

OF THE NATIONAL ACADEMIES

April 7, 2009

The Honorable Ray LaHood Secretary of Transportation U.S. Department of Transportation 1200 New Jersey Ave, SE Washington, D.C. 20590

Dear Secretary LaHood:

We are pleased to transmit to you this second letter report of the Committee for a Review of U.S. Department of Transportation (USDOT) Study on Implementation of Changes to the Section 4(f) Process. As briefly described in the report, Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) called for USDOT to implement regulations to streamline the process of evaluating impacts of transportation projects on 4(f) resources and further specified the following:

# SECTION 6009. PARKS, RECREATION AREAS, WILDLIFE AND WATERFOWL REFUGES, AND HISTORIC SITES.

- (c) IMPLEMENTATION STUDY.—
  - (1) IN GENERAL.—The Secretary shall—
    - (A) conduct a study on the implementation of this section and the amendments made by this section; and
    - (B) commission an independent review of the study plan and methodology, and any associated conclusions, by the Transportation Research Board of the National Academy of Sciences.

A committee appointed by the National Research Council (NRC) was convened under the auspices of the Transportation Research Board (TRB) to carry out this charge through a series of brief letter reports. In the first stage, the TRB committee reviewed USDOT's Phase I draft study plans and provided a letter report in June 2008 documenting the committee's evaluation. In the second stage—documented in this letter report—the TRB committee reviewed the draft Phase I study report and evaluated the draft study plan for Phase II. Phase II of the study, which is an update on the implementation of the *de minimis* impact provision and an evaluation of the implementation of the Final Rule on the feasible and prudent avoidance alternative standard, is intended to be an extension of the findings from the project-specific focus in Phase I to a more national-level perspective.

In this letter report, which presents the outcome of the TRB committee's second stage of work, the committee reviewed USDOT's Phase I Study Report (dated December 15, 2008), USDOT's proposed methodology for Phase II, held an open-session meeting in January 2009 to hear presentations from and engage in dialogue with USDOT staff and other stakeholders, and developed the letter report through closed-session meeting discussions and subsequent correspondence. The report then went through peer review, following standard NRC procedures.

We note that the committee's charge is not to evaluate whether regulatory decisions made by USDOT with regard to 4(f) projects under the new law are appropriate; rather, its role is limited to (a) advice on the study design for appropriate methodology and data collection for evaluating impacts and (b) review of the final study report to determine whether the findings and conclusions are justified by the data collected and methods applied in interpreting the data. The committee recognizes the many challenges faced by USDOT and its contractors in designing a draft study plan to evaluate the consequences of changes in procedures and regulations required by SAFETEA-LU. As discussed in the report however, we believe that the study plans can be strengthened in a number of ways to ensure a rigorous, well-balanced assessment of how 4(f) resources are being affected by streamlining processes. We hope you will find our guidance to be a constructive aid to your efforts.

Sincerely,

Michael Meyer

Committee Chair

Michael D. Meyer

# **Letter Report**

# Transportation Research Board of The National Academies

**Evaluating Implementation of Section 4(f) Streamlining Provisions** 

Review of U.S. Department of Transportation's Draft Phase I Study Report and Phase II Draft Methodology

#### 1. BACKGROUND CONTEXT

Established in the U.S. Department of Transportation (USDOT) Act of 1966, Section 4(f) was designed to protect publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historical sites [all of which are referred to herein as "4(f) resources"] from use by transportation projects unless the USDOT determines that there is no "feasible and prudent" avoidance alternative and that "all possible planning to minimize harm" has occurred. Consideration of 4(f) resources is included as part of the environmental analyses typically conducted under the National Environmental Policy Act (NEPA) process followed by transportation and environmental regulatory agencies, but 4(f) considerations have separate legislative and regulatory authority.

Section 4(f) originated during the peak period of Interstate highway construction, with the goal of preserving urban parks and historical sites that were in jeopardy of being destroyed. In its 1971 Overton Park decision (e.g., <a href="http://supreme.justia.com/us/401/402/">http://supreme.justia.com/us/401/402/</a>), the U.S. Supreme Court articulated a high standard for compliance with Section 4(f). In the years that followed, however, federal courts applied the Overton Park ruling differently in similar situations, reaching diverse conclusions about the extent to which certain mitigating factors may be considered in determining whether an avoidance alternative is feasible and prudent.

Congress amended Section 4(f) in Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in August 2005, leading to two important changes intended to streamline the Section 4(f) process. First, the USDOT was granted authority to approve a project that results in a use of parkland or historic property that is so minor that it does not "adversely affect the activities, features, and attributes" of the Section 4(f) resource, referred to as a *de minimis* impact. When USDOT determines that an impact is *de minimis* and the responsible officials with jurisdiction over the resource agree, compliance with Section 4(f) is complete. No analysis of avoidance alternatives is necessary. Second, USDOT was directed to clarify the factors to consider and the standard to apply for determining the feasibility and prudence of alternatives that avoid the use of Section 4(f) property. USDOT accomplished this second charge through rulemaking and the publication of a Final Rule on March 12, 2008. The Final Rule took effect on April 11, 2008.

Most transportation agency officials believe that the Section 4(f) streamlining provisions of SAFETEA-LU will reduce costs and save time in cases where alternatives are not available or when the impact on a 4(f) resource is minor. Although historic preservation and environmental protection groups generally agreed that some modification of Section 4(f) was acceptable in principle, development of the regulations for implementing changes to evaluate feasible and prudent avoidance alternatives proved contentious, and many of these groups remain cautious about how the regulations will be applied. (Implementation of the *de minimis* rulings did not require regulations.) Partly in anticipation of these controversies, SAFETEA-LU legislation specified that USDOT conduct a study of the effectiveness of

implementing the streamlining regulations. Specifically, USDOT was asked to report on the following:

- Efficiencies that may result from implementation of Section 6009,
- The post construction effectiveness of impact mitigation and avoidance commitments, and
- Quantity of projects with impacts that are considered *de minimis*.

SAFETEA-LU also specified that USDOT commission an independent review of the study plan and methodology and any associated conclusions by the Transportation Research Board (TRB) of The National Academies. Specifically, the TRB committee was tasked to review the design of, and the final report for, the USDOT study of the implementation of the revised Section 4(f) process. The committee was not tasked to evaluate whether regulatory decisions made by USDOT regarding 4(f) projects under the new law are appropriate; but rather, its role was limited to provide (a) advice on the study design for appropriate methodology and data collection for evaluating impacts and (b) a review of the final report of the study to determine whether the findings and associated conclusions therein are justified by the data collected and methods applied in interpreting the data. The pertinent technical questions for the committee involved items such as what data should be collected, how impacts should be measured, which parties should be interviewed, how cases should be selected for consideration, and so forth.

This letter report is the second letter report produced by the TRB committee that was established to carry out the independent review. The third letter report, to be issued in early 2010, will review the draft Phase II report of the study to determine whether the findings and associated conclusions therein are justified by the data collected and methods applied in interpreting the data for that phase.

# 2. PROCESS FOR THIS ACTIVITY

As provided for in Section 6009 of SAFETEA-LU, USDOT is conducting the mandated study in two phases. Phase I examines how the *de minimis* provision has been applied since it was enacted in August 2005. It also describes the feasible and prudent avoidance alternative standard and reviews the process used to develop the Final Rule. The Phase I draft was completed in mid-December 2008. Phase II of the study will focus on evaluating implementation of the feasible and prudent avoidance alternative standard as well as updating and extending the evaluation of the *de minimis* impact provision.

<sup>&</sup>lt;sup>1</sup> In accordance with National Research Council policy, an advance copy of the report was provided to the sponsor with allowance made for corrections of factual errors. The report has been changed throughout to clarify that the USDOT report that the committee reviewed was a draft report, not a completed report, which was subject to change based on the comments of the committee.

In accordance with USDOT's two-phase study, TRB is carrying out its independent review in three stages. In the first stage, the TRB committee reviewed USDOT's Phase I draft study plans and provided a letter report in June 2008 documenting the committee's evaluation. In the second stage (documented in this letter report), the TRB committee reviewed the draft Phase I study report and evaluated the draft study plan for Phase II. This letter report presents the outcome of the TRB committee's second stage of work.

The draft Phase I study report and the Phase II draft study plan, both developed by USDOT and designated contractors at the Volpe Transportation Systems Center, were shared with the committee and discussed at its meeting on January 9, 2009. Representatives of the following relevant stakeholder organizations participated in the meeting and shared their views about the USDOT study plans:

- Advisory Council on Historic Preservation,
- National Conference of State Historic Preservation Officers,
- National Recreation and Park Association,
- National Trust for Historic Preservation,
- Rails-to-Trails Conservancy,
- Ohio Department of Transportation, and
- Fish and Wildlife Service, U.S. Department of the Interior (DOI).

The Bureau of National Affairs, an independent publisher, was also invited but was not able to attend the meeting.

# 3. EVALUATION OF USDOT STUDY

#### 3A. DRAFT PHASE I STUDY REPORT

# 3.A.1. SUMMARY RESULTS OF DRAFT PHASE I STUDY

As described in the Phase I study draft, USDOT collected and analyzed information on existing *de minimis* cases, conducted initial explorations on this full set of *de minimis* cases, analyzed a small sample of these cases in more depth through written surveys and phone interviews with relevant stakeholders, and evaluated the information collected.

From August 2005 to November 1, 2008, there were 326 *de minimis* impact findings: 306 findings for highway projects (in 43 states) and 20 findings for transit projects (in 9 states). During that same period, DOI data show that the Federal Highway Administration (FHWA) conducted 186 individual 4(f) evaluations and the Federal Transit Administration (FTA) conducted 37 individual 4(f) evaluations. Seven states, Puerto Rico, and the District of Columbia have not made any *de minimis* impact findings to date.

Of the 326 *de minimis* impact findings, 62 percent were historic properties, 26 percent were parks, 10 percent were recreation areas, and 2 percent were wildlife—waterfowl refuge areas. The average size of the land area used is 1.12 acres, and the median is 0.26 acre. The

total transportation project costs range from \$84,000 to \$402 million, with an average cost of \$17 million and a median cost of \$3.2 million. Of the 326 *de minimis* impact determinations, most involved projects classified under NEPA as categorical exclusions (about 75 percent), while the remainder were environmental assessments (18 percent), Environmental Impact Statements (3 percent), and reevaluations or unknown (4 percent).

Twenty-five projects from a total of 20 states were selected for surveys and in-depth interviews in an attempt to achieve a representative sample of

- Number of *de minimis* findings per state,
- Mode (highway or transit),
- · Project type,
- NEPA Class of Action,
- Type of Section 4(f) resource, and
- Federal circuit court district.

For these 25 projects, 53 interviews were conducted as follows:

- · Eighteen FHWA divisions,
- · One FTA region,
- Nineteen state DOTs,
- One transit agency,
- Ten state historic preservation offices,
- Two park and recreation officials, and
- Two national organizations.

SAFETEA-LU directed USDOT to study efficiencies that may result from the streamlining provisions and post construction effectiveness. For the purposes of the Phase I study, USDOT defined efficiency as the savings in time and cost derived from making a *de minimis* impact finding versus use of the normal Section 4(f) processes [programmatic Section 4(f) evaluations and individual evaluations]. Regarding the findings about efficiency, and quoting from the draft Phase I report Executive Summary,

# "U.S. DOT concludes the following:

- The majority of transportation agencies do not collect data regarding the duration or costs associated with the Section 4(f) process. Prior to the enactment of SAFETEA-LU, 81 percent of the 42 transportation agencies surveyed did not formally collect information on the duration of the Section 4(f) process, while 83 percent reported that they did not collect information regarding costs. Similarly, 71 percent of those surveyed reported that since the enactment of SAFETEA-LU they have not collected data on the duration of the Section 4(f) process, while 81 percent still do not collect any data regarding costs.
- The *de minimis* impact provision generally has improved the timeliness for complying with Section 4(f) requirements. The majority of those surveyed (79 percent) reported that the *de minimis* impact provision has reduced the amount of time necessary to fulfill obligations under Section 4(f).

- The *de minimis* impact provision's elimination of the requirement to design and evaluate avoidance alternatives has generally reduced the amount of time necessary to complete the Section 4(f) process. Of the transportation agencies surveyed, 45 percent reported that the elimination of this requirement has significantly reduced the time associated with completing the Section 4(f) process, while an additional 36 percent reported that it somewhat reduced the completion time.
- Fifty-eight percent of those surveyed reported that the *de minimis* impact provision has decreased the cost of fulfilling the Section 4(f) requirements. No respondents reported that cost increases when the *de minimis* impact process is followed."

Because most transportation agencies do not collect data on time frames of the Section 4(f) process, time impacts were based on the scenario-based questions (i.e., if you could not have used *de minimis*, what processing would you have used, and how would that have affected the processing time?):

- Nineteen of the projects would have been processed using a programmatic evaluation,
- Two would have used individual evaluation,
- Two would have been designed to avoid the use of 4(f) property,
- One would not have been built, and
- One would have qualified as temporary occupancy.

Effectiveness was defined as maintaining the current level of protection of the Section 4(f) resource in the presence of the transportation project. Again quoting from the draft Phase I report Executive Summary,

- "The *de minimis* impact provision has not compromised the protection of Section 4(f) resources. Seventy-six percent of the transportation officials surveyed reported no changes to the protection of the Section 4(f) resource. Ten percent said it has improved resource protection. Several officials with jurisdiction stated that the *de minimis* impact provision is another "tool in the toolbox" to encourage transportation agencies to design projects that have less adverse impacts to resources.
- In some instances, the *de minimis* impact provision has generated a level of coordination with park and recreation officials that may not have previously occurred in the Section 4(f) process. With the *de minimis* impact provision, many interviewees reported that transportation agency staff members are learning more about the features, attributes, and activities of resources that are important to officials with jurisdiction. This improved understanding of Section 4(f) resources contributes to the design of better transportation projects.
- Fifty-five percent of those surveyed reported that the *de minimis* impact provision has not changed the outcome of their transportation projects, while 36 percent said that their transportation project outcomes have improved.
- A statement heard repeatedly throughout the interviews—from both transportation agency staff and officials with jurisdiction—is that the *de minimis* impact provision provides a common sense approach to fulfilling the Section 4(f)

requirements for projects that clearly have no adverse effect on Section 4(f) resources."

The Final Rule for Section 6009 provisions, which was published on March 12, 2008,

- Defined and formally implemented "feasible and prudent" avoidance alternatives,
- Outlined clear criteria for selecting the alternative that causes the least overall harm, and
- Defined and formally implemented the procedures for determining a *de minimis* impact.

The definition of feasible and prudent avoidance alternatives emphasizes that the use of Section 4(f) property is to be balanced against competing factors, with a "thumb on the scale" in favor of preserving the Section 4(f) property. The competing factors must pose a threat of severe problems or impacts. The Final Rule went into effect on April 11, 2008. The primary purpose of the Phase II study is to evaluate the implementation of the new feasible and prudent standard.

# 3.A.2. COMMENTS ON DRAFT PHASE I STUDY REPORT

The committee's main concern is that the results presented, particularly in the draft Executive Summary, are far more definitive than warranted on the basis of the evidence available. Although useful inferences can be drawn, there are limitations in the data collection methodology (e.g., small sample size and lack of diversity among the respondents) that should be addressed more fully. As a result, the findings may not be representative of 4(f) cases and are heavily weighted toward the perspective of transportation officials. While this may be useful information, the lack of balance of perspectives reduces confidence in the conclusions. Given these limitations, the committee does not believe that the Phase I draft has adequately addressed the questions posed by Congress relative to the *de minimis* provisions of SAFETEA-LU.

# **Methodological Issues and Associated Implications**

Key limitations of the data collection methodology are described below, and their implications are discussed in the paragraphs that follow:

- Small sample size: Twenty-five projects were selected for the Phase I study. Although this number represents approximately 10 percent of the projects for which a *de minimis* impact finding had been made as of March 21, 2008, any attempt to stratify the samples by 4(f) resource type results in a sample size that is too small to draw meaningful inferences.
- Lack of diversity among survey and interview respondents: The draft Phase I report describes two types of data collection approaches: a pre-interview survey and interviews. Surveys were provided to transportation officials only. As presented to the committee, for

each of the projects selected for the Phase I study, researchers attempted to include at least one federal transportation official, one state transportation official, and either a historic preservation official or an official with jurisdiction. Only two of the eight park officials with jurisdiction who were contacted participated in interviews. Ten historic preservation officials responded to the survey. Other stakeholders (i.e., users of a resource) were not interviewed. The USDOT draft Phase I report does not describe non-respondents and what types of resources they represent.

- Aggregate findings and conclusions about the efficiencies and effectiveness of the *de minimis* impact provision: The draft Phase I Study Report combines historic sites and other Section 4(f) resources, even though the regulations for these two categories of resources are different and they warrant separate consideration of both efficiency and effectiveness impacts. The regulatory provisions governing the evaluation of *de minimis* impacts for historic sites versus other Section 4(f) resources are different both procedurally and substantively. As a result, these different reviews may have different project efficiencies in terms of time and cost, and may result in different degrees of resource protection. The draft Phase I report does not distinguish between these issues.
- Inconsistency in units of analysis across evaluation questions: As noted earlier, surveys were provided to transportation officials only, whereas interviews included the broader range of stakeholders. Survey questions were not project-specific, and thus the unit of analysis appears to be the "office" (i.e., FHWA division, FTA region, state DOT, or transit agency). Responses may represent experience over multiple projects. Interview questions appear to mix units of analysis, with some questions directed toward a specific project and some directed toward more broadly defined experience. Limiting the distribution of questionnaires only to transportation officials is not consistent with the survey's intended purpose of producing quantifiable information that can be measured and compared across stakeholder groups (see page 11 of USDOT Phase I Draft Report). It would be appropriate for the Phase I Draft Report to explain why transportation officials were over-represented as interviewees, particularly since the focus of the study was not limited to efficiencies (the time and cost savings to transportation officials), but also included effectiveness from the perspective of resource protection—where the views of officials with jurisdiction over the resource would be particularly important.
- Use of "construction complete" as the primary sample selection criterion: The draft Phase I report indicates that projects included in the sample used for the evaluation were selected on the basis of indications that the project had been constructed as of March 21, 2008. USDOT is required by SAFETEA-LU to address post-construction effectiveness, therefore chose a sample dominated by completed projects. The very small sample of projects selected for analysis, however, raises an issue about representativeness. The best option for selecting a sample is by taking a random sample. Assuming the population is normally distributed allows one to make generalizations from the sample. The committee's previous letter noted that the first *de minimis* cases so designated may not be representative of the universe of projects that are likely to arise in the future. It is possible that the first set of projects to receive a *de miminis* designation were those that were simple and easy calls to

<sup>&</sup>lt;sup>2</sup> The two preceding sentences were added to the committee's letter report. The first clarifies that USDOT was obligated by SAFETEA-LU to study post-construction effectiveness. The second sentence clarifies the committee's concern about limiting the analysis to the small number of completed projects.

make and therefore are not representative of this class of projects. The methodology employed in selecting a sample by USDOT was following the general guidance the committee provided regarding considering the various factors that would be important to represent. The committee was expecting, however, that the sample would be drawn from all projects with a *de minimis* designation; it was not expecting that the sample would be dominated by projects that had been constructed. The committee's advice about including all completed projects referred to those that would be included among detailed case studies and that these cases would be used to inform judgments about project effectiveness, not project efficiencies. Having the sample dominated by completed projects runs the risk that the sample is even less representative than the class of already designated projects because these projects may be even more simple and straightforward than all designated projects. Drawing a random sample from designated projects would at least allow generalizations about project efficiencies to be drawn about projects designated *de minimis* to date.

These limitations undermine the utility of the draft Phase I study. First, the small sample size, lack of random sampling, and lack of diversity among respondents limit any type of categorical analysis, quantitative or qualitative. Thus, the findings of the report may not be representative of 4(f) cases and appear to represent a DOT-oriented view of the efficiency and effectiveness of the *de minimis* provisions. The data do not support an evaluation of whether this perspective is shared by non-DOT stakeholders. As noted in the June 9, 2008 letter report (pp. 8–9), this limited evaluation frame may not represent the broader concerns implied in the study questions outlined in SAFETEA-LU. Three separate groups of stakeholders should be included in the Phase I de minimis impact study: transportation officials, officials with jurisdiction over the resources (e.g., SHPOs or park managers), and resource advocates, typically nonprofit organizations who are concerned with the protection of the resource (for example, a local trail group, historic preservation organization, or parks advocacy organization). Special effort should be made to identify advocates for the resources that were impacted by each of the 25 projects. It is important that these perspectives be represented in any analysis. Providing a survey to two national organizations is not a substitute for identifying the resource experts and/or advocates associated with the specific de minimis project being examined.

The committee noted that the draft Phase I report did not include information relating to public review and comment on effects of the chosen projects as a measure of the effectiveness of the *de minimis* impact provision applicable to non-historic Section 4(f) resources. It is important to know whether the public input process has been effective in providing the public with an opportunity to review and comment on the effects of the project.<sup>3</sup>

Although the draft Phase I report states that the study used a "scenario-based" design, the inconsistency in the units of analysis across the study questions and the lack of

<sup>&</sup>lt;sup>3</sup> An incorrect sentence was deleted about a lack of interview questions addressing public comment on the proposed *de minimis* designation of projects in the sample. Such questions were asked but were not reported in the draft the committee reviewed.

diversity among survey respondents precludes this type of approach. A proxy pre-post design would require that multiple stakeholders answer the question, "What would have happened in the absence of the *de minimis* provision?" for each specific project. Instead, a counterfactual scenario was elicited from a sometimes limited set of stakeholders through the interviews, and cost and time savings data were collected from only transportation officials and were not clearly linked to specific projects.

Despite these limitations in the quantitative aspects of the study, the interviews provide some insightful findings (e.g., regarding sources of cost and time savings and the circumstances under which these savings are most likely to be realized). However, because of the small sample size, lack of diversity among interviewees, and limiting the sample to only include use of reported "construction complete" status as a screening criterion, ability to generalize these findings is limited. For example, because the sample of 25 includes the first 22 completed *de minimis* projects, it is possible that this group is made up of unusually simple and straightforward projects.

#### Recommendations

On the basis of the limitations of the Phase I study, the committee recommends that the USDOT revisit the study of the impact of the *de minimis* provisions of SAFETEA-LU by one of two methods:

- Finalizing the Phase I report based on existing information and addressing the limitations as part of the Phase II study, or
- Extending Phase I and delaying the issuance of the Phase I report until these limitations can be addressed.

If USDOT chooses to finalize the Phase I report based on existing data, the committee recommends that the report be revised in a way that recognizes the limitations of the methodology and interprets the preliminary results appropriately. More specific comments and recommendations are outlined next.

If the report is to be finalized without further data collection, more effort should be made in the body of the draft report to acknowledge the sources of information. For example, beginning on page 16 there are several pages of findings. The report needs to be clear about which respondent groups are being relied upon for these findings. On page 25, for example, there is a statement that reads, "Fifty-five percent of survey respondents reported that the *de minimis* impact provision has not changed the outcome of transportation projects." Although a close reading of the report reveals that only transportation officials were surveyed, this finding could be more clearly communicated. This comment applies equally to other statements referring to survey respondents.

In general, and to the extent possible without compromising the anonymity of the respondents, it would be preferable to report the empirical results of the interviews by type of respondent rather than only in the aggregate; unfortunately, in this case, the small number of

non-transportation respondents precludes meaningful comparisons among respondents by type.<sup>4</sup>

The fifth bullet on page 2 of the Executive Summary is a prime example of how the lack of perspectives among survey and interview respondents could undermine the validity of the Phase I conclusions, real or perceived. The bullet presents a summary addressing the issue of whether Section 4(f) resources are compromised by the streamlining provisions. It states: "Seventy-six percent of the transportation officials surveyed reported no changes to the protection of the Section 4(f) resource. ... Several officials with jurisdiction stated that the *de minimis* impact provision is another 'tool in the toolbox' to encourage transportation agencies to design projects that have less adverse impacts to resources." The juxtaposition of these statements could be misinterpreted by readers as suggesting that officials with jurisdiction agree with the view expressed by the majority of transportation officials. However, the statement attributed to officials with jurisdiction speaks to a process issue, not an outcome finding.

Finally, because the policy audience of the report may be unfamiliar with technical jargon, a glossary of technical terms and acronyms would be helpful.

#### 3B. PROPOSED PHASE II STUDY

#### 3.B.1. PROPOSED METHODOLOGY

Phase II of the study will be an update on the implementation of the *de minimis* impact provision and an evaluation of the implementation of the Final Rule on the feasible and prudent avoidance alternative standard. The intent is to extend the findings from the project-specific focus in Phase I to a more national-level perspective. Specifically, the focus of Phase II, as proposed in the draft study plan, will be on two research areas:

- 1. Extension of the findings of the Phase I de minimis impact provisions to
  - Update the national inventory by identifying any changes in national trends and patterns since Phase I, and
  - Convene focus groups to seek input from a cross section of peer groups regarding institutional factors associated with implementation of the de minimis impact provision and possibly identify a few case studies; and
- 2. Examination of feasible and prudent avoidance alternatives to
  - Determine how the new definition has changed the implementation of the Section 4(f) evaluation process, and

<sup>&</sup>lt;sup>4</sup> An incorrect sentence about the number of officials with jurisdiction was deleted from this paragraph. The remaining sentence of the paragraph was revised to make it consistent with a previous comment made in the report.

• Identify and analyze litigation trends and patterns before and after the Final Rule in order to evaluate the effect of the new rule.

The feasible and prudent avoidance alternative research approach will involve

- Administering pretested evaluation questions (online survey) to
  - State DOT staff,
  - Transit agency staff,
  - FHWA environmental staff,
  - FTA environmental staff,
  - FHWA transportation legal staff, and
  - FTA transportation legal staff;
- Analyzing FHWA and FTA litigation to identify trends and patterns;
- Conducting an evaluation of a sample of projects through stakeholder telephone interviews (these projects will be selected on the basis of survey responses); and
- Convening focus groups to discuss implementation and outcomes of the new definition of feasible and prudent avoidance alternatives.

The *de minimis* evaluation, according to USDOT, will (a) examine the types of avoidance, minimization, mitigation, or enhancement measures adopted by projects on Section 4(f) properties with *de minimis* impact findings and gather data on the impacts and resulting mitigation; (b) determine if the *de minimis* impact provision resulted in better-designed transportation projects; and (c) look for patterns of institutional variables that appear to positively or negatively affect program effectiveness.

To conduct Phase II, USDOT plans to update the analysis of the FHWA and FTA databases of projects with *de minimis* impact findings to identify changes in national trends and patterns. USDOT also intends to convene focus groups at national events to bring together stakeholders in order to elicit information on institutional factors related to the *de minimis* impact provision of Section 6009. Projects selected for further evaluation of feasible and prudent avoidance alternatives will be based on analysis of the survey data. Survey respondents and additional stakeholders will be interviewed in order to gather more in-depth information on patterns and trends that emerge from the survey, as well as to further understand any anomalies in the data.

Examples of projects for further evaluation will include those for which the survey respondents responded that (1) the new definition of feasible and prudent made them more or less likely to conduct a Section 4(f) evaluation, and (2) the new definition made conducting and reviewing the Section 4(f) evaluations easier.

The Phase II draft report is expected in early November 2009. The TRB committee review and comment on the Phase II draft report will take place in December 2009 and January 2010.

# 3.B.2. COMMENTS ON PROPOSED PHASE II STUDY

The committee has concerns about the proposed methodology for Phase II. The main concern is the small expected number (N = 25) of projects approved under the new feasible and prudent standard. Whereas focus groups and case studies are helpful ways to understand perceptions of an issue and are often used in the development of a study design and questionnaires, the results cannot be generalized to the broader population. The plan to study litigation patterns does not appear to have a hypothesis to test or a proposed method by which to do so. Gathering more information about cases from a broader set of perspectives via a telephone or online survey will be valuable, but a concerted effort will be needed to design appropriate questions and to ensure that a representative sample of respondents representing different perspectives, including citizen groups, is obtained.

# **Small Sample Size and Limited Time Frame**

As presented to the committee, it was estimated that although 50 to 75 draft and final Section 4(f) evaluations might be completed during the next phase of the analysis, during the next year only 25 are expected to be projects with final evaluations that utilize the new feasible and prudent standard.<sup>5</sup> Analyzing these projects should be useful, but it is questionable whether they will be representative.

#### Focus Groups

Focus groups held as part of meetings of national organizations can help to understand the policy perspectives of different groups. This will be valuable input to the evaluation. However, the people who attend national meetings tend not to be the same staff familiar with individual projects. The plan to have the focus groups address sampled projects, therefore, may not be workable. If USDOT has identified a list of projects when they are ready to run the focus groups, it could be used to contact people involved with these projects who will be attending the national meetings so that they can participate in the focus group. However, the committee questions whether this strategy will garner enough people with project-level information. As an alternative, USDOT could convene focus groups in a conference call setting not connected to a specific national meeting.

# Case Studies

A carefully selected set of case studies that examine a few projects in depth and elicit the perspectives of a wide range of stakeholders would be a valuable addition to the evaluation. Given the small number of projects expected to be completed under the new feasible and

<sup>&</sup>lt;sup>5</sup> This sentence was revised to clarify that the 50 to 75 projects would include draft and final evaluations.

prudent standard, this process may be the only way to gather detailed, in-depth information about these projects and how they are perceived by groups with different perspectives. However, it is not possible to generalize from a few case studies, and thus this part of the study should be used mainly to design questionnaires for the telephone or online survey.

# **Litigation Analysis**

More thought and explanation need to be given to how the analysis of litigation trends can inform the evaluation. The measures that attempt to ensure "clear and consistent interpretation" and "clear application of the legal standards" do not necessarily equate to a lack of litigation or changes in issue areas during Section 4(f) litigation. It seems questionable that a worthwhile litigation analysis can be conducted so early in the implementation process for these streamlining provisions. Obtaining information from those who have litigated these types of cases in the past would be speculative and may not be applicable given the current rules.

Is lack of litigation on the first set of completed projects a sign of success? Is the intent to compare the amount of litigation before and after the changes to Section 4(f) made in SAFETEA-LU? If so, then how will the pre-post data be established so that valid comparisons can be made? If there is a valid reason to conduct such an analysis, the individuals to be interviewed should be expanded to include DOI legal staff and the litigants themselves.

# **Online or Telephone Survey**

USDOT staff indicated that they might consider conducting a national telephone or online survey. This method would be a valuable study component and may be the best available method for collecting information from the variety of perspectives that need to be represented. Stakeholders, including citizen groups, need to be included. A stakeholder survey (or phone interview, or both) would need to differ from a survey of transportation or other professional agency staff; however, it would be informative to have some overlapping questions between the two surveys so that some comparisons could be made. A series of questions could be posed to respondents about their role in addressing issues raised, such as

- When do you get involved in the process?
- Are the resource agencies involved in the feasible and prudent analysis?
- Are the stakeholders involved in the feasible and prudent analysis?

USDOT needs to ensure that information from appropriate groups is represented in the analysis, but it also needs to ensure that the respondents are familiar with the details of some project or projects. Starting the survey with questions such as "What project or projects were you involved in?" and "What was your level of involvement?" would eliminate those who do not have first-hand experience with the projects being studied.

In addition, because USDOT may not get the breadth of information needed in the focus groups, when interviewing state DOT people, USDOT should ask the interviewees to identify counterparts in other agencies and nongovernmental organizations (NGOs).<sup>6</sup> This information could lead to contacts with individuals at the state and local parks who could be interviewed or encouraged to complete an online survey.

Regarding the draft survey instrument provided for the committee's review, a question should be added addressing whether there are factors that have made implementation challenging. There also should be a question about the effect of the new feasible and prudent standard on the protection of 4(f) resources. The committee recommends examining the issues presented by dissenters of the new prudent and feasible standard during the Notice of Proposed Rule Making process to see if their concerns have been manifested in implementation of the new standard. In addition, the committee recommends including a preamble about the new rule prior to question five on page B-2 of Appendix B.

# **Phase II Study Issues**

In general, the committee's recommendations about study and questionnaire design regarding the Phase I study (the committee's June 2008 letter report) apply to Phase II as well. The proposed methodology raises questions about whether the results will be meaningful. More cases need to be examined and more perspectives need to be represented. Questions need to be designed so that the perspectives about outcomes of different groups can be compared. Phase II could make up for the gaps of Phase I, but this procedure may take additional time and resources. USDOT staff may need to seek additional resources to gather the data that are needed to make informed decisions. USDOT should also consider seeking the assistance of an experienced social science research or survey firm in designing a Phase II methodology that responds to the committee's comments and is practical given the information and resource constraints within which USDOT is working.

<sup>&</sup>lt;sup>6</sup> NGOs could include groups related to historic resources rather than just state and local parks and, in particular, national and regional organizations interested in historic bridges or historic roadway corridors.

# **Enclosure A**

# Committee for a Review of U.S. Department of Transportation Study on Implementation of Changes to the Section 4(f) Process

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# Jonathan E. Upchurch

Transportation Engineering Consultant to National Park Service, Grand Canyon, Arizona

<sup>&</sup>lt;sup>7</sup> Participated in most of the meeting by teleconference.

<sup>&</sup>lt;sup>8</sup> Unable to participate in the meeting.

# Enclosure B Speakers and Guests at Committee Meeting January 9, 2009

Cassandra Allwell, Volpe National Transportation Systems Center
Carol Braegelmann, Federal Highway Administration, U.S. Department of Transportation
Richard Dolesh, National Recreation and Park Association
Andrea Ferster, Rails-to-Trails Conservancy
Gina Filosa, Volpe National Transportation Systems Center
Sean Furniss, Fish and Wildlife Service, U.S. Department of the Interior
Bethany Bacher-Gresock, Federal Highway Administration, U.S. Department of
Transportation
Tim Hill, Ohio Department of Transportation
Filizabeth Merritt, National Trust for Historic Preservation
Joe Ossi, Federal Transit Administration, U.S. Department of Transportation
Nancy Schamu, National Conference of State Historic Preservation Officers
Blythe Semmer, Advisory Council on Historic Preservation
Carol Legard, Advisory Council on Historic Preservation

<sup>&</sup>lt;sup>9</sup> Via conference call.