



EO-2292

SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

July 25, 2014

Charlene Dwin Vaughn, AICP
Assistant Director, Office of Federal Agency Programs
Federal Permitting, Licensing and Assistance Section
Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington, D.C. 20001-2637

Re: STB Docket No. FD 35523, CSX Transportation, Inc. – Joint Use – Louisville and Indiana Railroad Company, Inc.: **Notification of Adverse Effect and Invitation to Participate**

Dear Ms. Vaughn:

Pursuant to the regulations implementing the National Historic Preservation Act, 16 U.S.C § 470 (NHPA), the Surface Transportation Board (Board) (1) notifies the Advisory Council on Historic Preservation (ACHP) of the adverse effect resulting from the proposed replacement of the Flatrock River Bridge, a component of a joint rail use proposal in Indiana, and (2) invites ACHP to join in consultations with the Board, CSX Transportation, Inc. (CSXT), Louisville and Indiana Railroad Company, Inc. (L&I) and the Indiana State Historic Preservation Officer (SHPO) regarding the adverse effect to the Flatrock River Bridge.

Description of the Undertaking

CSXT and L&I submitted an application to the Board in 2013 seeking approval for joint use by CSXT and L&I of L&I's 106.5-mile rail line between Indianapolis, Indiana and Louisville, Kentucky (see Figure 1). CSXT would pay L&I \$10 million dollars for the operating easement. CSXT would also spend between \$70 and \$90 million to improve L&I's rail line to allow CSXT to move trains that are longer (from current 5,100-foot long trains to proposed 7,500-foot long trains), faster (from the current 15 to 25 miles per hour to proposed 49 miles per hour), and heavier (from current rail cars that can carry 263,000 pounds of freight to proposed rail cars that can carry 286,000 pounds of freight) than what the L&I rail line can currently accommodate. The CSXT-proposed improvements to the L&I rail line include installing heavier-weight and continuously welded rail over the Indiana portion of the 106.5-mile rail line, adding "hot box" detectors (i.e., track-side devices that can detect overheated axel bearings on passing rail cars), replacing older cross-ties, adding new ballast, and replacing the Flatrock River

OEA Note: The documents contained in the enclosures to this letter are all available on the Board's website at www.stb.dot.gov under STB Docket No. FD 35523 as either "Environmental Correspondence," "Filings," or "Decisions."

Bridge (an existing bridge with weight and speed restrictions), located near Columbus, Indiana. CSXT might also increase the length of existing rail sidings at Elvin and Brook, Indiana.

A Board decision on whether to grant the proposed joint use of L&I's rail line meets the definition of an "undertaking" under the NHPA. If the Board should approve the proposed joint use, CSXT would reroute between 13 and 15 trains per day from its rail lines to the L&I rail line. According to CSXT, rerouting these trains to the L&I rail line would improve the efficiency, consistency and reliability of CSXT operations in the Midwest region.^a The Area of Potential Effects (APE) for the undertaking is the right-of-way of the L&I rail line. The width of the right-of-way in Indiana is typically 60 feet. However, during reconstruction of the Flatrock River Bridge, temporary access could be required outside of the existing right-of-way, but the location, extent and need for such access won't be determined until final design of the replacement bridge is completed.

Steps Taken to Identify Historic Properties

Steps to identify historic properties were initiated with preliminary consultations and database reviews during the early stages of the environment review process. On OEA's behalf, CSXT made first contact with the SHPO via letter on July 11, 2011 (see Enclosures, Disk 2). The letter summarized the purpose and need for and general extent of planned improvements of the L&I rail line under the proposed joint use project, and requested SHPO input. In a reply letter dated August 9, 2011 (see Enclosure, Disk 2), the SHPO recommended review of various databases including the State Historic Architectural and Archaeological Research Database (SHAARD), Indiana Register of Historic Sites and Structures, and National Register of Historic Places (National Register). The SHPO also identified eight archaeological sites and six cemeteries in the vicinity of the L&I rail line right-of-way.

In a September 9, 2011 letter (see Enclosures, Disk 2), CSXT requested SHPO's opinion regarding National Register eligibility of the Flatrock River Bridge, which carries the L&I rail line over the Flatrock River at Mile Post (MP) 40.19. The CSXT letter notes that no information on the bridge is available in SHAARD. Attachments to the CSXT letter request included a topographic map showing the location of the bridge and nine photographs of the bridge. To accommodate heavier and faster-moving rail cars, CSXT notes that it plans to replace the Flatrock River Bridge with a similar steel-girder type structure. The SHPO replied to the eligibility determination request in an October 11, 2011 letter, and states its belief that the bridge meets the criteria for eligibility for inclusion in the National Register and that it appears to be significant under Criterion A and C for its association with transportation and as a good example of a heavily built, Pratt through-truss bridge. The SHPO noted that it would resume identification and evaluation procedures for the proposed joint use upon receipt of the Draft Environmental Assessment (EA) begin prepared by the Board's Office of Environmental

^a The CSXT trains would mostly be rerouted from its Louisville, Kentucky to Sidney, Ohio rail lines. CSXT explains that these rail lines are close to operating capacity and that because of their steep grades and tight curves, CSXT must restrict both the length and speeds of its trains. These steep grades and tight curves also make the physical rail line improvements needed to increase train speeds and operating capacity uneconomically. The proposed joint use would not include any construction on or physical improvements to any of CSXT's rail lines in Indiana or elsewhere.

Analysis under the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347 (NEPA) and the Board's own environmental rules at 49 C.F.R. Part 1105.

The Draft EA was issued by the Board on August 30, 2013 for a 30-day public review and comment period (see Enclosures, Disk 1). The Draft EA identifies the databases reviewed during EA preparation, including Indiana Survey of Historic Sites and Structures reports, SHAARD, and the National Register (Draft EA, pp. ES-19 and 3-70). The document acknowledges the archaeological sites and cemeteries identified by the SHPO in its August 9, 2011 letter, notes that any improvements to the L&I rail line under the proposed joint use would be contained within the existing L&I right-of-way, and concludes that the archaeological sites and cemeteries would not be directly impacted (Draft EA, p. ES-20). The Draft EA also concludes that replacement of the Flatrock River Bridge would constitute an adverse effect to a potentially eligible historic property (Draft EA, pp. ES-19, 3-70 and 3-71).

Description of Affected Historic Properties – The Flatrock River Bridge^b

Flatrock River Bridge is located approximately 1.6 miles northwest of Columbus, Indiana. The bridge consists of two pin-connected Pratt through truss spans at 144 feet, 8 inches each and seven riveted, deck-plate girder spans at 30 feet each on the south approach (see sample photograph in Figure 2). The bridge consists of open deck, timber-tie construction supporting one mainline track, and a single timber and steel-grate walkway on the west side of the bridge. Most of the existing truss bridge elements are over 100 years old and are suffering from wear, steel fatigue and corrosion.

The bridge was designed in 1897. The design of the bridge is known as “Pin-Connected Pratt Truss.” Pin-connected Pratt through truss bridges were commonly used for railway structures on spans of 125 to 200 feet built between 1890 and 1920. The design style is considered significant from an engineering perspective because of its simplicity and low cost. The original two truss spans and supporting substructure of the Flatrock River Bridge were built in 1899, and numerous repairs to broken and deteriorated parts have been made over the years. Seven riveted, steel deck girder spans and supporting stone substructure were built in 1916 to replace timber approach spans at the south end of the truss spans. Structural steel trusses and girder spans are “medium steel” and all rivets are wrought iron, which was in common use at the turn of the 19th century. The piers and abutments were built of stone masonry on spread footings, excepting the two main span support piers, which are supported on 20-foot-long timber pile foundations. These two main-span piers were encased in concrete around 1970 due to differential settlement and advanced deterioration of the original masonry. In 2012, the upper portal braces were reconfigured, and the upper lateral bracing square rods were replaced with new round rods.

^b Source: Minimum Architectural Standards for Flatrock River Bridge MP 40.19 over Flatrock River, Bartholomew County, Indiana, prepared by Butler Fairman Seufert, November 2913, attached with Enclosures, Disk 2 and available on the Board's website.

Description of Potential Effects

Consistent with the Draft EA and in concurrence with the SHPO, OEA concludes that replacement of the Flatrock River Bridge would constitute an adverse effect to an historic property that is potentially eligible for inclusion in the National Register (Draft EA, pp. ES-19, 3-70 and 3-71). Replacement would include replacing the existing through-truss bridge with a similar steel-girder superstructure.

By letter dated November 19, 2013 (see Enclosures, Disk 2), the SHPO concludes that no archaeological investigations appear necessary if proposed improvements to the L&I rail line are limited to areas within the disturbed L&I right-of-way. The SHPO adds that if any proposed improvements to the L&I rail line are to occur within 100 feet of the six identified cemetery, a development plan would be to be submitted to and approved by SHPO. OEA concludes that no adverse effects would occur to archaeological sites if proposed improvements to the L&I rail line are limited to the disturbed right-of-way and the improvements would also be located at least 100 feet from the six identified cemeteries.

Conditions or Future Actions to Avoid, Minimize or Mitigate Adverse Effects

As explained above, the purpose of the proposed joint use and related improvements to the L&I rail line is to enable CSXT to improve the efficiency, consistency and reliability of CSXT operations in the Midwest region. A key component of these proposed operations is the ability of the Flatrock River Bridge to accommodate modern rail cars and trains that are heavier and moving at faster speeds. The Flatrock River Bridge, believed to have been built in the late 1800s to early 1900s, is currently under weight and speed restrictions, and is not capable of accommodating the rail traffic that would operate on the L&I rail line under the proposed joint use. In a September 13, 2013 letter to SHPO (see Enclosures, Disk 2), Mr. Garry Shook, P.E., an independent railroad bridge engineer retained by L&I and CSXT, explains why the bridge (1) is not suitable under the joint use proposal, (2) cannot be modified and (3) must be replaced.^c Several of the engineer's key points about the bridge include the following:

- The two main-span piers were encased in concrete about 1970 due to differential settlement;
- While the bridge's design, which was commonly used between 1890 and 1920, provided efficiency in steel weight, it proved not to be strong enough for modern railroad loadings, and has many non-redundant "fracture-critical" members that can lead to sudden and complete bridge collapse in the event of failure of a single member or connection;
- Bridge components are subject to hairline cracks due to material flaws in the manufacturing process used at the end of the 19th century;
- Clearance under the bridge is approximately 2.5 feet short of accommodating the 100-year flood elevation and results in significant upstream flooding including substantial impacts to residential properties;

^c Note: The September 13, 2013 letter incorrectly states that an MOA has already been executed.

- If bridge rehabilitation were pursued, numerous temporary supports required during rehabilitation would further restrict flood waters, increase flood elevations, and worsen flooding impacts; and
- Rehabilitation of the bridge to accommodate 100-year flood elevations as well as modern railroad operations would require the replacement of most components of the bridge, thereby compromising the bridge's historical integrity, and in essence, creating a new bridge.

Following Mr. Shook's letter to the SHPO noted above, CSXT wrote the SHPO on September 18, 2013 (see Enclosures, Disk 2) offering to prepare a presentation package for the Flatrock River Bridge that complies with the Indiana Department of Natural Resources, Division of Historic Preservation & Archaeology's (DHPA) Minimum Architectural Documentation Standards, including: (1) black and white photographs providing an overall view of the Flatrock River Bridge in its environment and views of its significant components; (2) a written description of the Flatrock River Bridge; (3) statement of significance; and (4) any available architectural drawings or sketch plan of the site. CSXT adds that the subject documentation would be prepared prior to removal of the Flatrock River Bridge and to mitigate the adverse effect caused by removal of the bridge.

In an October 3, 2013 reply to CSXT (see Enclosures, Disk 2), the SHPO agreed that the Flatrock River Bridge has been modified from its original design and would require substantial additional modifications for continued use. Based on the bridge engineer's opinion (summarized above), the SHPO also understands that the bridge may not be feasibly repaired or strengthened to current railroad standards including the expected speed and load requirements under the proposed joint use. Nevertheless, the SHPO believes that the bridge likely retains sufficient integrity to be considered eligible for inclusion in the National Register. The SHPO also acknowledges that rehabilitation of the existing bridge does not appear to be feasible, and agrees with CSXT's recommendation that the bridge be documented prior to its removal, according to the DHPA Minimum Architectural Documentation Standards, as mitigation for the loss of this historic resource.

With the SHPO agreeing to documentation as mitigation, CSXT and L&I retained the firm Butler Fairman Seufert to prepare the documentation. By transmittal letter dated November 13, 2013, the subject documentation was submitted to the SHPO (see Enclosures, Disk 2). The documentation was prepared according to DHPA's Minimum Architectural Documentation Standards. By letter dated November 19, 2013 (see Enclosures, Disk 2), the SHPO acknowledges receipt of the documentation, states it has reviewed the material and concludes that the documentation is consistent with DHPA Minimum Architectural Documentation Standards.

OEA concurs that replacement of the Flatrock River Bridge would constitute an adverse effect to an historic property considered eligible for inclusion on the National Register and that avoidance of the adverse effect is not feasible if the L&I rail line is to safely accommodate the modern rail traffic under the joint use proposal. OEA also concurs that the bridge documentation submitted to the SHPO on November 13, 2013 mitigates the adverse effect. OEA is currently preparing a draft Memorandum of Agreement (MOA) that will document the Section 106

consultation process, state a finding of adverse effect, and express acceptance of the documentation as mitigation for the adverse effect. The MOA will be submitted to the SHPO, CSXT, L&I, and any other signatory and concurring parties, for review and comment.

Tribal Consultation

On OEA's behalf, CSXT initiated preliminary consultations with federally recognized Native American Tribes (Tribes) during the early stages of the environmental review process. On July 11, 2011 (see sample letter, Enclosures, Disk 2), CSXT sent preliminary consultation letters to the 14 federally recognized Native American Tribes (Tribes) listed the National Park Service's National NAGPRA^d Online Database for the six Indiana counties and one Kentucky county in which the L&I rail line is located. Of those 14 Tribes, the Peoria Tribe of Indians of Oklahoma and Delaware Nation responded (see Enclosures, Disk 2). The Peoria Tribe of Indians of Oklahoma requests that it remain on future mailings pertaining to the proposed joint use and the Delaware Nation requests a listing of counties in which the proposed joint use would occur.

Consultation with the 14 Tribes continued with OEA's distribution of the Draft EA. Of the 14 Tribes, the Peoria Tribe of Indians of Oklahoma and Kickapoo Tribe of Oklahoma replied (see Enclosure, Disk 2). Both Tribes state that they have no objections to the proposed joint use, however, they request immediate notification in the event burial remains or artifacts are discovered during undertaking-related rail line improvements. The 14 Tribes, regardless of reply status, will also receive the Supplemental and Final EAs when issued (see Status of Environmental Review Process below). As noted earlier, the proposed joint use would not include construction on or physical improvements to any of CSXT's rail lines in Indiana, Kentucky or Ohio, and therefore, Tribal consultations have not extended beyond the 14 Tribes with interests in the seven counties encompassing the L&I rail line in Indiana and Kentucky.

Opportunities for Public Participation

On OEA's behalf, CSXT and L&I initiated preliminary consultations with federal, state, and local agencies and elected officials during the early stages of the environmental review process. During the months of June and July, 2011, CSXT and L&I also conducted approximately 38 outreach meetings with representatives of various agencies, elected officials and planning organizations (See Enclosures, Disk 1, Draft EA, Appendix A). On July 11, 2011 (see sample letter, Enclosures, Disk 2), CSXT sent preliminary consultation letters to federal, state, and local agencies. Replies to those letters are also provided in Appendix A of the Draft EA.

The Draft EA, which contains summaries of historic properties and the 106 consultation process known at the time the Draft EA was prepared, was distributed to approximately 107 parties including federal, state and local agencies, organizations, Tribes, individuals and other interested parties. To expand opportunities for public review and comment, distribution of the Draft EA included 17 public libraries in the seven-county area encompassing the L&I rail line.

^d Native American Graves Protection and Repatriation Act.

The Draft EA is also posted on the Board's website at www.stb.dot.gov. When issued, the Supplemental and Final EAs will also be broadly distributed, placed in public libraries and posted on the Board's website for review and comment, as appropriate. OEA also maintains a description of the proposed joint use project, including a summary of the current status of the ongoing environmental and cultural resources reviews, under the "Environmental - Key Cases" section of the Board's website.

Furthermore, all outgoing and incoming correspondence to and from federal, state, and local agencies, organizations, Tribes, individuals, and other interested parties is posted and available for public review on the Board's website. All correspondence between signatory and any consulting parties to the MOA, including draft copies of the MOA and the executed MOA, will also be posted on the Board's website for public review.

Status of the Environmental Review Process

Some of the comments received on the Draft EA raise environmental concerns not assessed in the document. Consequently, OEA determined that additional environmental analysis is necessary and will prepare a Supplemental EA. OEA solicited comments on the scope of the Supplemental EA from interested federal, state and local agencies. OEA considered those comments, finalized the scope of the Supplemental EA and is currently preparing the document. The Supplemental EA will focus on the potential operational impacts of moving an additional 11 trains per day between Indianapolis, Indiana and Sydney, Ohio on CSXT's Indianapolis Line Subdivision. Other areas to be assessed in the Supplemental EA include:

- Interchanging the rerouted CSXT trains between the L&I rail line and CSXT's LCL and Indianapolis Line subdivisions;
- Grade-crossing safety and vehicle delay, emergency response, and noise and vibration on the CSXT rail lines;
- Other environmental resources areas, such as land use, community resources, water resources, biological resources and air quality and environmental justice on the CSXT rail lines; and
- Potential construction-related impacts from extending two existing L&I rail sidings and replacing a railroad bridge on the L&I rail (As noted above, the proposed joint use would not include construction or ground-disturbing activities on any of the CSXT rail lines).

It is anticipated that the Supplemental EA, when issued, will contain a copy of the initial draft(s) of the MOA and any signatory and consulting party comments on the initial draft(s) of the MOA available at that time. The Final EA will also contain copies of comments on MOA drafts, and if available, a copy of the executed MOA.

Thank you for your review of this project. If you have any questions, please do not hesitate to contact Dave Navecky, OEA's Project Manager, by phone at 202-245-0294, or by email at david.navecky@stb.dot.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with the first name "Victoria" and last name "Rutson" clearly distinguishable.

Victoria Rutson
Director
Office of Environmental Analysis

Enclosures:

Disk 1: Draft Environmental Assessment

Disk 2: Item 1 - Correspondence with Indiana SHPO's Office

Item 2 - Minimum Architectural Documentation Standards for Flatrock River Bridge MP
40.19 over Flatrock River, Bartholomew County, Indiana

Item 3 - Correspondence from Federally Recognized Tribes

cc: Chad Slider, Indiana State Historic Preservation Office (with enclosures)
Louis Gitomer, Outside Counsel, CSXT (w/o enclosures)

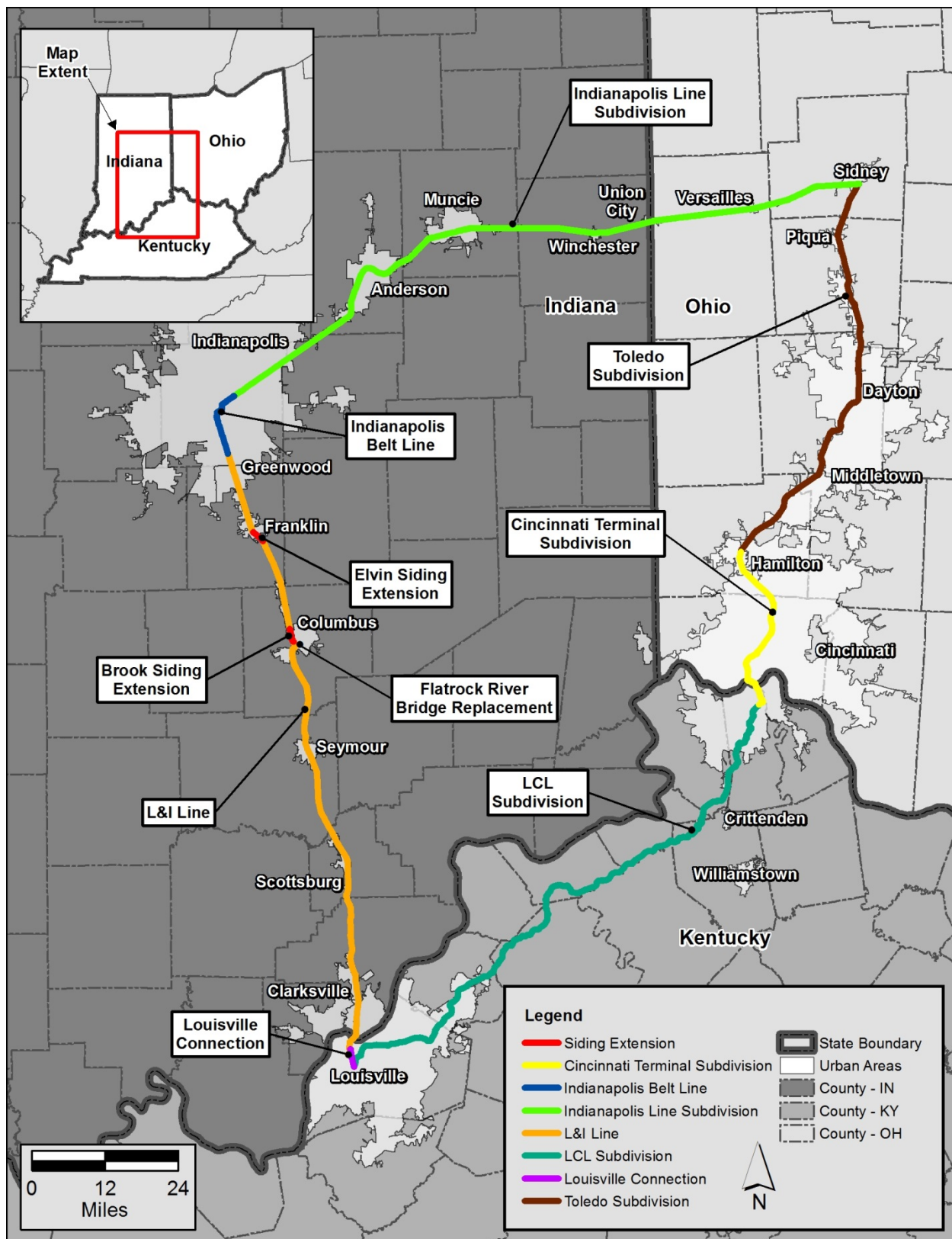


Figure 1. Project Location



Figure 2. Flatrock River Bridge