance of wooden bridge floors.

Some counties built their own short-span bridges by buying trusses, having them sent to the nearest railroad station, and erecting the bridges through the use of day-labor. A few counties bought old bridges from local railroads, moved them, and

re-erected them where needed. (See the section on the Adaptive Reuse of Railroad Bridges.) *

The Act of 1914 also divided the state into twelve highway districts with a supervising engineer for each district (Second Biennial Report: 17).

"Good Roads Policy"

A.O. Stanley, the governor during the period was elected on a platform of the "Good Roads Policy". In a speech to the Kentucky Association on September 15, 1915 he said that good roads cost money, but were a good investment for the state's economy. Good roads affected the cost of transportation of farm goods to market. Other politicians sounded similar themes. Frank A. Bullock was elected Judge Executive of Fayette County because he promised to take advantage of new machinery and new materials to give the people of Fayette County the best roads in the state. Under his tenure the county issued a \$500,000 bond issue for the construction and improvement of county roads (Stivers, 1914: 1).

Development of "Through-Routes"

Numerous citizen groups were organized to promote "Through Routes" which would traverse the state north to south and east to west. The Boone Highway Association proposed a road from Cumberland Gap to Louisville with a loop via Lexington. The Dixie Highway Association had two branches in Kentucky. One supported a route from Covington south to Cumberland Gap while the other connected Louisville with Nashville via Bowling Green. The Jackson Highway Association proposed a road from Maysville via Lexington, Louisville, Bardstown, Glasgow, Scottsville to

Nashville. The Dixie Bee Line went from Henderson south to the Tennessee line via Dixon, Madisonville, and Hopkinsville. The Jefferson Davis Highway went from Hopkinsville to Paducah and south to the Tennessee line. The McCreary Highway entered the state at the Virginia line and passed through Pike, Madison, LaRue and ended at Paducah. A more extensive list of the other road associations in the state during the period can be found in Appendix A.

Newspaper articles described the meetings of the citizen groups and discussed the commercial advantages of the through-roads. Good highways were needed for future truck service which would be necessary to relieve railway congestion. The railroads were congested with all terminals experiencing a rail car shortage. In the event of an emergency, the "through-highway" supporters suggested, the country would have to use trucks to move men and supplies ("Dixie Highway Boosters Hold Two Meetings", Lexington Herald, May 5, 1917: 4).

Many of these roads, including the East Dixie, Midland Trail, Mayo Trail, Boone Way, West Dixie highway, Jackson Highway, Ohio River Route, Dixie Beeline, Jefferson Davis Highway, were completed by 1924 (Seventh Biennial Report: 14).

Federally-Aided Post Roads

In 1914, \$20,000 was received from the federal government for the improvement of a post road in Montgomery County from Mt. Sterling to Sharpsburg. The county was to match the federal money at a ratio of 2:1. The work was supervised by the US Department of Roads through engineers provided by the federal

government (Second Biennial Report: 32).

In July 1916, Congress passed an act appropriating \$85,000,000 for the construction of additional rural post roads. The state gathered the information to comply with the guidelines of the act and proposed seven road roads for the program. World War I intervened and the federal government suspended action on the road work until 1919 (Third and Fourth Biennial Reports: 6).

Acts of 1917

Through the action of the Kentucky General Assembly, the counties were authorized to vote a tax of .20 per \$100.00 of assessed value of property for the construction of roads and bridges. Little roadwork, however, was done during the war due to the scarcity and high cost of labor (Third and Fourth Biennial Reports: 6).

Acts of 1918

The General Assembly in 1918 passed an act to allow state aid to be used for the maintenance of roads. The bridge office of the Department of Highways was to prepare all plans for drainage structures used in the construction of state or federal roads. The law required counties to secure plans from the Department of Public Roads for bridges costing more than \$500.00. Counties who used the bridge plans were promised free inspections from the Department of Public Roads. *

The act also required property owners with frontage along public highways to remove the brush and weeds during the summer months of July to August 20 (Third and Fourth Biennial Reports: 13).

Use of Convict Labor in Transportation Projects: 1915-1922

The Kentucky State Constitution was amended in 1915 to allow the use of convict labor in the construction of state roads. Convicts were employed to make road materials through the preparation of crushed limestone, quarrying and loading of limestone onto trucks (Second Biennial Report: 91-92).

The use of convicts and construction of camps were most pronounced in the counties of eastern Kentucky where road construction costs were high due to the difficulty of the terrain and low local labor pools.

The following counties were listed as using convict labor in the biennial reports of the period: Bell, 1916; Bell and Franklin, 1917; Franklin, Pike, Cumberland, Whitley, Henry, Bell and Owen, 1918; Pike, Whitley, Rockcastle, Cumberland, Harlan, Nelson, Owen, and Henry, 1919 (Third and Fourth Biennial Reports: 5).

By 1920, there were eight convict labor camps in the state containing a total of approximately 240 convicts (Fifth Biennial Report: 11). In 1920, there were convict labor camps in Bath, Cumberland, Harlan, Henry, Metcalfe, Owen, Pike, and Rockcastle counties (Fifth Biennial Report: 89).

Convict labor, though, proved to be unsatisfactory and the Kentucky General Assembly repealed the convict labor legislation in 1922 (Sixth Biennial Report: 10).

Adaptive Re-Use of Railroad and Trolley Bridges

When the railroads serving the coal region of the state upgraded the weight or gauge of the equipment or rerouted a line

they sometimes donated the outmoded railroad bridges to local communities which used the bridges in place or moved them to other stream crossings to serve as automobile bridges.

Examples include the following: bridge in Floyd County at Betsy Layne spanning the Levisa Fork which was built in 1920 by railroad (KYDOT, vol.2, #97); bridge in Breathitt County over Frozen Creek built by Jackson-Index Railroad in 1906 and taken over by the county in 1935 (KYDOT, vol. 1 #51; KHC Br-5); and bridge in

Greenup County on County Road 1268 at Hopewell spanning the Little Sandy River built by the East Kentucky Railroad in 1890.

Acts of 1918

In 1918, the Kentucky General Assembly raised the assessment on property to be used in the road fund. The state-aid program was expanded to include maintenance work. The Department of Public Roads purchased surplus war materials and the department began to grow. In 1921, the first state highway garage was built to store and repair trucks, automobiles, and other equipment owned by the state (Fifth Biennial Report: 10). A bridge division was established to handle the design and inspection of any bridge costing more than \$500,000.

Rail and Automobile Separation of Grade Projects

With the rapid growth in the number of automobiles, the number of accidents involving trains and cars increased. By the 1920's, the public debate about safer railroad crossings for automobile traffic became quite heated due to a report issued in 1919 by the Interstate Commerce Commission noting that 14,000

people had died as a result of being struck by trains.

In Lexington, the West End Viaducts over the railroads were initiated in 1913. Better traffic circulation and improved property values in the area were cited as justifications for the construction ("Commission Votes to Appropriate For West End Viaducts", Lexington Herald, February 1, 1913: 1). Milton H. Smith, the president of the L&N Railroad, presented the plans prepared by his engineers for the viaducts to the City Commission. The L&N bore the expense of making the plans and specifications, let the contracts for construction, paid property owners for damages to their properties due to the construction while the city removed all poles, wires, and tracks that would interfere with construction ("President of the L&N Presents a Plan for Viaducts", Lexington Herald, February 18, 1913: 1).

Surveys were undertaken by the highway department to locate new roads or relocate existing roads to eliminate dangerous curves, reduce grades, and eliminate dangerous at-grade crossings of railroad tracks (Fifth Biennial Report: 14).

By 1920, grade separations had become a principal policy on the primary roads of the state (Sixth Biennial Report: 33). In 1924, safety markings were placed along the centerline of the roads in the primary system (Seventh Biennial Report: 127).

Highway markers manufactured according to the standard designs of the Bureau of Public Roads in Washington were ordered and installed between 1926 and 1927 (Eighth Biennial Report: 255).

Act of 1920: Primary Road System

House Bill No. 60 of the General Assembly of 1920 created

the Department of State Roads and Highways. The department was to cooperate with the federal government on the rural post roads and design a primary system of state highways. The act abolished the State-Aid Law and declared that approximately 4000 miles of inter-county system be proposed as primary state highways. State and federal aid was limited to the improvement of the primary system. The act was funded by an automobile and gasoline tax. Another tax was proposed for the whiskey stored in warehouses, but it was declared unconstitutional (Fifth Biennial Report: 21-24).

Through 1927, the department followed the policy of completing all projects on the principal through-routes to serve local citizen and tourist alike. On the primary road systems, the department replaced toll ferries and antiquated structures with new bridges (Eighth Biennial Report: 14-17).

By 1930, the total mileage in the state primary system had been increased to 15,000 miles. The state began a "hook-up" system which built and improved feeders to federal roads (1930 Biennial Report: 6).

State Highway Department/ Department of State Roads and Highways

The General Assembly of 1930 enacted legislation to change the name of the Department of Public Roads to the Department of State Roads and Highways.

Establishment of Standard Specifications

In 1922, the revisions of the Department's standards specifications were approved by the federal Bureau of Public

Roads in Washington (Sixth Biennial Report: 7).

Seven Per Cent Road System (1921)

The Federal Roads Act as amended in 1921 permitted each state to construct, under federal aid, seven per cent of the estimated mileage of all of the roads in the state (Sixth Biennial Report: 7). In 1922, the federal-aid roads in Kentucky were expected to total 3,700 miles (Sixth Biennial Report: 31).

Transportation Publications

The Kentucky Road Builder, or the official bulletin of the State Road Department, was first issued in June of 1922 (Sixth Biennial Report: 11). "Kentucky Highways" was first issued on July 1, 1926 (Eighth Biennial Report: 25). In the early 1940's, a booklet was published by the Department to attract the tourist trade (Biennial Report 1940-1942: 16).

Bridges Built by Hydro Electric Companies

The Chenault Bridge, a 500-foot long bridge, over the Dix River was built in 1924 by the Kentucky Department of Highways and the Kentucky Hydro Electric Company (KYDOT, vol. #2; #85). The impoundment of the water for the Dix River Lake submerged nineteenth century wooden King's Mill Bridge ("Dix Dam Section Famed in History", Courier Journal, December 14, 1929, : Section 5, 9).

In Trigg County, the bridge over Lake Barkley or the Cumberland River was built in 1934 as part of an electrification project (KYDOT, Vol. 2, #72).

Private Toll Bridge Construction

Circa 1926, there was increasing pressure on the highway

commission for permits to construct private toll bridges. The Eighth Biennial Report editorialized that "toll bridges erected and even temporarily operated by outside capital can never be recaptured by the states when desired or at anything like the original cost for which they can be constructed by the department. Privately-owned bridges pile up costs such as sums, artificial or actually paid, for ferry franchises, engineers, promoters, or salaries of the officers of the corporation" (Eighth Biennial Report: 26).

An article in the Courier Journal in January 1927 protested the approval given to the Rogers brothers by the State Highway Commission for the construction of toll bridge in McLean County at Calhoun over the Green River. At the time Kentucky had 13 toll bridges and the writer felt that such structures "humble civic pride and deter tourism". The taxpayers had inadequate contractual protection in the supervision of cost, types of bridge construction, setting of the toll schedule, or limit on the earnings. The Highway Commission allowed the situation to occur because they could not fund new projects due to their assumption of the debts of the Morrow Commission. Meeting the demands of the counties for road construction hampered the commission in its bridge construction program. Consistent with the experience of other states, Kentucky private toll-bridge builders chose sites which had the potential for the largest returns in tolls with the least investment for construction. Consequently the State Highway Commission was left to build bridges on expensive sites with little chance for re-enumeration

of construction costs through tolls. Some states adopted a policy which prohibited toll bridges on state and federal highways. The federal government required the freeing of the bridge at Farmers in Bath County prior to giving aid to the Midland Trail which connected Ashland and Louisville ("Privately-Owned Toll System Grows", Courier-Journal, April 10, 1927: 1).

On a national level, the owners of private toll bridges retaliated by forming a national organization in St. Louis to foster legislation favorable to private toll-bridge construction. Another group, the American Association of State Highway Officials, passed a resolution at their national meeting that the erection of private toll bridges no longer be allowed. Kentucky's Highway Commission chairman did not follow suit. He was quoted as saying "We are willing they should put up toll bridges, if we can get them any time at cost". The toll bridge operators wished to rescind the US Bureau of Public Roads policy which withheld federal aid from roads which led to private toll bridges (McWain, April 15, 1927: 1, 5).

At the time of the articles, private toll bridges in Kentucky included the following: Calhoun Bridge over the Green River; Smithland Bridge over the Tennessee River between McCracken and Livingston Counties; Smithland Bridge over the Cumberland River between Lyon and Livingston Counties; Tyrone Bridge over the Kentucky River between Woodford and Anderson Counties; Clays Ferry Bridge on the East Dixie Highway over the Kentucky River between Fayette and Madison Counties; Munfordsville Bridge on the Dixie Highway; Rio Bridge on the

Jackson Highway; and the Irvine-West Irvine Bridge over the Kentucky River (McWain, April 10, 1927: 1).

As a result of the Murphey Toll Bridge Bill of 1928, the state bought three toll bridges: Rio Bridge in Hart County over the Green River; Munfordsville Bridge, Hart County; and Clay's Ferry in Madison County over the Kentucky River.

Murphey Toll Bridge Act (1928)

The Murphey Toll Bridge Act authorized the State Department of Highways to build bridges over larger rivers. The state could sell bonds, secured by the bridges and tolls collected thereon, to construct, acquire, operate, and maintain bridges.

The act was passed as the result of much debate about the freeing of the private toll bridges. The act of 1928 did not permit more than two toll bridges for each bond issue. The 1930 session of the General Assembly amended the act so that any number of bridges could be built under a single bond issue (1930 Biennial Report: 17).

The first Commonwealth of Kentucky Bridge Revenue Bond was issued in 1930 and initiated a vigorous period of bridge construction by the state within Kentucky's boundaries between 1930 and 1931. Bridges included: Boonesboro, Spottsville, and Tyrone Bridges over the Kentucky River; Burnside, Canton, and Smithland Bridges over the Cumberland River; and the Eggner's Ferry Bridge over the Tennessee River. *

The Fort Boonesboro Memorial Bridge connecting Madison and Clark Counties was located in the vicinity of the Boonesboro Ferry chartered in 1789 to John Calloway. It was dedicated on

November 12, 1931 and tolls were collected until the bond issue was retired ("Span is Dedicated at Boonesboro", Courier Journal, November 12, 1931: 1, 3).

At the Burnside Bridge dedication on November 13, 1931, Ben Johnson, the Chairman of the Highway Commission, declared that "Kentucky was no longer a detour state". The Burnside Bridge served as the last link connecting US 27 through the Commonwealth. The 1000-foot bridge was approached through a tunnel which was twice as long as the one at the Brooklyn Bridge ("Toll Bridge at Burnside is Dedicated", Courier Journal, November 13, 1931: 1). Two other dedications, occurred that month, the Maysville Bridge on November 25, Smithland Bridge on November 28th.

The second bond issued later in 1930 was given for interstate bridges and included the Ohio River Bridges at Ashland, Maysville, and Henderson. In 1935, a third bond for \$2,600,00 was issued to buy the Paducah-Brookport toll bridge from the Kentucky-Illinois Bridge Corporation and the Newport-Cincinnati Bridge from the Louisville and Nashville Railroad Company.

In 1937, there was a \$3,265,000 bond issue for the purchase of the Calhoun-Ramsey Bridge, Covington-Cincinnati-Bridge, and the Milton-Madison bridge. The Calhoun-Ramsey Bridge was built by the Stranahan, Harris, and Otte, Inc. of Toledo and New York after they bought the franchise from J.L. Rogers of Greenville, Kentucky ("Deal on for Toll Span at Calhoun", Courier Journal, April 15, 1927: 3).

The Covington and Cincinnati Bridge Company was incorporated in 1846. It had declared huge dividends over the years since it had no state regulation. The company refused to be investigated or to lower its tolls (McWain, April 20, 1927: 1).

The Milton to Madison, Indiana Bridge was built as private enterprise by J.G. White Company in 1928 and opened in December of 1929 ("Madison-Milton Bridge Formally Opened", Courier Journal, December 21, 1929: 1). The Kentucky Department of Highways acquired the bridge in December of 1937 and collected sufficient tolls by August of 1947 to free it.

In 1938 a bond issue for \$885,000 was given for the Catlettsburg-Kenova, West Virginia bridge. In 1939, another bond for \$325,000 was issued for the bridge over the Green River at Livermore.

New Deal Programs (1933-1943)

The impetus for the New Deal programs was the Great Depression. Unemployment in the civilian work force rose from approximately 3% in 1929 to over 25% in 1933. President Hoover responded by additional appropriations for construction of roads and trails in national parks and monuments and other public works, but the effort did not deter the downward economic spiral (Paige, 1985: 2).

Reconstruction Finance Corporation (RFC)

In 1932, the Reconstruction Finance Program was initiated to lend money to banks, railroads, and other institutions to stimulate the economy. Funds for highway projects and limited public works were passed through the RFC as a result of the

Emergency Relief and Construction Act passed in July 1932.

Works Progress Administration (WPA) (May 1935-June 1943)

The Works Progress Administration called the Works Projects Administration after 1939 was the largest of the Depression-era programs during the New Deal. The WPA was created by Executive Order in May 1935 to supersede the Civil Works Administration (CWA) and the Federal Emergency Relief Administration (FERA).

The Civil Works Administrations (CWA) was created in November 1933 to provide short-term relief by putting 4 million people to work by the end of a 4-week period. On a national level, by the time of its termination in March 1934, CWA built or improved 500,000 miles of roads, 40,000 schools, 3,500 playgrounds and athletic fields, and 11,000 airports (Leuchtenburg, 1963: 121). In Kentucky, airport construction peaked under CWA with new facilities at Cave City, Danville, Lebanon, Middlesboro, Williamsburg, Monticello, Glasgow, and Bowling Green (Goodman, Scrapbook, University of Kentucky: np). Over 100,00 Kentucky residents were employed by CWA over the duration of the agency. The CWA project files in the Department for Libraries and Archives list improvements to roads, sanitary sewers, schools, courthouses and the construction of some bridges. The road improvement projects consisted of grading, draining, ditching, and surfacing of county roads which were mail routes or gave rural families all season access to high schools and churches. Quarries were created to give counties sources of gravel with which to stabilize the ruts and mud of county roads.

The Federal Emergency Relief Administration (FERA) which

existed from May 1933 to summer 1935 was created to provide relief for the hungry and jobless as quickly as possible through federal matching grants to the states. FERA also dispensed direct relief, bailed out stranded coal towns, built 5000 public buildings and 7000 bridges, cleared streams, dredged rivers, and terraced land (Leuchtenburg, 1963: 123). Bridges built by FERA were wider and safer than the ones that they replaced and were to eliminate "bottle-neck impediments to modern traffic" (The Emergency Work Relief Programs of the FERA: 40). FERA focused on the "farm to market" roads and continued CWA's program of all weather roads. In September 1934, Roland R. Pyne, a former CWA engineer, working for the works division of FERA, conducted a survey in Kentucky of unfinished CWA school, sewer, and bridge projects (Goodman, Scrapbook, University of Kentucky: np).

On a national level, the WPA spent \$11 billion over its lifetime and employed a total of 8.5 million people on 1,410,000 projects. The WPA built 651,087 miles of highways, 124,087 bridges, 125, 110 public buildings, 8,192 parks, and 853 airports (Louchiem, 1983: 177). Led by Harry Hopkins, WPA projects were chosen which would put men to work right away and in which the cost of materials was negligible (Leuchtenburg, 1963: 125). Local relief offices certified WPA employees while city governments, county fiscal courts, and school boards served as sponsors for the most of the local work projects. Sponsors for state-wide projects included: the Kentucky State Park Commission, Kentucky State Highway Commission, Kentucky State Department of Health, US Department of Agriculture, and the Division of Armories, Military

Department, Commonwealth of Kentucky.

The number and cost of county road and bridge projects varied from county to county. The existing condition of the county road system affected project prospects. A sampling of county reports from the First Annual Report of the Second District of Kentucky (1935-1936) included in the Goodman Papers, demonstrates the varying abilities of the 27 counties within the jurisdiction. In Anderson County, the county roads were described as being in bad condition with no attempt having been made for maintenance. WPA projects were limited to the painting of 26 iron bridges, repair of bridge abutments, floors and approaches. McCreary County had no improved county roads and all WPA projects were federal roads beginning at the state highway. Boyle County, on the other hand, had county roads paved with water-bound macadam and treated with bituminous material.

The Annual Report also commented upon a county's cooperation with the state office and ability to provide machinery. In Casey County, progress was hampered by a lack of equipment and all work had to be done by hand. LaRue County had to mortgage the Poor Farm to obtain the funds to purchase the required equipment. In Taylor County, the projects were suspended because the sponsor failed to provide the equipment agreed upon.

Counties justified their choice of road improvement projects as a part of the farm to market program whose purpose was to "to pull the farmer out of the mud". These roads opened up farm land or provided a means for a number of families to go to church or school at all seasons of the year (Goodman, Scrapbook University

of Kentucky: np).

Existing bridges were moved or replaced with WPA funds. Often they were relocated above the high water. In Mercer County on the Salt River, which divides the county geographically in to east and west sections, four wooden covered bridges were replaced with steel or concrete bridges. The bridges on Forsythe Mill Road, Bohon Road, Cornishville Road, and Kirkwood Road were described as being antiquated, unsafe for heavy loads, and as having almost inaccessible approaches (First Annual Report: 194).

The WPA also participated in the construction of viaducts in automobile-railroad separation of grade projects. In 1935, funds were allocated to eliminate 8 crossings on the L&N Railroad's main line through Louisville where it crossed Kentucky, Breckinridge, Broadway, Chestnut, Walnut, Fehr, Baxter, and Jefferson Streets. (Goodman Scrapbook, Louisville Times, August 13, 1935). Separation of grade crossing projects were also done in Frankfort and Ashland. During 1935, the WPA removed interurban or street car tracks along Broadway in Georgetown in Scott County. The work done by the WPA included the cutting and hauling of the rails and replacement of the pavement. By 1942, street car rail projects were associated with defense purposes and abandoned street car rails were removed in Bellevue, Catlettsburg, Dayton, Lexington, Ludlow, and Versailles.

George Goodman was appointed the head of the WPA in Kentucky. The headquarters for the state was in Louisville where the staff processed requests for new projects from Kentucky's 120 counties. Goodman's scrapbook of newspaper articles related to

the WPA in the Special Collections section of the University of Kentucky library provides a day-by-day history of the agency in the Kentucky. Nature, the national economy, and World War II changed the priorities of the projects over the agency's life span. The 1936 drought prompted new jobs for rural workers while the 1937 flood created emergency projects for the WPA along the flood plains of the Ohio and Kentucky Rivers. The recession which lasted from September 1937 to the middle of 1938 was very disillusioning to New Dealers. Business activity which had been nurtured by the New Deal collapsed and industrial activity declined. The national administration struggled to restore the impetus of recovery from 1938 to 1939, but the situation was not resolved until the war broke out in Europe and defense orders expanded (Louchiem, 1983: 274). In Kentucky, the recession coupled with an election year caused financial pump priming. The Louisville WPA office channeled more than \$162 million through thousands of state projects. At the peak in September 1938, there were 72,000 Kentuckians on the payroll. In Kentucky, the WPA built 14,000 miles of roads; 73,000 bridges, culverts, and viaducts; and 900 public buildings including schools, jails, and fire stations.

WPA work under the National Park Service in 1938 through 1940 included improvements such as small bridges, simple park structures, fences, roads, trails, dams, and swimming facilities at Otter Creek Demonstration Area. The natural resources of water, soil, forest, and wildlife were to be conserved in the 2000-acre tract in Meade County while it was developed as a

recreational park for Louisville's working classes (Goodman Scrapbook, "Park Project Site Approved", Herald Post, March 3, 1935; WPA Project Index 1939-1940). Other conservation work included a project in 1938 in Lyon and Trigg Counties with the Department of Agriculture, Soil Conservation Service for the construction of fire lanes, dam replacement, timber harvesting, construction of buildings and telephone lines, sewers, and bridges (WPA Project Index 1938).

Several research projects related to transportation were conducted by the WPA. Projects for 1939 included research on lubricants and the initiation of a statewide master-file of drivers involved in traffic accidents and violations. Volume counts were also done to determine the amount and types of vehicular traffic on state and county roads in the vicinity of large population centers in the state (WPA Project Index 1939).

From 1939 to 1943, the focus was on National Defense Projects related to military installations. The public access roads to Fort Knox in Bullitt and Hardin counties were improved including the replacement of the Salt River Bridge at West Point which connected Hardin and Jefferson County on US 31W and US 60.

At Fort Knox, the WPA workers constructed buildings, streets, utilities, and a post railroad. They rehabilitated existing buildings, demolished the old stables and provided malaria control. In Campbell County, WPA workers made improvements to Fort Thomas Military Reservation including the rifle range. Other military projects from 1939 to 1941 included

improvements to the Veterans' Administrations Hospital in Lexington, Outwood Hospital in Christian County and the Marine Hospital in Louisville. Between 1940 and 1942, armories were built for the National Guard in most counties. The following airports were also built: Fayette County (1941-42); Goodman Field at Fort Knox (1939-1940); Boone County near Florence (1939); Bowman Field improvements in Louisville (1941); and a new airport for the Louisville and Jefferson County Air Board (1941).

The WPA was also involved in non-construction projects such as sewing centers, disposal of agricultural surpluses, recreation centers, library projects, and arts projects.

There is a list of WPA bridge projects by county from the WPA Index at the Department of Libraries and Archives in Appendix B.

Public Works Administration (PWA) (June 1933-1940)

The Public Works Administration later known as the Progress Works Administration was created in June 1933 as part of the National Industrial Recovery Act. The purpose of the PWA was to provide indirect economic benefits through large-scale public works and was not restricted to labor from the relief rolls (Schlesinger, 1959: 284). Over the course of the agency, from 1933 to 1940, PWA spent \$6 billion on 34,500 construction projects including the Lincoln Tunnel in New York City, the Grand Coolee Dam, and the aircraft carrier Enterprise.

The PWA initiated its own projects as a construction agency. It also made adjustments to enable other federal agencies to carry out construction through combination of loans and grants.

The PWA projects began slowly and were under close federal supervision with minimal participation by the state governments. Projects required advance planning, blue prints, specifications, and cost estimates. They often required local legal action such as a change of statutes to permit cities to borrow or a vote on bond issues to provide the local matching funds (Schlesinger, 1959: 287). There were 600 PWA projects in the state of Kentucky which totalled \$49 million. In Kentucky, the PWA appointed George Shafer as the state engineer or director. The federal appropriation covered 45% of a project's cost with the remainder to come from the local agency, such as the school system or municipal government which served as the sponsor for the project. Kentucky and many for the other states had to pass special legislation to allow the municipalities to enter into contracts with the PWA and to incur bonded indebtedness. Through the PWA, Kentucky communities acquired 276 new schools, 6 hospitals, 24 sewage treatment plants, 80 new water works. The municipalities of Lexington and Louisville used PWA funds for slum clearance.

Contractors compared the WPA and PWA by noting that the PWA exacted high standards, sought competitive bids, and employed trained professionals. The WPA, by contrast, used available labor, convenient materials, and frequently produced unsatisfactory work.

The PWA received funding under four acts: The National Recovery Highway (NRH); National Recovery Municipal (NRM); National Recovery Secondary (NRS); and the National Recovery Forest Highway (NRFH) (Biennial Report 1933-1935: 28).

Examples of bridges built through depression-era agencies include the Cairo Bridge with its five miles of approaches. It was built under the supervision of the Cairo bridge Commission with federal assistance from Illinois, Kentucky and Federal Public Works Administration. The state of Kentucky's contribution consisted of \$483,000 to grade and surface the approaches. The PWA grant was used to finance the bonds sold by commission to syndicate of St. Louis, Chicago, and Kentucky bankers. The tolls were collected for ten years and in November 1948, the bridge was freed. Other examples are the McLean County bridge on Rt.431 over Green and Rough Rivers, 1939 (Vol.2 KYDOT survey # 75); the Ohio County bridge at Rockport on Rt. 62 over the Green River, 1939 (Vol. 2 KYDOT, survey #77); and the Daviess County bridge at Owensboro on Rt. 431 over the Ohio River, 1939 (Da-Ob-100 KHC).

In Franklin County at Frankfort, the War Mothers Memorial Bridge over Kentucky River 1938 stimulated improvements to Capitol Avenue including grass medians and vistas to the Capitol building (Kramer, 1986, p. 336). In 1939, the War Mothers Memorial Bridge received an award for aesthetics from the American Institute of Architects (Serens, 1949, p. 39).

Civilian Conservation Corps or Emergency Conservation Work
March 1933 - June 30, 1943

At their national meeting in August of 1932, the Society of American Foresters advocated a program to employ men in the national and state forests to do work on erosion control, watershed protection, trail construction, and fire protection projects (Paige, 1985: 5). When Franklin Delano Roosevelt took

office on March 4, 1933, he immediately called a conference with the secretaries of Agriculture, Interior, War, and Army to draft a bill to be entitled the Federal Unemployment Relief Act which included the programs proposed by the foresters. Roosevelt's primary goal for the legislation was to remove unemployed youths from the cities, build up their health and morale while they contributed to the economic recovery of the country. His second goal was to accomplish the needed conservation measures in forests, parks, and agricultural lands. The Emergency Conservation Work (ECW) or Civilian Conservation Corps (CCC) with Robert Fechner as the director was initiated by the Emergency Conservation Work Act which was signed by President Roosevelt on March 31, 1933.

The Emergency Conservation Work Act was complicated to administer for it involved four separate federal departments. The Department of Labor supervised a nationwide recruiting program and selected enrollees from the lists of relief families and unemployed veterans of World War I. The War Department conditioned the recruits and transported them to their living quarters at the camp sites. The National Park Service and Forest Service operated the camps and supervised the work assignments. Approximately 75% of the CCC camps worked on projects administered by the Department of Agriculture. More than half of the men were employed in national, state, or private forests under the US Forest Service. The bulk of the funds was to be spent for labor costs related to the work projects and not for the procurement of expensive equipment (Paige, 1985: 12).

Nationally, the CCC or "Roosevelt's Army" involved 2.5 million men who planted 2.3 billion trees. In Kentucky, over the lifetime of the CCC, 80,000 men were involved. The enrollments from 1932 until the program was phased out in 1943, varied, but the largest number of enrollees occurred in the period from 1936 to 1937 with 30,000 men.

The War Department utilized Fort Knox as the conditioning facility for the Fifth Army Corps area which included the states of Kentucky, Indiana, Ohio, and West Virginia. Enrollees were "hardened" here before they were sent to the CCC Camps in the woods each of which accommodated approximately 200 men. In the early years of the program, Army tents were used. In 1934, the tents were replaced by sturdy wood structures with interchangeable parts designed by the Army and fabricated for easy construction and multiple uses for administration, recreation, mess, or barracks (Paige, 1985: 70). The camps proved to be a stimulus for the local economies in the vicinities in which they were located by providing construction work for local people.

Department of Agriculture/ U.S. Forest Service

Approximately 75% of the CCC camps worked on projects administered by the Department of Agriculture. More than half of the men were employed in national, state, or private forests under the US Forest Service. To make more federal land available in the eastern United States, Roosevelt allocated \$20 million of the emergency funds for the purchase of forest land under the Weeks Act of 1911 and the Clark-McNally Act of 1924. Additional

allocations were made in 1934 and 1935 for the purchase of additional national forest land (Collins, 1975: 216). CCC projects in the national forests included fighting and preventing forest fires, reforestation, soil conservation, recreational developments, range rehabilitation, aid to wildlife, flood control, drainage improvements, reclamation, and emergency rescue operations. Work was also done in the forests to protect against disease and insects. For white pines threatened by blister rust, the CCC workers removed the alternative hosts such as currants and gooseberries by hand (Salmond, 1967: 121-123).

In Kentucky, the Cumberland Service Unit of the Daniel Boone National Forest was established in 1930, but funds for the purchase of lands did not become available until 1933. Fifteen CCC camps were established in the Cumberland Service Unit. See Appendix C for the camp locations. The men planted seedlings, estimated timber, stretched telephone lines, and built a bridge across the Rockcastle River. Without the funds and work of the CCC programs, the Cumberland National Forest might have never been established. (Collins, 1975: 217) Near Kingdom Come State Park, the "Little Shepherd Trail" a 17-mile fire trail was built by the CCC between 1933 and 1937 (Spindletop Research, Kingdom Come State Park: 4).

The WPA also had projects in the National Forest including the improvement of roads in Rockcastle County. The WPA was also involved in a construction project to build roads, trails, and a crafts building in the Sublimity Service Area of the National Forest which covered McCreary, Pulaski, Whitley, Wayne, Estill,

Powell, Menifee, Beth, Clark, Laurel, and Jackson counties in 1940.

Department of the Interior/ National Park Service

In 1921, prior to the Depression only 19 states had any kind of park system. By 1925, state park commissions had begun to formulate development plans, but the Depression ended expansion. During the first years of the CCC, 105 CCC camps were assigned to 26 state parks projects. The Park Service supplied technicians to assist in the development and planning of state parks, recreational areas, wildlife conservation areas, and historic restorations (Paige, 1985: 16). The growth of the CCC in parks continued through 1934 with 102 camps in National Parks and 263 camps in state parks (Paige, 1985: 19). In 1936, there was a reduction in the number of camps with more cuts in the national parks than the state parks. The number of men in each camp was reduced from 200 to 160 as a means to reduce cost and also as part of an effort to make the CCC a permanent agency (Paige, 1985: 23).

In 1937, the agency was officially named the CCC and its life extended for only three years despite the fact that Roosevelt wished to make it a permanent agency (Paige, 1985: 23). Camp sizes and numbers were further reduced in 1937, 1938, and 1939. By 1938, the CCC had developed more than 3 million acres for park use in 854 state parks (Paige, 1985: 131). In 1938, the yearly report of the Department of Conservation, the predecessor of the Kentucky State Park System, noted that 11 CCC camps had been located in Kentucky's state parks. As a result,

there had been numerous improvements including trails, shelter-houses, over-night cabins, lookout towers, and lakes. Three camps remained at the time of the report, with eight having been abandoned, a situation which left various facilities incomplete. The yearly report noted: "This has necessitated an expenditure by the state of a considerable amount of money in order to finish the jobs and exhausted, in a great measure, the small appropriation made by the state for such purposes. This is especially true in view of the fact that many of the structures erected by the CCC camps were made out of inferior timber cut when the sap was up. Much of these have completely rotted and steps, tower houses, cabins, parking rails, balustrades, etc. are having to be removed and replaced. However the three remaining CCC camps have inaugurated a policy of furnishing better timber and building more out of stone and other permanent materials" (Division of State Parks, 1938: 7).

In the reorganization Act of 1939, the CCC was consolidated with all federal relief programs into the Federal Security Agency or Federal Works Agency. In 1940, after the fall of France in World War II, CCC camps were established on military bases to construct airfields, obstacle courses, artillery ranges, and to clear land for military exercises and military structures. By 1941, the CCC experienced a labor shortage because it was difficult to recruit for the CCC camps when there were more lucrative opportunities in defense jobs (Paige, 1985: 29). When the program was officially terminated in 1942, it had involved 2 million enrollees who had performed work in 198 camps in 94

national parks and monuments. There were also 697 camps in 881 state, county, and municipal parks. Through the CCC, 771 state parks were established (Paige, 1985: 132).

The Kentucky State Parks Commission was established in Kentucky through the Senate Bill 306 of the General Assembly Session in 1924. Pine Mountain became one of the first parks in the system when the commission received 2000 acres in the vicinity in 1924. The CCC built the following items at Pine Mountain: shelter house, open air auditorium, trail shelters, rest rooms, observation tower, service roads, foot bridges, incinerator, picnic tables, road entrance, parking area, custodian's house, landscaping, road to the pinnacle, contact station, and 11 cabins (Spindletop Research, Pine Mountain: 6).

The CCC assigned 136 workers to Cumberland Falls State Park. They worked on 26 projects over a period of four and one-half years. Projects included: construction of the Dupont Lodge (which burned in 1940 and was rebuilt in 1941 by the WPA), 15 cabins, trail side seats, camp fireplaces, park roads and trails, picnic tables (Spindletop Research, Cumberland Falls: 14). During the period of CCC involvement, the state highway department operated a ferry with a capacity for three cars on the Cumberland River near the park. In 1934, the state highway engineers planned a bridge near the falls, but the project was not completed due to the visual impact the bridge would have had on the scenery (Goodman Scrapbook, University of Kentucky: np). In 1954, a new concrete bridge faced with native limestone was built and named for Edward Moss Gatliff. The bridge had a span of 460 feet and

width of 26 feet (Spindletop Research, Cumberland Falls: 15-16).

In the 307-acre Levi Jackson Wilderness Road State Park which became part of the state park system in 1931, the CCC in 1935 built shelter houses, observation towers, trail shelters, latrines, foot bridges, incinerators, picnic tables and ovens, guard rails, custodian's house, service roads, auditorium, stables, and restored the old log house (Spindletop Research, Levi Jackson State Park: 9).

In 1942, the WPA also worked at Levi Jackson State Park building cabins, swimming pool, bath house, group camp building, sanitary sewers, septic field, filtration equipment (WPA Project Index 1942).

The John James Audubon State Park was brought into the state park system in 1934 by the Henderson Audubon Society. The CCC was assigned there in October of 1934. They built a six-acre wildlife lake, shelter house, trails, cabins and picnic areas. With assistance from the WPA in 1938, they built the museum, gate house, and gardens (Spindletop Research, Audubon State Park; WPA Project Index 1938).

The General Butler State Park came into the state park system in 1931. In 1935, the CCC built a bath house, shelter houses, look-out tower, parking area, water system, trails, bridges, picnic grounds, trail-side seats, public campgrounds, custodian's lodge, incinerator, service building, latrines, landscaping, guard rail, drinking fountains, camp stoves, park roads, and a lake. In 1941, a boat house, diving tower and service building were completed.

Columbus-Belmont Battlefield State Park came into the system in 1934 and was accepted as a state project for the CCC in March 1934. A camp was established here in 1935 with 150 men. By 1938, \$300,000 was spent in the park. Work included the restoration and landscaping of the grounds, trails, bridges, roads, lookout towers, utility systems, picnic shelters, employee housing, contact station, restoration of the Civil War era dispensary, erosion control along the river bluff, restoration of trenches, and the clearing of undesirable structures (Spindletop Research, Columbus Belmont Park: 10).

The Department of the Interior also directed work in the National Parks. When Mammoth Cave became a National Park in 1936, an article in the Louisville Times proclaimed that 800 CCC workers had built over 53 miles of roadway within the park. Five ferries operated by the National Park Service traversed the Green River (Goodman Scrapbook, University of Kentucky). Other CCC workers at Mammoth Cave, built rustic homes for the park employees and planted trees.

The CCC gave assistance in national emergencies including the floods of 1937, blizzards of 1936-1937 in Utah, Wyoming, and Nevada, the Florida tornado of 1933, and the New England hurricane of 1938 (Salmond, 1967: 46).

Tennessee Valley Authority (TVA)

The Tennessee Valley Authority was created in 1933 as a public corporation with the powers of government to build multi-purpose dams which would serve as reservoirs to control floods. The series of dams which provided better stream navigation on the

650 mile navigation channel from Knoxville to Paducah also created construction jobs, recreation facilities, and inexpensive electricity. The TVA also manufactured fertilizer and engaged in soil conservation and reforestation (Leuchtenburg, 1963: 54-55).

In 1938, funding was appropriated by Congress for the Gilbertsville Dam approximately 22 miles south of Paducah. Expenditures for the construction of the dam amounted to one third of all WPA, PWA, and CCC expenditures in Kentucky since the inception of the programs in 1933 ("TVA's Longest Dam Approaches Realization", Louisville Courier Journal, October 25, 1939: Section 7, 7). For the 184-mile long lake, the TVA had to purchase 300 thousand acres of land, farms, forests, bridges, cemeteries, and small towns. The dam was dedicated in October 1945.

Completed in 1944, the Kentucky Dam which created Kentucky Lake supports both a highway and Railroad. Two of the highway bridges are located at the lower end of the lock and the other crosses the lake and spillway.

Funding was appropriated by Congress in September 1940 to reconstruct the bridges impacted by the impoundment of water in the reservoir areas. The Egner's Ferry Bridge (US 68) spanned the Tennessee River on the Trigg-Marshall line approximately 20 miles south of the Gilbertsville Dam. The bridge was built in 1932 through the Murphey Toll Bridge Act. The impounded water would have inundated the approaches and reduced the navigation clearances beneath it ("Senate Subcommittee's Action May Ease State's Bridge Worry", Courier Journal, September 13, 1940:

Section 2, 8).

Research Checklist for 1912-1940

1. Determine date or era of bridge through an on-site examination of bridge construction techniques and materials.
2. Check Kentucky Heritage Council County Survey and National Register Files and KYDOT Bridge Inventory for listing of bridge.
3. Contact KYDOT Bridge Maintenance Division and/or KYDOT Bridge Archives for date of construction, materials, repairs, and current condition of bridge.
4. In county courthouse review County Order Books from era for local ordinances passed authorizing expenditures for materials and construction of bridge and/or abutments, and persons involved in the construction. Review courthouse records for Articles of Incorporation for local turnpike companies. Check deed indexes acquisition or leasing of right-of-ways and stream crossings for the turnpikes and other agreements related to bridge construction and/or maintenance.
5. Check state legislation authorizing bridge, especially toll bridges and appropriate biennial report from the state transportation agency.
6. In local or regional library, check on local history index for possible newspaper references to bridges during era.

Lexington Public Library: Lexington Herald; Lexington Leader; Kentucky Gazette 1787 to present.

Kenton County Public Library, Covington: northern

Kentucky newspapers 1835-1860; 1860-1926; 1984-present.

Louisville Free Public Library: Louisville Courier Journal and Louisville Times 1917 through 1977

7. Map collections at state and regional universities for maps cited below in bibliography and state highway maps from era of bridge.
8. Sanborn Fire Insurance Maps for Communities in Kentucky
(Appendix 4)

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Appendix A: Road Associations

Appendix B: Works Progress Administration Files

Appendix C: Civilian Conservation Corps Camps and Projects

Appendix D: Fire Insurance Maps for Kentucky: Sanborn Map Company

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Appendix A
ROAD ASSOCIATIONS

Boone Highway Association: proposes a road from Cumberland Gap to Louisville with a loop via Lexington to be complete in the next 18 months.

Dixie Highway Association: two branches in Kentucky, one from Covington south to Cumberland Gap, other from Louisville via Bowling Green to Nashville.

Jackson Highway Association: road from Maysville via Lexington, Louisville, Bardstown, Glasgow, Scottsville to Nashville

Dixie Bee Line: Henderson south to Tennessee line via Dixon, Madisonville, Hopkinsville.

Jefferson Davis Highway: Hopkinsville to Paducah and road planned south to Tennessee line.

McCreary Highway: entering state at Virginia line extending through Pike, Madison, Larue and ending at Paducah.

Numerous Road Associations in State:

Kentucky Good Roads Association
Kentucky County Road Engineering Association
Breathitt County Good Roads Club
Knott County Good Roads Club
Leslie County Wooten Good Roads Club
Leslie County Good Roads Club
Letcher County Good Roads Club
Perry County Good Roads Club
Southern Kentucky Good Roads Association
Breckinridge County Good Roads Association
Crittenden County Good Roads Commission
Henry County Citizens League
Hopkins County Road Association
Kenton County Good Roads Association
Knox County Good Roads Association
Knox County: Boone Way Booster Band
Larue County: Central Lincoln Road Club
McCracken County Joint Committee of Board and Trade
Paducah Road Association
Glade District Good Roads Association (Berea)
Nelson County Good Roads Association
Rowan County Good Roads Association
Todd County Good Roads Association
Warren County Good Roads Association
Whitley County Good Roads Organization
Dixie Highway East Branch
Dixie Highway West Branch
Boone Way
Dixie Bee Line
Dixie Short Line

Jackson Highway

Other listings will be included in final version for remainder of counties and years of program available from the Department for Libraries and Archives

Appendix B
WORKS PROGRESS ADMINISTRATION FILES 1935-1937

Most counties have the following statement:

County-wide. Improve roads throughout county including constructing headwalls and shoulders, ditching, surfacing and performing appurtenant and incidental work. Projects include the operation of quarries to provide materials for use on project. Not part of Federal Aid Highway system.

Adair

Construction of steel bridges not on Federal Aid Highways

Barren

Build concrete bridge abutments

Bell

Kentucky Ridge Forest Project development of recreation areas owned by Federal Government

Pineville: Replacing one pier and structure of bridge

Construction of fourteen pedestrian swinging bridges on public properties (project rescinded by P.L. 7642 2/4/37)

The following bridges were approved as projects 11/9/35

Bridge on Right Fork of Straight Creek at Wessel (project rescinded by P.L. 7462 2/4/37)

Right Fork of Straight Creek at Kettle Island (project rescinded by P.L. 7642 2/4/37)

Bridge on Left Fork Straight Creek at Rilla (project rescinded P.L. 7642 2/4/37)

Bridge on Left Fork of Straight Creek at Slusher (project rescinded P.L. 7642 2/4/37)

Bridge on Cumberland River at Methel (project rescinded P.L. 7642 2/4/37)

Bridge on Cumberland River at Cardinal (project rescinded P.L. 7642 2/4/37)

Bridge on Cumberland River at Hulen (project rescinded P.L. 7642 2/4/37)

Bridge on Cumberland River at T.J. (project rescinded P.L. 7642 2/4/37)

Bridge on Cumberland River at Fist Shoals (project rescinded P.L. 7642 2/4/37)

Bridge on Cumberland River at Varilla (project rescinded
P.L. 7642 2/4/37)

Bourbon

Bridge construction in Paris on Second, Houston, and
Lilleston Streets

Boyd

Threes Bridges at Catlettsburg (1936) (projects reduced in
scope by LRL 5/27/38

Rush Bridge (project rescinded P.L. 1931 1/7/37)

Summit Underpass (project rescinded P.L. 1936 1/9/37)

Ashland (1937) concrete bridges, retaining walls, and
grading for approaches at Spencer and Branch Streets

Boyle

Repair and improve various county roads not on Federal Aid
System

Cleaning and painting of bridges (1935)

Breathitt

Footbridges approved in 1935 and rescinded by P.L. 1954
1/28/37: Lost Creek School, Five Mile School
Bridge on North Kentucky River at Wolverine
Bridge Troublesome at Lost Creek
Bridge on Troublesome at Hardshell
Bridge Quicksand at Rousseau

Rousseau School Footbridges at Jackson 5/15/36

Caney School Footbridges at Jackson 5/15/36

Breckinridge

Bridge and abutment over Slick Creek at Cloverport

Bridge over Clover Creek on the Hardinsburg to Balltown Road
(Project rescinded P.L. 1938 1/9/37)

Bridge over Beech Fork on the Hardinsburg to Balltown Road
(Rescinded P.L. 1938 1/9/37)

Bridge over Lick Run Creek on the Union Star-Chenault Road
(Project rescinded P.L. 1938 1/9/37)

Bridge hardinsburg-Leitchfield Road (project rescinded by
P.L. 1938)

Bridge over Black Creek on the Glen Dean-Rockvale Road
(project rescinded P.L. 1938)

Repair or replacement of the Peters Cave Bridge; Galloway
Bridge; Long Lick Bridge, Dents Bridge which were damaged by
the recent flood

Bullitt

Construction of road and Concrete bridge at Shepherdsville
(1936)

Caldwell

Changing bridge location

Campbell

Clean and paint 49 small bridges (1935)

Bridge construction at Newport (project rescinded P.L. 1934
1/7/37)

Emergency repair to roads and bridges damaged by recent Ohio
River Flood approved in 1937

Carlisle

Construction and repair of 128 wooden bridges on public
property (project rescinded P.L. 1931 1/7/37)

Carroll

Road, bridge, culverts, walls, grading at Carrollton (1935)

Christian

Bridge across West Fork of Little River (1936)

Repair of the Second Street Bridge and rebuild rubble
masonry walls at Little River in Hopkinsville which was
damaged by the flood (5/11/37)

Clark

Cleaning and painting 32 bridges

Clay

Participation in the Kentucky Ridge Forest project which
includes Knox, Leslie, Bell, Harlan, and Clay counties

Clinton

Bridge at Wooten Creek (1935)

Daviess

Grade, drain, install bridges (project rescinded P.L. 1956
2/2/37)

Estill

Raise bridge and bridge approach 7/22/35

Fayette

Construction of reinforced concrete bridge (16 x 35) across
Town ranch at Sewage Treatment Plant

Construction of reinforced concrete bridge (12 x 35) across
Town Branch below Sewage Treatment Plant

Construction of dry rock retaining walls along Town Branch
on either side of Old Frankfort Pike through Central Rock

Improve roadways at city disposal plants by the construction
of small concrete bridges

Floyd

Construct seven bridges (rescinded P.L. 1931 1/7/37)

Fulton

Build six concrete bridges (project rescinded P.L. 1931
1/7/37)

Gallatin

Scraping and painting of steel bridges

Dismantle and reconstruct bridge at Warsaw connecting US
Highway 42 and 1935 to new highway

Flood repair

Garrard

Replace 22 bridges and culverts (project rescinded P.L. 1954
1/28/37)

Grayson

Paint and repair bridges (project rescinded P.L. 1934)

Green

Clean, paint, and replace flooring on bridges

Greenup

All of the following projects were proposed in 1935 and rescinded in 1938:

Bridge over Alcorn Creek
Bridge over Leatherwood Creek
Bridge over Dry Creek
Bridge over Clay Lick Creek
Bridge over Turkey Lick Creek
Bridge over Cane Creek
Bridge over East Fork
Bridge over Wingo Creek
Buck Hollow Bridge
Bridge over Culp Creek
Bridge over Laurel Creek

Harlan

Benham: Bridges to athletic field and assembly room (1939)

Loyall: Bridge across Cumberland River (1942)

Henry

County-wide bridge project reduced LRL #42 5/6/38

Newcastle construction of bridges (1935)

Hickman

Steel bridge (project rescinded P.L. 1931 1/7/37)

Jefferson

Construction of two 60' span steel bridges 11/9/35 project reduced in scope

Construction of two 100' span steel bridges (project reduced in scope)

Project to widen and deepen creeks and underpin piers under bridges (1935)

Improvements to public buildings and roads as a result of the flood (1937)

Jessamine

Reconstruction of seven bridges (project reduced LRL 5/27/38)

Johnson

Road improvements; pedestrian bridge at Fishtrap
Recreational Camp, Paintsville

One-way Suspension Bridge at Frontier Nursing Center
County-wide road improvements including construction of
bridges (1938)

Letcher

150' Suspension bridge

Bridge over Kentucky River at Main Street in Whitesburg
(project reduced LRL #9 3/3/38)

Bridge over Kentucky River at Letcher Street in Whitesburg

Bridge over Kentucky River at Harris Street in Whitesburg

Bridge over Kentucky River at Madison Street in Whitesburg
(1937)

Cornelia: Bridge across the Kentucky River (1938)

Madison

Lake Reba recreation area: bridges, paths, roadways, picnic
shelters on property of Richmond Water Works

Mason

Wreck and replace bridge over Limestone Creek (1936)

McCracken

Concrete bridge

Paducah: replacement of bridges in the western section of
the city (1941-42)

McLean

Culverts and bridges on the Buell-Buck Creek Road, Church
Road, Glenville-Glover School Road (1941)

Meade

The following bridge projects were rescinded by P.L. 1938
1/9/37

Bridge over Otter Creek

Bridge Doe Run Creek

Bridge French Creek

Bridge Wolfe Creek

Bridge Spring Creek

Nicholas

Paint and repair steel bridges

Owen

Bridge over Little Twin Creek

Three bridges over Red Oak Creek

Owsley

Bridge Cow Creek

Perry

Hazard suspension Bridge over North Fork of the Kentucky River

Pike

Suspension Bridge Elkhorn City (approved 1936, rescinded 1938)

Penley: 330 Suspension Bridge 9 foot wide

Suspension Bridge with stone rubble masonry: Pauley

Powell

Bridge cleaning and replacement

Pulaski

Somerset: 1 span reinforced concrete bridge

West Somerset: 288 foot steel bridge

Shelby

Repair to miscellaneous bridges

Trigg

County-wide repair of bridges damaged in recent flood

Constructing and reconstructing bridges (1938)

Woodford

Concrete bridge

Removal of wooden Bridge in Versailles

Appendix C
Civilian Conservation Corps Camps and Projects

	<u>FOOT BRIDGES</u> NP/SP	<u>HORSE BRIDGES</u> NP/SP	<u>VEHICLE BRIDGES</u> NP/SP
1934	73/536	63/87	173/331
1935	77/512	16/94	44/365
1936	33/454	11/27	19/129
1937	23/122	18/9	11/103
	<u>FOOT & HORSE BRIDGES</u> NP/SP		<u>VEHICLE BRIDGES</u> NP/SP
1938	10/49		12/35
1939	1/47		5/43
1940	3/63		2/36
1941	10/33		6/24
TOTALS	220/1783	108/217	272/1066

NP National Parks
 SP State Parks

From Table E-1: Selected Items Related to the Work Accomplished at Civilian Conservation Corps Camps at National and State Parks under the Jurisdiction of the National Park Service 1934 through 1941.

SOURCE: Robert C. Paige. The Civilian Conservation Corps and the National Park Service, 1933-1942, An Administrative History. Washington: National Park Service, Department of the Interior, 1985. Table C-1, p.190; Table C-3, p.213; Table C-4, p.214; Table E-1 from Reports 1934-1941, pp.217-239.

From Table C-1: Directory of CCC Camps Supervised by the National Park Service (updated to December 31, 1941).

Kentucky Counties bordering the Ohio River

Total of 26 counties

Ballard		US 62	to Cairo, Ill.
Boone	I-275 bridge		
Boyd	Ashland	US 60	
Bracken			
Breckinridge			
Bullitt			
Campbell	(Newport)	US 27 Monmouth St. I-275 East I-471	to Cincinnati
Carroll			
Crittenden			
Daviess	Owensboro	US 231	to Rockport, Ind.
Gallatin	Bridge at Markland Locks and Dam		
Greenup	(Russell) (Greenup Lock and Dam (South Shore)	KY 207 US 63	to Ironton connects to US 52 in Ohio to South Portsmouth, Ohio
Hancock	Hawesville (US 60)		to Tell City, Ind.
Hardin			
Henderson	Henderson	US 41	to Evansville
Jefferson	Louisville	Railroad Bridge Railroad Brdige I-64 I-65 George Rogers Clark (3rd St.) Jeffersonville 1929	
Kenton	Covington	US 25/Railroad Bridge I-75	
		Roebeling Bridge	1867

Lewis

Livingston

McCracken Paducah US 45

I-24

Mason Maysville US 68/62 to Aberdeen, Ohio

Meade Brandenburg KY 79 to Markport

Oldham

Pendleton

Trimble (Milton) US 421 to Madison, Ind.

Union (Blackburn) KY 56 to Shawneetown, Ill.

Kentucky Counties Bordering on the Mississippi River

No bridges:

Carlisle

Fulton

Hickman

Cumberland River: Bridges at county seats

Bell Pineville US 119 to Harlan
25E @ to Barbourville

Cumberland Burkesville

Harlan Harlan US 119 to Pineville
(Benham) US 119 to Whitesburg
Knox Barbourville KY 11 to Williamsburg

Livingston Smithland

Lyon Eddyville Lake Barkley

Whitley Williamsburg 25W to Corbin

Trigg Unincorp. area US68/ KY 80 Lake Barkley

Kentucky River: Bridges at County seats

Anderson:	Boundary	Bluegrass Parkway
	Boundary	US 62 Versailles to
Lawrenceburg		
Breathitt	Jackson (North Fork)	KY 15 to Campton
	Unicorpor. (Middle Fork)	KY 30 Jackson to
Booneville		
Clark	(Boonesboro)	KY 627 Richmond and Winchester
Carroll	Carrollton	US 42: Bedford and Carrollton
	Unicorp. area	I-71
Estill	Irvine	KY52 Irvine to S. Irvine and
Richmond		
Fayette	Boundary	(Clays Ferry) US 25/421 Richmond
and		Lexington
Franklin	Frankfort	US 127
		US 421 w/ railroad
		Ann St. (Singing Bridge)
		Capitol Avenue Bridge
		KY 676 (East-West Connector)
	Unincorporated Areas	I-64
Garrard	Boundary	Camp Nelson/US 27 Lancaster to
		Nicholasville
Henry	Boundary	KY 22:Gratz New Castle to Owenton
Jessamine	Boundary	See Garrard/ US 27
	Boundary	US 68: Nicjolasville to Harrodsburg
Lee	Beattyville	KY 587 Beattyville to McKee
	Unicorpor.	KY52 Beattyville to Jackson
Leslie	Hyden (Middle Fork)	KY 80 to Hazard
Letcher	Whitesburg	
Madison	Boundary	See Clark:KY 627
	Boundary	See Fayette:US 25/421
Mercer	Boundary	See Jessamine: US 68,
Owsley	Booneville (South Fork)	

Perry	-Hazard	(North Fork)	KY 15 to Whitesburg
Woodford	Boundary		See Anderson Bluegrass Parkway
Green River: Bridges at county seats listed first followed by other towns ()			
Adair	Unincorp. area		KY 206 Columbia to Liberty KY 551 Columbia to
Clements ville			
Butler	Morgantown		KY 79 Morgantown to north
	Unicorp. area		KY 185 Green River Parkway
	(Rochester)		KY 369 to Beaver Dam
Casey	Liberty		US 127 Russell Springs to Hustonville
			KY 70 to Campbellville (2 bridges)
	(Middleburg)		KY 198 to Stanford
Daviess	Boundary		Audubon Parkway KY 416 to Henderson US 60 to Henderson
Edmonson	Brownsville		KY 70 Brownsville to Aberdeen
Green	Greensburg Unicorp. area		US 68 Greensburg to Edmonton KY 88
Hart	Munfordsville		US 31W Munfordsville to Park City
	Unicorp. area		US 31E Glasgow to Hodgenville I-65
Henderson	Boundary		See Daviess Co.: Audubon Parkway KY 416 to Owensboro US 60 to Owensboro
McLean	Livermore		US 421 to Central City
	(Calhoun)		KY 81 to Sacramento
	Boundary		KY 147 KY 56

Muhlenburg	Boundary	US 62 to Beaver Dam
Ohio	Boundary	See Muhlenburg Co.: US 62 to Central City
Taylor Campbellsville	Unincorp. area	KY 55 Columbia to
Webster	Boundary	See McLean: KY 147 KY 56
Barren River		
Allen	Unicorp. area Boundary	Holland to Fountain Run KY 98: Scottsville to Fountain Run US 31E: Scottsville to Glasgow KY 252 KY 101: Scottsville to Brownsville
Barren	Boundary	See Allen: US 31E: Scottsville to Glasgow KY 252
Butler	(Woodbury)	KY 263 to Bowling Green
Monroe	Unincorp. area Boundary	KY 87: Gamaliel to Tennessee KY 87: Fountain Run to Tenn. See Allen: KY 98
Warren	Bowling Green Boundary Unicorp. area	31W/ US 68 State St. Bridge See Allen: KY 101 I-65 Green River Parkway US 231: Bowling Green to Owensboro KY 185 to Grayson KY 626
Chaplin River		
Boyle	(Perryville)	US 150
Bullitt	Boundary	KY 61 Elizabethtown to Shepherdsville I-65
Hardin	Boundary	US 62 Elizabethtown to Boston See Bullitt: Ky 61 and I-65

Mercer	(Rose Hill)	KY 152
Nelson	Unicorp. area	KY 62 Bardstown to Hodgenville Bluegrass Parkway
	Boundary	See Hardin: US 62
Washington	Unicorp. area	KY 53 Bluegrass Parkway Ky 605
	Boundary	KY 458 KY 55 to Taylorsville US 150 to Bardstown

Little River

Christian	Unicorp. area	I-24 KY 345 KY 117 KY 287 KY 164
Trigg	Cadiz	KY 272 to Hopkinsville US 68 to Murray

Little Sandy River

Carter	Grayson	US 60 to Catlettsburg KY 7 to Sandy Hook (3bridges)
Elliott	Sandy Hook	KY 32 to Louisa KY 7 to Grayson (3 bridges)
Greenup	Greenup (Argillite) Unicorp. area	US 23 to Ashland KY 1 to Greenup KY 2 from Warnock to Greenup (2 bridges)

Red River

Clark	Unicorp. area	KY 89 bet. Trapp and Hargett
Powell	Stanton (Clay City) Unicorp. area (Watersville)	KY 213 to Mt. Sterling KY 11 to Stanton Mountain Parkway KY 82 to Hargett
Wolfe	(Lee City) (Hazel Green) Unicorp. area	KY 205 KY 203 north KY 715

Salt River

Anderson	Unicorp. area	KY 248 KY 62 Bluegrass Parkway
Boyle	Unicorp. area	US 150 (Perryville Rd.)
Bullitt	Shepherdsville	Ky 61 south
Hardin	(West Point)	US 60/31W to Louisville
Mercer	Unicorp. area	KY 1160 (McAfee) KY 390 (Bohon) KY 152 (Rose Hill) US 68 (Perryville Rd.)
Spencer	Taylorsville	KY 55 to Springfield
	Unicorp. area	US 31E/150 Louisville to Bardstown KY 623 KY 248
Tennessee River		
Trigg	Unicorp. area	US 68/KY80 Kentucky Lake

Big Sandy River

Boyd	(Catlettsburg)	I-64 US 60 to Kenova, W. Va.
Floyd	Prestonsburg (Allen) Unicorp. area	US 23 KY 80 US 23 Paintsville to Prestonsburg
Johnson	Paintsville	KY 40 to Boons Camp US 23 to Prestonsburg
Lawrence	Louisa Unicorp. area	KY 37 to Wayne W. Va. KY 645 to Inez
Martin	Warfield	KY 292 to Williamson
	South Williamson	KY 119 to Williamson
Pike	Pikeville	US 23/119 to Virginia

Licking River

Bath	Boundary	KY 11 Mt. Sterling to Flemingsburg KY 111 Owingsville to Flemingsburg US 60 Owingsville to Farmers KY 1274 Frenchburg to Morehead
Bracken	(Milford) Boundary	KY 19 KY 165 KY 875
Campbell	Boundary	4th Street to Covington 11th St. (Shortway) Bridge I-275 KY 10
Fleming	Boundary Boundary	KY 57 Ky 344 See Bath: KY 11 and 111
Harrison	Cynthiana Boundary Unicorp. area	US 27 to Falmouth US 62 to Maysville Ky 32 to Carlisle KY 62 KY 1054 KY 1032
Kenton	Covington	4th Street 11th St. (Shortway) Bridge I-275
Lewis	Boundary	See Fleming: KY 57 and KY 344
Magoffin	Salyersille	US 460 to West Liberty Ky 7 to Royalton, Fredville
Mason	Unicorp. area Lewisburg	KY 596 US 62 Maysville to Cynthiana US 68 Maysville to Paris KY 11
Morgan	West Liberty	KY 519 US 460 to Salyersville
Pendleton	Falmouth (Butler)	KY 22 KY 177
Robertson	Boundary	See Bracken: KY 875 and 165
Rowan	Boundary	See Bath: US 60 and KY 1274

FIRE INSURANCE MAPS

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 Geography and Map Division

Introduction by Walter W. Ristow

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FIRE INSURANCE MAPS of Kentucky:

City/Country/Date	No. of Sheets	Comments	City/Country/Date	No. of Sheets	Comments
3120			3124		
<i>Adairville, Logan Co.</i>			<i>Augusta, Bracken Co.</i>		
Jan. 1893	1		Jan. 1884	2	
Oct. 1898	1		Sept. 1890	4	
Oct. 1905	1		Feb. 1895	5	
Jan. 1910	2		Sept. 1901	5	
Jan. 1916	3		June 1909	8	
May 1925	3		July 1920	8	
May 1925-Jan. 1939	3	501	Jan. 1931	9	
			Jan. 1931-Apr. 1945	9	501
3121			3125		
<i>Anchorage, Jefferson Co.</i>			<i>Barbourville, Knox Co.</i>		
Nov. 1928	4	Includes Lakeland-Ormsby Village, Military Park and Mar cia	Oct. 1913	2	
			Feb. 1919	5	
Nov. 1928-Mar. 1939	4	501. Includes Lakeland-Ormsby Village and Lyndon	Feb. 1926	9	
			Feb. 1926-Jan. 1943	9	501
3122			3126		
<i>Ashland, Boyd Co.</i>			<i>Bardstoun, Nelson Co.</i>		
Sept. 1886	5		July 1886	6	
Aug. 1890	10		Oct. 1891	7	
Feb. 1895	15		Oct. 1899	5	
Sept. 1901	16		Oct. 1905	9	
June 1907	26		Jan. 1910	14	
Feb. 1912	26		Mar. 1925	10	
Oct. 1920	33		Mar. 1925-Nov. 1941	10	501
Sept. 1927	42		3127		
Sept. 1927-Aug. 1961	48	501	<i>Bardwell, Carlisle Co.</i>		
3125			Nov. 1901	1	
<i>Auburn, Logan Co.</i>			Apr. 1907	2	
Jan. 1929	1		Dec. 1915	3	
Jan. 1929	1	501	Mar. 1925	4	
			Mar. 1925-Dec. 1943	4	501

CHECKLIST—KENTUCKY

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
Jan. 1901	2		3257		
Apr. 1909	2		<i>West Point, Hardin Co.</i>		
Apr. 1916	3		Nov. 1928	4	Includes Waverly Hills and Kosmosdale, Jefferson Co.
June 1929	3				
June 1929	3	512	Nov. 1928	4	512. Includes Waverly Hills and Kosmosdale, Jefferson Co.
3250					
<i>Trenton, Todd Co.</i>			3258		
July 1895	1		<i>Whitesburg, Letcher Co.</i>		
Apr. 1901	1		June 1927	3	
Feb. 1909	2		June 1927	3	512
May 1923	4				
May 1923	4	512	3259		
3251			<i>Wickliffe, Ballard Co.</i>		
<i>Uniontown, Union Co.</i>			Nov. 1897	2	
Oct. 1886	2		Dec. 1900	2	
Dec. 1892	2		Oct. 1905	2	
Sept. 1897	4		May 1910	4	
Nov. 1903	5		Mar. 1925	4	
Mar. 1909	8		Mar. 1925	4	512
Aug. 1916	8				
Jan. 1927	8		3260		
Jan. 1927-June 1939	8	512	<i>Williamsburg, Whitley Co.</i>		
3252			Oct. 1895	4	
<i>Vanceburg, Lewis Co.</i>			June 1901	4	
Feb. 1884	1		Nov. 1906	4	
July 1893	1		Oct. 1913	4	
July 1897	3		Dec. 1923	6	
Nov. 1903	3		Dec. 1923-Jan. 1943	-6	512
June 1909	4				
Nov. 1916	5		3261		
Aug. 1929	6		<i>Williamstown, Grant Co.</i>		
Aug. 1929	6	512	July 1886	1	
3253			Dec. 1890	2	
<i>Versailles, Woodford Co.</i>			Oct. 1895	2	
June 1886	3		Sept. 1901	2	
Aug. 1891	4		June 1908	2	
Feb. 1897	5		Sept. 1916	2	
Oct. 1903	6		Jan. 1927	2	
June 1908	9		Jan. 1927	2	512
June 1915	10				
Mar. 1929	11		3262		
Mar. 1929-June 1938	11	512	<i>Wilmore, Jessamine Co.</i>		
3254			Mar. 1919	3	
<i>Walton, Boone Co.</i>			Mar. 1929	5	
Oct. 1921	2		Mar. 1929	5	512
Jan. 1927	3				
Jan. 1927	3	512	3263		
3255			<i>Winchester, Clark Co.</i>		
<i>Warsaw, Gallatin Co.</i>			Sept. 1886	2	
July 1910	2		Sept. 1890	6	
Dec. 1920-Apr. 1938	3	512	Sept. 1895	10	
3256			July 1901	12	
<i>Water Valley, Graves Co.</i>			Dec. 1907	19	
Sept. 1914	1		Mar. 1912	24	
Oct. 1923	2		Mar. 1926	29	Includes Ford
Oct. 1923	2	512	Mar. 1926-July 1946	29	512. Includes Ford

City/Country/Date	No. of Sheets	Comments	City/Country/Date	No. of Sheets	Comments
3128			3137		
<i>Beattyville, Lee Co.</i>			<i>Cadiz, Trigg Co.</i>		
Dec. 1893	2		Nov. 1902	1	
Jan. 1908	3		Feb. 1903	2	
Dec. 1914	3	Includes Proctor	Feb. 1909	4	
Feb. 1921	3		Sept. 1923	5	
May 1930	4	Includes Proctor	Sept. 1923–Oct. 1938	5	502
May 1930	4	501. Includes Proctor			
			3138		
3129			<i>Calhoun, McLean Co.</i>		
<i>Beaver Dam, Ohio Co.</i>			Oct. 1886	1	
May 1910	2		Jan. 1893	1	
July 1923	3		Oct. 1898	1	
Jan. 1931	4		Oct. 1903	2	
Jan. 1931	4	501	Mar. 1909	2	
			July 1923	3	Includes Rumsey
3130			July 1923	3	502. Includes Rumsey
<i>Benton, Marshall Co.</i>					
Dec. 1915	3		3139		
June 1925	7		<i>Campbellsville, Taylor Co.</i>		
June 1925–June 1941	7	501	Aug. 1886	1	
			Nov. 1895	3	
3131			Sept. 1901	3	
<i>Berea, Madison Co.</i>			Feb. 1908	4	
Nov. 1907	2		May 1915	5	
Apr. 1912	3		Dec. 1927	8	
Jan. 1922	6		Dec. 1927–Nov. 1941	8	502
July 1929	5				
July 1929–Oct. 1942	5	501	3140		
			<i>Carlisle, Nicholas Co.</i>		
3132			Aug. 1886	2	
<i>Bowling Green, Warren Co.</i>			June 1891	3	
Aug. 1886	4		Aug. 1897	4	
Oct. 1891	6		Nov. 1903	4	
Dec. 1895	14		May 1909	6	
Mar. 1901	20		Oct. 1916	8	
Jan. 1909	28		Mar. 1929	10	Includes Henryville, Pickerelville and Arnold Heights
Oct. 1914	20		Mar. 1929–Sept. 1939	10	502. Includes Henryville, Pickerelville and Arnold Heights
June 1925	23				
Jan. 1932	23		3141		
Jan. 1932–May 1948	23	502	<i>Carrollton, Carroll Co.</i>		
			July 1886	4	
3133			Feb. 1893	5	
<i>Brooksville, Bracken Co.</i>			Sept. 1898	8	
June 1909	2		Oct. 1903	8	
Oct. 1926	3		May 1908	10	
Oct. 1926	3	502	Feb. 1917	12	
			Nov. 1925	14	Includes Prestonville
3134			Nov. 1925–May 1948	14	502. Includes Prestonville
<i>Buechel, Jefferson Co.</i>					
Nov. 1928	1		3142		
Nov. 1928	1	502	<i>Catlettsburg, Boyd Co.</i>		
			May 1885	2	
3135			Aug. 1890	5	
<i>Burnside, Pulaski Co.</i>			Jan. 1895	6	
May 1908	4		Sept. 1901	6	
Jan. 1914	5		May 1907	10	
May 1926	6		Feb. 1912	11	
May 1926–Sept. 1940	6	502	Nov. 1920	11	
			Nov. 1920–Jan. 1944	11	502
3136					
<i>Butler, Pendleton Co.</i>			3143		
July 1886	1		<i>Cave City, Barren Co.</i>		
Jan. 1927	2		Jan. 1901	2	
Jan. 1927	2	502	Feb. 1909	2	

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
Aug. 1919	2		3152		
Apr. 1927	3		<i>Covington, Kenton Co.</i>		
Apr. 1927	3	502	1886	39	Bound
3144			1894	97	Includes Newport, Dayton, Ludlow, and Bellvue. Bound
<i>Central City, Muhlenberg Co.</i>			1906	1	Central business district
Sept. 1901	2		1909	115	Includes map of congested district. Bound
Feb. 1907	4		1909-July 1949		
Aug. 1912	7		vol. 1, 1909-July 1949	87	001. Includes key map to edition and map of congested district
July 1923	8		vol. 2, 1909-July 1949	56	002. Includes key map to edition. Includes Bromley, Elsmere, Erlanger, Fort Mitchell, Independence, Ludlow, Park Hills, South Fort Mitchell, Lookout Heights and Fort Wright
Jan. 1931	13				
Jan. 1931-Jan. 1939	13	502	1909-1954		
3145			vol. 1, 1909; Republished		
<i>Clay, Webster Co.</i>			1954	90	35 X 29 cm. Bound
June 1925	8		vol. 2, 1909; Republished		
June 1925-June 1939	8	502	1954	60	35 X 29 cm. Includes Bromley, Crescent Springs, Edgewood, Elsmere, Erlanger, Fort Mitchell, Fort Perry, Fort Wright, Independence, Lakeside Park, Lookout Heights, Ludlow, Park Hills, South Fort Mitchell, South Hills and Winston Park. Bound
3146			New and Additional Sheets	2	Apr. 1923
<i>Clinton, Hickman Co.</i>			3153		
July 1894	2		<i>Cumberland, Harlan Co.</i>		
Nov. 1899	2		Aug. 1949	7	
Nov. 1905	2		Aug. 1949	7	503
June 1910	3		3154		
Oct. 1923	7	Includes Arlington	<i>Cynthiana, Harrison Co.</i>		
Oct. 1923-Dec. 1943	7	502. Includes Arlington	July 1886	6	
3147			June 1891	6	
<i>Cloverport, Breckenridge Co.</i>			July 1897	9	
Oct. 1886	1		Nov. 1903	9	
Jan. 1892	2		May 1909	15	
Oct. 1898	4		Oct. 1916	17	
Dec. 1903	4		Apr. 1926	23	
Mar. 1909	4		Apr. 1926-June 1942	23	503
July 1925	6		3155		
July 1925-June 1939	6	503	<i>Danville, Boyle Co.</i>		
3148			Oct. 1886	6	
<i>Columbia, Adair Co.</i>			Aug. 1891	7	
Apr. 1929	2		Nov. 1896	9	
Jan. 1941	5		June 1901	11	
Jan. 1941	5	503	May 1908	20	
3149			Apr. 1914	25	
<i>Columbus, Hickman Co.</i>			Nov. 1927	27	Includes West Danville
Nov. 1886	1		Nov. 1927-Aug. 1946	27	503. Includes West Danville
Dec. 1892	2		3156		
Nov. 1899	3		<i>Dawson Springs, Hopkins Co.</i>		
Nov. 1905	3		Mar. 1909	4	
Aug. 1910	3		July 1925	5	
Jan. 1927	3		July 1925-June 1949	5	503
3150					
<i>Corbin, Knox and Whitley Cos.</i>					
Apr. 1908	5				
Oct. 1913	6				
Nov. 1923	14				
Mar. 1930	33				
Mar. 1930-Oct. 1948	33	503			
3151					
<i>Corydon, Henderson Co.</i>					
July 1927	1				
July 1927	1	503			

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
3157			Oct. 1926	7	
Dayton, Hopkins Co.			Oct. 1926-Jan. 1944	7	504
July 1886	4				
3158			3165		
Earlington, Hopkins Co.			Fordsville, Ohio Co.		
Mar. 1909	5		July 1915	2	
Oct. 1923	13		June 1925	2	504
Oct. 1923-Oct. 1943	13	503	June 1925	2	
3159			3166		
Eddyville, Lyon Co.			Frankfort, Franklin Co.		
Nov. 1905	2		June 1886	12	
May 1910	3		Nov. 1890	17	
June 1925	5		Sept. 1896	18	
June 1925-Oct. 1943	5	504	Nov. 1901	19	
3160			Sept. 1907	30	
Elizabethtown, Hardin Co.			Aug. 1912	35	
Aug. 1886	2		Feb. 1925	34	
Sept. 1891	3		Feb. 1925-Dec. 1943	34	Includes Jetts and Farmdale 504. Includes Glens Creek Sta- tions, Jett and Farmdale
Nov. 1896	4				
Jan. 1901	4		3167		
Jan. 1907	5		Franklin, Simpson Co.		
July 1912	8		Aug. 1886	2	
Dec. 1922	10		Apr. 1892	3	
July 1929	16		Aug. 1897	4	
July 1929-July 1942	16	504	Oct. 1901	4	
3161			Dec. 1908	10	
Elkton, Todd Co.			May 1913	11	
Sept. 1886	1		May 1925	10	
Jan. 1893	2		May 1925-Aug. 1940	10	504
Oct. 1898	2				
Oct. 1903	3		3168		
Feb. 1909	4		Fulton, Fulton Co.		
June 1923	9		Nov. 1886	2	
June 1923-Aug. 1942	9	504	Sept. 1889	3	
3162			July 1894	5	
Eminence, Henry Co.			Nov. 1899	9	
June 1886	2		Oct. 1903	13	
Jan. 1893	2		Apr. 1909	18	
Sept. 1898	2		Sept. 1914	22	Includes South Fulton, Obion Co., Tenn.
Oct. 1903	3		Apr. 1925	25	Includes South Fulton, Obion Co., Tenn.
Apr. 1908	5		Apr. 1925-Dec. 1949	25	504. Includes South Fulton, Obion Co., Tenn.
Feb. 1915	6				
Apr. 1925	6		3169		
Apr. 1925-Nov. 1938	6	504	Georgetown, Scott Co.		
3163			May 1886	3	
Falmouth, Pendleton Co.			Dec. 1890	5	
July 1886	3		Oct. 1895	9	
May 1891	4		Sept. 1901	9	
July 1897	6		Oct. 1907	15	
Nov. 1903	6		June 1912	19	
May 1909	6		Dec. 1925	19	
Jan. 1927	7		Dec. 1925-Mar. 1945	19	505
Jan. 1927-Mar. 1945	7	504			
3164			3170		
Flemingsburg, Fleming Co.			Glasgow, Barren Co.		
Aug. 1886	2		Aug. 1886	2	
July 1891	3		Apr. 1892	2	
Oct. 1898	4		Aug. 1897	2	
Oct. 1903	4		Oct. 1901	3	
June 1909	5		Jan. 1909	5	
			Jan. 1916	7	
			Mar. 1923	14	

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
Jan. 1931	18		July 1901	8	
Jan. 1931–Nov. 1947	18	505	Jan. 1908	14	Includes Burgin
3171			May 1914	18	Includes Burgin
<i>Grayson, Carter Co.</i>			Jan. 1929	15	Includes Burgin
Jan. 1929	4		Jan. 1929–Dec. 1942	15	505. Includes Burgin
Jan. 1929	4	505	3179		
3172			<i>Hartford, Ohio Co.</i>		
<i>Greensburg, Green Co.</i>			Nov. 1925	5	
Aug. 1886	1		Nov. 1925–Feb. 1939	5	505
Nov. 1895	1		3180		
Aug. 1901	1		<i>Hawesville, Hancock Co.</i>		
Apr. 1908	1		Oct. 1886	1	
Nov. 1919	2		Nov. 1903	2	
Sept. 1927	2		Mar. 1909	2	
Dec. 1941	4		July 1925	2	
Dec. 1941	4	505	July 1925	2	505
3173			3181		
<i>Greensburg, Greenup Co.</i>			<i>Hazard, Perry Co.</i>		
Aug. 1886	1		Feb. 1920	5	
July 1893	1		Aug. 1923	8	Includes Harveyton
Oct. 1898	2		Apr. 1930	23	Includes Lothair, Harveyton and Dowlais
Nov. 1903	2		Apr. 1930–Aug. 1947	23	505. Includes Lothair, Harvey- ton and Dowlais
June 1909	2		3182		
Sept. 1929	4	Includes Riverton	<i>Henderson, Henderson Co.</i>		
Sept. 1929	4	505. Includes Riverton	May 1885	8	
3174			Mar. 1892	10	
<i>Greenville, Mublenberg Co.</i>			Mar. 1897	15	
Oct. 1886	2		Aug. 1901	22	
Jan. 1893	2		Mar. 1906	36	
Oct. 1898	2		Mar. 1913	39	
Oct. 1903	3		May 1923	36	
May 1910	6		Jan. 1931	41	
June 1923	7		Jan. 1931–July 1956	43	506
Jan. 1931	7		3183		
Jan. 1931–Sept. 1942	7	505	<i>Hickman, Fulson Co.</i>		
3175			Nov. 1886	2	
<i>Guthrie, Todd Co.</i>			Nov. 1892	3	
Oct. 1899	1		Sept. 1896	4	
Oct. 1905	2		Dec. 1900	4	
Jan. 1910	3		Nov. 1905	5	
Apr. 1923	5		Mar. 1910	5	
Apr. 1923–Aug. 1942	5	505	July 1917	5	
3176			Feb. 1927	8	
<i>Hardinsburg, Breckinridge Co.</i>			Feb. 1927–Aug. 1938	8	506
May 1916	2		3184		
July 1925	2		<i>Hodgenville, Larue Co.</i>		
July 1925	2	505	Aug. 1886	3	
3177			July 1895	3	
<i>Harlan, Harlan Co.</i>			Jan. 1901	4	
Feb. 1919	5		Apr. 1908	6	Includes Athertonville
Mar. 1925	7		Apr. 1916	6	Includes Athertonville
Oct. 1925	7		Apr. 1926	6	Includes Athertonville
Oct. 1932	6	Includes Baxter	Apr. 1926–June 1944	6	506
Oct. 1932–Aug. 1947	6	505. Includes Baxter	3185		
3178			<i>Hopkinsville, Christian Co.</i>		
<i>Harradsburg, Mercer Co.</i>			Sept. 1886	4	
Oct. 1886	5		Apr. 1892	5	
Nov. 1891	5		Oct. 1896	7	
Dec. 1896	7				

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
Apr. 1901	13		Mar. 1908	4	
Dec. 1906	23		Feb. 1915	6	
Feb. 1913	33		May 1925	6	
Sept. 1923	33		May 1925–Nov. 1942	6	507
Mar. 1931	37				
Mar. 1931–Aug. 1950	37	506	3194		
3186			<i>Lancaster, Garrard Co.</i>		
<i>Horse Cave, Hart Co.</i>			Nov. 1886	2	
Apr. 1916	3		Dec. 1891	2	
Jan. 1923	6		Dec. 1896	3	
Feb. 1932	6		Aug. 1901	4	
Feb. 1932	6	506	Mar. 1908	6	
			Jan. 1915	8	
3187			Feb. 1929	10	
<i>Irvine, Estill Co.</i>			Feb. 1929–Oct. 1939	10	507
Mar. 1920	5	Includes West Irvine and Ravenna	3195		
May 1923	8	Includes West Irvine and Ravenna	<i>Lawrenceburg, Anderson Co.</i>		
June 1930	23	Includes West Irvine and Ravenna	Oct. 1886	8	
June 1930–Feb. 1944	23	506. Includes West Irvine and Ravenna	Nov. 1891	9	
			Jan. 1897	10	
3188			Oct. 1903	10	
<i>Jackson, Breathitt Co.</i>			Apr. 1909	16	Includes Tyrone
Mar. 1897	2		May 1927	11	Includes Tyrone and McBrayer Station
Sept. 1903	2		May 1927–Dec. 1942	11	507. Includes Tyrone, McBrayer Station and Bonds Mill
Jan. 1908	4				
Jan. 1914	6		3196		
Mar. 1920	6		<i>Lebanon, Marion Co.</i>		
Apr. 1930	8		Aug. 1886	4	
Apr. 1930–Mar. 1940	8	507	Aug. 1890	6	
			July 1895	7	
3189			Sept. 1901	8	
<i>Jeffersontown, Jefferson Co.</i>			Mar. 1908	17	
Nov. 1928	3		Mar. 1915	16	
Nov. 1928	3	507	Dec. 1927	13	Includes Calvary and Loretto
			Dec. 1927–Mar. 1939	13	507
3190					
<i>Jellico, Whitley Co., Ky., and Campbell Co., Tenn.</i>			3197		
May 1903	2		<i>Lebanon Junction, Bullitt Co.</i>		
Aug. 1907	4		Jan. 1933	2	
July 1913	7		Jan. 1933	2	507
Apr. 1923	11				
Mar. 1932	6		3198		
Mar. 1932–Sept. 1942	6	507	<i>Leitchfield, Grayson Co.</i>		
			Aug. 1901	2	
3191			Jan. 1907	3	
<i>Junction City, Boyle Co.</i>			Aug. 1912	4	
May 1908	2		July 1925	5	
Jan. 1915	3		July 1925–June 1944	5	507
Mar. 1929	3				
Mar. 1929	3	507	3199		
			<i>Lewisport, Hancock Co.</i>		
3192			Aug. 1927	2	
<i>Kuttawa, Lyon Co.</i>			Aug. 1927	2	507
May 1927	2				
May 1927	2	507	3200		
			<i>Lexington, Fayette Co.</i>		
3193			May 1886	23	
<i>La Grange, Oldham Co.</i>			Dec. 1890	26	
June 1886	1		Sept. 1896	33	Sheet 11 uncolored
Oct. 1895	2		Oct. 1901	38	Sheets 16 and 17 uncolored
Oct. 1901	3		1907	97	Includes 8 skeleton maps. Bound
			1934	92	Includes Greendale. Includes 6 skeleton maps. Bound

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
1934—Oct. 1950	99	003. Includes Greendale. Includes 6 skeleton maps	vol. 4, 1928	87	Includes key map to edition. Bound
1934—1958			vol. 5, 1928	112	Includes key map to edition. Bound
vol. 1, 1934; Republished 1958	88	35 × 29 cm. Bound	vol. 6, 1928	106	Includes Camp Zachary Taylor, Prestonia, Audubon Park and North Audubon Park. Bound
vol. 2, 1934; Republished 1958	70	35 × 29 cm. Includes Greendale. Bound	vol. 7, 1929	83	Includes Saint Matthews. Includes key map to edition. Bound
New and Additional Sheets	13	Dec. 1920	1928—Mar. 1951		
3201			vol. 1, 1940—Oct. 1950	92	004. Includes key map to edition and map of congested district
<i>Livermore, McLean Co.</i>			vol. 2 East, 1941—Nov. 1950	87	006. Includes key map to edition
Oct. 1909	3		vol. 2 West, 1941—Nov. 1950	84	005. Includes key map to edition
July 1923	4		vol. 3, 1928—Dec. 1950	93	007. Includes key map to edition
Jan. 1931	4		vol. 4, 1928—Jan. 1951	101	008. Includes key map to edition
Jan. 1931	4	507	vol. 5, 1928—Feb. 1951	81	009. Includes key map to edition
3202			vol. 6, 1928—Feb. 1951	79	010. Includes key map to edition
<i>London, Laurel Co.</i>			vol. 7, 1929—Mar. 1951	105	011. Includes Saint Matthews, Mockingbird Valley and Indian Hills
Nov. 1895	2		vol. 8, 1928—May 1950	73	012. Includes key map to edition. Includes Shively
June 1901	2		vol. 9, 1928—June 1950	59	013. Includes key map to edition. Includes Aberdeen, Audubon Park, Camp Taylor, Kingsley, North Audubon Park, Parkway Village, Prestonia, Seneca Gardens, Seneca Vista, Strathmoor Gardens, Strathmoor Manor, Strathmoor Village and Wellington
Apr. 1908	3				
Apr. 1912	4		New and Additional Sheets	1	Dec. 1922
Aug. 1923	8		Nov. 1975		
Aug. 1923—Mar. 1941	8	507	vol. 1	87	Uncolored. 35 × 28 cm.
3203			vol. 2 East	84	Uncolored. 35 × 28 cm.
<i>Louisa, Lawrence Co.</i>			vol. 2 West	83	Uncolored. 35 × 28 cm.
July 1907	3		vol. 3	91	Uncolored. 35 × 28 cm.
Feb. 1912	4		vol. 4	99	Uncolored. 35 × 28 cm.
Jan. 1921	4		vol. 5	80	Uncolored. 35 × 28 cm.
Nov. 1929	10				
Nov. 1929—Apr. 1940	10	507	3205		
3204			<i>Madisonville, Hopkins Co.</i>		
<i>Louisville, Jefferson Co.</i>			Sept. 1886	2	
1892			Mar. 1892	3	
vol. 1	80	Includes 4 skeleton maps. Bound	Dec. 1895	5	
vol. 2	76	Includes 4 skeleton maps. Bound	Sept. 1901	5	
vol. 3	79	Includes key map to edition. Bound	Dec. 1906	7	
1905			Oct. 1912	12	
vol. 1	94	Includes key map to edition and map of congested district. Bound	Sept. 1923	18	
vol. 2	101	Includes key map to edition and map of congested district. Bound	May 1931	30	
vol. 3	94	Includes key map to edition. Bound	May 1931—June 1949	30	507
vol. 4	87	Bound			
vol. 5	92	Includes key map to edition. Bound	3206		
1906	1	Central business district. 68 × 96 cm.	<i>Marion, Crittenden Co.</i>		
1928—1941			July 1895	2	
vol. 1, 1940	91	Includes key map to edition and map of congested district. Bound	Apr. 1901	5	
vol. 2 West, 1941	83	Includes key map to edition. Bound	Nov. 1905	6	
vol. 2 East, 1941	86	Includes key map to edition. Bound	May 1910	11	
vol. 3, 1928	90	Includes key map to edition. Bound	May 1925	13	
			May 1925—June 1939	13	508

City/County/Date	No of Sheets	Comments	City/County/Date	No of Sheets	Comments
May 1927	17	Includes Keene and Camp Nelson	Jan. 1896	10	
May 1927–Oct. 1940	17	509. Includes Keene and Camp Nelson	Oct. 1901	10	
3221			Nov. 1907	18	
<i>Olive Hill, Carter Co.</i>			May 1912	23	
Dec. 1920	4		Mar. 1926	28	
Dec. 1928	4		Mar. 1926–Sept. 1949	28	510. Includes Claysville and Ruckerville
Dec. 1928–May 1942	4	509	3228		
3222			<i>Pembroke, Christian Co.</i>		
<i>Owensboro, Davies Co.</i>			July 1895	1	
June 1885	13		Oct. 1905	2	
Jan. 1890	16		Jan. 1910	3	
July 1895	23		May 1923	3	
Nov. 1900	29		May 1923–May 1941	3	510
Oct. 1905	43		3229		
1910	92	Includes 8 skeleton maps. Bound	<i>Pikeville, Pike Co.</i>		
1910–July 1950	101	015. Includes 8 skeleton maps	July 1910	4	
1910; Republished 1957	104	35 × 29 cm. Bound	May 1920	5	
New and Additional Sheets	3	Jan. 1922	Mar. 1925	7	
3223			Nov. 1932	5	
<i>Owenton, Owen Co.</i>			Nov. 1932–Aug. 1949	5	510
July 1885	1		3230		
Feb. 1893	2		<i>Pineville, Bell Co.</i>		
Oct. 1898	2		Jan. 1894	1	
Nov. 1903	2		June 1901	1	
June 1908	4		Aug. 1905	2	
Nov. 1925	5		Apr. 1910	2	
Nov. 1925–June 1935	5	509	Nov. 1913	3	
3224			Dec. 1919	8	
<i>Owingsville, Bath Co.</i>			Jan. 1926	13	Includes Straight Creek, Kettle Island, Arjay and Coleman
Sept. 1886	1		Jan. 1926–Mar. 1941	13	510. Includes Straight Creek, Kettle Island, Arjay and Coleman
July 1891	2		3231		
Feb. 1897	2		<i>Prestonsburg, Floyd Co.</i>		
Sept. 1903	2		June 1926	8	Includes West Prestonsburg
Jan. 1908	3		June 1926–Apr. 1938	8	510. Includes West Prestonsburg
Mar. 1914	3		3232		
Apr. 1929	3		<i>Princeton, Caldwell Co.</i>		
Apr. 1929	3	509	Sept. 1886	2	
3225			Dec. 1892	2	
<i>Paducah, McCracken Co.</i>			Sept. 1897	3	
May 1885	7		July 1901	3	
Aug. 1889	15		Dec. 1906	4	
Dec. 1893	20		Jan. 1913	6	
Oct. 1897	29		July 1925	15	
June 1901	34		July 1925–June 1949	15	510
1906	62	Bound	3233		
1906–July 1950	80	016	<i>Providence, Webster Co.</i>		
New and Additional Sheets	7	Aug. 1916, 3; Mar. 1922, 4	Sept. 1909	8	
3226			July 1921	10	
<i>Paintsville, Johnson Co.</i>			Mar. 1931	22	
July 1910	3		Mar. 1931–May 1944	22	510
Jan. 1921	4		3234		
Jan. 1930	10	Includes Bridgeford	<i>Richmond, Madison Co.</i>		
Jan. 1930–Mar. 1940	10	509. Includes Bridgeford	Nov. 1886	3	
3227			Oct. 1890	5	
<i>Paris, Bourbon Co.</i>			Sept. 1895	11	
Aug. 1886	8				
Dec. 1890	9				

City/County/Date	No. of Sheets	Comments	City/County/Date	No. of Sheets	Comments
Aug. 1901	12		3242		
Oct. 1907	17		<i>Shelbyville, Shelby Co.</i>		
Apr. 1912	19		June 1886	3	
May 1926	22	Includes Silver Creek	Jan. 1892	4	
May 1926-Sept. 1949	22	510. Includes Silver Creek	Aug. 1897	5	
3235			Sept. 1903	7	
<i>Russell, Greenup Co.</i>			Apr. 1909	8	
Sept. 1920	4	Includes Chinnville and Advance	Sept. 1916	10	
Oct. 1929	14	Includes Raceland, Worthington, West Russell, South Russell in Flatwoods, Advance and Melrose	May 1925	12	
Oct. 1929-July 1939	14	511. Includes Raceland, Worthington, West Russell, South Russell in Flatwoods and Advance	May 1925-Dec. 1946	12	511
3236			3243		
<i>Russellville, Logan Co.</i>			<i>Shepherdsville, Bullitt Co.</i>		
Sept. 1886	3		July 1886	1	
May 1892	4		Apr. 1909	1	
Sept. 1897	5		Mar. 1920	2	
Nov. 1902	6		Feb. 1929	2	
Feb. 1909	9		Feb. 1929	2	511
Apr. 1923	14		3244		
Apr. 1923-Jan. 1939	14	511	<i>Somerset, Pulaski Co.</i>		
3237			Oct. 1886	2	
<i>Sadieville, Scott Co.</i>			Nov. 1891	2	
Nov. 1895	1		Jan. 1897	4	
Sept. 1901	1		Sept. 1903	5	
June 1908	2		June 1908	12	
Apr. 1929	2		Feb. 1914	15	
Apr. 1929	2	511	Apr. 1926	21	
3238			Apr. 1926-Aug. 1950	21	511. Includes Ferguson
<i>Salt Lick, Bath Co.</i>			3245		
Jan. 1908	3		<i>Springfield, Washington Co.</i>		
Mar. 1914	2		Aug. 1886	2	
Feb. 1920	2		Feb. 1893	2	
Sept. 1927	2		Oct. 1898	3	
Sept. 1927	2	511	Dec. 1903	3	
3239			Mar. 1909	4	
<i>Scottsville, Allen Co.</i>			Mar. 1925	8	
Aug. 1903	3		Mar. 1925-Oct. 1942	8	511
Dec. 1908	6		3246		
May 1913	6		<i>Stamping Ground, Scott Co.</i>		
June 1925	9		Nov. 1920	1	
June 1925-Aug. 1940	9	511	Nov. 1920	1	511
3240			3247		
<i>Sabree, Webster Co.</i>			<i>Stamford, Lincoln Co.</i>		
Oct. 1903	3		Oct. 1886	3	
Mar. 1909	3		Dec. 1891	3	
May 1923	6		Dec. 1896	4	
May 1923-July 1934	6	511	June 1901	4	
3241			Feb. 1908	5	
<i>Sharpsburg, Bath Co.</i>			Feb. 1914	7	
Dec. 1893	1		Mar. 1929	8	Includes Rowland Station
Dec. 1907	2		Mar. 1929-Oct. 1939	8	511
Mar. 1914	2		3248		
Apr. 1929	2		<i>Sturgis, Union Co.</i>		
Apr. 1929	2	511	Dec. 1912	6	
			May 1915	6	
			July 1925	7	
			July 1925-Dec. 1932	7	512
			3249		
			<i>Taylorville, Spencer Co.</i>		
			June 1886	1	
			Oct. 1895	2	

