Cooperative Environmentalism:



Safer Roads and a Better Environment

Prepared For:
American Highway Users Alliance

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About the American Highway Users Alliance

The American Highway Users Alliance is a nonprofit advocacy organization serving as the united voice of the transportation community promoting safe and uncongested highways and enhanced freedom of mobility. Known as The Highway Users, the group works for sound transportation policy in the United States.

Since 1932, we have fought for road and bridge investments that will save lives, clean our air, promote economic growth, improve our quality of life, and protect our freedom of mobility.

The Highway Users includes among its more that 350 members corporations, small businesses, national trade associations, and state and local nonprofit organizations that represent over 45 million highway users.

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Cooperative Environmentalism: Safer Roads and a Better Environment

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EXECUTIVE SUMMARY

What is Cooperative Environmentalism? It's a new approach to expediting the environmental review process for highway projects without compromising environmental values. As the name suggests, Cooperative Environmentalism provides the framework for all parties to work together to protect the environment while improving highway mobility and safety.

Cooperative Environmentalism addresses the inefficiencies in the implementation of the 30-year-old National Environmental Policy Act (NEPA) through two major elements: (1) allowing states to take greater responsibility in the review process and (2) enhancing the authority of the secretary of transportation. Under Cooperative Environmentalism, specific changes to the environmental review process may include

- Allowing responsible transportation officials to establish reasonable, but binding, deadlines for comment by natural resource agencies.
- Ensuring that transportation officials, after consultation with resource agencies, will be the final arbiters of the identified transportation purpose and need of a proposed project.
- Giving states the option of undertaking the authority and responsibility of the U.S. Department of Transportation in the NEPA process.

Such changes would be relatively simple in comparison to the massive benefits the American public stands to reap. Cooperative Environmentalism is a tool to address the staggering damage to the environment, the economy, and the taxpayer caused by bureaucratic delays in starting highway improvement projects.

Why do we need Cooperative Environmentalism? Over the years, the well-intentioned NEPA process has become enmeshed in a web of duplicative bureaucratic reviews. It now takes approximately 12–15 years for major highway

construction projects to wend their way through the stages of planning, design, environmental review, and right-of-way acquisition. And that's before a single spade of dirt can be turned! Typically, one to five years of that time is spent completing the necessary environmental reviews, often to the detriment of the environment, public safety, and mobility. In practice, only a small percentage of the highway project-planning phase is spent conducting the actual environmental studies required by NEPA. The studies themselves—assessing potential impact on habitat and wildlife and vegetation and water quality, and studying soil and drainage—typically are completed within a year or two. By far the largest percentage of the preconstruction phase for a highway project up to a decade in many instances—is spent preparing required paperwork and transmitting it to and from federal and state agencies. Examples abound:

- A bridge over the Ohio River to connect the Indiana and Kentucky portions of I-265 around Louisville has been in the planning, environmental analysis, and review process for 15 years.
- In the nation's capital, the 38-year-old Woodrow Wilson Bridge, due to be replaced because of structural problems and inadequate capacity, took 11 years from the first bridge improvement study until construction finally began in October 2000.
- The I-95 New Haven Harbor Crossing in Connecticut was sent back to the drawing board for further study and preparation of a new draft Environmental Impact Statement, ultimately extending the *development period* for this project to *10 years*.
- The Wisconsin Highway 10 project was delayed for *seven years* after special interest groups requested that the state study additional alternatives to *one segment* of the project, a bridge crossing.

The same delays exact a high price in environmental degradation and additional roadway hazards. A 1999 report by the American Highway Users Alliance indicated that fixing the nation's 167 worst freeway bottlenecks would produce substantial air quality and safety improvements while reducing the time that Americans spend stuck in gridlock. This report, *Unclogging America's Arteries: Prescriptions for Healthier Highways*, estimates the following benefits of improved traffic flow over a 20-year period:

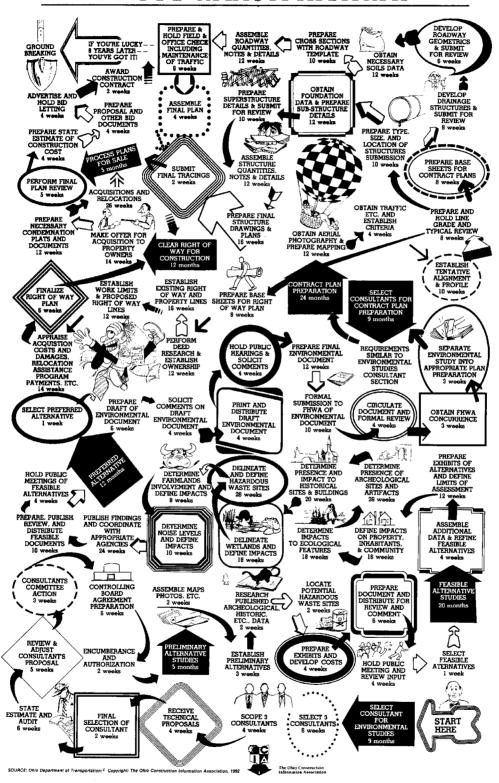
- Reduce the number of automobile crashes by 280,000.
- Prevent 140,000 injuries and more than 1,000 fatalities.
- Reduce tailpipe emissions of carbon monoxide and volatile organic compounds by 40 percent at the bottlenecks.

- Reduce greenhouse gas emissions by as much as 70 percent at those sites.
- Save gridlock-weary commuters an average of 19 minutes each way.

Another Highway Users study, entitled *Saving Time, Saving Money*, indicates that the economic impact of improvements to our worst bottlenecks would total \$164 billion.

The purpose of Cooperative Environmentalism is to shave years off of the time it takes for sorely needed transportation projects to move from the drawing board to that first spade of dirt. Because of the proliferation of reporting requirements and the layers of bureaucratic review, the environment itself now takes a back seat to the cumbersome process designed to protect it. It's time to put the environment, and the public, back in the driver's seat.

SO YOU WANT A HIGHWAY



Why does it take so long? One group, the Ohio Construction Information Association, sketched out this roadmap to getting a highway project started.

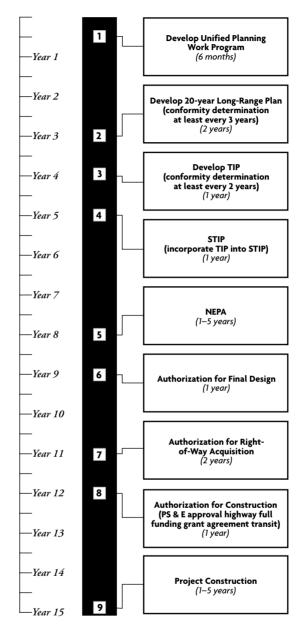
INTRODUCTION

Today, as illustrated in the following Federal Highway Administration (FHWA) chart, it takes approximately 12–15 years for major highway construction projects to wend their way through the stages of planning, design, environmental review, and right-of-way acquisition. And that's before a single spade of dirt can be turned! Typically, one to five years of that time is spent completing the necessary environmental reviews, often to the detriment of the environment, public safety, and mobility.

Examples abound of proposed projects delayed by a cumbersome and costly review process that 60 percent of Americans in a recent nationwide poll said takes too long.1 In the nation's capital, for instance, officials have long known that the 38-year-old Woodrow Wilson Bridge, bearing almost 200,000 vehicles a day on Interstate 95 (I-95) crossing the Potomac River between Maryland and Virginia, must be replaced because of structural problems and inadequate capacity. Yet it took 11 years from the time the first bridge improvement study was initiated until construction finally began in October 2000. Even as construction has finally begun, litigation against the project continues. Under the current timetable, the first span of a new bridge will open to traffic in autumn 2004, approximately the same time that engineers have projected the old bridge will have to be closed to truck traffic because of structural weaknesses.2

Similarly, a bridge over the Ohio River to connect the Indiana and Kentucky portions of I-265 around Louisville has been in the planning and review process for 15 years. The ongoing environmental review, public hearings, and litigation make it likely that construction on the bridge won't begin until 2003 at the

Highway Planning & Project Development Process



Legend

TIP: Metropolitan Planning Organization Transportation Improvement Program

STIP: Statewide Transportation Improvement Program

NEPA: National Environmental Policy Act

PS & E: Plans, Specifications, and Estimates

^{1 &}quot;Traffic Congestion and the Road Planning and Building Process," September 2000, Vox Populi Communications, McLean, VA.

A more complete description of the Woodrow Wilson Bridge project and others mentioned in this paper can be found on pages 23–26.

earliest. In the meantime, Louisville motorists waste time sitting in traffic or "taking the long way" to get around town; business development is slowed because of this critical missing link in the area's transportation network; and local taxpayers foot the bill for even more environmental studies and litigation.

Motorists are aware of the price they pay in lost time and patience when needed road improvements such as these are delayed. It may not be as obvious, however, that the same delays exact a high price in environmental degradation and additional roadway hazards. A 1999 report by the American Highway Users Alliance indicated that fixing the nation's 167 worst freeway bottlenecks would produce substantial air quality and safety improvements, while reducing the time that Americans spend stuck in gridlock.

Over 20 years, traffic flow improvements at those 167 highway chokepoints would reduce the number of automobile crashes by 280,000, preventing 140,000 injuries and more than 1,000 fatalities, according to *Unclogging America's Arteries: Prescriptions for Healthier Highways*. Similarly, tailpipe emissions of carbon monoxide and volatile organic compounds would drop by 40 percent, and greenhouse gas emissions would fall by as much as 70 percent at those sites. Meanwhile, gridlock-weary commuters would save an average of 19 minutes each way.

Putting a monetary value on the same safety, environmental, and timesaving benefits, another Highway Users study, entitled *Saving*

Time, Saving Money, indicates that the economic impact of improvements to our worst bottlenecks would total \$164 billion. That economic value would be reduced by \$30 billion if improvements were delayed by as little as three years, according to the study.

Clearly, the typical period of time spent in planning and development of a major highway project has a significant negative impact on public safety, environmental progress, and the economy—not to mention the personal time and productivity of American motorists. But perhaps surprisingly, most of the delay associated with planning needed highway projects has little to do with a failure to meet environmental standards. Both the law and public sentiment require that highway projects conform to high environmental standards.

The fact is, however, that any transportation project faces a federal bureaucratic and legal obstacle course. There are at least 65 federal laws, regulations, and executive orders that directly address the environmental effect of building roads.³ At least six cabinet departments and three independent or executive agencies have responsibility for administering those various provisions. Due to the proliferation of reporting requirements and the layers of bureaucratic review, the environment itself now takes a back seat to the cumbersome process designed to protect it.

Something must be done to expedite the environmental review of highway projects. Americans are paying too high a price for delays built into the current system.

³ See the table on pages 7–10, and pages 21–22.

FEDERAL DEPARTMENTS AND AGENCIES ADMINISTERING NEPA-RELATED PROVISIONS

Departments

- Agriculture
- Commerce
- Defense
- Interior
- Justice
- Transportation

Executive Branch Agency

• Council on Environmental Quality

Independent Agencies

- Environmental Protection Agency
- Federal Emergency Management Agency

The Department of Transportation identified NEPA-related provisions in the May 25, 2000, *Federal Register*, pp. 33978–79, NEPA and Related Procedures for Transportation Decisionmaking, Protection of Public Parks, Wildlife and Waterfowl Refuges, and Historic Sites; Proposed Rule. Specific citations of the provisions outlined in the table below are on pages 21–22.

Federal responsibilities that must be addressed in the NEPA process whenever applicable to the proposed action include:

(1) Individual Rights

i. Civil Rights Act

To ensure that no person shall, on the grounds of race, color, national origin, age, sex, or disability be subjected to discrimination under any program or activity receiving federal assistance

ii. Uniform Relocation Assistance and Real Property Acquisition

To ensure owners of property acquired for and persons displaced by federal-aid projects are treated fairly, consistently, and equitably

iii. Americans with Disabilities Act Implemented with the Civil Rights Act to include disabilities

iv. Nondiscrimination

Extends the coverage under the Civil Rights Act, for transportation purposes, to include an employment or business opportunity

v. Relocation Requirements

To ensure owners of property acquired for and persons displaced by federal-aid projects are treated fairly, consistently, and equitably

vi. Public Hearing Requirements

To ensure adequate opportunity for public hearings on the effects of alternative project locations and major design features; as well as the consistency of the project with local planning goals and objectives

(2) Communities and Community Resources

 i. Executive Order 12898: environmental justice for minority and low-income populations

To avoid federal actions that cause disproportionately high and adverse impacts on minority and low-income populations with respect to human health and the environment

- ii. Protection of Public Parks and Recreation To preserve publicly owned parklands, waterfowl and wildlife refuges, and significant historic sites
- Economic, Social, and Environmental Effects of Highways

To ensure that possible adverse, economic, social, and environmental effects of proposed highway projects and project locations are fully considered and that final decisions on highway projects are made in the best overall public interest

iv. Economic, Social, and EnvironmentalEffects of TransitSame as above, but applies to transit projects

v. Highway Noise Standards

Requires promulgation of noise standards

and requires new projects to include

reasonable and feasible mitigation

vi. Clean Air Act

To ensure that transportation plans, programs, and projects conform to the state's air quality implementation plans; To restrict federal funding and approvals for highway projects in states that fail to submit or implement an adequate State Implementation Plan [SIP]

vii. Safe Drinking Water Act

Ensure public health and welfare through
safe drinking water

viii. Farmland Protection Policy Act

To minimize impacts on farmland and
maximize compatibility with state and
local farmland programs and policies

ix. National Flood Insurance Act

Identify flood-prone areas and provide

insurance, and requires purchase of insurance
for buildings in special flood-hazard areas

x. Solid Waste Disposal Act

Provide for the recovery, recycling, and
environmentally safe disposal of solid wastes

- xi. Resource Conservation and Recovery Act
 Protect human health and the environment;
 prohibit open dumping; manage solid wastes;
 regulate treatment, storage, transportation,
 and disposal of hazardous waste for any
 project that takes right-of-way containing a
 hazardous waste
- xii. Comprehensive Environmental Response,
 Compensation, and Liability Act
 Provide for liability, compensation, cleanup,
 and emergency response for hazardous
 substances released into the environment
 and the cleanup of inactive hazardous
 waste disposal sites

Right to Know Act

To provide the public with information on hazardous and toxic chemicals in their community, and to provide for notification requirements to protect the public in the event of a release of extremely hazardous substances

xiii. Emergency Planning and Community

(3) Cultural Resources and Aesthetics

- Protection of Historic Sites
 To preserve publicly owned parklands,
 waterfowl and wildlife refuges, and
 significant historic sites
- ii. National Historic Preservation Act Protect national historic landmarks. Record historic properties prior to demolition

Economic, Social, and Environmental

- Effects of Highways

 To ensure that possible adverse, economic, social, and environmental effects of proposed highway projects and project locations are fully considered and that final decisions on highway projects are made in the best overall public interest
- iv. Economic, Social, and EnvironmentalEffects of TransitSame as above, but applies to transit projects

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Requires promulgation of noise standards and requires new projects to include reasonable and feasible mitigation

vi. Clean Air Act

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vii. Safe Drinking Water Act

Ensure public health and welfare through safe drinking water

viii. Farmland Protection Policy Act

To minimize impacts on farmland and maximize compatibility with state and local farmland programs and policies

ix. National Flood Insurance Act

Identify flood-prone areas and provide insurance, and requires purchase of insurance for buildings in special flood-hazard areas

x. Solid Waste Disposal Act

Provide for the recovery, recycling, and environmentally safe disposal of solid wastes

xi. Resource Conservation and Recovery Act

Protect human health and the environment; prohibit open dumping; manage solid wastes; regulate treatment, storage, transportation, and disposal of hazardous waste for any project that takes right-of-way containing a hazardous waste

xii. Comprehensive Environmental Response, Compensation, and Liability Act

Provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites

xiii. Emergency Planning and Community Right to Know Act

To provide the public with information on hazardous and toxic chemicals in their community, and to provide for notification requirements to protect the public in the event of a release of extremely hazardous substances

(4) Waters and Water-Related Resources

Economic, Social, and Environmental Effects of Highways

To ensure that possible adverse, economic, social, and environmental effects of proposed highway projects and project locations are fully considered and that final decisions on highway projects are made in the best overall public interest

Economic, Social, and Environmental Effects of Transit

Same as above, but applies to transit projects

iii. Federal Water Pollution Control Act

Restore and maintain chemical, physical, and biological integrity of the nation's waters through prevention, reduction, and elimination of pollution

iv. Wild and Scenic Rivers Act

Preserve and protect wild and scenic rivers and immediate environments for benefit of present and future generations

v. Land and Water Conservation Fund Act

Preserve, develop, and ensure the quality and quantity of outdoor recreation resources for present and future generations

vi. Water Bank Act

Preserve, restore, and improve wetlands of the nation

vii. Executive Order 11990: Protection of Wetlands

To avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative

- viii. Emergency Wetlands Resources Act

 To promote the conservation of wetlands
 in the U.S. in order to maintain the
 public benefits they provide
- ix. Rivers and Harbors Act

 Protection of navigable waters in the U.S.
- Executive Orders 11988 and 12148:
 Floodplain Management

To avoid the long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to restore and preserve the natural and beneficial values served by floodplains

(5) Wildlife, Plants, and Natural Areas

- Endangered Species Act
 Conserve species of fish, wildlife, and plants facing extinction
- ii. Protection of Wildlife and Waterfowl Refuges To preserve publicly owned parklands, waterfowl and wildlife refuges, and significant historic sites
- Economic, Social, and Environmental Effects of Highways

To ensure that possible adverse, economic, social, and environmental effects of proposed highway projects and project locations are fully considered and that final decisions on highway projects are made in the best overall public interest

iv. Economic, Social, and EnvironmentalEffects of TransitSame as above, but applies to transit projects

- v. Marine Protection Research and Sanctuaries Act Regulate dumping of material into U.S. ocean waters
- vi. Fish and Wildlife Coordination Act

 Conservation, maintenance, and management of wildlife resources
- vii. Wilderness Act

 Preserve and protect wilderness areas in their

 natural condition for two and enjoyment by

reserve and protect wilderness areas in their natural condition for use and enjoyment by present and future generations

- viii. Wild and Scenic Rivers Act

 Preserve and protect wild and scenic rivers

 and immediate environments for benefit

 of present and future generations
- ix. Coastal Zone Management Act

 Preserve, protect, develop, and (where
 possible) restore and enhance resources
 of the coastal zone
- x. Coastal Barrier Resources Act

 Minimize the loss of human life, wasteful
 expenditures of federal revenues, and the
 damage of fish, wildlife, and other natural
 resources
- xi. National Trail Systems Act

 Provide for outdoor recreation needs and
 encourage outdoor recreation
- xii. Executive Order 13112: Invasive Species

 Directs federal agencies to expand and

 coordinate their efforts to combat the

 introduction and spread of plants and

 animals not native to the U.S.

THE PROBLEM

EXCESSIVE BUREAUCRATIC REVIEWS

The National Environmental Policy Act (NEPA) was designed to ensure that all public works projects, including highways and other transit systems, were considered in terms of their potential impact on the environment. In practice, however, only a small percentage of the highway project-planning phase is spent conducting the actual environmental studies required by NEPA. The studies themselvesassessing potential impact on habitat and wildlife and on vegetation and water quality, and studies of soil and drainage—typically are completed within a year or two. The environmental studies are relatively straightforward compared with the tangled web of multileveled bureaucracy that must review and sign off on the study results. By far the largest percentage of the preconstruction phase for a highway project—up to a decade in some instances—is spent preparing required paperwork and transmitting it to and from federal and state agencies.

The Current Environmental Review Process

Currently, the NEPA review process involves a complex interplay of decisions made by the state and local transportation agencies that are reviewed by the FHWA and by federal and state environmental resource agencies to ensure compliance with the requirements of environmental law and regulation. This review process begins after transportation planning but before the preparation of detailed construction plans or purchase of right-of-way. There are three classes of highway projects, each with its own federal and state review requirements.

Class I projects are expected to have significant environmental effects, which are identified in an Environmental Impact Statement (EIS). The components of the EIS and the interplay of state and federal actions during the EIS process are described below.

Class II projects are not expected to have significant environmental effects and are granted categorical exclusions (CEs). CEs must be noted in an agency file, but no separate environmental document is required. FHWA and Federal Transit Administration (FTA) regulations provide criteria for and examples of CEs, such as routine highway maintenance, pavement resurfacing, and bus purchases.

Class III projects are those for which it is not initially clear whether there will be significant environmental effects. Agencies must collect data and undertake an analysis to determine whether the proposal has significant impacts on the human or natural environment. The results are presented in a document called an Environmental Assessment (EA), which is made available for public review and comment. After the review period, agencies make a final decision either to prepare an EIS or to make a "Finding of No Significant Impact" (FONSI). Some environmental assessments are as comprehensive and lengthy as a full EIS.

The Environmental Impact Statement (EIS)

There are multiple steps involved in preparing the EIS—and at each phase, the process is subject to review by multiple agencies and public concerns that frequently cause a stepby-step delay. Since the current process lacks truly binding deadlines for decisions and no single agency has final decision-making authority, it is not unusual for a highway project to spend the same amount of time in the environmental phase as it will ultimately spend in the construction phase. For example, a bridgewidening project on I-95 in Connecticut projected to take 10 years to construct recently spent the same amount of time bogged down in the EIS process. If completed on schedule, the highway improvements will begin to benefit commuters and the environment 20 years after they were first contemplated!

In making the decision to prepare an EIS, the state Department of Transportation (DOT) must coordinate with sponsoring and affected local jurisdictions, environmental resource agencies, and the interested public. The steps of the environmental process for an FHWA- or FTA-assisted project requiring an EIS follow:

- Notice of Intent (NOI).
- Scoping and coordination.
- Draft EIS (typically one to two years after the NOI).
- Public hearing.
- Final EIS.
- Record of Decision (ROD).

In the first step, the state DOT prepares an official NOI, which is published in the Federal Register to advise the public and other agencies that an EIS is being contemplated and describes the purpose of and need for the project. The purpose and need are normally determined through the statewide (rural) or metropolitan (urban) planning process, which occurs before the project enters the NEPA process. The NOI also describes the general location of the project in terms of the jurisdictions involved and specifies the termini. The NOI may describe the anticipated improvement—for example, a four-lane divided highway with limited access—or it may simply state that the EIS analysis will explore alternatives to overcome transportation problems in a corridor.

The next step is scoping and coordination. The state assembles available information on the corridor and invites appropriate local officials and potentially interested state and federal environmental resource agencies to a scoping meeting. Scoping is the determination of the issues and impact areas that must be analyzed in depth versus those that can be treated briefly. For example, a proposed highway project may have substantial effects on wetlands or protected wildlife, but there may be no historic

properties involved. The scoping process must be responsive to new information. For example, if an unanticipated endangered species is identified in the study area, the scope of work must be adjusted to permit consideration of potential impacts, potential avoidance strategies, and any necessary mitigation measures.

The scoping stage can cause considerable delays if there are conflicts among the federal, state, and local entities regarding the purpose and need for the project. For example, improvements to the northwest freeway corridor of U.S. 95 in Las Vegas, Nevada, were delayed when the EPA got involved and opposed the state's choice of the best alternative for this project. Although there are no major environmental resource issues involved, EPA supported the use of transit rather than expansion of the existing facility, citing the potential for future violation of carbon monoxide standards. The EPA did not address the significant carbon monoxide violations of a no-build option, which are currently impacting the environment while proposed improvements are caught up in layers of review. The EPA also appeared to override the expertise of state and local transportation officials regarding the best alternative for relieving congestion in their region.

The next step, a draft EIS, typically follows the NOI by one or two years. Most state DOTs have teams of interdisciplinary environmental specialists who either prepare the draft EIS or manage the work of consultants. The draft EIS offers alternatives to solve the transportation problem followed by an analysis of how well the alternatives satisfy the defined project purpose and need. The range of alternatives considered always includes a no-build option, alternative alignments, and, as appropriate, alternative modes or system management options. Each of the three to five alternatives selected is evaluated for its impact on the human and natural environment. Cost, services provided, and engineering feasibility also are investigated. All these factors are fully presented in the draft EIS.

Given the amount of work involved in preparing the draft EIS, significant delays arise when requests to consider additional alternatives are made after the draft EIS is prepared and circulated. This is the case with a project to widen portions of Highway 10 in Wisconsin from two to four lanes, to alleviate congestion and to remove a major safety hazard created by vehicles failing to pass correctly on the busy two-lane highway. Requests to consider additional alternatives to the crossing of the Wisconsin River beyond the alternatives identified in the EIS needlessly delayed this project several years—at a cost of more lives lost in the hazardous passing zones. A similar situation was barely avoided with the U.S. 95 project in Las Vegas. Additional delays might have occurred when the well-organized and wellfunded Sierra Club became involved late in the project-development phase, demanding that a new draft EIS be completed to focus on highway-related cancer risks of the people residing near the proposed highway expansion. After reviewing the facts, federal transportation officials denied the Sierra Club's request for additional alternatives analysis.

Public Comment

The draft EIS document is circulated for public and state and federal resource agency comment for a minimum of 45 days. The state DOT publishes a notice regarding availability of the document and announces the time and place for one or more public hearings. The draft EIS and the public hearing provide interested parties with the latest information on the project and also give the public, private organizations, and other government agencies the opportunity to provide information that can be used to aid in the project's development. For large or controversial projects, it is common practice to open a public information center in the vicinity of the project, publish newsletters, and hold frequent neighborhood meetings. Since the Woodrow Wilson

Bridge project in the Washington, D.C., metropolitan area involved multiple jurisdictions plus environmental and historical concerns, project planners used all of these methods, plus a Web site, in an attempt to streamline what turned out to be a decadelong process to get past the EIS stage. Significant opposition at the public hearing for the I-95 New Haven Harbor Crossing in Connecticut sent the state back to the drawing board for further study and preparation of a new draft EIS, ultimately extending the planning period for this project to 10 years.

Following the closing date for public comment, the state DOT analyzes all input received on the draft EIS, as well as feedback from the public hearing. The state DOT uses this input to help determine and identify a recommended alternative, which is then described in the final EIS. The final EIS also identifies planned mitigation measures for the proposed project. When and if the final EIS is approved by the FHWA, the document is made available for review and a notice is published in the Federal Register. Following approval of the final EIS document, the ROD is prepared to officially document the decision. The ROD cannot be issued until 30 days after the final EIS is approved. No further project actions can be taken until the ROD is approved.

In some cases, even the issuance of a ROD does not signify the end of the NEPA process. In the case of Sunset Beach Bridge in North Carolina, the process is still dragging on two years after the final EIS and ROD were issued for the replacement of a tiny, unsafe, one-lane bridge. All required studies have been completed, a ROD is on record, but the project is still on hold awaiting final permits from the Coast Guard and Corps of Engineers. Rather than accept the project specifications as documented through the NEPA process, these organizations insist on completing their own

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measurements before they will issue permits. During this delay, a citizen's organization has gotten involved, and the project is now facing litigation, despite all the precautions undertaken to support the NEPA analysis. This is a clear example of the bureaucratic process resulting in almost limitless opportunities for project opponents to create one delay after another.

Litigation

This brief overview only begins to describe the incredible complexity of the EIS process for large-scale, complicated projects. The expenditure of millions of dollars, the development of thousands of pages of documentation, and an elapsed time of six years or more are not uncommon. The complexity of the process also leads to extensive litigation. Controversial projects that survive the EIS process are almost always subject to court challenge, as the many steps and statutes involved offer a wide target. These challenges are almost always on procedural grounds. Rarely can a project be challenged because it is alleged to be in violation of a specific environmental standard. In North Carolina's Sunset Beach Bridge project, all NEPA requirements were met, but litigation ensued after the review period. In the Woodrow Wilson Bridge project, despite nearly a decade of public involvement, review, and education, multiple lawsuits were filed after the final EIS, bringing the Supreme Court into play and further delaying the project. For three years following the final Wilson Bridge EIS, a small but determined minority of wellorganized and well-funded citizen's groups litigated and further delayed this desperately needed replacement project.

The Complexity of the NEPA Review Process

The exhibit on pages 7–10 lists specific federal agencies and the environmental issues or public laws for which they have responsibility

in the context of a NEPA review. As the exhibit shows, six federal departments, one executive branch agency, and two independent agencies must administer a total of 54 NEPA-related provisions in five areas: individual rights; communities and community resources; cultural resources and aesthetics; waters and water-related resources; and wildlife, plants, and natural areas.

The NEPA review process offers considerable opportunities to streamline without compromising the necessary environmental review, since real experience in project after project clearly illustrates that the delays occur outside the environmental issues. The NEPA process has become congested with duplicative or inefficient interplays among federal, state, and public entities, including such problems as

- federal, state, and local agency conflicts regarding purpose and need of highway projects;
- lack of binding deadlines for action by the reviewing agencies;
- duplication between state and federal environmental review processes;
 and
- public comment periods and litigation that allow determined groups or individuals to further slow the process.

Ironically, this extended paperwork review phase results in further damage to the environment through wasted fuel and excess tailpipe emissions caused by the vehicles sitting on clogged roads, waiting for improvements to be approved. Delays in the completion of road projects also significantly impact highway safety, at the cost of thousands of lives each year. Therefore, lawmakers and public officials should place a high priority on expediting the development of highway projects without shortchanging the environment.

PREVIOUS ATTEMPTS TO REFORM THE NEPA REVIEW PROCESS

Various parties interested in streamlining the road project process for the public good have put forth proposals. In 1990, the previous Bush administration, in its legislative proposal for what became a six-year highway law, the Intermodal Surface Transportation Efficiency Act (ISTEA), included a provision delegating federal authority to states for all roads not on the National Highway System. The Bush proposal provided that states receiving block grant assistance may assume all the responsibilities for environmental review, decision making, and action pursuant to NEPA, and "other provisions of law that would apply to the secretary of transportation if the projects were undertaken as Federal projects." Congress did not adopt the Bush proposal.

The House proposal for streamlining, included in an early version of legislation that became the current highway law, the Transportation Equity Act for the 21st Century (TEA-21), went further than the provision ultimately approved in the conference with the Senate. The House proposal would have established a pilot demonstration program to permit the selection of up to eight states to administer the secretary's authority under NEPA, based on rules promulgated by the secretary and on a certification by the pilot state that it had complied with NEPA. A similar provision exists in the Housing and Urban Development Community Development Block Grant (CDBG) program, and it has been administered successfully for more than 25 years. In fact, transportation projects are eligible for CDBG funds under the infrastructure (urgent community needs) category.

Section 1309 of TEA-21 represents Congress's attempt to resolve the difficulties arising from the many federal statutes relating to environmental protection. The TEA-21 streamlining provisions mandate that the secretary of transportation work with other federal agencies to establish a single consistent project development process, but TEA-21 gives no *authority* to make this happen. The U.S. DOT has worked diligently to foster the cooperation of environmental resource agencies. The interagency agreements negotiated under TEA-21 provide that all agencies with a statutory role or interest in project development sign off at various points in the process, including the purpose and need statement and alternatives to be considered. The agreements also call for the establishment of time schedules and development of procedures for dispute resolution.

Most state transportation officials and some state environmental officials regard the implementation of Sec 1309 as a step backward. Environmental agencies opposed to a project are objecting to the purpose and need statement. An early read indicates that the TEA-21 streamlining provisions have not had the intended effect and may, in controversial situations, have made the situation worse by giving environmental agencies multiple points of sign-off—in other words, multiple points of veto. While the DOT has been diligent, the basic problem remains lack of authority.

A review of the U.S. DOT's proposed planning and environmental regulations is currently under way. This set of regulations is particularly relevant to the ongoing streamlining debate because it represents the first update of DOT environmental policy since 1987. The regulations also reflect significant planning, environmental, and streamlining mandates incorporated in TEA-21.

The proposals have not had a positive reception from the states, which found that in the two areas that Congress mandated streamlining (environmental streamlining and Major Investment Study integration), the proposed rules complicate and add burden rather than simplifying the existing process.

Environmental Streamlining

State officials find that the proposed regulations would significantly complicate the process and make it *more* time-consuming. The proposed regulations would significantly increase the costs of delivering transportation projects. They are concerned that the proposals

- do not include statutory requirements for comment deadlines for environmental resource agencies;
- do not include an anticipated dispute resolution process;
- lump large, complicated and small, uncontroversial projects together;
- add major new substantive requirements to the NEPA process, such as empowering all planning process participants to be treated the same as elected officials; and
- have no provision to make environmental interests recognize planning decisions for NEPA purposes.

Moreover, states suggest that the proposed rules on environmental streamlining open a Pandora's box of potential litigation relating to transportation project decisions.

Major Investment Study (MIS) Integration

The MIS requirement was enacted in ISTEA as a means of evaluating alternatives and analyzing the impacts of large transportation projects. Congress, noting the overlap of the requirement with the planning process and duplication with elements of the NEPA process, called for its elimination as a standalone requirement. The states argue that

"the proposed replacement for the MIS requirement does exactly what Congress ordered U.S. DOT not to do: 'it imposes a new requirement that applies not only to the Major Investments covered by the former MIS requirement...but to **all** projects regardless of their size, environmental impact, or cost."

The states have additional concerns about the proposed planning and environmental regulations:

- The first-time inclusion of a regulatory provision relating to environmental justice in the NEPA regulations.
- The failure to streamline and improve the process relating to Sec. 4(f) of the Department of Transportation Act of 1966, relating to use of parklands and historic sites.
- The lack of a transition period for implementing the proposed provisions.

The problem then, is simply that over the years, the well-intentioned NEPA process has become counterproductive to its intended effort to improve and preserve the environment by contributing to years of delays in starting highway projects. Those years are not spent actually studying environmental issues related to highway development but in preparing, reviewing, and exchanging the required paperwork—often, time and again for the same project. Leadership in this country is aware of the problem, and various efforts at the state and national levels have been put forth to attempt to alleviate it, yet none has really surfaced as the right solution at the right time. Cooperative Environmentalism, we believe, is just that solution.

COOPERATIVE ENVIRONMENTALISM

SAFER ROADS AND A BETTER ENVIRONMENT

It is entirely possible simultaneously to protect the environment and improve transportation, although the current process under NEPA fails on both counts. The good news is that the mechanisms for effecting change are already in place and tested at both the federal and state levels. Effective streamlining has been demonstrated in the areas of highway engineering and financial management, and responsible management of environmental issues in the development of highway projects has been a part of the Department of Housing and Urban Development (HUD) CDBG program for more than 25 years.

Engineering Streamlining

Following the delegation of project approval to field offices in the late 1950s, the FHWA, with support from Congress, further streamlined the highway engineering process by continuing to assign more responsibility to the states. This streamlining process began when states that developed secondary road plans were given approval authority for projects developed using secondary program funds. Then the combined road plan, a congressionally authorized pilot program, allowed specified states to approve non-Interstate projects without prior federal engineering review if they certified that they had followed Title 23 rules and procedures. In ISTEA, Congress extended the combined road plan to a much larger number of projects under the certification acceptance provisions.

Financial Streamlining

During this same period, the FHWA, in cooperation with the states, undertook a similar effort in financial streamlining. At the start of the Interstate period, financial records of all federal-aid projects were audited before vouchers were paid. During the 1960s and early 1970s, the FHWA worked to upgrade every state's accounting system. One by one, the FHWA approved state financial management

procedures, thereby permitting vouchers to be paid on receipt. More recently, this process has been further streamlined and made electronic. Now, states' accounts are electronically credited with vouchered amounts on the same day the electronic vouchers are received.

Environmental Streamlining

The CDBG program was established in 1974 to consolidate the many programs that came from the independent agencies that were joined to form HUD. The CDBG also encompassed a number of new categorical grant programs that had been initiated in the new department. The CDBG program is unique among federal grant programs in that Congress, early in the program, provided that the grant applicant, either a state or local government, could act like a federal agency and be responsible for compliance with NEPA. That is, the local agency would conduct the environmental scoping and decide what level of analysis and documentation would be required to comply with NEPA. The experience of the first several years was successful, so Congress amended the CDBG statute specifically to include related environmental statutes in addition to NEPA.

Senior HUD administrators report that experience with the NEPA delegation of authority in the CDBG program has been positive. They report no more problems than before, and the documents, while not as polished, get the job done. Critical issues are raised, interagency coordination accomplished, the public is involved, and issues are resolved. The environmental outcomes are not different from before. The main benefits are that the process is less time consuming, less costly, less complex, and requires far fewer federal, state, and local staff to administer.

Cooperative Environmentalism: How It Works

Cooperative Environmentalism is a new approach to expediting the environmental

review process for highway projects without compromising environmental values. This approach uses the core competencies of state and federal entities to make changes in the current system of duplicative environmental reviews. It consists of two major elements: (1) allowing states to take greater responsibility in the review process and (2) enhancing the authority of the secretary of transportation. Cooperative Environmentalism acknowledges that states have the competency, experience, and track record to shoulder some of the environmental burden in developing transportation projects. Under this approach, states will still be required to meet every federal environmental law and standard, but they will not in each instance have to have a federal official say "yes" before they can proceed. Instead, states will certify the appropriateness of their actions and be held accountable.

The second key element of Cooperative Environmentalism is to affirm that the secretary of transportation provides the federal establishment with transportation expertise. In the confusing arena of NEPA decision making, Cooperative Environmentalism establishes this premise as one means of adding some order to the project development process. The change will help expedite NEPA decision making, but, equally important, it will advise the judicial process. As judges review transportation decisions, this proposal should help them recognize that transportation matters are within the purview of the U.S. DOT. Some recent court decisions have accepted environmental agency opinion on transportation matters over those of the secretary. This statutory clarification should help reduce the procedural litigation and limit it to the substance of environmental standards.

Cooperative Environmentalism is relatively simple, but it will address the staggering damage to the environment, the economy, and the average taxpayer caused by the bureaucratic delays in starting highway improvement projects. The principles of Cooperative Environ-

mentalism may lead to some specific changes in the environmental review process:

- Allowing responsible transportation officials to establish reasonable but binding deadlines for comment by natural resource agencies. While still allowing for all affected parties to review and comment on highway projects, reasonable deadlines for those comments will help avoid situations like the Sunset Beach Bridge project, stalled after the completion of the NEPA process by disputes unrelated to any environmental issues with the project itself.
- Ensuring that transportation officials, after consultation with resource agencies, will be the final arbiters of the identified purpose and need of a proposed transportation project. This will help mitigate the long delays experienced in the Wisconsin Highway 10 project as special interest groups requested the state to study additional alternatives to one segment of the project, a bridge crossing. These requests, coming after the draft EIS stage, meant that a badly needed improvement project critical to the safety and economy of the region did not start for seven years after it was first proposed.
- Giving states the option of undertaking the authority and responsibility of the **U.S. DOT in the NEPA process.** All state transportation departments have staff or consultants on board to provide environmental expertise in the development of highway projects. States already do most of the technical analysis and drafting of the EIS. This provision of the Cooperative Environmentalism proposal would allow the state agency with responsibility for completing a proposed highway project to work directly with the federal resource agencies to resolve problems raised in the environmental review as quickly and efficiently as possible.

Such changes would be relatively simple in comparison to the massive benefits the American public stands to reap. The purpose of Cooperative Environmentalism is to shave years off of the time it takes for sorely needed transportation projects to move from the drawing board to that first spade of dirt. A recent nationwide poll⁴ learned that the average citizen does not understand the process by which roads are built, nor do people understand how environmental impacts are assessed. The poll showed that the public assumes that unmitigated highway congestion is the result of projects that have taken too long to finish, perhaps due to problems in the construction phase, rather than projects that have taken too long to start.

The 1999 report by the American Highway Users Alliance indicated that fixing the nation's 167 worst freeway bottlenecks would produce substantial air quality and safety improvements while reducing the time that Americans spend stuck in gridlock. Benefits to the environment of completing these projects include an estimated 40 percent reduction of tailpipe emissions of carbon monoxide and volatile organic compounds in America's most congested arteries alone and reduction by

70 percent of greenhouse gas emissions at those sites. Once such projects are completed, over the first 20 years of use, studies show that the number of automobile crashes could be reduced by 280,000, thus preventing 140,000 injuries and more than 1,000 fatalities, and commuters would save an average of 19 minutes each way. Another Highway Users study indicates that the economic impact of improvements to our worst bottlenecks would total \$164 billion. That economic value would be reduced by \$30 billion if improvements were delayed by as little as three years, according to the study. The sobering fact is that work on most of these bottlenecks has yet to begin, and experience shows that the total time elapsed from initial concept to ribbon cutting can easily reach 20 years.

We have the means to shorten the process considerably without shortchanging the environment. States have proven competencies in streamlining and environmental review. The U.S. DOT has the expertise to lead competent decision making to improve our national transportation system. Cooperative Environmentalism is the tool we can use to make it happen.

^{4 &}quot;Traffic Congestion and the Road Planning and Building Process," September 2000, Vox Populi Communications, McLean, VA.

ADDENDA

LIST OF RELEVANT ENVIRONMENTAL LAWS AND REGULATIONS (SEE CFR VOL. 65, NO. 102/THURSDAY, MAY 25, 2000, PROPOSALS, SEC 1420.1, THE NEPA UMBRELLA.)

§1420.109 The NEPA umbrella.

- (a) In keeping with the above goals, it is the policy of the FHWA/FTA that the NEPA process be the means of bringing together all legal responsibilities, issues, and interests relevant to the transportation decision in a logical way to evaluate alternative courses of action. Additionally, the policy should lead to a single, final decision regarding such key characteristics of a proposed action as location, major design features, mitigation measures, and environmental enhancements. This decision shall be made in the best overall public interest based on a balanced consideration of the need for safe and efficient transportation; the social, economic, and environmental benefits and impacts of the proposed action; and the attainment of national, state, tribal, and local environmental protection goals.
- (b) Any environmentally related study, review, or consultation required by federal law should be conducted within the framework of the NEPA process to ensure integrated and efficient decision making. The state is encouraged to conduct its activities during the NEPA process toward the same goal.
- (c) Federal responsibilities to be addressed in the NEPA process whenever applicable to the proposed action's decision include, but are not limited to, the following protections:

(1) Individual Rights

- (i) Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-2000d-4) and related statutes;
- (ii) Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq.), as amended;

- (iii) Americans with Disabilities Act (42 U.S.C. 12101 et seq.);
- (iv) 49 U.S.C. 5332, nondiscrimination;
- (v) 49 U.S.C. 5324(a), relocation requirements; and
- (vi) 23 U.S.C. 128 and 49 U.S.C. 5323(b), public hearing requirements.

(2) Communities and Community Resources

- (i) Executive Order 12898 (59 FR 7629, 3 CFR, 1995 comp., p. 859), environmental justice for minority and low-income populations;
- (ii) 49 U.S.C. 303, protection of public parks and recreation areas;
- (iii) 23 U.S.C. 109(h), economic, social, and environmental effects of highways;
- (iv) 49 U.S.C. 5324(b), economic, social, and environmental effects of transit;
- (v) 23 U.S.C. 109(i), highway noise standards;
- (vi) Clean Air Act (23 U.S.C. 109(j), 42 U.S.C. 7509 and 7521(a) et seq.), as amended;
- (vii) Safe Drinking Water Act (42 U.S.C. 201 and 300);
- (viii) Farmland Protection Policy Act of 1981 (7 U.S.C. 4201-4209);
- (ix) National Flood Insurance Act (42 U.S.C. 1401, 2414, 4001 to 4127);
- (x) Solid Waste Disposal Act (Public Law 89-272;42 U.S.C. 6901 et. seq.);
- (xi) Resource Conservation and Recovery Act of 1976(42 U.S.C. 6901 et seq.);
- (xii) Comprehensive Environmental Response,Compensation, and Liability Act of 1980(42 U.S.C. 9601 et seq.); and
- (xiii) Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. 11001 to 11050).

(3) Cultural Resources and Aesthetics

- (i) 49 U.S.C. 303, protection of historic sites;
- (ii) National Historic Preservation Act (16 U.S.C. 470 et seq.);
- (iii) 23 U.S.C. 109(h), economic, social, and environmental effects of highways;

- (iv) 49 U.S.C. 5324(b), economic, social, and environmental effects of transit;
- (v) Archeological and Historic Preservation Act (16 U.S.C. 469);
- (vi) Archeological Resources Protection Act (16 U.S.C. 470aa to 47011);
- (vii) Act for the Preservation of American Antiquities (16 U.S.C. 431 to 433);
- (viii) American Indian Religious Freedom Act (42 U.S.C. 1996 et seq.);
- (ix) Native American Grave Protection and Repatriation Act (25 U.S.C. 3001 to 3013);
- (x) 23 U.S.C. 144(o), historic bridges;
- (xi) 23 U.S.C. 530, wildflowers; and
- (xii) 23 U.S.C. 131, 136, 319, highway beautification.

(4) Waters and Water-Related Resources

- (i) 23 U.S.C. 109(h), economic, social, and environmental effects of highways;
- (ii) 49 U.S.C. 5324(b), economic, social, and environmental effects of transit;
- (iii) Federal Water Pollution Act, as amended (33 U.S.C. 1251 to 1376);
- (iv) Wild and Scenic Rivers Act (16 U.S.C. 1271 to 1287);
- (v) Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460);
- (vi) Water Bank Act (16 U.S.C. 1301 to 1311);
- (vii) Executive Order 11990 (42 FR 26961; 3 CFR, 1977 comp., p. 121), protection of wetlands;
- (viii) Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3921 to 3931);
- (ix) Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.); and
- (x) Executive Orders 11988 (42 FR 26951; 3 CFR, 1977 comp., p. 1171) and 12148 (44 FR 43239; 3 CFR, 1979 comp., p. 412), floodplain management.

(5) Wildlife, Plants, and Natural Areas

- (i) Endangered Species Act of 1973 (7 U.S.C. 136, 16 U.S.C. 1531 to 1543);
- (ii) 49 U.S.C. 303, protection of wildlife and waterfowl refuges;
- (iii) 23 U.S.C. 109(h), economic, social, and environmental effects of highways;
- (iv) 49 U.S.C. 5324(b), economic, social, and environmental effects of transit;
- (v) Marine Protection Research and Sanctuaries
 Act of 1972 (16 U.S.C. 1431 to 1445, 33 U.S.C.
 1401 to 1445);
- (vi) Fish and Wildlife Coordination Act (16 U.S.C. 661 to 666);
- (vii) Wilderness Act (16 U.S.C. 1131 to 1136);
- (viii) Wild and Scenic Rivers Act (16 U.S.C. 1271 to 1287);
- (ix) Coastal Zone Management Act of 1972 (16 U.S.C. 1451 to 1464);
- (x) Coastal Barrier Resources Act (16 U.S.C. 3501 to 3510, 42 U.S.C. 4028);
- (xi) National Trails System Act (16 U.S.C. 1241 to 1249); and
- (xii) Executive Order 13112 (64 FR 6183), Invasive Species.

THE MECHANICS OF A PROJECT DELAY: FIVE CASE STUDIES

This section takes five case studies of the impact of NEPA requirements on highway improvements and provides examples of the ways in which projects get bogged down. More sobering, perhaps, are the very real delays—up to 12 years and counting—that these projects have experienced, while the conditions that spawned the need for the proposed improvements continue to deteriorate.

Case Study 1: U.S. Highway 10, Wisconsin.

The U.S. Highway 10 project is an outgrowth of Wisconsin's statewide planning process. U.S. 10 is a major east-west route serving Wood, Portage, and Waupaca Counties, as well as regional and interregional traffic. The route is one of a number that the state considers important to enhance its economic position. The existing two-lane route is inadequate to serve the current traffic load in its eastern portion and experiences a fatality rate well above the statewide average for Wisconsin routes with similar characteristics. The majority of the serious crashes occur as a result of failed passing maneuvers where vehicles cross the centerline into oncoming traffic. The proposed improvement is a four-lane divided highway.

Wisconsin has a well-established planning and project development process, and projects typically move from planning to project development in an orderly fashion. The EIS for the proposed project covers 60 miles. Unique to this project is the inclusion of the final EIS for the soon-to-be-constructed eastern segment of the project. For the western segment of the project, the document serves as a corridor study that will be supplemented by further analyses and another environmental document. This is an appropriate approach, because the justification for the project is the same over its entire length, while environmental impacts may vary in different sections. Therefore, the overall justification is being handled in a single document. Going to different levels

of detail in different documents, as opposed to a draft and final documents at the same scale, is known as "tiering." Unfortunately, such logical and innovative approaches are not often attempted, and because so much NEPA practice is based on past litigation, states are reluctant to try approaches that have not survived legal challenge.

Unfortunately, the seven-year history of this project—from scoping and publishing of the Notice of Intent to the issuance of a Record of Decision (ROD)—is not unusual for this type of project. For U.S. Highway 10, the decision to use tiering caused further delays because most federal agencies are not accustomed to it. Additional time was expended when requests were made to consider alternatives to the crossing of the Wisconsin River, which the state undertook. The ultimate benefits of the decision to tier will not be known until the final EIS is issued for the western section.

Case Study 2: Northwest Freeway Corridor–U.S. 95, Las Vegas, Nevada. The Las Vegas metropolitan area is the fastest growing in the United States, with the population increasing 55 percent between 1990 and 1998. The resultant traffic is putting a strain on the transportation system and is raising concerns about the system's ability to sustain the region's economic vitality. The region is investing heavily in new transportation capacity, both highway and transit.

U.S. 95, a six-lane freeway, is the only major highway facility serving the northwest portion of the Las Vegas metropolitan area, which is experiencing tremendous growth. In addition to EIS-related studies, the Nevada DOT undertook a Major Investment Study (MIS), which was completed in 1997. MISs are required by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). They are designed to help determine appropriate transportation mode selection and to demonstrate the cost-effectiveness of the

recommended alternative. The MIS identified widening the freeway from 6 lanes to 10 lanes as the locally preferred alternative. This is also the alignment recommended in the final EIS. The project costs are estimated to be \$424 million.

This project development study moved along quickly, even though there will be significant impacts. The recommended alignment will require the acquisition of 396 dwelling units and the relocation of 942 residents. Federal agencies involved included the Advisory Council on Historic Preservation, the Fish and Wildlife Service, and the Department of the Interior.

Because the proposed improvement involves the expansion of an existing facility with two lanes in the median and two outside lanes requiring widening of the existing rightof-way limits—there are no major environmental resource issues. The EPA has, however, opposed the proposal repeatedly, suggesting that transit is the correct solution, although the region already has chosen transit as the solution for its resort corridor at a capital cost of \$2.5 billion. The resort corridor proposal includes a recommended new transit-fixed guideway costing approximately \$1.8 billion and an expanded bus system totaling approximately \$700 million, coupled with modest highway improvements. The study of this corridor is continuing. In the meantime, the major casinos on the Strip have announced plans for a people-mover to connect their resorts and stated that it would be compatible with any future public system.

It is unclear where the funds for the public system would come from. The demand for federal capital funds far exceeds the supply. The Federal Transit Administration has a long list of cities desiring federal new-start funds, which is only part of the picture. On average, transit facilities meet only one-half of their operating costs from the fare box. For every

dollar put into the fare box, another operating assistance dollar must be provided by state and local governments. EPA bases its opposition to the Northeast Corridor project and its demand for a transit solution on the fact that models show a single violation of the carbon monoxide standard in 2020 at one location. The no-build option provides a vastly worse air quality situation. The Sierra Club has joined EPA as an advocate for transit in the Northeast Corridor. They have demanded that new draft and final EISs be prepared focusing on highway-related cancer risks for people residing in the corridor and the impacts of induced travel on the forecasts. Meanwhile, the FHWA has issued an ROD for the project, and the state is proceeding with the final design.

Case Study 3: Sunset Beach Bridge, North Carolina. The Sunset Bridge replacement project is the smallest one considered in these case studies and, in some respects, could be considered the most difficult. It also serves to bring out the complexity of decision making on even small projects and demonstrates that, through NEPA, even small matters get federalized. The existing bridge is a single-lane, floating, steelbarge swing-span drawbridge. Two dock-like structures form the approaches; anchored between them is a steel barge with a swing-span mounted on it. When boats approach, the span swings on the barge to let the Intracoastal Waterway traffic pass. The existing bridge is only a few feet over the water, so only a rowboat can pass when the bridge is closed to allow roadway traffic to cross. The bridge connects the coastal island and mainland portions of the town of Sunset Beach.

The existing bridge is in very poor condition, having a sufficiency rating of 7.3 on a scale where 100 signifies perfect condition. Over the years, development of summer homes on the island and boat traffic on the Intracoastal Waterway have both increased significantly. Congestion on the one-lane road occurs frequently during the summer months as the

reversible roadway traffic and boat traffic compete. Operating and maintenance costs are very high. During large storms, the barge is towed from the channel and tied up to the shore.

The initial state studies called for a highlevel span set at the height the Coast Guard requires for the Intracoastal Waterway. Serious consideration was also given to a mid-level bascule span, but a complete analysis of environmental impacts and construction and operating costs led to the recommendation of the highlevel span. The length of time involved in starting this project—approximately nine years from the initial scoping efforts—is due to the fact that an island-based taxpayers association sued to stop the project, requesting that the project be enjoined and that a one-lane bridge be maintained. The judge hearing the case ruled that the EIS had not done an adequate job of addressing the cumulative and secondary impacts of the two-lane bridge. The state undertook additional studies, which showed that while there might be modest additional growth on the island with a two-lane bridge, the distinguishing characteristic of coastal island development was local zoning. The state looked at a number of its islands, along with improvements in capacity, and determined that situations exist with high-rise development and low-density development with the same relative access. The difference was local zoning. The state published an environmental document with the new information and the judge recently lifted the injunction. The FHWA has issued a ROD and the state is proceeding with final design. In keeping with long-standing practice, however, the Coast Guard and the Corps of Engineers will not issue final permits until they review the final designs.

The Sunset Bridge project essentially involved a dispute between the state of North Carolina and a small group of its citizens. NEPA was involved because the project would potentially use federal funds, the construction would involve wetlands, and a Coast Guard

bridge permit was needed. Any one of these three factors triggers NEPA's involvement. None of the environmental resource agencies had problems with the project, which involved replacement of an inadequate bridge. The argument involved development that the state was able to show was under local control. However, the threat of further litigation remains.

Case Study 4: I-95 New Haven Harbor Crossing, Connecticut. This project is typical of many found in metropolitan areas throughout the country. Major interstate corridors are experiencing severe congestion, and bridge structures and pavements are approaching the end of their useful lives. In or near center cities, the facilities are boxed in by existing development and options are limited. This section was originally built as a part of the Connecticut Turnpike in the mid-1950s.

In 1989, the Connecticut Department of Transportation published a Notice of Intent to undertake studies of the stretch of I-95 in the New Haven area. The department completed a draft EIS and held a public hearing in 1991. There was considerable opposition to the state's proposal, most of which related to the Quinnipiac River Bridge in New Haven and an adjacent interchange between I-95 and I-91. It was proposed to widen the bridge from 6 to 10 lanes. As a result of the opposition, the state went back to the drawing board.

The challenge was to justify the scale of the bridge and to keep traffic moving throughout the construction period without significantly enlarging the footprint of the facility. The state organized an extensive public involvement effort and considered additional options, including a further look at enhanced public transportation. In 1997, it published a new draft supplemental EIS and held additional public meetings. In the spring of 1999, the state published a final EIS with a recommendation for a new 10-lane bridge replacing the existing 6-lane structure and the widening of

the remaining portions of roadway based on the specific traffic forecasts.

The final design differs from the original proposal mainly in the details. The interchanges will have smaller footprints (meaning lower design speeds) and collector/distributor roads were eliminated in the waterfront area. The final EIS does not commit to permanent improvements to public transportation other than a new central rail station to replace the one that will be lost. The state will, however, provide greatly increased commuter rail service and expanded bus service as construction mitigation during the 10- to 12-year construction period. The FHWA has issued a ROD for the project, and the state is proceeding with the final design.

The 10-year history of this project is largely a story of a state working with its citizens to educate them and to overcome objections to a project proposal. The project has not been litigated, and federal resource agencies had no unusual problems.

Case Study 5: The Woodrow Wilson Bridge Project, I-95 Crossing the Potomac River between Virginia and Maryland. The 40year-old Woodrow Wilson Bridge was designed as a bypass to carry 75,000 commuter cars daily around the Washington, D.C., area. Today, the aging bridge works at nearly three times its designed capacity, carrying nearly 200,000 vehicles per day, including heavy truck traffic and through users of Interstate 95, for which it was not designed. The Wilson Bridge has double the accident rate of comparable Maryland and Virginia highways and double the accident rate of the American Legion Bridge—the northern alternative for crossing the Potomac River from Maryland into Virginia. Improvements to the bridge, finally under way in the

fall of 2000, will produce a new span by 2004—just when engineers predict the bridge will become structurally unsafe. This project has taken more than 12 years from initial study to groundbreaking.

This Woodrow Wilson Bridge Project is highly complex because it involves so many state and local jurisdictions, and faces environmental and historical concerns as well. In 1988, the federal government, Maryland, Virginia, and the District of Columbia initiated a study of the situation, with the bridge already stressed at double its designed capacity and rated two years earlier by AAA as one of America's 10 worst bottlenecks. In the early 1990s, the project selection process failed in the wake of opposition from local jurisdictions. Shortly thereafter, a new project identification process was initiated, this one designed to include local jurisdictions, with the goal to enhance mobility while addressing community and environmental concerns. This process included citizen workgroups, an in-neighborhood project office, Web site, newsletter, town hall meetings, open houses—in short, every possible endeavor to educate citizens was put forth in an effort to identify any concerns early in the process. In 1997, the final EIS was completed, and in 1998, the bridge project contract was awarded. From 1998 to 2000, the City of Alexandria, joined by citizens' and historical groups filed legal challenges. Although the FWHA and the City of Alexandria were able to settle in 1999, the citizens' groups continued on to the Supreme Court until a decision was reached in June 2000. This is an example of the power of a well-funded, well-organized opponent group, or the "squeaky wheel phenomenon"—an active 10 percent of disapprovers dominating a passive 90 percent of approvers.