

# Peak to Peak Scenic and Historic Byway

*North Central Colorado*

## Visual Intrusion Reduction Plan

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*Tourism and  
Recreation  
Program*



*Colorado Scenic  
& Historic Byway*

*Prepared for*

**Tourism and Recreation Program**

**Nederland, Colorado**

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## Executive Summary

The purpose of this plan is to identify visual intrusions or adverse visual elements within the Colorado Department of Transportation (CDOT) right-of-way (ROW) along the Peak to Peak Scenic and Historic Byway (byway) - a Colorado state-designated byway. The plan's intent is to improve the scenic quality of the Peak to Peak Byway noticeably and to enhance the viewer's experience. The plan is a recommendation of the Peak to Peak Scenic and Historic Byway Corridor Management Plan (1998).



Visual intrusions are anything visible that diminishes the natural and scenic beauty of the byway. Most often they are human-induced actions, developments or disruptions of natural scenic beauty or naturally appearing landscapes both within and outside the CDOT ROW. The plan recognizes that most of the significant visual intrusions occur outside of the ROW. This plan promotes and supports land use decisions along the byway that value and protect scenic and cultural landscape attributes.

Potential funding sources were evaluated prior to identifying potential visual intrusions or landscape enhancements. Identifying visual intrusion mitigation that is unlikely to be funded is of less value than identifying more suitable projects. Of all the potential funding sources investigated, TEA-21 Enhancement funding (TE funding) looks to be the most promising. One of the major TEA-21 project categories is Transportation Aesthetics and two of the eligibility categories are Landscaping and Scenic Beautification and Scenic and Historic Highway Programs. The downsides of the program are the need for a 20 percent local cash match and the competitive process. Boulder County TE applications are submitted to the Denver Regional Council of Governments.

A base map was prepared for the byway and specific visual intrusions were identified and located on the map in 0.10-mile increments. Intrusions typically include pullouts that seem to serve no purpose, wide unpaved shoulders of inconsistent width, disturbed areas that have not been revegetated, some unnecessary signage and sites where vegetative screening would be effective. The pullouts and wide shoulders are the most common visual intrusions.

An action plan is provided that makes recommendations pertaining to signage, delineators (reflectors), guardrails, pullouts, road intersections, wide shoulders, paving, design continuity elements and landscape enhancement projects. Recommended projects are prioritized and an implementation strategy provided. A draft Memorandum of Understanding (MOU) is provided that includes Larimer, Boulder and Gilpin Counties, as well as the U.S. Forest Service, CDOT and the Peak to Peak byway organization. A monitoring and evaluation program is described as well as a plan amendment process.

The plan's success relies largely on additional funding, though CDOT could implement some of the projects over time within its maintenance budget. Effective communication and perseverance by all project partners are keys to getting projects funded and implemented. Finally, a case study is provided to share our lessons learned with other byway organizations in Colorado and elsewhere.

# I. Introduction

## I.A. Purpose and Significance of this Plan

### I.A.1. Preservation and Enhancement of Scenic Quality

The purpose of this plan is to identify visual intrusions or adverse visual elements within the Colorado Department of Transportation right-of-way along the Peak to Peak Scenic Byway. In many areas the right-of-way extends 64 feet in both directions from the centerline of the highway thus comprising a corridor 128 feet wide. The adverse visual elements vary in visibility. They are in the viewing foreground as seen by a motorist. These foreground views, along with middle-ground and background views, combine in providing the motorist with an overall impression of scenic quality - how scenic the Peak to Peak is. A visual intrusion in the viewer's foreground can greatly diminish the viewer's overall impression of scenic quality, even if middle- and background views are attractive.



Another purpose of this plan is to identify means of eliminating or mitigating visual intrusions. Among other things, landscape enhancements are discussed as one option. The plan identifies necessary actions to accomplish projects as well as potential funding sources and administrative procedures. The plan focuses on projects that can be realistically accomplished with existing highway funds, as well as projects requiring supplemental funding through various grant programs.

The plan's intent is to improve noticeably the scenic quality of the Peak to Peak Byway - to enhance the viewer's experience. A secondary benefit is to promote a larger enhancement goal for the byway viewshed. Equally important, the plan encourages collaborative partnerships between communities, county government, the Colorado Department of Transportation, the U.S. Forest Service and the Federal Highway Administration.

### I.A.2. Scope of the Plan

The study area includes the CDOT right-of-way and not beyond. Although the plan recognizes the often majestic and expansive scenery of the byway, the emphasis is on what can be accomplished within the right-of-way by CDOT or others working in coordination with CDOT.

This plan recognizes that the preservation of scenic quality along the Peak to Peak lies within the jurisdictional development controls of the byway communities and counties. The U.S. Forest Service and National Park Service also control much of the scenic viewshed of the Peak to Peak Scenic Byway.

A desired outcome of this plan is to increase sensitivity to all scenic resources along the byway though the plan focuses primarily on immediate foreground elements. ROW elements are important. In addition, the foreground, middle ground and background views combine to profoundly impact the byway traveler's visual experience.

### **I.A.3. A Model Applicable to Other Scenic Byways**

No plan of this type has been prepared for other byways in Colorado. Planning goals include the identification of opportunities and constraints to enhancing visual resources and providing useful information for other byways interested in similar goals. Each byway is unique in terms of its many intrinsic qualities. Each byway organization is unique in terms of its vision. Each CDOT Transportation Region is unique in terms of priorities and available resources. This plan sheds light on the applicability and lessons learned for the Peak to Peak as well as other byways.

## **I.B. Brief History of the Peak to Peak Scenic Byway**

### **I.B.1. From Mining to Tourism**

Early roads in the area of the Peak to Peak Scenic Byway followed animal and Indian trails. With the discovery of gold in Gold Hill in 1859 roads and trails were improved for the many miners who flocked to the region. By 1864 the “Niwot and Black Hawk Wagon Road” was in place connecting Ward and Black Hawk. As soon as the railroad reached Ward tourists used rail to recreate in the area. Sixteen-passenger horse-drawn stagecoaches called tallyhos began touring the region. In 1911, Eugene Parsons Guidebook to Colorado touted the Rocky Mountains as a recreational wonderland and visitation increased.

As early as 1916 marketing materials were promoting the Peak to Peak region. In 1915 Rocky Mountain National Park was created and Stanley Steamer Mountain Wagons were replacing horse-drawn carriages. By the late-forties and early fifties, much of the road was oil-paved and by 1958 the roadway was engineered and paved to accommodate more vehicles at higher speeds. In 1989, the Peak to Peak Highway was designated as Colorado’s first Scenic and Historic Byway under the state’s new byways program.

### **I.B.2. Historical Design Elements**

The road was initially rustic in design character and some of these rustic elements remain. It initially was not intended to provide for large volumes of traffic at high speeds. The dirt road was narrow as it worked its way around various geological obstacles. Ground vegetation and trees were situated close to the road and gave the Peak to Peak a Rocky Mountain persona. Rock “guardrails” and cut stone bridges added to the rustic ambience. By the late fifties many of these historical design elements were gone. The road had been widened and realigned. Rustic signage gave way to the modern signing system utilized by CDOT.

## II. Methodology

The method or process used to develop this plan included the following components.

### II.A. Research

The consultant team met with the Peak to Peak Byway organization at the commencement of the project to finalize the scope of the plan, budget and time table. Prior data, reports and mapping were collected. The consultants drove the byway conducting a general reconnaissance of visual resources and a first look at visual intrusions. The Byway Corridor Management Plan, A Place Apart - A Preservation Investment Strategy, was reviewed and its relationship to this planning process was ascertained.

### II.B. Funding

A variety of funding sources were explored. These included the Transportation Equity Act for the 21st Century (TEA-21) byway dollars and Transportation Enhancement funding - also TEA-21 funding. Existing and potential funding by CDOTs Region 1 and 4 also was assessed. This included current operations, maintenance and construction funds. Other potential funding sources included Federal Highway Administration National Scenic Byways grants, the Colorado Historical Foundation, gaming impact funds and the U.S. Forest Service.

### II.C. Field Assessments

The byway route was driven several times - each time with a different purpose. Each field assessment was documented with mapping and photography.

- Trip 1 Overview of the Byway/Initial Identification of Visual Intrusions
- Trip 2 Overview of the Byway with the Region 4 Maintenance Supervisor
- Trips 3, 4 Assessment of Roadway Visual Intrusions
- Trip 5, 6 Assessment of Signage
- Trip 7 Overview with Byway Organization Members
- Trip 8 Final Reconnaissance and Map Checking

### II.D. Action Plan

The success of this plan is dependent on the ability to implement recommendations. Developing an action plan is the best way to assure this. The action plan addresses each recommendation by identifying specific projects and tasks, their priority, time-frames, and necessary project partners.

### II.E. Memorandum of Understanding

A draft memorandum of understanding (MOU) is provided for the byway organization, Gilpin, Boulder, and Larimer Counties, the U.S. Forest Service and CDOT. The MOU helps formalize the overall intent and purpose of the project and provides planning continuity as byway, CDOT, and county participants will change over time. The MOU does not obligate any of the project partners in any way. Its intention is to educate partners as to means of reducing visual intrusions to the benefit of everybody.

### **III. Planning Framework**

#### **III.A. Peak to Peak Corridor Management Plan**

In 1998 a corridor management plan (CMP) was completed for the Peak to Peak Scenic Byway Interest Group and the Tourism and Recreation Program of Boulder County. Entitled “A Place Apart” the CMP is viewed as a preservation investment strategy intended to protect the local intrinsic resources of the byway.

##### **III.A.1. Applicable Goals and Objectives from the CMP**

“Roadway Aesthetics” is a key theme for byway management. The plan calls for design consistency and an improvement of the overall aesthetic experience of the byway. “Details are important.”

The Byway Organization wishes to work cooperatively with the Colorado Department of Transportation in improving roadway aesthetics.

Roadway management is an important objective. The Peak to Peak Byway management objectives include attention to detail and strategies for preserving the character of the roadway.

An appendix to the CMP is entitled “Design Details and Roadway Management” This Appendix addresses:

1. The need for design detail management for the Peak to Peak.
2. Flexibility in the use of the AASHTO (American Association of State Highway and Transportation Officials) Green Book Standards.
3. Road-specific recommendations including:
4. Barriers
5. Road edges
6. Road width
7. Signage
8. Pullouts
9. Rest areas and interpretive sites

The CMP addresses the need for specific design detail management. It recommends the preparation and implementation of this Visual Intrusion Reduction Plan.

##### **III.A.2. Fostering the Sense of “A Place Apart”**

The Peak to Peak Scenic Byway is unique amongst Colorado’s scenic and historic byways. It is the closest byway to the Denver- Boulder Metropolitan Area, even closer than Mount Evans and Guanella Pass - both accessible via Interstate 70 west of the city. The Peak to Peak, unlike Mount Evans or Guanella Pass, is a longer touring route connecting small rural communities within a mostly exceptional scenic environment and an area of rich human history. The natural environment, the diverse byway communities, and area residents come together to create this unique region of rural Larimer, Boulder and Gilpin Counties.

Design elements that combine and give visual definition of this “Place Apart” also give it its “sense of place” - a purposeful but unforced visual character that is unique in many ways. Design elements can be creatively used as visual queues that unite the entire byway and give it a strong sense of place.



## **III.B. Highway Design Considerations**

### **III.B.1. Introduction**

The Peak to Peak byway has gone through a tremendous transition since its initial construction. The byway was once a curvy slow-paced dirt road constructed largely for the mining industry and for its recreational merits. Some of the first “recreational vehicles” were early touring cars that frequented the road. Today, Average Annual Daily Trips (AADTs) for many segments of the byway approach 5,000 vehicles. This number is determined by CDOT based on collected road count data and their determination of the total annual numbers of vehicles. They then determine a daily average. What was once a slow paced dirt road is now the Peak to Peak Highway.

### **III.B.2. Engineering Considerations**

Primary engineering considerations are safety related issues pertaining to the number and speed of vehicles currently using the byway. Speed limits are determined in relationship to sight distances and general road conditions. Speed limit, directional and cautionary signage are used to advise drivers to stay within acceptable safety guidelines. Highway access locations and the level of residential or commercial development along the byway are major elements in determining roadway engineering. CDOT traffic safety engineers and maintenance personnel monitor accident data and respond to requests from local government to mitigate or eliminate problems where possible.

### **III.B.3. Maintenance and Improvements**

The segments of the Peak to Peak Byway within Boulder and Larimer Counties fall under the jurisdiction of CDOT Region 4. The Gilpin County segment of the byway is within CDOT Region 1. These regional offices, in conjunction with local administrative offices or vehicle shops manage maintenance and improvements along the byway. Duties include roadway paving and repairs, stripe painting, snow removal, sign installation and maintenance, guardrail maintenance and other miscellaneous projects. Some of these, for example new bridges, are quite substantial. Many maintenance and improvement projects are closely related to vehicle volumes and site-specific safety conditions.

## **IV. What Are Visual Intrusions?**

### **IV.A. Definition**

Visual intrusions are anything visible that diminishes the natural and scenic beauty of the Peak to Peak Scenic Byway. Most often they are human-induced actions - developments or disruptions of natural scenic beauty or naturally appearing landscapes both within and outside of the right-of-way. More recently, scenic quality is also understood to include attractive cultural landscapes where diminishment of naturally appearing elements is not significantly disruptive.

This plan addresses visual intrusions only within the CDOT right-of-way. The plan fully recognizes that many of the most significant visual intrusions occur outside the right-of-way and are the result of land use decisions along the byway corridor as well as landowner stewardship. This plan also recognizes that presently the byway organization has limited capabilities in fostering and protecting scenic resources outside the right-of-way. This plan promotes and supports land use decisions along the byway that value and protect scenic and cultural landscape attributes.

## **IV.B. Visual Resource Categories**

### **IV.B.1. Natural Appearance**

The visual resource management systems developed by the U.S. Forest Service and the Bureau of Land Management place substantial emphasis on maintaining naturally appearing landscapes. If the design elements of line, form, color and texture for a human introduced feature are in contrast to natural features, the result is an adverse visual impact. If such a feature is highly visible, for example, seen by many people and visible for longer durations of time - the adverse impact is more significant. The greater the contrast, the greater the impact.

### **IV.B.2. Cultural Landscapes**

In the earlier evolutions of visual resource management systems, any human-altered landscape was considered to be of degraded scenic quality. Cultural landscapes, for example farms, ranches or mining structures, are scenically attractive to many people. Rural pastoral landscapes can be attractive though many of the visual elements have been introduced by humans. In 1996, the U.S. Forest Service changed its visual resource management system to a new "Landscape Aesthetics, A Handbook for Scenery Management". The new system embraces both naturally-appearing and cultural landscapes as worthy of preservation.

### **IV.B.3. Design Continuity**

Where elements of line, form, color and texture are repeated in a purposeful way, the elements contribute to design continuity or the purposeful repetition of elements that visually tie parts together to form a whole. Where design continuity is disrupted, it can become visually discordant. Where continuity is promoted, it can become visually pleasing.

Elements within the CDOT right-of-way that can provide design continuity include:

**Signage Uniformity** including locations, sizes, proportions, colors, reflectivity, height, and consistency in messages. For example all cautionary directional signage along the byway should be the same type and size and mounted on identical materials at the same heights.

**Guardrails** including locations, design type, color and reflectivity.

**Pavement Type** including material and color of both the travel lanes and shoulders.

**Road Width** including consistency in travel lane and shoulder width.

**Road Edge Treatment** including "hard" or "soft" edges, for example curbs or raised edges as opposed to smooth transitions from pavement or soil to grass or vegetation.

**Vehicle Barriers** including wheel stops, wooden posts, boulders, vegetation or other.

**Highway Delineators** (Reflectors - including material and color.)

**Striping** including uniformity of centerline and road edge striping.

**Pullouts** including location, size, soil color, visibility and safe ingress and egress from the highway.

#### IV.B.4. Context Sensitive Design

Where possible design elements within the right-of-way should be consistent or complimentary to good design qualities outside the right-of-way. One is an extension of the other. Grass and even weeds growing in front of a guardrail as an extension the right-of-way vegetation become context sensitive design elements. Structural barriers preventing rocks from rolling on to the highway may be context sensitive in relationship to tall rock walls. Trees planted in the right-of-way so as to mimic or extend natural forest growth are also context sensitive design elements. Such opportunities should be sought out and implemented.

#### IV.B.5. Categories of Visual Intrusions



For the most part visual intrusions fall into one of the following categories:

- Travel lane pavement
- Shoulder paving
- Soft shoulder
- Painting and striping
- Guardrail and road edge barriers, and
- Signage

These categories are a convenient way to identify intrusion classes as they apply to the entire byway. A Transportation Enhancement application may single out a specific intrusion category for the entire byway.

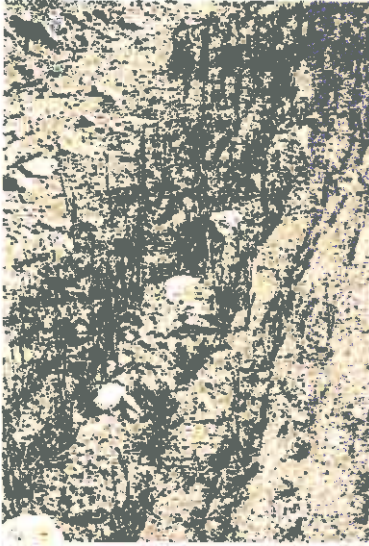
#### IV.B.6. Subjective Considerations

People differ in their perception of visual quality. There is an inherently subjective aspect to scenic appreciation. What may capture one person's attention may not capture another's. People place different values on different visual elements. We may say that there is 200 feet of guardrail, a quantifiable determination at a specific site, but people's perception of the guardrail may vary.

Important factors in both objective and subjective determinations may include the following considerations:

- How obvious is the intrusion, or
- How much does it contrast with its setting?
- For how long is the view visible? (duration of the view), and
- How many people are likely to see it?
- The Peak to Peak byway organization and their corridor management plan support a "low impacted" byway. They would rather see fewer drivers than **more**. With this in mind fewer drivers would equate to less visual impact.

## **V. Landscape Enhancements**



### **V.A. Definition**

A landscape enhancement is any action within or near the highway right-of-way that mitigates or eliminates a visual intrusion. Landscape enhancements may include both structural and vegetative elements. The following types of enhancements are included in the Action Plan Recommendations in Section VIII.

### **V.B. Types of Enhancements**

#### **V.B.1. Revegetation**

Revegetation is an excellent means of stabilizing and foliating disturbed or barren soil. After fairly little growth the disturbed soil is hidden by this growth. The selection of a type of plant and how it is planted or seeded is important because of the harsh conditions of rights-of-way. Revegetation also helps mitigate soil erosion.

#### **V.B.2. Screening**

Visual screening can include the construction of fences or the use of shrubs and trees to hide unsightly features. The screening should be attractive and context sensitive. An unsightly fence or screen does little to visually mitigate an intrusive element.

#### **V.B.3. Site Improvements**

Site improvements may include a combination of landscape or structural elements that collectively organize and enhance a site's visual impression. Improvements might include organizing vehicle travel and parking, installing vehicle barriers, paving, signage and landscape enhancements such as berming and planting.

#### **V.B.4. Structural Elements**

The introduction of certain structure elements may enhance visual quality or mitigate visual intrusions. They become continuity design elements that take attention away from intrusions and unify the visual byway experience. An example would be the addition of few more byway logo signs mounted on a unique wood frame or pedestal (supplemental funding to CDOT).

# **VI. Assessment of Funding Alternatives**

## **VI.A. Introduction**

Potential funding sources were evaluated prior to identifying visual intrusions or landscape enhancements. Identifying visual intrusion mitigation that is unlikely to be funded is of less value than identifying more suitable projects. Typically, CDOT would pay for any improvements in their right-of-way. This would include private contractors working for CDOT. This plan addresses opportunities for CDOT to fund projects through existing budgets. However, emphasis is placed on augmenting funding to CDOT as existing budget constraints would make it difficult to fund intrusion reduction projects.

## **VI.B. Potential Funding Sources**

### **VI.B.1. Statewide Transportation Planning Process**

The Statewide Transportation Planning Process is not a viable avenue to pursue for the Peak to Peak as it identifies only very large-scale capacity improvement projects such as new roads, road widening, new bridges and the like. . . . .

### **VI.B.2. TEA-21 National Scenic Byways Funding**

The Federal Highway Administration rarely funds projects within rights-of-way. They will fund safety improvements along National Scenic Byway and All-American Roads where some improvements are needed because national designation has increased traffic or exacerbated other problems. FHWA will fund pullouts, interpretive projects and other byway amenities along state byways, including the Peak to Peak.

The status of National Scenic Byways Program funding is unclear at this time. Both House and Senate Appropriations Committees reallocated the 2002 National Scenic Byways funding. This has had a profound impact on current projects. We are unsure of what lies ahead.

### **VI.B.3. Colorado State Historical Funds**

State historical funds only can be used for right-of-way improvements to repair or rehabilitate state or nationally listed historic structures, for example old rock walls or bridges. The byway organization should look at opportunities where sites along the Peak to Peak may be worthy of state or national designation. This potentially would make this funding source available.

### **VI.B.4. Gaming Impact Funds**

Gaming impact funds only can be used for right-of-way projects directly related to traffic safety and capacity needs resulting from gaming-related traffic increases. Additionally, funding is very competitive and current requests greatly exceed available funding.

### **VI.B.5. Current CDOT Regions 4 and 1 Budgets**

CDOT, over time, will be able to fund some of the recommendations of this plan with existing budgets. Traffic safety will be the primary concern as with all projects.

## VI.B.6. TEA-21 Enhancement Funding

Of all the potential funding sources investigated, TEA-21 Enhancement funding looks to be the most likely candidate. Like TEA-21 National Scenic Byways funding, enhancement funds are annual requests that must include a 20 percent local match. Funding also is competitive - all worthy projects are not funded.

CDOT defines project categories as follows:

- 1. Pedestrian and Bicycle Facilities
- 2. Historic Preservation
- 3. Transportation Aesthetics, and
- 4. Environmental Mitigation

Of the 12 eligibility categories for Enhancement Funding, two of the categories would apply for the purposes of this plan

- Scenic or historic highway programs, and
- Landscaping and scenic beautification

The Peak to Peak Byway could receive landscaping and scenic beautification funds under the project category of Transportation Aesthetics and possibly Historic Preservation. It also may be eligible for other funding because it is a state designated byway.

Under Colorado's Transportation Enhancement guidelines, Landscaping and Scenic Beautification is described as follows:

*"This activity consists of landscape planning, design and construction projects that notably enhance the aesthetic or ecological resources along transportation corridors. This activity includes improvements such as street furniture, lighting, public art and landscaping along streets, historic highways, trails, interstates, waterfronts and gateways. Applicants are encouraged to include water conservation features, such as xeriscape planning, native plant species and water harvesting. Identifying and planting for restoration or reintroduction of native plant species and appropriate adaptive species, are projects that amplify the ecological balance along a transportation corridor."*

The annual Enhancement funding process is as follows:

- For projects in Larimer County, the Transportation Enhancement application is submitted by the county to the Upper Front Range Regional Planning Commission.
- For projects in Boulder County, the TE application is submitted by the county to the Denver Regional Council of Governments.
- For projects in Gilpin County, the TE application is submitted by the county to CDOT.

## VI.C. Funding Strategies

The Transportation Enhancement funding program should be viewed as a long-term and potentially ongoing funding source. A difficulty is the need for a 20 percent cash match. Where do these funds come from? County governments may be a funding source. An application should be submitted annually and rejected propos-

als can be updated and resubmitted the following year. The plan must sell itself. Potential funding sources want to know what part of the overall picture are you working on and how they fit in. What are they getting out of it? The U.S. Forest Service also is a potential partner. Several roads and trailheads along the byway provide access to the Roosevelt National Forest. Forest Service dollars and in-kind services can be used as a match for TE grants applications.

Looking beyond TE funding, the Peak to Peak should diversify funding sources. We do not yet know what the short- and long-term ramifications are of the recent re-appropriation of the Byway TEA-21 grants by committees in both the U.S. House of Representatives and Senate. If byway funding is restored to its prior process, the Peak to Peak should seek it out aggressively.

The byway organization has completed several planning projects - some funded through the National Scenic Byways Program. Other plans already existed prior to Peak to Peak byway planning. The organization is anxious to move forward with implementation projects, not additional planning projects. This plan is directed at implementation.

## VII. Identification of Visual Intrusions

### VII.A. Base Mapping

A base map was prepared for the Peak to Peak Byway to locate visual intrusions, recommended projects and landscape enhancements. The map was developed by electronically combining digital versions of U.S. Geological Survey quadrangles and adding shaded relief and labeling. The map also includes much of the byway corridor and region. This will allow its use for other byway projects as well. The map has been referenced to the State Plane Coordinate System for GPS applications. Mile markers and key reference points along the byway were located by GPS.

### VII.B. Mapping Visual Intrusions

Specific sites were identified and located on the map in 0.10-mile increments relative to mile markers. Intrusions typically include:



- Pullouts that seem to serve no purpose as either scenic overlooks or CDOT staging areas.
  - Wide unpaved shoulders that are inconsistent in width and contrast sharply with contiguous shoulders of consistent width.
  - Disturbed areas that have not been revegetated or reclaimed.
  - Seemingly unnecessary signs or sign clutter.
  - Sites suitable for screening.
  - Guardrails of inconsistent color.
- Unnecessarily wide intersections.
  - Sites where blocking vehicle access will permit restoration in highly visible areas.

**Table VII.1. Visual Intrusions and Actions**

<b>Highway and Mile Marker</b>	<b>Comments</b>	<b>Side of Road</b>	<b>Action Number Keyed to Map</b>
<b>SH 119</b>	<b>Black Hawk to Nederland</b>		
7.2	Byway begins in Black Hawk		
7.6	Landscape south of CDOT shop	R	1
7.7	End of Black Hawk/Central City		
7.9	Note revegetation project	R	
8.1.	Reclaim large area	R	2
8.2	Revegetate area	L	
8.9	Note existing revegetation	R	3
9.1	Remove fire truck sign	R	
9.3	Remove fire struck sign	R	
9.6	Needs revegetation	R	4
10.5	Very wide area needs revegetation	R	5
10.7	Needs revegetation and screening	R	
11.1	Arapaho National Forest Boundary		
11.1	Needs revegetation	R	
11.3	Needs revegetation	R	6
11.8	Too wide (gravel)	R	
12.1	Remove school bus sign	R	
12.4-12.5	Sign clutter (Golden Gate State Park)	R	
12.6	Too wide, reclaim	R	
12.7	Reclaim very disturbed area	R	7
13.3	Neck down intersection	R	
13.4	Arapaho National Forest Boundary		
13.5	Neck down road	L	
14.2	Remove library sign	R	
14.5	Improve library sign	L	
14.8	Needs screening trees		8
16.0	Large area needs reclamation	L	
16.2	Pullout unnecessary, reclaim		9
16.7	Too wide, revegetation	R	



17.1	Road 11, too wide, narrow down	R, L	10, 11
17.2	Remove guardrail	R	
18.1	Revegetate both sides of highway	R, L	
18.7	Remove pullout	L	
18.8	Too wide, revegetate	R	
19.0	Remove point of interest sign	R	
19.3	Revegetate large area		
20.5	Revegetate area	L	
20.7	Narrow down roadway (Rollinsville)	R	
21.0	Sign clutter	L	
21.3	Remove pullout	L	
21.5	Remove large pullouts both sides	R, L	
21.8	Narrow down road (Kelly Dahl C.G.)		12
21.9	Formalize pullouts by lake	R, L	
22.0	Gilpin/Boulder County Line		
22.1	Revegetate area	R	
22.3	Revegetate long strip, remove dirt	L	
22.4	Revegetate both sides	R, L	
22.5	Revegetate both sides	R, L	
22.7	Junction with SH 72		
22.7	Revegetate, remove smaller pullout	R	
22.9	Remove grooved center line sign	R	
23.0	Remove "buckle up sign"	R	
23.1	Reduce size of pullout	R	13
23.4	Revegetate	R	
23.5	Revegetate	R	
23.6	Remove pullout	R	
23.7	Revegetate	R	
23.9	Magnolia Road, redress intersection	R	
24.0	Remove USFS litter sign	R	
24.1	Revegetate	L	
24.2	Peakview Drive, revegetation	L	
24.3	Revegetate	L	

24.6	Revegetate	R	
25.0	Remove pullout	R	
25.1	Eldora Turnoff		
25.5	Remove school bus sign (Nederland)	R	
<hr/>			
<b>SH 72</b>	<b>Nederland to SH 7</b>		
33.0	North edge of Nederland		
33.1	Revegetate hillsides	R, L	
33.2	Remove pullout	R	
33.3	Revegetate cut slopes	R, L	
33.5	5CR 128W, revegetate	L	
34.1	Remove pullout	R	
35.1	Narrow down both sides	R, L	
35.6	Narrow down roadway	R	
35.7	Dress up overlook, remove dirt piles	R	
36.2	Remove pullout	R	
37.2	Remove pulloutR		14
37.6	Revegetate cut slopes	R, L	
38.0	Remove pullout	L	
38.7	Remove pullout	L	
38.9-39.0	Scale down size of pullout	L	15
39.1	Remove pullout	R	16
39.2	Block access to old road, reclaim	R	17
39.2	Revegetate cut slope	R	
39.4	Remove pullout	R	
39.4	Revegetate cut slope	L	
39.5	Narrow down roadway	R	
40.0	Remove pullout, reduce area size	R	
40.1	Revegetate cut slope	R	
40.4	Remove pullout	R	
41.3	Block access to old road	R	18
42.1	Revegetate cut slope	R	
42.2	Revegetate	R	

42.5	Block access to old road, reclaim	R	19
42.8	Narrow down rock fall run-out zone	R	
43.3	Ward, screening shrubs and trees	R	
43.3	Revegetate	R	
44.5	Dress up overlook	R	
45.3	Narrow down roadway	R	
45.4	Remove pullout	L	
46.5	Plant trees	L	
48.9	Remove horse sign	R	
49.1	Narrow down roadway	R, L	
49.9	Remove horse sign	L	
50.7	Redress intersection	R, L	
52.3	Remove pullout	R	
52.4	Reduce area size	R	
52.5	Reduce area size	R	
52.5	Remove flood warning sign	R	
53.2	Reduce width, plant trees	R, L	
53.3	Reduce large area	R	20
54.0	End of SH 72		

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**SH 7                      U.S. 36 to SH 72**

0.0	Consolidate signs	R	
1.0	Leaving Estes Valley		
4.0	Remove pullout	R	
4.7	Remove pullout	L	
5.4	Redress existing pullout	R	
5.8	Organize trailhead area (Lily Trail)	R	
6.4	Lily Lake, remove disturbance	R, L	
6.5	Remove pullout, screening? reveg?	R	
6.6	Remove pullout	R	
7.1	Call box pullout	R	
7.6	Remove pullout	R	
8.0	Dress up Long's Peak pullout	R	

8.2	Dress up Long's Peak pullout	R	21
8.4	Dress up historical marker pullout	L	22
8.9	Long's Peak Road dress up	R	
9.1	Remove pullout	L	
9.7	Boulder County Line		
10.0	Change Adopt-A-Highway sign	R	
10.1	Remove pullout	L	
12.0	Change Adopt-A-Highway sign	R	
12.1	Remove pullout	R	
12.7	Clean up Wild Basin area	R	
13.0	Clean up both sides of roadway	R, L	
13.5	Scale down large staging area	L	23
14.7	Narrow down both sides of roadway	R, L	
15.0	Remove horse sign	R	
15.2	Remove horse sign	L	
15.3	Plant screening trees	L	
16.5	Interpretive site		24
18.2	Note revegetation	R	
19.0	Remove point-of-interest sign	R	
19.2	Intersection with SH 72, reduce size		

The side of the road is indicated as right or left as a driver travels in the order of increasing mile markers.

- SH 119 Black Hawk to Nederland
- SH 72 Nederland to SH 7
- SH 7 Estes Park to SH 7

Compass headings would be inaccurate because there are many curves and changes in compass direction along the byway.

## VII.C. Key Observations

1. The quality of the viewshed along the Peak to Peak Scenic Byway varies considerably. The views along the Gilpin County segment are generally more enclosed relative to the more expansive views along the byway in Boulder and Larimer Counties.
2. Adjacent land uses also vary considerably. The quality of the byway is often directly linked to foreground and middle-ground views and dependent on land uses adjacent to the byway.
3. There is no direct relationship between visual resource quality within the right-of-way and that found in foreground, middle-ground and background views of adjacent lands. CDOT right-of-way in Gilpin, Boulder and Larimer Counties is generally maintained to the same standard.
4. There are many pullouts or informal parking areas that appear to serve no purpose. They are not scenic or historic sites of interest and do not seem to be CDOT construction or staging areas. There are many segments of the byway with excessively wide shoulders of inconsistent width. Combined, these pullouts and shoulders comprise the most visible intrusions along the byway right of way
5. The Peak to Peak Scenic Byway is known by many Colorado residents. For some drivers there is a high level of expectation that the Peak to Peak lives up to its name.

## VIII. Action Plan

### VIII.A. Recommendations

Note: We recommend that the Colorado Department of Transportation review and offer comment to any of these recommendations as the proposed actions are within the CDOT right-of-way. CDOT may identify pullouts that are essential to maintenance or construction. Other issues, for example safety, may warrant revisions to the recommendations on a site by site basis.

#### VIII.A.1. Signage, Reflectors (Delineators) and Guardrails

- Install consistent roadway delineators or reflectors. Currently there are both metal and rubber green delineators with reflectors. If CDOT is phasing into all rubber delineators, replace the metal with rubber delineators as opportunities present themselves. Use green delineators. Some reflectors on the byway are brown and should be replaced.
- Paint the back of all reflective signs black.
- All signs of a particular type, for example speed signs, should be of the same size (smallest permissible) and mounted on the same post type and color and at the same height. The signs should be consistent in their application, for example curve signs should be installed to similar standards on similar curves.
- Consolidate signs at the Golden Gate State Park road intersection with SH 119.
- Consolidate signs at mile marker 21.0 along SH 119.

- Consolidate signs at the Longs Peak pullout and access road along SH 7.
- Remove unnecessary or redundant school bus cautionary signs.
- Replace the Adopt-A-Highway sign at mile marker 10.0 on SH 7 with the new style signs.
- Replace the Adopt-A-Highway sign at mile marker 12.0 on SH 7 with the new style signs.
- Consolidate signs in the Rollinsville area along SH 119.
- The Town of Nederland should review all signage in town relative to the town's sign code.
- Paint all guardrails a consistent "National Park Service" brown (reflectors unpainted). Do not paint the wood backing and posts that support the guardrails.

### VIII.A.2. Pullouts, Road Intersections and Wide Shoulders

- Eliminate unnecessary pullouts and restore/revegetate the sites. This may entail traffic control devices or barriers to prevent vehicles from entering these areas in combination with landscape restoration. Eliminate any pullouts with poor sight line distances.



- Scale down the size of several pullouts.
- Formalize pullouts that are frequently used as scenic overlooks or historic sites. Formalizing the sites does not necessarily mean paving or developing them and adding visitor amenities, but structuring the parking area in combination with attractive landscape enhancements.
- Restructure and restore all road intersections that are excessively wide.
- Strive for consistent shoulder widths and factor these into improvements or new construction.
- Formalize the Mount Meeker pullout.

### VIII.A.3. Paving

- Strive for uniform pavement types.
- Strive for uniform pavement width.
- Strive for uniform pavement texture and shoulder colors.

#### **VIII.A.4. Design Continuity Elements**

- Add five Scenic Byway signs, in both directions, 10 total.
- Find a unique and distinctive means of mounting all installed and future byway signs.
- Install rock-faced concrete guardrails of a rustic or historic design in 10 locations to replace or augment existing guardrails. Construct rock walls at some existing strategic pullouts.
- Work with landowners along the byway to install a unique split-rail fence design at 10 locations. The new fence would be used to replace existing and poorer quality fence. Do not require a mandatory style of fence. Along with rock walls use some fence at pullouts.
- Inventory and make recommendations regarding the utilization of pullouts. Recommendations might vary from no actions to total site development. Design continuity at all informal or formal pullouts can be a strong design tool in visually unifying the byway.
- Install common community gateway signage for Nederland, Black Hawk and Estes Park.

#### **VIII.A.5. Landscape Enhancement Projects**

- Bench or terrace and restore five small road cuts along the byway. See the action plan below for project priorities.
- Plant screening trees and shrubs at the following locations:
  - SH 119 Mile Marker 7.6
  - SH 119 Mile Marker 14.8
  - SH 72 Mile Marker 43.3
  - SH 7 Mile Marker 6.5
  - SH 7 Mile Marker 15.3
- Allow grass to grow in front of guardrails at certain locales, but so as to not block reflectors.

Table VII.1. summarizes the inventory of intrusive elements and key recommendations. A 5-to-7 Year Action Plan includes all sites where a photograph is provided (with the exception of photograph number 3). The numbers do not indicate priority.

## **VIII.B. Project Priorities**

Projects that are likely to be funded through Transportation Enhancements and result in obvious benefits should receive the highest priority. Obvious positive actions will spur interest in future projects. Project priorities should be as follows:

1. Removing the largest informal pullouts that are visually obvious
2. Blocking vehicle access to the most disturbed sites
3. Screening projects from the most obtrusive sites
4. Restructuring or formalizing some pullouts
5. Sign removal and/or consolidation
6. Narrowing and revegetation of roadway shoulders and intersections
7. Cut slope restoration
8. Sign and delineator replacement

## **VIII.C. Implementation Strategy**

The ability to raise the 20 percent matches for Transportation Enhancement grants will be a key factor in project selection. The first grant application might include some of items 1, 2 and 3 above - removing, blocking and screening projects. These projects would easily qualify for the Transportation Aesthetics category for TE funding. If some of the 1,2 and 3 projects are funded, subsequent applications may be for more of these project types along the byway.

It is important that CDOT is a partner or participant to the implementation of each recommendation. Their review of projects is critical. CDOT may implement **some** of the recommendations given their current funding. CDOT may implement some of the projects with supplemental funding. CDOT may provide administration or oversight to others implementing the projects.

As projects are funded, the action plan can be adjusted. Regardless, the action plan should clearly define all desired projects for a 3- to 5-year timeframe. The action plan should always define specific projects, likely funding sources, likely participants and the desired timeframe.

## **VIII.D. Draft Memorandum of Understanding**

The Peak to Peak Byway traverses three counties - Larimer, Boulder and Gilpin. The byway also is contiguous with U.S. Forest Service managed lands and in proximity to Rocky Mountain National Park. The byway organization, communities and counties are key players. Most of the Transportation Enhancement funding is routed through county government. Multiple jurisdictions may influence implementation. Key individuals may drop out of the process and new ones emerge. A Memorandum of Understanding will provide an informal structure to the plan recommendations and assure continuity over time. The following is a sample draft MOU for consideration.



**Memorandum of Understanding Pertaining to the Scenic Resources of the Peak to Peak Scenic and Historic Byway (Larimer, Boulder and Gilpin Counties, Colorado)**

- Whereas the Peak to Peak Byway is a Colorado State Scenic and Historic Byway, and,
- Whereas the scenic and historic resources of the byway are important intrinsic values requiring enhancement and preservation, and,
- Whereas, the Peak to Peak Scenic Byway is an important asset to Larimer, Boulder and Gilpin Counties, and,
- Whereas it is in the best interests of all three counties, the U.S. Forest Service and the Colorado Department of Transportation to protect the byway's scenic resources.

This Memorandum of Understanding (MOU) is entered into by the Peak to Peak Scenic Byway organization, Larimer, Boulder and Gilpin Counties, the U.S. Forest Service and the Colorado Department of Transportation to promote appropriate design and aesthetic enhancement within the CDOT right-of-way. This MOU also supports the maintenance of scenic resources along the byway within each county's existing land planning, development and review process as well as the Roosevelt National Forest Service's Land Resource Management Plan and the Colorado State Transportation Improvement Program.

Specifically, this MOU:

1. Encourages each county to work with CDOT, the other counties and the U.S. Forest Service in implementing recommended actions of the Peak to Peak Scenic Byway Visual Intrusion Reduction Plan.
2. Encourages each county to seek various funding sources for right-of-way improvements, including TEA-21 Transportation Enhancement funds.
3. Asks each partner to support right-of-way projects of other partners along the byway that benefit the entire byway. This MOU neither seeks nor specifies administrative or funding obligations from any of its partners nor does it allow any partner to obligate funding by another partner.
4. Recognizes that most of the recommendations of the Visual Intrusion Reduction Plan would fall outside CDOT's administrative and funding capabilities and will require other funding sources.
5. Recognizes CDOT's key role in reviewing and approving projects within the right-of-way, and
6. Promotes ongoing partnership development and fund leveraging in implementing recommendations of the Peak to Peak Visual Intrusion Reduction Plan.

## **IX. Monitoring and Evaluation**

### **IX.A. Measuring Success**

The success of this plan may be measured by the number of successful projects undertaken and completed. The success of the plan may also be measured by the noticeable reduction of visual intrusions in the right-of-way as seen by someone familiar with the route. The goals of this plan are action-oriented and very tangible. As progress is made the Peak to Peak byway organization will learn of the more successful or unsuccessful strategies.

### **IX.B. Amending the Plan**

Based on the success or failure of implementing plan recommendations the plan may be amended. Actions completed may be removed from the plan while new actions are included. The plan is viewed as a dynamic document designed to be flexible in implementation and responsive to changing needs. The plan may be amended annually or in light of particular funding cycles or unique opportunities.

## **X. Supporting Documentation**

### **X.A. Sources**

*A Place Apart, The Peak to Peak Scenic and Historic Byway Corridor Management Plan, A Preservation Strategy*, Tourism and Recreation Program, Nederland, Colorado, 1998.

*A Policy on Geometric Design of Highways and Streets*, American Association of State Highway and Transportation Officials, 1994.

*Colorado Scenic and Historic Byways Resource Manual*, Colorado Department of Transportation, 1996.

*Colorado Scenic and Historic Byways, Byway Resource Protection, A Manual of Methods and Techniques*, Sally Pearce, Mike Strugar, Steven P. Walker, Colorado Scenic and Historic Byways Program, Colorado Department of Transportation, 2000.

*Design Guidelines for Visual Resources Along Scenic and Historic Byways - An Overview*, Steven P. Walker, prepared for the Colorado Scenic and Historic Byways Commission and the Colorado Department of Transportation, 2000.

*Excursions From Peak to Peak Then and Now*, Silvia Pettem, Tourism and Recreation Program, Boulder, Colorado, 1997.

*Interim Policy on Transportation Improvement Program Preparation*, Denver Regional Council of Governments, Denver Regional of Governments, Denver, Colorado, 1999.

*Landscape Aesthetics, A Handbook for Scenery Management*, United States Department of Agriculture, U.S. Forest Service, Agriculture Handbook Number 701, 1996.

*Peak to Peak Scenic Highway Study*, Center for Built Environment Studies, School of Architecture and Planning, University of Colorado at Denver, 1998.

*Peak to Peak National Scenic Byway, Spring 1992 CIP Submittal*. Arapaho and Roosevelt National Forests.

*Peak to Peak Byway Sustainable Tourism Development*, Uehisa, Johnson, Lynch and Nindorf, no date.

# **Design Guidelines for Visual Resources Along Scenic and Historic Byways**

## **An Overview**

**Prepared for the  
Colorado Scenic and Historic Byways Commission  
and the  
Colorado Department of Transportation**

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Revised January 2000**

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## **Section I. Introduction**

Studies indicate that visual perception is perhaps the most dominant factor in human cognition. In many activities, as much as 90 percent of what people learn is visual—is based on what they see. About 80 percent of all U.S. vacations involve automobile or recreational vehicle travel and this is increasing. Scenic viewing is the most significant recreational activity associated with these vacations. U.S. Forest Service recreation studies find that scenic viewing from automobiles is the most popular activity within our national forests.

Scenic byways are local, state, or federally designated vehicle touring routes that may be of striking visual character. For many byways, scenic quality is the most important intrinsic quality that byways possess. People are specifically seeking out scenic driving routes. When people describe what constitutes scenic quality, they often describe naturally appearing landscapes. For decades, our principal federal land managers, the U.S. Forest Service (U.S.F.S), the National Park Service (NPS), and the Bureau of Land Management (BLM), have attributed scenic quality to what appears natural—landscapes not modified by humans.

There is inherent subjectivity in determining or discussing scenic quality. In many instances, beauty is in fact in the eye of the beholder. Ones' perception of beauty is frequently a factor of expectation and relativity. If a traveler has high expectations for stunning visual quality, anything less will appear less attractive or unattractive. If a traveler has never seen a diverse number of scenic landscapes, each view of a "more scenic" landscape will redefine what the traveler perceives as scenic.

Recently, the definition of "scenic" is being revisited. Rural and pastoral landscapes, historic structures and districts, and even cityscapes may be considered as scenic resources. The most recent logo graphic for the National Scenic Byways Program shows a mountain- and cityscape, not just the mountainscape of the first logo graphic.

Many travelers perceive historical and cultural landscapes and the living working landscapes of today as highly scenic. Heritage areas planning, heritage tourism and ecotourism are largely rooted in the scenic appreciation of historical and natural attributes. A sign of the times—the U.S. Forest Service Visual Management System (USDA Agricultural Handbook Number 462, 1974) strongly associated scenic quality only with naturally appearing landscapes. The new U.S. Forest Service Visual Management System (USDA Agricultural Handbook 701, Landscape Aesthetics, a Handbook for Scenery Management) fully embraces the scenic quality of historic, cultural, and living landscapes—a significant departure from the first system.

What about scenic and historic byways? In what way can byways showcase and preserve scenic quality? How can residents, planners, and engineers work in partnership to enhance or preserve scenic qualities, whether the qualities are natural, historic, or both. Design guidelines provide one means of enhancing or preserving visual integrity.

## **Section II. Purpose**

This paper provides an overview of design guidelines for visual resources along scenic and historic byways. Initially conceived as the request of one byway organization in Colorado, the purpose of the paper has expanded to address potential design guidelines for any byway in Colorado, or anywhere else.

This paper defines guidelines. Relationships to visual resource management systems are explored; design elements are identified; visitor expectations are addressed; and, means of implementation are discussed. Typical concerns or issues also are addressed. The paper provides adequate detail for application to specific byways and general information applicable to any byway. Case studies are provided as a way of documenting successful design guideline applications.

## **Section III. What Are Design Guidelines for Visual Resources?**

Design is the purposeful manipulation of line, form, color, texture, patterns, magnitude and contrast. This purposeful manipulation applies to any type of design, for example, jewelry, a car, a house, a bridge, or an interstate interchange. Relative to scenic and historic byways, civil and transportation engineering are brought together with architecture and landscape architecture to meet the stringent demands of roadway engineering and equal needs for attractive design elements.

Design guidelines address the small and large. On the same byway design guidelines may address fence pole materials, roadside plantings, retaining wall materials, and alternative interchange locations.

The word “guideline” is typically construed to mean voluntary—something to be done if desired, but not required. The term is misleading. In many cases guidelines are, in reality, ordinances or regulations. Often, non-professionals, professional planners, and engineers eye guidelines with caution or concern. In contrast to the concrete and steel of roadway infrastructure, design guidelines are sometimes construed as insignificant. They are nonessential and costly additions to roadway design and engineering and not appreciated by enough people to be worthy.

Design guidelines refer to elements of environmental design that provide guidance for design of visual features—most commonly falling in the arena of landscape architecture, architecture, planning, and urban design. Design guidelines are specified designs for elements or details commonly occurring along a roadway, for example signage, retaining walls, color of structures, the character of site amenities, or the selection of plant materials. Design guidelines may also include actions that preserve and enhance existing conditions or maintain existing visual resources.

Design guidelines also may apply to historic structures and sites and address stabilization or reconstruction. If a structure is on a State or National Register of Historic Places and receives funding as a result of this status, guidelines (ordinances) may apply.

## **Section IV. Design Elements**

The following are typical design elements associated with byways:

### **Signage**

- Materials
- Colors
- Sizes
- Mounting or foundation materials
- Reflectivity

### **Site Planning for Rest Areas, Welcome Centers, Scenic Pullouts, Interpretive Centers/Sites and Scenic Pullouts**

- Site selection
- Site orientation
- Setback distances
- Parking lots
- Road type, material, and width
- Striping
- Power, pipe, and telephone lines
- Architectural guidelines
- Signage
- Fences
- Colors
- Landscape design
- Grading, earthwork, berming
- Minimizing disturbed areas
- Retention of existing vegetation
- Planting plans
- Natural drainage
- Drainage ditches and structures, e.g., culverts
- Integration of open space
- Integration with existing visual character
- Visual screening
- Sound barriers
- Level of maintenance

### **Site Amenities**

- Restrooms
- Trash receptacles
- Benches
- Lighting
- Bollards
- Paving materials

**Retaining Walls**

- Materials
- Colors
- Heights
- Drainage

**Guardrails**

- Materials
- Colors
- Safety standards

**Shoulders**

- Materials
- Width
- Safety standards

**Medians**

- Materials
- Plant materials
- Colors
- Safety standards

**Special or Designated Traffic Lanes**

- Slow traffic
- Scenic viewing
- Pullouts
- Safety standards

**Vegetation Clearing**

- Clearing method
- Magnitude of clearing
- Edge treatments

**Revegetation**

- Seeding and mulching
- Drainage
- Erosion and sediment control (construction-related or permanent)
- Vegetation edges

**Rock Faces**

- Natural
- Sculpting

**Bridges, Viaducts, and Railings**

- Materials



- Colors
- Style

#### **Historic Sites or Structures**

- Stabilization
- Repair/rehabilitation
- Reconstruction

#### **Visual Screening**

- Walls and fences
- Berms
- Vegetation

#### **Trails**

- Width
- Materials
- Slope
- Erosion control

### **Section V. Implementation**

Design guidelines are implemented by several means. They may or may not be regulatory. Guidelines are often provided as part or supplement to the following types of planning documents:

- Design Guidelines as Stand-Alone Documents
- Municipal Comprehensive Land Use Planning and Zoning
- County Comprehensive Land Use Planning and Zoning
- Municipal and Regional Park and Recreation Master Plans
- State Parks Plans
- Neighborhood Plans
- Homeowners Associations
- Interpretive Plans
- Visitor Use Plans
- Development Guidelines
- Streetscape Guidelines
- Subdivision Regulations
- U.S. Forest Service Land Resource Management Plans
- Bureau of Land Management Area Plans
- National Park Service Development Concept Plans

Where design guidelines are ordinances or covenants, they frequently follow a design review board process. If a historic structure is listed on a State or National Register of

Historic Places, changes or modifications may fall under the jurisdiction of a municipal, county, or State Historic Society or review board.

In some instances design guidelines are organized and implemented through zoning ordinances. Besides permitted land uses and densities, zoning can provide a broader overlay to design guidelines. Voluntary or regulatory design guidelines associated with zoning can be used to provide continuity or the limits of acceptable change within land use zones.

At a larger scale design guidelines can be used to choose and evaluate roadway alignments, intersection or interchange locations, landscaping, and elements of design continuity, for example landscape modification, plant materials, and reducing cut and fill slopes.

Issues and concerns regarding design guidelines vary regionally within the United States. Some residents, landowners, and local planning jurisdictions are leery of design guidelines. Voluntary guidelines are viewed with suspicion as a first step toward regulatory guidelines or ordinances. Where design guidelines are regulatory, some people view this as a form “taking” not unlike zoning or condemnation. This attitude is more prevalent in the western United States than in the east partly because of more undeveloped land, conservative policies, decentralized state land use planning or autonomous county land use planning, and the amount of public domain/federally-managed land.

Another means of implementing design guidelines is through conservation easements. Where it is difficult to implement design guidelines for other reasons, easements can provide a means of design continuity. As additional easements are purchased, the use of design guidelines can be expanded.

## **Section VI. Relative Values of Design Guidelines**

The importance of design guidelines is dependent on several factors. Project priorities may be determined by the relative value of guidelines. Considerations include the following:

1. On local, state, or national scenic and historic byways, all visual elements are of importance as they support the scenic integrity of the byway.
2. Visitors expect to see attractive visual elements on scenic byways. Unattractive visual elements stand out in contrast.
3. Viewer duration is important. The longer a design element can be viewed, the more important it is.

4. The number of viewers is important. Design elements along a byway that carries large volumes of traffic are more important than guidelines on less traveled byways.
5. Visual diversity is good. Visually diverse environments are generally more attractive.
6. The retention of baseline visual character is good. In some cases, design guidelines can rehabilitate or enhance visual character where alteration is desirable.
7. Viewing distance is important. Closer visual elements are more visible and detail is more discernible.
8. Viewer focus is important. If a very scenic view is visible in the direction of travel or in front of the driver, for example a spectacular mountain view, visual features along the side of the road are of less consequence. Dominant visual features attract attention.
9. Visual edges are important. The eye is naturally drawn towards edges—for example the eye is drawn to mountain ridgelines. An unattractive visual element along a ridgeline is more visible and of greater adverse effect than elsewhere.
10. Total visible area is important. If the visible area is large, details can be of less significance. If the visible area is small, details can be of greater significance. The characteristic landscape of visible area is also important.
11. Traffic speed is important. At higher speeds, the viewer discerns less detail. At lower speeds, more detail is visible.

## **Section VII. Towards a Regional and National View**

Though design guidelines are crafted to be site-specific and meeting the needs of one byway, the guidelines also speak to a bigger view. Colorado is the eighth largest state in the United States—roughly the size of Great Britain. It could be thought of as a country of its own. Distinctly different physical and social settings suggest different design guidelines.

A Colorado plains byway may be rooted deeply in the history of western expansion, ranching and farming, and the living or cultural landscapes of today. This byway suggests design guidelines specific to these themes and visual characteristics. A Colorado mountain byway with a rich history in gold-mining may warrant significantly different guidelines. Though traffic safety and engineering requirements must be maintained to assure safety given certain travel volumes and vehicle types, there is still an adequate allowance for regional design guidelines.

In a similar way there is a regionalism within the United States that affects design guidelines. Considering the landscape, history, culture, and heritage of a region, byway design guidelines can do a great deal to sustain the authentic theme and character of a byway. The guidelines can maintain or enhance scenic quality while being appropriate to the design context.

A wide range of factors influences designs standards and guidelines. For example, signage considerations include highway engineering and traffic safety standards; federal, state, and local directional and informational signage; commercial signage; and recreation and tourism (or visitor) signage.

Many byway organizations would do well to develop partnerships in planning, designing, and constructing byway facilities. The partners get what they need, are constructive team players that are viewed as such, and save money. Many of the necessary partnerships already exist within regions of the United States.

In the western states, state and national scenic byway programs are working in close cooperation with the U. S. Forest Service (U.S.F.S.), Bureau of Land Management (BLM), and the National Park Service (NPS). Both the U.S.F.S. and the BLM have developed sophisticated visual resource management systems to measure visual change. For example, many of Colorado's state byways are also U.S.F.S. Scenic Byways or BLM Byways or Backcountry Byways. The federal partners and the Colorado Department of Transportation agreed early on to use only the state byway program's columbine flower sign on these multi-jurisdictional byways. This still allows byway partners to utilize creative, site-specific sign plans in conjunction with their agency mandates.

In the eastern United States, the NPS led the way in identifying many scenic and historic roadways before the term "byway" was even used. The NPS has also led the way in identifying heritage areas and corridors and remains an active partner in regional byways planning.

### **Recommendations**

1. Where a byway crosses, or is near a National Park or other NPS-designated facility, a U.S.F.S. or BLM byway, the byway can "borrow" design themes, materials, and colors from agency design guidelines. This visually extends these guidelines to the state or national byway. It provides a level of continuity and a regional theme for byway amenities. In many cases, construction documents and specifications have already been prepared and their use can save money.

2. Where a byway travels through, or near a state park, an excellent opportunity exists to merge design guidelines to the benefit of both the byway and the state park. In many states, the state parks agencies are already byway partners. Design guidelines used in state parks may be appropriate on byways.

3. Along with byway development and tourism, heritage areas' planning is expanding significantly. Economic development and regional tourism planning efforts are utilizing heritage areas and corridors as anchors in promoting tourism. The NPS has been the lead federal agency in the identification and promotion of heritage areas and corridors. Heritage areas and corridors are strongly representative of larger regions and the opportunity exists to use design guidelines to provide regional continuity.

### **Section VIII. Research Recommendations**

1. Inventory and document design guidelines by state.
2. Inventory and document design guidelines by federal agency (U.S.F.S., BLM, NPS).
3. Inventory Transportation Research Board data.
4. Survey state byway coordinators on status and issues.
5. Conduct a literature search and inventory.
6. Conduct a web site search and inventory.

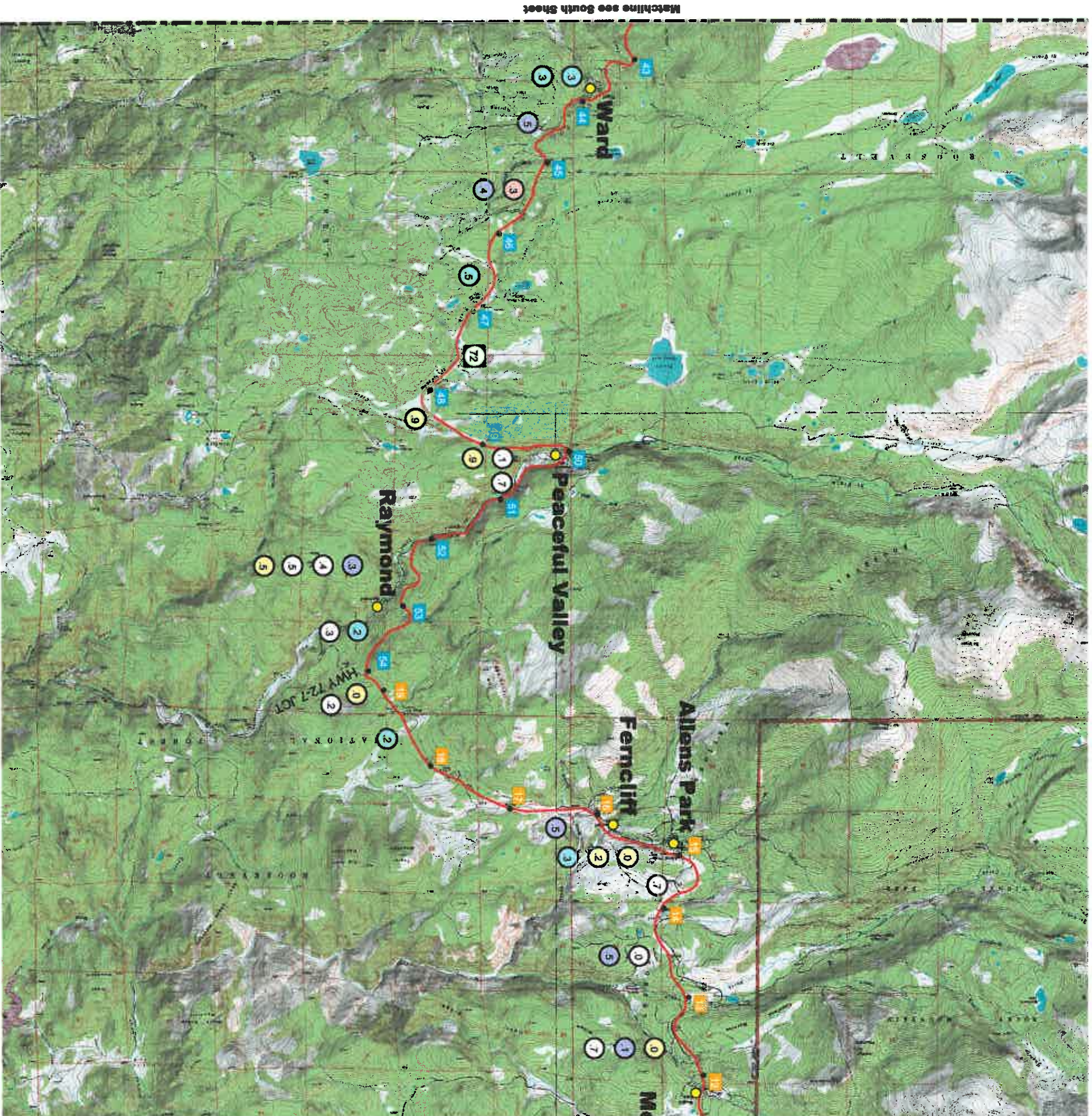
### **Section IX. Case Studies**

- I-70 at Glenwood Canyon - Grizzly Creek
- Vail Pass (I-70)
- McKenzie Pass (NW)
- Rainbow Bridge, Fort Morgan, Colorado

### **Section X. Information Sources**

Compendium of information sources





# Visual Intrusion Reduction Plan (North)

## Legend



Peak To Peak Highway



Towns



Mile Markers



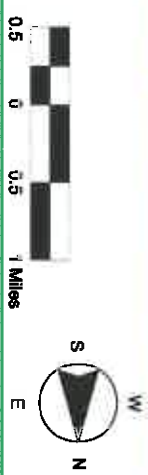
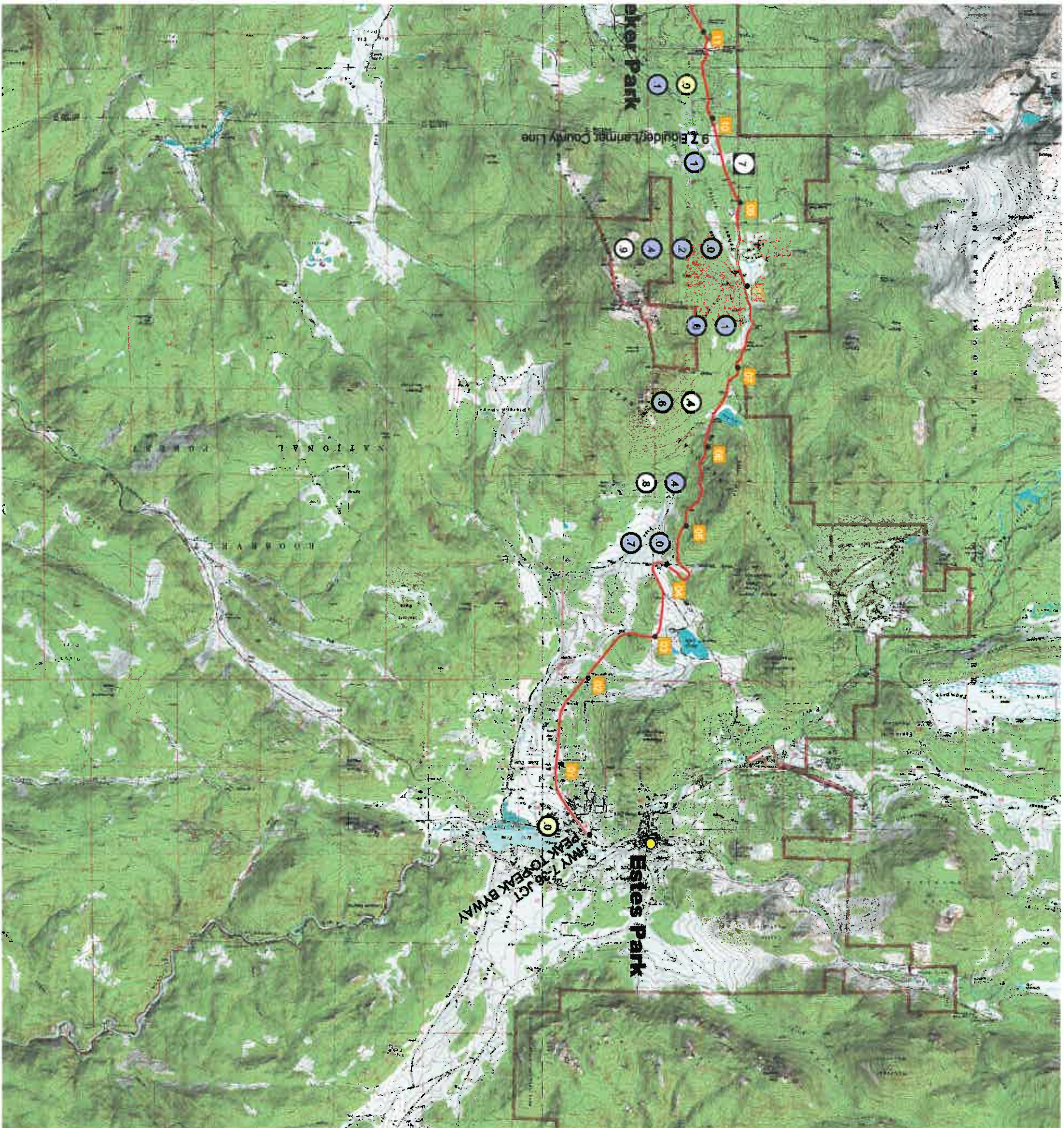
Immediate Mitigation

## Photograph Indicates Priority Actions



Peak to Peak Scenic and Historic Byway, North Central Colorado





date: 02/01/2002



Shoulder Width/  
Rd. Intersection



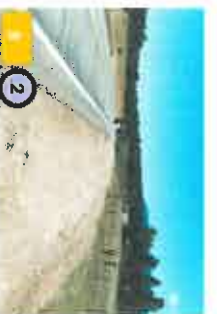
Signage



Revegetation



Pavement



Prepared by: Peak to Peak Scenic Byway Organization

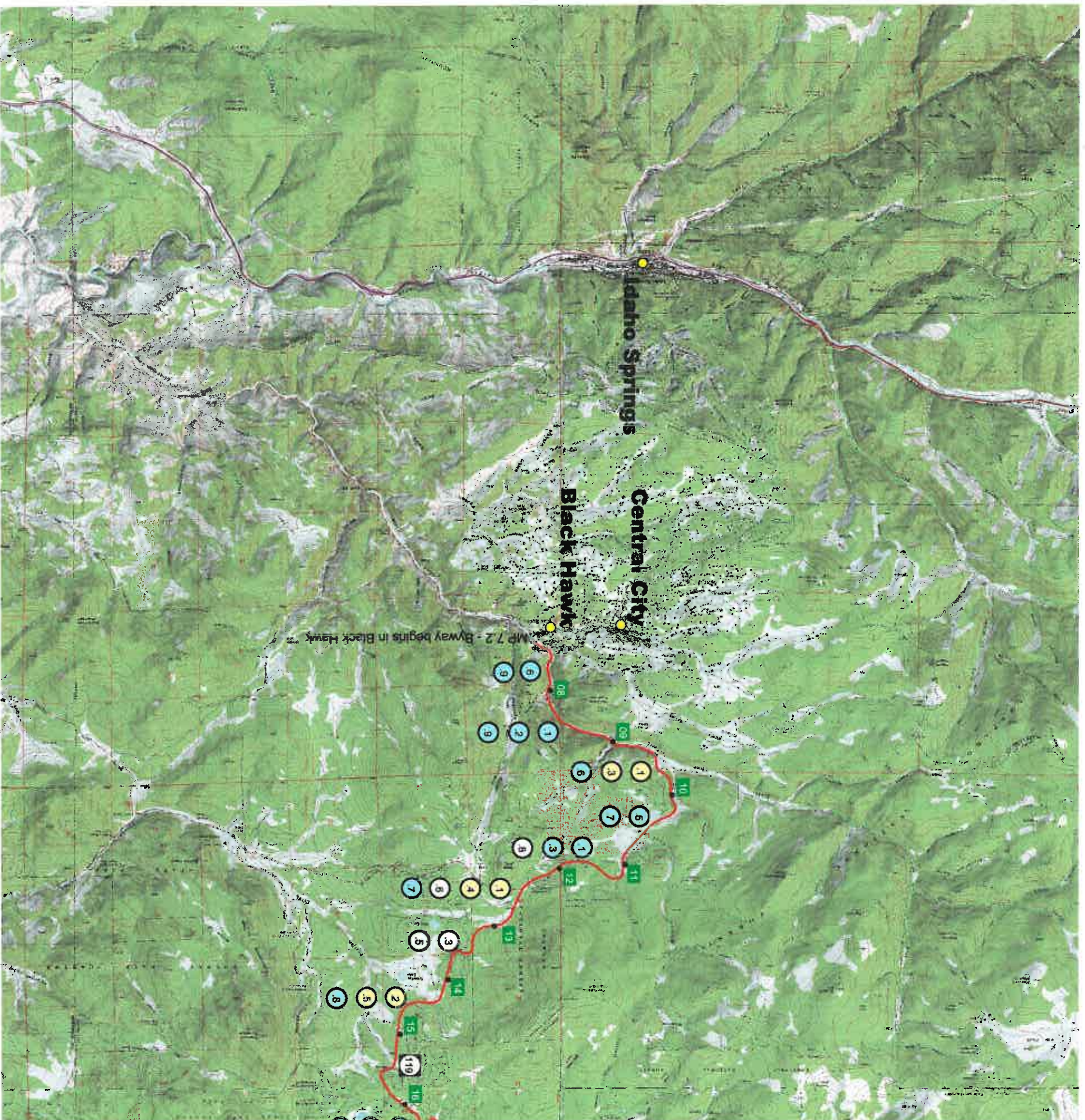
Funded by: Tourism and Recreation Program, Boulder County, Colorado

National Scenic Byways Program/Federal Highway Administration

Prepared by:







## Visual Intrusion Reduction Plan (South)

Legend



Peak To Peak Highway



Towns



Mile Markers



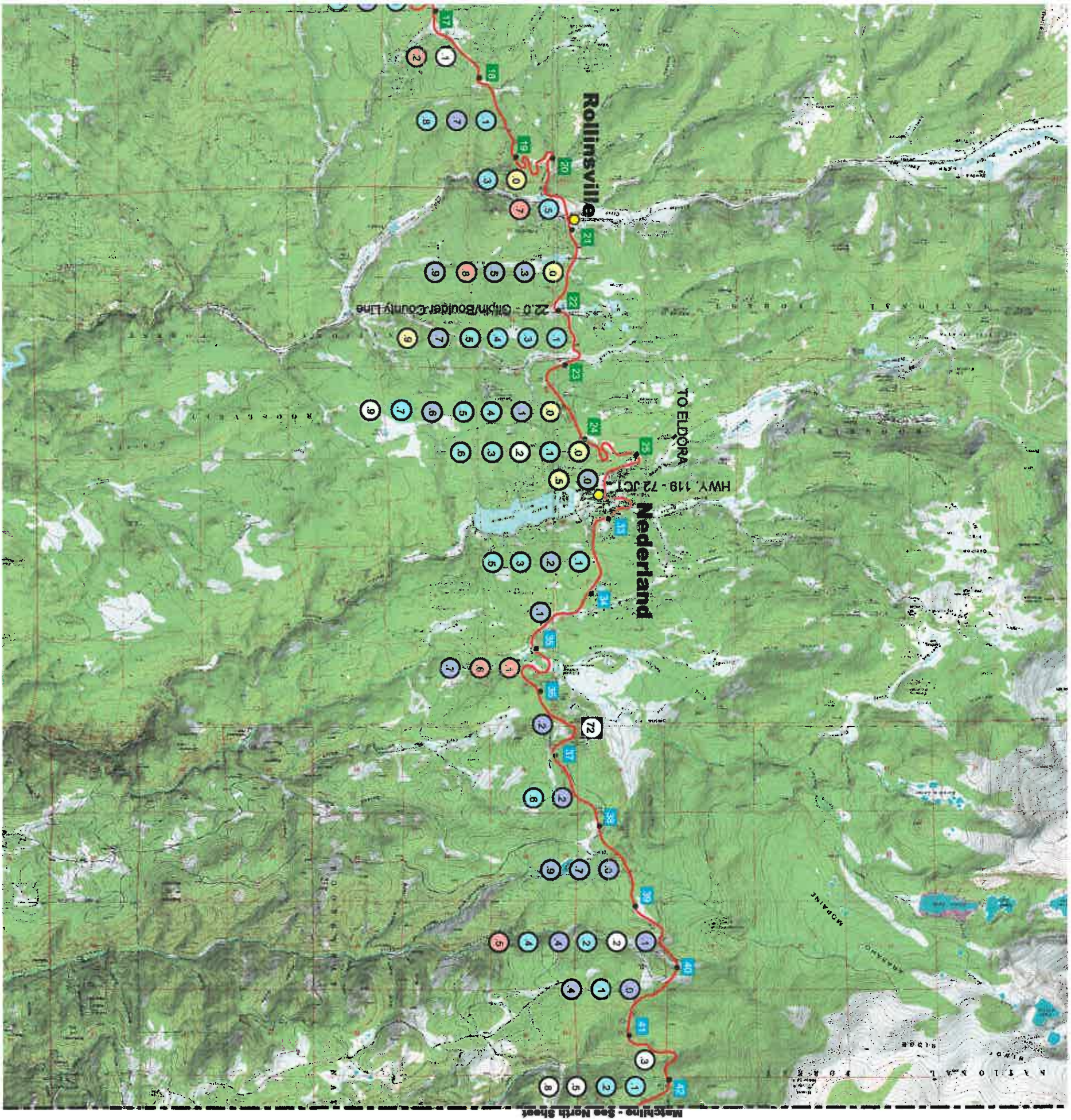
Pull Over

Photograph Indicates Priority Actions



Peak to Peak Scenic and Historic Byway, North Central Colorado





Matchline - See North Sheet



date: 02/01/2012

4 Intermediate Message

Shoulder Width/  
Rd. Intersection

4 Intermediate Message

Signage

4 Intermediate Message

Revegetation

4 Intermediate Message

Pavement



Prepared for: Peak to Peak Scenic Byway Organization

Funded by: Tourism and Recreation Program, Boulder County, Colorado  
Colorado Scenic and Historic Byways Program  
National Scenic Byways Program/Boulder Highway Administration

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FD&W



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