Planning and Environmental Linkages (PEL) Study
SR 1002 (Skinners Falls W Road) over Delaware River
Skinners Falls Bridge

Damascus Township, Wayne County, Pennsylvania
Town of Cochecton, Sullivan County, New York

Prepared For:

pennsylvania
DEPARTMENT OF TRANSPORTATION

NEW YORK
STATE OF OPPORTUNITY.
Department of Transportation

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Federal Highway Administration

PennDOT Engineering District 4-0
NYSDOT Region 9

Prepared By:

AECOM

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Acronyms and Abbreviations

ACS	American Community Survey
BCA	Benefit-Cost Analysis
CMP	Corridor Management Plan
COUP	Conference of Upper Delaware Townships
CRIGIS	Cultural Resources Geographic Information System
EJ	Environmental Justice
FHWA	Federal Highway Administration
HBRA	Historic Bridge Rehabilitation Analysis
JIBC	New York-Pennsylvania Joint Interstate Bridge Commission
JIBC Agreement	Joint Interstate Bridge Commission Agreement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NY	New York
NYSDOT	New York State Department of Transportation
NY SHPO	New York State Historic Preservation Office
NYSDEC	New York State Department of Environmental Conservation
PA	Pennsylvania
PA-SHARE	Pennsylvania's Historic and Archaeological Resource Exchange
PA SHPO	Pennsylvania State Historic Preservation Office
PEL	Planning and Environmental Linkages
PennDOT	Pennsylvania Department of Transportation

PFBC	Pennsylvania Fish and Boat Commission
PHMC	Pennsylvania Historical and Museum Commission
RD	River District
River Management Plan	*Final River Management Plan: Upper Delaware Scenic and Recreational River*
SOI	Secretary of the Interior
SOI Standards	The Secretary of the Interior's Standards for Rehabilitation
SR	State Route
STIP	State Transportation Improvement Program
TIP	Transportation Improvement Program
UNT	Unnamed Tributary
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WSRA	Wild and Scenic Rivers Act

Executive Summary

The Pennsylvania Department of Transportation (PennDOT), in cooperation with the Federal Highway Administration (FHWA) and New York State Department of Transportation (NYSDOT), initiated a Planning and Environmental Linkages (PEL) study for Pennsylvania State Route 1002[1] over the Delaware River (Skinners Falls Bridge) in Damascus Township, Wayne County, Pennsylvania, and the Town of Cochecton, Sullivan County, New York.

A PEL study is a planning level document that allows for the development and screening of alternatives and a preliminary evaluation of environmental impacts to assist in informing the National Environmental Policy Act (NEPA) phase.

The existing Skinners Falls Bridge is a single-lane, 466-foot 6-inch, two-span, Baltimore through truss bridge, which was constructed in 1901 and 1902 and is owned by the New York-Pennsylvania Joint Interstate Bridge Commission (JIBC). Multiple rehabilitation projects and emergency repairs have taken place since 1902. The bridge was closed to all traffic, including pedestrians, in October 2019 due to safety concerns. Bridge inspections done at the time identified extensive timber deck and lateral truss deterioration. At that time, PennDOT initiated the PEL study for a more holistic evaluation of the bridge condition, existing situation, and constraints.

Milanville, which is located in Pennsylvania on the western side of the project area, is a small rural village consisting of homes and a general store. Several business, including a campground and bed and breakfast, are located on the eastern shore of the Delaware River in New York. The Skinners Falls Bridge is significant to the community and the Upper Delaware Region. The bridge is listed on the National Register of Historic Places (NRHP) and is a contributing resource to the NRHP-listed Milanville Historic District (in Pennsylvania). It is also within the Upper Delaware Scenic and Recreational River United States National Park Service (NPS) unit.

The purpose and need for the project were developed in 2021 and finalized in 2022 in coordination with agency, stakeholder, and public input. The purpose of the project is to provide a safe and efficient crossing of the Delaware River at Skinners Falls for cars, trucks, trailers, emergency response vehicles, bicyclists, and pedestrians. Four transportation needs were also identified: the lack of efficient access for residents, businesses, and recreational users; the negative impact on emergency river rescues; delays in fire and emergency response times; and the lack of adequate accommodations for pedestrians, bicyclists, and recreational users.

[1] Pennsylvania State Route 1002 is named Milanville Road on the Pennsylvania side. On the New York side it is named Skinners Falls W Road.

A range of alternatives, described in **Table ES-1**, were developed based on concept-level engineering and screened for impacts to natural, socioeconomic, and cultural resources. Conceptual estimates were developed to better understand the total cost of each alternative, including the construction, lifecycle, and maintenance costs. As part of the alternatives screening, a Phase 1 Historic Bridge Rehabilitation Analysis (HBRA) was completed to evaluate the potential for rehabilitation compliant with The Secretary of the Interior's Standards for Rehabilitation (SOI Standards). The alternatives screening analysis included the No Build Do Nothing, Removal/Demolition, and Removal/Relocation and Reuse alternatives; Traditional Rehabilitation and Non-SOI Compliant Rehabilitation alternatives; as well as on-alignment and off-alignment Full Replacement bridge alternatives.

Table ES-1: Range of Alternatives

Proposed Alternative	Description
No Build Do Nothing	No permanent or maintenance work. Bridge eventually fails.
Removal/ Demolition	Demolish and scrap bridge, dead-end PA/NY approaches.
Removal/Relocation and Reuse	Disassemble and dead-end PA/NY approaches. Bridge is available for adaptive reuse (does not include restoration or relocation).
Traditional Rehabilitation to 4,7,10 tons	SOI-compliant rehabilitation. Retain current bridge width. Signalize on both ends. Add a dry hydrant adjacent to the bridge.
Non-SOI Compliant Rehabilitation	Explore retaining some historic materials while providing a bridge meeting needs. (assume two-span modern steel bridge with truss attached as a decorative element)
Full Replacement	Initial screening included offline, online, or immediately adjacent replacement. Bridge carries full loads. Accommodates pedestrians and cyclists. Potentially addresses geometric and sight distance deficiencies.

As a result of the alternatives analysis and thorough coordination with the agencies and stakeholders, the offline replacement alternatives were recommended for dismissal. The replacement alternatives online or immediately adjacent to the bridge were recommended for further study, along with each of the no build and rehabilitation alternatives.

On August 2, 2024, the Upper Delaware Council alerted PennDOT that metal bridge components were falling from the Skinners Falls Bridge into the Delaware River. PennDOT immediately conducted an emergency inspection concluding that the deterioration presented a threat to public safety. PennDOT coordinated a National Bridge Inspection Standards (NBIS) Bridge Inspection (October, 2024) and initiated an alternatives analysis to address the bridge

deterioration (Section 8 of this document). On December 16, 2024 Pennsylvania Governor Shapiro issued a declaration of emergency in relations to Skinners Falls Bridge. The FHWA concurred with the emergency declaration on December 17, 2024 and construction began on March 10, 2025 for the emergency removal of the bridge.

Since funding for transportation projects in this region of Pennsylvania and New York is limited, the PEL study included an examination of available funding sources. A review of available grant funding was completed; however, the low traffic volumes on the Skinners Falls Bridge would affect the availability of this type of funding. Additional efforts will be required for the planning and programming of both federal and state funds to advance further studies associated with the alternatives identified in this PEL study. The FHWA PEL Questionnaire Responses are included as **Appendix A**. A No-Build and Replacement structure alternatives remain to be evaluated if funding is available.

1 Introduction and Study Background

1.1 Study Area, Location, and Description

Pennsylvania State Route (SR) 1002 (Skinners Falls W Road) over the Delaware River (Skinners Falls Bridge) is a single-lane, two-span, Baltimore through truss bridge connecting Wayne County, PA, on the west and Sullivan County, NY, on the east **(Figure 1)**. Skinners Falls Bridge is one of several crossings over the Delaware River in this region. The Cochecton-Damascus crossing upstream and the Narrowsburg crossing downstream are approximately 6-7 miles from the Skinners Falls Bridge. The study area for the Skinners Falls Bridge project was relatively small because of the presence of these adjacent crossings. The analysis of transportation needs and development of alternatives was focused to the immediate area around the Skinners Falls Bridge.

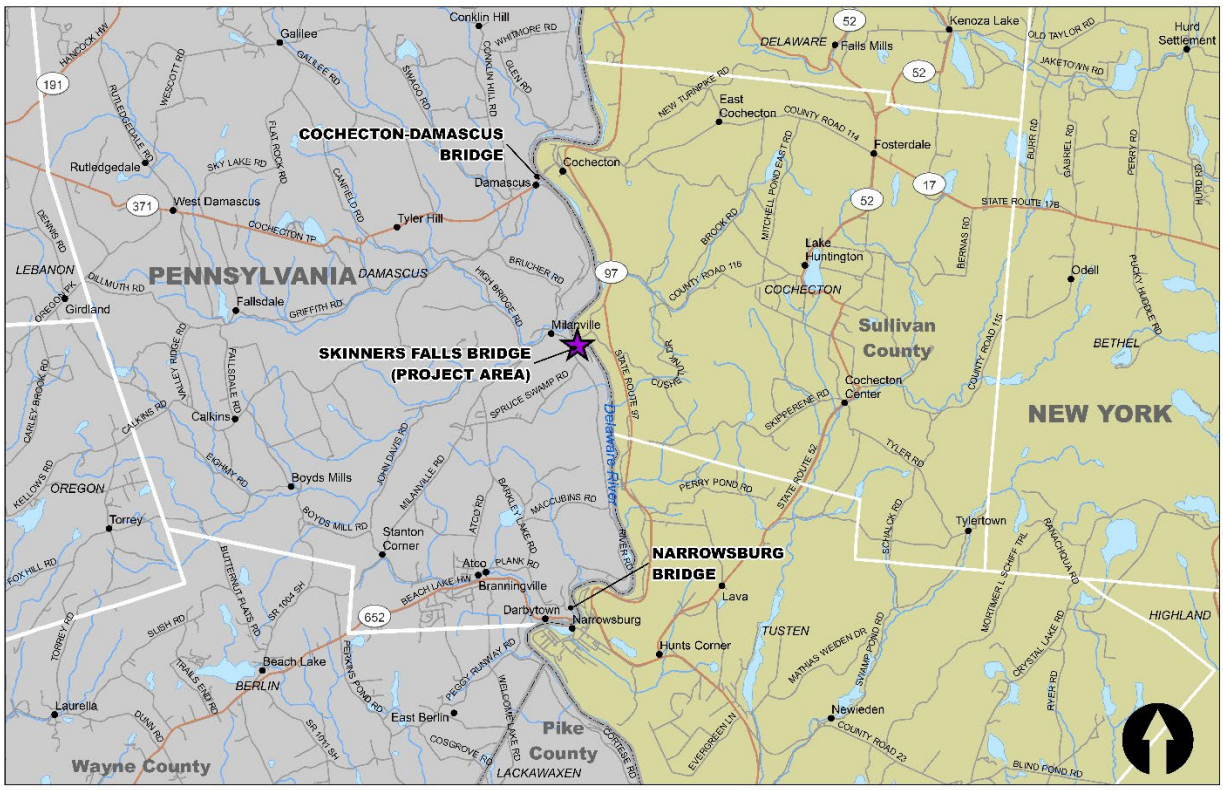


Figure 1: Project Study Area Map.

Within this focused study area, the village of Milanville, Damascus Township, PA, sits on the western shore of the Delaware River. Milanville is a small rural village consisting of homes and a general store **(Figure 2)**. On the eastern shore of the Delaware River, several businesses, including a campground, a river rafting outfitter, and a bed and breakfast, are located immediately adjacent to the river in the Town of Cochecton. This area is a tourist destination for access to the Delaware River and Skinners Falls, which are immediately downstream of the Skinners Falls Bridge. The Skinners Falls Bridge, which provides a connection between the campground and Milanville, is significant to the community and the Upper Delaware Region.

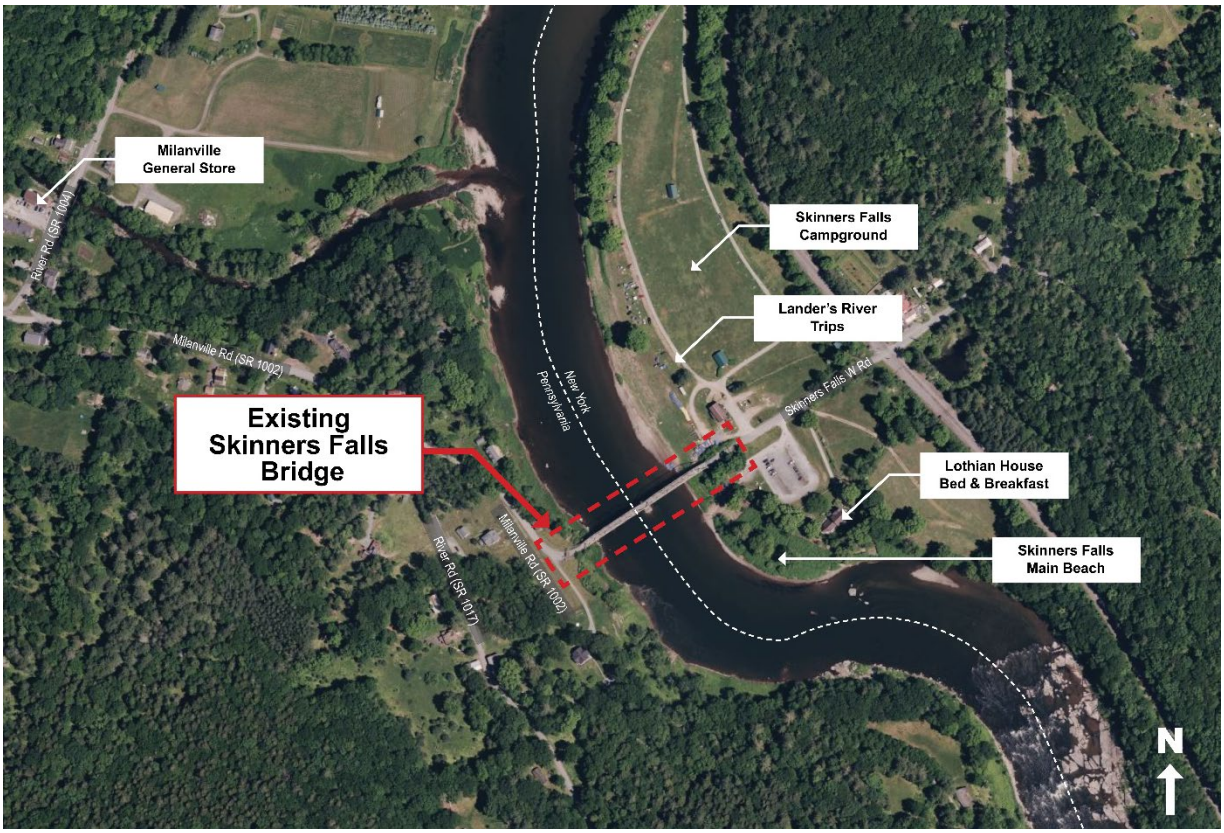


Figure 2: Aerial Map of Skinners Falls Bridge.

The Skinners Falls Bridge has been closed to all traffic since October 2019. The alternate routes for traveling between Milanville and the businesses on the eastern shore are all about 6.6 miles with an approximate travel time of 12 minutes.

1.2 Study Background and Context

PEL Study Overview

The Pennsylvania Department of Transportation (PennDOT) is dedicated to working with the public and federal and state agencies to provide safe and reliable transportation solutions for Pennsylvania. To assist in accomplishing this objective, PennDOT, in cooperation with the Federal Highway Administration (FHWA) and the New York State Department of Transportation (NYSDOT), initiated a Planning and Environmental Linkages (PEL) study for the Skinners Falls Bridge in 2021. The PEL study was conducted in accordance with 23 United States Code 168 and 23 Code of Federal Regulations 450.212, which are federal regulations set out by the FHWA. A glossary of terms can be found in **Appendix B**.

A PEL study is a planning level document that allows for the development and screening of preliminary alternatives and the initial evaluation of environmental impacts and the recommendation of alternatives to be carried into any potential future project development. As

a planning document, the conclusion of the PEL study may not directly lead into future phases. Although costs have been developed as part of this PEL study, they have been generated using concept-level information. At this time, funding to progress a project into future stages of design has not been programmed.

Funding through the Wayne County, Pennsylvania Transportation Improvement Program (TIP) and the New York Region 9 State Transportation Improvement Program (STIP), which include federal and state funds, would need to be programmed for the engineering design and construction of any of the alternatives recommended for further analysis in the PEL study. The programming of funds through the TIP and STIP is a collaborative process among PennDOT, NYSDOT, and Wayne County, PA. Per PennDOT guidance, the purpose of the TIP process is to evaluate transportation priorities with the greatest benefit to planning regions and individual counties. The collaborative planning process results in an updated TIP that is predictable in budget, scope, and schedule, and that provides the Commonwealth of Pennsylvania with a program that is fiscally constrained, environmentally responsible, contextually appropriate, and sustainable by the community.

Joint Interstate Bridge Commission

The Joint Interstate Bridge Commission (JIBC) was established by the State of New York Senate and Assembly through the Act approved May 11, 1916, Chapter 506, Laws of 1916, and the Commonwealth of Pennsylvania General Assembly by the Act approved July 25, 1917, P.L. 1180 (as amended by Act No. 169 approved December 19, 1975). The Joint Interstate Bridge Commission Agreement (JIBC Agreement) was revised on May 25, 1988. The JIBC has acquired and is responsible for 10 bridges between New York and Pennsylvania that span the Upper Delaware River. These bridges are Port Jervis-Matamoras, Pond Eddy, Shohola-Barryville, Narrowsburg, Milanville-Skinners Falls, Cochecton-Damascus, Callicoon, Kellam-Stalker, Lordville-Equinunk, and Hancock. As part of the agreement, each state maintains five bridges, with the costs of such activities paid jointly. Additionally, each state pays for maintenance and improvements along their respective approaches.

As required for the construction, repair or reconstruction of specific bridges, separate agreements may be made under the general JIBC Agreement. These agreements will need to be approved and executed in the same manner as the overall agreement.

Under the JIBC Agreement, the Milanville-Skinners Falls Bridge is maintained by Pennsylvania, and the maintenance and inspection activities have been conducted by PennDOT. As a result, PennDOT is leading the PEL study for the Skinners Falls Bridge in cooperation with NYSDOT.

Upper Delaware Scenic and Recreational River National Park Service Unit

The entire PEL study area is within the Upper Delaware Scenic and Recreational River unit as designated by the United States National Park Service (NPS). This NPS unit was designated in 1978 and extends from Hancock, NY, south to Mill Rift, PA. The unit encompasses 73.4 miles of

the Delaware River, extending from the river to the adjacent ridgetop in both states. Unlike the majority of areas managed by the NPS, nearly all of the land within the Upper Delaware Scenic and Recreational River unit remains privately owned. In 1986, the Conference of Upper Delaware Townships (COUP) and the NPS published the *Final River Management Plan. Upper Delaware Scenic and Recreational River* (River Management Plan), which established the Upper Delaware Council (UDC) to oversee the implementation of the River Management Plan. The UDC includes representation from both states, the Delaware River Basin Commission, and up to 15 river towns and townships. Any project located within the Upper Delaware Scenic and Recreational River must comply with the Land and Water Use Guidelines, published as a part of the River Management Plan. Furthermore, the UDC reviews all development activities for compliance with those land use regulations and supports the NPS in determining whether the potential development is in substantial conformance with the Land and Water Use Guidelines included in the River Management Plan.

Federal Wild and Scenic River

In addition to the NPS designation, the Upper Delaware River also became a federal Wild and Scenic River in 1978. The federal Wild and Scenic Rivers Act, originally enacted in 1968, seeks to protect certain selected rivers and their immediate environments in their free-flowing condition for the benefit and enjoyment of present and future generations. This designation protects 73.4 miles of the Delaware River from Hancock, NY, to Mill Rift, PA. Under the Wild and Scenic Rivers Act, protection of "Outstandingly Remarkable Values" is required (**Figure 3**). The Upper Delaware Scenic and Recreational River unit's Outstandingly Remarkable Values consist of culture, ecology, geology, recreation, and scenery. The Skinners Falls Bridge is an element that supports the cultural and scenic Outstandingly Remarkable Values of the Upper Delaware Scenic and Recreational River unit. Projects within the Upper Delaware Scenic and Recreational River unit system must comply with Section 7 of the Wild and Scenic Rivers Act, which is also regulated by the NPS.

Figure 3: Skinners Falls Bridge.

Bridge Terms

Throughout the PEL study, technical bridge terms are used to describe various components of the bridge. The illustrations in **Figure 4** and **Figure 5** come from the PennDOT Truss Maintenance Manual (2015) and are included to assist in identifying bridge components. The

components shown, including chords, verticals, and end beams, are also defined collectively as "members." Additionally, **Figure 6** and **Figure 7** are photographs of the existing Skinners Falls Bridge, provided to assist with identifying general bridge components, such as truss, pier, superstructure, running boards, and deck.

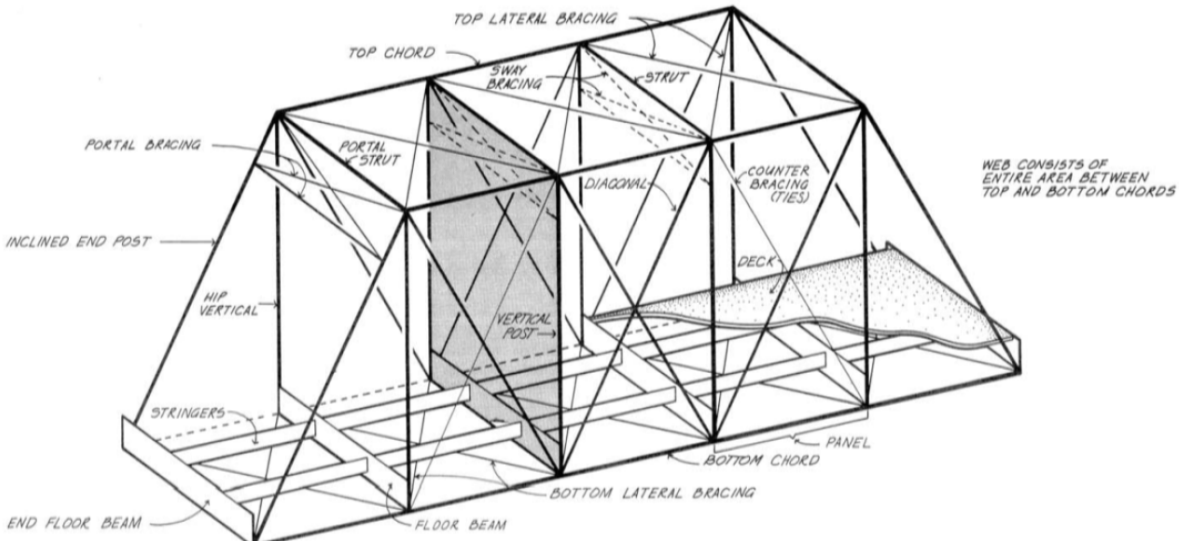


Figure 4: Basic Truss Components (from PennDOT Truss Maintenance Manual, 2015)

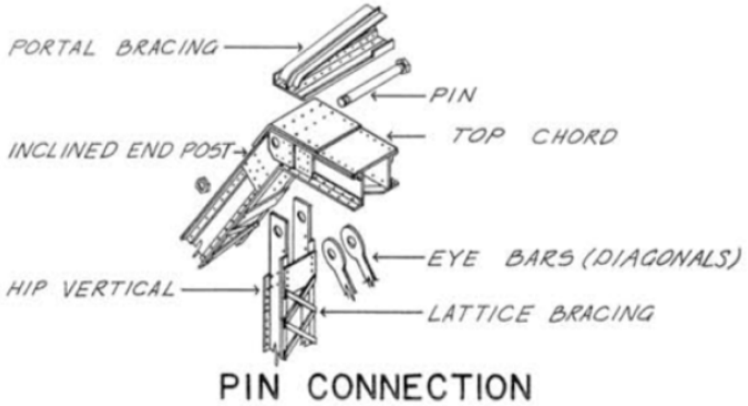


Figure 5: Structural Components (from PennDOT Truss Maintenance Manual, 2015)

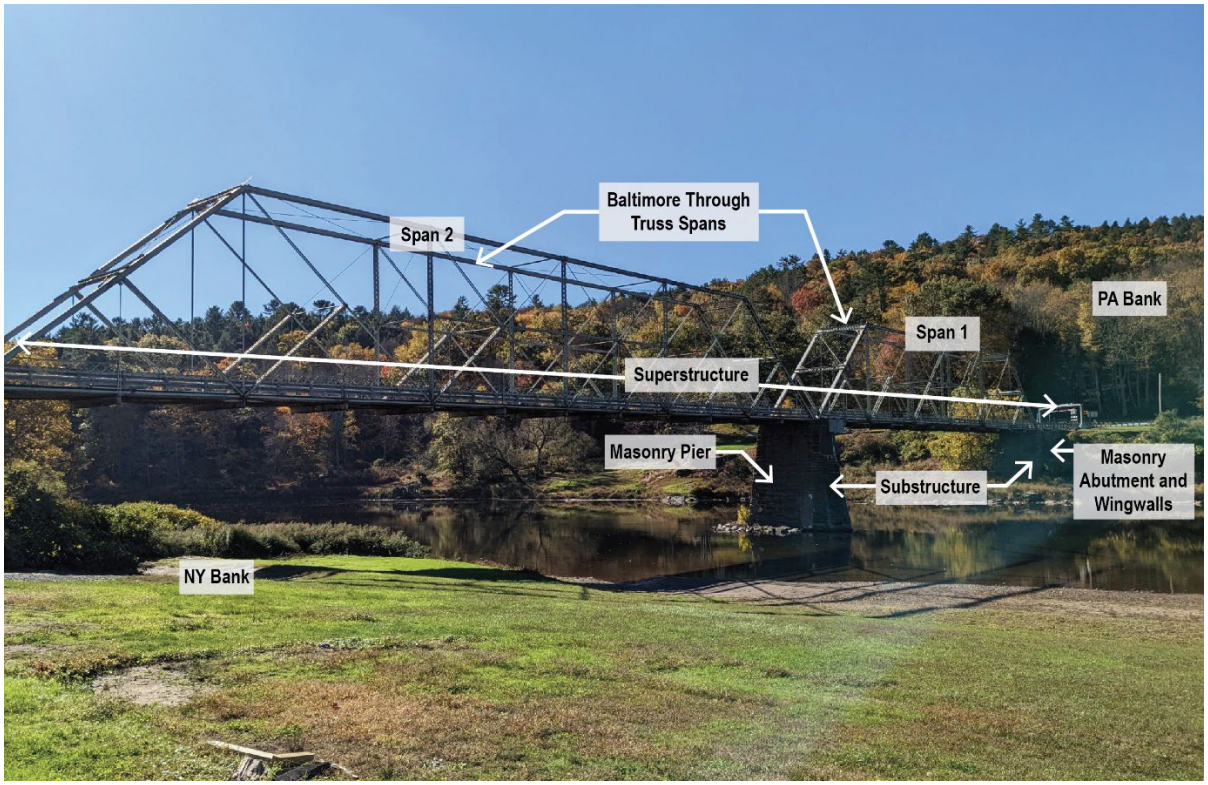


Figure 6: General Bridge Components, Elevation View

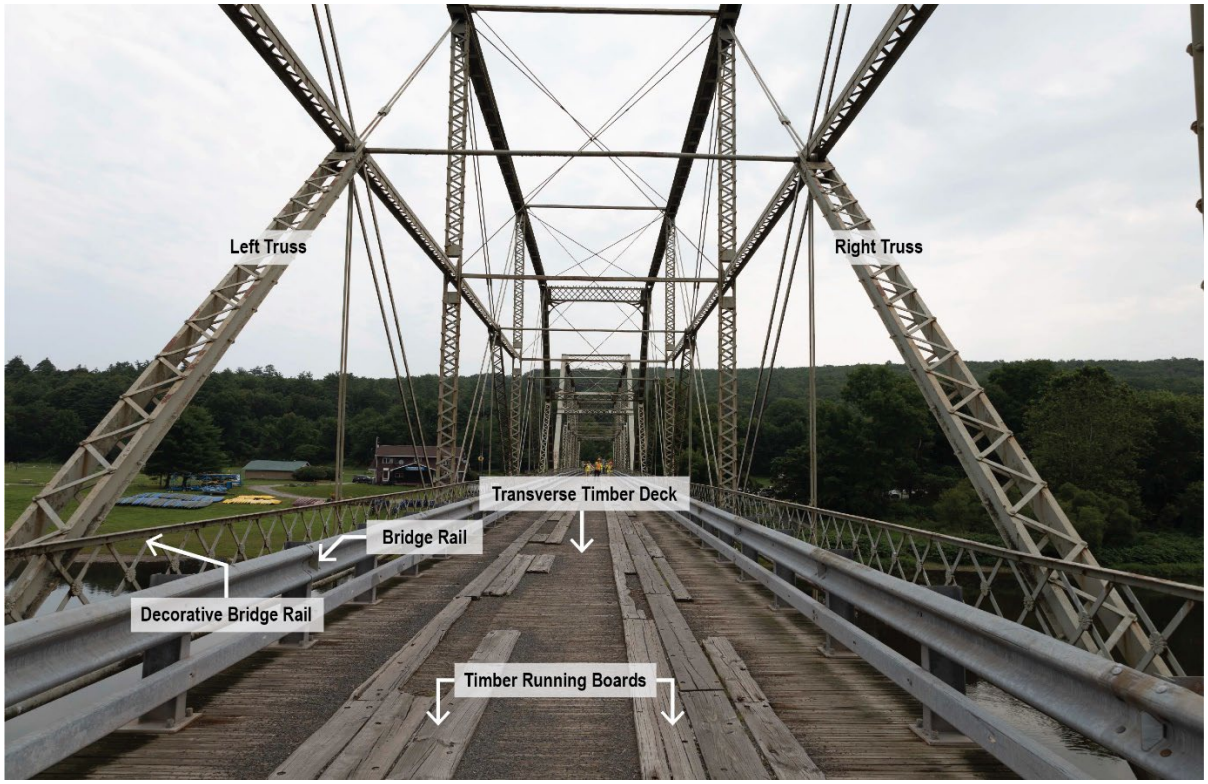


Figure 7: General Bridge Components, Section View Looking Eastward

History of Repairs and Rehabilitations

Originally constructed in 1902, the Skinners Falls Bridge is a two-span, 466-foot 6-inch total length, steel, pin-connected Baltimore through truss bridge across the Delaware River**.** Since its construction, two major rehabilitations in 1974-1975 and 1986 were conducted. While the bridge was originally constructed with a 9-ton[2] load capacity, it was posted for a 7-ton capacity in 2007 and has been posted for a 4-ton capacity since 2013. The bridge is currently closed to all modes of traffic, rehabilitation would be required to open it for any use. In addition to the major rehabilitations, emergency repairs to the bridge were conducted in 2010, 2012, 2013, and 2016 to address ongoing deterioration of the structure and to reopen the bridge after several short-term bridge closures. **Table 1** provides a summary of the activities performed during each rehabilitation and repair project.

Table 1: Previous Rehabilitation and Repair Summary

Year	Truss Members	Timber Deck	Floor Beams	Stringers	Sub-structure	Miscellaneous
1974–1975	• Tightened truss turnbuckle members • Heat shortening • Retrofitted diagonal channel member webs	Replaced	n/a	n/a	• Placed rock protection • Repointed masonry	• Reset expansion bearings • Cleaned and painted
1986	• Reinforced top plates near bottom of portal end posts • Heat shortening • Replaced diagonal built-up member bearing plates at 7 locations • Replaced mid-height vertical members • Replaced one-third of decorative bridge railing	Replaced	Strengthened floor beams	Replaced 10 stringers	n/a	• Added guide rail along both sides of bridge deck • Cleaned and painted

[2] The original maximum load capacity was confirmed through an in-depth inspection of the substructure components, materials testing, and structural analysis modeling conducted in 2013.

Year	Truss Members	Timber Deck	Floor Beams	Stringers	Sub-structure	Miscellaneous
2010	Repaired portal member	n/a	n/a	n/a	n/a	n/a
2012	Replaced deteriorated eyebar hangers	n/a	n/a	n/a	n/a	n/a
2013	n/a	n/a	•Strengthened floor beams •Repaired one floor beam connection to truss lower chord	• Braced stringers at floor beams abutments and piers • Replaced 43 stringers	n/a	n/a
2016	• Replaced missing pin caps • Replaced select U-bolts • Replaced truss diagonal U8-M9	n/a	n/a	Replaced 44 stringers	n/a	Installed headache bars

Current Bridge Condition

In 2019, engineering work was underway in preparation for another rehabilitation project focusing on the masonry abutment condition issues, potential deck replacement, stringer replacement, and sway/lateral bracing repairs or replacement. Following a customer complaint and subsequent PennDOT District 4–0 Bridge Unit inspection that identified extensive timber deck and lateral truss bracing deterioration, the bridge was closed to all traffic, including bicyclists and pedestrians. As a result, the engineering work was paused as attention turned toward a more holistic evaluation of the bridge condition, existing situation, and constraints, and to a determination of bridge needs.

Roadway Geometry

When open, the bridge operated as a single lane structure with two-way traffic, yield controlled on either end of the bridge. The driver's view from the east (NY) side of the bridge heading westbound is pictured below (**Figure 8**), showing the yield condition and signage indicating that vehicles should yield to oncoming traffic. This approach has poor sight of the opposing (PA) traffic due to the bridge being situated at a higher elevation relative to the roadway approaching the bridge. The difference in elevation, along with the steepness in slope between the approach and the bridge elevations limits driver's ability to see whether vehicles, pedestrians or bicyclists are on the bridge. However, sight distance across the bridge is substandard and problematic given the one lane available for vehicular travel.

Figure 8: New York Approach geometry with a view west of the approach on the east (New York) side of the bridge.

Nearby Projects

There are no funded recent, current, or near future planning studies in the vicinity. There are two ongoing transportation projects within the vicinity of the Skinners Falls Bridge. The River Road Bridge (SR 1004) over Calkins Creek superstructure replacement project is approximately 0.4 miles northwest of the Skinners Falls bridge and the Calkins Road Bridge (SR 1002) over the South Branch of Calkins Creek bridge replacement project is approximately 0.7 miles west. Both projects are in the preliminary engineering stage.

2 Project Purpose and Need

2.1 Background

The project purpose and need for the Skinners Falls Bridge Project was first developed in early 2021 in coordination with PennDOT, NYSDOT, and FHWA. The Purpose and Need Statement was established in accordance with *PennDOT Publication 319* (2020) and the FHWA and Federal Transit Administration (FTA) joint *Guidance on Purpose and Need* (2003). As per this guidance, the project purpose and need identified what the project is intended to accomplish. The project purpose and need must be defined to identify the range of alternatives considered during project development. Defining the purpose and need is a requirement of NEPA, Section 106 of the National Historic Preservation Act of 1966 (NHPA); Section 4(f) of the U.S. Department of Transportation Act of 1966 (Section 4(f)); Section 404 of the Clean Water Act; and Pennsylvania Chapter 105 permit regulations.

During the development of the purpose and need, coordination with stakeholders and agencies was undertaken to understand the transportation needs associated with the bridge. Prior to the March 2021 virtual meeting, PennDOT advertised the meeting on its website and in the most circulated newspapers in the region. PennDOT also mailed postcards to property owners, residents, and business owners in the PEL study area. In March 2021, an online public meeting was held to capture public feedback and obtain information on how the public used the bridge prior to its closure. In addition, a project survey was conducted between March and June 2021. Interviews with stakeholders including NPS, emergency responders, local businesses, and public officials were also conducted in 2021. The feedback received from the public and the agencies was incorporated into the process of defining the project need in 2022. See Section 6 regarding agency coordination and public involvement. The complete Purpose and Need Statement as finalized in May 2022 is included in **Appendix C** and can be found on the PennDOT District 4–0 project web page: Skinners Falls Bridge Project (pa.gov).

2.2 Purpose

The project purpose is defined as an overarching statement of why the state departments of transportation are pursuing the project and defines the project's primary objectives.

The purpose of the project is to provide a safe and efficient crossing of the Delaware River at Skinners Falls for cars, trucks, trailers, emergency response vehicles, bicyclists, and pedestrians.

2.3 Needs

Project needs are tangible fact-based transportation problems and answer "why is the project needed." Project needs for the Skinners Falls Bridge project consist of the following:

Project Need 1: The Skinners Falls Bridge is currently closed to traffic due to its condition, which limits efficient access for residents, businesses, and recreational users.
Project Need 2: River rescue is negatively affected by the absence of a functional bridge in the vicinity of Skinners Falls.

Project Need 3: Fire and medical emergency response are delayed due to the lack of a crossing at Skinners Falls.
Project Need 4: The Skinners Falls Bridge does not provide adequate accommodations for pedestrians, bicyclists, and recreational users in the area.

3 Alternative Development and Evaluation

3.1 Range of Alternatives

A range of alternative concepts was identified and screened for the Skinners Falls Bridge PEL study. The range of alternatives evaluated in the PEL study were developed based on concept-level engineering, with consideration given to meeting the project needs. The environmental resources mapped within the study area were identified from secondary source information and preliminary agency coordination. There are a number of important resources (threatened and endangered species, wild and scenic rivers, visual resources, etc.) in the study area, however certain resources were determined to be critical components of the planning level alternatives screening process, specifically the community and historic resources. Community and historic resources were determined to be the most critical resources at the planning level based on potential impacts to these resources.

Several of the alternatives would require changes to the JIBC Agreement. The JIBC Agreement outlines maintenance responsibilities for 10 bridges between Pennsylvania and New York, including Skinners Falls Bridge. Changes to the JIBC Agreement would require legislative action (**Appendix D**). Future studies will need to consider the legislative process and timeline that would be required if a No Build alternative variation (See Section 3.1.1) is identified as the preferred alternative.

During subsequent project development, all resources in the project area will undergo detailed investigation and analysis.

3.1.1 No Build

No Build Do Nothing Alternative:

The No Build Do Nothing Alternative consists of taking no action to rehabilitate or replace the existing bridge, which has been closed to all traffic, including pedestrians and bicyclists, since 2019. Existing vehicular detours that have been in place would remain permanently. Under this alternative, the bridge would remain closed, and no maintenance activities would be performed. The bridge would continue to deteriorate, and as a result of the continued deterioration, bridge failure would be inevitable. The bridge would be a serious hazard for recreational users of the Delaware River and adjacent properties, as the bridge could fall (in pieces or in its entirety) into the river. Changes to the JIBC Agreement would be required to reduce the number of bridges subject to the terms of the agreement.

Removal/Demolition Alternative:

The Removal/Demolition Alternative consists of the demolition of the existing bridge. The bridge components would then be transported to an approved offsite location for disposal. The bridge substructure elements, including the abutments and piers, would also be removed. This alternative would require a temporary causeway within the Delaware River to allow for the disassembly of the trusses as well as the removal of the piers and abutments. The Removal/Demolition Alternative would result in no crossing at this location once completed.

Changes to the JIBC Agreement would be required to reduce the number of bridges subject to the terms of the agreement.

Removal/Relocation and Reuse Alternative:
The Removal/ Relocation and Reuse Alternative consists of the careful disassembly of the existing bridge. The bridge members would be catalogued and transported to a location for temporary storage. The bridge substructure elements, including the abutments and piers, would also be removed. This alternative would require a temporary causeway within the Delaware River to allow for the disassembly of the trusses as well as the removal of the piers and abutments. PennDOT would advertise the bridge's availability for adaptive reuse on its bridge marketing website. Adaptive reuse may include the use of the bridge offsite and off-system for nonvehicular traffic at facilities such as parks, rail trails, and university campuses. The Removal/Relocation and Reuse Alternative would result in no crossing at this location once completed. Changes to the JIBC Agreement would be required to reduce the number of bridges subject to the terms of the agreement.

3.1.2 Rehabilitation

The Skinners Falls Bridge was listed on the National Register of Historic Places (NRHP) as a rare example of an intact multiple span Baltimore through truss. The structure also retains its historic location over the Delaware River and its setting which was cited in the nomination as "unique". The Skinners Falls Bridge is also a contributing resource to the Milanville, PA historic district. The Milanville, PA historic district is a 19th and 20th century industrial development, noteworthy for its architecture of the same era (see Section 4.1.1 for more detail). A HBRA Phase 1 report has been prepared to determine whether the historic Skinners Falls Bridge can be rehabilitated without altering characteristic-defining features that qualify the bridge for listing on the NRHP.

The HBRA Phase 1 report evaluated 4-, 7-, and 10-ton rehabilitation options and considered whether the rehabilitation could be performed in compliance with the SOI Standards. The HBRA can be found on the PennDOT District 4–0 web page: Skinners Falls Bridge Project (pa.gov). The SOI Standards form the basis for work on historic properties, including all federal undertakings, and they often form the basis for state projects as well. This report also evaluated whether the proposed rehabilitation options would result in an adverse effect under Section 106 of the NHPA to the Skinners Falls Bridge as an individually NHRP-listed resource and as a contributing resource to the NRHP-listed Milanville Historic District. All three of the rehabilitation options (the 4-, 7-, and 10-ton options) described in the HBRA resulted in an anticipated Section 106 finding of No Adverse Effect on the bridge and the Milanville Historic District. As part of the HBRA Phase 1 report, the rehabilitation alternatives were not evaluated for their ability to meet the project needs.

In addition to the 4-, 7-, and 10-ton rehabilitation options, a Non-SOI compliant rehabilitation was also investigated. The Non-SOI complaint rehabilitation does not meet the SOI standards,

but would still preserve some of the historic characteristics of the bridge. This type of rehabilitation will be investigated further as part of the HBRA Phase 2 studies. The Non-SOI compliant rehabilitation will result in an anticipated Section 106 finding of Adverse Effect on both the bridge and the Milanville Historic District.

4-Ton Rehabilitation Alternative:
This minimum rehabilitation alternative would involve performing the least extensive rehabilitation work on the existing truss, focusing on replacement of the existing floor system and timber deck. A total of 15% of the truss members would be replaced in this alternative. Truss members would be replaced in kind with like materials (modern steel with higher yield strength) of equivalent size, shape, and connection details. As part of all rehabilitation alternatives, the activities would require the complete disassembly of the bridge and replacement of the floor system, including the timber deck, stringers, and floor beams. The disassembly is necessary to allow cleaning between all surfaces and galvanization of the members for future protection as well as replacement of all bridge pins with new shouldered bridge pins. The replacement shouldered bridge pins would also be modern steel. Once the work is complete, the trusses would be reassembled.

For the 4-Ton Rehabilitation Alternative, it would also be necessary to rehabilitate or replace the existing bearings that are not functioning properly and are in poor condition. As a result of the existing bearings' lack of functionality, the thermal movements of the bridge are being restricted, affecting the superstructure and substructure. In addition, the New York abutment is in critical condition, while the remaining substructure units are overall in fair condition. This rehabilitation option includes extensive repair of the New York abutment, involving the installation of a new pile foundation to support the reconstructed masonry abutments and wingwalls, replacement of beam seat capstones and bearing stones, reconstruction and repointing of the failed stone masonry abutment stem and wingwalls, and improvements to the existing drainage behind the stone abutment walls.

7-Ton Rehabilitation Alternative:
This alternative is similar to the minimum rehabilitation option, but also includes the replacement of an additional 3% of the truss members, for a total of 18% of the truss members, (specifically portions of the bottom chord and diagonals) to an extent commensurate with bringing the entire structure to a minimum 7-ton operating rating. Truss members would be replaced in kind with like materials (modern steel with higher yield strength) of similar size, shape, and connection details.

As part of all rehabilitation alternatives, the activities would require the complete disassembly of the bridge and replacement of the floor system, including the timber deck, stringers, and floor beams. The strengthening methods were not specified in the Draft Feasibility Study Report (AECOM 2014); however, various methods may be used. Final repairs would not be identifiable until the truss is disassembled during construction. Member condition would need

to be evaluated near the pin connections once disassembled. For the 7-Ton Rehabilitation Alternative, it would also be necessary to rehabilitate or replace the existing bearings that are not functioning properly and are in poor condition. As a result of the existing bearings' lack of functionality, the thermal movements of the bridge are being restricted, affecting the superstructure and substructure. Rehabilitation would restore the structure to its as-designed capacity[3], as determined via calculation without materials testing results in the Draft Structural Assessment Report (AECOM 2013). This rehabilitation would be conducted without significantly altering the appearance of the bridge. The existing engineering function of the bridge would remain, as the overall truss configurations would be unchanged. The work to be performed on the truss would require the use of a temporary support system to allow for the removal of members and bridge pins.

For the 7-Ton Rehabilitation Alternative, it would also be necessary to rehabilitate/replace the existing bearings that are not functioning properly and are in poor condition. As a result of the existing bearings' lack of functionality, the thermal movements of the bridge are being restricted, affecting the superstructure and substructure. In addition, the New York abutment is in critical condition, while the remaining substructure units are overall in fair condition. This rehabilitation option includes extensive repair of the New York abutment, involving the installation of a new pile foundation to support the reconstructed masonry abutments and wingwalls, replacement of beam seat capstones and bearing stones, reconstruction and repointing of the failed stone masonry abutment stem and wingwalls, and improvements to the existing drainage behind the stone abutment walls.

10-Ton Rehabilitation Alternative:

This alternative would consist of repairing the bridge to a 10-ton operating rating, which would yield a higher structural capacity than the as-designed 1902 Skinners Falls Bridge. The Draft Structural Assessment Report (AECOM 2013) and the Draft Feasibility Study Report (AECOM 2014) contained information substantiating a 10-Ton Rehabilitation Alternative. Similar to the other rehabilitation alternatives, the 10-ton option would also include the replacement of all bridge pins, the entire floor system with new members of adequate capacity, and the timber deck system to ensure the extended service life of the structure. The 10-Ton Rehabilitation Alternative would include replacement, retrofit, and/or repair work to approximately 35% of the remaining truss members. A temporary bridge support structure, similar to the one proposed for the other alternatives, would be required for truss disassembly to permit replacement of members; cleaning, galvanizing, and painting; and reassembly of both truss spans.

[3] The as-designed capacity was initially determined to be 7 tons from the structural assessment report. Material testing results refined the original as-designed capacity to 9 tons.

For the 10-Ton Rehabilitation Alternative, it would also be necessary to rehabilitate or replace the existing bearings that are not functioning properly and are in poor condition. As a result of the existing bearings' lack of functionality, the thermal movements of the bridge are being restricted, affecting the superstructure and substructure. In addition, the New York abutment is in critical condition, while the remaining substructure units are overall in fair condition. This rehabilitation option includes extensive repair of the New York abutment, involving the installation of a new pile foundation to support the reconstructed masonry abutments and wingwalls, replacement of beam seat capstones and bearing stones, reconstruction and repointing of the failed stone masonry abutment stem and wingwalls, and improvements to the existing drainage behind the stone abutment wall.

Non-SOI Compliant Rehabilitation:

The Non-SOI Compliant Rehabilitation Alternative does not meet the SOI Standards but would still preserve some of the historic characteristics of the existing bridge. This type of rehabilitation would consist of a range of potential activities or improvements that will be investigated further as part of the HBRA Phase 2 studies, which will be conducted during future stages. The Non-SOI Compliant Rehabilitation Alternative considered in the PEL study consists of a modern two-span steel girder bridge with the trusses added as a decorative element to the outside of the superstructure, in recognition of the historic nature and aesthetics of the setting. As part of this alternative, the steel elements of the trusses would still need to be rehabilitated, and the top chords would need to be strengthened to meet stability requirements. Reuse of existing or introduction of new top lateral bracing would be incorporated depending on bridge width.

3.1.3 Full Replacement

Bridge replacement alternatives were evaluated as part of the PEL study. The replacement alternatives would result in the construction of a new, modern bridge in either the same location, known as online replacement, or a new modern bridge in a new location, known as offline replacement. For each of the replacement alternatives, the demolition and removal of the existing bridge is assumed. Per the current JIBC Agreement, the total number of bridges crossing the Upper Delaware River is limited to 10. Therefore, the construction of a replacement bridge at Skinners Falls would necessitate the removal of the existing bridge to maintain a total number of 10 bridges. Changing the number of bridges under the jurisdiction of the JIBC would require acts of the state legislatures in both Pennsylvania and New York. The conceptual bridge alignment locations are discussed below.

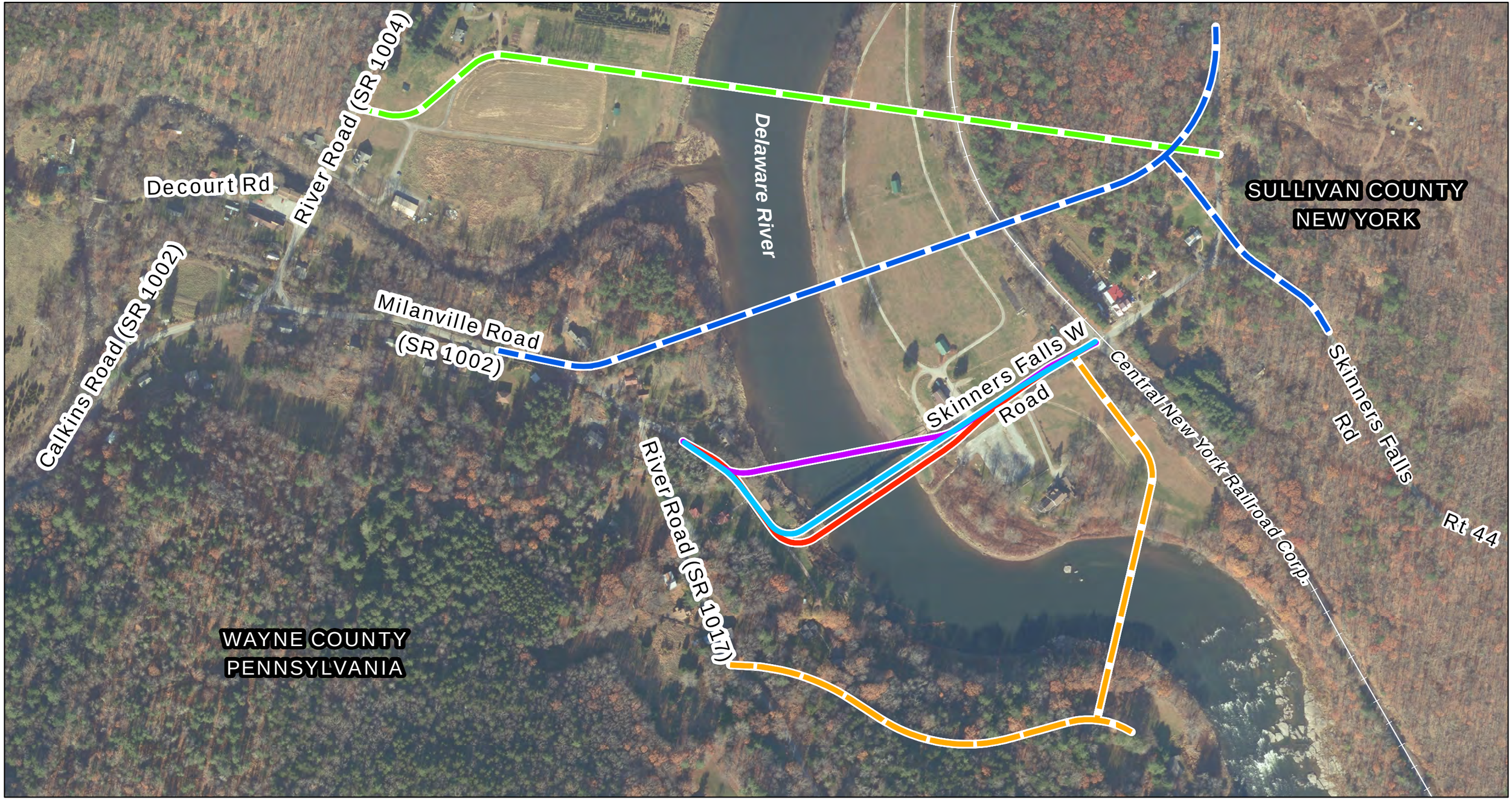
Conceptual Bridge Alignment Locations:

A total of six conceptual bridge alignment locations were developed as part of the PEL study (**Figure 9**). These conceptual alignments included bridge replacements and associated roadway improvements both upstream and downstream of the existing bridge and were developed using concept-level engineering. The conceptual bridge alignment locations were developed

based on current roadway and structure design criteria. A generic steel girder bridge was assumed as the structure type for the evaluation of the conceptual bridge alignment. All the conceptual bridge alignments assume the removal of the existing Skinners Falls Bridge.

The following six conceptual bridge alignment locations were studied:

- Alignment 1: Online Replacement. This conceptual bridge alignment consists of the replacement of the bridge on the same alignment as the existing alignment, along with associated roadway work and driveway adjustments to tie into the vertical profile of the new bridge.
- Alignment 2: North Shift. This conceptual bridge alignment consists of the replacement of the bridge just to the north of the existing alignment. The Pennsylvania abutment would be shifted to the north, which would improve the approach roadway geometry on that side. The New York abutment would be shifted slightly north to provide for improved roadway geometry across the bridge while tying into the approach roadway on that side. This conceptual alignment would also require associated roadway work and driveway adjustments to tie into the vertical profile of the new bridge.
- Alignment 3A: North At-Grade Crossing: This conceptual bridge alignment consists of the replacement of the bridge approximately 670 feet upstream of the existing bridge. This alignment improves approach roadway geometry on both sides of the bridge. This alignment would bisect the existing campground and require substantial roadway approach work on the New York side, including an at-grade crossing of the Central New York Railroad. Approach roadway work on the Pennsylvania side is also required.
- Alignment 3B: North Over Railroad: This conceptual bridge alignment consists of the replacement of the bridge approximately 1,375 feet upstream of the existing bridge and is the furthest north of the alignments studied. This alignment improves approach roadway geometry on both sides of the bridge and avoids impacts to the Milanville Historic District. This alignment would require a viaduct over the existing campground and Central New York Railroad, as well as substantial approach work on both the Pennsylvania and New York sides.
- Alignment 4: South Shift: This conceptual alignment consists of the replacement of the bridge immediately downstream of the existing bridge. This alignment would shift both the Pennsylvania and New York abutments slightly south from the existing bridge and would tie into the existing approach roadways. This conceptual alignment would also require associated roadway work and driveway adjustments to tie into the vertical profile of the new bridge.
- Alignment 5: Downstream Replacement: This alignment consists of the replacement of the bridge approximately 1,050 feet downstream of the existing bridge and is the furthest south of the alignments studied. This alignment improves approach roadway geometry on both sides of the bridge and avoids impacts to the Milanville Historic District. This alignment would require substantial approach roadway work on both the Pennsylvania and New York sides.



Skinners Falls Bridge
SR 1002-0230 over the Delaware River
FIGURE 9: PROPOSED ALIGNMENTS MAP
Long / Lat. 41.670139, -75.057724

- Alignment 1
- Alignment 2 - North Shift
- Alignment 3A
- Alignment 3B
- Alignment 4
- Alignment 5

pennsylvania DEPARTMENT OF TRANSPORTATION
Engineering District 4-0
55 Keystone Industrial Park Road
Dunmore, PA 19512

AECOM
625 W Ridge Pike
Conshohocken, PA 19428

0 150 300
Feet

Source: Aerials; Pennsylvania Emergency Management Agency.

Date: 3/20/2024

4 Environmental Overview

The environmental overview for the PEL study analyzed secondary source information and relied on preliminary agency coordination to identify potential environmental resources within the PEL study area. As mentioned in Section 1.1, the study area for the Skinners Falls Bridge project is relatively small. The study area for resource investigation varied based on the sensitivity of the resource and availability of secondary source information. Cultural and Socioeconomic constraints are shown in **Figure 10.** Environmental constraints are shown in **Figure 11.**

During future stages of design, studies to determine the presence or absence of environmental resources and to determine avoidance and minimization measures for sensitive species may be required. Potential project-level impacts of a transportation alternative or alternatives will be evaluated in future studies in consultation with PennDOT, NYSDOT, FHWA, and the appropriate resource agencies.

4.1 Cultural Resources

Within the study area, aboveground historic resources consist of the Skinners Falls Bridge and the Milanville Historic District. Previous studies also indicate the presence of archaeological resources on the Pennsylvania side of the river. Both the aboveground historic resources and the archaeological resources are discussed below. Ongoing coordination with consulting parties under Section 106 of the NHPA is also presented.

4.1.1 Aboveground Historic Resources

Skinners Falls Bridge:

The Skinners Falls Bridge was listed on the NRHP in 1988 under Criterion C for Engineering as a rare example of an intact multiple-span Baltimore through truss bridge of moderate length. In 1901, the American Bridge Company was hired by the Milanville Bridge Company. The Milanville Bridge Company was formed to construct the Milanville Bridge, more commonly referred to as the "Skinners Falls Bridge." Construction of the bridge was completed in November of 1902 for $14,000.

The primary character-defining features of the bridge are the two Baltimore through truss spans; truss configurations; and pin connections. Specifically, the structural members, including the top and bottom chords and the vertical and diagonal members, define the character of the truss configuration. Secondary character-defining features include the size and scale of the structure, portals, bracing, finials, decorative railings, bridge plaques, and decorative ornamentation. The structure retains its historic location over the Delaware River and its setting, which were cited in the original NRHP nomination as unique, as most Baltimore through truss bridges are found in other regions of the state. The Pennsylvania State Historic Preservation Office (PA SHPO), with assistance from PennDOT, conducted evaluations of metal truss bridges in 2018 and created a preservation prioritization system that ranked NRHP-eligible

Skinners Falls Bridge
SR 1002-0230 over the Delaware River
FIGURE 10: CULTURAL AND SOCIAL / ECONOMIC MAP
Long / Lat. 41.670139, -75.057724

Skinners Falls Bridge - National Register Listed

Milanville Historic District - National Register Listed

pennsylvania DEPARTMENT OF TRANSPORTATION
Engineering District 4-0
55 Keystone Industrial Park Road
Dunmore, PA 19512

AECOM
625 W Ridge Pike
Conshohocken, PA 19428

0 225 450
Feet

Source: Pennsylvania Emergency Management Agency, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.

Date: 3/26/2024

Skinners Falls Bridge
SR 1002-0230 over the Delaware River
FIGURE 11: ENVIRONMENTAL RESOURCES MAP
Long / Lat. 41.670139, -75.057724

Source: Pennsylvania Emergency Management Agency, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.

- NYSDEC Skinners Falls Access Area
- NHP Natural Heritage Community Occurances
- NHP Significant Natural Community Occurance
- USGS HUC12 Watersheds
- NWI Wetlands
- FEMA Zone AE
- FEMA Floodway
- Waterway
- NPS-Upper Delaware Scenic & Recreational River Boundary

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Date: 3/26/2024

or listed bridges as having an exceptional, high, or moderate preservation priority based on several attributes. Exceptional and high preservation priority bridges are usually rare, one-of-a-kind, or outstanding bridges within the remaining metal truss bridge population. The PA SHPO notes the historic preservation priority level of Skinners Falls Bridge as "Exceptional" because the bridge is one of only three representative examples of this type of truss bridge remaining in Pennsylvania. The New York State Historic Preservation Office (NY SHPO) notes it as "Significant" as it is the oldest example of an American Bridge Company Baltimore through truss highway bridge in the United States.

Milanville Historic District (Pennsylvania):
The Milanville Historic District was listed on the NRHP in 1993 under Criterion A for its association with the area's nineteenth- and twentieth-century industrial development, and under Criterion C for its noteworthy architecture of the same eras. The district's period of significance extends from 1815, reflecting the construction date of the earliest extant building, to ca. 1920, marking the end of the primary development period (Curtis 1992). Milanville was a center for lumbering, tanning, and wood distillation (creating industrial acids/chemicals from wood materials) during the nineteenth century, and played a key role in the history and development of the Upper Delaware Valley. The sawmill, tannery, and acid factory associated with these important industries are no longer extant; however, the residential and commercial buildings remain as evidence of the town's vitality during the period of significance (1815 to ca. 1920). The buildings include excellent examples of rural vernacular architecture, including the Milanville School, the Milanville Store, and the former barbershop, as well as examples of Greek Revival, Queen Anne, and Eastlake style dwellings. The Milanville-Skinners Falls Bridge also contributes to the historic district, representing an intact example of a Baltimore through truss bridge constructed during the district's period of significance. The district retains integrity of location, materials, design, setting, association, and feeling from the period of significance (1815 to ca. 1920). The NRHP boundary includes the historic core of the village as well as the Skinners Falls Bridge.

4.1.2 Archaeology

Preliminary investigations performed for projects along the Pennsylvania side of the river resulted in the identification of two archaeological sites within the study area: the Skinners Falls Bridge Tollhouse and the Volney and Milton Skinner Sawmill.

Additionally, 17 previously documented archaeological resources were identified in Pennsylvania Historical and Museum Commission's (PHMC's) online Cultural Resources Geographic Information System (CRIGIS), now known as Pennsylvania's Historic and Archaeological Resource Exchange (PA-SHARE), as being present within a 2-mile radius. These sites include both pre-contact period and historic period sites. No archaeological survey areas are shown on the NY SHPO Cultural Resources System (CRIS).

4.1.3 Consulting Parties

Under Section 106 of the NHPA, consulting parties and their comments must be considered throughout the project development process. A consulting party is an organization or individual with a demonstrated interest in the project due to their legal or economic relationship to the undertaking or affected property, or their concern with the undertaking's effects on historic properties. In addition to local government representatives, property owners in the PEL study area, and local historical societies or preservation organizations, State Historic Preservation Officers (SHPOs) and Tribal Nations and their Tribal Historic Preservation Officers (THPOs) are always solicited as consulting parties for projects.

Consulting parties were initially solicited for repair projects in October 2012. In 2016, PennDOT initiated Tribal Notification by soliciting seven Tribal Nations. PennDOT received two responses; the Delaware Tribe accepted consulting party status, and the Delaware Nation declined consulting party status but requested to be involved in the project development process. Although the Delaware Nation declined and only two responses were received, PennDOT will continue to consult with all the Tribal Nations that ascribe religious and cultural significance to the study area. As the PEL process started, consulting parties were again solicited in October 2022. A total of 224 consulting party invitations were sent in late October 2022 to property owners, agencies, and organizations. Respondents from the 2022 solicitation were added to the existing consulting parties as of 2013. A total of 61 consulting parties were listed on PennDOT's public Section 106 consultation website, Pennsylvania Transportation and Heritage (PATH), at the time the PEL study report was written. Consulting party comments have been solicited at various stages of the PEL study, including development of the Draft Purpose and Need document and the HBRA Phase 1 report. Consulting parties will continue to be engaged during further stages of design as the Section 106 process continues.

4.2 Natural Resources

4.2.1 Wetlands and Waters

Preliminary desktop investigations indicated the presence of four ponds, which are classified as palustrine unconsolidated bottom as part of the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapping within 0.4 mile of the existing bridge. No vegetated wetlands are present within the PEL study area based on NWI mapping.

Within 0.4 mile, the Delaware River, Calkins Creek, an Unnamed Tributary (UNT) to Calkins Creek, and a UNT to the Delaware River are the mapped perennial watercourses. Based on Pennsylvania Code Chapter 93, the perennial watercourses in the PEL study area on the Pennsylvania side have a designated use as High Quality-Cold Water Fishes and Migratory Fishes (HQ-CWF/MF), while the Delaware River is listed as Cold Water Fishes/Migratory Fishes (CWF). Within New York, the Delaware River and the UNT to the Delaware River are classified under Standard A(T) for trout waters and classification A surface waters for drinking water supply under the NYS Surface Water Classifications in 6 NYCRR 701. Based on the Pennsylvania Fish and Boat Commission (PFBC) information, the Upper Delaware River and Calkins Creek in

the PEL study area are not stocked with trout, are not naturally reproducing trout streams, and are not Class A Wild Trout Waters. Based on New York State Department of Environmental Conservation (NYSDEC) information, the Upper Delaware River and UNT to the Delaware River are not stocked with trout.

4.2.2 Threatened and Endangered Species

Based on initial agency coordination, threatened and endangered species under federal and state jurisdiction are present within the PEL study area. Resource agencies indicated that the federally endangered dwarf wedgemussel (*Alasmidonta heterodon)* and several bat species are present within the study area and are under the jurisdiction of the USFWS. Based on agency coordination, there are potential populations of other sensitive species within the study area. Additional coordination with these agencies will be required to determine impacts to these species.

4.2.3 Habitat

Based on secondary source information, the New York side of the riverbank in the vicinity of the Skinners Falls Bridge contains the Riverside Ice Meadow, which is a significant ecological community. According to the New York Natural Heritage Program (NYNHP), this community is critically imperiled in New York (Rank S1) and occurs along rivers where floating pieces of ice are pushed up into the shore during the winter, forming an ice pack that remains into the spring. The scour due to ice and the spring ice melt create a herbaceous community with a short growing season.

Additionally, in the same vicinity, the shoreline outcrop natural community is present. The shoreline outcrop in this location has been determined by NYSDEC as a High Quality Occurrence of an uncommon community type. According to the NYNHP, plants take roots in the cracks of the bedrock where soil accumulates along shorelines of lakes and streams. The community is located on outcrops of non-calcareous rocks. This community type is listed as vulnerable in New York (S3) with “a couple thousand occurrences statewide” in the NYNHP.

In Pennsylvania, the Wayne County Natural Heritage Inventory indicates that the Milanville Riverwash Site has a good population of a state species of special concern and should be part of an overall protection strategy for the Delaware River. This county rank 4 site (rank 1 is for the highest priority sites) contains a Pennsylvania rare shrub that grows on gravel bars in the Delaware River. The gravel bars are periodically scoured and change every year with spring floods. The core habitat is located north of the existing farm field on the Pennsylvania side between River Road and the Delaware River. Supporting habitat for this site is located from the confluence between Calkins Creek and the Delaware River north beyond the PEL study area limits.

Based on the Pennsylvania Conservation Explorer, the entire PEL study area is located within the Upper Delaware Scenic River Important Bird Area. The Important Bird Areas are recognized

as globally important habitat for the conservation of bird populations and are identified by BirdLife International.

4.3 Parks and Recreation

4.3.1 Scenic Rivers

The PEL study area is in the Upper Delaware Scenic and Recreational River unit, which was designated as an NPS unit in 1978. Also in 1978, the Upper Delaware River became a federal Wild and Scenic River designated by the federal Wild and Scenic Rivers Act (WSRA). The Upper Delaware is one of 10 national and Wild and Scenic Rivers that the NPS manages. The Skinners Falls Bridge is an element that supports the cultural and scenic Outstandingly Remarkable Values of the Upper Delaware Scenic and Recreational River unit. Outstandingly Remarkable Values are those elements of the Upper Delaware River that are worthy of special protection under the WSRA. Within the Upper Delaware Scenic and Recreational River unit, two scenic river segments and three recreational segments are present. The rationale for designations was described in the River Management Plan (COUP and NPS 1986) for the Upper Delaware River. Scenic river sections are free of impoundments and have shorelines or watersheds that are still largely primitive and shorelines that are largely undeveloped but accessible in places by roads. Recreational river areas are those river sections that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundments or diversions in the past. The Delaware River section between Callicoon, NY, and Narrowsburg, NY, is a recreational river section. This section contains the Skinners Falls Bridge.

Section 7(a) of the Wild and Scenic Rivers Act

The WSRA of 1968 (Public Law 90–542; 16 U.S.C. 1271 et seq.) creates protections for certain rivers with outstanding natural, cultural, and recreational values so that they are preserved in a free-flowing condition for citizens' enjoyment. The NPS classifies the Delaware River as a Scenic and Recreational River in the PEL study area. PennDOT and NYSDOT have coordinated with the NPS throughout the PEL study regarding the Delaware River.

Review of a future project may be required under Section 7(a) of the WSRA. The WSRA requires evaluation of the impacts of "water resources projects" (bridges or roadway construction projects) within the river's bed or banks.

4.3.2 Scenic Byways

The Upper Delaware Scenic Byway runs along NYS Route 97, and their Corridor Management Plan (CMP) is titled "An Enhancement Concept for the Upper Delaware Scenic Byway." This CMP document involved resolutions by multiple municipalities, plus review and approval by the Scenic Byways advisory board chaired by the NYSDOT Commissioner, as a prerequisite to the NY State legislature amending highway law to officially designate the byway. The CMP includes an inventory of intrinsic qualities, tourism resources, and visitor services that form the basis of designation of the corridor as a scenic byway, including scenic resources and historic resources. The Inventory of Intrinsic Qualities, Tourism Resources and Visitor Services section is a robust

part of the document which includes the Skinners Falls Bridge in the Historic Resources section with a photo and a short description. A map of the byway corridor shows the Skinners Falls Bridge marked with a historic site icon, and it is also listed in a table of Points of Interest. "Cultural Interest Area" Manual on Uniform Traffic Control Devices signs on the Upper Delaware Scenic Byway point tourists towards the bridge.

4.3.3 Recreational Areas

As noted above, the PEL study area is in the Upper Delaware Scenic and Recreational River unit. Primary recreational activities consist of boating along the Upper Delaware River, including canoeing, kayaking, and tubing. Additionally, recreational fishing and swimming are popular activities. Skinners Falls, an important river rapid along this section of the Delaware River, is located approximately 0.25 miles downstream of the Skinners Falls Bridge.

Within the southeast quadrant of the PEL study area, the NYSDEC owns and operates the Skinners Falls access area for recreational, non-motorized boaters. The access area consists of a 52-car parking lot and a partial concrete pad for launching canoes and kayaks. The planned improvements to this area, described in Sullivan County's *Site Designs for Six River Access Points* (2015) and prepared by NYSDEC, include upgraded and expanded parking, a permanent comfort station, and Americans with Disabilities Act accessibility. As of late 2023, these proposed improvements have not been implemented. The Skinners Falls main beach is located along a section of gravelly shoreline on the New York side of the river and is popular for picnicking and sunbathing.

Additionally, on the New York side, the southeast quadrant includes the Lothian House Bed and Breakfast/Lou's Tubes, which provides lodging, inner tube rentals, and an antique shop. Lander's
Campground and River Trips, located within the northeastern quadrant, offers kayak, raft, and inner tube rentals and includes a campground and snack shop.

Within the PEL study area on the Pennsylvania side, no additional recreational resources are present. However, the NPS Upper Delaware headquarters is located approximately 4.2 miles south of the bridge along River Road. The NPS also has a ranger station located approximately one-half mile west of the bridge along River Road. This ranger station is the closest emergency response facility to the bridge and to Skinners Falls.

4.3.4 Water Trails

The Upper Delaware River within the PEL study area is also part of the 250-mile-long Delaware River Water Trail. The Delaware River Water Trail extends from Hancock, NY, to Trenton, NJ, and
is popular with recreational boaters including canoes, rafts, tubes, and small fishing boats. Boaters can access the river from the NYSDEC-operated Skinners Falls access area on the New York side.

4.4 Socioeconomic Resources

4.4.1 Population, Housing and Environmental Justice

Population

According to US Census Data (ACS 2021), the total population of Wayne County, PA, was 51,244, and of Census Tract 9605, which contains the PEL study area, was 3,638. The total population of
Sullivan County, NY, was 78,806, and of Census Tract 9522, which contains the PEL study area, was 1,360. The median age for Wayne County was 48.4 and for Sullivan County was 43.2.

Housing

In Sullivan County, total housing units were reported to be 49,564; 70% were one-unit structures, and 63.9% were owner-occupied units. For Wayne County, total housing units were reported to be 31,937; 84% were one-unit structures, and 80.7% were owner-occupied units. Census Tract 9605 in Wayne County, PA, had a total of 2514 housing units; 89.1% were one-unit structures and 89.4% were owner-occupied units. Census Tract 9522 in Sullivan County, NY, had a total of 1,118 housing units; 84% were one-unit structures and 79% were owner-occupied units.

Environmental Justice

*Executive Order 12898, "*Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*"* (February 11, 1994), directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority and low-income populations. Recently, Executive Order 14096, "Revitalizing Our Nation's Commitment to Environmental Justice for All" (April 21, 2023), added additional protected populations of tribal affiliations and disability. In addition, the Executive Order 14096 amended the criteria to address the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers. The new executive order also removed "disproportionately high" from the definition and replaced it with "disproportionate." For transportation projects that use federal funds, the FHWA must identify disproportionate and adverse health or environmental effects on minority and low-income populations.

American Community Survey (ACS) 2022 Census data for the census tracts and Wayne County, PA, and Sullivan County, NY, are included in **Table 2** and **Table 3** respectively. At a screening level, the percentages of non-Hispanic minority population, which included people of color, and Hispanic populations within Census Tract 9605 were slightly higher than the county average, while the percentage of individuals in poverty was below the county average. For Census Tract 9522, the percentages of the non-Hispanic minority population, Hispanic population, and individuals in poverty were all below the county average.

At a screening level, the percentages of non-Hispanic people of color minority population, Hispanic population, and disabled population were above the county average. Therefore,

environmental justice (EJ) communities may be present within the census tract that includes the PEL study area on the Wayne County, PA, side of the river. Public, stakeholder, and agency coordination conducted to date has not indicated the presence of an EJ community within the PEL study area. As with the other resources described in this section, additional studies and evaluations regarding EJ communities will be needed in future stages of design.

Table 2: Pennsylvania Environmental Justice Populations

Geography	Non-Hispanic People of Color Minority Population	Hispanic Population	Native American Population	Disabled Population	Individuals in Poverty
Census Tract 9605, Wayne County, PA	9.5 %	6.9%	0%	23.2%	5.6%
Wayne County, PA	6.3%	4.3%	0.15%	17.0%	11%

Table 3: New York Environmental Justice Populations

Geography	Non-Hispanic People of Color Minority Population	Hispanic Population	Native American Population	Disabled Population	Individuals in Poverty
Census Tract 9522, Sullivan County, NY	6.7%	4.6%	0%	12.2%	10.5%
Sullivan County, NY	18.3%	15.6%	0.19%	16.4%	14.7%

4.4.2 Commercial and Economic Development

Land use planning documents for both New York and Pennsylvania did not indicate significant current or planned growth or designated growth areas (Sullivan County 2020; Wayne County Economic Development Corporation 2020). The Wayne County Comprehensive Plan Update (Wayne County 2010) stated that the regional economy is expected to continue to evolve from an agricultural and manufacturing economy to a rural residential and tourism-based economy.

The southeast quadrant of the project area in New York includes the Lothian Bed and Breakfast/Lou's Tubes, which provides inner tube rentals, lodging, and an antique shop.

Lander's Campground and River Trips, located within the northeastern quadrant in New York, offers kayak, raft, and inner tube rentals, and a campground and snack shop.

On the New York side, the entire PEL study area is zoned as the Hamlet District. The purpose of the Hamlet District is to provide for neighborhood commercial development in areas of the town that represent important meeting places and exhibit existing commercial activity but lack public sewer facilities.

In Pennsylvania, in the northwestern quadrant to the west of the bridge the PEL study area is residential and includes the Milton Skinner house and associated barn. The house is located on the west side of SR 1002 and the barn is located on the east side of the road.

On the Pennsylvania side, the entire PEL study area is located within the Zone River District (RD). The RD's intent is to conform with the requirements of the federal WSRA and for the NPS to allow for the enjoyment of the Delaware River Valley. In contrast, a River District designation is not present within the zoning regulations for the New York side. As described in Section 1 (Introduction and Study Background), as part of the Upper Delaware River Management Plan, the Upper Delaware Council (UDC) was established to oversee the implementation of the River Management Plan. The UDC includes representation from both states, the Delaware River Basin Commission, and up to 15 river towns and townships. Currently, both the Town of Cochecton and Damascus Township have representation within the UDC. Any project located within the Upper Delaware Scenic and Recreational River unit must comply with the Land and Water Use Guidelines, which were published in the *Final River Management Plan. Upper Delaware Scenic and Recreational River* (COUP and NPS 2015). As prescribed in the River Management Plan, UDC reviews development activities and land use regulations. In coordination with the UDC, the NPS determines substantial conformance with the Land and Water Use Guidelines included in the River Management Plan.

4.4.3 Community Services and Facilities

Within the project study area, no schools are present. The PEL study area is served by the Wayne Highlands School District in Pennsylvania and the Sullivan West School District in New York. No places of worship or cemeteries are mapped within the PEL study area.

4.4.4 Emergency Services

As part of the development of the project purpose and need, the project team coordinated with emergency responders within the PEL study area.

As previously noted in Section 4.3.2, Skinners Falls is located downstream of the Skinners Falls Bridge. Skinners Falls is a 100-yard-long stretch of rapids that is a popular recreation attraction. Water rescue calls are common in this area. In 2021, the NPS reported that since May 2017, there have been 151 major incidents, to which the NPS Ranger Station in Milanville, PA, responded, requiring use of the Skinners Falls Bridge and the adjacent Delaware River access

location in New York. The NPS is the primary responder for all river emergencies but is assisted by the surrounding fire departments of both states. The gross weight of the NPS river response vehicles is 4.5 tons. River rescues are dynamic operations conducted in a constantly changing environment and requiring large teams of coordinated rescuers. As a result, rescue operations and emergency response depend on access to both sides of the river, both upstream and downstream of the falls, to facilitate the initial search for victims, to provide adequate response and care, and finally to extract any victims from the scene. Furthermore, Milanville, PA, is used as a landing zone for "life flight" helicopters for emergencies and first responders of both states if critical emergency medical care is required following a river rescue. During a 2023 field meeting with PennDOT and NYSDOT, the NPS reiterated its concerns as the primary responder and noted the continued occurrence of incidents within the vicinity of Skinners Falls.

Emergency service providers on both sides of the river depend on each other for mutual aid. Lake Huntington Volunteer Fire Department and Narrowsburg Fire Department, both located in New York, stated they each respond to approximately 12 mutual aid calls per year that require them to cross into Pennsylvania (see **Figure 12**).

Figure 12: Emergency Services Locations

Although the Lake Huntington Volunteer Fire Department is in New York, it provides service to the Milanville, PA, area through a mutual aid agreement and is usually the first fire department to arrive on the scene of emergencies in the Milanville area (see **Table 4**). The Lake Huntington

Volunteer Fire Department stressed the need for a bridge over the Delaware River near Skinners Falls that can handle the weight and size of firefighting apparatuses. According to the Lake Huntington Volunteer Fire Department, the inability to cross the Skinners Falls Bridge increases its response time. The Lake Huntington Volunteer Fire Department previously used the Skinners Falls Bridge in accordance with the weight postings. For an incident in Milanville, firefighters would cross the bridge in a light-duty truck or car and wait to meet the firefighting apparatus once it arrived via the detour route. Equipment upgrades have prevented the use of the bridge by firefighting apparatuses in past decades; the newer Lake Huntington Volunteer Fire Department firefighting apparatuses weighed more, while the bridge's weight posting continued to be limited. The nearest bridges spanning the river are the Cochecton-Damascus Bridge to the north and the Narrowsburg Bridge to the south. Both bridges were recently rehabilitated and have no load postings or vertical clearance postings. These bridges can carry all emergency vehicles.

Table 4: Emergency Services Proximity

Fire Department	Driving Distance from Station to Milanville General Store*	Response Time without Skinners Falls Bridge*	Response Time with Skinners Falls Bridge*
Lake Huntington Volunteer Fire Department	8 miles	14 minutes	9 minutes
Narrowsburg Fire Department	6 miles	13 minutes	10 minutes
Equinunk Volunteer Fire Company	11 miles	19 minutes	19 minutes
Welcome Lake Fire Department	8 miles	18 minutes	18 minutes

*According to Google Maps

The Narrowsburg Fire Department is in Narrowsburg, NY, south of the Skinners Falls Bridge. The Narrowsburg Fire Department also provides mutual aid to Pennsylvania, including Milanville. The Narrowsburg Fire Department has used the Skinners Falls Bridge for emergency response, complying with the applicable weight postings; their rescue truck and mini pumper truck, which each have a gross vehicle weight of 8.5 tons, have complied with the weight postings.

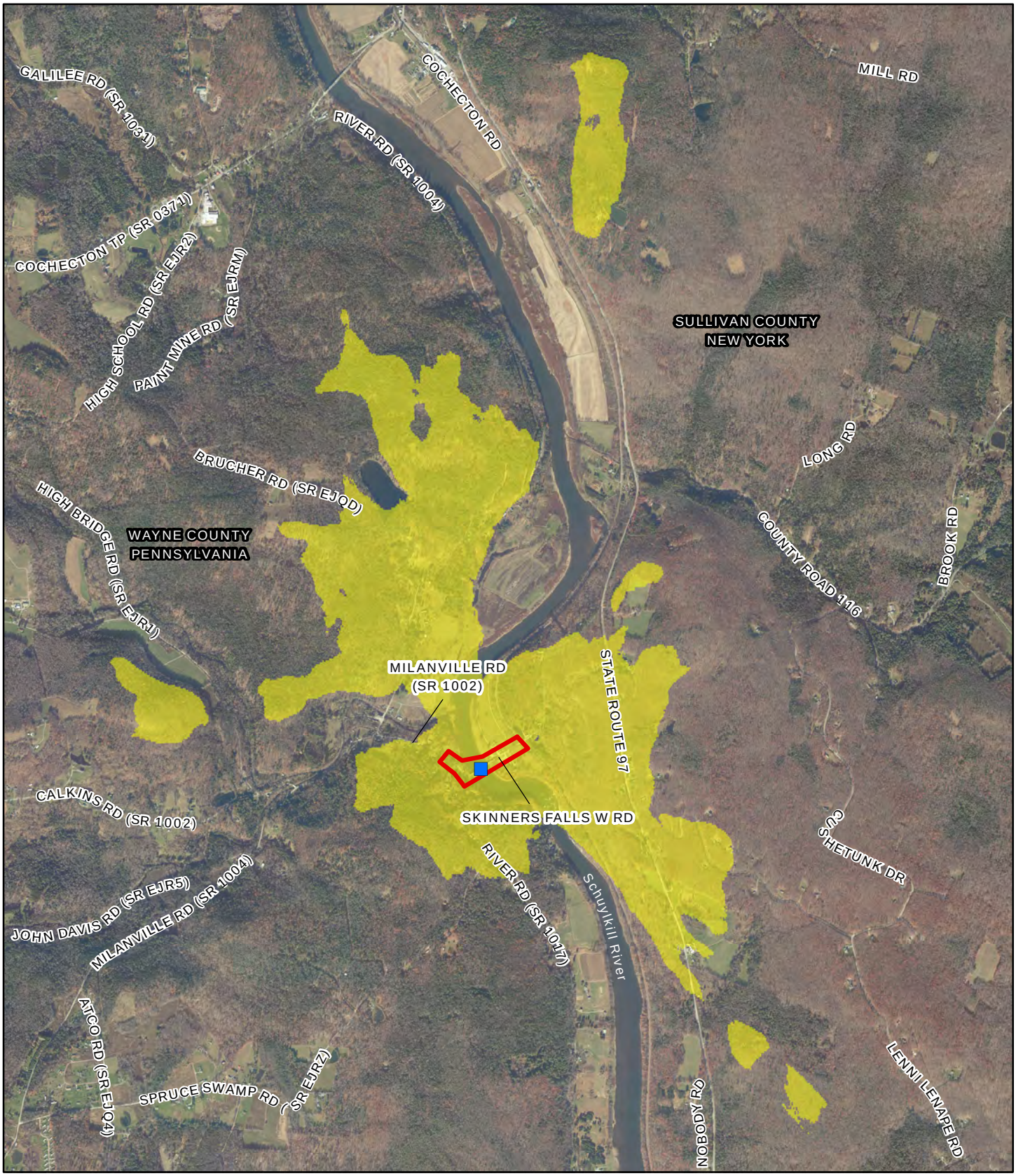
The Equinunk Volunteer Fire Company, the primary responder in Pennsylvania, stated that access to withdraw water for firefighting is not currently available on the Milanville side of the Skinners Falls Bridge. Water is primarily sourced from the New York side of the Delaware River, and multiple fill-ups are often required for fire calls.

In 2020, local officials, stakeholders, and the NPS submitted a Joint Position Statement that included a section regarding emergency response. The statement reiterated the importance of the Skinners Falls Bridge's connection between Pennsylvania and New York, and the increased emergency response time caused by its load posting and closure.

4.4.5 Visual Resources

The existing Skinners Falls Bridge is a visually striking structure within its surrounding landscape, contrasting with the natural character of the Delaware River and its setting. The PASHPO rated this bridge an "Exceptional" resource, the highest category within their preservation prioritization system. The NYSHPO rated the bridge a "Significant" resource, as it is the oldest example of an American Bridge Company Baltimore through truss highway bridge in the United States. As an authentic visible historic resource of exceptional value, it is also a visual resource of exceptional value. The bridge is a visible structure that supports the cultural and scenic Outstandingly Remarkable Values of the Upper Delaware Scenic and Recreational River unit as well and is considered worthy of protection under the federal WSRA. The thinness of the metal truss members and the roadway deck that make up the existing bridge give the bridge a sense of visual lightness and unobtrusiveness in the landscape. The bridge's setting is primarily characterized by mature wooded vegetation growing up to and along the edge of the river.

Existing topography, mature tree cover, and the shape of the river create a well-defined and discrete viewshed for the bridge (**Figure 13**). The bridge stands within its original context and is a point of interest for many recreational viewers. It is visible from nearby historic and community resources, including the Milanville Historic District, the Skinners Falls NPS boat launch, Skinners Falls Beach, local businesses, and the Delaware River itself. As an important resource for recreational viewers, it also has an associated importance for commercial and economic businesses and development related to local tourism. The bridge is also visible from single-family homes located along adjacent hillsides. The bridge may be visible from additional locations during winter months when trees are bare. Preservation of the bridge in its original context was raised by the community during the initial public meeting and the Purpose and Need comment period. Additional study is needed to determine the project viewshed and potential viewshed impacts associated with the various project alternatives.



Skinners Falls Bridge
SR 1002-0230 over the Delaware River
FIGURE 13: PRELIMINARY VIEWSHED MAP
Long / Lat. 41.669659, -75.058519

Point of Observation (Assuming 10m deck height & 1.6m observer height)

Project Area

Viewshed

pennsylvania DEPARTMENT OF TRANSPORTATION
Engineering District 4-0
55 Keystone Industrial Park Road
Dunmore, PA 19512

AECOM
625 W Ridge Pike
Conshohocken, PA 19428

0 1,250 2,500
Feet

Date: 3/26/2024.
Source: Aerials: PEMA 2018. Base: PASDA & NYS

5 Alternatives Screening

The alternative evaluation process conducted during the PEL study identified a range of alternatives and then screened them based on their ability to meet the project purpose and need, as well as on environmental, engineering, and cost considerations. Concept-level engineering was performed to develop the build alternatives, along with a generic bridge type. Concept-level impact analysis of environmental, cultural, and socioeconomic resources was then undertaken to evaluate the degree of impacts associated with each build alternative. Where appropriate, potential minimization and/or mitigation measures were also included. Concept-level impact tables for each of the alternatives listed below are included in **Appendix E**.

Concept-level costs for all the PEL study alternatives were developed to assist with the planning and programming of funds for the future stages of the project. These include estimated construction costs, anticipated mitigation costs for impacts to historic resources, and lifecycle costs. Lifecycle costs were evaluated over a 100-year duration, which is consistent with the typical lifecycle assumed for a modern bridge.

5.1.1 No Build

No Build Do Nothing

The No Build Do Nothing Alternative consists of no maintenance or rehabilitation activities except ongoing inspection. Because the No Build Do Nothing Alternative does not include any rehabilitation activities, the bridge will continue to remain closed to all traffic and its condition will continue to deteriorate. Bridge failure would be inevitable. It is acknowledged that this alternative would not be safe or reasonable and is only being carried forward for comparison purposes. The approaches would be signed as dead-ends, and no pedestrian or vehicular crossing would be present at this location. Environmental and cultural resources would be impacted once the bridge fails, necessitating its removal. Adverse effects to both the Skinners Falls Bridge and the Milanville Historic District are anticipated. Impacts to environmental resources, including the Delaware River, threatened and endangered species, and parks and recreational resources are anticipated due to the need to construct causeways to remove the bridge from the river. This alternative does not meet the purpose and need.

Concept-level costs for this alternative include the costs for demolition and historic mitigation. Lifecycle costs for this alternative are zero, as no bridge would be present at this location.

Removal/Demolition Alternative

The Removal/Demolition Alternative consists of the demolition of the existing bridge. The bridge substructure elements, including the abutments and piers, would be removed. The approaches would be signed as dead-ends, and no pedestrian or vehicular crossing would be present at this location. Environmental and cultural resources would be impacted as part of the demolition. Adverse effects to both the Skinners Falls Bridge and the Milanville Historic District are anticipated. Impacts to environmental resources, including the Delaware River, threatened

and endangered species, and parks and recreational resources, are anticipated due to the need to construct causeways to remove the bridge from the river. This alternative does not meet the purpose and need.

Concept-level costs include the costs for the demolition and removal of the bridge. Historic mitigation costs for the adverse effect to the Skinners Falls Bridge and Milanville Historic District are included. Lifecycle costs for this alternative are zero, as no bridge would be present at this location.

Removal/Relocation and Reuse Alternative

The Removal/Relocation and Reuse Alternative consists of the careful disassembly of the existing bridge. The bridge would then be catalogued and transported to a location for temporary storage. The bridge substructure elements, including the abutments and piers, would also be removed. The approaches would be signed as dead-ends, and no pedestrian or vehicular crossing would be present at this location. Environmental and cultural resources would be impacted as part of the disassembly. Adverse effects to the Milanville Historic District are anticipated. The potential exists for a "No Adverse Effect" finding for the Skinners Falls Bridge, assuming reuse in a new location, but an "Adverse Effect" finding for the Milanville Historic District is anticipated. PennDOT would advertise for the bridge's availability on its bridge marketing site for adaptive reuse. Adaptive reuse may include the use of the bridge offsite and off-system for non-vehicular traffic at facilities such as parks, rail trails, and university campuses. Impacts to environmental resources, including the Delaware River, threatened and endangered species, and parks and recreational resources, are anticipated due to the need to construct causeways to remove the bridge from the river. This alternative does not meet the purpose and need.

Concept-level costs include the costs for the disassembly of the bridge. These costs do not include the restoration or relocation of the bridge. Historic mitigation costs for the adverse effect to the Milanville Historic District are included. Lifecycle costs for this alternative are zero, as no bridge would be present at this location.

5.1.2 Traditional Rehabilitation (4-, 7-, 10-ton) Alternative

For the purposes of the alternatives screening, the 4-ton, 7-ton, and 10-ton rehabilitation alternatives were considered together as one rehabilitation alternative. The Traditional Rehabilitation Alternative may result in minimal impacts to environmental resources, although temporary impacts due to the use of temporary causeways to perform the rehabilitation would be necessary. As documented in the HBRA Phase 1 report, the 4-, 7-, and 10-ton alternatives would be conducted in compliance with the SOI Standards. As a result, a No Adverse Effect finding for the NRHP-listed Skinners Falls Bridge and a No Adverse Effect finding for the NHRP-listed Milanville Historic District are anticipated. Impacts to environmental resources, including the Delaware River, threatened and endangered species, and parks and recreational resources, are anticipated due to the need to construct causeways to perform the rehabilitation. Dry

hydrants, signalization of each approach, and a striped bicycle/pedestrian lane are enhancements that can be included with this alternative to address some of the identified project needs that may not currently be provided by the Traditional Rehabilitation Alternative. The Traditional Rehabilitation Alternative and the ability of its associated enhancements to meet the purpose and need will be determined in future stages of the project.

Concept-level costs include the costs for the rehabilitation according to the SOI Standards, along with costs for enhancements such as dry hydrants and signalization. Lifecycle costs for the Traditional Rehabilitation Alternative assume regular maintenance and rehabilitation activities to maintain the bridge and preserve load capacity.

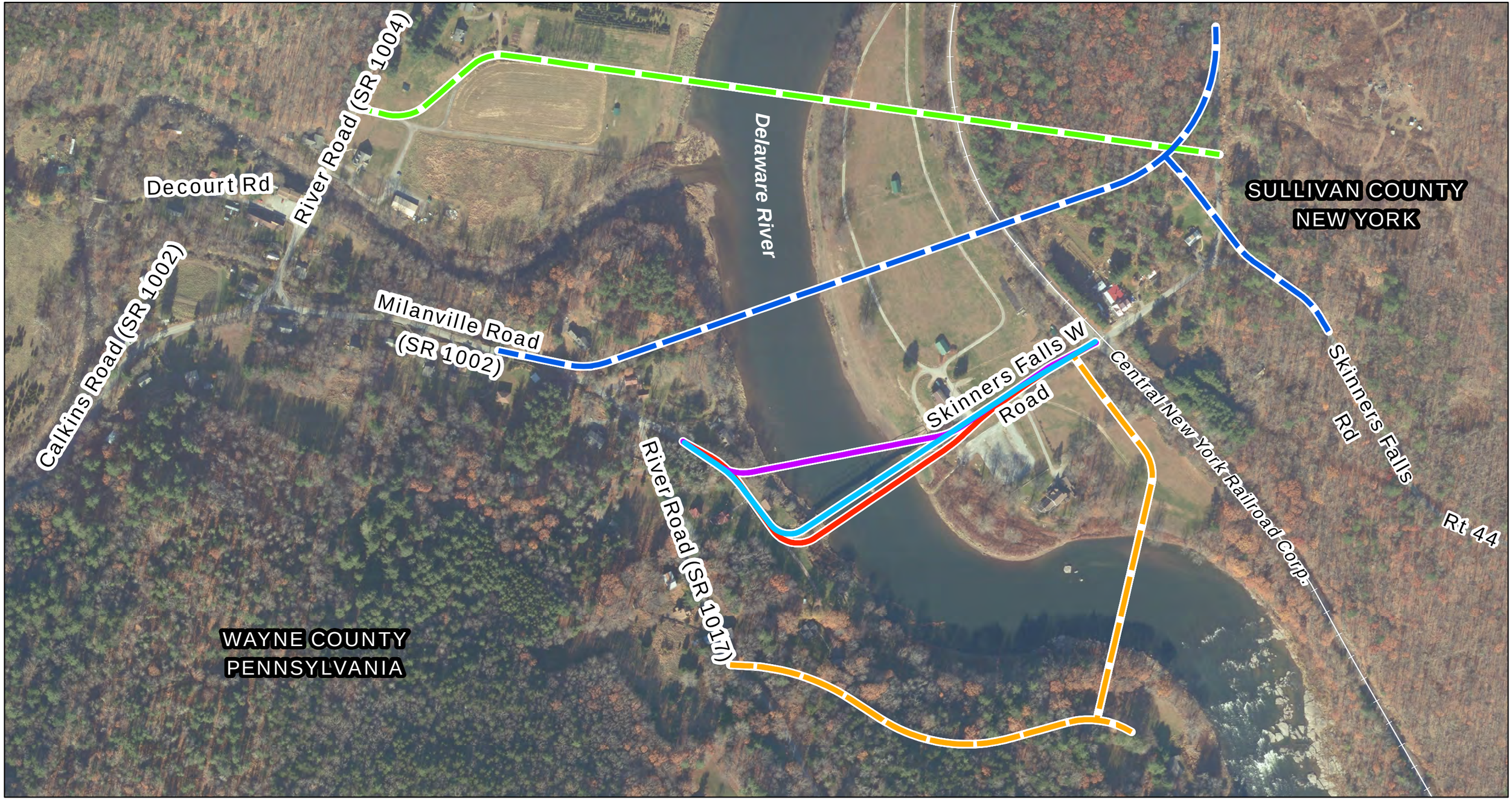
5.1.3 Non-SOI Compliant Rehabilitation Alternative

The Non-SOI Compliant Rehabilitation Alternative considered in the PEL study consisted of a modern two-span steel girder bridge with the trusses added as a decorative element to the outside of the superstructure, in recognition of the historic nature and aesthetics of the setting. As part of this alternative, the existing steel members would still need to be rehabilitated, and the top chords would need to be strengthened to meet stability requirements. Adverse effects to both the Skinners Falls Bridge and the Milanville Historic District are possible. Impacts to environmental resources, including the Delaware River, threatened and endangered species, and parks and recreational resources, are anticipated due to the need to construct causeways to remove the bridge from the river. The ability of the Non-SOI Compliant Rehabilitation Alternative to meet the purpose and need will be further revisited in future stages of the project. Additionally, the implementation of such a rehabilitation consists of a range of potential activities or improvements that will be investigated further as part of the HBRA Phase 2, which will be conducted during future stages.

Concept-level costs for this alternative include the costs for new substructure units, new beams, new deck, new railing, along with reuse of the existing truss members, as well as costs to mitigate the potential Section 106 adverse effects to historic resources. Lifecycle costs for this non-traditional rehabilitation assume regular maintenance and rehabilitation activities to maintain the bridge and preserve load ratings.

5.1.4 Full Replacement

For the purposes of the PEL study, the Full Replacement Alternative initially consisted of six variations based on the proposed alignment of the replacement structure. A four-span bridge was assumed for screening purposes. Proposed alignments are shown in **Figure 14**. For all full replacement alignments, impacts to environmental resources, including the Delaware River, threatened and endangered species, and parks and recreational resources are anticipated due to the need to construct causeways to perform the replacement. Concept-level costs for the Full Replacement Alternative's proposed alignments were not developed as part of the initial screening.



Skinners Falls Bridge
SR 1002-0230 over the Delaware River
FIGURE 14: PROPOSED ALIGNMENTS MAP
Long / Lat. 41.670139, -75.057724

- Alignment 1
- Alignment 2 - North Shift
- Alignment 3A
- Alignment 3B
- Alignment 4
- Alignment 5

pennsylvania DEPARTMENT OF TRANSPORTATION
Engineering District 4-0
55 Keystone Industrial Park Road
Dunmore, PA 19512

AECOM
625 W Ridge Pike
Conshohocken, PA 19428

0 150 300
Feet

Source: Aerials; Pennsylvania Emergency Management Agency.

Date: 3/26/2024

Alignment 1: Online Replacement

The online replacement alternative assumes a four-span bridge with approximately 1,650 linear feet of roadway and structure improvements. The online replacement would result in new piers within the Delaware River and potential improvements to the approach roadway geometry within the floodway and floodplain along the approaches. The online replacement is largely confined to the footprint of the existing bridge and immediate approaches, so the overall impacts associated with this alternative are generally lower than the offline alternatives. The substandard geometry of the roadway approaches would likely remain. As previously stated, all the replacement alternatives discussed in the PEL study would result in impacts to the existing Skinners Falls Bridge, which is a NRHP-listed historic resource. Furthermore, the replacement alternatives would also result in impacts to the NHRP-listed Milanville Historic District. Slightly over two acres of right-of-way impacts affecting approximately eight parcels are possible with this alternative.

Alignment 2: North Shift

The north shift alternative consists of approximately 1,500 linear feet of roadway and structure improvements with a proposed structure 88 feet longer than the online replacement alternative. The environmental impacts associated with the north shift are similar to the online replacement alternative, although due to the increases in structure length, slightly higher waterway impacts are anticipated. Impacts to the Milanville Historic District and the existing Skinners Falls Bridge and right-of-way impacts are similar to the online alternative. Over two acres of right-of-way impacts affecting approximately eight parcels are possible for this alternative. This alternative has comparatively lower business impacts compared to other offline alternatives.

Alignment 3A: North At-Grade Crossing

The north at-grade crossing alternative consists of approximately 3,600 linear feet of roadway and structure improvements, with a proposed structure length 58 feet longer than the online replacement alternative. This alternative improves the roadway geometry on the Pennsylvania side. This alternative would require the most roadway and structure improvements of the alternatives considered in the PEL study. In addition to the fill and riprap associated with this alternative, a crossing of a UNT to Calkins Creek would be required for the approach roadway on the Pennsylvania side. To build the new roadway approaches leading to the relocated bridge, increased fill within the floodway and floodplain would be required for this alternative. This alternative would also result in a new at-grade crossing of the railroad and in impacts to both the Milanville Historic District and the existing Skinners Falls Bridge. Comparatively high amounts of right-of-way, particularly from the campground on the New York side, would be required for this alternative. Under 7 acres of right-of-way impacts affecting approximately 18 parcels are possible with this alternative.

Alignment 3B: North Over Railroad

This alternative consists of approximately 2,900 linear feet of roadway and structure improvements, with a proposed structure length 783 feet longer than the online replacement alternative. The structure is anticipated to be a viaduct and is the longest of the alternatives evaluated in the PEL study.

A new crossing over the railroad would be required. In addition to the fill and riprap associated with this alternative, a crossing of a UNT to Calkins Creek would be necessary for the approach roadway on the Pennsylvania side. To build the new roadway approach on the Pennsylvania side, extensive fill within the floodplain would be required for this alternative. This alternative would result in impacts to both the Milanville Historic District and the existing Skinners Falls Bridge. As a result of the location of this alignment, comparatively high amounts of right-of-way, particularly from the campground on the New York side, would be required. Over 5 acres of right-of-way impacts affecting approximately 12 parcels are possible with this alternative.

Alignment 4: South Shift

The south shift alternative consists of approximately 1,700 linear feet of roadway and structure improvements, with a proposed structure 18 feet shorter than the online replacement alternative. The environmental impacts associated with the south shift are like those of the online replacement alternative, and relatively low floodway impacts are anticipated. The Milanville Historic District and the existing Skinners Falls Bridge and right-of-way impacts are similar to those for the online alternative. Under three acres of right-of-way impacts affecting approximately nine parcels are possible with this alternative.

Alignment 5: Downstream Replacement

The downstream replacement alternative consists of approximately 3,100 linear feet of roadway and structure improvements, with a proposed structure length 74 feet longer than the online replacement alternative. The amount of roadway and structure improvements is high compared to the alternatives in the immediate vicinity of the existing bridge. In addition to the fill and riprap associated with this alternative, a crossing of a UNT to the Delaware River would be required for the approach roadway on the New York side. Increased fill within the floodway and floodplain would be required to construct the new roadway approach on the New York side. The location of this alternative makes it the closest alternative to Skinners Falls and presents concerns regarding the potential for ice jams to affect the proposed bridge. This alternative also results in impacts to the Natural Heritage Community occurrences for the Riverside Ice Meadow and shoreline outcrop. Comparatively high amounts of right-of-way, particularly from the businesses on the New York side, would be required for this alternative. Slightly under six acres of right-of-way impacts affecting approximately 11 parcels are possible with this alternative. This alternative would result in impacts to both the Milanville Historic District and the existing Skinners Falls Bridge.

5.1.5 Alternatives Screening Summary

The proposed alternatives were presented to the agencies and stakeholders at the Agency Coordination Meetings (ACM) and Project Advisory Committee (PAC) Meetings. The benefits and disadvantages of the proposed alternatives screening are presented in **Table 5.** The benefits and disadvantages of the alternatives to critical resources, including community and historic resources, were evaluated. Additionally, consideration was given to safety, engineering, and the visual landscape. During this phase of the alternatives analysis, a Non-SOI Compliant Rehabilitation Alternative was not presented. Subsequent to these meetings the Non-SOI Compliant Rehabilitation Alternative was added to the proposed alternatives. The Non-SOI Compliant Rehabilitation Alternative has benefits and disadvantages similar to those of the online replacement alternative, but it offers some aesthetic improvements by retaining the original bridge members.

Table 5: Alternative Benefits and Disadvantages

Alternatives	Benefits	Disadvantages
No Build Do Nothing		• Impacts to Milanville Historic District and historic bridge • Becomes a safety hazard • Changes visual landscape
No Build Removal/Demolition	• Removes safety hazard	• Impacts to Milanville Historic District and historic bridge • Changes visual landscape
No Build Removal/Relocation/Reuse	• Removes safety hazard	• Impacts to Milanville Historic District and historic bridge • Changes visual landscape
Traditional Rehabilitation (4-, 7-, 10-ton)	• Meets the Secretary of Interior Standards • Maintains existing visual context • Minimizes impacts to Milanville Historic District	• Limited weight capacity • Single-lane bridge width • Substandard approach geometry remains
Non-SOI Compliant Rehabilitation	• Retains some historic materials • Maintains aspects of existing visual context	• Impacts to Milanville Historic District and historic bridge • Changes visual landscape

Alternatives	Benefits	Disadvantages

Alignment 1 (Online Replacement)	• Minimizes right-of-way impacts
	• Low business impacts
		• Impacts to Milanville Historic District and historic bridge
		  • Substandard approach geometry likely remains
		  • Changes visual landscape

Alignment 2 (North Shift)	• Improves roadway geometry • Low business impacts	• Impacts to Milanville Historic District and historic bridge • Increased right-of-way impacts compared to online replacement • Changes visual landscape
Alignment 3A (North At-Grade Crossing)	• Improves roadway geometry • Shorter bridge than Alignment 3B	• Impacts to Milanville Historic District and historic bridge • Potential viaduct • Bisects campground • Increased fill in floodplain/floodway • Additional grade crossing of railroad • Changes visual landscape
Alignment 3B (North over Railroad)	• Crosses over railroad on viaduct	• Impacts to farmland • Impacts to Milanville Historic District and historic bridge • Longest bridge (viaduct) • Bisects campground • Requires new overhead bridge crossing of railroad north of existing at-grade crossing • Existing at-grade crossing to remain to provide local access to the businesses • Changes visual landscape
Alignment 4 (South Shift)	• Shortest bridge • Low business impacts	• Closest to boat launch • Impacts to Milanville Historic District and historic bridge • Substandard approach geometry likely remains • Changes visual landscape
Alignment 5 (Downstream Replacement)	• Provides scenic vantage point over falls	• Closest to falls and has impacts to Natural Heritage Community • Impacts to Milanville Historic District and historic bridge • Concerns with ice jams • Widening of River Hideaway Drive • Changes visual landscape

Based on the presentation of the benefits and disadvantages, the offline alignments consisting of Alignments 3A, 3B, and 5 were recommended for elimination from further study due to floodway/floodplain impacts, business impacts, and right-of-way impacts, as well as the size of bridge and length of the roadway improvements. The replacement alignments recommended for further study are Alignment 1, Alignment 2, and Alignment 4 (**Figure 15**). Concept-level costs for these three alignments were generated to develop a range of costs for the full replacement alternative, and they include the costs for a new bridge as well as costs to mitigate the Section 106 adverse effects to historic resources.

As a result of the feedback received from the ACM and the PAC, as well as discussions with FHWA, PennDOT, and NYSDOT in the summer and fall of 2023, the alternatives were further screened for meeting the purpose and need based on preliminary planning level assessments, the level of
potential historic resource effects, estimated construction costs, estimated mitigation costs for historic resources, lifecycle costs, and overall costs. The screening process recommendations are to carry the following alternatives forward for future project development: No Build Do Nothing, Removal/Demolition, Removal/Relocation and Reuse, Traditional Rehabilitation, Non-SOI Compliant Rehabilitation, and the Full Replacement (Online/Alignments 1, 2 and 4) alternatives (**Table 6**).

Decourt Rd
River Road (SR 1004)
Milanville Road (SR 1002)
River Road (SR 1017)
Skinners Falls W
Road
Central New York Railroad Corp.
Skinners Falls Rd
Rt 44
Riverside Ice Meadow
SULLIVAN COUNTY
NEW YORK
WAYNE COUNTY
PENNSYLVANIA

Skinners Falls Bridge
SR 1002-0230 over the Delaware River
FIGURE 15: ALIGNMENTS FOR FURTHER STUDY MAP
Long / Lat. 41.670139, -75.057724

Alignment 1 (Online Replacement)
Alignment 2 (North Shift)
Alignment 4 (South Shift)
Skinners Falls Bridge - National Register Listed
Milanville Historic District - National Register Listed
NHP Significant Natural Community Occurance
FEMA Zone AE
FEMA Floodway

pennsylvania DEPARTMENT OF TRANSPORTATION
Engineering District 4-0
55 Keystone Industrial Park Road
Dunmore, PA 19512

AECOM
625 W Ridge Pike
Conshohocken, PA 19428

0 150 300
Feet

Source: Pennsylvania Emergency Management Agency, FEMA, USGS, CRIS, PA CRGIS, NWI, NHD, NYSDEC, NY State.

Date: 3/26/2024

Table 6: Alternatives Matrix

Proposed Alternative	Description	Meets Purpose and Need	Potential Section 106 Effects	Estimated Construction Costs*	Estimated Mitigation Costs*	Lifecycle Costs for 100 years*	Overall Cost*
No Build Do Nothing	No permanent or maintenance work. Bridge eventually fails. Meets none of the needs and presents a safety hazard.	No	Adverse Effect to the bridge and historic district	$2–2.5 M	$2-2.5 M for Adverse Effect to the bridge; $500 K to $1 M for Adverse Effect to Milanville Historic District	$0	$4–5 M
Removal/ Demolition	Demolish and scrap bridge, dead-end PA/NY approaches	No	Adverse Effect to the bridge and historic district	$2.7 M	$2-2.5 M for Adverse Effect to the bridge; $500K to $1 M for Adverse Effect to the Milanville Historic District	$0	$4.7–5.2 M
Removal/ Relocation and Reuse	Disassemble bridge (does not include restoration or relocation) available for adaptive reuse	No	Potential for No Adverse Effect to the bridge, but Adverse Effect to the historic district	$6.9 M	$500 K to $1 M for Adverse Effect to the Milanville Historic District	$0	$7.4–7.9 M

Proposed Alternative	Description	Meets Purpose and Need	Potential Section 106 Effects	Estimated Construction Costs*	Estimated Mitigation Costs*	Lifecycle Costs for 100 years*	Overall Cost*
Traditional Rehabilitation to 4,7,10 Tons	SOI-compliant rehabilitation. Retain current width. Potential enhancements: Move running boards for motorized vehicles to one side. Create pedestrian/bicycle lane on other side. Signalize on both ends. Add a dry hydrant adjacent to the bridge.**	TBD**	Potential for No Adverse Effect to the bridge and historic district	$16.9–19.1 M	$0	$32 M	$48.9–51.1 M
Non-SOI Compliant Rehabilitation	Explore retaining some historic materials while providing a bridge meeting needs. (Assume two-span modern steel bridge with truss attached as a decorative element paying homage to the historic setting.)	TBD	Adverse Effect to the bridge and historic district. Assume no other historic impacts.	$22.7–35.1 M	$2-2.5 M for Adverse Effect to the bridge; $500 K to $1 M for Adverse Effect to the Milanville Historic District	$40 M	$64.7–77.6 M
Full Replacement (Alignments 1, 2, and 4)	Assumes an online or immediately adjacent replacement. Carries full loads. Accommodates pedestrians and cyclists. Addresses sight distance challenges.	Yes	Adverse Effect to the bridge and historic district. Likely additional impacts to other contributing elements of the historic district.	$11.5–26.5 M	$2-2.5 M for Adverse Effect to the bridge; $500K to $1M for Adverse Effect to the Milanville Historic District	$29–55 M	$42.5–84 M

*Costs in 2023 US dollars

** Additional enhancements, which may include dry hydrant and signalization, could be included to potentially meet project needs and are shown for cost consideration.

K = thousand M = million SOI = Secretary of the Interior TBD = To Be Determined

6 Agency Coordination and Public Involvement

6.1 Public Engagement

The Skinners Falls Bridge PEL study included a Coordination Plan for Public and Agency Involvement (Coordination Plan) that guided and informed agency coordination and public involvement activities. Public and agency coordination was continuous throughout the PEL process (**Figure 17**), and the various methods and activities to support this coordination are described in the following sections.

6.1.1 PEL Study Communications

The following tools were implemented to enhance communication with the public:

Skinners Falls Bridge Website

The PEL study sub-site hosted on PennDOT District 4–0's website was created in early 2021 as an information hub to announce public meetings. It has been updated as PEL study milestones have occurred. A link to the website can be found at: Skinners Falls Bridge Project (pa.gov) (**Figure 16**).

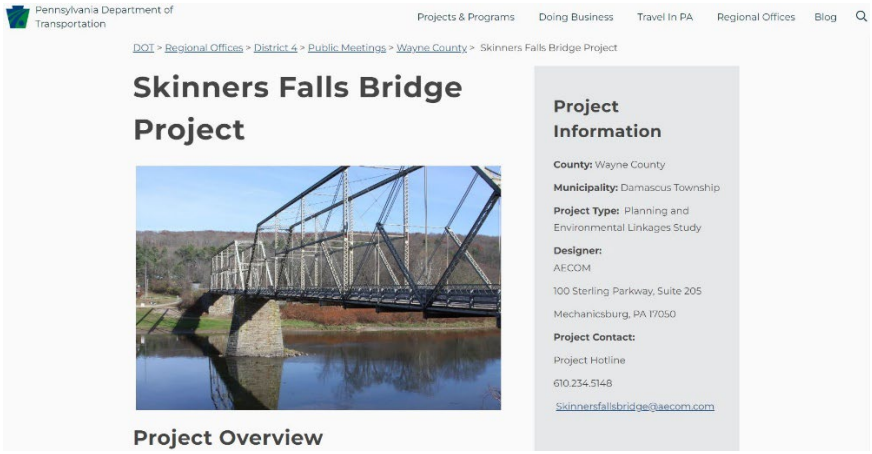


Figure 16: PennDOT Skinners Falls Bridge Webpage.

A brief description of the Skinners Falls Bridge Project can also be found on the NYSDOT Region 9 web page. The link can be found at: Skinners Falls-Milanville Bridge Project.

The PennDOT PEL Study website content has included or may include the following:

- PEL study fact sheets, updates, and public information materials, including public meeting dates
- PEL study photos or videos
- Contact information for the Project Hotline (email and phone number)
- Meeting announcements
- Media releases
- PEL study reports, as appropriate
- PEL study milestones and schedule

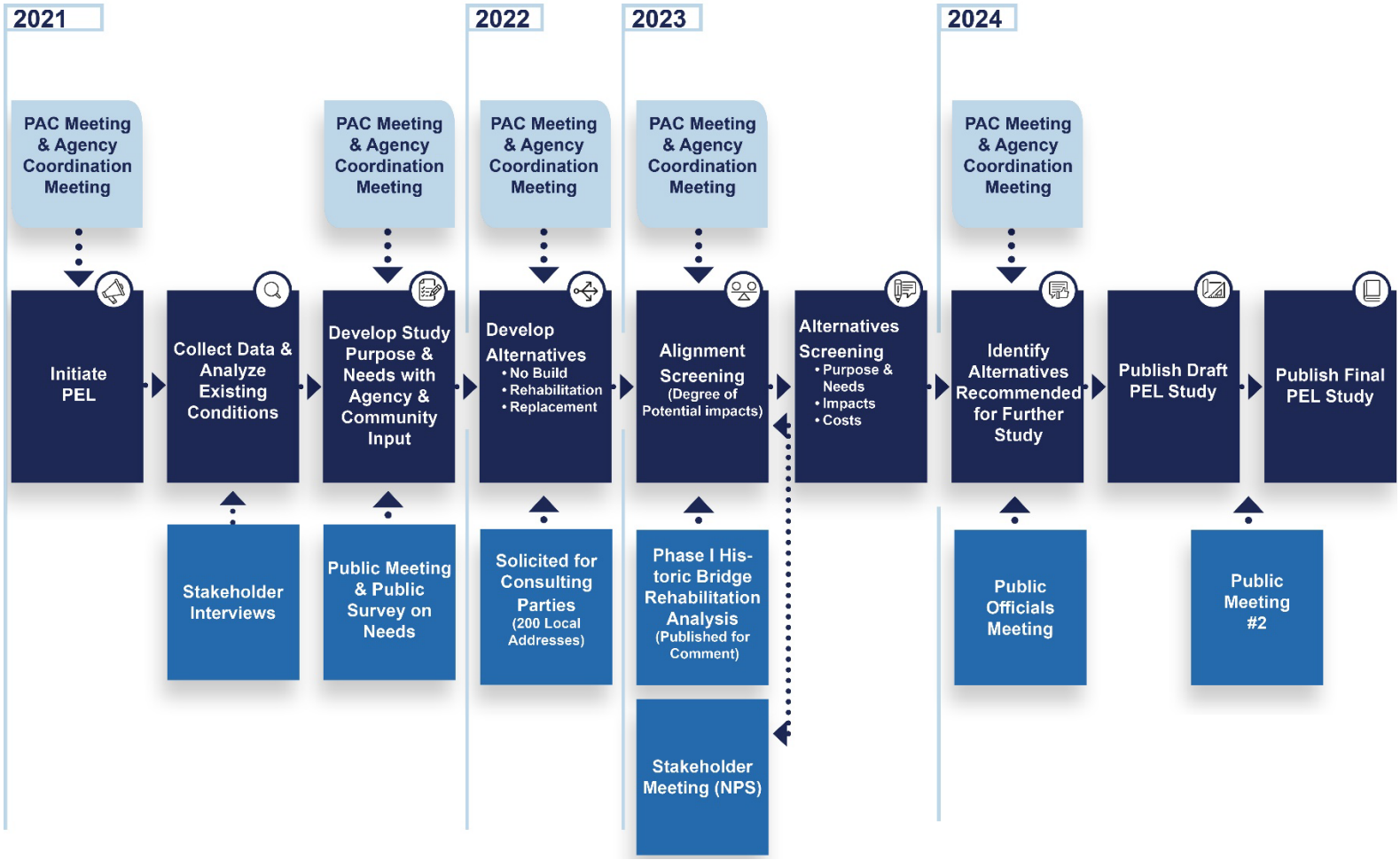


Figure 17: Public Involvement Timeline

- Online form(s) to gather contact information and feedback
- Visualization materials (e.g., renderings, drawings, maps, photos, videos) to provide visual examples of design concepts
- Links to other related web pages

As appropriate, comments and responses were recorded and included in the public and stakeholder tracking log, technical reports, and PEL study record. Future website content is not limited to the items listed above and could contain additional information as the PEL study is released. It is anticipated that the website will contain an overview of the PEL study history and process, with a link to the PEL study as well as information related to future studies.

PEL Study Survey and Comment Forms

Immediately following the virtual public meeting held on March 30, 2021, a project survey was conducted to capture public feedback on transportation needs and data on how the public used the bridge prior to its closure. The public survey and comment form was made available via the project website or by request, and had a 60-day comment period between March 31 and June 1, 2021. Public comments were also received through email, mail, and phone. Those who provided comments with contact information were added to the PEL study contacts list for future outreach.

The survey results and public comments were incorporated into the draft Purpose and Need Statement. The draft purpose and need document and public comment form was available on the project website and had a 60-day comment period between December 8, 2021, and February 7, 2022. Public comments were also received through email, mail, and phone. The Public Comment Response Report and the final Purpose and Need Statement are both available on the PennDOT Skinners Falls web page.

Public Meeting Notifications

Prior to the March 2021 virtual public meeting, PennDOT advertised the meeting on its website and in the most circulated newspapers in the region. The website and the newspapers provided an overview of the PEL study and included links to the project materials and an online survey/public comment form, as well as a link to allow access to the upcoming virtual public meeting. The articles also included the phone number and email for the Skinners Falls Bridge Hotline.

PennDOT also mailed postcards to property owners, residents, and business owners in the PEL study area that announced the meeting and the Public Comment Period.

Following the March 2021 public meeting, PennDOT disseminated information about, and solicited public input on, the Skinners Falls Bridge through advertisements in local newspapers between March and April 2021. The articles provided an overview of the PEL study and directions on how to locate the public comment form on the PennDOT District 4–0 website.
PennDOT will follow this same notification process for the second public meeting.

Stakeholder Database

PennDOT maintained a Stakeholder Database throughout the PEL study and will maintain one during future studies. All people who provided their contact information during the 60-day public survey comment period or via the project hotline were added to a contact list for future outreach and meeting notification. All project stakeholders are also included in this list. The PEL study team and PennDOT continued to expand the Stakeholder Database, as needed, through the PEL study phase.

Media

PennDOT has been responsive to press inquiries to date. Prior to the public meeting on March 30, 2021, and throughout the PEL study to date, PennDOT has disseminated information about, and solicited public input on, the Skinners Falls Bridge through advertisements in local newspapers.

6.1.2 Project Advisory Committee

The Project Advisory Committee (PAC) was made up of major stakeholders who represent the needs and priorities of the community. PAC meetings have been held throughout the PEL study process as documented in **Table 7.** PAC members were responsible for the following:

- Provide information on local and regional needs, issues, and activities related to Skinners Falls.
- Advise the PEL study team on transportation needs and goals.
- Communicate with constituents about the PEL study.
- Encourage public participation.

The following stakeholders make up the PAC:

- Town of Cochecton
- Damascus Township Board of Supervisors
- National Park Service (NPS)
- Sullivan County Planning Commissioner
- Upper Delaware Council (UDC)
- Wayne County Board of Commissioners Chair
- Wayne County Director of Planning

Table 7: PAC Coordination Points

Coordination Point	Date of Coordination	Information Presented/Discussed
PAC #1	February 22, 2021	PEL Study Initiation and Discussion of Needs
PAC #2	September 23, 2021	PEL Study Update
PAC #3	January 19, 2023	Public and Agency Coordination Plan PEL Study Update Final Purpose and Need Statement
PAC #4	May 24, 2023	Result of Phase I Alternatives Assessment
PAC #5	February 28, 2024	Alternatives Recommended to be Advanced for Further Study

PennDOT intends to transition the PAC established during the PEL study into future studies seamlessly. If it is determined through the PEL study that it is appropriate for a member of the PAC to change, PennDOT would coordinate with FHWA to modify or extend a formal invitation letter to the member. Additionally, if other potential major stakeholders were determined to be needed for their expertise or technical knowledge during future studies that was not necessary in the PEL study, PennDOT and the FHWA would formally invite the new member to the PAC in a manner consistent with the PEL study invitations.

6.1.3 Stakeholder Interviews and Meetings

Stakeholder involvement was a key component of the PEL study and is another source of input beyond what is received from the public at large. The Skinners Falls Bridge PEL study stakeholders include:

<u>The National Park Service</u>

In addition to being a Cooperating Agency and a member of the PAC, the NPS also serves as a stakeholder. The NPS is the primary responder for all river emergencies but is assisted by the surrounding fire departments of both states. In May 2014, the NPS provided information about the types and sizes of their rescue vehicle fleet to PennDOT. From May through September 2017, the Milanville NPS Ranger Station responded to 151 major incidents, which required use of the Skinners Falls Bridge and the adjacent Delaware River access location in New York. The NPS used the Skinners Falls Bridge in these incident responses. NPS river response vehicle access is a concern for the NPS as a stakeholder. In September 2019, PennDOT met with the NPS to provide details about the bridge inspection and anticipated rehabilitation approaches.

Representatives from PennDOT and NYSDOT met with the NPS at the bridge in July 2023. The goal of the meeting was for PennDOT and NYSDOT to hear directly from the NPS and to learn from the NPS about the bridge, its significance, and NPS roles and responsibilities to the Upper Delaware Scenic and Recreational River. Additionally, the NPS provided information on emergency response, ecological features, and other features, and a brief discussion of future technical studies also took place.

Emergency Responders

A joint Position Statement was issued on March 4, 2020, by representatives from local agencies and organizations, including Damascus Township, the Upper Delaware Council, the Chamber of the Northern Poconos, the Upper Delaware Scenic and Recreational River, the Town of Cochecton, Lake Huntington Fire Department, the Upper Delaware Scenic Byway Committee, and the Wayne County Planning Commission. The Position Statement asserted that the Skinners Falls Bridge is needed to provide emergency response, support the local economy, and connect the adjacent Pennsylvania and New York communities.

Between March and June 2021, the PEL study team conducted interviews with the Lake Huntington Fire Company in New York; the Narrowsburg Fire Department in New York; the Equinunk Volunteer Fire Company in Pennsylvania; the Welcome Lake Fire and Rescue in Pennsylvania; and the Wayne County 911 Dispatch in Pennsylvania. Key themes from the emergency responders included fire truck capacity needed, increased emergency response time with Skinners Falls Bridge closed, additional river crossing facilities, river rescues more feasible from the Pennsylvania side, Equinunk Volunteer Fire Company's use of river water to fill tanker trucks, and the fact that river access only exists on the New York side.

Local Businesses

Telephone interviews were held with four local businesses near the bridge between May and June 2021. In summary, these businesses cited a range of desires, including the desire that the bridge be used mainly as a pedestrian/bicycle connection but also to accommodate personal vehicles and ambulances, and the need for truck and trailer access across the bridge.

The PEL study team held stakeholder meetings as needed to address specific project issues or concerns. The means for contacting the PEL study team with concerns included a Project Hotline (telephone number) and an email address. The Project Hotline information was provided at the March 30, 2021, virtual Public Meeting, and is posted on the PennDOT District 4–0 project web page. Stakeholder meetings were documented and included in the public outreach technical file.

Public Officials

PennDOT and NYSDOT began coordination with elected officials in March 2021 to provide information about the Skinners Falls Bridge PEL study and to notify them of the upcoming public meeting to be held on March 30, 2021. PennDOT also notified public officials in December 2021 to make them aware that the Purpose and Need Statement was available for review and comment.

To date, elected officials have included:

- Town of Cochecton—Town Board Supervisor
- New York Assembly/New York State Representative—Aileen Gunther
- New York Senate—Mike Martucci (2021) Peter Oberacker (2023), Sullivan County
- Pennsylvania House of Representatives—Michael Peifer (2021) Joseph Adams (2023), Wayne County
- PA Senate—Lisa Baker, Wayne County

PennDOT and NYSDOT coordinated with elected officials throughout the PEL study phase to provide information so they could understand how the PEL study and future recommendations could affect their constituents. A public officials briefing will be held prior to the next public meeting.

6.1.4 Public Meetings

Since the PEL study was initiated, one public meeting was held on March 30, 2021. The meeting was held in a virtual format, in accordance with COVID-19 mitigation efforts in place at that time. Approximately 145 people were recorded as attending the meeting. The PEL study team put on a PowerPoint presentation to present a project overview and to explain the PEL study process. They also discussed local needs. The meeting was followed by a period of comments and questions. Public comments were also received through email, mail, and phone (**Figure 18**). The top four comments mentioned restoration, historic significance, maintaining a crossing, and the aesthetics which reflect the significance of the Skinners Falls Bridge to the community.

The public comments were considered when developing the final Purpose and Need Statement. Fifty-seven survey responses were received. Approximately two-thirds of respondents (37) agreed that the Draft Project and Need adequately documented the transportation purpose and needs for the Skinners Falls Bridge Project. Greater than half (32) of the respondents replied that there are no other transportation purpose(s) or need(s) not identified, with slightly less than half (25) responding that there are other purposes or needs that haven't been identified. The responses to the write-in comments from the survey are addressed as part of the overall comment and response section. The remainder of the document summarizes all the comments received and there were comments on historic preservation, alternatives, safety, emergency response, large trucks, environmental impacts (including visual), tourism, industry and the public involvement process. Public presentations, survey results, and comment response documents are available on the website at Skinners Falls Bridge Project (pa.gov).

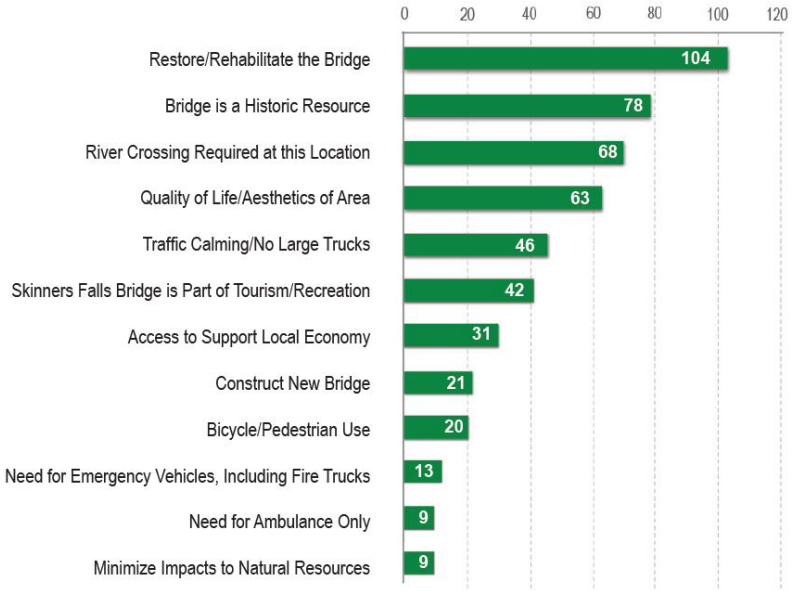


Figure 18: Email Comments and Survey Response Summary

A second in-person public meeting will be held to present the results of the PEL study to the public. This in-person public meeting is anticipated to take place between the release of the draft PEL study and final PEL study. Presentation materials, display boards, and a comment form will be posted to the project website. The results of the second public meeting will be documented in the final PEL report.

6.2 Agency Coordination

Federal, state, and local officials and agencies were given opportunities to be engaged in the PEL study. The following sections provide an overview of the coordination with these agencies.

6.2.1 Cooperating and Participating Agencies

As documented in the Public and Agency Coordination Plan, Cooperating Agencies include federal agencies that have jurisdiction by law or special expertise over an environmental resource that could be impacted by a federal action (for example: a federal permit, federal funding, or federal legislation). The roles and responsibilities of the Cooperating Agencies are found in **Table 8.** During the PEL study, key consensus points for the Cooperating Agencies include purpose and need, range of alternatives, and alternatives to be carried forward for future study.

Table 8: Agencies Invited to be Cooperating Agencies

Agency Name	Responsibilities	Response to Invitation
National Park Service	Oversee Wild and Scenic Rivers Act. Participate in the consensus process for purpose and need, range of alternatives, and alternatives recommended for further study.	Accepted
New York State Department of Environmental Conservation	Permitting jurisdiction New York State environmental permits. Participate in the consensus process for purpose and need, range of alternatives, and alternatives recommended for further study.	Accepted
Pennsylvania Department of Environmental Protection	Permitting jurisdiction Pennsylvania State Environmental Permits. Participate in the consensus process for purpose and need, range of alternatives, and alternatives recommended for further study.	Accepted
U.S. Army Corps of Engineers	Section 404 permit jurisdiction. Participate in the consensus process for purpose and need, range of alternatives, and alternatives recommended for further study.	Accepted
U.S. Environmental Protection Agency	Permitting jurisdiction under Section 404/401 of the Clean Water Act. Participate in the consensus process for purpose and need, range of alternatives, and alternatives recommended for further study.	Accepted
U.S. Fish and Wildlife Service	Endangered Species Act Consultation. Participate in the consensus process for purpose and need, range of alternatives, and alternatives recommended for further study.	Accepted

Participating Agencies include federal, state, or local agencies or Tribal Nations that could have an interest in the PEL study. Each Cooperating Agency is a Participating Agency, but many Participating Agencies are not Cooperating Agencies. Nongovernmental organizations and private entities cannot serve as participating agencies. The roles and responsibilities for the Participating Agencies are summarized in **Table 9**. Eight of the agencies invited to become Participating Agencies accepted the invitation.

Table 9: Agencies Invited to be Participating Agencies

Agency Name	Responsibilities	Response to Invitation
Absentee-Shawnee Tribe of Indians of Oklahoma	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Not Accepted
Damascus Township	Provide meaningful and timely input on local agency issues regarding infrastructure, land use/development, and community features.	Accepted
Delaware Nation, Oklahoma	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Not Accepted
Delaware River Basin Commission	Provide meaningful and timely input regarding the identification of issues related to the Delaware River.	Not Accepted
Delaware Tribe of Indians, Oklahoma	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Accepted
Eastern Shawnee Tribe of Oklahoma	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Not Accepted
New York State Historic Preservation Office, Technical Preservation Bureau	Section 106 of the National Historic Preservation Act consultation, cultural resources review and concurrence.	Accepted
New York State Department of Environmental Conservation Bureau of Fisheries	Provide meaningful and timely input regarding the identification of issues on aquatic and terrestrial species of concern under its jurisdiction.	Not Accepted
Onondaga Nation	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Not Accepted
Pennsylvania (PA) Department of Agriculture	Provide meaningful and timely input regarding the identification of issues within its jurisdiction.	Not Accepted
PA Department of Conservation and Natural Resources	Provide meaningful and timely input regarding the identification of issues within its jurisdiction.	Accepted

Agency Name	Responsibilities	Response to Invitation
PA Fish and Boat Commission	Provide meaningful and timely input regarding the identification of issues on aquatic and terrestrial species of concern under its jurisdiction in the study area. Responsible for review and approval of the Aids to Navigation Plan.	Accepted
PA Game Commission	Provide meaningful and timely input regarding the identification of issues regarding wildlife species and game lands.	Not Accepted
Pennsylvania Historical and Museum Commission (PHMC)	Section 106 of the National Historic Preservation Act consultation, cultural resources review and concurrence.	Accepted
Saint Regis Mohawk Tribe, New York	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Not Accepted
Shawnee Tribe	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Not Accepted
Stockbridge-Munsee Community, Wisconsin	Provide meaningful and timely input and information on culturally sensitive tribal matters, resources, and places. Provide input on the PEL study.	Accepted
Sullivan County Soil and Water Conservation District	Oversight of National Pollutant Discharge Elimination System (NPDES) permits for construction activities.	Not Accepted
Town of Cochecton	Provide meaningful and timely input on local agency issues regarding infrastructure, land use/development and community features.	Not Accepted
United States Coast Guard	Provide meaningful and timely input regarding the identification of issues within their jurisdiction.	Not Accepted
Wayne County Conservation District	Oversight of NPDES permits for construction activities.	Accepted

6.2.2 Agency Coordination Meetings

PennDOT holds monthly ACMs and field views for transportation projects and studies across Pennsylvania. Transportation projects and studies can be placed on the agenda by request to PennDOT's Central Office. Federal and state resource agencies have a standing invitation to the ACMs. For this project, New York state agencies were also invited to the ACMs. For the PEL study, special invitations to attend the ACM were provided to local agencies and Federally Recognized Tribal Nations that requested Participating Agency status. During the PEL study, key consensus points for the Cooperating Agencies included purpose and need, range of alternatives, and Alternatives recommended for further study. A total of five ACM meetings were held throughout the PEL process (**Table 10**).

Table 10: Agency Coordination Meetings

Coordination Point	Date	Information to be Presented/Discussed	Input Requested
ACM #1	February 24, 2021	PEL Study Initiation and Introduction to PEL	None
ACM #2	October 27, 2021	PEL Study Update	None
ACM #3	December 14, 2022	Draft Public and Agency Coordination Plan Final Purpose and Need	Agency Comment on Coordination Plan Cooperating Agencies Consensus on Purpose and Need
ACM #4	May 24, 2023	Result of Phase I Alternatives Assessment	Cooperating Agencies Consensus on Phase I Alternatives
ACM #5	February 28, 2024	Alternatives Recommended to be Advanced for Further Study	Cooperating Agencies Consensus on Alternatives Recommended to be Advanced for Further Study

7 Next Steps

The PEL study for the Skinners Falls Bridge was prepared to identify the transportation needs within the study area, identify a range of alternatives to be considered, and evaluate those alternatives based on their ability to meet the project needs and to minimize potential impacts to environmental, cultural, and socioeconomic resources.

7.1 Alternatives Recommended for Further Study

Table 11 provides a summary of the alternatives that, after evaluation, were recommended to be advanced for future project development.

Table 11: Alternatives Recommended for Further Study

Proposed Alternative	Description	Recommended for Further Study
No Build Do Nothing	No permanent or maintenance work. Bridge eventually fails. Meets none of the project needs and presents safety hazard.	Yes—While the No Build Do Nothing Alternative does not meet the purpose and needs, it is carried as the baseline against which to compare all other alternatives.
Removal/ Demolition	Demolish and scrap bridge, dead-end PA/NY approaches.	Yes—While the Bridge Removal/Demolition Alternative does not meet the purpose and needs, it is recommended for further study to determine if it is an economically feasible option.
Removal/ Relocation and Reuse	Disassemble bridge (does not include restoration or relocation).	Yes—While the Bridge Removal/Relocation and Reuse Alternative does not meet the purpose and needs, it is recommended for further study to determine if it is an economically reasonable option.
Traditional Rehabilitation to 4,7,and 10 tons	Secretary of the Interior (SOI) -compliant rehabilitation. Retain current width. Potential enhancements: Move running boards for motorized vehicles to one side. Create pedestrian/bicycle lane on the other side. Signalize on both ends. Add a dry hydrant adjacent to the bridge.*	Yes—The three Rehabilitation Alternative Options are compliant with the SOI Standards. They will be recommended for further study to determine which needs are met and to determine the impacts of the alternatives.

Proposed Alternative	Description	Recommended for Further Study
Non-SOI Compliant Rehabilitation	Explore retaining some historic materials while providing a bridge meeting needs. (Assume two-span modern steel bridge with truss attached as a decorative element paying homage to the historic setting.)	Yes— It is TBD if the Non-SOI Compliant Rehabilitation Alternative can meet the purpose and needs. It is recommended for further study to determine impacts and reasonableness of the alternatives.
Full Replacement	Assumes an online or immediately adjacent replacement. Carries full loads. Accommodates pedestrians and cyclists. Addresses sight distance challenges.	Yes—The Full Replacement Alternative can meet the purpose and needs. It is recommended for further study to determine impacts and reasonableness of the alternatives.

*Additional enhancements, which may include dry hydrant and signalization, could be included to potentially meet project needs and are shown for cost consideration.

HBRA Phase 2

Phase 1 of the HBRA was prepared to evaluate whether 4-, 7-, and 10-ton rehabilitations would be SOI compliant. Phase 2 of the HBRA will include additional rehabilitation options that may meet the SOI Standards. Phase 2 of the HBRA will also examine whether the proposed rehabilitation options meet the project purpose and need. Phase 2 of the HBRA will be completed during future studies.

Resource Considerations

The PEL study considered concept-level impacts to natural, cultural, and socioeconomic resources as part of the alternatives screening process. The resources included in **Table 12** are anticipated to be directly affected by the proposed alternatives recommended for further study. Future stages of design will refine alternatives, conduct detailed environmental studies, and consider avoidance, minimization, and mitigation efforts.

Table 12: Resource Considerations

Resource	Existing Condition	Considerations
Land Use	Located within Upper Delaware Scenic and Recreational River. Commercial campground and inner tube rental on east side, scattered residences on west side	Assessment of Conformance with the Upper Delaware Council/National Park Service Land and Water Use Guidelines. Evaluation of alternatives to minimize impacts to businesses and determine right-of-way requirements.

Resource	Existing Condition	Considerations
Mobility	The bridge is currently closed to all users.	Continue to consider needs of bicyclists and pedestrians in future stages of design.
Wetlands	Mapped wetlands are present within the project area.	Avoidance and minimization of impacts. Coordination with U.S. Army Corps of Engineers (USACE), Pennsylvania Department of Environmental Protection (PADEP) and New York State Department of Environmental Conservation (NYSDEC) for permitting and mitigation.
Watercourses	The Delaware River is the main watercourse within the project area.	Avoidance and minimization of impacts. Coordination with USACE, PADEP and NYSDEC for permitting and potential mitigation.
Wild and Scenic Rivers	The Delaware River is a federal Wild and Scenic River.	Continued consultation with National Park Service (NPS) regarding potential impacts and review of the project under the Wild and Scenic Rivers Act.
Floodplains	The 100-year floodplain and floodway of the Delaware River is present.	Minimization of Impacts. Coordination with USACE, PADEP and NYSDEC for permitting.
Threatened and Endangered Species	Mussel species regulated by the United States Fish and Wildlife Service (USFWS) are present within the Delaware River. Other state-listed species may be present.	Avoidance and minimization of impacts. Coordination with USFWS, Pennsylvania Fish and Boat Commission and NYSDEC regarding additional species, impacts and potential mitigation.
Cultural and Historic Resources	The Skinners Falls Bridge and the Milanville Historic District are listed on the National Register of Historic Places. Archaeological potential is present along the Pennsylvania side of the river.	Continued coordination with consulting parties to minimize or mitigate project effects.
Parks and Recreational Resources	Delaware Scenic and Recreational River. Commercial campground and kayak/tube rentals on east side, along with NYSDEC-owned Skinners Falls access area.	Assessment of conformance with the Upper Delaware Council/NPS Land and Water Use Guidelines. Coordination with NYSDEC regarding impacts to the access area. Evaluation of alternatives to minimize impacts to businesses.
Visual Resources	The existing bridge is visually striking, with a discrete viewshed established by natural features	Assess viewshed impacts and potential mitigation in coordination with the Pennsylvania Department of Transportation and the New York State Department of Transportation.
Emergency Services	Emergency response by the NPS and local first responders is impacted by lack of a functional crossing at this location	Continue coordination with first responders and the NPS.

7.2 Funding and Grants

As of the writing of this PEL study report, funding available for transportation projects in this region of Pennsylvania and New York is limited. Under the current JIBC Agreement, both states share the costs of repair or replacement of an existing bridge. Based on the current Wayne County, PA, Federal Fiscal Year 2023 TIP, no funding for fiscal year 2023 through fiscal year 2026 is shown for the Skinners Falls Bridge. Furthermore, the 12-year program only shows funding totaling $13 million for construction in the period from 2031 to2035. The New York Regional STIP for Region 9 shows a total of approximately $24 million in funding for both design and construction between fiscal year 2023 and fiscal year 2026.

Recognizing the limitations of the current funding programmed on the TIPs for each respective state, the project team undertook a funding scan to identify potential federal and state grants for the project. As a result of the Infrastructure Investment and Jobs Act (IIJA), increases in discretionary-transportation focused programs and grants are available, resulting in approximately $100 billion in formulaic funding and more than $180 billion in new discretionary funding. Several federal grant programs, including the FHWA's Bridge Improvement Program (BIP), FHWA's Federal Lands Transportation Program (FLTP), the USDOT's Rebuilding Infrastructure with Sustainability and Equity (RAISE), and the USDOT's Rural Surface Transportation Grant Program (RURAL), may be applicable for the project, as shown in **Table 13**. Many of these grant programs are competitive, and many also require benefit-cost analyses (BCAs) as part of grant applications for capital projects. The low traffic volumes on the Skinners Falls Bridge would result in a low BCA ratio, which would affect the bridge's selection for this type of funding.

Table 13: Potential Federal and State Funding Programs

Program Name	Issuing Agency	Potential Applicant	Estimated Funding and Average Past Award (if available)	Minimum Match Requirements	Benefit-Cost Analysis (BCA) Required
Bridge Investment Program (BIP)	FHWA	State DOT's, County/local government	$2.4 billion, past award range N/A	20% bridge project 50% large bridge project	Yes
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	U.S. Department of Transportation	State DOT's, County/local government	$1.5 billion, typical award $17 million	20% local (urban areas) 0% local (rural areas)	Yes

Program Name	Issuing Agency	Potential Applicant	Estimated Funding and Average Past Award (if available)	Minimum Match Requirements	Benefit-Cost Analysis (BCA) Required
Rural Surface Transportation Grant Program (RURAL)	U.S. Department of Transportation	State DOT's, County/local government	$300 million, typical award $10 million	20% local for future eligible costs	Yes
Federal Lands Access Program (FLAP)	FHWA	State DOTs, Tribal Nations, local governments	$1.30 billion, typical award $260 million	PA 19.62% minimum match NY 19.90% minimum match	No
Area Development Program	Appalachian Regional Commission (ARC)	State/local government, non-profits	$302 million (FY 2023), awards range $100,000 to $1.5 million	ARC share is 50% maximum	No
Keystone Historic Preservation Construction Grants	Pennsylvania Historic Preservation and Museum Commission	Local governments, historic preservation organizations	Maximum award: $100,000	50/50 cash match in funds	No
Multimodal Transportation Fund (MTF) Program	Pennsylvania Department of Community and Economic Development	Municipalities, economic development organizations, businesses	Maximum award $3 million	30% non-federal match required	No

As noted in **Table 13**, a BCA is required for many of the grants. A high-level BCA was prepared for the project to investigate the benefits conceptually versus the costs of the proposed project. The high-level BCA indicates a potential ratio of 1. A ratio of 1 indicates that the project is cost effective. However, for competitive grant programs, a ratio of 1.5 to 3 or above 3 is generally needed. Therefore, based on the amount of traffic that the bridge carried when it was last open compared to the conceptual costs of the build alternatives, the results of the high-level BCAs for the Skinners Falls Bridge would likely not rank high in a competitive grant process.

7.3 Conclusion

The PEL study for the Skinners Falls Bridge was conducted in accordance with 23 United States Code 168 and 23 Code of Federal Regulations 450.212, which are federal regulations set out for FHWA. This PEL study has resulted in the following components that can be used in future studies:

- Development of a purpose and need statement
- Concept-level alternatives analysis
- Screening of concept-level alternatives with recommendations for dismissal of offline bridge replacement alternatives
- Selection of a range of alternatives recommended to be advanced for further study

This PEL study has recommended alternatives for the project that will be carried into future phases. As a planning study document, the conclusion of the PEL study may not directly lead into future phases. Although costs have been developed as part of this PEL study, they have been generated using concept-level information. Additional efforts will be required for the planning and programming of both federal and state funds to advance further studies associated with the alternatives identified within this PEL study.

8 PEL Update

8.1 Summary of Emergency Activities (August 2024-May 2025)

Following the April 2024 public meeting on the draft PEL document, PennDOT was preparing responses to the public comments when they were alerted to metal bridge components falling from the bridge and into the Delaware River. The following update to the PEL was prepared to include the activities that have occurred since the notification of this falling debris.

On August 2, 2024, the Upper Delaware Council alerted PennDOT that metal bridge components were falling from the Skinners Falls Bridge into the Delaware River. On August 3, 2024, PennDOT conducted an emergency bridge inspection that revealed steel tube portions of the original bridge railing were missing, cross bracing was deteriorated or missing, and there were numerous loose and hanging J hooks. J hooks were metal hooks which attach the wooden deck planks to the stringers. PennDOT determined that this deterioration presented a threat to public health and safety of recreational river traffic under the bridge. As a result of the emergency inspection, PennDOT determined an in-depth NBIS inspection was needed to evaluate the condition of the bridge.

This structure, as a highway bridge, was subject to biennial inspections under NBIS. The previous NBIS bridge inspection on this structure was conducted in November 2022 and the next NBIS was scheduled for November 2024. However, based on the observed condition of the bridge, planning for the NBIS inspection was advanced in fall of 2024. The masonry substructure units were already being monitored at an increased frequency due to loss of mortar and cracking through several courses of stone with special inspections conducted in the spring following the major freeze/thaw cycles.

On August 23, 2024, PennDOT issued an Authorization for Emergency Procurement for installation of an Aids to Navigation (ATON) Plan and for under bridge netting to protect recreational river users. A Special Use Permit (SUP) was obtained from the National Park Service for the ATON Plan, netting and inspection. Obtaining the SUP allowed for the NBIS bridge inspection to be completed in early October 2024. The NBIS inspection revealed multiple observed conditions which resulted in downgrading the Skinners Falls Bridge to a superstructure condition of “2 – critical,” and a substructure condition rating of “0 – failed.” The substructure condition rating of “0 - failed” also results in an overall structure condition of “0 – failed.” At the New York (far) abutment, it was noted that active movement between the masonry and the truss bearing was observed requiring a new monitoring point as well as continuing loss of backfill material through the open joints had advanced from the prior documented observations. Upon review of the inspection report findings, PennDOT initiated an alternatives analysis and began/continued coordination with resource agencies (see Section 8.4 Agency Outreach) to address the failed condition of the bridge and discontinued the implementation of under bridge netting (See Section 8.2 below for the alternatives analysis.) On December 16, 2024, Pennsylvania Governor Shapiro issued a declaration of emergency in relation to Skinners Falls Bridge. The FHWA concurred with the emergency declaration on December 17, 2024. On December 17, 2024, PennDOT announced the Skinners Falls Bridge

would be removed via demolition due to the emergency declaration and as a result of the alternatives analysis.

On January 28, 2025, a Quality Assurance Bridge Safety Inspection of the Skinners Falls Bridge was conducted. Inspection of the deck and floor system was completed with an Unmanned Aerial System (i.e., drone) and the abutment inspection was performed from the ground using ladders. The findings confirmed the deteriorated state of the structure with additional deterioration noted. The main concern identified during the January 2025 inspection was the increase in movement at the far-left (far refers to the NY side) truss bearing and associated movement at the far-left wingwall below the far-left truss bearing. These noted increases indicated that the far abutment and far-left bearing areas were actively moving between inspections. Based on the evidence of expansion bearings that were frozen due to sever rust, it was reasonable to conclude that the expansion and contraction forces encountered by the truss were being translated directly into the abutment without mitigation or reduction in forces from the bearings. The expansion and contraction forces were unanticipated forces which stone masonry abutments were not designed to handle. These movements, coupled with the visible racking of the far portal, were conditions that required very close monitoring. The racking of the far portal was a consequence of the substructure condition although the overall failed condition rating of the structure was governed by the failure of the substructure. The January 2025 inspection confirmed the need to expedite the bridge removal in the interest of public safety.

As explained in Section 1.2 of this document, the PEL study is a planning level document that allows for the development and screening of preliminary alternatives and the initial evaluation of environmental impacts and the recommendation of alternatives to be carried into any potential future project development. The conclusion of the PEL study may not directly lead into future phases, including construction. As a planning study, the PEL study is conducted prior to the start of an actual project. Based on the funding challenges at this location, a substantial length of time was anticipated between the approval of the PEL and the start of a future design project. Upon review of the October and January inspection results and the associated safety concerns at this location, immediate action was needed to address the bridge condition. These actions could not be undertaken as part of the PEL process due to the immediate safety concerns. Therefore, due to public safety concerns, the emergency removal of the bridge was advanced as a separate project from the PEL process and the determination of the needs for a crossing at this location.

PennDOT, in coordination with NYSDOT and FHWA, submitted permit applications to federal and state resource agencies in winter 2025. Construction began on March 10, 2025, for the emergency removal of the bridge. The NY span was removed via mechanical means on April 17, 2025, and the PA span was removed via mechanical means on April 21, 2025. The construction activities were completed, the river re-opened to recreation and the NYSDEC parking lot restored in accordance with the NPS SUP and NYSDEC Temporary Revocable Permit conditions by May 22, 2025. Additional minor work, including landscaping and a canoe portage path

adjacent to the parking lot, was conducted after May 22, 2025, as part of ongoing coordination with NPS, NYSDEC, PennDOT and NYSDOT.

8.2 Alternatives Analysis

Upon receipt of the 2024 bridge inspection results, and the failure rating of the bridge, PennDOT developed an engineering analysis and conducted resource agency consultation and public involvement to develop alternatives to address the safety concerns with the bridge. Due to the emergency nature of the project, the alternatives were developed and revised rapidly in the fall of 2024.

A conceptual level screening of the land surrounding the bridge in Pennsylvania and New York was conducted to identify possible locations for staging areas. It was determined all work would be conducted from the New York side of the river. The reasons for utilizing the New York side included:

- The local roadway network in Pennsylvania is narrow and could not be navigated by the trucks needed to deliver the cranes, equipment, and materials.
- The embankments on the Pennsylvania side are steep, prohibiting a crane from moving from riverbank to causeway. Grades on the New York side are more consistent, gradual slopes.
- Topography and site conditions on the Pennsylvania side were not conducive to a staging area, nor was there enough room to serve as a staging and storage area.
- To avoid sensitive archaeological areas on the PA side.

The conceptual level alternatives evolved quickly. As each alternative was evaluated it was either retained for additional study or dismissed. Alternatives were dismissed if they did not meet the project purpose and need resulted in substantial impacts to environmental resources, recreational resources or businesses, or could not be constructed without unacceptable safety or operational problems. A timeline of the alternatives analysis is shown in **Figure 19.** The alternatives included three general groups:

- Temporary Bracing - This involved examining if the truss and abutment could be temporarily stabilized;
- Disassembly and Rehabilitation – These alternatives evaluated the possibility to safely lift each truss by crane, move them onto land, and carefully disassemble and store the bridge members for future rehabilitation, and;
- Demolition – These options were investigated as alternatives of last resort when PennDOT determined it was uncertain a disassembly and rehabilitation (lift/pick/disassemble) alternative could be safely executed.

During the development of the alternatives PennDOT engineers identified several challenges including:

- There was a serious concern the deteriorated structure would not survive the pick and move by crane due to severe section loss throughout the structure. Also, due to the size of the trusses (232 feet each), there was a potential for catastrophic failure of the

trusses in the air during crane swings to remove the trusses. This could result in load loss for the cranes. Once the crane loses its load, the boom and crane would flip backwards off the causeway. Worker safety was at risk with the unknown stability of bridge components. Once the crane loses its load, the boom and crane would flip backwards off the causeway. Worker safety was at risk with the unknown stability of bridge components.

- The site preparations, assembly and disassembly of the crane, and careful disassembly of the truss were expected to require multiple months, extending construction well into the river recreation season.
- A construction completion deadline of May 22, 2025, was a condition for procuring the SUP issued by the NPS for work in the Upper Delaware Scenic and Recreational River Unit and would be a condition of the Temporary Revocable Permit issued by NYSDEC for work within the Skinners Falls Fishing Access Site boat launch and parking lot.

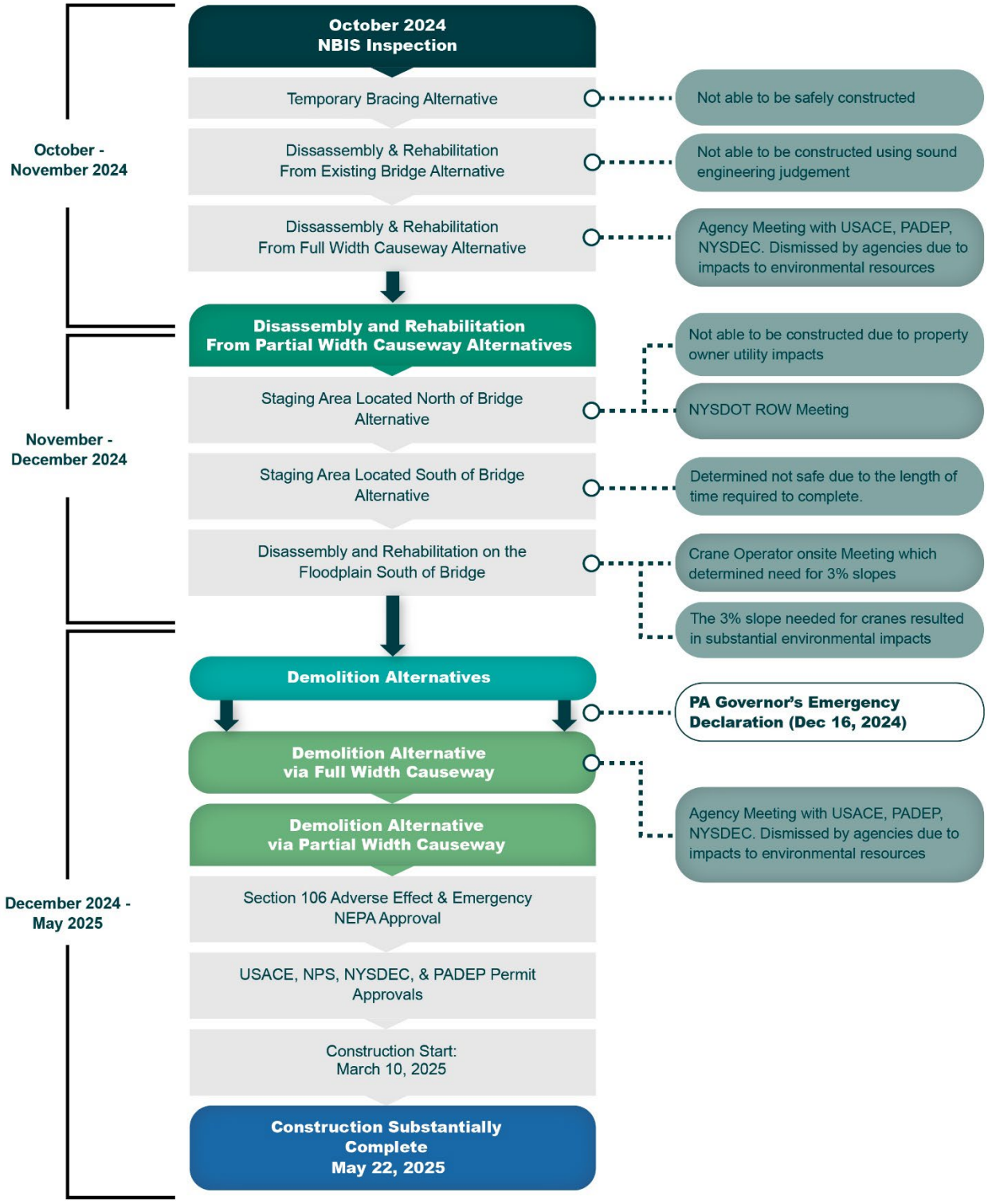


Figure 19: Timeline of Alternatives Analysis

Multiple alternatives evolved based on input from the regulatory agencies with jurisdiction over the resources in the project area. The sequence of work, layouts, and anticipated impacts was based on available information at the time each alternative was considered. The development and screening of alternatives was additionally influenced by a greater and more detailed understanding of the engineering constraints and impacts to project area resources that were revealed as the design progressed.

Each removal and disassembly (Disassembly and Rehabilitation Alternatives) operation required a causeway, numerous cranes and manlifts of varying sizes, and a significant amount of material be delivered and later removed from the site. Causeway limits, crane size(s), and construction duration varied substantially for each alternative. The lift/pick/disassemble process required a large crawler crane to pick the trusses due to the weight of the trusses themselves, as well as the height of the trusses above the causeway **(Figures 20 & 21).** A large crane staging area was required to deliver crane components and to assemble/disassemble the crane. The large crawler crane needed to pick the trusses would have been about 30 feet wide and with a 300-foot boom. The track height would have been approximately 6 feet high. This type of crawler crane uses a rear tray of counterweights to balance the load when it is picking up the crane boom and later when picking the trusses. The rear tray of counterweights can be seen in **Figure 21,** located on the left side of the image. These alternatives would require a second “assist” crane to add weights to the rear tray as load is placed on the hook of the larger crawler crane. As a result, at least two cranes would be on the causeway at any one time.

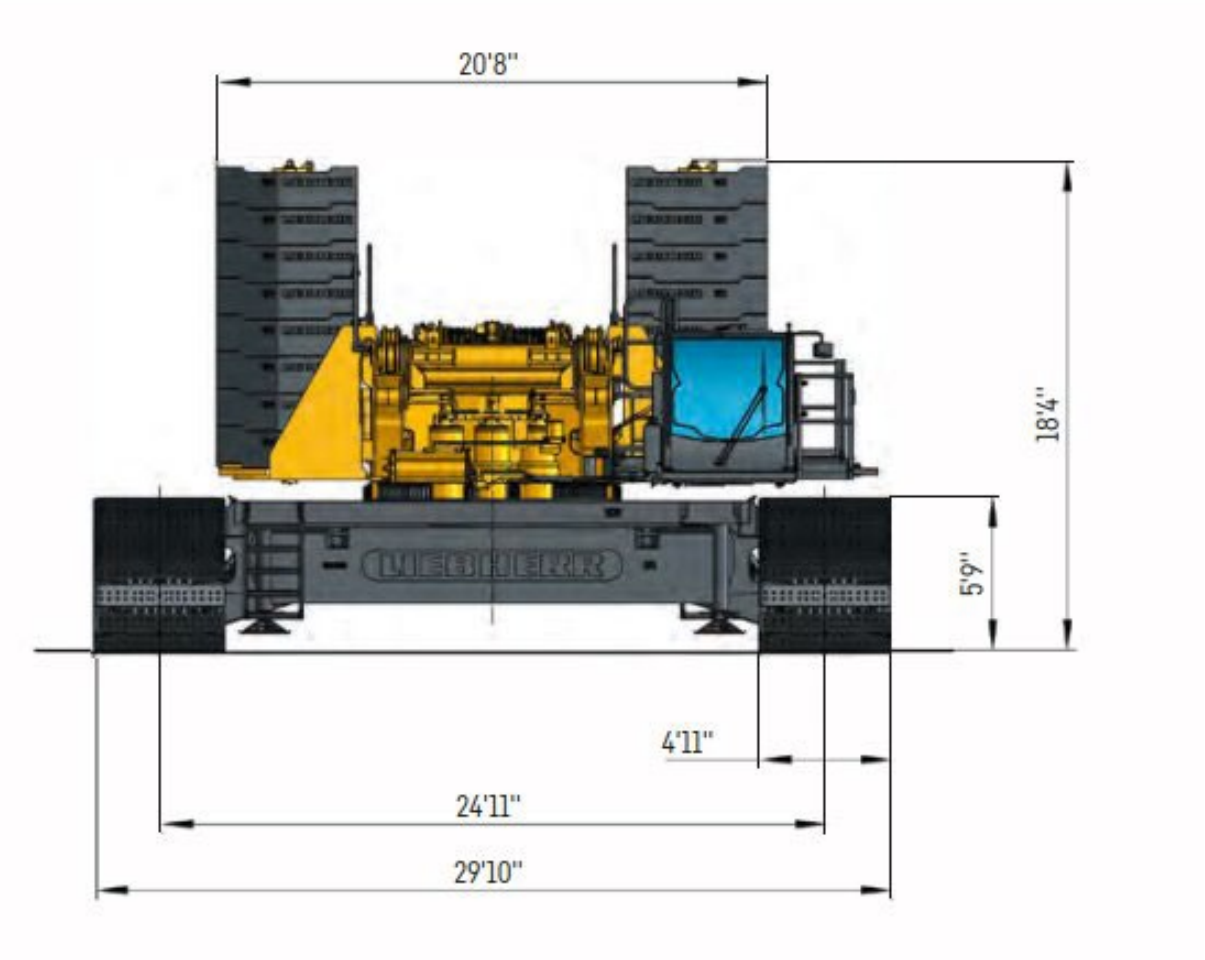


Figure 20: Schematic of Type of Large Crawler Crane Equipment to Be Used

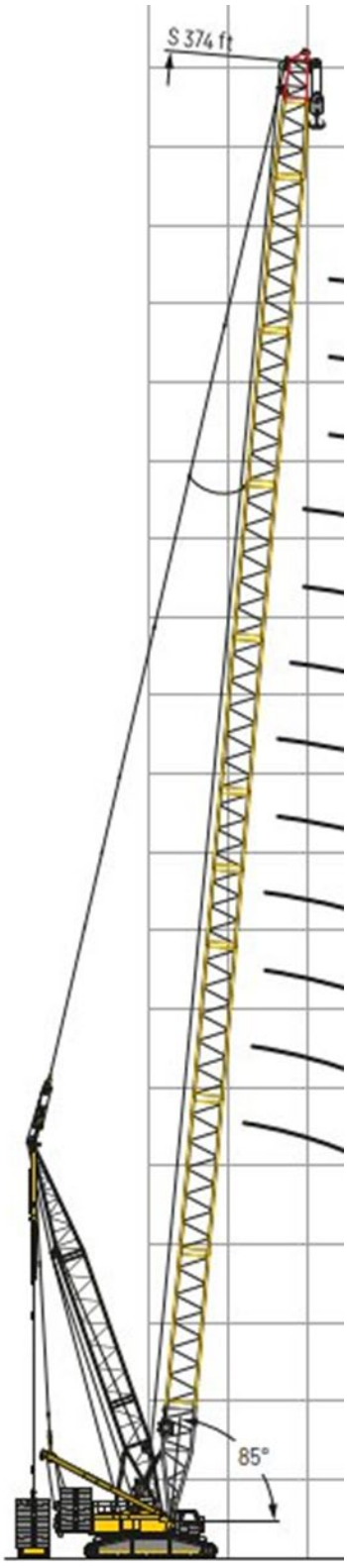


Figure 21: Schematic of Typical Large Crawler Crane to Be Used

8.2.1 Identification and Evaluation of Alternatives Considered

8.2.1.1 Do Nothing Alternative

The Do Nothing Alternative would result in the eventual collapse of the NY abutment. Once the abutment collapses, the NY span would likely fall into the Delaware River and suffer irreparable damage to the historic integrity of the truss. Should the NY truss fall into the river, the PA span may also become unstable and fall into the river. Recreational users in the area would be at risk for serious injury or death in the event of a sudden catastrophic collapse.

The Do Nothing Alternative does not address the failed condition of the bridge and does not eliminate the danger to the public due to falling debris or the risk of an uncontrolled bridge collapse. The Do Nothing Alternative would lead to an uncontrolled collapse of the bridge, the NY abutment, and pier. This alternative would result in an adverse effect for both the Skinners Falls Bridge and Milanville Historic District for the loss of the bridge, and the temporary impacts of the UDSRR Unit, Delaware Water Trail and NYSDEC Skinners Falls Fishing Access Site during clean-up efforts.

The Do Nothing Alternative does not meet the project purpose and need. However, it was carried forward as the baseline against which to compare all other alternatives.

8.2.1.2 Temporary Bracing Alternative

The Temporary Bracing of the NY abutment was examined as a possible interim measure while a long-term solution was designed and implemented. This alternative would have involved adding bracing to the NY abutment to temporarily stabilize the masonry from sudden failure while also requiring temporary support of the truss. Temporary bracing of the abutment would have been insufficient alone as this alternative would also have required the installation of netting or protection under the bridge to capture deteriorated steel bridge members and other materials falling from the bridge.

The Temporary Bracing Alternative could not be safely and effectively implemented. Rotation of the failed stone masonry abutment could have been restrained through an engineered temporary measure, but without full rehabilitation, the stone abutment would have continued to degrade causing settlement and posing an ongoing risk of collapse. Unlike a conventional multi-girder bridge, the bearing (support) location for this truss superstructure would have been required at the existing joint and could not simply have been shifted along the truss line from the existing bearing location without independent and substantial structural framing to enable the load transfer to a temporary abutment.

It was determined netting could not have been installed safely beneath the bridge. The netting would need to have been applied from the top of the bridge, at deck level. Because of the failed condition, the bridge was not safe, even for workers on foot to access and install the netting. Accumulation of ice/snow on the netting during winter weather would have increased the dead load weight the bridge needed to support, as well as the wind load on the truss spans. Therefore the netting would have needed to be removed prior to each icing event, and as previously mentioned, the bridge was not safe to access from the deck. The trusses were in a

deteriorated state and any delay in the truss removal may have resulted in collapse prior to, or during, truss removal operations.

Due to the following factors, it was determined the Temporary Bracing Alternative did not employ sound engineering practices:

- Debris netting could not have been installed on the bridge to protect recreational users. Due to safety concerns, PennDOT would not allow contractor access on the bridge for installation or temporary removal of netting during weather events. The wind loads and/or ice loads on the netting (even if it could have been installed) had the potential to overload and buckle the truss end diagonals leading to a possible collapse.
- Any temporary bracing alternative would have required a two-step process:
    - Temporarily support the truss and stabilize/repair the NY abutment.
    - Temporarily supporting the truss in stages to permit future disassembly and rehabilitation would have required deep foundations to handle river and ice flows but also extensive analysis to confirm if the bridge condition could withstand redistribution of forces throughout the truss for each interim step. The quantity and height of potential temporary supports would have required a causeway for access, construction of deep foundations penetrating the river bottom, and stability bracing all of which substantially constrict the hydraulic opening in the river. A panel by panel approach to rehabilitation would have extended over multiple construction seasons.

The Temporary Bracing Alternative could result in unacceptable safety or operational problems. The Temporary Bracing Alternative could not be constructed as a matter of sound engineering judgement and was dismissed from further consideration. The alternative was dismissed prior to development of a preliminary design; and therefore, a construction time frame and impacts were not calculated.

8.2.1.3 Disassembly and Rehabilitation Alternatives

Due to the deteriorated condition of the bridge, work could not have been conducted on the bridge without the risk of collapse. Therefore, PennDOT evaluated several alternatives which would require complete disassembly of the trusses. The truss spans would have been removed from the existing abutments and pier, stored, and evaluated for potential repair or replacement. These alternatives were developed in consideration of the environmental and cultural resources within the project area. The sizes of the causeway, which were designed as part of these alternatives, were the minimum necessary to safely perform the work with the required equipment. This minimization effort sought to reduce impacts to the federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) habitat, temporary flooding impacts, recreational river users, impacts to businesses, historic properties, and overall construction duration. PennDOT evaluated five disassembly and rehabilitation alternatives including:

- Disassembly and Rehabilitation from Existing Bridge,
- Disassembly and Rehabilitation via Full-Width Causeway,

- Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located North of Bridge),
- Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located South of Bridge),
- Disassembly and Rehabilitation on the Floodplain – South of Bridge.

8.2.1.4 Disassembly and Rehabilitation from Existing Bridge Alternative

For this alternative, the disassembly would have occurred from the bridge itself. No causeway would have been required. To perform this work, a contractor would need to access the bridge to install temporary members and utilize tools to temporarily remove load from certain truss members allowing removal from the pin and subsequent repair. A member by member approach could have only been implemented for a portion of the truss members located on the outside end of the pin and would not have addressed the critical bottom chord members. Complete disassembly of the truss would have required installation of a temporary structure and framing to support the load at each pinned joint.

Due to the existing failed condition of the bridge, no machinery or personnel would have been permitted on the bridge at any point during construction activities. This alternative was determined to not be safe and given the failed condition of the bridge, it could not have been implemented.

Due to the following factors, it was determined the Disassembly and Rehabilitation from Existing Bridge Alternative could not be built as a matter of sound engineering judgment:

- Debris netting could not be installed on the bridge to protect recreational users. Due to safety concerns, PennDOT would not allow contractor access on the bridge for installation or temporary removal during weather events. The wind loads and/or ice loads on the netting (even if the netting could have been installed) had the potential to overload and buckle the truss end diagonals leading to a possible bridge collapse.
- This alternative would have required workers and equipment to be on the bridge to facilitate the necessary activities. Due to safety concerns, PennDOT would not allow access for netting installation or any rehabilitation activities from the bridge due to existing failed condition as reported in the available bridge inspections.
- Without the netting in place debris would continue to fall into the river posing a threat to public health which would require permanent closure of the river. The NPS noted that they could not enforce a long term river closure.

The Disassembly and Rehabilitation from Existing Bridge Alternative could not be constructed without unacceptable safety or operational problems. The Disassembly and Rehabilitation from Existing Bridge Alternative could not be constructed as a matter of sound engineering judgement and was dismissed from further consideration.

8.2.1.5 Disassembly and Rehabilitation via Full-Width Causeway

During the initial conversations regarding disassembly alternatives, a full-width causeway was discussed at a conceptual level. The causeway would have extended across the entire width of the river and under each span. Minimal laydown areas would have been needed since the disassembly would have occurred on the causeway. The full-width causeway concept was discussed with the permitting agencies in early November 2024. This alternative would have resulted in substantial flooding risks, impacts to recreational users and aquatic resources (including the federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) mussel species habitat), and fish passage. A full-width causeway in the Upper Delaware River in the winter could have been subject to ice dams and subsequent flooding. The permitting agencies indicated this alternative would not have been permittable due to impacts to aquatic resources, fish passage, threatened and endangered species, recreational users, and adjacent businesses. Thus, the concept was not advanced further.

This alternative was dismissed in the conceptual stage, and impacts were not calculated.

8.2.1.6 Disassembly and Rehabilitation from Partial-Width Causeway Alternatives

The full-width causeway was determined to be unreasonable due to substantial environmental impacts, and therefore several partial-width causeway alternatives were developed to reduce the impact to recreational resources, businesses, and natural resources. For the alternatives involving disassembly onto a partial-width causeway, the truss spans would have been removed from the existing abutments and pier using a single, large crawler crane with a smaller assist crane and placed on temporary supports at the causeway elevation. These alternatives would have required a walking pick (i.e. truss suspended in the air while crane slowly moves to another location) which would not have been practical due to grade differentials. The large crawler crane would then be removed from the site and disassembly would have proceeded on the causeway using much smaller cranes and manlifts. Due to the size of the crawler crane, an additional contractor laydown area would have been required for equipment and material deliveries and crane assembly. The causeway would have extended into a portion of the river and river bank and floodplain. Due to the combination of truss height (~40’), its height above the river (~30’), and the weight of the trusses, the causeway would have extended to the west beyond the pier to allow for crane access to reach the western span. Similarly, the size of the causeway also would have included space for the bracing to allow for safe disassembly of the trusses, as well as access around the trusses. Two alternatives were examined for the staging/crane assembly area: north of the bridge and south of the bridge.

The anticipated sequence of construction would have been:

- Construct the causeway and contractor staging area for crane assembly
- Deliver and assemble large crawler crane
- Prepare the truss spans for crawler crane pick (potential removal of timber deck and addition of temporary bracing components (as needed based on stability analysis of the truss) and considering crane capacity versus weight of the truss span)
- Pick and place truss spans on temporary supports at causeway level

- Brace truss spans for disassembly and to secure against storm events then demobilize large crawler crane
- Mark the truss members for future identification and proper storage
- Disassemble panel by panel and remove the members from the causeway to prepare for storage
- Remove center pier and NY abutment
- Cap and stabilize PA abutment and install protective fencing
- Remove causeway and contractor staging area
- Remove all construction materials and restore site (signage, tree plantings, seeding/mulching, etc.)

These alternatives could have resulted in the simultaneous disassembly of both trusses if the causeway was sized appropriately. Once the PA span was removed, the river could have been re-opened to recreational users.

Each of the disassembly and rehabilitation alternatives with a partial-width causeway required use of a walking pick as described above. As was noted earlier, there was a serious concern the deteriorated structure would not survive the pick and move by crane due to severe section loss throughout the structure. As a result of the substantial risk to worker safety, each of the disassembly and rehabilitation alternatives were determined to have operational and safety concerns.

8.2.1.6.1 Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located North of Bridge)

The Staging Area North of the Bridge Alternative would have required a partial-width causeway within the Delaware River, extending beyond the central river pier, for crane access and movements to remove the trusses. The truss spans would be removed from the existing abutments and pier using a large crawler crane. The NY abutment and center river pier would have been removed. The PA abutment would have been stabilized with a concrete cap and a fence to restrict access.

This alternative would require a widened access road in the overbank area within the wide floodplain to overcome the existing grade differential for safe transport of the truss spans to the disassembly area in the campground in the northeast quadrant of the project area. While a portion of the causeway and access road on the overbank could be removed, the staging area would have remained on the adjacent landowner's boating and camping business for the remainder of the construction.

Considerations for northern staging area include:

- Would allow for simultaneous disassembly of the trusses
- Would require construction of access road and crane access road

- Would require the landowner who runs the campground and boating businesses to voluntarily allow use of property without compensation. The use agreement could be withdrawn at any time via a revocable permit

The estimated length of construction for this alternative would be 6-9 months and the size of the disturbed area would be over five acres. The causeway would have been approximately 202 feet wide and 430 feet long. This design would result in long-term direct impact to federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) habitat, and host fish passage and habitat, due to potential scour and ponding.

A meeting was held with the property owner in November 2024, and it was determined the campground could not be used as a proposed staging area because there is a buried septic drain field and a water line. In addition, the property owner would likely not be able to open the business for the recreation season, which was reported by the property owner to be 80% of their income.

The alternative would result in substantial impacts to the buried septic field, federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) mussel habitat, recreational users, and local businesses. This alternative would result in a conditional no adverse effect for both the Skinners Falls Bridge and Milanville Historic District and temporary impacts to of the UDSRR Unit, Delaware Water Trail and NYSDEC Skinners Falls Fishing Access Site.

This alternative was determined to be unreasonable under the environmental review process. The Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located North of Bridge) Alternative would result in substantial impacts to businesses, recreational users and environmental resources. This alternative was determined not to be safe due to the potential risk of bridge collapse when the trusses would be lifted and moved. This alternative could not be constructed without unacceptable safety or operational problems and was dismissed from further consideration.

8.2.1.6.2 Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located South of Bridge)

The Staging Area South of the Bridge Alternative would require a partial-width causeway within the Delaware River extending beyond the central river pier for crane access and movements to remove the trusses. The truss spans would be removed from the existing abutments and pier using a large crawler crane. The NY abutment would be removed in addition to the center river pier. The PA abutment would be stabilized with a concrete cap and a fence to restrict access.

The required access road would be approximately 37 feet wide from Skinners Falls Road to upstream from the NY abutment for use as a crane access road. The NYSDEC-owned parking lot for the Skinners Falls Fishing Access Site was not large enough to accommodate the boom of the large crawler crane while it was being assembled or disassembled.

Considerations for southern staging area include:

- Would allow for simultaneous disassembly of the trusses
- Would require construction of southern access road as well as a northern crane access road to the causeway
- Potential impact to the emergency services access road to Skinners Falls rapids and river.
- Would require improvement to Skinners Falls Road and the NYSDEC Skinners Falls Fishing Access Site parking lot
- Would use entire NYSDEC Skinners Falls Fishing Access Site for staging area, making this recreational resource inaccessible to the public during construction.
- Would require landowner to voluntarily allow use of property with a revocable permit

This alternative would result in a smaller staging area, but would require a large causeway, approximately 205 feet wide and 450 feet long which would remain in place for 6-9 months. The overall footprint for this design would have been 4.15 acres. This design would potentially impact federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) habitat, and host fish passage and habitat, due to potential scour and ponding.

The causeway as shown in the conceptual plan would not have been large enough for the cranes to maneuver while the trusses were sitting on the causeway. The staging area would not provide enough space for the assist crane required for the placement of the counter-weights onto the large crawler crane. The parking area is not of sufficient size to assemble and disassemble the crane. These additional refinements to the concept plan were not made due to the dismissal of this alternative.

The Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located South of Bridge) Alternative was determined not to be safe due to the potential risk of bridge collapse when the trusses would be lifted and moved. The alternative would potentially impact federally endangered mussel habitat, and disrupt the recreational users and businesses for the season. This alternative would result in a conditional no adverse effect for both the Skinners Falls Bridge and Milanville Historic District and temporary impacts of the UDSRR Unit, Delaware Water Trail and NYSDEC Skinners Falls Fishing Access Site.

The Disassembly and Rehabilitation on Partial-Width Causeway (Staging Area Located South of Bridge) Alternative could not be constructed without unacceptable safety or operational problems, and was dismissed from further consideration.

8.2.1.7 Disassembly and Rehabilitation on the Floodplain – South of Bridge

The Disassembly and Rehabilitation on the Floodplain – South of Bridge Alternative would require a partial-width causeway within the Delaware River extending beyond the central river pier. The truss spans would be removed from the existing abutments and pier using a large crawler crane. The NY abutment would be removed in addition to the center river pier. The PA abutment would be stabilized with a concrete cap and a fence to restrict access.

For this alternative, the staging area for the crane assembly/disassembly would take place primarily on the floodplain/bank area south of the bridge and the trusses would be placed on/near the NYSDEC Skinners Falls Fishing Access Site and on the bank area. A partial-width causeway within the Delaware River extending beyond the central river pier would be required for crane access and movements to remove the trusses. The truss spans would be removed from the existing abutments and pier using a large crawler crane.

The initial design utilized access roads with 10% slopes. Information provided by the crane operators noted all grades must be 3% or less slope to move the fully assembled large crawler crane. Grades greater than 1% would not be safe for the crane to move when performing a walking pick carrying the truss span and necessary counter-weights. The alternative with 10% access ramps was dismissed due to slope requirements for crane access, and the alternative was redesigned using 3% slopes.

In order to accommodate 3% sloped access roads, staging areas to the north of the bridge would be required in addition to staging areas on the southern floodplain or bench which increased the limits of disturbance. The NY truss would be placed in the NYSDEC Skinners Falls Fishing Access Site parking lot. The PA truss would be placed on the bench constructed on the overbank area between the Delaware River and the NYSDEC Skinners Falls Fishing Access Site parking lot to conduct the disassembly.

The anticipated sequence of construction would be as follows:

- Build causeway (and begin building bench and staging areas)
- Prepare trusses for disassembly
- Deliver and assemble large crawler crane
- Pick NY span and place on temporary supports in NYSDEC Skinners Falls Fishing Access Site
- Reposition crane and pick PA span and place on temporary supports on intermediate bench
- Remove center pier and NY abutment
- Cap and stabilize PA abutment and install protective fencing
- Disassemble crane
- Disassemble trusses and prepare for storage
- Remove all remaining causeway, bench, staging area materials
- Remove all construction materials and restore site (signage, tree plantings, seeding/mulching, etc.)

Considerations for staging in the NYSDEC Skinners Falls Fishing Access Site south of bridge include:

- Concern with flood events while working on causeway
- Would allow for simultaneous disassembly of the trusses
- Would allow river to be reopened to users on PA side once PA span is removed

- Would allow the trusses to be moved farther from the river
- Would require improvement to Skinners Falls Road including modifications at the railroad crossing, tree clearing, and temporary pavement
- Would require improvements to the NYSDEC Skinners Falls Fishing Access Site
- May require a temporary access road to the bed and breakfast south of NYSDEC Skinners Falls Fishing Access Site and to the emergency access road to Skinners Falls
- Would use entire NYSDEC Skinners Falls Fishing Access Site for staging area, making this recreational resource inaccessible to the public during construction.
- Estimated length of construction of 5-8 months

This alternative resulted in the second longest duration of construction and the greatest disturbance of land. It would also render the NYSDEC Skinners Falls Fishing Access Site boat launch and parking lot unusable for much of the summer recreation season. It would also impact the adjacent businesses who rely upon access to the river.

The alternative would require a large causeway (approximately 225 feet wide and 582 feet long) which would remain in place for 5-8 months. The overall footprint of the design was 6.98 acres. This design would impact federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) habitat, and host fish passage and habitat due to potential scour and ponding associated with the causeway.

The Disassembly and Rehabilitation on the Floodplain – South of Bridge Alternative was determined not to be safe due to the potential risk of collapse when the trusses would be lifted and moved. The alternative would also impact federally endangered mussel habitat and cause disruption to recreational users and businesses. The large size of the disturbance area (6.98 acre) would disturb the greatest amount of land and would result in the impact to land within UDSRR Unit, the Delaware Water Trail, and the NYSDEC Skinners Falls Fishing Access Site. This alternative would result in a conditional no adverse effect for both the Skinners Falls Bridge and Milanville Historic District and temporary impacts to the UDSRR Unit, Delaware Water Trail, and NYSDEC Skinners Falls Fishing Access Site.

The Disassembly and Rehabilitation on the Floodplain – South of Bridge Alternative could not be constructed without unacceptable safety or operational problems, and was dismissed from further consideration.

8.2.2 Demolition Alternatives

These alternatives were investigated as alternatives of last resort. PennDOT determined the time needed to design and implement a safe method to lift/pick/disassemble the bridge, was not reasonable given the bridge's rapidly deteriorating condition. On December 16, 2024, Pennsylvania Governor Shapiro issued a Declaration of Emergency in Relation to Skinners Falls. The Governor's declaration noted "The most recent inspection revealed that one of the structure's abutments was failing. This continued deterioration of the Skinners Falls Bridge has been of such a rapid nature that removal of the structure has become necessary. The bridge

poses risks to those below and downstream from the structure, including those using the Delaware River for recreational purposes." Therefore, in the interest of public safety, the disassembly and rehabilitation alternatives were dismissed because they could not be constructed expeditiously and without unacceptable safety or operational problems.

Two demolition alternatives were examined: Demolition via a Full-Width Causeway Alternative and a Demolition via a Partial-Width Causeway Alternative.

8.2.2.1 Demolition Alternative via Full-Width Causeway

This alternative would require a full-width causeway across the Delaware River. The truss spans would be dropped from their current locations onto a causeway spanning the entire river. The causeway would need to be at least 120 feet wide to allow for the trusses to twist or shift laterally as they were dropped and avoid them falling into the Delaware River. Minimal laydown areas would be needed. Under this alternative, the bridge would be disposed rather than disassembled and stored for a potential future rehabilitation project.

The full-width causeway would allow for bridge demolition activities, including access by workers, small cranes and trucks. The causeway would have been 335 feet wide by 204 feet wide. Twenty-five 6-foot diameter pipes would be installed in the causeway to allow for the passage of normal stream flows through the causeway. Explosive charges would be anticipated to be used to drop the bridge onto the causeway. The NY abutment would be removed in addition to the center river pier. The PA abutment would be stabilized with a concrete cap and a fence to restrict access.

The anticipated sequence of construction would be:

- Construct the causeway
- Drop the PA and NY spans onto the causeway, dispose of bridge components beginning with PA Span
- Remove PA causeway
- Remove center pier and NY abutment
- Cap and stabilize PA abutment and install protective fencing
- Remove the remainder of the causeway
- Remove all construction materials and restore site (signage, tree plantings, seeding/mulching, etc.)

Considerations for this bridge demolition alternative include:

- Would require a causeway which would span entire river
- Would require minimal lay down/staging areas
- Safer working conditions than a lift/pick/disassemble alternative
- More likely to be subjected to high river flows and/or ice flows
- Concern over ice jams in the pipes resulting in flooding
- Estimated length of construction is 4-5 months

The Demolition Alternative via Full-Width Causeway would result in impacts to recreational users and aquatic resources, (including federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) habitat, and fish passage). A full-width causeway in the upper Delaware River in the winter could be subject to ice dams and subsequent flooding. This alternative was presented to state and federal permitting agencies in a meeting on December 11, 2024. The agencies all expressed concerns about a full-width causeway. The permitting agencies were doubtful they could issue a permit for the demolition with a full-width causeway. The agencies suggested PennDOT examine an alternative that utilized a partial-width causeway which would reduce impacts and eliminate the need to fully close the river.

This Demolition Alternative via Full-Width Causeway would have resulted in an adverse effect for both the Skinners Falls Bridge and Milanville Historic District and temporary impacts of the UDSRR Unit, Delaware Water Trail, and NYSDEC Skinners Falls Fishing Access Site.

Given that the Demolition Alternative via Full-Width Causeway Alternative would likely not be permittable by the resource agencies, and it would result in substantial impacts to aquatic resources, including federally and state listed Dwarf Wedgemussel (*Alasmidonta heterodon*) habitat, property damage from flooding, and disruption to the recreational users of the river, it was dismissed from further consideration.

8.2.2.2 Demolition Alternative via Partial-Width Causeway

For the Demolition Alternative via Partial-Width Causeway, which was ultimately the selected alternative, a causeway was constructed approximately 30 feet beyond the center pier. The NY truss was dropped onto the causeway and the PA truss was dropped into the Delaware River and pulled up onto the causeway for salvage. The causeway was approximately 225 feet wide and 190 feet long in order to account for the NY truss twisting or shifting laterally as it was dropped and to allow room to pull the PA truss up on the causeway for demolition. Under this alternative, the bridge was disposed of rather than disassembled and stored for a potential future project.

Explosive charges were anticipated to drop the bridge onto the causeway; however, the contractor opted to use mechanical means. The NY abutment and center pier were removed. The PA abutment was stabilized with a concrete cap and a fence to restrict access.

The sequence of construction was as follows:

- Construct the causeway and install debris containment boom
- Drop the NY span onto the causeway
- Scrap NY span
- Drop PA span into the river
- Pull PA span onto causeway
- Scrap PA span
- Remove center pier and NY abutment; store masonry stone off-site for potential re-use.
- Cap and stabilize PA abutment and install protective fencing

- Remove the causeway
- Remove all construction materials and restore site

Consideration for dropping the bridge and salvage alternative include:

- Allowed for part of river to remain open during construction
- Required a minimal lay down/staging areas
- Safer working conditions than a lift/pick/disassemble alternative
- Estimated length of construction of 3 months

The Demolition Alternative via Partial-Width Causeway resulted in the least impact to waterway resources and was constructed in less time than any of the other alternatives, and had the smallest limit of disturbance. The smaller limit of disturbance (3.37 acres) resulted in reduced impacts related to recreational resources, fish passage, recreational users, businesses, and threatened and endangered mussel species habitat. This alternative resulted in an adverse effect for both the Skinners Falls Bridge and Milanville Historic District and temporary impacts to the UDSRR Unit, Delaware Water Trail and NYSDEC Skinners Falls Fishing Access Site.

8.3 Public Outreach

Since August 2024, PennDOT conducted several public information sessions regarding the emergency project. The first virtual public meeting was held on November 14, 2024, to update the public on the results of the in-depth bridge inspection, the concern over potential impacts to the public health and safety of recreational users of the Delaware River, and to explain the proposed plans for careful disassembly and storage of the trusses. Approximately 70 members of the public attended the meeting. Following the presentation, the PennDOT team answered over 55 questions from the public regarding the emergency project. The presentation and questions were posted on the project web page. In addition, public comment forms were sent to the Damascus Township building, Cochecton Town Hall, and the National Park Service Ranger station in Milanville to provide the public an opportunity to submit questions through the mail.

A second virtual public meeting was held on December 17, 2024. The purpose of the meeting was to present the emergency declaration from the Pennsylvania governor and explain the urgent need to immediately remove the truss superstructure, center pier and New York abutment. Approximately 50 members of the public participated; PennDOT answered 40 questions from the public. The presentation and questions from the December meeting were posted on the project webpage.

In addition, PennDOT and NYSDOT staff met with the New York businesses to discuss the potential temporary use of their properties and the impact to their businesses and met with the Town of Cochecton to discuss potential construction impacts to the local roads. PennDOT also released press releases to update the public on the start of construction and periodic construction updates.

In addition to public information sessions, PennDOT conducted a virtual Consulting Party meeting on February 11, 2025, in accordance with Section 106 of the National Historic Preservation Act of 1966. Section 106 requires federal agencies to consider the effects of projects they carry out, approve, or fund on historic properties. Since the bridge removal resulted in an adverse effect on the National Register of Historic Places Skinners Falls Bridge and Milanville Historic District, PennDOT conducted the meeting to discuss potential mitigation ideas to satisfy the adverse effects. Approximately 37 consulting party representatives attended the virtual meeting. During the meeting, approximately 70 questions or comments were submitted via the chat function in addition to direct verbal questions from participants during the meeting.

A second hybrid (in person and virtual) Consulting Party meeting was held on April 30, 2025. The Consulting Party meeting was held at the Tusten Town Hall in Narrowsburg, NY. The purpose of the Consulting Party meeting was to continue discussing potential measures to mitigate the adverse effect. Approximately 33 consulting party representatives attended the meeting either in person or virtually. During the meeting, approximately 22 questions or comments were submitted via the chat function in addition to direct verbal questions from participants during the meeting.

As part of the development of the Section 106 Memorandum of Agreement (MOA), PennDOT will review the suggested mitigation options with FHWA, ACHP, NY SHPO and PA SHPO and discuss which proposals to further consider and fund. The mitigation commitments will then be reviewed with the Consulting Parties and presented in the MOA document which will be prepared for the project.

8.4 Agency Outreach

After PennDOT was notified of debris falling from the bridge, PennDOT, NYSDOT, and FHWA initiated coordination with the necessary permitting agencies. Frequent meetings were held with the permitting agencies from November 2024 to February 2025 as the alternatives were advanced and permit applications prepared. The purposes of the meetings were for the PennDOT team to provide updates on limits of disturbance, potential methods for disassembling or demolishing the bridge, and timing of the project. PennDOT secured all necessary state and federal permits for the demolition of the bridge in February 2025 and held a pre-construction meeting with the permitting agencies on February 24, 2025. Additionally, an agency meeting regarding potential mitigation measures under Section 106 of the NRHP was held on June 16, 2025. Attendees at the agency meeting consisted of FHWA, ACHP, NPS, NY SHPO, PA SHPO, PennDOT, and NYSDOT. **Table 14** notes the agencies that were included in agency outreach as part of the emergency project.

Table 14: Agency Coordination

Agency	Documentation/Approval
US Army Corps of Engineers (USACE)	Nationwide Permit 3
Pennsylvania Department of Environmental Protection (PADEP)	Emergency Permit
New York State Department of Environmental Conservation (NYSDEC)	Emergency Authorization Temporary Revocable Permit Section 4(f) Evaluation concurrence as Official with Jurisdiction
National Park Service (NPS)	Special Use Permit Section 7a of the Wild and Scenic Rivers Act Determination Section 4(f) Evaluation concurrence as Official with Jurisdiction Section 106 Memorandum of Agreement
Upper Delaware Council (UDC)	Conformance Review
PA Fish and Boat Commission (PFBC)	Aids to Navigation Plan Concurrence on proposed mitigation measures Section 4(f) Evaluation concurrence as Official with Jurisdiction
Advisory Council on Historic Preservation (ACHP)	Adverse Effect Determination Section 106 Memorandum of Agreement
NY State Historic Preservation Office (NY SHPO)	Adverse Effect Determination Section 106 Memorandum of Agreement
Pennsylvania Historical and Museum Commission (PA SHPO)	Adverse Effect Determination Section 106 Memorandum of Agreement
US Fish and Wildlife Service (USFWS)	Concurrence on use of emergency procedures under Section 7 of the Endangered Species Act and proposed mitigation measures
Town of Cochecton	Concurrence on use of local roads
Central New York Railroad Corporation	Permit to enter

The following agencies and tribal nations were included in coordination efforts for the emergency project, although no approvals were required from these agencies:

- Delaware River Basin Commission
- Delaware Tribe of Indians, Oklahoma
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Onondaga Nation
- Shawnee Tribe
- US Coast Guard
- Stockbridge-Munsee Community Band of Mohican Indians
- Wayne County Conservation District

8.5 Visual Impact Assessment

As part of the emergency removal project, a Visual Impact Assessment is being prepared according to the Administration's FHWA Visual Impact Assessment (VIA) guidelines. The VIA builds off the existing visual resource conditions described in the Visual Resources Section (Section 4.4.5) of the PEL document. The removal of the bridge, as a visual resource, resulted in an adverse and permanent impact to the viewshed surrounding the bridge and to viewer groups including recreational users on the Delaware River, drivers on adjacent roads, and viewers within the Milanville Historic District, Skinners Falls Main Beach, Skinners Falls Boat Launch and residences. Avoidance of visual impacts would have required the bridge to remain present which would have resulted in continued unsafe conditions in the vicinity of the structure.

Public outreach to solicit input for mitigation measures regarding the visual impact will be conducted as part of the overall VIA analysis. Based on agency coordination, measures for the mitigation of visual impacts that occurred as a result of the emergency removal may also overlap with ongoing mitigation discussions subject to the requirements of Section 106 of the National Historic Preservation Act of 1966 and Section 4(f) of the U.S. Department of Transportation Act of 1966.

8.6 Cost Updates for Viable Alternatives

The overall costs for each alternative that were originally presented in the PEL document were expressed in 2023 US dollars. Estimated construction costs were updated for each alternative to support the planning and programming process. As a result, the updated construction cost for the remaining viable alternatives are shown below in Table 15. Potential mitigation noted in the draft April 2024 PEL Study were preliminary estimates developed for alternatives comparison. Their inclusion did not indicate FHWA approval of these costs. Mitigation will reflect reasonable and commensurate mitigation supportable by FHWA.

Table 15: Alternatives Matrix with Updated 2025 Costs

Proposed Alternative	Description	Meet Purpose and Need	Potential Section 106 Effects	Estimated Construction Costs*
No Build-Do Nothing	No permanent or maintenance work.	No	Adverse Effect to bridge and historic district.	$0
Full Replacement	Assumes an online or immediately adjacent replacement. Carries full loads. Accommodates pedestrians and cyclists. Addresses sight distance challenges.	Yes	Adverse effect to the bridge and historic district. Likely additional impacts to the historic district with removal of barn in historic district.	$13-28.5 M

* Costs updated to reflect 2025 dollars

8.7 Recommended Future Actions and Funding

The PEL has been updated to reflect the emergency demolition and removal of the Skinners Falls Bridge, which occurred in 2025. As a result of the bridge demolition, the Rehabilitation Alternative, which was originally recommended for future study in the previously released PEL conclusions, is no longer a viable alternative. Therefore, this PEL study is being reissued and recommends if future funding becomes available, the No Build Alternative and a Full Replacement Alternative be evaluated in a future NEPA study.

As described in **Section 7.2** of the PEL, funding available for transportation projects in New York and Pennsylvania is limited. Under the current JIBC Agreement, both states share the costs of repair or a replacement bridge. PennDOT and NYSDOT must follow the planning and programming for funding of transportation projects as stated in federal regulations including 23 CFR Section 450.306 (a).

As of the writing of the PEL update in 2025, there is $3.3 M in eligible bridge funding allocated in Federal Fiscal Year (FFY) 2025 as proposed in the Wayne County, Pennsylvania Independent Transportation Improvement Program (TIP). This funding is allocated to projects through a bi-annual TIP update, where all bridges in Wayne County are reviewed for inclusion in the upcoming TIP. The funding amount may vary year to year. The 2025 TIP covers FFY 2025 through 2028. Currently PennDOT manages 317 state owned bridges in Wayne County. Of these 317 bridges, approximately 20% are in poor condition. Bridges in poor condition, currently open to traffic receive priority for funding available to the county, for preservation, rehabilitation and replacement. Skinners Falls Bridge is not carrying traffic currently and had not been since 2019, and therefore, is not a priority over those carrying traffic.

Similarly, at this time, NYSDOT Region 9 is allotted an annual planning target of $34.1 M in funding for all types of projects across the seven counties in the region. NYSDOT does not program their funding by county. The funding is allocated to projects over a five-year program, which is reviewed and updated every three years as part of the State Capital Program Update and Federal Statewide Transportation Improvement Program (STIP) process. With regards to bridges, NYSDOT Region 9 has 956 state owned bridges. Of those, approximately 5% are in poor condition and another 21% are in fair-corrective condition (fair-corrective bridges require cost effective treatments to extend the useful life of the structure). The Region prioritizes bridge funding based on a combination of condition ratings and operational needs. Poor bridges with higher traffic volumes are prioritized first.

In addition to TIP/STIP funding, **Section 7.2** of the PEL also described a high-level evaluation of potential federal grants. The high-level evaluation concluded that while several federal programs may be applicable, many of the programs are competitive and require cost-benefit analyses as part of the grant applications. The low traffic volumes on the Skinners Falls Bridge would result in a low BCA ratio, which would affect the bridge's selection for this type of funding.

As stated above, the transportation needs exceed available funding. Transportation improvements are prioritized based on needs, i.e. overall system operations and volume of traffic. The lack of available funding will affect the planning and programming to advance further studies associated with the remaining alternatives identified within this PEL study.

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Appendix A: PEL Study Questionnaire Responses

Planning and Environmental Linkages Questionnaire Responses
April 2025 – Updated September 2025

Introduction

Per the April 5, 2011 directive from the Federal Highway Administration (FHWA), the Planning and Environmental Linkages "… questionnaire is intended to act as a summary of the Planning process and ease the transition from planning to a National Environmental Policy Act (NEPA) analysis. ... This questionnaire is consistent with the 23 CFR 450 (Planning regulations) and other FHWA policy on Planning and Environmental Linkage (PEL) process." The response to the PEL Questionnaire summarizes how PennDOT performed planning level analyses, developed project purpose and need, developed a range of alternatives, screened those alternatives and recommend alternatives for further study. This PEL pertains to SR 1002 (Skinners Falls W Road) over Delaware River, located in Damascus Township Wayne County, Pennsylvania and the Town of Cochecton, Sullivan County, New York.

PEL Questionnaire

1. Background:

a. Who is the sponsor of the PEL study?

The Pennsylvania Department of Transportation (PennDOT) is the project sponsor and the FHWA is the lead federal agency for this PEL Study.

b. What is the name of the PEL study document and other identifying project information (e.g., sub-account or STIP numbers, long-range plan, or transportation improvement program years)?

The official PEL document is called the *SR 1002 (Skinners Falls W Road) over Delaware River Planning and Environmental Linkages (PEL) Study.* Skinners Falls W Road over the Delaware River is identified in:

- **2023 Wayne County 12-Year Program (2023-2034)**
  The Skinners Falls Road Bridge over the Delaware River is listed as MPMS # 9983 with funding in the 3rd four-year portion of the 12-year program (2023-2034). No funding is currently present on the Wayne County 2023-2026 program or the 2027-2030 program.
- **2023 NYSDOT Region 9 STIP**
  The Skinners Falls Road Bridge over the Delaware River is listed as # 975504 with funding present for FY 2024-FY2026.

c. Who was included in the study team?

Federal Highway Administration
Camille Otto – Former PA Deputy Division Administrator
Jonathan Crum – Former PA Team Leader, Planning and Environment
Jennifer Crobak – PA Director, Planning, Environment and Finance
Michelle Goddard – PA Team Leader, Environment
Benjamin Harvey- PA Environmental Protection Specialist
Veronica Feliciano – PA Transportation Engineer/Environment
Damaris Santiago – Former NY Deputy Division Administrator
Timothy O'Donoghue – NY Discretionary Grants Project Coordinator

Nicole McGrath – NY Community Planner
Megan Pulver – NY Environmental Protection Specialist

Pennsylvania Department of Transportation
Bryon Ruhl – Natural Resource Specialist
Drew Ames – Division Chief
Kevin Mock – Archaeology Supervisor
Steve McDougal – District 4 Archaeologist
Kris Thompson-Above-Ground Cultural Resources Supervisor
Heather Gerling-District 4 Architectural Historian
Susan Hazelton- District 4 Assistant District Executive-Design
Amy Lolli- District 4 Project Manager
Gerard Babinski- District 4 Bridge Engineer
Chris Tomaszewski- District 4 Portfolio Manager
Greg Augustine- District 4 Environmental Manager

New York State Department of Transportation
Chris Klein- Regional Local Projects Liaison
Kris Gilbert- Region 9 Project Manager
Kyle Somerville- Region 9 Cultural Resources Specialist
Peter Dunleavy- Director Landscape Architecture Bureau

Project Design and Environmental Team
Lisa Brozey- Project Manager- AECOM
Dan Radle- Deputy Project Manager- Structures Lead- AECOM
Dave Semple- Civil Lead- AECOM
Steve Wittig- Environmental Planner- AECOM
Kate Farrow NEPA Support- NTM
Gretchen Yarnall- NEPA Support- NTM

d. Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment (urban vs. rural, residential vs. commercial, etc.)

The PEL study area is located in Damascus Township, Wayne County, PA and in the Town of Cochecton, Sullivan County, NY. SR 1002 is the main roadway within the project study area, which crosses the Delaware River via a 466'6" long, two span Baltimore Through Truss bridge. The existing bridge is a single lane with timber deck and timber running boards. The study area extends from the river west toward village of Milanville on the Pennsylvania side and extends from the river east to NY 97 on the New York side. The study area extends approximately 1,400 ft upstream and 1,100 ft downstream of the existing bridge.

SR 1002 – Calkins Road is a rural local road with a 22 foot wide unstriped bituminous travelway. SR 1017 – River Road is a rural local road with a 16 foot wide unstriped bituminous travelway. On the NY side, Skinners Falls W Road, is a rural minor collector road consisting of an unstriped 22 foot wide bituminous travelway. As these are all local roads, no access control is present. The study area is rural with scattered residential dwellings. A campground is present in the northeast quadrant, and a public boat launch is present in the southeast quadrant.

e. Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.

Prior to initiation of the PEL Study, several studies and improvements were conducted. These included the following activities:

Studies:

Draft Structural Assessment: A Draft Structural Assessment Report (SAR) was prepared in 2013 and included an in-depth inspection, calculated load ratings and rehabilitation recommendations. The SAR also included non-destructive testing (NDT) and materials testing of the structure.

Draft Feasibility Study: A Draft Feasibility Study Report was prepared in 2014 and included an assessment of the potential for the existing bridge to be rehabilitated to a 4, 7 and 10-ton weight limit, as well as a potential replacement alternative. This report was not finalized.

PEL Study Initiation- The PEL study was initiated in 2021. Initial activities consisted of the development of the project purpose and need, along with public and agency outreach to solicit feedback regarding the purpose and needs. The purpose and needs were finalized in June 2022. In 2023, a Phase 1 Historic Bridge Rehabilitation Assessment (HBRA) was performed to evaluate the load carrying capacity of the bridge and whether the bridge could be rehabilitated to the Secretary Of Interior's *Standards for Rehabilitation*.

Bridge Repairs and Rehabilitations:

1974-1975 Bridge rehabilitation: The plans for this rehabilitation were prepared in 1971. Activities performed on the bridge for this rehabilitation consisted of tightening truss turnbuckle members, heat shortening, retrofitting diagonal channel member webs, replacing timber deck, adding rock protection, repointing masonry, resetting expansion bearings, cleaning, and painting.

1986 Bridge rehabilitation: A second rehabilitation occurred in 1986. Activities performed on the bridge for this rehabilitation consisted of reinforcing top plates, heat shortening, replacing diagonal built up member bearing plates, replacing mid height vertical members and one decorative railing, replacing the timber deck, strengthening floor beams, replacing ten stringers, adding guiderail, cleaning and painting.

2010 Emergency Repair: An emergency repair project consisting of portal member repairs was conducted.

2012 Emergency Repair: An emergency repair project consisting of replacing deteriorated eyebar hangers with 7/8" threated rods was conducted.

Following an in-depth inspection and ratings analysis of the bridge, insufficient ratings resulted in mandatory temporary closures of the bridge and subsequent emergency repairs.

2013 Emergency Repair. An emergency repair consisting of bracing of stringers at floor beams, abutments and pier, replacing 43 of 246 stringers, strengthening of eight floor beams, repairing one floor beam connection to truss lower chord, cleaning and painting of members and the connection at Span 1, Left Truss PP L0. This emergency repair was necessary to reopen the bridge to traffic.

2016 Emergency Repair: An emergency repair consisting of replacing missing pin caps, replacing select U-bolts at floorbeam to truss lower chord connection, replacing truss diagonal U8-M9, Replacing select timber running boards, replacing 44 of 246 stringers and the installation of headache bars.

2019: The bridge was closed following a customer complaint and subsequent PennDOT District Bridge Unit inspection which identified extensive timber deck and lateral truss bracing deterioration. The bridge was closed to all traffic including bicyclists and pedestrians.

2024, August: Following the April 2024 public meeting on the draft PEL document, PennDOT was preparing responses to the public comments when they were alerted to metal bridge components falling from the bridge and into the Delaware River. PennDOT conducted an emergency bridge inspection and determined that existing deterioration presented a threat to public health and safety of recreational river traffic under the bridge. As a result of the emergency inspection, PennDOT determined an in-depth National Bridge Inspection Standards (NBIS) inspection was needed to evaluate the condition of the bridge. The NBIS bridge inspection was completed in early October 2024. The NBIS inspection revealed multiple observed conditions which resulted in downgrading the Skinners Falls Bridge to a superstructure condition of "2 – critical," and a substructure condition rating of "0 – failed." The substructure condition rating of "0 - failed" also resulted in an overall structure condition of "0 – failed. Upon review of the inspection report findings, PennDOT initiated an alternatives analysis and began/continued coordination with resource agencies to address the failed condition of the bridge.

2024, December: Pennsylvania Governor Shapiro issued a declaration of emergency in relation to Skinners Falls Bridge. The FHWA concurred with the emergency declaration on December 17, 2024. On December 17, 2024, PennDOT announced the Skinners Falls Bridge would be removed via demolition due to the emergency declaration and as a result of the alternatives analysis.

2025, March: Construction began on March 10, 2025, for the emergency removal of the bridge. The NY span was removed via mechanical means on April 17, 2025, and the PA span was removed via mechanical means on April 21, 2025. The construction activities were completed, the river re-opened to recreation and the New York State Department of Environmental Conservation (NYSDEC) parking lot restored in accordance with the NPS SUP and NYSDEC Temporary Revocable Permit conditions by May 22, 2025.

f. Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?
There are no funded recent, current, or near future planning studies or projects in the vicinity.

2. Methodology used:

a. Did you use NEPA-like language? Why or why not?
Yes, NEPA-like language was utilized while preparing the SR 1002 Over the Delaware River PEL Study to support future stages of project development.

b. What were the actual terms used and how did you define them? (Provide examples or list)

The PEL Report provided a Glossary of Terms that provided key terms along with a definition used throughout the PEL Study. Examples of terms in the glossary include:

- **Historic Resource:** A building, structure, site, district, or object which is significant in American history, architecture, engineering, and culture and is eligible for or listed in the National Register of Historic Places.

- **Resource Agency:** A group of federal and state agencies or commissions which have various regulatory, jurisdictional, and/or administrative responsibilities in a variety of subject areas that are part of the Transportation Program Development and Project Delivery Process. These agencies and commissions are involved in participating in project meetings, reviewing and evaluating PennDOT studies, commenting on documents, and granting certain approvals.

- **Need:** Describes the key problem(s) to be addressed by a proposal/project and, to the extent possible, explains the underlying causes of those problems. The need provides the factual foundation for the statement of project purpose. A need for a proposal/project is a tangible, fact-based problem**.**

- **Purpose:** A broad statement of the overall intended objective to be achieved by a proposed transportation improvement. The proposal's purpose is an overarching statement as to why the proposal is being pursued and the objectives that will be met to address the transportation problem or deficiency.

c. How do you see these terms being used in NEPA documents?

The terms used in the PEL Study are terms that are used in NEPA documents. As such they are consistent with current guidance and regulations. For example, the alternatives recommend for future study in this PEL may be advanced into future studies pending the programming of additional funding.

d. What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps?

The PEL Study included a six-step process:

Step 1: Collected background information, solicited public and agency input and developed the project purpose and needs.

Step 2: Developed a range of alternatives to be studied in the PEL.

Step 3: Prepared conceptual level engineering analysis and Phase 1 Historic Bridge Rehabilitation Analysis to investigate existing bridge capacity alternatives from an engineering perspective.

Step 4: Evaluated a range of alignment alternatives based on conceptual level engineering and anticipated environmental, socioeconomic, and cultural resources impacts.

Step 5: Identified alternatives recommended to be advanced for further study.

Step 6: Compiled PEL study and obtain approvals from FHWA.

Public and agency engagement extended throughout the entire PEL process. Engagement took many forms throughout the PEL Study including a website, electronic mailing list, public meetings, public officials' meetings, and resource agency coordination meetings. Five Project Advisor Committee (PAC) meetings, five Agency Coordination Meetings (ACM) meetings and two public meetings were held. These meetings occurred at major milestones in the PEL process.

Decision-makers included in the PEL Study process included PennDOT, NYSDOT, and FHWA with additional input from participating and cooperating agencies and the public. Cooperating agencies provided consensus on study purpose and need, the range of alternatives to be considered in the PEL, and alternatives to be advanced for further study.

e. How should the PEL information be presented in NEPA?

The SR 1002 over the Delaware River PEL Study would be discussed and summarized in future studies. The PEL Study identified and evaluated preliminary alternatives and provides supporting documentation for the identification, avoidance, and minimization of impacts by the proposed project. It also provides a foundation for continued public and agency involvement in future studies.

3. Agency Coordination:

a. Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.

PennDOT holds monthly commonwealth-wide ACM and field views for transportation projects and studies. Federal and state resource agencies have a standing invitation to the ACMs. For the PEL Study, special invitations to attend the ACM were provided to the federal, state and local agencies in NY and PA as well as federally recognized Tribes and Nations. A total of 5 online ACM's were held during the PEL process, from 2021 to 2024. Additionally, a field view and special meetings were held with the NPS to discuss agency concerns. The lead federal agency for the PEL Study is the FHWA.

Cooperating Agencies

National Park Service	NY State Department of Environmental Conservation	PA Department of Environmental Protection
U.S. Army Corps of Engineers	U.S. Environmental Protection Agency	U.S. Fish & Wildlife Service

Participating Agencies

Damascus Township	Delaware Tribe of Indians, Oklahoma	NY State Historic Preservation Office
PA Department of Conservation & Natural Resources	PA Fish & Boat Commission	Pennsylvania Historical and Museum Commission (PHMC)
Stockbridge-Munsee Community, Wisconsin	Wayne County Conservation District	

Consensus was sought and obtained from cooperating agencies during the ACM meetings at several key points in the PEL Study process. Participating agencies were presented with the same information as the Cooperating Agencies and could provide input at or immediately following the ACM.

b. What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?

The transportation agencies involved in the PEL Study were PennDOT, the lead state agency, and FHWA, the lead federal agency. NYSDOT was also involved in the project as the approach roadway on the New York side of the Delaware River is within their jurisdiction. The roadway approach on the Pennsylvania side of the Delaware River is within PennDOT Jurisdiction. Per the Joint Interstate Bridge Commission Agreement between New York and Pennsylvania, ten bridge crossings along the upper Delaware are jointly managed by both states, with each state leading efforts on 5 of the bridges. The efforts on the SR 1002 over the Delaware River bridge is led by PennDOT.

Additionally, coordination was also completed with the local municipalities, who are part of the PAC, throughout the PEL process.

c. What steps will need to be taken with each agency during NEPA scoping?

Coordination with each of these entities would continue during future studies once a project is identified.

4. Public coordination:

a. Provide a synopsis of your coordination efforts with the public and stakeholders.

Study Website: A study specific website (https://www.penndot.pa.gov/RegionalOffices/district-4/PublicMeetings/Wayne%20County/Pages/Skinners-Falls-Bridge-Project.aspx) was developed to keep the public informed during the study. The website includes general information on the project, including status updates, relevant documents, study area maps, public and agency outreach information, and meeting slides.

A brief description of the Skinners Falls Bridge Project can also be found on the NYSDOT Region 9 webpage. The link can be found at: https://www.dot.ny.gov/portal/pls/portal/MEXIS_APP.DYN_PROJECT_DETAILS.show?p_arg_names=p_pin&p_arg_values=975504.

Public Meeting:

Public Meetings:

- March 30, 2021. The meeting was held in a virtual meeting format with participants logging in via Microsoft Teams or dialing in by phone. There were approximately 145 people recorded as attending the meeting.
- April 25, 2024. The meeting was held at the Narrowsburg Union in Narrowsburg, NY. A total of 71 participants signed the attendance sheet.
- November 14, 2024. A virtual public meeting was held to update the public on the emergency bridge project. The presentation included an update on actions taken since August 2024, the current condition as reported in the October 2024 inspection and the alternatives under consideration. Approximately 105 people participated.
- December 17, 2024. A virtual public meeting was held to update the public on the emergency bridge project. Governor Shapiro had issued an Emergency Action to remove the bridge. FHWA concurred with the declaration and PennDOT initiated construction to remove the bridge. Approximately 99 people participated.

Public Surveys:

- March 30, 2021: Public feedback on transportation needs and data on how the public used the bridge prior to its closure.
- April 2024: Public feedback on the alternatives proposed for future study if funding becomes available. A total of 56 comment forms and 31 comments were received during the 45 day comment period.

Project Advisory Committee: The Project Advisory Committee is comprised of major stakeholders who represent the needs and priorities of the community. PAC communication points are summarized in the table below.

Coordination Point	Date of Coordination	Information Presented/Discussed
PAC #1	February 22, 2021	PEL Study Initiation and Discussion of Needs
PAC #2	September 23, 2021	PEL Study Update
PAC #3	January 19, 2023	Public and Agency Coordination Plan PEL Study Update Final Purpose and Need Statement
PAC #4	May 24, 2023	Result of Phase I Alternatives Assessment
PAC #5	February 28, 2024	Alternatives to be advanced for further study

Section 106 Consulting Parties: Consulting parties were solicited to review and comment on the Skinners Falls Bridge. Additional coordination was conducted as part of the emergency action outlined under 1.e. Consulting Parties communication points are summarized in the table below. All coordination and documentation of Section 106 communication is located on PennDOT's Pennsylvania Transportation and Heritage (PATH) website (https://path.penndot.pa.gov/ProjectDetails.aspx?ProjectID=1&txtMPMS=122260).

Coordination Point	Date of Coordination	Information Presented/Discussed
CP #1	February 11, 2025	Virtual Meeting to present effects determination and begin discussion of potential Mitigation Options to address adverse effect of Emergency Action
CP #2	April 30, 2025	In-person and Virtual Meeting to discuss potential Mitigation Options to address adverse effect of Emergency Action

5. Purpose and Need for the PEL study:

a. What was the scope of the PEL study and the reason for completing it?

This PEL Study was conducted to identify project purpose and needs, develop and screen preliminary alternatives and perform preliminary studies to evaluate the potential for and challenge of any future project and informing future studies.

b. Provide the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision.

The purpose of the project is to provide a safe and efficient crossing of the Delaware River at Skinners Falls for cars, trucks, trailers, emergency response vehicles, bicyclists, and pedestrians.

Project needs for the Skinners Falls Bridge project consist of the following:

Project Need 1: The Skinners Falls Bridge is currently closed to traffic due to its condition, which limits efficient access for residents, businesses, and recreational users.

Project Need 2: River rescue is negatively affected by the absence of a functional bridge in the vicinity of Skinners Falls.

Project Need 3: Fire and medical emergency response are delayed due to the lack of a crossing at Skinners Falls

Project Need 4: The Skinners Falls Bridge does not provide adequate accommodations for pedestrians, bicyclists, and recreational users in the area.

c. What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

The purpose and need developed for the PEL Study was intended to be directly transferable to the purpose and need statement used for future studies. It is anticipated that the supporting documentation will be updated with new or additional information during the future phases of the project.

6. Range of alternatives: Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis, and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision will not be considered reasonable alternatives, even if they reduce impacts to a particular resource. Detail the range of alternatives considered, screening criteria, and screening process, including:

a. What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)
A total of seven alternatives grouped into 3 categories were considered in this PEL Study:

No-Build
Do Nothing: Under this alternative, no maintenance or rehabilitation work would be performed on the bridge. The bridge would remain closed to all traffic. Due to continued deterioration, the bridge would remain a serious safety concern.

Removal/Relocation/ and Reuse This alternative results in the careful disassembly, storage and re-use of the bridge in a separate location. Under this alternative, a future crossing at this location would not be present.

Removal/Demolition: This alternative results in the demolition and scrapping of the bridge. Under this alternative a future crossing at this location would not be present.

Rehabilitation
Traditional Rehabilitation (4, 7, 10-ton): The existing bridge would be rehabilitated in accordance with the Secretary of Interior's *Standards for Rehabilitation*.

Non-Traditional Rehabilitation: A new superstructure and substructure would be constructed on the same alignment. The existing trusses would be repaired and reused as decorative elements on the outside of the new superstructure. Strengthening and replacement of existing truss elements would be required.

Full Replacement
Online: A new bridge on the same alignment as the existing bridge would be constructed. The existing bridge would need to be removed to make room for the new bridge.

Offline: A new bridge on a different alignment would be constructed. The existing bridge would need to be removed to maintain the number of bridges required as per the current Joint Interstate Bridge commission agreements.

These alternatives were screened on their ability to meet the purpose and needs, conceptual engineering designs, and minimizing environmental impacts. Any alternative determined to not meet the purpose and need was dismissed from further consideration as a reasonable alternative. See Section 6 of the SR 1002 over Delaware River PEL study.

After the emergency action outlined in 1.e. above, two alternatives, No Build and Full Replacement are recommended for further study if funding becomes available.

b. How did you select the screening criteria and screening process?

Overall the screening criteria were selected based on evaluation of conceptual engineering practices, an evaluation of existing environmental and socioeconomic resources, construction costs, lifecycle costs and the ability to meet the project purpose and needs.

Screening of alternatives took place in one phase. Conceptual level engineering was performed on each alternative. Each alternative was then evaluated based on impacts to environmental, socioeconomic, and historic resources. As part of the alternatives screening, a Phase 1 Historic Bridge Rehabilitation Analysis (HBRA) was performed to evaluate the potential for rehabilitation compliant with Secretary of Interior's (SOI) *Standards for Rehabilitation.* The results of the alternative screening are presented in the PEL Report.

c. For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws.)

The offline replacement alternative was not recommended for further study during the PEL. The offline replacement alternative included a total of three potential alignments: one downstream and two upstream of the existing bridge. This alternative was not recommended due to the significant environmental impacts including watercourse, floodway, threatened and endangered species and business impacts. Additional considerations included the approach roadway costs and right-of-way impacts associated with these alternatives. Consensus from resource agencies regarding the dismissal of the offline replacement alternatives was obtained during the ACM and PAC meetings in May 2023.

d. Which alternatives should be brought forward into NEPA and why?

As noted in 6.a. above, due to the emergency action taken in 2024-2025, the No Build and Full Replacement alternatives are the only two alternatives recommended for further study if funding becomes available.

Future studies will further evaluate the feasibility of these alternatives from an engineering, environmental, and funding perspective.

<u>No-Build Do Nothing</u>:

- Carried forward as a baseline alternative for future evaluation
- Does not provide a functional crossing

<u>Full Replacement</u>

- Minimizes impacts to environmental resources as compared to offline replacement
- Provides a functional crossing
- Provides longest service life
- Lifecycle costs may be less than rehabilitation alternative

e. Did the public, stakeholders, and agencies have an opportunity to comment during this process?

The project website (https://www.penndot.pa.gov/RegionalOffices/district-4/PublicMeetings/Wayne%20County/Pages/Skinners-Falls-Bridge-Project.aspx) provided the public with an opportunity to provide comments throughout the duration of the study via a project specific email address and phone number. A Public survey was conducted in 2021 as part of the development of the project purpose and needs. Stakeholder interviews with National Park Service, emergency responders and local businesses were conducted. Agencies have been briefed as part of regular Agency Coordination meetings which were held throughout the Study.

See 4.a.

f. Were there unresolved issues with the public, stakeholders, and/or agencies? Several groups of stakeholders have expressed strong support for the saving/ rehabilitation of the existing bridge. Additional stakeholders have expressed support for a crossing at this location. During the PEL process, public and agency input was obtained and considered at specific points Public and agency input was solicited and considered during:

- Identification of purpose and needs
- Preparation of the purpose and needs,
- Development of alternatives, and
- Alternatives advanced for future study.

A summary of public and agency involvement is documented in the PEL Report. Additional future studies to consider public and agency concerns, as well as further studies to evaluate alternatives will be conducted. As part of these additional studies, continued efforts to refine the engineering design, avoid and minimize impacts, and identify potential mitigation will occur.

7. Planning assumptions and analytical methods:

a. What is the forecast year used in the PEL study? n/a

b. What method was used for forecasting traffic volumes?

Because the PEL is focused on the Skinners Falls Bridge and immediately adjoining approaches, traffic volume forecasting was not performed.

c. Are the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?

This project is not a corridor project and is limited to the vicinity of the existing Skinners Falls Bridge. In coordination with NYSDOT, planning assumptions developed by PennDOT directly informed the project purpose and need and alternatives considered for this project. These assumptions are consistent with the existing NYSDOT and PennDOT Transportation Improvement Programs (TIP's)/12-year plans for each state. As of the writing of this PEL, the transportation assumptions included in the TIP's/12-year plans for each state, as well as the current legislative framework for the Joint Interstate Bridge Commission are consistent with the documentation included in the PEL.

d. What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?

The PEL assumed the continued legislative framework of the Joint Interstate Bridge Commission, as well as cost estimates for construction and lifecycle costs as based on current industry trends and professional judgement. The PEL assumed no major transportation network expansion or significant changes in land use within the project study area.

8. Environmental resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:

a. In the PEL study, at what level of detail was the resource reviewed and what was the method of review?

Environmental features in the study area were identified through secondary sources, select site reconnaissance, coordination with government agencies and private organizations, and outreach to the public. These features were mapped using a Geographic Information Systems (GIS) database. Environmental resources identified within the study area included:

Natural Resources – watersheds, watercourses, wetlands, floodplains, terrestrial habitat resources, and Federal and State Threatened and Endangered (T&E) Species and their associated habitat.

Cultural Resources – historic districts and historic properties listed in or determined eligible for listing in the National Register for Historic Places.

Socioeconomic Resources – residential neighborhoods, land use development, community facilities including Fire, Emergency Medical Systems (EMS) and Police facilities, medical facilities, parks and recreation areas.

b. Is this resource present in the area and what is the existing environmental condition for this resource?

Resource	Existing Condition	Considerations
Land Use	Located within Upper Delaware Scenic and Recreational River. Commercial campground and inner tube rental on east side, scattered residential residences on west side	Assessment of Conformance with the Upper Delaware Council/NPS Land and Water Use Guidelines. Evaluation of alternatives to minimize impacts to businesses and determine right-of-way requirements.
Mobility	The bridge is currently closed to all users.	Continue to consider needs of bicyclists and pedestrians in future stages of design.
Wetlands	Mapped wetlands (PUB ponds) are present within the project area	Avoidance and minimization of impacts. Coordination with USACE, PADEP and NYSDEC for permitting and mitigation.

Resource	Existing Condition	Considerations
Watercourses	The Delaware River is the main watercourse within the project area.	Avoidance and minimization of impacts. Coordination with USACE, PADEP and NYSDEC for permitting and potential mitigation.
Wild and Scenic Rivers	The Delaware River is a Federal Wild and Scenic River.	Continued consultation with NPS regarding potential impacts and review of the project under the Wild and Scenic River Act.
Floodplains	The 100-year floodplain and floodway of the Delaware River is present	Minimization of Impacts. Coordination with USACE, PADEP and NYSDEC for permitting.
Threatened and Endangered Species	USFWS regulated mussel species are present within the Delaware River. Other state listed species may be present.	Avoidance and minimization of impacts. Coordination with USFWS, PFBC and NYSDEC regarding additional species, impacts and potential mitigation.
Cultural and Historic Resources	The Skinners Falls Bridge and the Milanville Historic District are NRHP-Listed. Archaeological potential is present along the PA side of the river	Continued coordination with PennDOT, NYSDOT, NPS,PHMC and NYSHPO regarding minimization of resource effects and potential mitigation.
Parks and Recreational Resources	Delaware Scenic and Recreational River. Commercial campground and inner tube rental on east side, along with NYSDEC owned Skinners Falls access area.	Assessment of Conformance with the Upper Delaware Council/NPS Land and Water Use Guidelines. Coordination with NYSDEC regarding impacts to the access area. Evaluation of alternatives to minimize impacts to businesses.
Visual Resources	The existing bridge is visually striking, with a discrete viewshed established by natural features	Assess viewshed impacts and potential mitigation in coordination with PennDOT and NYSDOT.
Emergency Services	Emergency response by NPS and local first responders is impacted by lack of a functional crossing at this location	Continue coordination with first responders and NPS.

c. What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

See the table above containing resource-specific considerations. Detailed field investigations will be conducted to confirm, refine, and update the secondary source preliminary environmental resource information collected during the PEL Study including perform threatened and endangered species surveys, assess potential impacts to groundwater resources; assess floodplain impacts, conduct archaeological resource surveys; and assess potential effects on historic properties and districts. Mitigation commitments will be identified to mitigate any unavoidable environmental impacts.

d. How will the planning data provided need to be supplemented during NEPA?
The planning-level information and data gathered during the PEL Study will be confirmed, refined, and/or updated based on additional investigations and studies performed during future phases of a project. The additional resource information will then be used as part of an evaluation of alternatives included during future phases of a project.

9. List environmental resources you are aware of that were not reviewed in the PEL study and why. Indicate whether or not they will need to be reviewed in NEPA and explain why.
The PEL Study did not specifically investigate archaeological resources, noise analysis, air quality analysis, or reasonably foreseeable impacts as the alternatives were not developed with sufficient engineering detail to perform resource-specific studies. These environmental resources, along with the detailed investigations for environmental resources will be studied during future phases.

10. Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.
Reasonably foreseeable impacts were not considered in the PEL Study and will be studied during future phases.

11. Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.
Conceptual level alternatives to avoid and minimize impacts to resources were evaluated as part of the development of the build alternatives. Several off-line alternatives were not recommended for further study as a result of the impacts associated with these build alternatives. Further refinements to project impacts are anticipated during future phases. Mitigation strategies will be further investigated and coordinated with the appropriate agencies during the future phases to mitigate unavoidable impacts.

12. What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?
The existing website will house the PEL report, appendices, supporting information, and public/agency meeting materials. It is anticipated that the existing website will be maintained and will remain the project site through future studies associated with the project. As a result, the information on the website will continue to remain available to the agencies and public. It is anticipated that this information will also be used as part of the future studies.

13. Are there any other issues a future project team should be aware of?

a. Examples: Controversy, utility problems, access or ROW issues, encroachments into ROW, problematic landowners and/or groups, contact information for stakeholders, special or unique resources in the area, etc.

- Threatened and Endangered Species – USFWS indicated the project area contains protected mussel species.
- Project Controversy – there is controversy associated with this project, especially as it pertains to build options which do not result in the preservation of the existing historic bridge.
- Agency Coordination and Permitting – compliance with the Wild and Scenic Rivers Act, as well as compliance with the Upper Delaware Management Plan, both of which are administered by the National Park Service will be required.
- Funding – funding to advance the project has not been secured at the time of the PEL study.

Appendix B: Glossary

Glossary

Alternative: One of a number of specific transportation improvement proposals, alignments, options, design choices, etc., in a study. Following detailed analysis, one improvement alternative is chosen for implementation.

Average Daily Traffic Volumes (ADT): The total traffic volume during a given time period in whole days (24-hour periods), greater than one day and less than one year, divided by the number of days in that time period.

Cultural Resource: A broad term that is used to cover architectural, cultural, and archaeological resources. Cultural resources include bridges, buildings, archeological sites, cemeteries, sacred or religious landmarks, agricultural sites and landscapes, and historical objects such as sculptures and roadside markers.

Federal Highway Administration(FHWA): An agency of the U.S. Department of Transportation responsible for carrying out federal highway and transportation mandates through a network of several regional offices and a division office in each state.

Floodplain: The lands adjoining a river or stream that have been or may be expected to be inundated by flood waters in a 100-year frequency flood. (PA Chapter 105.1 Definitions)

Geographic Information System (GIS): A computer-based system that provides users with the tools to visualize, question, analyze, and interpret data to understand relationships, patterns, and trends within geographic space.

Historic District: A concentration or group of sites, buildings, structures, or objects that are linked through shared history or aesthetics.

Historic Resource: A building, structure, site, district, or object which is significant in American history, architecture, engineering, and culture.

Impacts: Positive or negative effects upon the natural or human environment resulting from transportation projects

Mitigation measures: Specific design commitments made during the environmental evaluation and study process that serve to moderate or lessen impacts deriving from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to effect construction or post construction action.

National Environmental Policy Act of 1969 (NEPA): The federal law that requires the preparation of an environmental impact statement (EIS), environmental assessment (EA), or categorical exclusion (CE) for undertakings using federal funds that may have significant impacts. To comply with NEPA, a process has been developed by PennDOT to address all potential environmental, social, cultural and economic impacts of a proposed highway project before decisions are reached on design. Public involvement is an integral component of the NEPA process.

National Historic Preservation Act of 1966 (NHPA) (Section 106): This act requires federal agencies to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve throughout the country. If a federal or federally-assisted project has the potential to affect historic properties, a Section 106 review will take place.

National Register of Historic Places (NRHP): The official national list of historic buildings, districts, sites, structures, and objects worthy of preservation. It was established as part of the National Historic Preservation Act of 1966 and is overseen by the National Park Service.

Natural Resources: Land, fish, wildlife, air, water, and other natural assets belonging to, maintained by, or otherwise regulated by federal, state, or local governments.

Need: Describes the key problem(s) to be addressed by a proposal/project and, to the extent possible, explains the underlying causes of those problems. The need provides the factual foundation for the statement of project purpose. A need for a proposal/project is a tangible, fact-based problem.

New York State Department of Transportation (NYSDOT): NYSDOT oversees transportation in the State of New York and is a partner agency for this project.

Pennsylvania Department of Transportation (PENNDOT): PennDOT oversees transportation in the Commonwealth of Pennsylvania. For this study, PennDOT will act as the lead state agency.

Planning and Environmental Linkages Study (PEL): A PEL is a high-level, early-planning study process that represents an approach to transportation decision making that considers environmental, community and economic goals early in the planning stage of a project. Decisions made during the PEL study will be advanced through project development, including the NEPA, design and construction phases**.**

Public Involvement: Coordination events and informational materials geared at encouraging the public to participate in the Transportation Program Development and Project Delivery Process. A successful public information plan facilitates the exchange of information among project sponsors and outside groups and the general public, and includes meetings, surveys, committees, presentations, etc.

Purpose: A broad statement of the overall intended objective to be achieved by a proposed transportation improvement. A proposal's purpose is an overarching statement as to why the proposal is being pursued and the objectives that will be met to address the transportation problem or deficiency.

Regulatory Agency: An agency empowered to issue permits or recommend approval or denial of a permit.

Resource Agency: A group of federal and state agencies or commissions which have various regulatory, jurisdictional, and/or administrative responsibilities in a variety of subject areas that are part of the Transportation Program Development and Project Delivery Process. These agencies and commissions are involved in participating in project meetings, reviewing and evaluating PennDOT studies, commenting on documents, and granting certain approvals.

Right -of-Way (ROW): Land, property, or interest therein acquired for and devoted to transportation purposes, including construction, maintenance, operations, and protection of a facility.

Threatened or endangered species (T&E): Threatened or Endangered species are those plants and animals that are likely to become endangered within the foreseeable future throughout all or a significant portion of its range or have become so rare they are in danger of becoming extinct**.**

Wetland: Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

Appendix C: Final Purpose and Need Document

Skinners Falls Bridge Project Purpose and Need Statement

Introduction/Background

Pennsylvania State Route (SR) 1002 over the Delaware River (Skinners Falls Bridge) is a single lane, two-span, Baltimore through truss bridge connecting Wayne County, Pennsylvania (PA) on the west side and Sullivan County, New York (NY) on the east side. The bridge was constructed in 1902 and is owned by the New York-Pennsylvania Joint Interstate Bridge Commission. The Joint Interstate Bridge Commission was established by the State of New York Senate and Assembly through the Act approved May 11, 1916, Chapter 506, Laws of 1916 and the Commonwealth of Pennsylvania General Assembly by the Act approved July 25, 1917, P.L. 1180 (as amended by Act No. 169 approved December 19, 1975). The Joint Interstate Bridge Commission is responsible for the maintenance, repair, or rebuilding of the Skinners Falls Bridge and nine other bridges in the Upper Delaware region.

Major rehabilitations of the Skinners Falls Bridge were undertaken in 1971 and again in 1986. Emergency repairs were completed on the bridge in 2010, 2013, and 2016. The bridge has been closed to traffic since October 2019. The bridge, originally constructed with a nine-ton load capacity, had been posted for a four-ton capacity since 2013.

The Skinners Falls Bridge has cultural significance to the local community and larger historic preservation community. It is listed on the National Register of Historic Places (NRHP) and is a contributing resource to the NRHP-listed Milanville, PA Historic District. It is also within the Upper Delaware Scenic and Recreational River, designated as a National Park Service (NPS) unit in 1978. The NPS considers this bridge a contributing element to the Cultural Outstandingly Remarkable Value for the Upper Delaware Scenic and Recreational River. Coordination with consulting parties, the State Historic Preservation Offices, and NPS will occur throughout the project development process. The Pennsylvania Department of Transportation (PennDOT) and New York State Department of Transportation (NYSDOT) will strive to avoid impacts to the bridge. If avoidance is not possible, minimization and mitigation of cultural and environmental impacts will be implemented in accordance with the applicable environmental laws.

At this point in the development process, PennDOT is establishing the purpose and need for this transportation improvement project in conjunction with NYSDOT and Federal Highway Administration (FHWA). The following purpose (an overarching statement of why the state departments of transportation are pursuing the project) and needs (tangible, fact-based transportation problems) were established in accordance with the guidelines of PennDOT Publication 319 Needs Study Handbook[1] and the Guidance on Purpose and Need[2], published jointly by the FHWA and Federal Transit Administration (FTA). Supporting technical data is in the project's technical file.

An online public meeting was held on March 30, 2021, which 143 people attended and shared questions and comments. In conjunction with the presentation, a project survey was conducted between March 31, 2021 through June 1, 2021 to capture public feedback on transportation needs and data on how the public used the bridge prior to closure. Public comments were also received through e-mail, mail, and phone. The survey results and public comments were incorporated into the project needs.

Purpose

The purpose of the project is to provide a safe and efficient crossing of the Delaware River at Skinners Falls for cars, trucks, trailers, emergency response vehicles[3], bicyclists, and pedestrians.

[1] PennDOT, 2020. *Publication 319, Needs Study Handbook.*
[2] U.S Department of Transportation, FHWA and FTA, 2003. *Guidance on Purpose and Need.*
[3] Emergency response vehicles are vehicles that support ambulance service, fire/rescue service, and law enforcement.

Needs

1. The Skinners Falls Bridge is currently closed to traffic due to its condition, which limits efficient access for residents, businesses, and recreational users.

The Skinners Falls Bridge has deteriorated such that it is currently closed to all traffic. A 2020 bridge inspection identified that the deck and superstructure are in poor condition and the substructure is in critical condition. Specifically, the transverse timber deck immediately beneath the running boards shows severe deterioration; the stone masonry abutment on the New York side shows continued movement and separation of stones; and the steel truss members, especially in the area of the pinned connections, are in poor condition. When the Skinners Falls Bridge was originally constructed in 1902, the maximum load capacity was nine tons[4]. In 2007, the weight posting was reduced to seven tons. Then, in 2013, the weight posting was further reduced to four tons. In 2016, "headache bars" were installed to restrict vehicles over 8.5 feet tall as a secondary means of deterring vehicles over the posted weight limit from using the bridge.

Traffic counts conducted between 2002 and 2018 indicate approximately 388 vehicles utilized the Skinners Falls Bridge daily. This demonstrates a low but consistent usage of the bridge crossing. Current alternate routes to travel between points directly on opposite sides of the Skinners Falls Bridge generally result in use of River Road/SR 1004/SR 1017[5] in Pennsylvania, NY 97 in New York, and then either the Damascus-Cochecton Bridge to the north or the Narrowsburg Bridge to the south. The northern route that utilizes the Damascus-Cochecton Bridge is approximately 6.6 miles and results in an average increase in travel time of about 12 minutes. The southern route that utilizes the Narrowsburg Bridge is approximately 11.6 miles and results in an average increase in travel time of about 20 minutes. In a recent public survey, approximately 86% of respondents said the bridge closure has increased the time required to reach their destinations.

There are economic generators on both sides of the river. An operational bridge is needed for local commerce:

- Per the results of the public survey, 61% of respondents used the bridge daily or a few times a week when it was open. Survey respondents noted the majority of trips they made across the bridge were related to commerce, which included commuting to work, daily errands, and deliveries.
- Approximately 69% of survey respondents said they are less apt to shop locally or visit an attraction because those destinations are harder to access due to the bridge closure.
- A local farmer noted that the Skinners Falls Bridge was the primary and safest route for transporting his livestock, up to ten cattle in a gooseneck trailer, to market. A fully loaded trailer may weigh up to ten tons. These trips, up to several times per month, are seasonal in nature. The alternative route involves sharp turns, narrow lanes, and longer distances.
- Lander's River Trips is a New York business in the northeast quadrant of the Skinners Falls Bridge. The business entails kayak, raft, and inner tube rentals; parking; a campground; and a snack shop. The owner reported that many of the campers would cross the bridge to access businesses in Milanville, PA.
- Lothian Bed and Breakfast/Lou's Tubes in New York operates in the southeast quadrant of the Skinners Falls Bridge. The business provides tube rentals, lodging, and an antique shop. The Lothians also own a restored, former church in Milanville, PA. This facility is rented for weddings with the bridal party returning

[4] The original maximum load capacity was determined through an in-depth inspection of the structure components, materials testing, and structural analysis modelling conducted in 2013.

[5] River Road is posted for ten tons. The roadway posting is in place to reduce excess damage and subsequent excess maintenance and repair caused by heavy truck loads. The River Road posting does not mean the road is unsafe for or cannot physically accommodate heavy trucks, rather it is a mechanism that requires haulers to be financially responsible for excess maintenance on the roadways they use through bonding, permits, or agreements. In addition, emergency vehicles, school buses, and others traveling to or from residences, commercial establishments or farms along the posted roadway are exempt from the state's bonding weight limits. In contrast, bridges are weight-posted independently of roadways. Regarding the Skinners Falls Bridge, the weight postings were related to a critical safety concern for the structural integrity of the bridge. Therefore, a weight posting on River Road does not necessitate a weight limit on a connecting bridge. Thus, the Skinners Falls Bridge Project limits include logical termini and have independent utility (i.e., the project would be useable and reasonable even if no additional transportation improvements in the area are made). For more information on PennDOT's posting and bonding policy, please visit: https://www.penndot.gov/ProjectAndPrograms/PostedBondedRoadway/Pages/faq.aspx.

to the B&B on the New York side for the reception. Furthermore, the Lothians would utilize the bridge to aid tubing customers on the Pennsylvania side who call for assistance. The Skinners Falls Bridge provides the most direct and efficient route for the Lothians, as owners and operators of the business, as well as their customers.

- The Milanville General Store is a business on the Pennsylvania side of the bridge. The store provides gas, groceries, camping items, gifts, baked goods, and made-to-order food items. Customers of Lander's Rivers Trips, Lou's Tubes, and the Lothian B&B frequently shop at the Milanville General Store and would use the Skinners Falls Bridge as their primary route to Milanville.

- Bill Case Polaris Sales & Service located in Beach Lake, PA noted the Skinners Falls Bridge was the most efficient and easy route when making some deliveries between their New York and Pennsylvania customers.

Available historic traffic records show that vehicles in excess of ten tons used the bridge. Every traffic count completed by PennDOT since 1998 has identified vehicles over ten tons (in excess of the original capacity of the bridge) using the Skinners Falls Bridge, with vehicles possibly in excess of 40 tons recorded crossing the bridge despite the weight posting and the headache bars, which were often vandalized to allow larger vehicles to cross. Usage of the bridge by overweight vehicles demonstrates a desire by owners of vehicles over ten tons to cross at this location.

Additionally, a Joint Position Statement was issued on March 4, 2020 by representatives from local agencies and organizations, including Damascus Township, Upper Delaware Council, Chamber of the Northern Poconos, Upper Delaware Scenic and Recreational River, Town of Cochecton, Lake Huntington Fire Department, Upper Delaware Scenic Byway Committee, and Wayne County Planning Commission. The Joint Position Statement asserted the Skinners Falls Bridge is needed to provide emergency response, support the local economy, and connect the adjacent Pennsylvania and New York communities.

2. River rescue is negatively affected by the absence of a functional bridge in the vicinity of Skinners Falls.

Skinners Falls is located downstream of the Skinners Falls Bridge. It is a 100-yard-long stretch of rapids that is a popular recreation attraction. Water rescue calls are common in this area. The NPS has reported that, since May 2017, there have been 151 major incidents which have been responded to from their Milanville, PA Ranger Station requiring use of the Skinners Falls Bridge as well as the adjacent Skinners Falls river access location in New York. The NPS is the primary responder for all river emergencies but is assisted by the surrounding fire departments of both states. Rescue operations depend on access to both sides of the river. During an emergency, the location of the victim and best access point can be unclear. Access to the river is generally poor from the New York side: NY 97 is far from the river, the terrain is steeper, and there are railroad tracks between NY 97 and the river. Furthermore, Milanville, PA is utilized as a landing zone for "life flight" helicopters for emergencies and emergency personnel of both states if critical emergency medical care is required following a river rescue. It is vital that rescue personnel and equipment from both Pennsylvania and New York, including boats and trailers, have quick and efficient access to both sides of the river near Skinners Falls. NPS river response vehicles weigh approximately 4.5 tons (vehicle ~3.5 tons, boat and trailer ~one ton).

3. Fire and medical emergency response are delayed due to the lack of a crossing at Skinners Falls.

There are currently limited river crossings between Pennsylvania and New York. Emergency service providers on both sides of the river depend on each other for mutual aid. Lake Huntington Volunteer Fire Department (LHVFD) and Narrowsburg Fire Department (NFD) stated they each respond to approximately 12 mutual aid calls per year that require them to cross into Pennsylvania.

The LHVFD is the closest fire company to the Skinners Falls Bridge at approximately four miles away. Although the LHVFD is located in New York, it provides service to the Milanville, PA area through a mutual aid agreement and is usually the first fire department to arrive on the scene of emergencies in the Milanville area. The LHVFD stressed the need for a bridge over the Delaware River near Skinners Falls that can

handle the weight and size of firefighting apparatuses. According to the LHVFD, the inability to cross the Skinners Falls Bridge increases their response time. The LHVFD previously used the Skinners Falls Bridge in accordance with the weight postings. For an incident in Milanville, firefighters would have crossed the bridge in a light-duty truck or car and be waiting to meet the firefighting apparatus once it arrived via the detour route. Equipment upgrades have prevented the use of the bridge by firefighting apparatuses in the past decades as the newer LHVFD firefighting apparatuses weighed more and the bridge's weight posting continued to be limited.

The NFD is located in Narrowsburg, NY, south of the Skinners Falls Bridge. NFD also provides mutual aid to Pennsylvania, including Milanville. The NFD has used the Skinners Falls Bridge for emergency response consistent with the applicable weight postings, including their rescue truck and mini pumper truck with a gross vehicle weight of 8.5 tons.

The Equinunk Volunteer Fire Company (EVFC), the primary responder in Pennsylvania, has a 30-minute response time to the Milanville, PA area. EVFC stated that access to withdraw water for firefighting is not currently available on the Milanville side of the Skinners Falls Bridge. Water is primarily sourced from the New York side of the Delaware River, and multiple fill ups are often required for fire calls.

As mentioned above in Need 2, Milanville, PA is utilized as a landing location for "life flight" helicopters. Persons requiring emergency medical air transport may originate in New York. A crossing at Skinners Falls Bridge was the most efficient route to access the helicopter landing zone.

Emergency response vehicles for local responders in the area range between 1.5 and 31 tons. Standard cars and light-duty trucks weigh approximately 1.5-3 tons. Ambulances generally weigh 5-7 tons. Fire tankers and fire engines weigh 15-31 tons. Brushfire trucks and other firefighting apparatuses range between six and 15 tons. Fire tankers and fire engines weigh 15-31 tons.

4. The Skinners Falls Bridge does not provide adequate accommodations for pedestrians, bicyclists, and recreational users in the area.

The Skinners Falls Bridge is located within the Upper Delaware Scenic and Recreational River corridor. This section of river protected under the Wild and Scenic Rivers Act and managed by the NPS saw an annual average of 241,308 recreation visitors throughout its 73.4-mile length between 2015 and 2020. The Skinners Falls public river access point is on the New York side in the southeast quadrant of the bridge and offers a non-motorized boat launch and parking area. During the same period (2015-2020), this access point saw an annual average of 10,696 vehicles. From 2008 to 2012 (prior to the 2013 four-ton weight restriction), an annual average of 23,685 vehicles entered the Skinners Falls access point. In addition, a private campground is located in the northeast quadrant of the bridge (Lander's River Trips). The Skinners Falls Bridge, in its current condition, does not provide access across the river for recreational vehicles and trailers for recreational boating, fishing, camping, and shopping. As a point of reference, a small tow behind camper may weigh approximately 1.4 tons, and a large fifth wheel style camper may weigh approximately 9.5 tons. Assuming a personal truck weighs approximately three tons, the combined truck and camper weight would be 4.4 and 12.5 tons, respectively.

The public survey included questions to better understand multi-modal needs in the study area. There were 278 respondents to the survey with 51 indicating they rode a bicycle and 93 indicating they walked over the bridge when it was open. Additionally, 11 indicated they drove an RV over the bridge and 29 indicated they drove a car or truck with a trailer in tow. When asked what type of access is needed to meet local needs, approximately 80% of survey respondents indicated bicycle or pedestrian access to the bridge is needed.

With the bridge currently closed, pedestrian and bicycle access is not provided. The detour route utilizing the nearest open bridge over the Delaware River is 6.6 miles long, which is a significant distance for a bike/ped user. The bridge is a single-lane structure with timber decking and running boards in line with a vehicle's wheel path. The effect is such that a vehicle crossing the bridge, when it was open, was restricted to the center of the lane where the running boards are located. This configuration is problematic for bicyclists or pedestrians who were attempting to cross the bridge: a vehicle may have entered the bridge from either direction and the driver could not shift their lane position to one side in order to share the lane with the bike/ped user. Further, there are no other bike/ped accommodations on the bridge, such as a sidewalk, shared lane, or bike lane.

Appendix D: Legislative Process

Dear Friend,

This brochure includes a brief description of the legislative process and gives an overview of how a bill becomes a law.

Knowledgeable and informed voters are essential to our democracy. By following the news, knowing the issues and contacting your elected representatives, you can make a significant contribution to the legislative process.

As your elected representative in the New York State Assembly, I welcome your comments and suggestions. We have been entrusted with a great legacy – representative government. I hope you will take advantage of the many ways in which you can be an active participant in your state government.

Sincerely,

Carl E. Heastie
Speaker of the Assembly

District Office:
250 Broadway, Suite 2301
New York, NY 10007
212-312-1400

Albany Office:
Room 932, LOB
Albany, NY 12248
518-455-3791

speaker@nyassembly.gov
www.nyassembly.gov

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The **Legislative Process** and **You**

A message from ...
Speaker of the Assembly
Carl E. Heastie

Your **State Legislature**

In New York State, there are three branches of government: the legislative, comprised of the Senate and Assembly; the executive, headed by the governor; and the judicial, comprised of the courts. This brochure focuses on the legislative branch and examines the process through which a bill becomes a law.

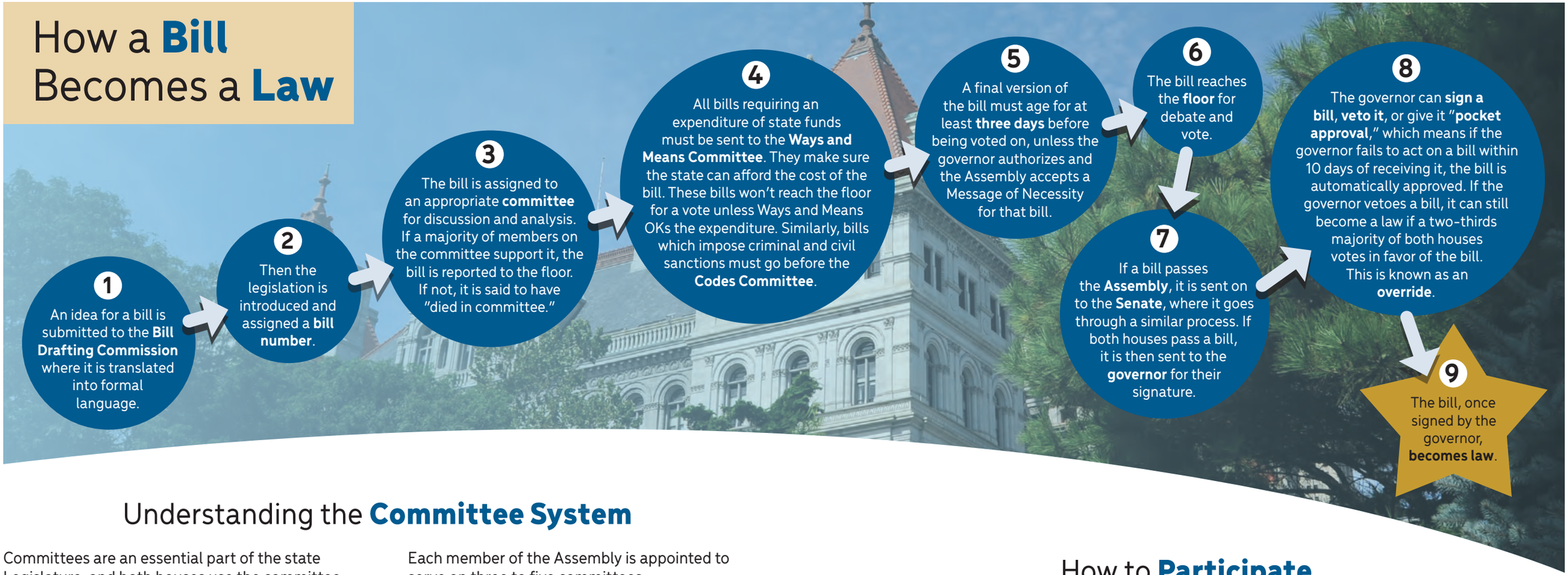
The Assembly, with its 150 members, and the Senate, with its 63 members, make up the New York State Legislature. Members of both houses are up for election every two years.

In the Assembly, the member presiding over the legislative session is known as the Speaker. The Speaker is elected for a two-year term by their colleagues. In the Senate, the lieutenant governor presides, but the Senate Majority Leader is the person whose work most closely parallels that of the Speaker of the Assembly. Both the Speaker and the Majority Leader have the power to create committees and appoint legislators to serve on those committees.

Each legislative session begins on the first Wednesday after the first Monday of the new year. The Legislature attends session in Albany until its business for that year is concluded. While session usually ends in June, legislators can be called back to Albany for special legislative sessions, formal meetings, committee work or public hearings year-round.

At the heart of the legislative process is the means by which a bill becomes a law. The diagram on the inside of this brochure shows the key steps of that process. Ideas for bills come from many sources, not just from government agencies or officials. In fact, if you have an idea for a law, you can call your representative and discuss it with them.

How a **Bill** Becomes a **Law**



1. An idea for a bill is submitted to the **Bill Drafting Commission** where it is translated into formal language.
2. Then the legislation is introduced and assigned a **bill number**.
3. The bill is assigned to an appropriate **committee** for discussion and analysis. If a majority of members on the committee support it, the bill is reported to the floor. If not, it is said to have "died in committee."
4. All bills requiring an expenditure of state funds must be sent to the **Ways and Means Committee**. They make sure the state can afford the cost of the bill. These bills won't reach the floor for a vote unless Ways and Means OKs the expenditure. Similarly, bills which impose criminal and civil sanctions must go before the **Codes Committee**.
5. A final version of the bill must age for at least **three days** before being voted on, unless the governor authorizes and the Assembly accepts a Message of Necessity for that bill.
6. The bill reaches the **floor** for debate and vote.
7. If a bill passes the **Assembly**, it is sent on to the **Senate**, where it goes through a similar process. If both houses pass a bill, it is then sent to the **governor** for their signature.
8. The governor can **sign a bill**, **veto it**, or give it "**pocket approval**," which means if the governor fails to act on a bill within 10 days of receiving it, the bill is automatically approved. If the governor vetoes a bill, it can still become a law if a two-thirds majority of both houses votes in favor of the bill. This is known as an **override**.
9. The bill, once signed by the governor, **becomes law**.

Understanding the **Committee System**

Committees are an essential part of the state Legislature, and both houses use the committee system to accomplish work. You can think of the committee system as a screening process during which smaller groups of legislators closely scrutinize bills. The committees analyze the merits of the legislation, hold hearings for public input and vote on whether it should be advanced for a vote on the Assembly floor.

Within the committees are subcommittees, which are established to study specific aspects of larger issues being reviewed by the full committee.

Bills are assigned to committees based on the subject they address. For example, a bill that affects senior citizens would be sent to the Aging Committee, while a bill affecting consumers would go to the Consumer Affairs and Protection Committee.

Each member of the Assembly is appointed to serve on three to five committees.

Committees meet regularly to discuss the bills referred to them. Meetings are broadcast for public viewing if you wish to see how the process works. Legislative sessions, where the bills are voted on and debated by the entire house, are also broadcast for public viewing. Visit **nyassembly.gov/av** to watch a livestream of proceedings or search and view archived footage.

To find out when a particular committee will meet, what's on its agenda or when the Legislature is in session, call the Assembly's Public Information Office at **518-455-4218** or connect online at **nyassembly.gov/PIO**.

How to **Participate**

You can be an active participant in the process and help pass or defeat legislation by sharing your opinions and positions with legislators.

If you want to advocate for or against a bill, it's good to start by knowing the official bill number and its sponsor. That information is helpful when communicating with legislators and makes it easier to track the bill's progress. You can search for information about a specific bill with the Assembly's online bill search feature at **nyassembly.gov/leg**.

Next, contact your assemblymember to share your position. Legislators want to hear from the people in their district. When a bill is assigned to a committee, you can also contact the committee chair and others on the committee.

Make your final campaign for or against a bill just before it comes up for a vote on the Assembly floor. Even one constituent letter, email or call on a bill could impact a legislator's vote.

If a bill passes the Assembly and is sent to the Senate, you will be able to go through the same process there. If it passes both houses, the bill goes before the governor, who will either sign it into law or veto it. The governor's action can also be influenced by your calls and letters.

Remember, the best way to effect change is to make your views known and be persistent.

Appendix E: Conceptual Alignment Impact Tables

PEL Alternatives Analysis Matrix- Page 1
Skinners Falls Bridge over the Delaware River

	Engineering Data			Wetland/Watercourses		Floodway/Floodplain	
Alternatives	Bridge Length (ft)	New Roadway/Roadway Improvement (Length in ft)	Total improvements (Roadway and Structure)	Wetland Impacts	Watercourse impacts	Floodplain Impacts	Floodway impacts
No Build (Do Nothing, Removal/Demolition, Removal/Relocation and Reuse)	N/A	None	None	No Impacts	Temporary causeways	Temporary causeways	Temporary causeways
Traditional Rehabilitation 4-, 7-, 10 Ton	466	None	466	No Impacts	Repair/replace substructures/riprap and temporary causeways	Repair/replace substructures/riprap and temporary causeways	Repair/replace substructures/riprap and temporary causeways
Non-SOI Compliant Rehabilitation	466	1172	1638	No Impacts	New piers/riprap and temporary causeways	New piers/riprap and temporary causeways	New piers/riprap and temporary causeways fill for approaches
Alignment 1 Online replacement	482	1172	1654	No Impacts	New piers/riprap and temporary causeways, lowest impact	New piers/riprap and temporary causeways, some fill for approaches	New piers/riprap and temporary causeways, some fill for approaches
Online replacement	570	913	1483	No Impacts	New piers/riprap and temporary causeways	New piers/riprap and temporary causeways	New piers/riprap and temporary causeways
Alignment 3A North At Grade Crossing	540	3025	3565	No Impacts	New piers/riprap and temporary causeways Crossing of UNT to Calkins Ck	New piers/riprap and temporary causeways fill for approaches	New piers/riprap and temporary causeways fill for approaches
Alignment 3B North over Railroad	1265	1670	2935	No Impacts	New piers/riprap and temporary causeways Crossing of UNT to Calkins Ck, highest impacts	New piers/riprap and temporary causeways, extensive fill for approaches, high floodplain impact	New piers/riprap and temporary causeways, extensive fill for approaches
Alignment 4 South Shift	464	1230	1694	No Impacts	New piers/riprap and temporary causeways	New piers/riprap and temporary causeways some fill for approaches	Yes-New piers/riprap and temporary causeways, low floodway impact
Alignment 5 Downstream Replacement	556	2590	3146	No Impacts	New piers/riprap and temporary causeways Crossing of UNT to Delaware River	New piers/riprap and temporary causeways, extensive fill for approaches, low floodplain impact	New piers/riprap and temporary causeways, extensive fill for approaches, high floodway impact
Note: Impacts were assessed using conceptual level engineering with secondary source resource information.							
Note: The Non-SOI Compliant Rehabilitation Alternative is based on the conceptual design of the Alignment 1 Online Replacement superstructure however the length will match the existing trusses.							

PEL Alternatives Analysis Matrix- Page 2
Skinners Falls Bridge over the Delaware River

	Natural Heritage Areas			Section 106 Resources		Agricultural Resources		Parks and Recreation areas		Visual
Alternatives	Natural Heritage Area (PA) - Milanville Riverwash supporting landscape	NHP Significant Natural Community Occurrence	Natural Heritage Community (NYSDEC) - Skinners Falls Shoreline Outcrop Buffer Area	Anticipated Effect on Milanville Historic District	Anticipated Effect on Skinners Falls Bridge	Prime and Statewide important farmland soils	Productive Agricultural Land	NYSCEC Boat Launch	NPS Upper Delaware Scenic and Recreational River	Visual Impacts
No Build (Do Nothing, Removal/Demolition, Removal/Relocation and Reuse)	Potential Impact	None	Potential Impact	Adverse Effect Anticipated- SFB is a contributing resource	Adverse Effect Anticipated- Deterioration of existing bridge and demolition of existing bridge. Removal has potential for no Adverse Effect	Yes	No	No	Yes-Temporary- causeways to remove bridge	Yes-Changes to visual landscape
Traditional Rehabilitation 4-, 7-, 10 Ton	Potential Impact	None	Potential Impact	Potential for No Adverse Effect	Potential for No Adverse Effect	Yes	No	No	Yes-Temporary and permanent impacts- rehabilitation of bridge	No
Non-SOI Compliant Rehabilitation	Potential Impact	None	Potential Impact	Adverse Effect Anticipated-SFB is a contributing resource, minimized fill along existing roadway	Adverse Effect Anticipated- Demolition of existing bridge	Yes	No	Yes- fill slopes	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape
Alignment 1 Online replacement	Potential Impact	None	Potential Impact	Adverse Effect Anticipated-SFB is a contributing resource, minimized fill along existing roadway	Adverse Effect Anticipated- Demolition of existing bridge	Yes	No	Yes- fill slopes	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape
Alignment 2 North Shift	Potential Impact	None	Potential Impact	Adverse Effect anticipated-SFB is a contributing resource, new intersection and associated fill	Adverse Effect Anticipated- Demolition of existing bridge	Yes	No	Yes- fill slopes	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape
Alignment 3A North At Grade Crossing	Potential Impact	None	Potential Impact	Adverse Effect Anticipated-SFB is a contributing resource, new intersection and associated fill	Adverse Effect Anticipated- Demolition of existing bridge	Yes	No	No	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape
Alignment 3B North over Railroad	Potential Impact	None	Potential Impact	Adverse Effect Anticipated-SFB is a contributing resource, minimal impacts to roadway	Adverse Effect Anticipated- Demolition of existing bridge	Yes- Productive ag is on Prime farmland soils	Yes- ALCAB potential	No	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape
Alignment 4 South Shift	Potential Impact	None	Potential Impact	Adverse Effect Anticipated-SFB is a contributing resource, minimized fill and impacts to historic district	Adverse Effect Anticipated- Demolition of existing bridge	Yes	No	Yes- fill slopes	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape
Alignment 5 Downstream Replacement	Potential Impact	Yes- Riverside Ice meadow	Potential Impact	Adverse Effect Anticipated-SFB is a contributing resource, avoids roadway impacts	Adverse Effect Anticipated- Demolition of existing bridge	Yes	No	No	Yes-Temporary and permanent impacts- new bridge and demolition of existing bridge	Yes-Changes to visual landscape

Note: Impacts were assessed using conceptual level engineering with secondary source resource information.

PEL Alternatives Analysis Matrix- Page 3
Skinners Falls Bridge over the Delaware River

	Right-of-Way*			
Alternatives	Commercial parcel impacts	Residential parcel impacts	ROW Impacts (acres)	ROW Impact (parcels)
No Build (Do Nothing, Removal/Demolition, Removal/Relocation and Reuse)	None	None	None	None
Traditional Rehabilitation 4-, 7-, 10 Ton	None	None	None	None
Non-SOI Compliant Rehabilitation	Low	Low PA side adjacent to approach	2.08	8
Alignment 1 Online replacement	Low	Low PA side adjacent to approach	2.08	8
Alignment 2 North Shift	Low	Moderate PA side for new approach	2.38	8
Alignment 3A North At Grade Crossing	High	Moderate PA side adjacent to approach	6.73	18
Alignment 3B North over Railroad	High	Low fill slopes and driveway access	5.24	12
Alignment 4 South Shift	Low	Moderate PA side adjacent to approach	2.49	9
Alignment 5 Downstream Replacement	High	High Impacts to both PA and NY parcels	5.95	11
Note: Impacts were assessed using conceptual level engineering with secondary source resource information.				
*No commercial or residential displacements anticipated				