The Road to Better Transportation Projects:
PUBLIC INVOLVEMENT AND THE NEPA PROCESS

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aster is better. For decades, this has been a basic American value. E-mail zips across the country, replacing “snail mail.” Media cycles become shorter and shorter. We are tempted to cut corners to accomplish jobs more quickly. But sometimes bending or breaking the rules for the sake of speed can have disastrous consequences. Sometimes quality of work matters as much or more than speed.

This report is about a landmark law requiring the federal government to examine alternatives and seek to minimize harmful effects of federally funded projects, like highways, which have the potential to damage our health, environment, and quality of life. The National Environmental Policy Act (NEPA), which took effect in 1970, requires that federal agencies study and disclose the environmental effects of their actions and include the public in the decision-making process for federally funded projects.

Public participation and environmental review are fundamentally important to the development of high quality projects and protection of natural resources. They have contributed mightily to the enhancement of road and bridge projects all over the country and are partly responsible for the level of environmental quality Americans enjoy today. However, the public participation and environmental review processes now face serious threats from shortsighted proposals from the Bush Administration and the road construction lobby, who seek to limit these critical phases of project development by weakening provisions of NEPA as they apply to highway construction.

Transportation, Community Development, and Natural Resources

Over the course of the twentieth century, our nation built a tremendous network of roads and highways. The U.S. Department of Transportation has estimated that the nation’s highway and road network equals a staggering four-million miles.

The pavement of roads and the cars and trucks that travel on them leave a big imprint on communities and the environment. Haphazard highway development and the subsequent sprawl that follows it chews up open space and wildlife habitat at an alarming rate. America is now losing an incredible two million acres of land a year to development. Automobiles are a major source of the air pollutants that have left 137 million Americans living in places where the air is unhealthy to breathe, according to the American Lung Association. Polluted runoff damages the water quality of our streams, lakes, and rivers. Of the 38 percent of our estuaries that are impaired, 46 percent of that impairment is due to polluted urban runoff, according to a 1996 Environmental Protection Agency report to Congress. Neglecting to look at the effects of how a new highway will impact the local community and its environment is a mistake with significant consequences.

The Road to Better Transportation Projects

Fortunately, NEPA required reviews help reduce this environmental damage by improving the quality of transportation projects. NEPA not only requires that the impacts be studied, but that alternatives be pursued in cases where the damage will be significant. Additionally, NEPA requires public inclusion in the decision-making process. NEPA has thus led to many positive modifications, which have resulted in transportation projects that “fit better” into communities. This report takes a critical look at the role NEPA has played in a dozen road projects around the country. The projects profiled in these pages include testimonials from transportation officials, citizens, and others who were involved in project development.

These examples tell stories from every corner of the country. In the west, NEPA requirements provided the needed incentive to consider measures including shuttles and parking fees in order to reduce the negative effects of traffic in
Oregon’s Mount Hood Corridor. Thanks to procedural safeguards under NEPA, several parts of local communities, including farmland, were saved by better routing of Wisconsin’s Highway 26 Bypass. Building a new four-lane highway in Rhode Island caused less environmental damage due to NEPA-driven decisions about location and size of the facility. And a project, in the aply named Alligator Alley, crosses Florida’s priceless Everglades with reduced damage due to clever design techniques including 24 wildlife underpasses and fencing along 40 miles of the route to reduce roadkill. NEPA’s protections gave local citizens a seat at the table and spurred these innovations.

Environmental Review: The Convenient Scapegoat

In spite of NEPA’s major role in including the public and mitigating environmental impacts of road projects, this indispensable statute is in jeopardy. President Bush signed an executive order in September of 2002 to undermine the environmental review process for transportation projects. This has spurred additional proposals to weaken these protections. Why is NEPA under attack? It is targeted because the highway builders have been aggressively promoting the convenient although false argument that NEPA is to blame for delays in road construction.

However, limiting public involvement and weakening environmental review are not the best ways to achieve greater efficiency. Proponents of these measures claim that such reviews cause unnecessary and significant delay. While it is true that the process of producing an environmental impact statement (as opposed to a less intensive “environmental assessment”) requires time — especially when the project is controversial — the fact is that they slow down only a very small percentage of projects every year. There are fewer and fewer such full-blown reviews; the number filed in 2001 — about 500 — was less than a quarter of the approximately 2,000 statements filed in 1973. Today, a mere three percent of federally funded transportation projects require an EIS.

In most cases, environmental reviews are not a significant time killer. In a 2000 study of 89 projects that had been delayed at least five years, the Federal Highway Administration found that environmental impact statements were not the major cause of delay. According to the study, the most significant factors slowing down these projects were lack of funding, local controversy, low priority, and project complexity, which collectively accounted for 62 percent of the delays. The remaining 38 percent included a range of other factors, including environmental concerns. Endangered species and wetlands accounted for only seven percent and four percent of delays, respectively.

A Better Way to Go

While the evidence is clear that public and environmental reviews improve the quality of our roads and have little to do with project delays, the NEPA process is not perfect and there are methods to improve it. Natural resource agencies could do their job more efficiently if they had appropriate budgets for staff and tools for conducting reviews so that better projects can be delivered faster. For instance, federal and state agencies are trapped by outdated technology. A 2000 National Research Council report recommended some specific ways to enhance the review process. The suggestions included: new collaborative planning and design processes, use of (geographic information systems) GIS to determine natural and community constraints on a project (called “gap analysis”), and computer visualization programs that allow users to view a proposed project and its potential impact in three dimensions. Better support for these agencies and updates of their tools and technology would go a long way toward speedier, higher quality project delivery.

Possibly the most promising — and common-sense — way to reduce delay is to establish early partnerships and coordination among stakeholders. The earlier that everyone affected is brought together to assist with the design of a project, the less likelihood there is for opposition further down the road. A recent Government Accounting Office study confirmed this: 30 of 33 transportation experts indicated that this approach has great or very great potential for reducing project delivery time.

America is known for its open roads. But just as our highway system is integral to our way of life, so are the laws that protect our communities and the natural resources we treasure. Since roads cannot be “unbuilt,” sensible protections such as NEPA — which guarantee project review and public involvement — should be safeguarded and not targeted in the name of expediency.
Mt. Hood highway roughly parallels a portion of the Oregon Trail and has rich cultural and historic significance. Stretching from the community of Rhododendron to its intersection with State Highway 35, it passes through the Spotted Owl wetlands and several endangered species habitats. This 35-mile segment came under scrutiny as Mt. Hood National Forest was becoming an increasingly popular recreational destination.

As plans for expansion began, pressure to support economic development on the mountain was matched with concern by community interest groups and Native American tribal governments to protect surrounding natural and cultural resources.

Oregon’s Department of Transportation (ODOT) had begun widening the entire highway piece-by-piece, but in 1994 the Federal Highway Administration intervened and indicated that the NEPA review process was needed before any additional expansion could occur.

Geoffrey Kaiser, then environmental/major projects manager for ODOT, wanted a method to consider the highway as a whole instead of studying segments individually. “We proposed an alternative to do a combination for Tier 1 EIS and a 20-year master plan,” he said.

Completed in 1996, the resulting Mt. Hood Corridor Study yielded a set of guiding principles to be applied to all future modifications to the entire Mt. Hood Highway over the next 20 years. Establishing the guiding resource conservation principles very early in the planning stages became the critical step to avoid many later obstacles and delays in the development and design phases. “This was the first real project where ODOT introduced NEPA in the comprehensive planning phase,” Kaiser said. “It took a lot of attitude adjustment. It was a challenge for scientists to think more conceptually, but they began to realize that by being involved early in the planning phase, it lessened the detail work later,” he added.

The study involved a large advisory committee representing community interest groups as well as development advocates. The group found that widening the segment alone would not alleviate congestion in the area, and thus recommended alternative solutions to mitigating the traffic. These included shuttles, real-time cameras to advise travelers of road conditions, and increased enforcement measures like parking fees to encourage off-peak visits.

Kaiser explained the study’s message, “Before you leap to widening, make a good effort. So far, it has been a useful master plan,” he said. The plan has since been used to support subsequent additions to the highway and other neighboring projects, such as relocating a streambed and adding wildlife crossings. “Each of these projects has to prove that the expansion does not exceed the [development] capacity of the area,” said Kaiser.

Donna Kilber, the NEPA coordination manager at the time, attributes the successful study to the NEPA process. “If the NEPA process wasn’t there, I doubt we would have taken the overall look like we did,” said Kilber.
Nevada, Hoover Dam Bypass

NEPA AS DIALOGUE BETWEEN DESIGNERS AND PUBLIC

The 3.5-mile Hoover Dam Bypass project was developed to address increased congestion from switchbacks and restrictions at the Hoover Dam crossing. The proposed bypass would stretch from Clark County, Nevada across the Colorado River to Mojave County, Arizona. The Central Federal Lands Highway Division (CFLHD) of the Federal Highway Administration was chosen to oversee the project because it is an initiative of both federal and local government.

Project manager Dave Zanetell considers his team to be a leader in environmentally responsible highway projects. “We work within a culture of context-sensitive design,” he said.

He led a multi-agency team in conducting the Environmental Impact Statement (EIS). However, environmental groups were concerned that not all options were being explored. “We didn’t think the EIS was sufficient,” said Jane Feldman, a Sierra Club activist involved with the project.

Zanetell agreed. “In response to their concerns, we agreed we had not fully explored all alternatives,” he said. In response, Zanetell hired a committee to research an alternative proposed by environmental groups more thoroughly. “We had grossly underestimated some of the alternatives and too quickly dismissed them. Because of their input, we decided to reexamine some other alternatives,” he said.

The alignment endorsed by environmental groups was researched, but ultimately it was not chosen as the preferred alternative in final design. Though disappointed, Feldman and other community members recognized the importance of their inclusion in the discussion. “If NEPA wasn’t there, we wouldn’t have had any opportunity [for involvement] at all,” she said.

Designers responded to public comments by adding some important features to the project. The final route is in closer proximity to developed areas instead of cutting through more pristine corridors. Also, accommodations such as sidewalks, pedestrian facilities, and parking have been included on the bridge project to make the area accessible to pedestrian visitors.

“Often times the public is a huge influence on the project. NEPA is certainly the foundation for public participation,” said Zanetell. “We don’t look at it as a burden, it is something we relish,” he added.

“If NEPA wasn’t there, we wouldn’t have had any opportunity [for involvement] at all.”

- Jane Feldman, community member
Montana, US-93

PUBLIC INVOLVEMENT PROMPTS CREATIVE SOLUTIONS

US-93, north of Missoula in western Montana, faces increased congestion from traffic heading toward Glacier National Park. The Montana Department of Transportation (MDT) proposed to take a 56-mile, two-lane segment of Route 93 and change it into a five-lane, undivided highway. This segment runs through the unique cultural landscape of the Flathead Indian Reservation, including territory in the heart of the Rocky Mountain ecosystem and the Ninepipe Wetlands Area, an ecosystem with thousands of kettle ponds supporting unique and fragile species of wildlife.

Under NEPA’s rules, the Confederated Salish and Kootenai tribal government and grassroots citizen groups such as Flathead Resource Organization (FRO) were able to challenge MDT — first, on the validity of the initial Environmental Assessment (which evaluated only a seven-mile stretch of the 56-mile project) and later on the Environmental Impact Statement (EIS). Federal agencies are required to make and evaluate EIS reports in order to determine the consequences of a proposed action, analyze action alternatives, and share the results with other agencies and the public. By forcing MDT to do an EIS, tribal members and citizens made MDT look for creative solutions and consider alternatives for the highway, which could negatively affect safety, environmental issues, and lack of protection for tribal culture and family farms.

A Federal Highway Administration decision stipulating that the tribes and MDT must agree on the project design prompted them to hire landscape architect Jim Sipes of Jones & Jones (a firm based out of Seattle, Washington). Sipes helped create a final design agreed to by all government entities involved.

Sipes’s design addressed safety, environmental, and cultural concerns about sprawl. Slow curves in the roadway are planned along the most scenic areas of the route to discourage speeding and follow the contour of the land. One mile of the highway will be relocated around the Ninepipe Wetlands area. Additionally, an unprecedented 42 wildlife crossings and wildlife fencing will be added at the request of the Tribes to reduce harm to area wildlife.

“**It became a project dramatically different than what the DOT had ever done.**”

- Jim Sipes, landscape architect

Amanda Hardy, research ecologist at Montana State University, is involved with the design and evaluation of the wildlife crossings. She said NEPA allowed “the public and agencies an opportunity to comment” so alternatives like these could be pursued.

“**US-93 became a project dramatically different than what the DOT had ever done,**” said Sipes. “NEPA gave us more weight so our voices could be heard — without it, US 93 would have been a standard four-lane highway with destructive impacts to the community,” he added. “been a standard four-lane highway with destructive impacts to the community,” he added.
Initial plans for I-70 through Glenwood Canyon in Colorado included blasting through the cliff, using ugly retaining walls, and channeling the Colorado River. But those plans were soon to change.

The Colorado Highway Commission’s lone environmental member helped to form a Citizens Advisory Committee (CAC) of design and ecological professionals, with members from The Colorado Open Space Coalition and western Colorado interests.

The group was active throughout the NEPA review process until the highway’s completion in 1992. The result is a 12.5-mile stretch of highway with lower environmental impacts — thanks in large part to NEPA’s procedural protections.

In 1978, after two years of design review, CDH (Colorado Department of Highways) brought the proposal before the public. Their proposal incorporated elements of natural and social sciences and environmental design in the highway’s planning and decision-making. These citizens’ concerns were incorporated into the final design, including the CAC suggestion to place a section of the highway in tunnels to protect the scenic Hanging Lake area from noise and visual impacts.

The final design preserves the natural topography and maintains the integrity of the Colorado River and side rivers entering it. Eastbound and westbound lanes often diverge with one lane rising over a bridge or ducking through a tunnel, preserving the canyon floor, walls, vegetation, and river where possible. Four bridges and viaducts (totaling 6.5 miles) and three tunnels minimize the highway’s impact on its surrounding environment. Also, the speed limit was set at 50 miles per hour (as opposed to the original 60 mph) to improve safety.

Additionally, a construction technique called balanced cantilever construction allowed each section of the highway to be built on bridge columns, reducing damage to the canyon. Workers were fined for damaging vegetation marked for preservation.

Features such as four rest stops, a bike and jogging path along the length of the canyon, a boat launch, and a raft drop allowed for canyon recreational use by tourists and regional residents. Placing the highway section near Hanging Lake into tunnels ensures that hikers in this area continue to enjoy their experience.

“NEPA helped engineers to understand ecology and environmental design. In this case, without it, the CAC would have been ignored or abolished and the unique Canyon would have been destroyed. NEPA ensured that citizens and design professionals were heard in preserving the Canyon,” said Bert Melcher, citizen activist. Indeed, the Glenwood Canyon project has received more than thirty awards for innovative design and environmental sensitivity. The American Society of Civil Engineers awarded the project the Outstanding Civil Engineering Achievement Award in 1993. Melcher concludes, “This proves that NEPA works.”

“NEPA helped engineers to understand ecology and environmental design.”

- Debbie Bauman, project manager
Wisconsin, Highway 26 Bypass

NEPA BRINGS COMMUNITIES TO THE TABLE

Highway 26 is a regional road that runs through south-central Wisconsin, connecting Illinois to Wisconsin’s Fox River Valley. In order to address increasing traffic from trucks and regional drivers, Wisconsin’s Department of Transportation (WisDOT) proposed the construction of a bypass.

The proposed routes for the bypass would have had impacts on a wide variety of landscapes. NEPA provided the process for stakeholders to engage in discussions about the project development. “NEPA forces us into providing alternatives that are representative of the interests from all agencies involved,” said James Oeth, WisDOT project manager (on contract from Earth Technologies).

The 48-mile corridor encompasses three communities. As stipulated by NEPA, several alternatives were selected, studied in detail, and made available for public comment. “We made sure to have alternatives for both the east and west sides,” said Oeth. “Without NEPA, we would have just asked what the shortest distance was and built the road through there,” he added.

The final decision was to skirt the bypass around the western border of Jefferson. According to WisDOT, this route was found to have the least impact and disruption to the community. “I believe NEPA allowed for these alterations to take place,” said Andy Didion, Jefferson resident and member of the Preserve 26 Coalition, a citizens’ interest group.

Although not all of the community’s major requests were accommodated, residents appreciated the opportunity to be involved in the process. “The DOT is getting much better and realizing this affects people’s lives,” said Didion, “They did their job and let everybody talk.”

One of the good results of the public involvement process came in moving the route to go around Ed McFarland’s dairy farm, which sits west of Watertown, instead of plowing right through it. While McFarland did not agree with the decision to place the bypass around the western portion of the town, he believes the public involvement process lessened the damage. “Public involvement helped us … the less land we lose, the better,” he said.

Plans for the bypass stayed close to the community’s urban service area, which includes land designated for development over the next ten years.

As the project nears its final stages of preparation, significant consensus exists between the local residents and transportation officials because of the opportunity for early public involvement. Public input allowed local citizens and public officials to discuss important local issues that would not have otherwise be reviewed by WisDOT.

Another important benefit of NEPA was the Highway 26 Corridor Planning Process, a new supplementary planning process to coordinate local planning efforts. It brought local politicians and citizens together.

“We talked out problems and came up with solutions that were agreeable to most participants,” said Greg David, a Jefferson County Supervisor. “The NEPA process has saved us a lot of money, and mitigated many of the externalized consequences of a freeway expansion project,” he added.
The Michigan Department of Transportation (MDOT) had pushed the construction of a four-lane freeway parallel to the existing two-lane US-23 for close to a decade. The expansion would have rerouted and widened the existing US-23 through undeveloped country in the northeastern part of the state. It would have forced the largest single wetlands loss within Michigan, according to the U.S. Fish and Wildlife Service. Friends of the Earth listed the US-23 expansion among the nation’s “Fifty Most Wasteful Roads in America.” Phases II and III of the project would have severely compromised protected wildlife habitat, state and national forest land, coastal wetlands, and the Au Sable River Corridor.

Along with environmental concerns, residents did not support the expansion and maintained a preference for adding passing lanes and other safety improvements, according to the Michigan Land Use Institute.

"Right from the start, that was our whole focus. Fix what we have and don't build a new, billion-dollar freeway,” said Paul Bruce, founder of People for US-23 Freeway Alternatives, a citizens group in Alpena.

Kelly Thayer, transportation project coordinator at the Michigan Land Use Institute, said the intervention was a huge success. Instead of a costly and damaging expansion, safety and mobility improvements were made.

"NEPA kept alive the public’s opportunity to give input,” said Thayer. Due to the NEPA review process, these communities will be spared the devastating impacts of unneeded and unwanted expansion. And in the end, an eye-popping $1.5 billion will be saved.

A Draft Environmental Impact Statement was made public in 1995. At that time, the only choices listed were to build the extension or do nothing. Upon discovering MDOT’s failure to comply with the NEPA requirement to analyze alternatives to new construction, the Federal Highway Administration (FHWA) rejected the proposal, which was the largest, most expensive project canceled in Michigan’s history.

The FHWA directed MDOT to upgrade the existing US-23 two-lane highway or study the creation of a less-damaging boulevard. After reviewing the state’s Final Environmental Impact Study (EIS) on US-23, the FHWA recommended alternatives supported by residents, including passing lanes, traffic signal upgrades, and turn lanes to improve the road.

The proposed expansion would have paralleled US 23 through the towns of Alpena and Standish, severely compromising protected wildlife habitat, state and national forest land, coastal wetlands, and the Au Sable River Corridor.
Kentucky, Paris Pike

CELEBRATING “THE SPIRIT OF PLACE”

Kentucky’s Paris Pike is a scenic road between Lexington and Paris, whose beauty was overshadowed by safety hazards and congestion. The Kentucky Transportation Center (KTC) proposed building a standard four-lane highway but faced opposition from local communities concerned about irreparable harm to the corridor’s history and natural landscape.

When the public did not approve of KTC’s plan for the highway, they decided to take their concerns to court to voice their opinions. A judge’s ruling told KTC to return to the planning process and seek a workable alternative to the highway that would meet demands of both parties. KTC and community members decided on a design that fit the aesthetics and contours of the land while minimizing environmental impacts. The improved road has received nationally recognized design awards and is the model for future projects of this nature.

The original two-lane rural highway extended over 13.5 miles of rolling hills dotted with historic thoroughbred farms. The highway had minimal shoulders with no passing or turning lanes, contributing to a fatal accident rate significantly higher than the average for two-lane roads.

The new design consists of two independent two-lane highways, one northbound and the other southbound, and an added shoulder to increase safety. Existing trees, fences, and stone walls were either preserved or moved and restored to their original condition. Environmental improvements include the relocation of more than 3,000 new trees and shrubs, designation of wetland areas, natural wooden guardrails, grass instead of gravel shoulders, three miles of stone fence, and the preservation of the natural environment within the median. A historic farmhouse was turned into a visitors’ center, generating tourism dollars for a town that would have lost money if Paris Pike were merely expanded.

“It has been an immensely successful project. It preserved its aesthetic integrity while doing what it was supposed to do: increase safety and capacity. It has significantly improved the corridor.”

- Lane Boldman, resident and activist

Paris Pike represents a true compromise facilitated by the NEPA process—road expansion without accompanying aesthetic and natural destruction. The National Trust for Historic Preservation, not usually a friend of road expansion, cited Paris Pike as a project that “celebrates the spirit of place instead of obliterating it.” The fourth and final phase of the $70 million project will be complete in November 2003.
Florida’s Alligator Alley

ACCOMMODATING WILDLIFE

Interstate 75 in Florida runs through a portion of the Everglades that harbors endangered and unique wildlife, including prime habitat of the endangered Florida panther. The Florida Department of Transportation (FDOT) proposed widening the stretch of interstate that runs through ‘Alligator Alley,’ named for the large number of alligators in the area. It was clear that future designs needed to address the issue of panther roadkill on I-75, which was threatening the panther population’s severely depleted numbers.

The Environmental Impact Statement (EIS) prepared for Alligator Alley was one of the first conducted in the State of Florida. Without it, as Leroy Irwin of FDOT’s Environmental Management

“NEPA was critical to this and other large projects around the country, as it provides accountability for impacts and leads to this sort of mitigation.”

— Gary Evink, former FDOT ecologist

Office comments, “there wouldn’t have been any conservation mitigation.”

After many delays, largely due to lack of funding, FDOT was set to move forward and had to complete what is referred to as an “environmental reevaluation,” which is mandated by the Federal Highway Administration’s NEPA regulations. The environmental reevaluation of Alligator Alley found that 36 wildlife underpasses and bridge widenings were needed to better protect the panther and other important wildlife from the roads. The reevaluation “helped the design tremendously,” according to Irwin, and the final project eliminated panther roadkill mortality on this stretch of I-75.

The completed project included 24 wildlife underpasses, 12 bridge extensions, habitat restoration, and extensive fencing along one 40-mile stretch. FDOT purchased land at the SR-29 interchange to prevent development and helped to purchase the land that became a Panther Refuge and the Big Cypress addition. Environmental education was prioritized. Brochures about the Florida Panther are handed out at tollbooths along Alligator Alley. Informational environmental kiosks now exist at rest stops, and wildlife warning signs have been posted along the highway. In addition to the elimination of panther mortality, roadkill of the black bear, deer, and bobcats has also disappeared along this stretch of highway.

The amount of environmental review and mitigation that went into the project is a helpful example for future Florida Department of Transportation projects.

Gary Evink, a former FDOT ecologist, agrees that “NEPA was critical to this and other large projects around the country as it provides accountability for impacts and leads to this sort of mitigation.”
Ohio US-24

COMMUNITY INVOLVEMENT REDUCES DESTRUCTION

US-24 has been a controversial highway. Many residents are not convinced that it is needed and fear that its construction will lead to significant environmental degradation. In fact, it was included as a worst highway project in a 2001 report by the Sierra Club Ohio Chapter.

Despite disappointment in the decision to build US-24, residents have appreciated the opportunity to give input on how it will be laid out in their community. It has been difficult for community members to accept a major highway whose need they do not recognize. However, they do recognize the importance of having a seat at the table to reduce the highway's negative impacts.

Early coordination in the NEPA process between the United States Fish and Wildlife Service (USFWS) and the Ohio Department of Transportation (ODOT) helped ensure that the reconstruction of US-24 in Ohio got off on the right foot. Partnerships between these agencies led to the identification of significant resources in the proposed project area and selection of a preferred alternative route.

Among the significant natural assets jeopardized were the Maumee State Forest, Maumee State Scenic and Recreational River, a number of city and metro parks, several historic properties, and the Oak Openings region, a unique prairie/savannah complex that occurs nowhere else in the state and supports a variety of rare plant and animal species. Working within the framework of NEPA led to creative design and coordination with the public and resource agencies to reduce harm to these special areas. In addition, ODOT rerouted the project twice to avoid impacts to bald eagles when nests were found within a half-mile of the proposed route.

"Without a law we had to follow we might just sit down, draw a straight line, and build it."

- Mike Ligibel, Ohio DOT

This degree of environmental protection would not have taken place without NEPA. Mike Ligibel of ODOT confirms this: “The reason we’re doing all this special environmental planning is because of NEPA. Without a law we had to follow we might just sit down, draw a straight line, and build it.”

Megan Seymour, a wildlife biologist at the USFWS adds, “Because of NEPA, ODOT takes effects on streams and wetlands into account and considers them significant resources.”

Regarding wetland and forest areas in the Ohio US-24 project she stated, “There is no guarantee that impacts in these places would have been avoided without NEPA.”
The segment of Route 50 passing through Aldie, Middleburg, and Upperville, VA, at the foothills of the Blue Ridge Mountains is a classic example of traditional main streets in small towns. This road was not a major truck or commuter route and traffic volumes have remained steady for a number of years. However, it began to suffer from problems of speeding, aggressive driving, and congestion during rush hours at one intersection. Virginia’s Department of Transportation (VDOT) came up with the conventional solution: expand the road into a four-lane, divided highway with bypasses around the small towns. The citizens, however, had another vision. They took the opportunity for public involvement afforded by the NEPA process and ran with it.

Five local citizens’ organizations came together in 1995 to create the Route 50 Corridor Coalition to seek alternatives to VDOT’s plan. The Coalition found that a four-lane highway would only increase speeding and local businesses would suffer if bypasses redirected traffic around the towns.

The Coalition conducted its own research, raised private funds, and hired transportation engineer Ian Lockwood. They involved the community in hands-on design workshops and came up with an alternative “traffic calming” plan that would solve the problems on the roadway, promote local business, protect the rural and historic character of the area, and cost much less than conventional highway expansion.

Traffic calming involves the use of strategic design of streets to maximize their role in controlling speed, volume, and flow of traffic. The Route 50 Corridor Coalition’s design aimed to incorporate the road into the town’s atmosphere and culture while reducing speeding and promoting pedestrian safety. Instead of wider roads that bypassed the town, the solution included: entranceway features at the edges of the towns, planted medians, raised intersections, changes in pavement for parking areas, and guardrails made from natural material. In addition to their aesthetic advantages, these additions will reduce speeding and promote pedestrian safety. One of the most innovative sections of the design is a network of roundabouts replacing the conventional signalized intersection at the junction of Routes 50 and 15.

The traffic calming design received official approval from VDOT in March 2003. The project, which received funding through the federal transportation enhancements program, is being implemented through a partnership involving the local community, local government, and VDOT. Through its unprecedented public process and review, it has produced an innovative, less expensive solution “that can be a model for the nation,” said Susan Von Wagoner, Coalition member.

Virginia, Route 50
A MODEL OF PUBLIC INVOLVEMENT

Citizens discuss the Traffic Calming Plan with engineer Ian Lockwood.

Virginia’s Route 50 passes through historic “main street” communities. The new traffic design is the result of collaboration among local citizens, community groups, business people, elected officials, and designers.
Rhode Island, Route 403
GIVING VOICE TO LOCAL RESIDENTS AND FUTURE USERS

Route 403 originally was a two-lane roadway cutting through the largely residential area of North Kingstown, Rhode Island. It is the main access to a nearby industrial park. According to Rhode Island Department of Transportation (RIDOT), the idea behind relocating Route 403, the Quonset Freeway, was to alleviate severe congestion by taking traffic off an otherwise local road. “The end result was the need for a freeway connection,” said Peter Healey, Principal Civil Engineer for RIDOT.

This connection meant building a brand new, four-lane highway — an idea that concerned some groups. “We didn’t see why we had to go to a whole new highway,” said Sierra Club activist Barry Schiller, representing the interests of environmental organizations. To a certain extent, RIDOT agreed. “There is a big benefit if you don’t build a new road,” Healey said, “Building is not always the best choice.”

Due to provisions in NEPA, RIDOT had to consider this viewpoint (as well as many others) when choosing the best option. “NEPA played a vital role in balancing these views,” Healey said. The idea behind NEPA is to “make a concept available to the public. It allows you to seek impact and balance a project. You can’t make all parties happy, but you can certainly balance their interests,” Healey added.

“We did look at widening the existing road in identifying alternatives … as well as [about] eight different alternatives for the location of the new route,” Healey said, explaining how NEPA was used. Healey and his team made extensive efforts to involve the public early in the design process. In addition to approaches mandated by NEPA, they held several briefings for the town council. “The public wants to help you make a project better,” said Healey. “The people that live [in the affected area] know more than I do.” He explained that a key benefit of public involvement was giving a voice to those who will be regular users of a project.

Although the decision to build a new, four-lane highway conflicted with environmental interests, NEPA provided for modifications to its design. “In order to reduce the roadway’s width, we decided to narrow it as much as possible. To do that, we had to put in a concrete barrier,” Healey explained. In one of the town council meetings, the suggestion was brought up to include a culvert for small-animal crossings. “I probably wouldn’t have thought of that on my own,” he said.

This modification lessened damage to wetlands. “The acreage reduction comes out of NEPA,” Healey said. “It clearly minimizes the impacts.”

Though not completely satisfied with the overall outcome, Schiller agreed that NEPA was an essential element in making some of the positive changes in the project. According to his records, the EIS indicated a loss of 50 acres of open space including five acres of wetlands. The final design reduced the impact to 2.42 acres of wetland loss. “We were protecting the loss of wetlands; [RIDOT] reduced the amount that was lost,” Schiller said. “NEPA has worked in Rhode Island to improve designs of highways,” he added.

Healey explained the public demand for protection of local natural resources, “As an industry, I’ve noticed there has to be a big concentration on ecological issues, because that’s what the public wants … If NEPA isn’t a requirement, someone may decide not to do it.”
Massachusetts, Route 146

REVITALIZING AN URBAN PARKWAY CORRIDOR

Route 146 runs through an area of central Massachusetts that is rich with American history, industrial development, and growing communities. The $290 million transportation project to transform Route 146 will expand four miles of a two-lane unlimited access road into a four-lane divided parkway and includes modifications to major interchanges and bridges.

Public input, required under NEPA, transformed the final project so that it fulfills its immediate economic mission — to improve travel by businesses and residents — and preserves unique physical and historic characteristics of the corridor.

NEPA regulations state that transportation departments must encourage and facilitate public involvement in decision-making. To help fulfill this requirement, the Massachusetts Highway Department established a Citizens Advisory Committee comprised of local business owners, residents, political leaders, environmental groups, and representative from federal and state agencies. After meetings were conducted with the stakeholders, a design was selected. This design links towns to the highway and to the history of the Blackstone River while enhancing natural and historic resources. For example, project features include construction of a bike path through the corridor, building preservation, historic bridge restoration, storm water and wetlands mitigation, and wildlife passages.

George Batchelor of the Massachusetts Highway Department said the Citizens Advisory Committee was “a meeting of the minds” that ensured that "what was done was done properly.” Without the input of citizen groups, the road design would not have addressed the region’s historic and environmental resources.

Worcester City Councilor Barbara Hiller compares Route 146 to the controversial I-290 project in Massachusetts. She said, “[Route 146] is a much better project. It will not disrupt the neighborhood traffic like I-290 did. That was a testament of the late '50s and '60s, of putting a line on the map and saying, ‘Build a road here,’ instead of mitigating the disruptions to the neighborhood.” Route 146 marks a change in practice from hacking highways through communities and natural areas to one where public input and environmental protection are primary goals.

“This project was really outside the box for Mass. Highway . . . Rte. 146 was looked at as an opportunity to revitalize Quinsigamond Village.”

- Stephen Bishop, Blackstone Valley Northern Gateway Project.

Local leaders hope Route 146 will become a renowned historic parkway that will attract tourism. Environmental review procedures have ensured that the natural and human history of the region will be highlighted, rather than swept away, by the Route 146 project.

Photo courtesy of Mass. Dept.

Blackstone River — one of the local treasured places.