

**Addressing the Quiet Crisis:
Origins of the National Environmental Policy Act of 1969
By
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One option not available is to disassociate and insulate our activities from the sweep of events in America today. To pretend otherwise would be the depth of self-delusion.

Lowell K. Bridwell
Federal Highway Administrator
December 1968

The Sixties

When historians give a nickname to a decade, such as the Roaring 20's, the nickname usually doesn't apply from the first day of the decade to the last. That is the case with "The Sixties." That nickname evokes images and ideas that evolved during the decade.

Perhaps, "The Sixties" began with the shock, sadness, and outrage following the death of President John F. Kennedy. On November 22, 1963, the American people lost, or may have lost, their faith that the United States was a Nation under vigorous leadership marching toward a New Frontier, as Kennedy had called it. Instead, the Nation was engaged in a complex detective story—who really killed the President?—with no quick end in sight. The search for the truth would contribute to a growing sense that our leaders cannot be trusted.

Or perhaps "The Sixties" began, less than 3 months after the assassination, when the Beatles appeared on "The Ed Sullivan Show" on February 9, 1964, and two succeeding Sundays, their first live television performances in the United States. The appearances continued rock and roll's assault on the generational divide that had begun when Elvis Presley appeared on the same show on October 28, 1956, demonstrating to millions of teenagers that their parents were not reliable music critics. Just as Paul Anka, Pat Boone, Bobby Rydell, and other crooners were undermining the rebellious heart of rock and roll, the Beatles and the "British Invasion" not only transformed rock and roll into rock, but unleashed a youth earthquake of long hair, strange clothes, and alienation from adult culture.

Terry Anderson, in his book *The Sixties*, quoted an unnamed government official as saying in late 1969, "Everything is being attacked." He quoted an observer as saying, "Flower Power is as revolutionary as Black Power, and after it America will never be the same again." That was true. America would never be the same. [Anderson, Terry, *The Sixties*, Longman, 1999, p. 149-150]

When the 1960s became "The Sixties" may be unclear, but for some, the mantra of the Sixties has been condensed to the phrase "peace, love, and understanding." (The phrase is from a 1974 Nick Lowe song titled "(What's So Funny 'bout) Peace, Love and Understanding," popularized by Elvis Costello and the Attractions.) By contrast, *Life* magazine referred to the 1960s in December 1969

as “The Decade of Tumult and Change.” As these extremes suggest, America would not return to the traditional ideas of the can-do 1950’s, but it also would not become the utopian world of “peace, love, and understanding” that the counter-culture envisioned.

Of the two characterizations, *Life*’s epithet was the one that can best be applied to the Interstate System. Construction continued at a fast pace on the new highways—a total of 31,500 miles of the 42,500 miles then planned, or 74 percent, had opened to traffic by the end of 1970, with another 4,183 miles under construction. The Interstate System had become an integral part of the American Way of Life, but the image of the Interstate System never recovered from the Sixties. The ideas that informed the decade—such as stewardship of the environment, guarantee of civil rights, expansion of the role of women, and the questioning of authority—meant that no amount of public relations and optimistic predictions about highways without stoplights could overcome the negative image the Interstate System received during its first years. There would be neither peace nor love for the Interstate System, and little understanding.

One Brave Woman

A turning point occurred in September 1962 with the publication of a book, Rachel Carson’s *Silent Spring*, that had nothing to do with the Interstate System. Carson, a marine biologist and retired U.S. Fish and Wildlife Service employee, had published several earlier books to supplement her government income, including the bestselling *The Sea Around Us* (1951). In 1958, Carson began researching the effect of new technologies on the planet’s life-support systems, with a focus on the effect of chemicals such as DDT on wildlife. She knew she would have to reach beyond the specialists (“a small number of human beings, isolated and priestlike in their laboratories”) and who had a vested interest in disputing her findings. Therefore, she wrote *Silent Spring* as an ecology primer for a mass audience, but also a scientific work documented with a 55-page appendix of principal sources.

Silent Spring was an immediate international best seller. As expected, the chemical industry and its allies attacked Carson and her book. Harvard Medical School accused her of “abandoning scientific truth for exaggeration” while the director of research for a pesticide manufacturer called her a “fanatical defender of natural balance.” Some of the attacks were personal. Former Secretary of Agriculture Ezra Taft Benson (1953-1961) wondered “why a spinster with no children was so concerned about genetics” and dismissed her as “probably a Communist.”

Carson’s book, with its extensive documentation, overcame the critics, especially after President Kennedy’s Science Advisory Committee reviewed her research and vindicated her thesis. [Udall, Stewart L., “How the Wilderness Was Won,” *American Heritage*, February/March 2000, p.104-105] She also benefited from a *CBS Reports* television special, “The Silent Spring of Rachel Carson,” on April 3, 1963. Her calm demeanor, in contrast to critics who also appeared on the program, won the confidence of the estimated 10-15 million viewers.

The history of environmental activism goes back a century in the form of the conservation movement, first popularized by President Theodore Roosevelt (1901-1909). The idea was to set aside some of our natural resources so they would not be depleted by human activities that could use any resources not within the protected circle. After Carson, we increasingly thought of “the

environment” as encompassing more than just the nature we would travel great distances to see, such as National Parks. The environment was something we could damage by our choices, our actions, and our technology.

Carson wrote to a friend that, “It would be unrealistic to believe one book could bring a complete change.” However, her book would do nearly that. People began to understand that the environment was a limited resource that could be damaged, even destroyed, by the careless actions of thoughtless people. Although Carson’s book indicted the chemical industry, people soon realized that many other once-trusted elements of society were just as guilty. The only answer was government intervention. This “quiet crisis,” as Secretary of the Interior Stewart L. Udall called it in 1963, would require a “new conservationist” in the form of ecologists, botanists, and biologists, among other specialists.

The quiet crisis would soon affect many aspects of national life, including highway building. In the pre-Interstate years, most road construction took place in or near the existing right-of-way, usually with the enthusiastic support of State and local officials as well as the public. During the Interstate System’s first 10 years of rapid growth, with much of the construction on new right-of-way, controversies became common on such subjects as impacts on businesses and towns that were bypassed, acquisition of homes and businesses, and the growing concerns about the effect of the Interstates on urban areas. The U.S. Bureau of Public Roads (BPR) and the State highway agencies faced many problems, but selecting a route or design to protect the environment had never been one of them. Rather, road builders sought the best routing to provide traffic service at the lowest cost with the least disruption to homes and businesses.

For the Interstate System, the “quiet crisis” in the post-*Silent Spring* world would soon become another concern that highway engineers had not anticipated.

Less than a year after *Silent Spring*, the BPR announced on August 26, 1963, that beginning January 1, 1964, the States would be required to certify, for each Federal-aid highway project, that they had considered its possible effects on fish and wildlife resources. In discussing this change, Federal Highway Administrator Rex M. Whitton (1961-1966) told a conference of park and recreational area organizations that their attacks on highway administrators were sometimes less than fair. “We do not seek to despoil the countryside.” He added, “But our responsibility, usually spelled out in law, is to spend the highway user’s dollar wisely.” The requirement to consider fish and wildlife resources demonstrated that “we do not have closed or calloused minds.”

Although Whitton presented the initiative as a “conservation” measure, it was one of many steps the highway engineers would take, willingly in some cases, not so willingly in others, in the wake of *Silent Spring*. The highway builders would have to adjust to an evolving public awareness that meeting transportation needs had environmental consequences that should be considered along with congestion relief, economic development, safety, and other traditional factors.

While researching *Silent Spring*, Rachel Carson also was fighting cancer. She died of cancer on April 15, 1964, at her home in Silver Spring, Maryland, at the age of 56. In 1999, *Time* magazine included her in the *Time* 100—the Most Important People of the Century, saying, “Before there was an environmental movement, there was one brave woman and her very brave book.”

The Quiet Crisis

In the wake of *Silent Spring*, the “conservation” movement gradually became the “environmental” movement. It took some time for the highway program and other government programs to adopt the new perspective, and that time happened to span the most active decade of the Interstate era.

Initially, highway engineers were convinced the opposition came from irrational idealists, misguided citizens, and weak political leaders who didn't understand the benefits the new highways would bring, as well as a hypocritical media that stirred up controversy to sell newspapers. The engineers believed that once the public began using the growing Interstate network, they would understand how much better life could be if only the engineers finished the job. For example, Federal Highway Administrator Bertram D. Tallamy (1957-1961) told an audience of urban officials, planners, theoreticians, and critics in September 1957 that he was confident that those who criticized the program the most at the start would “probably be pushing the real supporters of the program in the background at the finish so they can cut the ribbons and take the credit they do not deserve.” [Tallamy, Bertram D., “Highways to the Future,” Symposium on “The New Highways: Challenge to the Metropolitan Region,” Connecticut General Life Insurance Company, September 9, 1957]

Highway officials believed the problems could be solved by better public relations, such as clearer explanations at public hearings, which were intended to inform the public of plans, not receive public comments on them for consideration. The highway community also reached out to newspapers, radio, and television to convey the wonders the Interstate System would bring when it was completed. (See “The Fight of Its Life” in the May-June 2006 issue of *Public Roads* for more details on this initiative. <http://www.tfhrc.gov/pubrds/06may/05.htm>.)

The highway engineers soon found that the common saying “You can't fight City Hall” was no longer true. At the start of the decade, residents and business owners in the path of the new highways fought as best they could – attended City Council meetings, wrote letters to the editor, submitted petitions, and often gave up after realizing they couldn't stop progress. Robert Moses of New York City came to personify the image of autocratic urban public works figures, ignoring critics as if they were so many pesky gnats, but cities around the country had variations on the theme in an era when the political Bosses who had dominated cities for decades were in their last era before fading from the scene. (Tallamy had worked with Moses in New York, a background that made him singularly unable to adapt to the criticisms coming his way during the early years of Interstate construction.)

Anti-highway people were still isolated in their separate battles to preserve their homes and businesses from the specific Interstate that threatened them. Even as BPR and the State highway agencies rushed to complete the Interstates by the early 1970's as Congress had provided for in the Federal-Aid Highway Act of 1956, other movements were underway, particularly the Civil Rights Movement and the Vietnam War protests that would show highway opponents how to adapt to “fight City Hall” more effectively. Networks of project opponents formed and information was shared, while marches and picketing increased. They joined with the growing environmental movement to enact laws that would help them fight the highways they opposed.

The protests against the Vietnam War undermined faith in government as well as in America's belief in itself as essentially good. The Civil Rights Movement forced Americans to alter not only their actions but long-held views that had been at the core of their view of themselves and their country. The view that the government was lying, couldn't be trusted, and wanted to suppress protest became part of the cynical mindset of the era. The journalistic muckrakers of the early 20th century were reborn as consumer advocates telling Americans that everything was bad for them, including the highways and motor vehicles that had become an integral part of the American lifestyle.

Adapting to a New Era

Amid the cultural, political, and social changes in the 1960's, the environment emerged as a new front in the war between the can-do American attitude of one generation and the not-worth-doing attitude of many of their children. Rejecting the urban and industrial world built by earlier generations, the counterculture young launched a "back to the land" movement that took them to communal farms idealized as returning to nature where they could be "free." Terry Anderson summarized the consequences:

Some communes lasted weeks, others lasted years, some still exist. At most of them, however, life was much more difficult than hippies imagined when they left the city: "I remember having soybeans for breakfast, lunch, and dinner, and nothing else," recalled Cynthia Bates of The Farm. "Having kids made you more sensitive to the lack of necessities . . . how long could you live in a house with fifty other people?" Especially a house with no running water, no flush toilet, no electricity. After a while, many began to ask: what's the point? [Anderson, p. 151]

Even as the counterculture learned why so many people had abandoned life on farms, "a crisis in environmental quality approached," as Professor J. Brooks Flippen has written. Gradually, the larger culture—politicians, academia, and the media, including the entertainment media—began to accept the reality of the crisis:

Environmental degradation—whether a messy oil spill on pristine beaches or mountains of rusted automobiles taller than nearby buildings—executives now realized, made great copy for television. The National Advertising Council released a poignant commercial [in 1971] that depicted an American Indian looking out over a littered landscape, a tear rolling down his cheek. [Flippen, J. Brooks, *Conservative Conservationist: Russell E. Train and the Emergence of American Environmentalism*, Louisiana State University Press, 2006, p. 55]

Walt Kelly's classic comic strip *Pogo* boiled the growing sentiment down to a catchphrase by depicting the possum Pogo and his friend Porky Pine walking through a forest littered with debris. Pogo commented, "we have met the enemy and he is us." (Kelly first used the phrase on an Earth Day 1970 poster depicting Pogo shocked while looking in a mirror; Kelly incorporated the phrase into his strip the following year.)

As the 1960's progressed, the BPR and its successor in 1967, the Federal Highway Administration

(FHWA), adapted to the new environmental consciousness. In past decades, FHWA and its State partners assumed they were providing a popular public service; the primary complaint was that they weren't providing paved roads fast enough. Under these circumstances, highway engineers proceeded with the preliminary phase known as "location" with regard only to factors related to road service. FHWA's Bicentennial history, *America's Highways 1776-1976*, discussed this phase:

During the early years of highway development, the emphasis was almost exclusively on the engineering features of such location. Unless the highway was solely a land service facility, the highway agency attempted to find the most direct lines between the points that they wanted to serve and to develop the most economical way, in engineering terms, of building adequate roads along these direct lines. They sought easy grades, the shortest possible river crossings, and generally adopted the lowest priced adequate solution that could be found

Beginning about 1950 and rapidly developing in importance since that time, sociological and economic impacts on communities have become the principal and often overriding factors in the location selection process The highway location problems now are to find those places to build the roads that will provide an adequate highway facility for the particular traffic to be served and, at the same time, cause a minimal disruption of facilities, a minimum disturbance of the landscape, and the least adverse effect on such things as established school districts, church parishes, park areas and historical sites. [*America's Highways*, Federal Highway Administration, 1976, p. 365-366]

The elements of what today we think of as the "environment" or "ecosystem" were simply obstacles, like mountains or rivers, to be overcome with the best engineering skills and construction equipment available to the era.

In 1962, BPR combined two related functions by establishing an Office of Right-of-Way and Location, separating these functions from the engineering staff. This was a key step because, as *America's Highways 1776-1976* put it, location decisions "resulted in many hardships to the property owners for, too often, little consideration was given to their needs and the needs of the community as a whole":

A trial attorney once remarked that it appeared to him that the engineers' procedure was first to find a farmer's water supply and then make that the centerline of the highway. While this judgment is harsh, it is clear all too often that a little consideration of right-of-way costs and damages at the location stage could have materially lowered the cost of right-of-way and of the total highway project. [*America's Highways*, p. 365]

Two years later, BPR took a further step to adjust to the demand for increased attention to social, economic, and environmental factors:

[In] 1964, the Bureau issued a directive emphasizing the need for full consideration of all reasonable alternative alignments and listing approximately 20 social, economic, and environmental factors to be studied and evaluated, if applicable, in the process of investigating alternatives. [*America's Highways*, p. 372]

The phrase “social, economic, and environmental” became so common that its abbreviation became a standard part of road building jargon: SEE.

A further effort to separate location decisions from engineering occurred on June 7, 1968, when Secretary of Transportation Alan S. Boyd announced creation of an Environmental Development Division within the Office of Right-of-Way and Location. The new office was intended to guarantee full consideration of environmental factors in the location, design, and construction of freeways. It was staffed with architects, economists, landscape architects, sociologists, urban planners – and highway engineers. They would develop standards for evaluating the economic, social, aesthetic, cultural, and environmental factors that must be weighed in selecting a highway route.

The organizational change reflected statutory changes establishing responsibilities that highway engineers were not trained to undertake. For example, under the National Historic Preservation Act of 1966, any project affecting a historic site was to be referred to the Advisory Council on Historic Preservation for review and comment. That same year, the Department of Transportation Act of 1966, the legislation that created the U.S. Department of Transportation (DOT), contained a key environmental provision known as Section 4(f), which stated:

After the effective date of this Act, the Secretary shall not approve any program or project which requires the use of any land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use.

Senator Ralph Yarborough (D-Tx) had introduced this provision in response to a State plan for a U.S. 281 freeway linking downtown San Antonio with its international airport. Because highway planners saw the use of parkland as less disruptive than the taking of homes and businesses, they routed the road through Brackenridge-Olmos Basin Parklands as the best of several disruptive alternatives. Opponents wanted to preserve the parkland.

The Senator had tried to get a similar provision into the Federal-Aid Highway Act of 1966, which was approved September 13, 1966, but it included a watered down version as Section 138 of Title 23 (“Highways”), United States Code (U.S.C.). New Section 138 called for “cooperation” and “consideration” rather than explicit defense of the resources Senator Yarborough wanted to protect. Section 18 of the Federal-Aid Highway Act of 1968, approved August 23, 1968, amended Section 138 by substituting the language of Section 4(f).

(Although Section 138, as amended, is not part of the DOT Act, the “feasible and prudent” provision is still referred to as “Section 4(f).” For additional information on the origins of Section 4(f), see <http://www.fhwa.dot.gov/infrastructure/50section4f.cfm>.)

Another provision of the 1968 Act addressed the growing concern about the effects of routing highways through or around urban areas. Section 24 (“Urban Impact Amendment”) amended 23

U.S.C. 128 (“Public hearings”) to contain an additional consideration:

Any State highway department which submits plans for a Federal-aid highway project involving the bypassing of, or going through, any city, town, or village . . . shall certify to the Secretary that it has had public hearings, or has afforded the opportunity for such hearings, and has considered the economic *and social effects of such a location, its impact on the environment, and its consistency with the goals and objectives of such urban planning as has been promulgated by the community.* [Added language in italics]

The provision on public hearings, which dated to the Federal-Aid Highway Act of 1950, resulted from controversies over bypasses that took through traffic away from the “Main Street” merchants whose livelihood depended on passing motorists. The Federal-Aid Highway Act of 1956 amended the provision to require public hearings, or the opportunity for them, to consider the economic impacts of routes going through cities or towns as well as those routes bypassing them. This provision did not clearly apply to Interstate highways, which would have wiped out many of the bypassed small towns if routed through them; the Federal-Aid Highway Act of 1958 amended the provision to provide the specific citation.

With enactment of Section 24 of the 1968 Act, the requirement was expanded to cover social and environmental impacts and consistency with urban planning. In discussing the change in the 1968 Act, the Conference Committee report explained that the reason for the change was the one-sided nature of public hearings:

The public hearings held by the States [under Section 128] have been less than adequate in performing the intended functions of informing the public and allowing those affected to adequately voice their opinions, recommendations, and suggestions. One of the major problems raised before the committee was the inordinate amount of time that transpires between the date public hearings are held and the date construction begins. Based on an examination of the situation in nine urban areas, the average timespan between public hearings and the start of construction is about 8 years

It is important that those who participate in the hearings believe that the views they express will be considered and weighed in decisions relating to highway location and design. These hearings are intended to produce more than a public presentation by the highway department of its plans and decisions.

On October 23, 1968, FHWA published a Notice of Proposed Rulemaking in the *Federal Register* [33 FR 15663]. The purpose of the rule was “to ensure, to the maximum extent practicable, that highway locations and designs reflect and are consistent with Federal, State, and local goals and objectives.”

The Notice called for two hearings, or an opportunity for holding them, to familiarize all interested parties with the project and give them a chance to express their views at stages when the flexibility to respond to those views still existed. First, the corridor public hearing was to be held before the State highway agency was committed to a specific alternative and was to “ensure that an opportunity is afforded for effective participation by interested persons” and to provide a “public

forum that affords a full opportunity for presenting views on each proposed highway location, and the social, economic, and environmental effects of that location and alternate locations.” Second, the design public hearing was to be held after FHWA’s Division Engineer, who headed the Agency’s office in the State, approved the route location, but before highway design approval. The purposes were similar to those for the corridor public hearing.

The Notice defined “social, economic, and environmental effects” as “the direct and indirect benefits or losses to the community and to highway users,” as reflected in a range of factors to be considered. The factors included national defense, economic activity, employment, aesthetics, residential and neighborhood character and location, religious institutions and practices, conservation (including erosion, sedimentation and other water pollution problems), natural and historical landmarks, multiple use of space, and public health and safety. In addition, the factors included such traditional factors as engineering, right-of-way and construction costs, maintenance and operational needs, and operation and use of existing highway facilities and other transportation facilities during construction and after completion.

Further, the Notice spelled out appeal procedures after FHWA’s Division Engineer published a notice of action approving a highway location:

Any interested person may appeal the action of the division engineer on a request for approval of a highway location or design, or both. The appeal must be filed, within 15 days after the date of publication of the notice of that action The filing of an appeal within the time prescribed . . . stays the action of the division engineer until the appeal is disposed of by the Administration.

The appellate provision would soon threaten the Federal-State partnership that was at the heart of the Federal-aid highway program.

The Natives are Restless

The FHWA published the Notice shortly before the presidential election on November 5, 1968. Former Vice President Richard M. Nixon defeated the Democratic candidate, Vice President Hubert H. Humphrey, and would take office on January 20, 1969. The outgoing Democratic Administration accelerated the remaining steps to implement the change in the 1968 Act before the Republican Administration took office.

With the transition looming, the Notice’s twin hearings and appellate procedure became a symbol of the faultlines undermining the Federal-aid highway program in an era of change. Author A. Q. Mowbray, in his 1969 book *Road to Ruin*, pointed out that conservationists and city planners welcomed the dual hearing proposal as “an opportunity for the ordinary citizen to gain some leverage.” Mayors, represented by the U.S. Conference of Mayors and the National League of Cities, favored the rulemaking because Washington, they thought, offered help “denied them by the rural- or lobby-dominated state legislatures.”

The “highway lobby” attacked the proposal “as an attempt by the federal government to dominate highway planning and to burden the process with so much red tape that construction would be all

but impossible.” The Governors’ Conference (forerunner of the National Governors Association) opposed the regulation because it would remove decisionmaking from the officials closest to the people and place it in the Federal bureaucracy. “In the governors’ eyes, the level of government closest to the people is the statehouse.” The State highway agencies, Mowbray said, saw the proposal as an attempt by the new DOT “to curb the rampaging bulldozer and gain support for other modes of transportation.” He added that some States talked of mutiny. “If the proposed new federal regulations are adopted, Texas has threatened to pull out of the Federal-aid highway program entirely.” [Mowbray, A. Q., *Road to Ruin*, J. B. Lippincott Company, 1969, p 234]

Better Roads magazine reflected the State viewpoint. An editorial titled “The Natives are Restless,” published in the November 1968 issue, referred to “a growing unrest in intergovernmental relationships” as State and local highway officials “are becoming increasingly vocal about directives and procedures emanating from the direction of the Department of Transportation.” The editorial feared “a breakdown of a long-standing partnership.” To illustrate the point, the editorial quoted a speech by A. E. “Alf” Johnson, executive secretary of the American Association of State Highway Officials (AASHO) to highway officials in the Southeast:

It is evident that there are fewer and fewer people in Washington who believe that the federal-aid highway program should be a partnership operation. There is a tendency on the part of the new people who are essentially “federalists” and advocate the so-called “federal creativity,” which is subject to a broad range of interpretation, to consider the highway program a federal program with the role of the state being subservient, or acting as an agent of the federal government. They want to tell us how to do everything, even to the point of detailing how to handle debris or clean up after an accident. [“The Natives are Restless,” An Editorial Viewpoint, *Better Roads*, November 1968, p. 7]

Johnson’s concerns about the future of the partnership stemmed from a lifelong involvement in it. He had been a State highway official in Arkansas, rising to the position of Chief Engineer of the Arkansas State Highway Department before joining AASHO full time as executive secretary in 1955 after a year as its part-time president. He was a staunch supporter of the Federal-aid highway program who had played a key role behind the scenes during development of the Federal-Aid Highway Act of 1956.

Because of the Notice on public hearings, *Better Roads* stated in a December 1968 editorial, “the air is charged with tension and emotion.” It stated that, “The welkin has not ceased to ring since the proposed regulations were published in the *Federal Register*.” The editorial quoted several State highway officials, including Johnson, who said:

“This is a radical departure in the 50-year administration of the federal-state highway program,” he said. “This marks the first time they’ve gone through the Federal Register.”

Garrett Morris of the Texas Highway Commission said the proposal would “destroy the orderly process” of highway development and “usurp for the federal highway administrator the policy-making responsibilities of the Texas Highway Commission.”

The editorial speculated that the proposal might “be left to boil and bubble until the next

administration takes over,” but hoped “everyone concerned in this matter [would] back off a bit and take a cooler, considerate look at the problem.” [“The Relationship Gap Widens,” An Editorial Viewpoint, *Better Roads*, December 1968, p. 6-7]

When AASHO gathered in Minneapolis, Minnesota, for its annual meeting the first week of December 1968, the proposal was a major concern for many speakers. It unleashed all their frustrations. AASHO president John O. Morton, commissioner of the New Hampshire Department of Public Works, addressed the concerns of many highway officials when he said:

Our new interstate highways are anything but the atrocities the voices of opposition would have the public believe them to be.

He said that AASHO’s member agencies had conducted thousands of public hearings and knew “that certain objections will always be presented at a public hearing.” Ultimately, State officials must decide how to carry out their program. Morton, in summarizing what State highway officials feared, stated that the proposed rule far exceeded the intent of the 1968 Act:

Contained in the regulations is a provision that would allow a single individual appearing in opposition to a highway project, to effectively tie up the project for an indefinite period of time. It is impossible to comprehend the adoption of a regulation which has been so devised that the desires and needs of an overwhelming majority of the people as presented at a public hearing, could be overridden by the action of a single individual, responsible or otherwise If this is permitted, domination of its (the nation’s) economy will also rest in the hands of this same irresponsible minority group.

It was, Morton said, the first time in the 52-year history of the Federal-aid highway program that “a federal agency has taken over and flaunted [sic] the intent of a piece of highway legislation.” He suspected that “people high in the Department of Transportation” were responsible because they “have in the past made reference to the fact that the mentality of the highway departments should be changed.” He said that highway officials were “confused, shocked, and alarmed at such a power grab.”

Senator Jennings Randolph (D-WV), Chairman of the Committee on Public Works, began his address to AASHO with a joke to illustrate that the country was in a period of transition:

I recall that a minister united in holy wedlock two hippies, and at the end of the ceremony he turned to them and said, “Will one of you please kiss the bride?”

These are, he added, “times often of misconceptions and misunderstandings.”

Senator Randolph, a longtime road supporter who had once worked for the American Road Builders Association and advanced the Interstate System at every opportunity, recalled that when he addressed AASHO a year earlier, he told the members that “we were beginning to think in terms of the economic social and environmental development of our country, particularly as highways are involved.” He discussed the origins and implementation of the provision:

I announced that we would initiate a series of hearings which would deal particularly with the problems of urban highway development in all of its phases in this country. At that time I stated, "We are all aware of the outspoken opposition to highway locations which has been encountered in connection with various urban segments of the interstate system. The Senate Committee on Public Works is very much concerned that such opposition, much of which may well be justified, will create an intolerable situation and cause the failure of this important public works program"

These hearings began in November 1967 and were concluded in May 1968 The witnesses who appeared before us represented almost every facet of interest, profession and concern with highways and our urban areas

The testimony presented in our urban impact hearings was most impressive and as a result, a number of provisions were added to our basic highway law by the Federal-aid [sic] Highway Act of 1968

That Act . . . includes a number of important changes which will enable the Highway Program to meet our expanding concern for social, cultural and environmental values . . . a full fledged relocation assistance program for those who suffer private injury through disruption and dislocation as a result of highway construction . . . equal employment opportunity . . . all public hearings (must) consider the social and environmental, as well as the economic, impact of a proposed highway location

He shared the concern about the appellate procedure in FHWA's Notice of Proposed Rulemaking. He quoted from a letter that he and Ranking Member John Sherman Cooper (R-KY) had sent to Federal Highway Administrator Lowell K. Bridwell (1967-1969) in response to a request for the committee's views. The letter stated:

It is our strong belief that such procedure will invite unnecessary appeals to the Federal Highway Administration and to the Courts. Highway location decisions are really legislative in nature. This authority has been delegated by the Congress and the Legislatures of the respective States to the United States Department of Transportation and the State Highway Departments. Other than to assure that the rules have been fairly applied, there is no contribution which any Federal Court could make to the decisions relating to location and design.

The two Senators urged removal of the appellate procedures from the final version. "We believe the decision of the Federal Highway Administration should be final in all respects unless there is, in fact, a violation of law, in which case normal legal procedures would still pertain."

Bridwell, in his address, acknowledged the "problems of antagonism between highway professionals and professionals from other disciplines." Change was coming "too fast, too disordered, and too little anticipated," but like it or not, the program was facing "the same social and community forces that today confront every other basic national undertaking, whether in transportation, conservation, education, or the art of government." He said:

One option not available is to disassociate and insulate our activities from the sweep of events in America today. To pretend otherwise would be the depth of self-delusion. Nor, in many cases, are we masters of these events. Our decisions must reflect our realistic awareness of this.

They were living in a time “of difficult choices . . . matched, and possibly outweighed by the opportunities available to us today to select . . . directions which will produce . . . beneficial results for the future.” The Urban Impact Amendment of the 1968 Act was “a clear indication” of the future, but its mandate for consideration of social, economic, and environmental impacts “can only be fulfilled by a fundamental reshaping of attitudes toward highway development in relationship to urban goals.” He rejected the “cold war” option of “conflict—of fighting the program’s opponents with every means at hand.” Instead, he urged each highway official to “reshape his product and his way of doing business to reflect the new demands of the public.”

To illustrate his point, he referred to a sign that he said the inventor Thomas Edison kept on his desk. “‘Pioneer or Perish’ for the Federal-aid highway program in America today, there can be no more fitting watchword.”

Covering the meeting, *Better Roads* said that AASHO officials “had themselves a brawl . . . [and] found plenty to complain about.” The editorial quoted the welcoming speech by Governor Harold LeVander, who referred to the “difficult and delicate balance of federal-state authority in the highway program.” He continued:

To put it mildly, the experience that Minnesota has endured with the executive branch of the federal government has been less than appealing.

While highway officials were speaking “brave words,” the editorial stated, they “were looking over their shoulders to see what exactly it was that was chasing them.” Public criticism “hit a sensitive nerve” and prompted many State highway officials to renew their interest in public relations:

If we heard correctly, the word from above . . . included such profound advice as to “sell” the integrity and ability of the highway engineer and the antediluvian suggestion that arrangements be made for periodic appearances before groups such as the Rotary, Lions, and other civic clubs to tell them the wonders of the highway program.

Sarcasm aside, the editorial urged officials not to expect their public relations staff “to help pull some rabbit out of the hat after a bad situation has arisen.” A better idea was to make the public-relations staff “an integral part of the team—not just an appendage.” [“Hurdles in the Highway Program,” *Better Roads*, January 1969, p. 6-7]

On November 23, 1968, FHWA announced that it would hold a hearing on December 16, 1968, to give interested parties the opportunity to present their views on the proposed regulation. [33 FR 17364] FHWA received over 200 requests from agencies, organizations, and individuals wishing to be heard. The hearing, held in the auditorium of the Federal Aviation Administration Building from December 16 through 20, heard from over 150 people. Their comments were among the more

than 4,000 comments received on the proposed regulation. Mowbray cited one of those comments:

Former Governor John A. Volpe of Massachusetts, the new Secretary of Transportation [under President Nixon], was a multimillionaire contractor and builder before he became the first Federal Highway Administrator [1956-1957] under President Eisenhower. One of his last acts as governor was to send a 200-word telegram to Secretary Boyd asking him to “withdraw” the proposal. The regulations, he said, were “a slight to the dedication, sincerity, and integrity of our state highway officials and the career employees of the Bureau of Public Roads.” Planning of highways, he said, should be left in the hands of “professional highway planners,” and the proof of their all-around competence is best seen in the quality of the highway system completed to date. Adoption of the proposed regulations, said Volpe, “is not in the best interests of our highway program.” [Mowbray, p. 234-236]

On January 14, 1969, with just 6 days left in the Johnson Administration, Administrator Bridwell and Director of Public Roads Francis C. “Frank” Turner approved a Policy and Procedure Memorandum (PPM) as appendix A of Title 23, Code of Federal Regulations, Section 1.32. The change appeared in the *Federal Register* on January 17, 1969 [34 FR 727], along with an explanation of how the PPM was developed. The discussion acknowledged the controversy over the appellate provision:

A large number of comments objected to the proposal on the grounds that it would destroy the present State-Federal relationship with respect to the Federal-Aid Highway Program. In particular, it was argued that by providing an appellate review by the Administrator, final highway decisionmaking would be transferred from the States to the Administrator. However, under the laws governing the Federal-Aid Highway Program, final approval authority concerning Federal participation is, and has always been, reserved to the Secretary of Transportation and this authority has consistently been exercised by the Administrator pursuant to a delegation of authority from the Secretary

The goal was to strengthen the State’s role by increasing dialogue with those affected by proposed projects:

It was designed to help resolve controversies at the State and local level where they can be best dealt with. In recent years, more and more highway controversies have required the personal attention of the Administrator and the Secretary because the present coordination and hearing procedures did not provide for adequate public participation in the development of highway decisions. Appeals to the Administrator have become commonplace, many relating to highway decision approvals rendered over 10 years ago.

While defending the proposed appellate procedures, Bridwell and Turner decided to withdraw it:

The appellate procedures were also objected to on the grounds that the term “interested person” was too broad and that since there was no time limit concerning the disposition of the appeal, highway construction could be delayed indefinitely. Objections were also raised concerning the automatic “stay” of highway projects upon the filing of an appeal. These

objections do have merit and accordingly, the proposed appellate procedures are being withdrawn for further review and reconsideration.

Instead of the appellate procedures, the PPM stated that the State was to publish notice of the Division Engineer's approval of a highway location or design – and that was the final step in the review.

Other changes included the addition of “Fast, safe, and efficient transportation” as the first factor to be considered among the social, economic, and environmental factors. The PPM also clarified when two public hearings were required, namely for all Interstate and primary highway projects; secondary highway projects on larger roads; when the project is on new location or would have a different social, economic, and environmental effect; and projects where the function of connecting roads, including access limits, would be altered. Otherwise PPM 20-8 retained much of the notice.

In these and other ways, FHWA responded throughout the 1960's to the growing environmental movement, but these steps had not satisfied those who objected to highways in general and the Interstate System in particular. They also could not hold back the growing sense of urgency felt not only by environmentalists but politicians eager to satisfy them.

Images of Environmental Destruction

One person who had not embraced the environmental revolution was President Richard M. Nixon. Flippen quoted Nixon as saying in private:

I have no sympathy for environmentalists who are demanding equal time on the air for every reply to every issue. Some people want to go back in time when men lived primitively.

Environmentalists were “dippy” and the “Wacko fringe.” [*Conservative Conservationist*, p. 111]

After defeating Vice President Humphrey in the 1968 election, President-elect Nixon asked Dr. Paul McCracken, an economist who would serve as chairman of the Council of Economic Advisors, to establish transitional task forces to plan for the new Administration. Dr. McCracken neglected to establish one on the environment. When his deputy, Henry Loomis, urged him to appoint a task force on the subject, McCracken asked for a recommendation on who should lead it. Loomis, a trustee of the Conservation Foundation, recommended Russell E. Train, a conservative Republican who served as the foundation's president.

Train put together a bipartisan task force that did not include avowed environmentalists but that recommended a strong environmental role for the new Administration:

We recommend that improved environmental management be made a principal objective of the new Administration. While time is running out rapidly on our ability to arrest and hopefully reverse these trends, we now possess the knowledge and technology to begin the job. Do we possess the will?

The task force also recommended:

We recommend that priority be given to improving the surroundings in which most of our people live their daily lives—in our growing urban regions.

The members recommended “that emphasis be placed on performance, on making existing programs work.” [*Conservative Conservationist*, p. 61-62]

Train would join the Administration as Undersecretary of the Interior under Secretary Walter Hickel, a former Governor of Alaska known for pro-development attitudes. (Hickel, who had taken office as Governor in 1966, would serve as Governor of Alaska again from 1990 to 1994.)

Train shared Flippen’s conclusion that Nixon did not have any interest in environmental matters:

I certainly never heard him express any. His reaction to these issues was that of a highly political animal. He read the polls and he had to be aware that concern for the environment was rapidly rising among the American people. His political instincts told him that he and the Republican Party could not afford to be seen as anti-environment. Moreover, with the 1972 presidential election rapidly approaching, it was understandable that he would want to seize the environmental high ground from the Democrats, particularly from one of the leading contenders for the Democratic nomination, Maine’s senator, Ed Muskie. [Train, Russell E., *Politics, Pollution, and Pandas: An Environmental Memoir*, Island Press/Shearwater Books, 2003, p. 79]

Environmental crises would emerge during the period to add to the growing public concern as Congress searched for a response. One problem began in 1968 when oil was discovered on the North Slope of Alaska abutting Prudhoe Bay, an arm of Beaufort Sea. Transportation of the oil by ship was not practical because the sea was frozen most of the year, creating a demand for a pipeline to a year-round port at Valdez. The challenges of building and maintaining the pipeline created an environmental controversy about potential adverse impacts. [Train, p. 60-62] Another controversy involved the Miami Jetport, a proposal by Dade County, Florida, to build a mammoth Miami international airport west of Miami on 40 square miles of wetlands. [Train, p. 63] President Nixon’s proposal to develop two prototype commercial supersonic transports raised additional environmental concerns. [Train, p. 85]

Broader problems were reaching a point where they could not be ignored, as summarized by Flippen:

Across the nation’s fruited plains sprang miles of mass-produced and prefabricated suburban homes. The suburbs grew six times faster than established cities, and as early as 1960 one-quarter of Americans lived in such homes. Real estate developers, financial institutions, utility companies, and landowners pressed for more intensive use of land, and local governments, anticipating more tax revenue from higher land values, complied. Two-lane roads became four-lane roads and shopping centers grew in open fields. Because in many areas waste treatment facilities did not keep pace with greater population density, many communities dumped raw sewage into nearby rivers and lakes. This led to

eutrophication, the overfertilization of water plants. The resulting algal growth blocked the sun from deeper plants, whose death and decay eliminated the remaining oxygen in the water. In time, the water would become devoid of all life, its ecosystem destroyed. With agricultural runoff, the dumping of industrial chemicals and municipal dredging augmenting the problem, the nation's waters appeared to be in a perilous state.

On land the problem was trash. Municipal waste—residential, institutional, and commercial refuse—constituted millions of tons a year, the elimination of which created a municipal expense that only transportation and education surpassed. Many communities simply relied on open dumps, the least expensive alternative but one that contributed to disease and contaminated the nearby water tables. [*Conservative Conservationist*, p. 56]

These trends were hard to visualize, but the public was increasingly introduced to images that were hard to forget. On January 29, 1969, a Union Oil Company platform 6 miles off the coast of Santa Barbara, California, experienced a blowout that lasted 11 days and unleashed oil and natural gas. Crude oil created an 800-square mile oil slick that flowed onto 35 miles of coastline. Hundreds of birds, clams, dolphin, fish, lobsters, and other sea creatures became trapped in the oil slick and died. Television viewers and magazine and newspaper readers saw images of workers trying to save birds so coated in oil they could not follow their instinct to fly away from their rescuers. An editorial in *The Washington Post* on February 14, 1969, stated:

It is often man's crass indifference to the consequences of technological advance in exploiting nature which is leading to the despoiling of nature. That is to say, the gains from technology seem to run only one way – to profits rather than to preservation of a planet on which man can comfortably live

Instead of deciding that we must exploit them because we are technically able to do so, we ought to postpone exploiting them until the need is great or our knowledge of what damage exploitation may do is substantially larger.

That summer, the public received another visible image when fire broke out on the Cuyahoga River in Cleveland on June 22, 1969. An oil slick and debris in the river erupted in flames, possibly caused by sparks from a passing train on a railroad bridge. The fire did not last long, only about 30 minutes, but the image brought the issue home. *Time* magazine used the fire to question what people did to the rivers that provided the original rationale for the location of most of the country's larger cities:

Almost every great city has a river. The poetic notion is that flowing water brings commerce, delights the eye, and cools the summer heat. But there is a more prosaic reason for the close affinity of cities and rivers. They serve as convenient, free sewers.

The Potomac reaches the nation's capital as a pleasant stream, and leaves it stinking from the 240 million gallons of wastes that are flushed into it daily. Among other horrors, while Omaha's meat packers fill the Missouri River with animal grease balls as big as oranges, St. Louis takes its drinking water from the muddy lower Missouri because the Mississippi is far filthier. Scores of U.S. rivers are severely polluted—the swift Chattahoochee, majestic

Hudson and quiet Milwaukee, plus the Buffalo, Merrimack, Monongahela, Niagara, Delaware, Rouge, Escambia, and Havasupi. Among the worst of them all is the 80 mile-long Cuyahoga, which splits Cleveland as it reaches the shores of Lake Erie.

No Visible Life. Some river! Chocolate-brown, oily, bubbling with subsurface gases, it oozes rather than flows. “Anyone who falls into the Cuyahoga does not drown,” Cleveland’s citizens joke grimly. “He decays.” The Federal Water Pollution Control Administration dryly notes: “The lower Cuyahoga has no visible life, not even low forms such as leeches and sludge worms that usually thrive on wastes.” It is also—literally—a fire hazard. A few weeks ago, the oil-slicked river burst into flames and burned with such intensity that two railroad bridges spanning it were nearly destroyed. [“The Cities: The Price of Optimism,” *Time*, August 1, 1969]

Fires had erupted in the river before (in 1868, 1883, 1887, 1912, 1922, 1936, 1941, 1948, and 1952) and in rivers through other cities, but coming as the Nation was beginning to understand how human actions affected the environment, the latest incident made the Cuyahoga River a symbol that everyone could visualize and understand.

National Environmental Policy Act of 1969

Senator Henry “Scoop” Jackson (D-Wa.), Chairman of the Senate Committee on Interior and Insular Affairs, was looking for a way to ensure all Federal actions reflected the new environmental awareness. Late in the Johnson Administration, Senator Jackson wanted to increase the expertise of his staff in this area, but did not have the funds to do so. He asked Train if the Conservation Foundation would pay for the consultant services of Professor Lynton K. Caldwell of Indiana University to work with the committee. Train agreed.

Jackson introduced the National Environmental Policy Act (NEPA) on February 18, 1969. He said:

The purpose of this legislation is to lay the framework for a continuing program of research and study which will insure that present and future generations of Americans will be able to live in and enjoy an environment free of hazards to mental and physical well-being.

He cited the Santa Barbara oil spill as an example of an ecological disaster that prompted an outcry but not a comprehensive program:

We are still only reacting to crisis situations in the environmental field. What we should be doing is setting up institutions and procedures designed to anticipate environmental problems before they reach the crisis stage.

At this point, NEPA directed the Secretary of the Interior to conduct studies and research relating to ecological systems and environmental quality and to identify risks and ways of reducing them. It also created a Council on Environmental Quality (CEQ) in the Executive Office of the President:

The primary function of the Council shall be to study and analyze environmental trends and

the factors that effect [sic] these trends, relating each area of study and analysis to the conservation, social, economic, and health goals of this Nation.

The President would appoint the three members of CEQ, to serve at his pleasure, subject to consent by the Senate:

Each member shall, as a result of training, experience, or attainments, be professionally qualified to analyze and interpret environmental trends of all kinds and descriptions and shall be conscious of and responsive to the scientific, economic, social, esthetic, and cultural needs and interests of the Nation.

The bill did not include a requirement for review of individual projects.

Secretary Hickel, with Train beside him, testified during the committee's 1 day of hearings on April 16, 1969, that the Administration opposed the bill. The Secretary explained that CEQ was unnecessary because the White House had established an Environmental Quality Council (EQC) on May 29, 1969, to perform a similar function. Train, whose support for the bill was well known to Senator Jackson, believe the EQC had proven ineffective, but could not say so during the hearing. In his memoir, Train recalled:

Subsequently, I (along with others, I am sure) was able to persuade the administration to change its position on NEPA. Aside from the self-evident inadequacy of the EQC, one of my main arguments with the White House in support of NEPA was the fact that the legislation was going to pass overwhelmingly. I was authorized to testify in favor of the legislation in the House, where Representative John Dingell of Michigan had introduced a companion bill. [Train, p. 69]

Representing the DOT before Senator Jackson's committee was Assistant Secretary for Urban Systems and Environment John Braman, a former Mayor of Seattle. As Chairman Jackson noted in introducing Braman, he had taken office only the day before. Braman acknowledged that he and his office were new, but the office was "a new attempt to better organize the capacities of the department to cope with this very, very important and very serious problem which we all face." Secretary Volpe, Braman explained, had implemented the change:

The charter of this particular office is a very broad one. We are only now beginning to get to the point where we can see the manner in which we will attack the specific problems, but certainly it is very clear that one of the things the Secretary expects from this new office is a better decimation [sic] of information and better coordination between all of the activities of the Department which go to the whole field of highways, mass transportation, aviation, railroads, and many others to the end that the utilization of all funds, local, State, and national, can produce for the people the very best system of movement possible, at the same time recognizing that in many instances the determinations will have to be changed from being based on economics alone to a consideration of the economies as tempered by the impact on the environment.

The DOT, he said, shared the Administration's opposition to NEPA. "We believe the argument for

maintaining organizational flexibility is a compelling one and would recommend an administrative, rather than a statutory approach at this time.”

The “Action-Forcing Mechanism”

Professor Caldwell also testified. He supported creation of the CEQ to advise the President, but was concerned that it placed too much responsibility in the President, who already faced “responsibilities and burdens that no human individual can be expected to manage.” He believed that the country needed “an independent forum for a review of the Nation’s condition.” What was needed was:

. . . a body that is capable of making assessments not only of our current conditions, but of presenting alternatives for coping not only with the problems that we know about that are before us now, but problems we have yet to face We cannot afford to continue to learn from experience.

He called for creation of a “body” to serve as an “action-forcing mechanism” that would evaluate Federal actions before they occurred:

For example, it seems to me that a statement of policy by the Congress should at least consider measures to require the Federal agencies, in submitting proposals, to contain within the proposals an evaluation of the effect of these proposals upon the state of the environment, that in the licensing procedures of the various agencies, such as the Atomic Energy Commission or the Federal Power Commission or the Federal Aviation Agency there should also be, to the extent that there may not now exist fully or adequately, certain requirements with respect to environmental protection, that the Bureau of the Budget should be authorized and directed to particularly scrutinize administrative action and planning with respect to the impact of legislative proposals, and particularly public works proposals on the environment.

Now, these are what I mean by action-forcing or operational measures. It would not be enough, it seems to me, when we speak of policy, to think that a mere statement of desirable outcomes would be sufficient to give us the foundation that we need for a vigorous program of what I would call national defense against environmental degradation. We need something that is firm, clear, and operational. [Hearing before the Committee on Interior and Insular Affairs, United States Senate, *National Environmental Policy*, April 16, 1969, p. 114-116]

When the committee issued its report on July 9, the revised bill included a variation of Professor Caldwell’s action-forcing mechanism. For every Federal action significantly affecting the quality of the human environment, the sponsoring Federal Agency would be directed to study the environmental impacts of the proposed action, consider measures for mitigating any adverse environmental effects, and determine if any irreversible and irretrievable impacts were warranted by the need for the action. The report explained:

One of the major factors contributing to environmental abuse and deterioration is that

actions—often actions having irreversible consequences—are undertaken without adequate consideration of, or knowledge about, their impact on the environment. Section 201 seeks to overcome this limitation by authorizing all agencies of the Federal Government, in conjunction with their existing programs and authorities, to conduct research, studies, and surveys related to ecological systems and the quality of the environment. This section also authorizes the agencies to make this information available to the public, to assist State and local government, and to utilize ecological information in the planning and development of resource-oriented projects. [Committee on Interior and Insular Affairs, *National Environmental Policy Act of 1969*, Report No. 91-296, July 9, 1969, p. 9]

Senator Jackson introduced the bill on the Senate floor on July 10. He said that it “directs that all Federal agencies conduct their activities in accordance with these goals, and provides ‘action-forcing’ procedures to insure that these goals and principles are observed.” He did not elaborate on the mechanism. The floor debate prior to Senate approval did not include discussion of the provision. The focus was on the proposed CEQ, according to Flippen:

With the proposal for CEQ dominating the debate over NEPA, few legislators realized the importance of the bill’s impact statement requirement. Even Train, who had argued since his days at the Conservation Foundation for some established program to weigh environmental considerations, did not grasp its ramifications. [*Conservative Conservationist*, p. 85]

The Senate approved the bill the same day.

In July, the House Committee on Merchant Marine and Fisheries introduced a companion bill to create a CEQ as an amendment to the Fish and Wildlife Coordination Act. It did not contain a provision comparable to the action-forcing mechanism in the Senate bill. The House adopted the bill on September 23, 1969.

Senator Jackson returned to the Senate floor on October 8 to lay the House bill before the Senate, ask his colleagues to reject it, and agree to a Conference Committee to work out differences between the two bills. He submitted a formal statement, a report on differences between the Senate and House bills, the history of the legislation, and other material to be inserted into the *Congressional Record*. In discussing the origins of the bills, he cited the “inadequacy of present knowledge, policies, and institutions” related to a subject that “touches every aspect of man’s existence.” He said:

We see increasing evidence of this inadequacy all around us: haphazard urban and suburban growth; crowding, congestion, and conditions within our central cities which result in civil unrest and detract from man’s social and psychological well-being; the loss of valuable open spaces; inconsistent and, often, incoherent rural and urban land-use policies; critical air and water pollution problems; diminishing recreational opportunity; continuing soil erosion; the degradation of unique ecosystems; the degradation of unique ecosystems; needless deforestation; the decline and extinction of fish and wildlife species; faltering and poorly designed transportation systems; poor architectural design and ugliness in public and private structures; rising levels of noise; the continued proliferation of pesticides and

chemicals without adequate consideration of the consequences; radiation hazards; thermal pollution; an increasingly ugly landscape cluttered with billboards, powerlines, and junkyards; growing scarcity of essential resources; and many, many other environmental quality problems.

(This same list of environmental problems had appeared in the committee's July 9 report and would be repeated during deliberations on December 20.)

Several of these items related to transportation issues, but the report did not refer directly to highways or the Interstate System except in one instance. The Senator's report on legislative history concluded with a statement that the committee had reviewed and drawn on "many measures related to various aspects of environmental management." A footnote added:

In the closing days of the 90th Cong. [which ended October 14, 1968], the Legislative Reference Service tabulated over 100 bills concerned with environmental issues, covering a broad area of interest—cleaning up the Nation's rivers and better approaches to smog control, improving the use of open space and prevention of disorderly encroachment by superhighways, factories and other developments, improved protection of areas of high fertility, wiser application of pesticides, whose residues affect both man and wildlife, and the control of urban sprawl, unsightly junkyards, billboards, and power facilities that lower the amenities of landscape. [115 CongRec.91st Cong., 1st Sess., 29067-29068 (1969)]

This footnote is the only direct reference to highway construction in the material Senator Jackson presented on this occasion.

Congress Approves NEPA

After working out differences in the approved bills, the Conference Committee of the two Houses released its report on December 17, 1969. Section 101 was a "Declaration of National Environmental Policy":

The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practical means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

The Federal Government was "to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may" fulfill this policy.

As Flippen explained, the final version of NEPA included “almost all the stringent provisions” of the Senate version, including the action-forcing mechanism now in Section 102:

Under pressure from the House conferees, the report added the qualifying phrase “to the fullest extent possible” to its impact statement requirement, and it mandated each agency to “consult” with CEQ, not receive its approval. In all other respects, however, the report was as forceful a statement of environmental policy as supporters had hoped. [Flippen, J. Brooks, *Nixon and the Environment*, University of New Mexico Press, 200, p. 48]

On December 20, Senator Jackson brought the bill before the Senate. He said that, “there is a new kind of revolutionary movement underway in this country.” He continued:

This movement is concerned with the integrity of man’s life support system—the human environment. The stage for this movement is shifting from what had once been the exclusive province of a few conservation organizations to the campus, to the urban ghettos, and to the suburbs.

In recent months, the Nation’s youth, in high schools, colleges, and universities across the country, have been taking up the banner of environmental awareness and have been seeking measures designed to control technology, and to develop new environmental policies which reflect the full range of diverse values and amenities which man seeks from his environment.

The bill was “a response by the Congress to the concerns the Nation’s youth are expressing.” He saw NEPA not as a panacea, “but as a starting point” in addressing the consequences of “the exhaustive and impersonal technology modern science has created.”

Senator Jackson explained the rationale behind the action-forcing mechanism:

To insure that the policies and goals defined in this act are infused into the ongoing programs and actions of the Federal Government, the act also establishes some important “action-forcing” procedures. Section 102 authorizes and directs all Federal agencies, to the fullest extent possible, to administer their existing laws, regulations, and policies in conformance with the policies set forth in this act. It also directs all agencies to assure consideration of the environmental impact of their actions in decisionmaking. It requires agencies which propose actions to consult with appropriate Federal and State agencies having jurisdiction or expertise in environmental matters and to include any comments made by those agencies which outline the environmental considerations involved with such proposals.

Taken together, the provisions of section 102 directs [sic] any Federal agency which takes action that it must take into account environmental management and environmental quality considerations.

Neither the impact of highways, including construction of the Interstate System, nor the action-

forcing mechanism was uppermost during the debate. The focus was on CEQ. However, Senator Muskie stated that Section 102 would “apply strong pressures on those agencies that have an impact on the environment—the Bureau of Public Roads, for example, the Atomic Energy Commission, and others.” He continued:

This strong language in that section [102] is intended to bring pressure on those agencies to become environment [sic] conscious, to bring pressure upon them to respond to the needs of environmental quality, to bring pressure upon them to develop legislation to deal with these cases where their legislative authority does not enable them to respond to these values effectively, and to reorient them toward a consciousness of and sensitivity to the environment.

Senator Muskie did not fully understand the provision (“I understand that the nature and extent of environmental impact will be determined by the environmental control agencies”), but most of his colleagues took little or no notice of it.

Senator Jennings Randolph addressed his colleagues during the floor debate, but did not comment on how Section 102 might impact the roadbuilding program. Like many committee Chairmen, he was concerned about the jurisdiction issue that arose because the bill emerged from Senator Jackson’s committee but spanned the activities assigned to many other committees, including his Committee on Public Works.

In addition, he acknowledged the need for NEPA while pointing out the tradeoff that, “as we put down a mile of highway, no matter what type of road it is, we are not only placing cement or asphalt on the earth, but we are enabling people to move from one point to another.” In a reflection of the uncertainty at this stage of what constituted the “environment,” he cited the requirement for negotiation with those whose homes or businesses would be taken for a highway project as an example “to indicate that we are moving more broadly and more sufficiently to improve environmental quality.” Senator Randolph did not mention the Urban Impact Amendment of the 1968 Act that had nearly torn the Federal-State partnership apart.

The Senate approved the bill.

The House of Representatives took up the bill, introduced by Representative John D. Dingell (D-MI) of Detroit on December 23. Senator Randolph’s House counterpart did not participate in the floor debate. Like Randolph, Representative George H. Fallon (D-Md.), Chairman of the Committee on Public Works, was a longtime supporter of roads. Fallon also was one of the chief authors of the Federal-Aid Highway Act of 1956. Through his long congressional career (1945-1971), he rarely addressed the House on any subject other than roads. On December 20, after reviewing the conference report, he submitted questions to Representative Dingell, who incorporated them, with answers, into the record.

One of Fallon’s questions related to the jurisdictional issue that Senator Randolph had expressed: which committee would have jurisdiction over the annual report of the President required by Section 201? (The President’s report and its recommendations would be shared with the appropriate committees.)

Fallon also asked about potential conflicts between CEQ and the proposed Office of Environmental Quality included in the Water Quality Improvement Act of 1969, then in conference. (The new office would mesh with the CEQ to assist in implementing environmental policy and legislation. The Office of Environmental Quality was authorized by Public Law 91-224.)

Finally, he asked:

Is it intended that the Council become involved in the day to day operation of the Federal agencies, specific project [sic], or in inter-agency conflicts which arise from time to time?

The question suggested that Chairman Fallon was concerned that CEQ might block highway or other projects, or that it might add costs for environmental mitigation, but Fallon's letter did not explain what was behind the question.

The answer was that the conferees did not view NEPA "as implying a project-by-project review and commentary on Federal programs" for CEQ:

Rather, it is intended that the Council will periodically examine the general direction and impact of Federal programs in relation to environmental trends and problems and recommend general changes in direction or supplementation of such programs when they appear to be appropriate. It is not the Conferees' intent that the Council be involved in the day-to-day decision-making processes of the Federal Government or that it be involved in the resolution of particular conflicts between agencies and departments. These functions can best be performed by the Bureau of the Budget, the President's Interagency Cabinet-level Council on the Environment, or by the President himself.

NEPA Becomes Law

After the House and Senate approved NEPA in a groundswell of environmental enthusiasm, the bill went to President Nixon. Flippen explained how the President viewed the bill:

The committee report sailed through both houses of Congress, reaching Nixon's desk just after Christmas Surprisingly, no one in the White House recognized the significance of the impact-statement requirement, the only true coercive portion of the bill and the one in which environmentalists placed so much faith. No executive agency recommended against approval, despite potential conflicts with the new CEQ. In the years to come, Nixon would come to regret this oversight, but at the end of his first year in office, the bill appeared only a minor nuisance In any event . . . to veto the bill was to court political disaster, for the environmental "bandwagon" ensured a congressional override If he were to stage properly the signing ceremony, choose his words wisely, and follow with credible appointments, NEPA could work in the administration's favor. Coupled with his coming environmental message to congress, it would finally win the political initiative that the White House had so long sought. [*Nixon and the Environment*, p. 48-49]

Nixon decided that New Year's Day, a typically slow news day, would be perfect.

Few developments competed for the nation's attention, and, with opponents on vacation and the ceremony three thousand miles from the focus of national debate, Nixon could turn coverage to his advantage, away from the true Democratic genesis of the bill. In addition, signing NEPA on the first day of the new decade offered symbolic significance. If he were to highlight properly the signing as only the first action of a new era in which the government would protect America's environmental heritage, the press would focus on the future, in which the administration planned an environmental offensive, and not on the past, in which the White House had encountered little but environmental criticism. [*Nixon and the Environment*, p. 50]

On January 1, 1970, at around 10 am, President Nixon signed NEPA (Public Law 91-190) during a holiday stay at his home, known as the "Western White House," in San Clemente, California. It was the morning of New Year's Day, so he could not hold an elaborate signing ceremony with the congressional authors of the bill who might have distracted from the President's attempt to dominate the environmental issue. Photographers and a few reporters showed up for the event.

John Osborne, who wrote the weekly "Nixon Watch" column for *The New Republic* magazine, saw an additional purpose in the signing:

Two events during his stay in San Clemente at the end of his first year in office suggested that this very private President was trying, at the start of his second year, to correct the impression that he is so closely guarded, by himself and by his staff, because he is afraid to show himself in ways and situations that may expose to general view the man within the shell. On New Year's morning, at the signing of a bill requiring him to substitute a statutory environmental council for the one he created on his own authority, he appeared to the reporters whom he joshed and allowed to josh him, just a little, to be wholly at ease, really enjoying the occasion and the exposure that went with it. [The other event was allowing reporters to watch him golf, badly, at a Los Angeles country club.] [Osborne, John, *The Nixon Watch*, Liveright, 1970, p. 199]

His prepared remarks stated that the country would have to work in a bipartisan fashion on the environment "because it is now or never." Looking ahead 10 years, he said, if we do not start now, "we will not have an opportunity to do it later." The Nation will have "millions more automobiles," and water will be less pure, so it will be "much harder to turn it around." A major goal for the next 10 years "must be to restore the cleanliness of the air, the water, and that, of course, means moving also on the broader problems of population, congestion, transport and the like."

Nixon explained that all industrial societies have similar problems:

What we really confront here is that in the highly industrialized, richest countries, we have the greatest danger. Because of our wealth we can afford the automobiles, we can afford all the things that pollute the air, pollute the water, and make this really a poisonous world in which to live.

Flippen pointed out that while “Nixon had played no role in the passage of NEPA,” he was now portraying it as a reflection of his concern about the environment. The President reinforced that idea after signing the bill:

Chatting with reporters after signing the bill, Nixon told how he had recently taken a friend, Charles “Bebe” Rebozo, on a drive through the countryside of Orange County outside Los Angeles. In ten years, they had agreed, development would scar forever the beauty of the land, an occurrence not unique to southern California. With NEPA and a slew of legislation planned in the near future, Nixon promised, his administration would not let such a tragedy unfold. [*Nixon and the Environment*, p, 51]

The White House also issued a Statement by the President on NEPA that concluded:

The Act I have signed gives us an adequate organization and a good statement of direction. We are determined that the decade of the ‘70’s will be known as the time when this country regained a productive harmony between man and nature.

The statement also referred to Senator Muskie’s proposal to establish an Office of Environmental Quality to staff CEQ. “I believe this would be a mistake,” the President said. He added:

No matter how pressing the problem, to overorganize, to overstaff or to compound the levels of review and advice seldom brings earlier or better results.

In addition to the President’s remarks and statement, the White House issued a press release focused on CEQ. None of these documents mentioned the environmental reviews that individual Federal Agencies would have to conduct on a project-by-project basis.

The New York Times covered the signing on its front page and reprinted the text of the President’s statement on page 12 along with continuation of the article. A photograph on page 12 showed Nixon “giving reporters pens he used to sign” the bill. Nixon would not reveal his appointees to CEQ. “But he said that the council would be assisted by a ‘compact staff,’ and would function with the same close advisory relation to the President that the Council of Economic Advisors does in fiscal and monetary affairs.”

A companion article on page 12 titled “Challenge by Democrats” discussed concerns expressed by Senators Jackson and Muskie. They agreed with the President’s statements, but had “some residual doubt about how much effort and money the Administration was prepared to devote to carrying out the policy proclaimed in the new law.” Senator Jackson said that implementation of NEPA “will require a real commitment of funds and a re-ordering of our national priorities.”

Senator Muskie objected to the President’s comments about staffing. In addition to rejecting the Senator’s staffing proposal, the President told reporters he thought that NEPA provided an “adequate organization and a good statement of direction.” The Senator said:

There is no surplus of staff involved. If the council is to do the substantive job contemplated by the Congress, it will have to have the Office of Environmental Quality.

Senator Jackson, the article noted, had disputed the capability of the President's EQC. He and Congressman Dingell "felt that the President had created his Cabinet council to forestall Congressional action and to give the impression that the Administration was more active than in fact it was." They also believed that EQC had too many responsibilities and too few employees for the task.

The newspaper also printed a three-column "Man in the News" story about the "Sponsor of Pollution Control Bill," calling Senator Jackson "one of the most powerful members of the United States Senate." It described his chief concerns as "the extension of America's nuclear and military powers" and his "staunch support of American involvement in Vietnam." Referring to his success in maneuvering NEPA to passage, the article said, "The last time he maneuvered so diligently for a piece of legislation was in support of the antiballistic missile." His support for the supersonic transport plane and other military investments earned him the nickname "Senator from Boeing." (Senator Jackson, who had been in the House of Representatives from 1941 to 1953, served in the Senate from January 3, 1953, until his death on September 1, 1983.)

The two Times articles about NEPA focused on CEQ. In the final sentence of the next-to-last paragraph of "Challenge by Democrats," the article referred to the action-forcing mechanism. "It also directs that all Federal agencies must include in their legislative recommendations and proposed actions a statement on the environmental impact of the proposals." ["Nixon Promises an Urgent Fight to End Pollution," Kenworthy, E. W., "Challenge by Democrats," and "Sponsor of Pollution Control Bill," *The New York Times*, January 2, 1970]

Critics had to give the President credit for signing NEPA and saying the right things, but they assumed, as Flippen put it, that "when the glare of publicity dimmed, Nixon would show his true colors and appoint weak members" to the CEQ, possibly even members hostile to Federal regulation or unwilling to stand up to industry. Instead, on January 29, Nixon appointed Train as chairman of CEQ. "Everyone knew where Train stood on the environment; he was, as [Deputy Assistant to the President for Domestic Affairs John] Whitaker later recalled, 'for the environment first, Nixon second.'"

The President appointed two other distinguished members to CEQ along with Train:

Joining Train were Gordon MacDonald and Robert Cahn. MacDonald was a geophysicist and member of the Environmental Studies Board of the National Academy of Science, then serving on the faculty of the University of California at Santa Barbara. Cahn was a Pulitzer Prize-winning conservation reporter for the *Christian Science Monitor*. Together the appointees stood as a formidable trio, not one a lackey to industry. They were to "carry the ball," Nixon instructed them in the Oval Office, to "get the administration out front on the environment." [*Nixon and the Environment*, p. 52]

Nixon pointed out to reporters that Train and Cahn lived in Washington, while MacDonald would be moving from California, "the smog-free part—Santa Barbara." The President added that Dr. MacDonald "is an expert, incidentally, on the Santa Barbara oil problem. That is where I first became acquainted with him."

The President explained the CEQ's purpose to the assembled reporters:

This Council . . . is parallel in responsibility to the Council of Economic Advisers. For example, it will prepare for the President a report that will be made annually, the first one on July 1, on the environment.

The Council will also have responsibility for examining the facts on the environment, for setting up an early warning system with regard to how we can avoid some of the problems which may come back to haunt us, 5, 10, 15, even 20 years from now, and setting up programs for legislation as well as programs for the Federal agencies which may not require legislation, to deal with environmental problems.

In a separate statement, the President outlined the CEQ's role, adding that the EQC would be renamed the Cabinet Committee on the Environment "and will be used as a forum in which the President and appropriate Cabinet officers can discuss environmental issues." The statement concluded:

Environmental problems occur today because we were not alert enough, informed enough, or farseeing enough yesterday. The new Council on Environmental Quality will work to remedy these deficiencies and will thus contribute, in a most significant way, to the quality of American life for all

Senator Jackson's committee confirmed the three promptly.

Professor Caldwell, in a retrospective article, said:

NEPA implies a major modification and even a reversal of long established priorities in the political economy of the Nation. The disruptive effects of the Act on the business-as-usual economy do not appear to have been foreseen by the Congress or by those interests most likely to have been affected. However, the weekly news magazine *Time* observed, in its issue of August 1, 1969, that if NEPA became law, its impact might be felt by ". . . every imaginable special interest—airlines, highway builders, mining companies, real estate developers, . . ." and all federal policies with environmental implications would be open to challenge. [Caldwell, Lynton K., "The National Environmental Policy Act: Retrospect and Prospect, *Environmental Law Reporter*, March 1976, 6 ELR 50036]

April 1970

In September 1969, Senator Gaylord Nelson (D-Wi.) was attending a conference in Seattle. Since encouraging President Kennedy to embark on a 5-day, 11-State conservation tour in September 1963, the Senator had been searching for a way of focusing attention on the environment. During his conservation speaking tour in the summer of 1969, he had an inspiration:

At the time, anti-Vietnam War demonstrations, called "teach-ins," had spread to college

campuses all across the nation. Suddenly, the idea occurred to me – why not organize a huge grassroots protest over what was happening to our environment?

I was satisfied that if we could tap into the environmental concerns of the general public and infuse the student anti-war energy into the environmental cause, we could generate a demonstration that would force this issue onto the political agenda. It was a big gamble, but worth a try. [Nelson, Gaylord, “How the First Earth Day Came About,” EnviroLink, <http://earthday.envirolink.org/history.html>]

In Seattle, he announced plans for a nationwide grassroots demonstration on the environment in the spring of 1970. The first Earth Day would take place on Wednesday, April 22, 1970. The organizers’ manifesto explained the purpose:

Earth Day is a commitment to make life better, not just bigger and faster, to provide real rather than rhetorical solutions. It is a day to re-examine the ethic of individual progress at mankind’s expense—a day to challenge the corporate and governmental leaders who promise change, but who short-change the necessary programs April 22 seeks a future worth living. [As quoted in Hill, Gladwin, “Nation Set to Observe Earth Day,” *The New York Times*, April 21, 1970]

President Nixon and his staff anticipated that much of the Earth Day rhetoric, including comments from potential rivals in the 1972 president election, especially Senator Muskie, would be directed at his Administration. Still, with proper planning, the issue might be turned to political advantage, as Flippen described:

The first-term Republican, like many politicians in Washington, recognized the opportunity the occasion posed to sway a wide segment of voters. Environmentalism, it appeared, was particularly strong in critical electoral college states, including Florida, California, New York, and much of New England. Indeed, with polls indicating that the environment was a key issue among the nation’s youth, Earth Day offered a chance to score points with an important demographic group, a voting block not traditionally allied with Nixon. [*Nixon and the Environment*, p. 8]

To counter the expected anti-Nixon rhetoric, the Administration launched an environmental initiative that included the statements and press releases on enactment of NEPA and the appointment of the CEQ leadership. In addition, the President’s State of the Union Address on January 22, 1970, included a strong environmental theme. “Occasionally there comes a time when profound and far-reaching events command a break with tradition. This is such a time,” he said. “The moment has arrived to harness the vast energies and abundance of this land to the creation of a new American experience, an experience richer and deeper and more truly a reflection of the goodness and grace of the human spirit.” He restated a sentiment he had expressed when signing NEPA:

The seventies will be a time of new beginnings, a time of exploring both on the earth and in the heavens, a time of discovery. But the time has also come for emphasis on developing better ways of managing what we have and of completing what man's genius has begun but

left unfinished.

Our land, this land that is ours together, is a great and a good land. It is also an unfinished land, and the challenge of perfecting it is the summons of the seventies.

He turned to foreign policy, including the Vietnam War, explaining that the Nation was closer to peace than it was when he took office (“our foreign policy is to bring an end to the war in Vietnam in a way that our generation will be remembered not so much as the generation that suffered in war, but more for the fact that we had the courage and character to win the kind of a just peace that the next generation was able to keep”). He discussed the economy (“we have the greatest opportunity for progress at home of any people in world history”).

Finally, he returned to the environment:

The great question of the seventies is, shall we surrender to our surroundings, or shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land, and to our water?

Restoring nature to its natural state is a cause beyond party and beyond factions. It has become a common cause of all the people of this country. It is a cause of particular concern to young Americans, because they more than we will reap the grim consequences of our failure to act on programs which are needed now if we are to prevent disaster later.

Clean air, clean water, open spaces—these should once again be the birthright of every American. If we act now, they can be.

The “worst polluter of the air,” he said, was the automobile:

Adequate control requires further advances in engine design and fuel composition. We shall intensify our research, set increasingly strict standards, and strengthen enforcement procedures—and we shall do it now.

The Nation needed “comprehensive new regulations” and must require “that, to the extent possible, the price of goods should be made to include the costs of producing and disposing of them without damage to the environment.”

He was not advocating that the Nation turn from economic expansion:

The answer is not to abandon growth, but to redirect it. For example, we should turn toward ending congestion and eliminating smog [using] the same reservoir of inventive genius that created them in the first place.

Continued vigorous economic growth provides us with the means to enrich life itself and to enhance our planet as a place hospitable to man.

Each American should take up the cause, focusing on where “we spend 80 percent of our time—in our homes, in our places of work, the streets over which we travel.” He explained:

Street litter, rundown parking strips and yards, dilapidated fences, broken windows, smoking automobiles, dingy working places, all should be the object of our fresh view Each of us must resolve that each day he will leave his home, his property, the public places of the city or town a little cleaner, a little better, a little more pleasant for himself and those around him.

Government policies would have to change:

In the future, government decisions as to where to build highways, locate airports, acquire land, or sell land should be made with a clear objective of aiding a balanced growth for America.

In particular, the Federal Government must be in a position to assist in the building of new cities and the rebuilding of old ones.

At the same time, we will carry our concern with the quality of life in America to the farm as well as the suburb, to the village as well as to the city We must create a new rural environment which will not only stem the migration to urban centers, but reverse it. If we seize our growth as a challenge, we can make the 1970's an historic period when by conscious choice we transformed our land into what we want it to become.

America, which has pioneered in the new abundance, and in the new technology, is called upon today to pioneer in meeting the concerns which have followed in their wake—in turning the wonders of science to the service of man.

After recounting his vision of an America of peace, prosperity, and environmental recovery, he said:

Let it not be recorded that we were the first American generation that had the means but not the vision to make this dream come true.

He called on Americans to “recognize a fundamental truth” that he described as:

We can be the best clothed, best fed, best housed people in the world, enjoying clean air, clean water, beautiful parks, but we could still be the unhappiest people in the world without an indefinable spirit—the lift of a driving dream which has made America, from its beginning, the hope of the world.

Above all, let us inspire young Americans with a sense of excitement, a sense of destiny, a sense of involvement, in meeting the challenges we face in this great period of our history. Only then are they going to have any sense of satisfaction in their lives.

The greatest privilege an individual can have is to serve in a cause bigger than himself. We

have such a cause.

The first meeting of CEQ took place in Chicago on February 6, 1970. President Nixon invited the Governors of Illinois, Indiana, Michigan, and Wisconsin to join him, CEQ, and the Cabinet Committee on the Environment to discuss the future of the Great Lakes. He followed up on February 10, 1970, with a special message to Congress on environmental quality. Among other things, the President called for:

- Cleaning up the Nation's waters.
- Improving the Nation's air, including standards published the same day to limit pollution from motor vehicles.
- Research into pollution-free automobiles in cooperation with private enterprise.
- Extension of the Solid Waste Disposal Act with emphasis on environmentally friendly packaging.

In a transmittal message, Nixon said:

The task of cleaning up our environment calls for a total effort by ourselves and by our next generation With vigorous Federal leadership, with active enlistment of governments at every level, with the aid of industry and private groups, and, above all, with the determined participation by individual citizens in every State and in every community, we at last will succeed in restoring the kind of environment we deserve.

He issued Executive Order 11514 on "Protection and enhancement of environmental quality" on March 5, 1970. It spelled out the responsibilities of CEQ and other Federal Agencies under NEPA, beginning with a policy statement:

The Federal Government shall provide leadership in protecting and enhancing the quality of the Nation's environment to sustain and enrich human life. Federal agencies shall initiate measures needed to direct their policies, plans and programs so as to meet national environmental goals. The Council on Environmental Quality, through the Chairman, shall advise and assist the President in leading this national effort.

In these and other ways, the Nixon Administration attempted to blunt the criticism that would be directed at the President during Earth Day.

Even as the President was proclaiming his concern about the environment, he was distancing himself from the subject internally. In March 1970, he dictated a memo listing the subjects he thought should occupy his time. He identified many domestic issues, including crime, school integration, and the economy, but explicitly excluded the environment. "I consider this to be important, [but] I don't want to be bothered with the details. Just see that the job is done." [Reeves, Richard, *President Nixon: Alone in the White House*, Simon and Schuster, 2001, p. 261, quoted in *Panda*, p. 80]

The buildup to Earth Day was pushing the Vietnam War to the background as the President implemented his Vietnamization policy of training the South Vietnamese to fight their war against

the North Vietnamese, so Americans could come home. Reporter Gladwin Hill of *The New York Times* observed that:

The campaign has been widely derided by campus radicals and black militants as a “white middle-class diversion” of public attention from the issues of Vietnam and racial equality By ironic coincidence, the Washington headquarters of the past year’s Vietnam protest demonstrations announced Sunday that it was closing up shop. It cited the Administration’s commitment to the withdrawal of the troops. [Hill, Gladwin, “Nation Set to Observe Earth Day,” *The New York Times*, April 21, 1970]

On April 22, 1970, an estimated 20 million Americans participated in Earth Day rallies, protests, teach-ins, and other events that brought together groups that had been fighting independently against oil spills, air and water pollution, nuclear power plants, freeways, and other contributors to environmental damage. So many Members of Congress were participating in Earth Day events that Congress was in recess. Rallies in Chicago, New York, Philadelphia, and other big cities attracted as many as 25,000 people in each location. Organizers claimed that more than 2,000 colleges, 10,000 public schools, and citizens groups in 2,000 communities participated.

Hill listed some of the diverse ways people celebrated Earth Day:

- At the Washington Monument in the Nation’s capital, 10,000 people joined in a rally that included a rock concert and distribution of litter bags. “There was a minimum of disorder, despite the fact that the unprecedented event owed its format in some degree to the fractious antiwar protests of recent years.”
- About 2,500 young people demonstrated at the Department of the Interior against oil leases on public lands. “They chanted, ‘Off the oil!’ ‘Stop the muck!’ and ‘Give earth a chance!’” (The latter adapted Beatle John Lennon’s antiwar slogan, “Give Peace a Chance.”)
- In Tacoma, Washington, “100 high school students rode down a freeway on horseback, demonstrating against automobile fumes.”
- A San Francisco group calling itself Environmental Vigilantes “dumped oil into a reflecting pool at the offices of the Standard Oil Company of California in a protest against oil slicks.”
- A citizens group collected 5 tons of litter along a 5-mile stretch of U.S. 50 in West Virginia, and “dumped the litter on the Harrison County courthouse steps in Clarksburg.”
- Students at the University of New Mexico in Albuquerque collected signatures “on a big plastic globe to present as an ‘enemy of the earth’ award to 28 state Senators accused of weakening a recent anti-pollution law.”
- At Georgetown University in Washington, Senator Birch Bayh (D-In.) called for creation of a “National Environmental Control Agency to conquer pollution as we have conquered space.”
- Former Vice President Humphrey, speaking at a high school in Bloomington, Minnesota, his home State, “urged that the United Nations establish a global agency to ‘strengthen, enforce and monitor pollution abatement throughout the world.’”
- Police in Boston arrested 15 young people at Logan International Airport “for blocking a corridor in a protest against the development of supersonic transport planes and their threat of ‘noise pollution.’”

- Senator Muskie addressed a crowd of 25,000 in Philadelphia, telling them, “A cleaner environment will cost heavily in forgone luxuries, in restricted choices, in higher prices for certain goods and services, and in hard decisions about our national priorities.” He added that the Nation was spending 20 times more on Vietnam than on fighting water pollution “and twice as much on the supersonic transport as we are to fight air pollution.”
- In Buffalo, members of the Common Council “paraded through the square at City Hall with brooms, shovels and a sanitation cart, symbolizing a community clean-up campaign.
- Former Interior Secretary Udall spoke at Michigan State University, donating his \$1,000 speaking fee to the sponsoring campus ecology group.

In some States, officials focused on environmental legislation:

- Governor James A. Rhodes of Ohio “lifted a partial ban on commercial fishing in Lake Erie.” The ban had been imposed “because of the discovery of concentrations of mercury in the water” but Governor Rhodes said that lifting the ban was warranted based on “new and more complete tests of fish samples.”
- Governor William T. Cahill of New Jersey “signed a law creating a state environmental protection agency.”
- New York Governor Nelson A. Rockefeller approved a measure “coordinating pollution abatement and conservation activities.”
- Governor Marvin Mandel of Maryland “signed 21 bills and legislative resolutions dealing with environmental controls. [“Hill, Gladwin, “Activity Ranges From Oratory to Legislation,” *The New York Times*, April 23, 1970]

A companion article by Nan Robertson reported on activities by other government officials:

Vast numbers of United States Senators and Representatives, some Cabinet and sub-Cabinet members and everyone on the President’s Environmental Quality Council were spread out across the nation today, mostly on campuses, talking about how to improve a rapidly deteriorating environment.

In their wake they left quantities of litter, composed of speech texts and statements distributed across Washington.

She provided examples:

- “There were speeches and panel discussions at the State Department, cosponsored by Christian Herter, Special Assistant to the Secretary of State for Environmental Affairs, and Philander Claxton, special Assistant for Population Matters.”
- The Department of Agriculture featured “speeches and films about the earth, unspoiled and despoiled.”
- Screenings of topical films at the Rayburn House Office Building included ““what a beautiful bird the pelican was before pesticides got to it.””
- Assistant Secretary of Health, Education and Welfare James Farmer “took the symbolic route” by planting a tree at the Department’s main building. “Then he recorded a 20-second

inspirational ‘actuality statement’ that people could dial on the telephone.”

- Dr. Myron Tribus, the Commerce Department’s Assistant Secretary for Science and Technology, participated in a conference call to an Indiana high school, suggesting “that the students might monitor noise pollution of rock ‘n’ roll music and hot rods with acoustical meters.”

Senator Nelson, Robertson reported, “spoke at three colleges in his home state today” and “hopped from the University of Wisconsin to Denver and Berkeley, Cal.”

President Nixon and his staff had debated whether he should participate in Earth Day, but decided against it:

President Nixon, through White House spokesmen, said he had said enough on his concern about pollution and hoped this one-day event would be the start of a continuing campaign against it.

Only two Cabinet Secretaries took part. Secretary Volpe attended an environmental teach-in at Johns Hopkins University in Baltimore. Robertson reported that:

A spokesman for Mr. Volpe said today: “The past sins of the transportation industry have come to rest on this Administration and on his head.” [Robertson, Nan, “Earth’s Day, Like Mother’s, Pulls Capital Together,” *The New York Times*, April 23, 1970]

Baltimore was in the midst of controversy over Interstate construction through the city. After his speech at Johns Hopkins University, Volpe spoke with a “Miss Barbara Mikulski” and other members of Movement Against Destruction (MAD). He agreed to return to the city to meet with MAD to discuss plans for the East-West Expressway (I-170) through southwest Baltimore. The expressway was to be a 2.3-mile spur of I-70. (I-70 was designated from I-15 in Cove Fort, Utah, past the Baltimore Beltway through Leakin and Gwynns Falls Parks to I-95 a mile west of the Inner Harbor in downtown Baltimore).

(The meeting took place on June 25, 1970, in a community center on Edmonson Avenue. About 100 expressway opponents—preservationists, clergymen, and concerned citizens—addressed Volpe after he had taken a helicopter tour of the area. Prior to 1969, the city planned to build the I-170 through Rosemont, described in *Baltimore Sun* articles as “formerly a stable, middle-class Negro neighborhood.” Planners had designated the community an “impacted” area, allowing them to purchase over 450 homes at a cost of more than \$4 million. In 1969, Mayor Thomas L. J. D’Alessandro III (1967-1971) decided not to build the route through the community, even though acquisitions continued. Now that the route was being shifted, the city planned to rehabilitate the Rosemont homes and sell them to owner-occupants.

(However, citizens in the way of the new location objected to the displacement of residents along an entire city block in the Franklin Street/Mulberry Street corridor. Mikulski called the displacements a “new refugeeism” that would leave residents with next to nothing (“out in the cold,” as one speaker put it). *The Baltimore Sun* reported that Volpe promised “no family will have their house torn down until they are relocated to a decent place to live.” The audience applauded

enthusiastically when Volpe “said that if roads ‘don’t serve the needs of the people, then we don’t need them’.” Members of MAD and other participants were cautiously satisfied with the meeting. “‘We were looking for a chance to present our side to Mr. Volpe,’ said Miss Mikulski, ‘since the Department of Transportation can always talk with city and state officials.’” [Barbash, Fred, “Volpe Might Delay City’s Expressway,” *The Baltimore Sun*, June 26, 1970; O’Donnell, John B., Jr., “‘Final’ Route for Highway is Announced,” *The Baltimore Sun*, July 21, 1970)]

[“Miss Barbara Mikulski,” a social worker and community activist, won election to the City Council in 1970 and the U.S. House of Representatives (1977-1987). In 1986, she won election to the United States Senate where she continues to serve. In speeches, she still speaks of her years battling Baltimore’s Interstate highways, helping to block, reroute, or alter them. Most of I-70 inside the Baltimore Beltway was withdrawn from the Interstate System. In 1979, a 1.4-mile, six-lane segment of I-170 was completed in the Franklin Street/Mulberry Street corridor, mostly depressed with high retaining walls. Because it no longer connected to the Interstate System, it was eventually deleted from the System and is designated part of U.S. 40.]

Secretary Hickel returned to Alaska for a teach-in at the University of Alaska. Flippen commented on the presentation:

Hickel’s topic did little to appease critics: support for the Alaskan oil pipeline, a major privately funded engineering project that required federal permits Hickel . . . wanted to use the opportunity to argue that construction posed no hazard.

While recognizing the subject would not be a popular topic on Earth Day, President Nixon approved Secretary Hickel’s speech because of concern about a possible fuel shortage that Alaskan oil might help alleviate.

As Flippen summarized:

Nixon made no statement or proclamation, although White House proclamations appeared that week for National Boating Week and National Archery Week. The speeches of the many participating subcabinet officials, of Whitaker, Train, [senior CEQ staff member William K.] Reilly, and other prominent individuals friendly to the White House reaped little coverage.

In all, the Nixon Administration’s limited efforts on Earth Day were not successful in deflecting criticism. Even when White House staffers participated in cleanup of the Potomac River, Flippen found, “the cleanup appeared to be a lame attempt to shield the administration from further rebuke, far from any genuine expression of concern.” He added:

With neither the major riot so many feared nor a significant Vietnam story, the media had more time to assess and critique the event, and the focus quickly turned to the administration. Ignoring the administration’s efforts, the headline declared neglect by the White House—the very criticism Nixon had hoped to avoid. His actions—or, more correctly, lack of action [on Earth Day]—ensured condemnation [*Nixon and the Environment*, p. 14-15]

As Flippen put it, however, the criticism, in the long run, “made no difference”:

On the night of April 30—only eight days after Earth Day—Nixon went on national television to announce his decision to send troops into Cambodia. It was not an “invasion,” Nixon assured his audience. The troops would leave once they had disrupted the enemy’s supply lines into neighboring Vietnam. “We will withdraw,” he promised. The following morning, speaking to supporters, Nixon made an offhand remark describing student protesters as “bums,” a slur the press readily quoted.

Protests erupted around the country:

Students at 450 colleges and universities immediately went on strike. In California, the situation was so bad that Governor Ronald Reagan ordered the entire statewide university system closed. On May 4 the blaze turned to conflagration as National Guard troops at Kent State University in Ohio opened fire on student protesters, killing four.

The entire episode shook Nixon and shocked the country. The United States appeared on the verge of revolution, and, as tempers flared, leaders called for calm. Nixon, unable to sleep early one morning, ventured out unannounced to protesters at the Lincoln memorial [on May 9], trying in vain to reach an accord. He cared for the same things they did, he explained, turning to his environmental agenda as evidence of a common nominator.

Protesters rejected the effort. “Nixon’s attempt to divert the handful of war protesters with his care for the environment had as little effect as Earth Day in diverting attention from the Cambodian attack.” The environment would fade from the foreground, for now, as protests over the war escalated. [*Nixon and the Environment*, p. 15-16] Five days after the Kent State shootings, 100,000 people were in Washington for an antiwar march. President Nixon was taken to Camp David for his own protection while the protesters swarmed through the city in what observers thought looked more like a civil war than a protest.

(Secretary of the Interior Hickel was angered by the invasion, partly because he believed it would alienate America’s youth after he had worked hard to bridge the gap with them. Hickel later recalled, “Earth Day raised expectations. The Cambodian invasion crushed them.” Hickel drafted a letter of protest to the President, but did not send it. However, the draft was released to the press by mistake, making him a hero of the antiwar movement and an enemy in the White House. After deciding not fire Hickel immediately, the President instructed his staff to be “extremely cold” to him and “encourage his enemies” behind the scenes by building him up “as incompetent.” Nixon fired the Secretary in November 1970. [*Nixon and the Environment*, p. 78-79])

Theodore H. White, writing in 1975, reported that, “Whether or not Richard Nixon came close to nervous breakdown in the events of May, 1970, is debated by his aides.” Before going to the Lincoln Memorial at 4:15 am on May 9, he had called dozens of people beginning around 10:35 pm—38 calls in a 3-hour period, including a call to Secretary Volpe.

Perhaps the outrage marked the end of “The Sixties,” the culmination of the anger that had grown

over the war until it supplanted “Flower Power” as a means of effecting change. White said:

Looking back now [1975], the firestorm of emotion that burst in the two weeks of May, 1970, may be seen as the last massive nationwide protest of the insurgency of the 1960’s. But those who had to meet it could not know it was the last crest of a receding tide. [White, Theodore H., *Breach of Faith: The Fall of Richard Nixon*, Athenium Publishers/Reader’s Digest Press, 1975, p. 130-131.

Or perhaps the end of “The Sixties” had come a few days before Earth Day, on April 10, when Paul McCartney announced he was leaving the Beatles and releasing his first solo album, titled *McCartney*. On May 8, 1970, the Beatles released their 12th and final album of new material, *Let It Be*. They had wanted to record it “live” to recapture some of the enthusiasm and spontaneity of their earlier years. On January 30, 1969, the band went to the rooftop of the Beatles’ Apple Building in London to record their last live concert, part of which would be included on the album and in the documentary film of the same name. (As depicted in the film, the concert ended at the direction of police officers responding to noise complaints.)

Symbolic of the internal dissention within the group, the Beatles had not been able to complete the album. They had asked producer Phil Spector, famous for his “wall of sound” girl group recordings, to try to pull an album out of the hours and hours of tapes. Spector’s version was the album released as *Let It Be*. Neither the Beatles nor critics were entirely satisfied with the result although years later, in 2003, *Rolling Stone* magazine included *Let It Be* as 86th on its list of the 500 greatest albums of all time. (In November 2003, McCartney oversaw revision of *Let It Be* to remove the Spector “wall of sound” background and released it as *Let It Be ... Naked*.)

Originally, the Beatles had planned to call the album *Get Back*, as if even the Beatles longed for a simpler time before the world they helped create began forcing them apart.

Reorganization Plan No. 3

In April 1969, President Nixon established an Advisory Council on Executive Organization. It was headed by Roy L. Ash, a cofounder of Litton Industries, a large defense contractor that built navigation, communications, and electronic equipment, as well as civilian products, including microwave ovens. The commission’s mission was to review the executive branch and recommend changes to improve government efficiency.

In November 1969, the President’s Domestic Council asked Ash to explore whether all Federal environmental activities should be shifted into a single agency. The President reiterated the charge in December.

On April 15, the Ash Commission, as it was known, submitted its report on executive reorganization to the President recommending creation of an Environmental Protection Agency (EPA). It was to be an independent body concerned with pollution abatement and monitoring, research, standard-setting, and enforcement of environmental laws. The commission also proposed expanding the Department of the Interior into a Department of Natural Resources (DNR), which would include an ocean agency to be called the National Oceanic and Atmospheric Administration

(NOAA) .

The EPA would pull together elements of three Cabinet Departments (Agriculture, Interior, and Health, Education, and Welfare), three Bureaus, three Administrations, two Councils, one Commission, and one Service. Although some of the agencies that would lose elements to EPA objected to the change, the President approved creation of EPA and NOAA as Reorganization Plan No. 3. (The President rejected the DNR component of the Ash Commission recommendations. According to Flippen, the President concluded “that it posed too unrealistic a disruption of the existing congressional committee structure.” [*Nixon and the Environment*, p. 86])

President Nixon announced Reorganization Plan No. 3 and submitted it to Congress on July 9, 1970. The advantages of an independent EPA, he said, justified “an exception to one of my own principles: that, as a matter of effective and orderly administration, additional new independent agencies normally should not be created.” He explained:

This reorganization would permit response to environmental problems in a manner beyond the previous capability of our pollution control programs. The EPA would have the capacity to do research on important pollutants irrespective of the media in which they appear, and on the impact of these pollutants on the total environment. Both by itself and together with other agencies, the EPA would monitor the condition of the environment—biological as well as physical. With these data, the EPA would be able to establish quantitative “environmental baselines” [that are] critical if we are to measure adequately the success or failure of our pollution abatement efforts.

As no disjointed array of separate programs can, the EPA would be able—in concert with the States—to set and enforce standards for air and water quality and for individual pollutants. This consolidation of pollution control authorities would help assure that we do not create new environmental problems in the process of controlling existing ones. Industries seeking to minimize the adverse impact of their activities on the environment would be assured of consistent standards covering the full range of their waste disposal problems. As the States develop and expand their own pollution control programs, they would be able to look to one agency to support their efforts with financial and technical assistance and training.

He also recommended creation of the NOAA.

By submitting the proposal as Reorganization Plan No. 3, not a request for legislative authority, the President enabled EPA to begin operations in 60 days unless Congress formally objected. The House Government Operations Subcommittee on Executive and Legislative Reorganization, chaired by Representative Chet Holifield (D-Ca.) held hearings on July 22, 23, and August 4, as did the Senate Government Operations Subcommittee on Executive Reorganization and Government Research, headed by Senator Abraham Ribicoff (D-Ct.) on July 28 and 29. Both committees issued reports in September supporting the reorganization plan.

With EPA set to open, President Nixon announced on November 6, 1970, that he intended to nominate William D. Ruckelshaus as the first Administrator. A graduate of Princeton University

and Harvard Law School, Ruckelshaus was Assistant Attorney General for the Civil Division in the Department of Justice at the time of his nomination. Appearing before the Senate Committee on Public Works during his confirmation hearings on December 1, he began by saying:

I think that enforcement is a very important function of this new Agency. Obviously, if we are to make progress in pollution abatement, we must have a firm enforcement policy at the federal level. That does not mean that this policy will be unfair, that it will not be evenhanded, but it does mean that it will be firm [A]s far as I view the mission of this Agency and my mission as its proposed Administrator, it is to be as forceful as the laws that Congress has provided, and to present . . . firm support [for]enforcement [by] the States.

Senator Muskie endorsed Ruckelshaus, telling him, “I hope that you pre-empt the title that has been tossed about loosely in recent years. I hope that you become known as Mr. Clean.”

The Senate confirmed the nomination.

In a suite of offices at 20th and L Streets, NW., in Washington, EPA opened for business on December 2, 1970. Ruckelshaus took the oath of office, administered by Chief Justice Warren Burger, on December 4 in the White House Briefing Room. President Nixon said:

We are very proud to have had him in the administration in a very distinguished assignment with the Justice Department over the past 2 years, and we are very proud to have him and his fine family here today to be present for this swearing-in ceremony.

I will only say this: An indication of how a man is going to handle himself in a difficult assignment is how he handles himself before the Senate when he is up for confirmation. Having seen Mr. Ruckelshaus take the best shots that could be given by the very constructive critics in the Senate who were trying to be sure that he was qualified for this job, I think we have here the best man for this new job that we could find.

It is in that spirit that I am very proud to have him sworn in as the first head of the Environmental Protection Agency.

Ruckelshaus served as Administrator until April 30, 1973, when he left to become Director of the Federal Bureau of Investigation. He is widely praised for his independence at EPA and for his role in securing approval of environmental laws, rules, and regulations, including 1970 amendments to the Clean Air Act, the Resource Recovery Act of 1970, the Federal Environmental Pesticides Control Act of 1972, and many other measures. He was succeeded by Russell Train (September 13, 1973 to January 20, 1977).

(After Administrator Anne M. Burford (May 20, 1981, to March 9, 1983) resigned in the wake of controversies about her service, President Reagan nominated Ruckelshaus for a second term as head of the EPA. “Mr. Clean” served from May 18, 1983, to January 4, 1985, helping to restore the EPA’s flagging reputation.)

[This section was based in part on “The Birth of EPA” by Jack Lewis (*EPA Journal*, November

1985), and “The Guardian: Origins of the EPA” (EPA Historical Publication-1, Spring 1992), both of which can be found on EPA’s Web site at <http://www.epa.gov/history/origins.htm>.]

FHWA Goes on the Offense

Throughout the 1960’s, the highway community believed it was being unfairly targeted by critics who were delaying the important work for short-sighted, even selfish, reasons. In late 1969, FHWA launched an extensive counter-initiative of speeches, editorials, letters to the editor, and press releases to rebut what Director of Public Roads Ralph R. Bartelsmeyer called “the often repeated canard that the highway builder has but one mission – to bulldoze everything in sight,” as he put it during a “public information workshop” at Hotel Utah in Salt Lake City on May 6, 1970. [Brunsmann, Frank, “U.S. Highway Chief Attacks Negative Image of Builders,” *Salt Lake City Tribune*, May 7, 1970]

While top level officials fanned out across the country for speeches, FHWA issued a series of press releases touting environmental initiatives. One of the earliest releases, dated December 16, 1969, described how construction of a four-lane bridge across the Tennessee River near Decatur, Alabama, had been halted until March 1 because 65,000 ducks and geese from the northland had settled in for the winter at Wheeler National Wildlife Refuge. The release added, “the bridge builders have put their pile drivers and jackhammers into hibernation.”

Secretary Volpe contributed to the campaign on December 28, 1969, in a press release citing construction of I-80 through Nebraska and I-94 in North Dakota as examples of highway construction offered opportunities “for improving the quality of our lives . . . out in the great open spaces of rural America.” By impounding water along the Interstates, officials had created camping and fishing sites for recreational use. Volpe summed it up:

In these days when the public is more interested than ever before in ecology and environment, the highway program, as demonstrated in North Dakota and Nebraska, can play an important role in making our country a better and more attractive place in which to live.

A sampling of FHWA press releases from the campaign includes:

- The “basketball star of tomorrow” could practice how to dribble, pass, and shoot “because an Interstate highway came through his neighborhood” in the form of an elevated freeway with a basketball court laid out underneath. [February 16, 1970]
- Approximately 100 acres of swamp land were set aside as a bird sanctuary in the median of the Southern Tier Expressway in Tioga County, New York. [March 9, 1970]
- A freeway link between I-91 and I-95 in Connecticut was to run through Round Meadow Swamp, “one of the few remaining breeding grounds for migratory wild fowl in the State.” Instead, the Connecticut Highway Department, “heeding the pleas of naturalists and bird lovers,” located the road around the edges of the swamp. [April 26, 1970]
- I-75 “will take an unplanned swerve as it rolls out of Tampa, Florida . . . to avoid disturbing an eagles nest in the top of a 50-foot pine tree.” [April 29, 1970]
- Motorists on I-66 through historic Thoroughfare Gap in Virginia will pass Beverley’s Mill,

dating to 1749 (rebuilt in 1858) “only because of a cooperative effort on the part of conservationists and Federal and State highway officials” to preserve it. [May 24, 1970]

- As in Nebraska and North Dakota, highway officials in Minnesota were using “borrow pits,” created when material was removed for highway construction, to create ponds or marshes for wildlife, including ducks, geese, shorebirds, great blue herons, and mink and muskrat. [May 31, 1970]
- Construction of I-70 just west of Denver resulted in a monumental art work while cutting through the prominent terrain feature called the Hogback. [June 14, 1970]
- While relocating State Route 10 near the Ohio River, Kentucky highway officials shifted about 5,000 feet of the new roadway to avoid one of the largest pin oak trees in the State (58 feet high). [August 17, 1970]

One of the centerpieces of the campaign was a report on *Benefits of Interstate Highways* released in June 1970. It began:

Interstate and other highways influence the growth of the economy by improving mobility for economic and social activities. Benefits of the Interstate System include those received by people while using highways and benefits accruing to people and communities indirectly, as a consequence of highway use.

The report documented savings in travel time, operating costs, accident reduction, and goods movement. It also described general economic and community benefits, such as increase land use and value, industrial and commercial effects, opportunities for community change, and new towns and economic growth. The report documented what Administrator Turner and other officials had said many times: that the motorist on the Interstate Highway System is “probably the only taxpayer who gets his dollar back, with interest.”

Despite FHWA’s year-long campaign, the canard cited by Bartelsmeyer would remain the prevailing view.

NEPA and the Transition to Environmental Stewardship

According to Train, the first Chairman of CEQ, implementation of the NEPA requirement that agencies prepare environmental impact statements left many executive branch agencies confused:

A number of agencies, such as the Federal Highway Administration, did their best to avoid compliance. Others argued that the environmental impact analysis should be conducted not by the agency in question but by CEQ itself. We maintained successfully and, after all, with the support of the statute, that the environmental impact analysis process had to be an *integral* part of the agencies’ own decision making and not something imposed from outside. [Train, p. 90, emphasis in original]

On January 22, 1970, Administrator Frank Turner (1969-1972), the only career BPR/FHWA employee to rise to the top of the organization, addressed the 25th annual meeting of the National Limestone Institute in Washington. NEPA was the first topic he raised. “It was significant,” he said, that “President Nixon took the first day of this decade, New Year’s Day, to sign the National

Environmental Policy Act.” The concern and urgency the President expressed “are shared these days not only by environmental experts but by a majority of our citizens.” He added:

We in the highway program are, and have been, well aware of this concern and the implications it has for our future.

Our Nation—whether in its cities or its rural areas—cannot live without transportation, and highways provide the overwhelming proportion of that transportation. But highways can and must be made compatible with and enhance the environment, at the same time that they provide essential transportation services.

Furthermore, we must be concerned not only with problems of the physical environment, but also with what might be called the social environment—with the interaction of highways and people, with a highway’s impact on individuals and communities.

He acknowledged that these sentiments “may sound to you like an unusual way to introduce a discussion of highway needs.” He explained:

But it is obvious that our future highway needs and the ways to meet them cannot be considered in a void, insulated from the rest of our society. Highway transportation, more than any other form of transportation, provides the facilities and the services that will enable the American society of the 1970’s to function. And highway planning, highway decision-making, and highway construction must be done in the midst of that society, in the real world where people live and work and spend their leisure It is not a challenge to be viewed with dismay nor timidity, for we have built up many resources over the years in the highway program and are far better equipped to meet the situation than some people would have you believe.

He did not want anyone to think this concern was new. He cited the continuing, comprehensive, cooperative transportation planning process required by the Federal-Aid Highway Act of 1962 (“For the first time all municipalities were forced to face up to and do something about the need for areawide urban land use planning—since transportation is based on land use planning.”) Serious effort had been devoted in recent years to “the problem of identifying community goals in order to make highway planning, location and design more responsive to the social and environmental as well as the economic values of the community.” A long-list of socio-economic concerns had been identified for consideration while locating highways:

To refer to only some of these as illustrations for example, we insist upon early consultation with interested agencies, such as those responsible for fish and wildlife, historic preservation, and parks and recreation. Early consultation offers the best promise for accommodating other public interests and for satisfactory resolution of differences that too often become polarized when confronted at a later date.

Public hearings on highway projects, he said, had been underway for 20 years “to obtain citizen acceptance through early and active involvement and participation of local communities in the highway location and design process.” Turner also cited joint development (using the space above

or below highways for other facilities, such as playgrounds under elevated freeways, or buildings constructed over a highway) and improvements in housing for those displaced by highway projects. He continued:

I want to make it clear that we in the highway program recognize our social responsibilities and are doing something about them. We are as concerned with the social impact of our program as we are with its economic impact. We know that we must discharge our social responsibilities if we are to meet our fundamental responsibilities of serving the transportation needs of the Nation.

In this presentation, soon after NEPA became law, Turner did not mention environmental review of individual projects. He implied that FHWA was already addressing the concerns NEPA was designed to correct—almost as if no change would be needed.

On April 30, 1970, CEQ issued interim guidelines on implementing NEPA's environmental review requirements. The guidelines, which appeared in the *Federal Register* on May 12, 1970, explained that Section 102 applied to all Federal Agencies and that the phrase "to the fullest extent possible" added by the House "is meant to make clear that each agency of the Federal Government shall comply with the requirement unless existing law applicable to the agency's operations expressly prohibits or makes compliance impossible." [35 FR 7391]

The interim guidelines explained how reviews should be conducted, including the content of environmental statements. CEQ also explained the phrase "major Federal actions significantly affecting the quality of the human environment" by saying:

The statutory clause . . . is to be construed by agencies with a view to the overall, cumulative impact of the action proposed (and of further actions contemplated). Such actions may be localized in their impact, but if there is potential that the environment may be significantly affected, the statement is to be prepared. Proposed actions the environmental impact of which is likely to be highly controversial should be covered in all cases. In considering what constitutes major action significantly affecting the environment, agencies should bear in mind that the effect of many Federal decisions about a project or complex of projects can be individually limited but cumulatively considerable.

DOT Order 5610.1, issued on October 7, 1970, outlined procedures for preparing environmental statements under "the NEP Act." It also set procedures for considering Section 4(f) issues during the environmental review. Consistent with CEQ's interim guidelines, the order distinguished among projects based on whether they were "major Federal actions significantly affecting the quality of the human environment."

The phrase "significantly affecting" meant "any action that is likely to be highly controversial on environmental grounds" and any matter falling under Section 4(f) of the DOT Act or Section 16 of the Airport Act. Effects that would likely be considered significant included increasing ambient noise levels; displacing large numbers of people; disrupting an established community or affecting aesthetic or visual effects or areas of unique interest or scenic beauty. In addition, effects included significantly altering the pattern of behavior for a species or interfering with important breeding,

nesting, or feeding grounds; significantly increasing air or water pollution; disturbing the ecological balance of a land or water area; or involving a reasonable possibility of contaminating a public water supply source, treatment facility, or distribution system.

If these conditions did not apply to the Federal action, officials were to prepare a negative declaration:

Any proposal for an action to which this order is applicable . . . will include either a statement as required by Section 102(2)(C) of the NEP Act or a declaration that the proposed action will not have a significant impact on the environment. Negative declarations need not be coordinated outside the originating agency.

Because determining whether impacts would be significant could be subjective, officials were to keep this instruction in mind:

When there is doubt whether or not to prepare a statement it should be prepared. Where the environmental consequences of a proposed action are unclear but potentially significant, a statement should be prepared.

On November 30, 1970, FHWA's Associate Administrator for Right-of-Way and Environment, John A. Swanson, issued an FHWA Notice containing draft guidelines for implementing NEPA. Although he sought comments on the guidelines for consideration while drafting the final instructions, he stated that the State highway departments "should be requested to immediately begin implementation of the draft guidelines." He added that the final implementation guidelines would incorporate instructions for implementing Section 4(f) as part of the review process. The guidelines retained the concept of a Negative Declaration.

The FHWA implemented the guidelines by issuing Policy and Procedure Memorandum (PPM) 90-1, titled "Environmental Impact and Related Statements," on August 24, 1971. The NEPA evaluation would apply to an "Agency Decision," namely "approval of the location of a highway improvement." Additional reviews under NEPA would not be necessary for later stages, such as design or right-of-way acquisition. An environmental statement would be prepared to assess the "anticipated beneficial and detrimental effects which the agency decision may have upon the quality of the human environment," but a "Negative Declaration" could be prepared if "the anticipated effects upon the human environment will not be significant."

The PPM described the steps in the review and assigned responsibility to Regional Federal Highway Administrators, who oversaw several States, for approving the final environmental statements. Approval would occur only after concurrence by DOT's Office of Environmental and Urban Systems.

On August 1, 1973, CEQ promulgated revised guidelines for preparing environmental impact statements. [38 FR 20550] The guidelines required Federal Agencies to revise their NEPA procedures to incorporate the changes and publish drafts of their new procedures in the *Federal Register* for comment before October 30, 1973. FHWA issued a Notice of Proposed Rulemaking in the *Federal Register* on November 1, 1973, advising that it proposed to codify PPM 90-1 as Part

771 of Title 23, Code of Federal Regulations (CFR), titled “Environmental Impact and Related Statements.” [38 FR 30192] The Final Rule establishing 23 CFR 771 was published on December 2, 1974. [39 FR 41801].

CEQ’s 1973 guidelines remained in effect until revised regulations were approved effective July 30, 1979. The *Federal Register* notice stated:

Although the Council conceived of the [1973] Guidelines as non-discretionary standards for agency decisionmaking, some agencies viewed them as advisory only. Similarly, courts differed over the weight which should be accorded the Guidelines in evaluating agency compliance with the statute.

The result has been an evolution of inconsistent agency practices and interpretations of the law. The lack of a uniform, government-wide approach to implementing NEPA has impeded Federal coordination and made it more difficult for those outside government to understand and participate in the environmental review process. It has also caused unnecessary duplication, delay and paperwork. [43 FR 55978]

The new guidelines emerged from these concerns, as well as the need to provide guidance on other elements of Section 102 of NEPA involving agency planning and decisionmaking.

After CEQ issued its new NEPA regulations, DOT issued DOT Order 5610.C for comment on May 31, 1979 [44 FR 31341] and in final form on October 1, 1979 [44 FR 56420]. The CEQ regulations and DOT Order encouraged operating administrations such as FHWA and the Urban Mass Transportation Administration (UMTA) to develop implementing procedures consistent with their operating procedures. FHWA and UMTA began developing separate regulations covering their programs. However, the two Agencies decided to develop a single coordinated regulation to reduce red tape for applicants and enhance consideration of alternatives developed as part of the environmental review process. The final rule was published in the *Federal Register* on October 30, 1980. [45 FR 71966] (The current version of the regulation was published in the *Federal Register* on August 28, 1987. [52 FR 32660]).

A Field Perspective

On January 4-5, 1972, about 2 years after President Nixon signed NEPA, FHWA participated in a Conference on Environmental Impact Analysis in Green Bay, Wisconsin. John J. Kessler, FHWA’s Assistant Division Engineer in Madison, Wisconsin, represented the agency. He described the Federal-aid highway program, including construction of the Interstate System, explaining:

To relate the immensity of this public works program to the Environmental Policy Act, more than half of all the environmental statements that have been submitted to the Council on Environmental Quality from all the Federal agencies have come from FHWA.

He explained that DOT, like other Departments, faced several problems with NEPA, such as the broad language of the law (“major Federal actions significantly affecting the quality of the human

environment”)—“What is major? What is a significant effect upon the environment?”

Another problem was what to do with projects nearly at the end of the pipeline:

It may surprise some of you to learn that for major projects in urban areas, the time from the beginning of project planning to the time of construction often covers a period of ten years or more. While that may defy rational explanation, it is nevertheless factual. So on January 1, 1970 when NEPA became law, there were projects nearing the end of the pipeline which for all practical purposes represented an irreversible commitment of resources.

In PPM 90-1, FHWA had established a cut-off date of February 1, 1971:

If on that date a project had advanced to the point of having received design approval . . . preparation of an environmental statement would not be required. Nevertheless such projects had to be re-evaluated to assure that the projects were developed in a manner that would minimize adverse environmental consequences.

He outlined the approval authority for FHWA projects, pointing out that the Secretary had delegated all operational authority to FHWA except for NEPA and Section 4(f):

Since these exceptions are the only exceptions to the Administrator’s authority, I believe they bear witness to the importance placed upon environmental consideration by Secretary Volpe.

In the initial reaction to NEPA among the States, Kessler said “there was initially some inertia to overcome.” He also found a feeling in those early months “that FHWA didn’t really mean it when we indicated that we could not give project approvals until the environmental requirements had been satisfied, or, even if we did mean it, a feeling that FHWA was being unnecessarily bureaucratic in its implementation of the law.”

As for the impact statements, Kessler summarized several deficiencies that were common among the States. One was “a tendency . . . to emphasize the beneficial effects of highways and to minimize describing the adverse effects” as a way “to justify prior decisions.” Kessler believed that States were increasingly “telling it like it is” in accordance with “the adage that you can’t make an omelet without breaking an egg.”

Another problem was that the State highway departments were, like FHWA, basically engineering organizations. The result was that “the language of statements has been that of one engineer talking to another” even though they would be reviewed “by others in disciplines normally not exposed to engineering terminology.” He added that “the quality of statements has already shown signs of improvement” in this area.

One problem that “will continue to plague us” is that other agencies, the public, and “even the courts” did not understand the project development process. At the point of corridor approval, they expected to review “project details [that] are as yet undeveloped at this stage.” If such details were available, Kessler said, “FHWA and the States [would] run the risk of being accused of having

already irreversibly committed ourselves to a project.

The States also had been criticized for piece-mealing, “that is, the submission of short project segments rather than submission of a statement covering a longer segment of highway” that was controlled by the shorter segment and “may have significant environmental impact.” Because this issue was related mainly to projects late in the pipeline, “the cause should vanish with the passage of time.”

Moreover, FHWA, like other Federal Agencies, was subject to “the Office of Management and Budget’s directive to not only reduce manpower but to concurrently lower personnel grade levels. He did not elaborate on this point, but said that under such conditions, “the full spirit and intent of NEPA” can be achieved only “at the expense of other desirable programs.”

Recent court rulings were causing concern as well. “In effect, the courts are saying FHWA does not have the authority to exempt from application those projects which received design approval prior to February, 1971.” Kessler considered this ruling unrealistic “or if it is not, then the legislation is in need of revision.” Another worrisome ruling had been issued by the U.S. District Court for the Western District of Wisconsin just a month earlier. The court had ordered a project under construction to be halted “on the basis that an environmental statement was required and had not been prepared.” While the cost of delay was estimated to be several thousand dollars a day, the plaintiffs were “five individual citizens who were not required to post bond by the court.” He continued:

Not only have the recent court decisions been disturbing, but the number of court cases in which Federal highway officials have been named as defendants is increasing at an alarming rate. Last year no less than twenty-four court suits were initiated. Moreover, we believe that we are seeing only the first phase of legal actions—those which are based upon non-compliance with Federal law or procedures. We anticipate that the second phase will consist of legal challenges to the procedures themselves, or to the adequacy of environmental statements.

In short, “it behooves us to prepare statements that will withstand any such challenge.” The challenge of doing so was reflected in the fact that “FHWA has been processing statements at a rate of approximately 1,800 per year nationwide,” although he expected the total to drop to 500 a year.

Kessler concluded:

In summary, after two years of labor and learning, we are a little torn and tattered and in some cases perhaps a little bloodied, but we have survived. It is unfortunate that in some instances individuals, for totally selfish reasons, have used NEPA solely as a vehicle by which to stop projects with which they disagreed. But on balance, and once the projects now in the pipeline are completed, I believe that NEPA will help us to produce an even better product for the public. At the very least, fulfilling the requirements of NEPA should help to convince the public that what we are doing is in the best public interest or, failing that, it should at least establish that full consideration was given to environmental factors . . .

Our only hope is that we will be permitted to pursue that noble goal [of preserving and enhancing the environment] as reasonable men. We have none but the public interest at stake. [Kessler, John J., "The Federal Highway Administration," *Environmental Impact Analysis: Philosophy and Methods*, Ditton, Robert b. and Goodale, Thomas I, editors, University of Wisconsin Sea Grant Program, 1972, p. 45-52]

Adapting to NEPA

As reflected in Kessler's presentation, the transition to the new requirements was gradual, reflecting a wearing down of early resistance. In June 1973, the Center for Science in the Public Interest released its analysis of environmental impact statements issued by highway departments and found that they exaggerated the importance of the projects, minimized harmful effects, and neglected consideration of alternatives. "The impact statements surveyed contain arguments rather than findings, opinions rather than studies, and generalities rather than facts." They also contained standard language to assess impacts in widely divergent parts of the country.

Of the 76 statements reviewed, the center found that 13 percent did not mention air pollution, 18 percent did not discuss noise pollution, 34 percent did not consider community disruption, and 86 percent did not consider mass transit alternatives. The report also cited frequent use of stereotyped assertions on subjects "that require careful analysis." For example, the statements often claimed the project would reduce congestion in cities by speeding up traffic flow. The center countered that:

In the long run, they induce a larger number of people to buy and use automobiles as their major mode of travel. This increases congestion and stop-and-go traffic.

The center also disputed stereotyped safety claims included in the documents, as well as claims of increased tax revenue and economic benefits stemming from building highways. [Dilts, James D., "Reports on highway impact less than complete, group finds," *The Baltimore Sun*, June 11, 1973]

Despite the early resistance within the highway community, the 1970's would be a transition decade as early resistance was overcome and environmental stewardship became ingrained in the FHWA and the State highway agencies as they evolved into State departments of transportation. NEPA would help by finally providing a consistent nationwide framework, accepted by pro- and anti-highway forces, for resolving controversies about individual projects.

Another consequence of NEPA and other environmental laws was litigation. However, NEPA, Section 4(f), the public hearing requirements, and many other laws do not contain judicial review provisions of their own. The basis for legal challenges to Federal-aid highway projects is the Administrative Procedure Act (APA) of 1948. As Deputy Chief Counsel Edward V.A. Kussy of the FHWA explained:

Much of the APA's power lies in the fact that it establishes the standards for the manner in which the federal government makes decisions and for the judicial review of those decisions. The APA applies to both formal and informal decision making. Formal decision

making is found in the quasijudicial decision making of government comments, such as the ICC [Interstate Commerce Commission], that before making many of their decisions must seek input from many sources All of the federal decisions involving the administration of the Federal-Aid Highway Program are “informal.”

For informal decisions, the APA sets a baseline for decisions that requires that they may not be “arbitrary and capricious,” an “abuse of discretion,” or “contrary to law.” Courts have consistently held that this means that to make decisions properly, a federal decision maker must be able to demonstrate in the written record supporting his or her decision that (a) he or she understood the legal standard that applied to the decision, (b) he or she applied that standard to the decision, and (c) the decision was reasonable in light of the record before the decision maker. APA makes clear that courts are to apply a deferential standard when reviewing agency decisions. That is, if there is any reasonable basis on which to uphold a particular decision, a court must do so. If the decision is procedurally flawed, then it will often be overturned.

Kussy said of NEPA litigation:

The entire body of more than 6,000 NEPA cases [government-wide] is based on the proposition that a procedurally imperfect environmental review record cannot support a decision sustainable under the APA. Thus, if NEPA procedures are not followed correctly in supporting a particular federal action, the approval of that action is “arbitrary and capricious” and “contrary to law” and can, therefore, be set aside. The agency decision maker remains free under the APA to go back and remake the decision once the procedural error is corrected. [Kussy, Edward V.A., “Surface Transportation and Administrative Law: Growing Up Together in the 20th Century,” TRB Distinguished Lecture, *Transportation Law Issues*, Transportation Research Record 1527, Transportation Research Board, 1996, p. 8.]

If Congress did not initially understand the importance of NEPA’s action-forcing mechanism, the environmental community quickly made clear that it understood. Within a year, litigation had blocked construction of the Calvert Cliffs Nuclear Power Plant along the Chesapeake Bay in Calvert County, Maryland. In a 1971 decision, Judge J. Skelly Wright of the United States Court of Appeals, District of Columbia Circuit, criticized the Atomic Energy Commission for its “crabbed interpretation” of the environmental review process as a set of hoops to jump through:

We conclude, then, that Section 102 of NEPA mandates a particular sort of careful and informed decisionmaking process and creates judicially enforceable duties. The reviewing courts probably cannot reverse a substantive decision on its merits, under Section 101, unless it be shown that the actual balance of costs and benefits that was struck was arbitrary or clearly gave insufficient weight to environmental values. But if the decision was reached procedurally without individualized consideration and balancing of environmental factors—conducted fully and in good faith—it is the responsibility of the courts to reverse.

Judge Wright added that, “Our duty, in short, is to see that important legislative purposes, heralded in the halls of Congress, are not lost or misdirected in the vast hallways of the federal

bureaucracy.” [Calvert Cliffs’ Coordinating Committee v. AEC, 449 F.2d 1109, 1112, 1 ELR 20346, 20349 (D.C. Cir. 1971)]

Hereafter, agencies would have to balance judgments on a case-by-case basis, for example by modifying projects, delaying them, or canceling them to protect the environment. (Following additional environmental review, the nuclear plant began operation in 1975.)

Highway opponents now had the APA and Federal environmental laws—NEPA, Section 4(f), and many others—they could use as the basis for lawsuits. The courts soon became arbiters of whether highway agencies had developed a project in accordance with Federal requirements and the process established to follow them. The individual citizens—the mom-and-pop business owners, the homeowners, the apartment dwellers—who had led the protests in the 1960’s were soon replaced by national environmental organizations, law clinics, and law firms specializing in environmental law that launched a wave of litigation to block a wide range of Federal and federally funded projects, including highways. Individuals became the damaged parties cited as plaintiffs so the environmental organization had standing to file the suit.

What may have been the first court ruling on a highway project under NEPA occurred on April 8, 1971. It involved a plan for I-90 to bypass North Bend, Washington, a town that was platted in 1889 as a center for loggers and sawmill workers from nearby camps and mills in the bend where the South Fork of the Snoqualmie River swings north. The suit sought an injunction enjoining highway officials from proceeding with the project. The claim was that the Washington State Department of Highways (DOH) and FHWA had not complied with the interim guidelines the DOT had issued on October 7, 1970, for implementing NEPA. The project had been under development since the 1950’s, with the first public corridor hearing in April 1957, a second hearing in December 1969, and a third in September 1970. In addition to meeting with and consulting local officials and other interested agencies, groups, and individual, the DOH had issued an environmental report on the Upper Snoqualmie Valley and an advanced planning study from West Snoqualmie to Tanner.

Following release of the interim DOT guidelines, the State had prepared a draft environmental statement, on the basis of which FHWA approved the location on November 30, 1970, shortly after FHWA issue the draft of its interim guidelines on November 24. The plaintiffs objected that because a draft environmental statement had not been prepared before the third corridor hearing, public comments on it were not part of the decisionmaking process as contemplated by NEPA. Further, the plaintiffs objected to approval of the location before a final environmental statement.

In *George and Mary Daly et al., v. John A. Volpe et al.*, District Judge J. Beeks acknowledged that the project had not proceeded in strict compliance with the guidelines:

I am of the opinion, however, that there has been substantial compliance with the policies underlying NEPA and its implementing regulations. As applied to highway projects, the purpose of preparing an environmental statement and circulating it among interested agencies is to insure careful analysis of the effects the highway may have upon the environment. The extensive correspondence, consultations, meetings and hearings held with respect to this project, together with the two studies prepared analyzing the several

proposed routes, convinces me that the objectives of NEPA have been achieved, and that any failure of exact compliance with the Interim Guidelines was non-prejudicial. Accordingly, I find that plaintiffs have not established a probability of eventual success on the merits, a prerequisite for issuance of a preliminary injunction.

In addition, I am of the opinion that injury to the community of North Bend and to the citizens of the State of Washington by further delaying construction of the highway, will far outweigh any injury plaintiffs might sustain by allowing defendants to continue with this long delayed project.

As for the city of North Bend, it rebounded from being bypassed. Thanks to I-90, it has become an upscale bedroom community for Seattle. From a population of about 1,000 in 1970, it has grown to nearly 5,000 residents today. The city's Web site emphasizes its link to I-90 and the recreational opportunities that drivers will find if they travel the Interstate:

North Bend is located just 30 miles east of Seattle on Interstate-90. The City sits at the heart of an impressive array of year-round recreational opportunities including hiking, bicycling, kayaking, fishing, climbing and skiing. Surrounded by stunning vistas of Mount Si, Rattlesnake Ridge and the Cascade Mountains, North Bend charms with its Historic Downtown and offers an eclectic mix of dining and shopping, including the Factory Outlet Mall and its breathtaking views.

(The city also was one of the locations (along with nearby Snoqualmie) used for the filming of the ABC television drama *Twin Peaks*, director David Lynch's cult classic about attempts to unravel the mystery behind the death of a popular teenager, Laura Palmer. The show was one of the top shows its first season (beginning April 8, 1990), but after the mystery was resolved in the middle of the second season, the show became more obscure and convoluted, leading to declining viewership and greater cult potential. The show was canceled at the end of its second season, with the last episode airing on June 10, 1991.)

Although this early ruling favored the road builders, the highway community soon learned that litigation could delay, if not block, highway projects. In a case involving the Texas proposal to build U.S. 281 through Brackenridge-Olmos Parklands in San Antonio, the United States Court of Appeals, Fifth Circuit, ruled on September 21, 1971, regarding several State claims, including a claim that NEPA did not apply to Federal-aid highway projects. The court's ruling in *Named Individual Members of the San Antonio Conservation Society, et al., v. The Texas Highway Department et al., and the United States Department of Transportation, et al.*, summarized one aspect of the State's rationale:

The State argues [an environmental statement was not] required because (a) federal authorization of a federal-aid highway is not a 'recommendation' within the meaning of section 102(2); (b) there is no one for the Secretary to make his report or recommendation to; and (c) 'approval of a section of a roadway in Texas' is not a major federal action within the meaning of the statute.

The court dismissed each of these arguments based on the legislative history of NEPA and the

statutory language. “That federal-aid highways were among the federal actions affecting the human environment, and therefore covered by the Act” could be seen from the hearings and debates. In particular, he cited the reference to “superhighways” in the footnote that Senator Jackson had included in his report on the legislative history of NEPA. Moreover, the court added, DOT had testified at hearings on the bill. Regarding recommendations, DOT was required to make environmental statements available to CEQ. The fact that the project was estimated to cost \$18 million left the court with “no difficulty in characterizing a project of this size as ‘major.’”

The court declined to “de-federalize” the project so the State could proceed with its own funding, free of NEPA, Section 4(f), and other Federal requirements. “If we were to accept [this argument],”

the ruling stated, “we would be giving approval to the circumvention of an Act of Congress.”

(Despite this ruling, Senator Lloyd Bentsen (D-Tx.) succeeded in adding Section 154 ("Termination of Federal-Aid Relationship") to the Federal-Aid Highway Act of 1973. Section 154 stated that "the contractual relationship" with the Federal Government for the San Antonio North Expressway between I-35 and Interstate Loop 410 "shall be ended," with Texas returning Federal-aid funds to the United States Treasury. To be absolutely clear, Section 154 continued: "the expressway shall cease to be a Federal-aid project." This provision allowed Texas to complete U.S. 281 without Federal-aid funding and the Section 4(f) and NEPA strings that came with it. The Walter McAllister Freeway, named after a former Mayor, opened on February 7, 1978.

As this ruling would suggest, highway officials learned that the best defense was to follow the procedures put in place in the wake of NEPA and the other Federal and State environmental laws that had been enacted since *Silent Spring*. The highway agencies that had once considered themselves premiere engineering organizations soon found their transportation departments staffed with ecologists, biologists, planners, and a wide range of other specialists who could help work through the thickets of environmental law. Gradually, the specialists would play a growing role in agencies that would no longer see themselves as engineering organizations. (In 1974, FHWA changed the title of its top State officials from Division Engineers to Division Administrators, reflecting their changed role.)

Kussy estimated that of the 6,000 NEPA cases filed government-wide as of 1996, 10 percent involved the Federal-aid highway program. One of those cases resulted in an amendment to NEPA. *Conservation Society of Southern Vermont v. Secretary of Transportation* (531 F.2d 637 (2nd Cir.1976) involved a 20-mile segment of U.S. 7 between Bennington and Manchester, Vermont, and a related case involving construction of the Sleepers River Interchange on I-91 in St. Johnsbury, Vermont. On December 11, 1974, the U.S. Court of Appeals for the Second Circuit ruled that only Federal officials could prepare an environmental impact statement. States could not do so under NEPA because the law specified that Federal Agencies must do so. According to Kussy, “This ruling led to a shutdown of all federal-aid highway projects in the Second Circuit” (Connecticut, New York, and Vermont). [Kussy, p. 12]

In developing the action-forcing mechanism in NEPA, Professor Caldwell and Senator Jackson had contemplated Federal projects, such as river projects and locks constructed by the U.S. Army Corps of Engineers, not the Federal-aid concept of Federal assistance to help States develop projects. The correction, included in Public Law 94-52, approved July 3, 1975, modified Section 102(2)(D), which originally read:

[all agencies of the Federal Government shall--] study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.

As amended, the provision now provided that:

Any detailed statement required under subparagraph (c) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or officials, if

It continued established conditions for State preparation of the statement if, for example, the “State agency or official has statewide jurisdiction and has the responsibility for such action,” “the responsible Federal official furnishes guidance and participates in such preparation,” and “the responsible Federal official independently evaluates such statement prior to its approval and adoption.” After reaffirming the Federal officials’ responsibility “for the scope, objectivity, and content of the entire statement,” the amendment concluded that “this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.”

A Competing Requirement

Despite enactment of NEPA on January 1, 1970, with its action-forcing mechanism, the Senate Committee on Public Works decided to address review of highway projects. Even before the DOT had issued guidance on implementing NEPA, the committee’s version of the 2-year Federal-Aid Highway Act of 1970 contained a provision on “Economic, Social, Environmental, and Other Impacts.” Discussing the provision contained in Section 9 of the bill, Senate Report No. 1254, September 30, 1970, stated:

Although progress has been made by the Department of Transportation in identifying areas of environmental and social concern and in establishing planning and design guidelines to meet these needs, it is clear that there remain many hidden costs to communities and individuals in the construction of a highway. In order to be more responsive to the public welfare, it is essential to define the objectives of highway planning and construction and insure that action is taken to accomplish these objectives

The bill directs the Secretary to issue guidelines for reducing such community burdens and requires that future plans, specifications, and estimates for any proposed project include measures to overcome, avoid or minimize these adverse effects.

(Plans, specifications, and estimates, known as PS&E, are the detailed construction plans that are

used to advertise projects for bids.)

The committee appeared to see its provision as an alternative to NEPA:

Provisions of the Environmental Policy Act concerning highways will remain in effect until the provisions of the Federal-Aid Highway Act of 1970 become effective.

During discussion of the bill on the Senate floor on October 2, 1970, Senator Nelson asked Chairman Randolph about this sentence. "Will the Senator tell me what that means?" The Chairman replied:

While guidelines governing the ways and means to avoid, overcome, or minimize adverse impact are being developed, we intend that the Environmental Policy Act apply fully, the sentence was included to stay any premature application of section 105 of the Environmental Policy Act.

Section 105 of NEPA stated that: "The policies and goals set forth in this Act are supplementary to those set forth in existing authorizations of Federal agencies." This sentence was intended to recognize that NEPA is in addition to, but does not modify existing law. Federal Agencies were to conduct their activities in accordance with NEPA unless doing so would violate their existing statutory authorizations. FHWA's Kessler, in his Wisconsin speech, indicated the guidelines required by the 1970 Act would be helpful. Congress, he said, had recognized the deficiency in NEPA by requiring FHWA to promulgate environmental guidelines. "When finally adopted, these guidelines should assist in achieving a comprehensive evaluation of environmental factors."

The Senate included the provision in the approved bill. The House Committee on Public Works did not include a comparable provision in the bill approved by the House. The Conference Committee retained the Senate provision with some modifications as Section 136 of the Federal-Aid Highway Act of 1970, approved by President Nixon on December 31, 1970, without comment. Secretary Volpe called it "the most important federal highway legislation since that of 1956." He added:

It gives the Department of Transportation and the Federal Highway Administration many of the tools we need to tackle the growing social challenges of our nation, especially in our urban centers.

In a speech to the Mississippi Valley Conference of State Highway Officials in Chicago on March 12, 1971, Administrator Turner called the 1970 Act "benchmark legislation" because "it affirms in many practical ways the concerns and the priorities of our time." Turner told the officials:

We have been administering a program whose foundations were laid in the 1956 legislation. But we have not been constrained by blind adherence to a set of plans and specifications drawn up in 1956. On the contrary, we have approved some very significant change orders along the way. America has been changing these past 15 years and so have we. To use the broadest description, it is the quality of life that has increasingly concerned our fellow citizens. And I believe we in the highway program have been quick to respond to these

emerging concerns—not just with agreeable rhetoric but with meaningful action.

As Turner pointed out, the 1970 Act reauthorized the Federal-aid highway program through FY 1973, including an increase in the Federal share of non-Interstate projects to 70 percent instead of 50 percent (the stated rationale was to free State funds for State priorities and maintenance). It also contained many other innovative provisions that “reflected the concerns—shared by highway officials and the public’s representatives in the Congress—over the problems of urbanization, the environment, and human values.” He cited provisions that:

- Called on FHWA to designate a Federal-aid urban highway system consisting of arterial routes other than those on the primary and secondary systems in urban areas containing populations of 50,000 and more;
- Authorized Federal-aid highway funds for highway-related improvements to serve bus transit;
- Made Federal-aid funds available for the construction of exclusive bus lanes on freeways, bus roadways, traffic signals and other control devices to give buses preferential treatment, bus passenger loading areas and facilities, including shelters, and fringe and transportation corridor parking facilities to serve bus and other public-mass transportation passengers;
- Established a funding program for economic growth center development highways to demonstrate, in the words of the law, “the role that highways can play to promote the desirable development of the Nation’s natural resources, to revitalize and diversify the economy of rural areas and smaller communities, to enhance and disperse industrial growth, to encourage more balanced population patterns, to check, and, where possible, to reverse current migratory trends from rural areas and smaller communities, and to improve living conditions and the quality of the environment”;
- Required development of standards for highway noise levels and guidelines to assure that projects are consistent with air quality standards, and
- Expanded relocation assistance benefits for those displaced by highway development.

Turner also cited the guidelines in Section 136, saying:

There has long been an awareness in the highway program of the potential impact of highway improvements on economic, social and environmental values. We have studied these impacts for years and shaped our procedures accordingly. We devote a substantial portion of highway resources to environmental improvement, and were doing so long before it became a popular issue. [Turner, Francis, “The 1970 Federal-aid Highway Act, *Kansas Highway Highlights*, March-April, 1971, p. 11]

Section 136 amended Section 109 (“Standards”) by requiring the Secretary, after consulting with appropriate Federal and State officials, to promulgate guidelines “to assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimize such adverse effects” As examples of impacts, Section 136 cited air, noise, and water pollution; destruction of aesthetic values, community cohesion, and availability of public facilities and services; adverse

effects on employment, taxes, and property values; disruption of “desirable” community and regional growth; and “injurious displacement of people, businesses and farms.”

An August 1975 FHWA report on the provision summarized how FHWA implemented the provision:

The Federal Highway Administration initially attempted to respond to this mandate by developing detailed technical procedures covering broad areas of study which were applicable to Federal-aid projects. However, it soon became apparent that this so called “project approach” was not feasible. Possible social, economic, and environmental impacts were practically limitless, procedures for evaluating the impacts were often difficult to clearly define, and directives necessary to implement the “project approach” would have required an unprecedented Federal involvement. After consultations with State and Federal officials and environmental groups, this approach was abandoned and the “process approach”, which was recommended by a Transportation Research Board Environmental Workshop, was adopted.

“The “process approach” aims at developing broad guidelines which have universal applicability, and achieve the objectives of Section 109(h) [the amendment by the 1970 Act] by influencing the procedures and methods by which projects are developed.

FHWA issued the process guidelines as PPM 90-4 on September 21, 1972. [37 FR 21430] It directed State highway agencies to develop environmental Action Plans that designated areas of responsibility and procedures for achieving the following objectives at each stage of project development:

1. Identification of social, economic, and environmental (SEE) effects;
2. Consideration of alternative courses of action;
3. Involvement of other agencies and the public; and
4. Utilization of a systematic, interdisciplinary approach.

Details were left to the States, which could exercise considerable freedom based on their unique needs and conditions. All the Action Plans had been approved by the time of the report (50 States, the District of Columbia, Puerto Rico, and the FHWA Office of Federal Highway Projects). [Action Plans: A Summary Report, Environmental Action Plan Report, FHWA, August 1975, p. 1-2] An FHWA report to Congress in 1974 commented on the plans approved as of that date, “It is impossible to read the Action Plans so far approved without being struck by their thoroughness and sincerity.” [America’s Highways 1776-1976, p. 375]

On June 20, 1973, FHWA published a notice in the *Federal Register* advising that it was codifying PPM 90-4 by adding Part 795 to Title 23, Code of Federal Regulations. [38 FR 16056] FHWA published a Notice of Proposed Rulemaking on November 1, 1973, to consolidate its environmental regulations and reduce duplication. [38 FR 30192] For Part 795, the primary change involved public hearings. It gave highway agencies “sufficient flexibility so that they can use hearings more effectively as elements of a broader and more comprehensive program for involving the public in the planning and design of highway projects.” Each State would develop a public involvement

program subject to FHWA evaluation. The Final Rule was published on December 2, 1974 [39 FR 41804]

President Ronald Reagan took office on January 20, 1981, having defeated President Jimmy Carter in his bid for reelection in November 1980. One of President Reagan's campaign promises was to achieve regulatory reform and reduction of red tape. Consistent with this promise, FHWA published notice in the *Federal Register* on April 13, 1981, advising that it was reviewing program requirements "which are considered to be costly and/or controversial." The notice, which invited public comment, stated:

The items to be reviewed by the FHWA include regulations and related requirements in the following program areas: Civil Rights, Design Standards for Highways, Buy America, Air Quality, Environmental Impact Procedures, Environmental Action Plans, Hours of Service of Commercial Vehicle Drivers, and Commercial Vehicle Inspection, Repair and Maintenance. [46 FR 21620]

One outcome of this notice was elimination of 23 CFR 795, as explained in a notice published in the *Federal Register* on May 20, 1982:

The Process Guidelines/Action Plan approach, implemented during a period when State highway departments were gaining familiarity with the environmental analysis process, has accomplished its objective. The National Environmental Policy Act (NEPA) process, as recently revised by FHWA to incorporate the Council on Environmental Quality (CEQ) regulations (45 FR 71968, October 30, 1980), perpetuates the fundamentals of the Process Guidelines. Only in the area of public hearings and public involvement do the Process Guidelines/Action Plan provide significant additional elements to the highway decisionmaking process not presently included in the NEPA process. Therefore, the FHWA is rescinding its present regulation on Process Guidelines/Action Plans At the same time, the regulation on environmental impact and related procedures (23 CFR 771) is being amended to preserve the substance of the provisions now contained in Part 795 regarding the approval of alternative public involvement procedures.

Although FHWA was rescinding the Process Guidelines/Action Plan, it wanted to make one point clear:

Further, rescission of Part 795 does not represent a deemphasis of the identification, evaluation, consideration and mitigation of SEE effects of highway projects. It does not eliminate the Section 109(h) requirements, but rather recognizes NEPA as the core of Federal environmental requirements and acknowledges the experience gained under NEPA, its uniform application by Federal Agencies and its embodiment of the principles and spirit of 23 U.S.C. 109(h). [47 FR 21780]

Adjustments

One casualty of NEPA was the era of personal mediation. During the 1950's and 1960's, State highway officials decided the location of Interstates by selecting the best route on the basis of

geography, cost, economic benefit, directness of routing, minimum disruption of homes and businesses, political factors—all outside the public view.

When controversy arose, Federal and State highway officials met to decide on the routing that would be eligible for Interstate funds. Federal Highway Administrators John A. Volpe (1956-1957), Tallamy, and Whitton, and their chief engineer, Frank Turner, often met with State officials to decide on routing. Decisions might be made in formal settings, but could just as easily be made informally. For example, a diner near the site, with maps spread out amidst coffee cups and ashtrays, was sometimes where Federal and State highway engineers decided highway location. As noted, public hearing requirements dated to the 1950's, but were seen as opportunities to inform the public of plans, not to gather information for consideration in developing the project. Initially, they were geared to assuage the fear of towns and cities that were going to be bypassed. During the late 1950's and 1960's, as controversies grew over planned highway projects, the highway community saw the public hearings as one of several venues for telling their story better and winning support for their proposals. Surely, highway officials reasoned, controversies occurred because people didn't understand the benefits they would receive from the new highways. As laws were enacted to increase consideration of environmental issues, the role of the public hearings changed to a forum for gathering comments that would be addressed during environmental reviews.

On rare occasions, even Presidents became involved in personal mediation. On September 17, 1963, for example, President Kennedy, Secretary of Commerce Luther Hodges, and Administrator Whitton met in the White House with Governors John Dalton (Missouri), Frank Clement (Tennessee), Otto Kerner (Illinois) and Bert Combs (Kentucky) to discuss I-24. After what *The Nashville Tennessean* called "years of haggling," the Governors had agreed on a compromise routing for I-24 and creation of a 64-mile Interstate from I-55 at Hayti, Missouri, to I-40 at Jackson, Tennessee, via Dyersburg. After listening to the Governors, the President directed Whitton to study the proposal. (The BPR agreed to the compromise routing for I-24, but approved only a portion of the Interstate addition, from Hayti to Dyersburg (I-155).)

The process was informal and involved negotiations behind the scenes as crucial routing decisions were made. Through the mid-1960's, with pressure building from environmentalists, Civil Rights advocates, and urban critics to curb the Interstates, the process continued with the Administrator or Secretary of Commerce (the Secretary of Transportation beginning in 1967) approving or turning down controversial Interstates. For example, two Administrators under President Lyndon B. Johnson (Whitton and Bridwell) approved the 3.5-mile I-310/Vieux Carré Expressway through the historic French Quarter in New Orleans, Louisiana, before Secretary of Transportation Volpe turned the proposal down under President Nixon. (For more details, see "The Second Battle of New Orleans" at <http://www.fhwa.dot.gov/infrastructure/neworleans.cfm>.)

Secretary of Transportation William T. Coleman, Jr. (1975-1977), who served under President Gerald Ford, was probably the last Secretary to engage in personal mediation when he announced his approval in January 1977 to construct I-66 inside the Capital Beltway in Virginia into Washington, D.C. Having held public hearings in Virginia in 1975 and 1976, Secretary Coleman approved a four-lane, limited access highway with Metrorail's Vienna line in its median. Heavy duty trucks were excluded, and during peak hours, traffic in the peak direction would be limited to

buses, automobiles with four occupants, emergency vehicles, and Dulles Airport traffic. I-66 opened inside the Capital Beltway on December 22, 1982, but its limited capacity, even with Metro in the median, would remain a source of controversy.

Highway officials during the early years after NEPA recognized that it and its companion legislation, such as Section 4(f) and Section 136 of the 1970 Act, would have profound impacts on the Federal-aid highway program. The president AASHO for 1971, W. J. Burmeister of the Wisconsin Department of Transportation, expressed these concerns in a speech on March 10, 1971. He noted that Administrator Turner expected the clearance of environmental statements could extend project development time by as much as 6 months. Burmeister said, "I think even this is a conservative estimate of the time required for some of the more controversial projects." To illustrate, he cited an example that had recently emerged during a public hearing on the routing of I-43 between Milwaukee and Green Bay:

I read the account of testimony given by an individual who was criticizing our Division of Highways for the location of [I-43] and challenging even the need for such a highway. He lives in the Kettle Moraine area, but commutes daily to Milwaukee, a round trip of approximately 80 miles. He makes a considerable point of wanting to live in isolation in the Kettle Moraine, which is considered a part of the National Ice-Age Park I contend this is an irresponsible, antagonistic attitude toward an improved highway in the area, and if he is really conscientious about not despoiling the environment and ecology, and not contributing to the pollution, then he ought to live closer to his place of employment.

With such "determined opposition," Burmeister was convinced that NEPA "will very materially retard the approval of projects, and in some instances, may completely preclude such approval." He did offer his colleagues some hope:

Perhaps the extreme activity of some of the most ardent defenders of the environment and ecology have overplayed their hand to the extent that the public interest will suffer rather than be benefited by their activities. Perhaps the pendulum has swung too far in one direction.

He hoped the pendulum would "swing back to the center" so decisions can be jointly reached that "can be accepted by those who are now antagonistic toward the Highway Program"

Alf Johnson picked up the theme during a speech to AASHO's Mississippi Valley Association on March 21, 1971. He explained that any popular program eventually reaches a stage of public apathy. When that happens, "the critics, motivated by various reasons" and being "articulate, aggressive forces," gradually "gather supporters and it can become a fad to oppose the program and disenchant the public with it." That was, he said, "the spot we are in right at this moment." Only when service deteriorates as a result of the critics' effectiveness is public interest rejuvenated.

He was "shocked at the headway that the anti-highway movement" had made and disturbed by the "degree of resentment against highway departments by many city officials." He attributed the resentment to the success of the highway program while city officials struggled with limited funding. City officials also resented highway officials "on the grounds that they are not elected

officials.” He added:

The environmental impact requirements now being made for the highway departments can well be the straw that breaks the camel’s back in stalling the highway program. We have college professors all over the country analyzing the itemized checklist in the environmental requirements of the highway program and developing instructions for bringing litigation and stalling highway projects with injunctions.

With such critics and other assaults, Johnson was afraid the Federal-aid highway program would “fall of its own weight.” [Mertz, p. 185-188]

As these comments suggest, highway officials had a hard time understanding their critics or accepting the validity of their criticism. The success the critics were having in securing legislation to hinder the Federal-aid highway program was not only frustrating but inexplicable to highway officials who recalled the years, not so long ago, when they were praised for the pleasure they brought to motorists. At AASHO’s annual meeting in November 1972, president J. C. Dingwall of Texas lamented the “changing of the guard in the leadership of the highway program in the United States,” citing the retirements of Alf Johnson from AASHO and Frank Turner from FHWA as examples of the departure “of the statesmen who participated in the revitalization of the Federal aid highway program in 1956.” These departures were especially ill-timed in view of “what’s going on in our society.” He explained:

Highways are under attack from all directions. I think that this is so because there is a substantial protest subculture in the United States whose chief targets are the successful elements of the so-called Establishment. There is an amazing lack of protest over the failures of other program. But show me a successful program, or organization, or institution and I’ll show you a target for these attacks.”

Along with many officials who preceded him, Dingwall saw the solution in public relations:

We must tell the story like it is, and we must be certain we are chipping away at everything that doesn’t really look like our particular elephant. [Mertz, p. 205-206]

Turner, in his address to the Mississippi Valley Conference, illustrated how times had changed by pointing out that “many of the things that we are looking at today that we consider to have been mistakes in the program are largely things that we did under a different policy.” He recalled testifying before the Senator Committee on Public Works a decade earlier and being “berated rather heavily, along with other highways officials, as to the high cost of this particular program.” At the time, “the emphasis then was on cost, do it cheaper, cut out fringe things, keep the cost down.”

Over time, “The policy has changed. The people have changed.” He said that, “I believe we are working now in harmony with the policy and legislation that is before us.” He expressed the hope “that we would be allowed to continue to administer the program and get the job done” under the new conditions. [*Kansas*, p. 11]

Years later, in a 1988 oral history, Turner recalled the social revolution of the 1960’s:

I consider that—all of that upheaval of the 1960s [was] much larger than just singly the environmental question so far as the highway program is concerned. To my way of thinking—I don't mean it to be sacrilegious but almost a revolution in a way, almost like the . . . birth of Christ. It was just everywhere. And it was in everything It wasn't just highways. It wasn't just dams and locks and the Corps of Engineers. You guys [sic—probably referring to AASHTO, which sponsored the oral history] and the Bureau, I think, were target number one to everybody because we were convenient

But everything had to be changed. Everything in life at that time was wrong. Whatever you were doing at the time was wrong. We have a completely new generation. We were going to turn the world around. We were in the middle of the Vietnam war, the upheaval over there, and there was all that agitation Just—the breakdown of morals, families, all these kinds of things. It was a whole complete upheaval. We just happened to get caught in it. [Greenwood, Dr. John T., *Interview with Frank C. Turner*, American Association of State Highway and Transportation Officials, February 1988, Unpublished Transcript, p. 111-112, edited for readability]

In a companion 1988 oral history, Lester P. Lamm, who served as FHWA Executive Director (1973-1982) during the adjustment period, recalled the views of the earlier generation of road builders:

[The] era was so much more complex than the earlier managers of the highway program and the Interstate system had to deal with. Everything you can think of was changing, and again, thinking back on fifteen years with the Administrator's Office in the Federal Highway Administration, that was really what I thought was our collective challenge, my own personal most difficult challenge, was to keep the process going, keep the program going, while everything that we had previously used as direction or guideline or any kind of milestone was changing.

What you could count on in the 1960s, 1950s, 1940s, without exception, you couldn't count on in the 1970s and 1980s. [Rosen, Dr. Howard, and Greenwood, Dr. John T., *Interview with Mr. Les Lamm, President, Highway Users Federation*, American Association of State Highway and Transportation Officials (AASHTO), July 1, 1988, Unpublished Transcript, p. 65, some editing for readability]

Lamm had joined BPR in 1955, and so was of a later generation than Turner, who had joined in 1929, and his counterparts heading the State highway agencies:

We were getting someone's reaction in the late 1960s, early 1970s to a problem, and probably . . . a part of a highway project that shouldn't have been allowed to continue, but because it had been worked on for years by the state and by the Bureau of Public Roads, they all wanted it done And it was a very definite challenge to us to undertake whatever modification you needed to in the process to keep a program going, keep the funds being used, and still abide by the ever-increasing series of requirements. [Rosen, p. 61]

Perhaps because Lamm was younger, he could see the value of the changing landscape:

I think anybody who was around 30 years ago would tell you that things were simpler then—the golden age of roadbuilding. I personally think we have, in the 1970s and 1980s we have made more strides and we ought to be prouder of what we have done because we have had to do it with so many constraints and so many obstacles. [Rosen, p. 70]

The defensiveness evident in Turner's initial speech after enactment of NEPA was understandable:

I think to the engineers of Frank's vintage, it was particularly troublesome because they themselves would have invested 10, 20, 30 or 40 years in a system that they are seeing to some degree being repudiated. To people in maybe a later generation and certainly in my own case I didn't see it that way. I personally felt we were collectively just being challenged to do the old job in a new fashion, to be more aware of the non-highway service consequences of the highway program. [Rosen, p. 33]

The Year of the Environment

In many ways, 1970 was the year of the environment. It began with President Nixon signing NEPA on January 1. It included Earth Day, creation of EPA, and approval of legislation on December 31 to strengthen the Clean Air Act. The bill was not entirely to the President's liking. It included provisions, such as requiring EPA to set national ambient air quality standards and requiring States to test vehicle auto emission systems, that he had opposed. Moreover, Senator Muskie, the President's most likely rival in the presidential campaign of 1972, had been the chief sponsor of what was nicknamed the Muskie Bill. Nixon was tempted to veto the bill, but recognized that doing so was not feasible politically.

Instead, the President held a White House signing ceremony in the Roosevelt Room before invited Members of Congress—not including Senator Muskie—and other officials. Before signing the bill, the President recalled the day in San Clemente when he signed NEPA:

And I see in this room a few who were present in San Clemente on the first day of 1970 when I said that this would be the year of the environment, that it was now or never if we were to clean up the air and clean up the water in major parts of the United States and to provide the open spaces that are so important for the future generations in this country.

The year 1970 has been a year of great progress in this field. In February, you will recall that I submitted the most comprehensive message on the environment ever proposed by a President of the United States. During the year, there have been some administrative actions, some legislative actions.

He called the bill he was about to sign the most important clean air legislation “we have this year and the most important in our history.” It resulted, he said, from bipartisan cooperation, including the President's proposal and bipartisan efforts by Senators and Congressman from both parties. He cited Senators Jennings Randolph and John Sherman Cooper, and Representative William Springer

(R-II.), but not Senator Muskie.

Signing the bill was “only a beginning, because now comes the enforcement.” That would fall to William Ruckelshaus at EPA, the enforcement agency, and Russell Train at CEQ, which would help develop significant new recommendations for 1971.

The President said that “1970 will be known as the year of the beginning,” while he expected 1971 to be “the year of action.” Enforcement of the clean air bill would be a good indication because automobile pollution “is one that not only now plagues my native area of southern California but all the great cities of this Nation.” He added that “most of the great cities of the world have similar problems.” By signing the law, he was providing tools to “avoid the dangers that continuing air pollution by automobiles and through other methods will be going forward.”

Just before signing the bill, he concluded his remarks:

So, it seems very appropriate that in this room, the Roosevelt Room, a room that is named for both Roosevelts, Franklin Roosevelt and Theodore Roosevelt, but particularly in view of the fact that Theodore Roosevelt, who was the man most remembered in American history for his interest in conservation, his interest in the environment, that this bill is being signed here; this, it seems to me, is most appropriate.

And I would only hope that as we go now from the year of the beginning, the year of proposing, the year 1970, to the year of action, 1971, that all of us, Democrats, Republicans, the House, the Senate, the executive branch, that all of us can look back upon this year as that time when we began to make a movement toward a goal that we all want, a goal that Theodore Roosevelt deeply believed in and a goal that he lived in his whole life And if, as we sign this bill in this room, we can look back and say, in the Roosevelt Room on the last day of 1970, we signed a historic piece of legislation that put us far down the road toward a goal that Theodore Roosevelt, 70 years ago, spoke eloquently about: a goal of clean air, clean water, and open spaces for the future generations of America.

By the end of the “year of action,” President Nixon had rejected the idea that he could win the support of environmentalists. He received little or no credit from political opponents for his environmental accomplishments – Muskie accused him of launching only “a sham attack on pollution,” and that appeared to be the public perception. By February 1971, he told Chief of Staff H. R. Haldeman, “The environment is not a good political issue. I have an uneasy feeling that perhaps we are doing too much” by catering to the left, which praised Senator Muskie, also known as “Ecology Ed,” for his strong environmental stance. The President wanted to back away from efforts to reach out to his opponents and stress ideas that would appeal to his conservative supporters. Strong enforcement by EPA’s Ruckelshaus was no longer appreciated, as Nixon made clear in a meeting with Henry Ford II of the Ford Motor Company and Lee Iacocca of Chrysler Corporation after EPA had issued tough clean air standards. Flippen reported Nixon’s comments:

“Whether it’s the environment or pollution or Naderism or consumerism,” Nixon told the executives, “we are extremely pro-business.” [He] added, “Environmentalists are a group of people that aren’t really . . . interested in safety or clean air.” Their interest lay “in

destroying the system.” [*Nixon and the Environment*, p. 142]

He made clear that the White House, not EPA, CEQ, or the Interior Department set administration policy. The White House would protect the companies from “enemies of the system.”

With the 1972 presidential election around the corner, the President had concluded that, “You can’t out-muskie Muskie,” as he told an aide who suggested returning to a pro-environment public position. [*Nixon and the Environment*, p. 152] As it happened, though, Senator Muskie was not the President’s opponent in November 1972. Muskie’s campaign was derailed in New Hampshire before the primary when he appeared to be crying as he defended his wife against embarrassing claims (planted by Nixon’s “dirty tricks” team).

Instead, the Democrats nominated Senator George McGovern of South Dakota, primarily for his anti-war stance, and Senator Thomas Eagleton of Missouri for Vice President. A few weeks later, reports emerged that Eagleton had once undergone electroshock therapy for depression, a treatment he had not mentioned to his running mate. When McGovern told the public that he backed Eagleton “1,000 percent,” only to ask him to withdraw 3 days later, the campaign was fatally wounded. Adding Sargent Shriver, a brother-in-law to the Kennedys and former Ambassador to France, to the ticket, McGovern took his anti-war message to the electorate. President Nixon won in a landslide, securing 520 electoral votes to McGovern’s 17 (all from Massachusetts and the District of Columbia).

President Nixon’s interest in the environment was not revived in 1973, and came to an abrupt halt on October 17, 1973, when 11 Middle East nations proclaimed a progressively increasing monthly cut in exports of oil to the United States and other nations perceived as unfriendly to Arab goals, namely the elimination of Israel. The resulting energy crisis outweighed the environmental issues raised by efforts to increase domestic energy production and keep the economy running. Just as the energy crisis was abating in March 1974, Nixon would tell the Cabinet: “Promote energy developments. Get off the environmental kick.” [*Nixon and the Environment*, p. 214]

The following weekend, as the scandals collectively known as Watergate swirled around the President, he ordered Attorney General Elliot Richardson to fire independent counselor Archibald Cox. Richardson refused and resigned. Next, the President ordered the Deputy Attorney General, former EPA Administrator Ruckelshaus, to fire Cox. Ruckelshaus, too, refused and resigned. Finally, the President turned to Solicitor General Robert Bork, who had become acting head of the Justice Department. Unlike Richardson and Ruckelshaus, Bork had not made promises to the congressional committee overseeing Cox about not interfering in the independent investigation. Following the President’s order, Bork fired Cox. For the President, what became known as the “Saturday Night Massacre” on October 20, 1973, was in vain. Watergate would not go away. He would resign less than a year later, on August 9, 1974.

Whatever Nixon’s motivation and later regrets about his Administration’s environmental actions, he oversaw a major change in government action. Flippen summarized the result:

His presidency was, in a sense, a window of opportunity for the nation’s environment. The problems were tremendous and complex, but never before or since has public enthusiasm

been so great or the political climate so accommodating for progress. The window was short, perhaps, beginning to shut before Nixon left office, but one still cannot deny the long list of accomplishments that remain.

In addition to NEPA and EPA, Flippen cited the regulations that emerged from the Nixon era “in a spate of legislation unsurpassed in the years since.” He continued;

Endangered species, pesticide control, ocean dumping, coastal zone management, marine mammals—the breadth of legislation was matched only by the rapidity with which Congress passed it. Russell Train was correct in concluding that the Nixon era “put into place the basic principles and framework of environmental law.”

. . . Early in his administration, if solely to gain the political initiative, Nixon lent the full weight of the presidency, the prestige and aura of his office, to the environmental cause. His speeches, if not his heart, were unequivocal. If, at the outset, his program was insufficient to meet the challenge and sure to engender criticism in Congress, it still significantly improved upon the existing state of affairs. Many of his proposals were themselves revolutionary and were ultimately incorporated into law. Nixon, in short, helped build the momentum for environmental protection that he later found so troublesome. [*Nixon and the Environment*, p. 226-227]

As Flippen added, NEPA remains “the cornerstone of American environmental policy.” It remains essentially unchanged, “a clear and concise statement of American environmental values.” CEQ had been the main feature of NEPA for those who approved it. Environmental writer Bil Gilbert pointed out:

Since this council had no enforcement powers, the legislation was generally thought to be innocuous—essentially a statement of good principles on the order of those that speak well of mothers and apple pie. [Gilbert, Bil, “Earth Day plus 20, and counting,” *Smithsonian*, April 1990, p. 50]

CEQ was at its strongest in the first years after its creation, with competent environmentalists heading the small office. Its influence began to decline as President Nixon’s interest in the environment as a political issue waned, and reached a low point when President Reagan fired its entire staff, reduced its budget, and left it with a reduced role.

However, the environmental review process, inspired by Professor Caldwell’s call for an action-forcing mechanism, remains strong. Flippen commented:

Although underappreciated at the time of passage, its impact-statement requirement transformed the balance of power in the environmental struggles that followed, with the Nixon administration only the beginning. By 1980, agencies had filed over eleven thousand statements, almost 10 percent ending in litigation. Of this total, the courts blocked action in almost 20 percent. By 1990, the number of statements had stabilized at almost five hundred a year, and showed no sign of abating. [*Nixon and the Environment*, p. 226]

Gilbert agreed:

As it turned out, this provision put some very sharp teeth in NEPA, since it gave environmentalists a chance to put intense pressure on agencies to respect EIS findings.

Initially, many public land managers and would-be private developers fiercely resisted the EIS process on the grounds that it was impractical, inconvenient and economically ruinous. After a number of adverse legal rulings, however, most of them concluded that NEPA was a slippery crevice that was best avoided by planning projects and filing EISes that did not bring down the wrath and lawyers of the environmentalists. [Gilbert, p. 50]

The highway community underwent something of the same transformation. Almost as soon as the action-forcing mechanism went into operation, officials began expressing concerns about the delays the environmental reviews caused. Since then, the highway community has come to see the approval of NEPA as one of the most positive moments in the history of the Federal-aid highway program. It provided an accepted framework for considering adverse impacts and resolving them, with the courts as the final arbiter in many cases.

On April 20, 1990, Federal Highway Administrator Thomas D. Larson (1989-1993) sent a message to all employees titled “Earth Day—More than a second Thought.” Quoting the Gilbert article, it explained how NEPA had come to be. Dr. Larson recalled that by 1970, “America’s love affair with the car in general and the Interstate System in particular was strained.” The Greatest Public Works Project in History “had become an agonizing test of wills in many cities and in areas we now recognize to be environmentally sensitive.” The program and the reputation of road builders “were tarnished.” After initial resistance, the road builders realized that NEPA was not innocuous. With “grudging reluctance,” the highway community came to see that “NEPA, the whole elevation of environmental consciousness, has been a positive influence on the FHWA and on our program.” Dr. Larson continued:

Yes, it was inconvenient. Yes, it slows things up. And yes, it costs more. But I firmly believe the results are worth it. In the years since NEPA, we have built hundreds of highway projects that are “good neighbors.” Some people still consider highways the “route” of all evil, but to a large extent NEPA, and the FHWA’s implementation of it, have helped to restore a more favorable public impression and acceptance of our work

The change in how the highway community went about its business, “while initially unsettling has proved to be profound and positive.” [Larson, Thomas D., “Earth Day—More Than a Second Thought,” Administrator’s Note, Vol. I, Note 32, April 20, 1990, unpublished].

That same day, Dr. Larson approved FHWA’s first Environmental Policy Statement. Much had been accomplished, the statement said, since the early 1970’s to modify the project development process “to better address social, economic, and environmental considerations through the use of a systematic, interdisciplinary approach with increased public involvement and interagency cooperation.” Nevertheless, environmental concerns remained, particularly for air and water quality and retention of wetland resources:

The FHWA, in partnership with the States, will work vigorously to preserve and, where practicable, enhance our environment. It should be recognized that the environmental impacts associated with highway projects can be substantial and in some cases, unacceptable. It is the FHWA objective to ensure that environment is given full consideration along with engineering, social, and economic factors in project decision making.

The policy covered five areas:

- Communication and Coordination,
- Mainstreaming Environmental Considerations,
- Protection and Enhancement,
- Research and Technology Transfer, and
- Development and Utilization of Environmental Expertise.

Larson concluded the policy statement by pointing out that, “Everyone has a vital stake in environmental quality.” As trustees of the environment for future generations, “we must act creatively and decisively to minimize environmental degradation and protect environmental quality while enhancing lives by improving mobility.” Following this policy, he said, would contribute toward President George H. W. Bush’s “goal of leaving new generations with a better environment and a higher quality of life.”

In a speech later that year to the National Conference on Highways and the Environment, Larson explained that, project-by-project since NEPA, “we learned from our experiences.” Since then, environmental challenges had expanded, “including many that go to global issues well beyond the old scope of a highway project connecting point A with point B.” He concluded:

We can’t wait for experience. If we are to meet the new challenges facing us in the 21st century, we will have to consolidate our gains of the last 20 years and take Paul Bunyan-like steps towards the surpassingly important goal of giving to coming generations a planet that is a little better than it was when we started. [Larson, Thomas D., “Consolidating our Gains,” National Conference on Highways and the Environment, October 29-November 1, 1990, FHWA 1991]