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TABLE OF CONTENTS

Page:

AUTHOR'S ACKNOWLEDGMENTS	ii
GUIDANCE FOR MANAGING LEGAL RISKS IN THE NEPA PROCESS	1
Early Identification and Assessment of Legal Risks	1
Methods for Managing Legal Risks	2
Legal Risk Assessment Checklist for Transportation Projects	6
BACKGROUNDER: CASE LAW AND CASE STUDIES OF LEGAL RISK IN THE NEPA PROCESS	13
Introduction.....	13
Organization of this Section.....	14
Case Law.....	15
Purpose and Need.....	15
Range of Alternatives.....	17
Integration of NEPA and Other Environmental Processes.....	18
Section 4(f) Resources and Other Historic Sites.....	19
Wildlife and Habitat Issues.....	21
Impacts on Wetlands and Other Waters of the United States	22
Coordination with Other Environmental Reviews	23
Case Studies.....	23
Intercounty Connector Project	24
Mountain View Corridor	25
Alaskan Way Viaduct Replacement Project	26
The 11th Street Bridge Project.....	28
Presidio Parkway Project	28
Nelsonville Bypass Project	29
Identifying, Assessing and Addressing Risk	31
Identifying Risk.....	32
Type of Project	32
Resources Affected	34
Managing Risk.....	37
Responding to the Risk of Administrative Delay	38
Responding to Vocal Opposition.....	40
Responding to the Risk of Litigation	41
Deciding What to Do: Evaluating the Level of Risk and Using Experts	43
Conclusion	45

APPENDIX A: KEY OBSERVATIONS FROM INITIAL INTERVIEWS..... A-1

Early Risk Identification and Risk Factors.....A-1

Type of Project A-1

Resources Affected A-3

Other Indicators..... A-3

Strategies for Managing RiskA-3

Identify Issues Early A-3

Engage Expert Legal and Technical Advisors Early On A-4

Engage the Public Early On A-4

Coordinate with Resource Agencies and FHWA A-4

Prepare for Litigation from the Outset A-4

General ObservationsA-5

APPENDIX B: LIST OF ACRONYMS/ABBREVIATIONS..... B-1

SECTION 1

Guidance for Managing Legal Risks in the NEPA Process

This guidance is intended to assist federal and state transportation agencies in managing legal risks in the environmental review process for transportation projects, particularly highway projects, as part of a comprehensive approach to project risk management. The intended audience for this guidance includes Federal Highway Administration (FHWA) and State department of transportation (State DOT) staff, as well as the consultants who work for them in preparing environmental documents under the National Environmental Policy Act (NEPA) and related federal and state laws.

In this guidance, the term “legal risk” includes any risks related to legal requirements, including permitting delays as well as litigation-related delays.

This guidance focuses on two aspects of managing legal risks:

- Early identification and assessment of legal risks
- Effective methods for managing legal risks.

This guidance document is derived from the legal research documented in Section 2 of this report. Section 2 includes a summary of case law involving challenges to environmental reviews for transportation projects, as well as case studies of six projects in which legal risks were effectively managed. The research and this guidance document were prepared under the National Cooperative Highway Research Program (NCHRP), project 20-24(71), and is an extension of a previous effort, *Guide for Managing NEPA-Related and Other Risks in Project Delivery*, published as NCHRP Web-Only Document 183 Volume 1.

Early Identification and Assessment of Legal Risks

The premise of this guidance is that, in most cases, it is possible to identify important legal risks early in the environmental review process - and, if those risks are identified early, the transportation agencies are in a better position to manage those risks.

To assist practitioners in identifying and assessing risks, this guidance includes an annotated checklist. The checklist includes various factors that may indicate a heightened potential for legal risk. Every project is different. Practitioners should therefore use this checklist as a general guide, and not as an exhaustive list of the potential risks that could face a particular project.

The identification and evaluation of risks should be a team effort. It may involve a single risk-assessment meeting, or a longer-term, iterative process in which team members identify and discuss potential risks. Either way, it is helpful to involve multiple team members, because the sharing of information helps to uncover facts that may indicate the presence of legal risks. The involvement of multiple team members, with varying background and experience, reduces the risk of blind spots and the risk of greatly understating or overstating the magnitude of risks.

Methods for Managing Legal Risks

This guidance summarizes a range of strategies that federal and state transportation agencies have used to manage legal risks on complex projects. Many of these strategies may seem obvious, but experience shows that applying these strategies effectively - and in a timely manner - takes considerable forethought and discipline.

By compiling these common strategies in one document, this guidance is intended to give practitioners an easy-to-use menu of risk management options. Of course, not every strategy is appropriate for every project. These strategies can be adapted, as appropriate, to the circumstances of each project.

1. Build a Strong Project Team

- Establish a small core team responsible for managing preparation of the NEPA document and related technical studies. Consider including the FHWA environmental lead, the State DOT project manager, the consultant project manager, and legal counsel.
- Convene regular meetings of the core project team (in person or by phone) and allow time for discussion of difficult/contentious issues related to the NEPA document - e.g., disputes over whether which data to use, whether to change the methodology, how to respond to criticism from an agency or stakeholder.
- Encourage a culture of open discussion, probing questions and even debate within the project team; discourage group-think.
- Engage a technical editor to review all chapters of the NEPA document and relevant technical reports for clarity and readability, especially on issues that may become the subject of litigation.
- Ensure that the project team includes technical experts with strong experience in each of the subject areas that involve potential legal risks.
- Include experienced legal counsel on the project team to assist in assessing legal risks, reviewing NEPA documents, and responding to comments.

2. Take Time to Prepare Before Initiating the NEPA Process

- After the project team is established, take time to prepare for the NEPA process, rather than initiating the process immediately. Don't rush to issue the Notice of Intent just as a way to show progress.
- Preparing for the NEPA process may include activities such as:
 - Develop a written plan that outlines the team's overall approach to the NEPA process, focusing on how NEPA requirements will be integrated with consultation and permitting requirements under other laws.
 - Gather previous studies and assess their role in the NEPA process, including the potential to adopt decisions or analyses from those studies.
 - Assess the adequacy of existing transportation models for use in the NEPA process, and allow time to make any necessary improvements before the NEPA process begins.
 - Assess the adequacy of existing environmental data, including any geographic information systems (GIS) databases. If gaps are found, determine how much time is needed to fill the gaps.
 - Consider opportunities to use programmatic approaches to streamline the NEPA process.
 - Establish working relationships within the project team (including between State DOT and FHWA), including team meeting schedules.
 - Meet with regulatory and resource agencies to brief them on the project, assess their level of interest, and identify any potential concerns.

- Train the project team on issues related to document management, public-records laws, administrative records, and litigation preparation.

3. Conduct a Legal Issue Assessment Early in the NEPA Process

- Convene a team of experts (including legal counsel), early in the NEPA process, to conduct a legal issue assessment and develop a plan for responding to the identified risks.
- Conduct an open-ended discussion of legal risk with the project team; following that discussion, review and complete the “Legal Risk Assessment Checklist” (Attachment 1 to this Guidance).
- Don’t assume that there will be no controversy just because you are not seeing it up-front.
- The legal issue assessment should ask:
 - What legal or regulatory challenges are possible?
 - How likely are they to happen?
 - What can be done in advance to reduce the likelihood?
 - What should be done if and when it did happen?
- Update the legal issue assessment at key milestones during the NEPA process - e.g., after receiving comments on the DEIS.
- Refer to the legal issue assessment when evaluating the legal sufficiency of NEPA documents and in responding to comments on NEPA documents.

4. Actively Engage with All Stakeholders

- Build relationships with key stakeholders early in the process, even before the NEPA process begins - e.g., with a collaborative planning exercise that examines future transportation and land use scenarios.
- Be proactive in including and welcoming those who may oppose the project. It is useful to engage early with potential adversaries to both explore opportunities to avoid a legal challenge and to become aware of the issues likely to arise if there is such a challenge.
- Maintain a consistent two-way flow of information with key stakeholder groups, through formal and informal channels.
- Seek to understand the relationships between non-governmental stakeholders and public agencies.
- Seek to understand underlying issues and concerns regarding the project, not just the specific concerns expressed about the analysis in the NEPA document.
- Use multiple channels to communicate with the public throughout the NEPA process. Do not become overly reliant on a single channel, such as the project website or public meetings.
- Customize the public involvement activities to meet the needs of special populations such as low-income, minority, elderly, and limited-English proficiency.
- Consider creating smaller-group settings - e.g., task forces, advisory committees, etc. - in which individuals from varying perspectives can meet to provide input and/or seek to resolve disputed issues.
- Document meetings with stakeholders and provide participants with drafts of meeting summaries for them to review.

5. Coordinate Early and Often with Resource Agencies

- Establish an interagency group of “principals” who meet on a regular basis to discuss and resolve issues that could not be resolved at the staff level, with or without a mediator.
- Establish an interagency working group to address technical issues related to the NEPA document and project permitting.

- Meet with agencies, after receiving comments on DEIS, to discuss their concerns and how they might be addressed, rather than just responding to their comments in writing in the FEIS.
 - Provide opportunities for resource agencies to review and comment on drafts of technical reports and relevant chapters of the NEPA document while the documents are in production. Take particular care to address comments of cooperating agencies. Establish protocols for sharing documents that are consistent with maintaining confidentiality as well as complying with public-record requirements.
6. Use the Scoping Process Effectively
- Consider potential segmentation risks when determining the project termini, prior to issuing the Notice of Intent to prepare the EIS.
 - Use the scoping process to re-assess the project scope and determine whether expansion (or narrowing) is appropriate. Issues such as project termini and range of alternatives are often a major focus of NEPA litigation.
 - Incorporate avoidance, minimization, mitigation, and enhancement measures into the alternatives from the outset, rather than doing so only in response to specific legal requirements or demands from agencies or stakeholders.
 - Inform agencies and the public of decisions made regarding the scope of analysis and methodology for the NEPA document after scoping comments have been evaluated.
7. Use Collaboration and Dispute-Resolution Techniques
- Consider whether it would be helpful to engage expert assistance from qualified neutrals to keep the collaboration process positive and on track.
 - Be willing to take a step back and re-assess alternatives during the NEPA process when faced with strong public opposition or when presented with new ideas that have the potential to be reasonable alternatives.
 - When faced with an impasse, consider convening a stakeholder task force (or other stakeholder group) to receive input and seek to develop consensus on difficult issues, with or without a mediator.
 - Ensure the team members with appropriate technical expertise present or readily available when meeting with agencies and stakeholders.
 - Consider adding or refining alternatives in response to specific requests from agencies or stakeholders, especially when there is substantial public interest in an alternative.
 - Consider conducting special studies to address specific environmental issues that have become a particular area of interest among agencies or groups.
8. Prepare a Readable, High-Quality NEPA Document
- Ensure that the purpose and need statement is clearly articulated and that each element of the purpose and need is well-supported with relevant data.
 - When developing the purpose and need, think about what measures will be used to evaluate the alternatives' ability to meet the purpose and need.
 - Include citations to relevant data supporting the purpose and need.
 - Use visuals to complement the data, illustrating the purpose and need.
 - Provide an opportunity for public and agency comment on the draft purpose and need statement, and address any comments received.
 - Establish a systematic and objective process for screening alternatives, tailored to the circumstances of the project, and describe the steps in that process (not just the results) in the NEPA document.

- Use the scoping process to generate a wide range of potential alternatives for consideration in the screening process.
- Before screening begins, develop and document the methodology that will be used in the screening process, including screening criteria.
- Ensure that reasons for eliminating alternatives are consistent with the Council on Environmental Quality regulations and guidance.
- If the screening criteria are changed or new data is obtained after screening has occurred, consider whether to “re-screen” alternatives to ensure that previous decisions remain valid.
- Provide an opportunity for public and agency comment on the screening methodology and screening results, and address any comments received.
- Document the methodologies used in the environmental impact analysis, using language that can be understood by non-technical readers. “Show your work.”
- When relying on previous studies, such as planning documents, take care to ensure that the data remains current and that the findings are appropriate for use in the NEPA process.
- Give close attention to issues that are frequently litigated, even if they are not heavily emphasized in comments during the NEPA process.
- Ensure that responses to comments on the NEPA document are well-organized, thorough, and easy to cross-reference to the comments.
- Have the lead agency’s experts prepare thorough technical responses to expert reports submitted by commenters (e.g., on traffic modeling.)
- Use a reader-friendly format for the NEPA document to make it easier for elected officials and the public (and potentially judges and their law clerks) to understand the analysis and conclusions.
- Acknowledge the limitations of quantitative methods that are used to analyze environmental impacts - e.g., the difficulty of quantifying changes that are subjective, such as visual impacts or community cohesion impacts.
- Utilize legal counsel throughout the preparation of the NEPA document to assist in developing a legally sufficient document and a strong administrative record.
- Hold regular meetings with legal counsel during development of the NEPA document to obtain legal advice as decisions are being made, rather than obtaining legal advice only after it is submitted for legal sufficiency review.
- Review the main body of the NEPA document and all technical reports for inconsistencies - both within each document, and between the main body and the technical reports.

9. Anticipate the Need to Prepare an Administrative Record

- Provide training to project team members regarding confidentiality, public-record requests, and administrative records.
- Provide training to project team members regarding legal requirements and case law relevant to issues identified in the risk assessment.
- Establish a protocol for maintaining an organized, up-to-date project file throughout the NEPA process.
- Regularly review the project file to ensure that filing protocols are being followed.
- Begin preparing an administrative record when the NEPA process is approaching completion.
- Seek to have the administrative record completed before the end of the 150-day statute-of-limitations period for challenges to the ROD.

10. Anticipate and Manage Post-NEPA Litigation Risks

- After the completion of the NEPA process, remain alert for developments that could give rise to the need for a reevaluation or supplemental EIS; avoid taking actions that inadvertently create new opportunities for litigation.
- Where necessary, prepare reevaluations or supplemental NEPA documents to address new information or changes in the project.
- Establish an environmental commitments database to track implementation of commitments made in the NEPA document, in order to avoid the delays or other risks that could result if commitments are not implemented.

Legal Risk Assessment Checklist for Transportation Projects

#	Issue	Indicators of Higher Risk	√
1.	The Project		
1.1	NEPA Class of Action	<ul style="list-style-type: none"> • The project requires an EIS. • An EA/FONSI is anticipated, but the appropriateness of a FONSI is a close call. 	<input type="checkbox"/>
1.2	Capacity Expansion	<ul style="list-style-type: none"> • The project involves construction on new location. • The project involves a major expansion of capacity on an existing facility. 	<input type="checkbox"/>
1.3	Project History	<ul style="list-style-type: none"> • The project has a lengthy, complex history - e.g., numerous planning studies and/or previous unsuccessful environmental studies. 	<input type="checkbox"/>
1.4	Multi-State	<ul style="list-style-type: none"> • The project is located in two or more States, and thus has two or more States as project sponsors. 	<input type="checkbox"/>
1.5	Multi-Modal	<ul style="list-style-type: none"> • The project requires approval of two or more modal agencies within USDOT. 	<input type="checkbox"/>
1.6	Multi-Agency	<ul style="list-style-type: none"> • The project requires approval from other federal agencies, in addition to USDOT - e.g., U.S. Army Corps of Engineers, U.S. Coast Guard, etc. 	<input type="checkbox"/>
1.7	Study Area	<ul style="list-style-type: none"> • The project involves a very large study area - e.g., a multiple counties or multiple States. 	<input type="checkbox"/>
1.8	Media Attention	<ul style="list-style-type: none"> • The project has attracted a high degree of media attention in the project area. 	<input type="checkbox"/>
1.9	Public Opinion	<ul style="list-style-type: none"> • Public opinion about the project is polarized, with well-defined groups of advocates and opponents. 	<input type="checkbox"/>
2.	Funding		

#	Issue	Indicators of Higher Risk	√
2.1	Funding Gap	<ul style="list-style-type: none"> There is a large gap between available funds and estimated project costs. There is substantial uncertainty and/or political controversy about how to pay for the project. 	<input type="checkbox"/>
2.2	Tolling	<ul style="list-style-type: none"> The project involves a proposal to toll an existing non-tolled facility, or to construct a new toll facility. The project involves tolling and is located in an area where tolling has become controversial. 	<input type="checkbox"/>
2.3	“Major Project”	<ul style="list-style-type: none"> The project has an estimated cost of \$500 million or more - i.e., a ‘major project’ under 23 USC 106. 	<input type="checkbox"/>
3. Purpose and Need			
3.1	Clarity and Consistency	<ul style="list-style-type: none"> The Purpose and Need is not well-defined at the outset of the NEPA process - e.g., there is only a vague statement of purpose, or there are multiple, conflicting statements of purpose. The Purpose and Need has been modified several times, before or during the NEPA process. The project definition (e.g., project termini, major project elements) has changed one or more times during the NEPA process. 	<input type="checkbox"/>
3.2	Data Quality	<ul style="list-style-type: none"> The data underlying the Purpose and Need is incomplete or outdated at the outset of the NEPA process - e.g., old traffic forecasts. 	<input type="checkbox"/>
3.3	Model Quality	<ul style="list-style-type: none"> Questions have been raised by agencies or stakeholders regarding the traffic forecasts used to support the Purpose and Need - e.g., claiming that forecasts are overstated. 	<input type="checkbox"/>
3.4	Reliance on Previous Studies	<ul style="list-style-type: none"> Considerable time has passed since the previous studies were completed. There is disagreement among agencies about whether those studies can be relied on as the basis for the P&N. 	<input type="checkbox"/>
4. Alternatives			
4.1	Mode	<ul style="list-style-type: none"> Transportation mode has not been resolved in the planning process, prior to initiation of NEPA. 	<input type="checkbox"/>

#	Issue	Indicators of Higher Risk	√
4.2	Number	<ul style="list-style-type: none"> The number of potentially reasonable alternatives is very large - e.g., a vast number of potential alignments within a large geographic area. 	<input type="checkbox"/>
4.3	Design Standards	<ul style="list-style-type: none"> There is disagreement regarding the design standards that alternatives must meet - e.g., ability to avoid impacts by modifying design. 	<input type="checkbox"/>
4.4	Reliance on Previous Studies	<ul style="list-style-type: none"> Considerable time has passed since the previous studies were completed. There is disagreement among agencies about whether it is appropriate to rely on those studies as the basis for eliminating alternatives. 	<input type="checkbox"/>
5. Project Impacts			
5.1	Community Impacts	<ul style="list-style-type: none"> The project is located in a densely populated area, such as urban neighborhoods. 	<input type="checkbox"/>
5.2	Environmental Justice	<ul style="list-style-type: none"> The project is located in or near areas with large minority and/or low-income populations. Representatives of low-income or minority communities have expressed opposition to or concerns about the project. 	<input type="checkbox"/>
5.3	Historic Properties	<ul style="list-style-type: none"> The project is located in an area with numerous historic properties - e.g., an urban corridor with multiple historic buildings and historic districts. The project is located in an area that will require extensive efforts to identify and evaluate potential historic properties (e.g., a lengthy corridor). The project is located in an area with one or more extremely well-known historic properties - e.g., a famous battlefield. Section 106 consultation is expected to involve a large number of consulting parties. Historic preservation groups have expressed opposition to the project based on its potential impacts on historic properties. 	<input type="checkbox"/>
5.4	Tribal Issues	<ul style="list-style-type: none"> Resources of important to Indian tribes are located in the project area (even if the project is not located on Indian lands). A portion of the project crosses Indian lands, and therefore cannot be built without permission from one or more Indian tribes. Indian tribes are expected to take a strong interest in the project. 	<input type="checkbox"/>

#	Issue	Indicators of Higher Risk	√
5.5	Section 4(f)	<ul style="list-style-type: none"> The project is likely to require a 'full' Section 4(f) evaluation because it will use lands from parks, recreation areas, refuges, or historic sites (and the impacts are not 'de minimis'). There is controversy regarding the applicability of Section 4(f) to a property. There is controversy regarding the availability of prudent and feasible alternatives for avoiding the use of Section 4(f) properties. There is controversy regarding the potential for constructive use of Section 4(f) properties. 	□
5.6	Wetlands & Floodplains	<ul style="list-style-type: none"> The project is likely to require an individual permit under Section 404 of the Clean Water Act for impacts to wetlands or other waters of the U.S. The project involves extensive impacts to sensitive/high-value wetlands complexes or floodplains. Alternatives that avoid or reduce impacts to wetlands are available, but are not considered unacceptable by the project sponsor. Agencies involved in Section 404 permitting have declared that a specific alternative cannot be approved or is highly unlikely to be approved. 	□
5.7	Endangered Species	<ul style="list-style-type: none"> Federally listed threatened or endangered species are known to be present in the project area. The project area includes designated 'critical habitat' for federally listed species. The project is likely to require formal consultation under Section 7 of the Endangered Species Act. 	□
5.8	Air Quality Conformity	<ul style="list-style-type: none"> There is uncertainty about whether a conformity determination can be made for the project - i.e., will emissions be too high to meet conformity? There is controversy (or expected controversy) regarding the appropriate methodology for the conformity analysis - e.g., which model to use. The air quality analysis indicates that the project, as proposed, does not conform to air quality plans. 	□

#	Issue	Indicators of Higher Risk	√
5.9	MSATs	<ul style="list-style-type: none"> The project is likely to require a quantitative analysis of mobile source air toxics (MSATs) - e.g., it involves a high volume of diesel truck traffic in close proximity to residential populations. 	<input type="checkbox"/>
5.10	Induced Growth	<ul style="list-style-type: none"> The project has the potential to cause induced growth - e.g., it provides new transportation service on the periphery of a developed area. Stakeholders have publicly raised concerns about the project's potential to cause 'sprawl'. Agencies or stakeholders raise questions about the reliability of the methods used to predict induced growth - e.g., claiming that a different model should have been used. 	<input type="checkbox"/>
5.11	Cumulative Impacts	<ul style="list-style-type: none"> The project area includes sensitive resources that are being affected by multiple projects. There is uncertainty or disagreement about which projects or resources need to be considered in the cumulative impacts analysis. There is uncertainty or disagreement about the methods that should be used for analyzing cumulative impacts - e.g., whether to address them qualitatively or quantitatively. 	<input type="checkbox"/>
5.12	Regulated Resources	<ul style="list-style-type: none"> The project involves impacts on other resources that are subject to specific regulatory protection under Federal or State laws, such as: <ul style="list-style-type: none"> Wild and Scenic Rivers Coastal Zones Wilderness Areas Roadless Areas in National Forests The project involves unusual permitting issues - e.g., approval for a project to cross an international border. The project is subject to new or recently modified statutes or regulations. 	<input type="checkbox"/>

#	Issue	Indicators of Higher Risk	√
5.13	Emerging Issues	<ul style="list-style-type: none"> • There is uncertainty or disagreement about whether an environmental issue should be analyzed and/or about what methodology should be used. Potential examples: <ul style="list-style-type: none"> ○ Contribution to climate change through increased greenhouse gas emissions ○ Effects of climate change on the project (e.g., sea level rise) ○ Health effects based on project's potential to affect human behavior ○ Health effects resulting from air pollution 	□
6. Agencies and Stakeholders			
6.1	Local Governments	<ul style="list-style-type: none"> • Local governments and/or local elected officials have expressed opposition to and/or strong concerns about the project. 	□
6.2	MPOs	<ul style="list-style-type: none"> • The MPO (if applicable) has expressed opposition to and/or strong concerns about including the project in the long-range plan and TIP. 	□
6.3	Regulatory Agencies	<ul style="list-style-type: none"> • Federal or State regulatory agencies have expressed opposition to and/or strong concerns about the project. 	□
6.4	Community Groups	<ul style="list-style-type: none"> • Community groups - e.g., homeowners' associations - have expressed opposition to and/or strong concerns about the project. 	□
6.5	Interest Groups	<ul style="list-style-type: none"> • Interest groups - e.g., environmental or historic preservation groups - have expressed opposition to the project or strong concerns about the project. • New stakeholders emerge and raise new issues and concerns late in the NEPA process. 	□
6.6	Legal Counsel	<ul style="list-style-type: none"> • Stakeholders have retained legal counsel to assist in preparing comments in the NEPA process for the project and/or initiating litigation. 	□
6.7	Public-Record Requests	<ul style="list-style-type: none"> • Individuals or groups interested in the project have submitted multiple public-record requests (under FOIA or State laws) for documents related to the project. 	□
7. Project Team Capabilities			

#	Issue	Indicators of Higher Risk	√
7.1	Experience	<ul style="list-style-type: none"> The project team lacks experience with managing the NEPA process for complex, controversial projects. 	☐
7.2	Support	<ul style="list-style-type: none"> The project lacks high-level support within the government entities responsible for developing and funding the project. 	☐
7.3	Relationships	<ul style="list-style-type: none"> The project sponsor and lead agency do not have strong working relationships with one another. 	☐

SECTION 2

Backgrounder: Case Law and Case Studies of Legal Risk in the NEPA Process

Introduction

The National Environmental Policy Act (NEPA) applies to all Federal activities – including highway projects – that receive funds from the federal government, as well as to projects that require various types of federal approvals and permits. NEPA requires that before taking a major federal action significantly affecting the quality of the human environment, the federal agency proposing to take that action must prepare an analysis of the potential environmental impacts and possible alternatives.¹ Although NEPA is a very simple statute, more than 25,000 court decisions have been issued for various types of Federal projects since its enactment in 1969, which has resulted in an exacting, often-litigated process. Failing to comply with required procedures can result in objections and delays in obtaining timely responses to requests for comments, permits, or approvals from state and federal resources agencies, as well as court injunctions stopping work on a project until the defects in the process identified by the court are repaired.

In addition to its own procedural requirements, the NEPA process has also become the vehicle for documenting compliance with a large number of environmental laws which might apply to any given highway project.² The Federal Highway Administration's (FHWA) NEPA regulations require that a Final Environmental Impact Statement (EIS)/Record of Decision (ROD) or a Finding of No Significant Impact (FONSI) document compliance with applicable environmental laws, Executive Orders, and other related requirements.³ Some of these laws, such as Section 4(f) of the Department of Transportation Act⁴ and Section 106 of the National Historic Preservation Act,⁵ can also result in litigation, often concurrently with a NEPA challenge. Even when there is no litigation, administrative disputes between the project agency (i.e., FHWA and the state department of transportation) and one or more resource agencies (e.g., U.S. Army Corps of Engineers or U.S. Fish and Wildlife Service) can sometimes be very difficult to resolve and lead to delays rivaling any court-imposed injunction.

Congress has addressed the issue of delays in the NEPA process with increasingly forceful provisions in the last three major transportation bills. The Department of Transportation, as well as modal administrations within the Department, have made procedural reforms and developed interagency agreements since the 1990s, all with the purpose of making the NEPA process more efficient. The importance of early coordination and outreach are key themes of FHWA's policies.

While much of the focus of these efforts is on resolving problems, the fact remains that the majority of projects, even those requiring an EIS, go through the NEPA process without significant problems or

1 42 U.S.C. § 4332(2)(C).

2 FHWA maintains a comprehensive list of environmental laws that could apply to any given project. The list may be found at: http://www.fhwa.dot.gov/environment/env_sum.cfm

3 23 C.F.R. §§ 771.125 and 771.133.

4 The current version of this provision may be found at 23 U.S.C. § 138 and 49 U.S.C. § 303. These two sections are substantially identical.

5 16 U.S.C. § 470f.

opposition. This presents a dilemma both for the project sponsor and FHWA in determining the scope of the NEPA document. It is possible to comply with NEPA by simply following the rules, with relatively little outreach and routine mitigation measures. However, some projects require an entirely different level of effort, including massive public involvement at many levels or consideration of extensive and expensive mitigation measures, or they involve major disputes with resource agencies and bitter environmental litigation that can drag on for years.

When we use the term “risk,” we refer to the risk to the successful and timely completion of the NEPA process. By “successful,” we mean the issuance of a ROD or FONSI without having to issue a supplemental NEPA document. “Timely” means reaching this end within a reasonable or anticipated time frame. That risk can be the result of unresolved risk that reflects itself in a court-imposed injunction or extensive controversy between the agencies involved in the preparation and review of the NEPA document and/or the opposition from the affected community and environmental groups.

The research proposes that there are often warning signs of risk for project officials even before the NEPA process starts, or shortly after its inception, that enable them to make reliable judgments about which projects are likely to encounter significant problems down the road, whether during the administrative process or in a lawsuit, and which are not. Having this information available will allow the state transportation department to take steps to address these problems up-front, and therefore reduce or avoid entirely the problems that might otherwise arise. Equally important to evaluating early warning signs is recognizing when they are not present, and where expensive and time-consuming measures designed to respond to higher risks may not be required at all.

Organization of this Section

This Section is divided into three parts. First, we discuss some of the case law about some of the early warning signs that are typically addressed at the outset of the NEPA process. This summary is not intended to be a comprehensive treatment of NEPA case law. That is beyond the scope of this document and can be found in many treatises and legal articles.

Next, we present case studies, which provide a more detailed picture of what early issue identification and response looks like. The projects are from across the country, and all involved controversial or potentially controversial issues that were either identified at the outset or ultimately identified and addressed. The measures taken by project officials offer a spectrum of approaches that successfully anticipated issues that would have been much more difficult to address well into the NEPA process. Some of the particular projects in the case studies are projects that were mentioned in a set of initial interviews conducted by the research team. Key observations from the interviews are provided in Appendix A.

Finally, “Managing Risk” brings the various things we learned and our own observations together, in a comprehensive discussion of the issues and ideas that are the central focus of this research. In considering the ideas and recommendations presented in this research, it is important to remember a few factors about the NEPA process and addressing problems that may arise. Over time, the NEPA process has become the place where not only the environmental impacts of a project are addressed, but the project as a whole is discussed and, sometimes, debated. Thus, the NEPA process is often a kind of negotiation about the project, the benefits it provides, and how best to reduce the possible adverse effects of the project on the environment. That can mean broad, sweeping mitigation measures, or deciding to build or abandon a major alternative, but it can also mean providing focus on the impacts to a small neighborhood adjacent to an improved road/bridge or a new road, and addressing its concerns in a reasonable manner. Recognizing that at the outset, and as the NEPA process proceeds, can make a huge difference in the ultimate success of the project.

Case Law

There are a myriad of issues in the NEPA process that can confront transportation officials when planning improvements to an existing roadway/bridge or constructing a new roadway/bridge project. Some arise during the course of the NEPA process itself, but often, as explained in the Introduction to this Section, these issues can be identified early on, before or concurrently with the formal start of the NEPA process. These “early indicator” issues can be a source of administrative delays and litigation risks. When properly anticipated, however, the risks of delay can be assessed, and, where problematic, appropriate steps can be taken from the outset to reduce delays, whether caused by administrative action or court injunction. The purpose of this part of the document is to provide a brief overview of case law dealing with some of these “early indicator” issues for some context to the remainder of this Section. This is not intended as a comprehensive case law overview, which is provided in other sources, but is intended to aid NEPA practitioners in determining how and when to address these issues in the preparation of the NEPA document, and to assist in prioritizing agency resources and the consultation efforts that should be started prior to and during the preparation of the environmental document.

Purpose and Need

One example of a NEPA issue that has to be identified early is the “purpose and need” of the project. Sometimes, the purpose and need is controversial, and sometimes it is not. Purpose and need controversies often arise over whether the statement of purpose and need is drawn too narrowly so as to predetermine the selection of alternatives or eliminate a popular alternative or whether the purpose and need statement is sufficiently detailed to justify the need for project.

A project’s statement of purpose and need briefly defines “the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.”⁶ In framing the purpose and need for a project, the agency must take a hard look at the factors relevant to the definition of purpose and should take into account the needs and goals of the parties involved in the application.⁷ Courts have afforded agencies considerable discretion to define the purpose and need of a project.⁸ Courts generally defer to an agency’s statement of purpose and need and uphold them when reasonable.⁹

The lead agency for any given project should provide an opportunity for involvement by participating agencies and the public in defining the purpose and need for a project as early as practicable during the environmental review process.¹⁰ The statement of purpose and need should clearly set forth the objectives of the proposed action, which may include achieving transportation objectives identified in statewide or metropolitan transportation plans, or supporting land use, economic development, or growth objectives established in applicable Federal, State, local, or tribal plans.¹¹

An agency’s statement of purpose and need for a particular project necessarily determines the scope of reasonable alternatives the agency is required to discuss.¹² Because it is the factor driving discussion of

6 40 C.F.R. § 1502.13.

7 *Citizens for Smart Growth v. Sec’y of Dep’t of Transp.*, 669 F.3d 1203, 1212 (11th Cir. 2012).

8 See *City of Alexandria v. Slater*, 198 F.3d 862, 867 (D.C. Cir. 1999) (courts evaluate objectives of a project with “considerable deference to the agency’s expertise and policy-making role.”).

9 Daniel R. Mandelker, *NEPA Law and Litigation* 9-63 (Thomson Reuters/West, Rel. 10 2012).

10 23 U.S.C. § 139(f)(1).

11 23 U.S.C. § 139(f)(3)(A) & (B).

12 See, e.g., *City of Alexandria v. Slater*, 198 F.3d at 867 (courts evaluate an agency’s choice of “reasonable alternatives” in light of the objectives of the federal action); *Ass’ns Working For Aurora’s Residential Env’t. v. Colo. Dep’t of Transp.*, 153 F.3d 1122, 1130 (10th Cir. 1998) (finding agency was not required to evaluate mass transit as alternative to highway project where it did not meet project’s goal of alleviating traffic congestion).

alternatives, agencies may not define the objectives of their actions in terms so “unreasonably narrow” that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the project, thus making the EIS a mere formality.¹³

In recent years, courts have upheld an EIS statement of purpose and need where:

- A project’s statement of purpose and need was premised, at least in part, on the influence of the local metropolitan planning organization and county transportation plan.¹⁴
- A project’s stated purpose mentioning a “highway” did not prevent the agencies from considering non-highway alternatives, and the project’s stated needs were the product of a thoughtful, deliberative interagency and public participation process that balanced transportation needs with environmental concerns.¹⁵
- The agencies’ statement of purpose and need for a bridge replacement project was defined to reflect the regional transportation needs into the future.¹⁶
- A statement of purpose and need limiting the project to a southern crossing of a river, where the agency determined an existing crossing to suitably serve the central and northern portions of the river, was not unduly narrow.¹⁷

Thus, if the statement of purpose and need for the project will be controversial (for example, if the statement of purpose and need relates to a highway project, and the community prefers a transit project), then it is essential that the project’s purpose and need is well justified.

The importance of identifying issues with a project’s statement of purpose and need early on is perhaps best reflected in the streamlining provisions of both SAFETEA-LU and MAP-21.¹⁸ In SAFETEA-LU, Congress created a special provision for evaluating purpose and need issues *before* the start of the DEIS. Thus, 23 U.S.C. § 139(f) directed the lead agency to involve participating agencies and the public “as early as practicable” during the NEPA review process. A parallel provision in Section 139(f) deals with the alternatives analysis. MAP-21 left Section 139(f) intact, but put in the statute a provision emphasizing the importance of integrating planning decisions into the NEPA process.

After passage of SAFETEA-LU, FHWA issued comprehensive guidance about carrying forth planning decisions into the NEPA process.¹⁹ Congress essentially codified this guidance in MAP-21.²⁰ While not directly addressing purpose and need, the integration process will inevitably shape statements of purpose and need and alternatives analyses by allowing highway and transit agencies to carry forward more completely decisions made in the transportation planning process.

In relation to the results of the research conducted for this project, the statement of purpose and need for an EIS is important as an “early warning signal” because it is fundamental to so many other parts of the EIS and the NEPA process. The statement of purpose and need provides the basis for establishing the range of alternatives. Usually, the project’s purpose and need will evolve out of the transportation

13 Citizens for Smart Growth v. Sec’y of Dep’t of Transp., 669 F.3d at 1212.

14 Citizens for Smart Growth v. Peters, 716 F. Supp. 2d 1215, 1224-25 (S.D. Fla. 2010 (“The Purpose and Need statement in the FEIS is a permissibly broad statement of the goals of the project in accordance with the needs and desires of the community and its elected officials, and [the court] reject[s] plaintiff’s contention that the statement was impermissibly narrow.”)).

15 Audubon Naturalist Soc’y of the Cent. Atl. States, Inc. v. U.S. Dep’t of Transp., 524 F. Supp. 2d 642, 665 (D. Md. 2007).

16 Coal. for a Sustainable 520 v. U.S. Dep’t of Transp., 2012 U.S. Dist. LEXIS 103782, *34-35 (W.D. Wash. 2012).

17 Citizens for Smart Growth v. Sec’y of Dep’t of Transp., 669 F.3d at 1212.

18 Section 6002 of The Safe, Accountable, Flexible Efficient Transportation Equity Act: A Legacy for Users, Pub. L. 109-59, 119 Stat. 1144, Aug. 10, 2005 (SAFETEA-LU), and Moving Ahead for Progress in the 21st Century Act, Pub. L. 113-141, 126 Stat. 405, July 6, 2012 (MAP-21).

19 See 23 C.F.R. part 450, Appendix A, “Linking Transportation Planning and the NEPA Process.”

20 Section 1310 of MAP-21, codified at 23 U.S.C. § 168.

planning process. Therefore, the statement of purpose and need provides an opportunity to explain the linkage between the proposed project and the transportation planning process and to demonstrate the extent to which the purpose and need for a project were developed to implement transportation planning decisions that have already been made through those processes. As noted in the case law summary and in the interview responses, where the statement of purpose and need is premised on, or defined from, those transportation planning processes, litigation and delay risks can be reduced.

Range of Alternatives

The second early indicator issue arising in the NEPA process is inextricably tied to the project's statement of purpose and need: the selection of the range of alternatives evaluated. As noted above, an agency's definition of the purpose and need for its project drives the alternatives it is required to analyze.

An EIS must "[r]igourously explore and objectively evaluate all reasonable alternatives" and "[i]dentify the agency's preferred alternative."²¹ Judicial review of the range of alternatives considered by an agency is governed by a "rule of reason" analysis that requires an agency to set forth only those alternatives necessary to permit a "reasoned choice."²² Under the rule of reason, an EIS is not required to consider an infinite range of alternatives; it must only consider those reasonable or feasible alternatives.²³ Moreover, an agency is not required to undertake an analysis of those alternatives which are not significantly distinguishable from alternatives actually considered or which have substantially similar consequences.²⁴

The availability of reasonable alternatives to a proposed action depends, to a certain degree, on the breadth of the proposed action itself.²⁵ The choice of alternatives for any project is "bounded by some notion of feasibility."²⁶ The range of alternatives that must be considered in an EIS need not extend beyond those reasonably related to the purposes of the project.²⁷ An agency is not required to consider alternatives which are infeasible, ineffective, or inconsistent with the basic policy objectives for the project and related area.²⁸ Every EIS, however, must include an analysis of the "no build" baseline, or the conditions which would exist if the project were not built.²⁹ In selecting a range of alternatives for detailed evaluation, federal agencies may rely on prior state and federal environmental studies.³⁰

Courts have upheld the range of alternatives discussed as reasonable where:

- EIS did not discuss ten-lane bridge alternative as "reasonable alternative" to replacing existing six-lane bridge because studies indicated it did not meet need needs of project where it did not effectively ameliorate peak traffic conditions. A twelve-lane bridge was needed.³¹
- Agency rejected consideration of mass transit alternative because it did not meet objectives of highway project which was to relieve traffic congestion on existing highway.³²

21 40 C.F.R. § 1502.14(a), (e).

22 *California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982)

23 *Westlands Water Dist. V. U.S. Dep't of the Interior*, 376 F.3d 853, 868 (9th Cir. 2004).

24 *Id.*

25 See, e.g., *Friends of Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1038 (9th Cir. 2008) (range of reasonable alternatives is "dictated by the nature and scope of the proposed action"); *'Ilio'ulaokaokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1095 (9th Cir. 2006) (recognizing connection between breadth of action and breadth of alternatives).

26 *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 551 (1978).

27 *The Laguna Greenbelt, Inc. v. U.S. Dep't of Transp.*, 42 F.3d 517 (9th Cir. 1994).

28 *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1180 (9th Cir. 1990).

29 40 C.F.R. § 1502.14(d).

30 *The Laguna Greenbelt, Inc.*, 42 F.3d at 524-25 (upheld EIS that restricted alternatives to two build alternatives based on prior state environmental studies).

31 *City of Alexandria v. Slater*, 198 F.3d at 866-69.

32 *Ass'ns Working for Aurora Residential Env't. V. Colo. Dep't of Transp.*, 153 F.3d 1122 (10th Cir. 1998).

- Government did not consider appellant’s favored highway alignment alternative but did select similar alignment alternatives for detailed consideration.³³
- Finding FHWA did not incorrectly eliminate rail alternative where record demonstrated agency considered various combinations of alignments and modes of transit, including rail.³⁴

In contrast, an agency’s range of alternatives was found to be inadequate where the discussion of a proposed project’s “no build” alternative incorrectly included effects of the proposed action,³⁵ where the agency rejected a proposed viable alternative based on a justification for which all alternatives posed the same risk,³⁶ and where the agency rejected an alternative that partially met the need for a proposed highway project.³⁷

FHWA regulations demonstrate the importance of the identification and evaluation of alternatives early in the NEPA process. FHWA encourages project sponsors to use an alternatives analysis process to focus alternatives examined in a DEIS to help streamline NEPA review.³⁸ When Congress enacted SAFETEA-LU in 2005, it included extensive amendments to the federal transportation planning process, and provisions designed to accelerate the NEPA process.³⁹ Under SAFETEA-LU, the lead agency establishes the range of alternatives in the EIS before the issuance of the DEIS.⁴⁰

Participants in the NEPA process, such as participating and cooperating agencies, project supporters and opponents, affected local communities, etc., understand that much of the debate about a project plays out in the analysis and discussion of alternatives. Thus, the alternatives analysis for an EIS is a frequent source of administrative delay and of litigation. Because the range of alternatives can be disclosed during the scoping process, this is an opportunity to obtain public input early on and to conduct additional scoping and/or expand the number of alternatives, or level of analysis of particular alternatives, in consideration of the input received. This also provides an opportunity to build the Administrative Record from the beginning of the review process, so that if there is litigation later, the project team will have a thorough record for defending against the suit.

Integration of NEPA and Other Environmental Processes

While these early indicators are important to be mindful of at the outset of the NEPA review process, it is also important to think about the integration of a highway project’s NEPA review with other environmental reviews that may be required. A key indicator of potential future controversy is the project’s potential effects on particularly sensitive resources or protected areas and the individual and/or cumulative impacts that might result. For example, highway projects routinely implicate areas protected by Section 4(f) of the Department of Transportation Act, historic sites that are on or eligible for the

³³ *Prairie Band Pottawatomie Nation v. Fed. Highway Admin.*, 684 F.3d 1002, 1011-13 (10th Cir. 2012).

³⁴ *Conservation Law Found. v. Fed. Highway Admin.*, 2007 U.S. Dist. LEXIS 64465 (D.N.H. 2007) (finding range of alternatives discussed adequate, but requiring SEIS because agency failed to consider impacts of growth forecasts in evaluation of alternatives).

³⁵ *N.C. Wildlife Fed’n v. N.C. Dep’t of Transp.*, 677 F.3d 596, 602-05 (5th Cir. 2012).

³⁶ *S.E. Alaska Conservation Council v. Fed. Highway Admin.*, 649 F.3d 1050 (9th Cir. 2011) (rejection of alternative because it may reduce services elsewhere and increase costs was arbitrary because all alternatives posed same risk).

³⁷ *N. Buckhead Civic Ass’n v. Skinner*, 902 F.2d 1533 (11th Cir. 1990) (must consider alternative partially meeting need for highway project).

³⁸ See 23 C.F.R. § 450.318(d) (“The Alternatives Analysis may or may not be combined with the preparation of a NEPA document (e.g., a draft EIS). When an Alternatives Analysis is separate from the preparation of a NEPA document, the results of the Alternatives Analysis may be used during a subsequent environmental review process”).

³⁹ 23 U.S.C. § 139.

⁴⁰ 23 U.S.C. § 139(f)(4).

National Register of Historic Places (even those that do not give rise to a “use” under Section 4(f)), endangered species habitats, and wetlands. It is vitally important that project proponents address the project’s impacts on these resources in conjunction with their NEPA review whenever such resources may be impacted by a project.

Agencies are not required to duplicate the work done by another federal agency which also has jurisdiction over a project. Indeed, NEPA regulations encourage agencies to coordinate on such efforts. As early as possible, NEPA requires that the parties designate a lead agency, with other involved agencies designated as “cooperating agencies.”⁴¹ The lead agency, which is ultimately responsible for the EIS, should ensure the involvement of all other agencies involved and supervising the EIS preparation.⁴² The lead agency uses the environmental analyses of the cooperating agencies “to the maximum extent possible.”⁴³ In turn, cooperating agencies may adopt an EIS signed by the lead agency, so long as they undertake an independent review of the EIS and determine that their comments and suggestions have been satisfied.⁴⁴

Section 4(f) Resources and Other Historic Sites

Under Section 4(f) of the Department of Transportation Act, FHWA may not approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless it finds that: (1) there is no feasible and prudent alternative to the use of land; and (2) the action includes all possible planning to minimize harm to the property resulting from the use of such properties.⁴⁵ A decision as to whether an activity will “use” land requires an assessment of the magnitude of direct, temporary, and “constructive” uses of the land by the project.⁴⁶ Section 4(f) is a substantive statute that can drive the decision-making process.

Where a project potentially impacts historic resources, two environmental review processes are implicated: Section 4(f) and Section 106 of the National Historic Preservation Act.

Section 4(f) is one of the toughest decision standards in federal environmental law. The law, as interpreted by the courts since its enactment in 1966, has generated hundreds of court decisions that have greatly increased the effect of the statute on the decision-making process.⁴⁷ As a result, FHWA has issued extensive regulations that are based on the body of the court decisions, as well as some amendments to the law.⁴⁸ In addition, FHWA has issued a guide to aid officials and the public in better understanding and applying the statute.⁴⁹

Section 4(f) was intended to favor avoidance of protected sites, and to this day, many transportation planners seek to avoid such sites wherever possible. The statute imposes not only a high barrier to the use of protected lands, but a rigorous analytical process for compliance with its exacting requirements. There are a number of exceptions to the statute, especially if the impacts on the protected sites are *de minimis* (minimal) or the road either preceded the planning for a park or the road and park were planned

⁴¹ 40 C.F.R. § 1501.6.

⁴² 40 C.F.R. §§ 1501.5(a), 1501.6(a).

⁴³ 40 C.F.R. § 1501.6(a)(2).

⁴⁴ 40 C.F.R. § 1506.3(c).

⁴⁵ 49 U.S.C. § 303(c).

⁴⁶ See 23 C.F.R. §§ 774.17 (definition of “use”) and 774.15 (defining “constructive use”).

⁴⁷ See, e.g., *Citizens to Pres. Overton Park v. Volpe*, 401 U.S. 402 (1971); *Stewart Park & Reserve Coal. v. Slater*, 352 F.3d 545 (2d Cir. 2003); *Davis v. Mineta*, 302 F.3d 1104 (10th Cir. 2002); *Concerned Citizens on I-190 v. Sec’y of Transp.*, 641 F.2d 1 (1st Cir. 1981); *Brooks v. Coleman*, 518 F.2d 17 (9th Cir. 1975); *City of S. Pasadena v. Slater*, 56 F. Supp. 2d 1106 (C.D. Cal. 1999).

⁴⁸ 23 C.F.R. part 774.

⁴⁹ “The Section 4(f) Policy Paper,” located at: <http://environment.fhwa.dot.gov/4f/4fpolicy.asp>

This site contains links to much other useful information about the statute.

concurrently. These exceptions apply only if the park official or historic preservation officer concurs in the *de minimis* determinations of the FHWA and state department of transportation. And when these exceptions do not apply, extensive coordination between park/historic preservation officials is required both to establish the degree of impact and for mitigation planning. A cooperative relationship between the responsible park officials or historic preservation office makes this process much easier and more likely to withstand an attack through litigation.

Section 106, a procedural statute, applies to “federal undertakings,” defined as “a project, activity, or program funded in whole or in part under the . . . jurisdiction of a Federal agency, including . . . those carried out with Federal financial assistance.”⁵⁰ Section 106 prohibits federal agencies from approving an undertaking without first (1) assessing the undertaking’s effects on historic properties and (2) affording the Advisory Council on Historic Preservation, State Historic Preservation Officer, and other interested parties an opportunity to comment. The Section 106 regulations urge developing and evaluating “alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties.”⁵¹ The “adverse effects” to be accounted for include both direct effects and indirect effects.⁵²

Federal law inextricably links Section 4(f) to Section 106 of the NHPA. Section 4(f) only applies to certain “historic” resources – sites that are either listed on the National Register of Historic Places or that have been determined to be eligible for inclusion on the National Register in accordance with the NHPA.⁵³ Similarly, NHPA regulations define a historic property as “any historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places.”⁵⁴ The authority to determine whether a historic site is eligible for inclusion on the National Register is made pursuant to the NHPA regulations and vested in the lead federal agency, in consultation with the State Historic Preservation Officer.⁵⁵

The Section 4(f) and Section 106 mitigation processes have also been synchronized through the requirement to engage in “all possible planning to minimize harm” under Section 4(f).⁵⁶ FHWA’s Section 4(f) regulations define “all possible planning” to minimize harm as follows:

With regard to historic sites, the measures that normally serve to preserve the historic activities, features or attributes of the site as agreed by the Administration and the official(s) with jurisdiction over the Section 4(f) resource in accordance with the consultation process under 36 C.F.R. part 800 [regulations governing the Section 106 process].⁵⁷

Under FHWA’s regulations, therefore, the mitigation agreed to in the Section 106 process generally constitutes “all possible planning to minimize harm,” as required by Section 4(f).

The close connection between Section 4(f) and Section 106 is no accident. Congress enacted the NHPA in the same year as it enacted Section 4(f).⁵⁸ The reliance that FHWA places on the Section 106 process and determinations made under the Advisory Council’s regulations extend back to at least 1980, when FHWA first jointly issued Section 4(f) regulations with the Federal Transit Administration.⁵⁹ In 2005, Congress explicitly connected Section 4(f) and Section 106, when SAFETEA-LU amended Section 4(f) to provide for a *de minimis* exception.⁶⁰ This *de minimis* exception relies on findings made during

⁵⁰ 36 C.F.R. § 800.16(y).

⁵¹ 36 C.F.R. §§ 800.5 (assessing effects); 800.6 (avoiding, minimizing, or mitigating adverse effects).

⁵² 36 C.F.R. § 800.5(a).

⁵³ 23 C.F.R. §§ 774.17 (definition of “historic site”), 774.11(d)(1) (applicability).

⁵⁴ 36 C.F.R. § 800.16(1)(1).

⁵⁵ 36 C.F.R. § 800.4(c)(2).

⁵⁶ 49 U.S.C. § 303(c).

⁵⁷ 23 C.F.R. § 774.17.

⁵⁸ Pub. L. No. 89-665, 80 Stat. 915 (Oct. 16, 1966).

⁵⁹ See 45 Fed. Reg. 71,968 (Oct. 30, 1980).

⁶⁰ 49 U.S.C. § 303(d)(2).

the Section 106 process.⁶¹ Congress' adoption of the *de minimis* exception incorporates the linkage between the two statutes that had long been agency practice.

The consultations that underpin Section 106, as well as Section 4(f) as it relates to historical resources, are defined by the Advisory Council on Historic Preservation. The Advisory Council has established regulations and policies governing how federal agencies should address potential impacts on historic, archaeological and cultural sites.⁶²

Importantly, the Section 4(f) and Section 106 evaluation processes must be completed before approval of the project.⁶³ Courts have struck down phase-by-phase approaches to conducting the required analysis where such review is not completed before completion of the NEPA review process.⁶⁴ In contrast, courts have held that FHWA complied with these review processes where it made significant efforts to evaluate a project's effects on historic resources for the entirety of a project, but deferred some minor investigation of unknown impacts until after approval of the ROD.⁶⁵

Thus, it is important that agencies conducting the NEPA review process conduct a comprehensive Section 4(f) and Section 106 review as early in the NEPA process as possible. These reviews, where required, must be completed prior to the project's NEPA approval, which necessitates early planning.

Wildlife and Habitat Issues

Throughout the country, the importance of preserving the habitat of threatened and endangered animal and plant species has become a critical concern. It is important that highway projects that implicate such habitat take the necessary steps to address any such impacts pursuant to the federal Endangered Species Act (ESA) and any state endangered species laws.

Section 7 of the ESA (Section 7) requires every federal agency to ensure that its actions are not likely to jeopardize the continued existence of any species listed as threatened or endangered.⁶⁶ Each agency is required to verify that its actions will not jeopardize any species by consulting with, and obtaining the assistance of, the Secretary of the Interior, acting through the Fish and Wildlife Service, or, for marine species, the Secretary of Commerce, acting through the National Marine and Fisheries Service (collectively, the Service).⁶⁷ The agency must determine if any listed species may be present in the area affected by the proposed project and must confer with the Service whenever an action is likely to affect such a species.⁶⁸ In making its determination, the agency must use the best scientific and commercial data available.⁶⁹

As part of the consultation requirement, an agency is required to ask the Service in writing whether, in its opinion, a listed or proposed species may be present in the action area.⁷⁰ If the Service determines that no species are present, then the consultation requirement ends. If, however, the Service indicates that there may be threatened or endangered species in the area affected by the project, the agency generally prepares a biological assessment (BA) identifying any listed species in the affected area and evaluating

⁶¹ *Id.*

⁶² See 36 C.F.R. §§ 800-800.16.

⁶³ See *N. Idaho Cmty. Action Network v. U.S. Dep't of Transp.*, 545 F.3d 1147, 1158-59 (9th Cir. 2008).

⁶⁴ See, e.g., *id.*

⁶⁵ See, e.g., *Valley Cmty. Pres. Comm'n v. Mineta*, 373 F.3d 1078 (10th Cir. 2004) (FHWA complied with Section 4(f) where it made significant efforts to evaluate use of historic resources along project corridor, but deferred investigation of potential, but unidentified, 4(f) resources until after ROD); *City of Alexandria v. Slater*, 198 F.3d, 862 (upheld FHWA's Section 4(f) analysis, including survey of historic sites but not below-ground surveys for potential, but unknown, historic sites in construction staging areas and dredge oil disposal sites that had yet to be designed).

⁶⁶ 16 U.S.C. § 1536(a)(2).

⁶⁷ *Id.*

⁶⁸ 16 U.S.C. § 1536(a).

⁶⁹ *Id.*

⁷⁰ 16 U.S.C. § 1536(c)(1).

the project's potential effects on those species.⁷¹ Alternatively, the Service may determine that a species may be affected by the project, but the parties engage in an informal consultation process to determine the presence of the species; if the species is not present, no BA is required. A BA is also required for all federal actions which constitute a "major construction activity," whether or not a listed species is suspected in the area.⁷² A "major construction activity" is defined as "a construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment referred to in [NEPA]."⁷³ This BA, in turn, can be fulfilled as part of the agency's procedural requirements established by NEPA.⁷⁴

Courts have required ESA compliance where the indirect effects of a proposed project included development in an area designated as critical habitat for a listed species.⁷⁵ Additionally, courts have upheld approval of projects where the record amply demonstrated that FHWA and the Service engaged in extensive informal and formal consultation, and the project was modified as a result of this consultation to mitigate potential impacts on listed species.⁷⁶

Thus, it is important that, in conjunction with the NEPA review process, agencies address any concerns related to threatened or endangered species and their habitats as early in the process as practicable.

Impacts on Wetlands and Other Waters of the United States

Highway projects also frequently implicate Section 404 of the Clean Water Act because of impacts of the projects related to the dredging or placement of fill in waters of the United States and wetlands. Since highway projects tend to be linear projects, it may be impossible to avoid crossings of streams and waters running perpendicular to the proposed facility. It is therefore necessary for agencies to be cognizant of the necessity for obtaining a Section 404 Permit (404 Permit) at an early stage in the review process.

Section 404 prohibits the dredging or filling of waters of the United States without first receiving a 404 Permit from the Army Corps of Engineers (Corps).⁷⁷ A permit may not be issued if (1) there is a practicable alternative which would have less adverse impact and does not have other significant adverse environmental consequences; (2) the discharge will result in significant degradation, (3) the discharge does not include all appropriate and practicable measures to minimize potential harm, or (4) there does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Corps' Guidelines to permit issuance.⁷⁸ For a non-water dependent project, it is presumed that a practicable alternative exists and the burden to clearly demonstrate otherwise is on the applicant.⁷⁹

For actions subject to NEPA, the analysis of alternatives required for the NEPA environmental documents will in most cases provide the information for the evaluation of alternatives under the CWA Guidelines.⁸⁰ Although NEPA does not require the selection of the least damaging practicable alternative, courts have invalidated project approvals where such projects required a 404 Permit and the Corps did not have adequate information to determine whether there was a practicable alternative to the

⁷¹ *Id.*; 50 C.F.R. § 402.02

⁷² 50 C.F.R. § 402.12(b)(1).

⁷³ 50 C.F.R. § 402.02.

⁷⁴ 16 U.S.C. § 1536(c)(1).

⁷⁵ *See Nat'l Wildlife Fed'n v. Coleman*, 529 F.2d 359 (5th Cir. 1976) (federal defendants financed 90% of interstate highway project running through critical habitat and court found that development that would occur was an indirect effect necessitating ESA compliance).

⁷⁶ *See Ctr. for Biological Diversity v. Fed. Highway Admin.*, 290 F. Supp. 1175 (S.D. Cal. 2003).

⁷⁷ 33 U.S.C. § 1344(a), (d).

⁷⁸ 40 C.F.R. § 230.12(a)(3)(I)-(iv).

⁷⁹ *Id.* § 230.10(a)(3).

⁸⁰ *Utahns v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1163 (10th Cir. 2002).

preferred alternative.⁸¹ These cases highlight the importance of early coordination with the Corps and the state agency charged with issuing the Section 401 Water Quality Certification required for the Section 404 Permit of the NEPA and Section 404 review processes to ensure that the range of alternatives meets the objectives of both.

Almost all large highway projects in rural areas and many urban areas have at least some interaction with waters of the United States. This term is broadly interpreted and reaches not only navigable waters but waters that support interstate commerce. This requires some oversight from the Environmental Protection Agency and some kind of permit from the Corps.⁸² It is important to note that the permit issued by the Corps is also subject to NEPA. If the project NEPA document is not sufficient for the Corps' needs, the Corps will prepare its own NEPA document. Thus, on many levels, close cooperation between the Corps and transportation officials to determine the scope and content of the EIS can be very important.

Coordination with Other Environmental Reviews

There are many other environmental laws, orders, and requirements that apply to federal aid highway projects. FHWA maintains a list of such laws on its website.⁸³ To the extent that these laws and regulations require coordination or approval from another Federal or State agency, ensuring a close relationship and being responsive to documentation needs of the approving agency can be a very effective way to avoid problems and expedite the NEPA process. This is the purpose of early coordination and scoping in the NEPA process, but it can occur earlier as the transportation planning process. Anticipating the needs of these agencies both in the documentation and initial project preliminary design can make the NEPA process proceed much more smoothly.

In the following sections, we will see how these statutory requirements and court decisions play out in the implementation of projects and what actions project officials can take to anticipate the legal issues that may develop during the NEPA process. Courts often focus not only on the technical compliance with various procedural requirements, but on the quality of the project agency's effort and how it complies with the underlying purpose of the statute. Thus, one of the problems in considering that application of law to the NEPA process is that inextricably related to presentation of the factual content and technical analyses of the project, the surrounding environment, the impacts on that environment, and mitigation efforts. Anticipating issues that might arise in the NEPA process is a mix of legal, technical and even public involvement and public relations considerations.

Case Studies

The following case studies were selected from a considerably larger number of candidates. Projects from all parts of the country are included to provide a broad geographic range. We also selected projects that reflected how early anticipation of particular issues aided in the NEPA process and, in some cases, in litigation following the approval of the ROD. All of the projects presented here are relatively recent, to better reflect current issues or agency guidance. Finally, we limited the number of projects for budgetary considerations. There are many more examples of state and federal transportation officials achieving considerable success through early issue identification and targeted measures to address them.

⁸¹ See, e.g., *Id.* at 1186-1192.

⁸² Projects with smaller impacts may qualify for a "nationwide permit," rather than an individual permit. 33 C.F.R. parts 323, 330.

⁸³ http://www.fhwa.dot.gov/environment/env_sum.cfm

Intercounty Connector Project

The Intercounty Connector (ICC) project involved the proposed construction of a limited-access toll road connecting two Interstate highways (I-270 and I-95) in the Maryland suburbs of Washington, D.C. The project had been conceived in the 1950s as part of an outer beltway. Plans for the outer beltway were dropped, but the ICC itself remained part of land use and transportation plans that guided development in the project area from the 1960s onward. Those plans called for a system of “wedges and corridors” in which development would be concentrated along north-south corridors, while preserving wedges of open space between those corridors. The ICC was identified as one of the principal east-west routes connecting the corridors.

During the 1980s and 1990s, FHWA and the Maryland State Highway Administration (SHA) initiated two separate Draft EISs for the ICC, but neither study was completed. In both studies, the project encountered considerable opposition from resource agencies and organized groups. Concerns focused on two broad issues: (1) impacts to natural resources, including stream valley parks that would be crossed by the project, and (2) consideration of alternatives, including requests to consider transit, land use, and local road improvements rather than constructing a new limited-access highway.

As part of those earlier studies, several resource agencies had submitted comments expressing strong opposition to the alignment that was included in the local governments’ Master Plan for the area, based on Section 4(f) and other concerns. The resource agencies recommended consideration of a northern alignment, which would have reduced impacts to parks and streams, but would have had greater impacts to other resources, including historic properties.

In 2003, FHWA and SHA initiated a new EIS for the project. The new EIS was designated for expedited review by the President. The transportation agencies adopted several approaches that were intended to expedite the review while also addressing the concerns that had halted the earlier studies. Some of the key strategies included:

- Establishing a small group of “principals” from key transportation and regulatory agencies who met on a regular basis to discuss and resolve issues that could not be resolved at the staff level. This group was known as “principals plus 1” (or “P+1”) because each agency’s principal was allowed to bring a single staff member to the meeting. This group met on a regular basis, especially in the early stages of developing the EIS, to resolve concerns regarding issues such as the purpose and need and the range of alternatives.
- Using a professional mediator to facilitate open dialogue among the transportation and environmental agencies. The mediator was retained by the transportation agencies, but was independent from the consultant teams involved in preparing the EIS. The mediator facilitated the meetings of the P+1 group.
- Establishing an interagency working group (IAWG) to address technical issues related to the EIS and project permitting. The IAWG met more frequently than the P+1 group, and addressed issues at a higher level of detail. For example, the IAWG was engaged in defining the elements of the alternatives, discussing methodologies for evaluating alternatives, and identifying and evaluating potential mitigation and enhancement measures.
- Incorporating environmental stewardship measures into the project. The new EIS initiated in 2003 included an explicit commitment to not only mitigate impacts, but also to enhance existing environmental conditions by incorporating “environmental stewardship” measures into the project.
- Providing replacement parkland that far exceeded the amount of parkland impacted by the project. Altogether, SHA committed to provide 719.8 acres of replacement parkland. The preferred alternative identified in the FEIS had 83.4 acres of impacts to parkland.
- Utilizing a legal team throughout the preparation of the EIS to assist in developing a legally sufficient document and a strong administrative record. The State’s legal team included a dedicated attorney from the State Attorney General’s Office, as well as experienced NEPA

attorneys from two private firms. The FHWA legal team included a dedicated attorney from the FHWA chief counsel's office.

- This was a prior concurrence project with technical assistance and involvement by FHWA's Office of Project Development and Environmental Review. This exposed the project to a broad spectrum of NEPA experts with national experience and access to HQ liaisons with other Federal agencies to facilitate high-level communication and resolution of issues.

The new EIS was prepared in approximately three years: it was initiated in early 2003, and the ROD was issued in May 2006. During this process, FHWA and SHA were able to resolve the concerns that resource agencies had raised in earlier studies and reach consensus with the agencies on the alignment shown in the local governments' land use plans (known informally as the Master Plan alternative).

Several environmental groups remained opposed to the project, even with the additional mitigation and stewardship measures that had been incorporated as part of the new EIS. The groups raised a range of issues, including: that the purpose and need should have been defined more broadly; that the EIS should have included detailed study of alternatives involving land use, transit, and local road improvements; that the traffic modeling was flawed; and that the EIS and air quality conformity analysis did not properly analyze near-road air pollution.

After the ROD was issued, two lawsuits were filed in federal court challenging FHWA's approval of the project. The lawsuits were filed in late 2006, and the administrative record was filed in spring 2007. In November 2007, the district court issued a decision in favor of FHWA on all issues. An appeal was filed in one of the lawsuits, but the appeal was resolved through a settlement. Construction of the project went forward immediately after the district court's decision. The project is now substantially complete and open to traffic.

Mountain View Corridor

The Mountain View Corridor (MVC) project involved the proposed construction of a limited-access highway in the Salt Lake City region. The region is in a valley that is oriented north-south between two mountain ranges. The spine of the transportation network in the region is an Interstate highway, I-15. The MVC project was proposed as a parallel route to I-15, serving a rapidly growing area south of Salt Lake City.

The MVC project was related to a broader vision for construction of a new limited-access highway parallel to I-15 throughout the entire length of the Salt Lake valley. This vision was announced by the State's Governor in the 1990s. The initial section of the highway was known as Legacy Parkway. The Legacy Parkway project was the subject of an earlier EIS, which was challenged in a lawsuit. The lawsuit resulted in an injunction stopping construction of the Legacy Parkway project. At the time the EIS was initiated for the MVC project in 2003, FHWA and the Utah Department of Transportation (UDOT) were engaged in preparing the supplemental EIS for the Legacy Parkway project, in response to the adverse court decision.

At the outset of the NEPA process for the MVC project, it was apparent that this project would involve several complex and potentially controversial issues. For the resource agencies, one of the key issues of concern was the type and location of transportation improvements in the southern portion of the project corridor. In that area, resource agencies had concerns with the alternatives located closer to Utah Lake, primarily because of potential impacts to wetlands and wildlife habitat. For environmental groups, one of the key issues was the timing of the highway construction in relation to the development of transit service. The groups sought assurances that new transit service in the corridor would be implemented before the road was fully built, in order to encourage transit-oriented development patterns.

FHWA and UDOT employed several strategies to resolve resource agency and stakeholder concerns and ensure legal defensibility of the EIS:

- Developing a shared vision for transportation and land use changes, through a collaborative planning effort facilitated by an independent group. This effort was known as the Growth Choices process and was facilitated by a non-profit organization, Envision Utah. The Growth Choices process was carried out in parallel with the scoping stage of the NEPA process. Through that effort, FHWA and UDOT were able to reach agreement with a wide range of stakeholders on a vision statement that included a new limited-access freeway, new transit service in the corridor (along an existing arterial street), and land use changes that included a shift toward more transit-oriented development. The vision statement was signed by the parties to the Envision Utah process and was included in the EIS.
- Engaging in extensive consultation with the resource agencies after publication of the Draft EIS regarding the alignment and design for the southern portion of the corridor. This effort resulted in agreement on an alignment that was located away from Utah Lake, along an existing transportation corridor.
- Including commitments in the FEIS and ROD that linked the timing of the highway construction to the timing of implementation of transit improvements. In essence, the timing requirements meant that portions of the highway could not be built until after the new transit service had become operational.
- Involving legal counsel from an outside firm throughout the NEPA process, to assist in developing the overall approach to the EIS and in reviewing the document for legal sufficiency. The legal counsel also was involved in coordination with FHWA attorneys at key points in the NEPA process, such as preparation of the FEIS and approval of the ROD.
- This was a prior concurrence project with technical assistance and involvement by FHWA's Office of Project Development and Environmental Review.

After the ROD was issued in October 2008, FHWA issued a statute-of-limitations notice, but no lawsuits were filed. UDOT has proceeded with construction of the project in stages. Some modifications to the design have been made, and have been approved by FHWA following reevaluations of the FEIS. Some sections of the project are now open to traffic; design and construction is under way in other sections.

Alaskan Way Viaduct Replacement Project

The Alaskan Way Viaduct Replacement Project involved a proposal to replace a structurally deficient viaduct located along the waterfront in downtown Seattle. The viaduct was constructed in the 1950s as part of SR 99, a limited-access highway that runs north-south parallel to I-5 through the City. SR 99 functions as an important commuter route and also carries substantial freight traffic, because of its connections to the Port of Seattle and industrial areas along the waterfront.

The viaduct replacement project was initiated in 2001, shortly after a major earthquake occurred in the Seattle area. The earthquake damaged the viaduct and highlighted the urgent need to replace the facility. In June 2001, FHWA and the Washington State Department of Transportation (WSDOT) announced that an EIS would be prepared to examine alternatives for replacing the viaduct. The NEPA process took 10 years to complete. FHWA and WSDOT issued a Draft EIS in 2004, a Supplemental Draft EIS in 2006, a second Supplemental Draft EIS in 2010, and a Final EIS and ROD in 2011.

The length of the NEPA process resulted from several challenges facing the project, including (1) difficulty in reaching consensus on a local level about whether to replace the viaduct with a new viaduct, a surface street, or a tunnel; (2) concerns about the construction impacts associated with any of the alternatives; and (3) difficulties in obtaining sufficient funding to construct the project.

WSDOT and FHWA employed several approaches to manage risk, while also responding to changing circumstances. These approaches included:

- Using an innovative reader-friendly format for the EIS itself. This format involved increased use of graphics, a question-and-answer format for the text, a magazine-style layout, a lower level of detail in the main body of the FEIS, increased use of appendices for presenting technical data, and a strong emphasis on clear, jargon-free writing. The use of this format did not necessarily expedite production of the EIS; this approach was used because it helped to make the complex environmental and technical issues more understandable to resource agencies and the public.
- Preparing a Supplemental Draft EIS focused on construction impacts for two of the build alternatives considered in the Draft EIS. The Draft EIS itself included an analysis of construction impacts, but comments on that document made clear that the public had a high level of concern about the extent and duration of construction impacts; depending on which alternative was selected, the project had the potential to disrupt traffic for a period of 10 years or more. The Supplemental Draft EIS included a more detailed analysis of construction impacts.
- Holding an advisory vote in Seattle (at the request of the Governor) in which City residents were asked to vote on the two alternatives analyzed in the Supplemental Draft EIS - an elevated structure and a cut-and-cover tunnel. The public voted against both of those alternatives, which was a temporary setback for the project, but it led to re-consideration of a bored-tunnel alternative, which eventually was approved.
- Convening a regional, multi-stakeholder collaborative process -- known informally as the Partnership Process -- to re-assess alternatives after the negative votes on the referendum. The Partnership Process was distinct from the NEPA process, and considered transportation needs on a broader regional scale. The Partnership Process involved a comprehensive reassessment of alternatives for replacing the viaduct. The process culminated in an agreement by WSDOT, the County, and the City to pursue approval of a bored-tunnel alternative, which previously had been rejected as too costly.
- Preparing a second Supplemental Draft EIS to examine the bored-tunnel alternative and to consider the effects of tolling on the project. Preparing this document took additional time, but was necessary to re-introduce an alternative that had been rejected earlier in the study as too costly. This document also enabled WSDOT and FHWA to present the impacts associated with tolling, which ultimately was incorporated into the preferred alternative as part of the Final EIS.
- Convening a group of outside counsel to provide advice regarding an approach to NEPA compliance at the stage of the project when the bored-tunnel alternative was considered. The outside legal advisors assisted WSDOT and the State Attorney General's Office in deciding the overall approach to the Supplemental Draft EIS and in reviewing that document for legal sufficiency.
- This was a prior concurrence project with technical assistance and involvement by FHWA's Office of Project Development and Environmental Review.

Shortly before the ROD was issued, the City of Seattle held another advisory vote regarding the project. A majority of the voters expressed support for the project. While the favorable vote was not a precondition for issuance of the ROD, it helped to confirm that the alternative approved in the ROD had achieved majority support among the City's residents. FHWA issued a statute-of-limitations notice following the ROD, but no lawsuit was ever filed. The project is now under construction.

The 11th Street Bridge Project

The 11th Street Bridge Project is a \$390 million undertaking to greatly improve the connection between the Southeast Freeway (I-295) and Southwest Freeway (I-895) in Southeast Washington, D.C. The project consists of major ramp and bridge improvements and extensive widening of the previous connection. The project (and the pre-existing bridge) crosses both the Anacostia River and Anacostia Park, and is an integral part of the Anacostia Waterfront Initiative (AWI). Anacostia Park is a large park on the east side of the Anacostia River administered by the National Park Service. AWI involves a series of actions designed to enhance the quality of the River and its connection to the community. AWI includes a number of intermodal transportation improvements and extensive recreational, commercial and civic projects.

The new river crossing bisects the Park at approximately the same location as the pre-existing crossing. Thus, the immediate portion of the park where the project has been built has long been affected by an existing highway. Nevertheless, because of the size and location of the project, there are substantial, but largely unavoidable, impacts on Anacostia Park, which would trigger Section 4(f). Also, some of the neighborhoods through which the project passes, primarily on the eastern side of the Anacostia River, are low-income and minority and thus require special treatment under environmental justice policies. The project was a target for opposition groups concerned about increased traffic impacts not only in Anacostia, but nearby areas, such as portions of the Capitol Hill neighborhood. These and other factors could have resulted in substantial administrative delays and litigation.

Recognizing this fact, project planners both within the D.C. Department of Transportation (DDOT) and its consultants set about addressing these and other environmental concerns early on.

- Even before the start of the NEPA process, they reached out to National Park Service officials administering the Anacostia Park to ensure that their concerns and ideas were built into the project plans from the outset. The National Park Service superintendent responsible for Anacostia Park expressed considerable satisfaction at the flexibility of transportation officials in providing mitigation to compensate for the damage caused by the enlarged transportation facility. Both the existing and the new highway are on structures over the entire width of the Park, and, of course, the adjoining Anacostia River. Thus, pedestrian access under the highway is preserved. In addition, mitigation funding provided for numerous improvements in several areas of the Park. The outreach by DDOT and its consultants was extensive from the early stages and throughout the construction phase. DDOT and its consultants also coordinated with AWI, as well as starting a series of community outreach measures designed to assure residents that their concerns would be heard and considered as the project proceeded.
- This was a prior concurrence project with technical assistance and involvement by FHWA's Office of Project Development and Environmental Review.

The DDOT issued its Notice of Intent in September 2005. It issued the ROD in July 2008. Having all this in place as the NEPA process started lead to a much more constructive, cooperative process, and it resulted in a project more acceptable to resource officials and the community. Even then, not all controversy was avoided. In fact, litigation was initiated (although dismissed on procedural grounds). However, the large measure of support for the project and quality of the project record discouraged the filing of any follow up litigation.

Presidio Parkway Project

Presidio Parkway involved replacing an existing road, Doyle Drive, with a modern, earthquake-safe facility that is an integrated part of a National Park. When built in 1936, the elevated road crossed over the Presidio to restrict access to an active military base. The base was converted to a National Park in 1994. The project was designed as a parkway, including a wide landscaped median, two sets of short

tunnels, a traffic calming transition to city streets and reduced land and shoulder widths, with enhanced pedestrian connections to recreational and other facilities within the Presidio. The project is a collaborative effort of the California Department of Transportation, the San Francisco County Transportation Authority, and the Federal Highway Administration. The second phase of the construction is a Public Private Partnership project under Senate Bill X2 4.

The scoping process, with formal notification to other agencies, began in 2000. The project was originally proposed as a standard highway which would be wider than the existing road. In the third year of the process, it became clear there was substantial local opposition to a freeway type facility. The opposition had the potential to stop the project. At that point, the project sponsors started over and developed a non-standard facility with 102 design exceptions. The final design created a roadway that reduced impacts to biological, cultural and natural resources; respects the project setting within a National Park, the National Historic Landmark District and surrounding neighborhoods, meets community needs and provides a safer roadway. The Draft EIS/EIR was released in December, 2005. Major construction began in December 2009.

Key strategies utilized to resolve issues, select a locally preferred alternative with community support and complete the NEPA process included the following:

- Sponsored a feasibility study early on, before the environmental evaluation, which helped to identify issues that would need to be addressed or resolved.
- Developed a consensus project. Identified all the groups that had to be satisfied, and created a process to accomplish that. Public involvement/participation and coordination included public outreach meetings, newsletters, website and design charrette; a Citizens Advisory Committee was also convened.
- Established a public Agency Working Group, also known as the Executive Committee, to provide input throughout the process.
- Partnered with all agencies and established an escalation process that would be used if an issue could not be resolved. The concept of the escalation process was that of a mini-trial with presentation of arguments and responses, with staff that would be able to render a decision without further consultation with other staff. Although the parties convened the process several times and prepared for the presentation of the arguments, the parties never ended up actually using the process. Just the existence of the process put pressure on staff to resolve the issues instead of having their bosses brought in to solve the problem. This has been likened to “settling on the court house steps.”

The first phase of the project, including construction of some bridges, tunnels and the southbound High Viaduct, along with a temporary bypass to the completed Battery Tunnel and High Viaduct, was completed in 2012. The new route will be completed in 2015.

Nelsonville Bypass Project

The Nelsonville Bypass, U.S. 33, is a 4-lane highway on new location providing a high-speed bypass around the town of Nelsonville, Ohio. Construction on Phase I of the project commenced in 2007, but Phases II and III could not proceed for lack of adequate funding. The 2009 Stimulus Bill (ARRA) provided the necessary funding, making it the largest stimulus project in Ohio. Work on the Bypass is expected to be completed in the fall of 2013.

The project passes through the Wayne National Forest, a sensitive area for endangered species as well as the recreational importance of the National Forest itself. In addition, the town of Nelsonville itself has a long association with the coal mining industry and contains a number of important historic sites. It was important that the bypass be associated with the town so as to alert motorists of the historic significance of the area through which they were passing.

These and other concerns led to the filing of a lawsuit while the environmental documents were being prepared. While the lawsuit was dismissed as prematurely filed, it clearly signaled the vigor of the opposition to the project.

The Ohio Department of Transportation took a number of steps in light of controversy about this project. These techniques included:

- Hired experts recommended by the resource agencies. This provided credibility and ensured that the wildlife studies, in particular, were conducted right the first time. Note that this also means the project proponent needs to follow the recommendations of such experts. One example is mitigation; ODOT learned it is better to hire a firm that specializes in implementing mitigation sites.
- Utilized a public involvement expert. Went through a process with the public to hire and select the public involvement expert; ODOT paid for the expert, but the expert was hired by the public. This helped to build trust between ODOT and the public early on.
- Internal coordination among all disciplines was another key process that ODOT followed. By ensuring that engineers, environmental analysts and real estate professionals all worked together, they were able to resolve some complex issues in a positive way. If agency staff operate in silos, they are too focused on individual issues and won't have creative inter-disciplinary solutions. Important to make sure all internal departments/disciplines are represented, in meetings with public and in internal coordination meetings.
- Advanced real estate purchased. Purchased a site that was the only known site of the Indiana Bat. This was a win-win situation, since it allowed them to provide early mitigation, and prevented a landfill from expanding onto the site, which would have destroyed the bat habitat.
- Benefits of early issue identification:
 - beef up understanding of problems
 - allows better management – more identified early on, the better success at addressing
 - help to prioritize – not spin wheels and spend money efficiently
- Modified the project based on meetings with stakeholders, including the local community. Examples included state-of-the-art wildlife crossing areas along the length of the project, special aesthetic treatments of bridge structures and other project facilities, some realignments, and other actions designed to reduce concerns about the potential adverse impacts of the project.
- Hired special legal counsel to review all documents along the way. Did their own legal sufficiency review.

These actions were so successful that when the NEPA process was complete, the plaintiffs who filed the initial lawsuit decided not to pursue further litigation. Even though ODOT did the right thing and hired experts recommended by the resource agencies, they eventually had to seek a cabinet level resolution in Washington D.C. to resolve the endangered species issues. The extensive work with one resource agency, while not successful with that agency until cabinet level involvement, nevertheless helped them when they got to the point of permitting. The NEPA process took about 4 years. The Notice of Intent was issued in April 2001. The Record of Decision was issued in August 2005.

Identifying, Assessing and Addressing Risk

NEPA requires an environmental impact statement for every major federal action significantly affecting the quality of the human environment.⁸⁴ It does not require a specific result, only that an EIS be prepared.⁸⁵ Even categorical exclusions and environmental assessments/findings of no significant impacts are not required by the statute, but the regulations have created devices to assist agencies in determining whether a particular federal action requires an EIS. Thus, NEPA is often referred to as a “procedural statute” because, by itself, it does not mandate any particular result, nor does it impose any specific legal constraints on decision-making. In spite of this rather innocuous concept, NEPA has become a complex statute and imposes additional analysis on the decision-making process. There are three basic reasons for this, all of which relate to the central themes of this study.

First, the “NEPA process” is not just about NEPA. Many federal environmental laws and executive orders may apply to a particular federal aid highway project.⁸⁶ Each of these laws has its own procedural and, in some cases, substantive requirements. For many of these laws, the NEPA process is the vehicle for documenting compliance with these other requirements and the source of information needed to make appropriate determinations or reviews. This makes the NEPA document more complex, and it can result in the process becoming very time consuming.⁸⁷ The lead agency must carefully coordinate with the other resource agencies that must review and approve any aspect of the project. The lead agency must also ensure that the NEPA document contains enough technical detail, sufficient analysis in key parts of the NEPA document, and an appropriate range of alternatives not only for its own proposed action, but for the permit and approval agencies whose actions may also be subject to NEPA. Otherwise, the resource agency may be forced to do its own NEPA analysis, which requires additional time, duplicates effort, and may result in revisiting decisions.

Second, the NEPA process has become the forum in which the project is discussed with the public. The transportation planning process, which includes considerable opportunities for public involvement, may be a better place to discuss fundamental issues such as choice of transportation mode, location, and magnitude of the proposed facility. However, it is in the NEPA document that the project is presented in detail. Also, because of the way in which the federal aid highway process works, there are relatively few places in the project development process that give the public the same degree of access to project officials. Thus, even if a person may be concerned about the project for reasons that have little to do with the environment, the NEPA process gives that person an opportunity to be heard, his concerns to be considered, and his comments to be answered in detail. In this way, the NEPA process is a tool to enhance public understanding of and support for the project.

Third, the NEPA process involves not only a presentation of facts and analyses, but a negotiation about the project. Resource agencies, utilizing the comment and (perhaps) approval role that they have, can request design modifications or mitigation features in order to better address their regulatory or resource concerns. Communities through which the facility passes often can request mitigation measures or design

⁸⁴ 42 U.S.C. § 4332(2)(C).

⁸⁵ The Supreme Court has repeatedly held that NEPA is only a procedural statute. *See, e.g., Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 376-77 (1989); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 355-57 (1989). There are many law review articles that examine this issue. One interesting discussion was presented at the NEPA at 40 Conference held by the Council on Environmental Quality. *See* <http://www.eli.org/pdf/seminars/nepa/alfano.nepa.pdf>

⁸⁶ *See* http://www.fhwa.dot.gov/environment/env_sum. FHWA maintains a comprehensive list of environmental laws, orders, and regulations that may apply to a federal aid highway project.

⁸⁷ As referenced by the interviewees, and in the author’s experience, an EIS can take between 5-10 years to complete. Some projects have reached a ROD in less than five years, but, in general, three years for the process is a minimum amount of time.

modifications that provide for better integration of the new facility into the affected area and/or that are supportive of long term community needs. Very often, public concerns about local impacts can lead to design modifications or added mitigation features. This sort of interaction is exactly what is supposed to happen during the NEPA process.

Fundamental to understanding and evaluating risk in the NEPA process is the recognition that it is more than simply a presentation of environmental impacts and project alternatives. The NEPA process can be a comprehensive debate about the need for a project and all of its proposed features and impacts. When a project is highly controversial or results in significant adverse impacts, this debate can be quite intense. However, the intensity of the debate is not the same for every project. Many projects, even those quite large in scope, are implemented with little outcry and, sometimes, strong public support. A careful examination of specific risk factors can be predictive of what is likely to occur during the NEPA process.⁸⁸ We also believe that taking assertive action to address these risk factors as early as possible can help make the NEPA process less contentious. Even if litigation results, appropriately managed risk abatement can result in a more positive outcome.

Identifying Risk

Issues that delay or cause other problems for a project can arise at almost any stage of the NEPA process. However, the risks that are discussed here are those that often can be identified and evaluated at the outset of the process, even before any major steps are taken and subsequently mitigated and monitored as the project progresses. When these kind of risk factors are identifiable, the state department of transportation can determine whether and to what degree actions designed to reduce risk should be implemented. Some of the risk reduction measures we discuss in this report are expensive and many take some time to implement. Moreover, the fact that a risk factor is present does not necessarily mean that difficulties will occur. It means that the project sponsor or state transportation department should review all of the relevant facts to assess the possibility of problems in the upcoming NEPA process to determine what, if any, actions to take.

Based on the interviews (see Appendix A), case studies and other information developed for this research, the discussion that follows reviews some early indicators of potential issues that might be encountered. These can be divided up in to the type of project involved and the impacts that may be caused by the project.

Type of Project

Large and Complex Projects

Clearly, the larger the project, the more likely it is that the NEPA process will be more difficult. Public interest both for and against these projects is likely to be high. Larger projects are likely to have a greater number of impacts, both in scale and type. It is also possible that a greater number of agencies will have a stake or role in the project. All of these factors can make the NEPA process more time consuming, expensive, and adversarial.

Similarly, where projects involve several modes of transportation or other, non-transportation elements, and have complex or multi-faceted goals, it will sometimes be more difficult for the lead agency to get through the NEPA process. This is because those reviewing the project, whether in the public, resource agencies, or the transportation community, may not understand or agree with all that is being attempted. Linkages between the various elements of the project that are readily apparent to project planners may not be so easily accepted by others. Additionally, elements of the NEPA document, such as the statement of

⁸⁸ While some interviewees reported some project with unexpected controversy late in the process, or unexpected litigation, this was the exception.

purpose and need, analysis of alternatives, induced development, and cumulative and indirect impacts, become more difficult to prepare and explain if the project involves many aspects that have to be considered concurrently. This increased difficulty does not make it wrong to propose projects with complex goals. It simply means that the state department of transportation needs to anticipate and be prepared to deal with these factors.

Projects Opposed on Non-Environmental Grounds

There are many reasons to favor or oppose a highway project, not all of which are related to environmental factors. While there are a number of avenues open to people or groups to oppose projects, few are as directed at a particular project or as open to public comment and debate as the NEPA process. Transportation plans and major projects are considered in the statewide and metropolitan planning process.⁸⁹ The planning process includes opportunities for public involvement, and projects are often debated as part of that process. However, the focus of that process is at planning level decisions, not specific projects. This may change as efforts to more closely link decisions and analyses made during the planning process are further integrated into the NEPA process.⁹⁰ What has not changed is that decisions made during the planning process are exempted from NEPA analysis.⁹¹ Up until now, however, project opponents have generally used the NEPA process to express their concerns and seek changes that would make projects more acceptable, rather than other stages in the project development process.⁹²

Many local opponents to a highway project who have significant concerns related to a major highway use the NEPA process and litigation to raise arguments they have available to stop or modify the proposal. It has been observed that projects that pass through areas where the residents are higher income or well-educated are more likely to run into trouble because these residents understand the use and application of administrative processes to achieve their goals. Although “NIMBYs” (or “Not in My Back Yard”) are sometimes ignored, opposition from NIMBYs has resulted in amelioration of localized impacts being one of the most frequent changes that occur during the course of NEPA review.

Thus, it is not enough to look simply to the environmental impacts that a particular project may cause in order to determine the level of risk to the NEPA process. Rather, it is the level of controversy about the project as a whole. There are any number of reasons for individuals to be concerned about all or part of a highway project, not all of which are exclusively related to environmental impacts. These factors may be unique to a particular project, or they may be consistently predictable for certain kinds of projects. The key is to recognize that, where these kinds of factors exist, a problem in the NEPA process can be anticipated (e.g., a delay to resolve issues, extensive comments on a Draft EIS, or the need for additional analysis prior to preparing a Final EIS).

Toll Projects

Whether large or small, toll projects also seem to attract particular attention. Although the number of toll projects has increased in response to reduced public transportation funding and improved toll collection technology, toll projects still receive close scrutiny from future users of the project. Toll projects raise transportation equity issues, especially for low-income motorists. Many elected officials

⁸⁹ See 23 U.S.C. §§ 134-135; 23 C.F.R. part 450.

⁹⁰ FHWA and FTA added an extensive appendix to the 2007 amendments to 23 C.F.R. part 450 (Appendix A—“Linking Transportation Planning and the NEPA Processes”). This Appendix provides extensive guidance on bringing the products and decisions of the planning process into the NEPA process, with an eye toward encouraging reforms that would make the overall project development process more efficient. In 2012, Congress adopted many aspects of this guidance into law in section 1310 of MAP-21, “Integration of Planning and NEPA Review.”

⁹¹ 23 U.S.C. §§ 134(q), 135(k). These subsections are the same as the provisions were prior to the enactment of MAP-21.

⁹² We recognize that the planning process can and does result in vigorous discussion about what should be included in the long range plan and TIP. However, these discussions are not nearly as public and as focused as the NEPA process (with, of course, several exceptions).

oppose or have significant reservations about toll projects in general. Also, tolling can affect traffic patterns in a way that may result in environmental impacts that need to be considered. However, for purposes of this study, rather than the specific concerns that people may have about tolling, it is the controversy associated with toll projects themselves that gives a warning signal of possible controversy in the NEPA process.

Whether a proposed project is a toll road or a non-toll road typically makes little difference in terms of environmental impacts. However, we repeatedly heard that toll road projects are a target for potential problems. This is because some people, including some public officials, have yet to accept and/or understand the need for and advantages of toll roads. Economic competition or benefit may be another reason for a group to oppose or support a particular project. Further, tolling an existing bridge crossing can result in traffic diversions and may result in the need for other transportation improvements. In some situations, a project must be built as a toll road or not at all, as sufficient public funding may not be available for any other alternative. This raises issues about the scope alternatives to be examined in the NEPA document.⁹³ Thus, when tolling is involved, in most states, project officials will need to explain the need for tolling, the factors that led to the adoption of a particular toll collection technology, and, if the project is a Public Private Partnership, the reason for that business relationship as well.

Resources Affected

Sensitive Communities

When thinking about a project's impacts on communities, environmental justice concerns immediately come to mind. Minority and low-income communities have received special attention in the federal environmental process for quite some time. Concern about failure to include these communities in planning federally funded projects and past disproportionate impacts on these communities from Federal activities led to the issuance of an executive order by President Clinton in 1994.⁹⁴ The Department of Transportation issued its own implementing order in 1997, which was further strengthened in 2012.⁹⁵ For minority populations, these orders use and implement the provisions of Title VI of the Civil Rights Act of 1964.⁹⁶ For low-income populations, DOT relies on broader authority found in the statutes establishing the various programs that DOT implements.⁹⁷

Under these orders and implementing guidance, people living in minority and low-income communities must be engaged and made aware of the project passing through their neighborhoods. FHWA must determine that there are no practicable alternatives to imposing disparate impacts on or providing equitable access to these communities (that is, impacts borne by these communities, but not by others through which the project passes, or failing to provide adequate access to new transportation facilities from these communities).

Thus, impacts to environmental justice communities are often a source of controversy and potential difficulty. However, impacts to these communities are not the only potential source of problems. There are cohesive, long-standing communities that will resist the disruption that a highway project can bring.

⁹³ This issue was the subject of an extensive legal discussion by the FHWA chief counsel's office. See http://www.environment.fhwa.dot.gov/guidebook/NEPA_tollroads.asp

⁹⁴ E.O. 12988, *Federal Actions To Address Environmental Justice In Minority Populations And Low-Income Populations*, February 11, 1994.

⁹⁵ DOT Order 5610.2, 72 Fed. Reg. 18377 (April 15, 1997). This Order was amended in 2012. as DOT Order 5610.2(a). See the following links for the initial Order and the amended Order: http://www.fhwa.dot.gov/environment/environmental_justice/facts/dot_ord.cfm and http://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/order_56102a

⁹⁶ 42 U.S.C. § 2000d, *et seq.*

⁹⁷ For FHWA, this authority is found at 23 U.S.C. § 109(h), which requires states and FHWA to consider adverse economic, social, and environmental effects of their actions.

There are many examples of such communities initiating litigation to stop or modify a highway project.⁹⁸ Litigation with such communities can be especially bitter and difficult to resolve amicably.

Section 4(f), Parklands, and Historic Sites

A very frequently mentioned environmental law outside of NEPA in our interviews was Section 4(f) of the Department of Transportation Act. The legal standard that land from a protected site may not be used unless there is “no feasible and prudent alternative” is one of the toughest in federal environmental law. Almost as onerous is the additional requirement that if land must be used by the project, then the project shall incorporate “all possible planning” to minimize harm to the site.⁹⁹ As discussed earlier, these two tests have been rigidly applied by the courts, which has led to comprehensive regulations that incorporate the results of the many court decisions made under Section 4(f). The extensive coordination required under these procedures, as well as the many groups whose mission it is to protect the kinds of sites subject to such reviews, means that where Section 4(f) resources are involved, there are often major controversies and difficult decisions at some point in the NEPA process.

A Section 4(f) determination requires considerable additional analysis, and the rigid legal standards require careful, complete documentation that is consistent with the regulations that have been promulgated to implement this statute. As we noted previously, judicial review of Section 4(f) determinations can be exacting. Thus, in addition to the problems posed when sites protected by Section 4(f) are involved, opponents to a given project will often try to raise Section 4(f) issues because legal challenges under those standards have a better chance for success than a generalized NEPA attack, and victory on this ground can profoundly alter, if not actually stop, a transportation project.

Section 404 of the Clean Water Act and Wetlands

A number of provisions of the Clean Water Act have important impacts on highway projects. For example, Section 402 of the Act, requires a permit from the Environmental Protection Agency (or, in many states, the state agency which has assumed EPA’s role in the process) for point source discharges.¹⁰⁰ This provision affects buildings and other facilities on highway property. Runoff from highway construction sites is considered be a point source that must be controlled and comply with permit requirements. However, the most important provision for purposes of this discussion is Section 404, which regulates dredging and filling of “waters of the United States.”¹⁰¹ “Waters of the United States” is a term of art, based on the jurisdiction of the United States under the Commerce Power. It is considerably broader than the reach of statutes that are aimed at protecting the navigability of waterways, although Section 404 certainly includes this mission.

Highway projects routinely encounter wetland areas, streams and rivers, and other bodies of water that are protected by Section 404.¹⁰² When this occurs, the state transportation department must obtain a permit from the United States Army Corps of Engineers.¹⁰³ The Corps has its own regulations, and must

⁹⁸ Among the most bitter opponents of the ICC were residents in a small, longstanding community that was severely impacted by the project. Using land in this community was necessary in order to avoid a Section 4(f) site.

⁹⁹ In 2005, Congress amended Section 4(f) to provide relief for *de minimis* takings of Section 4(f) land. Where the Secretary and the officials responsible for the land agree that the use meets the *de minimis* standard of the statute, then neither avoidance of the land nor “all possible planning to minimize harm” is required. See 49 U.S.C. § 303(d). The test remains unchanged for other uses of Section 4(f) land. The Section 4(f) regulations issued in 2008 provided considerable clarification of the legal standard which will also facilitate compliance with the law. 23 C.F.R. part 774.

¹⁰⁰ 33 U.S.C. § 1342.

¹⁰¹ 33 U.S.C. § 1344.

¹⁰² This may be due, at least in part, to the linear nature of transportation projects; it may be difficult or impossible to avoid crossing drainages, streams, or rivers that run perpendicular to the proposed facility.

¹⁰³ 33 C.F.R. parts 320 – 332.

also follow guidelines issued by EPA (under Section 404(b)(1) of the Clean Water Act).¹⁰⁴ These regulations impose a rigorous standard that seeks avoidance of adverse impacts to protected waters and wetlands unless there is “no practicable alternative.” Corps decisions under the Clean Water Act are subject to NEPA. The project NEPA document can be adopted by the Corps for purposes of its decisions with respect to the project. Often, the Corps prepares its own NEPA document focused on Corps specific issues, and relies on the lead agency’s NEPA document for other issues.

Although primary responsibility for issuing a Section 404 Permit to the grantee rests with the Corps, EPA often gets involved because of its specific role in the review process. In addition, there is a requirement for consultation with agencies such as the U.S. Fish and Wildlife Service, the National Marine and Fisheries Service, and others. All this can make the 404 permit process both cumbersome and time consuming. FHWA has established a set of interagency agreements that are designed to expedite the permitting process by identifying disagreements among the agencies involved in the process and establishing a framework for resolving those differences.¹⁰⁵

Projects that only minimally impact waters of the United States typically qualify for a “nationwide permit.” The Corps review of these projects is greatly simplified.¹⁰⁶ However, if the project will require an individual Section 404 Permit, it is advisable to make the Corps a cooperating agency. Incorporating the Corps’ needs into the project’s NEPA document will avoid having to issue a separate NEPA document. While the cooperating agency process is well-suited to avoid duplication in the NEPA process, in the author’s experience, the Corps is often reluctant to agree to act as a cooperating agency. But, even when the Corps is not a cooperating agency, working as closely as possible with them s will make the permit process go more smoothly.

Other Environmentally Sensitive Areas

We will not attempt to discuss the 40+ environmental laws that apply to the federal aid highway program. The central aspect of these laws is that they usually require a consultation with a resource agency and frequently a review process that includes an opportunity for public comment. Sometimes they require approval before proceeding, and sometimes they involve only comments. Either way, many of these statutes can create a complex and lengthy process should the resource they protect be threatened. Two statutes which stand out are Section 106 of the National Historic Preservation Act¹⁰⁷ and Section 7 of the Endangered Species Act.¹⁰⁸

Section 106 requires agencies to consult with the State Historic Preservation Officer and the Advisory Council on Historic Preservation. If the project will have adverse effects on sites on or eligible for inclusion on the National Register of Historic Place, Section 106 requires that this consultation seek to minimize these effects, and the agreed upon mitigation plan is memorialized in an enforceable agreement. The Section 106 process draws in persons and agencies having a direct interest in the project and the historic site. It involves comment, review, and consultation. As a result, it has proven to be a very effective means of protecting historic sites. It also means that if a project may affect historic properties, it is an issue that has to be addressed from the outset, both because of Section 4(f) and because of Section 106.

If a project has potential impacts on endangered species or their critical habitats, Section 7 mandates careful examination of those impacts and a biological opinion from the Fish and Wildlife Service (or, in marine environments, the National Marine and Fisheries Service). If the project threatens the continued existence of an endangered species or its critical habitat, and that impact cannot be mitigated, it is

¹⁰⁴ 33 C.F.R. part 230.

¹⁰⁵ See <http://environment.fhwa.dot.gov/projdev/tdmnepa404.asp>.

¹⁰⁶ A summary of the 2012 list of nationwide permits may be found at: http://www.usace.army.mil/Portals/2/docs/civilworks/nwp/2012/NWP2012_sumtable_15feb2012.pdf

¹⁰⁷ 16 U.S.C. § 470f.

¹⁰⁸ 16 U.S.C. § 1536.

virtually impossible to proceed with the project (there is an exception process that permits extremely rare exemptions). The consultation process is complicated, and it is preceded by a careful examination of the project location to search for potential endangered species. The biological opinion process charges the Fish and Wildlife Service to review the project, its impact, and any studies prepared by the project agency. It then makes a determination regarding potential harm or jeopardy.

Any number of other issues can arise in the course of the NEPA process. While some of the many environmental laws and regulations are more likely to arise and present more procedural and analytical problems, the truth is that under the right set of facts and circumstances, many of them can be the source of considerable concern and disagreement over the level of analysis, or scope of such analysis, to address them. For example, the Clean Air Act normally interacts with highway construction through the transportation conformity process, which occurs during the transportation planning process.¹⁰⁹ However, in recent years, mobile source air toxic emissions (MSATs) have become of increasing concern. MSATs have been identified by EPA, but EPA has never issued National Ambient Air Quality Standards for them. Hence, they are not addressed by the conformity process. In addition, the health impacts of MSATs are not well understood, particularly for relatively short term exposures. Because they are not addressed elsewhere, when there is a potential issue, they are addressed in the NEPA process.¹¹⁰ Some of these toxic emissions are very harmful for extended exposures, and thus are a source of concern to people living near some highways. This can result in significant challenges to completing the NEPA process, and requires considerable coordination with federal, state, and local air quality, health, and other agencies.

Managing Risk

As we noted in the Introduction, “risk,” as it appears in this document, means the risk to the successful completion of the NEPA process in as short a time as possible. The NEPA process, whether the document being prepared is an EA/FONSI or an EIS, can run into difficulty because of administrative delay, intense political opposition, and/or litigation.

In the last four major surface transportation bills, Congress has addressed the issue of administrative delays in the NEPA process.¹¹¹ The provisions have considerably strengthened the legislative direction to all agencies involved to carry out their responsibilities in the process promptly. These provisions have had a positive effect, and the provisions in MAP-21 are particularly useful. However, a prime source of administrative delay is strong disagreement between a resource agency, the state department of transportation, and FHWA about the adverse impacts of the project and possible design and location modifications or mitigation measures needed to address those adverse impacts. These differences can play out over months, if not years, of delay, often in a poisonous atmosphere. This can also result in a record that is difficult to defend should litigation arise, particularly if the record does not demonstrate that steps were taken to address, or at least evaluate, the concerns, which can lead to even further delay. While the measures in MAP-21 and the statutes before it may result in shortening the time for such disagreements to be resolved, or to reach a point of “agreeing to disagree,” it remains with project officials to produce a record of accommodation, or at least a responsible explanation, that can withstand a legal challenge.

While typically these entities are unlikely to have formal legal authority to stop or require significant modification of a project, vocal opposition can change the political dynamic supporting a major public works project. After all, the state transportation department is a public agency working for the public good. When portions of the public are vehemently opposed to a project, transportation officials need to address those citizens’ concerns. It should be noted that many other agencies, including resource

¹⁰⁹ See http://www.fhwa.dot.gov/environment/air_quality/conformity.

¹¹⁰ See http://www.fhwa.dot.gov/environment/air_quality/air_toxics.

¹¹¹ An excellent summary of these provisions and related material may be found on FHWA’s streamlining webpage: <http://environment.fhwa.dot.gov/strmlng/index.asp>.

agencies, are more likely to raise concerns resulting in delay if there is strong local opposition to a project. Concerns from one group are often adopted by others, or contribute to a collective intensification of concern or opposition. In addition, other permitting agencies may be concerned that if they issue an approval or a permit, they will face litigation in addition to the highway agency. Moreover, litigation challenging the NEPA process for a project always comes from one or more of these persons or entities.

Throughout the many years we have worked on highway environmental matters, we have observed that roughly 20% of all EISs eventually result in litigation. We arrived at this number by comparing the number of EISs prepared each year to the number of new lawsuits filed.¹¹² This 20% figure is a very high number when compared to the frequency with which government actions in general are challenged in court, and it reflects the fact that EISs involve major actions with significant adverse environmental impacts.¹¹³ These projects are more likely to be opposed by individuals who are simply not satisfied with the actions that the state department of transportation is taking. While FHWA and the state prevail in the large majority of NEPA cases, even a successful defense is very expensive, draws financial and personnel resources away from other work, and often leads to significant delays, either self-imposed or because of court-imposed injunctions.

Responding to the Risk of Administrative Delay

Administrative delays are a major source of frustration in the NEPA process. They may be the result of a failure to respond in a timely manner to a request for comments, or stem from a failure to agree about the project, its impacts, and mitigation measures, especially when resource agencies are in a position to negotiate around these factors.¹¹⁴ Many administrative delays are self-imposed. That is, the state department of transportation may decide to delay a project for financial or policy reasons unrelated to environmental factors. Some delays are caused by technical issues with preliminary engineering or environmental studies. Many projects are shelved by state DOTs' shifting priorities. However, when transportation officials talk about delays in the NEPA process, they generally refer to the length of time it takes to work with resource agencies to address their permitting and approval processes and to coordinate with other participants in the process.

Administrative delays can occur at any stage of the NEPA process, up to and including the days before the Record of Decision – finalizing the EIS process – is signed. Indeed, the CEQ regulations reserve perhaps the most imposing delay of all, the “Pre-Decisional Referral,” to the 30-day waiting period that follows completion of the Final EIS before the ROD may be signed.¹¹⁵ Even before the CEQ Pre-Decisional Referral process is reached, Congress has created a similar elevation process for resolving agencies' differences of opinion within established time periods for transportation projects, reaching the Secretary of Transportation. SAFETEA-LU initiated this formal procedure, which was strengthened by

¹¹² This 20% figure is not based on a rigorous comparison of EISs and NEPA lawsuits filed. Rather, it is a rough approximation, based on the experience of the authors over many years.

¹¹³ By way of comparison, FHWA takes approximately 20,000 actions a year requiring a CE. Less than one lawsuit a year involves a challenge to a CE.

¹¹⁴ There are very many studies about the causes of delays in the NEPA process. One study that looks at these in a relatively straightforward manner may be found at: <https://www.transportationresearch.gov/dot/fhwa/ReNepa/Lists/aReferences/Attachments/84/25-25%20Task%205%20Final%20Report.pdf>. Other references may be found on FHWA's streamlining webpage, n. 19 *infra*.

40 C.F.R. part 1504. Pre-decisional referrals occur when a federal agency strongly disagrees on environmental grounds with the action that another agency plans to take. The decision to file a pre-decisional referral with the CEQ may be made by the agency only after other attempts to resolve the matter have failed. The referral process involves the heads of the two agencies involved in a very public dispute resolution process. Pre-decisional referrals are very rare.

MAP-21.¹¹⁶ The MAP-21 amendment includes an increasingly severe number of steps involving the Secretary and, potentially, a different kind of referral to CEQ, designed to achieve timely resolution of an issue. Failure to do so could have budgetary consequences for the agencies involved.

MAP-21 also contains a number of other provisions designed to address delays and disputes during the NEPA process. We have already addressed the provisions linking planning and NEPA. Another amendment to 23 U.S.C. § 139 that may accelerate the NEPA process for certain complex projects, provides that at the request of a project sponsor or a State's Governor for technical assistance, FHWA could accelerate project completion by developing a plan for completing the EIS within 4 years.¹¹⁷ A very interesting provision will encourage agencies to reach cooperative agreements on early coordination and technical assistance in the NEPA process.¹¹⁸ This is in addition to provisions in 23 U.S.C. § 139 that already require certain agencies to become "participating agencies" in the NEPA process on a project-specific basis. There are many other provisions of MAP-21 addressing the NEPA process. It is not our intent to summarize them here, but as a whole, they probably constitute the most significant effort by Congress to address the NEPA process for transportation projects since the enactment of NEPA in 1969. A summary of the MAP-21 provisions may be found on FHWA's website.¹¹⁹

What many of the MAP-21 provisions have in common with the theme of this report, and with long-standing guidance from FHWA, is the importance of addressing interagency issues early. We would suggest that where important resources or impacts are at issue, such as wetlands, parks, historic sites, threatened and/or endangered species, air toxics, induced development, and the like, it may be advisable to engage with the relevant resource agencies even before the start of the formal NEPA process. These kinds of consultations can establish relationships and coordination that will be useful throughout the process. It may also provide those agencies with an opportunity to convey their primary concerns early so that they can be addressed during the preliminary design process leading up to NEPA document, especially the purpose and need statement, the range of alternatives, the discussion of the effected environment, and possible mitigation measures.

Both in our interviews and the case studies, as well as in our own experience, we found that experienced transportation environmental practitioners confronted potential environmental issues by trying to reach out to key resource officials, park administrators, potential cooperating agencies, and the like to establish one-on-one relationships (if they did not exist already) and to solicit the views of such officials as the initial NEPA documents were being prepared (not after the initial circulation of purpose and need statement, scope of alternatives, etc.). Sometimes they did this as part of the early coordination process contemplated in the NEPA regulations,¹²⁰ and sometimes even earlier than and apart from that. Moreover, once this relationship was established, it was maintained throughout the NEPA process, as the project design and mitigation measures were developed. In this way, those resource officials, at least to the extent of their responsibilities, were a part of the project development process.

Resource officials are often too limited by budget and resource constraints to be actively involved in the early stages of a transportation project. At least part of the reforms in MAP-21 aim to encourage and require resource agency officials to become more deeply involved early on and continuously throughout the process. In many cases, this early involvement has proven to be mutually beneficial, that is, where each side tried to accommodate the needs of the other.

Better coordination early on can significantly reduce risk in the environmental process as well as reduce delay. It can reduce delays because issues that could become major problems can be addressed early, when resolving them through design modifications or mitigation measures is easier. The resultant

¹¹⁶ Sec. 1306 of MAP-21, amending 23 U.S.C. § 139(h).

¹¹⁷ Sec. 1309 of MAP-21.

¹¹⁸ Sec. 1320 of MAP-21.

¹¹⁹ See <http://www.fhwa.dot.gov/map21/qandas>. This is a "Q & A" page on MAP-21 provisions. FHWA has published only a few guidance memoranda on the new provisions.

¹²⁰ 23 C.F.R. § 771.111(a).

NEPA process will run more smoothly because later stage confrontations may be avoided or at least softened. The result can even affect the outcome of any litigation that might occur. For example, FHWA has found that where no resource agency objects to the outcome of the NEPA process, the risk of loss in litigation is dramatically reduced.¹²¹ Such a record demonstrates to a judge that the agency took the “hard look” required by NEPA and that the agency responded to comments and attempted to analyze alternatives and issues brought up by agencies and commenters.

Responding to Vocal Opposition

Strong opposition to a project, be it from NIMBYs, local governments, environmental advocates, or others, needs to be carefully considered from several perspectives. The first step is to carefully listen to what is being said. This is not always easy, especially when the opponent is loud, passionate, and not focused on the same issues that concern transportation officials. Is the opposition to the project as a whole, no matter where it is located, or is it to a particular aspect of a project or a specific location? Is the opposition a single voice, or does it represent a broad spectrum of the community? Have groups with different missions or objectives joined together in opposition to the project? Is the opposition based on a misunderstanding of the environmental process? Is it opposition simply based on a perceived failure to respond to a particular concern or to provide personalized information? These kinds of questions could go on indefinitely, but the point is not simply to hear that a speaker opposes the proposed action, but to understand what is motivating the opposition.

Opposition to a project often starts because a community or group of individuals thinks that their concerns are being ignored or not taken seriously. What transportation officials believe to be obvious and clear may not be understood at all by someone suspicious of the government and its motives. Groups who oppose the project outright use the lack of information and unresponsiveness to build support for their cause.

Project officials can avoid adverse publicity by staying ahead of project opponents by providing as much information as possible in an easily accessible manner. If some important piece of information is not available, indicate why it is not and when it will be. Another key is to provide access to information and, with reasonable regularity, access to officials who know what is going on with the project. For a major project, it is important to do this from the beginning, before misinformation takes root. Successful project efforts often have included public relations experts who know effective means of reaching out to the public and keeping them sufficiently informed. These public relations efforts often continue until construction is complete, serving first to provide information related to the NEPA process, then ongoing design developments, and finally information about construction schedules, road closures tied to construction, etc. Much good will can be generated by the constant availability of information.¹²² It might mean a willingness to go out and meet with groups of concerned citizens in forums where they feel comfortable.¹²³

¹²¹ Even if after all of the early coordination, resource agency and transportation officials cannot agree on the outcome, a record of attempts to resolve the environmental issue will greatly help in any ensuing litigation.

¹²² The skill set for a public relations effort of the kind we are referring to is not the same skill that a press office has whose job it is to deal with reporters and to provide news bulletins for major milestones. Rather, it is one that anticipates public needs and has an understanding of how information is provided to and received by the public. For a very large project, this can mean a very intensive and comprehensive program.

¹²³ For example, Massachusetts officials had two to three thousand such meetings to explain the work going on with the Central Artery Project in Boston, MA. This project, known as the Big Dig, did not have the type of serious opposition that so often plagues major transportation projects. Our information about this example of successful public outreach is based on guest lectures by Jane Garvey in a university course taught by one of the authors. Ms Garvey held several senior posts with the Massachusetts Department of Transportation. She later served as Deputy Federal Highway Administrator and Federal Aviation Administrator.

Another key is to accommodate local concerns, especially those of local governments, wherever possible. Sometimes, it may be advisable to anticipate these concerns before the NEPA document is published so as to avoid an unnecessary confrontation. Sometimes all that is needed is a forthright explanation of why a particular concern cannot be addressed. Large transportation agencies sometimes remain silent while developing their position or completing the development of needed information. If that silence continues for a long time, frustration, anger, and even fear can develop. Some states have addressed that problem by providing regular updates, even when there is not much to report. These updates provide a sense that there is really nothing to hide (as there rarely, if ever, is).

In addition to taking steps to adequately and affirmatively address anticipated vocal opposition, agency officials must also recognize that such vocal opposition can be an important tool for improving the NEPA document and making it more responsive to local concerns. If there are significant fears about one or more aspects of the project, why not listen to what concerns are being voiced and ensure that the NEPA document takes those concerns into account? Not only will this make the document more defensible should litigation arise, but it can also show concerned citizens that the state transportation department is listening to them.

Public involvement, response to comments, public hearings, etc. are part of all transportation projects, except those that are very small. They will certainly occur in due course during the NEPA process. However, when steps are taken at the outset of the process, they can proactively limit potential problems. Some critics will not comment further if they are provided with the right kind of information. Others may be satisfied simply by being allowed to participate at some level in the NEPA process. Even for those who remain steadfast in their opposition, engaging them early in the process will give project officials (and their lawyers) a much better idea of what might lie ahead.

Responding to the Risk of Litigation

If transportation and planning professionals have listened as the project moves through the last stages of the transportation planning process, such as development of the long-range transportation plan TIP, and the initial stages of the NEPA process, they will often know whether litigation is more likely or less likely for a particular project. Also, as we have noted already, some projects, by their very nature, are more controversial than others and, thus, are potential candidates for litigation. If the risk of litigation is high, there are specific steps that an agency can take to prepare for that possibility from the outset of the NEPA process that will strengthen the agency's litigation posture.

As simple as it sounds, the best thing the agency can do to bolster its odds against prospective litigation is to prepare high-quality documents and comply with and fully document the legal standards applicable to decisions reported in those documents. Agencies sometimes fail to comply with specific requirements in a regulation or law, or at least fail to document each element of what a particular decision must include. For example, FHWA's Section 4(f) regulations spell out exactly what findings must be made in order to determine that there is no feasible and prudent alternative to avoiding a Section 4(f) resource.¹²⁴ Courts will look to see if all of those findings have been specifically made in the Section 4(f) determination. A determination that does not include those findings is likely to be found legally deficient.

Another problem is that NEPA documents are long and complex, typically prepared by many people over a long period time. This means that there may be internal inconsistencies from one part of the document to the others. Plaintiffs feast on such inconsistencies. Also, during the NEPA process, the issues that engage the public, resources agencies, and transportation officials are the ones that receive careful attention and more complete documentation. However, an EIS must cover all of the environmental impacts and analyze reasonable alternatives, not just those that are the subject of debate in the process. When litigation comes, lawyers for the plaintiffs will scour the documents for potential

¹²⁴ 23 C.F.R. § 774.3(c).

deficiencies, not limited to those issues that are of principle concern to their clients. Thus, court cases are sometimes decided on issues wholly unrelated to those that were debated during the NEPA process itself.

NEPA is a statute that mandates that agencies: (1) evaluate and consider impacts on the environment in their decision-making process, and, (2) engage with the public and other resource agencies on the issues that concern them. Failure to respond adequately to concerns raised or comments made can weaken the NEPA document and process. That too can cause a court to take an in-depth and critical analysis of the agency's NEPA documents. That can be a problem, as NEPA records are often so complex that it is almost impossible to avoid at least some legal error. If a judge is concerned about the adequacy of the document, based on a perception that the agency did not take a "hard look" at potential impacts, this can forecast a request by the court to go back and correct deficiencies in the document or process.

These and many other factors affect the legal sufficiency of a NEPA document. Delays to a project schedule may result if a NEPA document needs to be substantially revised. For this reason, many of those to whom we spoke recommended that legal counsel be involved early on and throughout the NEPA process.

Every NEPA lawsuit is based on the "Administrative Record" for the project. There are many theories about what documents should be included in the Record. Some lawyers believe that the record should include only the main documents actually used by the decision maker, while others believe that the Record should include almost all documents the agency has that are relevant to the decision. NEPA is applicable only to federal actions and federal decisions. However, for highway cases, many of the records that back up the major NEPA documents are created and maintained by the state department of transportation. FHWA includes all documents relevant to the decision in the Administrative Record. Thus, in most NEPA litigation relating to highway projects, the Record includes not only the major NEPA documents, such as the draft and final EIS/4(f) and ROD, but all of the state and federal project files that are related to what is contained in the EIS or EA. This includes all technical studies, interagency correspondence, agency minutes of meetings with FHWA and other agencies, emails, memoranda, letters, etc.

The Administrative Record for a major environmental lawsuit concerning a large project can be hundreds of thousands of pages long. All of the documents have to be numbered and captured on searchable electronic media. Duplicate documents, of which there are likely to be many, must be removed. Also, documents not properly part of the Record must be found and removed. Agency files have to be checked and re-checked to ensure that all relevant documents are included. Apparent internal inconsistencies in the Record have to be identified and, if possible, the documents that explain these inconsistencies have to be located and included in the Record. This is because once the Record is submitted to the court, it is difficult to supplement without agreement of the plaintiffs. As it is being prepared, the Record must be searched for "privileged documents." These are documents subject to various legal privileges, such as the attorney-client privilege. Such documents are usually part of the Record, but not provided to plaintiffs.

All of this work adds costs and time. It can also place an additional burden on state agency staff, as they work to assist in preparing the Record. If construction is expected to start soon after approval of the ROD or FONSI, plaintiffs in a lawsuit are likely to want a preliminary injunction or temporary restraining order to keep construction from starting as the case is being litigated. If the state and federal transportation agencies are immediately ready to start defending litigation, these work stoppages can often be avoided. However, if the Federal government (typically with extensive assistance from the state DOT) must create and prepare the Administrative Record, the Justice Department and the FHWA may be put in the position of having to delay the commencement of construction until the Record is submitted to the court, even if the court does not enjoin the project.¹²⁵

¹²⁵ Decisions of this sort are typically discussed with FHWA and state transportation officials and their attorneys before such a step is agreed to.

Thus, when litigation is clearly expected, some of the individuals whom we interviewed recommended preparing for litigation from the outset, as the project progresses. This means coordinating with FHWA about what should be included in the Administrative Record. These documents should be separately filed and placed on electronic media (almost all administrative records today are submitted on searchable electronic media, such as DVDs or, perhaps, limited access to an online data base). Internal emails, memoranda, etc., should be carefully monitored, not so much to stop random harmful comments, but to ensure that all questions that are raised are addressed. This is because plaintiffs look for notes or memoranda that suggest the government failed to address an important issue or ignored an environmental concern raised by its own staff or a resource agency. The upside of this approach is that an Administrative Record can be ready almost contemporaneously with the ROD, which can become a powerful tool in the hands of lawyers representing the agency. The downside is that after the substantial investment in preparing the Record early, litigation may not be filed.

Deciding What to Do: Evaluating the Level of Risk and Using Experts

While the potential of risk to a smooth NEPA process, at some level, exists for any project, and certainly for any project involving an EIS, the fact is that the majority of projects go through the NEPA process with relatively little delay and without major controversy. Thus, part of the risk assessment process is not only identifying the potential sources of risk, but also assessing the severity of that risk on a project by project basis. We have identified some of the early warning signs of potential problems and how to address them. Some of the measures we have discussed can or may already be part of the routine way of doing business. Other measures may be time consuming and make extraordinary demands on the staff of the state department of transportation, FHWA, and the resource agencies involved. While such measures may be entirely appropriate for a major, controversial project, they may be overkill for a routine project. Transportation and resource agencies do not have the staff, the budget, or the time to make maximum effort on every project.

Below, we suggest several factors to consider in deciding how far to go with various risk-reducing measures. We recommend that these factors be evaluated at the very start of the NEPA process, as decisions are made on how to proceed. These factors should be evaluated at some level for every project. For small or simple projects, such as those that qualify for a categorical exclusion, the evaluation can be relatively informal, with a simple document or checklist supporting the exclusion. As the project becomes larger or more complex, the analysis should become more focused. The list of factors to consider is not in any particular order. Rather, each of the factors should be weighed independently.

1. *Is litigation on environmental grounds likely?* If the answer to this question is “yes,” it is almost always wise to take extra steps to ensure the quality of the documentation in the Record. Litigation can rarely be prevented, but steps taken to ensure that the Record meets and exceeds legal requirements and that the agency is ready to litigate will pay off. There are very few ways to actually prevent litigation by a determined project opponent. It may be possible that some of the measures suggested herein will persuade a potential plaintiff not to sue. However, with proper preparation, it is possible to greatly increase the agency’s likelihood of substantially prevailing.
2. *Does the list of potential opponents include a local unit of government or a national environmental group?* Local governments make very effective opponents in an environmental lawsuit, not only because they may be able to fund the litigation, but because they have more credibility arguing about unwanted impacts on their communities. National environmental groups bring more resources as well, and they also bring attorneys with considerable skill and experience should litigation arise. Where it is reasonable to do so, it may be wise to try settling issues of concern to these two types of potential plaintiffs. This is especially the case with local units of government. Local government plaintiffs often have very focused concerns about a project that may be possible to address through negotiation.

3. *Are people angry about the project from the outset?* A very angry or unhappy community or group of citizens can be very disruptive to the NEPA process. If they are sophisticated, they can encourage opposition by resource agencies. They can generate a lot of bad press about the project. They are sure to ask difficult questions at every opportunity during the process as well. It is usually a good idea to reach out to such groups. First, they often do not expect it, and may react positively. Second, attempting to address their concerns may be helpful in consulting with resource agencies, which may have litigation concerns of their own. Finally, should litigation come, having attempted to work with the likely plaintiffs will be very helpful for the Administrative Record.
4. *How large is the project?* Larger projects have larger budgets and are more likely to be a target of focused opposition. Taking steps to reach out to resource agencies early can be very effective. Other risk-reducing steps, such as ensuring that the documents meet legal requirements and are checked for accuracy and internal consistency, are likely to pay off as well. It should also be remembered that large projects often will have significant impacts on the communities through which they pass. Interaction with local citizens and the groups that represent them will therefore be important.
5. *Are sensitive environmental areas or resources likely to be involved?* Early coordination with the agencies responsible for these areas or resources could save a lot of grief in the long run. Care should be taken that any legal requirements of the laws protecting these resources are met and that the EIS includes the environmental factors that need to be considered because of these resources.
6. *How time-sensitive is management about the project?* Time is an important driver on many projects. Many of the reforms in SAFETEA-LU and MAP-21 are designed to make the NEPA process more efficient and predictable. However, the EIS process for a large, controversial project will never be simple or short. In advising management, environmental transportation officials and their lawyers will need to understand the time implications of both taking risk and implementing risk averse measures. The problem is that no amount of risk reduction can guarantee a smooth, cooperative NEPA process and successful conclusion to any lawsuit that might follow. On the other hand, there have been projects for which no measures were used to reduce risk that have been constructed without litigation being filed. This can make it difficult to persuade an agency manager determined to save time at all costs that time-consuming risk-reducing efforts may actually save time in the long run.
7. *How risk averse is agency management about the project?* Is management willing to see through the risk-reducing measures to the end? Long administrative delays and a loss in court may undermine the very viability of a project. On the other hand, some of the measures we have suggested are expensive and can be time consuming as well. In our experience, questions of risk must be answered for each project individually. This includes incurring the expense of getting ready for litigation from the outset of the NEPA process. Management needs to buy into the measures being applied. Some measures, such as those that involve reaching out to the public or working with resource agencies, cannot be simply stopped once they are started, as doing so could generate a wholly counterproductive backlash.

These questions may be answered quite objectively in a manner that suggests very little risk exists for a particular project. However, where this is not the case, these questions do not have simple answers. That is why so many of the people we talked to suggested involving lawyers and technical experts with significant NEPA experience from the beginning. These experts are not the same as the engineering companies that may be hired to prepare the environmental document, or that provide specialized input about aquatic resources, traffic modeling, or any of the myriad of other disciplines that may be involved in assessing the environmental impacts of the project. Rather, these should be experts about the process as a whole, who can help agency managers and environmental officials properly assess risk and then appropriately respond. This expertise may exist in-house in some transportation agencies. Certainly, consultation with FHWA regarding these issues may also be appropriate. However, for complex, large, or difficult projects, some states with even a considerable amount of NEPA experience have chosen to go

to outside legal and technical experts for help. Some states do so to gain another perspective about how to proceed with an important project. Others wish to enhance their own ability to deal with difficult issues, rather than simply relying on the expertise of the federal government.

When engaged, these experts would typically assist in developing the initial strategy for proceeding with the NEPA process, be available throughout the process as an expert resource as issues arise, and review and comment on key documents, such as the draft and final EIS, as they are prepared. How, and the degree to which, experts might be used can vary from state to state and project to project. A key element of the experts' role is that they be more or less independent from those actually doing the work of preparing the NEPA documentation. This is seen as helping maintain their objectivity and their independence in advising management.

No matter how much expertise the lawyers or technical experts may have, it must be understood that management and the state department of transportation is the client and thus has the last word on how to proceed. The experts provide advice, not direction. This has three important implications for state transportation officials in working with these types of very experienced experts. First, state officials must decide what kind of experts they wish to hire. For example, when hiring a lawyer, some officials we talked to recommended hiring the most experienced NEPA lawyer available. Although most experienced NEPA lawyers have been deeply involved in NEPA litigation, some have more experience in this area than others, while other NEPA lawyers may have more expertise in working with agency professional staff. Does the NEPA lawyer's experience include experience in other areas of environmental law that are particularly germane to the specific issues confronting the project at hand, be it historic preservation, wetland impacts, Section 4(f), etc.? States with complex environmental procedures may also want to have local counsel experienced in state environmental law, including state mini-NEPAs. One could ask a similar array of questions when considering a technical expert, who might be hired in lieu of or in addition to a legal expert.¹²⁶

Second, state officials must be able to evaluate the qualifications of the experts they are hiring. Thus, for example, when hiring a legal expert, state counsel should always be involved in the hiring process. In many states, all lawyers hired as contractors by state agencies must be retained through or with the approval of the office of the state attorney general. Some states may want to hire the lawyer as a subcontractor to the engineering firm responsible for preliminary engineering. This can work as well, so long as it is clear that the lawyer owes his or her legal duties to the state department of transportation and not to the prime contractor.

Third, the state officials must be in a position to evaluate the advice that they are being given so that they can make choices most appropriate to them. This experience can come from in-house staff or by asking the expert to provide an appropriate array of alternatives if the initial advice seems undesirable, or both.

Conclusion

The NEPA process applies to every highway project receiving federal aid or requiring federal approval. It includes CEs, EAs, FONSI, combined Final EISs/RODs, and EISs followed by a ROD. Even EISs, which apply only to major federal actions significantly affecting the quality of the human environment, can have differing degrees of complexity and controversy. State departments of transportation should not embark on the NEPA process for any project blindly, but should take steps to anticipate the complexity and difficulty likely to confront them. The expenditure of time and resources at the outset to make this assessment can make the whole process function more smoothly, or at least better prepare the state when problems arise. It can also help state officials "right-size" their effort to the project at hand.

¹²⁶ One interviewee noted that his agency hires experts recommended by the resource agencies; such experts have built-in credibility with the agencies. But, that places a burden on the agency to follow the expert's advice, or at least, provide a robust explanation as to why the advice cannot be followed.

We have provided a number of case studies where early anticipation of possible issues made for a more successful NEPA process and, in at least a couple of examples, actually persuaded project opponents to forego or abandon litigation. In other cases, this strategic approach made for a successful outcome in what could have been a very difficult NEPA lawsuit. These examples should not be read strictly to mean that this level of extra effort was necessary to avoid problems in the NEPA process. Rather, we would hope that the reader considers what drove officials in these cases to take these extra steps and whether those considerations apply to the project that the reader is considering. If the answer is not clear, it might well be worth some time and resources to make this determination, with or without expert assistance.

Appendix A: Key Observations from Initial Interviews

As part of the initial phase of this study, we interviewed a number of established NEPA practitioners from across the United States, including individuals from federal and state transportation agencies, public interest groups, and private consultants. Appendix A to this research is a list of the questions posed to each interviewee and a summary of their responses. The primary purpose of these interviews was to help identify projects that might be good candidates for more detailed examination as case studies. However, the individuals we talked to had much to offer by way of additional insight, and we therefore decided to devote this Appendix to those observations. Rather than simply summarize what we heard, we have attempted to extract the most salient observations.

The questions we posed to each interviewee focused on early warning signs that might alert project officials to possible controversies ahead. What are the early warning signs? What risk factors result from the type of project involved, and what factors are attributable to the kinds of environmental resources possibly impacted by the project? We also gathered information on the techniques used to identify and address risks both leading up to and during the course of the NEPA process. Finally, we asked interviewees to share any general observations they might have for our consideration.

The answers we received were quite consistent across our interviews, both as to the factors that predicted potential issues in the NEPA process ahead and, especially, the measures that should be taken to ameliorate the problems that could result from such issues. This is particularly telling, as all of our first round interviewees were experienced NEPA practitioners. We should note that none of our interviewees viewed the risks we describe below as a reason not to proceed with the project. Indeed, most of the projects we discussed were under construction or already open to traffic.

Early Risk Identification and Risk Factors

The first series of questions focused on the early warning signs and risk factors that project officials should look for at the start of the NEPA process. This presence of these signs and factors might indicate that actions to address them would be appropriate at the outset of the NEPA process.

Type of Project

Sometimes, the nature of a project itself constitutes a warning of future controversies. Indeed, one interviewee noted that the very fact that an EIS is needed should, by itself, be considered a sign of potential difficulties. Larger projects naturally draw more attention than smaller ones. Large projects affect more people, communities, and resources. All of those are risk factors in and of themselves. However, quite apart from the impacts they cause, large projects pose questions as to whether they are an appropriate use of resources. Those opposed to highway developments in general will examine large projects much more thoroughly and will pose questions about the need for the project and the reason for its large scale. Large projects will also attract more attention from the press, and thus will potentially be debated in a wider public forum, beyond those directly affected by the project. Large projects also take longer to plan, design, and construct. They will be in the public eye longer and cause greater disruption than a smaller project.

Another interviewee noted that projects that cause a good deal of impact or result in many relocations of people and businesses often create controversy. It should be remembered that some of the early Interstate Highway System construction projects literally moved thousands of people, especially in urban areas. Historic preservation laws, Section 4(f), public hearing requirements, the Uniform Relocation Assistance and Real Property Acquisition Policies Act (the “Uniform Act”),¹²⁷ and NEPA itself all grew out of that early time period. These laws still provide a measure of protection because they force transportation agencies to focus on projects with significant impacts. Also, it should be apparent that if many people and businesses are forced to move, albeit with compensation, at least some of them will object vehemently, up to and including commencing legal actions aimed at stopping or altering the project to prevent it.

Whether large or small, toll projects also seem to attract particular attention. Although the number of toll projects has increased in response to reduced public transportation funding and improved toll collection technology, toll projects still receive close scrutiny from future users of the project. Toll projects raise transportation equity issues, especially for low-income motorists. Many elected officials oppose or have significant reservations about toll projects in general. Also, tolling can affect traffic patterns in a way that may result in environmental impacts that need to be considered. However, for purposes of this study, rather than the specific concerns that people may have about tolling, it is the controversy associated with toll projects themselves that gives a warning signal of possible controversy in the NEPA process.

At least one respondent noted that an unconventional or complex purpose and need for the project may be an indicator of possible controversy. The statement of purpose and need effectively sets the parameters of the environmental analysis, and it is an important factor in determining the range of alternatives. A complex or multi-faceted statement of purpose and need can lead to a wider array of alternatives that must be examined. For example, if a statement of purpose and need is heavily focused on encouraging economic development as well as transportation improvements, it might be reasonable to consider alternative ways of achieving economic development, rather than those limited to achieving economic development through transportation improvements exclusively. Also, the scope of the project that needs to be analyzed in the NEPA document must reflect the complexity of the project’s purpose and need. Finally, a complex or atypical statement of purpose and need may be viewed with suspicion by reviewers who have become used to one that is more typical.¹²⁸

Projects adding or modifying access points into established neighborhoods can be a source of concern to local residents and a source of potential controversy. The development that may be supported by a particular project may be the source of controversy, whether or not the highway project itself causes adverse environmental impacts. Indeed, the development can be of more concern than the highway project itself. Cumulative and secondary impacts, if not carefully addressed in the NEPA process, can cause serious delay and significant legal problems.

The location of the project can also be a risk indicator, quite apart from any specific environmental impacts. Thus, projects that pass through relatively wealthy or well-established neighborhoods may result in greater controversy simply because those most affected by the project have the means and sophistication to challenge the proposed action. Projects located in areas that are particularly litigious, such as university towns, might warrant extra attention. Also, projects that impact close-knit communities or impact low-income or minority populations can be controversial. This is particularly the case if large public works projects in the same general area have run into difficulties previously.

¹²⁷ 42 U.S.C. § 4601, *et. seq.*

¹²⁸ On the other hand, in the author’s experience, an overly generalized statement of purpose and need can be so broad that a large number of alternatives would meet the purpose and need; in that situation, additional criteria and screening may be required in order to narrow alternatives for a final determination of a locally preferred alternative or the “least environmentally damaging practicable alternative” under CWA section 404.

Resources Affected

All of those interviewed noted that a key indicator of potential future controversy was the involvement of particularly sensitive resources or protected areas. Those mentioned repeatedly included areas protected by Section 4(f), wetlands, national forests and national parks, endangered species habitats, historic sites that are on or eligible for inclusion on the National Register of Historic Places (even when not giving rise to a use under Section 4(f)), and environmental justice communities. Many of these resources are protected by specific environmental laws that have their own procedural and substantive requirements that must be addressed, usually as part of or concurrently with the NEPA process. Quite apart from the additional legal requirements, there are often local or national groups concerned about protecting these resources, which could clearly make the NEPA process more challenging.

Other Indicators

There are other indicators, more specific to the particular project, which are worth paying attention to. Are local officials supportive of the project? Opposition by one or more of the jurisdictions affected by the project can be a strong warning of potential difficulties. Local government opposition is often reflective of broader public sentiment about the project.

Are those opposed to or raising questions about the project sophisticated in their understanding of the process? Are written submissions prepared by an attorney or someone else who is obviously familiar with the requirements at issue? Have there been extensive Freedom of Information Act or Public Records Act requests even through early phases of project development? These are signs of a group or individual who has invested the time and resources to pursue the issues being raised about the project. A state transportation agency would be well-advised to take these groups or individuals seriously.

Are national or regional public interest groups involved from the outset? These groups tend to select targets for their most intense efforts, and their active involvement can be a signal that they see larger issues at stake in the project.

What is the press saying about the project? Highly critical coverage can be an indicator of larger problems and could encourage opposition to the project. The press can also be reflective of public opinion about the project. Significant public opposition, or opposition from one segment of the public or one area impacted by the project, can be another indicator.

How concerned are resource agencies about the project? Are officials from these agencies raising serious, substantive issues with the alternatives or scope of analysis or expressing opposition? Are concerns being raised from the outset, rather than awaiting the normal agency review process? One interviewee cited a study done by FHWA in the mid-1990s that showed that unresolved issues with resource agencies radically reduced the likelihood of FHWA prevailing in NEPA litigation about the project.

Strategies for Managing Risk

The experts whom we interviewed were remarkably consistent in how to manage risk. This is particularly the case where risk of possible future problems has been identified. However, most of the interviewees apply these techniques for virtually any large project, as well as those that have other markers for future controversy. The responses focused on the following five points:

Identify Issues Early

There should be no surprises as the environmental review process develops. Early issue identification comes from careful planning and environmental studies leading up to the start of the NEPA process, but also from the other measures listed in this discussion.

Engage Expert Legal and Technical Advisors Early On

Several of the more successful state environmental officials noted that enlisting a team of experts to advise the state officials and those preparing the environmental documentation was very useful in both ensuring the completeness of the record and in anticipating issues during the early stages of the NEPA process. All emphasized that these experts should have considerable hands-on experience. One state official even noted that he often tries to hire attorneys for this role who opposed the state on other projects. His theory is that he can learn from their point of view.

These experts are typically not the same consultants who actually prepare the environmental documents or undertake the necessary technical studies. Rather, they offer higher level strategic advice regarding the scope of the necessary documentation and procedural measures that should be considered. They may also assist in reviewing the documentation prepared to provide “another set of eyes” to ensure the adequacy of the documentation.

Engage the Public Early On

Public hearings and the opportunity to comment are routinely part of most environmental processes. However, it may be advisable to engage in less formal listening sessions, make it easy to get to officials who can address people’s questions before they become problems, and develop strategies to address concerns wherever possible. Listening to and incorporating the ideas of the public can build a lot of goodwill for a project. One interviewee noted that state transportation officials are sometimes perceived as unwilling to listen or being inflexible in the face of public concern. That can result in unintentionally encouraging opposition or suspicion about the project and the motives of public officials.

Coordinate with Resource Agencies and FHWA

Particularly for large and complex projects, or those with potential adverse effects on significant resources, it is important to engage resources agencies early on. This will help anticipate their concerns and allow them to be incorporated into the NEPA documentation. It will also provide for an opportunity to develop design modifications and mitigation measures at an early stage, when it is easier and cheaper to accommodate them. The outreach should also include FHWA, both so that FHWA can assist the state and to facilitate and expedite the federal legal and technical review process. Engaging resource agencies early is not always easy because these agencies typically have only limited resources and other priorities. Thus, it may take considerable effort over an extended period of time to achieve an effective relationship.

Prepare for Litigation from the Outset

Where there is a substantial possibility that a project will face litigation, prepare for that litigation from the outset. This means that actions are well explained in the project files or “record.” Both comments from outside the state transportation department and by agency staff or consultants, whether hand written or via email, should be carefully considered. If the state transportation department receives an adverse comment or observation, as inevitably will be the case, make sure that the record contains a response or a resolution of the issue. Files, studies, documents, etc., should be kept in good order. In extreme cases, it may be advisable to prepare the Administrative Record as the project proceeds through the NEPA process.¹²⁹ It should not be assumed that agency or consultant staff know what it means to develop and

129 An Administrative Record requires that documents be placed on electronic media, that decisions are made about whether a document is relevant or privileged on a continuing basis and stored accordingly, that the general organization of documents within the Administrative Record is made from the perspective of the issues likely to

maintain a proper agency record. Thus, adequate training and oversight has to be a key part of the effort. All of this will make the litigation, if it comes, proceed much more smoothly and expeditiously.

General Observations

A key observation stemming from our interviews was that there is “no substitute for experience.” Experienced advisors can help the state take the right steps in the face of a myriad of facts, assertions, and pressures. Clearly, every potential “problem” noted above does not always cut against the project. Resource agencies may not have significant issues, the public may love a particular project, and environmental impacts can be large or small. Making sense of all this and steering the appropriate course for a particular project comes from having done it before.

For difficult projects with a good deal of disagreement among the various agencies, it may be advisable to establish a dispute-resolution mechanism. That has worked on a number of controversial projects. One can use the services of dispute-resolution entities or rely on less formal means, such as engaging more senior agency officials, who can address issues as they arise.

Remember that public involvement is not designed just to sell the project to the public, but also to enlist their aid in the project development process. Even adverse comments from committed project foes can help an agency prepare a better agency record. The best result is not a litigation-proof record, but a project that serves an important transportation need and that the public accepts and appreciates.

appear in litigation, etc. If this step is taken, it will be necessary to coordinate closely with FHWA and, potentially, with lawyers from the U.S. Justice Department who are likely to be responsible for the lawsuit if it is filed.

Appendix B: List of Acronyms/Abbreviations

ACRONYM/ABBREVIATION	DEFINITION
4(f)	Section 4(f) of the Department of Transportation Act of 1966
106	Section 106 of the National Historic Preservation Act
ADR	Alternative Dispute Resolution
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CWA	Clean Water Act
DOD	Department of Defense
DOT	Department of Transportation
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement, aka EIS, Draft EIS, Final EIS
EJ	Environmental Justice
EPA	Environmental Protection Agency
CAA	Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FOIA	Freedom of Information Act
FONSI	Finding of No Significant Impact
GHG	greenhouse gas
LEDPA	Least Environmentally Damaging Practicable Alternative
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MIS	Major Investment Study
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
NEPA	National Environmental Policy Act
NGO	non-governmental organization
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPS	National Park Service
NRDC	Natural Resource Defense Council
NRHP	National Register of Historic Places
P&N	purpose and need

ACRONYM/ABBREVIATION	DEFINITION
PRA	Public Records Act
ROD	Record of Decision
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHPO	State Historic Preservation Officer
SOL	statute of limitations
Title VI	Title VI of the Civil Rights Act of 1964
TIP	Transportation Improvement Plan
TRB	Transportation Research Board
U.S. DOT	U.S. Department of Transportation
UCACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service