

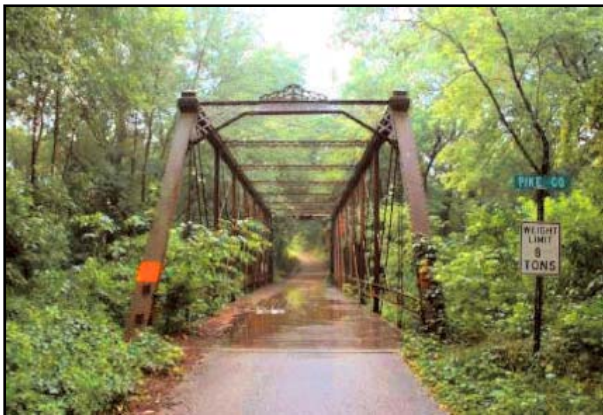
Successes **in** Stewardship

<http://www.environment.fhwa.dot.gov/strmlng/es4newsltrs.asp>

June 2011

Preserving Historic Bridges through a Streamlined Environmental Review Process

Historic bridges enhance a community's character and are an important part of the United States' transportation infrastructure. As these bridges age, transportation agencies might need to rehabilitate or replace them to ensure the safety of the traveling public. However, agencies can face complications when applying for Federal funding for rehabilitation or replacement. The Section 106 process of the National Historic Preservation Act (NHPA) is a particularly challenging requirement for bridge rehabilitation. Section 106 requires infrastructure developers to identify any historic properties that might be affected by their projects. It also requires developers to assess and resolve adverse effects of construction to these properties by consulting with a State Historic Preservation Officer (SHPO) and other stakeholders. The Federal Highway Administration (FHWA) provides resources and technical assistance to State Departments of Transportation (DOTs) and counties to preserve their historic bridges. Some States, such as Indiana, Ohio, and California, have developed statewide historic bridge programs to expedite the Section 106 process and encourage agencies to restore and preserve their historic bridges.



Historic Bridge in Pike County, Indiana. (Courtesy of Mead & Hunt)

Historic bridges can provide particular benefits to communities. Planners and transportation officials note that historic bridges often have unique and context-sensitive designs, fostering a sense of place as a monument to a community's history. Additionally, historic bridges are typically narrower than newer bridges and therefore can function as traffic-calming devices, as drivers tend to reduce speeds in narrower lanes. Residents and business owners often express appreciation for how historic bridges reduce traffic speed, especially when bridges serve as gateways to community centers. Preserving historic bridges can also provide environmental and economic benefits; agencies can reduce waste and yield significant cost savings by rehabilitating instead of replacing historic bridges.

Highway Bridge Replacement and Rehabilitation Program

Chapter 23 of the U.S. Code, Section 144 (the Highway Bridge Replacement and Rehabilitation Program) defines historic bridges as those included in or eligible to be included in the National Register of Historic Places. The U.S. DOT and State agencies are responsible for implementing programs that encourage "inventory, retention, rehabilitation, adaptive reuse, and further study of historic bridges." To fulfill this responsibility, FHWA provides resources on its [Historic Bridges website](#), including maintenance manuals, case studies, and best practices reports. FHWA also partners with the American Association of State Highway and Transportation Officials (AASHTO) Community of Practice for Historic Bridges and the Historic Bridge Alliance to identify case studies, promote good practices in historic bridge preservation, and provide webinars on historic bridge preservation and rehabilitation. The next webinar, which will focus on working with ferrous materials in historic bridges, will be held in late 2011. In addition to providing these resources, FHWA funds historic bridge rehabilitation projects through the [Highway Bridge Replacement and Rehabilitation Program](#), the [Transportation Enhancement Program](#), and the [National Historic Covered Bridge Preservation Program](#).

Federal regulations and assistance programs for historic bridge preservation pose challenges for agencies. Agencies that apply for Federal funds for historic bridge projects must determine if their bridge qualifies as historic. This may require substantial research if the bridge has not been previously evaluated. Agencies must also comply with the NHPA Section 106 review process. This process includes consultation with the SHPO and other interested parties to assess proposed projects' effects on the bridge. Repairing or replacing historic materials or replacing the entire bridge with a new structure could result in an "adverse effect," which requires mitigation. The following section documents Indiana's efforts to streamline the Section 106 process and encourage the rehabilitation of historic bridges.

Indiana's Historic Bridge Inventory

In the early 2000s, [Indiana Landmarks](#), a nonprofit organization devoted to protecting unique architectural and historic properties, published an article on the rapid demolition rate of Indiana's historic bridges. Counties often demolished and replaced the bridges using local funds because officials were deterred by the requirements and timeframes of the Section 106 process. The process to apply for Federal funding took approximately 6 to 12 months, with many projects taking 5 years or more to complete. Additionally, some counties were unaware that their bridges were eligible for Federal rehabilitation funds.

FHWA's Indiana Division Office responded to the article by creating a task group to determine how best to protect the State's historic bridges. The task group included representatives from FHWA, the Indiana DOT (INDOT), the Indiana SHPO, the Indiana Local Technical Assistance Program, Indiana Landmarks, the Historic Spans Task Force, the Indiana Association of County Highway Engineers and Supervisors, the Indiana Association of County Commissioners, the office of Senator Richard Lugar, and the Advisory Council on Historic Preservation. The task group developed a Programmatic Agreement (PA) that called for streamlining the Section 106 process and required INDOT to develop a program to inventory and manage all of the State's historic bridges built before 1966.

Completed in 2010, the [Indiana State Historic Bridge Inventory](#) uses data from the [National Bridge Inventory](#) and incorporates information from historians and the public to identify historic bridges and prioritize them for preservation. The Inventory lists all of Indiana's approximately 800 historic bridges and prioritizes them by historic importance and their suitability for preservation. The ranking scheme is based on a bridge's functionality, safety, and cost effectiveness to rehabilitate. The Inventory classifies bridges either as "Select," meaning the bridge is an excellent or rare example of a given type and is suitable for preservation, or "Non-Select," indicating a lower historic value or a less suitable candidate for preservation. The Inventory includes a Project Development Process (PDP) to help agencies complete the Section 106 process for Indiana's historic bridges, significantly reducing the time and effort that local agencies need to research and plan for bridge preservation.

INDOT and FHWA partnered with the consulting firm Mead & Hunt to develop the prioritization process with significant input from county governments, historic preservationists, and community groups. The agencies maintained transparency throughout the effort by updating a project website, holding public and task group meetings, and communicating directly with stakeholders. By consulting interested parties throughout the process, the agencies improved the prioritization process and made it possible for Indiana counties to more efficiently plan for historic bridge preservation.

By streamlining the Section 106 process and identifying bridges with historic value throughout the State, FHWA and INDOT expect to save a significant number of historic bridges from replacement, which will preserve community character, reduce waste, and cut costs for local governments. Additionally, the PA signing agencies agreed that the State and counties could no longer use Federal funding to demolish historically important or "Select" bridges. Consequently, agencies are using Federal dollars to preserve, rather than replace, historic bridges. Finally, the PA stipulates that agencies that intentionally demolish or otherwise diminish the historic integrity of a "Select" bridge with non-Federal-Aid funds must follow the normal Section 106 process for any future Federal-Aid bridge project proposed by that agency. Per the Historic Bridge PA, INDOT will update the Inventory every 10 years to account for the aging of bridges and changes in relative historic importance.

Lessons from Indiana's Inventory

INDOT's Historic Bridge Inventory is a model for other States looking to expedite their PDPs for historic bridges. Other States have made advances in historic bridge preservation and rehabilitation through education, rehabilitation guidelines, and inventories. However, Indiana's Historic Bridge PA provides additional support by prioritizing bridges for preservation, establishing a standard PDP for historic bridges, and establishing standard mitigation requirements. By using the Inventory results and the Historic Bridge PA, agencies can strategically plan to preserve the most critical bridges before rehabilitation becomes cost prohibitive due to age and disrepair.

FHWA Indiana Division Office staff note that INDOT's close working relationship with community groups, especially preservationists, was a key factor in developing the Historic Bridge PA and completing the Inventory. Indiana has a vocal historic preservation community, which INDOT found to be helpful in gathering information and providing input to assess historic bridges.

The [FHWA Historic Bridges website](#) is an online resource for best practices and guidance on historic bridge programs from Indiana and across the U.S. The website contains technical guidance, streamlining examples, funding links, and other tools for States to more effectively plan to preserve or rehabilitate historic bridges.

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Look What's New!

- In April, FHWA released a report entitled, "Evaluating Montana's ITEEM: Successes and Lessons for Eco-Logical." FHWA studied the Integrated Transportation and Ecological Enhancements (ITEEM) for Montana pilot to document an application of the *Eco-Logical* approach that could be replicated nationwide. The results of this study are posted in a [report](#) and [highlights brochure](#).
- AASHTO will host the National Planning and Environmental Practitioners Meeting – Standing Committee on Planning (SCOP)/Standing Committee on Environment (SCOE). The meeting will be held from June 20 through June 23 in Boston, MA. For more information, visit the [SCOP/SCOE website](#).
- The Council on Environmental Quality (CEQ) submitted its ninth report to Congress on the status and progress of National Environmental Policy Act reviews for projects and activities receiving economic stimulus funds under the American Recovery and Reinvestment Act. The report is available at the [CEQ website](#).
- AASHTO's Center for Environmental Excellence launched a redesigned website. The new [website](#) features a monthly case study that highlights a best practice from AASHTO member States, a calendar of upcoming meetings and events, and an enhanced "search" feature.
- FHWA held a webinar titled "Intersections Between Eco-Logical and PEL: FHWA Programs to Improve Environmental Outcomes" on April 6, 2011. The slides are available on the [Eco-Logical website](#).
- AASHTO recently released its "[Guidelines for Vegetation Management](#)" publication, which includes guidelines to assist managers in integrating the roadside vegetation management process into highway project planning, design, construction, and maintenance.

Successes in Stewardship is a Federal Highway Administration newsletter highlighting current environmental streamlining and stewardship practices from around the country. To subscribe, visit http://environment.fhwa.dot.gov/sis_registration/Register.aspx or call 617-494-2273.