Abilene Steam Locomotive
Nominated to National Register
See story on page 8.
Heritage Trust Fund Grants Awarded

The Kansas Historic Sites Board of Review recommended $1,096,000 in Heritage Trust Fund grants for 24 projects across the state on February 18, 2012.

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<tr>
<th>Project Description</th>
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<tr>
<td>Allen County Jail</td>
<td>$28,800</td>
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<tr>
<td>Atchison County Memorial Hall</td>
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<td>William C. &amp; Jane Shaft House, Chase County</td>
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<td>St. Francis City Park Band Shell, Cheyenne County</td>
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<td>Sumner Elementary School, Leavenworth County</td>
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<td>Cummins Block, Lincoln Block</td>
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<td>Peabody Downtown Historic District, Marion County</td>
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<td>C. A. Perdue House, Mitchell County</td>
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<td>Sylvan Park Gazebo, Reno County</td>
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<td>Rush County Courthouse</td>
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<td>Richmond Hill School, Sedgwick County</td>
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<td>William &amp; Delora Crosby House, Shawnee County</td>
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<tr>
<td>Home on the Range Cabin, Smith County</td>
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<tr>
<td>Wabaunsee County Courthouse</td>
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Home on the Range Cabin, Smith County.
Identifying the Earliest Buildings in Kansas, 1820-1861

As part of the 2011 commemoration of the state sesquicentennial the State Historic Preservation Office of the Kansas Historical Society commissioned a state-wide survey of Kansas vernacular architecture to identify the state’s earliest surviving buildings. Generally, methods of construction that use locally available resources and traditions to satisfy local needs and circumstances are called **vernacular**. The term applies to practically all the buildings constructed in Kansas through 1861 when Kansas was admitted to the Union as the 34th state.

Due to settlement patterns, these properties generally were located in the eastern part of Kansas and along transportation routes to the west. To help identify and protect these significant historic and architectural resources, Dale Nimz and Susan Ford carried out the survey and Nimz prepared a National Register Multiple Property Document Form (MPDF) for *Kansas Vernacular Architecture, 1820-1865*. During those years there were three stages of development: Indian Country, from 1820 to 1854; Territorial, from 1854 to 1861; and Statehood and the Civil War, from 1861 to 1865. In the future the MPDF will be developed and extended to vernacular architecture constructed through 1900.

Preliminary evidence from the survey does not support the definition of a distinctive “Kansas vernacular,” but further research may qualify that conclusion. In the examples identified, the significant characteristic of Kansas vernacular architecture constructed from about 1820 through 1865 was the use of local materials. In towns such as Leavenworth and Atchison on the Missouri River and Wyandotte, Lawrence, and Topeka on the Kansas River, some manufactured buildings and materials could be delivered by steamboat. Before 1861, however, these shipments did not meet the demands of the rapidly developing frontier towns. For other settlements such as Mound City, Manhattan, Emporia, and Marysville, the
delivery of manufactured building materials by ox team was too slow and expensive until after the construction of railroads beginning in 1864. Territorial period settlers and builders were forced to extract, process, and construct their structures with the materials at hand.

Vernacular architecture usually is distinguished from formal architecture. In the buildings constructed before 1861 it appears that architectural pattern books and architect-builders had less effect on architecture than the personal experience and cultural traditions of early settlers. After 1865 popular influences increasingly affected the choices embodied in common buildings. This broad category of common architecture has been defined by Virginia and Lee McAlester in *A Field Guide to American Houses* as the National Folk style.

Leading scholars of vernacular architecture such as Henry Glassie, Dell Upton, and John Vlach have shifted the study of the vernacular from a goal of “classifying inert objects as discrete examples to one of understanding a mental process through the examination of groups of artifacts that provide clues to the operation of that recurring invisible process.” Understanding the intention of the builders and users of vernacular architecture is the ultimate goal. As Upton and Vlach have stated, “we can get a sense of the builders’ intentions by observing what they do where a choice must be made.” To explain the value of vernacular architecture in preservation planning, architectural historian Camille Wells pointed out that “historic architecture is one aspect of the past that we can still see, touch, experience . . . and part of what attracts us to old buildings is their insistence on communicating, in some outmoded dialect we do not entirely understand, the energy and purpose, the achievements and hopes, the disappointments and hardships of those who made and used them.”

For centuries the central Great Plains has been a crossroads of exploration, settlement, and nation-building. From 1820 through 1865 Euro-Americans settled in the region along transportation routes and trails. Traders established the Santa Fe Trail in 1821. Travel on the Oregon-California Trail became heavier after gold in California was discovered in 1849. By the 1850s entrepreneurs established a stage route from St. Louis to Santa Fe. Fort buildings, trading posts, missions, churches, and houses were some of the earliest building types constructed during the period from 1820 through 1854.

To protect trade and travel on the major trails, the U.S. Army established forts at Fort Leavenworth, Fort Scott, and Fort Riley and built roads to connect these forts. Fort Leavenworth was founded in 1827 on the bluffs west of the Missouri River. After it became a permanent post in 1834, the army gradually replaced tents and log buildings with brick and wood frame buildings. Still standing at Fort Leavenworth are the earliest permanent buildings surviving in Kansas. Fort Riley was established in 1853 and many early buildings at Fort Riley were constructed of local stone quarried in the vicinity.

To provide more land in the East for Euro-American settlement after 1825 the U.S. government implemented a policy of Indian Removal from the Great Lakes region, the Ohio River valley, and the South to lands west of the Missouri River and the Missouri and Arkansas state borders. The Pawnee, Kansa, and Osage tribes were moved to defined reservations in order to make the region a “permanent” home for emigrant Indians. More than 20 tribes or remnants of tribes were given new land allotments in what is now Kansas.

Where the tribes built new settlements, Indian agents lived and administered government-supported education and annuities. Christian missions also were established to “civilize” both indigenous and emigrant Indians. These missions provided both practical and religious education with buildings that functioned as schools and churches.
Thirty-two missions were established, but by 1854, only nine remained. These missions had a variety of vernacular buildings ranging from crude log structures to stone and brick buildings. Well preserved examples include the Shawnee Methodist Mission, Johnson County; the Iowa, Sac, and Fox Mission, Doniphan County; Kaw Mission, Morris County; and the Potawatomi Baptist Mission, Shawnee County.

Many emigrant Indians adapted quickly and created a distinctive landscape. In an 1854 History of the Shawnee Indians, Indian agent Henry Harvey wrote, “many of them have good dwelling houses, well provided with useful and respectable furniture, which is kept in good order by the females, and they live in the same manner as whites do, and live well, too... Their houses are generally very neat; built of hewn logs with shingled roofs, stone chimneys, and the inside work very well finished off and mostly done by themselves.” The Shawnee lived south of the Kansas River in what is now Johnson and Douglas counties. The Delaware who lived north of the river also engaged in agriculture and lived in hewed log cabins.

Before 1854 only an estimated 800 or fewer Euro-American settlers lived in the territory that became Kansas. Most were associated with trading posts, missions, or forts. Many were of French descent whose ancestors had migrated from Canada because of the fur trade. Both whites and Indians in the area had African American slaves, but the number of blacks—slave or free—was probably fewer than 100.

Because of the growing demand for railroad routes and agricultural land, Congress approved the Kansas-Nebraska Act on May 30, 1854, to open Kansas Territory to settlers from the eastern United States. Approximately 100,000 people came across the Missouri border into northeast Kansas between 1854 and 1860. Free-state and proslavery advocates contested for power in Kansas from 1854 until 1865. Population mobility and political uncertainty limited the investment in permanent buildings. Most settlers chose sites near the Missouri-Kansas border as far south as Fort Scott or spread out along the Kansas River and its tributaries. Others followed the Santa Fe Trail southwest to Council Grove or the new town of Emporia.

The largest groups of permanent settlers in Kansas came from the states of Ohio, Illinois, Indiana, Michigan, and Wisconsin as well as Iowa and Minnesota. Many of these emigrants had previous pioneering experience and were familiar with techniques for breaking new land and building log cabins. New Englanders were prominent and their leadership derived from their involvement in antislavery politics and their investment in establishing towns; operating printing presses; and buildings hotels, sawmills, and gristmills. After 1857 proslavery settlers increasingly left the territory. Since only a few white Southerners came to Kansas directly from the Deep South, the southern influence on vernacular architecture came more from settlers from the Upland South who settled first in Missouri before they moved to Kansas Territory. European immigrants also comprised nearly 12 percent of the territory’s population in 1860. Most were German, but there were Scandinavian, French, Flemish, Irish, Swiss, and Czech immigrants. From 1854 to 1865 vernacular property types and plan forms expressed the culture of particular population groups.

Building types surveyed include public buildings such as courthouses, schools, and churches, commercial buildings, and houses. Most vernacular architecture resources will be locally significant, although there may be examples for which further research may be appropriate to justify a state or national level of significance. The outline of property types for the Multiple Property Document Form was organized by the material and method of construction. Four main categories of Kansas vernacular architecture include sod/earthen construction; log construction with three subtypes: single pen, double pen, and dogtrot structures; wood frame construction and masonry construction with three subtypes: concrete, stone, and brick masonry structures.
Methods of earthen construction probably originated from multiple sources and spread widely. During the period from 1820 to 1865 sod construction generally was considered an emergency or temporary building material. In Lawrence, for example, settlers discussed earthen construction in other regions as a possible expedient because of the shortage of native timber and manufactured lumber. In 1855 editor G. W. Brown of the Lawrence Herald of Freedom described adobe houses in New Mexico and Utah built of “well-tempered clay” bricks sun-dried, and argued that they would be durable in Kansas, with an Italian roof extending well over the sides and laid on a good stone foundation extending below the frost line and high enough to prevent the absorption of moisture. Brown concluded, “the clay here, mixed with sand, will furnish as good walls as those of Mexico and Utah.” No extant examples of sod or earthen buildings constructed before 1865 in northeast Kansas were discovered in the survey. If they remain, sod or earthen buildings probably were stuccoed or incorporated into other structures.

Log houses generally are made up of room-sized square or rectangular units called pens because, as Virginia and Lee McAlester explained in A Field Guide to American Houses, “the strength of the structure depends on the four corner joints.” The single pen property subtype is one room formed by four log walls joined at their corners. Sometimes it was improved by installing interior partitions or by adding one or more log pens. The “saddlebag” or double-pen subtype is composed of two contiguous log pens that share a central chimney. A third “dogtrot” subtype is formed by two pens separated by an open passage, all covered by a continuous roof. For example, the first house in Riley County (1854) was a one-story hewn log cabin with three pens joined end to end.

Typically, architectural historians have distinguished between log houses, which have walls of square hewn logs joined by careful corner notching, and log cabins in which the timbers are left round and joined at the corner by saddle notching. Cabin usually refers to a simple one-story structure that was less finished. Cabins were erected quickly for shelter on the frontier. Log houses were more permanent, one-and-a-half or two-story structures. Many of the early log houses were clad, sooner or later, with wooden weatherboard.

Many settlers in Kansas Territory had pioneering experience and skills, including the knowledge of log building construction. Settlers without those skills could hire others to build log homes and other structures for their use. Well preserved log buildings in their original location are rare and quite significant. A number of the surviving examples have been moved in order to preserve them. Early log buildings also were incorporated into later buildings or used as wings of larger buildings.

Wood frame houses and buildings similar to those constructed in Eastern towns and settlements were highly valued in Kansas before 1865. Before industrially produced lumber and nails reached Kansas Territory, hewn timbers were fastened with wooden pegs. To construct wood frame
houses before 1861 settlers had three main options. They could fabricate framed houses by cutting and hewing native timber, milling native timber into rough-sawn lumber, or hauling finished lumber from the nearest steamboat landing, usually on the Missouri River.

In the inland settlements, boxed wood frame houses were built that combined a hewn-timber frame with sawn and nailed studs. Carpenters in 17th century Virginia employed a simplified box frame of smaller standardized timbers when confronted with pressures to build quickly. Builders in Kansas could use hewn timbers and split weatherboard and lath or a combination of hewn timbers and sawn lumber produced by steam-powered sawmills.

Early settlers used wood frame construction for commercial, institutional, and residential buildings. The Osawatomie land office (1854) in Miami County is a rare example of a one-story rectangular wood frame building with a gable roof and false front. Probably, it is typical of other institutional and commercial buildings that have not been preserved. Constitution Hall, Lecompton, Douglas County, (1856, National Register) is similar although it is a larger two-story building without a false front.

Another significant territorial period structure is the Hartford House (1855, National Register), the only surviving example of 10 small prefabricated houses that were brought to Manhattan, Riley County, on the steamboat, Hartford. Another example is the Nelson Rodgers house (1856, National Register). Nelson Rodgers was the first blacksmith and postmaster in Troy, Doniphan County.

He built this one-and-a-half story center-gable house of hand-hewn oak, walnut, and pine. The corner posts are hewn cottonwood with mortise and tenon joints. The floor joists, studs, rafters, and ceiling joists are mortoised into the sills and plates.

Wood frame buildings constructed before 1865, particularly residences, are some of the vernacular buildings most likely to survive. However, these examples may be difficult to identify based on their exterior appearance. Relatively smaller proportions may suggest an earlier construction date. Interior construction details are the most important evidence to corroborate documentary or family history evidence of construction before 1865. Hewn timber or rough-sawn floor joists and roof frames may be indications of an early construction date. In buildings dating from the 1840s and 1850s, we would expect to find industrially produced cut nails. These might be used, for example, to toenail sawn studs into mortises in timber sills.

Concrete masonry or “composite” buildings were briefly popular in Lawrence and examples of this construction material and method appeared in other communities before 1865. No surviving examples were identified in the Kansas Vernacular Architecture Survey. One example of the use of “composite” material that survived until recently was the Benjamin Harding House in Wathena, Doniphan County. It was described in the National Register nomination as a two-story building with a basement constructed of crushed rock bound together with cement creating a smooth surface that has been scored to resemble cut stone and painted white.
Harding first built a log cabin in 1852 on the California road approximately four miles west of the Missouri River. By 1858 Harding needed a larger home for his growing family and began work on a new residence. “The local building stone was too soft to give the best service so he thought a house could be made from crushed rock bound together by cement.” The Harding House was demolished circa 2003 and has been removed from the National Register of Historic Places.

In addition to the buildings constructed at forts and missions, settlers in Kansas Territory began to erect permanent buildings constructed of stone and brick masonry as soon as possible in the 1850s. Stone was widely available and, since some settlers built with logs first and then stone, it may have been chosen as a more permanent building material. Most of these stone buildings had simple lines and relatively small proportions. In many localities early settlers “lacked the time, money, skills, and even desire to build elaborate structures.” Early stone houses often had only one or two rooms. Surviving examples may remain as sections of larger buildings. Other extant stone structures from the territorial period probably represent the larger and better-built examples of the full range of buildings that were constructed before 1865.

Some of the most impressive surviving early Kansas buildings were constructed of stone masonry. The first capital of Kansas Territory (National Register, KSHS) was a two-story rectangular building approximately 40 by 80 feet with a gable roof. It was constructed in 1855 in Geary County on the Pawnee townsite adjacent to the Fort Riley military reservation. Two other buildings at Fort Riley, the original Post Chapel and Building 24, Officers Quarters, were also constructed in 1855. The chapel is a one-story building with a cruciform plan and gable roof and masonry openings with Gothic Revival pointed arches. The Theodore Weichselbaum building (1859), Ogden, Riley County, served as a general store and post office with living quarters on the second floor. The rectangular two-story building has a hipped roof and a stone stable attached to the rear. Stone structures constructed before 1865 range from simple gable front residences to large massed plan residences. The surviving examples were distributed throughout the counties in the northeast Kansas survey area.

While the examples surveyed illustrate the range and variety of buildings constructed of stone before 1865, more detailed and comprehensive research is needed. Studies of individual stone masons, stone cutters, and quarrying in Kansas Territory, particularly in relation to specific properties that can be documented, are needed to accurately describe building methods and choices.

Another substitute for wood as a building material was brick. As some of the surviving mission and fort buildings demonstrate, locally manufactured brick was available in the Kansas Territory, but it was probably the most difficult material to manufacture before 1861. With a good supply of local clay available, however, an experienced brickmaker could dig the clay, mix and temper the material, pour into molds, and fire the bricks in clamps (temporary kilns) or hollow stacks of green bricks and produce a durable product. Due to its weight, brick was difficult and expensive to transport; therefore, it was the most localized manufactured building product. Lime mortar for brick and stone masonry construction and interior plaster was also produced locally.

For example, the three-story building erected in 1845 for the Iowa, Sac, and Fox building was constructed with a first floor of local hand-cut stone and second and third floors of brick made at the mission site. Lath, beams, posts, and sills were milled from native oak and walnut. Shingles for roofing, doors, and windows were transported by riverboat from Pennsylvania to Westport, Missouri, and then by ox team to the mission.

Brick masonry buildings surviving from before 1865 are typical of buildings constructed in more settled states in the 1850s and later in the 19th century. Territorial period settlers used brick masonry construction for both large
commercial buildings in towns and simple residences. Examples in Leavenworth, Leavenworth County, include the Anthony Wohlfrom building (1861) and the John Heusgen building (1859). Both are rectangular two-story buildings with low sloping roofs and parapets. Local brickmaking in Leavenworth began soon after the town was established. Other brick commercial buildings from the territorial period survive in several communities with façades altered over time.

Settlers constructed brick residences in a variety of forms. The J. T. Hereford house (1860), Atchison, Atchison County, is a small one-story residence with a sidegable roof and three-bay façade. In Lawrence the Robert Miller house (1858, National Register) is a two-story I-house with a rear ell constructed in 1863. The Hayton-Williamson house (1858-1860) in Troy, Doniphan County, was constructed by Joseph Hayton, an English emigrant and stone mason. The rectangular two-story building has ornamental brick arched openings and a sidegable roof with a prominent central wall dormer.

Because of their durability and higher quality construction, stone and brick masonry buildings constructed before 1865 probably survived in greater numbers than they were actually represented in the settlement landscape. More research on local brickmaking operations, masons, and bricklayers in Kansas Territory is needed to better describe building methods and choices during this period.

This multiple property document was based on previous historic architectural surveys and nominations, new survey of previously undocumented properties constructed through 1861, and extensive archival research. But more research and architectural investigation is needed. For almost all of the examples surveyed, the examination of framing systems, wood frame and masonry construction techniques, and available materials would add important information to our knowledge of Kansas vernacular architecture. Detailed investigation (including measured drawings where feasible) could help document a variety of plan forms for early wood frame and masonry buildings. Determining a more precise sequence of construction and alteration dates for individual buildings also will help determine the common elements of buildings constructed during the period from 1820 to 1865.

How the Survey was Completed

Beginning in January and continuing throughout the spring of 2011 the Historical Society requested information about potential territorial era structures, using news releases to media outlets and local historical societies, phone and podcast interviews, and a notice in Kansas Preservation. The Historic Preservation Office (SHPO) staff also meticulously sorted through existing survey files for every county to discover potential properties. Combined with the generous public response this information led to the development of a list of approximately 400 potential resources. The SHPO staff reviewed each public response for age potential and previous knowledge of the structure within the Kansas Historic Resources Inventory (KHRI). A shared spreadsheet between the SHPO and the survey consultants documented which properties would receive priority.

As the goal was to identify all pre-statehood resources, first priority was given to those resources that were not within the KHRI and whose physical characteristics—including location within the state—made them more likely to be territorial. Second priority was given to those resources within the KHRI that had very little information or that had not been surveyed within the last 10 years. Finally, those properties with established territorial era dates that had either been listed in the state or National Registers or had been surveyed within the last 10 years were considered; the goal was to survey at least 100 properties.

Of the 400 potential resources, the surveyors (the consultants and occasionally, KSHS staff) visited 222 properties. One hundred-seventy-five of those were identified as being constructed before 1861. Though this is not an exhaustive list of all pre-statehood buildings, it represents a large number of properties previously unidentified. All 222 records were entered into the KHRI database with photographs and site plans by September 30, 2011. To view the results, visit kshs.org/khri and search for the survey project “Kansas – Territorial Era (2011).”
Abilene Steam Locomotive is First in Kansas to be Nominated to National Register

At its regular quarterly meeting held at the Kansas Historical Society in Topeka on Saturday, February 18, the Historic Sites Board of Review voted to list one property in the Register of Historic Kansas Places and to forward eight nominations to the office of the Keeper of the National Register of Historic Places in Washington, D.C., to be evaluated by its professional staff. If they concur with the board’s findings, the properties will be included in the National Register. In other action, the board approved the African American Resources in Manhattan Multiple Property Documentation Form, which serves as a cover document rather than a nomination to the National Register, with the purpose of establishing a basis of eligibility for related properties.

ATSF Steam Locomotive #3415 – 411 S Elm Street, Abilene, Dickinson County

Many movable resources are listed in the National Register of Historic Places, including aircraft, trolleys, ships, and locomotives. Although there are more than 65 locomotives individually listed in the National Register of Historic Places, this is the first from Kansas to be nominated. The ATSF Steam Locomotive #3415 is a Class 3400 Pacific-type 4-6-2 passenger engine built by Baldwin Locomotive Works in 1919. The 4-6-2 designation refers to the engine’s wheel arrangement—the first number notes the number of leading wheels, the second number notes the number of driver wheels, and the third number notes the number of trailing wheels. This engine originally burned coal, but was converted to oil burning in the 1930s. It was operated by the Atchison, Topeka & Santa Fe Railway for 34 years and was donated to the City of Abilene in 1955. It sat in Eisenhower Park until 1996 when it was removed from the park for restoration. The locomotive is now situated on an abandoned segment of the Rock Island Railroad track that is used by the Abilene-Smoky Valley Railroad, a not-for-profit organization that operates a railroad museum and excursion train. When not in use, the locomotive is stored in the engine house at 411 South Elm Street in Abilene. It is one of only three 4-6-2 3400 class Pacific-type steam locomotives remaining in Kansas, and the only member of the class that is operational. It is nominated for its significance in the areas of engineering and transportation.

African American Resources in Manhattan Multiple Property Submission – Manhattan, Riley County

A multiple property submission (MPS) is a thematic group listing in the National Register that consists of related properties that share a common theme and can be submitted as a group or individually over time. The process begins with the preparation of a multiple property documentation form (MPDF), which acts as a cover
document rather than the nomination to the National Register. The purpose of the documentation form is to establish the basis of eligibility for related properties. The information outlined in the MPDF can be used to nominate and register related historic properties simultaneously, or to establish criteria for properties that may be nominated in the future. Information common to the group of properties is presented in the MPDF, while details specific to each individual building, site, district, structure, or object are placed on an individual nomination form. Thus, additions to an MPS can occur over time.

This MPDF provides a context for understanding the conditions that encouraged, hindered, or were associated with African Americans in Manhattan, as well as a basis for evaluating those physical historic resources that resulted from these activities and associations. It covers extant resources dating from 1865 through 1972 that are located within the current incorporated city limits of Manhattan, and is based in part on previous field surveys. The document provides three historic contexts involving African American history in Manhattan. The first covers the period from the earliest recorded African American residents in Manhattan, through the influx of Exodusters from the South and on into the early 20th century. Although life was far from the “promised land” that many of these emigrants had envisioned, their children were able to attend the same schools as the white residents of Manhattan. In 1903, however, discussions about school segregation were renewed, and this time the school board decided to build a separate elementary school for black children. A second context covers the small but tight-knit community that developed around Manhattan’s Douglass School and the nearby churches. Douglass Elementary was completed in 1904, and would serve as an important center of the black community in Manhattan for nearly 60 years. Several events in the third context, which focuses on the period between 1954 and 1972, came together to eventually break down the barriers of segregation associated with public accommodations, shopping, restaurants, and finally, with housing.

Two properties—the Bethel African Methodist Episcopal Church and the Second Baptist Church—were nominated as part of this multiple property submission.

This project was funded by a Historic Preservation Fund grant through a partnership between the Kansas Historical Society and the City of Manhattan.

**Bethel AME Church – 401 Yuma Street, Manhattan, Riley County**

The Bethel African Methodist Episcopal (AME) Church building is significant for its role in the development of the African American community in Manhattan. Like the Second Baptist Church, the AME church was one of the key community organizations in Manhattan, serving not only the religious needs of its members, but also the greater community by hosting education, social, and charitable activities. The original congregation was organized in 1879, the same year that a number of African American refugees arrived in Manhattan as part of the great Exodus from former Southern slave states. As the congregation grew in size and prominence, members built a second frame church in 1916, and were able to build this brick building in 1927. The church is the oldest existing African American congregation in Manhattan, and in cooperation with Manhattan’s other black churches, members of Bethel took leadership roles in civil rights activities in the community. Although membership dwindled to as low as five members in the late 20th century, the determination of those remaining members have kept the congregation and church in operation through today.

**Second Baptist Church – 831 Yuma Street, Manhattan, Riley County**

The Second Baptist Church building is significant for its role in the development of the African American community in Manhattan. Like Bethel AME, the Second Baptist Church was one of the key community organizations in Manhattan. It was not only a center for religious worship, but served the greater community by hosting education, social, and charitable activities. The congregation was organized in 1880, a year after the
influx of African American refugees arrived in Manhattan as part of the great Exodus from former Southern slave states. As the congregation grew in size and prominence, its members built this substantial brick building in 1917, replacing the earlier small frame building. It is located on a prominent corner at the intersection of Ninth and Yuma, across from Douglass School and the black U.S.O. Building—all significant community organizations in the historic African American neighborhood.

Emporia Downtown Historic District – Emporia, Lyon County
The Emporia Downtown Historic District includes 169 buildings spanning approximately 18 city blocks in the heart of Emporia’s central business district. In addition to traditional commercial blocks, the district includes a number of stand-alone buildings such as post office buildings, churches, schools, banks, and county government facilities. Together, they represent the community’s development over a period of nearly 150 years. Emporia was founded in 1857, and, as evidenced by historic photographs, the downtown was already showing signs of permanency in the late 1860s, by which time two- and three-story masonry Italianate buildings had already been built. The downtown expanded outward from its historic center at 6th and Commercial, the location of the town’s original building. Although some of the downtown buildings still represent their original appearance to a degree, most were modified over time. It was not uncommon for commercial buildings to have been built and updated many times through the years, particularly during boom years, such as in the 1910s and 1920s. During the early 20th century, downtown expanded east and west. Among the first non-residential buildings constructed on the west side, along Merchant and Constitution, were free-standing institutional, educational, and governmental buildings such as Emporia High School, Junior High, U. S. Post Office, YMCA, and Emporia Welfare Association. These buildings were quickly joined by an array of auto-related structures along U.S. 50, Merchant, and Mechanic Streets. The district is nominated for its commercial history and its architecture.

Jackson-McConnell House – 228 W 5th Street, Junction City, Geary County
The Jackson-McConnell House, built in 1911, is located near downtown Junction City on a broad, tree-lined east-west street in a residential neighborhood of primarily single-family residences in the Queen Anne, Bungalow, Craftsman, and Foursquare styles. Widow Lucy Jackson commissioned the construction of this house for herself and her daughter Ella and son-in-law Irving Miller, and it would remain in their family until 1944. Donald A. McConnell, the city’s long-time public school superintendent purchased the house in 1954, and it remained in his family until 1988. The house is a well-preserved example of the American Foursquare and reflects a mix of popular early 20th century architectural styles including Craftsman and Prairie. The two-and-a-half story wood-frame residence has a cube form, hipped roof, limestone single-story porch with a hipped roof, and a front-facing hipped dormer in the attic. The double-door entrance is centered. The corner windows, four in all, are some of the most striking exterior features of the building. It is nominated for its architecture.

Viets Block – 427, 429, 431 State Street, Augusta, Butler County
The Viets Block is a two-story building located on the southwest corner of the intersection of State Street and 5th Street in downtown Augusta. This key corner building, which occupies three city lots, developed over many years in the early 20th century and today retains its Commercial-style appearance, its traditional storefronts and recessed entrances, tile entry, and glass transoms.
Mercantile proprietor Charles A. Viets developed the property in about 1900 and later contributed to major renovations in 1916 and 1923, which gave the building its current appearance. The building's first floor housed two regionally important department stores—the Viets clothing and dry goods store during the early 1900s and later Calvert's department store. The second floor served as meeting space for the local Elks lodge for about 20 years. It is nominated for its local commercial history and its Commercial-style architecture.

**Westside Service Station & Riverside Motel – 325 W River Street, Eureka, Greenwood County**
The Westside Service Station and Riverside Motel is located on the south side of U.S. 54 / River Street just east of the bridge spanning Fall River in Eureka. It marks the west edge of Eureka’s mid-20th century roadside commercial district along U.S. 54. The property was developed over several years beginning in 1939 when D. R. Parks purchased the property and constructed a combination service station and café building and three sleeping cabins with attached carports. These wood-frame buildings were faced with limestone reflecting a common regional architectural style known as Ozark Giraffe, an early 20th century version of the cobblestone house-building tradition. Frank “Benny” Lore, Jr., and his wife, Lois, purchased the property in 1951 and soon added two one-story Ranch-style buildings behind the café and service station. They operated the business for more than 50 years. The small cabins were demolished in 2011, but the remaining buildings were rehabilitated and once again function as a café and motel. The property is nominated for its architecture and commercial history.

**Paul Jones Building – 317 W River Street, Eureka, Greenwood County**
Built in 1946, the Paul Jones Building is located along the south side of U.S. 54 / West River Street and is adjacent to the Westside Service Station and Riverside Motel, which marks the west edge of Eureka’s roadside commercial district. Eureka businessman Paul Jones built this building to house his Dodge and Plymouth showroom. It reflected characteristics similar to other contemporary roadside dealerships, with its streamlined design, curved forms, barrel vaulted truss system, and large showroom windows. The showroom wasn’t especially glamorous, and there was a clear emphasis placed on service. The building included a “wash and lubrication” garage in addition to a large service area at the rear. Additionally, Jones participated in the development and promotion of U.S. 54 through Eureka, and just three weeks before his unexpected death in 1956 was elected president of the National Highway 54 Association. The business closed after Jones’ death, and in subsequent years several auto-related repair shops operated out of the building. The building is nominated for its local significance in the area of commerce.

Left to right, Westside Service Stateion & Riverside Motel, Greenwood County; Paul Jones Building, Greenwood County.

Above, Paul Jones Motor Company advertisement March 29, 1951, Eureka Herald.
Register of Historic Kansas Places

Richardson Produce Warehouse – 141 S Rock Island Avenue, Wichita, Sedgwick County

The Richardson Produce Warehouse is located in a historically industrial area south of Douglas Avenue in downtown Wichita. It was built in the early years of the 20th century as wholesale houses were being constructed to the north and south of Douglas Avenue. All were situated on the rail lines that spanned Wichita near the center of town creating a viable warehouse district; many of those buildings are extant. This warehouse was located near three trunk line freight depots. The trunk line railroad tracks that once traversed Rock Island and Mead Avenues have been removed and paved streets are now in place immediately on the east and the west sides of the Richardson Warehouse. Many companies used this particular warehouse over the years for storage and shipment of hardware supplies, poultry, and eggs, wholesale groceries, and produce. It is named for Raymond R. Richardson whose wholesale produce company occupied the building from 1937 to 1952. It is nominated for its role in Wichita’s wholesale activity and for its relationship to the transportation of goods by railroad during the first half of the 20th century.

Richardson Produce Warehouse, Sedgwick County.

The National Register of Historic Places is the country’s official list of historically significant properties. Authorized by the National Historic Preservation Act of 1966, the National Park Service’s National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America’s historic and archeological resources. Eligible properties must be significant for one or more of the four criteria for evaluation. Properties can be eligible if they are associated with events that have made a significant contribution to the broad patterns of our history. They can be eligible if they are associated with the lives of persons significant in our past. Distinctive construction can qualify properties for the National Register if they embody the characteristic of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. Lastly, properties may be eligible for the National Register if they have yielded or may be likely to yield information important in prehistory or history. The National Register recognizes properties of local, statewide, and national significance.

The Register of Historic Kansas Places is our state’s official list of historically significant properties. Properties included in the National Register are automatically listed in the state register. However, not all properties listed in the state register are included in the National Register. The same general criteria are used to assess the eligibility of a property for inclusion in the state register, but more flexibility is allowed in the interpretation of the criteria for eligibility.

National Register of Historic Places: nps.gov/nr/
Kansas Historical Society (National and State Registers): kshs.org/14638
Drafts of these nominations and links to photographs: kshs.org/14633
A Tale of Two Cities:
Manhattan’s and Wichita’s African American Communities

It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair . . .

Although Dickens’ famous opening lines in *A Tale of Two Cities* were written about London and Paris around the period of the French Revolution, they could easily apply to the African American communities within Manhattan and Wichita in the late 19th and early 20th centuries. Denied access to the full community, African Americans were forced to live in segregated sections of both cities and attend separate schools. However, in response to (or perhaps in spite of) this segregation, vibrant communities sprang up within both cities where blacks owned businesses, organized social groups, sponsored recreational activities, and controlled and owned their individual churches.

Although these two communities share some similar histories, there were a few key differences as well, starting with the very establishment of the two towns. Manhattan was founded by abolitionists from the New England Emigrant Aid Company in 1855, yet there were no African Americans among the earliest residents. It was not until the Kansas Agricultural Census of 1865 that any African Americans were documented as living in Manhattan, and even then their numbers totaled nine. On the other hand, African Americans were a part of Wichita’s earliest pioneer history. An African American was one of the earliest non-native Americans to settle in the area. Furthermore, between Buffalo Soldiers making trips to the area and the cattle drovers in the 1870s (nearly a third of which were either African Americans or Hispanics), many blacks eventually decided to settle in Wichita. Historian Craig Miner believed that, at least in the early decades of Wichita’s settlement, the pioneer atmosphere of the new town welcomed African Americans for what they could add to the growing community, a sort of “live and let live” attitude. That attitude would soon change, however.

After the Civil War the black population in both Manhattan and Wichita grew at a more substantial rate. By 1870 there were 65 African Americans living in Manhattan, nearly six percent of the city’s residents. However the greatest growth, both in numbers and percentage of the overall population of Manhattan, occurred in 1879 during the mass migration of blacks from the South to Kansas after the end of reconstruction as part of the “Great Exodus.” Many rode steamboats up the Mississippi to St. Louis, and then west toward Kansas City. When the latter town stopped accepting the new emigrants, they continued on to Wyandotte, Kansas. By the time the steamboat *Durfee* arrived there on April 21, 1879, however, that community was overwhelmed with “Exodusters,” and residents quickly raised money to transport nearly the entire group to Manhattan a few days later.

In response to this influx of new citizens, the town leaders of Manhattan voted on a resolution welcoming the former slaves to town, and raised money and food for relief. Other African Americans from former slave states continued to come to the town over the next few months, so that by the
The 1880 census showed that the percentage of African Americans living in Manhattan swelled to 14 percent of the population. As a relatively small town, however, this translated to only 289 people. Although the number of Exodusters may have been greater in other Kansas towns and counties, Manhattan continued to have one of the higher percentages of black residents in the state in the decades through 1900. This translated to some rare political power and significant historical milestones, which were unfortunately forgotten in later years. An African American served on the school board, city council, and the police force. Kansas State University (then Kansas State Agricultural College) celebrated the graduation of the first black male student in 1899, George Washington Owens, followed by the first female African American to graduate in 1901, Minnie Howell Champe. However, due to the overall small number of African Americans in Manhattan, business opportunities were much more limited. With the population holding at around 300, there wasn’t a pressing need to establish separate stores, undertakers, and entertainment venues compared to Wichita and Topeka.

The reaction to the arrival of Exodusters in Wichita was quite different, although initially the prospects for new settlers looked promising. The city started a subscription list in April 1879 to raise money for the Exodusters, with even the mayor pledging funds. Shortly thereafter, though, Marshall Murdock, editor of the Wichita *Eagle*, took a strong and prejudiced stance against the emigrants. Building on fears of a yellow fever outbreak, Murdock spread a rumor in July 1879 that Topeka had shipped 50 “contaminated” blacks to Wichita. The city council called an emergency meeting and passed a quarantine ordinance. Fourteen new arrivals were found and shipped back to Topeka, leading other Kansas newspapers to ridicule the attitudes of Wichita. So while the Exodus movement produced a growth in the numbers of African Americans from former slave states in other parts of Kansas, Wichita did not experience a significant increase in the percentage of blacks moving to town as a result of this migration.

Instead, most new African American residents moved to Wichita for the job opportunities resulting from the city’s real estate boom of the 1880s, with the black population growing from around 5,000 in 1880 to nearly 24,000 by 1890. However, even though their numbers continued to steadily increase from 1890 through the next half century, the percentage of Wichita’s African American population remained around five percent through 1950. Manhattan’s African American population, on the other hand, stayed relatively steady in numbers through 1950. Since the overall population was growing, the percentage of African Americans in Manhattan shrank through the mid-20th century, starting at nine percent in 1900 and down to three percent by 1950.

After 1900 the nation’s prevailing attitudes towards discrimination and laws supporting segregation, coupled with the relatively low percentage of African Americans in both cities, blacks in Manhattan and Wichita held little political power. However, the number of blacks living in Wichita continued to grow during this 50-year span.
from around 24,000 in 1900 to nearly 170,000 in 1950 (contrasting with the 300 to 500 African Americans in Manhattan during the same period). Denied access to white-owned businesses and recreational opportunities in Wichita, African Americans organized numerous businesses and social organizations. In 1922-1923 a local black-owned publishing company printed a *Negro Year Book* 1923 listing more than 100 African American businesses. Black professionals in Wichita included doctors, lawyers and a veterinarian. Over the years several black newspapers were also published in Wichita. On the other hand, Manhattan’s small black population could not support many separate businesses. Furthermore, the lack of any black newspapers in Manhattan unfortunately hinders research of African American history in that community, as white newspapers rarely covered events involving blacks. The rare black-owned businesses in Manhattan typically included small lunchrooms and personal service enterprises, such as barber and beauty shops. There were no black professionals living in Manhattan during the first half of the 20th century; the only jobs available to college-educated African Americans were teaching at Douglass elementary school.

In spite of these contrasts the African American communities in both of these cities had common features, most unfortunately related to segregation. Blacks in both cities were restricted to living in segregated sections of the community. However, the population mixes in the two communities differed: Wichita’s black neighborhoods were almost completely comprised of African Americans, while due to the small numbers of blacks in Manhattan, the black part of that town also housed white and Hispanic families. As a result of the solid concentration of black housing in Wichita, that city was ranked as one of the most segregated in the nation in the 1950s and 1960s. Although the mixture of population in Manhattan may have given the appearance of its being less segregated, the fact is blacks could not live outside of the unwritten boundaries in either city due to restrictive real estate practices. Agents “steered” prospective homeowners to certain parts of town, banks and lending agencies refused loans, and real estate covenants prevented blacks from moving into many subdivisions.

Both cities segregated elementary-age students in defiance of an 1879 Kansas law, which stated that only cities of the first class were allowed to operate separate schools for the races. In Wichita black parents fought the first attempts to segregate students in the early 20th century. Previously students were taught together in the same classrooms, but beginning in 1906 black students were taught in separate classrooms at Park Elementary school. In 1913 four new elementary schools were opened for Wichita’s African American elementary students: Frederick Douglass, Eighteenth Street, Grand, and L’Ouverture. Students in both cities attended integrated junior and senior high schools, but in Wichita the segregated residential patterns effectively resulted in segregated junior high schools.

In Manhattan black students were taught in separate elementary classrooms by 1884, shortly after the arrival of new residents from the South; discussions for a separate black school began in earnest in 1903. Years later the school district would claim that a separate black school was built at the “request” of black parents. However, there are no documents supporting this claim, although there was an editorial written by the district’s African American teacher in support of a separate school. It nonetheless appears that the school district was well along in its plans for a separate
school by the time parents were made aware of the action. In spite of their protests, the Douglas School (initially spelled incorrectly) was opened in 1904, although revealing the split in the African American community, the school board’s only black member, Randall Keele, voted to approve the separate school. Although the African American schools in Manhattan and Wichita were clearly not equal in services to the white schools, they nonetheless were well constructed and were far away better equipped than black schools in southern states. They also provided role models in the form of the African American teachers and principals, and many black residents of Wichita and Manhattan have fond memories of their school days.

While separate schools were forced upon African American residents in Manhattan and Wichita, separate churches evolved to become the single most significant institution in both cities. Black churches served not only as the heart of religious life, but cultural, social, and civic life as well. Nationally, these churches were among the first institutions organized and owned by blacks. They were not only free to express themselves in the church, but they also were among the few places where African Americans served in positions of authority. Churches sponsored choirs, fellowship and charitable groups, educational classes, and literary societies. Continuing their importance to the African American community into the civil rights era, churches played crucial roles in the movement, not only by providing locations for meetings but by sponsoring or participating in the numerous race relations studies, committees, and workshops on race relations. Churches were often the first areas of cooperation between the races in both cities, with white and black members visiting each other’s congregations. The significance of these institutions is reflected in the National Register of Historic Places, albeit belatedly in comparison to white-owned historic resources. The Calvary Baptist Church in Wichita was listed October 28, 1998, and two historically black churches in Manhattan are currently under consideration for listing.

While the issues of segregation and discrimination were clear in both cities, the approaches used during the Civil Rights Movement differed, again likely due to the vast differences in population numbers. Local efforts in Civil Rights not only began earlier in Wichita, but were more activist-oriented than Manhattan. Wichita was also the site of a nationally significant and pivotal event in the nation’s Civil Rights movement—the Dockum Drugstore sit-ins. Conceived and carried out by the local youth chapter of the NAACP, students in Wichita conducted the nation’s first successful sustained sit-in, preceding the sit-in in Greensboro by nearly two years.

In Manhattan the earliest efforts in civil rights originated on campus. Although the numbers of college students at Kansas State University prior to World War II were few, after the war the university made significant strides in ending segregation, starting first with athletics. In 1948 Harold Robinson, a Manhattan native and grandson of Randall Keele, was the first black football scholarship athlete in the Big Seven conference. Earl Woods, another Manhattan native and later father of Tiger Woods, broke another conference color barrier in 1951 as the first black baseball player. The university began hiring black professors in the 1960s, and brought back football notable Veryl Switzer in 1969 to help recruit black students. Residents of Manhattan’s black neighborhood, on the other hand, did not begin to organize until the early 1960s. Although the neighborhood had always suffered from a lack of services and poor infrastructure, when a city street lighting project was proposed to end right at the traditional boundaries of the black neighborhood, the residents had had enough. They organized to protest the
city’s plans, and from this group emerged several important leaders in civil rights, including James Butler, who later served as president of the Kansas chapter of the NAACP as well as chairman of the Kansas Civil Rights Commission.

In studying the historic African American resources in Manhattan and Wichita, one unfortunate similarity between the two cities is the extensive demolition of historic black resources. Since African Americans were restricted to living and working in sections of the cities considered “less desirable,” African American properties were among the first to be demolished under urban renewal projects. Consequently, African American built resources in both Wichita and Manhattan are considered rare property types. This rarity should be taken into account when evaluating the eligibility for registration, and is especially true when evaluating the integrity—more specifically in the area of materials. Although it is often considered an important aspect of eligibility, materials should be given less weight in these circumstances, especially when evaluating residential buildings. Unlike other populations in similar economic situations, African Americans were barred from moving to certain parts of either city through the 1970s. Furthermore, restrictive banking practices often made it difficult to relocate even within the same neighborhood. As a result, black home owners typically “improved” and altered their existing houses. The application of secondary siding materials, for example, is a common alteration to African American residences. Although these buildings should be considered on a case-by-case basis, the rarity of this entire group of resources suggests that these buildings are at least worthy of a second look. If the historic resident would be able to recognize the property in its present condition, then non-original siding should not deter a property from listing.

This article is based on research conducted for Certified Local Government grant projects for Manhattan and Wichita. For both cities, a National Register multiple property documentation form and two individual National Register nominations were prepared. The lead consultant for the Wichita African American project was Deon Wolfenbarger of Three Gables Preservation, with Barbara Hammond providing additional research. Deon Wolfenbarger of Three Gables Preservation was also the lead consultant for Manhattan’s project, with Kerry Davis of Preservation Solutions LLC and Barbara Hammond assisting with research.
Fox Theatre in Hutchinson

A Heritage Trust Fund grant has made possible the restoration of the 1931 marquee at the Fox Theatre in Hutchinson. The like-new marquee was installed with updated electrical service and proper drainage to help ensure a long, useful life. The theater’s former executive director, Mary Hemmings, applied for HTF funding several times in recent years. As the marquee continued to deteriorate, the situation became dire. Application was successful in early 2011 with an award of $90,000 toward the project. Luminous Neon in Hutchinson was quickly contracted to undertake the repairs and work proceeded steadily over the summer. The restored marquee was reinstalled on the historic Art-Deco theater in late September 2011. More information about the marquee and upcoming events at the theater can be found online at hutchinsonfox.com.
In 2008, with the expertise of the Data Access and Support Center at the Kansas Geological Survey, the Kansas Historical Society (KSHS) launched an online database of surveyed resources throughout the state. Meant to be the sole digital repository of survey records, the purpose of the Kansas Historic Resources Inventory (KHRI) is to be also a research and education tool for the public, whether a professional or a homeowner. The functionality of this database is meant to continually expand and mature, so in December 2011, the newest version came online with a cleaner look and new features, including an interactive map.

Other new features to the site include a homepage, the ability to search by state or National Register historic district, and a more user-friendly search results page. The KHRI has 227 registered users and almost 59,000 records in it so far. We continuously rely on members of the public for information about the places important to them, and this database is a way for the public to share that information. To view, edit, search, and play with the new KHRI, visit kshs.org/khri.

The map is the most exciting addition to the KHRI and one that will be upgraded with new features in the coming months. Most surveyed resources within the KHRI are indicated on the statewide map by a blue dot, enabling the user to visualize the number of surveyed resources within a neighborhood, town, or county. Aerial images and a base map with street names are both available, and their transparency can be easily manipulated in the Map Layers tool bar.

Specific features within the state’s inventory also can be searched on the map, such as a date range of all buildings built between 1800 and 1865, by clicking “Search Map Features.” The image here shows the regions of the state where those resources likely occur. Other features on the map include the ability to zoom to a specific city, address, or section/township/range location and a printable PDF map of the view selected.
Clicking on one of the blue dots on the map will bring up a smaller window with the resource's details. If a photo is attached to the survey record, this photo will be displayed. A link on the pop-up window takes the user to the survey record page.

Double-clicking a specific record on the search page will bring up a detailed page of the resource's location, description, history, register status, and survey information. Also available for viewing are photographs and various related documents, which upon clicking, enlarge for better viewing. Along both the top and the bottom of the web page are a series of buttons that will allow the user to create a printable PDF version of the record, complete with thumbnail photos; create an email-able link to the record; view the record on the map; and scroll through the previous and next records.
Good Old Wood

The 2012 Preservation & Sustainability Conference was held in Wichita January 26-28. Several interesting topics were covered, including basic wood science and specification presented by Ron Anthony of Anthony & Associates in Fort Collins, Colorado. This article summarizes some of the points presented by Anthony and includes answers to some common questions.

What accounts for the variable behavior of wood?

Wood is both prized and cursed for its variability. Beautiful, one-of-a-kind grain patterns are sought after, but the fickle behavior can lead to problems. Wood is a natural material and is highly affected by moisture in the environment, both in liquid and vapor forms. It is absorptive and will swell and shrink as the moisture content in the air rises and falls. Wood is constantly trying to achieve balance with its environment, termed equilibrium moisture content (EMC), which depends primarily on the relative humidity, and to a limited extent, the temperature, of the environment. The EMC can be approximated by dividing the relative humidity (RH) of the air by 5. For example, if the RH is 50 percent, then the EMC of the wood is approximately 10 percent. This is the percentage of moisture that the wood will be trying to achieve. This means that if wood with 17 percent moisture content is introduced into an area with 50 percent RH, it will try to release moisture to reach 10 percent moisture content to reach EMC. If it releases moisture too quickly, a large split can result. By using a simple moisture meter (figure 1) you can get a relatively accurate moisture reading in a wood sample. By comparing the reading to the average relative humidity in the air, you can predict with reasonable accuracy how the wood will behave.

What is old growth wood? Why is it better?

Old growth wood comes from virgin forests that are hundreds or thousands of years old. Old growth wood, depending on the species, features close growth rings, superior density, resistance to insects and rot, and superior strength and beauty (figure 2). Wood used to construct buildings in the United States from colonial times up through the turn of the 20th century was predominantly old growth timber. Unfortunately, by the early 20th century old growth forests had been logged to the point of endangerment; current market demands for lumber make it unsustainable to continue the practice, and managed forests of quickly grown trees are the reality of the timber industry. However, there is now a robust market for reclaimed old growth timber. These facts aside, old wood is still sometimes perceived as inferior to the “latest and greatest” new products. For example, historic wooden windows in particular are often targeted for replacement when they are actually extremely well made, are inherently repairable, and will last indefinitely if maintained properly. The same cannot be said for a vinyl replacement window or even a new wooden window!
What is the difference between a seasoning check and a split?

A seasoning check occurs when the wood dries naturally, or is kiln dried, after being cut from the tree. Seasoning checks do not go all the way through the wood piece and do not affect the structural stability of the wood (figure 3). A split goes all the way through a piece of wood and may make it unstable.

![Figure 3 Example of a seasoned timber with seasoning checks.](image)

Seasoning checks do not affect the structural stability of the wood.

How do mold, mildew and fungi affect wood?

Mold and mildew, while unsightly and sometimes hazardous to our health (although rarely), do not result in the deterioration of wood. They only appear on the surface and do not infiltrate the wood. Decay fungi, such as brown rot or white rot, result in breakdown of the wood and can completely destroy a piece of wood (figure 4). In general, 20 percent or greater moisture content is required for fungi to grow. The presence of 20 percent moisture in wood does not guarantee that fungi, mold, or mildew will grow, as spores also need to be present, but it does make it possible. And invisible spores can be anywhere at any time. The exception to this is wood that is completely submerged in water. Fungi and mold cannot grow under water due to the lack of oxygen. In fact, fully submerged timbers are often pulled out of the water in a near perfect state of preservation.

![Figure 4: This interior floor sheathing has been destroyed by wood decay fungi. In this case, an undetected plumbing leak was to blame.](image)

How do I know if there is wood deterioration in my building?

A few simple testing methods can indicate a potential problem with the physical properties of wood members. Often the first clue is that the wood is discolored and shows signs of moisture contact. First, determine if the discoloration is just on the surface or goes into the wood substrate. If the discoloration is mold or mildew, you should be able to wipe it off. A good cleansing with diluted bleach or a non-chlorine bleach alternative will often solve the problem. If the discoloration is not mold or mildew, the deterioration may go into the wood substrate. A good way to test wood for soundness is to probe with an awl; a bluntly pointed tool similar to an ice pick, but with a rounded tip (figure 5). If the awl penetrates the wood easily, it indicates that some deterioration has occurred and the area should be investigated further.

![Figure 5 A small probe indicates that this wood is deteriorated. Sound wood would be generally impenetrable.](image)

It is a good idea to periodically inspect areas of a building that have the potential to be problem areas as wood deterioration may occur in areas that are not directly visible. A good place to check for problems is near the interface of two materials. This is a common area for moisture to enter a structure and may not be easily detected. For example, a common historic method of construction was to install wood...
floor joists in pockets of a masonry foundation (figure 6). This was often done without the use of flashing causing the wood to be in direct contact with masonry. Masonry absorbs moisture and the moisture can easily wick from the masonry to the wood. If the area is not adequately ventilated, the wood will remain damp and deterioration could result in structural deficiency.

What can I do to keep wood in good condition?

Although there are potentially several causes of wood deterioration, many of them are enabled by the presence of moisture for a prolonged period. So one of the best things you can do to prevent deterioration is to manage moisture in and around the building. Building details should be designed to allow the flow of water away from the building. Periodic building inspections will help you spot potential problem areas before they get out of hand. You will not be able to keep the building from getting wet, but you can certainly manage the moisture.

Where can I find more information?

More information can be found in the sources below. The U.S. Forest Products website also provides a wealth of information about wood science. And of course it is always a good idea to consult a professional structural engineer or architect before attempting to make any structural repairs.


Figure 6: Floor joists inserted directly into masonry foundation pockets; A common area of moisture entrapment.

Historic Sites Board of Review

The Kansas Historic Sites Board of Review is a group of 11 professionals from various fields that meets quarterly to review and recommend nominations to the National Register of Historic Places and the Register of Historic Kansas Places, and award preservation planning and rehabilitation grants. As prescribed by the Kansas Historic Preservation Act of 1977 (K.S.A. 75-2719), the board is comprised of the following members: the governor or the governor’s designee, the state historic preservation officer or such officer’s designee, and nine members appointed by the governor for three-year terms. At least one member must be professionally qualified in each of the following disciplines: architecture, history, prehistoric archeology, historical archeology, and architectural history.

Jennie Chinn, State Historic Preservation Officer
Craig Crosswhite, Ness City, chair
J. Eric Engstrom, Wichita, governor’s designee, vice chair
John W. Hoopes, Lawrence
Nancy Horst, Winfield
Leo Oliva, Stockton
Billie Marie Porter, Neodesha
Daniel Sabatini, Lawrence
David H. Sachs, Manhattan
Jay Price, Wichita
Margaret Wood, Topeka

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LiDAR: A New Tool for Locating Historic Trail Segments

The Oregon and California Trails continue to exert a strong influence over the imaginations of people across the state and the larger Central Plains region. This was eloquently expressed in a 1935 speech delivered in Bremen, Kansas. The speaker observed that “The emigration to the west over the Oregon Trail began in 1841 and continued for thirty-five years. And it is estimated that during those years over 350,000 people went to the West and the Pacific Coast and no less than 200,000 people moved over this very spot on which we are gathered today. No wonder yonder ruts are still visible today,” Marysville Advocate, June 13, 1935.

Those and other “yonder ruts” are the subjects of two current, separate Kansas Historical Society projects. The Kansas Historical Society is working in conjunction with the National Park Service in order to identify intact historic trail resources on both the Santa Fe and Oregon-California trails and to nominate those resources to the National Register of Historic Places. Although many trail segments visible in 1935 are still present today, intact trail ruts/swales have steadily decreased over the years due to cultivation, erosion, and development. Given all those changes, finding intact trail segments and authenticating them can be a challenge. The biggest question that arises is whether a set of ruts or a swale actually dates to the trails period, or is actually a later linear feature such as an abandoned road, or a lane to an old farmstead. For example, a Santa Fe Trail swale that was proposed for National Register nomination several years ago was instead determined to be an old silo pit, with the associated farmstead being long gone. For the two current projects, Historical Society staff members are utilizing aerial LiDAR (Light Distance and Ranging) imaging. This new technology is a powerful tool that can be used to help confirm the existence and path of historic trails.

Original Survey Maps
Original survey maps were produced in the mid-19th century by the General Land Office (GLO) in order to lay out the section, township, and range grid by which land was subdivided for settlement (figure 1). Those maps have proven to be significant in finding approximate locations and routes of trail resources. As the GLO surveyors were laying out section lines, they would often (though not always) note where the trails crossed. Between the section lines, they would note the trail’s general path. In many cases, that approximation does not closely follow actual trail segments on the ground. The surveyors also recorded notes that sometimes accompany the maps. The Historical Society has copies of the maps and notes that can be viewed in the State Archives.

United States Geological Survey Topographic Maps and Aerial Photographs
The GLO maps are then compared to modern U. S. Geological Survey (USGS) 7.5 minute topographic maps and aerial photographs. The USGS maps allow close examination of terrain, and can provide clues as to where the trails would have gone, whether along ridges or negotiating hills and water crossings. Aerial photographs are widely available online and can guide field investigations by showing current ground conditions, often in clear high-resolution format.
Primary and Secondary Publications

Of the published collections of primary sources, one of the most widely used is The Beginning of the West: Annals of the Kansas Gateway to the American West 1540–1854. Written by Louise Barry and published by the Kansas Historical Society in 1972, this book contains 1,296 pages of detailed personal accounts of occurrences on the trail by military personnel, traders, and emigrants alike. These accounts often provide detailed locations and describe conditions of the trails, which can prove useful in pinpointing the location of camps and water crossings. A wide variety of secondary sources is also available, including numerous articles and books dealing with the Oregon-California and Santa Fe trails.

Field Survey

The current research project involves field visits to numerous potential trail segments. After the archival research has been completed and the land owners’ permission granted, Historical Society staff conducts site visits to the suspected trail remnants. At each site, digital photographs and Geographic Positioning System (GPS) coordinates are taken and field observations recorded. Since trail ruts can be difficult to photograph, it helps to take pictures when the sun’s rays are at a low angle relative to the ruts in order create shadows in the depressions. Winter, with its lack of foliage, is ideal for this and a dusting of snow aids in highlighting the trail remnants for photography.

LiDAR

LiDAR is a type of remote sensing that uses imagery obtained from satellites and airplanes to map the landscape. It uses pulses of light to measure the distance from an airplane or satellite to a target on the ground. These laser measurements can then be used to create highly detailed maps of the land surface. LiDAR imagery has a major advantage over traditional aerial photography for documenting trails. Unlike aerial imagery, LiDAR can actually penetrate foliage and vegetation, resulting in detailed maps of the bare earth even in heavily forested areas and in areas with dense ground cover. Currently, LiDAR imagery for several Kansas counties is available free of charge through the Kansas Data Access and Support Center (kansascis.org), though a Geographic Information System (GIS) software package such as ArcGIS (esri.com) is required in order to view the maps.

A good example of the capabilities of LiDAR imagery in a forested area was noted at the Green Memorial Wildlife Area in Shawnee County, where a clearly visible segment of trail ruts was observed during pedestrian survey (figure 2). However, it was completely invisible on the aerial image due to the heavily wooded nature of the area (figure 3a). By contrast, the LiDAR imagery reveals a detailed picture of the length, width, and form of this same segment (figure 3b).

In addition to revealing evidence of trail features in areas of heavy vegetation, LiDAR imagery can also reveal subtle features that are invisible to surveyors on the ground within areas with relatively little vegetation. It can therefore often produce results that are superior to traditional field surveying techniques. For example, a series of well-defined trail ruts
near the town of Big Springs has been surveyed. The ruts are recorded on historic maps and are clearly visible on the ground (figure 4). Since the ruts are situated in a maintained pasture with no tree cover, they are also visible on aerial images (figure 5a). The LiDAR map of the same area reveals that the trail ruts are much more extensive than was visible either on the ground or in the aerial image (figure 5b).

**Future Applications**

LiDAR imagery is a powerful new tool that allows researchers to more accurately locate and define historic trail segments. When used in conjunction with careful examination of historic maps and documents, it will help provide a more complete picture of historic trail resources in Kansas.

For more information on discovering the historic trails in Kansas contact Rick Anderson, 785-272-8681, ext. 228; randerson@kshs.org; or John Tomasic, 785-272-8681, ext. 258; jtomasic@kshs.org.

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**Nominate Santa Fe, Oregon-California, and Pony Express trail sites**

The National Trails System of the National Park Service has partnered with the Kansas Historical Society to document historic resources along the historic Santa Fe, Oregon-California, and Pony Express trails in the state. These resources include trail segments, campsites, and crossings. The documentation and evaluation of these sites will help determine potential eligibility for inclusion within the National Register of Historic Places. The Santa Fe Trail sites will be nominated under the Historic Resources of the Santa Fe Trail thematic nomination currently being amended by staff. At least 45 properties (30 for Santa Fe Trail; 15 for Oregon-California and Pony Express trails) will be nominated as part of this project. Although staff members have visited more than 30 sites, we are still seeking property owners who are interested in listing their trail sites (there are no fees, no property ownership changes, no agricultural restrictions, and no public access required). If you know of a historic trail-related site our staff members should visit, or if you have questions about the project, please contact Amanda Loughlin, survey coordinator, 785-272-8681, ext. 257; survey@kshs.org or visit kshs.org/trails.
Pursuing Traces of the Wind People

The 2012 Kansas Archeology Training Program field school will be held June 2-17 at the site of Fool Chief’s Village (14SH305) on the north side of Topeka in Shawnee County. The site is a historically documented Kansa Indian habitation that has been determined eligible for the National Register of Historic Places. A road project, being designed to address safety concerns at the intersection of U.S. 24 and Menoken Road, will have a negative impact on the site. The Kansas Historical Society, under contract with the Kansas Department of Transportation (KDOT) and under the direction of the Federal Highway Administration, will carry out a data recovery program to mitigate adverse effects to the site. The Kansas Anthropological Association will partner with the Historical Society in this effort on the June 2-17 portion of the fieldwork.

Around 1830 the Kansa (also known as the Kanza or Kaw) left their villages in the Manhattan vicinity and moved eastward to be closer to the newly formed agency at Cantonment Leavenworth in northeastern Kansas. American Chief and Hard Chief established villages along Mission Creek south of the Kansas River in western Shawnee County. Fool Chief (Kah-he-ga-wa-ti-an-gh, translated by Kansa historian George Pierson Morehouse as brave and courageous, even to rashness) established his village between the Kansas River and Soldier Creek. Contemporary traders, travelers, and missionaries described Fool Chief’s as the principal Kansa village with 30-50 lodges that sheltered a population of 700-800 people. These villages were among the last that the Kansa occupied in the tribe’s ancestral homeland before members were relocated by the U.S. Government to a reservation near Council Grove.

Fool Chief’s Village was occupied during 1830-1844, a tumultuous period when important cultural and economic
changes were disrupting Native American communities. The Kansa had deeply integrated themselves into trade networks, and mass-produced trade items were readily available to them. They continued to practice seasonal hunting and agriculture, living a semi-sedentary way of life. Hunting, however, took on new meaning as the acquisition of hides gave the Kansa access to markets, and competition and warfare periodically raged between the Kansa and the Pawnee and other tribes. White settlers encroached on the already diminished Kansa lands, and the Kansa saw their way of life change dramatically. Researchers actually know surprisingly little about how native peoples acted and reacted to the rapid changes unfolding in their communities and in the world around them.

In 1957 then State Archeologist Roscoe Hall Wilmeth recorded the site. The site was known historically and was mapped at this location based on eyewitness accounts and historical data; however, pedestrian surveys in 1957, 1969, and 1974 seeking to document the village location found virtually nothing. Metal detector surveyors intensively collected the site over the years.

In spring 2006 KDOT requested archeological evaluation of 14SH305 because proposed improvements to U.S. 24 threatened 14SH305. The Kansas Historical Society Contract Archeology Program (CAP) conducted a pedestrian survey with some shovel tests, a limited metal detector survey, and restricted remote sensing. In fall 2006 a road grader was used to strip away portions of the plow zone along the approximate centerlines of the proposed roadways. Archeologists shovel skimmed to investigate possible house and hearth features.

In light of the discoveries, KDOT funded a geophysical survey of the site using magnetic and resistivity devices. Numerous anomalies were found, three of which were recommended for further investigation. In fall 2007 CAP conducted test excavations over the three anomalies, but no features were encountered. Next an area was scraped and systematically monitored by archeologists, volunteers, and metal detectorists. The scraping revealed the presence of five charcoal and artifact concentrations, ranging up to 10 meters (about 30 feet) in diameter. Unfortunately, heavy rodent disturbance made them difficult to interpret.

In June-July 2011 Dr. Margaret C. Wood of Washburn University conducted an archeological field school on the property. Dr. Wood and her students used a total station to pinpoint the location of two features that were uncovered during the 2007 KDOT project, and they excavated one of them. Three postmolds and several burned elements were identified.

The primary objective for the 2012 KATP field school is to recover as much information as possible from the part of 14SH305 that will be impacted by the KDOT project. KSHS Highway Archeologist Tricia Waggoner will serve as principal investigator for the 2012 project. She has identified research questions concerning trade, lodging styles, regional comparisons, and a number of other issues. This is a sample of the questions that she hopes the project will answer:

- Other than bison, what animals for fur trade are represented in the faunal remains at the site?
- Are any pre-contact manufacturing styles still being practiced by the Kansa at Fool Chief’s Village, or has all manufacturing been superseded by trade?
- Historical accounts indicate that the Kansa lived in both earth lodge villages and bark lodge villages. What style of lodge was being used at Fool Chief’s Village?
- How does Fool Chief’s Village compare with other known Kansa sites, such as Hard Chief’s Village, Blue Earth Village, the Fanning Site, and the Council Grove villages?
- Is there evidence of horses and dogs at Fool Chief’s Village?

Overall, the results of the investigation will contribute to knowledge of the Fool Chief’s Village site and to better understanding of Kansa adaptations during the Contact period, especially compared to other Contact-period groups in the Great Plains.
Registration Packet Available
The project headquarters will be at the Kansas Historical Society, 6425 SW 6th Street in Topeka. Registration, the artifact-processing lab, including the water screening and soil flotation stations, and some classes will take place at the KSHS complex. Classes, which can be taken for college credit through Emporia State University to fulfill KAA Certification Program requirements, or simply for the information, are Archeological Fieldwork, Basic Archeological Excavation, Archeological Short Subjects, Our Town II: Preserving Local Museum and Archives Collections, and Historic Buildings.

Details are included in the registration packet, which is posted on the website (kshs.org/14622) but also is available in hard copy. The packet contains forms for KAA and/or Kansas Historical Foundation (KHF) membership; registration and scheduling forms; options for lodging, camping, and food; a map of pertinent project locations; a list of recommended equipment; instructions for enrollment in formal classes; details about the KAA certification program; and a schedule of accompanying activities.

Registration forms submitted by May 1 qualify for a participation fee of $20 for KAA and KHF members and $80 for nonmembers. After May 1 the participation fee increases to $30 for members and $90 for nonmembers.

Although field and laboratory activities continue without stopping for the 16-day period, volunteers may participate for a single day or the entire time. Participants must be at least 10 years of age, and those younger than 14 must plan to work with a parent or other sponsoring adult at all times. A legally responsible adult must accompany participants between 14 and 18 years of age.

The KSHS and KAA do not discriminate on the basis of disability in admission to, access to, or operation of their programs; please make prior arrangements to accommodate individuals with disabilities or special needs with the KSHS public archeologist at 785-272-8681, ext. 266.

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Happenings in Kansas

Through April 28
Ledger Art of the Cheyennes and Kiowas Exhibit • Pawnee Indian Museum State Historic Site, Republic

Through April 29
You Are Here: Putting Kansas on the Map Exhibit • Kansas Museum of History, Topeka

April 14
Spring Tea • Grinter Place State Historic Site, Kansas City

April 21
KAA Annual Meeting • Meade County Historical Museum, Meade

April 24-July 29
HeadBling! Hats from the Museum Collections • Kansas Museum of History, Topeka

April 26
History and Environmental Fair • Kansas Museum of History, Topeka

April 28-29
Grinter Place Quilt Show • Grinter Place State Historic Site, Kansas City

April 29
Archaeology Family Day • Topeka and Shawnee County Public Library, Topeka

May 12
Historic Sites Board of Review • Kansas Historical Society, Topeka

June 2 – 17
Kansas Archeology Training Program, Shawnee County • Kansas Historical Society, Topeka

June 13-14
Our Town II: Preserving Local Museum and Archives Collections and Historic Buildings • Kansas Historical Society, Topeka

Join the Preserving Kansas listserv under Historic Preservation at kshs.org.