

Environmental Analysis

Section 4(f) – Step by Step

Objective

Conducting the Alternatives Analysis
Documentation

Processing and Distributing the Section 4(f) Evaluation

Section 4(f) Evaluation Discussion within the NEPA Document

OBJECTIVE

Once the official with jurisdiction determines that the proposed project would have an adverse rather than a *de minimis* impact over the Section 4(f) resource, the Environmental Analyst will prepare a Section 4(f) Evaluation. The evaluation will document the finding that:

- > There is no feasible and prudent alternative that avoids the greater than *de minimis* use of the Section 4(f) property; and
- > The project includes all possible planning to minimize harm to the Section 4(f) property resulting from the project.

CONDUCTING THE ALTERNATIVES ANALYSIS

Step 1 – Identify an Avoidance Alternative

The first step of the Section 4(f) Evaluation is to determine whether a feasible and prudent avoidance alternative exists. This requires assessing potential avoidance alternatives and identifying a reasonable range of project alternatives. A reasonable range of alternatives includes those that avoid greater than *de minimis* uses Section 4(f) property, as well as the no-build alternative.

The avoidance alternatives should be reasonable and should attempt to address the Need & Purpose (N&P) of the project. Any alternatives developed during screening in the scoping or transportation planning phase may be considered. However, additional alternatives may need to be developed if the previously evaluated alternatives did not emphasize avoiding Section 4(f) properties. Potential alternatives to avoid the use of Section 4(f) property may include new location alternatives, alternative actions, design shifts, or design changes. A project alternative that avoids one greater than *de minimis* use of a Section 4(f) property by using another Section 4(f) property (resulting in a greater than *de minimis* use) is not an avoidance alternative.

Preferably, the process of evaluating avoidance alternatives will uncover a reasonable and prudent avoidance alternative that had been previously overlooked or, at the minimum, identify an alternative that reduces impacts to a *de minimis* level. If neither of these outcomes is possible, the evaluation must turn its attention to gathering the information necessary for the Section 4(f) Evaluation. The information to be gathered must demonstrate that there is no prudent and feasible avoidance alternative and that the selected/preferred alternative would minimize overall harm to Section 4(f) resources.

Step 2 – Feasibility and Prudence

In 23 CFR 774.17, the Section 4(f) regulations specify the definition of feasible and prudent. A feasible and prudent avoidance alternative is one that avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property. The property's value or significance (in the context of its Section 4(f) protection), relative to the project and other important considerations along the corridor, should be considered as part of the feasible and prudent determination.

Feasibility Determination

An alternative is feasible if it can be designed and built as a matter of sound engineering judgment. Thus, most alternatives are feasible. If a potential avoidance alternative cannot be built as a matter of sound engineering judgment, the engineering problem with the alternative should be documented in the project files with a reasonable degree of explanation.

Prudence Determination

The potential avoidance alternative is *not* prudent if:

- > It compromises the project to the degree that it does not meet its N&P;
- > It results in unacceptable safety or operational problems;
- > It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- > It causes other unique problems or unusual factors;
- > After reasonable mitigation, it still causes:
 - Severe social, economic, or environmental impacts;
 - Severe disruption to established communities;
 - Severe disproportionate impacts to minority or low-income populations; and/or
- > An accumulation of factors, as opposed to an individual factor, which result in adverse impacts, present unique problems, or reach extraordinary magnitude.

The Section 4(f) regulations allow consideration of the value of the Section 4(f) resource when determining whether an alternative is prudent. The regulations establish a sliding scale in which the problems resulting from avoidance are evaluated with the significance of the protected resource.

Step 3 – Minimizing Harm

If the analysis concludes that a prudent and feasible alternative that avoids the use of Section 4(f) land does not exist, further consideration must be given to minimizing harm to each Section 4(f) resource. Minimization of harm includes both design changes that lessen the impact as well as mitigation measures that compensate for any remaining impacts. The official with jurisdiction over the resource must be consulted while considering minimization and mitigation efforts.

Mitigation of historic resource impacts are usually outlined in the Memorandum of Agreement (MOA) prepared during the Section 106 process. Mitigation of impacts to public parks, recreation areas, or wildlife or waterfowl refuges may include the replacement of land or facilities of comparable value and function, or monetary compensation that could be used to improve the remaining land.

Step 4 – Determine Least Overall Harm

According to 23 CFR 774.3(c), if there is more than one prudent and feasible alternative that has greater than *de minimis* use of land from Section 4(f) resources, an evaluation to determine which alternative results in the least overall harm to Section 4(f) resources must be conducted. This evaluation should consider not only impacts to the Section 4(f) resources but also the alternative's ability to meet the N&P, impacts to non-Section 4(f) resources, and "substantial differences in cost" among the alternatives. Minimization and mitigation measures will be included in the least overall harm analysis. *Ultimately, the alternative resulting in the least overall harm must be selected.*

According to the Federal Highway Administration (FHWA) Section 4(f) policy paper, seven factors are used to determine least overall harm:

- > The mitigation of adverse impacts to each Section 4(f) property (including any measures that benefit the property);
- > The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- > The relative significance of each Section 4(f) property;
- > The views of the officials with jurisdiction over each Section 4(f) property;
- > The degree to which each alternative meets the N&P for the project;
- > After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and

- > Substantial differences in costs among the alternatives.

When different prudent and feasible alternatives propose the use of different Section 4(f) resources, the importance of the resources must be considered. The FHWA policy paper compares the use of three marginal acres from a large park versus one acre from a small city park. The officials with jurisdiction over the Section 4(f) resource must be consulted and their opinions recorded in the administrative record.

The above guidance underscores that the least harm analysis is not simply an extension of the avoidance Alternatives Analysis; rather, it is a separate analysis that potentially brings into consideration a new and different set of alternatives. For example, the analysis of avoidance alternatives would have excluded any alternative that causes adverse effects to other Section 4(f) resources. The minimization of harm analysis, on the other hand, must include those alternatives if the Section 4(f) resources they would adversely affect are of lesser value than the ones being adversely affected by the preferred/selected alternative.

DOCUMENTATION

The FHWA Section 4(f) policy paper notes that the written Section 4(f) Evaluation establishes an administrative record and ensures that FHWA has followed all regulatory and statutory requirements. The administrative record establishes, in writing, the basis for concluding that there is no prudent or feasible alternative to the use of Section 4(f) land and that all minimization of harm occurred.

Additionally, documentation must not substitute similar terminology, such as “affected”, “impacted”, or “encroached upon”, when describing a “use”. This may cause confusion or misunderstanding by the reader.

A Section 4(f) Evaluation must include:

- > A project description (if the evaluation is not embedded in an Environmental Assessment [EA] or Environmental Impact Statement [EIS]);
- > N&P (if evaluation is not embedded in an EA or EIS);
- > Applicability of Section 4(f) to a property used by the project;
- > A description of the Section 4(f) resource(s), including:
 - General description;
 - Location;
 - Boundary;
 - Size;
 - Maps or drawings;

- Ownership;
 - Function;
 - Description and location of existing and planned facilities;
 - Access and usage;
 - Relationship to other similar lands nearby; and
 - Unusual characteristics;
- > Impacts on Section 4(f) resource(s) for each alternative (including amount of land to be used);
 - > Avoidance alternatives that do not impact any Section 4(f) resource and include a finding of prudence and feasibility;
 - > Measures to minimize harm (including those measures adopted and those considered but not adopted); and
 - > Coordination.

The supporting documentation should describe the Section 4(f) Evaluation’s findings of no feasible *and* prudent alternatives and *all possible planning to minimize harm*.

Documentation is required to clearly explain the process and its results. Once the conclusion is reached that an alternative is not feasible and prudent, its consideration ends.

If an Individual Section 4(f) Evaluation is being prepared, the final Section 4(f) Evaluation will include a “finding of no feasible and prudent alternatives.”

PROCESSING AND DISTRIBUTING THE SECTION 4(F) EVALUATION

There are three approaches to Section 4(f) Evaluations: Individual Evaluation, Programmatic Evaluation; and a determination that the project has *de minimis* impacts along with the jurisdictional officials’ written concurrence.

Individual Section 4(f) Evaluation

An Individual Section 4(f) must be completed to approve a project requiring the use of Section 4(f) property in which the use results in a greater than *de minimis* impact and a Programmatic Section 4(f) Evaluation does not apply. The Individual Section 4(f) Evaluation documents the Section 4(f) properties in the project area. It evaluates all alternatives and their effect on the Section 4(f) properties, including the no-build alternative. The Individual Section 4(f) Evaluation requires two findings:

1. There is no feasible and prudent alternative that completely avoids the use of Section 4(f) property; and

2. The project includes all possible planning to minimize harm to the Section 4(f) property resulting from the transportation use.

An Individual Section 4(f) Evaluation requires both a Draft and a Final Evaluation. The process for obtaining approval of an Individual Section 4(f) Evaluation involves the following:

- > Prior to circulating the Draft Evaluation:
 - Preliminary coordination with the official of the agency owning or administering the resource;
 - For projects using land from the National Forest System, preliminary coordination with the U.S. Department of Agriculture through the appropriate National Forest Supervisor; and
 - For projects using a Section 4(f) resource where Housing and Urban Development (HUD) funds have been used, discussion with FHWA as to whether preliminary coordination with HUD is required.
- > Once the FHWA Division Office has approved the Draft Section 4(f) Evaluation:
 - Coordination with Department of Interior (DOI) and others;
 - Submission of two copies to HUD (FHWA will prepare the transmittal letter);
 - Allowance of a 45-day comment period (from date of receipt);
 - If DOI does not respond within 15 days of the comment deadline, FHWA “may assume a lack of objection and proceed with the action;” and
 - Pre-review by FHWA Chief Counsel.
- > Final Section 4(f) Evaluation:
 - Legal sufficiency determination by FHWA Chief Counsel;
 - Review and approval by FHWA; and
 - Submission of two copies to HUD.

Programmatic Section 4(f) Evaluation

Programmatic Section 4(f) Evaluations have historically been used as an alternative to the preparation of an Individual Section 4(f) Evaluation, especially in situations where the use of a Section 4(f) property would not result in an adverse effect to the resource. However, the *de minimis* provision enacted in 2005 as part of Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) transportation funding

authorization rendered the use of Programmatic Section 4(f) Evaluation in no-adverse effect situations practically obsolete.

Although the FHWA Division Office has ultimate authority to determine if a Programmatic Section 4(f) Evaluation is applicable, these evaluations have typically been restricted to projects that would improve the operational characteristics, safety, and/or physical condition of existing highways on essentially the same alignment.

Compared to an Individual Section 4(f) Evaluation, a Programmatic Section 4(f) Evaluation has the virtue of saving time, because higher-level review is not required. However, compared to the use of *de minimis*, a Programmatic Section 4(f) Evaluation is time consuming because it requires the same rigorous analysis of alternatives as an Individual Section 4(f) Evaluation.

The four nationwide Programmatic Section 4(f) Evaluations that have been used in Georgia are:

- > Minor use of historic resources (for those projects with a “No Adverse” effect finding under Section 106):
 - Cannot be used for the construction of a new location highway, and
 - Cannot be used in conjunction with the preparation of an EIS;
- > Minor use of park & recreation lands and wildlife & waterfowl refuges for those projects using a minor amount of land [For 10 acres or less, minor is a use of 10% or less; For 10 to 100 acres, minor is a use is 1 acre or less; For over 100 acres, minor is a use of 1% or less]:
 - Cannot be used for the construction of a new location highway, and
 - Cannot be used in conjunction with the preparation of an EIS;
- > Historic bridges (even those that are adversely affected):
 - Cannot be used if the affected bridge is designated a National Historic Landmark;
- > Net benefit (where FHWA and the official with jurisdiction determine that use of the Section 4(f) property will result in a net—overall—benefit to the property).

As noted, Programmatic Section 4(f) Evaluations are rarely used since the advent of *de minimis*. Of the four nationwide Programmatic Section 4(f) Evaluations, the type still in most common use is for historic bridges. GDOT has conducted a historic bridge inventory and management plan. Each bridge (identified by its serial number) determined eligible for the NRHP was further studied for its preservation potential. The Programmatic Section 4(f) Evaluation must address issues raised in the management plan. At a minimum, alternatives must include:

- > A no-build alternative option;
- > A new structure built on new location without affecting the historic bridge property; and
- > Rehabilitation of an old bridge without affecting its historic integrity.

Programmatic Section 4(f) Evaluations for the minor use of parks and recreation lands are sometime completed at the request of the official with jurisdiction over a public park.

The Programmatic Section 4(f) approval is obtained when the FHWA Division Office finds all criteria have been satisfied.

De minimis Section 4(f) Evaluation

Measures to avoid, minimize, or mitigate impacts or enhance the resource should be considered before the *de minimis* determination is made. FHWA makes the determination based on a review of project documentation. Details of the work conducted to reach the *de minimis* determination, as well as the approval for the *de minimis* impact, is included in the NEPA document. This would include the EA or EIS, CE determination, Record of Decision (ROD), Finding of No Significant Impact (FONSI), or Section 4(f) Evaluation when one is prepared for a project (23 CFR 774.7 (b) and (f)). For projects that qualify for approval under the Programmatic Categorical Exclusion (PCE) Agreement, a copy of the *de minimis* concurrence must be provided to FHWA and retained in the PCE file.

For historic properties, the Section 106 consultation must result in a finding of no adverse effect and the SHPO must acknowledge that FHWA will be utilizing the *de minimis* provision. The cover letter transmitting the Assessment of Effects (AOE) prepared for the Section 106 consultation will request the SHPO's acknowledgement.

For public parks, recreation areas, wildlife, and waterfowl refuges, the official with jurisdiction over the property must concur that the proposed action will not adversely affect the activities, features, and attributes of the property that qualify it for protection under Section 4(f). Public notice and an opportunity for public review and comment must be provided prior to FHWA making a *de minimis* finding for a public park, recreation area, or for a wildlife or waterfowl refuge.

SECTION 4(F) EVALUATION DISCUSSION WITHIN THE NEPA DOCUMENT

Regardless of whether the Section 4(f) Evaluation is Individual, Programmatic, or *de minimis*, a brief discussion of the evaluation should be included in the NEPA document. If the Section 4(f) Evaluation is Individual or Programmatic, the Section 4(f) applicability section should include the following:

- > A list of the Section 4(f) resources;

- > A description of why Section 4(f) applies (e.g., the project will have an adverse effect on the bridge);
- > A statement on why alternatives or avoidance were not feasible or prudent; and
- > A reference to the evaluation and/or coordination materials in the appropriate attachment or appendix.

Guidebook Revision History

Revision Description	Relevant Sections	Revision Date
Initial Publication	All	5/22/2019
Revision Table Added	Last Page	9/21/2020