

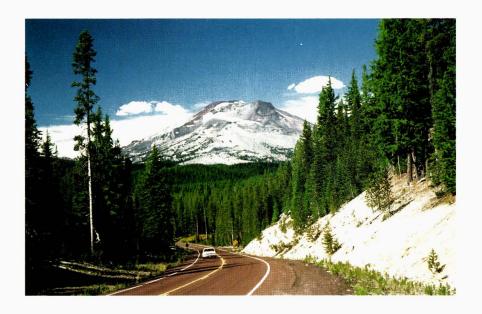
« COVER

Mt. St. Helens scenic byway. A more dramatic display of Nature's bounties would be difficult to find in America. The vast majority of scenic byways are two-lane facilities such as this one.

Map reproduced by permission © AAA.

NATIONAL

SCENIC BYWAYS STUDY



U.S. Department of Transportation **Federal Highway Administration**

ACKNOWLEDGEMENTS

The preparation of this report and all of the study efforts it summarizes involved the time and effort of a considerable number of individuals from Federal, State, and local governments and private agencies. Some provided comment and criticism which assisted in shaping the design of the study, in defining concepts, in developing inventory procedures, and in identifying areas for special study and emphasis. Still others provided invaluable photographic and illustrative materials that contributed importantly to the value of the study effort.

For all of this talented assistance, grateful acknowledgement is made.



THE SECRETARY OF TRANSPORTATION WASHINGTON, D.C. 20590

The Honorable Frank R. Lautenberg Chairman, Subcommittee on Transportation and Related Agencies Committee on Appropriations United States Senate Washington, D.C. 20510

February 19, 1991

Dear Mr. Chairman:

In response to Senate Report 101-121 on the Department of Transportation's Fiscal Year 1990 Appropriations Act (Public Law 101-164), I am pleased to submit our report documenting the National Scenic Byways Study.

The Senate Report asked us to suggest guidelines for a National Scenic Byways Program; discuss potential safety consequences and associated environmental impacts; prepare an updated, nationwide inventory of existing scenic byways; and report on case studies of the economic impact of scenic byways. The enclosed report discusses the study and comments on guidelines, safety, and impacts. We have already transmitted the case studies and a nationwide inventory to committee staff.

During the study, we consulted such organizations as the Transportation Research Board and the American Association of State Highway and Transportation Officials as well as representatives of the private sector, public interest groups, and all levels of government with tourism, highway, bicycling, environmental, or preservation interests. We also published an announcement in the *Federal Register* seeking comments and conducted a National Scenic Byways Workshop. In response to our contacts, we found support for scenic byways at the Federal, State, and local level.

While much progress has been made without a Federal focus, we believe additional initiatives are desirable. Chapter V of the enclosed report describes six program options, without recommendation, for pursuing a national program and to help realize the benefits scenic byways offer. With release of the enclosed study, we are beginning our own efforts to promote scenic byways. We are developing an action plan to implement the following options:

Interagency Coordination Program: Formalization of the working relationships that exist among the key Federal and State agencies.

DOT Technical Assistance Program: Creation of a Scenic Byways function within the Federal Highway Administration to provide technical assistance to Federal, State, local, and private groups.

"All-American Roads" Recognition Program: Explore with outside groups the possibility of establishing partnerships for recognizing America's finest scenic byways.

In addition, our recently submitted legislative proposal addressed the broadened eligibility option and the DOT grants program option.

On June 9, 1989, William Least Heat-Moon, the author of *Blue Highways*, testified on scenic byways before a subcommittee of the Senate Committee on Environment and Public Works. In his concluding remarks, he said, "The travelers are ready to go, let the journey begin." In that spirit, we look forward to working with the Congress and with the many government agencies and private groups that support the scenic byways initiative.

I am sending identical letters to Senator Alfonse M. D'Amato, Ranking Minority Member of the Transportation and Related Agencies Subcommittee, as well as to Representative William Lehman, Chairman of the Subcommittee on Transportation, Committee on Appropriations of the House of Representatives, and to the Subcommittee's Ranking Minority Member, Representative Lawrence Coughlin.

Sincerely.

Samuel K. Skinner

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EXECUTIVE SUMMARY

Study Scope and Objectives

This report presents the results of a study conducted in response to the U.S. Department of Transportation and Related Agencies Appropriations Act of 1990 that charged the U.S. Department of Transportation with the following:

- Update for the use of Congress a nationwide inventory of existing scenic byways.
- Develop guidelines for the establishment of a National Scenic Byway program, including recommended techniques for maintaining and enhancing the scenic, recreational, and historic qualities associated with each byway.
- Conduct case studies of the economic impact of scenic byways on travel and tourism.

Analyze potential safety problems and associated environmental impacts.

Study Organization and Approach

In conducting the study, the Federal Highway Administration (FHWA) consulted such groups as the scenic byway task forces of the Transportation Research Board and the American Association of State Highway and Transportation Officials. FHWA also met periodically with a special Federal interagency committee. In this way, everyone with tourism, highway, bicycle, environmental, or preservation interests had an opportunity to participate in the study.

Both individuals and interest groups also provided comments in response to the *Federal Register* announcement of the study and through invited participation in a National Scenic Byway Workshop. State transportation and tourism agencies provided detailed policy and program information through responses to the national inventory. Twenty-six case studies by as many qualified interest groups added more information. A listing of these case studies is included at the end of this report.

Rationale for a National Scenic Byway Program

A national, non-federally directed, scenic byway program to recognize and promote the Nation's outstanding scenic byways makes sense for several good reasons; among them are the program's potential effectiveness to

- Assure that more Americans come to know and to appreciate the Nation's superb scenic, cultural, and historic resources.
- Induce new economic development in communities and regions by creating new jobs, stable industries, and expanded tax bases.
- Protect and enhance the scenic, cultural, and historic assets within scenic byway corridors.
 - Reduce traffic congestion on some major travel routes by encouraging more tourist traffic to divert to parallel and less heavily used routes.
- Encourage foreign travelers to visit the United States more often, to stay longer, and to travel more widely while here.

Existing Scenic Byway Programs

The Nation's scenic byway mileage has grown steadily. Nearly half of the States, many local governments, and several private sector groups have scenic byway programs. The U.S. Forest Service and the U.S. Bureau of Land Management have begun major programs that continue to expand. The U.S. Bureau of Indian Affairs and the National Park Service are considering programs. In total, the States, the Federal agencies, the Virgin Islands, and Puerto Rico report having about 52,000 miles of scenic byways. Two-thirds of that mileage has been officially designated, while one-third is planned or under consideration for designation. The States own 74 percent, various Federal agencies own 19 percent, and local governments own 7 percent of the mileage.

The States own over 39,000 miles of designated and potential scenic byways. Complementary services such as rest stops, pullouts, campgrounds, lodging, restaurants, and service stations are provided on over 50 percent of that mileage. About 13,000 miles include parallel hiking trails, and 8,000 miles include marked bikeways. Several of the States without programs—Alaska and Hawaii are good examples—say all of their roads are scenic and need no special attention drawn to them.

In the past two years, both the Forest Service and the Bureau of Land Management have started ambitious new programs. As of August 1, 1990, the Forest Service had designated 73 scenic byway routes totaling 3,849 miles. The Bureau of Land Management had designated 37 "Back Country Roads" totaling 1,839 miles. Both agencies anticipate adding more mileage to their systems.

Most existing scenic byways are two-lane paved roads passable by all types of vehicles. About 800 miles of State designated scenic byways are subject to seasonal restrictions: extremely heavy tourist travel may require summer closures; heavy snows may require winter closures. Bridge limitations restrict the use of another 1,200 miles. Four-wheel and all-terrain vehicles are prohibited on some Federally owned roads.

Scenic Byway Benefits

Much of the present enthusiasm for scenic byways began with the President's Commission on Americans Outdoors, which found that "driving for pleasure is second only to walking as a popular form of recreation activity by adults. Americans seek variety as they drive: glimpses of mountains, lakes and rushing streams; small towns and farms; wildlife; covered bridges; and first-hand insights into lifestyles of rural Americans."

FHWA surveys support this view. They show that 23 percent of all vehicle trips and 30 percent of all vehicular miles driven are for purposes such as taking vacations, visiting friends and relatives, pleasure driving, and other forms of recreation. Not only do more and more Americans own cars, but they also buy and operate a large variety of four-wheel drive vehicles, campers, motorhomes, and other recreational-use vehicles.

With the value of the dollar declining abroad, many citizens are staying home to see America first. Many foreign visitors are now traveling here for the same reason: America has become a real vacation bargain. Increasingly, foreign visitors fly to inland "gateway" cities, where they rent cars and take their own driving tours rather than buy packaged, guided tours.

Americans are beginning to understand the richness of their scenic, cultural, and historic heritages, and want to preserve them. Protecting scenic byway corridors is one means of doing so. In many instances, States require that local governments prepare land use management plans before they designate a route as a scenic byway. Many local governments have complied so they might profit from the increased travel and tourism spending that goes with scenic byway designation and signing.

Tourism is an important part of the U.S. economy. It creates jobs, retail sales, and sometimes even new businesses. A \$350 billion a year industry, travel and tourism ranks as either the first, second, or third largest employer in 37 of the 50 States. This industry produces 6.7 percent of the Gross National Product and 13 percent of the total service sector's product.

Some Scenic Byway Problems

Various problems associated with scenic byways were discussed and debated at length during the 2-day National Scenic Byways Workshop in mid-1990. They included the following:

- Protecting scenic corridors although many techniques exist for the preservation of scenic, cultural, and historic values in the corridors, they challenge landholders to look beyond monetary return and to act in the overall public interest. Land use planning has never had particularly strong support in the United States.
- Traffic delays and accidents attracting larger numbers of bigger and slower recreational vehicles to mostly two-lane roads, many of them steeply graded and sharply curved, may lead to more vehicular accidents. Though no major problem now exists, there was concern that one might develop.
- Classification and signing there is a lack of consistency in typing scenic byways and identifying their attractions and possible driving hazards through signs and markings. The large mileage of existing byways and the variety of signs and markings already in place make consistency difficult to achieve.
- Definitions and design standards there is no single definition of a scenic byway and no specifically applicable set of highway design standards that address some of the special needs of scenic byways such as "see-through" guardrails and "information/interpretation" parking areas.
- Problems of community acceptance although many communities may profit from the additional tourist revenues generated by scenic byways, some may dislike the added traffic and possible restrictions on how abutting properties are used.
- Concerns of bicyclists many bicyclists place great value on quiet, little-used rural roads, and fear that naming them "scenic byways" will bring more traffic and destroy their attractiveness as pleasant bike paths.
- Limited funding resources as attractive as an expanded and physically improved system of scenic byways may be, a funding shortage may preclude bringing that concept fully to reality. State and local governments face many unmet highway needs and have funds only sufficient to maintain streets and roads needed to carry on the Nation's daily commerce.

National Scenic Byway Program Options

Considerable progress is being made toward developing scenic byway routes and programs. Better results, however, can be obtained if the various Federal, State, and local efforts are made in a more coordinated and mutually supportive manner. Agreements on goals, objectives, and mechanisms for achieving more cooperation and information sharing would significantly further the scenic byway effort.

To pursue a national scenic byway program and to enjoy the full benefits of scenic byways requires an organized approach. This study describes, without recommending, six "program options" that might be implemented either singly or in combination.

Except for the "Continuing Trends" (or the no-action-needed program), each of the other options suggests an important step toward better coordination and cooperation among responsible public agencies at Federal, State, and local levels, and among those agencies and private sector agencies and entrepreneurs.

Every program option is entirely voluntary at the State and local government level. The private sector can participate or not as it wishes. Except possibly in the most ambitious program option ("DOT Grants"), no new Federal rules, regulations, or legislation are needed.

None of the program options call for any new categorical grant program for constructing or improving scenic byways. That would be inconsistent with the National Transportation Policy, which states that it is Federal policy to "move from predominantly categorical grants to broader, more flexible Federal funding for transportation."

For ease of reference, the six program options are termed the

- Continuing Trends Program
- Broadened Eligibility Program
- Interagency Coordination Program
- **DOT Technical Assistance Program**
- "All-American Roads" Recognition Program
- DOT Grants Program

The **Continuing Trends Program** requires that no actions be taken. It recognizes that progress has been made, and will continue to be made, without any particular changes in approach and without additional Federal assistance. Some States and several Federal agencies are moving ahead, and solid Federal/State/local/private sector partnerships for the creation and promotion of scenic byway programs are advancing as needed.

The **Broadened Eligibility Program** provides for more clearly establishing the categories of Federal-aid funds that are eligible for scenic byway development and enhancement costs. This program will foster certain innovative design features, unique to scenic byways, which before may have been taken as ineligible for Federal-aid. These enhancements may include providing new "see-through" guardrail on bridges, turnaround bays for large recreational vehicles, map and poster kiosks, signing, information booths, tourist centers, vista parking areas, and audiovisual interpretive displays. The decision to incorporate such design features would remain the States' decision to make.

The **Interagency Coordination Program** suggests some formalization of the excellent working relationships forged during the present study. Federal, State, and local agencies now moving ahead with their individual scenic byway programs would, by this mechanism, have the means regularly to compare progress on their programs, to examine impediments to further progress, and to find new ways to reach common goals. Moreover, some projects, otherwise impossible within single-agency funding mechanisms, might advance by virtue of interagency agreement.

The **DOT Technical Assistance Program** calls for the dedication of full-time staff within the Federal Highway Administration to provide technical aid to any Federal, State, or local agency requesting it and to serve a clearinghouse and information exchange function.

The staff would provide for the exchange of research results, market survey information, and news about scenic byway design, operation, maintenance, and marketing. It would also provide guidance on planning and implementing scenic byway systems and programs, help prepare procedural manuals, aid in conducting training seminars, sponsor original research, and participate in a range of other activities to further the development of scenic byways.

The "All-American Roads" Recognition Program suggests the advantages of recognizing America's finest scenic byways, a limited-mileage, non-interconnected group drawn from every part of the Nation, without regard to ownership.

Such roads would be chosen on the basis of their unique scenic, cultural, and historic values by a broad-based group of Federal, State, local, and private sector representatives having scenic byway expertise. The roads would be specially signed — perhaps four gold stars superimposed on existing signs — and intensively marketed to attract tourists from home and abroad.

The "All-American Roads" program would contribute to a greater commonality of purpose among State and local governments, and should foster favorable public attention, interest, and support by giving travelers something truly special to see, enjoy, and learn from. The slogan "See America First!" clearly merits the companion term "All-American Roads." Clear eligibility of scenic byway activities — including promotional costs — for Federal-aid highway funds would accompany the program.

The **DOT Grants Program** would make Federal Highway Administration funds — perhaps up to \$100,000 per State per year for up to three years — available to the States wishing to start or expand planning and program development efforts for scenic byways.

State participation would be optional. The funds would allow the States to create "scenic byway offices," or, alternatively in some cases, to provide such road-user amenities as information services, maps and brochures, and interpretive displays of various kinds on some existing byways. A one-time special funding authorization of \$15,000,000 would be required.

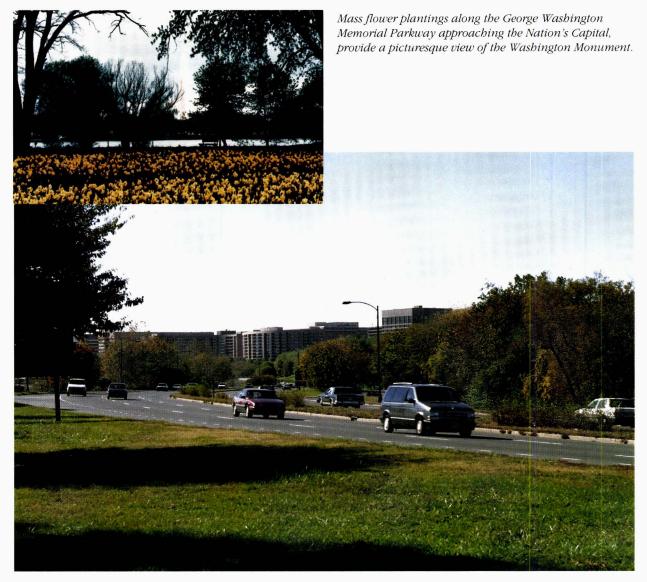
State and Local Responsibilities

The Federal role in each of the above options is the straightforward one of providing leadership, coordination, information exchange, technical assistance, and general support.

The roles of State and local governments are more direct and more all-encompassing. These governments must continue to play the most vital role in planning, funding, and operating scenic byway systems, just as they do now. They must enforce scenic byway corridor protection and enhancement measures, provide local amenities such as bicycle and hiking trails, and promote and market local tourist attractions.

CHAPTER I

INTRODUCTION



The George Washington Memorial Parkway in northern Virginia (within the Washington, D.C. metropolitan area) provides a relaxed and scenic environment, with its multiple overlooks and enjoyment of dramatic vistas for both commuters and tourists. Urban and suburban scenic byways are important since two-thirds of all pleasure driving trips are within twenty miles of home. Urban scenic byways can be both functional and recreational.

Study Scope and Objectives

his report presents the results of a study conducted in response to the U.S. Department of Transportation and Related Agencies Appropriations Act of 1990 that charged the U.S. Department of Transportation with the following:

- Update for the use of Congress a nationwide inventory of existing scenic byways.
- Develop guidelines for the establishment of a National Scenic Byway program, including recommended techniques for maintaining and enhancing the scenic, recreational, and historic qualities associated with each byway.
- Conduct case studies of the economic impact of scenic byways on travel and tourism.
- Analyze potential safety consequences and environmental impacts associated with scenic byway designation.

Setting objectives . . .

As envisioned and discussed in this report, a purposeful national scenic byways program must first recognize the actions needed to make current scenic byway planning and development more effective, and then suggest the key steps that different levels of government must take to accomplish them.

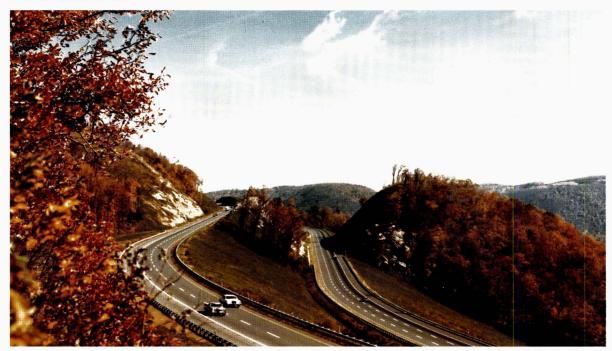
The biggest need is setting objectives that everyone can agree upon—some common plan of attack, with real roles for each interested party to play. Many of the steps having a high priority for action were identified at the mid-1990 National Scenic Byways Workshop held in Washington, D.C. (The proceedings of this workshop are published separately, but many of the workshop findings are incorporated into this report.)

Range of Scenic Byway
Roads . . .

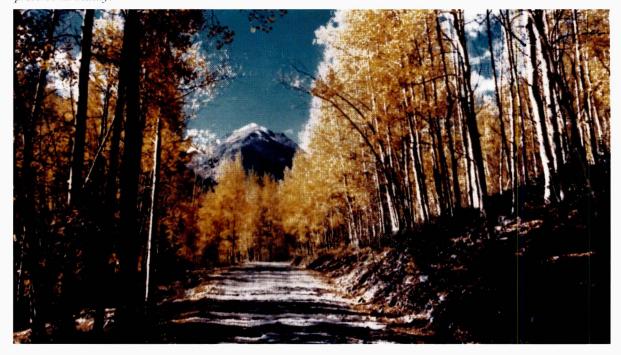
The study recognizes that existing scenic byways range from Interstate highways to dirt roads barely wide enough for vehicles to pass. What a road looks like — its design and alignment — does not determine its designation as a scenic byway.

Existing scenic byways may also have less scenic than cultural significance. Thousands of roads may have little if any scenic value, but be rich in many cultural and historic senses. For that reason, they may also qualify as scenic byways.

The range of scenic byways–from Interstate to unsurfaced roads–is as great as the vast distance that separates these two illustrations.



Interstate 77 in Virginia was built as two individual roadways to avoid disturbing the natural landscape and preserve its beauty.



A typical dirt road in the American Flats Bureau of Land Management Recreation Area in Southwest Colorado.

"Scenic Byways" go by many names, among them simply byway, highway, parkway, boulevard, backway, rustic road, leisure way, or historic route. This study is not restrictive in its definition. It accepts that all of these names may be appropriate at different times and places.

Study Organization and Approach

The Federal Highway Administration conducted this study with the assistance of Greenhorne & O'Mara, Inc. In addition, various interest groups were consulted throughout the study. These groups included Transportation Research Board (TRB) and American Association of State Highway and Transportation Officials (AASHTO) task forces and a special Federal interagency committee. Task force memberships included representatives from the private sector and from every level of government. Tourism, highway, bicycle, environmental, and preservation interests were all included.

Four different approaches . . .

To ensure a comprehensive review of scenic byway programs and issues and to get the broadest possible range of public opinions and suggestions, the study also included the following:

- An inventory of current Federal, State, local, and private sector scenic byway programs.
- An announcement in the Federal Register seeking views on the study approach and guidelines for a national program.
- A national workshop to discuss options for a national scenic byway program.
- Case studies investigating tourism impacts, safety and environmental issues, scenic and historic protection techniques, and successful Federal, State, and regional byways and byway programs. A listing of these case studies is included at the end of this report.

This report summarizes these various activities, but more detailed discussions of the inventory, case studies, and the national workshop are available as a permanent resource of scenic byway initiatives in a series of supplemental documents.

The Rationale for a National Scenic Byway Program

A national, non-Federally directed scenic byway program to recognize and promote the Nation's outstanding scenic byways makes sense for several reasons. Among them are such a program's potential effectiveness in

Assuring that more Americans come to know and to appreciate the Nation's superb scenic, cultural, and historic resources.

- Inducing new economic development in communities and regions by creating new jobs, stable industries, and expanded tax bases.
- Protecting and enhancing the scenic, cultural, and historic assets within scenic byway corridors.
- Reducing traffic congestion on some major travel routes by encouraging more tourist traffic to divert to parallel and less heavily used routes.

Encouraging foreign travelers to visit the United States more often, to stay longer, and to travel more widely while here.

In addition, a national scenic byway program is an important step toward carrying out the National Transportation Policy. One of the U.S. Department of Transportation's (DOT) major new policies aims at protecting the environment and maintaining the quality of American life. U.S. DOT Secretary Skinner's policy report, completely endorsed by President Bush, announced that it was Federal policy to

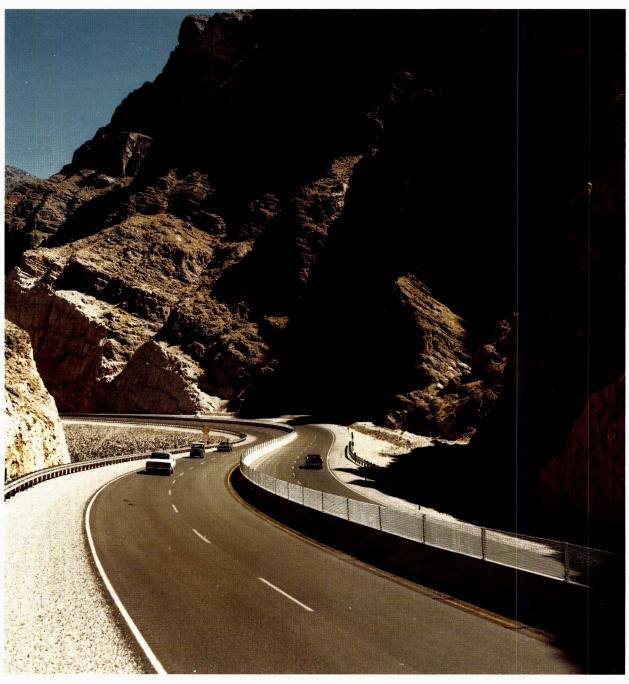
Encourage the design and building of transportation facilities that fit harmoniously into communities and the national environment and preserve scenic and historic sites.

Promote standardized signs and increase the information for travelers, particularly at airports and passenger terminals, and along scenic highways and other passenger routes. Why a scenic byway program?

A broader base . . .

CHAPTER II

EXISTING SCENIC BYWAY PROGRAMS AND OBJECTIVES



The rugged beauty of the Virgin River Gorge is revealed as this portion of Interstate 15 deftly winds its way through this colorful canyon in Arizona. Both travel safety and a dramatic recreation experience are served by this facility.

SCENIC BYWAYS



n 1990, the FHWA updated its previous (1974) national inventory of scenic byway facilities and programs. State transportation and tourism officials, Federal land managers, and private scenic byway program directors provided information on their scenic byway programs and facilities, travel, and tourism.

The complete results of the inventory, more detailed than any previous one, are reported separately in the FHWA report, "An Analysis and Summary of the 1990 National Scenic Byways Study Inventory." This section highlights the major findings.

Before looking at separate Federal and State programs, it is helpful to review the combined designated and potential mileage of scenic byways as revealed by inventory summaries (accompanying charts and graphs provide a visual overview). Separate appraisals of Federal and State programs will follow.

Some basic findings of what we have today . . .

- As of May 4, 1990, there were 51,518 miles of designated and potential scenic byways in the United States, the Virgin Islands, and Puerto Rico. Almost two-thirds of that mileage is officially designated, and one-third is either planned or under consideration for designation.
- About 84 percent of the total mileage is on, or planned for, the Federal-aid highway system. About half (47.3 percent) the total is on Federal-aid primary routes. About a third (31.4 percent) is on Federal-aid secondary routes. The Interstate Highway System accounts for 3.7 percent of the total mileage, and the Federal-aid Urban System for 2.2 percent. That leaves 15.4 percent of the total mileage not on the Federal-aid system (so-called "off-system" roads).

The States own the large majority (74.5 percent) of today's scenic byway mileage. Federal agencies own 18.8 percent, and local agencies own the remainder.

Most scenic byways are two-lane paved roads. Most State byways are paved, as compared to about three-fourths of Federal agency byways.

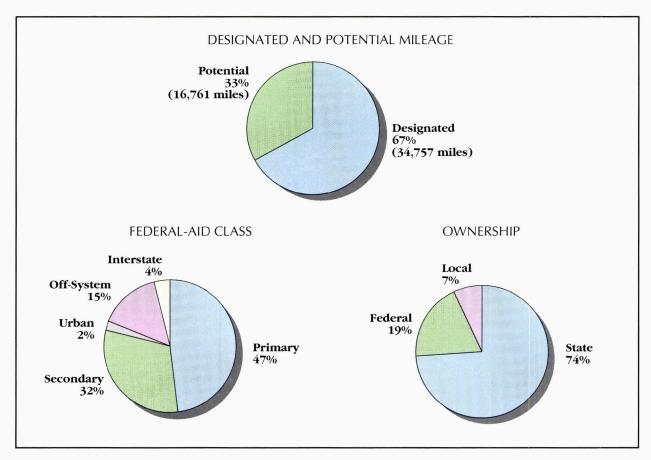


Figure 1. Selected characteristics of scenic byway mileage.

The last 25 years have seen three major Federal studies—1966, 1974, and 1990—of the potential for a national scenic byway program. The reported mileage of existing and proposed scenic byways was surprisingly consistent, ranging from 52,000 miles in the 1990 study to 60,000 miles in the 1974 study. The 1974 study mileage includes more potential scenic byways than the 1990 study.

State and Local Programs

Results of the National Inventory

As reflected in the 1966 FHWA report, "A Proposed Program for Scenic Roads and Parkways," many of the States have had scenic byways for 30 or 40 years. When that report was written, only half the States were planning and building scenic byways, and the rest were just considering or had no plans for a scenic byway program.

COMPARISON OF SCENIC BYWAY MILEAGES IDENTIFIED IN MAJOR STUDIES

STUDY	MILEAGE	PERCENT*
A Proposed Program for Scenic Roads and Parkways, U.S. Dept. of Commerce, FHWA, 1966. Existing and Proposed Routes.	54,411	1.40
An Assessment of the Feasibility of Developing a National Scenic Highway System – Report to Congress, 1974. Existing and Proposed Routes.	60,295	1.55
congress, 1)/ it maining and Proposed Routes.		
National Scenic Byways Study, Federal Highway Administration, 1990. Existing and Potential Routes.	51,518	1.33
American Automobile Association, 1990.		
Identified and Mapped, Existing Routes.	30,340 1	0.78

Table 1. Comparison of scenic byway mileages identified in major studies.

Broad State interest . . .

Today, only seven States show no interest in establishing scenic byway programs, and those States who have, or plan to have, programs are continuing to move ahead. Some findings of the FHWA's mid-1990 national inventory include:

As of May 4, 1990, the States report owning and operating 30,335 miles of designated scenic byways, averaging nine routes per State. They have another 464 miles under active consideration, and they report the potential for adding 146 more routes totaling 8,510 miles.

^{*} Percent of 1989 total public road and street mileage (3,876,501 miles)

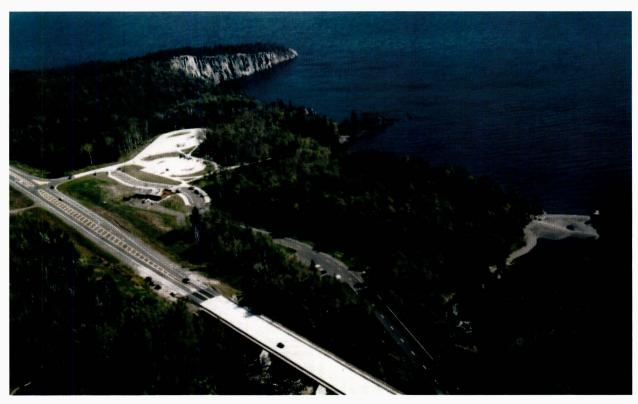
¹ Additional routes are being added.



SR 410 in Mt. Rainier National Park, Washington, presents a typical two-lane scenic road built through a partnership arrangement between Federal and State agencies. The byway is blended into pristine scenery making possible an enjoyable and relaxing experience for the recreation seeker.

- Most State scenic byways are paved two-lane roadways. About 800 miles are seasonally restricted: in summer due to extreme peaks in tourist traffic, and in winter due to heavy snowfalls. About 1,300 miles are restricted due to bridge weight limitations.
- Most State scenic byways are thus comfortably passable by all types of vehicles. The States say that virtually all potential State scenic byways will be similarly passable by all vehicle types.
- About 20,000 miles of State scenic byways offer such complementary services as rest stops, pullouts, camping grounds, lodging, restaurants, and service stations. About 13,000 miles include parallel hiking trails, and 8,000 miles include marked bikeways.

Some facts the States bave told us . . .



Lake Superior's north shore drive on U.S. 61 in Minnesota is one of the most scenic routes in the Nation. Note the ample and well-designed support and complementary facilities. Such special accommodations for the recreation seeker make the driving adventure more pleasurable and more fulfilling and constitute an integral part of the recreation experience.

Environmental and safety concerns...

- In most of the States with scenic byway programs, environmental protection concerns are not an issue. Some States do fear, however, that designating highways as scenic byways may prevent improving them in the future.
- Safety is an important factor taken into consideration by most States as part of their designation criteria. Most States do not experience any unique safety problems as a result of designation.
- Most States support a national, but not a Federal, scenic byway program. They want flexibility to develop programs that let them set their own designation criteria and meet their own unique needs.
- The 10 States without scenic byway programs have various reasons for not desiring them. Alaska and Hawaii feel that

all their roads are scenic and see no need for special designations. Others do not see any advantages and are concerned about safety and the possible hazards of "rerouting" traffic over narrow and poorly aligned roads. Several of the 10 States are still weighing the pros and cons of scenic byway programs.

Examples of Outstanding State Programs

NORTH CAROLINA lures visitors with its scenic and cultural diversity, historic attractions, and many recreational offerings. Tourism is the second largest employer in the State and will become the largest employer by the year 2000. About 61 million tourists spent \$6.2 billion in the State in 1988.

North Carolina first considered a scenic byway program in 1964 after the President's Council on Recreation and Natural Beauty recommended a national program of scenic roads. By 1966 it had prepared a program estimated to cost \$85 million to \$170 million for road improvements and related enhancements. For various reasons, action was deferred. A program developed in 1974 was postponed because of the OPEC oil embargo.

Citizen interest continued through the 1980s, however, and in 1988 the Governor directed the North Carolina Department of Transportation to develop a proposed program strongly linked to historic preservation. A statewide plan was developed and the resulting scenic byway program was approved unanimously by the North Carolina Board of Transportation in early 1990.

The five criteria for choosing the roads to be included in the program were the following:

- They should be at least a mile long.
- The development along the byway "should not detract from the scenic character and visual quality."
- There should be "significant visible natural or cultural features along its borders. These include agricultural lands, historic sites, vistas of marshes, shorelines, forests with mature trees or other areas of significant vegetation, or notable geologic or other natural features."

Strong support in North Carolina . . .

Note the criteria used . . .

- There should be a preference for roads that are protected by land use controls.
- There should be provision for de-designation should the character of the road change over time.

North Carolina's governor has strongly endorsed the new program, which initially incorporated 1,500 miles of scenic roads in about 30 segments throughout the State. Route signing has been erected, and maps and brochures have been prepared. So far the traveling public is quite pleased with the new system. (The North Carolina experience is the subject of a case study.)

Excellent progress in New York with local support ...

NEW YORK has a much older, more firmly established scenic byway program. Efforts in the late 1960s to adopt a program of scenic byways were substantial, with 54 of the State's 64 counties participating. Much of the momentum dissipated in 1970 with the abolishment of the State Natural Beauty Commission. Today's interest arises from the public's desire to develop programs preserving and protecting the State's aesthetic resources. (New York's program is the subject of a case study.)

The New York program emphasizes the role of the local governments in the nomination, management, and protection of the scenic road. The State neither forces the designation of a scenic road on a community nor imposes any regulations after the designation. The State does encourage the preparation of a management plan. These plans, prepared by the local agencies, include detailed corridor management programs consisting of the following elements:

Emphasis on local corridor management programs...

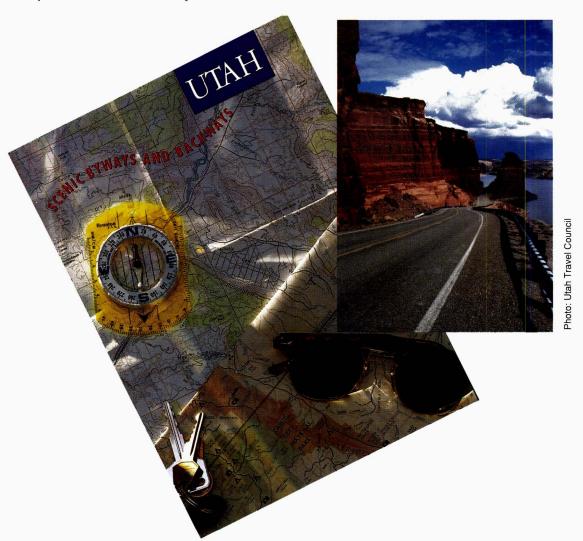
- An action plan for both short- and long-term responses to development pressure.
- A description of the specific existing and proposed legal authorities and methods that will be used to implement the program.
- A schedule for its adoption and implementation.

The New York program provides for a re-evaluation of each designated byway at least every 4 years and the implementation of measures to ensure preservation, protection, and enhancement of its scenic qualities. This re-evaluation is performed to ensure that

the road still meets the designation criteria, and the process can lead to a byway being dropped from the State Scenic Roads Program.

UTAH has some of the most spectacular scenery in the Nation. It has five national parks, six national forests, 10 million acres of high mountains, 3,000 lakes, including the Great Salt Lake, and a variety of recreation-oriented resorts. Tourism brings in some \$2.5 billion each year and is the State's largest private sector industry. (A case study describes the Utah experience.)

Utab's unique program and partnership approach...



Utah's byways program is the product of an effective partnership between Federal, State, and local agencies and others, all packaged in a unique 48-page brochure. Insert: Note the highlighted Bicentennial Scenic Byway U-95 as it passes through magnificent red gorges along Lake Powell.

Utah started working on a scenic byway program in 1986. Much of the impetus for the program came from members of the local tourism industry wanting to attract tourists into their own communities. The Utah Travel Council provided the leadership and soon formed a steering committee consisting of various State, Federal, and private sector groups.

A steering committee generated a partnership arrangement...

From this committee evolved a partnership unique in the Nation. The designation of "Scenic Byways and Backways" in Utah is a joint program of the Forest Service, Bureau of Land Management, National Park Service, Association of Governments, Utah Department of Transportation, FHWA, Utah Travel Region, and Utah Travel Council. All participants share funding and program implementation and direction responsibilities. This has allowed the partnership to establish a sound system with the public's interests in mind, and to avoid the constraints of working strictly within single agency boundary lines.

Utah's "Scenic Byways" system includes 27 routes, all major roads, regularly traveled, while its "Scenic Backways" system numbers 58 routes, most of them safely driven in a normal passenger car. A handsome Utah Travel Council brochure describes and maps all the routes, and their usage for tourist travel has increased significantly since their official designation.

Colorado's unparalleled resources spawn scenic byways...

COLORADO is another outstanding place for scenic exploration and recreation. It has 11 national forests, three national recreation areas, Rocky Mountain National Park, 31 state parks, over a dozen raftable rivers, and much more. Over 26 million tourists visited Colorado in 1989, and tourism is its largest employer next to the Federal government.

Before there was a formal scenic byway program, several regions had sought recognition for scenic drives. Independence Pass was named a scenic byway by the State legislature in the 1970s; some groups then formed to promote like designations for the "Scenic Highway of Legend" and for the "Peak to Peak Highway."

In 1988, with the governor's support for an expanded program, a working task force was formed (with members from the State legislature, various State agencies, and the U.S. Forest Service), which then evolved into the Colorado Scenic and Historic Byways Commission.

The Commission's special concerns were to develop a coordinated statewide effort on scenic byways to: (1) promote uniformity in their criteria and marketing; (2) allow for the designation of roads not wholly in National Forests; (3) ensure including scenic or historic roads in the State's eastern plains; and, (4) foster strong community involvement and support.

The Commission developed five criteria for designating routes. Any proposed Scenic and Historic Byway must

- Have unusual, exceptional, and/or distinctive recreational, historical, educational, scientific, geologic, wildlife, cultural, or ethnic features.
- Be suitable for prescribed types of vehicular use.
- Be an existing route and have public access.
- Have strong local support and demonstrate coordination with relevant agencies.
- Be accompanied by a conceptual plan, as specified in the nomination process.

Five roads were chosen in 1989 and 19 nominated routes are being considered. The nomination process will go through another cycle in 1991, the third and last year of the Commission's life. State officials say that about 30 routes eventually will be named to the State system. (The Colorado experience is reported in a case study.)

CALIFORNIA is one of seven States that has established a long-standing statewide "master plan" of individual byway routes that may be proposed by local governments and moved ahead through a local nomination and State designation process. State legislation made 5,870 miles of State roads eligible for the process, but so far only 1,022 miles have been designated. Additional routes can only be designated by legislative action following the request of a local governing body, and after the recommendation of the Transportation Department Advisory Committee.

To gain legislative designation, candidate routes must have outstanding features such as rivers, waterfalls, virgin timber, Practical criteria for designating scenic and bistoric routes...

California and its Master Plan...



One of the most dramatic and scenic corridors in the world is State Route 1 along the northern California coast, designed and located to feature its cultural, scenic, and historic elements. Note the inset map showing a master plan with designated and eligible State and county highways.

geological formations, canals, reservoirs, old bridges, historic sites, and buildings of architectural, historical, or civic value. The 1988 California Department of Transportation booklet, "Guidelines for the Official Designation of Scenic Highways," explains what local officials need to know about these factors and describes the nomination/designation process in some detail.

The State designation process requires that local jurisdictions adopt a program to protect and enhance the scenic byway corridor. The minimum requirements for a protection program are: (1) the regulation of land uses and the density of development; (2) detailed land and site planning; (3) the control of outdoor advertising; and, (4) the control of earth moving, and landscaping the design and appearance of structures and equipment.

Note the elements of a corridor protection program...

California provides no special funds for scenic roads. Funding for administration of the program and for signing comes out of the California State Highway Account. No special design standards are applied. Like other State roads, scenic byways incorporate the concept of the "complete highway," featuring safety, utility, economy, and pleasing appearance. Private contributions to a "Special Interest Stopping Place" fund help in the establishment and maintenance of parking areas near points of special scenic, historic, or cultural interest.

Wisconsin's Rustic Roads . . .

The WISCONSIN "Rustic Roads" program (a case study subject) shows that a locally initiated and State-administered "scenic byway" program can be inexpensive. Started in 1973, the program now includes 57 county, town, and municipal roads from 1 to 26 miles long, ranging in character from single-lane unimproved roadbed to two-lane paved county highway.

The program's original intent was to create a system of country roads that would protect the quiet, slow, natural beauty of lightly traveled rural roads. The only costs are for initial and replacement trailblazer signs, "Rustic Roads" promotional brochures, salary for a half-time "Rustic Roads Coordinator," and travel expenses for the official "Rustic Roads Board" (which sets all regulations and approves all additions to the system). County and town/municipal governments incur no direct costs for being part of the program.

The Rustic Roads program includes no mandatory restrictions on either road maintenance or land use on adjoining property. Local governments are encouraged, however, to adopt compatible policies concerning road improvements, mowing, and zoning of adjacent land.

Although tourist traffic has increased very little, the program has increased public respect for preserving rural landscapes and traditional social values, and reduced road mowing and road improvement costs.

Benefits of Rustic Roads . . .



One of Wisconsin's 57 Rustic Road routes, pioneered to preserve the natural beauty of lightly travelled byways. Note the historic marker erected on Rustic Road Number One. Major benefits include protection of the natural, historic, and/or rural character of the road, contribution to local tourism, and prestige for local communities.

The regional approach–Mississippi River Parkway...

One of the first (1938) multi-state scenic byway programs was the "Great River Road" (a case study subject) that parallels the Mississippi River from Minnesota to the Gulf of Mexico. A 3,000-mile network of Federal, State, and county roads, the Great River Road crosses the river at various points, and quietly passes woodlands, famous river towns, peaceful farmlands, and hundreds of quaint villages. Congress has since extended the road's northern end to the Canadian border, and two Canadian provinces have now provided linkages with the 5,000-mile Trans-Canada Highway.

All 10 Great River Road States have erected scenic highway trailblazers depicting a steamboat steering wheel along the route for the guidance of tourists who find within the corridor more than 1,500 historic sites. Among them are Indian mounds, archaeological digs, pioneer towns and villages, steamboats, forts, battlefields, and other points of interest.

Dramatic in concept, the Great River Road has faced constant funding shortfalls. Today, more than 50 years after its start, many road user amenities are still lacking, and the cost of completing the system is estimated at \$1.3 billion.



The Great River Road, traversing 10 States and Ontario and Quebec, Canada, has achieved worldwide recognition through international marketing efforts, as evidenced by the above promotional brochure directed toward the Japanese tourism market.

Federal Programs

Results of the National Inventory

For half a century, Federal agencies have been building and operating scenic roads and byways, starting with the world-famous "Skyline Drive" in Virginia. However, the breadth of active Federal agency programs has in the last 2 years increased dramatically, and no immediate end is in sight. From the FHWA's national inventory come these facts:

Federal Agency data . . .

- As of May 4, 1990, the Forest Service (FS) had designated 56 routes, consisting of 2,786 miles of National Forest Scenic Byways, and the Bureau of Land Management (BLM) another 34 routes, consisting of 1,636 miles of Back Country Scenic Byways.
- Both agencies are rapidly adding to their designated system mileage. The totals as of August 1, 1990, were, for the Forest Service, 73 routes representing 3,849 miles, and for the BLM, 37 routes for 1,839 miles.

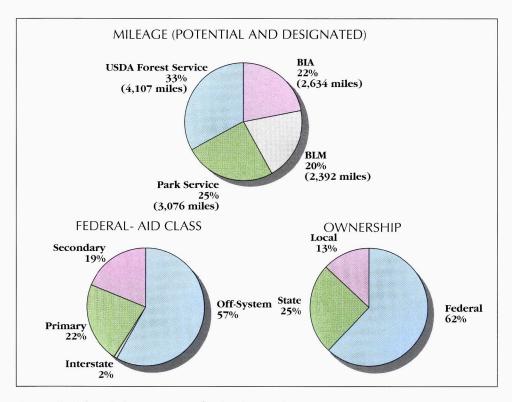


Figure 2. Selected characteristics of Federal scenic byways.

Neither the National Park Service (NPS) nor the Bureau of Indian Affairs (BIA) reported any designated scenic byway mileage in the FHWA inventory, but both had numerous routes under consideration for future designation. The BIA reported a potential 2,634 scenic byway miles, while the NPS indicated a potential 3,076 scenic byway miles.

USDA, Forest Service

The Forest Service began its "National Forest Scenic Byway Program" in 1988 as part of its National Recreation Strategy. These byways offer recreational motorists a showcase of outstanding scenic beauty and well-managed, changing landscapes in the 190 million acres of National Forests.

Forest Service's twoyear-old Scenic Byway Program...

In 1989, National Forests provided more than 253 million visitor days of recreation use, a full 42 percent of total outdoor recreation on the Nation's Federal lands. The recreating public heavily uses the 105,000 miles of National Forests' roads maintained for passenger car travel. Of this mileage, nearly five percent has potential to meet National Forest Scenic Byway criteria. Scenic byways highlight opportunities for visitors of National Forests to pass through some of America's most spectacular scenery.

Beginning in 1988, scenic stretches of existing National Forest roads were identified for potential designation according to specific criteria and program definitions. Seventy-three "National Forest Scenic Byways" are in service, and suggestions for others are still coming in from Forest Service field units.

The National Forest Scenic Byway program emphasizes road corridors that contain scenic vistas and facilities for enjoying them. These corridors offer many opportunities to provide visual and physical access, to explain Forest Service land use management, to interpret outstanding resource values, and to strengthen service to urban residents, ethnic minorities, the physically challenged, the elderly, and the young.

The Forest Service has established National Forest Scenic Byways in partnership with States and local communities to help stimulate the local tourism industry and diversify economies. Partnerships and cost-sharing programs encompass Federal and State agencies, user groups, private industry, and nonprofit organizations.

The Forest Service program provides educational and recreational opportunities . . .

Rather than encourage building additional roads, the National Forest Scenic Byway Program strives to improve existing ones. Facility improvements, signs, interpretive areas, and other amenities are made available from Forest Highway and other eligible Federal-aid financing, the Forest Service's road improvement program, and from cost-sharing and partnership assistance.

U.S. Bureau of Land Management

Back Country Byways of BLM . . .

The 342 million acres of public lands managed by the U.S. Bureau of Land Management (BLM) provide unique opportunities for back country exploring. Over 55 million recreation visitor days were provided on BLM lands in 1989. Recognizing this fact, the BLM started a "Back Country Byways" program as its contribution to a national scenic byways effort.

The Back Country Byways program has opened up new opportunities for people to see unique and scenic areas of public lands in the safety and convenience of their own cars, trucks, and recreational vehicles.

The Back Country Byway system includes existing roads and trails that can accommodate a variety of vehicles. There are four classes of byways: Type I, negotiable by normal passenger cars; Type II, safe for two-wheel drive vehicles with high ground clearances; Type III, requiring four-wheel drive vehicles; and Type IV, single track trails that can accommodate mountain bikes, dirt bikes, snowmobiles, and all-terrain vehicles.

BLM's vast land holdings offer unlimited opportunities for pleasure driving...

The BLM has dedicated byways in 12 western States. As of August 1990, its national system included 37 byways: 18 were Type I, and 5 more had Type I segments; 12 were Type II; and except for one snowmobile trail, the Great Mountain Byway, the remaining byways were all Type III or had Type III segments. BLM expects that its Back Country Byway system might eventually include more than 100 byways.

Maps and brochures are available for all byways. Most byways have directional signs to guide and direct users, and all such signing will be completed in 1991. As time and funding permit,

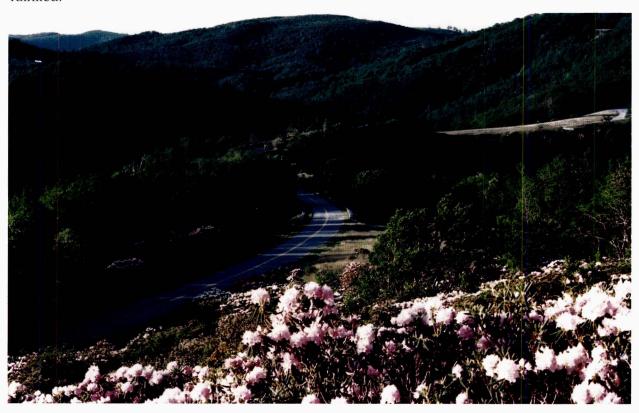
the BLM is cooperating with national, State, and local partners in cost-sharing activities such as interpretive wayside exhibits, road improvement, and other amenities along the byways.

National Park Service

National Park units are located in 49 States, the District of Columbia, Puerto Rico, and three U.S. territories. In all, more than 79 million acres of Federal lands exist within the National Park system.

With few exceptions, motor vehicles are the only available mode of transportation, and the park road system is the basic means of visitor access. The marked increase of park visitors (over 360 million in 1988) represents both a threat to some park values and an extraordinary number of recreational and cultural opportunities fulfilled.

NPS's national parkways and scenic park roads...



This portion of the 470-mile Blue Ridge Parkway, often referred to as the Crown Jewel of Scenic Byways, features an outstanding display of rhododendron in Daughton Park, North Carolina. It is one of nine Congressionally designated national parkways.

Currently, 7,975 miles of National Park roads and parkways are located within or give access to the National Park System. Of this number, 108 principal park roads total 1,924 miles, and nine national parkways total 1,152 miles.

Many park roads and parkways have been placed on the National Register of Historic Places because of their unique settings, design features, and historic values. Some examples include:

National Register of Historic Places and Scenic Byways...

- Going-to-the-Sun Road-Glacier National Park
- Generals' Highway–Sequoia National Park
- Trail Ridge Road–Rocky Mountain National Park
- George Washington Memorial Parkway
- Mount Vernon Memorial Highway
- Mount Carmel Highway–Zion National Park

PARKWAY	STATE	LENGTH(miles)
Baltimore-Washington Parkway (Gladys Noon Spellman Memorial Parkway)	Maryland	191
Blue Ridge Parkway	Virginia and North Carolina	470
Colonial Parkway	Virginia	23
Foothills Parkway	Tennessee	692
George Washington Memorial Parkway	Virginia and Maryland	32
Natchez Trace Parkway	Tennessee, Alabama, Mississippi	4463
Rock Creek and Potomac Parkway	District of Columbia	4
John D. Rockefeller, Jr., Memorial Parkway	Wyoming	82
Suitland Parkway	Maryland	7

¹ Represents Federal portion

Table 2. National parkways designated by Congress.

² 47 miles remaining to be constructed

³ 37 miles remaining to be constructed



John D. Rockefeller, Jr., Memorial Parkway links the south entrance of Grand Teton National Park with Yellowstone National Park, in Wyoming. This 82-mile corridor commemorates JDR's role in aiding the establishment of many parks, including the Grand Teton.

Although the Park Service does not use the term "scenic byway," most of its roads essentially are treated as such in their design, construction, and operation. Scenic values, recreational features, wildlife, and cultural and historical features are emphasized. Included with park roads are scenic overlooks, recreational centers, campgrounds, and interpretive exhibits.

U.S. Bureau of Indian Affairs

More than 21,000 miles of Federally owned roads exist within the 53 million acres of land held in trust by the U.S. Bureau of Indian Affairs (BIA) for tribal units. Some 14,000 miles of the Indian Reservation Road System are low-volume, unimproved roads. The BIA, in cooperation with tribal councils, is responsible for the design, construction, and maintenance of this road system.

The BIA and its proposed scenic byways in Indian reservations...

Although BIA has not as yet officially created a scenic byway system, it may soon do so under administrative authority. Ten of BIA's 12 regions have submitted nominations for scenic byway routes, and these candidate routes are being evaluated.

Goals of a potential BIA program...

The main goal of a BIA scenic byway system is to create economic development on Indian reservations. As more routes are proposed, each will be judged for scenic, recreational, historic, and cultural value, as well as its useful economic potential.

The BIA believes that a scenic byway system should be established using some Indian Reservation Roads to create a better opportunity for economic development within the reservations. Scenic byways should increase travel and tourism, with highly beneficial results.



This is Nutria Road, Route 5, not far from the Zuni Indian Reservation and the Zuni Mountain Range, where wildlife are abundant, including mule deer, red-tailed bawk, golden and bald eagles, and migratory fowl. There is much that can be learned and experienced of Native American culture and history on potential BIA byways.

U.S. Department of Transportation

The U.S. Department of Transportation, through the FHWA and its predecessor agency, the Bureau of Public Roads, has supported the development of the Nation's highway system since 1916. Federal highway dollars come from several funding categories, each with its own purposes, requirements, matching ratios, and distribution methods. Collectively, these categories comprise the Federal-aid highway program. One of the categories is the Federal Lands Highway program directed to Federally owned roads and other public roads serving Federal lands. The permanent provisions of law establishing or affecting the administration of these categories are presented in Title 23 of the United States Code, titled "Highways."

FHWA supports scenic byway projects through its regular programs...

Specific funding for each category is authorized periodically by the Congress. These authorized entitlements are then distributed among the States and sometimes through the States to local areas. State and local governments may apply these funds toward planned street and highway improvements that meet eligibility requirements. After the FHWA approves a project, the Federal government obligates funds to the extent of the Federal share of the project's estimated cost.

FHWA procedures are well-established...

With the exception of the Federal Lands highways, the Federal-aid highway program is a reimbursement program: State and local governments must provide first-instance funding for all projects. As the work progresses, the States may submit progress vouchers asking reimbursement for the Federal share, which varies by category—from 75 percent up to 100 percent for some special purposes. The FHWA's main tasks include project approvals, assuring that Federal funds are used in accordance with applicable laws, inspecting the finished work, and approving State vouchers.

"Scenic byways" are not a Federal-aid funding category, nor is the Federal-aid funding for Interstate, Primary, Secondary, Urban System, or Federal Lands highway projects changed because those highways might also be "scenic byways."

Such Federally aided projects may, however, at State highway agency discretion, include various design features to provide users with "scenic byway" type amenities, many of which under existing regulations would be eligible for FHWA funding assistance.

In addition, measures to mitigate the adverse impacts of highway projects or enhance environmental conditions related to highways can also be eligible. Eligible measures include habitat rehabilitation, wetland replacement, erosion control, scenic easements, and various aesthetic amenities.

Other Federal Roads Programs

U.S. Army Corps of Engineers . . .

The U.S. Army Corps of Engineers builds roads as part of its flood control, hydroelectric, and inland water navigation projects. The Corps also builds roads along with the construction of major reservoirs and recreational areas, and they become important adjuncts to such projects.

TVA . . .

The Tennessee Valley Authority (TVA) provides a system of reservoirs for flood control and hydroelectric power, in addition to improving the navigability of the Tennessee River. The TVA has built several hundred miles of public access roads in connection with these facilities. More than 11,000 miles of shoreline have attracted over 71 million visitors.

Although neither the Corps of Engineers nor TVA has scenic road programs and neither expects to, some of their roads may qualify for inclusion in a national scenic byway program.

Related Federal Programs

Several other Federal agencies have responsibilities relating to recreational travel and tourism, but perhaps the most important, as it relates to scenic byway programs, are those of the U.S. Travel and Tourism Administration (USTTA) of the Department of Commerce.

USTTA mission . . .

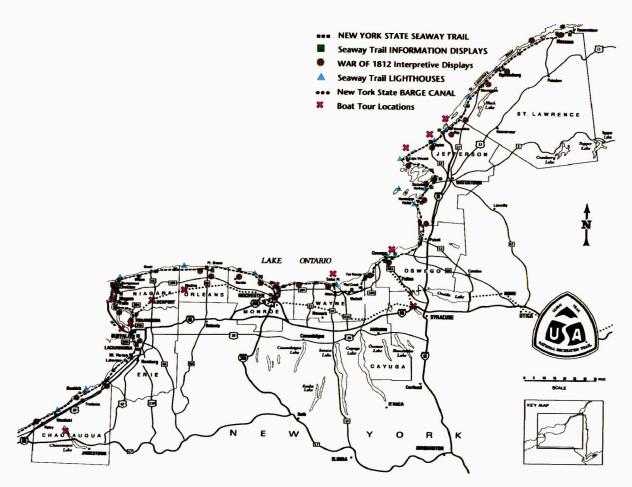
USTTA was established in 1981 by the National Tourism Policy Act. The mission of the USTTA is to increase U.S. export earnings through trade in tourism by carrying out trade development and trade policy and statistical research programs designed to increase the American travel industry's awareness of the export market; by facilitating the entry of medium- and small-sized American travel companies into the market; and, by eliminating barriers to the market entry of such companies.

For the past several years, the USTTA has placed major emphasis on its partnership approach to regional, State, and local tourism organizations and private sector tourism companies. With its knowledge and experience in the marketplace, the USTTA serves as a catalyst to organize and coordinate cooperative travel export development programs in which U.S. travel industry organizations seek business for their destinations, attractions, and events. In fiscal year 1988, the USTTA generated nearly 5,000 partners who invested \$14 million in a broad array of cooperative trade development programs.

USTTA, tourism, and scenic byways...

Special-Purpose Programs

Where State and local governments have not moved forward with projects that private groups or entrepreneurs thought especially



The New York State Seaway Trail is said to be the longest recreational scenic byway in America. It is an outstanding illustration of private sector initiative and public-private partnership arrangements.

appropriate, the latter have sometimes taken independent action. Since private sector scenic byways are often familiar tourist routes along publicly owned roads, they depend on State and local highway agencies for improvements, maintenance, marking, and signing.

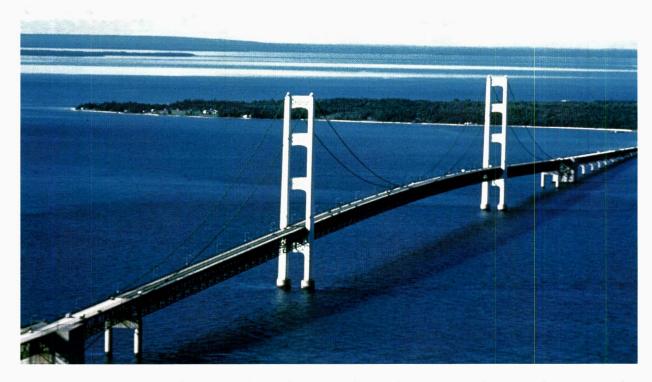
New York's Seaway Trail-an outstanding partnership arrangement... The "Seaway Trail" (a case study subject) in New York is a 454-mile route paralleling Lake Erie, the Niagara River, Lake Ontario, and the St. Lawrence River. It incorporates State and county two-lane roads suitable for cars, bicycles, recreational vehicles, and motorcoaches. Some planners call it a "greenway," because it includes public access to 38 state parks, 13 wildlife management areas, 37 fishing access sites, and 21 public beaches.

Green and white trailblazer signs are located every few miles to identify the route, and extra signs are placed at intersections and within communities. Brown and white "War of 1812" signs mark the Trail's historic theme, with 42 stopping points where tourists can learn about many of the war's events. Visitor information displays are placed at 56 outdoor sites where they can be consulted to locate and learn the driving distances to historic places, camping spots, and boat launch sites.

Created in 1978 by a nonprofit corporation to promote tourism, the Seaway Trail has succeeded admirably: between 1976 and 1986, tourism-related employment reached 95,000, an increase of 36 percent, and the number of firms in the tourism industry doubled.

The corporation's annual operating budget is in the \$500,000 range, met by grants from the New York State Office of Parks, Recreation, and Historic Preservation, from membership fees, and from profits generated by publications and other such self-financing ventures. The Seaway Trail is an impressive example of private sector initiative.

Lake Michigan Circle Tour-part of the Great Lakes Circle Tour... Another water-oriented byway is the "Lake Michigan Circle Tour," a 1,100-mile circuit of shoreline routes in Michigan, Wisconsin, Illinois, and Indiana. A system of existing State roads, mapped as a single continuous route by the West Michigan Tourist Association, its green and white trailblazer signs lead tourists from one outdoor recreational opportunity to another. The Association annually publishes a tour guide listing beautiful sights, accommodations, restaurants, and year-round entertainment available in the four



The Mackinac Bridge is part of the Great Lakes Circle Tour, involving eight U.S. States and two Canadian provinces that border the Great Lakes-St. Lawrence system. This scenic byway and recreation tour is another example of a regional approach to establishing a scenic byway corridor.

States. Similar "circle tours" exist for the other Great Lakes and are included in an overall scenic, international road system of some 6,500 miles known as the Great Lakes Circle Tour, established under the leadership of the Great Lakes Commission.

One of the new "special purpose" scenic byway programs is that in Pennsylvania. In 1988, the Congress created the Southwestern Pennsylvania Heritage Preservation Commission to direct a tourism development plan that would build on the region's rich industrial history, and to designate a "Southwestern Pennsylvania Industrial Heritage Route" connecting key sites and providing interpretive opportunities.

Using \$500,000 authorized by Congress, the National Park Service (NPS) has completed a plan for a 500-mile highway loop

Pennsylvania's Industrial Heritage Route Project provides interpretive opportunities...

connecting 300 historic, scenic, and recreational attractions in the region. In mid-1990, the NPS was developing signage, interpretation, and roadside improvement plans for the first 47-mile segment expected to be completed in 1991.

Though the NPS has provided most of the leadership, the program is a partnership of Federal, State, and local governments, private industry, and several not-for-profit organizations. The participating counties see the project as an opportunity for economic growth.

Scenic Coal Heritage Corridor in West Virginia... In West Virginia, there is support for a "Scenic Coal Heritage Corridor" (a case study subject) to interconnect southern West Virginia's remaining early-1900s mining facilities such as tipples, coal washing machinery, derelict company towns, and deep-shaft elevators with such other attractions as the New River Gorge and the Hawks Nest State Park.



State Route 16, a coal road at Itmann, West Virginia, featuring the Itmann Company Store Complex. This is proposed to be part of a Coal Heritage Road and Scenic Byway through the heart of five W.V. counties, each of which has both natural beauty and a rich heritage of involvement with coal production dating back to the 1870s.

A "Scenic Coal Heritage Corridor" would resemble programs developed in the Black Hills goldfields of South Dakota and the iron ranges of northern Minnesota. The 188-mile "Iron Trail" of Minnesota runs through glacial lake country and along iron range ridges. This scenery helps attract some 300,000 visitors annually to the 18 industrial heritage sites located in 10 towns and cities dotted throughout its corridor. Similar attractions related to gold mining are found along picturesque and scenic highways in the Black Hills of South Dakota.

Among recent attempts to identify the Nation's scenic byways is the program of the American Automobile Association (AAA). The AAA shows, by a special symbol on its touring maps, all roads that by its criteria qualify as "Scenic Routes" (a case study subject). AAA's designated system totals about 30,000 miles of high-quality roads, spanning every State. Designated routes must have one of these attributes: quintessential scenery, natural beauty, cultural beauty, uniqueness, or have been named a "scenic byway" by an agency of the Federal government.

Scenic byway designation and mapping by AAA...



A typical AAA road map section showing scenic routes designated by AAA based on four scenic byways criteria. The routes are denoted as scenic using a series of dots along the route.

The AAA says that while most of its members want to drive on safe, multi-lane highways when traveling long distances cross-country, many others "continue to remind us that Americans also want to travel on roads that take them through the historic, rural, culturally diverse areas of America. Our scenic byway program is designed to meet that desire."

Programs Outside the United States

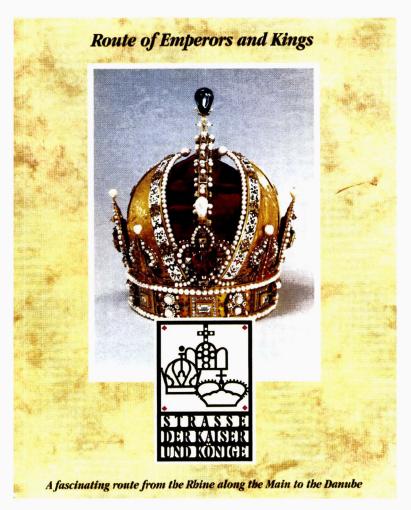
Variation exists in programs outside the United States...

A case study by the Academy for State and Local Government of selected tourism-oriented, developed countries outside the United States found a wide variety of regulations and procedures for the designation, signing, and promotion of scenic byways. While there are no "national scenic byway programs," local and regional level governments are moving forward with the help of voluntary bodies, tourist boards, and private interests.

West Germany alone has more than 70 scenic highways, each with names such as the "Castle Route," the "Fairy Tale Route," and the "Route of Emperors and Kings." They are signed throughout their often significant length, one route reaching from the Alps to the Baltic Sea, and are marketed aggressively by a national tourist association. Both German and foreign language brochures describing the routes' attractions are provided to travel agencies, and full-page advertisements are placed in publications aimed at the foreign travel market.

We can learn considerably from international experience... Opinions on the economic impacts of scenic road designations are universally positive. The dollar benefits accruing from Canada's distinctively marked "Yellowhead" national highway—marketed as a scenic tourist route by the several regions, communities, and four national parks through which it passes—may be in the hundreds of millions annually. Dutch and German tourist associations find scenic routes "economically significant," and, while it gives no precise figures, the Automobile Association of Great Britain states that scenic roads "appear to have been welcomed by the general public."

While there are no national standards for designating scenic byways, there are rules almost everywhere for signposting many tourist attractions. England leads the way in the extent and precision of its national signing standards, consistently using white



A sign for a fascinating route from the Rhine along the Main to Danube. Scenic route signing from abroad can be attractive, innovative, and informative.

lettering on brown background. The British say that the French were first to use this color combination, and it is now widely used in many countries.

Considering what is happening elsewhere, the United States might well be considered a relative newcomer among the countries which provide for recreation by motorcar. Much progress has been made abroad, particularly in Europe, where the management of land development and the preservation of "green belts" has always been more vigorous than in America.

CHAPTER III

SCENIC BYWAY BENEFITS



Lumberman's Monument, Great River Road Scenic Byway, Huron-Manistee National Forest, Missouri. This historic and interpretive presentation is typical of many scenic byways which, all together, comprise the Mississippi River Parkway which traverses 10 states.

More People Gain a Greater Appreciation of America

Driving for pleasure and

recreation seeking . . .

uch of the present enthusiasm for the development of scenic byways began with the report of the President's Commission on Americans Outdoors. Based on 1986 market research, the Commission revealed that "driving for pleasure is second only to walking as a popular form of recreation activity by American adults. Americans seek a variety of sights as they drive: glimpses of mountains, lakes and rushing streams; small towns and farms; wildlife; covered bridges; and first-hand insights into the lifestyles of rural Americans."

FHWA surveys support this view. They show that 23 percent of all vehicle trips and 30 percent of all vehicular miles driven are for purposes such as vacations, visiting friends and relatives, pleasure driving, and other forms of recreation:

- In 1983, Americans drove 301 billion vehicle-miles for social-recreational purposes.
- From 1969 to 1983, social-recreational travel increased 46 billion vehicle-miles, about 20 percent.
- Excluding trips to visit friends and relatives, recreational driving in 1983 accounted for 17 percent of all personal driving, or 170 billion vehicle-miles.

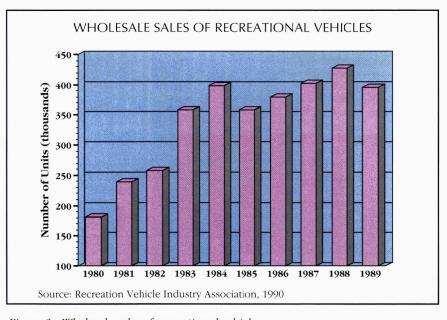


Figure 3. Wholesale sales of recreational vehicles.

Without unduly belaboring the enormity of American recreational travel, the essential points are these:

- More and more Americans own cars and, increasingly, buy and operate for pleasure a variety of four-wheel drive vehicles, campers, motorhomes, and other recreational-use vehicles.
- Many of these recreational drivers may have little knowledge of the vastness and variety of attractions to be found in the United States. For lack of good directional signing and proper information, drivers may miss them even when they are nearby. AAA reports that one of the frequent comments heard at 65 public forums on the needs of the motoring public was "there is a beautiful alternate route just a few miles away, but no one knows about it."
- Moreover, few of the fortunate recreation seekers who do find scenic or interesting routes to follow know anything about what they are seeing, and may fail, for lack of interpretive signing and displays, to learn of the historical and cultural background of the areas though which they drive.

Scenic byways give a valuable focus to recreational travel by calling attention to rewarding routes. Once tourists begin following them, the educational material provided by interpretive signs, displays, voice recordings, and other means assures them greater opportunity for learning and enjoyment.

Without the focusing effect of signed and marked scenic byway routes, some recreational travel may prove unfulfilling and be quickly forgotten upon returning home.

Speakers at the mid-1990 National Scenic Byways Workshop suggested that scenic byway development be linked with a program of learning about America: "see and know America first!"

And knowing America has become increasingly important to many travelers. Consider the following facts summarized by the National Trust for Historic Preservation:

In 1982, two-thirds of the inquiries to the State of Washington's tourism office were for information on historic sites.

There is a beautiful alternate route just a few miles away, but no one knows about it...

See and know America first . . .

Historic America offers countless opportunities for travel...

- ▶ A 1984 survey by "Southern Living" magazine found that historic sites topped the agenda of its readers when touring.
- A 1986 survey by the Virginia Division of Tourism found that far more tourists came to the Commonwealth for its "historic atmosphere" than for any other reason.
- ▶ A 1978 survey by the State Historic Preservation Center of South Dakota discovered that tourists visiting historic sites stayed an average of one day longer than the general tourist.

With the value of the American dollar declining abroad, more and more American vacationers and tourists are staying home and seeing America first, some perhaps for the first time ever. An increasing number of retirees, for example, now have both the time and the resources to travel extensively. The number of older Americans driving motorhomes has increased markedly in recent years.



The Nantahala Gorge Scenic Byway meets the Great Smoky Mountain Scenic Railroad at the restored Bryson City, NC, station. History and recreation are inextricably woven together.

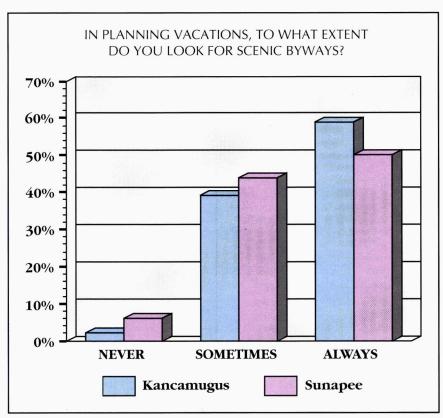


Figure 4. Survey results from New Hampshire case study--one example of tourist attitudes.

At the same time, growing numbers of foreign tourists are coming to America. For much the same reason that Americans are avoiding travel abroad—the declining purchasing power of the American dollar—many foreigners are choosing to travel in America. For much of the world, a vacation trip to the United States is a bargain.

Where foreign visitors travel is also changing. In years past, most wanted to see America's big cities. Today's visitors express greater interest in seeing the American countryside with its highly varied scenery (much of it, like Arizona's Grand Canyon, unique in the world), diverse rural cultures, and colorful historic places—in short, the "real" America.

Foreign visitors increasingly fly to inland "gateway" cities where they rent cars and take their own driving tours. Such visitors, many of whom may have limited knowledge of American geography, its long distances, and its varying driving conditions, are among those who stand to gain most from well planned and marked scenic byway routes and systems.

Gateway City concept . . .

To summarize: Both our own and the world's citizenry is turning more and more to the open road as the most popular way to see and learn about America. The development of scenic byways provides a way to obtain all of the many benefits that touring confers.

Scenic and Historic America Is Preserved

In its brochure, "Facts About Scenic Byways," North Carolina says that scenic byways provide the "means to show pride in the State's heritage through protection and preservation of the special resources found only along these roads."

Protection of scenic environments...

Many scenic byway supporters share this view. Some go further and say that protecting the scenic and man-made environment should be the paramount purpose of byway programs. They argue that without firm guarantees against environmental degradation, scenic byways should not be designated at all.

Scenic America, a nonprofit conservation membership organization representing individuals, municipalities, and environmental interest groups, has urged that the development of any scenic byway program be based on the overarching principle of conservation (a case study subject). Its suggested measures include visual pollution controls, a tree protection policy, a system of uniform motorist information and directional signage, the purchase of development rights or scenic easements as part of right-of-way acquisition in road expansion or new construction, and corridor management plans. Scenic America says of the latter:

Corridor management plans . . .

"Communities located along designated scenic highways and roadways should develop management plans which outline ways in which the scenic, historic, and cultural characteristics of the road corridor will be maintained while accommodating new development and increased tourism. Corridor Management Plans should include:

- Inventory and viewshed mapping to identify important scenic, historic, and cultural resources to be protected.
- ldentification of natural resource protection zones.
- Comprehensive plans that identify future development zones.

- Commercial and residential site development requirements and design guidelines.
- Reconstruction guidelines.
- Roadway safety improvement guidelines."

Scenic America stresses viewshed mapping because it involves an early identification of critical corridor features and appraisal of the visual impact that proposed development projects may have on roadway area views. Such mapping should precede the designation process so that scenic byway sponsors cannot mistake the magnitude of preventing future visual pollution.

Primary inducements for recreational travel...

The Oregon Department of Transportation, in its case study of the redesign and reconstruction of US Route 101 along the Pacific Coast, concluded from its tourist survey that "visiting scenic, interesting places and experiencing natural, uncluttered visual environments are important to travelers who consider visual resource management to be a key US 101 improvement issue."

The "view from the road" may still be the prime inducement for recreational travel. If this is true, it certainly focuses sharp attention on roadside treatments as one of the important aspects of scenic byway design. In its case study, the American Society of Landscape Architects found that some of the positive scenic values associated with scenic byways include the following:

The view from the road is critical...

- Vegetation such as forest patterns and edges, agricultural patterns, and spatial definition by trees.
- Landscape features such as panoramas, rock outcrops, and skylines.
- Roadway characteristics such as conformance to topography, surface, and design speed.
- Water bodies such as lakes, rivers, and wetlands.
- Man-made structures such as buildings, walls, and bridges.

The problem protectionist groups foresee is that the development of scenic byways might be a self-defeating program—that manmade visual pollution will eventually spoil everything worth

SCENIC BYWAYS

seeing. The National Trust for Historic Preservation, for example, warns that designating scenic byways may attract so many tourists that:

Some protectionist views . . .

We increase the risk of adverse changes in the very scenic and historic qualities that were the reason for the designation itself. If this unintended result occurs, then we have both damaged the scenic aspect of the byway and perverted the very purpose of the designation. Thus, designating a scenic byway without providing, at an absolute minimum, for protecting the scenic and historic qualities of that byway will, in many circumstances, be far worse than no designation at all.

However, if guarantees against corridor degradation by unwarranted and unwise land use development are made part of the process of recognizing scenic byway corridors, and if recognized corridors can be "de-recognized" should protection efforts fail, then just the reverse of the Historic Trust's warning might eventuate: scenic byways could become the means of preserving and protecting what is good in those corridors.

Land use controls . . .

Fortunately, land use development can be controlled in many ways. The National Trust for Historic Preservation (in its case study on the subject) suggests the application of

- Land use zoning techniques, including the appropriate regulation of uses, setbacks, building heights, and signage (both on and off premises).
- Historic district and historic landmark designations by local jurisdictions.
- State and local tax incentives, including fixed formulas limiting appraisal valuations, to provide incentives for retaining open space and agricultural uses.
- Easements and other deed restrictions to protect historic structures, sites, and their surroundings.

Corridor protection devices . . .

Corridor protection techniques can sometimes even enhance scenic and historic values. Positive measures include restoring deteriorated historic structures, removing valueless dilapidated buildings, planting trees, and burying utility lines.

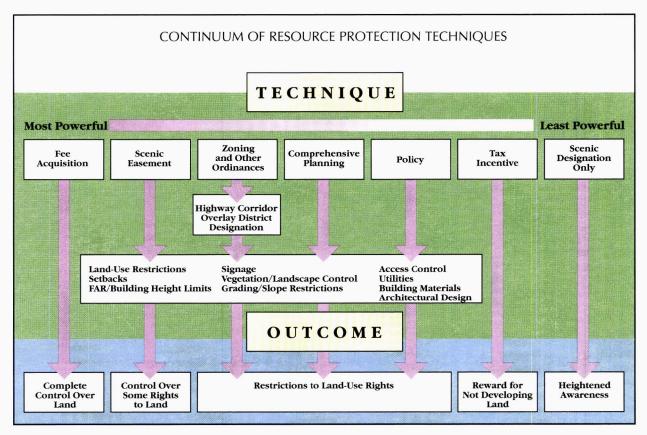


Figure 5. Continuum of resource protection techniques.

Like Scenic America, the National Trust for Historic Preservation recommends that "states designate scenic and historic byways only when a local management plan is in place for the entire area relevant to the byway under consideration."

To summarize: Many local governments in rural America have been slow to develop land use management plans, and much vacant land has suffered resulting visual and physical degradation. Much unplanned and unprotected landscape can still be saved, however, through land use controls designed around scenic byways.

Some controls are already being imposed. Designating additional scenic byways only after land management plans have been adopted for the corridors they traverse might save much more of America's precious scenic and historic heritage.

Increased Tourism Boosts Jobs and the Economy

Some persuasive facts on travel and tourism...

Tourism is important to the American economy. It creates jobs, retail sales, and even new businesses. By promoting tourism, scenic byway programs can contribute importantly to the American economy. Consider some of these facts from the Travel Industry Association of America:

- Travel and tourism is a \$350 billion a year industry and the Nation's third largest retail industry (after auto dealers and food stores).
- Travel and tourism ranks as either the first, second, or third largest employer in 37 of the 50 States. It produces 6.7 percent of the Gross National Product and 13 percent of the services sector.
- In 1989, travel and tourism generated \$42.8 billion in tax revenues and a total industry payroll of \$73.5 billion. It is America's second largest employer (only health care employment is larger). About 5.8 million people are directly employed in travel and tourism, and 2.5 million more are employed indirectly in providing goods and services to the industry.

U.S. Travel Data Center studies of travel benefits...

How much economic importance can be attached to scenic byways? As the findings of the U.S. Travel Data Center case study show, quite a lot.

Begin with total travel away from home for business and personal pleasure: As measured by the Data Center's National Travel Survey, travel away from home increased in 1989 for the fifth consecutive year, reaching a record high 1.25 billion person-trips (a person-trip is one person traveling to a place at least 100 miles from home).

Stepping down from this grand total, the Data Center estimated from a carefully drawn sample that in 1988 U.S. travelers on some 1,600 miles of typical scenic byways in nine States spent about \$48 million. This created 920 new jobs, nearly \$9 million in payroll, more than \$2 million in State tax receipts, and \$0.5 million in local tax receipts.

Applying the Data Center's estimates on a mileage basis to all the scenic byways in the United States, the estimated tourist spending associated with scenic byways would be approximately \$1 billion.

Much depends on how well scenic byways are promoted. The most successful are those where all the attractions of the scenic corridor are marketed as a package. As with many service products, a pleasant, easily remembered name; a theme upon which to build an image; and a good marketing effort are all important to success.

Effective marketing is important to success...

The Urban Institute confirmed this in its case study of the Virginia Byways Program. When little promotional effort was made to promote the scenic and historic quality of the State's scenic byways, merely signing and depicting them on the official State highways map did not produce significant economic impacts. When local tourism groups actively promoted them, however, tourism increased measurably.



The Bad Lands of North Dakota provide the recreation seeker with Americana from the upper Middle West. Bus transportation provides mobility for thousands of travelers.

SCENIC BYWAYS

Experience suggests that marketing and promotional activities can be effectively handled through partnerships. This is true because local entrepreneurs and State and Federal agencies all have reason to foster tourism. Scenic byway development and tourism go hand in hand.

Government and private sector partnerships in marketing and promoting scenic byway programs...

Each member of the partnership has a message to convey. Federal and State agencies want to display and interpret their land management practices and the beauty and historical drama of their environments. Volunteer local groups may want to make known their communities' attractions and activities. Towns and local chambers of commerce may want to explain the special inducements they can offer to businessmen and other visitors.

An outstanding example of a public/private partnership that pulled together diverse groups is the San Juan National Forest Association (subject of a case study). This nonprofit, fee-membership, voluntary partnership produces and markets interpretive and promotional literature about the San Juan Skyway in southwestern Colorado. Print and broadcast media coverage is arranged in the United States and abroad.

The locally available marketing products include free descriptive brochures; the *San Juan Skyway: A Colorado Driving Adventure*, a full-color book costing \$9; an *Auto Tour Tape*, an interpretive tour of the Skyway through visitors' car cassette decks, costing \$10; and a *San Juan Skyway Videotape*, costing \$20. All net receipts go to support additional Skyway promotions. Nobody knows yet how many new tourists and how many new jobs this intensive marketing will attract (the program is very new), but the expectations are high.

Economic benefits of international tourism...

Promotional efforts on a national scale, aimed at international visitors, seem even more certain to produce a solid payback for America's international balance of trade. In 1989, travel services rendered to foreign visitors were America's largest "export." Based on information from the U.S. Travel and Tourism Administration (USTTA), on the average, each foreign visitor spent \$1,602 in the Unites States. Translated into more specific terms, such travel involved:

- \$34.4 billion of expenditures in the United States.
- > \$8.0 billion generated payroll income.

- > 570,000 jobs.
- \$2.1 billion generated Federal tax revenues.
- ▶ \$1.3 billion generated State tax revenues.
- \$700 million generated local tax receipts.

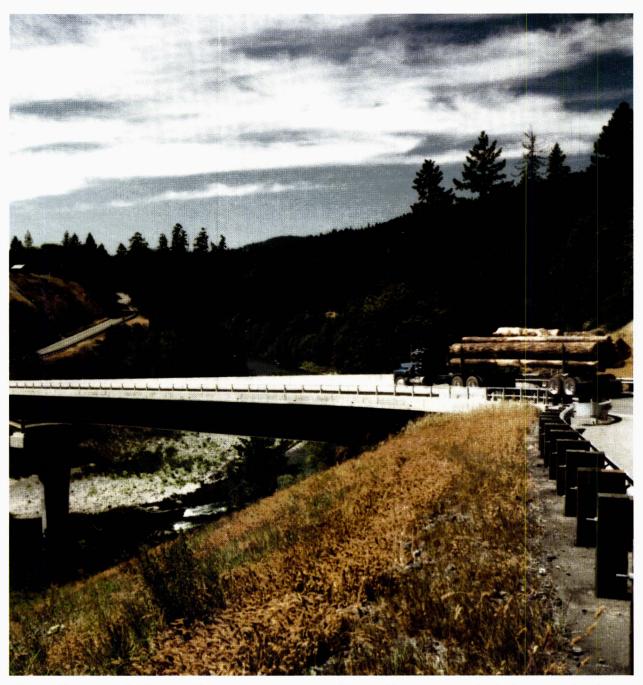
The USTTA reported that in 1989, 39 percent of foreign visitors used a rental car for vacation purposes, while 31 percent used a personal automobile. About 69 percent of Canadian arrivals that year came by auto. The trend is for an increasing number of foreign visitors to tour rural America by car rather than stay in its major cities.

To summarize: Tourism in the United States is big business, and scenic byways and tourism are closely related. Increasing numbers of international visitors can and do share with American travelers the scenic beauty and historical and cultural attractions to be found along scenic byway corridors. A better organized and more effectively marketed scenic byway program should be a cost-effective way to generate new jobs and an improved international balance of trade.

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CHAPTER IV

SCENIC BYWAY PROBLEMS



The new Trinity River bridge in Six Rivers National Forest in California. This route serves the dual purposes of timber barvesting and scenic byway travel.

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iven the benefits that scenic byways bring, it is awkward to say anything negative about them. Still, there are some problems, and they should be honestly stated. Understanding these problems does not diminish the benefits of scenic byways. Facing and overcoming the problems will provide a more realistic foundation for success.

Protecting Scenic Byway Corridors

Protecting and preserving the scenic, historic, and cultural assets within a scenic highway corridor may prove extremely difficult. The local pressures favoring land use development to serve an increased number of tourists will often be great.

How to define the scenic corridor for protection purposes . . .

One of the questions immediately raised is what constitutes the "scenic byway corridor." Some say that it embraces an area one-half-mile wide with a quarter-mile wide band on both sides of the roadway. Others say that is too narrow; land development ought to be controlled within the entire "viewshed."

The next question is, what is the viewshed? The answer is, as far as one can see. And from there the argument can go on and on.

In Monterey County, California, the county's rule regarding new construction along the world-famous Route 1 scenic byway fronting the Pacific Ocean is, "If it can be seen from the road, you can't build it!" (The issue of "viewsheds" is addressed in a case study by the American Planning Association.)

Environmental concerns...

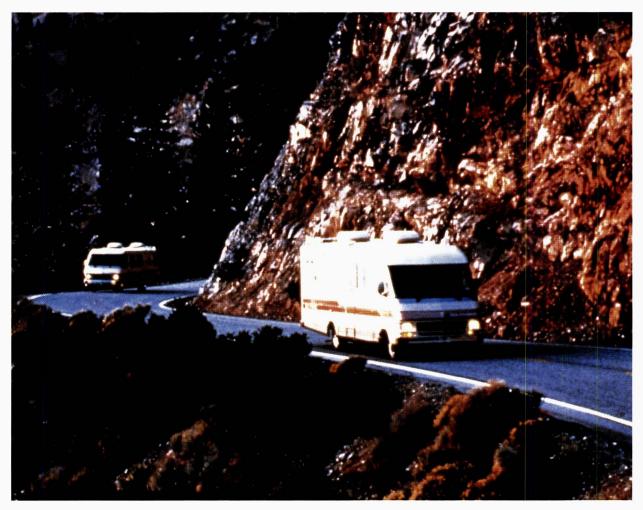
What is "environmental degradation" anyway? Would one energy-generating windmill with a fifty-foot propeller built a quarter-mile away from a scenic byway be an unacceptable eyesore? Would a hundred? Would their height, or their location atop a hill or down in a valley, matter?

Wide latitude for disagreement exists. Opinions on the kinds, amounts, densities, locations, and types of land development that could be accommodated in a scenic byway corridor before any environmental harm was done vary widely. No one can presently set universal rules. The cumulative experience is still too sparse. Each local jurisdiction wanting to protect its scenic corridors must develop its own guidelines.

Traffic Delays and Accidents

A national scenic byway program will generate more recreational travel involving not only automobiles and campers, but also large motorhomes and tour buses. On some routes, this increased traffic seems likely to produce more accidents.

So far, however, there is little evidence that signing a road as a scenic byway increases its accident rate. In the 1990 National Inventory, none of the States reported heightened accident rates after a road was designated as scenic.



Vehicles of different kinds and operating characteristics may precipitate problems of safety and driver behavior. Motorist awareness, appropriate signing, and some basic improvements can help to minimize the difficulties.

Scenic byway accident data...

A case study by Greenhorne & O'Mara analyzed before-and-after accident rates for five scenic byway routes in Arizona, seven routes in Oregon, two in Tennessee, and eight in the State of Washington, as well as on the Blue Ridge Parkway and the Natchez Trace Parkway. The accident rates proved similar to those found on other roads of comparable design. Designating these routes as scenic byways did not measurably increase their accident rates. The highway officials who were contacted also felt that scenic byway designation did not lead to more accidents.

With few exceptions, then, scenic byways do not pose any unsolvable safety problems. Nonrecreational drivers know they are using a route carrying slow-moving tourists and adjust their operating speeds and driving behavior accordingly.

That is not to say that all scenic byways are safe roads. Many older scenic roads have some inherently unsafe features. A Blue Ridge Parkway case study singled out some of the troublesome ones:

Unsafe features of some scenic byways...

- Road geometrics, such as combined curves and grades, and curves alone.
- Short stopping and passing sight distances, limited signing, and wooden guardrail without steel backing.
- Environmental features, such as fixed objects (e.g., earth embankments, trees, guardrail, rock outcroppings, and access ramps).

A safety problem mentioned by a few States occurs where a route doubles as a major interstate truck route and a scenic byway. The State of Washington reports that for this reason it sometimes bans all truck traffic on certain routes during the peak tourist season.

Some safety problems are really the fault of unthinking drivers. The recreational driver who ignores roadway design limitations and takes a car on back country byways meant only for high-clearance four-wheel vehicles, then has an accident, cannot blame the byway. Colorado says it must watch its primitive byways carefully to make sure drivers understand the hazards.

A special case study of possible safety problems lists the following actions that would help avert future accidents:

- Measures to enhance safety . . .
- Reducing the speed differentials between recreational and other traffic through signs and warning messages.
- Using larger and brighter signs to compensate for an increased number of older drivers.
- Erecting advance warning signs announcing lane width changes (extremely important to over-size vehicles on two-lane roads).
- Providing adequate clear zones outside the traveled roadway in which errant vehicles could recover.
- Installing adequate curbs and guardrail and placing barriers where clear zones cannot be provided.
- Providing parking turnouts at major viewing areas and short passing bays on long grades where continuous climbing lanes are infeasible.
- Removing, where possible, dangerous fixed objects too near the roadway, such as large boulders and abandoned structures.
- Providing parallel but separate hiking and biking trails.
- Installing escape ramps for recreational vehicles on long, steep downhills.
- Improving sight distances on horizontal and vertical curves.
- Rehabilitating or replacing bridges and culverts inadequate for larger recreational vehicles.
- Providing adequate access and facilities for police, medical, and fire emergency vehicles.

SCENIC BYWAYS

The American Association of State Highway and Transportation Officials (AASHTO) design standards provide suitable guidance for the minimum standards for scenic byway safety features on Federal-aid routes. A significant proportion of scenic byways, however, are low-volume county and local non-Federal-aid roads never meant to meet the AASHTO design standards. Such roads often lack safety features. Either they should be improved, or their users must adjust their speeds and driving expectations accordingly.

To summarize safety issues . . .

Questions of accident liability make the issue of scenic byway design standards important. By sign-posting scenic byways and encouraging tourist traffic, responsible government officials risk being accused of negligence. Proper signing and positive guidance systems necessary to forewarn and protect drivers can reduce this possibility.

Problems in Describing (Classifying) Scenic Byways

There are at least three ways to describe, or "classify," scenic byways and, as suggested by speakers at the National Scenic Byways Workshop, when they overlap, they can be confusing. The classifications are:

Alternative classification systems . . .

- **By predominant theme**: what the scenic byway offers, whether scenic, historic, or cultural, and whether mainly oriented to mountains, prairies, rivers, water, or urban scenes.
- **By major road features**: the road's cross-section and surface, whether it is one-lane unimproved, or two-lane gravel-surfaced, or on up to four-lane paved primary road; whether it is mostly straight and level, or curvy and hilly; and whether there are vehicle restrictions.
- By usage and ownership: whether most of its use is recreational or whether there is a significant proportion of truck traffic and other nonrecreational traffic; whether the road is owned/operated by the State or a local government or a Federal agency; and which can be expected to provide emergency services.

Finally, a case study describes alternative classification systems for scenic byways based on their design elements, safety features, and operating conditions. Five scenic byway categories result:

	SCENIC BYWAY CLASSIFICATION BASED ON DRIVER EXPECTATION OF MAJOR ROAD FEATURES								
Class	Average Speed (MPH)	Vehicle Restrictions	Standard Signs and Markings	Pavement Surface	Level of Safety Features				
1	>50	None	Yes	Paved	High				
2	40-50	None	Yes	Paved	Medium to High				
3	30-40	Possible	Variable	Variable	Variable				
4	<30	Likely	Not Likely	Variable	Mostly Substandard				

Table 3. One possible scenic byway classification based on driver expectation of major road features.

- **Category A** would include urban and rural principal arterials as well as freeways and expressways with full control of access. Such byways could provide some special design amenities for recreational drivers, such as scenic overlook pullouts, while still maintaining the minimum design standards required on such highway facilities.
- Category B would include urban and rural principal arterials with partial control of access, parkways, and principal park roads. Most would have two or more lanes and design speeds exceeding 45 miles per hour.
- Category C would include urban and rural minor arterials and major collector roads without access control. Most would be paved two-lane roads, with design speeds of 40 miles per hour or greater.
- ▶ Category D would include rural secondary routes and urban and rural local roads. Most would be two-lane roads with design speeds of 30-40 miles per hour, depending on terrain. Road surfaces would be paved, but there would be little or no shoulder width.

Proposed classification categories . . .

Category E would have the lowest design standards, with only one or two lanes of gravel or natural graded surface, and no shoulders. The design speed could be as low as 10 miles per hour. Users of these roads would be advised to expect a considerable degree of difficulty in driving on these roads.

The classification of scenic byways in a manner that conveys all or most of this information to recreational drivers through signing is the desired goal. There is no agreement on how this can be done.

The problems of standard scenic byway signing...

The problem is additionally complicated by the fact that so many different scenic byways trailblazer signs are already used. Even if a single kind of multipurpose sign were agreed upon, a large investment in sign modification and replacement would be needed. Some argue that all scenic byway signs should be of uniform size, shape, and color. White lettering on a brown background, as often seen in Europe, is suggested. Others insist that uniform signing should exist within any given State, but that each State should have its own signing system. Still others support a combination of regional/State identity along with a uniform national size.

Problems of Community Acceptance

Community reaction to scenic byway proposals...

Do all the communities and residents within a scenic, historic, or cultural corridor really wish to have their highway signed as a scenic byway? Experience suggests they do not. Though that might bring more tourists and added tourist revenues, some communities would rather preserve their anonymity, peace, and quiet and pass up any chances for inducing a more active tourism industry. How often, as summer ends, do the residents of a resort center smile among themselves to see the last tourists go home?

Active opposition to scenic byway designation has surfaced in a few States. Much of this has been due to public misunderstandings about what was being proposed. In retrospect, California and Texas report they now think that during the designation process they should have arranged more "people contacts," held more public meetings, and paid more attention to enlisting and to maintaining significant local support.

Highway officials in the State of Washington found that the first reaction of some landowners was an almost automatic hostility to scenic byways, but that many were reassured once they became part of the decision-making process.

Nevertheless, certain basic kinds of opposition persist. Farmers and ranchers, for example, often oppose scenic roads out of fear of new limitations on the use of their lands, such as restrictions on their right to erect range fences when and where needed. In many agricultural areas, there are no fast-food restaurants or all-night service stations, and many farmers and ranchers like it that way.

Some States have determined that to overcome opposition, the scenic byway designation process MUST involve the public, and especially the owners of abutting property. California, which requires that corridor protection plans be made before a byway is granted State designation, says in its "Guidelines for the Official Designation of Scenic Highways" that

The scenic highway protection program should be prepared in cooperation with local citizens' committees, affected property owners, environmental groups, and anyone else who might be impacted or interested in the proposed designation. These groups should be involved at the earliest possible date to afford ample time for review and comment before official action is taken.

Concerns of Bicyclists

Many bicyclists take pleasure in escaping traffic-choked urban and suburban roads and riding on quiet, low-volume country roads. If by naming them "scenic byways" more traffic is attracted, the tranquil qualities bikers enjoy most may be lost.

The Bicycle Federation of America opposes the creation of a Federal categorical grant program for building scenic byways, and says that resource protection should be the inspiration for most scenic byway designations.

The Federation also suggests that scenic byways be used only for recreational, not for general transportation, purposes; that speed limits should not generally exceed 35 mph; that nonessential truck traffic be sharply restricted, especially on the weekends; and that bicyclists should be able to use all bridges, tunnels, and other highway facilities on the byways.

Gaining public support . . .

Suggestions of bicyclists . . .



Bicycle use has constantly increased--to 90 million in 1989. Many States have extensive networks of back country routes suitable for bicycle use, such as this Virginia scenic byway.

Limited Funding Resources

Some would regard limited funding resources as the number one impediment to moving ahead with a national scenic byway program. Lacking adequate funds for all purposes, State and local highway agencies must make difficult choices. They must choose between meeting basic transportation needs and meeting the special needs of a smaller group of recreational travelers. Seldom can they do both.

HUFSAM's thinking . . .

The Highway Users Federation for Safety and Mobility (HUFSAM), as part of its recommendations on a national highway program for the future, suggests a \$300 million annual Federal budget to develop scenic/recreational roads. The HUFSAM says:

Millions of acres of lands in the public domain should be treated with environmentally sensitive road development to open their scenic beauty to all Americans and foreign visitors. An important part of a new national highway program would provide Federal funds to support park, parkway, public land and scenic/recreational route development. Part of this program would include developing ecologically good roads to remote areas to contribute increased mineral, livestock and timber production to our national well-being.

The annual cost of the HUFSAM's transportation recommendations totals \$21.8 billion. The \$300 million for scenic and recreational roads is about 1.4 percent of that total.

Other groups estimate that the States need up to \$40 billion annually in Federal-aid for highway improvements. Though State transportation officials do not oppose the development of scenic byways, most say they cannot consider large-scale scenic byway programs so long as other, more pressing needs are so far from being met.

The AASHTO's policy on a possible national scenic byway program, as of October 7, 1989, supported "the concept of updating a national scenic road study," and securing the States' "exclusive authority in scenic route designation and [the preservation of] the States' authority for the selection and construction of improvement projects receiving Federal-aid highway funds within existing environmental constraints and system categories."

Thus the general sentiment among State transportation officials is that any highway that is eligible for Federal-aid at all should receive such funding support at each State's discretion regardless of its "scenic byway" status, and that there should be no new special Federal funding category for scenic byways as such.

AASHTO policy proposals . . .

CHAPTER V

NATIONAL SCENIC BYWAY PROGRAM OPTIONS



Mt. Baker Scenic Byway in the Mt. Baker National Forest, Washington. The majesty of Mt. Baker has inspired many a recreation seeker--a fitting setting for consideration of national scenic byway program options.

Six program options . . .

None of the program options call for any new categorical grant program for constructing or improving scenic byways. That would be inconsistent with the National Transportation Policy, which states that it is Federal policy to "move from predominantly categorical grants to broader, more flexible Federal funding for transportation."

To pursue a national scenic byway program and to enjoy the full benefits that would confer requires an organized approach. On the following pages are descriptions of six program options. For ease of reference, they are termed the

he development of a national scenic byway program can, to some considerable extent, be undertaken without imposing Congressional authorizations. Each of the possible programs described next are entirely optional at the State and local levels.

Used separately or in combination . . .

- Continuing Trends Program.
- Broadened Eligibility Program.
- Interagency Coordination Program.
- DOT Technical Assistance Program.
- Mall-American Roads" Recognition Program.
- DOT Grants Program.

The last five program options can be implemented either separately or in whatever combinations would seem most timely and appropriate.

The following discussions of each program option provide background enough to justify the selection of any or all of them. The emphasis is on useful results.

Option one – do nothing new . . .

The Continuing Trends Program

One approach to formulating a national scenic byway program is to change nothing and simply allow current trends to continue without added Federal intervention. Consider, for example, the progress that has been made with virtually no national coordination. Several States have recently inaugurated new scenic byway programs, among them North Carolina, Utah, Colorado, and Maryland. Support has come from many sources: governors, Federal land managing agencies, citizen groups, State legislators, and additional diverse groups. (Each of these four State programs was the subject of a case study.)

Each of the States developed its program differently: Colorado formed a Colorado Scenic and Historic Byways Commission; Utah organized a high-level task force of Federal, State, and local officials; North Carolina worked through several State agencies; Maryland's DOT worked closely with the governor's office.

Currently, nearly half of the States have scenic byway programs, and another one-third are seriously considering programs. Only seven States seem opposed to such programs. Though the States are moving at different speeds toward their scenic byway program objectives, the trends are clear: there is a considerable interest in scenic byways, and the more serious States are moving forward without seeming to need Federal direction.

Local governments and private sector groups have also begun the development of local scenic byway systems. Often their "systems" are little more than a series of signed streets going through an attractive part of town. But in many instances, they are well-planned routes, with logical stops and parking at key points: San Francisco's "Route 49 Scenic Route" circle tour is an excellent example of a 50-60 mile system with much appeal for tourists.

In New York State there is the 454-mile "Seaway Trail" (a case study subject), a privately developed circle tour. In the midwest, there is the 1,100-mile "Lake Michigan Circle Tour," developed by the West Michigan Tourist Association. In Monterey, California, there is the "17-Mile Drive," a privately developed scenic byway charging a user toll. On a national scale, there is the AAA program of identifying and mapping scenic byway driving opportunities across the United States.

Some of the Nation's best-known scenic roads were built early and are still operated by the National Park Service. Among them are the much heralded Blue Ridge Parkway (a case study subject) in North Carolina and Virginia; the George Washington Memorial Parkway, an excellent example of a mostly urban scenic road; the Going-to-the-Sun Highway in the West; and the Natchez Trace in the south.

Established scenic byway programs-State, local, & private . . .

Federal programs ...

Although the National Park Service does not designate its roads as scenic byways, as such, they are used almost exclusively by tourists and recreational drivers and would, by any definition, qualify as "scenic byways."

U.S. Forest Service . . .

In the summer of 1988, the U.S. Forest Service initiated its National Forest Scenic Byway Program. The program was in direct response to the study findings of the President's Commission on Americans Outdoors that listed pleasure driving as the number-one form of outdoor recreation for most Americans. The National Forest Scenic Byways Program complements the overall National Forest Recreation Strategies.

In the fall of 1988, the San Juan Skyway (a case study subject) became the thirteenth designated National Forest Scenic Byway. Many others have quickly followed, with more to come. If all of its plans succeed, the Forest Scenic Byway system will eventually equal in total mileage a round trip between New York and Los Angeles, and the system's users will number many millions each year.



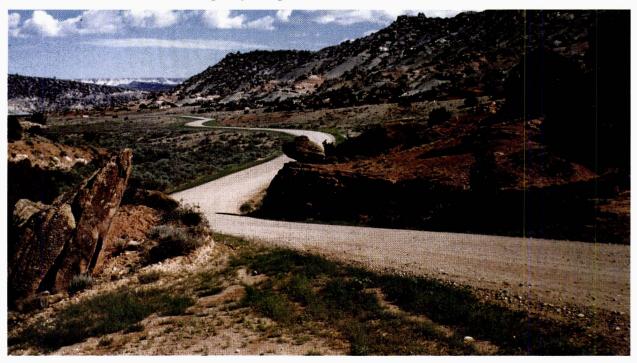
The San Juan Skyway is a 236-mile loop of State-maintained scenic byways traversing some of the most spectacular, rugged, and primitive country in America, in southwestern Colorado. The skyway is the result of cost-sharing partnerships involving Federal, State, and local agencies and private industry.

The U.S. Bureau of Land Management (BLM) has moved forward during the last 2 years with its equally ambitious program of "Back Country Byways." All of these roads are off the beaten track, but are classified for maximum safety according to road conditions, ranging from paved, all-weather roads quite suitable for normally equipped passenger cars, to single-track trails suitable only for dirt bike, mountain bike, snowmobile, or all-terrain vehicle use.

U.S. Bureau of Land Management . . .

The BLM's first Back Country Byway, the Wild Horse Canyon Byway, was designated in California in 1989. So far there are three BLM Byways in that State with a dozen more on the way. Nationwide, 35 have been designated, and the potential exists for over a hundred. The goals of the system are "to meet public demand for pleasure; to facilitate partnerships among recreation groups and government agencies; to help contribute to local economies; and, finally, to increase awareness of the public lands."

Significantly, both Forest Service and Bureau of Land Management programs were begun by the agency directors without new Federal legislation or new Federal funds. A need was recognized, and so far has been met with normal agency budgets.



The 64-mile Seminoe-Alcova BLM Back Country Byway in Wyoming provides visual and physical access to such major attractions as the Seminole Mountains, Seminole Reservoir, Bennett Mountains, and a miracle-mile section of the North Platte River containing a blue-ribbon fishery and national wildlife refuge.

Even disregarding the newest Federal agency programs, there are still the on-going Federal Highway Administration (FHWA) programs supported by traditional Highway Trust Fund revenues. Although the normal Federal-aid available to the States for Interstate, Primary, Secondary, Urban, and other systems could be used to support scenic byway projects, few States use the funds for this purpose.

However, FHWA policies have been moving steadily toward placing more emphasis on environmental protection, and some feel that this augurs well for scenic byway development by the States. The FHWA's most recently published environmental policy stresses a need to consider and support environmental enhancement measures for all highways—a policy that will support scenic byway enhancements as well.

Present progress may be deceiving . . .

With so much scenic byway progress being made at all levels of government, and in the private sector, the Continuing Trends Program option suggests that good progress will continue to be made, with or without technical assistance or special funding from the Federal government—that various existing programs, as separate and uncoordinated as they may be, may have created ample pleasure-driving opportunities.

However, this could be a dangerous assumption. The impressive progress to date may have been partly based on the expectation of a national scenic byway program to come. If there is no national program, further progress could falter. Just such a slowdown did occur after the 1966 and 1974 national studies.

Missing links . . .

What is more, the Continuing Trends option will provide for no national group to encourage and provide information and technical assistance to those States having an interest in establishing and improving scenic byways programs. Some progress may still be made, but without the considerable benefit of more expeditiously shared information from State to State.

Neither can the Continuing Trends option be fully successful in accenting the growing number and type of unique scenic, historic, and cultural opportunities waiting for domestic and international tourists and recreational drivers. Potential income from tourism cannot be realized without better coordination than now exists.

Broadened Eligibility Program

This program is recommended in response to the need for more clearly establishing what categories of scenic byway development and enhancement costs will be eligible for reimbursement through normal Federal-aid programs. The program will foster innovative design features, unique to scenic byways, that may have been previously considered as ineligible for Federal-aid. Whether the States employ such design features will remain the States' prerogatives.

Option two – expand Federal eligibility . . .

Scenic byway enhancements are improvements closely related with the highway and its right-of-way. They include such features as see-through guardrail on bridges, turnaround bays for larger recreational vehicles, map and poster kiosks, signing, information booths, tourist centers, turnout parking areas, and audiovisual interpretive displays. Such enhancements add immeasurably to the enjoyment of pleasure driving.

The widely different mix of vehicles and drivers on scenic byways calls for a diversity of enhancements. No single design standard is applicable. Scenic byways will have growing usage by campers, motorhomes, and other recreational-use vehicles. They also attract a growing number of older, retired persons, some of whose needs may be special.

The exact nature of what would become cost-reimbursable under the Broadened Eligibility Program must be spelled out more exactly. This study does not attempt to provide needed comprehensiveness, suggesting only the approval of the concept.

Indeed, many enhancement features suggested by participants in the National Scenic Byways Workshop were acknowledged as conceptual and requiring further research. See-through guardrail, for example, has been suggested for many years. While the idea is popular, the needed engineering is yet to be perfected. Such guardrail must be strong, safe, and economical as well as being transparent.

Before certain scenic byway enhancements are provided on a broad scale, they may need first to be shown as fully practical through various research on both physical and nonphysical subjects. A nonphysical subject, for example, might address the How to broaden the existing programs . . .

various ways of providing interpretive information: what cultural and historic facts do travelers want to know? How best can these facts be presented? What means are the most durable, vandal-proof, and cost-effective? All such research addressed to potential scenic byway enhancements will also be eligible for Federal-aid funding.

The Interagency Coordination Program

Option three – knit Federal and State efforts together... Although some interagency coordination occurs at both Federal and State levels, its effectiveness can almost certainly be improved. The Interagency Coordination Program option is a means to reach that end, formalizing what is now mostly an informal arrangement.

The present study is an example of the excellent cooperation that can exist among the several Federal agencies that share major interests in scenic byways: the Forest Service, the Park Service, the Bureau of Land Management, the Bureau of Indian Affairs, the Department of Commerce (U.S. Travel and Tourism Administration), and the Department of Transportation. When the study has been completed and submitted to Congress, however, there is always the possibility that such cooperation will end.

Coordination offers great rewards...

At the State level, the AASHTO's task force on scenic byways furnishes a continuing basis for cooperation among the States, but with the principal exception of an informal relationship with the FHWA, the AASHTO and its special task force does not communicate or meet regularly with other Federal agencies. Each State is generally left to work individually with separate Federal agencies on an as-needed basis.

Better progress might be made with a mechanism that provided both horizontal and vertical lines of communication and coordination. All cognizant Federal agencies should work together, and all State and local agencies should work together, and then regular lines of communication should be established between these two levels.

As reported previously, the Utah program is an excellent example of a fully coordinated program. Federal agencies (Forest Service, Bureau of Land Management, and DOT) work together. State



The Federal Heritage Scenic Byway near Brevard, NC, on U.S. 276 is an example of interagency cooperation. The U.S. Forest Service and the North Carolina DOT have dually designated several scenic byways in the State. To keep signage to a minimum, only one agency's signs are displayed.

agencies (Utah DOT, the Utah Travel Council, and others) work together. And both Federal and State groups work with one another as a complete team.

Some of the advantages to be gained by an Interagency Coordination Program include:

Interagency funding opportunities that could be more clearly identified and defined. Some projects might go forward that would otherwise not be possible within single-agency funding mechanisms. In turn, this might make possible the more effective use of limited Federal funding as "seed" money to attract private sector matching investments in scenic byway facilities and programs.

Why better coordination?

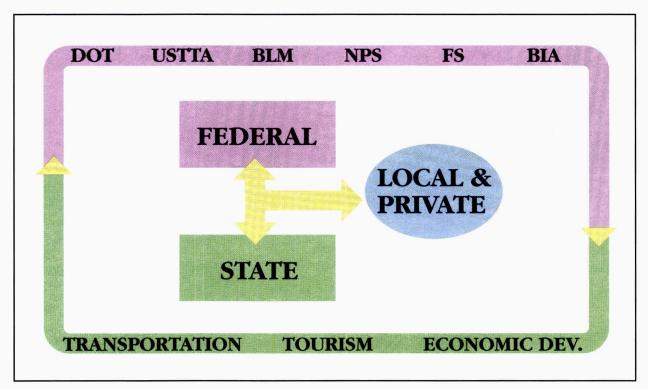


Figure 6. Groups essential for coordination efforts.

- Better interagency coordination might serve to stimulate scenic byway programs in States lacking such programs but wishing to move ahead with them. These States may have various unresolved questions about what may or may not be possible under existing Federal rules, regulations, and programs—questions more easily answered in a coordinated context than on an agency-by-agency basis.
- Most importantly, all of the Federal, State, and local agencies now moving forward with their individual scenic byway programs would have some means, on a regular basis, to compare progress on those programs, to examine impediments to progress, and to find suitable new ways to pull together toward common objectives.

How to make coordination work...

This program option would require a simple agreement among the Federal agencies to meet regularly (perhaps once each month) and to share with one another all pertinent information about their scenic byway programs (whatever those may be). The effective

chairmanship and lead agency role might be rotated periodically, with the lead agency being largely responsible for disseminating information among the agencies, to the States, and to various private sector interests.

Concurrently, each State could establish its own interagency group, including the State highway agency, the State tourism agency, the State economic development agency, and perhaps others. The State highway agency would normally provide leadership and be the chief link with the Federal interagency coordinating group. While actual working mechanisms would vary, the goal would remain clear: better interagency coordination.

The main disadvantage of not creating an improved means of gaining interagency coordination may best be expressed in terms of missed opportunities—opportunities lost due to an unfortunate lack of understanding of what was or was not possible.

The DOT Technical Assistance Program

With so many different scenic byway programs moving ahead, there is much need for a single information clearinghouse. Its prime function would be to exchange research results, survey information, and other news on scenic byway design, operation, and maintenance. It might also give technical aid to State and local governments, private sector agencies, and private businesses on planning and implementing scenic byway systems and programs. How-to help might include preparing various procedural manuals, helping to hold training seminars, participating in local conferences, making field visits, and sponsoring original research.

Although there are probably several nonprofit private sector groups that could perform these functions under contract to the Department of Transportation, an alternative is to dedicate FHWA staff to do the job. In a limited manner, some FHWA offices have already done so. What is needed is to combine several separate activities and create a small full-time staff with an adequate budget.

Such staff would coordinate and cooperate with all other Federal agencies having programs or responsibilities in recreational travel and tourism, among them the USTTA. The USTTA would be especially valuable in suggesting ways for State and local governments to assess their marketing programs for attracting foreign visitors, and in providing statistics about foreign travel in

Option four –
Information exchange
and technical
assistance...

SCENIC BYWAYS

the United States (see prior discussion of agency roles under "Existing Programs").

Acting as the national information clearinghouse would in no way give the FHWA, or any participating Federal agency, influence on the decision-making process of any State, local, or other entity, nor would FHWA's proffered technical assistance have any binding effects on them.

Attendees at the National Scenic Byways Workshop identified a range of clearinghouse activities such as the assembly, summarization, and dissemination of the following practical information:

Elements of a clearing bouse operation...

- Scenic byway facilities and programs, marketing materials, maps, brochures, and all related promotional matter.
- Travel demand statistics, tourist visitation and spending data, and economic development information.
- Current practice in scenic byway planning, design, operation, and maintenance, and the costs of these activities.
- Synopses of current research by all travel and transportation agencies, universities, private sector groups, and others dealing with scenic byways and tourism.
- Summaries of new marketing strategies, particularly those being directed at emerging scenic byway users such as the elderly, the single-parent household, and minority groups.
- Summaries of promotional materials, particularly those aimed at travelers from foreign countries who now increasingly enjoy taking do-it-yourself driving tours from inland gateway cities.
- Summaries of worldwide trends in scenic byway developments.

Though only a partial list, these suggested functions show that an information clearinghouse can contribute much to a national scenic

byway program. As it stands now, scenic byway agencies must gain their information piecemeal from many sources.

The technical assistance function might embrace activities such as those identified in the National Workshop:

- Offering ideas to State and local governments not yet involved in scenic byway programs on how to get organized.
- Providing guidance on ways to conduct surveys and to maintain continuing inventories of scenic byway systems and their users.
- Suggesting techniques that might be used by local governments in preserving and enhancing the environmental integrity of scenic byway corridors through land use planning and zoning.
- Helping design marketing and promotional techniques best suited to particular regions of the country and educating local officials in the use of such techniques.

In time, technical assistance might be provided through an even broader range of activities. FHWA staff might, for example, help develop and promote guidelines for scenic byway programs at the State level. Those guidelines would not intrude on any State's selection of its byways and program goals, but would aim toward ensuring that effective mechanisms were used.

Any State's program could be evaluated against the guidelines, and those satisfying requirements might get special advantages. Federal certification of a State's program might, for example, qualify the State for an increased Federal match of funds or the right to use some special national logo or insignia. The American Recreation Coalition's case study suggests that the guidelines for a good scenic byway program might include:

- Clear designation criteria.
- Formal periodic reviews of designated routes to ensure continued eligibility.

Technical assistance functions...

Guidelines for scenic byway programs...

- Provisions for signing routes and a plan for interpretation of key sites.
- Corridor management programs, including a mechanism to provide technical assistance to local units of government.
- Analyses of byway demand, an inventory of route potentials, and a State scenic byway plan.
- A mechanism for establishing a State scenic byway coordinating group involving Federal agencies, other interested State agencies, local government representatives, and key private sector representatives.

General Accounting
Office review . . .

Whatever its precise content, this program option—the establishment of a centralized information clearinghouse with a technical assistance function—is consistent with the findings of the 1990 scenic byway study conducted by the U.S. General Accounting Office, which reported:

Most scenic byway officials we contacted would support a small-scale program that facilitates the exchange of scenic byway information between the States and assists in promoting byways created for tourism purposes.

"All-American Roads" Recognition Program

Option five – Establishment of an "All-American Roads" program... A national scenic byway program would identify a limited-mileage network of existing scenic byway routes to be recognized, mapped, and signed as "All-American Roads" (or some similar name, such as "Byways of America"). The routes would be chosen from among those roads already designated as scenic byways by Federal agencies, by State and local governments, or by the private sector.

The scenic byways eligible for national recognition would likely be found at Federal, State, and local levels of ownership. Some candidate byways will be located on federally owned or federally managed lands such as in National Forests and National Parks, and on public lands in the custody of the Bureau of Land Management. Federally owned scenic byways would need to meet the same criteria as any other routes for recognition as "All-American Roads."



The Nisqually Paradise Road in Mt. Rainier National Park, about 80 miles southeast of Seattle, Washington. This scenic road would be an example of a potential candidate, along with others, for recognition as an "All-American Road." This recognition effort would be a joint Federal-State-local-private sector effort.

Strikingly unique, beautiful, and interesting, such routes would be recognizable as the best America has to offer. Identifying them should be simple. They would nevertheless be chosen on the basis of stringent criteria established by Federal, State, local, and private sector government representatives. The selection process would involve Federal agency staff participation, but not Federal funding, and but modest Federal decision-making.

This recognition effort would be a joint Federal-State-local-private sector effort...

The unique quality of "All-American Roads" cannot be stressed too much. Besides having outstanding qualities of scenic, historic, and cultural attractiveness, these scenic byways should also possess these additional attributes:

- ▶ They should be located in States with an active scenic byway program involving more than merely designating scenic byways as such.
- They should have been originally nominated for State designation on the basis of meaningful selection criteria, and State-designated through an open planning process involving various public agencies, private interests, and ordinary citizens.

Elements of qualification . . .

The corridors in which they are located should be protected from future environmental degradation by locally prepared and locally supported land management plans.

Some specifics of the All-American roads approach... These "All-American Roads" need not be continuous or interconnected in any sort of "system," nor do they need the words "scenic byway" in their current titles, in order that they achieve the broad objectives defined for them within a national program.

No initial mileage, either nationally or by state, would be set. Selecting only the most outstanding routes would keep the initial mileage limited. An on-going recognition process would permit new routes to be recognized from time to time.

The main responsibility of the State and local governments opting to participate in the program would come from their keeping their agreements for maintaining the environmental integrity and visual attractiveness of those scenic byway corridors.

Recognition of any route as an "All-American Road" would be shown by some special additional symbol, such as four gold stars, or some other logo, placed in a corner of the existing scenic byway signs.

Such roads should probably provide for a minimum continuous driving length (perhaps 30 miles), and provide an exciting series of views, cultural insights, and historic sites in eventful succession. This is not asking too much. Many of America's most outstanding scenic byways fit this description well, some extending 200 or 300 mile.

The "All-American Roads" option is a way to start a national scenic road program quickly. It should gain favorable public interest and support from the outset. The selection process would provide many opportunities to measure some of the advantages and disadvantages of establishing and promoting such specially recognized roads.

"World-class" scenic byways...

The recognition and development of some set of "All-American Roads" might be a good means of assuring that many scenic byways users get something really special to see, enjoy, and learn about, and that the corridors they pass through will be protected from all environmental degradation. This program option would also mean that America's best scenic attractions can be marketed more effectively at home and abroad.

The DOT Grants Program

Another option might see the FHWA making funds available to those States wishing to initiate or to expand planning and program development efforts for scenic byways.

Option six - Funding for planning scenic byways...

Such new funding — perhaps up to \$100,000 per State per year — might initially be limited to planning such scenic byway routes as could gain recognition as belonging among the Nation's best, if certain enhancements were added. No State would be required to do such planning or to accept funds for these purposes. Participation in this or any other phase of a national scenic byway program would remain entirely voluntary.

This pilot program would allow State highway agencies to create scenic byway offices. These offices would function as statewide scenic byway information clearinghouses, and perhaps could also function as a single State office coordinating all State agency efforts in scenic byway program development and promotion.

This Federal funding, from the FHWA to the State highway agencies through normal Federal-aid highway fund channels, might encourage as well as enable the several States that have so far decided against the vigorous pursuit of scenic byway planning and program development to begin to make efforts in that direction.

Such pilot program funding for States already moving ahead might alternatively be made eligible for application to other purposes such as planning for providing improved user amenities on some existing scenic byways. Funds ought to be available for at least three years to provide for a fair test of their effectiveness in encouraging State interest in scenic byway program development.

State and Local Government Responsibilities

For the most part, the Federal role (in addition to those played by the Federal agencies that have their own scenic byway programs) in each of the action options just presented is straightforward: it is mainly one of providing leadership, coordination, information exchange, technical assistance, and general support. Except in the last option, financial aid is not the prime consideration. Pilot programs . . .

State and local roles . . .

The roles of State and local governments are more direct. By common consensus, the States must play the critical role in the planning, implementation, and funding of scenic byway systems. To do so they should participate actively in all efforts at the national level and recognize their potential responsibility to

- Name a lead agency to serve technical assistance and information clearinghouse functions, similar to that suggested at the national level through FHWA.
- Work collectively in matters of scenic byways through their own associations (e.g., AASHTO and State Tourism Directors) as well as individually. Every State would retain its independence to pursue scenic byway programs or not.
- Create and implement an appropriately designed byway designation (and de-designation) process for adding (or taking away) byways on the State highway system. Each State would also be responsible for operating and maintaining its own scenic byways (except those owned and operated by Federal agencies).
- Include an appropriate citizen participation program in the designation process. The selection criteria and various details of the designation process would be jointly established by State and local entities, but published by the State.
- Help local governments in their efforts at scenic byway corridor protection and enhancement planning and plan implementation. State enabling legislation may be needed to provide land use restrictive zoning authority, and to recognize the legitimacy of a joint State and local role in corridor protection efforts.
- Provide visitor centers and work with State travel agencies, local governments, and the private sector in the preparation of maps, educational brochures, displays, audio messages, and other interpretive material.
- Hold training seminars for private sector providers and rural development agencies on how to take advantage of the opportunities provided by scenic byway designation and development.

How States and localities can assist...

Provide close ties with the FHWA scenic byway staff (should it be established), and provide it with all the user statistics, survey results, cost data, and general program information that can be usefully shared with others.

More suggestions for States and locals . . .

Organize the nomination process for the "All-American Roads" program, and where any route is accepted, assume responsibility for new signs, maps, enhancements, and whatever may be needed to make national recognition meaningful.

Local governments have still more specialized roles to play in the scenic byway arena, among them to

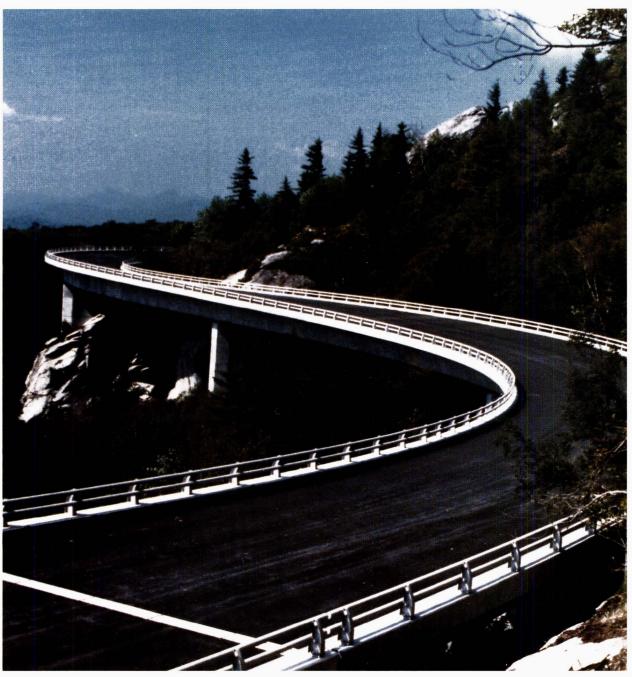
- Provide the principal mechanisms for local land use decisions in scenic byway corridor enhancement/ protection.
- Establish partnerships in developing the user amenities, services, and facilities needed along scenic byways, in raising local funds to help provide them, and in marketing and promoting scenic byway corridor attractions.
- Take the lead in researching the unique historical and cultural aspects of scenic byway corridors, and thus the educational value they may offer to the traveling public. This background is vital for promotional purposes.
- Provide such local amenities as bike trails, hiking trailheads, access paths to lakes and other waters, and similar features.

Specific local efforts . . .



CHAPTER VI

SOME OTHER THINGS TO CONSIDER



The Linn Cove Viaduct on the magnificent Blue Ridge Parkway in North Carolina. This facility represents the embodiment of many of the elements identified in this report.

Designation Criteria

hough it would appear appropriate for all the States and local governments to employ consistent criteria for designating scenic byways, that is impossible. It would require consistency in how scenic byways are defined, and it has already been shown that no single definition exists.

Consistent or varying criteria for designation . . .

Despite common elements in their designation processes, the States that manage scenic byways, and most other byway owners or operators, have developed criteria that meet their needs. They neither need nor want a new set of criteria. This is also true of the Federal agencies owning scenic byways.

Classification Standards

Classification issues . . .

The establishment of a nationally applicable system of classifying scenic byways for the purpose of advising users what to expect has definite merit (as previously discussed). A classification system based at least upon highway design elements, safety features, and operating conditions should be considered, but other factors will also need to be considered.

Whether a numbering or lettering system is better, and how any such system will relate to existing systems of functional classification and road ownership, are unresolved questions. Classification system and signing questions are interrelated. They must be considered and answered together.

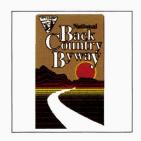
Signing and Marking

Signing issues . . .

Similarly, though there might be merit to a single all-purpose scenic byway trailblazer sign, most State and local governments have their own signs, and would face great expense should they be altered. While consideration might be given to finding a standard size, shape and color, each State should keep its own unique logo.

If an "All-American Road" program gets underway, existing signs could be retrofitted with a suitable national symbol superimposed. If a classification system is also used, the sign could include a reference to the "class" of scenic road. The signing for guidance, warning, and regulatory purposes should adhere to the standards in the *Manual on Uniform Traffic Control Devices*.









































Numerous and varied logos have been adopted for use along scenic byway corridors.

Design Standards

Most people agree that scenic byways are no different from any other public road. Minimum levels of driver safety must always be provided, consistent with the class or type of road. But there is sometimes a conflict between maintaining the natural character of the roadway and providing such safety measures as minimum widths and grades, parking and passing turnouts, and guardrail.

Safety and design standards . . .

Understandably, many argue against destroying part of a road's attractiveness to make it safe for users. This argument creates a serious dilemma for highway officials, because they may be blamed by preservationists if they program too many improvements for the sake of safety, but be blamed by drivers if they make too few.

To help minimize potential disagreements, the level of safety to be provided by different classes of scenic byways needs to be set against recognized design and safety standards. AASHTO standards provide accepted guidance for the minimum design of most roadside safety features. Some scenic byway mileage may, however, be built and maintained to less than AASHTO requirements. Then something must be done to make them safe. Some of the options are:

Suggestions for safety improvements . . .

- Improve the road to the minimum design standards necessary to provide safe operation for the types of vehicles expected to use the road. Sometimes these improvements will be of a fairly minor nature; other times, significant changes will be necessary.
- ➤ Tolerate the design deficiencies, provided that traffic volumes and speeds are low, and that drivers can be adequately warned of what driving conditions to expect through the use of caution and advisory signs, maps, and descriptive brochures.
- Prohibit those types of vehicles that cannot safely negotiate the road. For example, tour buses might be banned on roads with curves they could not negotiate. Motorhomes might be banned on roads with sustained grades too steep for them to climb at reasonable speeds.

If a proposed scenic byway cannot be rendered safe due to the high cost of needed improvements, or due to environmental restrictions, it should be considered ineligible for designation. An exception can be made if provisions for limiting certain vehicles or their hours of operation, enforcing strict speed limits, and providing appropriate warning signs, markings, and delineation are feasible.

Byway standards should also allow certain amenities not usually considered on other types of roads, such as improved see-through guardrail on bridges, turnaround bays on narrow two-lane roads for large recreational vehicles, and information kiosks. Such features contribute importantly to traveling pleasure.

The Effects of Funding Limitations

The suggestion that potentially extensive and costly user amenities are needed and should be added to many scenic byways does not imply support for a Federal categorical grant program. Considering the pressing need for other highway improvements, that is unrealistic.

The several States, through AASHTO and otherwise, have made it very clear to the U.S. DOT they do not want such a program except with a complete assurance that Federal funding for normal highway purposes continues undiminished. This State position was also reported by the Government Accounting Office (GAO) after an early-1990 survey of State road officials in ten States.

Even the strongest supporters of scenic byway development, such as those associations and individuals assembled in the National Scenic Byways Workshop in mid-1990, recognize and accept that a large new categorical grant program for scenic byways is neither needed nor likely to be possible.

Between developing and improving scenic byway routes or building and improving other streets and roads, State and local highway agencies have few real choices. Before trying to meet the needs of strictly recreational travel, they must first provide for the daily demands of commercial traffic and work-related travel.

There are, however, some possible mid-way positions regarding the Federal funding of scenic byway programs—positions that The realism of funding limitations . . .

provide more funds than at present, but well short of the ambitious levels suggested in previous scenic byway studies. Such positions might include:

Modest funding possibilities . . .

- Increasing the Federal matching percentages applicable to given categories of highway projects to create incentives for developing scenic byways. States "going the extra mile" to add scenic byway design features to a new road project might get a better matching ratio. If the match was normally 75 percent-25 percent, Federal-State, then an augmented design might warrant an 80 percent-20 percent Federal-State match.
- Providing separate funding on a single-project basis for multi-State scenic byway routes, such as the still only partly completed Great River Road from Canada to the Gulf of Mexico, or a proposed "Pacific Coast Highway" from Mexico to Canada. The Congress might consider special appropriations for projects of such magnitude on grounds of their completions having multi-state economic impacts, thus warranting the broadest national interest.
- Providing Federal funds other than from transportation sources. Given the success of scenic byways in generating tourism dollars and in promoting general economic growth, there would seem to be justification for other Federal departments sharing in the Federal investment in scenic road development.

Regardless of whatever Federal support may be forthcoming, scenic byway supporters concede that scenic byway needs can never be fully Federally funded. There is the general sense that scenic byway supporters must stop looking to the Congress as the sole source of financial assistance and begin seeking innovative non-Federal sources.

The partnership concept is attractive . . .

Some of the more successful scenic byway programs have found great advantage in funding partnerships. They have combined State, Federal, and private funds to do what none could have done alone. Another example of funding partnerships is that between the Forest Service and the Bureau of Land Management in their partner and cost challenge share programs.



This kiosk was dedicated on October 10, 1990, in Rock Creek Park, off the Rock Creek Parkway at Pierce Mill, in Washington D.C. It is one of the fruits of a partnership between BLM, American Isuzu Motors, Farmers Insurance Group, and the Coleman Company.

Some say that those who benefit financially from scenic byway development—the tourists and the businesses that constitute the tourism industry—ought to pay some share of the development. That is, tourist revenues and various user fees should be captured by the owners and operators of scenic byways to help them in financing scenic road enhancements. Numerous innovative funding techniques should be applicable.

Arriving at cost estimates for providing scenic byway enhancements is difficult. Much variation is introduced by the

Some closing thoughts on funding . . .

standards adopted for the kind and frequency of user amenities to be provided. Standards for "All-American Roads" might be set very high. Standards for other byways might be set lower.

Updating the cost estimates prepared for the 1974 national scenic byways study ("An Assessment of the Feasibility of Developing a National Scenic Highway System, Report to Congress") suggests that \$150 million to \$250 million a year over a multi-year period would now be needed to provide the scenic byway enhancements necessary for safety and road user amenities. This is \$3 million to \$5 million per State per year, compared to HUFSAM's estimate of \$300 million, or \$6 million per State per year.

Even funding needs to be coordinated . . .

Special note should be taken of the funding needs of those Federal agencies that build and maintain their own "scenic byway" systems—the National Forest Service, the Bureau of Land Management, the Bureau of Indian Affairs, and the National Park Service. Independently of questions concerning Federal funding assistance to help develop State and local scenic byway programs, the Congress may wish to assure that budgets for these agencies be sufficient to enable them to move forward with their programs at least as fast as the States move forward with theirs.

Because the Forest Service and Bureau of Land Management programs have developed so quickly, each has a considerable need to add the user enhancements that were not provided at the outset. Their new scenic byway programs have an explicit function in helping the public to understand the role of public lands and how the Federal government manages them, and for that purpose they place an extra emphasis on providing interpretive signing and both auditory and visual educational materials.

LISTING OF SUPPORTING REPORTS PREPARED AS PART OF NATIONAL SCENIC BYWAYS STUDY

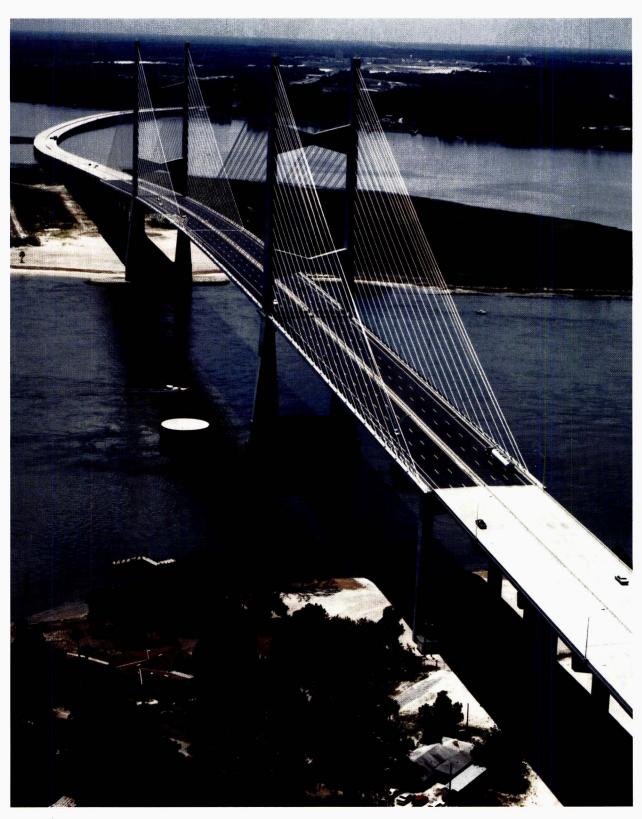
CASE STUDIES

- 1. Academy for State and Local Government Scenic Byways Programs Outside the United States.
- 2. American Automobile Association AAA's Scenic Byways Designation and Mapping.
- 3. American Planning Association The Role of Local Planning Authorities in Scenic Byways Programs.
- 4. American Recreation Coalition Common Elements of State and National Scenic Byways Programs.
- 5. American Society of Landscape Architects Creative Landscape Design Solutions for Scenic Byways.
- 6. Bellomo-McGee, Inc. Evaluation of Scenic Byways in Terms of Safety Impacts, Operational Impacts, Maintenance Impacts, and Design Standards.
- 7. Bicycle Federation of America The Impact of Bicycling on Scenic Byways.
- 8. Southeastern Research Institute, Inc. The Economic Impact of the Blue Ridge Parkway.
- 9. Benjamin Cottrell, Jr. The Safety Impact of the Blue Ridge Parkway.
- 10. John Blount The Environmental Impact of the Blue Ridge Parkway.
- 11. Greenhorne & O'Mara Safety, Traffic, and Cost Considerations on Scenic Byways.
- 12. Heritage Task Force Scenic Roads in New York State.
- 13. Iowa State University An Analysis of the Wisconsin Rustic Roads Program.
- 14. Marshall University Actual and Potential Scenic Byways in Mining and Extraction Industry Areas in Rural America.
- 15. The Mississippi River Parkway Commission The Great River Road Experience.
- 16. National Trust for Historic Preservation Techniques Available to Protect Scenic and Historic Resources.

- 17. New Hampshire Department of Transportation The Economic Impact of the Kancamagus Highway on Tourism and Its Possible Application to the Lake Sunapee Area.
- 18. North Carolina Department of Transportation Resolution of Safety, Environmental, and Economic Impact Issues in the North Carolina Scenic Byways Program.
- 19. Oregon Department of Transportation Behavior and Preferences of Oregon Scenic Road Users.
- 20. Oregon Economic Development Department Design of an Integrated System of Roadside Information for Scenic Roads.
- 21. U.S. Forest Service, Department of Agriculture The Use of Public-Private Partnership on the San Juan Skyway.
- Scenic America Scenic Corridor Protection Devices for a Range of Scenic Environments.
- 23. Seaway Trail, New York Effective Procedures for a Scenic Byways Program Evolved Through a Largely Private Approach.
- 24. United States Travel Data Center A Data-Based Analysis of Tourism and Scenic Roads.
- 25. The Urban Institute Economic Impacts of Scenic Byways.
- 26. Utah Travel Council The Development of Utah's Scenic Byways and Scenic Backways.

NATIONAL INVENTORY

1. Greenhorne & O'Mara, Inc. — An Analysis and Summary of the 1990 National Scenic Byways Study Inventory.



This is the Dames Point Bridge, centerpiece of the Dames Point Expressway and a major link in the eastern portion of Jacksonville, Florida's I-295 Beltway. Its majestic sweep over the river provides a dramatic urban viewshed for tourists and city dwellers alike.





U.S. Department of Transportation

Federal Highway Administration

