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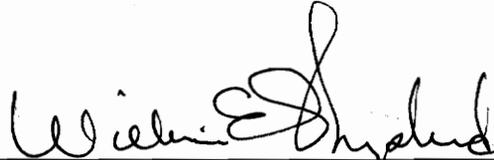
The Status of Corridor Protection  
Along Scenic Byways

by

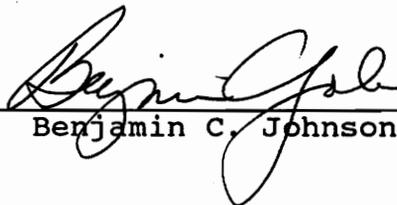
Helen E. Cozzetto

Thesis submitted to the Faculty of the  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the  
degree of  
Master of Landscape Architecture

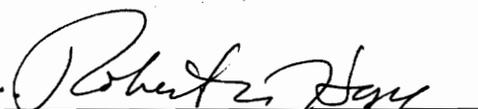
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July, 1990  
Blacksburg, Virginia

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THE STATUS OF CORRIDOR PROTECTION  
ALONG SCENIC BYWAYS

by

Helen E. Cozzetto

Committee Chairman: William E. Shepherd  
Landscape Architecture Department

(ABSTRACT)

Scenic corridor protection can be viewed as a microcosm of all land use and protection concerns. The issue has been a topic of discussion among a select few land use professionals, including landscape architects, highway engineers and land use lawyers, for over fifty years. However, the acceleration of land development into previously undisturbed scenic areas, coupled with recent federal initiatives aimed at the inclusion of scenic byways programs into the 1991 Transportation Bill, has increased discussions on scenic byway issues, including questions on the success or failures of scenic corridor protection. To date, there has been little research on the issues and concerns of scenic corridor management and protection, especially at the state level. This thesis is an attempt to gauge the status of scenic corridor protection among those states with several years experience in the field and to offer other states some insights as to tools, issues and concerns involved with corridor management and protection. The process was achieved through a combination of telephone

interviews, a questionnaire and case studies of each participant state.

Indications are that the field is currently fragmented in terms of tools and methods of management and many managers feel a sense of frustration at the lack of a holistic approach to scenic corridor protection.

## ACKNOWLEDGEMENTS

There are many people who become involved with the undertaking of any research project. My experience has been that everyone who contributed in any way to this project did so with a great deal of enthusiasm and support. To all participants, both official and unofficial, thank you for sharing your experiences and time with me. It has been a most rewarding endeavour.

I wish to specifically call out the following contributors as these people have been more than generous in some way to the completion of this project. Firstly, I can't thank enough my thesis committee for their support over the past year and a half. To Dr. Will Shepherd, I owe the most, as it was my first studio with him that began this process of studying scenic byways, which turned into a long-range serious effort. I will miss the team working spirit which you fostered, the excitement of work well done and well received, and of course, the many 'dog and pony shows' we became involved with, in the course of pursuing the diverse aspects of scenic byways. Thank you for all your time, support and especially your congeniality. It was hard work but also a great deal of fun.

To Professor Ben Johnson, special thanks for introducing me to all the wonderful people of the Ellett valley who opened

a part of their very interesting lives to me, and for your continuing bright design ideas and comments which kept me on my toes. I hope this thesis makes up for the change in direction I took over the past year.

To Mr. Robert Hope, Resident Landscape Architect of the Blue Ridge Parkway, I owe a great deal of gratitude and thanks for the time you took to share your land ethic values and insights with me. Your sensitivity to the many issues involved with scenic lands helped to reinforce and solidify my own perspective.

To Dr. Patrick Miller and the Department of Landscape Architecture, thank you for the financial support over the course of my studies and your faith in my academic abilities. I hope my performance was deemed worthy of your trust.

To Dr. David Levin, Mr. Larry Isaacson and Mr. Tom Edick, all associated with the Federal Highway Administration in Washington, DC, many thanks for your support and continued interest in this work. It has been an honor to know you.

To Elizabeth Fischer, Landscape Architect, North Carolina Department of Highways, and Mr. William Melton, Landscape Architect, Washington State Department of Transportation, thank you for being so involved with this project and providing me with such a generous supply of research material over and above what I originally requested. I am deeply grateful.

To my husband Don, who was completing a PhD. during this same time-frame and can fully appreciate the pressures involved, and to my daughters Darcy and Dana, thank you for juggling your schedules and for the understanding that this chaotic lifestyle would not last forever.

Lastly, my most profound thanks to Alexander Graham Bell, whose invention of the telephone made all this work possible.

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## PREFACE

## PREFACE

### STUDY BACKGROUND

This study is an outgrowth of a project that I worked on during the fall of 1988 and expanded into the spring of 1989. At that time I was researching various issues related to the use of conservation easements and other land management tools in rural environments. Part of this research also involved inventory and criteria assessment along a designated scenic byway; Route #785, in Southwest Virginia.<sup>1</sup> This pastoral scenic landscape located on the edge of a growing university town, is known as the Ellett Valley and has had a long and colorful history. It has been recorded that the road was once a bison trail and well-travelled Indian route and for a time, the gateway through the Appalachians to Ohio and the west.<sup>2</sup> Descendants of some of the original white settlers still live between the mountains, in this picturesque valley.

By delving deeper into the issues facing many rural landowners living on the edge of growing communities, it became apparent this valley was considered a 'special place'

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<sup>1</sup> Dr. Will Shepherd. " Visibility Description, Visual Analysis and Land Use Control Along Rural Scenic Byways." Paper presented at the Sept. 1989 Parkways, Greenways, Riverways: The Way More Beautiful conference; hosted by The Appalachian Consortium; Asheville, NC.

<sup>2</sup> Frederick B. Kegley. Kegley's Virginia Frontier. (Roanoke, VA: The Southwest Virginia Historical Society, 1938).

to all its residents and they were concerned with preserving their rural lifestyle and scenic areas. As they saw it it was an issue of "quality of life".<sup>3</sup> Yet it was also apparent that these people are fiercely independent and hold a high distrust of any outsiders "telling them what to do".<sup>4</sup>

In the spring of 1989, I began to explore whether the landowners' of the Ellett valley considered their rural way of life worthy of protection and if so, what private legal measures they had taken to insure the long-term retention of their rural way of life. A series of in-depth interviews were conducted with seven families owning various sizes of land tracts bordering the scenic byway. While every person interviewed considered the valley a unique place to live and hoped the rural character would be preserved, not one landowner had made any private legal arrangement to retain or permanently preserve the integrity of their own property.<sup>5</sup>

Quite unexpectedly, through the interviews, it was brought to my attention that the designation of Route #785 as

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<sup>3</sup> Interviews with Ellett valley residents; Southwest Virginia, April/May 1989.

<sup>4</sup> Discussions with Dr. Karl Hereford, professor of Educational Research at Virginia Polytechnic and State University; Sept. through Nov. 1988. Dr. Hereford is a former resident of the Ellett valley and was owner of the only vineyard along the Route #785 scenic byway. The vineyard has since been sold and plowed under.

<sup>5</sup> Unpublished research results. May 1989.

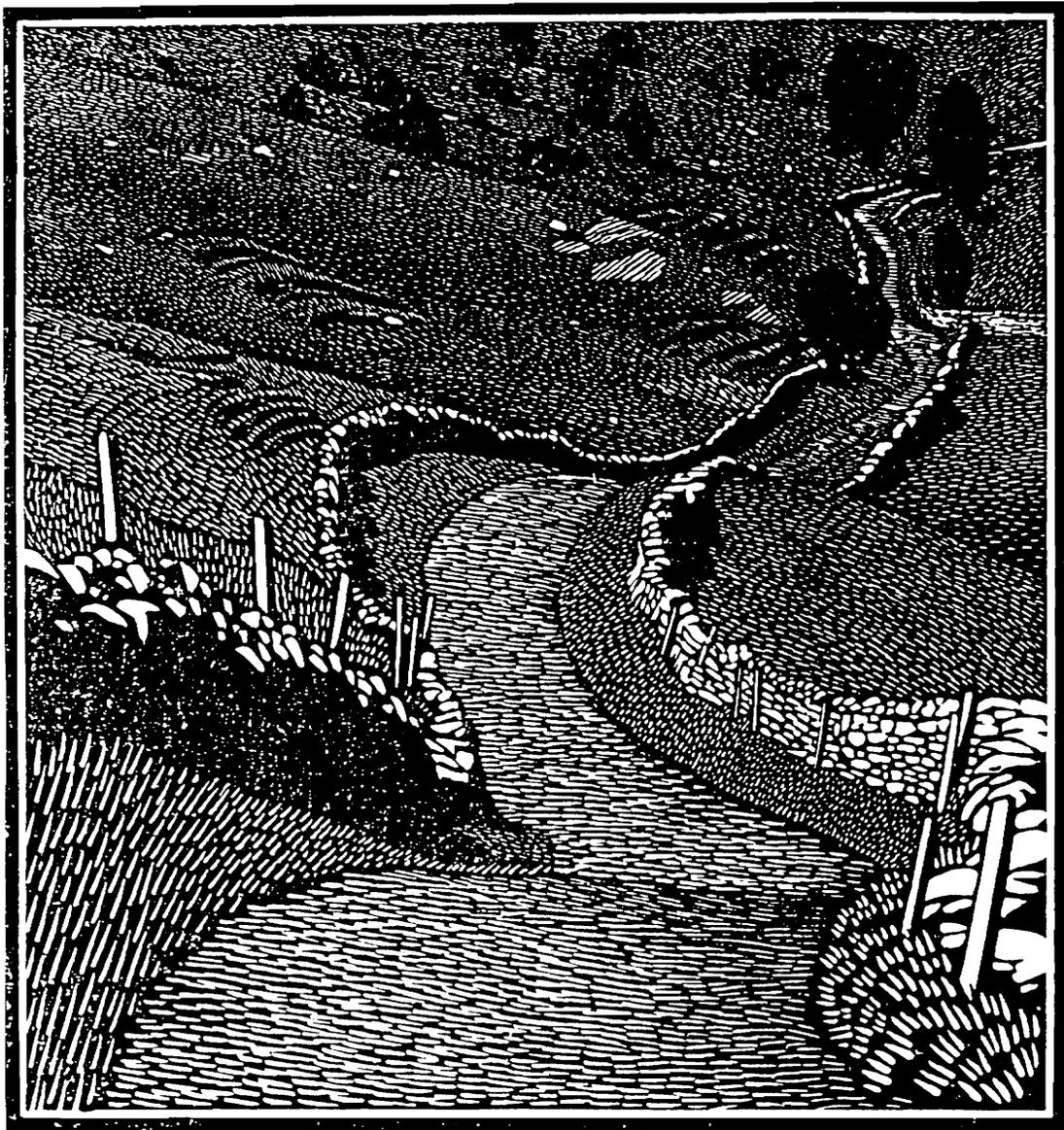
a scenic byway in August 1985, had been a grass-roots attempt by the valley residents to preserve their rural way of life. Although scenic byway designation in Virginia is strictly a voluntary measure, the residents' perception was that the designation would act as a protection tool for their valley.<sup>6</sup>

Could the Ellett valley residents' presumptions of a scenic byway acting as a land protection tool be substantiated elsewhere? What purpose do scenic byways serve in other states? What has been the experience of other states in protecting landscapes commonly known as scenic corridors? What are the positive and negative aspects of scenic corridor protection? and finally; What, if any, tools, do states use to protect or manage their scenic byway corridors? As all these questions and other scenic corridor issues, began to circle in my head, I felt it was time to review some of them and other scenic corridor issues with experts in the scenic byway field.

That is how this study came about.

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<sup>6</sup> Interview with Carol Sutphin,- April 1989. Interview with J.B. Sutphin, March 1990. Mr. Sutphin's father, a respected valley farmer, had been instrumental in having Route #785 designated as a scenic byway. His message was that the designation would act as an impediment to development and help to preserve the "quality of life" that the valley residents currently enjoyed.



ILLUSTRATIONS BY STEVE MCCRACKER FOR THE WASHINGTON POST

FIGURE #1

'The Way More Beautiful.'

## CHAPTER ONE

## CHAPTER ONE

### STUDY PURPOSE

#### A. Introduction

Long before the invention of the automobile, Americans have been attracted to natural and rural landscapes traversed by a narrow country road.

...Mountains distant and near, smooth and shaggy, single and in ridges, a little river hiding itself among the hills so as to shew in lagoons only, cultivated grounds under the eye and two small villages.... It may be successfully offered, and in different portions through vistas, or which will be better, between thickets so disposed as to serve for vistas, with the advantage of shifting the scene as you advance on your way.<sup>1</sup>

The above passage is from a letter Thomas Jefferson wrote to William Hamilton in 1806. As indicated by his sophisticated observances, Jefferson was acutely aware that travelling through pleasant surroundings is more than getting from place A to place B and that the journey itself should be an exciting and invigorating experience. Almost 200 years later, Jefferson's interest in pleasure travelling is being promoted

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<sup>1</sup> Edwin M. Betts and Hazlehurst Bolton Perkins. Thomas Jefferson's Flower Garden At Monticello. (Charlottesville, VA: University Press of Virginia, 1986) pg.1.

by various scenic byway and highway programs that have become increasingly popular with the general public through the invention of the automobile and rise of a domestic tourist industry.

Most Americans can and do enjoy scenic beauty through their windshields, and learn of our nation's geography, history, and culture the same way. In fact, tourism is among the top three industries of 40 states, and 80 percent of that tourism involves travel on highways.<sup>2</sup>

The popular explosion of travelling on America's scenic byways has broad land use implications as increased tourism encourages diverse economic development pressures in many previously unadvertised scenic areas.

Given its \$37 billion dollar weight, I expect to see policymakers in governments at all levels; Federal, State and Local, to begin to rid themselves of the notion that 'tourism' is a non-productive, frivolous activity and begin to think of it as serious business, deserving as a tool for economic development and cultural enrichment.<sup>3</sup>

Automobile companies have also popularized the scenic landscape by routinely advertising their products within images of winding roads through rolling hills, quaint farms or backdrops of breathtaking ocean and mountain views. Photography, film and television have further ingrained these

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<sup>2</sup> G.M. Bastarsche. "Scenic Highways Targeted." American Automobile Association fact sheet, Summer 1989.

<sup>3</sup> Remarks by Under Secretary Rockwell A. Schnabel before the Scenic Byways Conference, sponsored by the American Recreation Coalition, Washington, DC: Nov. 6, 1989.

images of scenic landscapes on our minds, so that we take their existence for granted.<sup>4</sup> Today the lure of seeing and experiencing these images is so strong, that a leisurely drive in the country is considered "... the most popular form of outdoor recreation in America."<sup>5</sup>

Planes are fast. Trains are direct. But the best way to experience the variety of America's landscape and the richness of its history is to see the country up close - to smell the dawn in a piney parkland, dawdle at a mountain lookout, linger at a country fair. Why fly over or clatter by when the road brings you right there? ...From Arizona's Painted Desert to the painted barns of the Pennsylvania Dutch, these journeys are a medley of sceneries, purposes and lengths. The leisurely routes unveil a meandering portrait of the America that thrives behind the interstates.<sup>6</sup>

## B. Problem Statement

Efforts to properly protect and manage our scenic resources along roadways, are increasingly critical as more and more of us begin to explore and exert pressures on America's scenic landscapes. Almost daily we read newspaper

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<sup>4</sup> For example, Mabry Mill on the Blue Ridge Parkway is the most popularly photographed image of the U.S. landscape today.

<sup>5</sup> Beverly Magley. National Forest Scenic Byways. (Billings, MO: Falcon Press, 1990). Foreword by F. Dale Robertson, Chief, Forest Service, pg.vi.

<sup>6</sup> "Great American Getaways." US News and World Report May 16, 1988.

articles of rural scenic landscapes being destroyed by an influx of development which hopes to capitalize on the 'intrinsic values' that made these landscapes so special. Particularly affected by the pressures of development are the degradation of the aesthetic and environmental qualities of the scenic landscapes that we so highly prize. Sadly, the zeal to develop and exploit these scenic resources often has the effect of 'killing the goose that laid the golden egg'.<sup>7</sup>

Much research has been done on the effects of increased human activity on the environmental degradation of scenic resources.<sup>8</sup> However, little research has been done on the larger issues of aesthetic degradation of scenic landscapes (referred to as corridors), along roadways. This study is therefore, an attempt to document and assess the success or failures of scenic corridor protection along long-established state-designated scenic byways. The hypothesis is that the scenic byway field is currently fragmented and that a need exists for a 'holistic' approach to scenic corridor protection. The need for this research has been recently

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<sup>7</sup> "Development Paints Grim Vista at Shenandoah." The Washington Post, Oct. 7, 1989 and "Congressmen Seeking Study of Shenandoah Battlefields." The Washington Post, Dec. 9, 1989.

<sup>8</sup> Warren E. Wise. "The Concept of Carrying Capacity as a Tool for Managing Scenic Roadways." (Blacksburg, VA: Virginia Polytechnic and State University; Masters of Landscape Architecture Thesis, 1988), lists a good bibliography.

accelerated by a series of issues and events that are to be addressed in the 1991 Highway and Transportation Bill.

In 1987, the Report of the President's Commission on the American Outdoors, recommended that; "Local and state governments create a network of scenic byways... and take action to protect these resources."<sup>9</sup> This statement along with the explosive growth of the tourist industry, has encouraged a resurgence of interest in scenic byways at all levels of government.

In February 1989, the first legislation on scenic byways in fifteen years, was introduced in Congress by Senator Jay Rockefeller (D-WV) S.432 and Congressman James Oberstar (DFL-MN) H.R. 1087. The bill directed the Secretary of Transportation to study many aspects of scenic byways including a introduction of a national system, designation and guideline criteria, economic impacts, safety issues, and inventory of existing national corridors. In October 1989, approval was given by Congress to study the Scenic Byways Bill and one million dollars provided for a year-long study.

In a press announcement, Senator Rockefeller stated, "Preserving scenic beauty is one goal of a national scenic byway program but there's also a tremendous economic

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<sup>9</sup> Report of the President's Commission. American Outdoors: The Legacy, The Challenge. (Washington, DC: Island Press, 1987). pg. 163.

benefit."<sup>10</sup> It is this statement that reinforces the dichotomy discussed above and why an assessment of existing scenic corridor protection was undertaken. If scenic byways will boost the ever-growing tourist industry, it is vital that we know how to properly protect and manage all our scenic resources that make this economic development so attractive.

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<sup>10</sup> Press statement by Senator Jay Rockefeller; recorded in Scenic Byways Bulletin. March/April 1989.

## CHAPTER TWO

## CHAPTER TWO

### LITERATURE REVIEW

#### A. Scenic Byways Definition

The term scenic byways is a relatively new one that has evolved from the earlier scenic roads and parkways concept. Due to the changing nature of both landscapes and human preferences, there is great debate over what exactly a scenic byway is. To date, there is no one agreed-upon definition, but for the purposes of this study, a scenic byway is an existing rural road traversing through landscapes which convey high aesthetic qualities of natural, cultural, historic or recreational resources along the way (See Fig. #2). Historically, these roads served either utilitarian purposes or were considered the backroads by local residents. Many were built without the use of sophisticated construction equipment and though their functions may have changed over time, these roads and their surrounding landscapes are still considered 'special' to many local residents. Today, the evolution of these byways from 'pleasantly forgotten' to 'tourist destination' is causing growing concern over their protection and preservation.

**WATER**

Rivers, Lakes, Waterfalls,  
Rapids, Beaches, Marshes,  
Islands, Dams, Canals, Locks,  
Harbors, Lighthouses.



**TOPOGRAPHY**

Mountains, Canyons,  
Geologic Formations,  
Golf Courses, and other  
Specialty Graded Sports  
Areas.



**FAUNA**

Wildlife Areas, Hunting  
Preserves, Livestock  
Grazing Areas, Pastures.



**VEGETATION**

Forest, Prairies,  
Orchards, Active Farm  
Croplands, Tree Farms.



**HISTORIC & CULTURAL**

Forts, Battlefields, Old  
Mills, Covered Bridges,  
Mines, Ghost Towns,  
Plantations.



**RECREATION**

Camp Grounds, Picnic Areas,  
Boating, Gold Panning,  
Rock Collecting Areas.



Source:

*A Proposed Program for Scenic Roads & Parkways. U.S. Department of Commerce for the President's Council on Recreation and Natural Beauty.*

**FIGURE #2**

**Elements of Scenic Roads and Scenic Corridors**

The laudable progress that has been made in the designation and promotion of byways by states, regional commissions and federal agencies should not divert us from the continuing question of protection. The future use and enjoyment of byways by both domestic and international traveller will depend upon their remaining scenic.<sup>1</sup>

### B. Scenic Corridors Definition

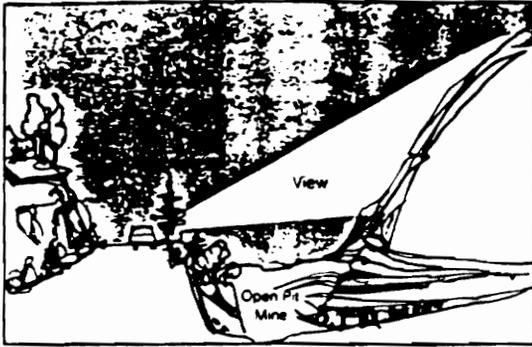
Because of mounting tourist and development pressures in many regions, 'remaining scenic' requires that there be effective protection and management of the surrounding landscape or scenic corridor of which the byway is a part. A scenic corridor is referred to as the 'frame of reference' of a road or byway. It includes all the surrounding landscape visible through which the roadway passes or, 'the view from the road'.<sup>2</sup> The corridor is the context of which the road and its right-of-way are just two of its elements. (See Fig. #3). Other more intangible yet equally important characteristics which contribute to the scenic driving experience include:

1. The quality of the experience
2. The variety of the landscape
3. The accessibility of connecting resources

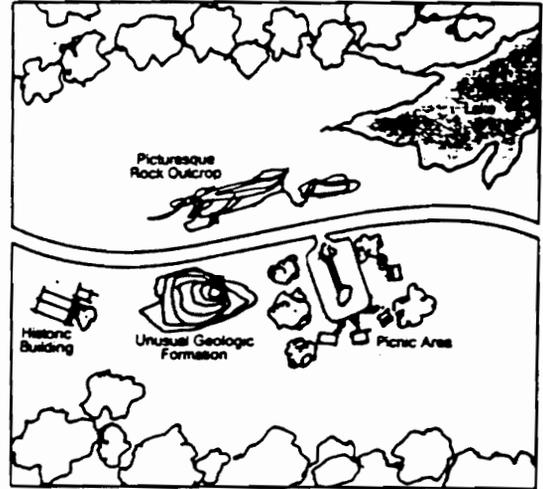
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<sup>1</sup> Peter Hauley. "Protecting and Enhancing Scenic, Cultural and Recreational Resources." Summary remarks by the National Trust for Historic Preservation to Scenic Byways Conference'89. Nov.6, 1989.

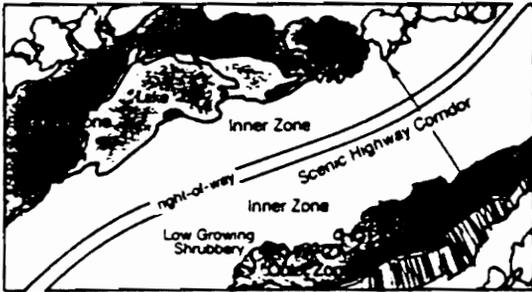
<sup>2</sup> Donald Appleyard; Kevin Lynch; and John Meyer. The View From the Road. (Cambridge, MA: MIT Press, 1964).



Screens of trees or shrubs are used deliberately to narrow the corridor at some points by permanently blocking from view objectionable landscape features.



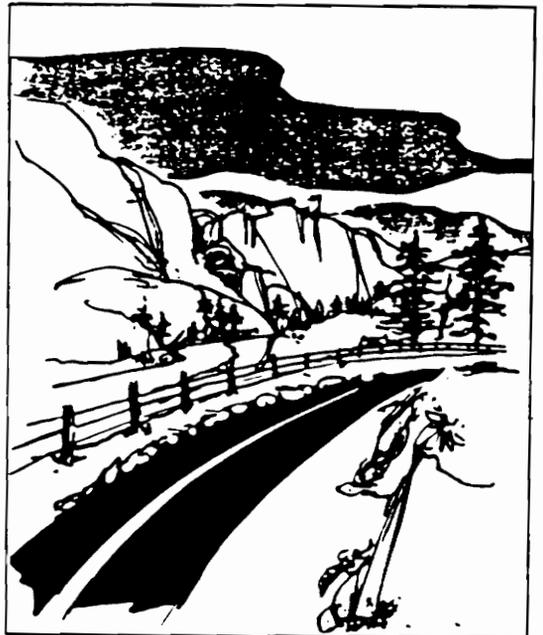
Corridors should protect and enhance scenic resources.



The corridor is wider than the highway area.



The scenic corridor has variable widths, depending on whether it goes through steep or flat country, or along ridge tops instead of valley bottoms.



Modified timber harvesting practices may open up an attractive vista along a scenic road.

Source: A Proposed Program for Scenic Roads & Parkways, U.S. Department of Commerce for the President's Council on Recreation and Natural Beauty

FIGURE #3  
Scenic Corridor Elements

4. The location and geographic distribution of the road
5. The design and safety of the road
6. The public and private development consistency
7. The compatibility of other resources
8. The management of competing uses<sup>3</sup>

The process of delineating scenic corridors can be determined by a variety of visual assessment methods which inventory and analyze the landscape elements. These inventory and assessment methods were all developed during the 1960's and 1970's and form the core of scenic corridor documentation to date.

Techniques listed below, include processes related to:

- A. Inventory of existing elements such as: foreground, middleground, background of landscape units including; scale, distance, view type, observer position, view point (Litton)<sup>4</sup>
- B. Assessments of existing elements such as: vividness, intactness, unity (State of Washington; Bureau of Land Management; Jones and Jones Landscape Architects)<sup>5</sup> or light, spatial characteristics, plan symbols (Appleyard and Lynch)<sup>6</sup>
- C. Assessments of potential corridor elements such as: visual zone overlays incorporating visual complexity, sequential

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<sup>3</sup> Adapted from Federal Highways Administration Report Scenic Byways 88 (Washington, DC: Federal Highway Administration, 1988). "The Scenic Corridor" pgs. 7-1 to 7-2.

<sup>4</sup> Burt Litton Jr. "Forest Landscape Description and Inventories: A Basis for Land Planning and Design." (Berkeley, CA: Forest Service Paper PSW-49, 1968).

<sup>5</sup> See: Washington State Department of Transportation. "Scenic Classification System." (Olympia, WA: State of Washington, 1973).

<sup>6</sup> Appleyard, supra.

visual experiences, orientation. (Hornbeck and Okerlund)<sup>7</sup>

All these methods can be graphically documented and thus serve the purpose of providing a legal basis for future land protection decisions.<sup>8</sup> New methods of documentation including the use of photo montages/computer plot programming<sup>9</sup>, data bases<sup>10</sup> or video recorders<sup>11</sup> are currently being tested and show promise in this area as well.

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<sup>7</sup> Peter Hornbeck and Garland A. Okerlund. Visual Values for the Highway User: An Engineer's Workbook. (Washington, DC: Federal Highway Administration, 1973).

<sup>8</sup> J.H. Beuscher. "The Highway Corridor as a Legal Concept." Highway Research Record #166. (Washington, DC: Highway Research Board, 1967). "It would help these new scenic road programs immensely if there was some overall scenic plan required so that the lawyer could see the objectives that he was being asked to protect." pg. 11.

<sup>9</sup> Harland Bartholomew and Assoc., Inc. "Aesthetics and Visual Quality." Roanoke River Parkway Technical Memorandum #10. (Richmond, VA: Harland Bartholomew and Assoc., Inc., Sept '89).

<sup>10</sup> RIIMS Data Collection System. This system has recently been tested by Dr. Bob L. Smith; Professor of Civil Engineering-Kansas State University; Manhattan, KS: (no date).

<sup>11</sup> Department of Landscape Architecture - Virginia Polytechnic Institute and State University. New River Parkway Masterplan. (Blacksburg, VA: in progress, 1990).

Figure #4 shows an example of a scenic corridor assessment for the New River Parkway; West Virginia, based on Burt Litton's assessment technique. This method was field recorded at intervals of maximum visibility throughout the scenic corridor and then graphically translated to a USGS 7.5 min. topographic map at 1: 24000 scale. The end product depicts the visually sensitive corridor as it relates to a potential new parkway and can be used as a foundation for land planning and performance standards of future structures and improvements.



NEW RIVER PARKWAY MASTER PLAN

Prepared for  
NEW RIVER PARKWAY AUTHORITY  
WEST VIRGINIA  
By  
VIRGINIA POLYTECHNIC INSTITUTE  
LANDSCAPE ARCHITECTURE PROGRAM  
1989

SCENIC CORRIDOR



### C. Parkways Definition

In contrast to scenic byways, parkways are defined as newly created, limited access roads, which are specifically designed "to lay lightly on the land"<sup>12</sup> in a linear park setting. Their purpose is to provide a leisurely driving experience through park-like settings and provide roadside amenities for the use and enjoyment of the motoring public.<sup>13</sup>

The first parkways were constructed in Boston, Mass. in 1893-94.<sup>14</sup> New York state followed suit by designing and building parkways in the early 1900's. Although many of these initial parkways were designed as higher-speed divided roads, their intent was to offer the motorist a pleasant driving experience. These roads including the Bronx River Parkway, the Westchester County parkways, and later parkways on Long Island, Brooklyn and Queens,<sup>15</sup> set the stage for federal involvement in the parkway concept.

The first federal parkway effort was the Mount Vernon

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<sup>12</sup> National Park Service. Park Road Standards. (Washington DC: National Park Standards, 1984). pg.1.

<sup>13</sup> Ibid. pg.2.

<sup>14</sup> David R. Levin. "Scenic Corridors." Highway Research Record #166. (Washington, DC: Highway Research Board, 1967). pg.14.

<sup>15</sup> Domenico Annese. "The Impact of Parkways on Development in Westchester County, New York City and the Metropolitan New York Region." Parkways: Past, Present and Future. (Boone, NC: Appalachian Consortium Press, 1987). pgs.117-21.

Parkway which was built from 1929-33.<sup>16</sup> Gradually federal parkways began to provide a more leisurely driving experience through design shifts from the urban divided four-lane freeway approach to a narrower scaled two-lane road concept in a rural setting. Congress had earlier defined this vision for parkways in 1916 through Act 39 - Statute 535 which reads as follows.

A national parkway is a federally owned, elongated park featuring a road designed for pleasure travel, and embracing scenic, recreational or historic features of national significance. Access from adjoining properties is limited and commercial traffic is not permitted. A national parkway has sufficient merit and character to make it a national attraction and not merely a means of travel from one region to another.<sup>17</sup>

The creation of a parkway relies on "scenic considerations which are of paramount importance in the selection of any scenic route."<sup>18</sup> The Blue Ridge Parkway which was built out of a ravaged and degraded landscape, owes its success to some visionary landscape architects, particularly Stanley Abbott, who applied this 'scenic' philosophy and created a magnificent parkway weaving gently throughout the

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<sup>16</sup> Christopher Tunnard and Boris Pushkarev. Man-Made America: Chaos or Control? (New Haven, CT: Yale University Press, 1963). pg.162.

<sup>17</sup> National Park Service. National Parkways Handbook. (Washington, DC: US Department of the Interior, June 1964). Ch.1, pg.2.

<sup>18</sup> Dudley C. Bayliss. Planning Our National Park Roads and Our National Parkways. (Saugatuck, CT: Traffic Quarterly, 1957). pg.428.

Blue Ridge mountaintops.<sup>19</sup>

The National Park Service was well aware that this scenic resource needed to be properly protected to insure that a visitor's experience would always be of exceptional quality.<sup>20</sup> Since the inception of the project, the National Park Service has either acquired land outright or purchased scenic easements as land protection measures along the entire corridor of this parkway.

"This was a new concept in recreational management and was the first venture of its kind for a rural parkway."<sup>21</sup> Yet even with scenic easement measures being in place for almost 60 years, there are continuing threats to the scenic integrity of the parkway.

Instead of hayfields, orchards, pastures and farms, we are beginning to see either tourist attractions or mountain subdivisions, for the same qualities that make the mountain areas enjoyable for leisurely travel also make them desirable for land development...Therefore, some control of this corridor must be imposed or the parkway may lose the very qualities that made it a scenic roadway par excellence. Much of the charm of the parkway lies beyond the confines of the narrow right-of-way; and if this rural environment is to be preserved, Virginians and North Carolinians will have to come to grips with some form of land use planning.<sup>22</sup>

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<sup>19</sup> Harley E. Jolley. The Blue Ridge Parkway. (Knoxville, TN: University of Tennessee Press, 1969).

<sup>20</sup> National Park Service. Scenic Easements. (Washington, DC: National Park Service in-house document, 1974). pg.4.

<sup>21</sup> Ibid. pg.4.

<sup>22</sup> Ibid. pgs.4-5.

At the moment, the National Park Service is in the process of negotiating with state highway departments on primary and secondary road access point crossings along the Blue Ridge, to better coordinate and improve future land uses. As the Park Service sees it, land use and road access go hand in hand. The control of land use will affect traffic flow and the pressures for new state road access points. Existing pressures from the county levels are for new or improved road crossings which will eventually entice development. It is therefore critical to identify and define sensitive areas before any development occurs.<sup>23</sup>

The National Park Service regards scenic corridors as the most important element in a linear park system. In the case of the Blue Ridge Parkway, the difficulty comes from managing a park as opposed to managing a road. Their approach is to elevate the 'image' of the corridor as a park and de-emphasize the highway aspect. The parkway is not intended as a travel route but as a destination in itself. The Park Service's intent is that this emphasis on 'image' and sense of pride will filter down to all levels of community who will in turn be more inclined to protect this aesthetic resource by incorporating higher standards of land use control along the Parkway.<sup>24</sup>

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<sup>23</sup> Personal discussion with Mr. Robert Hope, Resident Landscape Architect for the Blue Ridge Parkway; July 13, 1990.

<sup>24</sup> Ibid.

Although this study does not concentrate on federal parkway protection, the above examples and other issues such as the lack of a masterplan for the Blue Ridge or scenic degradation facing this and other parkway projects are comparable to protection issues facing scenic byway managers at the state and local levels as well.

#### D. Historical Concerns

The notion of protecting and preserving landscape scenery and features is not a new concept. Its roots are grounded in the wilderness preservation movement of the 1800's which was instrumental in creating the first National Park system in the world.<sup>25</sup> In the early 1900's, wild and pastoral scenery became accessible to a great many more people through the invention of the automobile and concerns over the protection of these scenic resources centered around outdoor advertising and billboard control.<sup>26</sup> The use of zoning was also introduced during the 1920's and became an extremely popular method of separating land uses, particularly clean, quiet residential areas from highly polluted and dirty industrial ones. In the early 1930's, the Highway Research Board issued this statement

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<sup>25</sup> Roderick Nash. Wilderness and the American Mind. (New Haven, CT: Yale University Press, 3rd. ed. 1982). pgs.108-121.

<sup>26</sup> Donald G. Hagman and Julian Conrad Juergensmeyer. Urban Planning and Land Development Control Law. (St. Paul, MN: West Pub. Co, 1986). pg.449.

which specifically related to roadside protection.

Roadside development must conserve, enhance, and effectively display the natural beauty of the landscape through which the highway passes.<sup>27</sup>

However, the post World War Two building boom paid little heed and there was an explosion of development and destruction along many scenically sensitive lands especially along the eastern seaboard and the California coast.<sup>28</sup> This trend alarmed many of those involved with roadside management as evidenced below.

If we are set about the task of building a finer America we must love our country and be willing to enlist in its service. But we need also to think of ourselves and our service in a much wider frame of reference. We are not only descendants but ancestors. We are the trustees of a great inheritance that we dare not squander. A part of that inheritance is the countryside itself, the value and beauty of which must not be dissipated with reckless indifference.<sup>29</sup>

By the end of the 1950's, it became evident that a major land protection problem was occurring along scenic roads. A few 'voices in the wilderness' took up the issue of scenic highway protection, but as landscape architect Philip Lewis later lamented, "Space is probably the most neglected resource

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<sup>27</sup> Charles R. Anderson. "Preservation of Landscape Features." Highway Research Board Special Report #138. (Washington, DC: Highway Research Board, 1973). pg.95.

<sup>28</sup> Jon A. Kusler. Regulating Sensitive Lands. (Washington, DC: Environmental Law Institute, 1980).

<sup>29</sup> Wayne Earley. "Warrents, Criteria and Standards for Acquiring Land and Interests in Land for Scenic and Other Highway Environmental Purposes." Highway Research Record #206. (Washington, DC: Highway Research Board, 1967). pg.2.

in this country."<sup>30</sup>

Pessimism turned to optimism in the 1960's as the rise in environmental concerns spilled over into the transportation field as well. Issues relating to the protection of scenic values along roadways finally came to the fore and were discussed frequently among highway designers, landscape architects and lawyers.

Under President Johnson, scenic road enhancement was first brought to the forefront of the federal policy arena with the passage of the 1965 Highway Beautification Act.

We have not chosen to have an ugly America. We have been careless, and often neglectful. But now that the danger is clear and the hour is late this people can place themselves in the path of a tide of blight which is often irreversible and always destructive.<sup>31</sup>

President Johnson saw the Highway Beautification Act as a forum to improve America's degrading landscapes and recommended the initiation of a comprehensive aesthetic program which included legislation relating to the scenic road system, easements, control of junkyards and billboards and improved access to recreation facilities for the travelling

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<sup>30</sup> Philip H. Lewis Jr. "Protection of Scenic Values." Highway Research Board Circular #23 (Washington, DC: Highway Research Board, 1966). pg.5.

<sup>31</sup> President Lyndon B. Johnson's Special Message to Congress on Natural Beauty of Our Country, 111 Congress Rec. 2045, Feb. 8, 1965.

public.<sup>32</sup> Unfortunately, these measures fell short of an overall comprehensive land use initiative for scenic corridor protection and though there have been successes over the years, some initiatives, particularly the control of billboards has been less than satisfactory.<sup>33</sup>

Problems relating to the management and control of visual blight was only one aspect of scenic road protection addressed in the 1960's. A far larger issue was the control of land use and development within the scenic corridor. This concern surfaced among road designers during a 1966 Highway Research Board Special Session on Roadside Development.

In our Nation's growing understanding of the need for total environmental planning and design, the highway is not now seen as a right of way with a relatively narrow band of pavement and some immediately associated appurtenances, but as one element in an environmental complex - a visual corridor within which roadside development has a major function to provide a transition between the pavement and the adjacent landscape or cityscape, a foreground to the controlled progressive display of natural scenes and man-made developments. In short, we are now more than ever concerned with the 'Complete Highway'.<sup>34</sup>

This 'complete highway' concept which envisioned the

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<sup>32</sup> John Matheny. "Acquisition of Scenic Easements." Highway Research Record #166. (Washington, DC: Highway Research Board, 1967).

<sup>33</sup> Harold Scarlett. "Bill Would Close Huge Loopholes in Billboard Law." The Houston Post, Dec. 3, 1989. Reprinted in Scenic America's Sign Control News, Jan/Feb. 1990.

<sup>34</sup> "The Art of Roadside Development." Highway Research Board Special Report #88. (Washington, DC: Highway Research Board, 1966). pg.73.

inclusion of surrounding landscapes outside the traditional right-of-way, was the beginning of the scenic corridor concept.

In 1967 the significance of incorporating scenic values into highway and planning processes was once again put forward as a major land use issue.

The highway corridor is one of the most important innovations to be added to American planning concepts in the present decade.<sup>35</sup>

But concerns surfaced that acceptance of the scenic corridor idea without properly addressing non-traditional highway issues such as land use control would effectively render this concept useless.

The long-term control, management, and use of the land in the corridor is critical to the establishment of a scenic road. Future changes in land uses may greatly alter the present landscape and reduce or destroy its scenic nature. Ownership or control devices must be available to protect the scenic values of the corridor.<sup>36</sup>

The inclusion of land use issues and controls along highway corridors was a new concept for state highway departments.

It is appropriate that preservation, restoration and enhancement, development and development control, through the complete highway concept be added to existing highways where possible and incorporated

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<sup>35</sup> Forward to Highway Research Record #166. "Highway Corridor Planning and Land Acquisition." (Washington, DC: Highway Research Board, 1967).

<sup>36</sup> Levin, "Scenic Corridors." supra, pg.15.

throughout all phases of future highways.<sup>37</sup>

Over 20 years have passed since the above was written, and indications are that not much progress has been made in this direction. Many highway departments are still strictly concerned with their road right-of-way's and have not become involved with issues of scenic corridor protection. Yet new pressures to get on the scenic byway 'bandwagon' are forcing many highway departments to either reevaluate their existing byway programs in terms of land use control, or explore new initiatives for scenic corridor protection. History has shown us that scenic corridor protection is critical to the survival of scenic byway programs. It may also be so in the larger land use context as well.

#### E. Context of Corridor Protection

In the past 5 years or so there has been a renewed urgency to protect natural and scenic resources in the United States. One concern is the realization that we have been destroying a massive amount of environmental and scenic resources. The consequences of these actions are no longer isolated but beginning to surface in every part of the country.

Another concern is that the urban sprawls and strip

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<sup>37</sup> Earley, supra, pg.4.

developments are badly eroding the diverse characters of our countryside and destroying that rural 'quality of life' that many of us idealize.<sup>38</sup> As so cleverly portrayed in Figure #5, the ensuing widespread sameness and densities of development creates negative reactions on residents and visitors wishing to enjoy and experience the countryside.

Sight-seeing is of the essence of tourism...The commuter in the journey-to-work, the shopper in the journey-to-shop, also visualize landscape in making travel decisions. But only for the sightseer is the search for unique place experience the primary motive for travel.<sup>39</sup>

Placed in these contexts, scenic corridor protection is the single most important issue in the scenic byways field today.<sup>40</sup> The entire purpose of scenic roads rests on the aesthetic appeal and condition of the surrounding landscapes through which it passes and the 'spirit of place' that it evokes. These free-flowing and sequential scenic landscapes take many forms and are tied to the roadway's visual boundaries, not political ones. As such they present a unique protection and management challenge which has not received its rightful notice in the mainstream of land management processes.

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<sup>38</sup> Harry Launce Garnham. Maintaining the Spirit of Place. (Mesa, AR: PDA Pub., 1985).

<sup>39</sup> John A. Jakle. The Visual Elements of Landscape. (Amherst, MA: MIT Press, 1987) pg.8.

<sup>40</sup> Telephone discussion with Dr. David R. Levin, retired Federal Highway Administration Director and editor of Scenic Byways; June 28, 1990.



FIGURE #5

Context of Corridor Protection

During the late 1960's and 1970's the idea of regulating development on environmentally sensitive lands such as wetlands, floodplains, steep slopes or prime agricultural lands began to take hold in many state legislatures.<sup>41</sup> Since then a few states of which Vermont, Maine, and Oregon are examples, have passed land use controls for development on scenically sensitive lands as well.

At the moment, there are many diverse resource issues vieing for legal protection and scenic land protection is but one. The issue of aesthetics is however, making an impact on land management policy and some recent initiatives have included:

- A. The American Society of Landscape Architects' proposal to include aesthetics under conservation reserve objectives in the 1990 Farm Bill.
- B. Congressman Peter H. Kostmayer's introduction of the bill "The American Landscape Protection Act of 1990."
- C. The National Trust For Historic Preservation's recognition that historic landscapes are the larger context of historic preservation and so have been included as a sensitive resource in the 1990 National Heritage Conservation Act.
- D. The Greenways initiative activated by the President's Commission on America's Outdoors which introduced the scenic corridor concept to the general public and sparked national grass-roots interest in this approach to open space protection.

Due to the nature of the scenic corridor resource as an all-encompassing sequential land mass, it appears reasonable to suggest that scenic corridor protection is the next logical

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<sup>41</sup> Kusler, supra, 1980.

step in a currently fragmented approach to sensitive land protection. With the 1991 Highway Bill almost upon us, the opportunity to take a great step forward in protecting scenic corridors is close at hand. Concern for scenic land protection has grown over the past forty years as illustrated by Aldo Leopold in 1948 and again by Warren Zitzmann in 1989. Let us heed these calls with a concerted effort to recognize scenic corridor protection as a major land use issue of the next century.

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the aesthetic harvest it is capable...of contributing to culture.<sup>42</sup>

We must have the political courage and foresight to use the tools that are available to us...The basic decision that policymakers must make is to follow a difficult course of land use planning and implementation of those plans. The alternative is to follow... the 'buffalo-hunter' mentality that exploits natural and manmade resources for short-term selfish gain.<sup>43</sup>

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<sup>42</sup> Aldo Leopold. A Sand County Almanac. (New York, NY: Ballantine Books ed., 1970). pg.xviii-xix.

<sup>43</sup> Testimony of Warren T. Zitzmann before the Hausie Committee on Interior and Insular Affairs; May, 1989.

## F. The Case for Aesthetics

Scenic corridor protection is aimed at retaining the 'image' and context of a byway. Without this image, there is no byway. Without the byway, there is no protection for the landscape's corridor.

One of the purposes of land protection is an attempt to preserve or enhance the beauty of an area. But as beauty is a subjective issue, it has been difficult to quantify its meaning in legal terms. Prior to 1954, aesthetics were considered a luxury and did not represent a valid, separate purpose under the police power.

In the 1954 case *Berman v. Parker* (348 U.S. 26), Justice Douglas observed,

...the concept of public welfare includes values which are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy.<sup>44</sup>

This statement has been interpreted by the courts to mean that aesthetics is a valid use of the public's police power and can be applied for regulatory purposes.<sup>45</sup>

The legislative acceptance of aesthetics was first put into law in California in 1959, with the passage of the Scenic Easement Deed Act. The act enabled local governments to accept

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<sup>44</sup> Hagman, supra pg.447.

<sup>45</sup> Matheny, supra pg.42.

easements from landowners wishing to protect the aesthetic and scenic qualities of their properties from development.<sup>46</sup> Although not directly related to scenic corridors, this historic open space protection law, set the stage for subsequent scenic lands protection.

Specific references to legal issues related to scenic corridor protection began to appear in the early 1960's with ideas for highway corridor reservations and conservation zones as new land use control measures.<sup>47</sup> There was also the call for better cooperation between state highway departments and local governments so that aesthetic landscapes along roadways would be better protected and not so heavily influenced by local politics.<sup>48</sup>

In 1967, Norman Williams Jr. focused attention on the issue of aesthetics and corridor preservation.

Protection of scenery along transportation routes is of special significance now - because our scenery is increasingly threatened, and also because its preservation is increasingly important.<sup>49</sup>

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<sup>46</sup> Thomas S. Barrett and Putnam Livermore. The Conservation Easement in California. (Covelo, CA: Island Press, 1983). pg.11.

<sup>47</sup> Daniel R. Mandelker. "Highway Reservations and Land-Use Controls Under the Police Power." Highway Research Record #8. (Washington, DC: Highway Research Board, 1963).

<sup>48</sup> Ibid. pg.58.

<sup>49</sup> Norman Williams, Jr. "Legal Techniques to Protect and to Promote Aesthetics Along Transportation Corridors." Highway Research Record #182. (Washington, DC: Highway Research Board, 1967). pg.25.

He likened the problem to one of 'landscape pollution' and listed these legal remedies as partial solutions to the increasing degradation of scenic landscapes:

1. Persuasion.
2. Incentives (persuasion with a carrot)
3. Public regulation of private development, primarily through the police power.
4. Affirmative action by public authorities.<sup>50</sup>

Professor Williams went on further to say that there is no one single legal technique to deal with scenic protection as the problem is so complex. Serious discussion must be sought on the approaches to scenic corridor protection rather than some quick-fix solutions. The approaches which are available and show the most promise for corridor protection, include:

1. Highway routing and design.
2. Public acquisition and development of land and vistas in the corridor.
3. Regulation of private activities and uses of land in the corridor.<sup>51</sup>

These legal approaches to protecting the aesthetic qualities of scenic corridors along roadways, were defined over 25 years ago, yet still today, only a handful of states are seriously practicing their use.

The passage of the National Environmental Policy Act (NEPA) in 1969 guaranteed that aesthetic objectives be a part of all national policies, by requiring an assessment of a

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<sup>50</sup> Ibid. pg.27.

<sup>51</sup> Ibid. pg.32.

project's impact on aesthetic resources. In any federal project, this process is part of the Environmental Impact Statement (EIS).

While this process is limited to federally funded projects, it has placed pressure on states to recognize the need for legal aesthetic protection measures, which in turn has fostered a more responsible community approach to land aesthetics.

#### G. Land Management Tools

Land management tools are used by various levels of government and private organizations to bring a semblance of order to an otherwise chaotic waste of land resources. Tools such as fee purchase, comprehensive planning, general zoning, and easement acquisition have been in use over fifty years. The recent explosion in alternative land protection methods was initiated in the late 1960's when it became apparent that the traditional methods of land use control (particularly zoning), were no longer providing adequate protection to the land resource. This 'quiet revolution' in land use control,<sup>52</sup> came about from a combination of factors, including rapid urban growth/sprawl, severe environmental abuses and damage,

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<sup>52</sup> Fred Bosselman and David Callies. The Quiet Revolution in Land Use Control. (Washington, DC: Council on Environmental Quality, 1971).

to the realization by a significant number of people that their intrinsic 'quality of life' was rapidly deteriorating.

Land management tools can be administered separately or in combinations, depending on the situation and level of expertise involved. Emphasis today is on resource protection and growth management practices, which provides more flexibility than traditional zoning methods. Appendix A briefly defines all tools listed in this study's questionnaire as well as citations on some excellent publications which give in-depth analysis on various land management tools.

With this section complete, let us now examine specific case studies of scenic corridor protection issues and concerns.

## CHAPTER THREE

## CHAPTER THREE

### ISSUES AND CONCERNS

#### A. Methodology

Within the past two years, interest in the 1991 Highway and Transportation Bill has prompted many states to seriously study scenic byways. However, intents vary from promotion of the "product", to providing new recreation opportunities, to protection or preservation of the scenic corridor.<sup>1</sup>

According to the Federal Highway Administration (FHWA) publication Scenic Byways, there were just 17 states in July 1988 with any kind of scenic byways program at all.<sup>2</sup> Of those states, only 10 have 15-20 years management experience dealing with issues relating to scenic byways. Within this time-frame relatively little data has been documented on the progress of scenic byway programs or their corridor protection success rates. This lack of data required that first-hand communication with byway managers was essential in order to

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<sup>1</sup> Telephone interview with Mr. Brian Estes of the Government Accounting Office in Seattle, Washington, March 1, 1990.

<sup>2</sup> This figure has now risen to over 30 according to the latest 1990 AASHDO information.

glean a sense of success or direction for these programs. Consequently, the use of telephone interviews coupled with a questionnaire was determined to be the best method of obtaining and recording this raw data. (See Appendix B for a sample copy of the questionnaire.) Both methods were then combined into individual case studies so that it is possible for the reader to access a particular participant state's program easily.

Telephone interviews with several byway planners and managers, revealed that there are many issues and concerns surrounding scenic byways. Some of these are being currently addressed for the Fall 1990 Congress session by either the Federal Highway Administration Scenic Byway report, or the Government Accounting Office (GAO) report, which is assessing the tourist and economic aspects of byways.<sup>3</sup> Both documents are due for review in December 1990. Initially, the issue of scenic corridor and resource protection had not been given high priority. This lack of attention to the protection of scenic byway resources, prompted an ad hoc group of organizations to survey several states regarding aspects of corridor protection and enhancement, for inclusion in the 1990

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<sup>3</sup> A listing of reports and case studies to be included in the Federal Highway Administration and Government Accounting Office documents are available from those respective departments in Washington, DC. and Seattle, Washington as of December, 1990.

Federal Highway Scenic Byways report. The groups include: Scenic America, Bicycle Federation of America (BFA), American Society of Landscape Architects (ASLA), American Planning Association (APA), National Wildlife Federation (NWF), and The National Trust for Historic Preservation (which is submitting their report separately.)

As little has been done to document and assess land management tools specifically targeted to scenic byways, the questionnaire in this study has been designed to include both specific tools and broad issues. Several experts were solicited to either comment on the questionnaire or pre-test the questions. These included various Departments of Transportation (DOT) or Environmental Conservation managers of scenic byways from the states of Arizona, Michigan, New York, and North Carolina.<sup>4</sup>

Comments on this portion of the research were very favorable. Criticism centered on the questionnaire perhaps being too long. This problem was overcome by personally telephone interviewing each participant first and explaining the purpose of the questionnaire. Each call ranged from one to two hours in length which allowed participants to begin thinking and commenting aloud on the issues of scenic byway

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<sup>4</sup> A list of pre-test participants is included in Appendix C.

corridor protection. The questionnaire, with a covering letter reiterating each personal telephone conversation, was then sent individually to participants. (See Appendix B for a sample of the covering letter.) A follow-up phone call, approximately two weeks after the questionnaires were sent, was also a part of this process. Its purpose was to insure that all participants understood the process and had hopefully completed and returned the questionnaire along with their comments.

The questionnaire in this study was also independently reviewed by both the Federal Highway Administration and the Scenic America ad hoc group, so as to avoid any redundancies or ambiguities that could arise. Results from this study's interviews and questionnaire are meant to supplement the results of those other surveys currently in progress.

Participants were chosen as key management representatives in Departments of Transportation or Environmental Conservation with established scenic byway programs.<sup>5</sup> These managers were selected from lists used and supplied by both Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO), from their own previous survey and

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<sup>5</sup> A list of questionnaire participants is included in Appendix C.

research work. The use of these lists was also instrumental in helping the author contact other scenic byway managers who were subsequently interviewed, either during the pre-test stage or as part of the case studies.

The states profiled in this study included: California, Maine, Massachusetts, Minnesota, Oregon, Tennessee, Vermont, Virginia, Washington, and Wisconsin. All these states have had many years experience with scenic byway management although not every one uses specific scenic corridor land management tools or protection measures. However, all states agree this issue is a timely one and is taking on increasing importance in the transportation field today.

## CASE STUDIES

## B: Case Studies

The following represents individual profiles of the ten participating states' responses to the interviews and questionnaire. States are profiled alphabetically. Responses to the questionnaire are combined with telephone information when required, but are written in the same order as the original questionnaire. Answers are written as close as possible to the respondent's own wordings. An individual summary of issues and concerns is also included for each participating state. The numerical breakdown of questionnaire results are contained in Chapter 4 under B. Questionnaire Results.

## 1. California

As one of the most beautiful yet populous states in the United States, California has had a long history of land use conflicts between growth development and the protection of its scenic resources.

During the next two decades California's cities, towns, and countryside will be called on to absorb nearly 10 million more persons, about half that increase coming from migration...The projected 10 million person increase is the same as the total population of California in 1950, reflecting 100 years of growth accumulated since the discovery of gold and statehood.<sup>1</sup>

How well the state will respond to this massive increase on its scenic resources base remains to be seen, but indications are that the population today takes seriously its commitment to a high 'quality of life' standard. In 1990, this is evidenced by a surge of environmental issues being placed in the political ballot box.

Over the years, California has used a variety of land management tools to try and protect its scenic resources from indiscriminant development. Since the early 1930's when scenic

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<sup>1</sup> Irving Schiffman. Alternative Techniques for Managing Growth. (Berkeley, CA: University of California; Institute of Government Studies, 1990). pg. vii.

easements were initiated to protect views and open space lands along highways (especially coastlines), the need to protect scenic corridors adjacent to roadways has been of continuing concern. In 1963 the legislature passed the State Scenic Highways Program to address this issue and "...establish the State's responsibility for the protection and enhancement of California's natural beauty by identifying those portions of the state highway system which, together with the adjacent scenic corridors, require special scenic conservation treatment."<sup>2</sup>

Although the California Department of Transportation (Caltrans) oversees and is responsible for all scenic highway programs, responsibility for specifics such as the designation and protection of the scenic corridor, rests with local government agencies of cities and counties.

#### Caltrans' Perspective

California's scenic highway program is characterized by locally developed tools such as general (comprehensive) plans, specific plans and ordinances. State scenic highway regulations specify that cities and/or counties develop and

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<sup>2</sup> California; Streets and Highway Code; Div.1 Ch.2 Art. 2.5 State Scenic Highways 260 - Legislative intent.

implement scenic corridor protection programs to conform with state requirements.

Protection programs vary from one jurisdiction to another. In general the degree of controls are at a level necessary to protect the scenic appearance of the corridor and to meet community goals. The protection measures can be in the form of regulations or policies in the local general plan or area plans.

Minimum requirements for a scenic protection program are listed below. All these tools have been part of the scenic highway program since 1963.

1. Regulation of land use and density of development
2. Detailed land and site planning
3. Control of outdoor advertising
4. Careful attention to and control of earthmoving and landscaping
5. Regulation of design and appearance of structures and equipment<sup>3</sup>

State scenic highway program regulations call for monitoring the local protection program and renewal of the official scenic designation every five years. Renewal is granted if local officials declare that the corridor protection program is being enforced, and the Caltrans District Scenic Highway Coordinator concurs. If not, communities have one year to comply or withdraw from the

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<sup>3</sup> Ibid.

program. This tool can be effective, if diligently applied. However, enforcement at both the local and state level varies with the degree of interest in the program and available funding. The cost associated with the program at the state level is a portion of personnel time for the program coordinator and for some district coordinators.

Caltrans considers public participation the most important tool in this program. The local scenic highway protection program should be prepared in cooperation with local citizens' committees, affected property owners, environmental groups and anyone else who would be impacted by the proposed designation. Ideally, these groups are involved at the earliest possible date to afford ample time for review and comment before official action is taken. Effective citizen participation will result in a protection program which generally meets local desires.

Corridor protection programs in officially designated state scenic highway corridors are subject to specific review by Caltrans. However, all general plan elements are reviewed by the department as part of the California Environmental Quality Act review process. Many general plans contain a scenic highway component, which is an optional element of the enabling legislation.

California has established a list of state highways

eligible for scenic designation, but participation is strictly a local option. Caltrans feels that they should be partners in land use/transportation decisions, but the state should not dictate local land use.

Today the conflicts over growth control is an issue that affects scenic corridors and the scenic highway program. Those wishing stricter control over land use will see scenic highway designation as an aid. Those who wish to intensify local growth development view it as a hindrance.

#### Program Summary

Discussion with various levels of government involved in scenic corridor protection basically support Caltrans responses to the questionnaire. Caltrans' function is to review and approve scenic highway designation and monitor scenic highway programs. All management and enforcement issues are delegated to local levels of government. This means that scenic corridor protection is as varied as the city or county under which it is administered. Local issues and concerns of the day, therefore, have a great influence on the success or failure of the program.<sup>4</sup> Due to the pressures and competing

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<sup>4</sup> Telephone interview with Mr. Bill Felts - Senior Transportation Planner for Caltrans; March 20, 1990.

interests on local government budgets, there is no guarantee that scenic corridor protection will be a priority. Even in a wealthy jurisdiction such as Monterey County, where the protection of scenic beauty is important, competing land interests often create havoc within the community.

All scenic highway applications must go through a rigid Comprehensive Plan process which includes intense public hearings. Even though land prices are high, the beauty of the area is a drawing card for anyone with money. Development has gone crazy here. On Monday nights, the Planning Commission meets to discuss new proposals. Even though we carefully plan development to protect and preserve rusticity in the scenic corridor, we have a saying in the office here, that 'on any given Tuesday, this can all change.'<sup>5</sup>

Many local jurisdictions do not regard scenic corridor protection as a high priority and have drastically altered the rustic quality of their scenic roads. Caltrans does have the power to de-designate roads which no longer meet the state's scenic criteria but this has not yet occurred, "although there are places where it could."<sup>6</sup>

California is in a unique position with respect to scenic highways today. On the whole the economy is very stable and public committment to a 'high quality of life' standard has

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<sup>5</sup> Telephone interview with Ms. Mary Tsui - Department Head, Monterey County Planning and Building Inspection Department, May 22, 1990.

<sup>6</sup> Felts interview, supra, May 1, 1990.

meant a swell of grass-roots participation in community decisions regarding scenic highways. As development and user pressures continue to rise, communities are becoming more possessive of their scenic roads. With state attention focusing on major freeways and highways, Caltrans would like to up-grade many rural roads from two-lane to four-lane but are experiencing strong local opposition to destroying the aesthetics and scenery of these routes. Local strategies are to leave the roads as they are and have users put up with the inconveniences associated with increased use.<sup>7</sup>

Tensions between local and state protection objectives has had some unfortunate consequences in the use of certain land management tools or measures. The discontinuation of scenic easements at the state highway level is one example.

We no longer use scenic easements in this program as the political flavor is against spending highway money on this. Today land is only bought at the state level as a mitigation measure for environmental purposes, not for aesthetics.<sup>8</sup>

California has often been used as a model for many diverse policy decisions. Caltrans sees the protection of scenic highway corridors coming from the grass-roots and being implemented at the local levels. The existing program is

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<sup>7</sup> Telephone interview with Mr. Greg Albright, Landscape Architect for District 5, Caltrans; Monterey, CA. May 4, 1990.

<sup>8</sup> Ibid.

somewhat fragmented because there are conflicting objectives between local jurisdictions and the state. Caltrans is not interested at this time in upgrading scenic corridor protection while many local jurisdictions (particularly wealthy communities) are voicing strong support for the retention and increase of scenic corridors.

Therefore, programs that are working the best are in those localities where individuals and organizations have taken an aggressive stance to protect their scenic resources and conveyed this message to their local councils and the state.<sup>9</sup>

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<sup>9</sup> Ibid.

## 2. Maine

Maine has had a scenic highway program in existence since approximately 1967. It was initiated as a direct result of the 1965 Highway Beautification Act. In 1969 the Maine Scenic Highway Board was created but convened only 8 times until it was abolished and restructured in 1972 under the Commissioner of Transportation.<sup>1</sup> As per statute 23 MRSA 4206 1-G the duties of the Commissioner are:

To establish a system of scenic highways and preserve the scenic values along them and adopt the necessary procedures to accomplish this. Consideration is to be given to:

1. scenic value
2. safety aspects
3. economic implications
4. preservation of scenic value
5. compatibility with other national, regional and local conservation plans."<sup>2</sup>

Further to this, statutes 23 MRSA 651 and 23 MRSA 153 state provide for the Department of Transportation to:

preserve and develop the natural scenic beauty along and adjacent to any state or state aid highway to integrate the public improvement with the aesthetics of the area traversed by the highway...Lands may be acquired by the Department for roadside development...for the preservation of and

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<sup>1</sup> "Maine Scenic Highway Program Study." Department of Transportation in-house document, Jan. 20, 1975.

<sup>2</sup> Ibid. pg.1.

development of natural scenic beauty.<sup>3</sup>

Although the statutes emphasize the protection of scenic beauty and the state uses various land management tools to protect the scenic quality of its highway corridors, the main purpose of the program today is considered economic development and tourism.

Maine is a strong Home Rule state<sup>4</sup>. The Departments of Transportation and Economic Development oversee land management issues but tools are administered and enforced through local planning boards and Conservation Commissions. This results in a wide variety of land management tools and difficulty in assessing each local jurisdiction's success rate.

#### Maine's Department of Transportation Perspective

Maine employs a wide variety of land management tools to protect their scenic resources. These include: zoning (both at the state and local levels), scenic area overlay districts,

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<sup>3</sup> Ibid. pg.1.

<sup>4</sup> Home Rule refers to the power given to local governments by the state to make, administer and enforce certain local regulations. In some states such as California, this power includes the authority to locally zone. For a more complete explanation see: Donald Hagman and Julian C. Juergensmeyer. Urban Planning and Land Development Control Law. (St. Paul, MN: West Pub. Co, 1986). pgs.53-54.

design review overlay techniques, highway/transportation overlay districts, special permits (use or density restrictions), buffers and set backs, architectural controls, sign controls, fee acquisition/leaseback, and wider than usual road right-of-way.

The Department of Transportation does not administer or manage many of the aforementioned tools but concentrates its work on the design and maintenance of landscape forestry. Visual assessment techniques are part of the formal process and selective thinning is considered the department's specialty. From the Department of Transportation's standpoint, there are two issues regarding administration and enforcement that concern them.

The first is the lack of coordination between those trying to preserve and protect scenic corridors and timber companies who own large tracts of land bordering scenic roads. Many timber companies clear-cut forest crops without any regard to the scenic aspects of the resource.

These companies need to be educated about the other aspects of the forests bordering our scenic highways. It is very frustrating for us to spend time selective thinning land parcels for increased visual qualities, only to have the adjacent land tract be decimated along the road. We need to coordinate our objectives with the private companies so that a more unified management strategy can

emerge.<sup>5</sup>

The second problem for the Department of Transportation is the issue of growth along scenic corridors. Comprehensive Planning at the county levels are often poorly coordinated with the state's objectives. This adds to difficulties in retaining the existing character of the scenic corridors. Since 1968, Maine has had land management information on file but no 'teeth' in the law, so that enforcement of standards has been uneven at best.

The protection of public scenery is a major issue to us here. At the grass-roots level, saving scenic resources has become an emotional issue of protecting a way of life. Right now, Maine is suffering from fiscal restraints and it is difficult to make politicians understand that the issue of public scenery is a critical one. Local governments do not have the money to buy scenic lands but are very concerned with protecting those lands that the tourists find so beautiful. What point is there in protecting fragmented pieces of the landscape, or for that matter buildings. They have no meaning without context. The scenic corridors give them the context but how to protect them is a very difficult task. Scenic resource protection is not a high priority. At the moment we only give lip-service to scenic corridor protection or delegate the responsibility to local governments. We need to push scenic corridor protection at state and federal levels and combine this issue with the protection of wetlands, wildlife habitats, land conservation, etc.<sup>6</sup>

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<sup>5</sup> Telephone interview with Mr. Clyde Walton, Landscape Architect for Maine Department of Transportation, March 20, 1990.

<sup>6</sup> Ibid.

The Department of Transportation's views toward managing and maintaining the best scenic corridors is the use of fee simple ownership.

If we're going to have any public scenery in the future, we have to invest in it now.<sup>7</sup>

Again the Department is concerned that the effectiveness of many tools is fragmented due to a lack of coordination or common objectives at the state level. This is not to say there hasn't been any local success stories, but higher levels of government also need to invest in scenic corridor protection. In this instance the optimal choice is to purchase more scenic land and development rights.

Since Maine is a Home Rule state with regard to state primary over local control, local zoning laws are badly needed. Also, sufficient funding for their enforcement is necessary. Scenic preservation remains a low order issue with respect to growth management and environmental protection.

### Program Summary

Maine's scenic highway program has been in existence for a long enough period of time, that the Department of Transportation can pinpoint present and future trouble spots.

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<sup>7</sup> Ibid.

At the present time, there is a push for tourism on scenic roads to help bolster a poor regional economy. Private land trusts and community groups are struggling to protect small parcels of scenic lands in Maine, but the Department of Transportation realizes that efforts to protect scenic corridors must be initiated at state and federal levels in order to effectively protect these scenic resources. Maine sees a federal scenic byways program as a positive step to protect existing scenic resources and impact future scenic corridor land uses. This is a departure from traditional highway thought which has been concerned only with infrastructure and for the most part does not concern itself with land use outside the right-of-way. The Department feels perhaps it is time to broaden their thinking and reassess the highway's role in resource protection.

Existing scenic roads are the perfect vehicle for this thinking and could serve the function of protecting existing scenic corridors and serve to guide planned development of future land uses.<sup>8</sup>

On the state policy level, the Department's own assessment of their scenic highway program, is that there has been a dramatic shift since the 1960's. Under President Johnson's Highway Beautification Program of 1965, all policy and management directives came through the bureaucratic system

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<sup>8</sup> Ibid. May 29, 1990.

from the top down. Today there is a complete turn-around and programs are initiated and managed at the local levels.<sup>9</sup>

People are seeing their way of life disappear, so there is a real concerted grass-roots effort to 'protect' their way of life. Citizens will become involved when their own lifestyles and properties are at stake.<sup>10</sup>

Maine would like to see local levels of commitment combined with state and federal scenic corridor protection objectives, so that the current program will not remain fragmented but rather serve to protect scenic corridors throughout the whole of Maine rather than small isolated pockets.

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<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

### 3. Massachusetts

In the 1880's Frederick Law Olmsted proposed a plan of connecting parks 'like beads along pathways' throughout the city of Boston, Mass. The design was 8 miles long and is referred to as the Emerald Necklace concept. In 1929 the newly formed Massachusetts Bay Circuit expanded Olmsted's concept to include wide swaths of open space and a parkway for statewide protection. The intent was "...to preserve the countryside for the enjoyment of urban residents as they motored around."<sup>1</sup> Unfortunately this proposal was not implemented as the Depression hit 2 months later. In 1956 the Bay Circuit legislation was passed, but due to development that had taken place over the years, the inclusion of a parkway was dropped. The legislation did call for existing roads to be designated as scenic but no funding was attached so that little was done in this regard. In 1984 the plan was finally funded with \$3.25 million and has outlined a series of program goals, accomplishments and anticipated activities for the Bay Circuit area.<sup>2</sup>

It is interesting to note that though the Olmsted park/road concept is often referred to as an outstanding example of scenic and corridor protection objectives,

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<sup>1</sup> "History of the Massachusetts Bay Circuit." (Boston, MA: Department of Environmental Management, Sept. 1989)

<sup>2</sup> Ibid.

state level. By its own admission,

A little known and brief law, the Scenic Roads Act of 1973, gives towns the power to protect the scenic qualities of local roads.<sup>3</sup>

This law does state that;

After a road has been designated as a scenic road any repair, maintenance, reconstruction or paving work...shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls, or portions thereof, except with the prior written consent of the planning board...<sup>4</sup>

The law makes no mention of land management or state oversight of the program. It is strictly a local initiative.

Massachusetts' Department of Environmental Management  
Perspective

As the Office of Transportation under the Department of Public Works (DPW), does not yet have a statewide scenic byways program, the Department of Environmental Management currently oversees corridor issues. However, a proposal to commence a Scenic Roads program in the fall of 1990 is underway at the Office of Transportation. At the moment the Office of Transportation is concentrating its efforts for scenic corridor protection under the Open Space Program which

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<sup>3</sup> "Little-Known Law Helps Towns Preserve Scenic Roads." (Boston, MA: Department of Environmental Management, no date).

<sup>4</sup> Ibid.

will be referred to in the program summary.

State agencies have no role in land management issues under the law so locally governed tree protection ordinances and stone-wall preservation are the only tools used to protect a scenic corridor in this state. A public hearing must be held prior to removal. All decisions of the planning boards are final. There is no process for appeal and this has not been challenged to date.

Assuming Massachusetts did not change the law ( that is the Scenic Roads Act of 1973, remains a local option and locally-managed program), there is a definite need for concerted encouragement and guidance to local officials in making this law effective. Without any incentives to enact or enforce it, the law remains ineffective.

On both the short-term and long-term horizons the Department of Environmental Management would like to see design controls within overlay districts.

### Program Summary

While Massachusetts does not have a state-wide scenic byways program, existing legislation provides for the protection of trees and stone walls along local scenic routes. However, the lack of funding combined with the low profile of this program has meant that it has been ineffectual in

protecting and conserving the traditional New England landscapes at the regional scale.

To rectify this alarming situation, the Massachusetts legislature enacted a \$10 million Open Space Transportation Bond issue in 1985. The bond was to be used;

...to restore the balance between growth and scenic beauty, by acquiring scenically and environmentally important parcels along public ways.<sup>5</sup>

To date \$2.5 million has been spent to acquire scenic lands but due to poor economic conditions and state fiscal restraints, the remaining funds of \$7.5 million are currently frozen. It is therefore impossible, at this time, to predict whether this program will be successful or not in protecting scenic corridor resources.

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<sup>5</sup> "Open Space Program." (Boston, MA: Department of Public Works, no date).

#### 4. Minnesota

In 1924, the scenic North Shore Highway in Minnesota was opened to the motoring public. Running around the magnificent waters of Lake Superior, it remains one of the most spectacular scenic roads in the United States. Yet with all Minnesota's scenic management experience on roadways, it is perhaps surprising to learn that the state is only now, in the process of consolidating an official scenic byways program.

Minnesota has taken some innovative approaches to scenic land management over the years. Since the early 1950's, the state has administered a scenic easement program dedicated to acquiring scenic lands adjacent to highways. The program was legislatively adopted in 1965 (Minn. Stat. &173.04). Its main purpose was to preserve scenic lands in private ownership and control billboard and outdoor advertising proliferation. The need to further improve visual qualities along highways, prompted the state legislature to initiate a new program in 1971, aimed at controlling and eliminating junk yards along public roads. This was followed over the years by various land use statutes which are related to highway projects; including limited use permits, transfer of fee title lands, highway easements, and cooperative agreements with other pertinent

agencies.<sup>1</sup>

In 1978 Minnesota began to contribute significant skills and attention to its role in the development of the Great River Road. This federally-assisted project encompassing ten states and two provinces along the Mississippi River, is considered a successful collaborative effort between various levels of government and public and private agencies. Minnesota regards this project as unique from their other scenic roads. Management and administration issues are handled separately through the Minnesota Mississippi River Parkway Commission. Currently, the Federal Highway Administration has commissioned an in-depth analysis on the Great River Road for the Federal 1990 Scenic By-ways report;<sup>2</sup> therefore references in this study will be brief.

In 1986, the Minnesota legislature passed a new law promoting recreational enhancement along state scenic highways, as part of the State Transportation Act. The law called Highways In Recreation Areas (HIRA), dictates the coordination of highway construction and recreation opportunities between the Department of Transportation and the Department of Natural Resources. Cooperative inter-agency

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<sup>1</sup> Highways In Recreation Areas. (St Paul, MN: Minnesota Department of Transportation, Sept. 1988). pg.29.

<sup>2</sup> Great River Road Association Newsletter. (St. Paul, MN: March 1, 1990).

efforts have been specifically laid out, including the evaluation and designation of:

... 'unique and scenic' highway segments to protect, interpret or enhance the visual, natural or cultural character of roadway corridors.<sup>3</sup>

Minnesota has recently established one other important program relating to scenic road development. This is the North Shore Management Plan which was finalized in 1988. In 1989 a Corridor Management Program<sup>4</sup> was drafted for over 130 miles of Lake Superior's North Shore Drive as a result of cooperative efforts between local communities and various state agencies.

Although not specifically mandated as a program, Minnesota also practices in-house management practices on an on-going basis and refers to this work as De Facto (DF). Examples include existing mowing practices and the use of landscape architects or foresters as construction and maintenance supervisors.

#### Minnesota's Department of Transportation Perspective

As mentioned above, Minnesota has several programs

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<sup>3</sup> HIRA supra; Inter-agency policy action #3 pg.3.

<sup>4</sup> Corridor Management Program for the North Shore Drive. (St Paul, MN: Departments of Transportation and Natural Resources, July 18, 1989).

related to scenic roads. These programs include:

1. Scenic Easement Program
2. Great River Road Program
3. Highways in Recreation Areas
4. North Shore Management Plan
5. De Facto Management Program

Purposes for each program vary but all include a combination of scenic preservation, improvement of recreational opportunities and tourist-related economic development. The Great River Road program also lists historic preservation as one of its purposes.

Land management tools used specifically for scenic corridor protection are applied in the North Shore and De Facto programs. The Scenic Easement, Highways In Recreation Areas, and Great River Road programs do not use land management tools for this specific reason.

The Department of Transportation is the lead agency in the De Facto program. This program incorporates a cooperative effort with the Department of Agriculture Weed Inspectors. The Department of Transportation will also be the lead agency in the new Scenic Byways program. The North Shore program is overseen by counties and communities and the Great River Road program by the Mississippi River Parkway Commission and adjacent communities. The De Facto, Scenic Easement, and Great River Road programs are administered and enforced at the state level; the North Shore and Great River Road at both the county

and local levels.

The following tools are used by Minnesota in scenic byway management:

1. The North Shore program employs comprehensive planning, local level zoning, special conservation or corridor districts and special purpose boards or authorities.
2. The Great River Road program employs local level zoning (billboards), sign control, conservation or scenic easements, wider than usual road right-of-way (paved shoulders), voluntary programs and special purpose boards or authorities.
3. The Scenic Easement program employs scenic area overlay districts, sign control, fee acquisition/leaseback, conservation or scenic easements and technical committees.
4. The De Facto program employs erosion and sediment controls, and wider than usual road right-of-way.

The Great River Road was chosen by the Department of Transportation for land management assessment as this project has over ten years experience with land management tools. The following tools were considered to be the best choices:

1. Fit local expectations; conduct local meetings and use results in route development guides.
2. Funnel funds through local agencies.
3. Incorporate a state-wide advocacy group such as the Legislative Commission in the Great River Road.

Fitting local expectations and incorporating a state-wide advocacy group is considered very effective. Funnelling funds

through local agencies is considered only moderately effective.

Ease of administration varies but all three tools are moderately easy. It is up to the counties to administer with state agencies monitoring the programs and oversight by the Legislative Commission.

The Scenic Easement program was highly effective when it was initially begun. However, the determination of where the state holds property is not easily accessible, and so there has been no continuity or follow-up in the program over time. The properties are still owned by the state but land uses have not been inventoried or monitored within recent years. There appears a real need to update this information especially in light of the fact, that the program was such a major investment over 30 years ago.

Minnesota does not see any difference in the management of scenic byways with other land management programs and finds optimal effectiveness in programs where a combination of state agencies are working together on a project. Each agency has a vested interest in some phase of the project so that the final goals or completion of the project is enhanced. Task forces are also effective in this sense and may have significant non-agency membership from the community. The Department of Transportation also feels that participation

with local communities cannot be underscored.

In both the short and long-terms, issues of development and harvesting of natural resources are significant concerns for Minnesota's scenic roads programs. In the short-term, the development and adoption of the Scenic Byway system is a concern. In the long-run, the system's maintenance is a concern.

#### Program Summary

Minnesota's scenic byway protection issues differ from those states that have experienced overwhelming development pressures during the past twenty years. Nearly 27% of the state's land base is owned by the federal government<sup>5</sup> so land use issues outside the major urban centers, tend to focus on vegetation and wildlife management and resource harvesting.<sup>6</sup> Scenic protection does not seem to be a problem with public lands. Private land that has been critical to retain for scenic purposes, has often been bought by the state or placed under the scenic easement program.

Over the years, the Department of Transportation has

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<sup>5</sup> HIRA supra, pg.4.

<sup>6</sup> Corridor Management Plan for the North Shore Drive. supra.

worked extensively with visual analysis techniques for use on scenic corridors and has recently developed a comprehensive Visual Impact Assessment Process which is legally grounded on various aesthetic and environmental laws.<sup>7</sup>

Although this process is still in its infancy, it offers many exciting possibilities for cataloguing and assessing impacts on scenic corridors which can be used to decide important protection issues.

The Department of Transportation has also expressed interest in setting up a taxonomy for typical landscapes.

All scenic byways seem to concentrate on the spectacular, such as unusual landforms or water features. Here on the prairies there are many more subtle landscapes that could be just as interesting to the outside visitor especially as they are also rapidly disappearing. We are mulling around the idea of how to show off these typical sceneries which to a resident is usually boring but to a tourist may be fascinating.<sup>8</sup>

During the 1988 draft stage of the new Highways In Recreational Areas program, the greatest percent of comments referred to a need for more public and inter-agency cooperation on all scenic highway projects, including;

...more efficient procedures, highway signing, roadside management and moderate cost enhancement

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<sup>7</sup> "Visual Quality for EIS processes." (St Paul, MN: Department of Transportation; Environmental Services Section, 1989).

<sup>8</sup> Telephone interview with Catherine Thayer; Senior Planner for Minnesota Department of Transportation, March 20, 1990.

or restoration of existing facilities rather than development of more costly new projects. Several local agencies, tourism groups and nature organizations expressed an eagerness to work with the Minnesota Department of Transportation, the Department of Natural Resources and other state agencies to preserve, enhance and promote their local areas.<sup>9</sup>

It remains to be seen if Minnesota will be successful in this new cooperative vision of scenic protection but so far their track record has been pretty good.

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<sup>9</sup> HIRA supra, pg.25.

## 5. Oregon

Oregon has the oldest scenic byways program in the United States. In 1913 the first State Highway Commission was established to oversee a transportation system which "...foresaw the importance of preserving the state's scenic and historic values."<sup>1</sup> One of the projects initiated by the Commission was the Columbia River Highway, begun in 1913. Touted in tourist brochures as 'America's premier scenic asset'<sup>2</sup>, this work by Samuel C. Lancaster, laid out design and engineering standards that were "...so carefully integrated with the landscape that it became a work of art in itself."<sup>3</sup>

Oregon's scenery became a great drawing card for tourists, but concern over its mis-use, led the Commission in 1919, to support legislation aimed at protecting forests adjacent to scenic highways and improving highway facilities and landscaping.

The success of Oregon's highway beautification program over the years, served as a model for federal involvement in highway enhancement begun in 1934 and continuing to the present.

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<sup>1</sup> Oregon - Historic and Scenic Highway Program. (Salem, OR: Department of Transportation, no date). pg.2.

<sup>2</sup> Diane Ochi. Columbia River Highway, Options for Conservation and Reuse. (Cascade Locks, OR: Columbia River Highway Project, 1981). pg.91.

<sup>3</sup> Ibid. pg.4.

During the 50's and 60's, Oregon passed several laws strengthening their commitment to the state's scenic roads program. These included control of outdoor advertising, use of scenic easements, control of junkyards and billboards and the designation of over 3,500 scenic miles. During this time also, the Scenic Area Board was created (1961) to oversee the scenic byways program.

The 1970's was an interesting period in Oregon's scenic byway history. In 1974, the federal government broached the idea of a national scenic byways program and asked all states to participate in a full-scale study. The conclusion was that individual states set up their own scenic byway programs. Due to lack of funding and poor local interest, Oregon chose not to establish such a program. Then in 1977, the Scenic Areas Act was repealed affecting future control over advertising and junkyards. While these negative steps appeared to set back the program, other moves in the larger political arena had reaffirmed Oregon's concern for the protection and preservation of its scenic resources.

In 1973, Oregon became the first and only state to adopt state-wide land use planning by adopting Senate Bill 100, (now Ch. 197 - Oregon Revised Statutes).

There is considerable consensus that two factors were the most influential. First, Oregonians seemed to feel that the state enjoyed a special place in the world by virtue of its natural features and that these should be protected...The corollary

factor was Oregonians' determination to avoid becoming another California...where uncontrolled development had turned a natural paradise into a polluted nightmare...<sup>4</sup>

The law created the Land Conservation and Development Commission (LCDC) which mandates and oversees all state, city and county planning efforts including scenic byway protection. A sub-agency, the Department of Land Conservation and Development (DLCD) was created to administer LCDC's goals which include Transportation and Open Space criteria. The Department of Transportation remains involved with scenic byway designations but their management concerns are limited to existing highway right-of-ways.

#### Oregon's Department of Transportation Perspective

The Department of Transportation manages its scenic highways through the use of wider than usual road right-of-ways and scenic highway corridor reservations at the state level. The use of technical committees comprised of highway staff is also employed on some projects. All other management concerns are handled through county levels of government in compliance with the Department of Land Conservation and Development requirements.

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<sup>4</sup> John M. DeGrove. Land Growth and Politics. (Washington, DC: American Planning Association; Planners Press 1984). pg.235.

Oregon's Department of Transportation finds the following tools most effective for their purposes in managing scenic highways:

1. Corridor Highway Studies involving local units of government are just getting underway on Oregon's most important highways but are not limited to scenic highways.
2. 20 year access studies for important highways in the state.

As both tools are highway planning tools not specifically related to scenic corridor establishment, they are only moderately effective and rather high in costs. Although these tools are considered moderately easy to enforce, they are considered to be moderately difficult to administer due to the problems involved with developing new planning methods in an engineering organization which may not be versed in these issues

Oregon's scenic highway program is contained within the highway right-of-way. The Department of Transportation has had little interest or control of adjacent land use. Instead they rely on the Forest Service, Bureau of Land Management control, or state-wide land use through the Land Conservation and Development Commission.

The Department of Transportation has established a committee to take another look at the Scenic and Historic Highway Program due to pressures to add other scenic highways that don't qualify under the existing rules. The idea that the Department should be concerned about land management off the

right-of-way is new to Oregon, but is catching on especially concerning access control on more important highways. There is a large amount of Forest Service, Bureau of Land Management and State Park lands adjacent to all highways including many of the state's scenic areas. This has meant that up to now, Oregon has relied on other agencies' land management tools for protection.

The Department of Transportation sees a real difference between scenic byway management and other land management programs. This varies with the function of the highway accessing the scenic area as the highway is not what the people come to see. It could be a freeway going to a local attraction or a two-lane local collector going by an attraction of national significance. The management of both must be planned together, that is; highway and land use.

The Department of Transportation sees their direction of doing Corridor Studies as a positive step in corridor management. Roles are defined for highways in connection with local economic and land use patterns. The Department solicits local support in land use patterns and then acknowledges the need to manage the highways. Two examples of this are the U.S. 97 Corridor Study currently in the second phase of development and the U.S. 101 Parkway Concept.

Issues related to management in the short-term future will revolve around defining what it means to a highway

division to have a scenic byways program. Many states are concerned that it will limit their ability to expand or manage the facility in the future and everything will be classified as a "4F" condition. It is imperative that there is a clear definition of what it means to be a scenic byway.

In the long-run the issue will be the integration of land use and highway planning. View protection will also be critical.

#### Program Summary

Oregon is in much the same position as Minnesota in terms of land protection issues. Most of Oregon's scenic roads are bordered by state and federal lands or hug the coastline. 52% of the state is in public ownership so development issues do not affect these areas.<sup>5</sup> Problems related to scenic protection along public lands are concentrated on resource harvesting, specifically timber. For instance, conflicts surrounding the uses and management of old-growth forests have recently escalated on the federal level which puts Oregon in a precarious position in terms of policy making for scenic corridor protection. This is one example where a state-wide

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<sup>5</sup> Oregon Shines: An Economic Strategy for the Pacific Century. (Salem, OR: Oregon Economic Development Department, May 1989). pg.11-56.

system of 'sensitive' scenic corridor zones or buffers could be cooperatively agreed upon by state, federal and private timber companies. This type of cooperation has already been recognized by the state government in other areas of growth management.

Drawing on the state's tradition of environmental protection, and the strong regulatory structure already in place, Oregon is well-positioned to distinguish itself as a place where environmental quality and business growth support rather than impede each other. To achieve this vision, Oregon's comprehensive land use planning system will have to be strengthened, and state and local environmental, transportation and public works agencies will need to work closely together.<sup>6</sup>

The Department of Transportation feels their scenic byway program is currently a little fractured and needs to be better coordinated as there are too many levels of administration with no one clear goal. The Department would like to see a more holistic approach to transportation and corridor land use. At the moment the state is in a policy holding pattern while awaiting the federal government's decision on scenic byways programs.

The state also feels a sense of frustration over one project that hinges on regional land use decisions made today. This is the Highway 101 project which Oregon envisions as a three-state partnership of preserving the scenic corridor of the entire Washington, Oregon and Northern California

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<sup>6</sup> Ibid. pg.11-49.

coastline. A cooperative inter-state protection plan is vital to this project's success, yet California's agenda is currently geared to large-scale freeways and the state is not interested in pursuing another coastal scenic road through their state.<sup>7</sup> Here again the federal government could play a key role in the success of this project, by promoting the coast highway as a new national treasure and in the process help to preserve the magnificent West Coast shoreline as a scenic corridor for all citizens to enjoy.

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<sup>7</sup> Telephone interview with Mr. Don Byard, Highway Planner Oregon Department of Transportation, March 22, 1990. ODOT recently received a Special Achievement Award from the American Planning Association for their vision on the comprehensive approach to planning the Highway 101 project. Mr. Byard was the award recipient.

## 6. Tennessee

Tennessee is a state blessed with abundant natural, cultural and historic resources. Excluding the Great Smokies Mountains National Park, there are 51 state parks and natural areas. The state is a favorite destination spot for tourists<sup>1</sup> and scenic roads play a vital role in attracting millions of visitors to Tennessee each year. The state is also home to the oldest scenic trail in the U.S.; a trail that was forged through the centuries, by bison and Indians, and officially opened as a 'modern' route by the U.S. government in 1803; a trail that is known throughout the world as the Natchez Trace Parkway.<sup>2</sup>

In 1971, the General Assembly recognized the importance of its scenic road system and passed the Scenic Highway System Act, (Tenn. Code Ann., Ch. 17. 54-17-101), which laid out its intents for a Scenic Highway System (Part 1) and the Tennessee Parkway System (Part 2). The Act divided all scenic roads into two classes; Class I - Urban Roads and Class II - Rural Roads. Criteria was also established for regulations and restrictions on all advertising, junkyards, trash dumping, and building heights within 1000' of a designated scenic road.

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<sup>1</sup> "Tennessee Scenic Parkway." (Nashville, TN: Department of Transportation in-house fact sheet, no date).

<sup>2</sup> Federal Highway Administration. Scenic Byways. (Washington, DC: Department of Transportation, 1988). pg.4-4.

As stated in the legislation the objectives of the act are:

1. To provide for the recovery and conservation of natural beauty along designated scenic highways.
2. To provide a safe and attractive environment for tourists and travelers to enjoy the scenic beauty of the state of Tennessee.
3. To maximize the potential of little used and bypassed sections of highway.
4. To return economic viability to distressed areas through the promotion of tourism.
5. To provide for preservation of routes of historical significance in urban and rural areas of Tennessee.

In 1982, the General Assembly reworked the Tennessee Parkway System to improve and complement the existing legislation. This was in direct response to Governor Lamar Alexander's presentation, in 1981, of the Safe Growth Plan which "...recognized the need for a statewide scenic route system that would enhance enjoyment of the Tennessee landscape and, in turn, promote the expansion of Tennessee's travel and tourism industry."<sup>3</sup>

Today there are over 2300 miles under this Parkway Plan, yet any road which is not listed can still be designated as a scenic highway if local or state officials so request.

Tennessee's intended purpose of their scenic byways programs is to protect the scenic character and historic sites in the state, while providing recreation opportunities for residents and visitors alike. These purposes are combined with

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<sup>3</sup> Tennessee Parkway Plan. supra.

an overall objective of encouraging economic development through the promotion of tourism. Land management tools are used to achieve this objective through the Department of Transportation at the state level.

### Tennessee's Department of Transportation Perspective

In Tennessee, few tools are used in the management of scenic byways. Zoning at the state level is the most widely used tool followed by sign control and buffers and set backs. Zoning regulations take precedence over state designations in those counties that use comprehensive planning.

From the Department of Transportation's perspective, general planning followed by the use of performance controls are the best land management tools for scenic byways. Both have been used in Tennessee between 5-10 years, are considered to be very effective and moderately low in cost. However, they are also considered moderately difficult to administer and enforce.

Tennessee's main concern is in advertising structures, junkyards and trash dumping controls. Development is not considered a concern and the state has no comprehensive plan for land management at this time.

## Program Summary

Tennessee has been successfully promoting their scenic byways and parkways as vacation destinations for many years. Issues of land management have concentrated on retaining or cleaning up the environment from poor local land protection practices. Like many states, Tennessee has an aversion to wide-spread land controls for most purposes and prefers to rely on local initiatives to act as incentives for tourist development. However, local protection programs vary widely and in fact may be virtually non-existent in many localities.<sup>4</sup> This suggests that it is very difficult to provide comprehensive scenic corridor protection throughout the state. The degree of success, in terms of scenic corridor protection, seems to depend on the level of interest, sophistication and income of the local citizenry. For example, Williamson Co. which is rather wealthy county, has recognized the need to protect its scenic resources, one of which is the northern stretch of the Natchez Trace. In 1988, it passed an extensive zoning ordinance addressing many aspects of scenic corridor protection including: sections on building height limitations, parking, lighting, signage, and landscaping requirements. This comprehensive ordinance is the only one of its kind in

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<sup>4</sup> Telephone interview with Mr. Perry Perritt, Planning Department - Williamson Co. TN: May 4, 1990.

Tennessee but even so it has been difficult to enforce and many locals remain suspicious of its intent.<sup>5</sup>

At the moment the state's main objective is to promote tourism. Development is not considered a concern and no statewide effort is being made to manage growth at this time. Scenic protection remains sporadic and confined to those counties which are experiencing intense development but are determined to protect their local scenic corridor resources.

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<sup>5</sup> Ibid.

## 7. Vermont

Vermont's official involvement with scenic roads dates back to the late 1930's, when the legislature passed a bill authorizing the construction of a multi-state route, which is known as Route 100 today. During this project, concern for the protection of Vermont's rural countryside, spurred the legislature to grant the Highway Board the right to take actions "...needed for the preservation of its scenic character."<sup>1</sup>

This scenic preservation sentiment extended through various other legislative initiatives as well, including billboard, land use and beverage container laws, which were all passed during the 1960's.

The possessive nature of Vermonters to their rural landscapes and way of life became evident on a regional scale in 1970, when the state passed Act 250, one of the only state-level growth management laws in the country. This was further followed in 1977, by the Scenic Highway Law (Public Act No. 58) which officiated work done since 1966, by the Scenery Preservation Council. The law limits designation to state or town-owned roads and is strictly a voluntary program. Roads

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<sup>1</sup> Designating Scenic Roads - A Vermont Fieldguide. (Montpelier, VT: Vermont Scenery Preservation Council and Vermont Transportation Board, June, 1979). pg.10.

that have been officially designated "must be managed according to standards set by the State Transportation Board."<sup>2</sup> However, these Scenic Highway Law provisions apply only to maintenance and construction issues within the highway right-of-way and do not preclude adjacent landowners from developing their properties. Although the law does not deal with land uses outside the right-of-way, its purpose is to encourage constant awareness of rural scenic protection.

It is the policy of the state of Vermont to preserve through planning the scenic quality of its rural landscape, and enable municipalities to designate town scenic highways which may be improved in accordance with standards combining aesthetic and functional criteria.<sup>3</sup>

Further reinforcement for the retention of the scenic quality is expressed through the following:

Scenic roads will be maintained as nearly as possible in the condition which existed at the time of designation.<sup>4</sup>

The Agency of Transportation is not involved with officially protecting the scenic qualities of its scenic highways. Issues of land management off the highway right-of-way are covered under Act 250, which states that permits are required for any development with a ... "greater than local

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<sup>2</sup> Ibid. pg.2.

<sup>3</sup> Ibid. pg.11.

<sup>4</sup> Ibid. pg.13.

impact."<sup>5</sup> On the local level, selectmen oversee the administration and enforcement of land management issues. One of ten criterion studied during the review process is the effect of the development on the aesthetics of the land. This criterion plays an important role when developments are proposed adjacent to designated scenic roadways. It has also been used to judge the impacts of developments on unofficial but scenically sensitive road corridors.<sup>6</sup>

#### Vermont's Agency of Transportation Perspective

Vermont's Agency of Transportation does not use land management tools for scenic corridor protection but does use tools to maintain and reconstruct scenic roadways when necessary.

As the Scenic Highway Law is a voluntary program, the Agency manages its scenic highways through the use of sign control, tree protection ordinances, erosion and sediment controls, and the Transportation Board's rules regarding maintenance and reconstruction of scenic roads. The state has

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<sup>5</sup> John M. DeGrove. Land Growth and Politics. (Washington, DC: American Planning Association; Planners Press, 1984). pg.72.

<sup>6</sup> Personal correspondence to the author by Mr. Donald Remick, Planning and Policy Advisor; Vermont Agency of Transportation. April 12, 1990.

followed the Transportation Board's rules regarding all maintenance and construction for over the past ten years. According to the Agency, this system has been moderately effective but is very low in terms of cost. This system is also considered to be moderately easy to both to administer and enforce.

The Agency of Transportation sees no difference between scenic byway management and other programs. Their optimal choices for the protection of scenic corridors are to purchase adjacent land, purchase development rights, or acquire scenic easements.

To the Agency the future issues facing scenic corridor protection are the same in the short and long term. They include:

1. Overall lack of interest in the program.
2. Unwillingness of state and local governments to attempt to take away property owners' right to do as they wish with their land.
3. Non-availability of public funds to purchase land, or scenic or development rights, from adjacent property owners.

### Program Summary

Vermont does not use land management tools to protect their scenic byway corridors specifically, but instead relies on Act 250 to oversee management and development. In fact the state has only two designated scenic roads which pass, in

part, through state and national forests so scenic corridor protection concerns are similar to issues of resource management in Maine, Minnesota and Oregon. As previously mentioned, the majority of scenic byways in Vermont are voluntarily designated as 'town roads' through local town systems of government. These roads have little corridor protection outside the existing Scenic Highway Law and the Transportation Board rules.<sup>7</sup> However, designation criteria specifies that roads be maintained as close to their original condition as possible.<sup>8</sup> Many scenic roads are dirt or gravel which discourages large volumes of use and acts as a positive factor in corridor protection. To date the strict maintenance and construction rules have been successful as any major changes in upgrading of scenic roads must come before a public hearing.

Local existing sentiments are for retaining the status quo of scenic roads and many townships regard the system as a deterrent to development. However, the desire to styme development through this method has not been put to the legal test. The current strategy of Vermont is to protect its scenic byways by not advertising or publicizing their whereabouts. The main issue to Vermont residents is one of preserving and

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<sup>7</sup> Ibid.

<sup>8</sup> Designating Scenic Roads ibid. pg.13.

protecting their scenic resources rather than promoting them to outsiders.<sup>9</sup>

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<sup>9</sup> Telephone interview with Mr. Donald H. Remick, *supra*, March 22, 1990.

## 8. Virginia

Virginia has been involved with scenic road design since the early 1930's. Scenic roads such as the Mount Vernon Memorial Highway, the George Washington Memorial Highway, the Colonial Parkway and the Blue Ridge Parkway are all testimony to the beauty and history of the Virginia landscape.

In 1966, the General Assembly passed its Scenic Highways and Virginia Byways program, but did not officially designate a road until 1973. Virginia is the only state surveyed that draws a legislative distinction between scenic highways and byways. As defined in the law (Code 1950, &.33.1-63) a Virginia Byway is; "... a road, designated as such by the Commonwealth Transportation Board having relatively high aesthetic or cultural value, leading to or within areas of historical, natural or recreation significance."<sup>1</sup> Examples of this would be existing local roads which meet the above criteria.

A Scenic Highway is defined as (Code 1950, .33.1-64);

" ...a road designated as such by the Commonwealth Transportation Board, within a protected scenic corridor located, designed and constructed so as to preserve and enhance the natural beauty and cultural value of the

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<sup>1</sup> A Guide for Virginia Byway Management. (Richmond, VA: Department of Conservation and Historic Resources, April 1988). pg.2.

countryside."<sup>2</sup> Examples of these roads are the Colonial Parkway and the Blue Ridge Parkway. The term 'parkway' implies special status and as such dictates these road projects be built in protected areas such as National or State parks, National Forests or other protected corridors.<sup>3</sup> As the status of Virginia scenic highways differs from byways, (due to federal agency involvement), this study only references 'parkway' land management issues.

The scenic byways program in Virginia tries to recognize those roads or corridors that display statewide natural, cultural or historical significance. However, the program is strictly voluntary. The state does not use any land management tools to protect the road or corridor but relies on local governments to provide protection.

A joint management effort by the Department of Conservation and Historic Resources and the Division of Parks and Recreation produced in 1988, the Guide for Virginia Byway Management which lists and explains several existing state programs that can be locally initiated to assist in byway management and protection.

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<sup>2</sup> Ibid. pg.3.

<sup>3</sup> Ibid. pg.2.

Virginia's Department of Conservation and Recreation  
Perspective

The byway program in Virginia is a joint venture between the Department of Conservation and Recreation and the Department of Transportation which acts only on issues directly related to roadway improvements.

As mentioned previously, Virginia's byway program does not use land management tools for byway protection specifically but concern with this issue is increasing, especially in rapidly developing areas. The following tools are used at both the state and local levels in relation to scenic byway management in Virginia: local comprehensive planning, local level zoning, sub-division ordinances, special resource overlay zones, the use of buffers and set backs at the local level, open space requirements, sign control and tree protection ordinances at the state and local levels, erosion and sediment control, and conservation or scenic easements both at the state and local levels.

The most effective tools listed by the department have been used for over ten years and include:

1. Use of local comprehensive plans and zoning to conserve corridors.
2. Publications taking corridor qualities into consideration among state and local planning agencies.
3. Billboard laws and sign control both at state/local levels.

Since the byway program in Virginia is dependent upon local support, the state must rely on local land use controls for most activities outside the road right-of-way. There is a wide disparity among the local units of governments as to how the land use controls are applied. The Department of Conservation and Recreation feels therefore, that these measures have been only moderately effective, however their costs are very low.

Most administration is left to the localities so this makes it moderately difficult to both oversee and enforce land management. The same problems discussed above are applicable here also.

Virginia's program is an administrative process with joint responsibility between the Department of Transportation and the Department of Conservation and Recreation. The Act is a resource recognition law that is dependent upon local support. There are no restrictions associated with the legislation, so these agencies must rely on local land use controls, which vary widely from one area to another.

The Department of Transportation has total responsibility for operating and maintaining the road network. They generally do not treat byways any differently than other similar roads.

The citizens who are instrumental in getting a designation effort started, usually become proponents of conservation of the corridor, and in some cases are successful

in getting controls or restrictions imposed.

No specific management tools are listed as being particularly poor in their application to date. Local land control ethics in Virginia makes the process cumbersome and at times slow. In the past, there was confusion between the Virginia Byway Program and the acquisition and development of the Blue Ridge Parkway. In the 1930's the Blue Ridge right-of-way was condemned and residents were forcibly evicted from their lands. Many people from rural areas remember this and are afraid that the Virginia Byways Program will have some of the same constraints. One of the problems is that management of the program would work better at the state level. Unfortunately, there is a lot of left-over local hostility to the Blue Ridge and Skyline Drive projects. Localities still harbor a lot of animosity towards land control in Virginia, and would resent the state taking any lead in this area. If the program did become managed at the state level, it would be killed within a year.

On the positive side, almost one-third of the proposed system has been designated and interest is increasing but this is only because of grass-roots initiation and support. If there is no local support there is no program.

Like Vermont, Virginia sees no difference between scenic byway management and other land management programs.

As far as recommendations go, the ideal solution from the

state's point of view would be a one-time designation of the entire system. Land use controls or other management techniques would need to be tailored to the area through which the road passes. The objective should be to conserve the existing scene, not restrict corridor developments.

Strip development is considered the biggest short and long-term problem related to the scenic roads issue especially in Northern Virginia.

#### Program Summary

Virginia is a state blessed with diverse and plentiful scenic and historic resources which have been exalted since the time of Thomas Jefferson. The abundance of these resources has provided the state with many opportunities for their promotion. But, historically there have been many resources in peril and their protection is by no means an assured one. In fact plans to destroy George Washington's home in Virginia, resulted in the creation of the first national preservation effort in 1853 and ended six years later with the permanent protection of the Mount Vernon estate.<sup>4</sup> A key issue which was not resolved immediately, was the preservation of the view across the Potomac River. Although this issue was eventually

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<sup>4</sup> Nathan Weinberg. Preservation in American Towns and Cities. (Boulder, CO: Westview Press, 1979). pg.21.

settled, it did not alarm the state enough to change their 'laissez-faire' attitude to scenic protection. Over the years this issue has repeatedly resurfaced and is now at a critical juncture especially in those highly historic and scenic areas that are experiencing massive development pressures. Two examples come to mind.

One was the plans by the University of Virginia in January 1990, to build an \$11 million office complex near the entrance to Monticello which had already seen its view threatened within the past 10 years. This time the plans created such a commotion that permanent scenic corridor protection measures have been initiated.

The setting of Monticello was important to Mr. Jefferson and it's important to us.<sup>5</sup>

What this thing has done is alert Monticello to take care of its entrance.<sup>6</sup>

Two options now being worked out include buying an easement for permanent protection and designing the entrance as a parkway "that would protect the access corridor and that's our number one goal."<sup>7</sup> This crisis management solution to scenic protection is all too common in many areas of the country, but the issue which brought the greatest visibility to scenic

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<sup>5</sup> "Preservationists Win Battle at Monticello." The Washington Post, Jan. 20, 1990.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

protection, was the fiasco over the destruction of the scenic views and integrity of the Manassas National Battlefield Park, in Prince William County, Virginia. This is a prime example of where the vision of local land management was clearly at odds with the 'Big Picture' and no state protection plan was in place to prevent the destruction of this resource. The repercussions of this controversy has had wide land use implications at the federal level. In 1988, Congress through a legislative taking, assured that Manassas would remain a viable historic site. But the damage done to the site previous to the taking raised many questions over the protection of this resource. On Nov. 10, 1988 Public Law 100-647 was passed which "...calls for the preservation of the scenic views within the Park and directs that a study be performed regarding the closing and relocation of highways that run through the Park's boundaries."<sup>8</sup> The protection mandate for this park has since been expanded through the National Heritage Conservation Act which is currently being prepared by the National Trust for Historic Preservation and other parties. As stated, "This legislation is both a response to increasing threats affecting our national heritage and an attempt to provide additional authorities to the federal government to assist in fulfilling its role of encouraging the

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8 "Manassas National Battlefield Park Amendments of 1988." Preservation Law Reporter. 1988 Annual.

best possible stewardship of these resources."<sup>9</sup> However, the Act falls short of including scenic corridor protection which is a critical issue.

As mentioned by the Department of Conservation and Recreation, the problem of scenic corridor protection has been extremely frustrating in other lesser-known situations.<sup>10</sup> Although there are some excellent examples of local scenic protection, the overall success rate in the state is sporadic. Virginia should take a state-wide look at what is significantly important in terms of historic and scenic protection. This will provide Virginia with a well-defined network of sensitive resources, which can then be targeted for vital immediate or future protection.

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<sup>9</sup> "The National Heritage Conservation Act." (Washington, DC: National Trust for Historic Preservation; draft copy, Jan. 4, 1990).

<sup>10</sup> Telephone interview with Mr. C. Derral Jones, Environmental Program Manager; Virginia Department of Conservation and Recreation, Richmond, VA: March 15, 1990.

## 9. Washington

The state of Washington has over 1900 miles in a scenic byway system<sup>1</sup>, making it one of the most extensive in the country. Since the early 1960's, when the first legislation was passed regarding scenic roads, (Scenic Highway System - Session Laws 1961), to the introduction of the Scenic and Recreational Act of 1967 <sup>2</sup>, Washington state has been concerned with the protection of its magnificent scenery.

In January 1970, this viewpoint was strengthened in the case of State of Washington v. W. Kenneth Kingman. The state sought to overturn a lower court denial of its right to condemn land for 'public use and necessity.' From the state's point of view this action was not only in the public interest but also a viable use of highway funds. The state maintained that a parcel of lake-front land belonging to Mr. Kingman, and running alongside a scenic state highway, was necessary for public use.

...(c) the purpose of the action is to preserve the natural beauty of the locale. Specifically, it is to preserve a beautiful view of Lake Chelan and the

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<sup>1</sup> National Scenic Byways Study. (Olympia, WA: Department of Transportation; Program Development Division, 1990). forward.

<sup>2</sup> Federal Highway Administration. Scenic Byways. (Washington, DC: Department of Transportation, July 1988). pg.3-34.

foothills beyond.<sup>3</sup>

The Superior Court sided with the state and overturned the public use denial. This is the only case of its kind to date, in Washington, but it gives strong support to the state's position of scenic protection.

During the 1960's and early 1970's, one contentious aspect of scenic corridor protection in Washington state was the issue of overhead utilities. The Department of Transportation has the responsibility of managing all aspects of highway right-of-ways including utility accommodation, "... in a compatible fashion relative to preserving scenic quality..."<sup>4</sup>

The original Scenic and Recreational Act legislation stated that all overhead utilities were to be placed underground along these routes. The utility companies protested loudly on grounds that the law was unreasonably expensive and unnecessary in many cases. The legislature placed the Department of Transportation in charge of finding a more workable solution and together with the Washington Utilities Coordinating Council a long-term planning strategy was established.

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<sup>3</sup> Remarks of J. Weaver in *The State of Washington v. W. Kenneth Kingman et al* Jan.8, 1970.

<sup>4</sup> Utilities Accommodation Policy M22-86. (Olympia, WA: Department of Transportation, Feb. 1989).

In 1973 a scenic classification system was set in motion to inventory all of Washington's state highway system for aesthetic criteria requirements. This system was the first in the country and has been used as a model for other states.<sup>5</sup> It is updated every two years and either reinforces the values of existing scenic routes or assesses scenic degradation as a basis for undergrounding utilities. Utility companies must also reapply for their permits every 25 years at which time they are required to place utilities underground.<sup>6</sup> The system has proved highly successful and cost-effective. The cooperative spirit between the Department of Transportation and the Washington Utilities Coordinating Council has created such interest, that in 1987 the two agencies produced a video on their scenic enhancement efforts.<sup>7</sup>

On Feb. 28, 1990 the state legislature reiterated their position to protect scenic areas, by adding this new section to the existing Scenic and Recreation Act of 1967.

The legislature finds that scenic and recreational highways are designated because of a need to develop management plans that will protect and

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<sup>5</sup> Scenic Classification System for Utilities Accommodation. (Olympia, WA: Department of Transportation, 1973).

<sup>6</sup> Telephone interview with Mr. William Melton; Landscape Architect for Washington Department of Transportation; Olympia, WA: March 22, 1990.

<sup>7</sup> DOT'S Scenic Classification System. video (Olympia, WA: Pacific Communications Inc. Nov. 1987).

preserve the scenic and recreational resources from loss through inappropriate development. Protection of scenic and recreational resources includes managing land use outside normal highway rights of way. The legislature recognizes that scenic and recreational highways are typically located in areas that are natural in character, along watercourses or through mountainous areas, or in areas with a view of such scenery.<sup>8</sup>

Washington's Department of Transportation does use land management tools on scenic highways for the main purpose of protecting or preserving the scenic corridor. Other purposes such as providing recreation opportunities or developing tourism are more dependent on the location attributes of the countryside. All levels of state and local government are involved with the administration and enforcement of the scenic highway program.

#### Washington's Department of Transportation Perspective

Washington uses a variety of land management tools for scenic corridor protection but concentrates their efforts on performance controls and conservation/growth management including; zoning at the local level, transfer of development rights, the use of buffers and set backs, open space requirements, sign control, tree protection ordinances, and limited access control, fee acquisition/ leaseback,

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<sup>8</sup> "Scenic and Recreational Highway Act of 1967." Sub. Senate Bill #6426 amending Ch. 47.39 RCW, new section.

conservation or scenic easements, special conservation or corridor districts, wider than usual road right-of-way, voluntary open space programs, and the use of technical committees.

The five most effective tools cited were:

1. Fee title
2. Scenic Easement
3. Zoning at the local level
4. Limited Access Control
5. Open space declaration (voluntary through counties)

All the above tools have been in use for over ten years. Both fee title and scenic easements involve the need for funding. Without a source of funds, scenic preservation as well as any other roadside endeavor are low priorities which is usually the norm.

Zoning at the local level and limited access control have been cited as being the best tools but have not been pursued for scenic preservation with as much effort in recent years.

Both fee title and scenic easements are considered moderately effective as they require monitoring and/or protection (fencing) to control encroachments.

Zoning at the local level is very effective because of local control and better visibility. However, limited access control and open space declarations are only moderately effective. In rural areas with little development, Departments of Transportation can establish limited access controls to prevent any access from the highway itself. This is effective

when little access from behind exists.

As expected, the cost of using fee simple is very high. Both scenic easements and limited access controls are moderately high in costs. The problem again is the lack of money. Even with limited access control, the Department of Transportation often has to buy access rights from adjoining property owners. Only local level zoning and open space declarations, which are voluntary are very low in costs.

All the above tools are moderately difficult to administer. All tools cited except open space declaration are often difficult to establish and especially to change. As open space declaration is done as a volunteer option of individual property owners, this problem does not occur.

Limited access control is the only tool that is considered easy to enforce. Fee simple, scenic easements and open space declarations are moderately difficult to enforce. Local level zoning is considered the most difficult to enforce.

The best management tools are those identified and levied at the 'grass-roots' local level. The locals should be a part of the process. They need to be educated on the problems and the needs such that they 'are' led to choose the appropriate controls. Open space declaration of a land use such as forest lands, pasture lands, wetlands, wildlife preserve, etc. is very effective with reduced property tax as an incentive.

These declarations need a penalty clause for default or to change from designated use that would require payment of deferred taxes plus interest back to day one.

Condemnation for "Fee Title" is a last resort alternative used only to stop eminent loss of the scenic or recreational resource. Washington state has gone this route only once but won the case.

The Department of Transportation feels there is a definite difference between scenic byway management and other programs. Transportation agencies normally deal or manage within their rights-of-way. Management outside the right-of-way is more foreign because it deals directly with land use as opposed to indirectly "causing" land use. Transportation Departments need to become more involved in the "Big Picture".

The Department's best recommendation is to start all scenic byway programs locally.

The Department cited their biggest problems now and in the future as a lack of funding and a late start. Their assessment is that too much damage has already been done. Developments encroaching up to the right-of-way cause visual degradation so localities come back to the Transportation Departments and request the installation of sound barriers which becomes a further visual degradation.

## Program Summary

Washington like Oregon, sees a need for Departments of Transportation to become more integrated with other groups and agencies in their scenic corridor management practices. In response to the 1990 National Scenic Byways Study, the state supported the need for a coordinated effort and that a national program "...should strive to involve all interested citizens in the processes to 'preserve, protect, and enhance' so that they develop a sense of ownership, pride, and particularly respect for these currently fast diminishing (scenic, recreational, and cultural) heritage resources."<sup>9</sup>

To avoid unnecessary hostilities, the state also stresses the need to keep local citizens and landowners always part of any scenic protection process. This is especially important when the issue of control measures comes up. California and Maine also considered this observation to be of critical importance for the protection of scenic corridors.

In all, Washington credits a good part of their management of scenic resources on the collaborative efforts between the Department of Transportation, the Forest Service, the National Park Service and the private utility companies. The Scenic Classification System developed in the early 1970's

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<sup>9</sup> National Scenic Byways Study. supra, pg.47.

has identified all scenic areas of the state and this is now being used as a basis for many scenic management decisions. Although most of the scenic areas border federal lands, there seems to be a common inter-agency objective in protecting and maintaining the spectacular scenery along all byways. This cooperative objective is not as strong with state forests, as they tend not to be in the designated scenic areas. Overall, this program seems to be quite successful although there are always frustrations over insufficient funding to acquire threatened scenic corridors.

## 10. Wisconsin

Wisconsin has the honor of being the home state of two men who spent their lifetimes consumed with the issues of scenic protection. Both John Muir and Aldo Leopold set the stage for a state that has a long history and expertise in the protection of their scenic environments.

The first scenic route designated in Wisconsin was the Great River Road in the late 1930's. Although this project was not given official approval from Congress until 1954, Wisconsin was one of the first of the ten states to apply scenic corridor control to its portion of this 3,000 mile project.

In 1952, a State Supreme Court decision (Muench v. Public Service Commission) on a waterway issue legislatively supported the importance of scenic beauty in Wisconsin. This decision which stated the "right of the citizens of the state to enjoy our navigable streams includes the enjoyment of scenic beauty.... a legal right that is entitled to all the protection which is given financial rights."<sup>1</sup>, would have wide-spreading effects on scenic protection in Wisconsin.

A year later, this decision provided the impetus to modify the existing road legislation to include protection of

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<sup>1</sup> Richard E. Chenoweth. "Image-Capture Computer Technology and Aesthetic Regulation in Rural Riverway Planning and Management." (Madison, WI: University of Wisconsin; Department of Landscape Architecture, 1989). pg.2.

'fragile areas' during highway construction under the cooperative management of both the Department of Transportation and the Department of Natural Resources.<sup>2</sup> Although not directly related to scenic considerations, protection of natural resources would also have the benefit of enhancing the scenic qualities of the roadside corridor.

Along with the National Park Service and California, Wisconsin has the greatest amount of experience with the use of scenic easements for corridor protection. In use since the early 1950's, the state reaffirmed the tool's success in 1961, with a boost in public funding. A \$50 million 10 year plan for resource development and conservation was authorized, of which \$2 million was set aside for the purchase of scenic easements.<sup>3</sup> As the easements are taken minimum 300 ' from the road centerline, the program has proved highly successful "...from the standpoint of controlling signs, junk yards and trash dumps. It has likely enhanced the value of many properties because of the orderly development promoted by the restrictions."<sup>4</sup>

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<sup>2</sup> Lewis A. Posekany. "Biological Values." Highway Research Record #138. (Washington, DC: Highway Research Board, 1973).

<sup>3</sup> Federal Highway Administration. A Proposed Program for Scenic Roads and Parkways. (Washington, DC: Department of Commerce, June 1966). pg.52.

<sup>4</sup> Wisconsin Department of Transportation internal memo on scenic easements, Dec. 18, 1989.

In 1973, the state legislature passed the Rustic Roads Program (Wis. Stat. 84-85, 83.42; Wis. Adm. Code, Trans-RR1 - 01) which pushes the scenic byway concept even further. It is considered the first of its kind in the country whose purpose is to preserve "...what remains of Wisconsin's scenic, lightly travelled country roads for the leisurely enjoyment of bikers, hikers and motorists."<sup>5</sup> This program does not include specific land management controls, but through administrative rules, encourages land use protection.<sup>6</sup> However, the Department of Transportation does use land management tools for scenic protection at the state level in other programs.

#### Wisconsin's Department of Transportation Perspective

Wisconsin uses an extensive amount of tools to protect the scenic quality of their road systems. These include; comprehensive planning, zoning at the local level, subdivision ordinances, natural resource overlay zones, special use permits, clustering provisions, buffers and set backs, architectural controls, sign control, erosion and sediment controls, and conservation or scenic easements.

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<sup>5</sup> Rustic Roads - A Positive Step Backward. (Madison, WI: Department of Transportation, no date).

<sup>6</sup> Personal correspondence to the author by Mr. George Gunderson, Director, Bureau of System Planning; Wisconsin Department of Transportation, April 3, 1990.

From the Department of Transportation's perspective, the five best choices for land management are listed below. All these tools have been in use in the state for over ten years.

1. Scenic easements
2. Sign control
3. Local level zoning
4. Sub-division ordinances
5. Comprehensive planning

Scenic easements and sign control are considered moderately effective while local level zoning, sub-division ordinances and comprehensive planning are all considered periodically effective.

Scenic easements are considered moderately low to use in terms of cost. All four other tools are considered very low in terms of costs.

Scenic easements and sign control are considered moderately easy to administer but moderately difficult to enforce. Local level zoning is considered moderately difficult to administer and very difficult to enforce. Sub-division ordinances are considered moderately difficult to both administer and enforce. Comprehensive planning is moderately easy to administer but very difficult to enforce.

In the scenic easement program the only failures resulted from variances given over the years that caused certain uses to be inconsistent with the intent of the program.

Management problems include the lack of staff and other resources to properly monitor the program as well as lack of

specific laws that provide a means of dealing with the scenic easement violations.

The main differences between scenic byways and the management of other land programs is the difficulty in defining and maintaining the scenic qualities along the scenic byway. These may not be high priorities in other land management efforts.

Wisconsin's Department of Transportation supports the federal concept for a national scenic byways program on a very loose basis as long as they don't tell everyone what to do.

Wisconsin sees the scenic corridor issue as being a continued conflict between development and the perceived benefits to local units of government versus long term preservation of scenic quality.

### Program Summary

Wisconsin's Rustic Roads Program has the reputation of being highly successful in terms of its original goals. As with Vermont, "the program does not include specific land management controls, however the administrative rules do encourage land use protection".<sup>7</sup>

The state takes seriously its commitment to scenic

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<sup>7</sup> Ibid.

corridor protection by continuing to support the use of scenic easements. Problems occur with controlling certain land uses along scenic routes such as mobile homes and the difficulties in convincing local townships of the need to preserve scenic corridors through the use of easements. The Rustic Roads program has the power to de-designate routes that no longer display a rustic character due to over development but to date none have been withdrawn for this reason.<sup>8</sup>

One other example of Wisconsin's commitment to protect scenic resources is currently under way at the University of Wisconsin in Madison. Research is being conducted on the use of image-capture computer technology as a tool to provide the public with the best available knowledge for issues related to water corridor protection.<sup>9</sup> This type of technology could also be used to aid local government decisions with respect to visualizing a scenic byway corridor through a series of before and after scenarios. Hopefully, land use decisions will then be based on a more informed basis and aid in protecting scenic corridors. It is premature to assess this new land management tool in terms of scenic byways but as a forerunner in scenic corridor protection Wisconsin's experiment will have far-reaching implications if it proves successful.

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<sup>8</sup> Ibid.

<sup>9</sup> Chenoweth, *supra*.

## CHAPTER FOUR

## CHAPTER FOUR

### SUMMARY OF FINDINGS

#### A. Issues and Concerns of Case Studies.

The purpose of this summary is to capsulize management issues and concerns in state scenic byway programs specifically related to scenic corridor protection. As discussed, ten states were profiled for the case studies, based on the length of their experience in the scenic byway field and having their program legislatively mandated. These states included: California, Maine, Massachusetts, Minnesota, Oregon, Tennessee, Vermont, Virginia, Washington, and Wisconsin.

Throughout the case studies, we have been trying to gauge a sense of what land management tools each individual state is using for scenic corridor protection and what issues and concerns are important to their management practices. The process was conducted through lengthy telephone interviews and a questionnaire. A composite of questionnaire results, can be found in Section B. of this chapter.

Scenic byway program experience was originally set at 20 years or more. However, this was expanded to include

Tennessee, Massachusetts, and Vermont which have 19, 17, 13, years experience respectively. Although none of these states uses land management tools to protect scenic corridors (Virginia does not either), their perspectives provided some valuable management information. Seven out of ten participants, have scenic byway management experience of ten years or over. Their comments and concerns on future issues of scenic byway management are surprisingly similar but here the similarity ends.

There is a wide range of land management tools employed in this field. Concentrations are on first on Performance Controls such as sign control, tree protection ordinances, buffers and set backs and erosion and sediment controls. This is followed by the use General Planning Tools such as local level zoning and comprehensive planning. Conservation and Growth Management tools commonly used, include scenic easements and wider than usual road right-of-way.

The overwhelming use of sign control suggests that there has been a serious attempt to control visual blight along scenic roads. The use of other performance oriented controls also suggests that states are making concerted efforts to control the visual quality along these sensitive routes (such as in the retention of trees along the corridor.) However, there is still a great deal of frustration over management and enforcement issues for a variety of reasons including lack of

funding, great disparity of enforcement at the local level, conflicting goals on land uses, and insufficient permanent protection. As evidenced, there were high marks for the use of easements, wider than usual road right-of-way and to a lesser degree, fee acquisition. Fee acquisition is considered the best method but it's typically too expensive. It seems these tools solve many management and enforcement problems but the high initial capital costs are their biggest drawback. In contrast, tools used most frequently were those that tended to be very low in cost such as local level zoning. However, these low-cost tools tend to be moderately difficult to administer and enforce as well as being only moderately effective. It is, therefore, extremely difficult to pinpoint one or a few highly successful land management tools. At the present time, there appears to be a great diversity in the use of land management tools in protecting scenic corridor resources.

Local level zoning and comprehensive planning were the only General Planning Tools considered to be widely used for any scenic corridor protection. However, their effectiveness seems confined to localities that are willing to aggressively enforce them. Examples include Monterey County, CA. and Williamson County, TN. Many states reinforced this observation by stressing the importance of beginning all scenic management and protection processes from the local levels up. It was also considered critical to have local communities be well-versed

in scenic protection issues. This process is accomplished through a combination of education of the community to the issues and the implementation of protection measures by strong local leaders. Both are considered critical for the successful monitoring and protection of the scenic corridor. Comprehensive planning and to a lesser degree, the use of technical committees comprising of local officials and professional teams, were seen as being tied to this local level process as well.

No consensus was apparent on whether scenic byway management practices are similar or different from other land management programs. There is a great deal of diversity in scenic byway programs and each state seems to be tied to its own regional agenda and concerns.

Due to the nature of administrative structures, there is also a real split on how the programs are managed. At one end, there is a single central state agency handling all issues and on the other there are diverse conglomerates of groups or agencies involved with the programs' functioning. Many managers commented that their programs were fragmented and needed a strong common vision. However, they are concerned that their own individuality on the state and local levels will be homogenized and that a top-down independent federal vision will strip away any vibrant diversity that now exists in these programs.

The general consensus among all these respondents is that an ideal model for scenic byway management and corridor protection must work in a holistic manner, beginning with local 'grass-roots' initiatives, working with the state level as a cooperative venture and using some sort of federal guideline as the 'big picture' vision only. In this manner, local pride and initiatives will drive the programs, supplemented by state and federal support as opposed to the top-down approach of forcing compliance with new state or federal laws. These cooperative ventures should (in some cases are) be extended to the private sector as well. Private sector roles such as the introduction of land trusts or private citizen land protection initiatives, are vital to the success of scenic corridor protection and will strengthen any policy decisions. Protecting the scenic resource is the most important goal of scenic byway management today and can only be successfully accomplished through cooperation of all affected citizens, groups and levels of government.

#### B. Questionnaire Results.

Response to the questionnaire was 100% in terms of questionnaires returned. Some states chose to answer questions generally rather than specifically or left out questions they felt were not pertinent to their particular situation. Many

respondents had given answers in the telephone phase and referred to these (recorded in the preceding case studies), rather than repeat answers on the questionnaire. Most states also included additional information on their scenic byway programs, such as copies of legislative wordings of byway statutes and criteria requirements of designations.

Following is a numeric breakdown of the questionnaire results recorded in the original format.

#### SCENIC BYWAYS LAND MANAGEMENT QUESTIONNAIRE RESULTS

##### A. Preliminary Information:

Question 1: All participants are listed in Appendix C.

Question 2: The Great River Road program began in the 1930's. Two programs began in the 1950's, four in the 1960's and three in the 1970's. Respondents' experience ranges are: Three with 1-5 years, one with 5-10 years, two with 10-15 years and four with over twenty years.

Question 3: All ten programs have been legislatively mandated.

Question 4: The intended purpose of the programs fall into the following categories: (Some participants checked more than one.)

7 checked preservation or improvement of scenic character  
5 checked economic development and tourism  
4 checked enhancement of scenic and recreational opportunities  
3 stated recognition for state-wide significance  
2 stated historic sites.

Question 5: Six programs use land management tools to maintain or protect the scenic and visual quality of the corridor; four do not.

Question 6: Five respondents' agencies are the main participants in land management; five are not.

Question 7: Other participating agencies include:

3 Local governments

1 Departments of Public Works and Environmental Management

1 Department of Land Conservation and Development

Question 8: There are sometimes more than one level of government involved with the responsibilities associated with the administration and enforcement of land management duties of scenic byways:

7 respondents checked local level

6 respondents checked state level

3 respondents checked county level

## B. Land Management Tools

Below is a list of tools that were cited as being in use on scenic byway programs in the 10 states surveyed for this study. The tools have been rearranged in terms of their aggregate popularity. Numbers in the boxes correspond to the votes received for each tool. Blank boxes denote no votes.

1. General Planning Tools	Y	N	NA
zoning (local level)	5		
comprehensive planning	4		
zoning (state level)	2		
sub-division ordinances	2		
special resource overlay zones	2		
scenic area overlay districts	2		
natural resource overlay zones	1		
design review overlay technique	1		
highway/transportation overlay districts	1		
floating zone districts			
carrying capacity model			
environmental quality corridors			
other (please list)			
2. Use and Density Restrictions	Y	N	NA
special permits (use or density restrictions)	3		
clustering provisions	1		
transfer of development rights	1		
sliding scale zoning			
density bonuses			
other (please list)			
3. Performance Controls	Y	N	NA
sign control	8		
tree protection ordinances	5		
erosion and sediment controls	5		
buffers and set backs	5		
architectural controls	3		
open space requirements	2		
other (please list)	3		
4. Conservation and Growth Management Tools	Y	N	NA
conservation or scenic easements	4		
wider than usual road right of way	4		
fee acquisition/leaseback	3		
voluntary programs (please list)	3		
special conservation or corridor districts	2		
scenic highway corridor reservation (state level)	1		
other (please list)			
5. Multi-jurisdictional Approaches	Y	N	NA
technical committees	3		
special purpose boards or authorities	1		
citizens' review boards			
other (please list)			

C. Best Choices of Land Management Tools for Use on Scenic Byways

Question 1: The five most effective land management tools listed were:

Tool #1: 3 \_\_\_\_\_ local initiatives.  
2 \_\_\_\_\_ local level zoning.  
2 \_\_\_\_\_ Department of Transportation rules  
1 \_\_\_\_\_ comprehensive planning.  
1 \_\_\_\_\_ fee title.  
1 \_\_\_\_\_ scenic easements.

Tool #2: 2 \_\_\_\_\_ public relations.  
1 \_\_\_\_\_ comprehensive planning.  
1 \_\_\_\_\_ scenic easements.  
1 \_\_\_\_\_ local funding.  
1 \_\_\_\_\_ performance controls.  
1 \_\_\_\_\_ sign control.

Tool #3: 2 \_\_\_\_\_ local level zoning.  
2 \_\_\_\_\_ sign control.  
1 \_\_\_\_\_ use of commissions.

Tool #4: 1 \_\_\_\_\_ sub-division ordinances.  
1 \_\_\_\_\_ limited access control.  
1 \_\_\_\_\_ erosion control.

Tool #5 1 \_\_\_\_\_ comprehensive planning.  
1 \_\_\_\_\_ open space declaration.  
1 \_\_\_\_\_ architectural controls.

Question 2: Usage ranges were as follows:

2 \_\_\_\_\_ 1-3 years (corridor studies, 20 year access study).  
0 \_\_\_\_\_ 3-5 years  
2 \_\_\_\_\_ 5-10 years (general planning, performance controls).  
22 \_\_\_\_\_ Over 10 years (3 local level zoning, 3 comprehensive plan, 3 sign control, 2 DOT rules, 2 scenic easements, fee title, local initiatives, fund locally,

commissions, Architectural controls, erosion and sediment controls, sub-division ordinances, limited access control, open space declaration).

Question 3: Effectiveness ranges were as follows:

- 5 \_\_\_\_\_ Very effective (local level zoning, general planning, performance controls, public participation/local initiatives, commissions).
- 14 \_\_\_\_\_ Moderately effective (2 scenic easements, 2 DOT rules, 2 sign control, fee title, fund locally, corridor studies, 20 year access study, local level zoning, comprehensive plan, limited access control, open space declaration).
- 3 \_\_\_\_\_ Periodically effective (local level zoning, comprehensive plan, sub-division ordinances).

Question 4: Cost ranges were as follows:

- 1 \_\_\_\_\_ Very high (fee title).
- 4 \_\_\_\_\_ Moderately high (scenic easements, limited access control, corridor studies, 20 year access study).
- 3 \_\_\_\_\_ Moderately low (general planning, scenic easements, performance controls).
- 12 \_\_\_\_\_ Very low ( 4 local level zoning, 2 comprehensive plan, 2 sign control, 2 DOT rules, sub-division ordinances, open space declaration).

Question 5: Administration ranges were as follows:

- 0 \_\_\_\_\_ Easy
- 8 \_\_\_\_\_ Moderately easy (2 DOT rules, local initiatives, commission, fund locally, comprehensive planning, scenic easements, sign control).
- 13 \_\_\_\_\_ Moderately difficult (3 local level zoning, general planning, comprehensive plan, sub-division ordinances, fee title, scenic easements, performance controls,

0 \_\_\_\_\_ sign controls, limited access control).  
Difficult

Question 6: Enforcement ranges were as follows:

1 \_\_\_\_\_ Easy (limited access control)  
3 \_\_\_\_\_ Moderately easy ( DOT rules, corridor studies, 20 year access studies).  
12 \_\_\_\_\_ Moderately difficult (2 scenic easements, 2 sign control, general planning, local level zoning, comprehensive plan, subdivision ordinances, DOT rules, fee title, performance controls, open space declaration).  
3 \_\_\_\_\_ Difficult (2 local level zoning, comprehensive plan).

Question 7: Responses on criteria used to assess the quality of scenic byways programs were as follows:

3 \_\_\_\_\_ Grass-roots initiated programs.  
1 \_\_\_\_\_ Fee simple ownership.  
1 \_\_\_\_\_ Reassess existing program.

Question 8: Responses to problems associated with scenic byways management were as follows:

2 \_\_\_\_\_ Condemnation of land for scenic purposes creates a bad image  
1 \_\_\_\_\_ Long-term effectiveness of programs are unassessed  
1 \_\_\_\_\_ Existing programs have been too narrow in scope (reference to Departments of Transportation).

#### D. Overview of Scenic Byways Management

Responses to whether there are any differences in scenic byway management and other land management programs were as follows:

4 \_\_\_\_\_ No difference  
3 \_\_\_\_\_ Yes differences  
3 \_\_\_\_\_ No answer

E. Land Management Recommendations

Responses for optimal scenic byway land management recommendations were as follows:

- 4 \_\_\_\_\_ Interagency cooperation, local cooperation, grass-roots initiatives.
- 2 \_\_\_\_\_ Purchase land, scenic easements or transfer of development rights.
- 1 \_\_\_\_\_ Define the highway role to set land use patterns.
- 1 \_\_\_\_\_ Need one-time state-wide designations
- 1 \_\_\_\_\_ Clean up environment; control trash, etc.

F. Future Issues

Responses to future problems and issues both for the short and long terms were as follows:

- 8 \_\_\_\_\_ Conflicts between development (either private or government) and long-term preservation. ( The issue of view protection will require design controls within overlay districts. Another issue is that government won't take away private rights to protect scenery.)
- 2 \_\_\_\_\_ Lack of funds for scenic protection.
- 2 \_\_\_\_\_ Lack of interest in the programs.
- 1 \_\_\_\_\_ Need to define what a scenic byway is.

## CHAPTER FIVE

## CHAPTER FIVE

### CONCLUSION

#### A. New Directions

Land aesthetics are difficult to quantify. We are never really aware of their value until they are destroyed or simply disappear. This observation is only now being realized as we use the tools of technology to document our landscapes and find that increased human activities have created vast changes to our ecosystems. These activities impact our perceptions of beauty in ways that we may not even be aware of. Alston Chase uses the case of Yellowstone Park to expound on this observation, which can easily be applied to all scenic resources.

Here, as throughout the park, the slow rate of change - and the short span of our lives - help obscure Yellowstone's fate. In a place so beautiful, those without the perspective of time may not notice what is missing...They probably will not miss all that has been lost, for it is difficult to mourn the absence of something one never knew, something that disappeared, perhaps, in one's grandparents' day. Instead, the transformation of Yellowstone, for many visitors, would be a subtle one: not a change that they would see, but a gradual, and perhaps unconscious, impoverishment of their Yellowstone experience. But some day visitors may realize that the experience, once so special, that the park once offered, is

gone.<sup>1</sup>

As aesthetics are often determined by cultural biases, (as in 'beauty is in the eye of the beholder') understanding and respecting the intrinsic values of land aesthetics will determine how we, as a society, envision our future direction in terms of a 'quality of life' ethos.

Just before his untimely death in 1987, the eminent ecologist Robert Dorney was quoted as saying, "Without landscape, we have no identity."<sup>2</sup> In 1990, new land policy initiatives are addressing this concern of which scenic corridor protection is just one micro-cosm. Scenic corridors are the context in which most of us see or experience the best of our surrounding landscapes. President Johnson had addressed this issue with much concern many years previous:

Association with beauty can enlarge man's imagination and revive his spirit. Ugliness can demean the people who live among it. What a citizen sees every day is his America. If it is attractive it adds to the quality of his life. If it is ugly it can degrade his existence.<sup>3</sup>

Scenic corridors can act as the perfect vehicle to

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<sup>1</sup> Alston Chase. "Playing God in Yellowstone." (New York: NY: Harcourt, Brace, Jovanovich, 1987) pgs. 371-72.

1. Robert S. Dorney. The Professional Practice of Environmental Management. (New York, NY: Springer-Verlag, 1989) pg.ix.

<sup>3</sup> President Lyndon B. Johnson's Special Message to Congress on Natural Beauty of Our Country, 111 Congress Rec. 2045, Feb. 8, 1965.

address land growth issues and policies because their existence is directly related to the protection of these highly visible resources. As was indicated in this study's preface, even the initiation of scenic byway designation, is often presumed to help protect the integrity of the corridor resources.

The discussion of all resource protection is gaining momentum at the national level and we are increasingly hearing the call for a new dialogue on these issues.

As a nation, we have for the most part neglected to examine the haphazard way in which America handles her growth. We have failed to ask, let alone answer, the question of how we should balance our genuine need for economic development and growth with the equally important task of preserving and protecting our country's natural and historic legacy...The time has come to reassess our national policies toward development.<sup>4</sup>

Scenic corridor protection has been a topic of discussion among highway managers, landscape architects and legal advisors since the 1930's. During the 1960's the proposal was brought forth to organize a "...total program of highway corridor protection"<sup>5</sup> under the umbrella of transportation departments. However, little if any progress has been made on this front and as this study has indicated, we are still

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<sup>4</sup> Peter H. Kostmeyer. "Open Space: Our Vanishing Legacy." Landscape Architecture News Digest. May, 1990.

<sup>5</sup> J.H. Beuscher. "The Highway Corridor as a Legal Concept." Highway Research Record #166. (Washington, DC: Highway Research Board, 1967) pg.9.

dealing with a fragmented approach to corridor protection. The renewed awareness of scenic corridor protection issues today, offers us a forum for land growth, management, and ethics discussions in the political arena. It presents an opportunity to elevate scenic corridor protection to a major policy issue not only on the local and state levels but for the 1991 Federal Highway and Transportation Bill as well. However, many environmental resource professionals have begun to recognize that, "...in most cases, the main impediments to a more rational long-term approach to resource and environmental management seems to be primarily political."<sup>6</sup>

One of the many problems encountered in scenic corridor protection is that the profession of landscape architecture, which professes to preserve and protect all natural resources, has been remiss in making its collective voice heard in the political arena.

It's become clear that the politics of this country require people who want to affect large-scale land management to become politically active.<sup>7</sup>

In the final analysis, virtually every major land use decision in a community is made by its elected officials, with political considerations uppermost

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<sup>6</sup> Colin W. Clark. "Bioeconomics." Perspectives in Ecological Theory. (Princeton, NJ: Princeton University Press, 1989) pg.284.

<sup>7</sup> Interview with Joan Nassauer. Landscape Architecture. September, 1990 pg.60.

in their minds.<sup>8</sup>

The president of the American Society of Landscape Architects, Mr. G. Patten, has recently stated:

It is in the conduct of our professional lives that major opportunity for action lies...but too few of us fully employ our values and ethics in the standards of our designs...We have no strong applied research and development program that deals with the issues of our time.<sup>9</sup>

This sentiment is reinforced by the fact that there are today, perhaps less than 30 landscape architects in the United States, fully versed in the practise of landscape protection, preservation or restoration.<sup>10</sup> Six of the participants in this study are landscape architects and expressed frustration at this situation. As Mr. Patten concedes, "the people working on...land reclamation and management projects seem more at the margins of the profession than part of its mainstream."<sup>11</sup>

As a profession, landscape architecture needs to go beyond the 'shrub it up' mentality and begin to seriously contribute initiatives and skills to land growth and use

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<sup>8</sup> Michael A. Mantell; Stephen F. Harper; and Luther Propst. Creating Successful Communities - A Guidebook to Growth Management Strategies. (2 vols.) (Washington, DC: Island Press, 1990) pg.165.

<sup>9</sup> Gerald D. Patten. "Expressing the Ethic - Thought, Word, and Deed." Landscape Architecture News Digest. Feb., 1990.

<sup>10</sup> Jane Holtz Kay. "From Olmsted to Infiniti." Landscape Architecture. May, 1990, pg.48.

<sup>11</sup> Patten, supra.

issues. Professor Joan Nassauer further echos this sentiment in stating that she is "concerned that the profession needs to embody a regional consciousness."<sup>12</sup>

This regional consciousness must not however be limited to the landscape architecture profession but also embrace other professions, organizations and the public, to develop a national land use ethic.

The future may see a progressive unification of biology, economics, and political science, culminating in a grand view of man and his vital resource systems.<sup>13</sup>

Throughout this study, the issue of a lack of a national land use vision was repeatedly mentioned. Successes are occurring at the local community and some state levels but the overall approach to land use is fragmented. Most participants felt there is a real need for a cooperative effort between all levels of government and private interests to achieve this goal. Regional and national views on land use must be implemented to make corridor protection more than isolated realities.

Aldo Leopold presented a concise land ethic perspective over 40 years ago when he said:

The key-log which must be moved to release the

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<sup>12</sup> Kay, supra. pg.48.

<sup>13</sup> Clark, supra, pg.284.

evolutionary process for an ethic is simply this: quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient.<sup>14</sup>

The process of promoting this new vision can only be accomplished through a genuine cooperative effort by all interested parties in any new land use endeavour. We are beginning to witness this dialogue on a variety of land use issues including the call for "regional views"<sup>15</sup> and the realization that good business practices can be synonymous with environmental protection objectives<sup>16</sup> (of which aesthetic considerations is just one).

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<sup>14</sup> Aldo Leopold. A Sand County Almanac. (New York, NY: Ballantine Books edition, 1970) pg.262.

<sup>15</sup> Rudolph A. Pyatt Jr. "Regional View Needed on Land-Use Issues." The Washington Post: Business Supplement. Feb. 5, 1990.

<sup>16</sup> Dorney. *supra*. pg.198.

"The potential for significant economic savings in using environmental systems-oriented knowledge is demonstrated in my years of experience and that of others. Single discipline-driven development solutions can be wasteful by having overlooked often simple social, economic, or environmental dynamics and impacts. Thus the normally perceived economic conflict between achieving environmental quality and economic development may disguise other socioeconomic or political issues. Skillfully integrated environmental design and assessment offer promise of reducing government costs and improving the general welfare at the same time."

Robert Dorney's observations have been practiced by a few landscape architects, most notably John T. Lyle, who has documented his work in Design for Human Ecosystems. (See bibliography for complete citation.)

## New River Parkway Project

In the field of scenic corridor protection a new cooperative spirit is being tried and tested in an innovative fashion, on the New River Parkway project in southern West Virginia.

During the planning stages of the I-64 interstate, pressures to expose and develop the exquisite natural resources along the New River Gorge began to mount. The creation of the New River Parkway project was a direct response to this challenge and was initiated as a cooperative venture among local and state groups to protect and enhance the accessibility of the New River region south of the New River Gorge National Park. The project offers a unique approach to combining regional economic development with the creation of a scenic parkway, while respecting and protecting the rich and diverse regional landscapes. Unlike other parkways, this one will not be constructed exclusively on federal lands, meaning public agencies and private organizations must work together to achieve the goals of this project. To complicate matters, the project runs through at least three counties, all with differing political agendas. To facilitate this difficult process, the West Virginia Legislature created the New River Parkway Authority in 1985, to coordinate the project and act as an independent body with

the mandate to oversee the parkway's implementation. As stated in the legislation:

There is hereby created a New River parkway authority, to coordinate with counties, municipalities, state and federal agencies, public nonprofit corporations, private corporations, associations, partnerships and individuals for the purpose of planning, assisting and establishing recreational, tourism, industrial, economic and community development of the New River parkway for the benefit of West Virginians.<sup>17</sup>

The New River Parkway Authority consists of three voting members from each represented county (nine total) and a contingent of non-voting members from affected public agencies.<sup>18</sup>

Many issues are involved here, including as primary, the protection of the scenic corridor resource from uncontrolled development. The delicate balance of encouraging tourist developments while retaining the scenic integrity of the corridor has meant that all parties involved in this project must have a clear and holistic vision as to the future of this parkway's corridor. To date this has not been an easy matter.

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<sup>17</sup> House Bill 2073 passed April 13, 1985 by the West Virginia Legislature.

<sup>18</sup> The voting members comprise three representatives from each affected county, of which no more than two may belong to the same political party. Non-voting members consist of representatives from the National Park Service, the U.S. Corps of Engineers, the West Virginia Department of Highways, the West Virginia Department of Natural Resources, the West Virginia Department of Agriculture and the West Virginia Department of Commerce.

It has meant that all parties and the public must educate each other to their own specific concerns and work towards a unified goal. Through a series of on-going workshops and meetings, differences have been aired as to the vision of this parkway but slowly a general consensus is being reached. It is to the credit of those individuals who have a long-range vision and the drive to continue, that this project will become a model for other scenic corridor protection ventures. It must be realized though that visions are grounded in tenacity and the process of cooperation towards a common goal is a long and arduous one. This project serves as an example of the spirit of a new vision, one that not only benefits the regional interests of West Virginia but can serve as a model for a new national dialogue on land use issues as well.

#### B. Further Research

This study has been an attempt to document and assess the status of corridor protection along designated scenic byways. There are many issues that have been raised which were unfortunately outside the scope of this work to pursue but nevertheless should be explored as they may have important land use implications.

The explosion of interest and concern over land use issues today has contributed to many how-to and guidebook

publications on land management tools, for local level use from both the public and private perspective. Some of these publications which are useful guides for scenic corridor protection are listed in Appendix A. However, as recorded in this study many land management tools are not currently used for corridor protection (for instance carrying-capacity), and further research is needed to ascertain why and what the problems with some of these tools are.

As this study assessed scenic corridor issues and concerns of only a few states, and the time-frame of these programs existence was small, it would be interesting to readdress this study at a future date. It would also be of value to compare how states just implementing scenic byway programs are faring in terms of corridor protection and what concerns or problems they face today and in the future.

Further research also needs to be done in the area of education and just what that entails in the management of land resources in general and scenic corridor protection in particular. Many participants stressed that education, not only of the public at the community levels but also of professionals, agencies, and private business or organizations was essential in order for true land use cooperation to be implemented. Several issues are involved here including:

1. The need for 'trained' professionals in ecological processes.
2. The need for research funding to explore

ecological/economic relationships; including how aesthetics or the intrinsic values of beauty form a part of these processes.

3. The need to educate both professionals and the public to the values of ecological processes (including perceptions of beauty) as being more than an economic issues but as sociopolitical issues as well.
4. The need to educate both the private and public sector to think beyond conservation/preservation towards rehabilitation of our resources.<sup>19</sup>

These issues need to be further explored.

Many participants felt that increasing the levels of awareness and respect for scenic beauty by all members of society was considered an important aspect of education. It was also stressed that the tendency for agencies and consultants to come in and 'help' communities with corridor protection was often unsuccessful and that successful corridor protection could only be achieved through a 'grass-roots initiative' which encourages a genuine sense of pride in one's surroundings.<sup>20</sup> This issue needs to be further explored.

In terms of the implications for landscape architecture, many of the issues involved with corridor protection revolve around the changing nature of land uses and the management

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<sup>19</sup> Dorney, supra. Chapter 8 "Professionalization: Reality and Prospects." pgs.197-206 offers an excellent discussion of these issues.

<sup>20</sup> This perspective was supported by the late R. Dorney's observations. " Societies ... with environmental expertise to call on will be in a stronger position than those societies dependent on outside expertise. Because of the regional nature of ecosystem dynamics, such expertise must be locally trained and must have local experience to be effective." Dorney. supra, pg. 205.

conflicts arising from scenic lands being perceived as:

1. non-productive agriculture<sup>21</sup>
2. providing visual access but not necessarily economic development<sup>22</sup>
3. protecting a multi-jurisdictional resource<sup>23</sup>
4. protecting a resource from pressures of both tourist and

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<sup>21</sup> Joan Iverson Nassauer. "Vernacular Aesthetics and New Policies for the Rural Landscape." The Rural Landscape. Fall 1988 pg.4 "It is important to note that such scenic conventions as: curving roads, colorful leaves, expansive views, a skyline in the distance, sunsets, and being down in a valley were important to viewers of rural Midwest landscapes, just as they seem to be to viewers of very different landscapes. However...these qualities do not seem to be more important than neatness, and where they make the landscape less neat or less productive than it could be, they may be seen as unattractive....How can we design landscapes to look neat and show good stewardship when neat landscapes often harm ecological systems and natural or conservation landscapes often look messy?"

<sup>22</sup> Colin W. Clark. "Bioeconomics." in Perspectives in Ecological Theory. (Princeton, NJ: Princeton University Press, 1989). Bioeconomics refers to "...the gamut of interactions between biological systems on the one hand and human economic systems on the other...The question of conflicting demands on resources is one of the leading themes in bioeconomics." pgs. 275-76

<sup>23</sup> Alston Chase. Playing God in Yellowstone - The Destruction of America's First National Park. (San Diego, CA: Harcourt, Brace, Jovanovich, 1987. The following example of management problems in Yellowstone can easily be applied to other multi-jurisdictional scenic resources as well. "Recognizing that many of the problems facing the area were exacerbated by an incoherent labyrinth of conflicting and overlapping political jurisdictions involving two national parks, five national forests, several federal agencies, and three states, the Coalition resolved to lobby for creation of one administrative entity to replace all those....the Coalition decided... to ask Congress to enact legislation that would give national recognition to the ecosystem, placing the area under one 'coordinated system of management.'" pg. 365

transportation impacts.<sup>24</sup>

From the purely aesthetic perspective, landscape architects now have many techniques to show various scenarios of land use impacts. However, these techniques have usually been limited to single land parcels. Further research needs to be done on questions and techniques related to regional cumulative impacts on landscapes so that more informed decisions can be made in terms of all land use impacts. As land is always in a state of ecological and economic flux, landscape architects need to begin exploring how to accommodate land use changes, while ensuring that the land remains healthy. As many experts have observed, it is not enough to leave the land alone.<sup>25</sup>

One final area of research must surely be the tying in of all diverse and fragmented land use approaches to a national holistic vision for all our scenic lands. The landscape architecture profession must have the skills and tools to assess the needs involved with corridor protection

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<sup>24</sup> William E. Hammitt and David N. Cole. Wildland Recreation - Ecology and Management. (New York, NY: John Wiley and Sons, 1987) explores the conflicts between preserving ecological integrity and providing recreational uses in wild or scenic lands.

<sup>25</sup> Dorney, supra, "To propose socially acceptable, environmentally acceptable, and economically satisfactory alternatives will require considerable vision to define the possible, the feasible, and the implementable." pg.205

and bring those needs to the forefront of the political arena.

Traditionally, landscape architects have not been greatly involved with the larger issues of land use. Moreover, they have often been forced to react and fix up land use decisions made elsewhere by individuals or organizations unfamiliar with the complexity of land use issues or the consequences of poor decision-making. In the far past, these localized decisions did not have much affect on the overall use of land. Unfortunately, over the past one hundred years, the cumulative impact of poor land use decisions has contributed to some very serious problems, including the degradation of our scenic resources. This problem has been recognized and discussed since the late 1800's<sup>26</sup> yet as a society, we are still struggling between quick-fix economic gain versus long-range protection of our resources. Projects such as the New River Parkway or the North Shore Corridor Plan discussed in the Minnesota case study, offer us a new direction and model for cooperation for all parties interested and involved in the protection of scenic resources. Their future success may provide concrete examples of corridor protection and serve as models for new cooperative land use decisions which will balance growth, protection and rehabilitation of our scenic resources.

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<sup>26</sup> Roderick Nash. Wilderness and the American Mind. (New Haven, CT: Yale University Press, 3rd. ed. 1982).

The profession of landscape architecture can contribute significant skills to 'the way more beautiful' by taking a lead role in the many processes involved with scenic corridor protection and so help to ensure that these resources will remain an important and viable reality in the future.

## BIBLIOGRAPHY

### BOOKS

Appleyard, Donald; Lynch, Kevin; and Meyer, John. The View From the Road. Cambridge, MA: MIT Press, 1964

Barrett, Thomas, and Livermore, Putnam. The Conservation Easement in California. Covelo, CA: Island Press, 1983

Betts, Edwin M., and Perkins, Hazlehurst Bolton. Thomas Jefferson's Flower Garden at Monticello. Charlottesville, VA: University Press of Virginia, 3rd. ed. 1986

Bosselman, Fred, and Callies, David. The Quiet Revolution in Land Use Control. Washington, DC: Council on Environmental Quality, 1971

\_\_\_\_\_. The Taking Issue. Washington, DC: Council on Environmental Quality, 1973

Brenneman, Russell L., and Bates, Sarah M. (eds.) Land-Saving Action. Covelo, CA: Island Press, 1984

Carr, James H., and Duensing, Edward E. (eds.) Land Use Issues in the 1980's. New Brunswick, NJ: Center for Urban Policy Research Rutgers University, 1983

Chase, Alston. Playing God in Yellowstone - The Destruction of America's First National Park. San Diego, CA: Harcourt, Brace, Jovanovich, 1987

Cullen, Gordon. Townscape. London, GB: The Architectural Press, 1961

DeGrove, John M. Land Growth and Politics. Washington, DC: American Planning Association Planners Press, 1984

Devall, Bill. Deep Ecology. Salt Lake City, UT: Gibbs M. Smith Inc. 1985

Diehl, Janet, and Barrett, Thomas. The Conservation Easement Handbook. San Francisco, CA: Trust for Public Land, 1988

Dorney, Robert S. The Professional Practice of Environmental Management. New York, NY: Springer-Verlag, 1989

- Findley, Roger W., and Farber, Daniel A. Environmental Law. St. Paul, MN: West Pub. Co, 1988
- Garnham, Harry Launce. Maintaining the Spirit of Place. Mesa, AZ: PDA Pub. Corp., 1985
- Hagman, Donald G., and Juergensmeyer, Julian Conrad. Urban Planning and Land Development Control Law. St. Paul, MN: West Pub. Co., 2nd. ed. 1986
- Hammit, William E., and Cole, David N. Wildland Recreation - Ecology and Management. New York, NY: John Wiley and Sons, 1987
- Hartzog, George B. Jr. Battling for the National Parks. Mt. Kisco, NY: Moyer Bell Limited, 1988
- Higuchi, Tadahiko. The Visual and Spatial Structure of Landscapes. Cambridge, MA: MIT Press, 1983
- Hoose, Phillip M. Building an Ark: Tools for the Preservation of Natural Diversity Through Land Protection. Covelo, CA: Island Press, 1981
- Hosmer, Charles B. Jr. Presence of the Past - A History of the Preservation Movement in the United States Before Williamsburg. New York, NY: G.P. Putnam's Sons, 1965
- Jakle, John A. The Visual Elements of Landscape. Amherst, MA: University of Massachusetts Press, 1987
- Jolley, Harley E. The Blue Ridge Parkway. Knoxville, TN: University of Tennessee Press, 1969
- Kegley, Frederick B. Kegley's Virginia Frontier. Roanoke, VA: The Southwest Virginia Historical Society, 1938
- Kusler, Jon. Regulating Sensitive Lands. Washington, DC: Environmental Law Institute, 1980
- Leopold, Aldo. A Sand County Almanac. New York, NY: Ballantine Books edition, 1970
- Lockeretz, William. (ed.) Sustaining Agriculture Near Cities. Ankeny, Iowa: Soil and Water Conservation Society, 1987
- Lyle, John Tillman. Design for Human Ecosystems. New York, NY: Nostrand, Reinhold, 1985

- McHarg, Ian L. Design with Nature. Garden City, NY: Doubleday and Co. 1969
- Magley, Beverly. National Forest Scenic Byways. Billings, MT: Falcon Press, 1990
- Mantell, Michael A.; Harper, Stephen F.; and Propst, Luther. Creating Successful Communities - A Guidebook to Growth Management Strategies. (2 vols.) Washington, DC: Island Press, 1990
- Marsh, William M. Landscape Planning - Environmental Applications. New York, NY: John Wiley and Sons, 1983
- Meinig, D.W. (ed.) The Interpretation of Ordinary Landscapes. New York, NY: Oxford University Press, 1979
- Mitchell, Bruce. Geography and Resource Analysis. New York, NY: John Wiley and Sons, 2nd. ed. 1989
- Montana Land Reliance. Private Options: Tools and Concepts for Land Conservation. Covelo, CA: Island Press, 1982
- Nash, Roderick. Wilderness and the American Mind. New Haven, CT: Yale University Press, 3rd. ed. 1982
- Noe, Francis P., and Hammitt, William E. (eds.) Visual Preferences of Travellers Along the Blue Ridge Parkway. Washington, DC: National Park Service; Scientific Monograph Series No. 18, 1988
- Petulla, Joseph M. American Environmental History. Columbus, OH: Merrill Pub. Co., 2nd. ed. 1988
- Rohse, Mitch. Land-Use Planning in Oregon. Corvallis, OR: Oregon State University Press, 1987
- Roughgarden, Jonathan; May, Robert M.; and Levin, Simon A. (eds.) Perspectives in Ecological Theory. Princeton, NJ: Princeton University Press, 1989
- Schiffman, Irving. Alternative Techniques for Managing Growth. University of California at Berkeley: Institute of Government Studies, 1989
- Selznick, Philip. TVA and the Grass-roots. Berkeley, CA: University of California Press, 1949
- So, Frank S. (ed.) The Practice of Local Government Planning.

Washington, DC: International City Management Association, 2nd. ed., 1988

Stokes, Samuel N., et al. Saving America's Countryside - A Guide to Rural Conservation. Baltimore, MD: John Hopkins University Press, 1989

Stone, Christopher D. Should Trees Have Standing? Los Altos, CA: William Kaufmann, Inc., 1974

Tilden, Freeman. The National Parks. New York, NY: Alfred A. Knopf, 3rd. ed., 1986

Tucker, Edwin Wallace. Legal Regulation of the Environment. St. Paul, MN: West Pub. Co., 1972

Tunnard, Christopher, and Pushkarev, Boris. Man-Made America: Chaos or Control? New Haven, CT: Yale University Press, 1963

Weinberg, Nathan. Preservation in American Towns and Cities. Boulder, CO: Westview Press, 1979

Worster, Donald. Nature's Economy. Cambridge, MA: Cambridge University Press, 1977

#### MANUALS AND REPORTS

Adams, Carolyn A., and Wells, Gary. Field Guide for Assessing Scenic Quality in Countryside Landscapes. Washington, DC: US Department of Agriculture; Soil Conservation Service, no date

American Association of State Highway and Transportation Officials. Task Force Report on Scenic Byways Study Act of 1989. Washington, DC: AASHTO, 1989

American Society of Landscape Architects. Report of the Activities of the Legislative Steering Subcommittee of the Rural Landscape Open Committee. Washington, DC: ASLA, 1990.

Arizona Parkways, Historic and Scenic Roads Advisory Committee. Application Procedures for Designation of Parkways, Historic and Scenic Roads. Phoenix, AZ: Arizona Department of Transportation, no date

Bayliss, Dudley C. Planning Our National Park Roads and Our National Parkways. Washington, DC: National Park Service reprint from Traffic Quarterly, 1957

Bartholomew, Harland and Assoc. Inc. Aesthetics and Visual Quality - Technical Memorandum: Roanoke River Parkway. Richmond, VA: Harland Bartholomew and Assoc. 1989

Braselton, Susan. Research and Recommendations for Kentucky Scenic Highway Legislation. Louisville, KY: Kentucky Heritage Council, 1989

Bucks County Planning Commission. Village Planning Handbook. Doylestown, PA: Bucks County Commissioners, 1989

California Department of Transportation. Guidelines for the Official Designation of Scenic Highways. Sacramento, CA: State of California; Department of Transportation, 1988

Committee on Geometrics and Esthetics of Highway Location and Design. Practical Highway Esthetics. New York, NY: American Society of Civil Engineers, 1977

Duerksen, Christopher J. Aesthetics and Land-Use Controls - Beyond Ecology and Economics. Chicago, IL: American Planning Association; Report No. 399, 1986

Federal Highway Administration. Scenic Byways Washington, DC: US Department of Transportation Report No. FHWA-DF-88-004, 1988

\_\_\_\_\_. Visual Impact Assessment of Highway Projects. Washington, DC: US Department of Transportation; Office of Environmental Policy, 1983

Hornbeck, Peter L. and Okerlund, Garland A. Jr. Visual Values for the Highway User; An Engineer's Workbook. Washington, DC: US Department of Transportation, 1973

Hunt, Roy E.L. Managing Growth's Impact on the Mid-South's Historic and Cultural Resources. Washington, DC: National Trust for Historic Preservation; Critical Issues Series, 1988

Litton, R. Burton, Jr. Forest Landscape Description and Inventories: A Basis for Land Planning and Design. Berkeley, CA: US Department of Agriculture; Forest Service Research Paper, PSW-49, 1968

Massachusetts Department of Environmental Management. Little-known Law Helps Towns Preserve Scenic Roads. Boston, MA: Department of Environmental Management, no date.

\_\_\_\_\_. History of the Massachusetts Bay Circuit. Boston, MA: Department of Environmental Management, 1989

\_\_\_\_\_. Open Space Program. Boston, MA: Department of Public Works, no date.

Melton, William R. National Scenic Byways Study - Washington State. Olympia, WA: Washington State Department of Transportation; Program Development Division, 1990

Minnesota Department of Transportation. Corridor Management Program for the North Shore Drive. St. Paul, MN: Minnesota Departments of Transportation and Natural Resources, 1989

\_\_\_\_\_. Great River Road Project Development Report. St. Paul, MN: Office of Environmental Affairs, 1977

\_\_\_\_\_. Great River Road Route Selection and Development Guide. St. Paul, MN: Office of Environmental Services, 1982

\_\_\_\_\_. Highways in Recreation Areas. St. Paul, MN. Minnesota Departments of Transportation and Natural Resources, 1988

Montgomery County Planning Commission and Department. State Route 785 - Designation as a Virginia Byway. Christiansburg, VA: Montgomery County Planning Commission and Department, 1985

National Forest Service. National Forest Landscape Management. Washington, DC: US Department of Agriculture Handbook Nos. 434 and 462, 1973

National Park Service. National Parkways Handbook. Washington, DC: Department of the Interior, 1964

\_\_\_\_\_. Park Road Standards. Washington, DC: Department of the Interior, 1984

\_\_\_\_\_. New River Parkway Concept Plan. Hinton, WV: Department of the Interior, 1987

North Carolina Department of Transportation. North Carolina Scenic Byway. Raleigh, NC: North Carolina Department of Transportation; Division of Highways, 1990

Ochi, Diane. Columbia River Highway; Options for Conservation and Reuse. Cascade Locks, OR: Columbia River Highway Project, 1981

Oregon Department of Transportation. Oregon Historic and Scenic Highway Program. Salem, OR: Oregon Department of Transportation; Highway Division, no date

\_\_\_\_\_. US 97 Corridor Study. Salem, OR: Oregon Department of Transportation, 1988

Oregon Economic Development Department. Oregon Shines; An Economic Strategy for the Pacific Century. Salem, OR: Oregon Economic Development Department, 1989

Papke, Gary and Roddewig, Richard J. Reconciling Growth and the Preservation of Historic Character. Washington, DC: National Trust for Historic Preservation; Critical Issues Series, 1988

Pennsylvania Department of Transportation. Guidelines to Improve the Aesthetic Quality of Roads in Pennsylvania. PA: Pennsylvania Departments of Transportation and Environmental Resources, 1978

President's Council on Recreation and Natural Beauty. A Proposed Program for Scenic Roads and Parkways. Washington, DC: US Department of Commerce; Highways Division, 1966

Proceedings of the Second Biennial Linear Parks Conference. Parkways: Past, Present, and Future. Boone, NC: Appalachian Consortium Press, 1987

Report of the President's Commission. Americans Outdoors; The Legacy, the Challenge. Washington, DC: Island Press, 1987

RMA/Texas. An Open Space Plan for Collin County. McKinney, TX: Collin County Open Space Board, 1986

Shanahan, Deborah and Smardon, Richard. Preserving New York State Scenic Roads. Syracuse, NY: State University of NY at Syracuse; School of Landscape Architecture, 1990

Spengler, John O. Scenic Byways: Issues and Actions. Washington, DC: Congressional Research Service Report, 1988

Thurber, Pamela (ed.). Controversies in Historic Preservation: Understanding the Preservation Movement Today. Washington, DC: National Trust for Historic Preservation, 1985

Transportation Research Board. Designing Safer Roads. Washington, DC: National Research Council; Special Report 214, 1987

Vermont Scenery Preservation Council. Designating Scenic Roads - A Vermont Fieldguide. Montpelier, VT: Vermont Transportation Board, 1979

Virginia Department of Conservation and Historic Resources. A Guide for Virginia Byway Management. Richmond, VA: Department of Conservation and Historic Resources; Division of Parks and Recreation, 1988

Washington State Department of Transportation. Utilities Accommodation Policy. Olympia, WA: Department of Transportation, 1989

\_\_\_\_\_. Scenic Classification System. Olympia, WA: Department of Transportation; Highways Division, 1973

Wise, Warren E. "The Concept of Carrying Capacity as a Tool for Managing Scenic Roadways." Blacksburg, VA: Virginia Polytechnic and State University; Masters of Landscape Architecture Thesis, 1988

Wisconsin Department of Transportation. Rustic Roads - A Positive Step Backward. Madison, WI: Department of Transportation, no date

Yaro, Robert D. et al. Dealing with Change in the Connecticut River Valley: A Design Manual for Conservation and Development. Amherst, MA: Lincoln Institute of Land Policy, 1988

#### ARTICLES

Adler, Jerry et al. "Troubled Waters." Newsweek. April 16, 1990

Anderson, Charles R. "Preservation of Landscape Features." Highway Research Board Special Report #138. Washington, DC: Highway Research Board, 1973

Annese, Domenico. "The Impact of Parkways on Development in Westchester Co., New York City and the Metropolitan New York Region." Parkways: Past, Present and Future. Boone, NC: Appalachian Consortium Press; 1987 Conference Proceedings, 1989

Bastarache, G.M. "Scenic Highways Targeted." American Automobile Association. fact sheet, Summer 1989

Bauer, Betsy et al. "Great American Getaways." US News and World Report. May 16, 1988

Beck, Laura. "New Market, MD. Just As They Like It." The

Washington Post. Feb. 3, 1990

Beuscher, J.H. "The Highway Corridor as a Legal Concept." Highway Research Record # 166. Washington, DC: Highway Research Board, 1967

Brodsky, Harold. "Highways and Outdoor Recreation." Highway Research Record # 161. Washington, DC: Highway Research Board, 1967

Campbell, E. Wilson. "Transportation System Corridors." Highway Research Record #166. Washington, DC: Highway Research Board, 1967

Chenoweth, Richard E. "Image-Capture Computer Technology and Aesthetic Regulation in Rural Riverway Planning and Management." Madison, WI: University of Wisconsin; Department of Landscape Architecture, 1989

Davidson, Paul; Tomer, John; and Waldman, Allen. "The Economic Benefits Accruing From the Scenic Enhancement of Highways." Highway Research Record #285. Washington, DC: Highway Research Board, 1969

Digilio, Alice. "Development Paints a Grim Vista at Shenandoah." The Washington Post. Oct. 7, 1989

Disque, Earl A. "The Great River Road - A Model for America's Scenic Routes." Highway Research Record #161. Washington, DC: Highway Research Board, 1967

Earley, Wayne O. "Warrants, Criteria and Standards for Acquiring Land and Interests in Land for Scenic and Other Highway Environmental Purposes." Highway Research Record #206. Washington, DC: Highway Research Board, 1967

Federick, Joseph C. "The New Trichotomy: The Highway, The Roadside and Recreation." Highway Research Record #206. Washington, DC: Highway Research Board, 1967

Frankland, Bamford. "California's Scenic Highway Program." Highway Research Record #161. Washington, DC: Highway Research Board, 1967

\_\_\_\_\_. "Coexistence in the Highway Corridor. A test of Intergovernmental Cooperation." Highway Research Record #166. Washington, DC: Highway Research Board, 1967

Grove, Noel. "Greenways - Paths to the Future." National

Geographic V.177, No. 6, June 1990

Hammer, Philip. "Growth Management: A New Framework for Land Use and Transportation Planning." Transportation Research Record #508. Washington, DC: Transportation Research Board, 1974.

Hawley, Peter. "Protecting and Enhancing Scenic, Cultural and Recreational Resources." Washington, DC: National Trust for Historic Preservation, Nov. 6, 1989.

Highway Research Board (eds.) "The Art of Roadside Development." Highway Research Board Special Report #88. Washington, DC: Highway Research Board, 1966. pg.73.

\_\_\_\_\_. "Legal Problems of Highway Beautification." Highway Research Circular #23. Washington, DC: Highway Research Board, 1966.

\_\_\_\_\_. "Condemnation of Scenic Easements; A Wisconsin Case Study." Highway Research Board #60. Washington, DC: Highway Research Board, 1967.

\_\_\_\_\_. "Junkyards, Geraniums, and Jurisprudence: Aesthetics and the Law." Highway Research Circular #77. Washington, DC: Highway Research Board, 1968.

Isaacson, Larry. "Visual Quality and the Motorist." Highway Research Board Special Report #138. Washington, DC: Highway Research Board, 1973.

Kay, Jane Holtz. "From Olmsted to Infiniti." Landscape Architecture. May, 1990.

King, Alfred L. "Congressmen Seeking Study of Shenandoah Battlefields." The Washington Post. Dec. 9, 1989.

Kostmayer, Peter H. "Open Space: Our Vanishing Legacy." Landscape Architecture News Digest. May, 1990.

Landscape Architecture. (eds.) "Academic Assemblage." Landscape Architecture. September, 1990.

Lappegaard, Ray. "Environmental Goals for Highway Organizations." Highway Research Board Special Report # 138. Washington, DC: Highway Research Board, 1973.

Levin, David R. "Scenic Roads and Parkways." Highway Research Record #161. Washington, DC: Highway Research Board, 1967.

\_\_\_\_\_. "Scenic Corridors." Highway Research Record #166. Washington, DC: Highway Research Board, 1967.

Lewis, Philip H. Jr. "Environmental Values in Regional Highway Design." Highway Research Record #161. Washington, DC: Highway Research Board, 1967.

\_\_\_\_\_. "The Highway Corridor as a Concept of Design and Planning." Highway Research Record #166. Washington, DC: Highway Research Board, 1967.

Lewis, Roger K. "Historic Preservation Poses Problems." The Washington Post. April 7, 1990

Levy, Claudia. "The Greening of Montgomery." The Washington Post. Oct. 22, 1989

Lorens, E.R. "Valuation of Scenic Area Easements." Highway Research Record #166. Washington, DC: Highway Research Board, 1967

Mandelker, Daniel R. "Highway Reservations and Land-Use Controls Under the Police Powers." Highway Research Record #8. Washington, DC: Highway Research Board, 1963

Marks, Harold and Spitz, Salem. "A Review of Transportation Aspects of Land-Use Controls." Highway Research Board #31. Washington, DC: Highway Research Board, 1966

Matheny, John B. "Acquisition of Scenic Easements." Highway Research Record #166. Washington, DC: Highway Research Board, 1967

Mulder, William J. Jr. "Development of Criteria for Scenic Roads." Transportation Research Record #508. Washington, DC: Transportation Research Board, 1974

Nassauer, Joan Iverson. "Vernacular Aesthetics and New Policies for the Rural Landscape." The Rural Landscape. Fall 1988

National Park Service. "Scenic Easements." Washington, DC: US Department of the Interior, 1976

National Trust for Historic Preservation. "Manassas National Battlefield Park Amendments of 1988." Preservation Law Reporter. 1988 Annual.

\_\_\_\_\_. "The National Heritage Conservation Act."

Washington, DC: Jan. 4, 1990

Netherton, Ross D. (ed.) "Action Strategies and Environmental Values." Highway Research Board Special Report #138. Washington, DC: Highway Research Board, 1973

Patten, Gerald D. "Expressing the Ethic - Thought, Word, and Deed." Landscape Architecture News Digest. Feb., 1990

Posekany, Lewis A. "Biological Values." Highway Research Board Special Report #138. Washington, DC: Highway Research Board, 1973

Pyatt, Rudolph A. Jr. "Regional View Needed on Land-Use Issues." The Washington Post; Business Supplement. Feb. 5, 1990

Robinson, John. "Citizen Participation and Environmental Considerations in Transportation Planning." Highway Research Board Special Report #138. Washington, DC: Highway Research Board, 1973

Rottinghaus, B.H. "Achievements in the Visual Quality of Roadway Design." Highway Research Board Special Report #138. Washington, DC: Highway Research Board, 1973

Satchell, Michael. "The Battle for the Wilderness." US News and World Report. July 3, 1989

Scarlett, Harold "Bill Would Close Huge Loopholes in Billboard Law." The Houston Post. Dec. 3, 1989 Reprinted in Sign Control News. Jan./Feb. 1990

"Scenic Byways Study Act of 1989 Introduced in US Congress." Scenic Byways Bulletin. March/April 1989

Schnabel, Rockwell A. "Remarks Before the 1989 Scenic Byways Conference." Washington, DC: US Department of Commerce, Nov. 6, 1989

Shepherd, William E. "Visibility Description, Visual Analysis and Land Use Control Along Rural Scenic Byways." Blacksburg, VA: Virginia Polytechnic Institute and State University; Landscape Architecture Department, Oct. 1988

Smith, Bob L. "Scenic Byways Project." Manhattan, KS: Kansas State University; Department of Civil Engineering, July 10, 1990

Tennessee Department of Transportation. "Tennessee Scenic Parkway." Nashville, TN: in-house fact sheet, no date.

Transportation Research Circular (eds.) "The Easement Approach: Can It Rescue Highway Visual Quality?" Transportation Research Board #165. Washington, DC: Transportation Research Board, 1975

Tunnard, Christopher. "Highway Scenic Potentials." Highway Research Record #182. Washington, DC: Highway Research Board, 1967

Warren, Scott S.; Morrisey, Tom; and Scodellaro, Nadine. "10 Dramatic Drives." Friends: Travel and Adventure in America. Oct./Nov. 1988

Williams, Norman Jr. "Legal Techniques to Protect and to Promote Aesthetics Along Transportation Corridors." Highway Research Record #182. Washington, DC: Highway Research Board, 1967

#### VIDEOS

"The Gift of the Journey: America's Scenic Roadways." Washington, DC: Scenic America. Fall 1989

"Washington: Department of Transportation's Scenic Classification System." Olympia, WA: Pacific Communications Inc. Nov. 1987

## APPENDICES

## APPENDIX A

### LAND MANAGEMENT TOOLS

The following definitions are capsules of large-scale concepts in land planning that have been used in this study's questionnaire. The definitions are meant to briefly introduce the reader to these concepts. Many excellent publications including the following, will provide the reader with a more complete analysis than is listed herein.

#### SOURCES

The Practice of Local Government Planning Municipal Management Series. Washington, DC: American Planning Association, 1988  
Urban Planning and Land Development Control Law D. Hagman, J.C. Juergensmeyer. St. Paul, MN: West Pub. Co., 1986  
Wildland Recreation-Ecology and Management W. Hammitt, D. Cole. New York, NY: John Wiley and Sons, 1987  
Creating Successful Communities; A Guidebook to Growth Management Strategies M. Mantell, S. Harper, L. Propst. Washington, DC: Island Press, 1990  
Landscape Planning W.M. Marsh. New York, NY: John Wiley and Sons, 1983  
Land-Use Planning in Oregon M. Rohse. Corvallis, OR: Oregon State University Press, 1987  
Alternate Techniques for Managing Growth I. Schiffman. Berkeley, CA: University of California, 1990  
Saving America's Countryside; A Guide to Rural Conservation S. Stokes; A.E. Watson; G.P. Keller; J.T. Keller. Baltimore, MA: John Hopkins University Press, 1989

#### DEFINITIONS

##### 1. General Planning Tools:

Comprehensive Planning is an official long-range plan and/or document which is adopted by the local governing body to help steer a course of action for future community developments.

Zoning is the traditional form of land use control which divides land parcels into districts or pockets called zones. Controls such as density, building height, bulk, allowable

use, etc. are imposed according to zone types which have been adopted either at the state or local levels.

Sub-division ordinances control the division of land into specific lot sizes for its future sale and development purposes. Sub-divisions are most often associated with residential, commercial, or industrial developments.

Floating zones are usually applied on a case by case basis as an alternative to traditional zoning. Ordinances may create a special needs requirement and later provide the floating land to fit the said requirement.

Overlay zones are applied over and above traditional zoning as added protection for sensitive or multiple resources. They do not affect the density or use of the existing zones. Various resources can be identified specifically through this process such as natural resources, historic districts, scenic areas or highway/transportation resources. In conjunction, design review overlay techniques can be applied which dictate or control development to insure compatibility with designated overlay zones.

Carrying capacity models have their beginnings in wildlife and natural resource management. Models have been adapted to planning to include a threshold of human impacts on land in relation to the amount of destruction or damage that natural ecosystems can handle. Carrying capacity models are also beginning to be used as a growth management tool for regional development projects.

Environmental quality corridors are identified on master plans as having specific importance for ecological protection. Some examples include wetlands or wildlife corridors which are natural routes and habitats not necessarily corresponding to man-made boundaries.

## 2. Use and Density Restrictions

Special permits are sometimes issued by the local governing body upon a landowner's request to change the type of use on a specific piece of property. The land is not rezoned but the property owner must demonstrate that there will be no adverse affects to either neighbours or the public at large.

Sliding scale zoning is an attempt to protect agricultural land from high density developments by imposing a limit to the

number of dwelling units allowed per acre of land.

Clustering provisions concentrate the building of structures at a higher density on a smaller portion of land in exchange for preserving the larger portion of land as open space.

Transfer of development rights involves the selling of specific rights to develop land on property which is not considered sensitive to development, while 'freezing' sensitive land parcels, so as to insure that they remain open space.

Density bonuses of increased building units are granted to developers by the governing body as a land use incentive for developers to provide community benefits or amenities which the said community could not otherwise afford. They are also referred to as bonus or incentive zoning.

### 3. Performance Controls

Buffers and set-backs separate two land uses by a strip of open space. They vary in size and distance with each stated land purpose and are often incorporated in design guidelines.

Open space requirements are identified by local governments as minimum accepted parcels of land within a community's boundaries, where development restrictions are placed in order to protect sensitive agricultural, natural, scenic or wildlife habitats.

Architectural controls are considered aesthetic monitoring techniques which are enforced by local government ordinances on visually sensitive land parcels, such as historic districts or scenic areas, to preserve the existing character which may be in danger of destruction by insensitive development.

Sign controls are specifically targeted at controlling the visual blight along highways and byways. They are an outgrowth of billboard controls which has been a controversial issue since the early 1900's.

Tree protection ordinances fall under the category of design review and are an attempt by many communities to protect specimen trees from destruction, due to development or willful removal. These ordinances are used in urban localities concerned with environmentally or aesthetically sensitive districts.

Erosion and sediment controls are environmental measures which attempt to control soil loss and its impacts on drainage, wetlands, terrestrial vegetation and rivers, especially during periods of development construction. Increasingly, the use of storm-water management techniques, which monitor on-site, point-source peak discharges entering water supplies are being employed as powerful erosion and sediment controls.

#### 4. Conservation and Growth Management Tools

Fee acquisition/leaseback refers to the purchase of private land with the objective of renting back the parcel to the owner under certain restrictive measures.

Conservation or scenic easements set permanent restrictions on land, regardless of the owner, through the transfer of partial land interests, by purchase or gift to either a government entity or non-profit organization.

Special conservation or corridor districts are designated areas considered to be sensitive to development on aesthetic or environmental grounds. They are a recent outgrowth of the architectural historic district concept.

Wider than usual road right-of-ways are employed by transportation or highway departments to protect scenic roadways from unsightly developments, by prohibiting development on adjacent parcels of land which would not normally be under the highway department's jurisdiction.

Scenic highway corridor reservations are placed at the state or local level as protection tools to manage or regulate development along sensitive roadways.

Voluntary programs can be initiated by both private and non-profit organizations to conserve or protect sensitive land parcels. An example is the Adopt-a-Highway program where volunteers maintain the beauty of a stretch of roadway by cleaning up trash, clearing brush, etc. and performing other duties which are coordinated through local highway departments.

## 5. Multi-jurisdictional Approaches

Special purpose boards or authorities are appointed to oversee the management of a specific resource or project which may overlap certain political boundaries. The members are not necessarily professionally trained in the area of resource management and may rely on technical committees for advice or guidance.

Citizen review boards are comprised of concerned citizens who may be appointed by the local government to provide public participation services and feedback on community reactions relating to resource management. These groups may also perform watchdog duties on resources such as parks, riverfronts or lakes.

Technical committees are comprised of professionals such as landscape architects, resource scientists, planners, architects or engineers, who advise local governments or appointed boards, on issues or problems associated with the land management of resources.

## APPENDIX B

VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY

Blacksburg, Virginia 24061

March 20, 1990

Dear

It was great to talk with you this week. As I indicated on the phone, I am conducting research on land management issues relating to the protection or enhancement of scenic byways. This research will form the core of my Masters thesis in Landscape Architecture.

As you are aware, there is an increasing interest in scenic byways for various reasons, including the belief that scenic byways help to preserve and protect many portions of rural America. However, there are many problems involved with managing rural scenic byways, including their size, location, the ever-changing landscape, and the increasing threat of encroaching development. There is also much confusion and no consensus as to what the definition of a scenic byway is. This makes the task of defining the parameters of scenic byway land management difficult, at best.

For the purposes of this study, I am limiting my research to rural roads which have been designated as scenic or rustic by a state with a recognized program of over 20 years (ref. Scenic Byways, FHWA pub. July 1988). I am excluding both urban roads and federal byways and parkways, as these roads involve a completely different set of land management issues and problems.

In your own experience, what role do land management tools play in insuring that a scenic byway (including the surrounding scenery, vistas, etc.) stays that way? How important are land protection measures? Are there instances when a scenic byway should lose its designation because it is no longer scenic? I hope you will be able to answer some of these concerns in the attached questionnaire. Your insights will be especially helpful to other states contemplating the implementation of a scenic byways program.

I shall be calling you within the week to make sure that you received the folder. Please complete it and return it to me as soon as possible. I have included a self-addressed envelope for your convenience. Should you have any other questions or queries that we did not discuss on the phone, please do not hesitate to call me at 703-231-5644 or my major professor, Dr. Will Shepherd at 703-231-6863.

Thank you for all your time and enthusiasm on this project. I feel it will generate some interesting discussions and points which I will happily share with you, should you request it.

Sincerely,

Helen Cozzetto  
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Encl:

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**SCENIC BYWAYS LAND MANAGEMENT ASSESSMENT QUESTIONNAIRE**  
**Department of Landscape Architecture - VPI & SU - March 1990**

A. Please complete the following preliminary information.

1. Your name, position, and working address:

2. When did this state first begin its scenic byways program?

\_\_\_\_\_

How long have you been involved with this program?

1-5 years	5-10 years	10-15 years	Over 20 years

3. Has this program been legislatively mandated? \_\_\_\_\_

4. Please check the intended purpose of your scenic byway program

Preservation or improvement of scenic character \_\_\_\_\_

Enhancement of scenic and recreational opportunities \_\_\_\_\_

Economic development and tourism \_\_\_\_\_

Other (please state) \_\_\_\_\_

5. Does your scenic byways program use land management tools to maintain or protect the scenic and visual quality of the corridor? YES \_\_\_\_\_ NO \_\_\_\_\_

6. If yes, is your agency the main participant in land management issues related to scenic byways? YES \_\_\_\_\_ NO \_\_\_\_\_

7. If not, please list other agencies that oversee this program

8. Which level of government is responsible for the administrative and enforcement duties with respect to land management issues relating to your scenic byways?

State level	County level	Local level

**B. Land Management Tools**

Below is a list of tools that are frequently cited as being in use or appropriate for use in land management programs. Please check the tools you or your agency most frequently use for scenic byway management under the Y column, and those you do not use under the N column. Tools you feel are inappropriate to scenic byway management should be marked NA.

1. General Planning Tools	Y	N	NA
comprehensive planning			
zoning (state level)			
zoning (local level)			
sub-division ordinances			
floating zone districts			
natural resource overlay zones			
special resource overlay zones			
scenic area overlay districts			
design review overlay technique			
highway/transportation overlay districts			
carrying capacity model			
environmental quality corridors			
other (please list)			

2. Use and Density Restrictions	Y	N	NA
special permits (use or density restrictions)			
sliding scale zoning			
clustering provisions			
transfer of development rights			
density bonuses			
other (please list)			

3. Performance Controls	Y	N	NA
buffers and set backs			
open space requirements			
architectural controls			
sign control			
tree protection ordinances			
erosion and sediment controls			
other (please list)			

4. Conservation and Growth Management Tools	Y	N	NA
fee acquisition/leaseback			
conservation or scenic easements			
special conservation or corridor districts			
wider than usual road right of way			
scenic highway corridor reservation (state level)			
voluntary programs (please list)			
other (please list)			

5. Multi-jurisdictional Approaches	Y	N	NA
special purpose boards or authorities			
citizens' review boards			
technical committees			
other (please list)			

**C. Best Choices of Land Management Tools for Use on Scenic Byways**

Below are a few questions relating to Part B. The main purpose of this research is to ascertain what and where successes or problems lie in terms of scenic byway land management. This information may help states contemplating the use of various land management tools to have some prior knowledge as to the success or failure of these tools elsewhere. Therefore any comments about these tools will be most valuable.

1. Please state the FIVE most effective land management tools you or your agency uses along scenic byway corridors.

Tool #1	
Tool #2	
Tool #3	
Tool #4	
Tool #5	

2. How long have you or your agency used this tool?

1-3 years                      3-5 years                      5-10 years                      over 10 years

Tool #1				
Tool #2				
Tool #3				
Tool #4				
Tool #5				

Problems and comments:

3. How effective has this tool been in terms of managing your byway programs' scenic corridors?  
 Very effective                      Moderately effective                      Periodically effective

Tool #1			
Tool #2			
Tool #3			
Tool #4			
Tool #5			

Problems and comments:

4. What is the overall cost of using this tool?

	Very high	Moderately high	Moderately low	Very low
Tool #1				
Tool #2				
Tool #3				
Tool #4				
Tool #5				

Problems and comments:

5. How easy is it to administer this tool?

	Easy	Moderately easy	Moderately difficult	Difficult
Tool #1				
Tool #2				
Tool #3				
Tool #4				
Tool #5				

Problems and comments:

6. How easy is it to enforce this tool?

	Easy	Moderately easy	Moderately difficult	Difficult
Tool #1				
Tool #2				
Tool #3				
Tool #4				
Tool #5				

Problems and comments:

7. Please list and comment on other criteria that you or your agency uses to assess the usefulness of these tools in managing and maintaining the quality and integrity of your scenic byways program; (for example public acceptance or new approaches to managing these byways).

8. Are there any land management tools that you or your agency has used that have been particularly poor with respect to scenic byway management? If so, please state and comment.

**D. Overview of Scenic Byways Management**

Please comment on whether you feel there is a difference in the management of scenic byways as opposed to other land management programs. If so, what are these differences?

**E. Land Management Recommendations**

Whether or not you or your agency uses such methods, what would be your recommendations to other states, as the most effective land management tools for them to employ? Keep in mind this would be an optimal choice, regardless of cost, or other constraints.

**F. Future Issues**

In light of your knowledge or experience in this field, what do you see as the biggest land management problems and issues facing your scenic byways program over a) the short-term (next 5 years) and b) over the long-term ( + 25 years)?

APPENDIX C

APPENDIX C

PRE-TEST PARTICIPANTS

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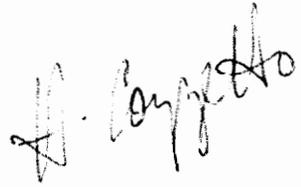
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**VITAE**

**HELEN E. COZZETTO**



**Education**

- 1990      **Masters of Landscape Architecture**  
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Blacksburg, Virginia
- 1980      **Bachelor of Architecture**  
University of British Columbia, Vancouver, British  
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- 1974      **Bachelor of Arts-photography**  
University of Saskatchewan, Saskatoon, Saskatchewan

**Professional Affiliations**

American Society of Landscape Architects  
American Planning Association  
Royal Architectural Institute of Canada  
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**Practical Experience**

- 1990      **Project Manager-New River Parkway Project, Hinton, WV**  
1989      **Project Manager-Community Design Assistance Center,**  
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- 1985      **Principal and Owner-3-D Design Architectural Firm,**  
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- 1982      **Project Architect-Government of the NWT**  
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