

Improving the Quality of Environmental Documents

A Report of the Joint
AASHTO/ACEC Committee
in Cooperation with the
Federal Highway Administration



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Chapter 1 Introduction

1.1 What is the joint AASHTO/ACEC/FHWA Initiative on Improving the Quality of NEPA Documents?

This report documents an initiative of transportation practitioners nationwide to improve the quality of Environmental Impact Statements (EISs) and Environmental Assessments (EAs) written to comply with the National Environmental Policy Act (NEPA).¹

In 2003, the American Association of State Highway and Transportation Officials (AASHTO), the American Council of Engineering Companies (ACEC), and the Federal Highway Administration (FHWA) joined forces in an initiative to improve the readability and functionality of the documents prepared for transportation projects in compliance with NEPA.

In 2003 and 2004, an AASHTO, ACEC, and FHWA work group conducted a survey of state Departments of Transportation (DOTs), the engineering consultant community, and the FHWA to assess the current quality of NEPA documents and inform its future activities. Two “environmental document quality” workshops were held in conjunction with the AASHTO Standing Committee on the Environment’s annual meetings in 2004 (Snowbird, UT) and 2005 (Chicago, IL). The workshops provided additional insight on the various opinions and issues related to the preparation of quality NEPA documents for transportation projects.

Based on the findings of the survey and workshops, three task teams were commissioned by the work group to address these three priority issues: 1) the quality and clarity of NEPA documents; 2) the legal sufficiency² of NEPA documents; and 3) the training and education related to NEPA and environmental documentation.

This guide documents the efforts of the Quality and Clarity of NEPA Documents Team and the Legal Sufficiency Team. Findings from the Education Team, which will be updated frequently, will be made available through AASHTO’s Center for Environmental Excellence Web site.

The first several chapters of this report address the quality and clarity of NEPA documents. These chapters offer recommendations on ways to improve the quality of NEPA documents by making them more effective, engaging, and useful for the public and decision-makers, including focusing on the needs of reviewing regulatory agencies and the legal community.

The issue of legal sufficiency for transportation-related NEPA documents is addressed in Chapter 5. It is intended to provide state DOTs, engineering consultants, and FHWA with a better understanding of the FHWA legal sufficiency review. It also provides practical advice for improved development of quality and legally adequate NEPA documents.

¹ 42 U.S.C. 4332; 40 C.F.R. 1500-1508.

² FHWA regulations at 23 C.F.R. 771.125(b) and 23 C.F.R. 771.135(k) require the formal legal sufficiency review of all final environmental impact statements (EIS) and final Section 4(f) evaluations prior to approval of those documents by the FHWA Division Office.

AASHTO and ACEC survey respondents identified a range of problems related to writing quality and format of NEPA documents:

- Too large, wordy, repetitive, complex, and cumbersome
- Lack of consistency in format, approach
- Lack of a coherent story with a logical progression
- Too much focus on legal “air-tight” document versus writing for the public
- Too much focus on “the look” of the document vs. usability for decisions
- Lack of communication among multiple authors.

This document is intended as a resource, not official guidance. It was developed by a group of experienced NEPA, transportation, and environmental professionals and represents the collective thinking of these individuals.

1.2 Why do we need to improve NEPA documents?

NEPA requires agencies to disclose environmental impacts of their decisions in a way that is understandable to the public and to decision-makers.

In the past few decades, NEPA documents have evolved into voluminous collections of data aimed at meeting increasing legal requirements. In many cases, these documents have become overwhelming and incomprehensible to the average citizen. Many EISs and EAs are not clearly written, are poorly organized, and are presented in a format that is difficult to follow.

This trend has occurred despite NEPA regulations and Federal agency guidance that provide adequate flexibility for documents to be written in a way that will more effectively communicate to the public. In fact, the regulations require clear, understandable documents that “concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.”³

AASHTO, ACEC, and FHWA practitioners identified a range of problems with NEPA documents; however, the top concern was the unwieldy size of the documents, with respondents complaining that documents are too large, wordy, repetitive, complex, and cumbersome.⁴ It is not at all uncommon for EIS documents to approach 1,000 pages.⁵ Other key concerns included poor writing quality and the need for better technical editing.

Recent research has found that “the length and complexity of environmental documents may deter some people from reading and comprehending them, which is antithetical to their very purpose.”⁶

For example, a study by University of Illinois researchers found that the majority of citizens they tested showed no better understanding of a project after they read the project’s EIS document than they had before they read it.⁷

State transportation officials point to a variety of circumstances that contribute to the growing size and complexity of environmental documents, including changing expectations from regulatory agencies, legal concerns related to court challenges, and information requests from the public or special interest groups.

“We recognize that our environmental documents must continue to meet the needs of regulatory agencies and the attorneys that defend our projects, but they also need to meet the needs of the public that we serve,” WSDOT said

CEQ—Regulations for Implementing NEPA

Agencies shall focus on significant environmental issues and alternatives and shall reduce paperwork and the accumulation of extraneous background data. Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses.

40 C.F.R. Sec. 1502.1 Purpose.

³ *CEQ Regulations*, 40 C.F.R. 1500.1(b)

⁴ *Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content*, NCHRP Project 25-25(01), January 2005, *Appendix C*, p. A-5.

⁵ Washington State Department of Transportation *Reader-Friendly Document Tool Kit*, p. 2-2.

⁶ *Ibid.*, page 1

⁷ *Assessing the Impact of Environmental Impact Statements on Citizens*, *Environmental Impact Assessment Review*, Vol. 16, No. 3, May 1996, pp. 171–182.

in its *Reader Friendly Document Tool Kit*. WSDOT’s Tool Kit provides NEPA document writers with practical advice for achieving the state’s goals to produce “reader-friendly” environmental documents.

And while most EISs and EAs will not require the drastically different approach taken for some recent environmental documents, numerous recent projects offer valuable lessons for developing environmental documents that are effective communication tools.

Practitioners have noted the difficulties in balancing the need to ensure regulatory compliance with the need for clear writing and effective presentation of information. Not surprisingly, practitioners tend to err on the side of caution in applying new approaches.⁸

But among these efforts, a key theme is emerging: quality NEPA documents must effectively “tell the project story” through clear, concise writing; effective organization and formatting; and effective use of visual elements. This report endorses these findings, stressing the need to tell the story of the *project*—but also to tell the story of the *process* used to reach good decisions.

1.3 What is a quality NEPA document?

The findings of the Task Team on Quality and Clarity of NEPA Documents embraced and expanded on findings and recommendations of National Cooperative Highway Research Program Project 25-25 (01), *Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content*; Washington State DOT’s *Reader Friendly Document Tool Kit*; Caltrans’ *North and Central Regions Style Guide for Environmental Documents*; and other resources and document examples discussed during the joint workshops. These efforts underscore a national trend focused on producing documents that better fulfill the spirit and the letter of the NEPA statute.

Based on the recent body of research and deliberations of transportation practitioners, the team identified the overarching principles essential to improving NEPA documents. Quality NEPA documents effectively “tell the project story” through clear, concise writing; effective organization and formatting; and effective use of visual elements. Documents must explain project decisions in simple, concise terms that are understandable to the public, while clearly demonstrating compliance with regulatory and legal requirements.

The team recommends a basic framework applicable to most NEPA documents based on the “blueprint” presented in the NCHRP 25-25(01) project report. It also suggests procedural steps for successful document preparation and offers observations on use of specialized and advanced techniques.

Aside from general recommendations in the blueprint and the legal sufficiency chapter, this report does not address specific aspects of the NEPA process, such as improving purpose and need statements, analysis of alternatives, and indirect and cumulative impacts analysis.

NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.

*CEQ Regulations
Sec. 1500.1(b)*

⁸ *Synthesis of Data Needs for EA and EIS Documentation*, p. 2.

Chapter 2 Core Principles for Improving the Quality of NEPA Documents

2.1 What are the core principles for quality NEPA documents?

Based on the NCHRP research and deliberations of the joint AASHTO/ACEC/FHWA work group, the following “core principles” have received general consensus as the basis for quality NEPA documents:

Principle 1: Tell the story of the project so that the reader can easily understand the purpose and need for the project, how each alternative would meet the project goals, and the strengths and weaknesses associated with each alternative.

Principle 2: Keep the document as brief as possible, using clear, concise writing; an easy-to-use format; effective graphics and visual elements; and discussion of issues and impacts in proportion to their significance.

Principle 3: Ensure that the document meets all legal requirements in a way that is easy to follow for regulators and technical reviewers.

Practitioners should note that effective use of the scoping process is integral to the successful implementation of these core principles. The scoping process involves inviting participation; coordinating with the public and agencies; determining the scope of the project and study area; identifying important issues versus minor issues; allocating assignments; and determining specific activities and their timing.

Proper application and documentation of the scoping process can support the decision to limit the amount of detail that is included in NEPA documents. A well developed and documented scoping process can explain why particular issues were either highly developed or only minimally discussed in the document.

In addition, the application of these core principles requires that the document be straightforward in presenting the facts as they are. Particular care should be taken to assure that the document is not an advocacy piece for the project or for any particular alternative.

These principles, properly applied, are valuable tools for any environmental document and will go a long way toward achieving informed decisions that are understandable to the public.

2.2 How do you tell the story of the project?

Effective NEPA documents provide a clear path of logic with a consistent theme or “thread” throughout the document based on what the project is trying to accomplish. EISs and EAs should provide the reader with a clear understanding of how decisions were reached and will be reached, answering key questions and discussing relevant findings related to each alternative.

The “story of the project” should be understandable to a broad audience, serving the needs of public as well as document reviewers. Multiple technical

Ultimately, of course, it is not better documents but better decisions that count. NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action.

*CEQ Regulations
40 CFR Sec. 1500.1(c)*

Environmental impact statements shall be written in plain language and may use appropriate graphics so that decision-makers and the public can readily understand them
CEQ Regulations, 40 CFR Sec. 1502.8

subjects should be integrated based on the common question: what is the project trying to accomplish and what are its effects?

The project purpose and need, alternatives analysis, and impacts should be clearly presented in plain language using effective visual elements. Document writers should focus on information that is relevant to the project decision, keeping the document as brief as possible.

Washington State’s *Reader Friendly Document Tool Kit* illustrates how a traditional EIS could be reorganized to more clearly engage readers and tell the project story using a question-and-answer format.⁹

Question-and-answer headings help direct readers to the information they are most interested in. They also give writers an opportunity to cover NEPA required topics (such as logical project termini) in a way that is more interesting to the reader. Examples of traditional EIS headings transformed into question-and-answer headings are shown below.

Question-and-Answer EIS/EA Headings	
Traditional EIS	Reader-Friendly EIS
Purpose and Need	Why do we need the project?
Project termini and why are they logical	Where is the project located and why were these boundaries selected?
Alternative Description Structures Design Standards Illumination Pedestrian and Bicycle Facilities Construction	What is the alternative? How would it be built? How would it change access? How would it affect travel times and traffic flow? How would pedestrians and bicycles be affected?
Impacts and Mitigation Land Use Noise Social and community impacts	How would it change the character and land use in the project area? How would noise levels change? How would the alternative affect neighborhoods and the people who live there?

This format offers one option for organizing the document. Other approaches include reorganization for better flow, with “the story” told as with chapters in a book.

Traditional NEPA document organization also can be used to tell the project story.

Sometimes the reason environmental documents are difficult to understand is not just because the writing is poor—sometimes the thinking is incomplete. If the author doesn’t know what the analysis or data demonstrate, writing clearly is impossible.

–WSDOT *Reader Friendly Document Tool Kit*

Preparers of NEPA documents must understand technical issues well enough that they can explain those issues in a manner that is understandable to the general reader.

–NCHRP 25-25(01)

⁹ WSDOT *Reader-Friendly Document Tool Kit*, pp. 2–7.

2.3 How do you keep the document brief?

A renewed focus is needed on readability of NEPA documents, reflecting the intent of Council on Environmental Quality's (CEQ's) implementing regulations:

- Use clear, concise writing;
- Provide effective summaries;
- Select an easy-to-use format;
- Summarize information and use pictures and effective graphics to help communicate complex issues or comparisons;
- Separate technical information or high-volume materials into appendices or use cross-references as appropriate; and
- Include only the most relevant information—do not discuss effects that do not matter.

Writers should use simple language presented in an active voice to engage the reader. The writer should avoid technical jargon, minimize abbreviations, define terms, and spell out acronyms.

Question-and-answer headings are effective to help readers focus on the most relevant information. The document should explain the problem and why people should care, answering questions such as:

- What is the problem the project will fix?
- How will each alternative affect users and other stakeholders?

Writing with greater clarity does not mean removing technical details from NEPA documents; it means explaining technical details in a way that is understandable to non-technical readers.¹⁰ The most important job of the document writer is to explain what the technical data mean in relation to the decision to be made. The writer should capture compelling cross-cutting issues that are important for the project and summarize key issues with perspective.

According to CEQ, “if only technically trained individuals are likely to understand a particular discussion, then it should go in the appendix, and a plain language summary of the analysis and conclusions of that technical discussion should go in the text of the EIS.”¹¹

2.4 How do you ensure that the document meets all legal requirements in a way that is easy to follow for regulators and technical reviewers?

Effective NEPA documents must strike a careful balance: they must include sufficient technical detail to ensure compliance with a range of legal requirements; explain complex information in an understandable manner; and present information in a way that is easy to follow for agency reviewers, courts, and the public.

Many NEPA documents today are frustrating to the general public not simply because they contain highly technical information, but because they fail to explain that information clearly. Agency reviewers and courts share the same frustration. They, too, are seeking clearer and more concise explanations of complex technical issues.

—NCHRP 25-25(01)

¹⁰ *Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content*, NCHRP Project 25-25(01), January 2005, pp. 37–38.

¹¹ *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, Council on Environmental Quality, March 23, 1981, <http://ceq.eh.doe.gov/nepa/regs/40/20-29.HTM>, #25.

There are several steps that can help strike this balance.¹² Some of the key steps outlined in the NCHRP 25-25(01) report are reprinted below:

- **Identify and Explain Key Assumptions.** The technical analyses contained in a NEPA document generally are based on a series of assumptions. For example, traffic forecasts are based on assumptions about future population and employment trends. These underlying assumptions must be credible in order for the results to be credible. Therefore, in presenting technical information, preparers of NEPA documents should specifically identify key assumptions and explain why those assumptions were made.
- **Describe Methods Used to Develop Data.** The persuasive power of technical data depends heavily on the reader's confidence in the methods used to generate that data. If the reader cannot understand how the data were developed, the reader is essentially being asked to "take it on faith." Thus, describing the methodologies used to develop the data can enhance the credibility of a NEPA document. This approach requires more than giving the name of the model used; it requires explaining in simple terms how that model works and what type of information it provides. It also means explaining any inherent limitations in that model. Note that the methodology used to develop data can be presented at various points throughout a NEPA document. In general, it is preferable to explain the methodology in the same section of the document that contains the results. It also may be helpful to include a methodology section at the beginning of the Environmental Consequences chapter, if there are some general points that need to be explained with regard to the impacts analysis for all categories of impacts. It is also possible to have a stand-alone chapter early in the EIS that covers methodology issues across the board. The level of detail included in the main body of the NEPA document will vary according to the project and the potential risk for litigation. In many cases, it may be preferable to briefly summarize the methods and refer the technical reader to the relevant discipline report for details.
- **Use Effective Visuals to Present Key Results.** In addition to their value for the general reader, visual aids can be particularly helpful in litigation. The basic challenge facing attorneys in a NEPA case is to explain a complex series of events as briefly as possible. In most cases, the entire legal brief defending a NEPA study is less than 50 pages long, and often it is much shorter than that. Within those space constraints, there may be only a few pages available to explain the entire history of a single complex issue. As a result, a single visual aid can be profoundly helpful in litigation—not just because it reinforces a key argument, but also because it frees up space to develop other arguments more fully.
- **Do Not Just Summarize the Data, Analyze It.** A NEPA document presents a vast quantity of technical information. The most fundamental task of a NEPA document preparer is to explain what that data means. Explaining the data involves more than reciting in text the data that

¹² *Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content*, NCHRP Project 25-25(01), January 2005, pp. 37–40.

appears in an accompanying table or figure. The explanation should connect the dots—that is, it should identify patterns in the data, explain causal relationships, and explain anomalous or otherwise unexpected results. The data rarely speaks for itself; the responsibility for explaining the data rests with the preparer of the NEPA document.

- **Document Compliance with Key Regulatory Requirements.** The NEPA process is typically used as the vehicle for achieving compliance not only with NEPA, but also with a range of other laws, including Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, Section 404 of the Clean Water Act, and air quality conformity requirements under Section 176(c) of the Clean Air Act. These regulatory requirements often are the subject of legal disputes. Given the potential for disputes, it is prudent for a NEPA document to include a systematic, point-by-point review of these regulatory requirements—explaining which are applicable, which are not applicable, and how the applicable requirements have been met. This overview of regulatory compliance may have limited value for the general reader, but has great value for a reviewing court. [Note: The issue of regulatory compliance can be addressed in two places. It can be covered in the Summary section of the document, by briefly reviewing each of the major regulatory issues and explaining whether they are applicable and how they have been addressed for the project; if additional steps are needed to achieve compliance, those can be noted. Regulatory compliance also can be addressed in the individual section of the document that is pertinent to the regulatory requirement.]
- **Provide Overview of Major Project Issues.** In most NEPA studies, there are a few issues that receive a disproportionate amount of attention from regulatory agencies, interest groups, or the public. These issues often involve long-running efforts to resolve complex or controversial issues. By the time the NEPA process is completed, the issue may have generated hundreds of pages of technical studies, dozens of letters among agency officials, and hundreds of public comments. For permitting agencies or a reviewing court, it can be difficult to assess the lead agency’s handling of such a complex issue. The NEPA document can greatly facilitate the task of agency reviewers and the courts by listing these major issues and briefly explaining the concerns that were raised and how those concerns were addressed. This summary should provide cross-references to other locations in the document where more detail is provided.
- **Systematically Review Data to Ensure Internal Consistency.** The large amount of data presented in a NEPA document creates numerous opportunities for internal inconsistencies and contradictions. There may be inconsistencies in a single section between the tables and the text; there may be inconsistencies between discussions of the same issue in different sections; and there may be inconsistencies between discussions of different issues that happen to involve the same data (e.g., traffic, noise, and air quality). There is no easy way to eliminate these inconsistencies; crosschecking is an inherently time-consuming and

onerous task. Nonetheless, careful crosschecking to ensure rigorous consistency is a valuable effort that enhances the credibility of the document for the public, agency reviewers, and a reviewing court.

2.5 What are some of the benefits of applying the core principles?

By applying the principles outlined in this chapter, agencies will improve the likelihood that the NEPA documents they produce can be used to inform decision-makers and the public on the project—explaining what alternatives were considered, how well they fulfilled the stated purpose and need, and how they addressed anticipated environmental effects.

A NEPA document must ensure that the agency’s decision is based on a thorough analysis of the environmental impacts of a proposal. At the same time, it must guarantee that this information will be available to the public, whose concerns and insight may then be incorporated into the decision.

Quality NEPA documents will achieve the dual goals of public involvement and regulatory compliance, resulting in good decisions.

Clear, understandable NEPA documents will help project proponents:

- Demonstrate accountability and build trust;
- Engage the public, decision-makers, and reviewing regulatory agencies in a meaningful dialogue about projects that will form and define communities for years, and sometimes generations;
- Document agency decision-making; and
- Avoid lawsuits.

In fact, transportation agencies that have experimented with more readable document formats are reporting positive results.

Washington State DOT’s project teams reported that the level of public comments on their “reader-friendly” documents was more sophisticated and specific to the project. Comments were substantive rather than broad brush, and citizens seemed to comprehend the elements of the proposed action far better than in the past.¹³

The following NEPA documents profiled in the NCHRP 25-25(01) report are among those that are demonstrating new and effective ways to present information in NEPA documents:

- Alaskan Way Viaduct and Seawall Replacement Project (Washington State DOT)
- Mon/Fayette Transportation Project, PA Route 51 to I-376 (Pennsylvania Turnpike Commission)

Quality NEPA documents will achieve the dual goals of public involvement and regulatory compliance, resulting in good decisions.
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¹³ Correspondence from Washington State DOT environmental services policy manager Carol Lee Roalkvam, 8/19/05. Projects include Kirkland EA, SR 502, Alaskan Way Viaduct, Bremerton Tunnel. See the WSDOT Web site for links to recent documents:

<http://www.wsdot.wa.gov/environment/compliance/ReaderFriendly.htm>

- Route Post 13 (I-15) Interchange (Utah DOT)
- Southern Corridor (I-15) (Utah DOT)
- Vancouver Rail Project (Washington State DOT)
- Fulton Street Transit Center (New York Metropolitan Transit Authority)
- US 93 Somers to Whitefish (Montana DOT)
- I-69 Evansville to Indianapolis (Indiana DOT)
- Mid-Currituck Sound Bridge (North Carolina DOT)
- Reno Railroad Corridor (Nevada DOT)

As noted in the report, compared to typical NEPA documents, these documents “are not necessarily shorter, nor may they be quicker to prepare. They are, however, clearer, and according to those who prepared and/or reviewed them, they have helped improve decision-making and project delivery.”¹⁴

While the NEPA documents used for these projects were important, other aspects of these projects, including public involvement, also were important to the projects’ success.

¹⁴ *Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content*, NCHRP Project 25-25(01), January 2005, p. 8.

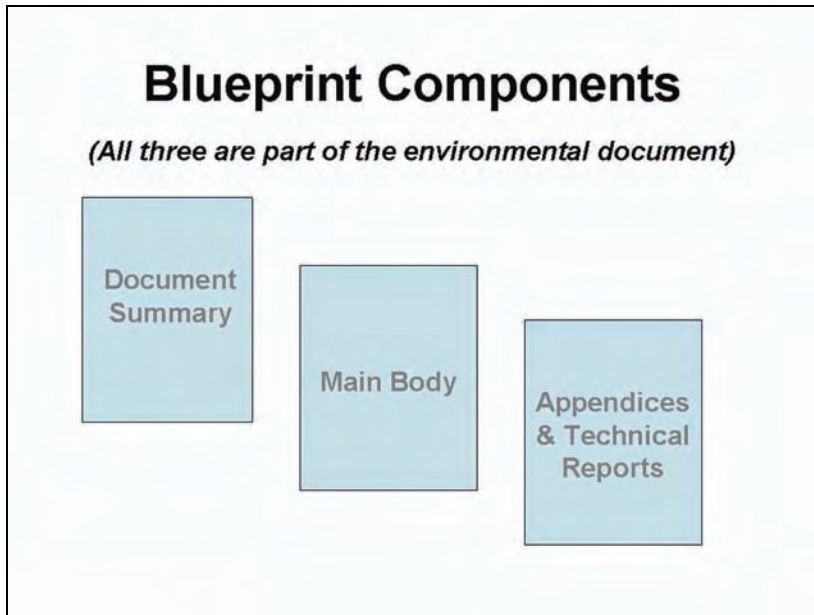
Chapter 3 Content and Process

3.1 How can agencies better organize their environmental documents?

Some agencies have developed templates and style guides that outline the elements to be included in their environmental documents. While not providing a template, the AASHTO/ACEC/FHWA work group endorses the basic blueprint outlined in NCHRP project 25-25(01) as an effective organization for most EIS documents.¹⁵

Drawing on practices that states already are using, the blueprint outlines the three core components of a NEPA document, each of which should focus on “telling the project decision-making story clearly, while still meeting legal sufficiency needs.”

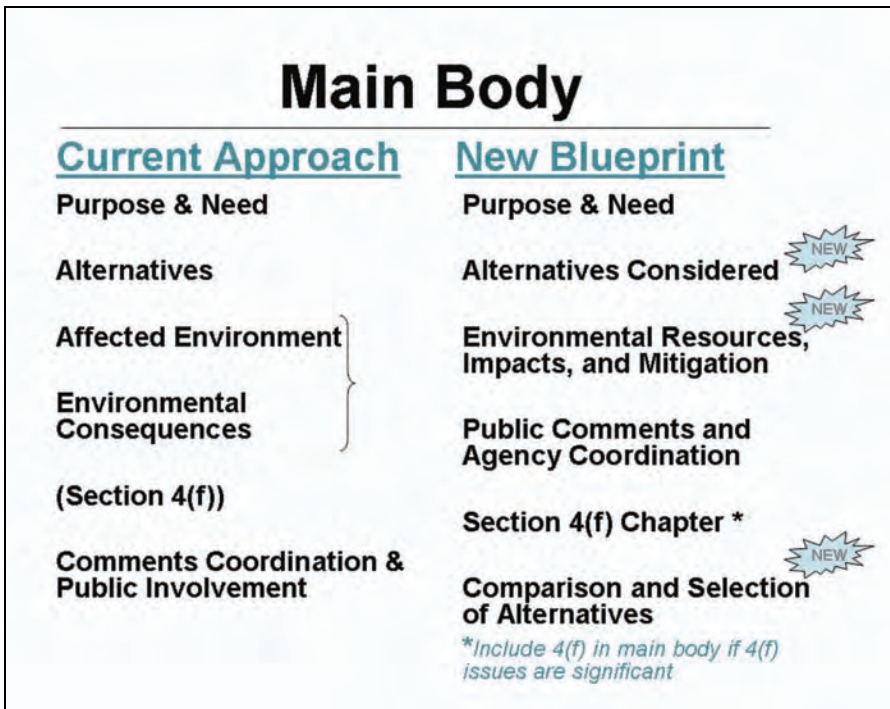
Reminder: It is always important to coordinate with federal lead agencies when making decisions on document formats.



¹⁵ *Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content*, NCHRP Project 25-25(01), January 2005, pp. 27–36.

The blueprint differs from traditional NEPA documents in two key areas. It combines the Affected Environment and Environmental Consequences discussions into one chapter. This is done to provide readers with a full understanding of which environmental issues are significant in the project area and how each alternative affects them.

In addition, the blueprint divides the Alternatives chapter into two separate chapters. One chapter identifies preliminary alternatives, explains the screening process, and discusses how alternatives were brought forward. A separate chapter provides a comparison of the reasonable alternatives that were carried forward for detailed study, and describes the preferred alternative once it is identified.



The blueprint sets forth the following components for NEPA documents:

- The Document Summary.** The summary should provide a synopsis of why the project is needed, what alternatives were considered, how the alternatives affect the environment, and (at least in the FEIS) the rationale for selecting the preferred alternative. It should emphasize the key issues as well as major environmental and community concerns that may be controversial and difficult to resolve. The summary is a vital component, as it may be the only part of the document that many people read. It must adequately and accurately summarize all key aspects of the EIS.

- **Main Body.** The main body of the document includes sections that are similar to a traditional EIS:

Purpose and Need. This section is the foundation of the NEPA document. It introduces the reader to the project and focuses on why the project is proposed and important.

Alternatives Considered. This section identifies the preliminary alternatives developed in the scoping process; explains the methods used for screening alternatives; summarizes the results of screening processes, including the reasons for eliminating any alternatives from consideration; describes each of the alternatives carried forward for detailed study; and explains how the alternatives carried forward achieve the project’s purpose and need.

Environmental Resources, Impacts, and Mitigation. In the Blueprint, this section combines the Affected Environment and Environmental Consequences chapters of a traditional NEPA document. It presents a discussion of impacts for each of the reasonable alternatives, presenting information in a neutral and objective fashion, even if a preferred alternative is identified later in the document. The volume of information in this section is weighted toward environmental impacts of most relevance to the decision-making process.

Public Comments and Agency Coordination. This section discusses the processes for public involvement and agency coordination, and addresses comments and suggestions emanating from these processes.

Section 4(f) Chapter. Traditionally, FHWA has required a separate Section 4(f) chapter, but the agency’s current thinking is that Section 4(f) could be addressed in an appendix, and then discussed as appropriate in the main body of the EIS document. A standalone Section 4(f) appendix would be required for any project that results in the use of a Section 4(f) resource.

Comparison and Selection of Alternatives. This section analyzes each of the reasonable alternatives in light of the information presented in the preceding chapters on the benefits, impacts, and costs of those alternatives. If a preferred alternative has not yet been identified, this section describes each alternative and identifies the principal advantages and disadvantages of each. Once a preferred alternative is identified, this chapter also includes the rationale for selecting that alternative. This section is intended to address one of the most common shortcomings of NEPA documents—that they may be rich in data, but fail to “tell the story” of what the data mean and how the data led to the selection of the preferred alternative.

- **Appendices and Technical Reports.** The use of appendices and technical reports as a repository for voluminous material offers the greatest opportunity to “de-clutter” the main body of the document. Appendices and technical reports include information that is important to

While the Blueprint advocates combining the Affected Environment and Environmental Consequences sections, practitioners should use careful judgment and make sure to adequately document existing conditions.

document in support of information and analyses contained in the main body.

The blueprint offered in the NCHRP 25-25(01) report is not intended as an ironclad, one-size-fits-all recipe, but rather as a starting framework.

Although it may be used as the basic outline for NEPA documents, the blueprint is not intended to be prescriptive. The NCHRP report authors stressed that “many layers of detail must be addressed for the Blueprint to be implemented in any individual case.”

The components of the Blueprint can be re-organized if necessary to meet the needs of individual projects.

3.2 How will the content be different than traditional NEPA documents?

An easy-to-use, understandable NEPA document does not translate into “NEPA-light.” Quality NEPA documents will have content as well as format focused to “tell the project story” to multiple audiences. Documents should use a variety of techniques to communicate complex issues, moving away from jargon and acronyms. And while the document should be concise, it also should communicate strong, well-grounded findings. Quality NEPA documents also should highlight project-related environmental benefits, as well as impacts.

3.3 What is the recommended process to produce a quality NEPA document?

A quality NEPA document requires careful management of the entire document creation process by the right team. The team should be designated early in the process.

Ideally, one individual, such as an “editor-in-chief,” would be responsible for managing the document itself as well as establishing clear roles for team members, setting schedules, monitoring timing, and ensuring quality.

The editor-in-chief would be responsible for ensuring that the document meets all legal requirements while telling the project story in a way that is understandable to the public as well as regulators. In a role separate from that of the project manager—the editor-in-chief would be responsible for ensuring that the document meets the highest standards, while achieving budget and schedule requirements. The editor-in-chief should have excellent organizational skills as well as writing and leadership skills, and should ensure that the NEPA document effectively communicates the project decisions.

The editor-in-chief should decide up-front the appropriate format and whether it will be a “standard” document, or a more customized approach.

In addition to the editor-in-chief, the team should include the project manager; key agency staff; technical experts for discipline reports; and the

When organizing the writing of a document, start by understanding the nature and extent of the project. This must be the first step in working out the simplest structure for your work. What essential information must you communicate? What is the simplest way to communicate it?

—CalTrans Style Guide for Environmental Documents

EIS or EA development team (writers, graphic designer, technical experts, technical editors).

The document must be edited to achieve a single voice, to bring together work of multiple authors, and to ensure quality control.

The editor-in-chief should determine the expectations for the NEPA document, identifying the audience and determining the framework for document organization. Key decisions include planning out development of the materials, determining what work needs to be done, who will do the work, and how the document will be integrated.

Oversight of the document starts with the editorial process—planning the concept with storyboards, outlining, and planning assembly and integration.

Quality assurance/quality control also is vital and must be ensured from all perspectives:

- Editorial quality (check grammar, spelling, syntax, fact-checking, place names, etc.)
- Technical validity (make sure technical validity has survived editing process);
- Legal sufficiency (make sure lawyers are consulted); and
- Overall effectiveness (make sure the right message comes through).

3.4 What should be considered regarding document production?

The following basic recommendations can assist in effective document production:

- Consider early on whether to use word processing software (which may look more “bookish”) vs. desktop publishing software (which may facilitate use of many graphics);
- Think about graphic design early and allow time and budget to create graphics;
- Organize the document and develop an outline for both text and graphics;
- Use visuals appropriately to communicate complex data—consider whether to use photos, photo simulation, maps, graphs, charts, tables; Locate text and graphics on the same page where possible, never more than one page apart;
- Make sure the layout is easy to read, and consider using standardized formats or templates;
- Use markers and overviews to guide readers (i.e., headings, section summaries, tabs, dividers, highlighting, bullets, various fonts, text boxes, sidebars, etc.);
- Ensure that the document has a consistent “look and feel;”
- Use computer technology effectively—ensure NEPA documents are transferable across different media.

Chapter 4 Advanced and Specialized Techniques

4.1 What are some alternative approaches to formatting NEPA documents?

States are experimenting with a range of alternative approaches to make NEPA documents more readable:

- Use of larger page size, such as 11-inch by 17-inch paper in a landscape format;
- Extensive use of color graphics and photography;
- Investment in high-end graphic design;
- Use of non-traditional chapter organization, such as structuring the document around major anticipated questions;
- Use of advanced printing techniques; and
- Incorporation of simulations (video or still).

Some states have developed separate summary documents targeted to the general public that incorporate the “reader-friendly” concepts. Practitioners in North Carolina have developed stand-alone “Citizen Summaries” for several projects as a public education tool issued in conjunction with NEPA documents. In some cases, such a user-friendly summary could substitute for the NEPA document executive summary.¹⁶

“We came up with the idea of a magazine-style, reader-friendly concept to communicate to lay people the critical elements of the EIS and those elements the public and local officials tended to be most interested in.”

–Jill Gurak, PBS&J, Raleigh, N.C.

4.2 When are alternative formats appropriate?

All NEPA documents should be customized to some degree to meet the needs of the project, the intended audience, and the agency proposing the project. The degree to which a document should be customized by using alternative formats depends on the goals and what makes sense for your project. For some projects, writing more clearly and using question-and-answer headings may be sufficient. For complex projects with a great deal at stake, it may be worth the additional effort to make the document engaging and easy to understand. In any case, it is critical to work closely with the Federal lead agency or agencies when considering alternative formats.

NEPA regulations do not specify the document page size or design. However, NEPA practitioners and agency reviewers have become accustomed to 8 1/2-inch by 11-inch standard size documents that generally follow a familiar outline. These documents are typically produced using word processing software such as Microsoft Word with graphics from computer-assisted design and drawing (CADD) engineering drawings or spreadsheet programs. Graphics also often are prepared using geographic information systems software and Adobe Illustrator.

¹⁶ Comments of Jill Gurak, PBS&J, Raleigh, N.C., on FHWA Re:NEPA Community of Practice Web site, NEPA Process and Documentation Topic Area, 11/2/05.

For many NEPA projects using word processing software is sufficient, although some would benefit by using an alternative approach—specifically one that enlists the expertise of graphic design and document layout professionals. The phrase “a picture is worth a thousand words” is often true when trying to communicate complex information to a broad audience. The document’s ability to effectively convey information substantially improves when well-designed graphics and clearly written text are integrated on the same page using document layout tools.

Use of alternative formats should add value in some way, such as reaching a wider audience, getting media attention, or obtaining a wider base of interest in the project.

Alternative formats should be considered on a case-by-case basis and should be based on factors such as:

- Importance of the project;
- Complexity of the issues of concern;
- Level of controversy; and
- Budget available for the document.

4.3 What are the benefits of developing alternative formats?

Alternative formats offer several potential benefits. First, these documents excel at meeting the intent of NEPA by making complex information understandable and accessible. If the text and graphics are thoughtfully produced, they can go a long way toward clearly illustrating complex issues and building trust between project proponents, the public, and regulatory agencies. An EIS that is clearly written and carefully organized with effective graphics integrated within its layout conveys complex information much more effectively than a traditional document. These elements work together: clearly written text provides understandable information, professional graphics provide visual and spatial relationships, and thoughtful page layout puts text and graphics together so the reader can more easily assimilate the information.

Making complex information understandable engages an informed dialogue between the public and decision-makers, improving the decision-making process. In the case of the Alaskan Way Viaduct Project Draft EIS, WSDOT found that the comments received focused on substantive issues, suggesting that people really understood the issues presented in the document.

The goal, no matter what format is used, is to make better decisions and successfully deliver projects. When there is a great deal at stake, alternative document formats can help agencies better meet these goals.

4.4 What is FHWA policy on alternative formats?

FHWA’s 1987 Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, sets forth the agency’s latest recommended format for environmental documents. Although this guidance is still in effect, the agency has recently accepted and even

encouraged experimentation with alternative document content and format, with due consideration of the flexibility granted in the CEQ regulations.

Although no formal FHWA guidance has been issued related to alternative formats for NEPA documents, the following excerpt from a 2003 FHWA guidance document on indirect and cumulative effects¹⁷ indicates the agency's thinking on document format and supports the principles for quality NEPA documents set forth in this report:

While documentation is not the end-all-be-all of the NEPA process, it is important that we do a reasonably good job of communicating the purpose and need of the project; the values used to develop and compare alternatives; the results of analysis for direct, indirect impacts, and cumulative impacts; and mitigation as required by relevant regulation. An environmental impact statement (EIS), or in some cases an environmental assessment (EA), may be the most obvious and scrutinized part of the NEPA process. It provides evidence to the public and participating agencies of our commitment to, and satisfaction of the NEPA requirements. Environmental documentation must communicate clearly the results of project analysis and the subsequent decisions.

We should be mindful of the fact that the adequacy of an EIS document is evidenced by a reasonably thorough discussion of the probable environmental consequences of a proposal. The format and content must provide for informed decision-making and fully discuss the analysis and reasoning in choosing a particular course of action over another. There is an established relationship between adequate documentation and the project scope, in terms of detail. The environmental document should focus on the important concerns as opposed to trivial and minor issues. If a topic does not add value to the project decision or the related decisions of other agencies, or if it does not promote full disclosure, then it should only be briefly discussed or in some cases not included at all.

The following are suggestions for improving and reducing the length of EIS documents taken from the CEQ regulations (40 CFR § 1500.4 Reducing paperwork):

- Set appropriate page limits (1501.7(b)(1) and 1502.7);
- Prepare analytic rather than encyclopedic environmental impact statements (1502.2(a));
- Briefly discuss the minor and less than significant issues (1502.2(b));
- Write in plain language (1502.8);
- Follow a clear format (1502.10);
- Emphasize the portions of the environmental impact statement that are useful to decision-makers and the public (1502.14 and 1502.15);

If a topic does not add value to the project decision or the related decisions of other agencies, or if it does not promote full disclosure, then it should only be briefly discussed or in some cases not included at all.

¹⁷ *Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process*, Federal Highway Administration, January 31, 2003, <http://environment.fhwa.dot.gov/guidebook/Gqaimpact.htm>.

- Reduce the emphasis on background material (1502.16);
- Focus on the important environmental issues identified in the scoping process (1501.7);
- Summarize the environmental impact statement (1502.12) and circulate the summary if the environmental impact statement is unusually long (1502.19);
- Incorporate information and data by reference (1502.21);
- Combine environmental documents with other documents (1506.4).

[The above passage was excerpted from *Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process*, Federal Highway Administration, January 31, 2003.]

4.5 Are there other options for flexible approaches?

Yes. Both CEQ and FHWA regulations and guidance make it clear that the flexibility and encouragement exists to dramatically improve the form and substance of environmental documents.

For example, the FHWA Technical Advisory suggests the use of “condensed” or “abbreviated” formats for Final EISs (FEIS).¹⁸

A condensed FEIS incorporates by reference the draft EIS. Under this approach, the FEIS “is a much shorter document than under the traditional approach; however, it should afford the reader a complete overview of the project and its impacts on the human environment.”

“The crux of this approach is to briefly reference and summarize information from the draft EIS which has not changed and to focus the final EIS discussion on changes in the project, its setting, impacts, technical analysis, and mitigation that have occurred since the draft EIS was circulated. In addition, the condensed final EIS must identify the preferred alternative, explain the basis for its selection, describe coordination efforts, and include agency and public comments, responses to these comments, and any required findings or determinations (40 CFR 1502.14(e) and 23 CFR 771.125(a)).”

In addition, FHWA said the CEQ regulations (40 CFR 1503.4(c)) provide the opportunity to use an abbreviated final EIS “to expedite the final EIS preparation where the only changes needed in the document are minor and consist of factual corrections and/or an explanation of why the comments received on the draft EIS do not warrant further response.”

An abbreviated FEIS should consist of the draft EIS and an attachment containing errata sheets making any necessary corrections to the draft EIS; a section identifying the preferred alternative and a discussion of the reasons it was selected; and if applicable, a discussion of the Section 4(f) evaluations, wetland finding, floodplain findings, and mitigation commitments. Copies of comments received on the draft EIS and public hearings also should be attached.

¹⁸ FHWA Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, Section VI.

In using the abbreviated format, FHWA stressed that the errata sheets together with the draft EIS must “constitute a readable, understandable, full disclosure document.”

4.6 How will document reviewers and the public respond to alternative approaches?

As states continue to experiment with alternative formats allowed by the regulations, stakeholders and agency reviewers must become familiar and comfortable with a new approach and a “new look” for NEPA documents. New approaches to NEPA document organization, content, and format will be well received if they effectively communicate project decisions.

Transportation agencies must learn to “break the mold,” and find people with the right talent and skills to customize documents in a way that is most successful for a given project.

Agencies also must ensure that customization does not compromise the legal sufficiency of their documents. If a new format is used, document writers should include tools to help regulatory agencies find key information and allow some time for agency reviewers to get used to new formats. Where significant departures from traditional formats are considered, the team should consult FHWA legal counsel and FHWA NEPA program staff.

Issues surrounding legal sufficiency are analyzed in further detail in Chapter 5 of this document.

In addition, findings and recommendations related to education and training, prepared in association with this report, elaborate on means to better educate practitioners on developing successful NEPA documents. Those findings, including references to specific courses and curricula, will be continuously updated and made available on the AASHTO Center for Environmental Excellence Web site.¹⁹

If a new format is used, document writers should include tools to help regulatory agencies find key information and allow some time for agency reviewers to get used to new formats.

¹⁹ The AASHTO Center for Environmental Excellence Web site may be accessed at www.environment.transportation.org.

Chapter 5 Legal Sufficiency of NEPA Documents

5.1 What is the legal sufficiency review?

This chapter addresses the issue of legal sufficiency for transportation-related NEPA documents and is intended to provide state DOTs, engineering consultants, and FHWA with a better understanding of the FHWA legal sufficiency review. It also provides practical advice for improved development of quality and legally adequate NEPA documents.

There are three general themes related to legal sufficiency and the preparation and review of NEPA documents: 1) the legal sufficiency review; 2) the common trouble spots related to the legal sufficiency of NEPA documents; and 3) what practitioners can do to create better and legally sufficient NEPA documents.

The legal sufficiency of NEPA documents is an important element of the overall NEPA project development process for federally funded transportation projects. It involves identifying and addressing potential legal risks of proposed projects, many of which will be addressed by improving the overall quality, clarity, and reasoning of NEPA documents. Improvements in NEPA documents can be achieved through format and process flexibility and other innovative practices without compromising legal requirements and standards. The ultimate goal is to produce better NEPA documents for public use, improve the legal defensibility of the document and process, comply with the intent of NEPA, and make better project decisions. Seeking expert legal advice early and throughout the project and document development process is likely the best way to achieve the broader purposes of legal sufficiency.

The ultimate goal is to produce better NEPA documents for public use, improve the legal defensibility of the document and process, comply with the intent of NEPA, and make better project decisions.

5.1.1 What is the purpose of FHWA's legal sufficiency review of NEPA documents?

As the lead Federal agency for Federal-aid highway projects, the FHWA has a legal responsibility to comply with the various laws, regulations, and Executive Orders as appropriate and applicable to the NEPA project development and decision-making process for proposed projects. To manage this responsibility, the FHWA in compliance with the CEQ regulations,²⁰ issued its own regulations that require a formal legal sufficiency review for all final environmental impact statements (EIS)²¹ and final Section 4(f) evaluations²² prior to approval of the documents by the FHWA Division

²⁰ 40 C.F.R. 1507.

²¹ 23 C.F.R. 771.125(b).

²² 23 C.F.R. 771.135(k). Section 4(f) of the Department of Transportation Act is mentioned only in the context of the legal sufficiency review requirement. The specifics of legal sufficiency related to Section 4(f) evaluations are not addressed in this paper. For additional information on Section 4(f), refer to the FHWA Section 4(f) Policy Paper, March 1, 2005 (<http://www.environment.fhwa.dot.gov/projdev/4fpolicy.asp>).

Office. The primary purpose of the legal sufficiency review is to ensure that FHWA's NEPA process, Section 4(f) evaluation, and compliance of other environmental requirements will be sustained in federal court if the project is litigated. The formal legal sufficiency review applies to final EISs and Section 4(f) documents only, regardless of the likelihood of litigation, degree of controversy, project size, cost, or complexity. Other classes of action documents, EAs for example, may be subjected to legal sufficiency review if the project situation warrants or the FHWA Division Office requests it.

Legal sufficiency reviews are normally performed concurrently with the FHWA Division Office's routine review of administrative drafts of final EISs, prior to their approval and formal circulation. However, depending on project complexity, controversy, and related issues, the review may be initiated at the draft EIS stage or earlier. Legal sufficiency reviews are performed by FHWA attorneys located in one of the Agency's field offices and/or headquarters. These attorneys are familiar with the interpretations of NEPA law by the federal courts with jurisdiction over the states for which they are responsible.

Legal sufficiency reviews differ from other routine FHWA reviews and prior concurrence reviews, which are performed by FHWA headquarters²³ for those projects that meet the criteria specified in FHWA regulation.²⁴ Legal sufficiency reviews assess the document from the perspective of legal standards and litigation risk, rather than technical adequacy, which the attorney assumes to be correct and complete. The document is analyzed from the perspective of whether it was developed properly and answers the substantive questions that reasonably could be asked. The review focuses on the adequacy of the discussion of essential NEPA and project decision-making elements such as purpose and need, alternatives, scope of environmental resources and impact analysis, interagency coordination, public involvement, and responses to comments.

The reviewing attorney considers the likelihood of litigation and the specific issues that could be raised if the project were litigated. Even if the possibility of litigation is small, the attorney must determine that all applicable requirements have been substantially satisfied. The attorney will also highlight any obvious shortcomings in the documentation and recommend steps to achieve compliance and improve the quality of the document. Because of the inherent differences among reviewers, projects, and court decisions, legal sufficiency comments on one project may be different from those on another project with similar issues.

Seeking expert legal advice early and throughout the project and document development process is likely the best way to achieve the broader purposes of legal sufficiency.

²³ Office of Project Development and Environmental Review.

²⁴ 23 C.F.R. 771.125(c). For additional information on prior concurrence, refer to the FHWA guidance *EIS Prior Concurrence Procedures*, October 3, 2001 (<http://environment.fhwa.dot.gov/guidebook/pcguidance.asp>).

Legal sufficiency review comments can generally be organized into the following categories:

- **Compliance with applicable laws, regulations, Executive Orders, or Agency guidance.** These are substantial comments, which require appropriate attention.
- **Substantive questions or comments.** These may include, for example, comments on the adequacy of supporting information related to the elimination of alternatives or Section 4(f) feasible and prudent alternative analysis.
- **Consistency with FHWA policies.** This may include, for example, comments related to mitigation measures or evidence of coordination with other agencies and/or the public.²⁵
- **Editorial comments.** Generally, comments in this category are opinions on ways in which the document can be improved.

The primary purpose of the legal sufficiency review is to ensure that FHWA's NEPA process, Section 4(f) evaluation, and compliance of other environmental requirements will be sustained in federal court if the project is litigated.

5.1.2 How should legal sufficiency review comments be addressed?

How formal legal review comments should be addressed depends on the nature of the comment, as discussed above. Some analysis on the part of the project manager may be necessary if it is not clear how to address or resolve a comment. In these cases, it is advisable to seek clarification from the attorney, through the FHWA Division Office, to avoid successive review and comment iterations, which can have time, cost, and delay implications. It may be helpful to prepare a table or matrix that includes the comments and how and where in the document they have been addressed. This is a desirable practice for all substantive comments. Since the legal sufficiency review itself is a regulatory requirement, evidence of the review should be documented in the project administrative record.²⁶

Some written comments from legal counsel may be privileged attorney-client communications and if the privilege exists, the comments would not be subject to the Freedom of Information Act (FOIA),²⁷ although this may be different under state law. There are certain instances where FHWA chooses to put the comments in the project administrative record to provide evidence that the Agency took the requisite "hard-look" at an issue and indeed has not made an arbitrary and capricious decision, as discussed in the next question.

²⁵ 23 C.F.R. 771.105 Policy.

²⁶ For information on the administration record, refer to *Presenting and Defending Administrative Records*, Edward V. Kussy, February 1992, and other related information at FHWA's Re: NEPA online community of practice. (<http://nepa.fhwa.dot.gov/ReNepa/ReNepa.nsf/searchresults?searchview&query=Administrative%20Records>)

²⁷ 5 U.S.C. 552. For additional information refer to <http://www.fhwa.dot.gov/foia/>.

5.1.3 How is the potential for litigation and risk considered in the legal sufficiency review?

Legal sufficiency reviews are especially important for those projects where the potential for litigation is high to assess the risk associated with the issues that are most often the subject of legal challenge. The attorney's role in these cases is to assist the project development team in identifying the risks or degree of risk and recommending appropriate action to reduce those risks. This will generally involve additional efforts to strengthen certain areas of the NEPA document and the administrative record.

In order to fully appreciate the importance of the legal sufficiency review and legal risk, it is necessary to understand the standards of judicial review. Challenges to federal agency decisions are filed under the Administrative Procedure Act (APA).²⁸ Under the law, a federal court must defer to and uphold an agency's decision, unless the court finds the decision to be arbitrary and capricious, an abuse of agency discretion, or otherwise not in accordance with law. This deferential standard means that courts will give agencies the benefit of the doubt, but will not rubberstamp agency's decisions. Courts must carefully review the project record to determine that it supports the decision and provides evidence that the agency took the requisite "hard look" at environmental and other issues related to the project decision.

Any assessment of risk related to litigation, particularly during the NEPA process, is inherently subjective and uncertain. The assessment involves a prediction about how unknown judges might rule on claims by unknown plaintiffs, based on a record that has not yet been fully developed. Despite these uncertainties, it is possible to develop general conclusions about the degree of risk related to the project. Some of the factors to consider in assessing litigation risk include:

- Likelihood that the proposed project will be challenged in court due to organized opposition, a history of problems or controversy, or similarities to other litigated projects.
- Degree and grounds of public or agency controversy (environmental vs. "not in my back yard") related to the proposal or location of the project.
- Whether the project involves complicated resource or regulatory issues such as the probability of formal Endangered Species Act Section 7²⁹ consultation, environmental justice,³⁰ or complex Clean Water Act Section 404³¹ permitting issues.

Legal sufficiency reviews assess the document from the perspective of legal standards and litigation risk, rather than technical adequacy, which the attorney assumes to be correct and complete.

²⁸ 5 U.S.C. 552.

²⁹ Endangered Species Act (ESA) 16 U.S.C. 1531-1544, as amended; 50 C.F.R. 402.

³⁰ For information on environmental justice, refer to <http://www.fhwa.dot.gov/environment/ej2.htm>.

³¹ Clean Water Act (CWA) 33 U.S.C. 1251; 40 C.F.R. 230, 33 C.F.R. 320-330.

Project type, size, and cost are also considerations but are relative measures and should be considered in light of the locale, the resources, applicable requirements, and other issues. Although small projects can be complex and controversial, large projects are generally both.

5.1.4 Is there an acceptable degree of litigation risk?

There is a degree of risk associated with almost every transportation project EIS. The legal sufficiency review attempts to determine that the NEPA document and project development process is defensible but it cannot guarantee that it is bulletproof against all possible legal challenge. A baseline level of legal adequacy must be achieved in order for an attorney to determine that the document is legally sufficient. If a document does not meet the minimum standards in the reviewing attorney's opinion, the attorney will advise against its approval and release until corrections or improvements are made. Attorneys will provide advice about acceptable risks and suggest ways to reduce the risk of specific projects and situations. Whether a particular litigation risk is considered acceptable will depend on the opinion and experience of the attorneys and approving officials.

5.2 What are some common trouble spots related to the legal sufficiency of NEPA documents?

The common issues of legal sufficiency and litigation risk are also those elements of the NEPA process that are essential to environmental compliance and project decision-making. These generally include the following issues.

Purpose and Need.³² Project purpose and need is the linchpin of any NEPA study and is often a point of criticism and target in litigation. Common concerns include:

- The project purpose and need is defined too narrowly. This can lead to criticism that the range of reasonable alternatives was improperly narrowed.
- Project goals are established either vaguely or too broadly. For example, the goal might be stated as "improving mobility in the project area." Vague statements such as this make it difficult to identify the actual purpose of a project or determine that the project is really needed. Also, inclusion of all nine purpose and need examples listed in the FHWA Technical Advisory³³ is a problem. FHWA's guidance provides these categories of purpose and need as examples; it does not require that they be incorporated into every project.

³² For information on project purpose and need, refer to FHWA's Web site at <http://www.environment.fhwa.dot.gov/projdev/tdmelements.asp>.

³³ T6640.8A: *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, October 31, 1987 (<http://environment.fhwa.dot.gov/projdev/impTA6640.htm>).

- Local agencies' policy and goals established in transportation, land use, and other relevant planning studies are not addressed in the purpose and need statement. These objectives provide an important foundation and support for the purpose and need, and should be considered in defining a project's objectives. Evidence of this consideration should be documented in the administrative record.

Alternatives Screening and Analysis.³⁴ Related to purpose and need, the development and screening of alternatives is a frequent cause of criticism and target in litigation. The record must support the development and elimination of alternatives. Some common concerns include:

- Failing to explain the alternative development, screening, and evaluation process adequately so that it can be found rational, reasonable, and complete.
- Eliminating alternatives based on generalities, without adequate or appropriate analysis to support the decisions.
- Eliminating alternatives based on outdated information or older studies that may no longer be reliable.
- Failing to reconsider alternative screening decisions later in the project development process when new information becomes available. For example, it may be necessary to revisit the cost estimates of alternatives eliminated on that basis, if the costs of alternatives under consideration increase to levels that were considered unacceptable at the screening stage.
- Over-reliance on weighting and scoring techniques. Numerical rating systems, sometimes known as weighting and scoring, can be useful for screening alternatives, particularly if numerous alternatives are being considered. However, the results of these techniques can be misleading if important information is not available or if too much or too little weight is given to certain factors. For example, a scoring technique that does not take into account regulatory factors such as Section 404 and Section 4(f) may not provide an informed basis for screening alternatives. This does not mean that scoring techniques should be avoided; they should be used appropriately and with care.

Project Segmentation.³⁵ The FHWA NEPA regulations require project alternatives to have logical termini, independent utility, and not restrict consideration of alternatives for reasonably foreseeable future

³⁴ For information on alternatives analysis, refer to FHWA's Web site at <http://www.environment.fhwa.dot.gov/projdev/tdmalts.asp>.

³⁵ 23 C.F.R. 771.111(f). For additional information on logical termini, refer to *The Development of Logical Project Termini*, November 5, 1993, at <http://environment.fhwa.dot.gov/projdev/tdmtermini.asp>.

transportation improvements. To establish a solid foundation for a study, it is helpful to include in the NEPA document and administrative record information that supports the project and alternatives termini and addresses the criteria established in the regulations. The discussion of how and why termini were chosen helps support the purpose and need and provides evidence of the project's independent utility within these boundaries. It also provides additional evidence that the agency took the requisite "hard look" at all relevant issues.

Study Area and Boundaries. Appropriate study area and environmental resource boundaries are critical to the NEPA process, yet are often described vaguely or without clear rationale. The study area is sometimes defined by limited boundaries, despite the fact that project impacts extend over a wide geographic area or include different and overlapping environmental resource boundaries. Appropriately established project and study area boundaries will take into account the resources and impacts under analysis.

Indirect and Cumulative Effects Analysis.³⁶ The indirect and cumulative effects analysis required by CEQ regulations is often the target of criticism and litigation. Indirect and cumulative effects analysis in an environmental document, especially an EIS, should be thoroughly reviewed and considered in light of current guidance, case law, and the particular issues in the project study area related to land use, development, and local planning goals.

Compliance with Procedural Requirements. The NHPA Section 106³⁷, ESA Section 7, and other procedural processes require the lead agencies to consult with resource and regulatory agencies concerning project impacts to specific resources. If the document or administrative record contains little or no evidence of how the procedural requirements were satisfied, it may not pass muster. One way to address this concern is to include a summary in the relevant section of the NEPA document that highlights the consultation process, with key dates, participants, and reference to related documents in the record. It is particularly important to explain how the consultation process was resolved and include specific information regarding the conclusion of the process (e.g., a memorandum of understanding for historic resources). It will be helpful to include related correspondence or summary in an appendix to the NEPA document.

³⁶ Guidance on indirect and cumulative effects includes FHWA's *Interim Guidance on Indirect and Cumulative Impacts Related to the NEPA Process*, January 31, 2003 (<http://environment.fhwa.dot.gov/guidebook/Gqaimpact.htm>); CEQ's *Guidance on Consideration of Past Actions in Cumulative Effects Analysis*, June 24, 2005 (http://ceq.eh.doe.gov/nepa/regs/Guidance_on_CE.pdf); *Consideration of Cumulative Impacts In EPA's Review of NEPA Documents*, May 1999 (<http://www.epa.gov/compliance/resources/policies/nepa/cumulative.pdf>); and CEQ's *Considering Cumulative Effects under the National Environmental Policy Act*, January 1997 (<http://ceq.eh.doe.gov/nepa/ccnepa/ccnepa.htm>).

³⁷ National Historic Preservation Act, 16 U.S.C. 470, 33 C.F.R 800.

Compliance with Substantive Requirements. Legal sufficiency reviews will most certainly look at the applicable substantive requirements, those that will potentially influence the ultimate project decision. Two important and common requirements in particular include Section 4(f) and Section 404, both of which require specific findings prior to approval of the project or permit. For projects subject to these requirements, seemingly minor changes in wording can substantially affect perceived adequacy and legal defensibility of the documentation. In some cases, it will be beneficial to prepare the sections of the NEPA document that address these requirements with input from legal counsel.

Responses to Public Comments. For some high-profile projects, public comments on draft EISs can be voluminous and substantive. Responding to these comments can be challenging and time consuming. In many cases, responses will be prepared by a team, which can make the process more efficient, but may also introduce inconsistency or result in responses that fail to address the substantive issue. To avoid these problems, the project team should work closely with the subject matter experts, FHWA, and if necessary, seek the advice of an attorney to adequately respond to substantive issues.

Responses to Resource Agency Concerns. For large and complex projects, tension or disagreement can develop between the lead agency and resource agencies. It is important that relevant and reasonable resource agencies' concerns be considered and adequately addressed. Courts often look to resource agencies as the public sector subject matter experts, and failure on the part of the lead agency to adequately respond to their comments or address their concerns can present serious problems during litigation.

Accounting for New Information or Circumstances. Essential information related to the project analysis and decision-making must be kept current and up-to-date. Project studies should be continually updated, with new information incorporated into the document and administrative record as it becomes available. This is especially important for those projects in which the NEPA processes have been lengthy or have been re-initiated after a period of dormancy.

Courts often look to resource agencies as the public sector subject matter experts, and failure on the part of the lead agency to adequately respond to their comments or address their concerns can present serious problems during litigation.

5.2.1 What role does the administrative record play in legal sufficiency reviews?

The administrative record³⁸ is a fundamental component of the NEPA project decision-making and documentation process. It is intended to provide evidence that the agency's decision was derived in accordance with NEPA and is in compliance with other requirements and the APA. The administrative record consists of the NEPA documents (Environmental Assessment, Draft Environmental Impact Statement, Final Environmental Impact Statement, and Record of Decision) and other documentation that

³⁸ See Footnote 7.

supports or is referenced in the NEPA documents, such as public hearing transcripts, technical reports, and so forth. The record includes written correspondence, e-mail, meeting minutes, and references to information that support the facts and decisions specific to the NEPA process, such as purpose and need, alternatives development, impact analysis, public involvement, and interagency coordination.

In developing an administrative record, information that contributes to evidence of the deliberative process should be included. Documentation of contrary opinions or conflicting data and the resolution of the same are critical. When the relevance of the information to the project story or decision is limited, or can otherwise be represented by other items in the administrative record, then exclusion is reasonable. A good administrative record should fully reflect how and why the agency reached its decision.

Because the administrative record itself can become voluminous and is by nature generated by many different people, at a variety of locations, and over a considerable amount of time, a project-specific plan for managing the administrative record is generally necessary and recommended. The lead agency should be given the opportunity to review and approve the administrative record plan very early in the project development process. The administrative record should be assessed periodically throughout the project development process for completeness and adequacy, not after a lawsuit is filed.

The lead agency should be given the opportunity to review and approve the administrative record plan very early in the project development process.

5.2.2 How does overall document quality relate to legal sufficiency?

The same characteristics that make an EIS clear and understandable to the general public and the decision-makers also make it easier for an attorney to determine legal sufficiency or a court to uphold the agency's decision. If the document is disorganized, poorly written, or incomplete, it will be more difficult to assess compliance and determine the degree of litigation risk. Bad grammar, in and of itself, may not be a legal matter, but for an attorney trained in the careful use of language, it is an unavoidable distraction and almost certain to elicit comments. Poor organization makes it difficult to find information and check for consistency. Poor writing, excessive use of jargon, and obtuse or missing conclusions will make it harder for an attorney or other reviewer to understand what the document is saying. Missing or incomplete information could mean longer review times, since the attorney cannot evaluate what is not there. Further, poorly written or organized documents may cause a reviewing court to suspect the substance of the document.

Document quality and clarity simply makes it easier for a reviewing attorney or court to understand the document and conclude that the decisions were reasonable and based on the demonstrable facts and applicable law. Poor quality documents may not be considered legally sufficient because the public, the decision-makers or a court could not reasonably be expected to understand the document.

5.3 What can practitioners do to create better and legally sufficient NEPA documents?

Creating quality and legally sufficient documents can be a complex undertaking, considering the variety of substantive and procedural issues involved in major transportation project decision-making. One way to improve the quality of the NEPA process and assure legal sufficiency of a document is to involve an attorney in the project development process early and throughout the process. The attorney should be familiar with NEPA law related to transportation projects. This involvement may be as part of the project development team or through participation in the project at key stages in the process.

Early attorney involvement in the NEPA process is supported by the premise that practicing preventive law provides peace of mind, serves the best interest of the project and the public, and allows any needed changes in the document to be made when they are easier and before certain positions or commitments have been presented to the public and other agencies. In addition to the active and early involvement of an FHWA attorney, the project sponsor may enlist the services of its own attorney to serve as a member of the project team or provide assistance. The most important qualification is that the attorney be knowledgeable of NEPA, the related substantive and procedural environmental requirements, and the APA.

In most instances, simply asking whether an attorney should be involved is an indicator that one should be involved.

Early attorney involvement will:

- Help ensure that the information contained in the document is consistent with the most recent interpretations of NEPA law.
- Help address potential litigation risks and issues before problems develop.
- Provide timely consideration, consistency, and appropriate compilation of necessary materials for the administrative record.
- Provide assistance in drafting and preparing a project's environmental documents, which should minimize reviewer comments and thus expedite document development and processing.

Legal advice should be sought at the earliest useful opportunity, well before the time attorneys are typically called upon to review completed environmental documents. By no means is there an easy test for when to involve an attorney in project development, but in most instances, simply asking whether an attorney should be involved is an indicator that one should be involved. Public controversy, project size and/or cost, potential resource issues, and types of impacts are some of the more common things to consider.

5.3.1 What is the role of the attorney in early legal involvement?

The following suggestions are offered for when and why to solicit attorney involvement:

1. During scoping, the project team should work with an attorney to identify the key project development decision points where early

attorney involvement is warranted and would be the most beneficial. Some potential points are the development of purpose and need, concurrence in the range of alternatives, Section 4(f) analysis and determinations, and other decision points that influence the NEPA process. After consulting with its attorney, the project sponsor should coordinate with the appropriate FHWA attorney.

2. Seek attorney input in setting up a coordinated system for maintenance of project documentation. Complex projects generate thousands of pages of project information, some of which will be included in the administrative record. Working out the process in advance will eliminate or reduce confusion related to preparation of the project administrative record. Consulting with an attorney in the development of the administrative record can improve the quality of the NEPA process and the legal sufficiency of the document. Also, the contents of the administrative record can be periodically shared with the attorney in the form of an organized “contents” page or outline. Sharing such an outline can serve as a trigger if certain activities or interim process milestones need additional attention.
3. Foster an atmosphere of cooperation, where asking questions earlier is preferable to fixing problems later in the process. There are those that believe asking an attorney for advice or input should be avoided unless absolutely necessary. This “pay me later” approach is counter-productive for several reasons. For example, problem avoidance is usually faster and less expensive than problem remediation, and legal requirements will vary depending on the location of the project, environmental resource impacts, and other context-related issues.
4. Provide documents to the FHWA attorney for review at key process stages. While the legal sufficiency review is required for the final EIS, attorney review at the draft EIS stage or earlier will provide an excellent start in the development and preparation of a legally sufficient final EIS. Also, once the draft EIS has been distributed to the public there is no way to address problems that exist in that document. It makes sense to address concerns as early as possible and make changes before the document is made public. FHWA attorneys would like to see the NEPA document at the draft EIS stage, especially for those projects in which litigation is highly probable.
5. Have the project sponsor’s attorney perform a preliminary legal sufficiency review and share his or her comments with the FHWA attorney. It may be helpful for the attorneys to discuss the comments or issues with each other prior to providing them to the project development team. Use of a quality review process at both the State DOT and the FHWA Division Office can “certify” that the document has been professionally reviewed and is believed to be legally sufficient by the professional staff.

While the legal sufficiency review is required for the final EIS, attorney review at the draft EIS stage or earlier will provide an excellent start in the development and preparation of a legally sufficient final EIS.

5.3.2 Conclusions regarding legal sufficiency

The FHWA legal sufficiency review is required by regulation for final EIS documents and is intended to assess and ensure the legal adequacy of the federal decision-making process. Because of this fact, these reviews should be thought of as a normal and necessary part of the project development process.

Legal sufficiency depends on the substantive content, procedural compliance, and to some degree the overall document quality and readability. These reviews will assist FHWA, the state DOTs, and other Applicants in understanding the litigation risks associated with a particular project, environmental document, and administrative record. A legally sufficient NEPA document does not, however, eliminate the risk of legal challenge or guarantee success if a project is litigated.

The early involvement in the project development process of attorneys experienced in NEPA, including FHWA counsel, is a key factor in reducing litigation risks related to environmental documentation by opening lines of communication on key issues early and positively. Early involvement by appropriate legal counsel also will help to avoid delays in established documentation and project delivery schedules.

Chapter 6 Achieving Continuous Improvement

This Joint AASHTO/ACEC/FHWA report on improving environmental documents offers an important new beginning to DOTs and their consultants, and to FHWA and resource agencies, in how environmental documents might be developed and how they can become more effective in communicating information and satisfying legal requirements.

For some time, environmental documents have grown in size but may have declined in quality. This report offers an opportunity to reverse that trend but it is very much a beginning rather than the end of the story. Only through numerous and diverse attempts to implement the principles and practices suggested in this report will the fruits of this immediate effort be reaped and the seeds for continuous learning and future improvement be sown.

Preparing environmental documents is a process that will be with us as long as we continue to propose improvement to our infrastructure. There will be ample opportunity to measure progress and results, evaluate shortcomings and opportunities, and perhaps to reconvene similar work groups in the years ahead to assess progress and offer new insights.

A key element of this process will be implementation of the Education Team's recommendations regarding an effective curriculum and adequate training opportunities for NEPA practitioners.

To facilitate this learning process, AASHTO plans to use its Center for Environmental Excellence and the Center's Web site³⁹ to disseminate the results of this effort, including education and training resources, keeping the subject alive and relevant for practitioners in the months and years to come.

³⁹ The AASHTO Center for Environmental Excellence Web site may be accessed at www.environment.transportation.org.

Resources

NEPA Style Guides

Environmental Document Quality Improvement Tools, Utah DOT Web site, www.dot.state.ut.us/index.php/m=c/tid=1028.

The Environmental Style: Writing Environmental Assessments And Impact Statements, R.P. Detwiler National Nuclear Security Administration (NNSA) Office of General Counsel, October 2005, http://www.eh.doe.gov/nepa/tools/guidance/Volume2/2-12-the_environmental_style.pdf.

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Synthesis of Data Needs for EA and EIS Documentation—A Blueprint for NEPA Document Content, National Cooperative Highway Research Program Project 25-25(01), [http://www4.trb.org/trb/crp.nsf/reference/boilerplate/Attachments/\\$file/25-25\(1\)_FR.pdf](http://www4.trb.org/trb/crp.nsf/reference/boilerplate/Attachments/$file/25-25(1)_FR.pdf).

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WSDOT Reader Friendly Document Toolkit, <http://www.wsdot.wa.gov/environment/compliance/ReaderFriendly.htm>.

General Plain Language Style Guides

Communications Guide for Federal, State, Regional, and Local Communicators, Federal Communications Network, Dec. 2000.

The Plain Language Action and Information Network (PLAIN), hosted by FAA, www.PlainLanguage.gov.

Planning in Plain English, Natalie Macris, American Planning Association.

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Writing User-Friendly Documents, National Partnership for Reinventing Government, Bureau of Land Management, 1993.

Sample EISs

Alaskan Way Viaduct Draft EIS,
<http://www.wsdot.wa.gov/projects/Viaduct/DEIS.htm>.

Vancouver Rail Project EIS, WSDOT, Feb. 2002.

Other Resources

Some Modest Suggestions for Improving Implementation of the National Environmental Policy Act, CEQ General Counsel Dinah Bear, University of New Mexico School of Law, *Natural Resources Journal*, Vol. 43, No. 4, Fall 2003.

Legal/Regulatory Requirements and Guidance

Council on Environmental Quality Regulations for Implementing NEPA, 40 CFR 1500 through 1508, http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm.

FHWA Technical Advisory T 6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*,
<http://www.fhwa.dot.gov/legsregs/directives/techadvs/t664008a.htm>.

Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process, Federal Highway Administration, January 31, 2003,
<http://environment.fhwa.dot.gov/guidebook/Gqaimpact.htm>.

The NEPA Task Force Report to the Council on Environmental Quality Modernizing NEPA Implementation,
<http://ceq.eh.doe.gov/ntf/report/index.html>.

National Environmental Policy Act,
<http://ceq.eh.doe.gov/nepa/regs/nepa/nepaeqia.htm>.



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