



Section 4(f) Historic Bridge Programmatic Reference Information

This reference information is applicable to projects funded through the Federal-Aid Highway Program that will result in a Section 4(f) “use” of a historic bridge, and for which preparation of the Programmatic Section 4(f) Evaluation Form for Use of Historic Bridges is proposed. Use of this document is intended to be concurrent with preparation of the Bridge Programmatic Evaluation Form and its organization mirrors that of the Form. Prior to beginning work on a bridge evaluation, verify concurrence with the Statewide Environmental Office.

The bridge cannot be a National Historic Landmark and there must be agreement among the State Historic Preservation Officer (SHPO), the Alaska Department of Transportation and Public Facilities (DOT&PF), and the Advisory Council on Historic Preservation (ACHP) pursuant to Section 106 of the National Historic Preservation Act (NHPA). A bridge is “historic” if it is listed on, or eligible for listing on, the National Register of Historic Places and a “use” would occur if the Section 106 consultation process results in a finding of adverse effect.

Elements of a Section 4(f) Historic Bridge Programmatic Evaluation

1. Project Description
2. Section 4(f) Property Description
3. Programmatic Evaluation Applicability Criteria
4. Alternative Analysis and Finding of Feasibility and Prudence
5. Measures to Minimize Harm
6. Coordination
7. Determination and Approval

Project Description

Provide a description of all proposed project actions. This can typically be a copy of what is provided in the NEPA document, however, additional explanation for all actions affecting the bridge should be provided. A description of the location and setting is also helpful to include in this section. This may include items such as: general setting (rural, urban, suburban); adjacent land use; features or obstacles in the area (geographic or manmade); roadway information; adjacent road network; other Section 4(f) properties in the area; etc.... Figures featuring pictures, aerial imagery, or maps should be included here.

Describe the issues causing the bridge deficiencies. This information can be obtained from inspection reports, condition evaluation reports, design standards, the NEPA document purpose and need statement, bridge section, project engineering staff, traffic or accident data, etc... The issues with the current bridge should be described thoroughly and in detail.

Section 4(f) Property Description

Describe the historic bridge and include its AHRS number. Include type of bridge, significance criteria and aspects of historic integrity that qualify the property to be eligible, and location of the historic site. Include figures showing the bridge and its relation to the proposed project. Include items such as year built; design style; construction material; length; design life; years of service; number of spans/piers; number of lanes; presence of pedestrian facilities; width; etc...

Programmatic Evaluation Applicability Criteria

Answer checkbox questions.

Alternative Analysis and Finding of Feasibility and Prudence

The replacement or rehabilitation of historic bridges is typically an activity of narrow and specific purpose that has a predictable range of alternatives. For this reason, there are three prescribed alternatives for evaluation and nothing further is required. As detailed on the bridge programmatic form, each alternative includes a list of factors that must be addressed in the analysis. Evaluation will require preliminary design efforts and input from the project design team to ensure an adequate level of analysis when evaluating the alternatives. This analysis should be completed concurrently with the Section 106 finding of effect consultation.

Finding an alternative as not feasible and prudent must be based on the definition of "feasible and prudent avoidance alternative" from 23 CFR 774.17.

The following list includes some supplemental guidance and information to consider when conducting the alternative analysis.

Alternative 1: Do Nothing

- a. Maintenance
 - This alternative results in no action to address the bridge deficiencies other than normal maintenance and it is important to include a description of the expected normal maintenance activities in comparison to the work necessary to correct the situation.
 - Describe how normal maintenance activities are inadequate.
 - The estimated remaining lifespan if only normal maintenance is performed can be useful to include.
- b. Safety
 - Does the bridge pose any safety hazards currently or are they expected in the near future without repairs above normal maintenance?
 - Consider the alternative routes of travel if the bridge is closed or substantially weight restricted.
 - What are the impacts to travelers, businesses, emergency vehicles, school buses, nearby residents, economies, etc...?

Finding

- If the project purpose and need has been well-crafted, the do nothing alternative can frequently be dismissed for not addressing the purpose and need for the project.

Alternative 2: Build a New Structure at a Different Location without Using the Bridge or Affecting its Historic Integrity

Demonstrate that one of the following situations, as described on the Bridge Programmatic Evaluation Form, is applicable:

- a. Terrain; or
- b. Adverse Social, Economic, or Environmental Effects; or
- c. Engineering and Economy; and
- d. Preservation of Old Bridge
 - If one of the following situations is met, then preservation of the old bridge would not be feasible and prudent:
 - The historic bridge is beyond rehabilitation for a transportation or an alternative use;
 - No responsible party can be located to maintain and preserve the bridge; or

- When a permitting authority, such as the USCG, requires removal or demolition of the old bridge.

Finding

- When making a finding of feasibility and prudence for this alternative, keep in mind that the proposed project must be constructible as a matter of sound engineering judgment. Impacts must rise to the level of severe or be of an extraordinary magnitude in order to dismiss.

Alternative 3: Rehabilitate the Bridge without Affecting the Historic Integrity

Demonstrate that one of the following situations is applicable:

- a. Bridge is structurally deficient; or
 - This will require coordination with the PQI, SHPO, or other qualified individual to determine whether integrity would be affected by rehabilitation
 - Analysis generally requires a description what makes the bridge historic, what it will take to rehabilitate the bridge to meet the project purpose and need, and why the requisite activities would adversely affect the historic integrity of the bridge.
- b. Bridge is seriously deficient geometrically
 - Bridge cannot be widened to meet minimum capacity of highway system on which it is located without affecting the historic integrity of the bridge.
 - Flexibility in the application of AASHTO geometric standards should be exercised (as permitted in 23 CFR 625)

Finding

- All feasible and prudent factors listed at 23 CFR 774.17 should be considered when making the finding.

If the Section 4(f) alternative analysis finds a feasible and prudent avoidance alternative, it is likely that a “use” would no longer occur and updated Section 106 consultation is necessary. The project would be required to move forward with that alternative.

Measures to Minimize Harm

All possible planning to minimize harm is met when all four measures are satisfied (as applicable to each project’s circumstances). Ensure the discussion of minimization measures describes all efforts taken and attach relevant documentation to the form.

1. Preserving the bridge’s historic integrity to the greatest extent possible is required when the bridge will be rehabilitated for continued use, but the project will result in an adverse impact to the bridge under Section 106.
 - a. Consultation with the PQI, SHPO, ACHP (if participating), and other consulting parties will be essential in this situation as they are the experts in this arena.
 - b. This measure applies only to bridges that are to be rehabilitated.
2. Documentation of the bridge’s historic features in accordance with the Historic American Engineering Record (HAER) standards or other suitable means developed through consultation.
 - a. This measure applies when bridge will be rehabilitated, moved, or demolished to the point that historic integrity is affected.
 - b. Consider including this measure as part of the mitigation efforts to resolve the Section 106 adverse effect..
3. For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge; and
 - a. This measure applies to all situations when the existing bridge will be demolished or otherwise adversely affected due to replacement.

- b. Costs incurred by the State to preserve a historic bridge (including funds made available to the State, locality, or private entity to enable it to accept the bridge) shall be eligible as reimbursable project costs in an amount not to exceed the cost of demolition.
4. Completion of the Section 106 process as demonstrated by written agreement of the consulting parties (SHPO, DOT&PF, and the ACHP if participating) satisfies this mitigation measure.

Coordination

Answer checkbox questions and describe all Section 106 consultation efforts. Attach all documentation in support of Section 106 consultation efforts. If the ACHP declined to participate, make sure that is stated here and attach documentation.

Determination and Approval

Review the eight criteria as a final check prior to approval to ensure all steps are complete and approval of the evaluation can proceed.

Other Considerations

- Regular coordination with SEO during preparation of the evaluation will result in a streamlined review and approval process.
- The purpose and need statement for the bridge replacement project will generally require a higher level of detail in order to support the evaluation of avoidance alternatives.
- Use of the Historic Bridge Programmatic evaluation is intended to be a streamlined alternative to preparing an individual evaluation, but the level of detail and depth of information should not be relaxed.