



# Kansas LTAP Fact Sheet

A Service of The University of Kansas Transportation Center for Road & Bridge Agencies

## Considerations for Restoring Historic Bridges

By Aliza Chudnow

**A** historic bridge paints a picture of what life was like in the past. Many older bridges in Kansas are listed on national, state or local historic registers, deemed especially worthy of preservation. This article describes criteria and considerations for restoration, financial assistance available for restoration, and highlights a bridge restoration project in Wichita.

**Types of listings.** A historic bridge can be nominated for national or state listing as a historic property. Some communities have a local listing process, too, like the cities of Wichita and Lawrence, and that's a third possibility. You can nominate a bridge for any or all of these listings. Instructions for nominating a property for federal or state listing are available at <http://www.kshs.org/p/nomination-process/14654>.

**National listing** makes it possible for you to apply for federal financial assistance for the listed property. Federal restoration standards must be followed. (See the federal standards sidebar on the next page.)

**State listing** provides an extra measure of protection for a property, along with also requiring that federal restoration standards be followed. Patrick Zollner, Director of the Cultural Resources Division at the Kansas State Historical Society, said the Kansas preservation statute, K.S.A. 75-2724, requires that state the historic preservation officer be given notice and an opportunity to investigate and comment upon any proposed project the state (and any political subdivision of the state) undertakes that will "damage or destroy" federal- or state-listed historic property.

**Local listing** establishes a property as being important to the community and can help establish local preservation funding priorities. The community sets its own restoration standards. This is the most flexible option, but with fewer options for funding assistance.



**Preservation Profile: Minisa Bridge.** Built in 1932 in Wichita, the Minisa Bridge was listed on the Wichita Register of Historic Places in 1979 and was restored in 2007. The restoration project received a Transportation Enhancement grant through KDOT. \$2 million of the City of Wichita's general funds were spent in addition to the grant.

Restoring the Minisa Bridge was no easy feat. Originally the city was only going to repair the deck and the rails, said Wichita's senior planner, Kathy Morgan. But during preliminary inspections, the structural components of the bridge were found to be compromised. The abutments, deck and pilings had to be replaced.

Also needing restoration were concrete sculptures at the bridge heads (see photo above) and Carthalite railings and some of the colored Carthalite sculptures. A product unique to Wichita, Carthalite is cast stone with colored glass in the mix.

"A historic masonry consultant was hired and then he trained the contractor [to restore the Carthalite]," Morgan said. "We did mortar and concrete testing to determine the chemical make-up of the original material and then duplicated that material."

The city launched a campaign to involve the community to participate in the restoration process. The city conducted a press conference and advertised in the local paper and on TV to ask for donations of 1930's- era colored glass that the contractor needed to reconstruct the Carthalite. A donation booth was set up near the bridge site. Even though the bridge was closed for six months and caused traffic hardships, the public was invested in helping the project succeed.

"Restoring the Minisa Bridge was a huge success in engaging the community," Morgan said. "Over 200 people attended the re-opening."

The Minisa Bridge, along with many others, remains an important physical reminder of Wichita's history, and will continue to stand strong for many more years to come.

Parsons Brinckerhoff



**Financial assistance for bridge restoration.** The Kansas Historical Society manages one of the two primary financial assistance programs—the Heritage Trust Fund. For this program, 80/20 matching grants up to \$90,000 are available for federal- or state-listed bridges. Another avenue for bridge preservation funds, and one that does not require a federal or state listing, is a Transportation Alternatives Grant, administered by the Kansas DOT. A bridge may be awarded either a Heritage Trust Fund or a Transportation Alternatives Grant, or both. Zollner said both grant programs are competitive. If selected, the bridge owners work closely with the State Historical Society to make sure the bridge is restored according to the federal Standards for the Treatment of Historic Properties.

KDOT Federal Funds Exchange dollars can be used for bridge restoration using local standards, or as a match for one of the above grants.

**Restoration considerations.** Listing a property does not guarantee that it will be restored. For example, the Austin Bridge in Neosho County has been listed on the National Register of Historic Places for almost 40 years, still unrestored. Zollner said there is no established process for restoring listed property. “Listed properties are routinely demolished through neglect or re-development,” he said.

Before deciding to restore a historic bridge, do your homework. Even if you are fortunate enough to be awarded outside financial assistance, local funds will be needed too. It could be an expensive project. See the sidebar on the next page for some thoughts from Clark Rusco of Barton County about what could drive up costs for restoring stone bridges.

Restoring a historic bridge needs strong community support to gain political support. Often citizens have emotional ties to historic bridges that can help this process. Wichita built community support for restoring its Minisa Bridge—see sidebar on the first page. And that support has now turned into community pride.

**More information.** For (much) more information about restoring historic bridges than we have space for here, visit

## US Secretary of the Interior’s Standards for the Treatment of Historic Properties

These standards, codified as 36 CFR Part 68, are regulatory for Historic Trust Fund and Transportation Alternatives grants. The Standards are neither technical nor prescriptive, but are intended to promote responsible preservation practices. For example, they cannot, in and of themselves, be used to make essential decisions about which features of the historic structure should be saved and which can be changed. But once a treatment is selected, the Standards provide philosophical consistency to the work.

The four treatment approaches, in hierarchical order, are Preservation, Rehabilitation, Restoration, and Reconstruction.

**Preservation** places a high premium on the retention of all historic fabric through conservation, maintenance and repair. It reflects a structure’s continuum over time.

**Rehabilitation** emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work. (Both Preservation and Rehabilitation standards focus attention on the preservation of those materials, features, finishes, spaces, and spatial relationships that, together, give a property its historic character.)

**Restoration** focuses on the retention of materials from the most significant time in a property’s history, while permitting the removal of materials from other periods.

**Reconstruction** establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials.

Choosing the most appropriate treatment for a building requires careful decision-making about a building’s historical significance, as well taking into account a number of other considerations, including:

- Relative importance in history
- Physical condition
- Proposed use
- Mandated code requirements

Source: [http://www.nps.gov/hps/tps/standguide/overview/using\\_standguide.htm](http://www.nps.gov/hps/tps/standguide/overview/using_standguide.htm)

<http://www.kshs.org>. If you have a specific question about restoring a bridge, contact Patrick Zollner at [pzollner@kshs.org](mailto:pzollner@kshs.org).

**To list or not to list?** Barton County has six historic stone bridges in need of repair, built in the 1940’s by the Works Progress Administration (WPA). The bridges are on the National Historic Register. Clark Rusco, Barton County engineer, sees value in listing historic bridges, because a listed property is eligible for Heritage Trust funding. However, he cautions local governments to think about whether they will realistically be able to meet the standards in restoring listed structures (see information on the standards at page 2).

At the 2012 MINK local roads conference, Rusco said, in his opinion, stone bridges probably should *not* be nominated for historic designation if damaged stones are low in the structure, near the natural waterline, and need to be replaced, if stones are missing from the structure, or if “all of the stone masons in the area are on Medicare.” Those situations could create a costly project. He said a stone structure *should* be nominated for historic designation if the structure is in good shape, grout is the major repair item, you can preserve work of previous craftsmen, and if contractors are in your area to do the work. Rusco also advised that extra paperwork is part of the territory when working with a listed property, and to be prepared for that.



It's easy to learn which bridges in your jurisdiction are located on the national and Kansas registers of historic places:

- Go to <http://www.kshs.org/p/register-database/14638> to access the database menu.
- To find all the listed bridges for your jurisdiction, type the word “bridge” under “Property/District Name” and add the name of your jurisdiction where indicated. Press “Search” and you will see your listed bridges along with their descriptions and photographs.

Another helpful resource is the Historic Bridge Foundation (<http://historicbridgefoundation.com>), a clearinghouse of information on how to restore a historic bridge, including a list of contractors with experience in bridge restoration.

Also, an Iowa-based grass roots organization called Workin' Bridges has spearheaded bridge restorations in Iowa and has recently been involved in efforts to preserve several historic Kansas bridges. Learn more at <http://www.skunkriverbridge.org/the-project.html> or contact Julie Bowers at [jbowerz1@gmail.com](mailto:jbowerz1@gmail.com) or at (641) 260-1262. ■

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Sources: ■ ■ ■

- Interviews. Clark Rusco on June 1, 2012; Kathy Morgan on June 4, 2012; Patrick Zollner on June 10, 2012.
- Kansas Historical Society website. <http://www.kshs.org>
- Kansas Statute K.S.A. 75-2724. <http://www.kshs.org/p/state-historic-preservation-statute/15577>
- Hamada, Abdul. “Something Old, Something New: Wichita restores historic bridge.” *Government Engineering*. March-April 2009.
- Rusco, Clark. Is it better to be a stone arch bridge or an historic stone arch bridge? Presentation at 2012 MINK conference, St. Joseph, MO.