

Getting Infrastructure Going

Expediting the Environmental
Review Process



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Roundtable Information

Rethinking NEPA: Leveraging Lessons Learned to Expedite Project Delivery

Friday, June 10, 2011

Woodrow Wilson International Center for Scholars
1300 Pennsylvania Ave, NW, Washington, D.C.

We thank the Woodrow Wilson Center for the use of their space for this meeting.

This Regional Plan Association report was informed by the discussion at this expert roundtable. The recommendations in this report are not necessarily endorsed by the roundtable participants, but were distilled from the general discussion, case studies, and further research conducted by Regional Plan Association following the meeting.

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Executive Summary

In the 40 years since the passage of the National Environmental Policy Act and the development of the current federal regulatory process, the practice of completing environmental reviews for major infrastructure projects has significantly lengthened average project delivery times. For example, in 2011, the average time it took to complete an environmental impact statement on a highway project was over eight years, compared with two years just after the law was passed. And yet experience has shown that the law itself still provides a strong regulatory framework that ensures adequate protection for the environment, a process for reaching informed investment decisions, and sufficient flexibility to comply with environmental requirements in an expedited manner. It is the misguided implementation of the law that has significantly affected project delivery time.

This report focuses on common federal and state agency implementation practices of the National Environmental Policy Act – or NEPA – that lead to delays, which are often overlooked in discussions of streamlining the environmental review process. Delays during the NEPA process are often caused by:

- Lack of stakeholder consensus over fundamental aspects of a project, which are not efficiently resolved during the environmental review process;
- Differing and conflicting interpretations of NEPA requirements, and inconsistent implementing policies and procedures among the multitude of government agencies;
- Administrative bottlenecks and outdated procedures within agencies that have insufficient staff capacity and training to efficiently complete environmental studies or reviews; and
- Misdirected response to the threat of environmental litigation, which leads to overly complex and technical environmental analysis and rigorous documentation efforts.

Proposals to expedite the environmental review process originating in Congress often focus on changes to NEPA law, rather than the procedural causes of delay described in this paper. While federal legislators are naturally drawn to legislative solutions, the dismantling of the NEPA law would erode important environmental protections without necessarily addressing the procedural causes of delay that bog down the process. Our consultations with practitioners of the environmental review process offer several examples of environmental reviews that met high environmental standards and were completed in a timely fashion. These examples, however, tend to be the exception to the rule, and their practices are not often repeated. This may be changing with new federal initiatives, although it is too soon to judge the impact of these new measures.

Adopting new procedures and changing agency practices is difficult but achievable. Making progress towards timelier and more efficient environmental review will require adopting and sharing best practices across agencies in the federal government and between federal, state, and local levels. Better and more implementation-focused training is required to equip the current and next generation of environmental practitioners with these best practices. Advances in technology and data management can also help achieve better and timelier outcomes and create good administrative records that help protect the lead agency in case of lawsuits. Finally, it is essential that the environmental review process not be used as a process by which to solve

intractable or fundamental conflicts among project stakeholders. Often times, an EIS is moved forward to show progress, expending valuable staff resources and wasting time, while fundamental conflicts remain unresolved.

A project with strong leadership and stakeholder consensus on the problem statement and the need for a solution that enters the NEPA process is much more likely to emerge from it with the necessary approvals in an efficient manner than projects with key issues left unresolved. Sometimes, the best way to avoid delay is to avoid the NEPA process until strong leadership and consensus can be obtained. In this spirit, this report offers the following recommendations to federal and state agencies, environmental practitioners, and process reformers:

- 1. Integrate planning and environmental reviews.** Establish broad agreement among agencies and stakeholders on project goals and carry them forward into the environmental process to help prevent controversies from arising later on.
- 2. Front-load agreements among agencies.** Spend more time at the beginning of the process establishing memoranda of understanding among participating agencies on timelines, procedures, language, and environmental outcomes.
- 3. Establish stronger federal leadership on major projects.** Strengthen federal leadership on major employment-generating projects and reduce federal involvement in minor projects. Allocate sufficient funding and staff capacity to federal agencies to take on stronger leadership roles.
- 4. Train the next generation of environmental practitioners.** Educate environmental professionals to adopt and share best practices, such as streamlined stewardship and environmental performance commitments, for more efficient and effective reviews.
- 5. Increase transparency and accountability.** Environmental practitioners should focus on producing a more thorough administrative record, as opposed to excessive analysis of unlikely impacts. Greater transparency and accountability can also be achieved by posting the deadlines for key decision points online.
- 6. Update procedures for the 21st century.** Take advantage of information technologies, such as digital submission and transmission of environmental documents, and web-based interactive stakeholder involvement tools to improve the efficiency of the NEPA process.



The I-35W Mississippi River Bridge in Minneapolis collapsed on August 1, 2007. The replacement bridge, the I-35W St. Anthony Falls Bridge, opened on September 18, 2008 several months ahead of schedule due in large part to an efficient NEPA process. Source: Creative Commons

Introduction

There are major barriers to the timely completion of the federal environmental review and permitting requirements for important infrastructure projects. It often takes over eight years for the largest, most complex, and controversial projects to complete the environmental review process, compared with just over two years in the 1970s.¹ Expediting the environmental review of these big projects is the focus of this report.

Long timelines delay important infrastructure improvements and their much needed benefits. They drive up costs by extending the environmental review process and postponing construction. They discourage private investors and erode public confidence in government's ability to use infrastructure funding wisely. They create uncertainty about when or whether a project will be completed, making it difficult for states and metropolitan regions to conduct long-range infrastructure planning. In the midst of a sustained economic slump, the importance of rethinking the environmental review process is underscored; getting infrastructure going would hasten our economic recovery.

On June 10, 2011, America 2050, the national infrastructure planning and policy program of Regional Plan Association, convened 20 experts at a roundtable meeting in Washington, D.C., to discuss the environmental review process for infrastruc-

ture projects of national and regional significance, identify major causes of delay, and rethink this process within the bounds of NEPA legislation. The participants explored the available tools and techniques for expediting the delivery of major infrastructure projects, examined the administrative and regulatory framework, reviewed best practices, and discussed ways to turn these best practices into common practice. Three case studies, where innovative tools and methods were used to achieve time savings in the NEPA process, were discussed and are presented in this paper.

Participants at the roundtable were charged with identifying process improvements that could achieve speedier timelines without rewriting a word of the NEPA legislation and still meeting the full intent of the law to protect the environment and involve citizens in federal decision-making. For example, early coordination among all agencies involved and making full use of memoranda of understanding to obtain consensus prior to the NEPA process, developing new guidelines and training programs for practitioners to promote a continued commitment to excellence within the profession, and collaborative, web-based tools that improve coordination and remove administrative bottlenecks, are a few of the methods and techniques that were discussed.

¹ 2011 – U.S. DOT. 2012. *Environmental Document Tracking System*. FHWA.

1970s – FHWA & The Louis Berger Group, Inc. 2001. *Evaluating the Performance of Environmental Streamlining: Development of a NEPA baseline for Measuring Continuous Performance*. FHWA.

NEPA – A Landmark Environmental Law

The federal environmental review process was established by the National Environmental Policy Act of 1969, the nation's first major environmental law and the foundation of all of our national environmental policies. This historic legislation enshrined three main principles into federal decision-making: 1) consideration of the environmental effects of proposed federal actions; 2) multi-generational environmental sustainability; and 3) citizen participation.

NEPA, as written, is not considered a primary cause of project delivery delay. Rather, delays are more commonly caused by a change in a project's funding situation, a shift in political winds that affects local priorities, a controversy within the community, project complexities, or the fear of litigation.² Some of these causes are a fundamental part of a well-functioning democracy, while others are unnecessary and costly. According to the experts consulted for this paper, many of these delays can be attributed to a lack of communication and consensus in the pre-NEPA planning stage, administrative process bottlenecks, project management failings, or a lack of capacity among the agencies involved in the process.

So, while discussions about expediting project delivery often begin with changing the NEPA law, in reality, rewriting NEPA would likely undermine environmental protections and fail to address root causes of delay. Instead, reforming the internal administrative policies, procedures, and practices currently in place to follow the NEPA law has the potential to shorten project delivery timelines while maintaining the strong environmental protections that NEPA established. Even greater efficiency can be achieved by integrating environmental reviews with state and metropolitan planning requirements into a more cohesive project development process.

How NEPA Works

The National Environmental Policy Act requires federal agencies to analyze all of a project's potential impact on the human and natural environment before spending federal dollars, and to involve the public in government decisions. Protection of the human and natural environment for future generations is a fundamental aspect of the NEPA law; however it also recognizes the needs of current generations. The Council on Environmental Quality in the Executive Office of the President states that the NEPA law seeks to harmonize "the country's economic and environmental aspirations and emphasizes public involvement in government actions affecting the environment."³

Projects can satisfy the federal NEPA requirements in one of three ways:

- **Categorical Exclusion:** Many projects clearly do not significantly impact the environment and as a result do not need to be subject to all of the rigorous reviews of the NEPA process. Every federal agency has experience with certain types of projects that do not harm the environment and maintains a list of the classes of projects that can be put in this category – called categorical exclusions. When one of these projects is proposed, the agency need only prepare a categorical exclu-

sion, which completes the required environmental review process. This reduces the paperwork and delays associated with the other pieces of the NEPA process.

- **Finding of No Significant Impact:** When it is unclear whether the environmental consequences of a proposed project will be significant, an environmental assessment must be conducted. An environmental assessment is an interdisciplinary process that is used to determine the significance of the effect that a project will have on the environment, and solicit input from stakeholders before a decision to move forward is made and federal funds are spent. An environmental assessment document is supposed to include a concise discussion of the purpose and need for the project, an evaluation of all reasonable alternative actions, the environmental impacts of the project and the alternatives, and a description of the assessment process. It either concludes that a project will not affect the environment, in which case a finding of no significant impact is prepared, which completes the environmental review process, or that significant impacts will occur, and an environmental impact statement must be prepared before the project can proceed. If it is obvious that a project will significantly impact the environment, the lead federal agency can opt to skip the environmental assessment process and immediately begin the preparation of an EIS.
- **Environmental Impact Statement:** An EIS evaluates a range of reasonable alternative actions and discloses potential environmental impacts associated with these options. The general public and agencies with a stake in the project are consulted frequently throughout the process – in public scoping sessions, agency coordination meetings, and in reviewing and commenting on draft EIS documents. After the comments have been considered and incorporated, the lead federal agency publishes the final EIS for review, and then issues a record of decision, which explains the agency's final decision. After this final public comment period, the Environmental Protection Agency may review the environmental assessment process, record of decision, and final EIS for sufficiency.

NEPA is not the only federal environmental law that must be addressed. Rather, NEPA serves as an umbrella process to incorporate a number of other federal requirements. The NEPA process encompasses other laws that address specific environmental resources, such as endangered species, water, and air, and others that address important human resources. For example, the National Historic Preservation Act requires analysis to determine significant impacts on cultural and historic resources, and is usually included in the NEPA documentation. Furthermore, states have a range of their own environmental laws and regulations that apply to infrastructure projects.⁴

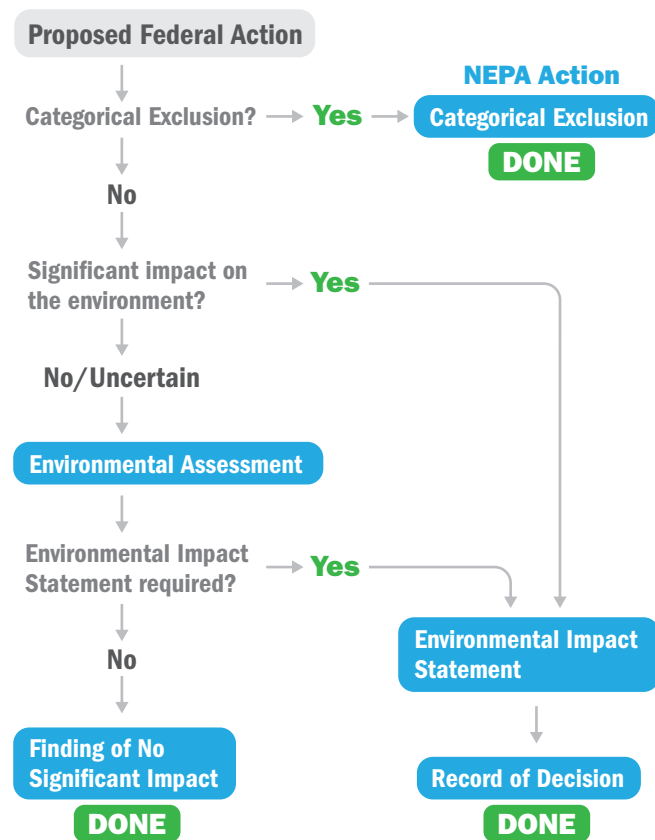
NEPA was originally conceived of as a streamlining tool – organizing the many reviews, regulations, and regulatory agencies and consultants involved in any given project while providing citizens with an opportunity to learn more about projects and their impacts, and the government's decision-making process. The law and requirements were intended to result in faster, more transparent, informed, and ultimately improved federal decision-making. However, complying with NEPA regulations has become so lengthy that it can postpone the construction of infrastructure projects for many years, particularly for complex projects, even if their environmental impacts are minimal.

² U.S. DOT. 2000. *Reasons for EIS Project Delays*. FHWA. <http://bit.ly/tEcoRI>

³ CEQ. 2011. *CEQ Calls on Public, Federal Community to Nominate Pilot Projects to Improve the Efficiency of NEPA Environmental Reviews*. <http://1.usa.gov/vcABoQ>

⁴ CEQ. 2011. *National Environmental Policy Act*. <http://1.usa.gov/tgfO7O>

The NEPA Process



The length and complexity of NEPA documents have also grown exponentially. In 1973, a final EIS, including public comments and responses, published by the Federal Highway Administration was usually 22 pages long. Now, EISs often reach 1,000 pages or more.⁵ Similarly, categorical exclusion documents often reach vast page lengths despite a 1983 guidance memorandum by the Council on Environmental Quality that strongly discouraged any “procedures that would require the preparation of additional paperwork to document that an activity has been categorically excluded.”⁶ Unfortunately, the length of NEPA documents does not assure their adequacy and or expedited review. Longer NEPA documents typically delay the review and approval process.⁷

The Council on Environmental Quality maintains that the NEPA process should take less than 12 months to complete, even for large, complex projects, and no more than three months for less complicated projects. In fact, a survey of projects by the Federal Highway Administration found that the average time it took to complete an EIS in 2011 had grown to 8.1 years, compared with 2.2 years in the 1970s.⁸ A similar study found that it typically took 18 months to process a finding of no significant impact and six months to document a categorical exclusion.⁹ This indicates the significant amount of time that can be saved by avoiding the need to complete an EIS in the first place.

5 Washington State DOT. 2008. *Reader-Friendly Document Tool Kit*. <http://1.usa.gov/sFmMkw>

6 CEQ. 1983. *Guidance Regarding NEPA Regulations*. <http://1.usa.gov/vgz4vT>

7 Washington State DOT. 2008. *Reader-Friendly Document Tool Kit*. <http://1.usa.gov/sFmMkw>

8 U.S. DOT. 2012. *Estimated Time Required to Complete the NEPA Process*. FHWA. <http://bit.ly/xX5JBE>

9 U.S. DOT. 2001. *Evaluating the Performance of Environmental Streamlining*. FHWA. <http://bit.ly/vUjhSr>

Tiering

The NEPA regulations that were issued by the Council on Environmental Quality in 1978 include a provision for evaluating large, complex infrastructure projects called tiering. Tiering allows lead agencies to divide the environmental review process into two tiers. Tier 1 focuses on the broad, programmatic issues relating to project design and environmental impacts, and Tier 2 addresses site-specific details and mitigation measures. This gives the lead agencies the flexibility to work with the community and stakeholders on the issues that are “ripe for decisions at each level of the environmental review” and avoid issues that have already been decided and leave other issues to be dealt with in later stages.¹⁰ In this way, tiering is envisioned to create a more efficient NEPA process and reduce paperwork and duplication.

A tiered NEPA process results in one programmatic-level environmental impact statement after Tier 1 and then multiple project-level environmental impact statements during Tier 2. In general, a Tier 1 EIS includes a broad policy statement about the purpose and need, and sufficient social, economic, and environmental analysis to support a decision about a preferred area-wide or programmatic alternative. However, it allows for more local, site-specific issues and alternatives to be discussed and decided upon during Tier 2.

For example, the California high-speed rail project is using tiering because it allowed the lead agency to analyze broad transportation options, such as the general alignment, mode choice, and service levels, and corridor-wide environmental impacts, in the first tier, which was completed in 2005, and eliminate the need to repeat these analyses in subsequent levels of review.

Root Causes of Project Delivery Delay

While the NEPA law is the most common magnet of criticism for the massive delays that routinely plague project delivery in the U.S., the cause of delays is not rooted in the legislation itself. For example, NEPA regulations state that in most cases EISs should be less than 150 pages long and less than 300 pages even for projects of particular complexity.¹¹ Delays are more often caused by a lack of resources, or policies and procedures that have developed over time within the agencies and organizations that implement NEPA.

Sometimes delays that occur during the NEPA process are actually caused by external factors, such as shifts in state or local political and funding priorities.¹² However, according to experts convened at our roundtable, delays are most commonly indicative of the following four aspects of the process and institutions involved:

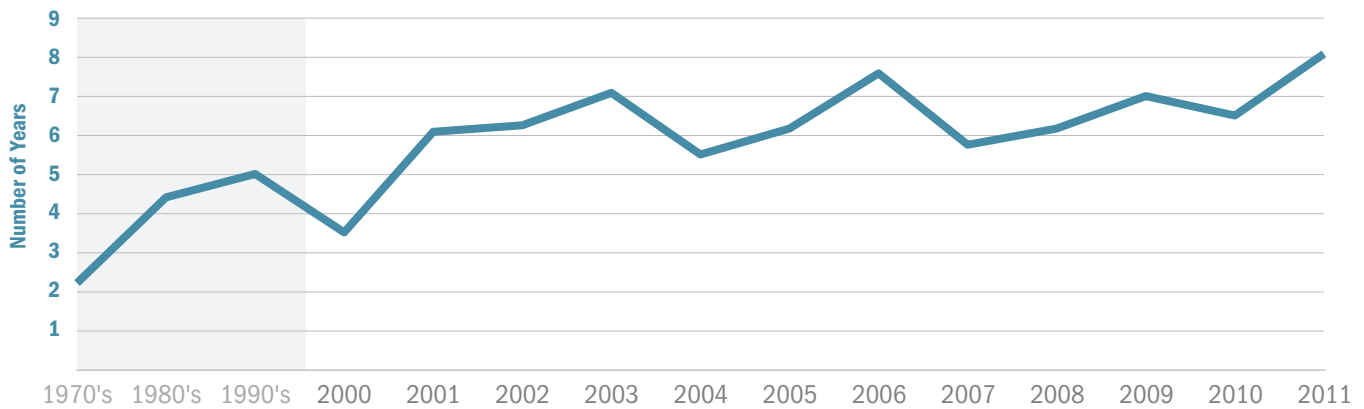
- Lack of stakeholder consensus over fundamental aspects of a project forged during the planning phase, which are not efficiently resolved during the environmental review process;
- Differing and conflicting interpretations of NEPA requirements, and inconsistent implementing policies and procedures among the multitude of government agencies;

10 Code of Federal Regulations. *Title 40: Protection of Environment*. 1502.2 - Tiering. <http://bit.ly/K2s0aS>

11 Code of Federal Regulations. *Title 40: Protection of Environment*. 1502.7 - Page limits. <http://bit.ly/vFyiTd>

12 Multiple sources: (1) Cambridge Systematics, Inc. 2011. *Accelerating Federal Program and Project Delivery*. <http://bit.ly/wOmr3I> (2) U.S. DOT. 2000. *Reasons for EIS Project Delays*. FHWA. <http://bit.ly/tEcoRI>

Average Time Required for Highway Projects to Complete an Environmental Impact Statement



It took 8.1 years for the average highway project to complete an environmental impact statement in 2011, compared to 2.2 years in the 1970s. Source: 2000-2011 – U.S. DOT. 2012. *Environmental Document Tracking System*. FHWA. 1970s-1990s – FHWA & The Louis Berger Group, Inc. 2001. *Evaluating the Performance of Environmental Streamlining: Development of a NEPA baseline for Measuring Continuous Performance*. FHWA.

- Administrative bottlenecks and outdated procedures within agencies that have insufficient staff capacity and training to efficiently complete environmental studies or reviews; and
- Misdirected response to the threat of environmental litigation, which leads to overly complex and technical environmental analysis and rigorous documentation efforts.

Lack of Stakeholder Consensus in Planning Phase

The lengthy delays that can arise during the environmental review process under NEPA are often due to the fact that the project was not ready for NEPA, either because of a flaw in its design or because project planners did not address key concerns and were unable to establish consensus among the various stakeholders during the planning phase.

As EISs and environmental assessments are drafted, the public and interested agencies are consulted and notified at every step. If local controversies about a project develop and are not addressed in the planning phases, the public participation steps during the NEPA process are often the times when they will surface, delaying a project or forcing it to be redesigned. Thus, the drafting of the EIS tends to be the time when stakeholders come together and realize that they do not agree with some aspect of the project, whether it is the purpose, design, location, environmental impacts, mitigation measures, cost, or some other considerations. In this type of case, the delay is due to a failure to foster agreement during the project planning phases before the NEPA process began.

Building consensus during the pre-NEPA planning phase requires greater investments of financial and administrative resources in advance, but tends to save time and money in the long-term by helping avoid unnecessary delays during the EIS or environmental assessment process and achieves greater benefits by delivering the project faster.

Inconsistent Policies and Procedures

The lack of common language and practice between the public agencies at all levels of government and the private sector consultants that are involved in the NEPA process can make communication and collaboration difficult. The various agencies, firms, and levels of government tend to interpret some aspects of the NEPA requirements, process, and vocabulary differently. For example, each U.S. Department of Transportation agency,

such as the Federal Highway, Transit, Aviation, and Railroad administrations, has established its own procedures and tends to interpret NEPA differently.¹³ The Federal Highway and Federal Transit administrations are the only two modal administrations that have a joint regulation, but even they have different implementing procedures and tend to interpret NEPA differently. In this environment, coordinating an environmental review becomes complicated when several of these agencies are involved, as is the case with many multi-modal projects. As a result, cooperation between divisions and agencies is more cumbersome and reviewers often have to translate and decipher the varying terminology and procedures that are used. At times, reviewers find that project sponsors actually misinterpret NEPA requirements.

According to the experts we consulted, agencies that have more experience with the NEPA process frequently develop relationships with the reviewers, who know what to expect from those agencies and trust that they interpret NEPA requirements correctly. Established relationships between project sponsors and reviewers can help expedite the NEPA compliance process. It is much more time-consuming to review environmental documents when the agency that prepared them has less experience or the reviewer is less familiar with that agency's style of work. Even worse, if a reviewer has seen an agency's work before and found that the agency consistently misinterpreted the NEPA procedures, the reviewer will be less inclined to expedite the review and approval of the EIS.

Another problem is that agencies may be disallowed from using environmental analyses, EISs and other NEPA work prepared for other, previous projects. This leads to longer time lines for creating and collecting data, and conducting analyses a second time. Many agencies lack the necessary resources to share data and information with ease and efficiency.

Administrative Bottlenecks and Capacity Constraints

Administrative delays within the agencies that implement NEPA are another common cause of project delivery delay. Every year, project sponsors prepare thousands of environmental assessments and EIS documents that have to be reviewed and approved by cooperating agencies, the Council on Environmental Quality, the Environmental Protection Agency, and more. There may be multiple consultant firms involved at various stages during any

¹³ Center for Environmental Excellence by AASHTO. 2011. *NEPA Process*. <http://bit.ly/sLLOIC>

given NEPA process. Within the current procedural framework, a tremendous amount of communication, transmission of documents, resources, and capacity at these organizations is required to complete a single EIS.

Bottlenecks often occur because federal or state agencies do not have sufficient capacity to do the work in a timely fashion. This can happen when a reviewer is asked to work on more projects than he or she can handle and cannot complete the reviews within a reasonable amount of time. When this does occur, the process often becomes driven by the processing of documents, as opposed to being focused on producing high-quality outcomes.

Procurement of consultants to complete the environmental work is also a lengthy process that adds a considerable amount of time to the NEPA process. It can take an agency many months to get approval for an environmental study, prepare a request for proposals, review the submitted proposals, and select the final consultant.

Some agencies have more experience with the process and fully understand the procedures. However, others lack the experience and expertise to quickly and efficiently complete the necessary environmental documentation. Reviews take more time when documents are prepared by an agency with little NEPA experience and may include critical mistakes that the reviewers must identify and correct.

Lastly, environmental documents require large amounts of resources and staff capacity to prepare, review, and approve. The agencies and consultants that prepare EISs, and the agencies that review and approve hundreds of them every year, commonly do not have the resources they need to hire and properly train the employees that conduct the NEPA work. They also may not have the resources and expertise necessary to implement collaborative information technology that could expedite the preparation and transmission of NEPA documents.

Misdirected Response to the Threat of Litigation

When a stakeholder community or interest group believes that a project will significantly affect an environmental asset and that the EIS does not adequately address this impact, a common recourse is to sue the agency that led the NEPA process. The threat of environmental lawsuits motivates lead federal agencies to take time-consuming steps or redesign projects to avoid them, contributing to project delivery delays.

Projects that are likely to be challenged by the community or other stakeholders often receive additional analysis and review to address in greater detail specific concerns, such as noise, safety, traffic and/or economic impacts on local businesses, which could be the subject of a suit. As a result, environmental documents become much longer and more complex than they need to be, which adds to the time it takes to produce and review them.

However, experts consulted for this paper observed that excess documentation of every possible environmental impact, however remote, is not an effective strategy for discouraging or fighting lawsuits. Motivated opponents will sue, no matter the length and exhaustiveness of the environmental documentation. A more effective strategy would be to compile a thorough administrative record,¹⁴ which documents key decisions in the EIS process and why the decisions were made.

Federal Actions to Expedite NEPA

Since the 1990s, numerous proposed initiatives have aimed to streamline the federal review and approval process in order to expedite the delivery of important infrastructure projects. But the amount of time, paperwork, and money needed to comply with NEPA requirements and complete an environmental review has continued to increase.

These proposals often aim to cut through bureaucratic red tape and expedite the review process by rewriting regulations or removing key requirements from the law. Streamlining measures such as these risk weakening the environmental protections and public process established by NEPA. However, various federal strategies, such as those discussed below, seek to reform agency implementing policies and procedures that contribute to excessive delays in the environmental review process, while leaving the NEPA legislation intact. It is too soon to tell whether the more recent reforms, such as the NEPA Pilot Program, will have an impact on ingrained agency practices and procedures.

Planning & Environment Linkages

Despite the inherent linkage between project planning and environmental consequences, few professionals have a thorough understanding of both processes. In 2008, the Federal Highway Administration developed an approach called Planning & Environment Linkages that aims to better integrate the planning and environmental review phases of a project, creating a seamless transportation decision-making process that minimizes duplication of efforts and delays.

One of the principles of the Planning & Environment Linkages approach is to set up a framework for carrying the environmental, community, and economic goals developed during the planning phase forward into the environmental review phase. This “lays the foundation for a broad consensus on goals and priorities relating to transportation and related processes” during the planning phase prior to the commencement of the NEPA process.¹⁵ In this way, the Planning & Environment Linkages approach addresses one of the four root causes of NEPA process delays discussed above. While the program is still young and the metrics for measuring its effect on delays are not yet available, it has the potential to prevent the project controversies that often arise during the NEPA phase and add time to the process.

NEPA Pilot Program

On the 40th anniversary of the passage of NEPA in 2010, the Council on Environmental Quality proposed new measures that seek to enhance the public’s involvement, increase transparency, and ease the implementation of the NEPA process.¹⁶ Following this, President Barack Obama issued Executive Order 13563 in January 2011 directing the Council to reexamine all NEPA regulations and identify those that lead to unnecessary project delays. The order also directed the Council to identify a range of best NEPA practices and explore ways to deploy them more widely.¹⁷

14 AASHTO Center for Environmental Excellence. 2006. *AASHTO Practitioner’s Handbook 01: Maintaining a Project File and Preparing an Administrative Record for a NEPA Study*. <http://bit.ly/MR6ZDc>

15 U.S. DOT. 2009. *What Are Planning and Environment Linkages? FHWA*. <http://1.usa.gov/rA6xKA>

16 CEQ. 2011. *Steps to Modernize and Reinvigorate NEPA*. <http://1.usa.gov/so6ExV>

17 White House. 2011. *Improving Regulation and Regulatory Review - Executive Order 13563*. <http://1.usa.gov/v242gJ>

The NEPA Pilot Program, established in 2011 in response to the executive order, aims to highlight examples of infrastructure projects around the country that demonstrate unique approaches to NEPA resulting in reduced cost and delays, greater transparency and accountability, and enhanced public involvement. The lessons learned from successful pilots could eventually inform the creation and adoption of new or revised NEPA procedures. More than 40 projects were nominated¹⁸ and five were selected on the basis of their ability to generate replicable lessons learned. The selected projects will be tracked and evaluated based on their outcomes, and lessons learned will be promoted around the country.¹⁹

Executive Order 13563

In August 2011, President Obama sent a memo to all of the heads of executive departments and agencies directing them to immediately speed the delivery of major infrastructure projects that are stuck in the NEPA process to more quickly deliver their job benefits, and use information technology to improve the accountability, transparency, and efficiency of the permitting and review processes.²⁰ In October, 14 infrastructure projects were selected by the Council on Environmental Quality for expedited reviews (see table).

The president indicated that additional federal funds and resources would be directed to these five federal agencies and steps would be taken to expedite the environmental reviews of these 14 projects. Depending on the project, those steps will include, “integrating planning and environmental reviews; coordinating multi-agency or multi-governmental reviews and approvals to run concurrently; setting clear schedules for completing steps in the environmental review and permitting process; and utilizing information technologies to inform the public about the progress of environmental reviews as well as the progress of federal permitting and review processes.”²¹

Council on Environmental Quality Guidance

The Council on Environmental Quality was created to establish compliance standards for NEPA and ensure that all federal agencies adhere to the requirements set forth in NEPA. They also require each agency to establish procedures for implementing NEPA. Therefore, implementation procedures can vary widely from agency to agency, based on their unique mission and mandate. While this flexibility allows agencies to tailor their procedures to meet their specific needs, this myriad of approaches makes coordination among multiple federal agencies more challenging.

Over the years, the council has issued several guidance documents in an effort to strengthen the NEPA process, clarify NEPA regulations, and assist federal agencies implement NEPA in a more efficient manner. This includes modernizing and reinvigorating regulations that cause unnecessary delays, updating and revising lists of actions that qualify as categorical exclusions, or improving environmental justice. Much of their guidance parallels the recommendations in this report.

The most recent guidance, *Improving the Process for Preparing Efficient and Timely Environmental Reviews* under the National Environmental Policy Act, gives advice to federal

18 CEQ. 2011. *NEPA Pilot Program Nominations*. <http://1.usa.gov/vfEbaa>

19 CEQ. 2011. *CEQ Calls on Public, Federal Community to Nominate Pilot Projects to Improve the Efficiency of NEPA Environmental Reviews*. <http://1.usa.gov/veABoQ>

20 White House. 2011. *Speeding Infrastructure Development through More Efficient and Effective Permitting and Environmental Review*. <http://1.usa.gov/ueun7X>

21 Ibid

Projects Selected for Expedited Review

Department of Agriculture

Cleghorn Ridge Wind Project, California
Deerfield Wind Power Project, Vermont
Dakota Prairie and Little Missouri National Grasslands, North Dakota and South Dakota

Department of Commerce

Arroyo Sequit Watershed and Qwuloolt Estuary Coastal Habitat Restoration Project, California
West Coast Coastal Habitat Restoration Project, California and Washington

Department of Housing & Urban Development

Denver Mariposa Housing Project, Colorado
City Market at “O” Street, District of Columbia

Department of the Interior

Navajo Gallup Water Supply Project, New Mexico

Department of Transportation

Tappan Zee Bridge, New York
Crenshaw/LAX, California
Whittier Bridge, Massachusetts
Provo Westside Connector, Utah
Baltimore Red Line, Maryland
Next Generation Air Transportation System Infrastructure Project, Texas

Source: White House. 2011. *Obama Administration Selects 14 Infrastructure Projects to be Expedited Through Permitting and Environmental Review Process*. <http://1.usa.gov/sfu7GN>

agencies that specifically targets improving the efficiency and timeliness of the NEPA process. It points out that the NEPA legislation and the CEQ NEPA regulations provide numerous tools and techniques for preparing environmental documents in a more efficient and timely manner. The guidance asks the agencies to keep in mind the following basic principles when conducting environmental reviews:

- NEPA encourages simple, straightforward, and concise reviews and documentation that are proportionate to and effectively convey the relevant considerations in a timely manner to the public and decision makers while comprehensively addressing the issues presented;
- NEPA should be integrated into project planning rather than be an after-the-fact add-on;
- NEPA reviews should coordinate and take appropriate advantage of existing documents and studies, including through adoption and incorporation by reference;
- Early and well-defined scoping can assist in focusing environmental reviews to appropriate issues that would be meaningful to a decision on the proposed action;
- Agencies are encouraged to develop meaningful and expeditious timelines for environmental reviews; and
- Agencies should respond to comments in proportion to the scope and scale of the environmental issues raised.²²

22 CEQ. 2012. *Final Guidance on NEPA Efficiencies*. <http://1.usa.gov/ya0OfT>



The structurally deficient Tappan Zee Bridge in New York was selected by President Obama in 2011 for an expedited environmental review. New York State Department of Transportation spends \$600 million per year inspecting structurally deficient bridges. Source: Creative Commons

These recommendations strike at the heart of the practices of NEPA implementing agencies that are contributing to delays in the NEPA process. However, in order for these agencies to fully reform their established procedures they will need greater assurance and direction that the changes will not lead to an up-tick in lawsuits challenging the completeness and appropriateness of their environmental studies or reviews. This assurance could be provided by a growing body of legal precedents in which simple, straightforward, environmental documents hold up to legal challenge in court. This will require leadership and courage at federal agencies to conduct environmental reviews as instructed by NEPA law, and not by common practice and procedure.

Case Studies of Best Practices

The following three case studies should help illustrate the tools and techniques that are available to environmental practitioners to speed the environmental review process. None of the methods that are described in these case studies required a change in the NEPA law, waivers or exemptions from NEPA, or special legislation. Efficiencies were found through innovative agency practices, which hold lessons for other environmental reviews.

Central Corridor Light Rail Project – Minneapolis/St. Paul

After local businesses challenged the legality of the final EIS for a light rail project in Minneapolis/St. Paul, the Federal Transit Administration completed a court-ordered supplemental environmental assessment that addressed their concerns in less than three months by taking the lead and preparing it in-house.

The Central Corridor Light Rail is a 10.9-mile light rail transit line connecting downtown Minneapolis and St. Paul in Minnesota that is now under construction. Running along University Avenue for most of the route, the project includes the construction of 18 new stations, is expected to cost \$1 billion, and be completed by 2014.²³

²³ Metropolitan Council. 2011. *Central Corridor Light Rail Transit*. <http://bit.ly/v5rAg2>

The Metropolitan Council (the metropolitan planning organization for the Twin Cities) was the local project sponsor agency, working closely with the Federal Transit Administration, the lead federal agency, to complete the environmental review process. After the final EIS was prepared, the record of decision was issued in August 2009, clearing the project for final design and construction.²⁴

However, in January 2011 the National Association for the Advancement of Colored People filed a lawsuit against the U.S. Department of Transportation and the Metropolitan Council, which claimed that the final EIS was inadequate on four counts. The U.S. District Court of Minnesota dismissed three of the claims and refused to delay the project. Regarding the fourth claim, it ruled that analysis of the short-term impact of project construction on businesses in the corridor in the final EIS was inadequate. The businesses' complaints were based on the project's removal of street parking, on which they heavily rely. They claimed that construction of the light rail line would prevent customers from patronizing their stores, affecting their revenues and business viability. The court ordered the agencies to reexamine the loss of business revenue during construction and complete a supplemental environmental assessment documenting these losses and offering mitigation for any impacts.

After several town meetings, hearings, and community involvement, the Federal Transit Administration completed an in-house, supplemental environmental assessment that reviewed the potential construction-related economic effects on businesses along the corridor in less than 10 weeks. By taking more control over the process and not having to coordinate with a consultant, the Federal Transit Administration was able to complete the supplemental environmental assessment and issue a finding of no significant impact in April 2011, and thus a new EIS was not required.

The final supplemental environmental assessment did not attempt to estimate the potential loss of business revenues due to the construction phase of the project. However, it did suggest a range of mitigation measures to help small businesses affected by construction activities. In total, the Metropolitan Council, City of St. Paul, City of Minneapolis, Metro Transit (the regional transit authority), and contractor committed nearly \$15 million

to these mitigation measures to help businesses in the corridor cope with the impacts of construction and loss of street parking.²⁵

Lower Manhattan Recovery Effort – New York

The emergency reconstruction of the transit infrastructure beneath the World Trade Center after the attacks of September 11, 2001, was a national and regional priority. The rebuilding process was expedited because it benefited from a dedicated stream of emergency funding from Congress and the project sponsors adopted several innovative approaches to NEPA, including streamlined stewardship and environmental performance commitments.

The destruction of the World Trade Center had a devastating impact on New York City's transportation system, disrupting multiple subway lines and PATH service to New Jersey. In total, some 250,000 commuters were affected and the resulting changes in travel patterns were estimated to have displaced as many as 100,000 jobs in Manhattan and New Jersey. The recovery effort needed to be fast and the rebuilding of transit infrastructure was deemed a major priority for the economic prosperity of Lower Manhattan.

Unique to this project was the national significance and attention that resulted in Congress appropriating emergency funds for the reconstruction effort. These funds enabled the project sponsors to overcome one of the most common and fundamental causes of delay in the NEPA process – a lack of resources. These funds, managed by the Federal Transit Administration, also ensured a strong degree of federal control and leadership.

Prior to launching the NEPA process, the Federal Transit Administration and all of the participating agencies met to hammer out a written procedural agreement among all of the parties that instituted the concept of streamlined stewardship. This agreement called for an exceptionally close degree of collaboration and fast review turn-around times to expedite the process, and dictated how all of the parties would share data, use common methodologies, and communicate the outcomes to the federal agencies and public in a consistent, transparent way. Using standard document protocols meant that the reviews were



Businesses along University Avenue are contending with construction of the Central Corridor Light Rail in St. Paul. Source: Minnesota Public Radio



Damage to subway stations underneath the World Trade Center in New York following the attacks of September 11, 2001. Source: New York City Transit

²⁴ Metropolitan Council. 2011. *CCLRT Environmental Documentation*. <http://bit.ly/t3LcdP>

²⁵ Metropolitan Council. 2011. *Final Supplemental Environmental Assessment for Construction-Related Potential Impacts on Business Revenues*.

timelier because the reviewers did not have to waste time identifying and deciphering each document. All of these steps saved a significant amount of time.

The project sponsors also moved away from the concept of mitigation. Implicit in this term is the assumption that the project will cause harm requiring remedy. Since mitigation efforts are often left undefined, the affected parties tend to be less willing to sign off on an EIS because they do not know what the remedy will be ahead of time. Instead, for the Lower Manhattan recovery effort, project sponsors utilized environmental performance commitments, which extracted all of the desired environmental outcomes of the diverse agencies and communities, for example, with regard to air quality or historic and cultural resources, and incorporated them into the project specifications in advance of NEPA. This meant all of the stakeholders knew early on what outcomes to expect and thus were less apt to raise concerns later in the process.²⁶

I-35W Mississippi River Bridge Reconstruction – Minneapolis

After a major bridge collapse in Minneapolis captured nationwide attention, federal, state, regional, and local agencies moved quickly to expedite the permitting and review process for the reconstruction effort. Project sponsors were able to deliver this large, complex bridge construction project from the drawing board to completion in less than 14 months because of strong leadership and communication, established working relationships among agencies, and by limiting the scope of the project and thus the environmental impact, utilizing performance incentives and other contracting mechanisms that ensure expedited project delivery, and more.

The tragic collapse of the I-35W Bridge into the Mississippi River on August 1, 2007, in downtown Minneapolis killed 13 people and injured 145. The original steel truss bridge opened in 1967 and was designed to handle 66,000 cars per day. In 2006, 140,000 vehicles traveled across the bridge on an average day.²⁷ It had been declared structurally deficient in 1990 due to corrosion and fatigue cracks in the spans, including one that was four feet long. On the day of the collapse, four lanes were closed for a resurfacing project, and more than half a million pounds of construction supplies and equipment was on the bridge's deck.²⁸

The I-35W Bridge was one of the busiest bridges in the state and had to be reconstructed quickly. The state department of transportation, MnDOT, estimated that the collapse cost the state's economy \$400,000 per day.²⁹ So, a state of emergency was declared within several days of the collapse. Within only two months, MnDOT had selected a contractor to design and build the replacement bridge in its original location with some additional width to accommodate potential transit options in the future. During those same two months of procurement, MnDOT was also able to complete the entire environmental review process. MnDOT met all of the environmental regulations and nearly all of the required approvals and permits were issued within three weeks, demonstrating that, particularly in emergencies, it is possible to complete NEPA, even for large projects, in a matter of months or even weeks.³⁰



The I-35W St. Anthony Falls Bridge. Source: Creative Commons

Despite its urgency, the project was not granted a single waiver or exemption from the permitting or environmental review process. It completed the same NEPA steps as would any typical transportation project of a similar scope and scale. The only difference was the level of federal leadership and advanced coordination that occurred. All federal agencies and project sponsors understood their roles and responsibility and began work immediately upon hearing of the tragedy.

MnDOT held a meeting on August 2, 2007, the day after the collapse, with all federal, regional, state, and local agencies to be involved in the rebuilding. Everyone in attendance agreed to all of the environmental requirements, approvals, and lines of communication, as well as the agency roles and responsibilities. This occurred in advance of reconstruction, while the recovery phase was still under way.

Because the new bridge would have the same capacity and alignment as the old bridge, MnDOT quickly determined that it would have no new significant effects on the environment. So, the Federal Highway Administration agreed to grant the project the status of categorical exclusion, which meant that the project did not have to complete a full EIS. By limiting the scope of the project, MnDOT reduced its complexity and environmental impacts, and ensured an expedited NEPA process. If MnDOT had proposed to reconfigure approaches to the bridge, it would have triggered an expanded environmental review and added months, if not years, to the reconstruction time line.

Open lines of communication between federal, regional, state, and local agencies developed over years of working on past projects also benefitted this reconstruction effort. These pre-existing relationships allowed for smoother coordination among the different agencies, which led to accelerated action. When the environmental practitioners clearly understand the roles and responsibilities of the various agencies involved, they are able to begin their work more quickly and make better decisions.³¹

The I-35W Minneapolis Bridge Replacement Project won national accolades for its timely completion in the wake of a tragedy. The contractors received a \$25 million bonus for finishing the project ahead of schedule.³² In this case, a large, complex project that would normally take three years was completed in just over one, largely due to an efficient NEPA process.

²⁶ Presentation by Diana C. Mendes, AICP, AECOM. June 10, 2011. *Recovering Opportunities: Lessons Learned During the Lower Manhattan Recovery Effort*.

²⁷ U.S. DOT. 2008. *Meeting Environmental Requirements After a Bridge Collapse*. FHWA. <http://bit.ly/tjbw3Z>.

²⁸ National Transportation Safety Board. 2008. *Collapse of I-35W Highway Bridge, Minneapolis, Minnesota, August 1, 2007. Highway Accident Report NTSB/HAR-08/03*.

²⁹ MnDOT. 2007. *Road-User Cost Due to Unavailability of Interstate 35W Mississippi River Crossing at Minneapolis, Minnesota*. OIM. <http://bit.ly/vYjFd7>.

³⁰ U.S. DOT. 2008. *Meeting Environmental Requirements After a Bridge Collapse*.

³¹ FHWA. <http://bit.ly/tjbw3Z>.

³² Ibid.

³² Governing. 2009. *Minneapolis Speedway*. <http://bit.ly/MR7IEy>.

Lessons Learned

One of the fundamental issues uncovered in our consultations with environmental practitioners is that many of the delays that plague large, complex infrastructure project during the environmental review process are not due to shortcomings in the law, but rather are caused by the administrative policies and procedures for carrying out the environmental review process. Other common problems are a lack of local consensus about the project or insufficient planning and preparation by the sponsor agencies prior to initiating the environmental review process.

An important lesson from the expert roundtable in June is that one of the ways to prevent delays is to avoid the need to complete an EIS in the first place. Early on in a project's conception, attempts should be made to limit the scope and bypass any natural resources or amenities that could trigger an EIS, where appropriate. Of course, expedited time frames should not always dictate project design. Planners should strive to build high-quality projects that meet the needs of current and future generations, and not just replace outdated infrastructure. However, if a project is designed to achieve positive outcomes and benefits, while avoiding triggering an EIS, the lead agencies only have to process either a finding of no significant impact or a categorical exclusion, which might only take up to 18 months or six months, respectively, to complete.

When an EIS is required, the three case studies reveal and the expert roundtable confirmed that there are several programs, tools, and techniques for expediting the NEPA process that already exist within the current legislative and regulatory framework. Certain methods are only applicable to projects in unique and specific circumstances, and it is particularly important to determine which methods can be applied to all projects. For example, all three case studies reveal that strong federal leadership led to reduced delays. As a result, this lesson may have broad applicability. On the other hand, methods used in crisis situations, such as reconstruction of the World Trade Center and I-35W Bridge, which involved emergency funds from Congress, might not apply to the more typical variety of infrastructure projects.

Our recommendations based on these lessons are summarized below.

Integrate planning and environmental reviews.

Strengthening pre-NEPA planning activities, such as early scoping meetings, can help integrate recommendations from the project's planning phase and coordinate decision-making. This would help prevent local controversies from arising during the NEPA phase and ensure that projects lacking sufficient consensus – those that are most prone to delays – never make it to the environmental review process.

If only the projects on which the agencies and stakeholders already have broad agreement make it to the environmental review process, the stakeholders will raise fewer concerns and reviews will proceed more quickly.

Front-load agreements among agencies.

As demonstrated in the case of the Lower Manhattan Recovery Effort, there was a concerted effort in the environmental review process to construct agreements among participating agencies on timelines, procedures, language, and environmental outcomes, which led to a more streamlined process. Convening the public

and environmental stakeholders early in the process to establish initial environmental performance commitments helps build consensus, prevent lawsuits, and bring projects in on time.

When project sponsors agree to meet environmental performance commitments prior to the NEPA process, environmental stakeholders will be more likely to support the project and less likely to challenge it in court. Reducing the threat of litigation should contribute to expediting environmental review processes and lead to smaller NEPA documents over time.

Establish stronger federal leadership on major projects.

In the case studies above, strong federal leadership helped guide projects through the NEPA process in an expedited fashion. Federal sponsors can speed the process by devoting ample personnel and resources to high-priority, employment-generating projects, instead of multiple, small, lower-priority projects, which often consume their attention. However, adequate funding and staff capacity must be allocated to these agencies to take on this leadership role; they should not be expected to do more with less.

A strong federal project sponsor should manage the interfaces between the cooperating federal agencies, resource agencies, local project sponsors, and stakeholders. If federal project sponsors better communicate and delegate the roles of all of the respective agencies involved from the very start of the process, some redundancies and inefficiencies that contribute to delays can be avoided.

Establishing more consistent interpretations of NEPA procedures can also save time. Written agreements between agencies can establish common implementing policies and procedures, which would expedite environmental reviews.

Train the next generation of environmental practitioners.

The environmental review process and regulatory framework is complex, and NEPA implementing procedures vary considerably from one agency to another. As a result, navigating the process is challenging for all environmental practitioners, but especially for those with less experience. Better training is needed to educate environmental professionals to adopt and share best practices, such as streamlined stewardship and environmental performance commitments. When environmental practitioners have the proper training and experience, they are better equipped to ensure that high-quality projects make it through the environmental review process.

Increase transparency and accountability.

In response to the threat of litigation, environmental practitioners should focus their efforts on producing a more thorough administrative record that documents key decisions in the environmental review process and why those decisions were made. This is a more effective strategy than weighing down environmental studies with excessive analysis of unlikely impacts.

Online tools, such as project websites, can give the public a better way to track the progress of environmental reviews and hold agencies accountable. The NEPA process can achieve a greater degree of transparency and accountability by posting the deadlines for key decision points online.

Update procedures for the 21st century.

All efforts should be made to take full advantage of available technologies, such as electronic data-sharing platforms and online public engagement tools, to expedite informed decision-making. Prior NEPA work should be made available to envi-

ronmental practitioners through shared databases. Time can be saved when a project is able to utilize environmental studies and data that were created for previous projects.

Excessively lengthy paper documents, aside from being wasteful, are more time-consuming to review. Shorter, clearer documents in electronic format are more accessible to the general public, facilitating more effective outreach. Submitting and sharing all NEPA documentation digitally, and finding ways to limit their length, would save a significant amount of time and lead to a more transparent and accountable process.

Conclusion

There are many steps that federal, state, and local agencies can take that do not require amending NEPA, new legislation, or a mandate from the president. Clarifying the scope of projects during concept and preliminary design phases, better integrating planning and environment processes, strengthening the federal role on large, complex projects, better training and process management, and modernizing outdated, inefficient procedures can shave months or even years off of the NEPA process.

Making the environmental review process more efficient by reforming the agency procedures that are the root cause of project delivery delays will allow high-priority infrastructure projects to be constructed sooner, creating hundreds of thousands of jobs and fixing many of the deteriorating infrastructure systems that are weakening America's global economic competitiveness.



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