I-70 Mountain Corridor PEIS Visual Resources Technical Report August 2010 With Corrections March 2011

This page intentionally left blank.

Revision and Errata List

I-70 Mountain Corridor PEIS Visual Resources Technical Report March 2011

The following list represents revisions to the *I-70 Mountain Corridor PEIS Visual Resources Technical Report* (CDOT, August 2010).

Page Item

- 1 The first two sentences of **Section 2, Background and Methodology**, are revised and now read, "The Corridor's unique visual character is a highly valued resource for residents and visitors. Sightseeing and recreation are major activities throughout the Corridor, and visual resources are a critical component to both activities."
- 2 A discussion about the visual resources study area is added as the first two paragraphs to Section 2.1, Visual Resources Inventory Methodology. The added text reads, "The Corridor width considers all views and viewers located within the northern and southern ridgelines through which the interstate passes. The Colorado Department of Transportation (CDOT) inventoried the existing visual environment by examining the character of the landscape and identifying potential viewers (also called sensitive receptors) within the viewshed of the Corridor. The Colorado Department of Transportation organized landscape characteristics and sensitive receptor locations into 27 distinct scenery analysis units or landscape units throughout the Corridor. The inventory also identified gateway views, focal views, and canyon views.
- 6 Two maps showing visibility within the Corridor based on foreground, middle ground, and background are added to the document after page 6. The following sentence is added to the beginning of paragraph 3 on page 6 to introduce the two graphics: "**Figure 1 and 4** below illustrate the foreground, middle ground, and background views throughout the Corridor. "
- 18 In paragraph 3, the sentence referencing the effects of the mountain pine beetle upon vegetation is revised. The text now reads, "The infestation has resulted in an aesthetic blight for sightseers, killing entire hillsides of ponderosa, lodgepole, ornamental, and limber pine trees, and leaving behind rust-colored skeletons."
- 40 Within paragraph 2, the first sentence is replaced with the following text: "The Minimal Action Alternative provides improvements to 30 existing interchanges and adds climbing lanes and auxiliary lanes."
- 62 A new sentence is added to the first paragraph in **Section 5.2, Indirect Impacts**, to clarify the role of the Action Alternatives upon induced growth. The paragraph now reads, "The development of the I-70 highway has influenced land use patterns in the Corridor over the past 30 years, and a relationship between growth in traffic and population in the Corridor region (past 15 years) suggests that changes in travel demand in the future would also affect growth in the region. The Action Alternatives all affect development in the Corridor pertaining to growth patterns and rates and will affect visual resources. Indirect impacts on visual resources center on the potential for changes in the rural Corridor setting associated with possible induced growth and development associated with Action Alternatives."

Revision and Errata List

I-70 Mountain Corridor PEIS Visual Resources Technical Report March 2011

Continued

Page Item

63 Section 5.4, Impacts in 2050, revises the conclusion about Action Alternatives impacts upon visual resources from, "By 2050, the Action Alternatives likely have less influence on visual resources than community controls on growth and land use planning" to state that, "The Action Alternatives will have sustaining effects on the visual landscape into 2050. Community controls on growth and land use planning will also play a large part in changes to the visual landscape, as will effects of the implementation of Bureau of Land Management and United States Forest Service visual resource management plans."

Table of Contents

Section 1. Purpose of the Report	
Section 2. Background and Methodology	
2.1 Visual Resources Inventory Methodology	
2.2 Federal Lands Visual Management Prescriptions	
2.3 Visual Resources Impact Methodology	8
Section 3. Description of Alternatives	11
3.1 Minimal Action Alternative	11
3.2 Transit Alternatives	11
3.2.1 Rail with Intermountain Connection	11
3.2.2 Advanced Guideway System	
3.2.3 Dual-mode Bus in Guideway	
3.2.4 Diesel Bus in Guideway	
3.3 Highway Alternatives	
3.3.1 Six-Lane Highway 55 mph Alternative	
3.3.2 Six-Lane Highway 65 mph Alternative	
3.3.3 Reversible Lanes Alternative	
3.4 Combination Alternatives	
3.5 Preferred Alternative—Minimum and Maximum Programs	
3.6 No Action Alternative	
Section 4. Affected Environment	
4.1 Garfield County	
4.1.1 Landscape Character	
4.1.2 Key Viewpoints and I-70 Views	
4.1.2 Key viewpoints and 1-70 views	
4.2 Eagle County	
4.2.2 Key Viewpoint and I-70 Views	
4.3 Summit County	
4.3.1 Landscape Character	
4.3.2 Key Viewpoints and I-70 Views.	
4.4 Clear Creek County	
4.4.1 Landscape Character	
4.4.2 Key Viewpoints and I-70 Views	
4.5 Jefferson County	
4.5.1 Landscape Character	
4.5.2 Key Viewpoints and I-70 Views	
4.6 Visual Conditions and Scenic Attractiveness by Landscape Unit	
4.7 Federal Lands	
Section 5. Environmental Consequences	
5.1 Direct Impacts	
5.1.1 Alternative Components and Contrast Corridorwide	
5.1.2 Visual Contrast from Alternative Components by County	
5.1.3 Key Roadway Views	
5.2 Indirect Impacts	
5.3 Temporary Construction Impacts	
5.4 Impacts in 2050	63
Section 6. Tier 2 Considerations	63
Section 7. Mitigation	
Section 8. References	65

Appendices

- A I-70 Mountain Corridor County and Municipal Visual Planning Policies
- B Description of Landscape Units and Visual Contrast of Action Alternatives

List of Charts

Chart 1. Total Miles of Visual Contrast Corridor-Wide	
Chart 2. Total Miles of Visual Impacts Corridor-Wide	
Chart 3. Visual Contrast, Action Alternatives in Garfield County	
Chart 4. Visual Impacts, Action Alternatives in Garfield County	
Chart 5. Visual Contrast, Action Alternatives in Eagle County	
Chart 6. Visual Impacts, Action Alternatives in Eagle County	
Chart 7. Visual Contrast, Action Alternatives in Summit County	
Chart 8. Visual Impacts, Action Alternatives in Summit County	
Chart 9. Visual Contrast, Action Alternatives in Clear Creek County	
Chart 10. Visual Impacts, Action Alternatives in Clear Creek County	
Chart 11. Visual Contrast, Action Alternatives in Jefferson County	
Chart 12. Visual Impacts, Action Alternatives in Jefferson County	

List of Figures

Figure 1. Scenic Attractiveness: Garfield to Summit Counties	4
Figure 2. Scenic Attractiveness: Summit to Jefferson Counties	5
Figure 3. Corridor Landscape Unites: Garfield to Summit Counties	16
Figure 4. Corridor Landscape Unites: Summit to Jefferson Counties	17
Figure 5. Garfield County Scenery Analysis Units	20
Figure 6. Eagle County Scenery Analysis Units	
Figure 8. Summit County Scenery Analysis Units	
Figure 8. Clear Creek County Scenery Analysis Units	
Figure 9. Jefferson County Scenery Analysis Units	

List of Tables

7
9
10
19
22
26
30
33
35
37
56
-

Section 1. Purpose of the Report

This *I*-70 Mountain Corridor PEIS Visual Resources Technical Report supports the information contained in **Chapter 3, Section 3.11** of the *I*-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS). It identifies:

- Methods used to identify visual resources and determine potential impacts of alternatives
- Coordination with local, state, and federal agencies
- Description of the visual resources in the Corridor
- Consequences of the Action Alternatives evaluated in the *I-70 Mountain Corridor PEIS*
- Considerations for Tier 2 processes
- Proposed mitigation strategies for visual resources

Section 2. Background and Methodology

Sightseeing and recreation are major activities throughout the Corridor, and visual resources are an important component of both activities. User surveys conducted in the summer of 1999 and winter of 2000 indicated that most trips along the Corridor are for recreational purposes. Officials from the White River National Forest and Arapaho and Roosevelt National Forests estimate that between 17 and 37 percent of these trips were for sightseeing purposes (United States Forest Service, August 2001). Corridor communities, visitors, and public land managers are dedicated to, and have a vested interest in, protecting the Corridor's natural beauty. The Colorado Department of Transportation (CDOT) recognizes that the Corridor is highly valued for scenery and views.

Objective visual assessment of the landscape settings in the Corridor establishes identifiable, consistent qualities that can be described and measured. These concepts for analyzing landscape character, scenic attractiveness, and changes to landscape settings have been implemented in the assessment of the Action Alternatives.

As part of the environmental process, CDOT solicited public input in various ways, including the following:

- Included working sessions at I-70 Mountain Corridor PEIS open houses to obtain input on the landscape units and local context/sense of place
- Displayed illustrative materials and provided comment forms at the United States Forest Service visitor's centers in Minturn, Silverthorne, and Idaho Springs
- Displayed illustrative materials and provided comment forms at the Colorado Ski Museum in Vail
- Displayed illustrative materials and provided comment forms at the Jefferson County Courts and Administration Building
- Provided illustrative materials and provided comment forms on the project website

The results of this public input were used in development of the landscape characterizations of the Corridor.

The Colorado Department of Transportation also contacted the United States Forest Service and the Bureau of Land Management to understand these agencies' visual resource management guidelines and related information. While guidelines related to visual resource protection are limited primarily to federal lands, CDOT also reviewed county and town plans to understand visual planning policies protecting

community values and place identity. **Appendix A** of this report contains a table of these topics and policies, and the discussion below summarizes these findings.

Many communities' visual resource policies center on historic resources that reflect a community's heritage and are important to the communities' sense of place. Other common themes in visual resource policies include the following:

- Developing strategic gateways to communities
- Maintaining and preserving scenic vistas
- Protecting ridgelines and mesa edges from development
- Limiting development on steep slopes
- Clustering development to preserve sensitive landscapes
- Encouraging development patterns that maintain open space buffers between towns and community centers
- Enhancing local character with development through considerations of building placement, height, massing characteristics, and natural screening opportunities
- Considering the cumulative impacts of incremental development on sensitive landscapes.

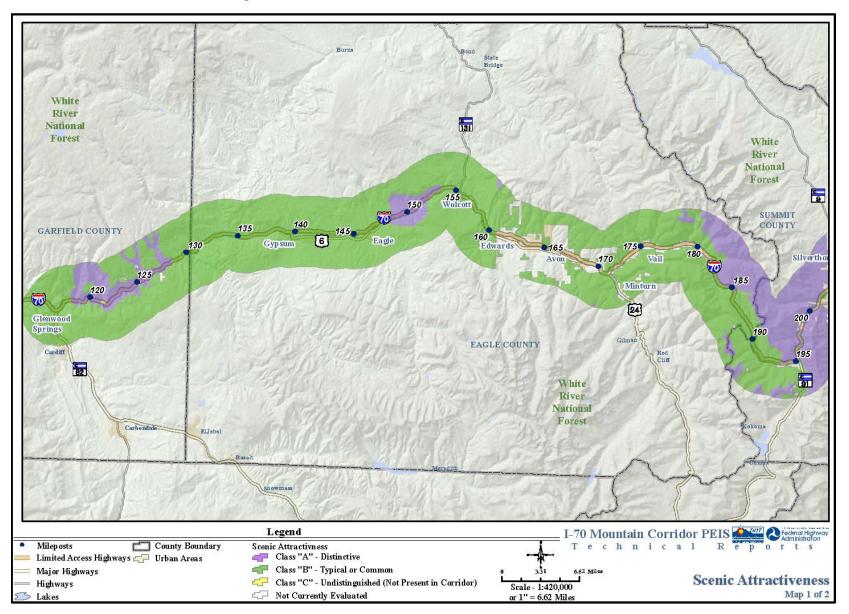
2.1 Visual Resources Inventory Methodology

The first step in the visual resource analysis created an inventory of the existing environment. This involved examining the character of the Corridor landscape itself, as well as examining viewers and their sensitivity to impacts on the visual character of the landscape. Viewers include residents, motorists, or recreationalists with a view of the I-70 highway or from the I-70 highway. The visual characteristics of distinct areas along the Corridor have been described in terms of landform character, vegetation, and community values or sense of place. These discrete areas are rated in terms of the existing visual conditions and the landscape scenic attractiveness of the area. Descriptions of landscape character and existing scenic integrity are provided in **Section 4** of this report. A photo inventory of the Corridor landscapes was collected in 2000 and 2003. No major changes have occurred to the I-70 highway and no new major land development has occurred since data collection began, so little change to the built environment has taken place. The mountain pine beetle infestation occurred since the initial data collection, and the discussion of visual landscapes is updated to reflect its effects on the natural environment, particularly forested areas. Tier 2 processes will capture existing visual conditions at time of those analyses. Assessment of the visual resource inventory relied on the Bureau of Land Management and United States Forest Service evaluation standards to objectively determine existing visual conditions and landscape scenic attractiveness of both federal and non-federal lands, as discussed below.

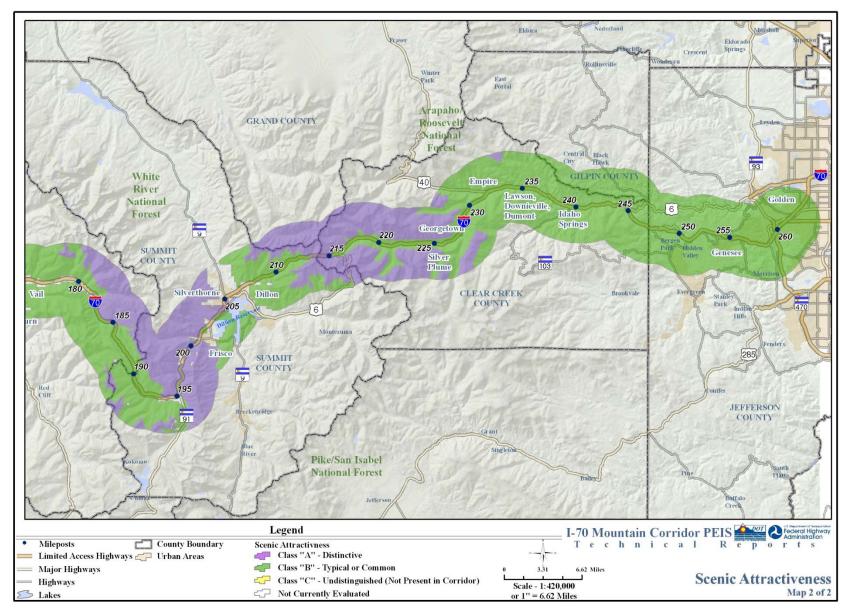
Existing Visual Conditions is a United States Forest Service concept for rating existing disturbances and their effect on the integrity of the landscape setting, regardless of scenic attractiveness. Ratings range from I to III, as described in **Table 6** in **Section 4**. Natural landscapes that appear untouched by human activities are rated as "I," whether or not they may also be assigned a classification of high scenic attractiveness. Natural appearance of landscape remains dominant, evidence of human activities is minor or resembles natural patterns are assigned a "II" rating. Developed areas or town sites are assigned a "III" rating.

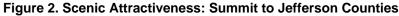
Landscape Scenic Attractiveness is a shared United States Forest Service and Bureau of Land Management classification of the natural landscape setting. Scenic Attractiveness is best described as the overall impression retained after driving through, walking through, or flying over an area of land. While all landscapes have some value, those with the most variety or diversity tend to have the highest Scenic Attractiveness. Scenic Attractiveness ranges from Class A to Class C, where Class A represents a rare example of landscape type in the region, Class B describes landscapes that contain some distinctive features but that are generally typical examples of landscape in the Corridor, and Class C represents areas of homogeneous features occurring for many miles without variation.

The majority of lands within the Corridor are rated as Scenic Attractiveness Class B. However, several Scenic Attractiveness Class A landscapes are present in the Corridor, including Glenwood Canyon, Red Canyon, Dowd Canyon, Vail Pass/Black Gore Creek, Officers Gulch/Tenmile Canyon, and the Continental Divide. These Class A areas include features with more distinctive or unusual characteristics of valued landscape elements, such as landform, water characteristics, vegetation, and cultural features than those defined elsewhere in the Corridor. **Figures 1 and 2** below illustrate the scenic attractiveness of the entire Corridor.









The second step in the inventory of visual resources is to identify **key views**. Due to the amount of community- and recreation-oriented development within the Corridor, the I-70 highway is highly visible along its entire length between Glenwood Springs and C-470. A detailed inventory of sites with views to the highway was compiled as part of the visual resource inventory and can be grouped as follows:

- **Twenty communities** are present within the Corridor in close proximity to the I-70 highway. Residences are located in adjacent town sites and in existing subdivisions and rural areas in unincorporated county areas.
- **Recreation viewers** include those viewing the Corridor from trails, parks, recreation areas, campgrounds, picnic areas, interpretive sites, river access points, ski resorts, and golf courses. Within 3 miles on either side of the Corridor, 224 designated recreation sites are present.
- Roadway viewers include travelers viewing the Corridor on the I-70 highway and the six major roadways that stem from the interstate, including US 6, State Highway (SH) 131, SH 91, SH 9, US 40, SH 103, Guanella Pass Road, and SH 119.

Key Viewpoints and Distance Zones are visibility concepts shared by United States Forest Service and the Bureau of Land Management. Key viewpoints throughout the Corridor can be categorized into views to the I-70 highway and views from the I-70 highway. Sensitive views to the highway include residential, recreation, and roadway views. Views from communities, recreation sites, and roadways were calculated using geographic information system (GIS) overlays to represent foreground, middleground, and background distance zones, which have been defined for this study as follows:

- **Foreground** views extend about 0.5 mile from the observer, allowing for the perception of detail of individual objects or landscape features and the intensity and values of color are to be seen in maximum contrast.
- **Middleground** views extend 0.5 to 3 miles. A middleground view is more generalized and expansive than foreground views, allowing the observer to see more clearly a series of hills or mountains joined together into a range. Middleground distance zones are critical not only because they tend to dominate the view but also because they can often best show whether man-made changes are visually compatible within the landscape.
- Background views extend beyond 3 miles and are less prevalent in the Corridor due to the mountainous terrain and overlapping viewsheds, each enclosed by its own set of visual boundaries frequently precluding views beyond 3 miles. Where views beyond 3 miles exist, such as at Genesee Bridge, the west side of the Eisenhower-Johnson Memorial Tunnels, and Vail Pass distant landscape forms are reduced to simple outline shapes and any sense of surface texture or detail is removed.

It is important to note that as observers travel along the I-70 highway (versus viewing from recreation or community vantage points), the background may become middleground or foreground, because the concept of grounds is static, and the traveling observer is mobile.

2.2 Federal Lands Visual Management Prescriptions

Because portions of the Corridor are under federal land management, the approach for the visual resource assessment was coordinated with federal land managers from the Bureau of Land Management and the United States Forest Service and is consistent with both agencies' visual analysis methodologies. Over the past 30 years, both of these agencies have developed, refined, and implemented visual analysis and management systems that provide tools for assessing aesthetic qualities of the landscape in objective terms. Management prescriptions describe the different degrees of modification allowed to the landscape. Management prescriptions are derived from an overlay technique that combines the maps of scenic attractiveness classes, sensitivity levels, and distance zones. These areas are assigned to one of five

management classes according to predetermined criteria. The criteria for the Bureau of Land Management and United States Forest Service classifications are described below, and compared in **Table 1**.

- Bureau of Land Management Visual Resource Management Program. The Bureau of Land Management has developed the Visual Resource Management program to classify and manage landscapes. This system places landscape areas into visual management classes, which indicate the overall significance of the visual environment and establish management objectives to determine the degree of acceptable visual change within a landscape. These classes are used to evaluate the visual compatibility of proposed projects and range from Class 1 to Class 5. Class 1 allows for only natural ecological changes and very limited management activity. Any contrast created within the characteristic landscape must not attract attention. This classification is applied to wilderness areas, wild and scenic rivers, and other similar situations. Class 5 is applied to areas where the natural character of the landscape has been disturbed to a point where rehabilitation is needed to bring it up to one of the four other classifications.
- United States Forest Service Scenery Management and Visual Management Systems. The United States Forest Service has developed the Scenery Management System for the inventory, analysis, and management of scenery on national forest lands. This system for visual resource management replaces the Visual Management System that was implemented on forest lands between 1973 and 1995. Although the essence of the system remains basically intact, the system has been expanded to include increased constituent input and to integrate basic concepts for ecosystem management. Both the White River National Forest and the Arapaho and Roosevelt National Forests have implemented the Scenery Management System.

Within the Scenery Management System, Scenic Integrity Objectives are used to evaluate the visual compatibility of proposed projects as well as manage these federal lands. Scenic Integrity Objectives classes generally range from **Very High** to **Very Low**. Lands designated under the Scenery Management System as Very High are areas that are unaltered, where the valued landscape character is intact with only minute deviations, if any. In these areas, only ecological changes are allowed. Activities outside of recreation facilities with minimal visual impact are prohibited. Changes to the visual qualities, such as size, amount, intensity, direction, and pattern of these areas should not be evident. Lands classified as Very Low are areas that appear heavily altered, where the deviations dominate the valued landscape character and borrow little from the natural landscape in terms of form, line, color, or texture.

Bureau of Land Management	United States Forest Service	
Class 1 Preserve the existing character of the landscape. The goal is to provide a landscape setting that appears unaltered by man. The level of change to the landscape should be very low with only limited development occurring such as hiking trails.	Very High Refers to landscapes where the valued landscape character "is" intact with only minute, if any, deviations. The existing landscape character and sense of place are expressed at the highest possible level.	
Class 2 Retain the existing character of the landscape. Management activities may be seen but should not attract attention from the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant nature features of the landscape.	pattern common to the landscape character so	

Table 1. Comparison of Federal Lands Visual Management Prescriptions

Bureau of Land Management	United States Forest Service
Class 3 Partially retain the existing character of the landscape. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the natural features of the landscape.	Moderate Refers to landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed.
Class 4 Provide for management activates which require major modification of the existing landscape. Management activities may dominate the view and may be the major focus of the observer. Every attempt should be made to minimize the impact of these activates through careful location, minimal disturbance, and repeating the basic elements.	Low Refers to landscapes where the valued landscape character "appears moderately altered." Deviations begin to dominate the landscape character being viewed, but they borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed. They should appear not only as valued character outside the landscape being viewed but compatible or complementary to the character within.
Class 5 Natural character of the landscape has been disturbed to a point where rehabilitation is needed to bring it up to one of the four other classifications	Very Low Refers to landscapes where the valued landscape character "appears heavily altered." Deviations may strongly dominate the landscape character. They may not borrow from valued attributes such as size, shape, edge effect and patter on natural openings, vegetative type changes, or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.

Table 1. Comparison of Federal Lands Visual Management Prescriptions

2.3 Visual Resources Impact Methodology

Once the inventory was completed and the affected environment described, a systematic approach was used for the analysis of visual impacts for each project alternative. The *first step* was to identify the anticipated changes associated with project elements, such as alterations to landforms or the addition of structural elements. This is known as visual contrast. Under the *second step*, these project elements were then assessed for their level of visual impact based on the landscape setting and viewer characteristics. The visual impact assessment consisted of an overlay of contrast (alternative specific), landscape characteristic, and proximity to views to determine whether the alternative produces a visual impact. Because a given Action Alternative is not expected to generate the exact same level of visual contrast and impact across evenly across the Corridor, the *third step* quantitatively analyzed each Action Alternative based on the varying levels of contrast and impacts produced in length of miles. Details on assessing visual contrast and impacts are described in the subsections below.

Step 1: Assessing Visual Contrast of Project Alternatives

A key tool in assessing the change associated with activities in a landscape is the concept of *visual contrast*. Contrast ratings compare project alternatives with existing conditions element by element, according to the degree of dominance or discontinuity anticipated to occur within the landscape setting. Alternatives were evaluated for their effects on the surrounding landforms and their structural elements. Landform changes occur where cut or fill slopes would be necessary to accommodate alternative

footprints within the mountainous landscape of the Corridor, as well as where median treatment between eastbound and westbound lanes would be altered from an open, grass median to a closed, paved median. Structural elements include retaining walls, which are typically incorporated to minimize the footprint to avoid sensitive features, bridges, and elevated platforms for transit or roadway lanes. The intensity of the contrast of these elements within the landscape depends on the size, quantity, and diversity of these elements.

Levels of visual contrast range from weak to very strong, denoting the extent of change to the characteristic landscape perceived by viewers:

- Weak contrast is associated with changes that can be seen but do not attract attention, and are subordinate to the setting.
- **Moderate contrast** is associated with changes that are noticeable but are still subordinate to the setting.
- **Moderate to strong contrast** is associated with changes that attract attention and begin to dominate the setting.
- **Strong contrast** is associated with changes that attract attention and dominate the setting.
- Very strong contrast is associated with changes that demand attention, will not be overlooked by the average observer, and dominate the setting.

Table 2 describes the types of anticipated landform changes and structural elements associated with alternatives and qualifies their degree of visual contrast. During the planning and design stages of a project, areas of extreme contrast to setting may be mitigated and potentially lessened. (Potential mitigation strategies of project alternatives is addressed in **Section 7**.)

	Project Elements	Very Strong	Strong	Moderate to Strong	Moderate	Weak
Landform	Retaining Walls	N/A	Long, continuous, large-scale walls	Long continuous moderate- scale walls or moderate large scale walls	Moderate section, moderate scale walls	Short section, small- scale wall
	Roadside cut-and-fill slopes	N/A	Major cut or fill slopes over 40 feet	Large cut or fill slopes 25 to 40 feet	Moderate cut or fill slope 10 to 25 feet	Minor cut or fill slope 10 feet or less
	Median Treatment	N/A	Transition from open median to closed median with wider roadway footprint and large scale walls between lanes	Transition from open median to closed median with wider roadway footprint	Remains closed median with wider roadway footprint	Remains closed median with wider roadway footprint

Table 2. Visual Contrast Levels of Project Elements

I	Project Elements	Very Strong	Strong	Moderate to Strong	Moderate	Weak
Structures	 Elevated Platforms Piers/columns Bridges Catenary Barrier Fencing 	Large in size, numerous in quantity, and/or high diversity in shape	Moderate to large in size and quantity, and/or moderate in diversity and shape	Small to moderate in size and quantity, and/or little diversity in size and shape	Small in size and quantity, and/or little diversity in size and shape	N/A

Table 2. Visual Contrast Levels of Project Elements

Step 2: Assessing Visual Impact of Project Alternatives

Visual impacts associated with Action Alternatives can be described as a range from low to high, indicating the level of project/setting contrast that would be visible from recreation sites or communities, and anticipated compatibility of project elements within the landscape settings. For this analysis, the level of anticipated visual impact was assigned based on the following three factors:

- Proximity to sensitive views: visibility distance zones foreground, middleground, and background.
- Compatibility with the landscape setting: existing visual conditions.
- Level of project/setting contrast, structural and landform contrast: "weak to very strong."

The assignment of visual impact levels took into consideration the compatibility of alternative elements within the various landscape settings encountered. For example, structural elements, such as elevated structures, retaining walls, and systems of poles and overhead electric wires (catenary systems), are considered to be more compatible with urban, developed settings than with rural, undeveloped settings. Considered in terms of the setting, the assessment of impacts was also based on proximity to views—that is, whether the project element is within the foreground, middleground, or background in relation to the viewpoint. The discussion of visual impacts takes into account the application of mitigation measures to reduce visual contrast. Areas of very strong or strong visual contrast that cannot be reduced through mitigation were considered a high visual impact. **Table 3** illustrates the factors taken into consideration for assigning visual impact levels.

	Visibility Distance Zones			
Landform/Structure Contrast	Foreground Views 0 to 0.5 Mile	Middleground Views 0.5 to 3 Miles	Background Views Beyond 3 Miles	
Very Strong	High	High	Moderate to High	
Strong	High	Moderate to High	Moderate	
Moderate to Strong	Moderate to High	Moderate	Low to Moderate	
Moderate	Moderate	Moderate to Low	Low	
Weak	Low to Moderate	Low	Low	

Table 3. Visual Impact Model

Step 3: Quantifying the Visual Contrasts and Impacts of Project Alternatives

Because the landscape character of the project setting varies within each landscape unit, the resulting effect of the alternative elements may be more or less dominant depending on competing visual elements within the landscape. Typically, more diverse landscape settings are able to absorb more change before added elements become dominant. A combination of large, complicated, and multiple components results in higher visual contrast than components few in number, low in diversity, and smaller in size. Based on the degree of visual contrast and impact, as determined in the above methodology, each alternative was analyzed for the level of contrast and impact generated, in length of miles. Essentially, throughout a given landscape unit or County, a particular Action Alternative may produce a strong visual contrast or impact at one location but a low contrast or impact at another location. The resulting analysis quantifies the number of miles of very high, high, moderate to high, moderate, moderate to low, and low visual contrast and impact across the entire length of a landscape unit or County. The results of the analysis are portrayed in visual contrast and impact charts in **Section 5**.

Assessing the degree of contrast and impact by the length of miles is an appropriate representation because (1) alternatives with a smaller scope (such as the Minimal Action Alternative) create impacts only in select locations and, therefore, create a lesser impact than alternatives that extend over a longer distance, and (2) it provides a means to compare visual impacts of alternatives that extend the length of the Corridor, such as the Transit, Highway, and Combination alternatives.

Section 3. Description of Alternatives

This section summarizes the alternatives considered in the I-70 Mountain Corridor PEIS. A more complete description of these alternatives is available in **Chapter 2** of the PEIS and in the *I-70 Mountain Corridor PEIS Alternatives Screening and Development Technical Report* (CDOT, August 2010).

3.1 Minimal Action Alternative

The Minimal Action Alternative provides a range of local transportation improvements along the Corridor without providing major highway capacity widening or dedicated transit components. The Minimal Action Alternative includes elements of the Transportation System Management family and the Localized Highway Improvements family, including: transportation management, interchange modifications, curve safety modifications, and auxiliary lanes. These elements are also incorporated into the other Action Alternative Packages.

3.2 Transit Alternatives

Four Transit alternatives are considered in the PEIS as a reasonable range representing the Fixed Guideway and Rubber Tire Transit families:

- Rail with Intermountain Connection Alternative
- Advanced Guideway System Alternative
- Dual-Mode Bus in Guideway Alternative
- Diesel Bus in Guideway Alternative

3.2.1 Rail with Intermountain Connection

The Rail with Intermountain Connection Alternative would provide rail transit service between the Eagle County Regional Airport and C-470. Between Vail and C-470 the rail would be primarily at-grade running adjacent to the I-70 highway. The segment between Vail and the Eagle Count Airport would be constructed within the existing Union Pacific Railroad right-of-way. A new Vail Transportation Center,

including new track, would be constructed between Vail and Minturn to complete the connection between the diesel and electric trains. This alternative also includes auxiliary lane improvements at eastbound Eisenhower-Johnson Memorial Tunnels to Herman Gulch and westbound Downieville to Empire and the other Minimal Action Alternative elements except for curve safety modifications at Dowd Canyon, buses in mixed traffic and other auxiliary lane improvements.

3.2.2 Advanced Guideway System

The Advanced Guideway System Alternative would provide transit service between the Eagle County Regional Airport and C-470 with a 24-foot-wide, 118 mile, fully elevated system. The Advanced Guideway System Alternative would use a new technology that provides higher speeds than the other Fixed Guideway Transit technologies studied for the PEIS. Any Advanced Guideway System would require additional research and review before it could be implemented in the Corridor. Although the Federal Transit Administration-researched urban magnetic levitation system is considered in the PEIS, the actual technology would be developed in a Tier 2 process. This alternative includes the same Minimal Action elements as described previously for the Rail with Intermountain Connection Alternative.

3.2.3 Dual-mode Bus in Guideway

This alternative includes a guideway located in the median of the I-70 highway with dual-mode buses providing transit service between the Eagle County Regional Airport and C-470. This guideway would be 24 feet wide with 3 foot high guiding barriers and would accommodate bidirectional travel. The barriers direct the movement of the bus and separate the guideway from general purpose traffic lanes. While traveling in the guideway, buses would use guidewheels to provide steering control, thus permitting a narrow guideway and providing safer operations. The buses use electric power in the guideway and diesel power when traveling outside the guideway in general purpose lanes. This alternative includes the same Minimal Action Alternative elements as described previously for the Rail with Intermountain Connection Alternative.

3.2.4 Diesel Bus in Guideway

This includes the components of the Dual-mode Bus in Guideway Alternative except that the buses use diesel power at all times.

3.3 Highway Alternatives

Three Highway alternatives are advanced for consideration in the PEIS as a reasonable range and representative of the Highway improvements, including Six-Lane Highway 55 mph, Six-Lane Highway 65 mph, and Reversible/HOV/HOT Lanes. The Highway alternatives considered both 55 and 65 mph design speeds to 1) establish corridor consistency and 2) address deficient areas within the Corridor. The 55 mph design speed establishes a consistent design speed throughout the Corridor, which currently does not exist. The 65 mph design speed further improves mobility and addresses safety deficiencies in key locations such as Dowd Canyon and the Twin Tunnels. Both the 55 mph design speed constructs tunnels in two of the locations: Dowd Canyon and Floyd Hill/Hidden Valley.

3.3.1 Six-Lane Highway 55 mph Alternative

This alternative includes six-lane highway widening in two locations: Dowd Canyon and the Eisenhower-Johnson Memorial Tunnels to Floyd Hill. This alternative includes auxiliary lane improvements at eastbound Avon to Post Boulevard, both directions on the west side of Vail Pass, eastbound Frisco to Silverthorne and westbound Morrison to Chief Hosa, and the Minimal Action Alternative elements except for buses in mixed traffic and other auxiliary lane improvements.

3.3.2 Six-Lane Highway 65 mph Alternative

This alternative is similar to the Six-Lane Highway 55 mph Alternative; it includes the same six-lane widening and all of the Minimal Action Alternative elements except the curve safety modification at Dowd Canyon. The higher design speed of 65 mph alternatives requires the curve safety modifications near Floyd Hill and Fall River Road to be replaced with tunnels.

3.3.3 Reversible Lanes Alternative

This alternative is a reversible lane facility accommodating high occupancy vehicles and high occupancy toll lanes. It changes traffic flow directions as needed to accommodate peak traffic demands. It includes two additional reversible traffic lanes from the west side of the Eisenhower-Johnson Memorial Tunnels to just east of Floyd Hill. From the Eisenhower-Johnson Memorial Tunnels to US 6, two lanes are built with one lane continuing to US 6 and the other lane to the east side of Floyd Hill. This alternative includes one additional lane in each direction at Dowd Canyon. This alternative includes the same Minimal Action Alternative Elements as the Six-Lane Highway 55 mph Alternative.

3.4 Combination Alternatives

Twelve Combination alternatives, combining Highway and Transit alternatives are considered in the PEIS. Four of these alternatives involve the buildout of highway and transit components simultaneously. Eight alternatives include preservation options, the intent of which is to include, or not preclude, space for future modes in the I-70 Mountain Corridor. The Combination alternatives all include the Six-Lane Highway 55 mph Alternative for highway components.

Combination Rail and Intermountain Connection and Six-Lane Highway Alternative—This alternative includes the 55 mph six-lane highway widening between Floyd Hill and Eisenhower-Johnson Memorial Tunnels, the Rail and Intermountain Connection transit components, and most of the components of the Minimal Action Alternative. The exception is that only one of the Minimal Action auxiliary lane improvements (from Morrison to Chief Hosa westbound) is included.

Combination Advanced Guideway System and Six-Lane Highway Alternative—This alternative includes the 55 mph six-lane highway widening between Floyd Hill and Eisenhower-Johnson Memorial Tunnels and the Advanced Guideway System transit components. It includes the same Minimal Action Alternative elements as the Combination Rail and Intermountain Connection and Six-Lane Highway Alternative.

Combination Bus in Guideway (Dual-Mode) and Six-Lane Highway Alternative—This alternative the 55 mph six-lane highway widening between Floyd Hill and Eisenhower-Johnson Memorial Tunnels and the dual-mode bus in guideway transit components. It includes the same Minimal Action Alternative elements as the Combination Rail and Intermountain Connection and Six-Lane Highway Alternative.

Combination Bus in Guideway (Diesel) and Six-Lane Highway Alternative—This alternative includes the 55 mph six-lane highway widening between Floyd Hill and Eisenhower-Johnson Memorial Tunnels and the diesel bus in guideway transit components. It includes the same Minimal Action Alternative elements as the Combination Rail and Intermountain Connection and Six-Lane Highway Alternative.

Combination Rail & Intermountain Connection and Preservation of Six-Lane Highway Alternative—This alternative includes the Rail and Intermountain Connection Alternative and preserves space to construct the Six-Lane Highway 55 mph at a later point.

Combination Advanced Guideway System and Preservation of Six-Lane Highway Alternative— This alternative includes the Advanced Guideway System and preserves space to construct the Six-Lane Highway 55 mph at a later point.

Combination Bus in Guideway (Dual-Mode) and Preservation of Six-Lane Highway Alternative— This alternative includes the Combination Bus in Guideway (Dual-Mode) Alterative and preserves space to construct the Six-Lane Highway 55 mph at a later point.

Combination Bus in Guideway (Diesel) and Preservation of Six-Lane Highway Alternative—This alternative includes the Bus in Guideway (Diesel) Alternative and preserves space to construct the Six-Lane Highway 55 mph at a later point.

Combination Preservation of Rail and Intermountain Connection and Six-Lane Highway Alternative—This alternative includes the Six-Lane 55 mph Highway Alternative and also preserves space to construct the Rail and Intermountain Connection at a later point.

Combination Preservation of Advanced Guideway System and Six-Lane Highway Alternative— This alternative includes the Six-Lane 55 mph Highway Alternative and also preserves space to construct the Advanced Guideway System at a later point.

Combination Preservation of Bus in Guideway (Dual-Mode) and Six-Lane Highway Alternative— This alternative includes the Six-Lane Highway Alternative and also preserves space to construct the Bus in Guideway (Dual-Mode) at a later point.

Combination Preservation of Bus in Guideway (Diesel) and Six-Lane Highway Alternative—This alternative includes the Six-Lane Highway Alternative and also preserves space to construct the Bus in Guideway (Diesel) at a later point.

3.5 **Preferred Alternative—Minimum and Maximum Programs**

The Preferred Alternative provides for a range of improvements. Both the Minimum and the Maximum Programs include the Advanced Guideway System Alternative. The primary variation between the Minimum and Maximum Programs is the extent of the highway widening between the Twin Tunnels and the Eisenhower-Johnson Memorial Tunnels. The Maximum Program includes six-lane widening between these points (the Twin Tunnels and the Eisenhower-Johnson Memorial Tunnels), depending on certain events and triggers and a recommended adaptive management strategy.

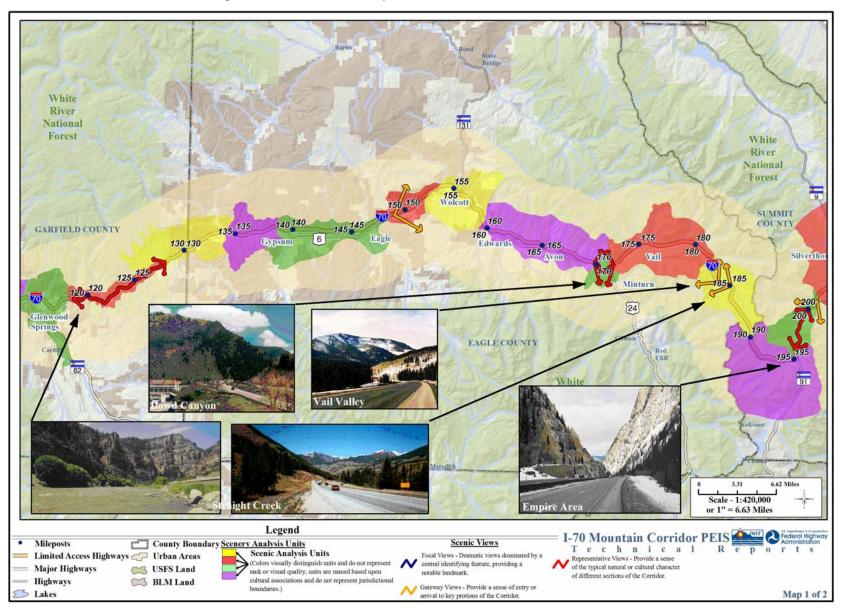
3.6 No Action Alternative

The No Action Alternative provides for ongoing highway maintenance and improvements with committed funding sources highly likely to be implemented by the 2035 planning horizon. The projected highway maintenance and improvements are committed whether or not any other improvements are constructed with the I-70 Mountain Corridor project. Specific improvements under the No Action Alternative include highway projects, park and ride facilities, tunnel enhancements, and general maintenance activities.

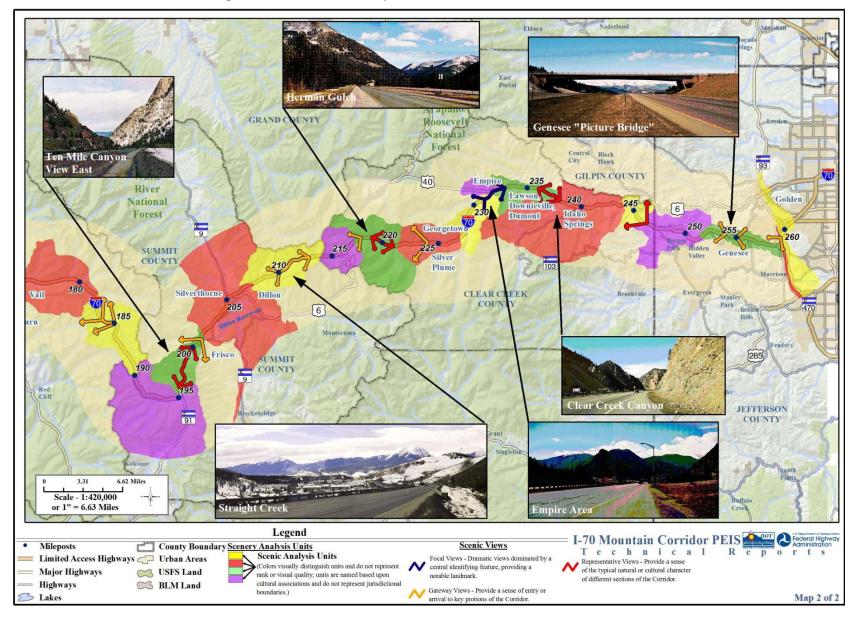
Section 4. Affected Environment

Travelers on the I-70 highway experience a wide range of scenery characteristics; the Corridor includes various landscapes that range from mountains and mountain valleys to canyons and foothills. The highway traveler's field of vision is bounded by a series of ridgelines and peaks. These visual boundaries define the limits of the area of influence, or that portion of the landscape observable by the highway user, and, conversely, capture those areas with visibility of the highway. While the entire Corridor provides scenic interest, specific locations along the highway are especially dramatic and exhibit high scenic integrity. These unique locations across the Corridor are categorized into three types of vantage points illustrated in **Figures 3 and 4**:

- **Gateway views** provide a sense of entry or arrival to key portions of the Corridor.
- **Focal views** or dramatic views are dominated by a central identifying feature that provides a notable landmark.
- **Canyon views** are outstanding examples of canyon environments in the Corridor. These areas provide a sense of enclosure and dramatic settings.









I-70 Mountain Corridor PEIS August 2010

The I-70 highway passes through mountainous terrain with dramatic elevation and ecological changes and unique geologic formations, offering views of historic mountain towns and occasional glimpses of wildlife. The I-70 highway provides access to scenic vistas, campgrounds, picnic areas, trails, ski areas, and resorts of the Rocky Mountains. The 144-mile route from C-470 to Glenwood Springs climbs from an elevation of 6,400 feet to a maximum elevation of 11,000 feet above sea level at the Eisenhower-Johnson Memorial Tunnels.

The presence of the I-70 highway and congestion has affected the adjacent environment and communities in various ways. Interstate access has stimulated local economies, increased recreational travel, and enhanced highway users' driving experience in the Rocky Mountains. While stretches of the Corridor over Vail Pass and through Glenwood Canyon are good examples of improvements in the highway driving experience, roadway scars are prominent along several stretches of the Corridor. Roadway cut-and-fill slopes are most evident in the canyon environment of Clear Creek County and along Straight Creek, where existing cut-and-fill slopes dominate the setting.

The visual character of the Corridor has been affected by the widespread infestation of the mountain pine beetle. The infestation has resulted in an aesthetic blight for sightseers; killing entire hillsides of ponderosa, lodgepole, Scotch, and limber pine trees; and leaving behind rust-colored skeletons.

The ongoing loss of pine forests because of the mountain pine beetle continues to alter the forest landscapes across the Corridor. Statewide, the mountain pine beetle has affected the entire 3 million acres of lodgepole pine forests. The Colorado State Forest Service entomologist recently estimated that nearly all the state's lodgepole pine forests have been affected and that the food source for the beetle has diminished (Finely, 2010). Because most of the Corridor's trees are lodgepole pines, dead trees are prominent throughout the Corridor and have a substantial effect on all of the Corridor's viewsheds.

The visual influence of dying trees has become regional in scale, as the predominant forest colors change from green to rust/gray. The long-term visual character will evolve with the stages of forest succession and forest composition. Some factors that will influence the future visual character of the forests include:

- The rate and nature of the forest composition as the pine forests die and successional vegetation patterns emerge
- Future forest management strategies by United States Forest Service on White River National Forest and Arapaho and Roosevelt National Forests; as well as county, municipal, and private land management practices
- The influence of possible forest fires

The United States Forest Service has developed a plan to address the impacts of the mountain pine beetle epidemic (United States Forrest Service, August 2007), which aims to reduce hazardous fuels and wildfire risk to the forest, homes, communities, and critical watersheds and reduce hazards to recreation and public infrastructure.

The following discussion provides an overview of the Corridor setting, including landscape characteristics (Existing Visual Conditions and Scenic Attractiveness) and key viewpoints within the five counties along the Corridor. A detailed visual inventory was conducted at a smaller scale, within visually distinct segments of the Corridor identified as 27 landscape units. The tables associated with each County include an inventory of key viewpoints located within each landscape unit.

4.1 Garfield County

Just over half of the land in Garfield County is publicly owned and managed by the Bureau of Land Management, the White River National Forest, or the Bureau of Reclamation. Most of the privately owned land is devoted to agriculture, with a relatively small portion being residential and commercial with minor amounts of industrial development.

4.1.1 Landscape Character

Only a small portion of eastern Garfield County is within the Corridor. This portion includes some of the more dramatic and diverse scenery that exists within the entire Corridor. Corridor settings within Garfield County include an urban mountain setting, a narrow canyon environment (Glenwood Canyon), and an agriculturally developed broad river valley, all centered on the Colorado River between the communities of Glenwood Springs and Dotsero. Glenwood Springs is located at the confluence of the Colorado and Roaring Fork rivers and is known for its striking terrain such as the red rock escarpment backdrop. The interstate follows the Colorado River through Glenwood Canyon for 12 miles of steep, rugged canyon walls extending 2,500 feet above the river/highway elevation. Glenwood Canyon is rated as Class "A" scenery by the White River National Forest, their highest rating for scenic quality. The I-70 highway transitions from this narrow canyon environment into a broad river valley surrounded by steep hillsides traveling east. This area has a less dramatic, rural, and open character.

Several characteristics contribute to the *sense of place* within Garfield County. Glenwood Springs, now highly valued for its recreational amenities, also has a long history associated with the hot springs resort and silver mining. The recreational amenities and natural beauty of Glenwood Canyon also contribute greatly to Garfield County's identity.

4.1.2 Key Viewpoints and I-70 Views

In addition to the community view from Glenwood Springs, Garfield County contains many sensitive recreation-oriented views. Recreation is highly valued throughout the area on both public and privately owned lands. Views from the I-70 highway vary from being open and expansive in the Glenwood Springs area to confined and enclosed in the Canyon environment. Interstate motorists experience views of geologic diversity in color and form, with walls on either side of the highway displaying soft sedimentary rock layers and evidence of the geologic forces of erosion. **Table 4** and **Figure 5** provide the individual landscape units that occur in Garfield County and the key viewpoints that occur in each landscape unit.

Landscape Unit	Key Viewpoints
Glenwood Springs (milepost 113 to 118)	Town of Glenwood Springs Axtell Park Centennial Park Glenwood Hot Springs Glenwood Canyon Trail Horseshoe Bend Picnic Area North Hyland Park Two Rivers Park Vogelaar Park Veltus Park
Glenwood Canyon (milepost 118 to 128)	Glenwood Canyon Trail Grizzly Trail Hubbard Cave Trail Hanging Lake Trail No Name Trail

Table 4. Landscape Units in Garfield County

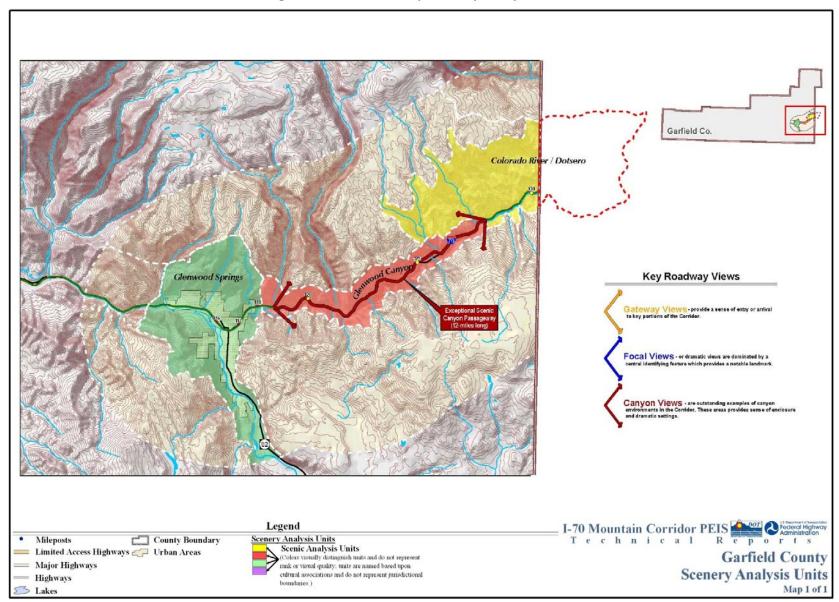


Figure 5. Garfield County Scenery Analysis Units

4.2 Eagle County

Eagle County is one of the fastest growing regions in Colorado. Much of this county is federally managed by the White River National Forest and the Bureau of Land Management. Two major resorts within the Corridor, Vail and Beaver Creek, are located within Eagle County, as well as many other outdoor year-round recreational opportunities. Community development on private lands is primarily located along the I-70 highway and other major road corridors, with the majority of County land consisting of agricultural and rural residential areas. Much of the landscape in Eagle County remains rural, with an open character. The master plan for Eagle County identifies the preservation of open space between clustered developments as a priority.

4.2.1 Landscape Character

Eagle County was divided into nine landscape units for the purposes of detailed assessment. This large number of units in one county is an indication of the variety of landscape characteristics present in the county. Stretching from the broad river valley at Dotsero to the spectacular red rock escarpments at Red Canyon, through the Eagle Valley to Dowd Junction where views are dominated by the striking banded cliffs of the Minturn Formation, and on through Vail Valley to Vail Pass, this county has much to offer in terms of sightseeing and recreation.

A dominant geologic element throughout Eagle County is the Eagle Valley Formation, characterized by colorful and rugged sandstone cliffs and canyons. Red Canyon is a distinctive example of the Eagle Valley Formation and is rated Class "A" scenery by the Bureau of Land Management (their highest rating for scenic quality). Landforms east from Dotsero to Dowd Canyon include glaciated, U-shaped valleys centered on the Eagle River and its riparian corridor. Vail Valley is characterized by a relatively broad, U-shaped valley centered on Gore Creek and its associated riparian shrub complex. These river valleys provide striking contrast to the surrounding rugged hillsides.

Deviations from the natural landscape character are present in the Vail area, primarily associated with community development and the Vail Resort. Vail is a relatively new community and a resort destination for skiing. Vail Pass is characterized by its rural woodland setting dominated by deep green spruce fir forest with large areas of grass/forb meadows and contrasting red sandstone cliffs. Development along Vail Pass is primarily related to recreation. Few deviations from the natural landscape character are present along Vail Pass. Vail Pass is dominated by the rugged peaks of the Gore Mountain Range within the Eagles Nest Wilderness Area, which is rated as Class "A" scenery by the White River National Forrest.

4.2.2 Key Viewpoint and I-70 Views

Eagle County contains many sensitive views from communities and recreation areas. Communities within Eagle County include Gypsum, Eagle, Wolcott, Edwards, Eagle-Vail, Avon, Minturn, and Vail. Sensitive views within Eagle County include many recreation sites, parks, and trails in and around communities and throughout the White River National Forrest. Due to the number of communities and recreation properties and their proximity to the interstate throughout Eagle County, the I-70 highway is almost completely within foreground views from these sites.

Views from the I-70 highway vary considerably throughout the county from open and expansive in areas of broad valleys to confined and enclosed within canyon environments. Interstate motorists experience diversity in color and form of geology. **Table 5** and **Figure 6** provide the individual landscape units that occur in Eagle County and the key viewpoints that occur in each landscape unit.

Landscape Unit	Key Viewpoints
Colorado River/Dotsero (milepost 128 to 134)	Siloam Springs Trail Ute Trail
Lower Eagle River Canyon (milepost 134 to 139)	Community site Dotsero Crater Geologic site Horse Pasture site Lava Flow recreational site
Eagle Valley/ Eagle – Gypsum (milepost 139 to 148)	Town of Gypsum Town of Eagle City Park Eagle County Fairgrounds and Ball fields Eagle River Estates Park Eagle River Park Estes Lane Park Gypsum Meadows Park Gypsum Open Space Gypsum Park Gypsum Platted Open Space Gypsum Ponds State Wildlife Area Gypsum recreational site Mountain Glen Park Old Town Park Quail Run Park Town Hall Park Lower Town Hall Park Upper Town Park
Red Canyon (milepost 148 to 153)	Hell's Pocket Trail
Wolcott (milepost 153 to 160)	Eagle River Access Wolcott Recreation Site
Eagle Valley/Avon (milepost 160 to 170)	Arrowhead Ski Area Avon Open Space Avon Parks Berry Creek/Miller Ranch Eagle-Vail Golf Club Eagle-Vail Park and Play Court Nottingham Lake/Park Turquoise Lake Trail
Dowd Canyon (milepost 170 to 172)	Martin Creek Trail Meadow Mountain tie thru Mount Meadows Trail Whiskey Creek Trail

Table 5. Landscape Units in Eagle County

Landscape Unit	Key Viewpoints		
Vail (milepost 172 to 182)	Town of Vail Bighorn Park Bighorn Trail Booth Falls Tot Lot and Tennis Courts Booth Lake Trail Buffer Creek Park Buffer Creek Park Buffer Creek Park Buffer Mountain Deluge Lake Trail Donovan Park Ford Park Game Creek Trail Gore Creek Trail Gore Creek Trail Katsos Ranch Open Space North Trail North Vail Trail Pitkin Trail Roger Staub Park Sandstone Park/Tot Lot Spraddle Creek Trail Stephens Park Vail Golf Course Vail Open Space Vail Open Space Vail Parks Vail Ski Area		
Vail Pass/Black Gore Creek (milepost 182 to 190)	Mountain Hut Shrine Mountain Inn and Tenth Two Elk Trail Tenmile-Vail Pass National Recreation Trail Vail Pass Winter and Summer Recreation Area		

Table 5. Landscape Units in Eagle County

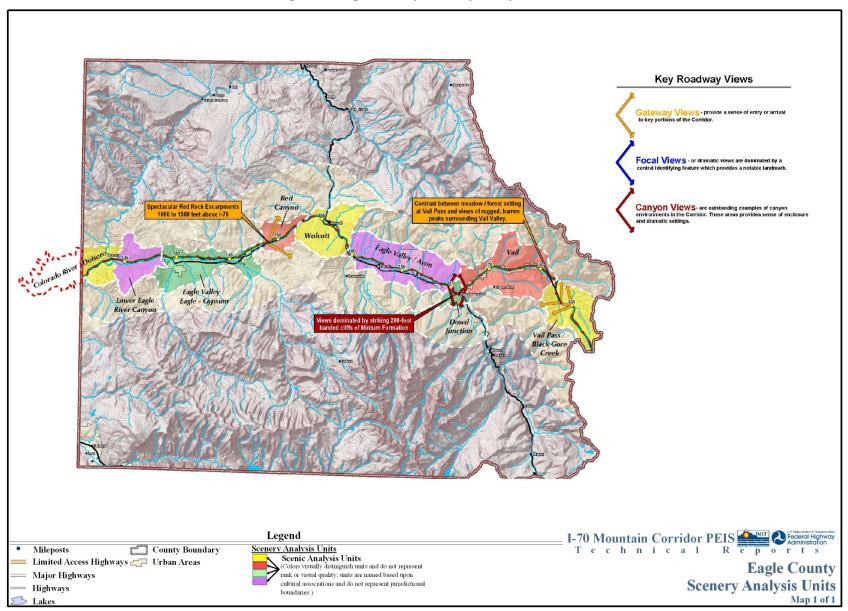


Figure 6. Eagle County Scenery Analysis Units

4.3 Summit County

Most land in Summit County is publicly owned and managed by the White River National Forest. Privately owned lands are located predominantly along the Blue River and Snake River valley bottoms and adjacent to the I-70 highway, US 6, and SH 9. Four major Corridor resorts are located within Summit County: Copper Mountain, Breckenridge, Keystone, and Arapahoe Basin, as well as many other outdoor year-round recreational opportunities. Historically, Summit County has been an agricultural and ranching area. While there are still some agricultural and large lot rural residential areas, private lands within Summit County have become increasingly urban over the decade.

4.3.1 Landscape Character

The interstate passes through a number of scenic areas in Summit County. Entering the county (from the west) at Copper Mountain, it traverses the dramatic canyon environment of Officers Gulch and Tenmile Canyon. The highway then passes through the Blue River and Straight Creek stream valleys, to the county line at the Continental Divide, which features panoramic views west to the Gore and Tenmile ranges.

In the Copper Mountain and Officers Gulch/Tenmile Canyon areas, the I-70 highway parallels Tenmile Creek and is dominated by the Gore Mountain Range and Copper Mountain Resort. The Blue River Valley is located at the confluence of Tenmile Creek, Blue River, Straight Creek, and Snake River, and is a broad river valley surrounded by the steep hillsides of the Gore Mountain Range to the west and the Williams Fork Mountain Range (part of the Continental Divide) to the east. Distinctive landscape features within this area include rugged peaks of the Gore Mountain Range within the Eagles Nest Wilderness Area and the rugged peaks of the Williams Fork Mountain Range within the Ptarmigan Wilderness Area. Both of these areas in the White River National Forest are rated as Class "A" scenery. Deviations from the natural landscape character are associated primarily with community development in Frisco, Silverthorne, and Dillon; minor cut-and-fill slopes associated with the I-70 highway, SH 9, US 6; and the Dillon Dam Reservoir. The I-70 highway continues west along Straight Creek where the scenery is dominated by the steep, rugged terrain of the Continental Divide (rated Class "A" scenery). Deviations from the naturally occurring landscape along Straight Creek, which is primarily undeveloped forest lands, are related to the roadway cut-and-fill slopes associated with the I-70 highway and the pull off/parking area near the west portal of the Eisenhower-Johnson Memorial Tunnels.

4.3.2 Key Viewpoints and I-70 Views

Much of the western portion of the I-70 highway within Summit County is within foreground views from recreation sites such as the Copper Mountain Resort, Eagles Nest Wilderness Area, Tenmile-Vail Pass National Recreation Trail, Corral Creek Trail, and Wheeler Lake Spur Trail. The Tenmile-Vail Pass National Recreation Trail parallels the interstate between Vail and Silverthorne. Many other trails depart from locations near the I-70 highway and extend either to the north or south of the interstate. Views along the interstate are enclosed by local terrain and are dominated by the peaks of the Gore and Tenmile mountain ranges as well as the Copper Mountain ski runs.

Because the Blue River Valley is developed, Action Alternatives would be almost completely within foreground views from the communities of Frisco, Silverthorne, and Dillon, as well as from the recreation areas. Designated recreation is abundant in this area, including White River National Forest-designated recreation complexes, campgrounds, picnic areas, scenic overlooks, and trails. The communities in this area also encompass designated open space, parks, and trails. Sensitive viewpoints within the Blue River Valley also include residential areas, designated recreation areas, and roadways. Primary roads that traverse this area, in addition to the I-70 highway, include SH 9 and US 6.

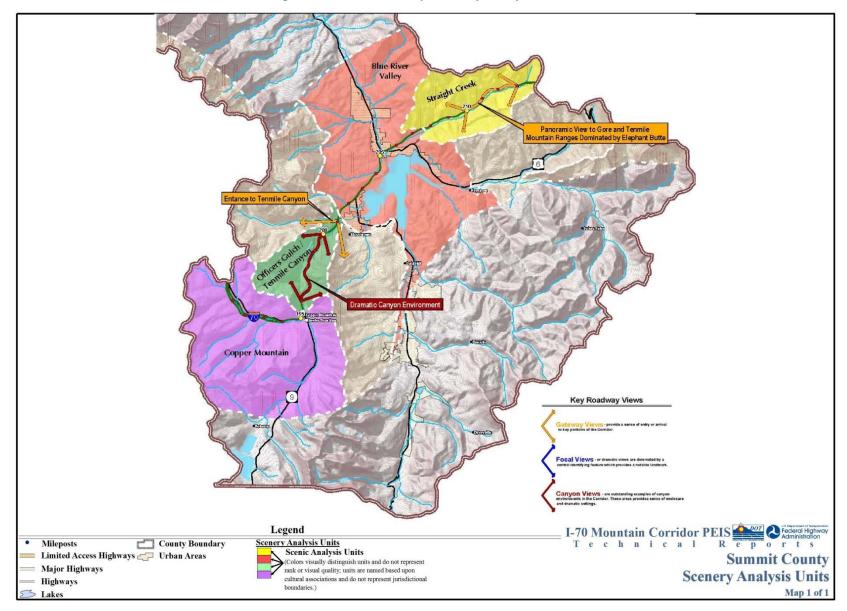
The Straight Creek area includes sensitive views associated with the Ptarmigan Peak area. **Table 6** and **Figure 7** provide the individual landscape units that occur in Summit County and the key viewpoints that occur in each landscape unit.

Landscape Unit	Key Viewpoints
Copper Mountain (milepost 190 to 195)	Copper Mountain Resort Corral Creek Trail Eagles Nest Wilderness Area Tenmile-Vail Pass National Recreation Trail Wilder Gulch Trail Wheeler National Recreation Trail
Officers Gulch and Tenmile Canyon (milepost 195 to 201)	Lake Uneva North Tenmile Trail Tenmile-Vail Pass National Recreation Trail Wheeler Lake Spur Trail

Table 6. Landscape Units in Summit County

Landscape Unit	Key Viewpoints
	Town of Dillon
	Town of Frisco
	Town of Silverthorne
	Arctic Placer Park
	Blue River Park (regional)
	Blue River Trail
	Buffalo Cabin Trail
	Cottonwood Park
	Dillon Dam Recreational/Frisco Lakefront Trail
	Dillon/Frisco Ballfields
	Dillon Nature Preserve
	Dillon Open Space
	Dillon Park
	Eagles Nest Wilderness Area
	Frisco Historic Park
	Frisco Nordic Center and Rec Area
	Frisco to Breckenridge Trail
	Giberson Bay Picnic Area
	Greenbelt Park (Dillon)
	Lily Pad Trail
	Lowry Campground
	Marina Park
	Meadow Creek Park/Wetlands
	Meadow Creek Trail
Blue River Valley	Memorial Park
(milepost 201 to 208)	Mesa Cortina Trail
	Peninsula Rec Area/Trails
	Pine Cove and Peak One Campground
	Pioneer Park and Tennis Courts
	Pocket Park
	Prosecutor Campground Ptarmigan Pass Trail
	Ptarmigan Trail
	Ptarmigan Wilderness Area
	Rainbow Park (Silverthorne)
	Sapphire Point Loop
	Sapphire Point Overlook and Picnic Area
	Silver Mountain Park
	Silverthorne Mountain Park
	Silverthorne Open Space
	Swan Mountain Rec Area
	Tenderfoot Trail
	Trail/Frisco Lake Front Trail
	Trent Park
	Triangle Park
	Tenmile-Vail Pass National Recreation Trail
	Walter Byron Memorial Park
	West Dillon Overlook
	Willow Preserve Open Space
	Windy Point Campground
Straight Crook	Ptarmigan Peak Wilderness
Straight Creek	Ptarmigan Trail
(milepost 208 to 214)	Ptarmigan Pass Trail

Table 6. Landscape Units in Summit County





4.4 Clear Creek County

Most land in Clear Creek County is publicly owned and mostly consists of the Arapaho and Roosevelt National Forests, with a small portion of Pike and San Isabel National Forests. Development in the county is primarily within incorporated towns and unincorporated areas along the interstate and other major roadways. Mountainous terrain and federal jurisdiction prohibit community development throughout much of the county.

4.4.1 Landscape Character

The I-70 highway enters Clear Creek County from the west at the Loveland Ski Area, where dramatic views are enclosed by the Continental Divide. The Arapaho and Roosevelt National Forests have rated lands along the slopes of the Continental Divide as Class "A" scenery (the highest rating for scenic quality). The western portions of Clear Creek County are characterized by the largely undeveloped forest setting of Herman Gulch to Silver Plume. Herman Gulch has a unique character within the Corridor because it is the first dominant rural forest setting that appears to be comparatively undeveloped as one travels west through the Corridor. The interstate traverses a glaciated, U-shaped valley from the Loveland area to Empire, where the landscape transitions to an unglaciated, rugged, V-shaped canyon. Starting at Silver Plume, county lands are more developed, but still dominated by the mountainous terrain, through Georgetown, Lawson, Dumont, Downieville, and Idaho Springs. The rugged and rural Clear Creek Canyon and historic mining area are the primary contributors to the identity of Clear Creek County. The Georgetown-Silver Plume Historic District encompasses an area of extensive historic mining activities with many mine tailings, shafts, and mill remains visible from the interstate and surrounding areas, as well as the many colorful and historic buildings. Clear Creek County is best known for its mineral extraction history, the Loveland Ski Area, proximity to the gambling community (in Gilpin County), and 14,000-foot peaks.

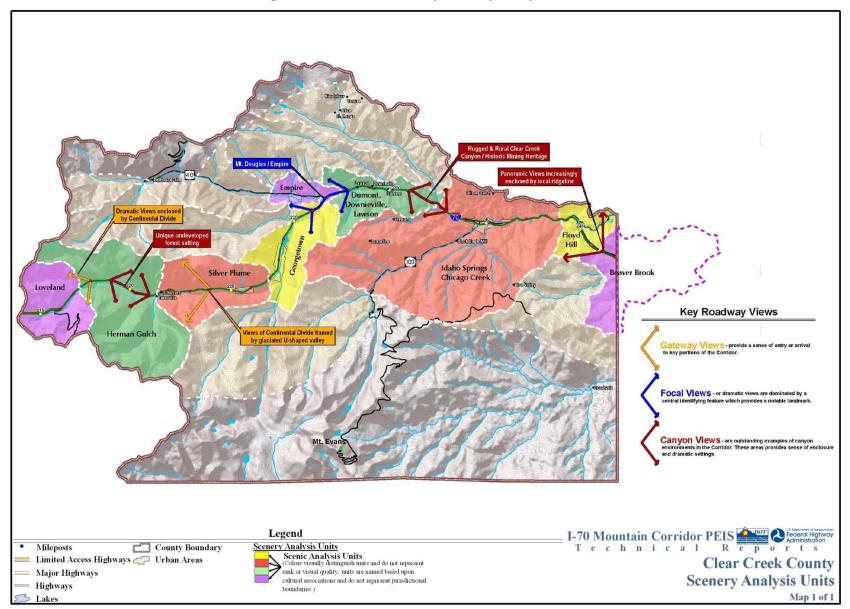
4.4.2 Key Viewpoints and I-70 Views

Portions of the I-70 highway near the Loveland area are within foreground views of recreation resources. Sensitive viewpoints are primarily related to the Loveland Ski Area, and trails such as the Loveland Pass Trail and the Bakerville to Loveland Trail in the Arapaho and Roosevelt National Forests. Sensitive viewpoints at Herman Gulch include designated recreation areas within the Arapaho and Roosevelt National Forests. The Continental Divide National Scenic Trail crosses under the I-70 highway in this unit (via Herman Gulch).

Sensitive viewpoints at Georgetown and Silver Plume include residential areas, roadways, and designated recreation areas. Residences within these units are located within the communities of Silver Plume and Georgetown, which are both lower in elevation than the interstate. Views within these communities toward the I-70 highway are dominated by large fill slope banks associated with the highway grade. **Table 7** and **Figure 8** below provide the individual landscape units that occur in Clear Creek County and the key viewpoints that occur in each landscape unit.

Landscape Units	Key Viewpoints
Loveland (milepost 214 to 217)	Bakerville to Loveland Trail Loveland Ski Area Loveland Pass Trail
Herman Gulch (milepost 217 to 221)	Bakerville to Loveland Trail Bard Creek Trail Herman Gulch/Continental Divide National Scenic Trail Kearney Gulch Trail Watrous Gulch Trail
Silver Plume (milepost 221 to 227)	Bard Creek Trail Continental Divide National Scenic Trail Georgetown to Silver Plume Bike Trail Silver Plume Mountain Trail
Georgetown (milepost 227 to 232)	Town of Georgetown Empire Pass Trail Facility/Tennis Courts Georgetown to Silver Plume Bike Trail Georgetown Recreation Area Georgetown City Park Georgetown Ballfields Georgetown Recreation Georgetown Lake Rec Area
Empire Area (milepost 232 to 233)	US 40
Lawson, Downieville, and Dumont (milepost 233 to 237)	Red Elephant Hill Trail Scott Lancaster Memorial Bike Path/Bike Way Whitewater Rafting on Clear Creek
Idaho Springs/Chicago Creek (milepost 237 to 243)	Town of Idaho Springs Citizens Park Clear Creek Metropolitan District Rec Center Cooper Park Courtney Ryley Cooper Park East End Ballfields
Floyd Hill (milepost 243 to 246)	Scott Lancaster Memorial Bike Path/Bike Way
Beaver Brook (milepost 246 to 252)	Bergen Park Elk Meadow Park Fillius Park Genesee Park Jefferson County Open Space Painters Pause Park

Table 7. Landscape Units in Clear Creek County





I-70 Mountain Corridor PEIS August 2010

4.5 Jefferson County

The easternmost extent of the Corridor under consideration is within a small portion of Jefferson County. Starting at the western county line, the I-70 highway runs through Beaver Brook, then through Mount Vernon Canyon. This area features panoramic views toward the eastern plains and offers westward travelers their first panoramic views to the Continental Divide, framed by a bridge at milepost 254 locally known as the "Picture Bridge." The interstate then passes through the Hogback, where exposed geologic layers in the road cut through Dinosaur Ridge (the Hogback) provide a framed entry to the foothills, ending at Rooney Valley.

4.5.1 Landscape Character

The I-70 highway travels west from Beaver Brook through a V-shaped valley until reaching the sharp crest of Hogback ridge. East of the Hogback is Rooney Valley, a flat terrain with open and expansive views to the Front Range. Beaver Brook is an open, panoramic environment with rugged terrain composed of hard resistive rock—primarily the Idaho Spring Formation (metamorphic rock) with small pockets of Silverthorne Formation (granite and igneous rock). The landscape transitions to the closed canyon environment of Mount Vernon Canyon with panoramic views at the west end high point.

The Hogback is a sharp-crested ridge with steep slopes on both sides, formed by the erosion of steeply tilted rock layers. Vegetation along this ridge includes a mosaic of grassland, mountain scrub, and juniper woodland. Jefferson County Open Space surrounds much of this ridge, which is highly valued for recreational and educational opportunities and for geologic and paleontological resources. This area is also a popular migration corridor for many raptors, including eagles, hawks, kestrels, merlins, falcons, turkey vultures, and ospreys. There is an abrupt change in elevation from the Hogback down to the Rooney Valley floor.

4.5.2 Key Viewpoints and I-70 Views

Sensitive viewpoints from Beaver Brook through the Rooney Valley include dispersed residences in unincorporated Jefferson County and dispersed and designated recreation and residences with the communities of Genesee and Golden. Close proximity parks and recreation areas include Genesee Park, Matthews/Winters Park, Hogback Park, and Green Mountain Park. Many hiking and bike trails are located in these Jefferson County open space lands. **Table 8** and **Figure 9** below provide the individual landscape units that occur in Jefferson County and the key viewpoints that occur in each landscape unit.

Landscape Units	Key Viewpoints
Mount Vernon Canyon (milepost 252 to 259)	Apex Park Apex Trail Beaver Brook Trail Bonanza Trail Chimney Creek Trail Genesee Park Grubstake Loop Trail Jefferson County Open Space Katherine Craig Park Kinney Run Trail Lookout Mountain Nature Center Matthews/Winters Park Pick N' Sledge Trail Red Rocks Trail Village Walk Trail Windy Saddle Park
Hogback (milepost 259)	Dakota Ridge Trail Green Mountain Park Hogback Park
Rooney Valley (milepost 259 to 261)	Green Mountain Park

Table 8. Landscape Units in Jefferson County

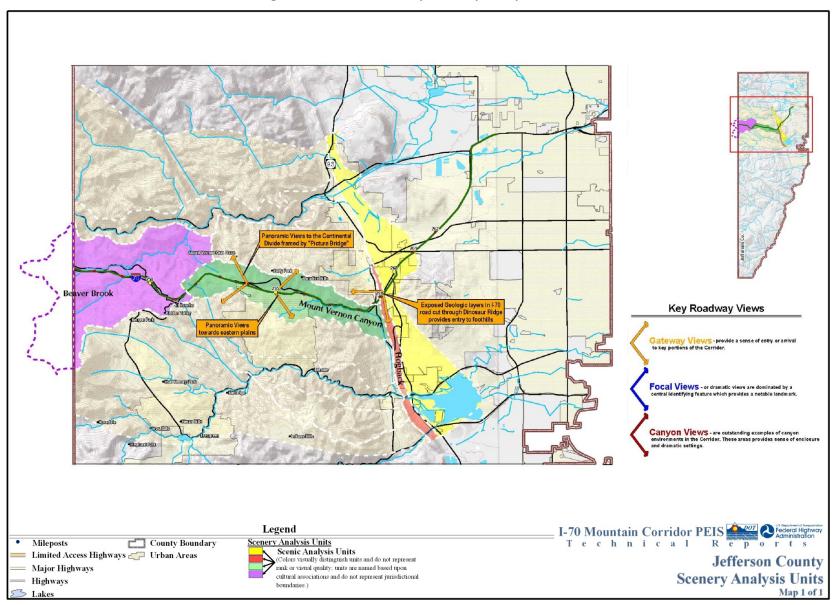


Figure 9. Jefferson County Scenery Analysis Units

4.6 Visual Conditions and Scenic Attractiveness by Landscape Unit

As described in the Methodology section, CDOT classified the existing visual conditions and scenic attractiveness for each landscape unit. **Table 9** illustrates those classifications by the 27 landscape units throughout the Corridor. Additionally, percentages provided in the table indicate the extent to which the highway is visible within each Landscape Unit (whether in foreground, middleground, or background views) cumulatively from the various key viewpoints. Where there is overlap between various views, closer proximity is taken into account. For example, where foreground and middleground views from various key viewpoints occur along the same location of the road, that area is recorded as foreground. Where middleground and background views from various key viewpoints occur along the same location of the road, that area is recorded as middleground.

		for Cons	Landscape Qualities and Scenery Concepts for Consistent and Quantifiable Visual Resource Assessment							
	Landscape Units	Existing Visual	Landscape Scenic	Amount that I-70 Occupies FG, MG, BG Views from Viewpoints						
		Conditions ¹	Conditions ¹ Attractiveness ²		MG ³	BG ³				
Garfield County	Glenwood Springs (milepost 113 to 118)	111	В	47%	1%	52%				
Garf Cou	Glenwood Canyon (milepost 118 to 128)	I	A	58%	4%	38%				
	Colorado River/Dotsero (milepost 128 to 134)	II and III	В	60%	19%	21%				
	Lower Eagle River Canyon (milepost 134 to 139)	II and III	В	75%	20%	5%				
	Eagle Valley/ Eagle – Gypsum (milepost 139 to 148)	II and III	В	97%	3%	0%				
unty	Red Canyon (milepost 148 to 153)	I	А	82%	16%	2%				
Eagle County	Wolcott (milepost 153 to 160)	II and III	В	96%	3%	1%				
ů	Eagle Valley/Avon (milepost 160 to 170)	II and III	В	96%	4%	0%				
	Dowd Canyon (milepost 170 to 172)	II	В	95%	5%	0%				
	Vail (milepost 172 to 182)		В	80%	10%	10%				
	Vail Pass/Black Gore Creek (milepost 182 to 190)	I	A and B	62%	16%	22%				

Table 9. Visual Conditions and Scenic Attractiveness by Landscape Unit

		for Cons	Landscape Qualities and sistent and Quantifiable V	d Scenery Conc /isual Resource	epts Assessmen	t	
	Landscape Units	Existing Visual	Landscape Scenic	Amount that I-70 Occupies FG, MG, BG Views from Viewpoints			
		Conditions ¹	Attractiveness ²	FG ³	MG ³	BG ³	
	Copper Mountain (milepost 190 to 195)	II	A and B	95%	5%	0%	
Summit County	Officers Gulch and Tenmile Canyon (milepost 195 to 201)	II	А	91%	3%	7%	
	Blue River Valley (milepost 201 to 208)	Ш	A and B	90%	3%	7%	
	Straight Creek (milepost 208 to 214)	Ш	A and B	7%	37%	56%	
	Loveland (milepost 214 to 217)	II	A and B	70%	30%	0%	
	Herman Gulch (milepost 217 to 221)	II	A and B	97%	3%	0%	
	Silver Plume III III		A and B	92%	8%	0%	
unty	Georgetown (milepost 227 to 232)		A and B	98%	2%	0%	
eek Co	Empire Area (milepost 232 to 233)	II	В	90%	8%	0%	
Clear Creek County	Lawson, Downieville, and Dumont (milepost 233 to 237)	Ш	В	100%	0%	0%	
	Idaho Springs/Chicago Creek III (milepost 237 to 243)		В	100%	0%	0%	
	Floyd Hill (milepost 243 to 246)		В	100%	0%	0%	
	Beaver Brook (milepost 246 to 252)	Ш	В	87%	3%	0%	
ty	Mount Vernon Canyon (milepost 252 to 259)	II	В	80%	20%	0%	
Jefferson County	Hogback (milepost 259)	Π	В	100%	0%	0%	
Jef Cc	Rooney Valley (milepost 259 to 261)	111	В	100%	0%	0%	

¹ Rating of existing disturbances related to community development and I-70 and their effect on the integrity of the landscape setting, regardless of scenic attractiveness.

I = Natural landscapes that appear untouched by human activities

II = Natural appearance of landscape remains dominant, evidence of human activities is minor or resembles natural patterns

III = Developed areas or town sites

² Shared USFS and BLM classification of the natural landscape setting.
 Class A = Rare example of landscape type in the region
 Class B = Areas in which there is a combination of some outstanding features and some that are fairly common to the region
 Class C = Areas of homogeneous features occurring for many miles without variation

 3 **FG** = Foreground: views within 0 to 0.5 mile from the observer

MG = Middle ground: views between 0.5 to 3 miles away from the observer

BG = Background: views beyond 3 miles

Key to Abbreviations/Acronyms ARNF = Arapaho and Roosevelt National Forests USFS = United States Forest Service

BLM = Bureau of Land Management WRNF = White River National Forest

4.7 Federal Lands

The visual designations of the Bureau of Land Management and United States Forest Service lands remained as determined by those agencies. According to the visual management guidelines established by the Bureau of Land Management, lands within the project area have a visual class rating of Class 2 in close proximity to the Eagle River and Class 3 on adjacent hillsides. No Bureau of Land Management lands within the project area have visual class ratings of Class 1, Class 4, or Class 5.

White River National Forest lands within the project area have Scenic Integrity Objective ratings ranging from *Very High* to *Very Low*. The Eagles Nest Wilderness Area and the Gore and Tenmile mountain ranges have ratings of *Very High*. Land between Avon and Vail, Copper Mountain, and between Frisco and Straight Creek have ratings of *Very Low*.

Arapaho and Roosevelt National Forest lands within the project area have ratings of *High* and *Low*. None of these lands within the project area have ratings of *Very High*, *Moderate*, *Very Low*, or *Unacceptably Low*. Land between Herman Gulch and Silver Plume have a classification of *High*. The Loveland Ski Area is classified as *Low*. **Table 10** includes the classification ratings for all Bureau of Land Management and United State Forest Service lands throughout the Corridor.

		Federal La	ands Visual Managemer	nt Guidelines
	Landscape Units	WRNF Scenic Integrity Objectives	ARNF Scenic Integrity Objectives	BLM Visual Resource Management
Garfield County	Glenwood Springs (milepost 113 to 118)	N/A	N/A	Class 2
Garf Cou	Glenwood Canyon (milepost 118 to 128)	• High	N/A	N/A
nty	Colorado River/Dotsero (milepost 128 to 134)	N/A	N/A	Class 2 Class 3 Class 4
jle County	Lower Eagle River Canyon (milepost 134 to 139)	N/A	N/A	Class 2 Class 3
Eagle	Eagle Valley/ Eagle – Gypsum (milepost 139 to 148)	N/A	N/A	Class 2 Class 3

Table 10. Classifications of Federal Lands in the Corridor

			ands Visual Managemer	
	Landscape Units	WRNF Scenic Integrity Objectives	ARNF Scenic Integrity Objectives	BLM Visual Resource Management
	Red Canyon (milepost 148 to 153)	N/A	N/A	Class 2
	Wolcott (milepost 153 to 160)	N/A	N/A	Class 2
ť	Eagle Valley/Avon (milepost 160 to 170)	Moderate	N/A	Class 2
Eagle County	Dowd Canyon (milepost 170 to 172)	Moderate	N/A	N/A
Eagle	Vail (milepost 172 to 182)	• Very Low • Moderate	N/A	N/A
	Vail Pass/Black Gore Creek (milepost 182 to 190)	• Moderate • High • Very High	N/A	N/A
	Copper Mountain (milepost 190 to 195)	 Very Low Moderate High Very High 	N/A	N/A
County	Officers Gulch and Tenmile Canyon (milepost 195 to 201)	• Moderate N/A • Very High		N/A
Summit County	Blue River Valley (milepost 201 to 208)	• Low • Moderate • High • Very High	N/A	N/A
	Straight Creek (milepost 208 to 214)	• Moderate • High • Very High	N/A	N/A
	Loveland (milepost 214 to 217)	N/A	• Low	N/A
nty	Herman Gulch (milepost 217 to 221)	N/A	• High	N/A
ek Cou	Silver Plume (milepost 221 to 227)	N/A	N/A	N/A
Clear Creek County	Georgetown (milepost 227 to 232)	N/A	N/A	N/A
Cle	Empire Area (milepost 232 to 233)	N/A	N/A	N/A
	Lawson, Downieville, and Dumont (milepost 233 to 237)	N/A	N/A	N/A

		Federal Lands Visual Management Guidelines						
	Landscape Units	WRNF Scenic Integrity Objectives	ARNF Scenic Integrity Objectives	BLM Visual Resource Management				
	Idaho Springs/Chicago Creek (milepost 237 to 243)	N/A	N/A	N/A				
	Floyd Hill (milepost 243 to 246)	N/A	N/A	N/A				
	Beaver Brook (milepost 246 to 252)	N/A	N/A	N/A				
County	Mount Vernon Canyon (milepost 252 to 259)	N/A	N/A	N/A				
	Hogback (milepost 259)	N/A	N/A	N/A				
Jefferson	Rooney Valley (milepost 259 to 261)	N/A	N/A	N/A				

Table 10. Classifications of Federal Lands in the Corridor

¹ USFS Very High/BLM Class 1 = Allows for ecological changes only

USFS High/BLM Class 2 = Allows for no changes evident in any of the basic elements

USFS Moderate/BLM Class 3 = Must remain visually subordinate

USFS Low/BLM Class 4 = May visually dominate, but must borrow attributes of the characteristic landscape

USFS Very Low/BLM Class 5 = Visually dominates the characteristic landscape

Key to Abbreviations/Acronyms

ARNF = Arapaho and Roosevelt National Forests WRNF = White River National Forest BLM = Bureau of Land Management USFS = United States Forest Service

Section 5. Environmental Consequences

5.1 Direct Impacts

The following provides an overview of the anticipated project/setting contrast and resulting visual impacts, organized by county, to allow the reader to identify key impacts in familiar areas. **Appendix B** describes impacts at the detailed Landscape Unit level.

As described below, each alternative would include various components that could affect the visual setting along the Corridor. The degree to which alternatives affect the setting would depend primarily on the level of visual contrast associated with proposed elements and the proximity from which they are viewed. It is important to note that Action Alternatives within the Corridor would primarily be within foreground distance zones (88 percent) from sensitive community and recreation viewpoints, while middleground and background distance zones would represent a relatively minimal portion (6 percent each).

5.1.1 Alternative Components and Contrast Corridorwide

Each alternative considered in the *I-70 Mountain Corridor PEIS* would include various components that could affect the visual setting along the Corridor. Some components would more likely attract attention than others. Common elements to all Action Alternatives would include cut-and-fill slopes and retaining walls in select locations where terrain changes would be necessary to accommodate the alignment within

the mountainous terrain. Vertical elements (such as elevated structures and retaining walls) would tend to attract more attention from views that are inferior (below) or normal (even) to the alternative. Horizontal elements (such as additional pavement and median treatment) would attract attention from views that are superior (above) to the alternative, however, would not attract attention from views that are inferior (below) or normal (even) to the alternative. **Appendix B** documents the degree of visual contrast associated with terrain changes and the addition of structural elements at the landscape unit level.

The existing landscape character of the Corridor setting would be largely retained under the No Action Alternative; however, areas of currently disturbed slopes would continue to degrade the local setting. Existing disturbances within the project area are dominant in the characteristic landscape and do not repeat form, line, color, or texture common to the surrounding landscape. Views from the existing highway and views of the highway from critical viewpoints would not change substantially in the short term. The No Action Alternative would consist of several planned or permitted projects, which are described in detail in the *I-70 Mountain Corridor Alternatives Development and Screening Technical Report* (CDOT, August 2010). No additional construction activities would create visual impacts under the No Action Alternative.

The Minimal Action Alternative footprints include auxiliary lanes, curve safety modifications, and conceptually defined interchange modifications. It is important to note that these interchange areas are design estimations during the Tier 1 process. While these Minimal Action components could result in cut-and-fill slopes, they generally would involve modifications to existing structures and are not anticipated to have the same level of visual impact that would be expected of a new structure. The total number of miles of visual impact of each alternative would include the number of miles of the Minimal Action component associated with it. The Minimal Action Alternative would result in localized changes and would primarily result in changes that do not attract attention and are subordinate to the setting (weak contrast). The Minimal Action Alternative is anticipated to result in the least visual impacts.

The Rail with Intermountain Connection Alternative would use the existing Union Pacific Railroad track from the Eagle County Airport to the Minturn interchange and would require new electric rail between Vail and C-470. No new structures or landform changes would be necessary with the use of the existing Union Pacific Railroad track; this portion of the Rail with Intermountain Connection Alternative would not result in visual contrast. The Rail with Intermountain Connection would partially occur on existing Union Pacific Railroad track and partially on newly constructed track. The newly constructed portions of track could result in disturbance of existing vegetation and alteration of land forms. The electric rail alignment would include catenary structures, for which the visual contrast is considered to be moderate. While the rail would be primarily on-grade (for 83 miles), portions of this alternative would be elevated (35 miles) where necessary to minimize the footprint, cross from one side of the interstate to the other, or avoid sensitive resources. In the elevated portions, the ail component would include piers spaced every 80 to 100 feet and require a solid deck. These elevated portions of rail are anticipated to result in very strong visual contrast. Elevated portions of the Rail with Intermountain Connection Alternative (30 percent) would result in changes that would attract attention and dominate the setting (very strong contrast). Ongrade portions (70 percent) would result in changes that are noticeable but subordinate to the setting (moderate contrast). The Rail with Intermountain Connection Alternative is anticipated to result in some of the greatest visual impacts among the alternatives.

The Advanced Guideway System Alternative is anticipated to result in changes that would attract attention and dominate the setting (strong contrast). Although the specific technology for the Advanced Guideway System has not been finalized, it is planned to be a completely elevated system occurring throughout the Corridor between mileposts 142 and 260. Piers are expected to be spaced every 80 to 100 feet along the entire length of the alternative. The guideway could be a tubular design, which is similar to a lattice structure, and would allow for portions of the landscape to be seen beyond it, creating a lesser visual contrast than a solid deck (as required for portions of the elevated Rail). Because this alternative

would be completely elevated for 118 miles, the Advanced Guideway System Alternative is anticipated to result in the greatest visual impacts.

The Dual-Mode and Diesel Bus in Guideway alternatives would essentially be the same in appearance. These alternatives, which are proposed within the median of the I-70 highway, would include multiple 3-foot-tall guideway barriers. Between Silverthorne and the Eisenhower-Johnson Memorial Tunnels, two barriers would be required to accommodate a single bus lane. From the Eisenhower-Johnson Memorial Tunnels to C-470, three barriers would be required to accommodate two directions of bus lanes. These are anticipated to result in moderate to strong visual contrast, where an existing median is open and would be closed as a result of the bus in guideway facility. In other locations where the median between eastbound and westbound lanes is currently closed and the transportation footprint would simply be widened, the Dual-Mode and Diesel Bus in Guideway alternatives are anticipated to result in moderate the alternative alignment within mountainous terrain. The Dual-Mode and Diesel Bus in Guideway alternative alignment within mountainous terrain. The Dual-Mode and Diesel Bus in Guideway alternative alignment within mountainous terrain. The Dual-Mode and Diesel Bus in Guideway alternative alignment within mountainous terrain. The Dual-Mode and Diesel Bus in Guideway alternatives would primarily be on-grade in the median and would result in changes that do not attract attention and are subordinate to the setting (weak contrast). In areas where these alternatives would be elevated, such as in Idaho Springs and Floyd Hill, they would attract attention and dominate the setting (very strong contrast).

The Highway alternatives would include construction of two additional traffic lanes (general-purpose or reversible). While the Highway alternatives would be primarily on-grade, portions of these alternatives would be elevated where necessary to minimize the footprint and avoid sensitive resources. Highway alternatives would include piers spaced every 80 to 100 feet along elevated portions of the alternatives. These elevated portions of highway (Idaho Springs and Floyd Hill) would result in very strong visual contrast. Locations where the Highway alternatives would transition from a currently open, grass median between the eastbound and westbound lanes to a closed, paved median, a strong to moderate visual contrast is anticipated. Areas of large-scale retaining walls and major cut-and-fill slopes would result in changes that attract attention (strong contrast). Changes associated with the Highway alternatives would range from very strong to weak contrast.

The Combination alternatives would include combinations of project elements described above, creating a wider transportation Corridor footprint than Transit or Highway alternatives alone. The ail component of the Combination Six-Lane Highway with Rail and Intermountain Connection Alternative would be ongrade primarily within the median east of the Eisenhower-Johnson Memorial Tunnels and would result in changes that are noticeable but subordinate to the setting (moderate contrast). The Advanced Guideway System component of the Combination Six-Lane Highway with Advanced Guideway System Alternative would be elevated within the median, which would result in changes that attract attention and dominate the setting (strong contrast).

Generally the combination of a transit and highway facility results in stronger contrast due to more complex components and a wider transportation footprint. The Combination Six-Lane Highway with Rail and Intermountain Connection Alternative is anticipated to be among the alternatives with the greatest visual impacts. The Combination Six-Lane Highway with Advanced Guideway System Alternative is anticipated to result in the greatest visual impacts. Changes associated with the Combination Six-Lane Highway with Bus in Guideway Alternative would range from very strong to weak contrast. In areas where these alternatives would be elevated, such as in Idaho Springs and Floyd Hill, they would attract attention and dominate the setting (very strong contrast).

The Preferred Alternative is presented as a range because the adaptive management component allows it to be implemented based on future needs and associated triggers for further action. **Chapter 2, Section 2.7** of the PEIS describes the triggers for implementing components of the Preferred Alternative. The Advanced Guideway System is included in both the Minimum and Maximum Programs of the

Preferred Alternative. As such, the Preferred Alternative would create a strong visual contrast throughout the Corridor and is among the alternatives with the highest impacts. If the Preferred Alternative is fully implemented with the Maximum Program of improvements, additional impacts would occur from the introduction of highway widening through all of Clear Creek County would have the potential to result in stronger contrast (very strong) due to more complex components and a wider transportation footprint.

The Advanced Guideway System, Bus in Guideway, Combination alternatives, and the Preferred Alternative (Minimum and Maximum Programs) would have impacts primarily in the moderate to high category.

Chart 1 illustrates the number of miles of very strong, strong, moderate to strong, moderate, and weak visual contrast associated with each Action Alternative throughout the Corridor.

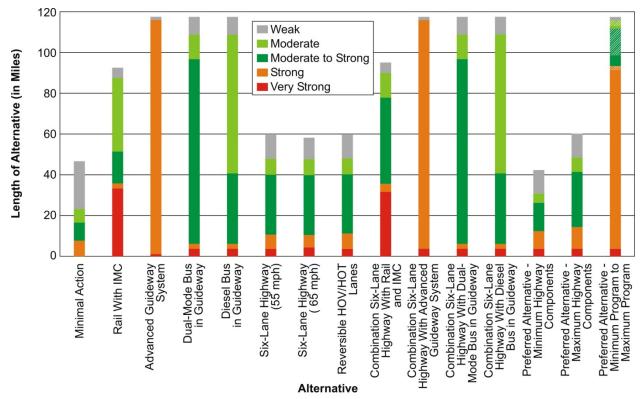


Chart 1. Total Miles of Visual Contrast Corridor-Wide

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

HOT = High Occupancy Toll IMC = Intermountain Connection

Chart 2 illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each Action Alternative throughout the Corridor.

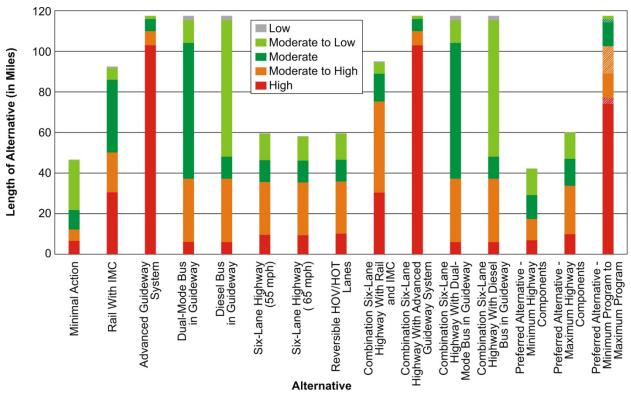


Chart 2. Total Miles of Visual Impacts Corridor-Wide

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

HOT = High Occupancy Toll IMC = Intermountain Connection

5.1.2 Visual Contrast from Alternative Components by County

The following describes the visual contrast and visual impacts expected from the Action Alternatives in each Corridor county. The extent of visual contrast and impact of alternatives is related to both the length of impact and severity of impact along the Corridor. By presenting impacts according to both their length of impact (by number of miles) and severity of impact (weak to very strong and low to very high), this approach allows the alternatives to be compared for both the context and intensity of impacts. For instance, an alternative may extend a long distance but create only minor changes to the visual landscape along its reach. Another alternative may also extend a long distance but have some or many areas where visual changes are more pronounced. The No Action Alternative is not included in the comparison of impacts because improvements included under the No Action Alternative are also included in each of the Action Alternatives, and therefore, are part of the same baseline.

Garfield County

Only the Glenwood Springs interchange improvement at milepost 116 would occur in Garfield County, associated with the Minimal Action Alternative but would be implemented under all Action Alternatives,

including the Preferred Alternative. As illustrated on **Chart 3 and Chart 4**, this component is anticipated to result in weak contrast and low visual impacts.

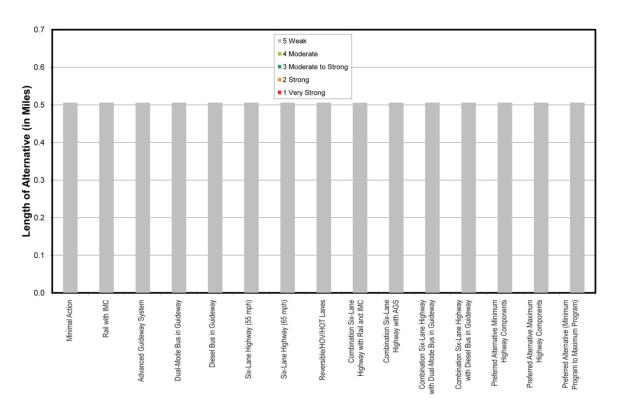


Chart 3. Visual Contrast, Action Alternatives in Garfield County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

HOT = High Occupancy Toll IMC = Intermountain Connection

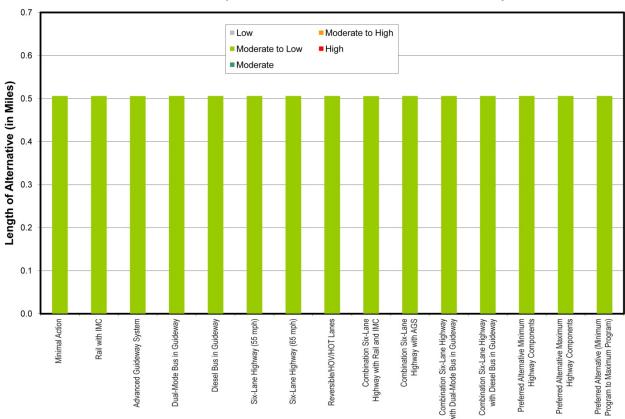


Chart 4. Visual Impacts, Action Alternatives in Garfield County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

Eagle County

Views in Eagle County are primarily within foreground distance zones (93 percent). Middleground and background distance zones represent a relatively minimal portion (6 percent and 1 percent, respectively) of the Corridor within Eagle County.

Within Eagle County, the Rail with Intermountain Connection Alternative would consist of (1) the Intermountain Connection, which involves use of the Union Pacific Railroad track from the Minturn interchange to the Eagle County Airport, combined with (2) a new electric rail facility. Because no new structures or landform changes are necessary with the use of the existing Union Pacific Railroad track, this portion of the Rail with Intermountain Connection Alternative is not anticipated to result in visual contrast. In areas where the new rail facility would be elevated through Eagle County (approximately 15 miles in select locations between Dowd Canyon and east Vail Pass), it is anticipated to dominate the setting and result in very strong contrast. The on-grade portions of the Rail with Intermountain Connection Alternative are anticipated to result in moderate to strong visual contrast, where an existing

median is open and would be closed as a result of the rail facility. Otherwise, the on-grade portions of this alternative are anticipated to result in moderate to weak contrast.

The Advanced Guideway System Alternative would be a completely elevated system. An Advanced Guideway System, while relatively less visually complicated and obtrusive than the elevated rail, is anticipated to result in changes that would attract attention and result in strong visual contrast. The Preferred Alternative includes the same components as the Advanced Guideway System Alternative in Eagle County.

Highway improvements at Dowd Canyon, Wolcott, and Vail Pass are anticipated to result in strong contrast where major landform changes are necessary to accommodate the alternative in this mountainous terrain. The Six-Lane Highway 65 mph Alternative includes a tunnel through Dowd Canyon and, therefore, results in greater impacts than the Six-Lane 55 mph Alternative that includes modifications to the existing highway curves. Due to the topography through Eagle County, the Highway alternatives are likely to require large retaining walls and/or major cut-and-fill slopes that would attract attention and dominate the setting. The range of visual contrast associated with project elements is illustrated in **Chart 5**.

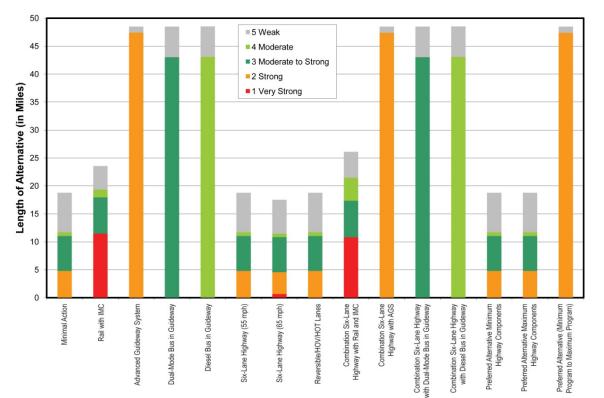


Chart 5. Visual Contrast, Action Alternatives in Eagle County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

HOT = High Occupancy Toll IMC = Intermountain Connection High visual impacts within Eagle County would occur in areas where strong or very strong contrast is anticipated to occur within foreground or middleground distance zones of sensitive views. A primary example of high visual impacts within Eagle County would include elevated rail and Advanced Guideway System platforms along Vail Pass. Vail Pass is largely undeveloped and the addition of an elevated platform would be noticeable to the casual observer. **Chart 6** illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each Action Alternative.

In Eagle County, the Advanced Guideway System, Combination Six-Lane Highway with Advanced Guideway System alternatives, and the Preferred Alternative would begin at milepost 142 (Eagle County Airport) and extend east to the border of the county at milepost 190, and, therefore, would have the most number of miles of visual impact. These alternatives would result in visual impact along 48 miles of the Corridor within the county and are anticipated to result in 43.1 miles of high visual impact. The Rail with Intermountain Connection and Combination Six-Lane Highway with Rail and Intermountain Connection alternatives would begin at milepost 142, with the Intermountain Connection component utilizing the existing Union Pacific Railroad line, therefore resulting in no visual impacts for this portion. Visual impacts would begin at milepost 171, where the new portion of the Intermountain Connection begins and continues throughout the rail transit portion, ranging from low to moderate to high.

The Bus in Guideway Alternative would require no change to the existing I-70 highway in Eagle County; the buses would operate in mixed traffic on the existing I-70 highway and, therefore, would result in no additional visual impact within the county. The low to moderate impacts shown in **Chart 6** are entirely the result of Minimal Action components associated with these alternatives.

The Highway alternatives, Combination Six-Lane Highway with Bus in Guideway Alternative, and the Preferred Alternative (Minimum and Maximum Programs) would require two additional 12-foot-wide lanes or a tunnel (65 mph only) through Dowd Canyon resulting in localized visual impacts in this area. These changes would result in impacts ranging from low to moderate to high.

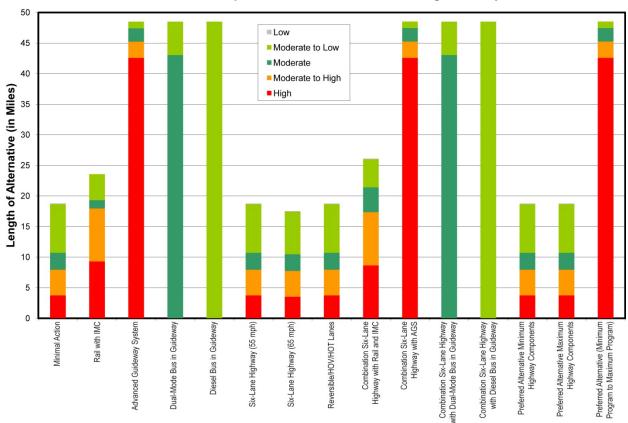


Chart 6. Visual Impacts, Action Alternatives in Eagle County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

Summit County

Views in Summit County are primarily within foreground distance zones (77 percent). Middleground and background distance zones represent a relatively minimal portion (10 percent and 13 percent, respectively.

The Transit alternatives proposed within Summit County include Rail with Intermountain Connection, Advanced Guideway System, and Bus in Guideway alternatives. The only highway improvements would be those necessary to accommodate the Bus in Guideway alternatives within the median of the I-70 highway near the Eisenhower-Johnson Memorial Tunnels.

Within Summit County, the Rail with Intermountain Connection Alternative would be elevated for a distance of approximately 12 miles in select locations near Copper Mountain and the Eisenhower-Johnson Memorial Tunnels, where it is anticipated to dominate the setting and would result in very strong contrast. The remainder of the Rail with Intermountain Connection Alternative within the county would be on-grade and is anticipated to result primarily in moderate to strong contrast.

The Advanced Guideway System Alternative would be a completely elevated system. Advanced Guideway System, while relatively less visually complicated and obtrusive than the elevated rail, is anticipated to result in changes that would attract attention and result in strong visual contrast.

The Dual-Mode and Diesel Bus in Guideway alternatives are anticipated to result in visual contrast ranging from weak to strong. In areas where long, continuous large-scale walls or major cut-and-fill slopes are necessary, these alternatives are anticipated to attract attention and dominate the setting.

The range of visual contrast associated with project elements is illustrated in Chart 7.

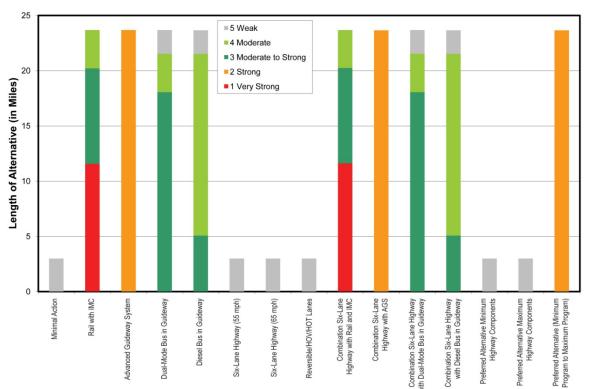


Chart 7. Visual Contrast, Action Alternatives in Summit County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

HOT = High Occupancy Toll IMC = Intermountain Connection

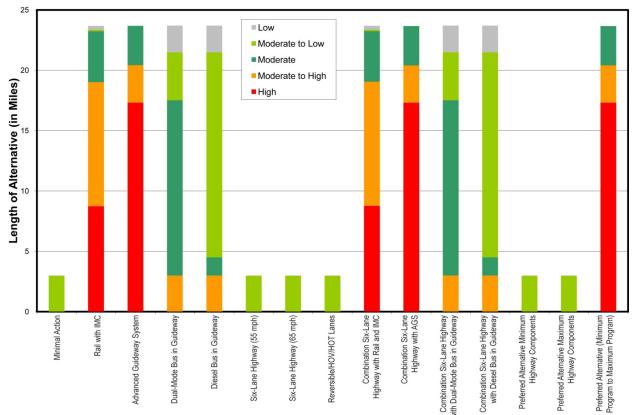
High visual impacts within Summit County would occur in areas where strong or very strong contrast is anticipated to occur within foreground or middleground distance zones of sensitive views. A primary example of high visual impacts within Summit County would include elevated rail and Advanced Guideway System platforms in select locations between Copper Mountain and Officers Gulch and at the approach to the Eisenhower-Johnson Memorial Tunnels. **Chart 8** illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each alternative.

The Rail with Intermountain Connection, Advanced Guideway System, Preferred Alternative, Combination Six-Lane Highway with Rail and Intermountain Connection, and Combination Six-Lane

Highway with Advanced Guideway System alternatives would run the full length of the interstate (mileposts 190 to 214) within Summit County and, therefore, would have the most miles of visual impacts within the county (24 miles). However, the Advanced Guideway System and Combination Six-Lane Highway with Advanced Guideway System alternatives are anticipated to each have 16.9 miles of high visual impact, whereas the Rail with Intermountain Connection and Combination Six-Lane Highway with Rail and Intermountain Connection alternatives would have only 8.7 miles of high impacts on visual resources, with another 10.3 miles in the moderate to high category.

The Bus in Guideway and Combination Six-Lane Highway with Bus in Guideway alternatives would have miles of visual impacts along the I-70 highway, resulting from a 14-foot eastbound single-lane guideway to be built from Silverthorne to Eisenhower-Johnson Memorial Tunnels (mileposts 205 to 214). The majority of these impacts would be in the low and low to moderate categories. Additional miles of impact reflect the Minimal Action components associated with these alternatives.

For the Highway Alternatives, visual impacts shown on **Chart 8** would result from Minimal Action components associated with these alternatives because Highway widening would not occur in Summit County. These impacts are anticipated to be low to moderate.





* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

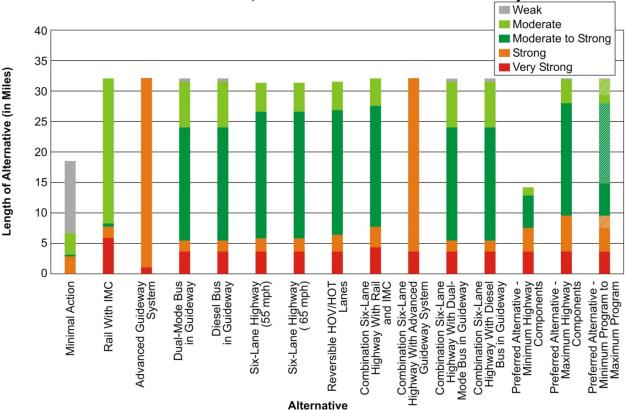
HOT = High Occupancy Toll IMC = Intermountain Connection

Clear Creek County

Views in Clear Creek County are almost completely within foreground distance zones.

Within Clear Creek County, the Rail with Intermountain Connection Alternative would be elevated for a distance of approximately 6 miles in select locations between Silver Plume and Georgetown, throughout Idaho Springs, approaching the Twin Tunnels, and at the bottom of Floyd Hill, where it is anticipated to dominate the setting and result in very strong contrast. The remainder of the Rail with Intermountain Connection Alternative throughout the county would be on-grade and is anticipated to result primarily in moderate contrast. The Advanced Guideway System Alternative and transit component of the Preferred Alternative (Minimum and Maximum Programs) would be a completely elevated system. An Advanced Guideway System, while relatively less visually complicated and obtrusive than the elevated rail, is anticipated to result in changes that would attract attention and result in strong visual contrast.

The Bus in Guideway and Highway alternatives would be elevated for a distance of approximately 3 to 4 miles throughout Idaho Springs, as well as at the bottom of Floyd Hill, where they are anticipated to dominate the setting and result in very strong contrast. These alternatives would also require large-scale retaining walls and major cut-and-fill slopes in select locations, which would also result in strong visual contrast. The range of visual contrast associated with project elements is illustrated in **Chart 9**.





* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

The specific highway components of the Preferred Alternative Minimum Program would include a section of new six-lane highway from East Idaho Springs to the top of Floyd Hill. The visual impacts associated with the Maximum Program components of the Preferred Alternative, if fully implemented would be consistent with the extent of strong to very strong visual contrast considered under the Combination Six-Lane Highway with Advanced Guideway System Alternative. Extending highway widening through all of Clear Creek County would have the potential to result in stronger contrast (very strong) due to more complex components and a wider transportation footprint.

High visual impacts within Clear Creek County would occur in areas where strong or very strong contrast is anticipated to occur within foreground or middleground distance zones of sensitive views. A primary example of high visual impacts within Clear Creek County would include elevated rail and Advanced Guideway System platforms within foreground views from Silver Plume, Georgetown, and Idaho Springs. **Chart 10** illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each Action Alternative within Clear Creek County.

All alternatives (other than the Minimal Action Alternative) would run the full length of Clear Creek County and, therefore, would affect the same number of miles of visual resources along the I-70 highway. The majority of visual impacts of the Advanced Guideway System, Combination Six-Lane Highway with Advanced Guideway System alternatives, and Preferred Alternative (Minimum and Maximum Programs) would be in the high category. The majority of visual impacts of the Rail with Intermountain Connection and the Combination Six-Lane Highway with Rail and Intermountain Connection alternatives would be in the moderate category, with some areas of high impact.

The majority of visual impacts from the Highway, Bus in Guideway, Combination Six-Lane Highway with Bus in Guideway, Combination Six-Lane Highway with Rail and Intermountain Connection, and Preferred Alternative (Minimum and Maximum Programs) alternatives would be in the moderate to high category.

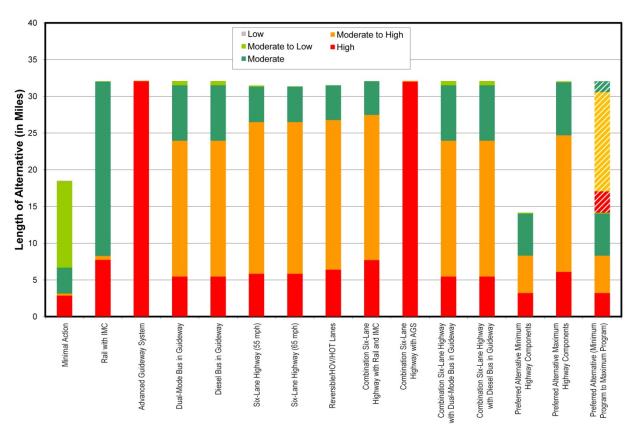


Chart 10. Visual Impacts, Action Alternatives in Clear Creek County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

Jefferson County

Views in Jefferson County are primarily within foreground distance zones (83 percent). Middleground and background distance zones represent a relatively minimal portion (16 percent and 1 percent, respectively).

The Rail with Intermountain Connection Alternative would be primarily on-grade throughout Jefferson County and is anticipated to result in moderate visual contrast with very strong contrast associated with elevated portions. Advanced Guideway System, a completely elevated system, is anticipated to result in strong visual contrast, as is the Preferred Alternative, which included the Advanced Guideway System.

The Bus in Guideway and Highway alternatives within Jefferson County would require moderate scale retaining walls and cut-and-fill slopes in select locations, resulting in moderate to strong and strong visual contrast. The range of visual contrast associated with project elements is illustrated in **Chart 11**.

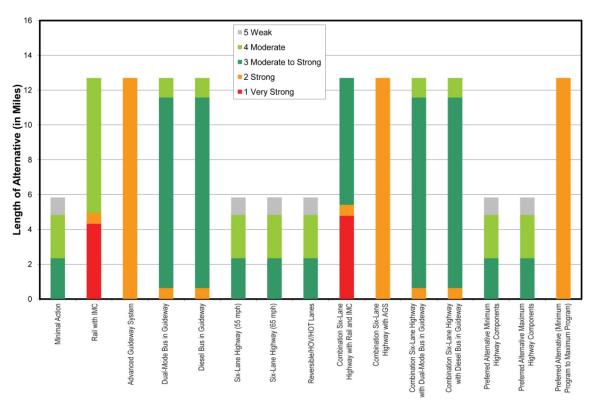


Chart 11. Visual Contrast, Action Alternatives in Jefferson County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms AGS = Advanced Guideway System HOV = High Occupancy Vehicle

HOT = High Occupancy Toll IMC = Intermountain Connection

High visual impacts within Jefferson County would occur in areas where strong or very strong contrast is anticipated to occur within foreground or middleground distance zones of sensitive views. A primary example of high visual impacts within Jefferson County would include elevated rail and Advanced Guideway System platforms within foreground views from Silver Plume, Georgetown, and Idaho Springs. **Chart 12** illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each Action Alternative within Jefferson County. The eastern terminus of all Action Alternatives would be within Jefferson County.

The Highway-only alternatives would extend 1 mile east of the Clear Creek-Jefferson County border and, therefore, would have 1 mile each of visual impact in the low to moderate category. The additional miles of visual impact shown in **Chart 12** would result from Minimal Action components associated with these alternatives.

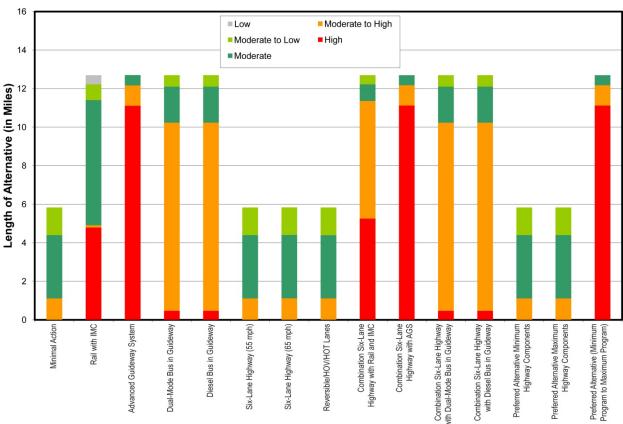


Chart 12. Visual Impacts, Action Alternatives in Jefferson County

* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

The remaining alternatives would terminate at C-470 (milepost 260), and each would have approximately 13 miles of visual impacts in the county.

The Preferred Alternative, Advanced Guideway System, and Combination Six-Lane Highway with Advanced Guideway System alternatives in Jefferson County would have visual impacts that are primarily in high and moderate to high categories. The Advanced Guideway System and Combination Six-Lane Highway with Advanced Guideway System alternatives in Jefferson County would be partially within middleground views. While strong contrast within foreground views would result in high visual impacts, strong contrast within middleground views would result in moderate to high visual impacts.

The Rail with Intermountain Connection alternative would have primarily moderate impacts on visual resources along the I-70 highway within the county. The Combination Six-Lane Highway with Rail and Intermountain Connection Alternative would have impacts primarily in the high and moderate to high categories.

5.1.3 Key Roadway Views

Roadway views would be altered to varying degrees and in varying locations from each alternative throughout the Corridor. Each alternative follows the existing alignment of the I-70 highway in close proximity, and with few exceptions stays within the right-of-way. Key features that would influence roadway views include the following alternative attributes:

- The Rail with Intermountain Connection Alternative would be elevated for a distance of 35 miles and would include catenary poles and wires for a distance of 89 miles.
- The Advanced Guideway System Alternative would be elevated for a distance of 118 miles.
- Bus in Guideway Alternative would close a currently open median for a distance of 38 miles.
- Highway alternatives would close a currently open median for a distance of 20 miles.
- Combination alternatives would include a combination of the bullets above, resulting in the widest transportation footprint.
- The Preferred Alternative would also include a combination of the Advanced Guideway System and Highway alternative bullets.

Table 11 shows generally which of the alternatives would occur in each of the key viewpoints discussed below. Cells with "X" marks indicate that the alternative would occur in that viewpoint. Blank cells indicate that the alternative would not affect that viewshed.

Scenic Views	No Action	Minimal Action	Rail with IMC	AGS	Bus in Guideway	Six-Lane Highway 55 mph	Six-Lane Highway 65 mph	Reversible HOV/ HOT Lanes	Combi- nation Six-Lane Highway with Rail and IMC	Combi- nation Six-Lane Highway with AGS	Combi- nation Six-Lane Highway with Bus in Guideway	Preferred Alternative
Glenwood Canyon												
Red Canyon												
Dowd Canyon	х	х	х	х		х	х	х	х	х	х	х
Vail Pass and Vail Valley	х	х	х	х		X ^a	X ^a	X ^a	х	х	X ^a	Х
Tenmile Canyon	х	х	х	х					х	х		х
Straight Creek	х	х	х	х	х				х	х	х	х
Herman Gulch	х	х	х	х	х	х	х	х	х	х	х	х
Empire Area	х	х	х	х	х	Х	х	х	Х	Х	х	х
Clear Creek Canyon/Fall River Road Area	х	х	x	x	х	х	х	х	х	х	х	х

Table 11. Alternatives Present within Key Viewpoints

Scenic Views	No Action	Minimal Action	Rail with IMC	AGS	Bus in Guideway	Six-Lane Highway 55 mph	Six-Lane Highway 65 mph	Reversible HOV/ HOT Lanes	Combi- nation Six-Lane Highway with Rail and IMC	Combi- nation Six-Lane Highway with AGS	Combi- nation Six-Lane Highway with Bus in Guideway	Preferred Alternative
Floyd Hill	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Genesee "Picture Bridge"	x	х	х	х	х	X ^a	X ^a	X ^a	х	х	х	Х

Table 11. Alternatives Present within Key Viewpoints

^a Auxiliary lanes only – alternative not otherwise present

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System, HOV = High-Occupancy Vehicle, HOT = High-Occupancy Toll, IMC = Intermountain Corridor, mph = miles per hour

Glenwood Canyon

Setting. The I-70 highway traverses the entire length of this 12-mile long canyon centered on the Colorado River. Roadway views through Glenwood Canyon are dominated by steep and rugged canyon walls that extend 2,500 feet above the Colorado River.

View Disruption. Although Glenwood Canyon is within the Corridor, because no alternative would occur there, no changes to roadway views from Action Alternatives are anticipated.

Red Canyon

Setting. The I-70 highway through Red Canyon parallels the Eagle River. Roadway views are dominated by the spectacular red rock escarpments, which rise 1,000 to 1,500 feet above the interstate. The canyon walls create an enclosed landscape and provide a sense of entry as the landscape transitions from open and expansive to this enclosed canyon environment. Bright red rock formations contrast vividly with dark green coniferous forest cover and grass bottomlands.

View Disruption. Although Red Canyon is within the Corridor, because no alternative would occur there, no changes to roadway views from Action Alternatives are anticipated.

Dowd Canyon

Setting. Views from the interstate vary considerably throughout Dowd Canyon, from open and expansive in areas of broad valleys to confined and enclosed within canyon environment. Interstate motorists experience diversity in color and form, viewing geologic features such as the striking 200-foot banded cliffs of the Minturn Formation. The existing highway in this area includes two lanes in each direction, with a closed median between eastbound and westbound lanes.

View Disruption. The Minimal Action, Rail with Intermountain Connection, Advanced Guideway System, Highway, Combination alternatives, and Preferred Alternative (Minimum and Maximum Programs) are proposed through Dowd Canyon. The Rail with Intermountain Connection, Advanced Guideway System alternatives, and the transit components of the Preferred Alternative (Minimum and Maximum Programs) would consist of elevated structures through Dowd Canyon and would transition from the north side to south side of the interstate at the Minturn interchange (milepost 171). This elevated crossing would result in a brief obstruction of the local canyon setting.

The driving experience would also be modified by the Highway alternatives. The Six-Lane Highway 55 mph, Reversible/High Occupancy Vehicle/High Occupancy Toll Lane alternatives, and the highway components of the Preferred Alternative (Minimum and Maximum Programs) would include a wider highway footprint through this area with the addition of two general-purpose lanes. Views along the interstate would change moderately as a result of these Highway alternatives. The Six-Lane Highway 65 mph alternative would include a tunnel that largely bypasses Dowd Canyon.

The Combination alternatives and the Preferred Alternative (Minimum and Maximum Programs) would include both highway widening and transit (Rail with Intermountain Connection or Advanced Guideway System), which would result in the greatest disruption of views and change in driving experience through Dowd Canyon.

Vail Pass and Vail Valley

Setting. Vail Pass descends into the Vail Valley through a relatively broad, U-shaped valley. Vail Pass is characterized by red sandstone formations that create a vivid contrast to the riparian shrub complex. Views along the I-70 highway in this area transition from the forested landscapes along Vail Pass to more open views of the town of Vail dominated by the barren mountain peaks rising above groves of aspen and spruce, the Vail ski areas and Vail Village.

View Disruption. Within the town of Vail, Rail with Intermountain, Advanced Guideway System, Combination Six-Lane Highway with Rail and Intermountain Connection, Combination Six-Lane Highway with Advanced Guideway alternatives, and the Preferred Alternative (Minimum and Maximum Programs) would all include transit within the median between the existing eastbound and westbound lanes. While the median through Vail is relatively wide, the transit alternative would contribute to a more urbanized driving experience through Vail.

Along Vail Pass, the Rail with Intermountain Connection, Advanced Guideway System, Combination Six-Lane Highway with Rail and Intermountain Connection, Combination Six-Lane Highway with Advanced Guideway System alternatives, and the transit components of the Preferred Alternative (Minimum and Maximum Programs) would include elevated structures that would transition from the north, to the south, and back to the north side of the I-70 highway. These alternatives would result in multiple disruptions of roadway views along Vail Pass.

The driving experience would also be modified by the Minimal Action, Highway alternatives, and the highway components of the Preferred Alternative (Minimum and Maximum Programs), which would include a wider highway footprint through this area with the addition of eastbound and westbound auxiliary lanes. Views along the interstate would change moderately as a result of these Highway alternatives.

The Combination alternatives and Preferred Alternative (Minimum and Maximum Programs) would include eastbound and westbound auxiliary lanes and transit (Rail with Intermountain Connection or Advanced Guideway System), which would result in the greatest disruption of views and change in driving experience along Vail Pass.

Tenmile Canyon

Setting. Views through Tenmile Canyon are some of the most dramatic throughout the Corridor. These views are framed by a broad U-shaped valley and are dominated by imposing peaks of the Gore and Tenmile mountain ranges.

View Disruption. The Rail with Intermountain Connection, Advanced Guideway System, Combination Six-Lane Highway with Rail and Intermountain Connection, Combination Six-Lane Highway with Advanced Guideway System alternatives, and the transit components of the Preferred Alternative

(Minimum and Maximum Programs) would include elevated structures. These alternatives would parallel the interstate on the north side throughout Tenmile Canyon. These elevated structures in close proximity to westbound travelers would result in obstruction of the local canyon setting.

Straight Creek

Setting. The Straight Creek unit provides a gateway view and a sense of entry into Summit County. The Straight Creek unit is dominated by steep, rugged terrain associated with the Continental Divide. Views along Straight Creek range from panoramic, as one travels west out of the Eisenhower-Johnson Memorial Tunnels, to more enclosed as one continues west entering the Blue River Valley. The rugged peaks of the Gore and Tenmile mountain ranges dominate these views.

View Disruption. The Rail with Intermountain Connection, Advanced Guideway System, Combination Six-Lane Highway with Rail and Intermountain Connection, Combination Six-Lane Highway with Advanced Guideway System alternatives, and transit component of the Preferred Alternative (Minimum and Maximum Programs) would include elevated structures. While Advanced Guideway System and Preferred Alternative (Minimum and Maximum Programs) would be a completely elevated system, the Rail with Intermountain Connection and Combination Six-Lane Highway with Rail and Intermountain Connection alternatives would be elevated and on-grade throughout the Straight Creek area. Panoramic views to the Williams Fork Mountain Range would be obstructed by a transition of the elevated Transit structures from the south side of the interstate to the median, which would occur approximately halfway down the Straight Creek grade into Silverthorne.

The driving experience would also be modified by the Bus in Guideway alternatives, which would each result in wider transportation footprints and would modify the median from an open median, separating the eastbound and westbound lanes to a closed, paved median. Views along the I-70 highway would change moderately as a result of these alternatives.

Herman Gulch

Setting. The Herman Gulch unit has a unique character within the Corridor in that it is the first dominant rural, forest setting that appears to be comparatively undeveloped as one travels west from C-470 on the I-70 highway. The landscape character of this unit is enclosed and defined by steep, U-shaped mountain slopes. Views in proximity to Herman Gulch are enclosed and dominated by the rural forest setting and slopes of the Continental Divide. The alpine peaks of the Continental Divide, as well as the unnatural vegetative patterns associated with the Loveland Ski Area, dominate views from the interstate within this unit.

View Disruption. The Minimal Action, Transit, Highway, Combination alternatives, and Preferred Alternative (Minimum and Maximum Programs) are all proposed through the Herman Gulch area. The Advanced Guideway System, Combination Six-Lane Highway with Advanced Guideway System alternatives, and the transit component of the Preferred Alternative (Minimum and Maximum Programs) would consist of elevated structures through this area. This elevated structure would result in obstruction of roadway views to the local forest setting.

The driving experience would also be modified by the Bus in Guideway, Highway, Combination alternatives, and Preferred Alternative (Minimum and Maximum Programs) which would each result in wider transportation footprints and would modify the median from an open median, separating the eastbound and westbound lanes to a closed, paved median. Due to the rural and pristine setting along Herman Gulch, views along the I-70 highway would change considerably as a result of these alternatives.

The Combination Six-Lane Highway with Advanced Guideway System alternative and the Minimum and Maximum Programs of the Preferred Alternative would include both highway widening and transit, and

would result in the greatest disruption of views and change in driving experience through the Herman Gulch area.

Empire Area

Setting. The Empire area is at the junction of two relatively broad valleys and is characterized by rugged terrain and historically mined areas. To the east of the Empire area, the Corridor transitions from a glaciated U-shaped valley to V-shaped canyons, meeting at a focal point, Mount Douglas, which is a visual landmark located at the confluence of these valleys.

View Disruption. The Minimal Action, Transit, Highway, Combination, and Preferred Alternative (Minimum and Maximum Programs) are all proposed through the Empire area. The Advanced Guideway System, Combination Six-Lane Highway with Advanced Guideway System alternatives, and Preferred Alternative (Minimum and Maximum Programs) would consist of elevated structures through this area. This elevated structure would result in obstruction of roadway views to the local setting.

The driving experience would also be modified by the Bus in Guideway, Highway, Combination alternatives, and Maximum Program of the Preferred Alternative, which would each result in wider transportation footprints and would modify the median from an open median, separating the eastbound and westbound lanes to a closed, paved median. Views along the interstate would change moderately as a result of these alternatives.

The Combination Six-Lane Highway with Advanced Guideway System alternative and the Maximum Program of the Preferred Alternative would include both highway widening and transit, and would result in the greatest disruption of views and change in driving experience through the Empire area.

Clear Creek Canyon/Fall River Road Area

Setting. The landscape throughout Clear Creek Canyon is characterized by rugged terrain, V-shaped valleys, and historically mined lands. Surrounding hillsides include variable density montane zone with rock and eroded slopes. A large riparian floodplain along Clear Creek is lined with narrowleaf cottonwood.

View Disruption. The Minimal Action, Transit, Highway, Combination alternatives, and Preferred Alternative (Minimum and Maximum Programs) are all proposed through Clear Creek Canyon. The Advanced Guideway System, Combination Six-Lane Highway with Advanced Guideway System alternatives, and the transit component of the Preferred Alternative (Minimum and Maximum Programs) would consist of elevated structures through this area. This elevated structure would result in obstruction of roadway views to the local canyon setting.

The driving experience would also be modified by the Bus in Guideway, Highway, Combination alternatives, and Maximum Program of the Preferred Alternative which would each result in wider transportation footprints and would modify the median from an open median, separating the eastbound and westbound lanes, to a closed, paved median. Views along I-70 would change moderately as a result of these alternatives.

The Combination Six-Lane Highway with Advanced Guideway System alternative and the Maximum Program of the Preferred Alternative would include both highway widening and transit, and would result in the greatest disruption of views and change in driving experience through the Clear Creek Canyon/Fall River Road area.

Floyd Hill

Setting. Views along the I-70 highway throughout the Mount Vernon Canyon unit are primarily enclosed and are representative of the natural character of the Clear Creek County setting. Along the lower elevation portions of Floyd Hill, views are enclosed by rugged terrain.

View Disruption. The Minimal Action, Transit, Highway, Combination alternatives, and Preferred Alternative (Minimum and Maximum Programs) are all proposed along Floyd Hill. Each alternative would include elevated structures at the base of Floyd Hill associated with the proposed ramps to the Black Hawk Tunnel. This change is anticipated to dominate roadway views. The driving experience along Floyd Hill would be modified by all alternatives as a result of a wider transportation footprint. The Combination alternatives and the Preferred Alternative (Minimum and Maximum Programs) would include both highway widening and transit, and would result in the greatest disruption of views and change in driving experience along Floyd Hill.

Genesee "Picture Bridge"

Setting. A local high point along the interstate coincides with a single span bridge over the I-70 highway (Genesee Park Bridge, Exit 254) that frames the first views of the Continental Divide for westbound travelers. This bridge is locally known as the "Picture Bridge."

View Disruption. The Minimal Action, Transit, Combination alternatives, and Preferred Alternative (Minimum and Maximum Programs) are all proposed in this area. To preserve views framed by the Genesee "Picture" Bridge, all alternatives are proposed on-grade in the median through this area, rather than elevated on the north side of the interstate. Due to local terrain constraints, locating alternatives to the south would not be feasible, and locating structures to the north of the interstate would obstruct the panoramic views to the Continental Divide. The driving experience near the Genesee Bridge would be modified by Transit and Combination alternatives as a result of a wider transportation footprint, and transition from an open to a closed median, which will appear more urbanized. The Combination alternatives would include both highway widening and transit, and would result in the greatest change in driving experience in this area.

Federal Lands Management

Potential Conflicts with Management Prescriptions

By definition, alternative components resulting in very strong and strong contrast would not be compliant within lands designated as "Class 2", "Class 3," "high," or "moderate" scenic integrity objectives. Conflict with the management prescriptions could occur with the implementation of the Rail with Intermountain Connection, Advanced Guideway alternatives, or Preferred Alternative (Minimum and Maximum Programs) in proximity to the Eagles Nest Wilderness Area. This conflict is also anticipated to occur with the implementation of Rail with Intermountain Connection, Advanced Guideway System, Highway alternatives, or Preferred Alternative (Minimum and Maximum Programs) between Herman Gulch and Silver Plume. The effectiveness of mitigation to reduce visual impacts associated with Action Alternatives and to potentially bring alternatives into compliance with visual management prescriptions would be considered at the Tier 2 process.

Summary of Direct Impacts

All Action Alternatives are anticipated to result in impacts ranging from low to high depending on the level of visual contrast anticipated within the setting and the proximity in which it is viewed. It is important to note that project/setting contrast is the primary indicator of visual impacts. Because I-70 and, consequently, Action Alternatives that are closely aligned to I-70 are largely within foreground distance zones from sensitive community and recreation viewpoints, contrast associated with project elements is the primary factor in determining visual impacts.

Because the landscape character varies within each landscape unit, the result of the Action Alternative components may produce a more or less visually dominant effect. Typically, more diverse landscapes are able to absorb more change before added elements become dominant. A combination of large and multiple project components result in higher visual contrast than components fewer in number, low in diversity, and smaller in size. The level of visual contrast associated with the Action Alternatives combined with the number of viewers to fully gauge the visual impacts. The amount of visual contrast created by the project features are related to the distance of the feature from the viewers.

Based on these considerations, alternatives with larger footprints or more elevated features have higher levels of visual impact than those that add fewer new transportation components. Therefore, the No Action and Minimal Action alternatives create the least visual impact. The Minimal Action Alternative provides improvements to 24 existing interchanges, climbing lanes, and auxiliary lanes. The Rail with Intermountain Connection and Advanced Guideway System alternatives add new modes to the landscape and have the greatest single-mode impact. The Advanced Guideway System Alternative generates a larger visual impact than the Rail with Intermountain Connection Alternative because it is elevated through the Corridor, with supporting piers spaced every 80 to 100 feet and a lattice structure underneath the guideway deck. Options that build on the existing highway and increase the footprint of the highway (including the Highway alternatives) further degrade the visual landscape by increasing manmade features but result in lesser landform contrast and lesser visual impact than the Rail with Intermountain Connection and Advanced Guideway System alternatives. The 65 mph Six-Lane Alternative creates a larger impact than the 55 mph option because the former requires three new tunnel bores to accommodate the higher speed through the Corridor canyons. The Combination Alternative and the Preferred Alternative result in the greatest adverse visual impact by adding both the six-lane highway widening with curve safety improvements and the above-grade Advanced Guideway System. The range of visual impact differences between the Preferred Alternative Minimum and Maximum Programs is relatively minor given that the majority of all visual changes occur under both Programs with minimal additional impacts occurring under the Maximum Program, if fully implemented.

5.2 Indirect Impacts

The importance of the Corridor as a historical mining and modern recreation corridor influenced its settlement patterns and culminated in a transportation system unable to support current travel demand. The development of the I-70 highway has influenced land use patterns in the Corridor over the past 30 years, and a relationship between growth in traffic and population in the Corridor region (past 15 years) suggests that changes in travel demand in the future would also affect growth in the region. Indirect impacts on visual resources center on the potential for changes in the rural Corridor setting associated with possible induced growth and development associated with Action Alternatives. Currently, 13 percent of the land within the Corridor viewshed is developed, and according to adopted land use plans, an additional 19 percent of land will be converted from vacant, undeveloped land to developed land. Corridor improvements under all Action Alternatives are expected to strongly influence existing and future development trends and potentially alter the existing visual character and quality. The No Action and Minimal Action alternatives would have the potential to suppress population growth in the Corridor region. Transit alternatives could cause planned future growth to develop in concentrated patterns surrounding proposed transit stations in existing urban areas. The resulting "urbanization" due to transit could affect the "mountain-related" visual image and character of town centers. Highway alternatives could relieve Corridor congestion and facilitate, instead of suppress, growth into rural areas beyond current population projections. Section 3.7, Land Use and Right-of-Way in the PEIS and the I-70 Mountain Corridor PEIS Cumulative Impacts Technical Report provide an expanded discussion of indirect impacts relating to land use conversion.

The majority of Corridor municipalities and counties have development review design standards that are considered during the development review process. Many of these standards include preserving

ridgelines, encouraging cluster development, and maintaining distinct buffers between towns. Municipalities and counties will be principally responsible for the manner in which future development is constructed and the way in which it interacts with the natural landscapes.

5.3 Temporary Construction Impacts

Preliminary estimates would require a temporary construction easement to extend 15-feet beyond the permanent right-of-way, with an additional 15-foot sensitivity zone extending beyond the temporary construction easement. In this easement area, existing vegetation would be temporarily removed, and construction staging areas and equipment storage areas would be located here. Actual construction needs will be finalized during Tier 2 processes.

Existing construction scars are likely to be altered during future construction phases.

5.4 Impacts in 2050

Because urban development is a principal driver of visual change in the I-70 Mountain Corridor, the Action Alternatives impact visual resources based on the degree to which they accommodate or suppress growth pressures. The No Action and Minimal Action Alternatives both decrease the demand for growth in Corridor communities, which presumably reduces the amount of undeveloped lands being converted to new urban development. The other Action Alternatives, including the Minimum and Maximum Range of the Preferred Alternative, increase demand for growth in Corridor communities, which likely results in conversion of undeveloped land to developed land. However, the visual impact of new development varies greatly, depending on the policies communities implement to guide or control growth. For example, dense development on a scale disproportionate to a rural mountain setting has greater visual impacts than integrated, dispersed development, even though the latter develops more land.

By 2050, the Action Alternatives likely have less influence on visual resources than community controls on growth and land use planning and Bureau of Land Management and United States Forest Service visual resource management plans. Local land use decisions could have either positive or negative impacts on visual resources. The Bureau of Land Management and United States Forest Service visual resource management plans minimize visual impacts to these federal lands. **Chapter 4, Cumulative Impacts** in the PEIS provides additional analysis of the alternatives in relation to past and current trends and other reasonably foreseeable future actions and events.

Section 6. Tier 2 Considerations

The lead agencies will use the visual inventory developed in the first tier analysis to focus attention in Tier 2 processes on visual elements that have either Corridor-wide or local importance. Additionally, they will conduct a more detailed and localized analysis of visual resources in individual jurisdictions and segments along the Corridor to define further important visual elements and assess potential effects of Tier 2 processes. Additional analysis of direct impacts to visual resources during Tier 2 processes may determine the impact type (temporary or permanent) and description. The lead agencies will consider creating visual simulations during the Tier 2 processes to accurately illustrate the visual change at specific locations. The lead agencies will continue to coordinate with all jurisdictions regarding direct and indirect impacts to visual resources. Mitigation options (such as design modifications) that could minimize disruption to or interference with the Corridor's historic towns and mountain scenery will be explored using the I-70 Mountain Corridor Context Sensitive Solutions Aesthetic Design Guidelines.

Mitigation strategies apply to all alternatives evaluated under the Tier 1 process and will be considered in detail during Tier 2 processes. The aesthetic guidelines prepared as a part of the I-70 Mountain Corridor Context Sensitive Solutions program will provide Tier 2 guidance for all the alternatives evaluated under

the Tier 1 process. The I-70 Mountain Corridor Aesthetic Guidance provides an Aesthetic Vision for the entire corridor that will guide the design of future projects and improvements. The Aesthetic Vision describes how the overall corridor will look and describes the aesthetic approach to unique places in the corridor. The Aesthetic Guidance defines the corridor as a whole rather than defining it in construction phases or funding increments. This ensures that future projects do not become separate and disconnected from the entire corridor. The guidance is intended to be used in all future design efforts. As part of the Context Sensitive Solutions process, aesthetic design will be integrated with engineering rather than tagged on as a decorative afterthought applied to predetermined solutions."

The Corridor-wide visual contrast resulting from the Preferred Alternative would be due to both the highway widening and associated retaining walls, roadside cut-and-fill slopes, tunnel portals, structures lanes, and median treatment; and the elevated Advanced Guideway System guideway system. These elements of the multimodal transportation improvements would result in changes to the form, line, color, and texture of the landscape to viewers, and the surrounding viewshed, including the traveler's perspective, nearby communities, recreation resources, and historic properties.

Strong visual contrast levels associated with the Preferred Alternative would have the potential to attract attention and dominate the setting. The assignment of Corridor-wide strong visual contrast levels implies the need for extensive mitigation and design treatment during Tier 2 processes. The resulting visual image of the future multimodal transportation system would have the potential to introduce a positive visual image to the I-70 Mountain Corridor and adjacent views, as well as to the overall context and sense of place of the broader viewshed, with the implementation of the following:

- Aesthetic design treatment with extensive agency, community, and stakeholder involvement.
- Application of current and emerging visual resource management policies and guidelines by the United States Forest Service, Bureau of Land Management, and county and local jurisdictions.
- Implementation of the aesthetic guidelines prepared as a part of the I-70 Mountain Corridor Context Sensitive Solutions program for all Tier 2 processes.
- Mitigation planning for the scars that were left behind as a result of I-70 construction as a part of Tier 2 processes.
- Consider mitigation recommendations from the Mitigation Issue Task Force.

Tier 2 processes on the I-70 Mountain Corridor will include collaboration with counties and municipalities to understand and integrate relevant visual resource planning. This Tier 1 process has identified cumulative impacts at the watershed level tied to the indirect impacts from induced growth on resources. Direct impacts on resources are generally localized and minor when compared to the indirect growth-related impacts on environmental resources. Possible induced growth in Eagle and Summit counties could lead to pressure for additional development (beyond planned development). Tier 2 processes will provide more context of the proposed action in relation to these local values.

Section 7. Mitigation

Mitigation strategies for visual resources will be defined in Tier 2 processes in coordination with Corridor communities and will focus on reducing visual contrast associated with implementation of Action Alternatives. Any Tier 2 process involving transit will impact the entire Corridor. Because visual contrast is most closely associated with the addition of structural elements and changes to landform characteristics, mitigation measures will consider efforts to minimize impacts related to both landform and structures.

Development of mitigation strategies will involve the review of United States Forest Service and Bureau of Land Management and other jurisdictions' visual standards. Mitigation strategies and enhancement opportunities through design treatment at Tier 2 would have the potential create a positive visual image of the future multimodal transportation system for the Corridor and adjacent views, as well as to the overall context and sense of place of the broader viewshed.

The aesthetic guidelines prepared as a part of the I-70 Mountain Corridor Context Sensitive Solutions program will provide Tier 2 guidance for establishing an aesthetically positive visual experience for all viewers; mitigation planning for the scars that were left behind as a result of I-70 construction will be included as a part of Tier 2 processes. The lead agencies will refer to the I-70 Mountain Corridor Context Sensitive Solutions Aesthetic Guidelines and create a site-specific Tier 2 Aesthetic Plan and Lighting Plan. Additionally, the lead agencies will consider creation of a Visual Impact and Mitigation Plan for each Tier 2 process that addresses:

- Past visual impacts and scarring
- Project-related visual impacts
- Consideration of mitigation strategies for both that includes:
 - Review and consideration of all United States Forest Service, Bureau of Land Management and other jurisdictions' visual standards (or as otherwise agreed to or amended)
 - Non-obstructed views of items like narrow canyons to valleys, rivers, etc.
- Adopt rock fall mitigation measures
- Minimal use of signage, light poles, guard rails, or other infrastructure elements (where safety permits)
- Use of vertical and horizontal alignments to preserve views of items such as rivers, canyons, etc.
- Use minimum amount of road cuts, fills, turnarounds, etc.

Section 8. References

Bureau of Land Management. 1983. Final environmental impact statement of the Glenwood Springs resource management plan.

—. 1984. Resource management plan record of decision—Glenwood Springs resource area.

CDOT. 2004. State Highway 9 Frisco to Breckenridge. May.

City of Golden. 2003. Comprehensive plan. August 6.

City of Lakewood. 2002. Rooney Valley Master Plan. July 30.

Clear Creek County. 1993. Clear Creek County comprehensive plan. January 11.

--. 2003. Greenway plan.

--.2004. Master plan 2030.

Eagle County. 2006. Eagle County master plan-1996 (revised).

--. 2008. Sustainable Communities 2010.

Garfield County. 2000. Comprehensive plan.

Glenwood Springs. 1998. Comprehensive Plan.

Idaho Springs. 2008. Idaho Springs comprehensive plan-1994, 2001 (revised).

Jefferson County. 1994. Central Mountains Community Plan. December.

--2005. Evergreen Area Community Plan-1987 (revised). October 12.

- Silver Plume Planning Commission. A plan for the historic preservation of Silver Plume. Silver Plume Planning Commission and the Center for Community Development and Design, University of Colorado. Denver, Colorado.
- Silverthorne. 2008. Comprehensive plan.
- Summit County Planning Department. 1999. *Summit County Copper Mountain subbasin plan*. Ten Mile Planning Commission. January 7.

Summit County. 2003. Countywide comprehensive plan. November 3.

- Town of Avon. 2008. Comprehensive plan—February 2006 (revised). March.
- --. 2009. Transit strategic planning update. March 10.
- --. 2009. Comprehensive transportation plan. October.
- Town of Eagle. 2008. Eagle area community plan. November.
- Town of Edwards. 2003. Edwards area community plan vision report. January.

Town of Frisco. 2004. Master plan.

Town of Georgetown. 2000. *Town of Georgetown comprehensive plan*. Balloffet and Associates, Inc. Fort Collins, Colorado. May 23.

Town of Gypsum. 1999. Gypsum foundation plan.

--. 2007. 3-Mile Annexation plan.

Town of Minturn. 2009. Comprehensive plan.

Town of New Castle. 2009. Comprehensive plan.

Town of Rifle. 2006. Comprehensive plan.

Town of Vail. 2009. Land use plan-1986 (revised). January 28.

--.2009. Environmental programs. http://www.vailgov.com/subpage.asp?dept_id=113

Town of Wolcott. 2009. Wolcott area community plan.

United States Forest Service. 1995. Landscape aesthetics handbook. Agriculture handbook number 701.

- —. 1997a. Final environmental impact statement—Arapaho and Roosevelt National Forests and Pawnee National Grassland. USFS Rocky Mountain Region. Fort Collins, Colorado.
- —. 1997b. Final environmental impact statement summary—Arapaho and Roosevelt National Forests and Pawnee National Grassland. USFS Rocky Mountain Region. Fort Collins, Colorado.
- --2001. National visitor monitoring results, Arapaho-Roosevelt National Forests. USFS Region 2. August.
- --2007. Bark Beetle Incident Implementation Plan (2007–2011). USFS Rocky Mountain Region 2. Golden, Colorado. August 29.
- Vision Plan Advisory Committee. 1993. Visions 2010. City of Golden comprehensive plan update. Shapins Associates, Boulder, Colorado, and The Lincoln Company, Littleton, Colorado. August 12.

Visual Resources Technical Report

Two appendices support the Visual Resources Technical Report:

- Appendix A provides a description of the I-70 Mountain Corridor County and Municipal Visual Planning Policies. These descriptions are based on land use plans current as of 2009. Tier 2 processes would review policies in place at the time of the studies and include in project planning as appropriate.
- Appendix B provides a description of the landscape units and assessment of visual contrast of the Action Alternatives considered in the I-70 Mountain Corridor PEIS on the individual landscape units.

Visual Resources Technical Report

Following is an update of visual resource planning obtained through a review of planning documents and questionnaires with planning department contacts. Information provided directly by planning departments appears in blue.

County/		
Municipality	Planning Documents	Visual Resource Topics Considered
Garfield County David Pesnichak, AICP Senior Planner – Long- Range dpesnichak@garfield- county.com	Garfield County Comprehensive Plan (2000) (April 2006 update not yet adopted) • Request for Qualifications, Garfield County	See http://www.garfield-county.com/Index.aspx?page=651, map 16 for visual corridor along I-70 dated 5.17.07. <u>Response to questions from Garfield County Planner 5.05.09</u> What are the County's visual policies, and to what extent are the county's visual policies taken into account within your review and approval process? As you probably noticed in reviewing our Comp Plan, it identifies a Visual Corridor but does not go any further than that (no standards, requirements, etc.). So, the general standard at land use review has been to require screening from the same elevation or below but have not, to my knowledge, precluded any development strictly on the presence of a visual impact. Are these policies reflected in zoning? The Visual Corridor is noted in the Land Use Resolution (LUR) and the LUR does have screening and landscaping requirements. Does the County have any restriction on or guide for ridgeline development? GarCo does not currently regulate ridgeline development. Is there currently any interface between Garfield County visual policies and White River National Forest visual management? None that I am aware of. Has the County conducted a systematic inventory of key or significant views? The Visual Corridor in the Comp Plan is the closest we have to an inventory of key or significant views. This corridor is based on what one sees while traveling major roadways within GarCo. I see you created a Visual Corridor map for views from I-70 in 2007. I have attached for your interest a figure showing Key Roadway Views from I-70 within Garfield County that was created for the I-70 Draft PEIS - has a visibility analysis been conducted based on your mapping for views from I-70 by Garfield County? Have any other visibility analyses been conducted? The Visual Corridor map is the only one which has been conducted and does include views from I-70. To what extent is your Visual Corridor map utilized in the review and approval process? As noted above, the Visual Corridor does not have any standards or requi
Glenwood Springs	Glenwood Springs Cor	we may recommend that additional screening or other requirements are incorporated, but there is nothing strictly enforced as a consequence of being located within the Visual Corridor.
New Castle	Town of New Castle	New Castle Community Vision (Page 8):
	Comprehensive Plan 2009	THE VISION STATEMENT DESCRIBES THE NEW CASTLE COMMUNITY IN 2050. In the year 2050, New Castle is an attractive thriving Western Slope town that continues to value both its heritage and community. The Town enjoys a sustainable growth rate, a stable economy and a healthy environment. Passive open space protects high-quality wildlife habitat, conserves native vegetation, maintains view corridors, safeguards riparian areas and preserves other environmental resources. Existing Conditions, under Parks (Page 23): New Castle owns and maintains numerous publicly dedicated open space parcels along rights of way in Castle Valley Ranch. New Castle also owns the 200-acre Mt. Medaris property that separates historic downtown from Castle Valley Ranch and Lakota Canyon PUD. These properties, other undeveloped private land and nearby federal lands include important wildlife habitat, greenspace, viewplanes, biodiversity, natural areas and floodplains. Section 8. Natural Environment, under Guiding Principle (Pages 65 and 67): New Castle is dedicated to preserving the natural environment while recognizing that the urban development inherent in the growth of the Town will have impacts on that environment. New Castle will strive to identify and preserve critical environmental resources and will work closely with County, State and Federal governments and government agencies to identify those resources and to implement enhancement

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		and preservation strategies. New Castle will support activities and programs aimed at preserving specific environmental values, including wildlife habitat, clean air and water, a dark night sky, low noise levels, health native vegetation, access to scenic resources and sunshine and reduction in usage of toxic or harmful chemicals and other materials. In addition to these natural environment protections, development is to be kept out of areas of natural hazards, sensitive habitat, floodplains, critical viewsheds and other inappropriate locations.
		Goal EN-6: New Castle will protect ridgelines and viewsheds.
		Policy EN-6A: The Town will identify critical viewplanes and regulate development within those viewplanes to preserve public visual access to the area landscape.
		Policy EN-6B: The Town will designate important ridgelines and protect those ridgelines from adverse visual impacts.
		Policy EN-6C: The Town will include viewshed impact analysis in the land use code to be part of development reviews.
		Section 9. Mineral Extraction & Energy Development, under Guiding Principle (Pages 68-69):
		Extraction of natural resources and energy development has a significant role in Garfield County and in areas near New Castle. Mineral resource extraction and energy development is an essential industry, but can have substantial detrimental impacts on quality of life and environmental quality if it is not properly located, managed and regulated. These mineral deposits are located in the river bottoms, in the Grand Hogback, and in the upland mesas in other locations, some of which are in close proximity to New Castle. The Natural Environment section of this plan describes the importance of protecting water and air quality, riparian corridors, wildlife habitat, ridgelines, viewsheds, dark skies and other qualities that are important to New Castle. New Castle acknowledges the need for energy and minerals, but supports quality of life enhancements for its residents, preservation of a clean healthy environment and sustainable resource use.
		New Castle will work closely with Garfield County to assure that the Town/County concerns are completely addressed before any mineral or energy development is approved. Protection of air and water quality, avoidance of visual impacts, minimization of associated traffic, wildlife/habitat preservation and avoidance of other industrial impacts are major considerations on any mineral extraction or energy development proposal.
		<u>Goal MEED-1:</u> All areas within the New Castle Urban Growth Boundary (UGB) will be protected from all adverse impacts associated with mineral extraction or energy development.
		Policy MEED-1D: Any mineral extraction or energy development activity proposed within the Joint Planning Area must first be accompanied by a detailed mitigation plan addressing all Town concerns and a reclamation plan that mitigates all impacts after the activity has ended. Such plans shall address the following:
		Visual and scenic quality Light and Night Sky
Rifle	Rifle Comprehensive Plan 2006	2.3.6 City image objectives (Page 18): (these represent a wide array of consensus from citizens, city council, planning commission and rifle city staff, and can be utilized by city staff to measure the achievement of the city's goals.)
Nathan Lindquist Planner		 Create great first impressions at strategic gateways in Rifle welcoming visitors to the City by creating a distinctive identity and ensure adequate resources to maintain the City's improved appearance.
(970) 625-6248		2. Maintain and preserve scenic vistas and view corridors as development occurs.
1. 1		 Promote the renovation and preservation of historic buildings throughout the City. Premete energy expectation
nlindquist@rifleco.or g		4. Promote energy conservation.
g		4.2.1 Hillside development / Scenic resources (Page 31): The topography in the City of Rifle is comprised of riparian drainages, slopes, ridgelines, and upland mesas. The diversity of landforms that
		rise from river valley and creek drainages exposes interesting geologic formations and creates significant natural landmarks. However,

County/ Municipality	Planning Documents	Visual Resource Topics Considered
wunicipality		these land forms pose some geologic and natural hazards, and create potential constraints to development.
		The most prevalent geologic and slope hazards related to development are slopes in excess of 30%. These areas are prone to rock falls and active landslides and require detailed geotechnical investigation prior to development. The drainages and side slopes of Graham, Hubbard and Prefontaine Mesas to the north, as well as Taughenbaugh, Grass, and Flatiron Mesas to the south, pose development hazards, though the majority of these lands remain undeveloped. (Include slope map here)
		Within the incorporated boundaries of Rifle, numerous homes and accessory structures have been built along the ridgeline and mesa edges that define the upland mesas. Buildings constructed along these edges not only require additional engineering for stability, but detract from the visual quality of the area Steep slopes present a number of difficult problems when subject to development: rock fall, scarring, slope failure, erosion / storm water control and traffic access. In addition to these public safety concerns, development on steep slopes also creates a significant negative impact to the important visual character that defines the community
		Scenic resources can be defined as areas of high visual quality which range from open valleys and irrigated fields to unique and memorable landforms. The City of Rifle is surrounded by striking environmental features and uncommon scenic quality. Throughout the greater Rifle area, visual backdrops range from mesa ridgelines, steep mesa slopes, riparian corridors, to expansive scenic vistas. New developments should capitalize on these scenic vistas and their developments should compliment these views rather than detract from them.
		Hillside development / scenic resource Policies:
		5. When appropriate, high points that offer scenic vistas should be preserved as open space. New development or redevelopment should be reviewed as to the visual impact and maintenance of key view corridors.
		6. Where hillsides are in private ownership and development rights exist, the City will reduce the impact of development on steep hillsides through measures such as low-density zoning, cluster or transfer of development rights.
		 Public safety must be preserved by assuring that stability is properly maintained on any development of hillsides and/or slope and that problem soils are properly mitigated.
		8. The aesthetic qualities of hillsides shall be preserved by minimizing the amount of hillside excavation and requiring that where hillside excavation occurs, cuts are fully reclaimed to a natural appearance through regarding and landscaping, or screening from general view by buildings.
		Hillside development / scenic resource Actions:
		 Prepare a zoning map amendment to reduce overall densities on hillsides. The zoning map amendments will indicate the areas intended to be preserved ("sending" portions) and the areas intended to "receive" the clustered density.
		Prepare ordinance requiring that all proposed subdivisions and major construction projects shall include a geologic/soils report addressing site conditions.
		 Research and formulate ordinances (such as transfer of density or development rights) to encourage clustering homes on the portion of the properties not on steep hillsides.
		 Response to questions from Town of Rifle Planner 5.05.09 Have I captured all elements of Rifle's Comprehensive Plan related to visual resource planning? Yes, those are the major points. The Comprehensive Plan has yet to be adopted (I am assuming you followed the link from our website to the Winston and Associates page). Has the City prepared a zoning map amendment to reduce overall densities on hillsides as suggested by the Plan? No, we deal with that on a case-by-case basis. Has any progress been made with respect to TDR ordinances encouraging clustering homes on properties not on steep hillsides - also as suggested by the plan? While we have not done TDR, we have worked with individual properties to cluster development and avoid steep hillsides.

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		 To what extent are the City's visual policies taken into account within your review and approval process? This may come up more in the future than it has so far, especially as we begin to see more downtown redevelopment of three or more stories that blocks views for folks. Has the City conducted any systematic inventory of key or significant views? Or conducted a scenic corridor study? We are currently rewriting the Downtown Code and we did look at a 3D model of building heights on one property in particular where we were looking to allow 6 to 8 story buildings. This allowed us to see that 6 story buildings would not impair views of the Colorado River for single-family houses on a mesa elevated above the property.
Eagle County	Eagle County Comprehensive Plan	3.8.3 Lands with Cultural Resources
Robert Narracci, AICP Planning Manager (970) 328-8750	Comprehensive Plan 2006 • Sustainable Communities 2010 (Eagle County	<u>Policies:</u> c. Development and development patterns should preserve landscapes that include visual, historic, and archeological value. d. The continued evolution of Eagle County's present day culture should be considered integral to the high quality of life desired by residents and visitors.
Bob.Narracci@eaglecou	Government Fall 2008)	Lands with cultural resources are those properties that contain visual, historic, or archeological attributes. Cultural characteristics are highly valued by residents and visitors, and add significantly to the quality of life available in Eagle County.
nty.us		Locals have ranked the importance of scenery as very high on many surveys, most recently the Homeowner Survey conducted by Northwest Colorado Council of Governments for the Second Home Study (residents = 90% and second home owners = 92%). For the purposes of this plan, visual resources include both pastoral and constructed views from the county's major roads; Interstate 70, Highway 6, Highway 131, Highway 24, Highway 82, and the Colorado River Road. Scenery management areas identified by the Bureau of Land Management and the United States Forest Service in their land management plans are also included. Additional research is needed to identify and preserve other important viewsheds, which could include those from recreational areas, parks, neighborhoods, or other sites frequently visited by residents and visitors.
		Historic resources reflect the area's heritage and remind us of our past. In a county where 41 percent of the residents in 2000 had been in Eagle County for less than five years, it is important to establish opportunities where historic resources can be viewed, learned about and above all recognized as significant elements of the quality of life available in Eagle County. As people come to the area, they should have the ability to investigate what has made it a unique and wonderful place. The County's historic resources date back to Native American occupation, and include sites and structures reflective of mining, ranching, army training and finally skiing and resort development. Eagle County Government should promote the identification and protection of the region's historic resources, and should work with the Eagle County Historical Society and the Basalt Regional Heritage Society to develop appropriate guidelines.
		Archeology is the study of ancient cultures through the examination of their building sites, graves, tools, and other artifacts. There are many archeologically significant sites in Eagle County, the most notable of which is the <u>Yarmony Pit House</u> north on Trough Road near Radium. Yarmony Pit House is an outstanding example of the archaic period (circa 7000BC to AD1) and is listed on both the State and National Registers of Historic Places.
		For all proposals, cultural features that may be impacted should be identified and appropriate mitigation efforts taken to ensure the least amount of disturbance to the cultural landscape.
		Eagle County Government's role in the development and evolution of its own culture is not so much to ensure that all residents share the same ideals and participate in similar "cultural" activities, but is instead to ensure that the freedom for people to explore is protected, that tools and resources are available for the development of individual and social creativity, and that cultural diversity is fostered within neighborhoods and communities.
		Policy.
		Development and development patterns should preserve landscapes that include visual, historic, and archeological value.
		Recommended Strategies

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		Identify and inventory significant views, historic sites and structures, and archeological sites in Eagle County. Identify and protect historical sites Consider the cumulative impact of incremental development on landscapes that include visual, historic, and archeological value during the decision making process Develop interpretive programs and walking and driving tours to increase public awareness of the county's history and heritage Incorporate historic buildings or features as amenities into new developments When unable to incorporate historic buildings, make every attempt to move buildings prior to development Establish one or more sites within the county where historic buildings can be relocated, restored and made available for public viewing or use Identify and protect archeological sites. Work to identify and preserve valuable scenic resources through surveys and public forums. Place a high priority on parcels within scenic corridors for open space acquisition Implement controls and programs to maintain air quality at pristine levels Encourage a land development pattern that maintains open space buffers between towns and community centers Consider a zoning overlay that controls the types and character of land uses that can occur in open areas that separate community centers Response to questions from Eagle County Planning Manager 4.20.09 1. Has there been a systematic inventory of significant views? In developing our Ridgeline Development regulations (below) there was a systematic effort to ascertain views/ahed from key public travel routes throughout the county. We are currently in process of creating a systematic inventory of significant views? In development on landscapes that involve visual value? As part of staff evaluation of land use proposals, we do acknowledge cumulative visual (and other) impacts over time. The issue of cumulative visual impacts is not regulatory and has never been atsted by the elected officials as a reaso for denying development approval. Denials typical
Dotsero (unincorporated)	Up next for attention b	y Eagle County within a month or so (phone call March 7, 2009)
Gypsum	 Goal 1: Dire slopes, high Eagle River Area Plan 	Plan 1999, under Growth Management (Page 23): ct growth into appropriate areas and arrangements, diverting development away from prime agricultural lands, riparian corridors, steep ly visible hilltop areas, critical wildlife habitat, and geologic hazards.) Public Open House 2008 (to update Foundation Plan) le Annexation Plan 2007 Update

County/ Municipality	Planning Documents	Visual Resource Topics Considered
Eagle	Eagle Area Community Plan, November 2008	Preservation of Open Lands, Environmentally Sensitive Areas and Wildlife Habitat and Corridors (Page 12): The preservation and management of open space will enhance and conserve critical environmentally sensitive areas for current and future generations. It is imperative that development does not adversely affect the health and integrity of the Eagle River and Brush Creek, as well as the critical habitat and corridors for wildlife. The visually sensitive areas including views of the mountain skyline, views to major peaks, views from key corridors through the community, and views of town from vantage points in the mountains will be preserved.
		View Protection (Page 54): The scenic quality of Eagle is a vital contributor to its sense of place. The vision expressed by the community is to protect view corridors and visually sensitive areas that exemplify the surrounding rural character, natural beauty and spirit of the area. The mountains, ridges and valleys, as well as the established Growth Boundary form a clearly defined edge separating the built fabric from the rural landscape. The Future Land Use Map maintains the remaining agricultural and rural land uses outside the Growth Boundary while preserving existing open space.
		Design standards and special planning area principles enable the Town and County to provide guidance during the development review process in order to enhance view corridors. Visually sensitive areas have been identified and mapped (See Scenic View Corridors Map in Appendix A). Views will be protected within the community buffer area, the Brush Creek Valley and key locations within town.
		The Community Buffer, as identified in the Future Land Use Map, occurs outside of municipal boundaries and between communities on the Interstate 70 corridor. Lands included in the Community Buffer support agricultural/rural or single-family large lot residential uses. It is intended to provide undeveloped visual breaks between communities to maintain or create quality gateways into communities.
		The community buffer within the Eagle Planning Area is characterized by panoramic views from the interstate which contributes to the small town character of Eagle. These views also reveal the expansive open space surrounding the town. Paralleling Interstate 70, the Eagle River Corridor is typically surrounded by open, undisturbed lands.
		As future development occurs, views of surrounding open lands from Interstate 70 should be maintained, as well as views to Castle Peak, the Sawatch Range and Red Canyon. The Future Land Use Map provides the land-use framework needed to maintain rural land uses and open space between communities and surrounding corridors. Land use development restrictions on steep slopes will protect panoramic views of ridgelines.
		The Brush Creek Valley supports residential uses ranging from low to high densities within the Growth Boundary. Outside the Growth Boundary, largely undeveloped rural lands cover the valley floor, Bellyache Ridge defining the eastern edge and the Seven Hermits/Hardscrabble Mountain defining the western edge. Brush Creek Road provides access to the White River National Forest and Sylvan Lake State Park. As the gateway to these destinations, it is critical to maintain view corridors as well as minimize the visual impact of any development that occurs.
		The Future Land Use Map illustrates the locations for the Conservation Oriented Community land use, as well as locations for increased densities and infill within the Growth Boundary in order to preserve the open/rural character of the Brush Creek Valley outside of the Growth Boundary.
		Design standards maintain view corridors, and generally protect the rural character of the surrounding Brush Creek Valley. The visual impact of development will be minimized by integration within the existing landscape patterns. These guidelines will encourage the use of existing vegetation, vegetative screening, limit development on ridgelines, limit building height and setbacks, and minimize development on agricultural land and wildlife habitat.
		Key locations from which view corridors should be protected include the downtown area and major town parks. Key views from the downtown area, particularly Broadway Street, include views to Castle Peak to the north and the Sawatch Range to the south. Eagle Town Park allows the user to experience 360 degree views of surrounding ridgelines and Brush Creek Valley. The Eagle River Regional Park and Fairgrounds maintains views to Castle Peak.
		As future development and redevelopment occurs, Special Character Area planning principles will serve as tools to ensure the protection of these views. The Community Buffer overlay within the Future Land Use Map encourages current zoning to remain resource, which will

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		maintain the rural character and openness of the Interstate 70 corridor along the Eagle River Park and the Eagle River Regional Park and Fairgrounds. This will be further strengthened through the acquisition of open space within the Eagle River Corridor. Again, the expansion of the existing design standards will work to maintain view corridors through regulation of building sites, height, and setbacks.
		NS Goal 4: Important view corridors and visually sensitive areas will be protected. Policy—4.1) Maintain the quality of visually sensitive areas.
		 Recommended Strategies Utilize the view analysis map (Appendix A) in the development review process. Create view protection design standards to guide development to enhance view corridors. Continue to protect our community's dark skies through user-friendly night sky standards.
Wolcott	Wolcott Area	Executive Summary, under SUMMARY OF PUBLIC DESIRES (Page ES-4):
(unincorporated)	Community Plan 2009	The desires of stakeholders emerged early in the planning process, and remained true and consistent throughout the formative development phase of the plan. A brief summary of community expressed desires is listed below.
		Retain high quality views
		Executive Summary, under CHARACTER AREA STRATEGIES, THE VALLEY FLOOR RECOMMENDATIONS (Page ES-6):
		In the event that a Residential Community is contemplated:
		Existing views should be protected, and new views created from within developed areas.
		Executive Summary, under CHARACTER AREA STRATEGIES, LANDS NORTH RECOMMENDATIONS (Page ES-8):
		New development should be limited to areas outside of view corridors, retaining visual quality and the area's rural, undeveloped character.
		Introduction, under TRENDS OF PLANNING SIGNIFICANCE (Page 6):
		This plan envisions Wolcott as a place where service needs are adequately met within the context of mountain living. It promotes Wolcott as a place where the preservation of open space, views and the quality of the natural environment is given a high priority, and where compact development can be used to provide a vibrant, functional development footprint.
		I. PLANNING AND ADMINISTRATION GOALS AND POLICIES 2. NATURAL RESOURCES AND ENVIRONMENTAL QUALITY (Pages 17-18):
		GOAL 2.1 Visual Resources—The quality of views, scenic corridors and the night sky in the Wolcott Planning Area is preserved and/or enhanced.
		POLICY 2.1.1—Preserve/enhance vistas, view corridors and natural features that contribute to the scenic quality of the area.
		POLICY 2.1.2—Guide new development to frame, enhance and otherwise work with view corridors and scenic quality.
		POLICY 2.1.3—Protect the quality and clarity of the local air shed.
		POLICY 2.1.4 —Promote a uniform quality of lighting in Wolcott and minimize fugitive light to enhance character and preserve a dark night sky.
		3. CHARACTER AND APPEARANCE (Pages 19-20):
		GOAL 3.3 Aesthetics —The scale, architecture, and design of development in the Wolcott Planning Area is aesthetically appealing and compatible with the natural and cultural setting.

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		POLICY 3.3.1 —Fit development to the natural landscape, utilizing flatter areas for buildings and roads. Avoid development on ridge tops, steep slopes, drainages and areas of natural hazard. Development should preserve or enhance view corridors, wildlife habitat and significant stands of vegetation
		9. OPEN SPACE AND RECREATION (Page 25):
		GOAL 9.1 Open Space—Undeveloped lands are strategically preserved to protect the quality of natural resources and natural ecosystems, to provide dispersed recreational experiences, and to enhance the open character, visual quality and historic beauty of the Wolcott Planning Area
		POLICY 9.1.2 —Create an interconnected network of open lands, incorporating views, agricultural lands, public lands, wildlife habitat, riparian habitats and other sensitive lands, hazard areas, community buffer areas, stands of significant vegetation, parks and trail and transportation corridors
		Chapter 3: Character Area Analysis and Strategies
		The Valley Floor Character Area, NATURAL RESOURCES (Pages 29-30):
		Of particular note, the steep escarpment that rises from the river due north of the I-70 interchange is unique, and adds considerably to the visual character of the area.
		The Valley Floor Character Area is viewed by thousands of commuters each day who travel on Interstate 70, US Highway 6, Highway 131 and Bellyache Ridge Road. Much of the I-70 travel corridor that is within the character area lies within "Community Buffer Zones", which are areas intended to remain largely undeveloped for the purpose of preserving open character, scenic views and wildlife habitat between communities along the route (please reference page 172 of the Eagle County Comprehensive Plan). The eastern two miles and western two miles of the Valley Floor Character Area are within a community buffer zone, as depicted on the attendant Valley Floor Viewshed Map. The remaining 1.5 miles of Interstate 70 pass through that portion of the Valley Floor where additional development, if approved, would occur. Due to topography and bends in the valley, not all of the valley floor can be seen from any one point by commuters. This provides an opportunity to break the travel corridor into separate "viewshed sections" for the purpose of analysis. Four separate sections have been created, as depicted by the circled numbers on the Viewshed Map (please see Appendix A, "Valley Floor Viewshed Analysis"). A detailed inventory of visual elements within each viewshed seen by both westbound travelers and by east bound travelers on I-70, as well as a description of views witnessed from other travel routes on the Valley Floor, is also provided in Appendix A.
		SIGNIFICANT PLANNING FACTORS FOR THE VALLEY FLOOR CHARACTER AREA (Page 32):
		 The Valley Floor contains special attributes worthy of preservation, including high quality viewsheds, the sensitive lands of the Eagle River corridor and the historic Wolcott Hamlet.
		VF 2. NATURAL AND CULTURAL RESOURCES, VF 2.1 VISUAL QUALITY (Pages 35-38)
		Ensure that proposed development and land uses on the valley floor will be visually compatible with the natural setting by incorporating the following strategies:
		A. VISUALLY INTEGRATED LAND USE, IN ALL INSTANCES, THE FOLLOWING APPLIES:
		2) Require compact development and establish clear development boundaries on the Valley Floor to minimize visual impacts.
		10) Position, screen and/or camouflage transmission lines, cell towers, wind power systems and other utilities to minimize visual impacts.
		11) Use photo simulation and similar graphic analysis tools during application review to demonstrate how the various key visual components of development (architecture, massing, scale, parking, open space, landscaping, etc.) will work together to create

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		an attractive and visually integrated community form.
		IN THE EVENT OF A RESIDENTIAL COMMUNITY, THE FOLLOWING SHOULD ALSO APPLY:
		13) Require a comprehensive Traffic and Parking Plan for development that minimizes negative impacts to the visual quality of the natural and built environment.
		B. EXISTING DEVELOPED AREAS, IN ALL INSTANCES, THE FOLLOWING APPLIES:
		 Encourage appropriate management of the mature trees that surround the Jouflas Ranch House and the Wolcott Hamlet to retain them as significant viewshed elements.
		C. OPEN LAND PRESERVATION, IN ALL INSTANCES, THE FOLLOWING APPLIES:
		 Limit disturbances to and preserve the quality of the Eagle River corridor and associated riparian habitats and vegetation. Buffer the River Corridor from new development with adequate setbacks to preserve views internal to the corridor.
		2) Provide space for the Eagle County Regional Trail adjacent to the Eagle River corridor to assure the continued enjoyment of related views and environments by the public. Require an alignment of the trail that protects wetlands, riparian habitats and other sensitive lands to the greatest degree possible.
		3) Preclude development on open lands viewed from travel corridor sections 1, 2 and 4 (please reference Wolcott Viewshed Map) that would negatively impact the perceived open character of the valley or diminish the quality of existing views. (see also Bellyache Ridge Character Area strategies).
		 Discourage additional development of or disturbance to lands in the Ute Creek Drainage that are visible from the Valley Floor Character Area (see also Ute Creek Character Area strategies).
		6) Encourage the preservation of the pastures in proximity to the Jouflas Ranch House as prominent viewshed elements.
		IN THE EVENT OF A RESIDENTIAL COMMUNITY, THE FOLLOWING SHOULD ALSO APPLY:
		 Incorporate into the Primary Valley Floor PUD Guide a comprehensive Open Space and Viewshed Preservation Plan for the Valley Floor.
		VF 4. COMMUNITY CHARACTER AND, DESIGN VF4.2 DESIGN AND LAYOUT (Page 50)
		Ensure an efficient, functional and attractive layout and positioning of amenities on the valley floor by incorporating the following strategies:
		E. OPEN SPACE (see also VF 2.1 VISUAL QUALITY), IN ALL INSTANCES, THE FOLLOWING APPLIES:
		4) Evaluate the visual impact of development on the quality of adjacent open space areas. Consider additional setbacks from the river corridor. Transition and "feather" development edges, avoiding dense development "fronts" alongside undeveloped lands.
		5) With the exception of one riverside public park and a new pedestrian bridge, design new development to preserve the environments and views of the Eagle River corridor.
		6) Incorporate existing view corridors into the design and layout of new development. Design buildings, travel corridors and open areas to frame significant natural features and landmarks that surround the Valley Floor.
		IN THE EVENT OF A RESIDENTIAL COMMUNITY, THE FOLLOWING SHOULD ALSO APPLY:
		12) Require as part of the development application a comprehensive open space and view corridor preservation, enhancement and management plan for the Valley Floor Character Area.
		VALLEY FLOOR FUTURE LAND USE MAPS (FLUMS) (Page 55-56)
		TRANSITIONAL DEVELOPMENT AREA This area represents that portion of the Residential Community Footprint that is within an

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		identified viewshed on the Valley Floor. Specific to the Residential Community map, it is intended to accommodate development that is visually attractive and that contributes positively to the visual quality of the viewshed (please note additional information in Appendix A, Valley Floor Viewshed Analysis). It is also intended that development in this area would serve to transition the more intensively developed portions of the Valley Floor (to the west) to areas of less intensive use and open space (to the east and south), with a soft development edge and an appropriate backdrop to the south pasture Character Preservation area.
		QUALITY VIEWSHED OVERLAY This is not a FLUM land use designation, but is instead an overlay that depicts lands that contain natural and/or man made elements that contribute significantly to high quality views on the Valley Floor. Development on these lands should be limited, and should be considerate of the contribution these areas make to the visual and cultural quality of Wolcott. This overlay is common to both Valley Floor FLUMs.
		The Bellyache Ridge Character Area
		BR 2. NATURAL AND CULTURAL RESOURCES, BR 2.1 VISUAL QUALITY (Page 64)
		Preserve the existing visual quality and view corridors of Bellyache Ridge by incorporating the following strategies: A. VIEWSHED PROTECTION:
		1) Preserve unplatted Bellyache Ridge lands that can be seen from the I-70 corridor as undeveloped open space.
		The Ute Creek Character Area
		UC 2. NATURAL AND CULTURAL RESOURCES, UC 2.1 VISUAL QUALITY (Page 73)
		Ensure that impacts to existing visual quality are avoided by incorporating the following strategies: A. VIEWSHED PROTECTION:
		 Require demonstration that proposed or expanded development in Ute Creek will not unreasonably impact views of the Ute Creek drainage from distant view points on Bellyache Ridge and the I-70/US Highway 6 corridor.
Edwards (unincorporated)	Edwards Area Community Plan Vision Report, January 2003	 (Page 15) 12. Goal: Clean mountain air, scenic vistas and the visual qualities of the night sky are amenities of the Edwards area and are protected from environmental and scenic degradation. Objective. 12.3 Maintain Scenic Vistas and the Visual Quality of the Environment. Maintain and improve mountain/ridgeline scenic values, wildlife habitat and viewing opportunities, and forested and range vegetation. Use the most detailed mapping available for ridgeline, scenic corridors, wildlife habitat, and vegetation to assess the impacts of each new development proposal.
		(Page 30) If the scenic vistas and natural setting are indeed some of the most treasured components of the Edwards community, ridgeline and hillside development guidelines should also be considered. These can best be accomplished by becoming part of the Eagle County Land Use Regulations. This would require full public hearings by the Planning Commission and approval by the Board of County Commissioners.
Avon	 Town of Avon Comprehensive Plan, February 2006, Revised March 2008 Avon Transit Strategic Planning 	(Page 40) Goal B.2: Provide a distinct physical and visual separation between Avon and its surrounding communities that preserves the natural beauty of the surrounding mountains and the Eagle River valley.
		Policy B.2.1: Inventory, analyze and prioritize lands adjacent to the developed portions of the Town, particularly developable open space, steep slopes, drainage corridors, ridgelines, river frontage and other environmentally sensitive areas, for possible acquisition and/or preservation as open space or other public purposes in order to maintain Avon's visual identity.
	Update – March 10,	(Page 46)

County/ Municipality	Planning Documents	Visual Resource Topics Considered
	2009 Comprehensive Transportation Plan – October 2009	Goal D.2: Create community gateways and streetscapes that reflect and strengthen Avon's unique community character and image. Policy D.2.4: Coordinate with the Colorado Department of Transportation to lessen visual and noise impacts for development adjacent to I-70 while preserving important views of Avon from I-70. Avon makes specific visual prescriptions for specific areas, eg: District 22: Nottingham Road District (page 97) Encourage additional informal landscaping to soften the visual impact of large existing structures. District 28: Village at Avon Northern Residential District (Page 101) Prevent significant alteration of natural landscape as well as ridgeline and steep slope development. This area should be highly sensitive to visual impacts of improvements, wildlife, and lighting. Emailed Avon Planners with questions 5.4.09
Minturn Vail	 Goal (NRG 4.1 (NRS 4.1) Draft Executive Summ Goals and Objectives Town of Vail Land Use 	Community Plan, under Natural Resources (Page 20): 4): Preserve, Protect and Enhance Ridgelines and View Corridors) Develop methods to regulate development on ridgelines and preserve specific view corridors) ary, March 2009 Open House Synopsis, February 2009 e Plan, adopted November 18, 1986, updated January 28, 2009 mental Programs on website: http://www.vailgov.com/subpage.asp?dept_id=113
Summit County Kate Berg Planner II 970.668.4204 kateb@co.summit.co.us	 Summit County Comprehensive Plan 2003 (Housing Update, 2009) Matrix of Issues: Summit Leadership Forum 2008 – Year 2030 Forecast for Summit County 	Design and Visual Resources Element (pp. 100 – 107) addresses goals, policies, actions and strategies for implementation for the protection of visual resources for the county. See Table 1 below for progress on visual resource strategies and basin maps of visually important lands.
Frisco Jocelyn Mills Senior Planner (970) 668-5276 x3031 JocelynM@townoffris co.com	Town of Frisco Master Plan 2004 (undated)	 All taken from the Town of Frisco Master Plan: "Enhancing our quality of life while preserving our mountain town character, honoring our historical influences and scenic corridors, maintaining our economic vitality, enhancing recreational opportunities, promoting healthily lifestyles, supporting families, and protecting the natural environment, in and around the Frisco community." Master Plan vision Environmental Chapter of the Plan: "Protect and preserve surrounding natural areas [including visual corridors to these natural areas] that contribute to and enhance the Town's quality of life and mountain character." "Preserve and protect the open space resources of the Town and surrounding areas. These areas include buffers between neighborhoods and communities, natural areas, and scenic areas and vistas." Growth Management Chapter of the Plan: "Continue to protect the undeveloped buffer around Frisco, and discourage development north of Interstate 70 outside of town limits."

County/ Municipality	Planning Documents	Visual Resource Topics Considered
Silverthorne Michael Johnson Senior Planner (970) 262-7361 mjohnson@silverthor ne.org	• Silverthorne Comprehensive Plan 2008	 "Protect scenic views of Frisco's mountains and lake features." <u>County planner responses to questions dated 4.29.09:</u> What mechanisms do you have in place to protect the visual corridors to natural areas? Are there guidelines or regulations that are part of your review and approval process? The Frisco Master Plan, it is heavily weighted with respect to all development approvals in town, and while a project cannot be denied solely on the master plan, it is heavily weighted with respect to all development approvals in town, and while a project cannot be denied solely on the master plan, it is heavily weighted with respect to if a project meets the intent of the plan or not. Has the Town conducted any systematic inventory of key or significant views? No, but it's a fairly small town so when we indicate preserving scenic views of mountains and the reservior, that covers basically major corridors south to north, and east to west. Frisco is surrounded basically by mountains on the south, west and east. And the reservoir to the east. Do you have any restriction or guideline for ridge top development? Building height has to respect the slope, and basically must follow the contour of the existing landscape up to whatever the height restriction is depending on where you are in town, the height requirement hait in Dorner Visual steps slope entry entry of steps slopes that can be disturbed. Is there a mechanism in place to protect the undeveloped buffer around Frisco? Not a formal mechanism but basically, with one small exception of private individual ownership, the Town is surrounded to the north, west and south by US Forest Service land, and to the east by Dillion Reservice. We a letter agreement that if Denver Water were to sell any of its land, they would come to the Town first. And the U.S. Forest Service sells land through land trades, and no it's LOAA - nothing is indicated within this area around Frisco that they would be intersted in

County/ Municipality	Planning Documents	Visual Resource Topics Considered				
		prominent features such as the Blue River and surrounding mountain vistas.				
		Policy LU 6.4 Development adjacent to the Blue River shall be accomplished in a manner that enhances the river corridor and protects water quality. N incompatible uses or designs shall be allowed. Pedestrian access and use is required so long as it does not negatively impact the scenic and natural resources of the Blue River.				
		Policy LU 6.5 The Town shall develop regulations so that rooflines do not extend above ridgelines.				
		Goal T 3 (Page 49) To develop a safe, convenient, and economical transportation system which does not disrupt urban social units, unique natura resources, or cohesive land use zones, and responds to the proposed future land use patterns established in the Plan.				
		Town Gateways (Page 54) The entryways to Silverthorne should be enhanced to create a memorable "first impression" and community identity to visitors and to identify the edge of the community. These gateways can be established with appropriate land development patterns and architectural features to serve as entrances through which people enter and leave Silverthorne on US 6, SH 9, and I-70. Architectural Character (Page 55)				
		The Town continues to strive to establish a moderate sense of continuity in its architecture. This can be accomplished while allowing individual properties to develop to meet their specific needs and visual character goals. Each of the Town's commercial districts has site and architectural standards that have been adopted to define the character of that district.				
		Goal CD 2 (Page 58) To protect mountain vistas, scenic backdrops, ridgelines, the Blue River and significant vegetation and integrate the open space into the community.				
		Policy CD 2.1 The Town shall establish and maintain view corridors to mountain vistas and the Blue River from public areas, such as parks, Town Hall, the Pavilion, the Recreation Center and the riverfront.				
		Policy CD 2.2 New development shall take views into consideration in site plan and architectural design, with projects designed to enhance and frame views, not block prominent views of mountain vistas or the Blue River.				
		Policy CD 2.3 Key views of mountain vistas from the Blue River shall be highlighted, and "viewing stations" including benches, and interpretive markers shall be provided along public trails.				
		Policy CD 2.4 Development along the Blue River shall be varied in height and mass so as to frame and preserve selected views both to the river as we as views to the surrounding mountain vistas.				
		Policy CD 2.5 Building placement, height, and massing character along the Blue River and Blue River Parkway shall complement and enhance key vie corridors to the river and mountains.				
		Goal CD 3 (Page 59) To enhance the visual character of Silverthorne by increasing the level of streetscape improvements and landscaping throughout the community.				
		Response to guestions from Silverthorne Planner 5.11.09				

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		 Have I captured all of the goals and policies relevant to visual resources? I would suggest also including LU 2 GD.1 – GD.3 these policies anticipate greater development in the I -70 corridor and support a transit stop. Also possibly Goal T3 in the Chapter 5 – Transportation element might be included as well as Town Gateways Page 54 of the Comp Plan. Has the town established view corridors to prominent views from public areas? The Town has not identified view corridors or prominent views. Has the town conducted an inventory of significant views? None have be conducted. Are there mechanisms in place to maximize and protect these view corridors within your review and approval process? Not at this time. Has the town conducted any visual studies in connection with roadways? None as of this e-mail. Has the Town developed regulations to prevent development above ridgelines? Ridgeline development is only covered with a reference in the Comp Plan. There are no Code requirements that would restrict ridgeline development other than referencing the Comp Plan policy.
Clear Creek County Frederick Rollenhagen Planning Director (303) 679-2360 frollenhagen@co.clear- creek.co.us	 Clear Creek County Master Plan 2030 (2004) Clear Creek County Non-Motorized Corridor (map included in the Clear Creek County Master Plan, Map 4.3) Clear Creek County Greenway Plan Clear Creek County Board of County Commissioners Goals & Objectives 2008–2009 	Goal 2-7 (Page 2-3) Preserve the County's mineral and natural resources for future generations. • Preserve visual and scenic quality of the County. (Page 4-13) These historic mine roads criss-cross the mountainsides of the Clear Creek drainage and sub-drainages. How these historic roads are used, improved or reclaimed will have an impact on the visual quality of Clear Creek County. Therefore, design standards, as expressed by a number of residents, would be to allow improvement of the roadway only back to historic conditions, including width, gradient, surface, etc. Conservation Management (Page 4-32) The Master Plan reflects the community's desires to expand the existing conservation easements in the eastern portions of Clear Creek County to include more of the existing subdivisions and proposed additional filings of existing subdivisions. The idea is not to stop residential development, but rather manage it with the intent of conserving the overall, unique, visual and environmental character of these areas. Large view sheds exist that are important to the value and quality of life within this portion of the County. hese areas are also rich in wildlife habitat and bio-diversity. Areas of Opportunity Recommendations (Page 4-38) • Prior to any further development and to protect visual qualities and natural and cultural resources, prepare Master Plans for the Henderson Mine, Empire Junction and Floyd Hill. The plan for Floyd Hill should provide for substantial open space, wildlife movement and an attractive entry to Clear Creek County. EDS51 (Page 5-11) Improve the image (visual and emotional) of the County along the I-70 corridor. County pla

County/ Municipality	Planning Documents	s Visual Resource Topics Considered				
		Commissioners just passed a regulation allowing for small scale wind turbines in the County and the regulation requires a special review of such requests in these visually sensitive areas. I expect the Board will adopt other regulations in the future that pay attention to the goals of these specific areas.				
		1. To what extent are the county's visual policies taken into account within your review and approval process? The County's visual policies in the <i>Master Plan 2030</i> are taken into consideration when adopting and revising land use regulations such as Zoning and Subdivision Regulations. The County's commercial development Review process has criteria that reflect the need to design the site and any structures to be in harmony with the existing natural environment. Our Subdivision Regulations requires protection of significant ridgelines and the natural environment to the largest extent possible.				
		2. Is there currently any interface between Clear Creek County visual policies and Arapaho and Roosevelt National Forests visual management? Not specifically. However, all land use applications, when proximate to U.S. Forest Service land, are referred to the Idaho Springs Arapaho and Roosevelt National Forests District office for review and comment based on their forest service plans.				
		3. Has the county conducted an inventory of significant views? I have attached a figure showing Key Roadway Views from I-70 within Clear Creek County that was created for the I-70 Draft PEIS for interest - has such a visibility analysis been conducted for views from I-70 by Clear Creek County? Have any other visibility analyses been conducted? The County, in conjunction with Idaho Springs, and Central City, conducted a viewshed analysis in the area of the intersection of the Central City Parkway and I-70 at Hidden Valley for a subregional master planning effort. Other than that, the County has not conducted any other inventories of significant views except occasionally on a site-by-site basis based on specific requests.				
		4. Do you have any restriction or guideline for ridgeline development? At this time, our only specific ridgeline development restrictions are in our subdivision review process as explained above. However, language in our commercial Development Review process also gives us the ability to guide development in such a way as to avoid ridgeline development in order to maintain the environmental aesthetic of the property or area if deemed to be necessary to conform with our criteria for approval.				
Georgetown	Town of Georgetown	Comprehensive Plan 2000				
Idaho Springs Tim Katers, AICP Idaho Springs Planning	Idaho Springs Comprehensive Plan 2008	Collaborative Agreement (Page 11) Efforts by a coalition of communities along the I-70 corridor and the Colorado Department of Transportation (CDOT) and Federal Highway Administration have led to an agreement to allow some roadway congestion improvements along the I-70 corridor. That same agreement, signed by all parties in June of 2008, allows advocates of an elevated rail alternative until the year 2025 to develop a feasible rail option along the corridor.				
Katers & Associates 535 W. 3rd. St. Loveland, CO 80537		Key items in the Collaborative Agreement include: - determination and resolution of the effect of transportation facility construction regarding visual, noise and economic impacts.				
		Goal T.1: Continue to participate in developing a long-term solution for Interstate 70. (Page 46)				
(970) 635-9974 tkaters@msn.com		Policy T.1.4: Work to locate Regional Transit Station(s) within the Idaho Springs original Townsite (i.e.: Argo Mill, south of Historic District, football field).				
		Policy T.1.5: Require mitigation of noise, dust and visual pollution in any planning for I-70.				
		Policy T.1.6: Remain active in the NEPA and I-70 Stakeholder process as it relates to solutions for congestion on Interstate 70.				
		Goal T.2: Participate in long-term improvements on Colorado 314. (Page 46)				
		Policy T.2.5: Require mitigation of noise, dust and visual pollution in any planning for Colorado 314.				
		Goal T.3: Develop and maintain safe, attractive and efficient roadways. (Page 47)				
		Policy T.3.1: Develop gateway plans with CDOT for all I-70 interchanges.				

County/							
Municipality	Planning Documents	Visual Resource Topics Considered					
		Policy T.3.2: Ensure that all new road right-of-ways respect the historic assets of the community and allow for future roadway expansions.					
		Goal ED.1: Maintain a strong historic business district. (Page 53)					
		Policy ED.1.1: Promote activities of the Historical Society Idaho Springs and ensure that a coordinated and holistic effort is made to preserve and promote the historic elements of the City.					
		Policy ED.1.2: Assist in the redevelopment of the existing football field as and if it occurs.					
		Policy ED.1.3: Implement the regulations and policies found in the Idaho Springs 1041 Area regulations.					
		Policies T.1.4 and T.1.6 would also apply here. Additional policies could be listed under Goal T.2 as they relate to any realignment of 314 - and then the impact (including visual) of that realignment. Policy T.3.2 should be added. Policy ED.1.3 discusses the 1041 Regulations that include visual impacts.					
		 <u>County planner responses to questions dated 5.11.09:</u> Have I captured all city planning around visual resources in the excerpt above? Response: No, the City has adopted regulations related to "Areas and Activities of State Interest", commonly known as 1041 Regulations. These are codified as Chapter 25 of the Municipal Code and include in Section 25-45.C.7 the requirement for projects impacting the historic resource to review visual aesthetics and nuisance factors. This includes the identification of view sheds, scenic vistas, etc. 					
		2. What mechanisms do you have in place to protect the visual corridors to natural areas? Are there guidelines or regulations that are part of your review and approval process? Responses: Chapter 25 of the Municipal Code would come into play here again.					
		Comprehensive Plan policy C.3.6 (p. 38) seeks to preserve the historic assets of Idaho Springs. That policy supports the 1041 Regulations in the code and views are part of those 1041 Regulations.					
		Most of the policies under Goal GL.4 (p. 40) would apply.					
		3. Has the Town conducted any systematic inventory of key or significant views? Response: Only as it relates to the establishment of the 1041 regulations. A map of the historic resource and historic resource impact area is attached. The text relating to establishing these areas can be found beginning in Section 25-81. Language regarding the rationale for the designation of these areas (related to view sheds) can be found in Section 25-83.B.					
		4. Do you have any restriction or guideline for ridgeline or steep slope development? Response: I believe that Public Works has a practical restriction or standard as it relates to street grades and will check with them. We do not have a ridgeline development restriction in Idaho Springs.					
		Comprehensive Plan policy C.1.1 (p. 37) seeks to preserve ridgelines in as natural state as possible.					
Jefferson County	Jefferson County – Th	e Central Mountains Community Plan, 1994					
Evergreen area	Jefferson County –	Summary of Goals (Page 7)					
Heather Gutherless Planner	Evergreen Area Community Plan 2005	Transportation 1. Safeguard visual corridors, as identified in the Visual Resources section.					
(303) 271-8716		Visual Resources 1. Preserve and maintain landscapes that have special visual qualities and are seen frequently by many people.					
hgutherl@co.jefferson.co		2. Protect quality landscapes from unnecessary visual disruption by ensuring that development makes maximum use of the natural screening capabilities of the landscape.					

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		3. Protect the night sky as much as possible from unnecessary light pollution to preserve it as a visual resource.
		Housing (Page 23)
		f. Slope Standards
		1) Residential development should be allowed only on slopes not exceeding 30%. Adverse impacts of development on steeply sloping property include increased fire and geologic hazards, difficulty in placing wells and septic systems, difficulty in meeting county road standards, increased erosion, and increased visual impact of hillside cuts.
		2) The slope categories should be used to determine the total number of homes allowed on a parcel (see Appendix for example). The standards are not intended to entirely prohibit lots on steep slopes. Such lots may be acceptable, if geologic reports indicate that slopes are stable and if all other constraints have been adequately addressed. Once the number of homes is determined, density may be transferred from the areas of steep slopes to less steep areas.
		g. Visual Resources
		Development within the visual corridors, as shown on the Visibility Analysis maps, should make maximum use of the site's topography and existing vegetation to screen development. Recommendations from the Visual Resources section and the Design Guidelines should be followed.
		8. Rezonings should be handled as Planned Developments, except in those cases where a straight zone district can meet the recommendations of all sections of this Plan and design guidelines. Planned Developments should contain additional design requirements, e.g., no-build areas, building materials, drainage areas, road locations, possible well locations and areas of septic constraints, etc.
		9. All developments should demonstrate that they are served by a fire protection district at the time of re zoning, exemption from platting, platting, and building permit.
		10. New developments, including areas already platted, should be required to provide an adequate onsite water supply for fire fighting purposes, as required by the fire district of jurisdiction, prior to the issuance of a building permit.
		11. New developments should demonstrate that adequate services are provided to the site, e.g., electricity, telephone, gas, fire protection, Sheriff's protection, etc.
		12. Credit for housing units, as allowed in certain resource or hazard areas, should not be given if the parcel is involved in another incentive program, i.e., tax incentive, conservation easement, or life estate programs. These programs are listed in the Open Space, Trails and Recreation section. This does not include affordable housing grants, which may qualify.
		13. As the number of senior citizens in the area increases, some additional housing for seniors may be needed. New senior citizen developments should be located in areas designated for residential or community use and near existing commercial services in activity centers. These facilities should also ensure the mobility of their residents, i.e., provide transportation services or be located near public transportation.
		14. Affordable housing should be encouraged, especially for area workers and seniors. New affordable housing developments should be located in areas designated for residential use and near existing commercial services. These facilities should be located near public transportation.
		 <u>County planner responses to questions dated 4.30.09:</u> To what extent are the county's visual policies taken into account within your review and approval process? Any applications for a change in land use (for us Rezoning and Site Approval processes) are subject to the visual policies in the community plan. If someone is going to work within their existing zoning and just build something allowed on the property, then the plan does not apply. Examples of those processes are Subdivision Plat, Site Development Plan, and Minor Adjustment.
		2. Has the county developed a systematic approach for conducting visual resource inventories in line with visual management

County/ Municipality	Planning Documents	Visual Resource Topics Considered
		systems used by the Bureau of Land Management and the US Forest Service (as mentioned under "Implementation" in the Visual Resources section of the Community Plan page 55)? No
		3. Is there currently any interface between Jefferson County visual policies and Arapaho and Roosevelt National Forests visual management? No
		4. Has the county completed a scenic corridor study (also mentioned on page 55 of the Community Plan)? We have done the visibility analysis maps, but we have not done a more detailed scenic corridor study.
		5. I see you have created visibility analysis maps for views from Evergreen Parkway, State Highway 74, and Jefferson County 73. I have attached a figure showing Key Roadway Views from I-70 within Jefferson County that was created for the I-70 Draft PEIS for interest - has such a visibility analysis been conducted for views from I-70 by Jefferson County? Have any other visibility analyses been conducted? We did not do a visibility analysis along I-70 for the Evergreen Plan. However, there are also visual resources maps in the Central Mountains Community Plan, which show a scenic corridor along I-70 and US 40 Corridor from the Morrison exit to the El Rancho exit. Those maps also locate views and vistas and prominent features. I know that the visibility maps for Evergreen were created just using topography, vegetation was not taken into account. I was not at Jeffco when the Central Mountains plan was done, so I don't know if the visual resources maps took into account vegetation.
		6. To what extent are the visibility analysis maps utilized in the review and approval process? In Evergreen, the visibility analysis maps are used mainly to influence site design and building placement. For example, if a property was in a highly visible area, then we would ask for restrictions on building colors, perhaps building height, and may put no build restrictions in the rezoning document to minimize the visibility of any new buildings. It does not impact the density recommendations in the plan. In the Central Mountains plan, the visibility of a site does impact density. If the site is in a Class I scenic corridor, as defined in
		the plan, the density recommendations are much lower than if it is in a Class II or Class III scenic corridor. In addition to the density restrictions, we also look at site design and building placement. Here is the link to that plan. http://jeffco.us/planning/planning_T59_R13.htm .
Golden	City of Golden Comprehen	sive Plan, August 6, 2003

Goal, Policy/Action	Project/Description	Timeframe	Priority	Progress		
A.2, A.6	Involve the County, towns, and other appropriate entities (e.g., U.S. Forest Service, Open Space and Trails department) in a work program to acquire public interest or, in another manner,	Ongoing effort	Medium	Each basin master plan has identified areas of highest visual importance. See maps of visually important lands for each basin:		
	protect areas of high visual importance from development, where regulatory programs are not adequate. Each basin master plan should identify areas of highest visual importance, including			Lower Blue http://www.co.summit.co.us/Planning/MasterPlans/docume nts/VisibilityMap2-5-09_001.pdf		
	visual open space buffers around communities.			Snake River		
				http://www.co.summit.co.us/Planning/MasterPlans/docume nts/VisuallyImportantLandsMap2-19-09_000.pdf		
				Ten Mile Basin		
				http://www.co.summit.co.us/Planning/MasterPlans/docume nts/VisuallyImportantLandsMap2-12-09.pdf		
				Upper Blue		
				http://www.co.summit.co.us/Planning/MasterPlans/docume nts/VisuallyImportantLandsMap2-26-09.pdf		
				County has made open space acquisitions along I-6 (can speak to Director of Open Space and Trails, Brian Lorch, for more on this: 970.668.4067, brianl@co.summit.co.us)		
A.5	Ensure that existing and future County TDR programs/regulations do not identify areas of high visual importance as TDR receiving areas. Where so, the programs and accompanying mapping should be amended to ensure that lands of high visual importance are not designated as TDR receiving areas. The County should undertake this effort as part of a public process.	6 months (once areas of high visual importance have been identified)	Low	Use the basin plans to ensure that highly visible sites are sending sites rather than receiving sites.		

_	Table A-1. Summit County Design and Visu	al Resources Eler	nent Impleme	entation Strategies

Goal, Policy/Action	Project/Description	Timeframe	Priority	Progress
B.1, B1.1, B1.2	Amend the Land Use and Development Code to incorporate countywide design standards and guidelines. Planning Department staff should initiate this amendment, utilizing the recommendations contained in the Draft Summit County Design Standards and Guidelines. Because the recommendations are extensive, the Planning Department should prioritize them and develop a code amendment package that includes the most important recommendations. A second effort should occur subsequently to incorporate other recommendations from the draft guidelines and standards. The standards should provide enough flexibility to not stifle creativity and variety in design.	6 months (initial code amendments) 1-2 years (subsequent code amendments)	High (initial code amendments) Low (subsequent code amendments)	Comprehensive development code in June 2007. Adopted building, architectural design standards 3.5.05 (chapter 3) Expanded back country zone regulations. Used to only apply to upper blue basin. Amended to strengthen, applied to all back country mining plans in other basins. Back country zoning stringent standards in terms of minimizing disturbance, building envelope, etc. Blending in to hillside. Strict on square footage, also height. 2 acre mining claim, 750 square feet. Each additional acre additional 50 acres. 5 acres typical (35-14). Road standards – basic drainage etc, but avoid view of road cuts – design standards. Avoiding large clearings. Maintaining primitive character.
B.5	The Planning Department staff should initiate an amendment to the Land Use and Development Code to require underground of new utility lines for all new development.	3 months	Low	Subdivision regs under chapter 8 have been amended to require underground for new utilities.
B.6., B.7	The Planning Department should initiate an amendment to the Land Use and Development Code subdivision standards that requires the establishment of building envelopes and/or site disturbance envelopes when necessary on all new platted lots. The building envelope includes the area within which the building footprint is allowed. The disturbance envelope includes the area in which grading, excavation, tree clearing, and other disturbances to land and vegetation is confined. These envelopes should be placed to avoid areas of high visual importance and to avoid environmentally sensitive areas.	3 months	High	Comprehensive Code Amendment.
B.11	Summit County Road and Bridge and the Colorado Department of Transportation should initiate process to review roadway standards and proposals for new roadway expansions to ensure the roadways are designed with the most minimal impact on the landscape. Issues such as minimizing road widths, including native plantings along roadways, using soft shoulders outside urban areas, and avoiding unnecessary cut-and-fill slopes should all be considered.	1 year	Medium	? Doesn't know whether process initiated.

Goal, Policy/Action	Project/Description	Timeframe	Priority	Progress
F.1	The County should work with homeowners and the development community to explore incentives and programs to encourage a higher level of green design and energy efficiency in new home construction and remodeling.	2 years.	Low	Sustainable building code adopted Jan 1, 2009. Intergovernmental advisory committee formed to develop code to be adopted by all areas but Silverthorne. Based on size of home. 3000 sq ft or less, some minimum requirements to meet for energy efficiency to get a permit. Bigger house using same amount of energy as base level sized house. Above that, certain number of points. Took into account LEED and other codes, developed for Summit County. No incentive to exceed the code. Town of Frisco added component – require more points than any other town, and incentivize builders to exceed code by refunding building permit fees.
F.4	Amend the Code to require all new municipal buildings to meet green standards. The County shall take initiative to amend the Code to ensure future developments serve as green building examples and incorporate green design techniques, standards, and energy efficient practices.	2 years	Low	Long range planning department working to form county green team to improve county buildings. Want to improve energy efficiency in existing buildings, new buildings as green as possible. Nothing codified yet. Materials recovery facility – incorporated green features. Building a new fleet building, taking into account renewable energy, energy efficiency. More ad hoc. All county buildings have been energy audited, completed lighting retrofits, motion sensors on lights. Summit stage is purchasing renewable energy credits to offset carbon emissions. Green team will bring it all together and make it all more organized and structured.
F.5, F.5.1	The County should incorporate information on home construction with green standards into the County web site.	3 months	Medium	Not on county website. High Country Conservation Center – non profit promoting green building, energy efficiency, waste reduction. Central point of contact on these types of initiatives. Information on their website explaining green building checklist. Developing a list of local business where materials can be purchased.
Pine Bark Beetle				Trying to figure out how pine bark beetle affects planning. Some areas will not be treed anymore. May not be able to regulate buffering with existing trees may not be possible

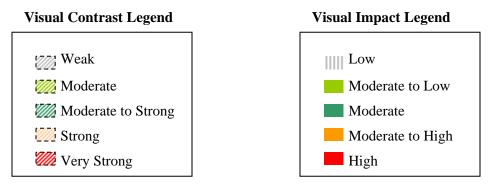
Appendix B. Description of Landscape Units and Visual Contrast of I-70 Mountain Corridor Alternatives

Appendix B. Description of Landscape Units and Visual Contrast of I-70 Mountain Corridor Alternatives

Landscape Unit organizes the following description of the affected environment and environmental consequences for visual resources. These include photographs of each unit and descriptions of:

- Landscape character and context;
- Key viewpoints to and from the I-70 highway;
- Estimated level of visual contrast associated with various elements of Corridor alternatives illustrated in bar chart format; and
- Estimated miles of visual impacts associated with various elements of Corridor alternatives illustrated in bar chart format.

Bar charts illustrate levels of contrast and miles of impacts in the following levels:



It is important to note that project/setting contrast is the primary indicator of visual impacts. Because the I-70 highway (and consequently, Corridor alternatives that are closely aligned to the I-70 highway) is largely within foreground distance zones (88 percent Corridor-wide) from sensitive community and recreation viewpoints, contrast associated with project elements is the primary factor in determining visual impacts.

The following Unit descriptions are intended to support the summarized discussion of visual resources provided in **Section 4**, Affected Environment and **Section 5**, Environmental Consequences of the *I*-70 *Mountain Corridor Programmatic Environmental Impact Statement* (PEIS).

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)

Overview

The western portion of the Corridor is composed of nine Landscape Units (Glenwood Springs, Glenwood Canyon, Colorado River/Dotsero, Lower Eagle River Canyon, Eagle Valley, Red Canyon, Wolcott, Eagle Valley/Avon, and Dowd Canyon), each with distinct landscape characteristics. Below are descriptions and context photographs documenting the character and context of the landscape within these units. These nine Landscape Units are described collectively for ease of comparison in both inventory and analysis because the majority of Corridor alternatives extend between Vail and C-470, not affecting these Landscape Units. While scenery throughout these units varies, the general character is described as follows:

Broad river valleys centered on riparian corridors and surrounded by steep hillsides with sparse vegetation. The westernmost units are dominated by the Colorado River and associated riparian corridor and include red rock escarpments and contrasting piñon-juniper woodland vegetation. The remaining units are centered on the Eagle River and associated riparian corridor, which provides striking contrast to the surrounding hillsides. The scenery along the Eagle River includes 30 miles of colorful and rugged sandstone cliffs and canyons from Edwards to Dotsero. Spruce trees, cottonwoods, alder, dogwoods, and various other riparian vegetation border the river. Spruce-fir and aspen forests are seen in the mountain backdrop, and serviceberry, scrub oak, piñon-juniper woodland, sagebrush and grasses occur in the foothills foreground. The lower Eagle River valley is characterized by agricultural and livestock ranches.

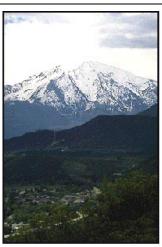
Enclosed and rugged canyon environments that extend up from 1,500 to 2,500 feet above the Colorado River (Glenwood Canyon, Red Canyon, and Dowd Canyon).

Overall, these units are composed of common variety, unity, and vividness attributes and are rated Class B scenery. Outstanding scenic attractiveness within these units is present within Glenwood Canyon and Red Canyon and are rated Class A scenery. While the towns of Glenwood Springs, Gypsum, Eagle, Wolcott, and Avon are urban mountain communities and constitute deviations from the naturally appearing landscape, they are valued for their small town characteristics, rural landscapes, undeveloped wooded hillsides and ridgelines, and scenic views. Existing elements, such as minor cut-and-fill slopes associated with roadways, remain subordinate to the setting.

Glenwood Springs Unit (Mileposts 113 to 118)



Hotel Colorado, view north



Sunlight Peak, view south



Natural Hot Springs Pool, view east

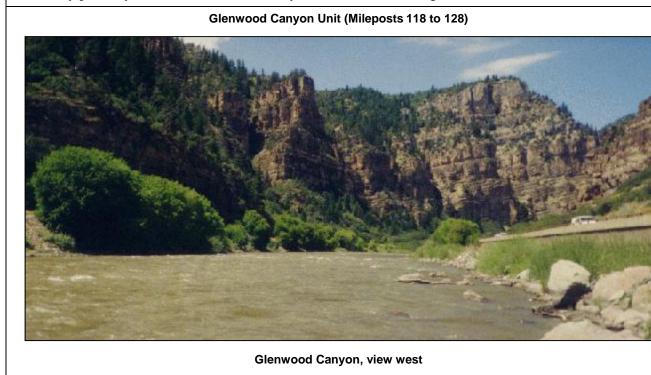
West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)

Glenwood Springs Unit: Landscape Character

- Broad river valley defined by steep hillsides, red rock escarpments
- Foothills zone
- North- and south-facing slopes dominated by homogeneous piñon-juniper woodland
- Undeveloped wooded hillsides and ridgelines

Glenwood Springs Unit: Landscape Context

- Jurisdiction: town of Glenwood Springs, unincorporated Garfield County, Bureau of Land Management Glenwood Springs District, White River National Forest
- Small town characteristics
- Confluence of Colorado and Roaring Fork rivers
- Primarily privately owned lands surrounded by Bureau of Land Management lands



West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)

Glenwood Canyon Unit: Landscape Character

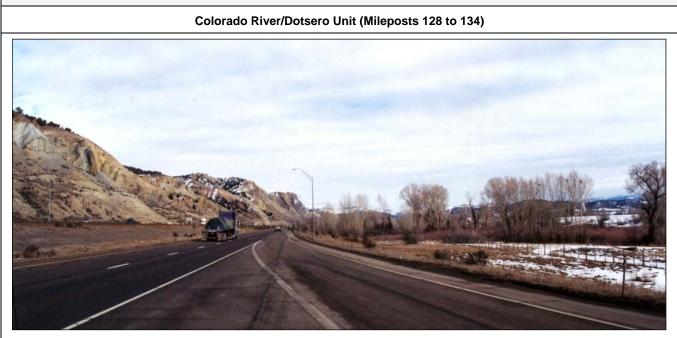
- Steep and rugged canyon walls extend 2,500 feet above Colorado River
- Oakbrush and aspen add color along canyon walls
- Very resistive rock, white river uplift: Saguache quartzite
- White sandstone cliffs
- Extensive cave network at canyon rim
- Layers of sedimentary deposits contain abundant Paleozoic fossils
- South-facing slopes dominated by scrub oak and piñon-juniper
- North-facing slopes dominated by scrub and woodland
- Riparian corridor of serviceberry, choke cherry, box elder, cottonwood
- Some areas composed of limestone and dolomite; springs exist
- Parallels Colorado River

Glenwood Canyon Unit: Landscape Context:

- Jurisdiction: White River National Forest, Bureau of Land Management Glenwood Springs District
- Glenwood Canyon Recreation Trail provides scenic access to numerous and varied recreation opportunities
- Intersected by many recreation trails

Appendix B. Description of Landscape Units and Visual Contrast of I-70 Mountain Corridor Alternatives

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)



Dotsero Area, view east

Dotsero Unit: Landscape Character

- Broad river valley surrounded by steep hillsides
- Eagle Valley Formation
- Soft sedimentary rock, highly erodible; sparse vegetation in valleys
- Glaciated, U-shaped valley
- Foothills zone
- North- and east-facing slopes dominated by piñon-juniper woodland
- Lower side valley contains alluvial fans of sagebrush-rabbitbrush scrub
- Large riparian meadow and forest riparian complex along Eagle River
- Parallels Colorado River west of Dotsero and Eagle River east of Dotsero

Dotsero Unit: Landscape Context

- Jurisdictions: Bureau of Land Management Glenwood Springs District, White River National Forest, unincorporated Garfield County, unincorporated Eagle County
- Includes unincorporated town of Dotsero
- Rural, open character of Eagle County
- Recreation orientation
- Preservation of open space through clustered development

Appendix B. Description of Landscape Units and Visual Contrast of I-70 Mountain Corridor Alternatives

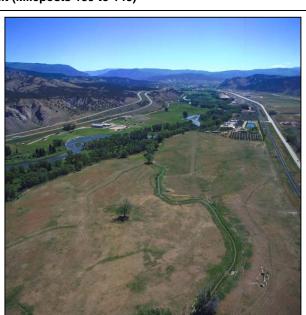


- Rural, open character of Eagle County
- Recreation orientation
- Preservation of open space through clustered development

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)

Eagle Valley/Eagle-Gypsum Unit (Mileposts 139 to 148)





Gypsum, view east

Gypsum, view east

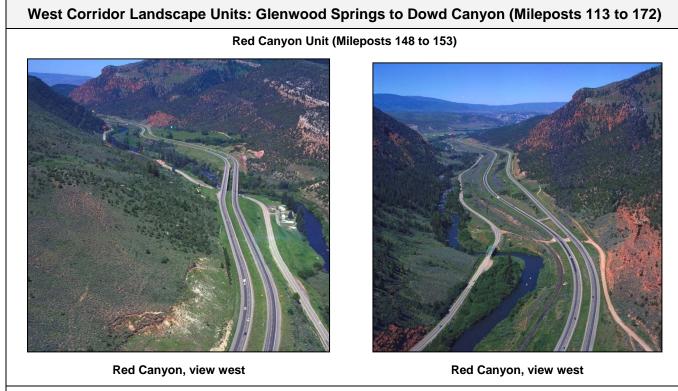
Eagle Valley/Eagle-Gypsum Unit: Landscape Character

- Broad river valley surrounded by steep hillsides
- Eagle Valley Formation
- Soft sedimentary rock, highly erodible; sparse vegetation in valleys
- Area not mined
- Glaciated, U-shaped valley about 0.5 mile wide
- Abrupt elevation change of 600 feet from side slopes to valley floor
- Foothills zone
- South- and west-facing slopes are open areas with dispersed piñon pine and Rocky Mountain juniper
- North- and east-facing slopes include denser piñon-juniper woodland
- Large riparian meadow and forest riparian complex along Eagle River

Eagle Valley/Eagle-Gypsum Landscape Context

(Source: Eagle County Master Plan)

- Jurisdiction: Bureau of Land Management Glenwood Springs District, unincorporated Eagle County, towns of Gypsum and Eagle
- Includes unincorporated town of Dotsero
- Rural, open character of Eagle County
- Recreation orientation
- Includes Gypsum Ponds State Wildlife Area
- Denver and Rio Grande Western Railroad traverses unit
- Preservation of open space through clustered development
- Parallels Eagle River

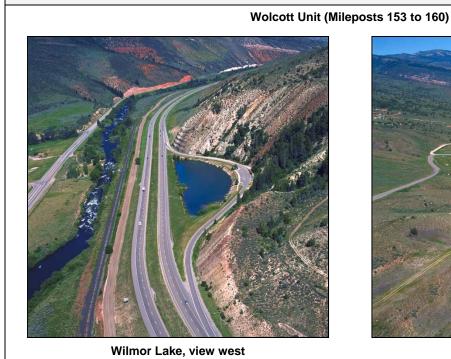


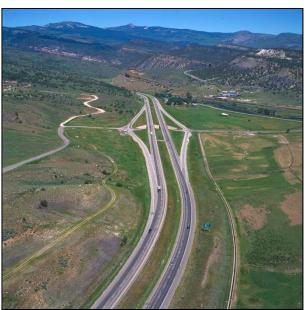
Red Canyon Unit: Landscape Character

- Spectacular red rock escarpments east of Eagle rising 1,000 to 1,500 feet above the I-70 highway
- Enclosed landscape
- Bright red rock formations contrast vividly with dark green coniferous forest cover and grass bottomlands
- Red sandstone cliffs, Mesozoic rock
- Area not mined
- Glaciated, U-shaped valley
- Upper Foothills zone
- North- and south-facing slopes dominated by complex of sagebrush intermixed with piñon juniper and mountain scrub
- North-facing slopes include large patches of aspen
- Valley bottom lined by large riparian forest
- Parallels Eagle River

Red Canyon Unit: Landscape Context

- Jurisdictions: Bureau of Land Management Glenwood Springs District and unincorporated Eagle County
- Traversed by the I-70 highway, US 24 (old US 6), Arkansas-Eagle main line of Denver and Rio Grande
- Western Railroad, and several overhead utility lines
- Ranching activity present





Wolcott Area, view west

Wolcott Unit: Landscape Character

• Broad, open river valley surrounded by steep hillsides with sparse vegetation and highly erodible Eagle Valley Formation soft sedimentary rock

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)

- Red sandstone, cliff forming (Mesozoic rock)
- Glaciated, U-shaped valley
- Upper Foothills zone
- North-facing slopes include large patches of aspen
- North- and south-facing slopes include complex of sagebrush intermixed with piñon-juniper and mountain scrub
- Large riparian meadow and forest riparian complex along Eagle River

Wolcott Unit: Landscape Context

- Jurisdiction: Bureau of Land Management Glenwood Springs District, unincorporated Eagle County
- Rural, open character of Eagle County
- Recreation orientation
- Preservation of open space through clustered development

I-70 Mountain Corridor PEIS August 2010

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)

Eagle Valley/Avon Unit (Mileposts 160 to 170)





Avon, view west

Edwards, view west

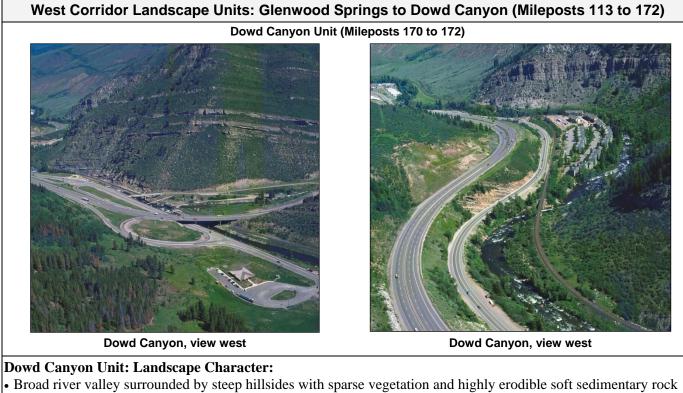
Eagle Valley/Avon Unit: Landscape Character

- Broad valley centered on Eagle River, bordered by steep hillsides
- Eagle Valley Formation
- Soft sedimentary rock, highly erodible; sparse vegetation in valleys
- Area not mined
- Glaciated, U-shaped valley
- Upper Foothills zone
- North- and south-facing slopes dominated complex of sagebrush intermixed with piñon-juniper woodland and mountain scrub
- North-facing slopes include large patches of aspen
- Valley bottom lined by large riparian forest

Eagle Valley/Avon Unit: Landscape Context

(Source: Eagle County Master Plan)

- Jurisdiction: Bureau of Land Management Glenwood Springs District, White River National Forest, unincorporated Eagle County, town of Avon
- Rural, open character of Eagle County
- Recreation orientation
- Preservation of open space through clustered development
- Parallels Eagle River



- Enclosed canyon environment
- Abrupt elevation change from side slopes to valley floor
- Striking 200-foot banded cliffs of Minturn Formation, deposits of debris washed from ancestral Rockies, and limestone layers formed from marine organism shells
- South-facing slopes include sagebrush intermixed with piñon-juniper woodland and mountain scrub
- North-facing slopes have large patches of aspen
- River lined by large riparian forests
- Red beds, iron-rich sandstone

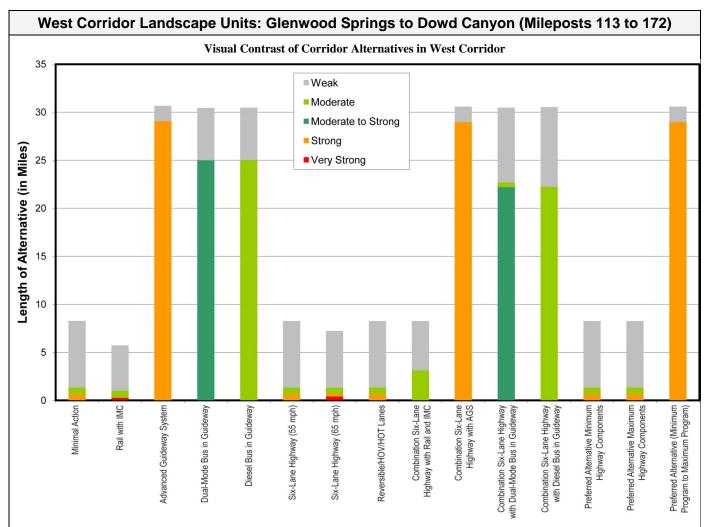
Dowd Canyon Unit: Landscape Context:

- Jurisdiction: White River National Forest, unincorporated Eagle County, town of Minturn
- Area not mined
- Confluence of Eagle River and Gore Creek
- The I-70 highway and the Denver and Rio Grande Western Railroad located parallel to Eagle River
- Includes towns of Wolcott and Avon

West Corridor Landscape Units: Key Viewpoints and the I-70 Highway Views

The Landscape Units between Glenwood Springs and Dowd Canyon include many sensitive community- and recreation-oriented views. The I-70 highway and the Union Pacific Railroad are located parallel to the Colorado/Eagle River throughout these units. Views from THE I-70 HIGHWAY vary considerably throughout these units, from open and expansive in areas of broad valleys to confined and enclosed within canyon environments. Interstate motorists experience diversity in color and form, viewing geologic formations primarily composed of soft sedimentary, highly erodible rock. Recreation is highly valued throughout these units on both public and privately owned lands.

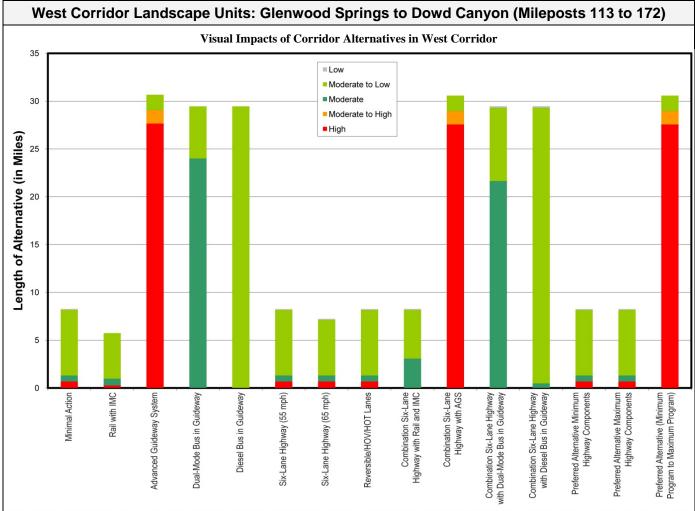




* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

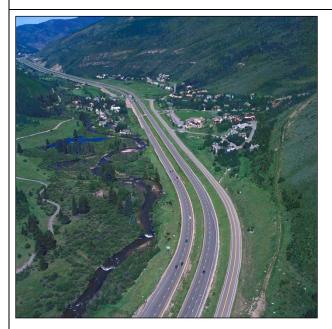
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Vail Landscape Unit (Mileposts 172 to 182)

Overview

A relatively broad, U-shaped valley centered on the Gore Creek riparian shrub complex characterizes the Vail unit. This unit has some distinctive landscape features, such as the red sandstone formations that create a vivid contrast to the riparian shrub complex. However, the overall unit is composed of common variety, unity, and vividness attributes, and is rated Class B scenery. The following provides descriptions and context photographs documenting the character and context of the landscape within this unit. Deviations from the natural landscape character are present in the Vail unit, primarily associated with community development and the Vail Ski Area.



Vail, view west



Vail, view west

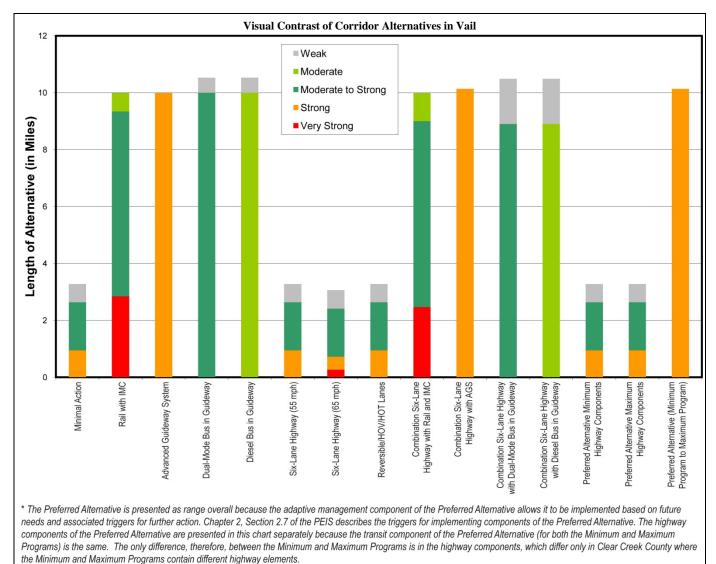
- Landscape Character
- Red beds, iron rich sandstone; very erodible soils
- Area not mined
- Glaciated, broad U-shaped valley
- Mixed montane forest and foothills mountain scrub zone
- South-facing slopes dominated by mountain scrub with intermittent sagebrush
- North-facing slopes dominated by Douglas-fir and aspen
- Gore Creek riparian shrub complex

Landscape Context

- Jurisdiction: White River National Forest, unincorporated Eagle County, town of Vail
- Resort destination (skiing, shopping, Gold Medal fishing stream)
- Relatively new community; includes Vail Ski Area
- Contains open space lands, numerous Vail recreation facilities, and designated White River National Forest recreation sites
- Adjacent to Eagles Nest Wilderness Area
- Parallels Gore Creek

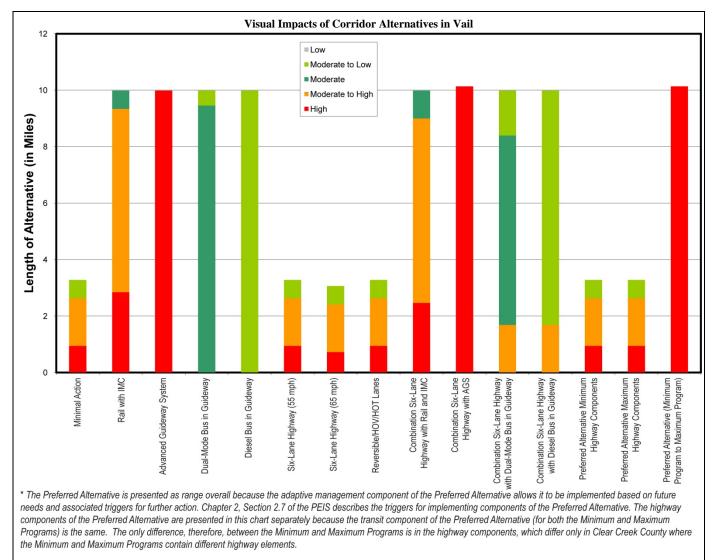
Key Viewpoints and the I-70 Highway Views

Vail is a popular resort destination for skiing, shopping, and Gold Medal fishing. Sensitive views within this unit include open space lands, many recreation sites, parks, and trails within the town of Vail, as well as many designated recreation sites within the White River National Forest. The Eagles Nest Wilderness Area is located adjacent to this unit within the White River National Forest. Views along THE I-70 HIGHWAY within this unit transition from the forested landscapes along Vail Pass to more open views of barren mountain peaks rising above groves of aspen and spruce. Due to the developed nature of this unit, Corridor alternatives would be completely within foreground views from recreation areas, as well as the community of Vail.



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



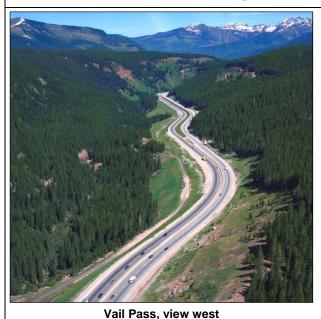
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Vail Pass/Black Gore Creek Landscape Unit (Mileposts 182 to 190)

Overview

The Vail Pass/Black Gore Creek unit is primarily characterized by its rural, forest setting. Distinctive landscape features within this unit include red sandstone rock outcrops, deep green spruce fir forest, alpine meadows, and meandering streams. Class A landscapes within this unit are associated with the rugged peaks of the Gore mountain range within the Eagles Nest Wilderness Area. Views to distant Class A landscapes of the rugged peaks of the Tenmile Mountain range are visible within this unit. Development within this unit is primarily related to recreation. Few deviations from the natural landscape character are present in the Vail Pass/Black Gore Creek unit.





Vail Pass, view west

Landscape Character

- Red beds, iron-rich sandstone; highly erodible soils
- Undulating mountains interrupted occasionally by modest-sized red sandstone cliffs
- Eastern slopes vary from gentle to moderately steep; steeper western slopes
- Area not mined
- Glaciated, U-shaped valley and large meadows
- Subalpine zone with meandering streams
- Dominated by deep green spruce-fir with large areas of grass/forb meadows

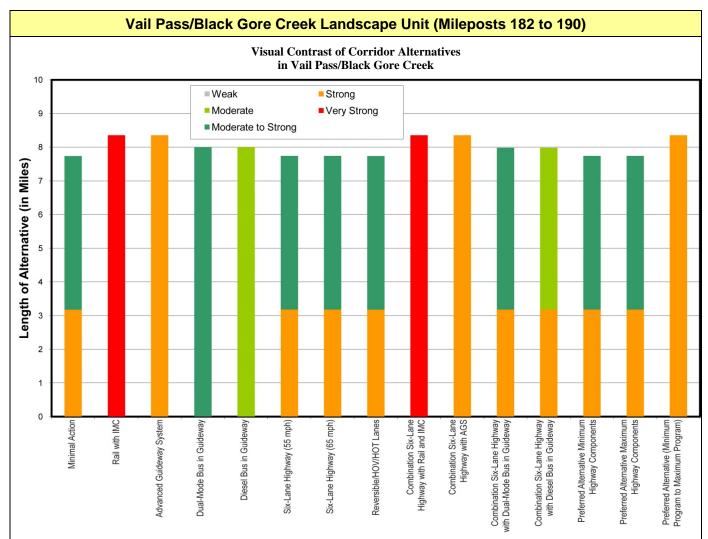
Landscape Context

- Jurisdiction: White River National Forest, unincorporated Eagle County
- The I-70 highway paralleled by Tenmile-Vail Pass National Recreation Trail
- One of the highest interstate highway locations in the United States (10,603 feet)
- Bordered on north side by Eagles Nest Wilderness Area
- Parallels Black Gore Creek

Vail Pass/Black Gore Creek Landscape Unit (Mileposts 182 to 190)

Key Viewpoints and the I-70 Highway Views

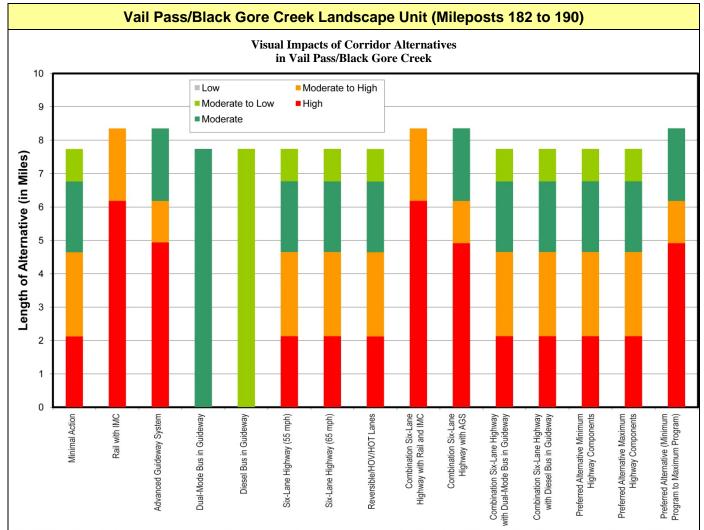
Much of this unit is within foreground, middleground, and background views from recreation sites, such as the Tenmile-Vail Pass National Recreation Trail, Vail Pass Winter and Summer Recreation Area, and Two Elk Trail. Views from the I-70 highway through the Vail Pass/Black Gore Creek unit are some of the more scenic natural landscapes throughout the Corridor. The I-70 highway is paralleled by the Tenmile-Vail Pass National Recreation Trail, which extends from east Vail to Silverthorne (throughout the unit area). Many other trails depart from locations near the I-70 highway and extend to either the north or south of the interstate. Views from the I-70 highway within this unit are dominated by broad mountain slopes covered with aspen, lodgepole pine, fir, and spruce. Further west on Vail Pass, the views become more dramatic as terrain becomes more rugged.



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Copper Mountain Landscape Unit (Mileposts 190 to 195)

Overview

Copper Mountain is characterized by a broad U-shaped valley dominated by imposing peaks of the Gore and Tenmile mountain ranges, which are considered an example of outstanding scenic attractiveness. Deviations from the naturally appearing landscape are primarily related to the Copper Mountain Resort development, the I-70 highway, and US 6. Below are descriptions and photographs documenting the character and context of the landscape within this unit.



Copper Mountain, view southwest

Landscape Character

- Broad valley dominated by Gore Mountain Range and Copper Mountain Resort
- Open expansive views to Copper Mountain ski runs
- Red beds, iron rich sandstone
- Area not mined
- Glaciated, U-shaped valley
- Subalpine zone
- Dominated by spruce and fir with large areas of grass/forb meadows

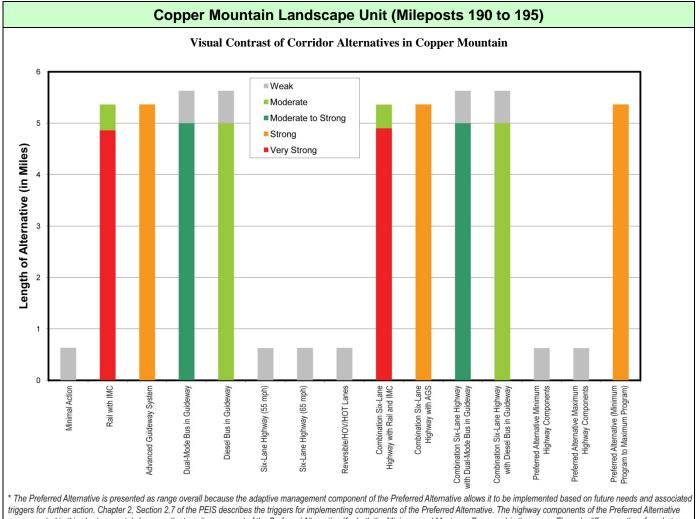
Landscape Context

(Source: Copper Mountain Sub-basin Plan)

- Jurisdiction: White River National Forest, unincorporated Summit County
- Ski resort
- Historic Ute hunting camp
- Slopes of Copper Mountain were mined in 1800s
- Includes Wheeler Flats, named for John S. Wheeler, who homesteaded in the area in the 1870s
- Parallels West Tenmile Creek

Key Viewpoints and the I-70 highway Views

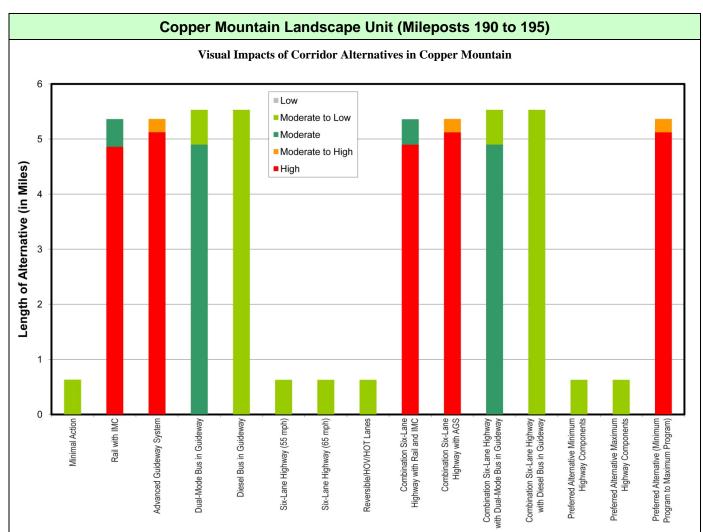
Much of this unit is within foreground views from recreation sites, such as the Copper Mountain Resort, Eagles Nest Wilderness Area, Tenmile-Vail Pass National Recreation Trail, and Corral Creek Trail.



are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

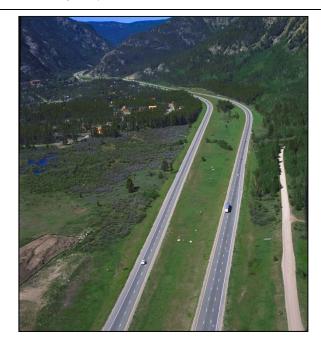
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

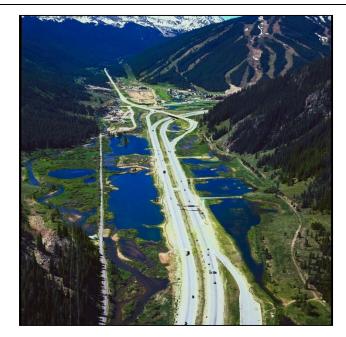
Officers Gulch and Tenmile Canyon Landscape Unit (Mileposts 195 to 201)

Overview

This unit is primarily characterized by its rural, forest setting. Development within this unit is primarily related to recreation. Copper Mountain and Tenmile Canyon units are dominated by the imposing peaks of the Gore and Tenmile mountain ranges that tower more than 13,000 feet in elevation. The landscape within these units is an example of outstanding scenic attractiveness and is considered to be Class A scenery. Minor deviations from the natural landscape character are present; however, they are subordinate to the characteristic landscape and include the I-70 highway and US 6.



Tenmile Canyon, view southwest



Tenmile Canyon, view southwest

Landscape Character

- Dominated by Gore and Tenmile mountain ranges and Copper Mountain Resort
- Tenmile Formation
- Resistive granite
- Area not mined
- Glaciated, broad U-shaped valley
- Lower subalpine to subalpine zone
- North- and south-facing slopes dominated by lodgepole pine with large stands of aspen
- Riparian areas centered on Tenmile Creek and pond complex toward Copper Mountain

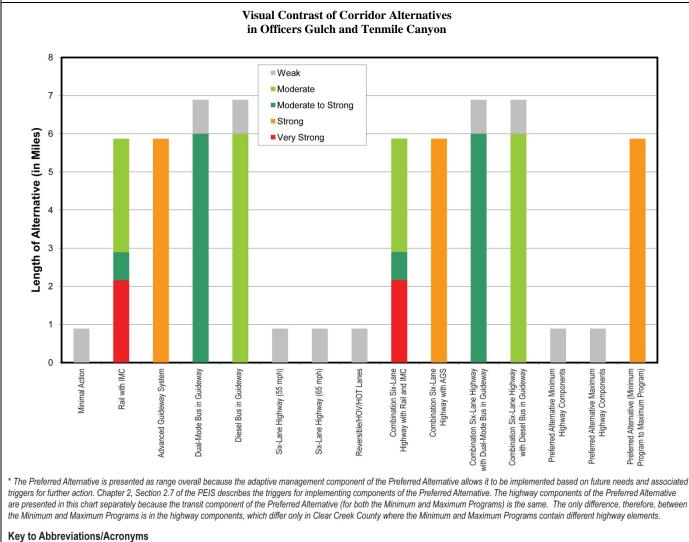
Landscape Context

- Jurisdiction: White River National Forest, unincorporated Summit County
- Copper Mountain Resort elements detract from natural setting
- Paralleled by Tenmile-Vail Pass National Recreation Trail
- Eagles Nest Wilderness Area north of the I-70 highway
- Parallels Tenmile Creek

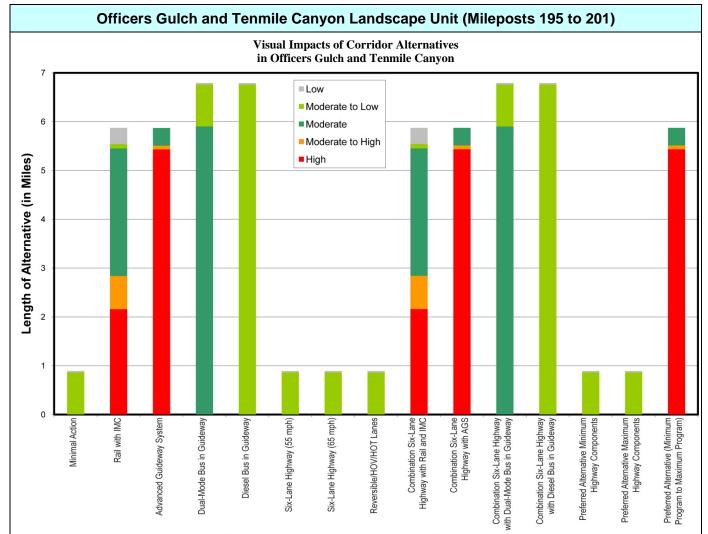
Officers Gulch and Tenmile Canyon Landscape Unit (Mileposts 195 to 201)

Key Viewpoints and the I-70 Highway Views

Much of this unit is within foreground views from recreation sites, such as the Tenmile-Vail Pass National Recreation Trail, North Tenmile Trail, and Wheeler Lake Spur Trail. The I-70 highway throughout this unit is paralleled by the Tenmile-Vail Pass National Recreation Trail, which extends from east Vail to Silverthorne. Many other trails depart from locations near the I-70 highway and extend either to the north or south of the interstate. Views along the I-70 highway are enclosed by local terrain and are dominated by the peaks of the Tenmile and Gore mountain ranges, as well as the Copper Mountain ski runs.



AGS = Advanced Guideway System	HOT = High Occupancy Toll
HOV = High Occupancy Vehicle	IMC = Intermountain Connection



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

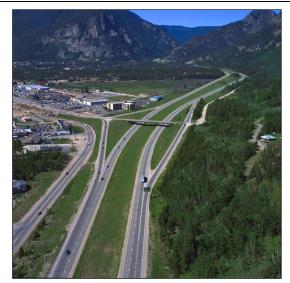
Blue River Valley Landscape Unit (Mileposts 201 to 208)

Overview

The Blue River Valley unit is centered on the confluence of Tenmile Creek, Blue River, Straight Creek, and Snake River. A broad north/south-oriented valley encompassed by the Gore and Williams Fork mountain ranges characterizes the Blue River Valley unit. This unit is composed of both Class A and Class B scenery. Distinctive landscape features within this unit include rugged peaks of the Gore mountain range within the Eagles Nest Wilderness Area. Deviations from the natural landscape character are present in the Blue River Valley unit, primarily associated with community development; minor cut-and-fill slopes associated with the I-70 highway, State Highway (SH) 9, SH 6; and the Dillon Dam Reservoir. Community developments influencing this unit include Frisco, Silverthorne, and Dillon.



Blue River Valley, view west



Blue River Valley, view west

Landscape Character

- Broad river valley with both sides characterized by steep hillsides
- Defined by Gore Mountain Range (west) and Williams Fork Mountain Range (east)
- Midvalley sedimentary rock; soft rock, dark gray shale, Mancos Formation and Dakota sandstone
- Area not mined
- Glaciated, U-shaped valley
- Broad riparian zone centered on Blue River
- Blue spruce, cottonwood, aspen, willow
- South- and west-facing slopes include dense sagebrush with lodgepole pine

• North- and east-facing slopes include dense aspen and lodgepole pine

Landscape Context

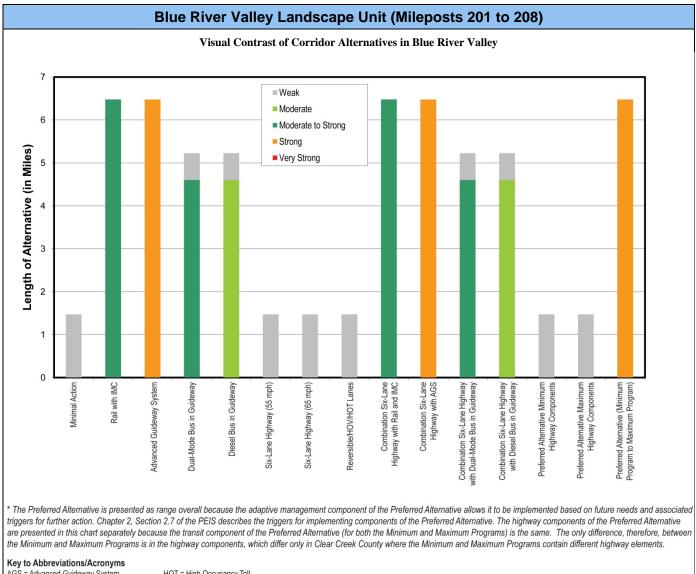
(Source: Summit County Comprehensive Plan)

- Jurisdictions: White River National Forest; unincorporated Summit County; towns of Frisco, Silverthorne, Dillon
- Easy access to numerous recreation facilities: Gold Medal trout fishing, golf, skiing, Dillon Reservoir amenities
- Established as makeshift construction camp for workers building Dillon Dam
- Surrounded on two sides by forest and wilderness area; adjacent to Eagles Nest Wilderness Area
- Gateway to Summit County and western Colorado
- The I-70 highway, SH 9, and SH 6 traverse unit
- Confluence of Tenmile Creek, Blue River, Straight Creek, and Snake River

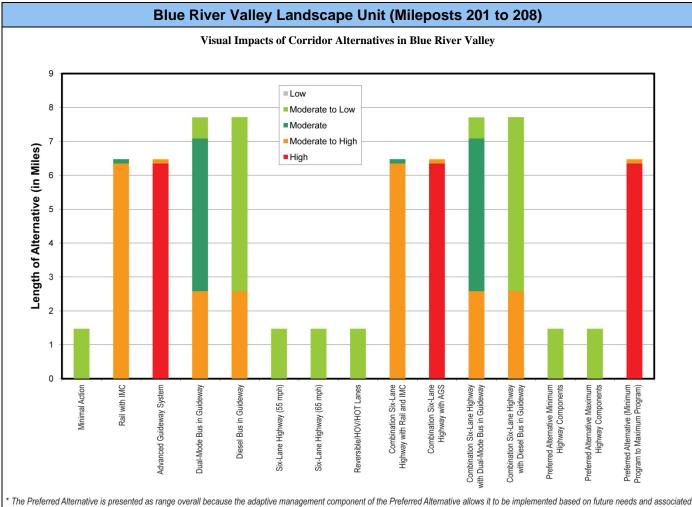
Blue River Valley Landscape Unit (Mileposts 201 to 208)

Key Viewpoints and the I-70 Highway Views

Due to the developed nature of this unit, Corridor alternatives would be almost completely within foreground views from the communities of Frisco, Silverthorne, and Dillon, as well as from recreation areas. Designated recreation is abundant in this unit, including White River National Forest -designated recreation complexes, campgrounds, picnic areas, scenic overlooks, and trails. The communities in this unit also encompass designated open space, parks, and trails. Sensitive viewpoints within the Blue River unit also include residents, designated recreation areas, and roadways. Residents are primarily located within the communities of Frisco, Silverthorne, and Dillon. Primary roads that traverse this unit, in addition to the I-70 highway, include SH 9 and SH 6. Views from the interstate within this unit are relatively enclosed within a broad river valley that is bordered on both sides by the Gore and Williams Fork mountain ranges.



AGS = Advanced Guideway System HOV = High Occupancy Vehicle



triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

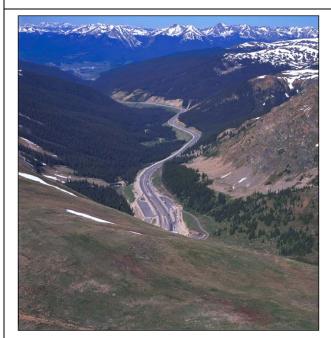
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Straight Creek Landscape Unit (Mileposts 208 to 214)

Overview

The Straight Creek unit is dominated by steep, rugged terrain associated with the Continental Divide. The Scenic Attractiveness of lands within the Straight Creek unit consists of Classes A and B. Straight Creek is relatively undeveloped with the exception of the I-70 highway and the Eisenhower-Johnson Memorial Tunnels. Deviations from the naturally appearing landscape are primarily related to the roadway cut-and-fill slopes associated with the I-70 highway and the pull off/parking area near the west portal of the Eisenhower-Johnson Memorial Tunnels.





Straight Creek, view west

Straight Creek, view west

Landscape Character

- Views dominated by Continental Divide, Williams Fork Mountain Range, Buffalo Mountain
- Steep, rugged terrain: hard resistive rock, Idaho Springs Formation (metamorphic rock), light and dark colored banding
- High mountain range due to resistive rock and faulting
- Area not mined
- Glaciated, U-shaped valley
- Upper subalpine zone
- Dense, homogeneous mix of Engelmann spruce and lodgepole pine with patches of aspen
- Elevations above 11,200 feet are alpine meadow grassland with krummholz

Landscape Context

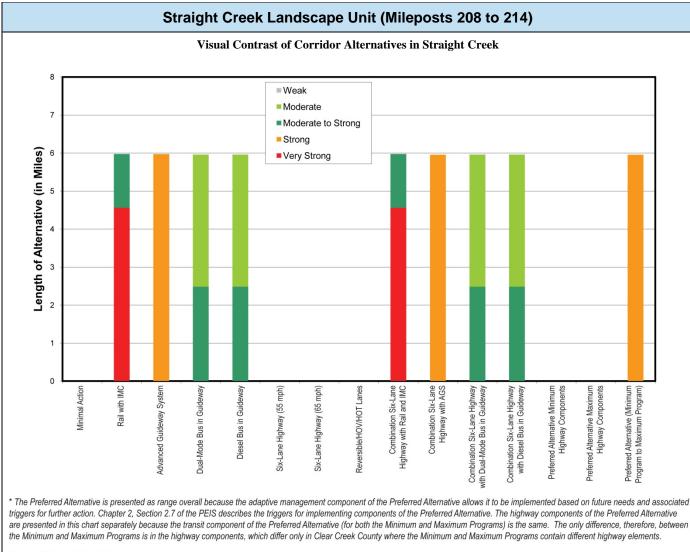
- Jurisdiction: White River National Forest, unincorporated Summit County
- The I-70 highway parallels Straight Creek west of the Eisenhower-Johnson Memorial Tunnels and Clear Creek east of the Eisenhower-Johnson Memorial Tunnels
- Steep grade down to Blue River Valley
- West portal to Eisenhower-Johnson Memorial Tunnels
- Bordered on north side by Ptarmigan Wilderness Area

Straight Creek Landscape Unit (Mileposts 208 to 214)

Key Viewpoints and the I-70 Highway Views

Due to the rural nature of this unit, most of this unit is within background distance zones from recreation sites and middleground and background distance zones from the community developments of Silverthorne and Dillon. Sensitive views within this unit include the Ptarmigan Peak Wilderness Area and trails within the White River National Forest. Views along the I-70 highway within this unit range from panoramic as one travels west out of the Eisenhower-Johnson Memorial Tunnels, to more enclosed as one continues west entering the Blue River Valley. The rugged peaks of the Gore and Tenmile mountain ranges dominate these views.

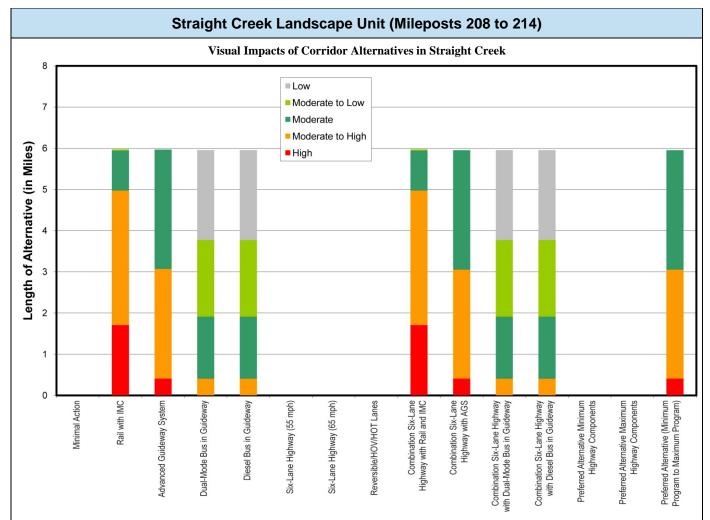




Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

Technical Reports
Page B-34



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Loveland Landscape Unit (Mileposts 214 to 217)

Overview

The Loveland unit is dominated by steep, rugged terrain associated with the Continental Divide. The Scenic Attractiveness of lands within the Loveland unit consists of Classes A and B. Deviations from the naturally appearing landscape, such as the Loveland Ski Area (ski runs, lodge, and parking area), major cut-and-fill slopes associated with the I-70 highway, and the east portal of the Eisenhower-Johnson Memorial Tunnels, begin to dominate. Overall, noticeable deviations within this unit remain visually subordinate to the landscape character being viewed.



Loveland, view west

Loveland, view west



Loveland, view northwest from Loveland Pass along SH 6

Landscape Character

- Dominated by Continental Divide
- Steep, rugged terrain: hard resistive rock, Silver Plume Formation (igneous rock), consistent gray granitics
- High mountain range due to resistive rock and faulting
- Area not mined
- Rolling terrain, glaciated, U-shaped valley
- Subalpine zone
- Homogeneous mix of Engelmann spruce and subalpine fir with pockets of lodgepole pine
- Pockets of aspen, especially on south-facing slopes
- Elevations above 11,200 feet are alpine meadow grassland with krummholz

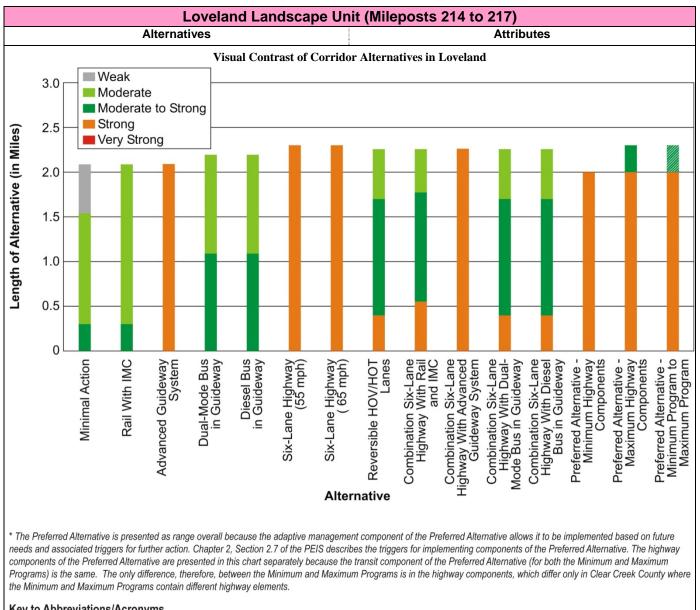
Loveland Landscape Unit (Mileposts 214 to 217)

Landscape Context

- Jurisdiction: Arapaho and Roosevelt National Forests
- Includes Loveland Ski Area and Loveland Pass Trail
- Eisenhower-Johnson Memorial Tunnels entrance to Western Slope
- High mountain parks
- Seven Sisters avalanche chutes
- Parallels Clear Creek

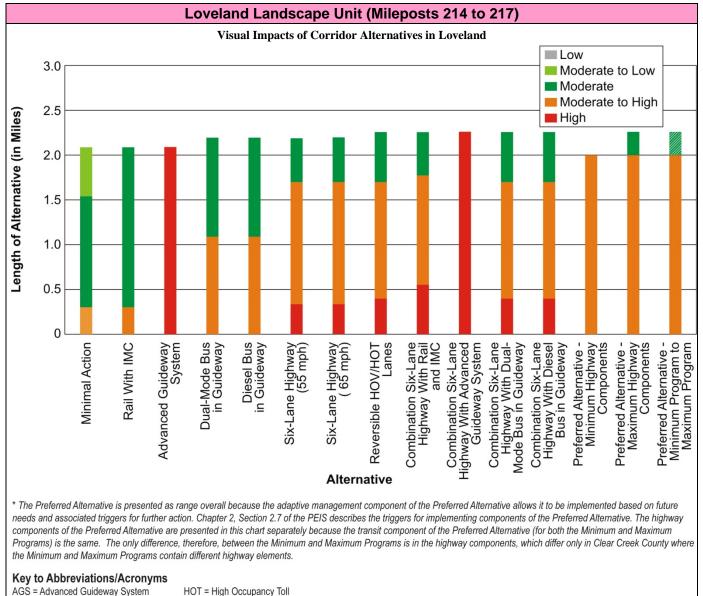
Key Viewpoints and the I-70 Highway Views

All of this unit is within foreground views of recreation resources. Sensitive viewpoints within this unit are primarily related to the Loveland Ski Area and trails, such as the Loveland Pass Trail and the Bakerville to Loveland Trail within the Arapahoe and Roosevelt National Forest. Views within the Loveland unit are enclosed and dominated by the rural forest setting and slopes of the Continental Divide. The alpine peaks of the Continental Divide, as well as the unnatural vegetative patterns associated with the Loveland Ski Area, dominate views from the I-70 highway within this unit.



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

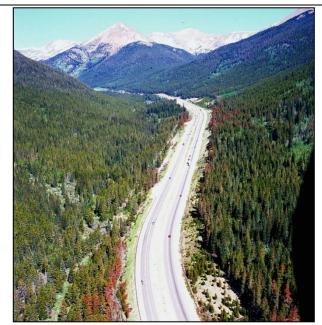


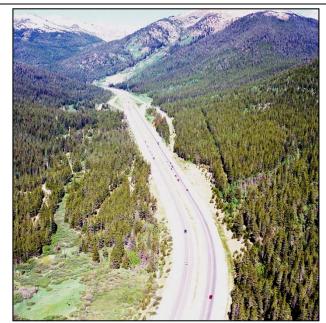
HOV = High Occupancy Vehicle

Herman Gulch Landscape Unit (Mileposts 217 to 221)

Overview

The Herman Gulch unit has a unique character within the Corridor in that it is the first dominant rural, forest setting that appears to be comparatively undeveloped as one travels west from C-470 on the I-70 highway. The landscape character of this unit is enclosed and defined by steep, U-shaped mountain slopes. Vegetation in this unit consists of a fairly homogeneous mix of Engelmann spruce and subalpine fir with occasional pockets of lodgepole pine and aspen. The Scenic Attractiveness of lands within the Herman Gulch unit consists of Classes A and B. Class A scenery is associated with the Continental Divide.





Herman Gulch, view west

Herman Gulch, view west

Landscape Character

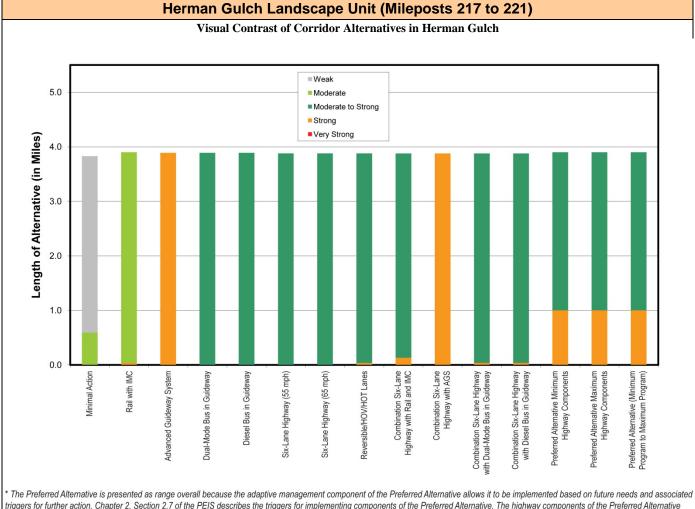
- Enclosed corridor defined by valley slopes
- Steep, rugged terrain: hard resistive rock, Silver Plume Formation (igneous rock), consistent gray granitics
- High mountain range due to resistive rock and faulting
- Rolling terrain, glaciated, U-shaped valley
- Subalpine zone
- Few landscape character deviations evident
- Homogeneous mix of Engelmann spruce and subalpine fir with pockets of lodgepole pine
- Pockets of aspen, especially on south-facing slopes

Landscape Context

- Jurisdiction: Arapaho and Roosevelt National Forests
- Valued recreation opportunity for high country hiking
- Corridor to Loveland Ski Area
- Continental Divide National Scenic Trail passes under the I-70 highway via Herman Gulch
- Parallels Clear Creek

Key Viewpoints and the I-70 Highway Views

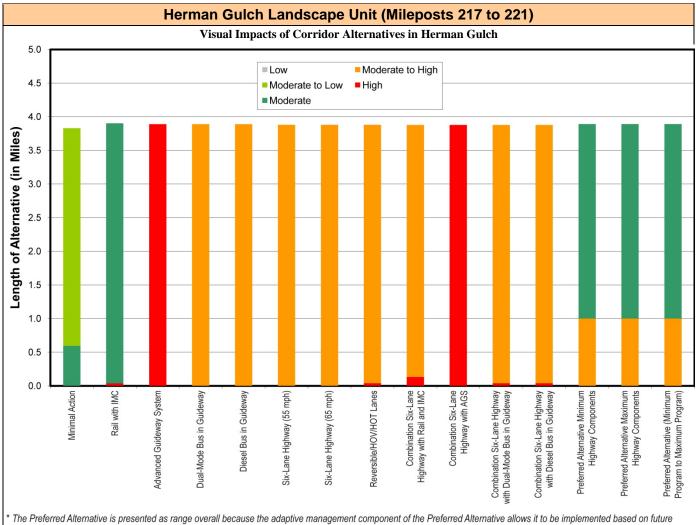
Alternatives within this unit would be almost completely within foreground views from recreation resources and within foreground and middleground from community development. Sensitive viewpoints within this unit include designated recreation within the Arapaho and Roosevelt National Forest. The Continental Divide National Scenic Trail crosses under the I-70 highway in this unit (via Herman Gulch). Views from the I-70 highway within this unit are enclosed and dominated by the rural forest setting and slopes of the Continental Divide.



triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

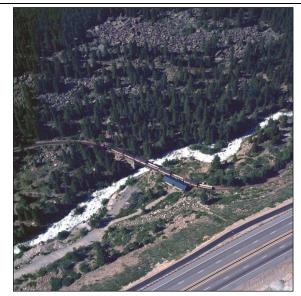
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Silver Plume Landscape Unit (Mileposts 221 to 227)

Overview

The Georgetown-Silver Plume Historic District encompasses an area of extensive historic mining activities with many mine tailings, shafts, tipples, and mill remains visible from the I-70 highway and surrounding areas, as well as many colorful and historic buildings. The Colorado Historical Society operates the narrow-gauge railroad between Georgetown and Silver Plume, as well as an old mine and mill operation. Many properties and buildings in Silver Plume are on the National Historic Register, and the Georgetown-Silver Plume District is a National Historic Landmark. The Scenic Attractiveness of lands within this unit consists primarily of Class B, indicating that lands have some distinctive features but overall are typical examples of the landscape. In addition to the community development associated with Silver Plume and Georgetown, deviations from the naturally appearing landscape within this unit include evidence of historic mining, a major electric power line, and the Corridor.



Silver Plume, view west



Silver Plume, view west

Silver Plume Landscape Character

- Steep, rugged terrain: hard resistive rock, Silver Plume Formation (igneous rock), consistent gray granitics
- High mountain range due to resistive rock and faulting
- Includes historically mined area
- Glaciated, U-shaped valley
- Subalpine zone
- North- and south-facing slopes include mix of Engelmann spruce and subalpine fir with pockets of lodgepole pine
- Pockets of aspen, especially on south-facing slopes
- East-facing slopes are steep and rocky with open mountain scrub and intermittent barren slopes
- Large riparian floodplain along Clear Creek lined with narrowleaf cottonwood

Silver Plume Landscape Context

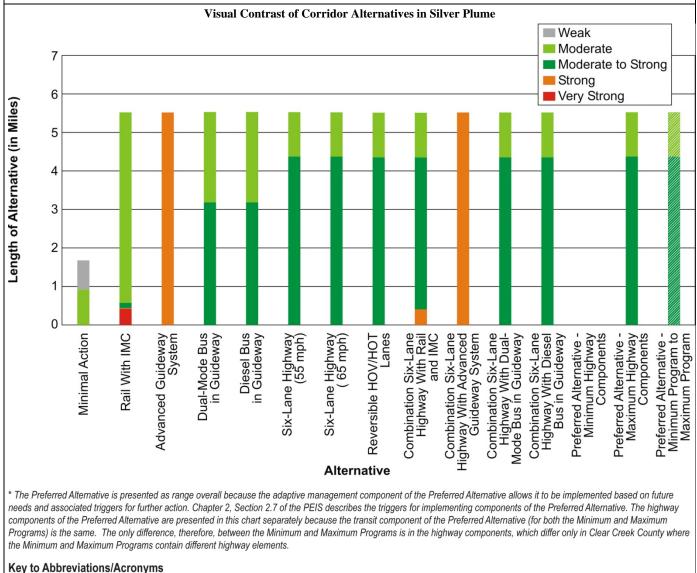
(Source: A Plan for the Historic Preservation of Silver Plume)

- Jurisdiction: Arapaho and Roosevelt National Forests, unincorporated Clear Creek County, town of Silver Plume
- Historic resources; very small, old rural mining town typical of Rocky Mountain high country
- True western mining flavor of architecture (false front buildings with elements of Victorian architecture)
- Within one of Colorado's first National Historic Landmark Districts
- Georgetown Loop Railroad connects Georgetown and Silver Plume communities
- Parallels Clear Creek

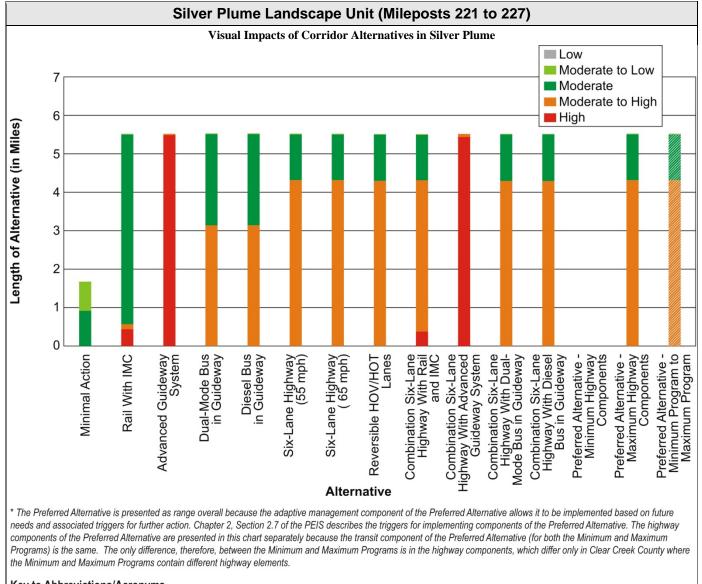
Silver Plume Landscape Unit (Mileposts 221 to 227)

Key Viewpoints and the I-70 Highway Views

Sensitive viewpoints within these units include residences, roadways, and designated recreation areas. Residences within these units are located primarily within the community of Silver Plume, which is lower in elevation than the I-70 highway. Views within this community toward the I-70 highway are dominated by large fill slope banks associated with the highway grade. The Georgetown to Silver Plume Trail and the Historic Georgetown railroad both connect Silver Plume to Georgetown. Several other designated recreation areas (parks and ballfields) are located within these towns. Views from the I-70 highway in these units are enclosed and dominated by Columbia, Republic, and Democrat mountains to the north and Saxon, Woodchuck, and Griffith mountains to the south.



AGS = Advanced Guideway System HOV = High Occupancy Vehicle



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Georgetown Landscape Unit (Mileposts 227 to 232)

Overview

The Georgetown-Silver Plume National Historic District encompasses an area of extensive historic mining activities with many mine tailings, shafts, tipples, and mill remains visible from the I-70 highway and surrounding areas, as well as many colorful and historic buildings. The Colorado Historical Society operates the narrow-gauge railroad between Georgetown and Silver Plume, as well as an old mine and mill operation. Many properties and buildings in Georgetown are on the National Historic Register, and the Georgetown-Silver Plume District is a National Historic Landmark. The rugged terrain northwest of Georgetown is a major bighorn sheep and mountain goat viewing area. The Scenic Attractiveness of lands within this unit consists primarily of Class B, indicating that lands have some distinctive features but overall are typical examples of the landscape. In addition to the community development associated with Georgetown, deviations from the naturally appearing landscape within this unit include evidence of historic mining, a major electric power line, and the Corridor.



Georgetown, view west



Georgetown, view west

Georgetown Landscape Character

- Broad valley floor defined by steep side slopes
- Steep, rugged terrain: hard resistive rock, Silver Plume Formation (igneous rock), consistent gray granitics
- High mountain range due to resistive rock and faulting
- Includes historically mined area
- Glaciated, U-shaped valley
- Variable density montane zone with rocky eroded slopes
- South- and west-facing slopes are steep and rocky with open mountain scrub and intermittent barren slopes
- North- and east-facing slopes dominated by dense lodgepole pine (60 percent cover) with patches of Douglas-fir
- Large riparian floodplain along Clear Creek lined with narrowleaf cottonwood

Georgetown Landscape Unit (Mileposts 227 to 232)

Georgetown Landscape Context,

(Source: Town of Georgetown 2000 Comprehensive Plan)

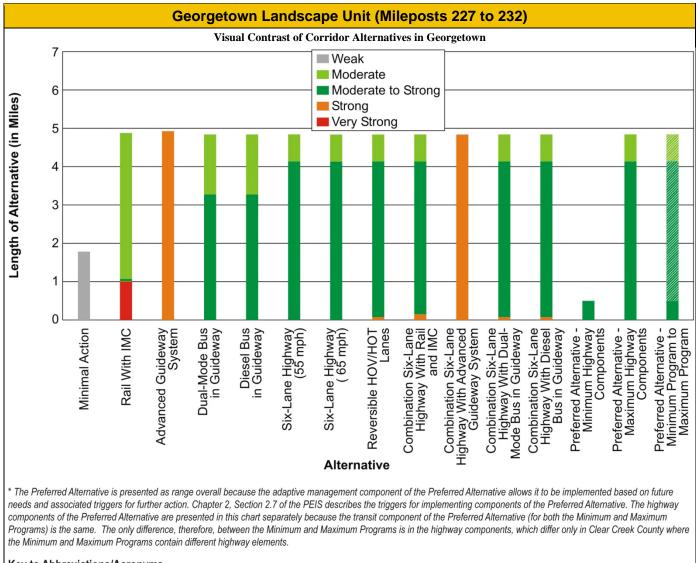
• Jurisdiction: Arapaho and Roosevelt National Forests, unincorporated Clear Creek County, town of Georgetown

- Historic resources and Victorian image
- Mine tailings, shafts, tipples, and mill remains visible from the I-70 highway
- Casual appearance and lack of theme: western small town feeling; funky neighborhoods have eclectic mix of old and new
- Includes north end of Guanella Pass National Scenic Byway
- Georgetown Loop Railroad connects Georgetown and Silver Plume communities

Parallels Clear Creek

Key Viewpoints and the I-70 Highway Views

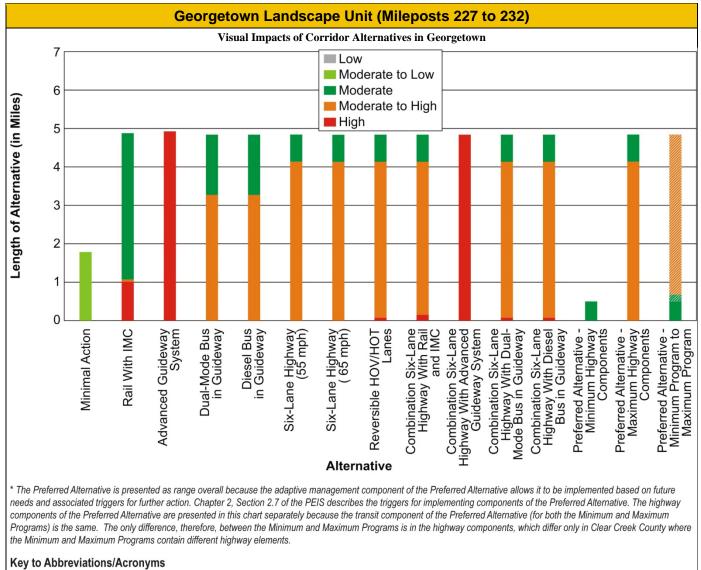
Sensitive viewpoints within these units include residences, roadways, and designated recreation areas. Residences within these units are located primarily within the community of Georgetown, which is lower in elevation than the I-70 highway. Views within this community toward the I-70 highway are dominated by large fill slope banks associated with the highway grade. The north end of the Guanella Pass National Scenic Byway is in Georgetown. The Georgetown to Silver Plume Express Trail and the historic Georgetown Railroad both connect Silver Plume to Georgetown. Several other designated recreation areas (parks and ballfields) are located within the town. Views from the I-70 highway in these units are enclosed and dominated by Columbia, Republic, and Democrat mountains to the north and Saxon, Woodchuck, and Griffith mountains to the south.



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System

HOV = High Occupancy Vehicle

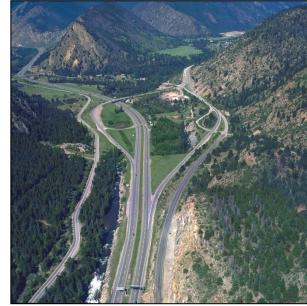


AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Empire Area Landscape Unit (Mileposts 232 to 233)

Overview

The Empire area is at the junction of two relatively broad valleys and is characterized by rugged terrain and historically mined areas. The I-70 highway parallels Clear Creek in this area lined with narrowleaf cottonwood. South- and west-facing slopes include rocky eroded slopes with open mountain scrub and intermittent barren slopes. North- and east-facing slopes are dominated by dense lodgepole pine. To the east of the Empire area, the Corridor transitions from a glaciated U-shaped valley to V-shaped canyons. The Scenic Attractiveness of lands within the Empire unit consists of Class B, indicating that lands have some distinctive features but overall are typical examples of the landscape. In addition to the community development associated with Empire, existing elements, such as the the I-70 highway and US 40 Corridors, influence this unit.





Empire Junction, view west

Empire Junction, view west

Landscape Character

- Junction of two relatively broad valleys
- Rugged terrain: hard resistive rock, Idaho Springs Formation (metamorphic rock), light and dark colored banding
- Includes historically mined areas
- Glaciated, U-shaped valley transitions to V-shaped valley east of Empire area
- Variable density montane zone with rocky eroded slopes
- South- and west-facing slopes are steep and rocky with open mountain scrub and intermittent barren slopes
- North- and east-facing slopes dominated by dense lodgepole pine (60 percent cover)
- Large riparian floodplain along Clear Creek lined with narrowleaf cottonwood

Empire Area Landscape Unit (Mileposts 232 to 233)

Landscape Context

(Source: Clear Creek County web page)

• Jurisdiction: Arapaho and Roosevelt National Forests, unincorporated Clear Creek County, town of Empire

• 1860s gold mining camp

• Star-shaped valley traversed by Clear Creek

- Includes Colorado's first sawmill, gold mines, brewery, large Ute Indian campground
- Exit to Winter Park Resort

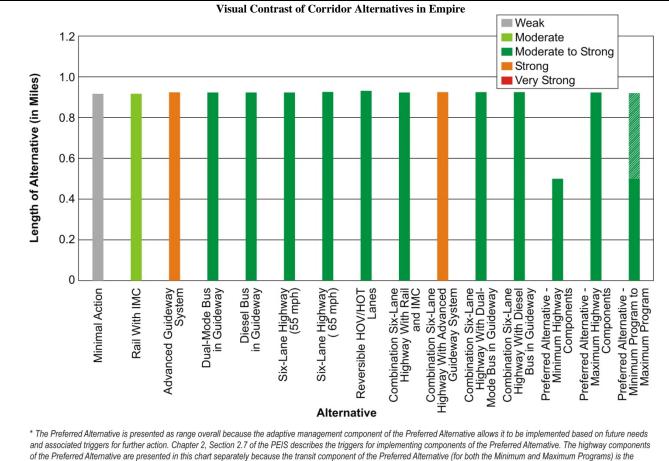
• Includes US 40 and Red Elephant Hill Trail

• Views dominated by Douglas Mountain

• Parallels Clear Creek

Key Viewpoints and the I-70 Highway Views

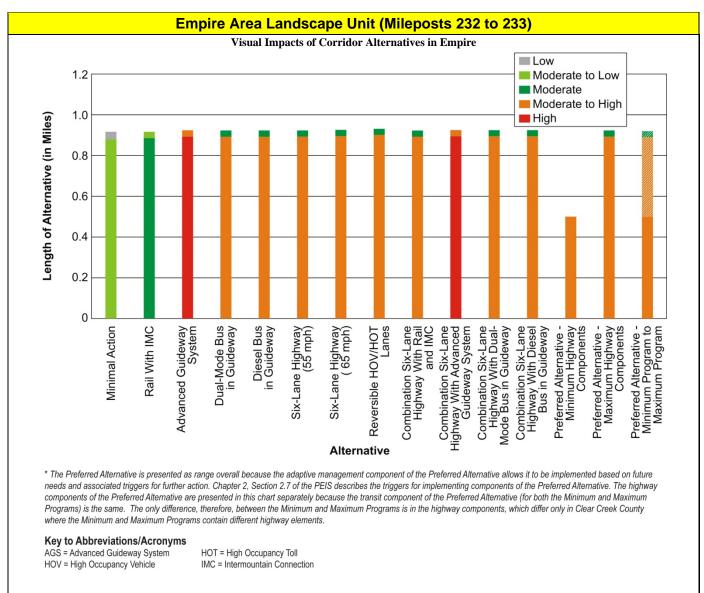
Sensitive viewpoints within this unit include Empire, Red Elephant Hill Trail, and US 40. The surrounding rugged terrain dominates the views from the I-70 highway within this unit (see Key View photograph in **Error! Reference source not found.**).



of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

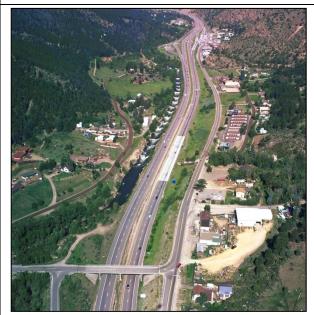
AGS = Advanced Guideway System HOV = High Occupancy Vehicle



Lawson, Downieville, and Dumont Scenery Analysis Unit (Mileposts 233 to 237)

Overview

The lands in this unit are characterized by rugged terrain, V-shaped valleys, and historically mined areas. Surrounding hillsides include variable density montane zone with rock and eroded slopes. South- and west-facing slopes include open montane scrub with intermittent barren slopes. North- and east-facing slopes are dominated by dense lodgepole pine. A large riparian floodplain along Clear Creek is lined with narrowleaf cottonwood. The Scenic Attractiveness of lands within this unit consists of Class B, indicating that lands have some distinctive features but are overall typical of the landscape. In addition to the community development associated with Lawson, Downieville, and Dumont, deviations from the naturally appearing landscape within this unit include evidence of historic mining, a major electric power line, and the Corridor. Due to the historic significance of much of the development, as well as the evidence of historic mining, these have become valued elements within this unit.





Dumont, view west

Lawson, view west

Lawson, Downieville, and Dumont Landscape Character

- Rugged terrain: hard resistive rock, Idaho Springs Formation (metamorphic rock) light and dark colored banding
- Includes historically mined areas
- V-shaped canyon
- Variable density montane zone with rocky eroded slopes
- South- and west-facing slopes are steep and rocky with open mountain scrub, juniper woodland, and intermittent barren slopes
- North- and east-facing slopes dominated by dense lodgepole pine (60 percent cover)
- Large riparian floodplain along Clear Creek lined with narrowleaf cottonwood

Lawson, Downieville, and Dumont Landscape Context

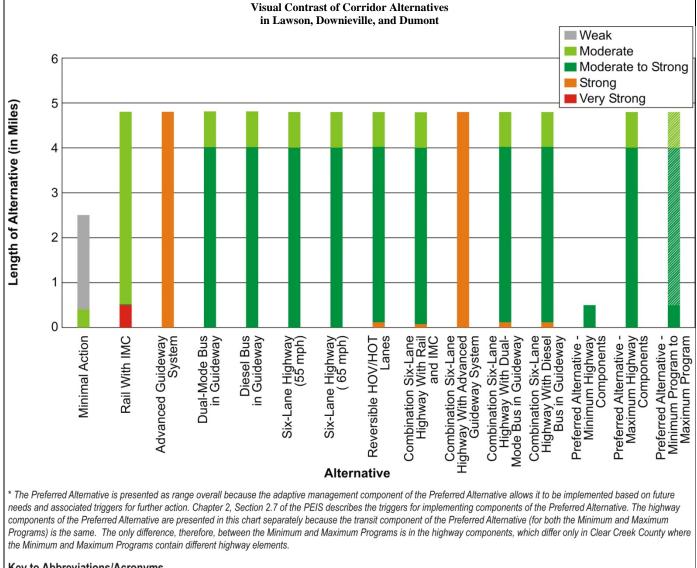
(Sources: J.F. Sato and Associates observation, Clear Creek County Comprehensive Plan)

- Jurisdiction: Arapaho and Roosevelt National Forests, unincorporated Clear Creek County
- Rural, historic atmosphere
- Magnificent natural setting
- Strong community identity
- Parallels Clear Creek

Lawson, Downieville, and Dumont Scenery Analysis Unit (Mileposts 233 to 237)

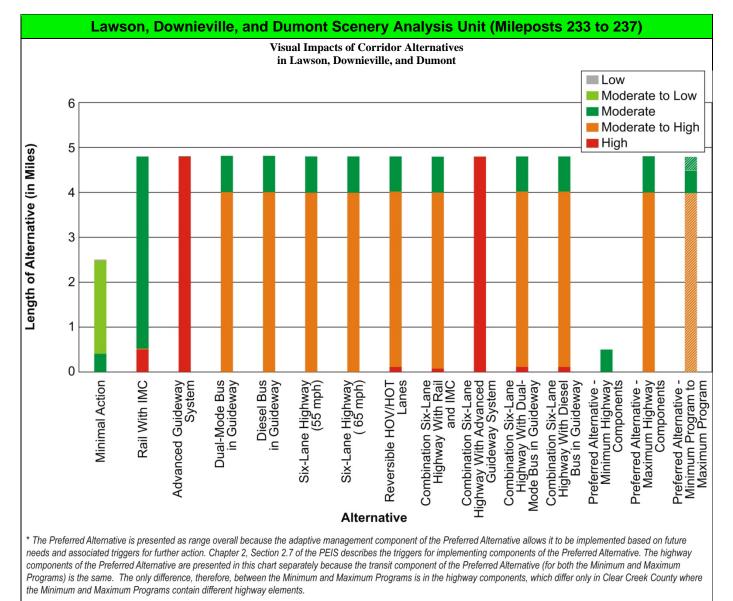
Key Viewpoints and the I-70 Highway Views

Sensitive viewpoints within this unit include residences and recreation areas. Residences are primarily located within the unincorporated communities of Lawson, Downieville, and Dumont. Other sensitive viewpoints include community parks and recreation sites both within the towns and in the Arapahoe and Roosevelt National Forest lands south of the I-70 highway. Views from the I-70 highway in this unit are dominated by rugged mountain terrain. In select locations throughout this unit, views from the I-70 highway are dominated by the community development closely bordering the highway.



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Idaho Springs/Chicago Creek Landscape Unit (Mileposts 237 to 243)

Overview

The lands in this unit are characterized by rugged terrain, V-shaped valleys, and historically mined areas. Surrounding hillsides include variable density montane zone with rock and eroded slopes. South- and west-facing slopes include open montane scrub with intermittent barren slopes. North- and east-facing slopes are dominated by dense lodgepole pine. A large riparian floodplain along Clear Creek is lined with narrowleaf cottonwood. The Scenic Attractiveness of lands within this unit consists of Class B, indicating that lands have some distinctive features but are overall typical of the landscape. In addition to the community development associated with Idaho Springs, deviations from the naturally appearing landscape within this unit include evidence of historic mining, a major electric power line, and the I-70 highway and SH 103 Corridors. Due to the historic significance of much of the development, as well as the evidence of historic mining, these have become valued elements within this unit.



Idaho Springs, view west



Idaho Springs, view northwest

Idaho Springs/Chicago Creek Landscape Character

- Rugged terrain: hard resistive rock, Idaho Springs Formation (metamorphic rock), light and dark colored banding
- Includes historically mined areas
- V-shaped valley
- Variable density montane zone with rock and eroded slopes
- South- and west-facing slopes include open mountain scrub with intermittent barren slopes
- North- and east-facing slopes dominated by dense lodgepole pine (60 percent cover)
- Large riparian floodplain along Clear Creek lined with narrowleaf cottonwood

Idaho Springs/Chicago Creek Landscape Context

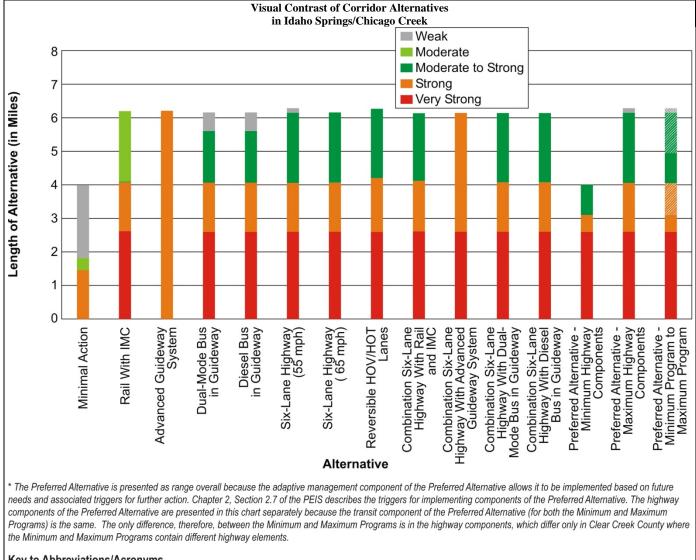
(Source: Idaho Springs Comprehensive Plan)

- Jurisdiction: Arapaho and Roosevelt National Forests, unincorporated Clear Creek County, town of Idaho Springs
- Urban mountain community with mountain vistas, open spaces, and clean air
- Downtown district and surrounding historic area have a visual identity as impressive as mountain views behind them
- The I-70 highway bordered by Scott Lancaster Memorial Trail/Colorado Bikeway Route and Charlie Tayler Water Wheel
- Parallels Clear Creek

Idaho Springs/Chicago Creek Landscape Unit (Mileposts 237 to 243)

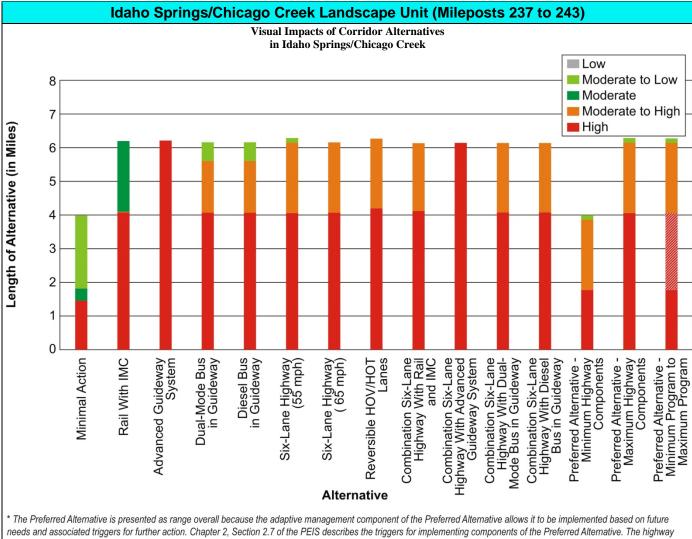
Key Viewpoints and the I-70 Highway Views

Sensitive viewpoints within these units include residences and recreation areas. Residences are primarily located within the incorporated community of Idaho Springs. The I-70 highway in this area is bordered by the Scott Lancaster Memorial Trail/Colorado Bikeway Route. Other sensitive viewpoints include community parks and recreation sites both within the towns and in the Arapahoe and Roosevelt National Forest lands south of the I-70 highway in this unit are dominated by rugged mountain terrain. In select locations throughout this unit, views from the I-70 highway are dominated by the community development closely bordering the highway.



Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOT = High Occupancy Toll HOV = High Occupancy Vehicle IMC = Intermountain Connection



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

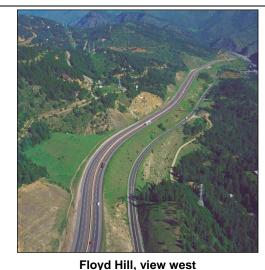
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Floyd Hill Landscape Unit (Mileposts 243 to 246)

Overview

The Floyd Hill unit is characterized by rugged and steep sculptured rock. This unit is a relatively enclosed landscape, with canyon enclosure along Clear Creek and contained views along the I-70 highway. This area is characterized by dense cover montane zone with a mix of ponderosa pine and Douglas-fir on north- and east-facing slopes. South- and west-facing slopes are rocky with open juniper and mountain scrub. The Scenic Attractiveness of lands within the Floyd Hill unit consists of Class B, indicating that lands have some distinctive features but overall are typical examples of the landscape. Modifications to the landscape include dispersed residential development, a quarry, and rock/slope cuts associated with the I-70 highway, US 40, and US 6.





Floyd Hill, view west

Landscape Character

- Enclosed, relatively contained views
- Canyon enclosure along Clear Creek
- Rugged terrain: hard resistive rock, primarily Idaho Springs Formation (metamorphic rock) with small pockets of Silverthorne Formation (granite, igneous rock)
- V-shaped valley
- Dense cover montane zone
- South- and west-facing slopes are rocky with open juniper and mountain scrub

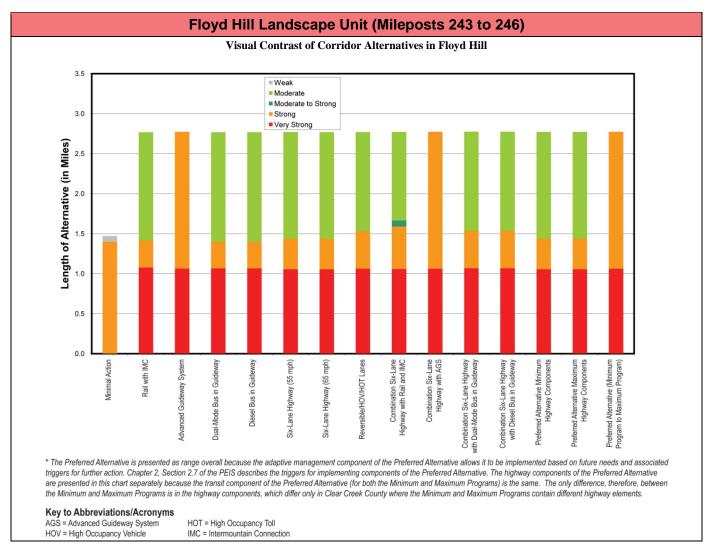
• Mix of ponderosa pine, Douglas-fir, and lodgepole pine on north- and east-facing slopes

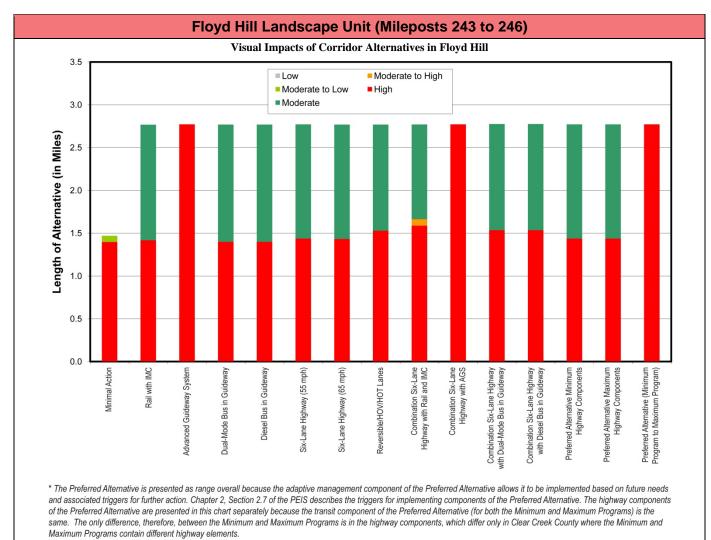
Landscape Context

- Jurisdiction: primarily unincorporated Clear Creek County
- Almost devoid of designated recreation areas
- Corridor between historic mountain towns and dispersed suburban Jefferson County development
- Steep hill along the I-70 highway with sharp curves
- Junction with Clear Creek Canyon and US 6
- South- and west-facing slopes are rocky with open juniper and mountain scrub
- North- and east-facing slopes include dense mix of ponderosa pine, Douglas-fir, and lodgepole pine

Key Viewpoints and the I-70 Highway Views

The Floyd Hill unit is almost devoid of designated recreation areas; however, dispersed residential development is located at the east end of this unit, high on the hillsides above the I-70 highway. The I-70 highway, US 40, and SH 6 through Clear Creek Canyon are the vantage points from which most people experience this unit. Views along the I-70 highway in this unit transition from open panoramic views at the top of Floyd Hill to enclosed views, within a canyon environment at the bottom of Floyd Hill.





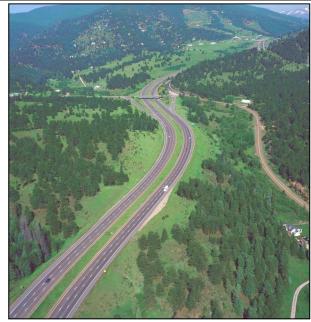
Key to Abbreviations/Acronyms

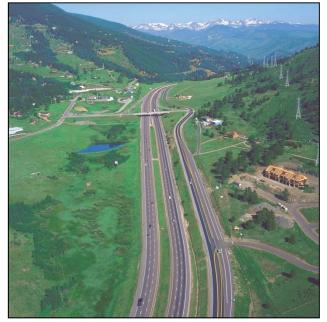
AGS = Advanced Guideway System HOV = High Occupancy Vehicle

Beaver Brook Landscape Unit (Mileposts 246 to 252)

Landscape Character

The Beaver Brook area can be characterized as a mountain residential community located between the historic mining districts of Clear Creek and the more suburban development of Jefferson County. A more open V-shaped valley characterizes the landscape. The vegetation in this area is characterized by open woodland montane zone with wetland complex that contains a mix of ponderosa pine and Douglas-fir on north- and south-facing slopes. The Scenic Attractiveness of lands within the Beaver Brook unit consists of Class B, indicating that lands have some distinctive features but overall are typical examples of the landscape. In addition to residential development, modifications to the natural landscape character include a major electric power line, billboards, and the Corridor.





Beaver Brook, view west

Beaver Brook, view west

Landscape Character

- Open, panoramic environment
- Rugged terrain: hard resistive rock, primarily Idaho Springs Formation (metamorphic rock) with small pockets of Silverthorne Formation (granite, igneous rock)
- Open parkland montane zone with wetland complex
- Mix of ponderosa pine and Douglas-fir on north- and south-facing slopes
- South- and west-facing slopes include dense ponderosa pine
- North- and east-facing slopes include open stands of Douglas-fir

Landscape Context:

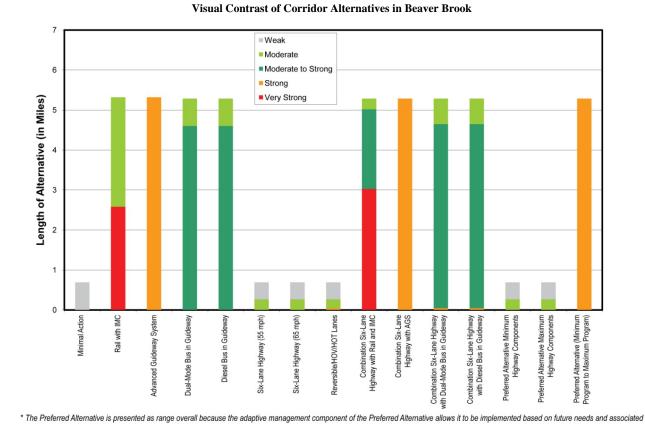
(Source: Evergreen area community plan)

- Jurisdiction: unincorporated Clear Creek and Jefferson counties, town of Evergreen
- Designated recreation in Genesee Park
- Valued for large areas of natural, undeveloped open lands
- Mountain residential community; working population commutes to businesses outside the area
- Majority of commercial development planned between downtown Evergreen and the I-70 highway

Beaver Brook Landscape Unit (Mileposts 246 to 252)

Key Viewpoints and the I-70 Highway Views

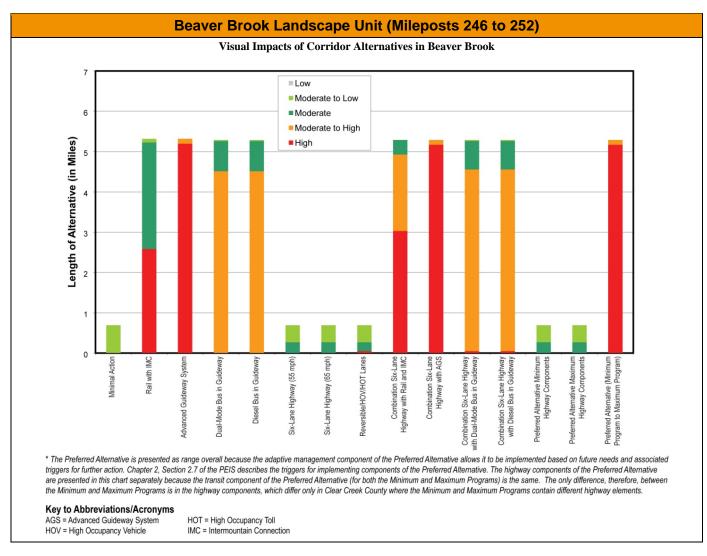
Sensitive viewpoints within this unit include dispersed residences in unincorporated Jefferson County and dispersed and designated recreation within Genesee Park. Views along the I-70 highway are characterized by open woodland setting and dispersed residential and commercial development.



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

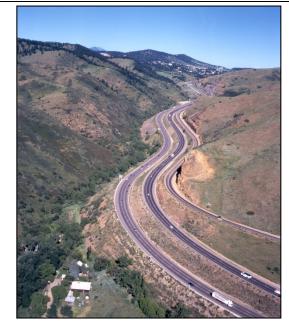
AGS = Advanced Guideway System HOV = High Occupancy Vehicle



Mount Vernon Canyon Landscape Unit (Mileposts 252 to 259)

Overview

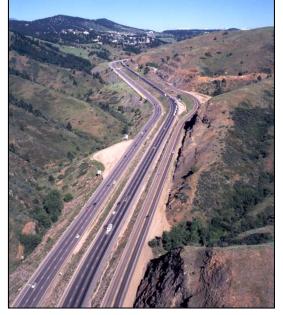
The Mount Vernon Canyon unit is a V-shaped valley environment, primarily enclosed, except for an area with panoramic views at the high point along the I-70 highway in this area. This high point coincides with a single span bridge over the I-70 highway (Genesee Park Bridge, Exit 254) that frames the first views of the Continental Divide for westbound travelers. This bridge is locally known as the "picture bridge." Vegetation in this unit is characterized by mountain scrub and a mix of ponderosa pine and Douglas-fir. While spectacular views to distant landscapes exist from this unit, the Scenic Attractiveness of lands within the Mount Vernon Canyon unit consists of Class B, indicating that lands have some distinctive features but overall are typical of the landscape. Existing elements, such as the dispersed development and roadside cut slopes, which exposes steep rock faces, remain subordinate to the setting.



Mount Vernon Canyon, view west

Landscape Character

- Primarily enclosed canyon environment with panoramic views at west end high point
- Rugged terrain: hard resistive rock, primarily Idaho Springs Formation (metamorphic rock) with small pockets of Silverthorne Formation (granite, igneous rock)
- Area not mined
- V-shaped valley
- Foothills and lower montane zone
- Mountain scrub, mix of ponderosa pine and Douglas-fir
- South-facing slopes contain 80 to 100 percent shrub coverage with some grass cover
- North-facing slopes have mountain shrub interspersed with ponderosa pine and lodgepole pine; Douglas-fir in drainages
- Developed areas between exits 256 and 254



Mount Vernon Canyon, view west

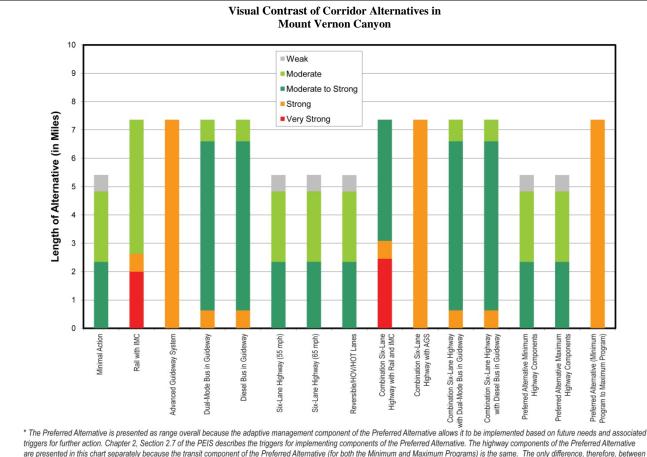
Mount Vernon Canyon Landscape Unit (Mileposts 252 to 259)

Landscape Context

- Jurisdiction: unincorporated Jefferson County, town of Genesee
- Gateway to the Rockies for tourists and skiers
- Principal growth and commuting corridor for residents in central mountains
- Provides panoramic vista to distant mountains (Exit 254 "picture bridge" frames the first view of the snow-capped Rockies)
- Many hiking and bike trails located within Jefferson County open space lands
- Close proximity parks and recreation areas include Genesee Park, Matthews/Winters Park, Hogback Park
- Bison and elk in Denver's largest mountain park (Genesee Park) are a primary attraction

Key Viewpoints and the I-70 Highway Views

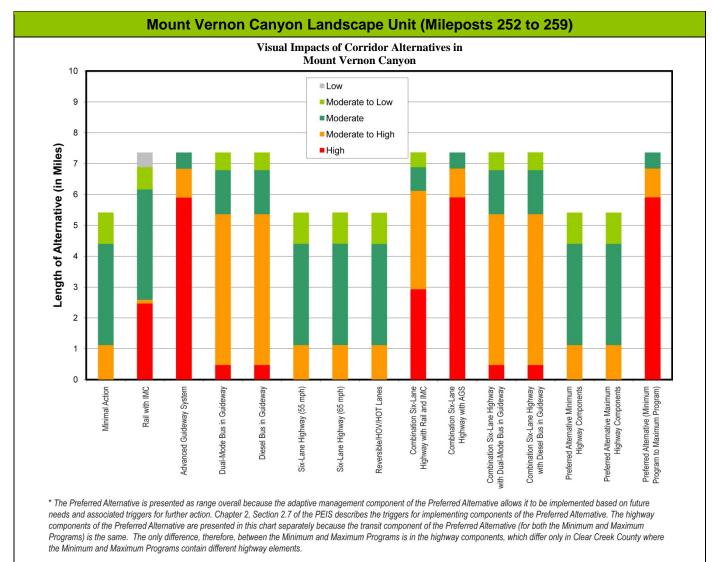
Sensitive viewpoints within the Mount Vernon Canyon unit include residences within the community of Genesee, as well as dispersed residences and subdivisions within unincorporated Jefferson County. While views along the I-70 highway throughout the Mount Vernon Canyon unit are primarily enclosed, there are panoramic views west to the Continental Divide and east to Denver along a high point between mileposts 254 and 255. Along the lower elevation portions of this unit, views are enclosed by rugged terrain.



triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle



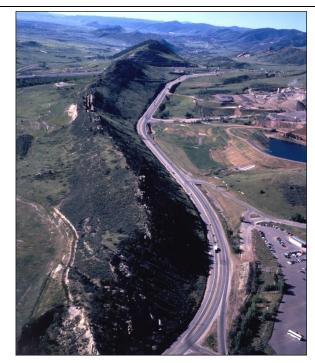
Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

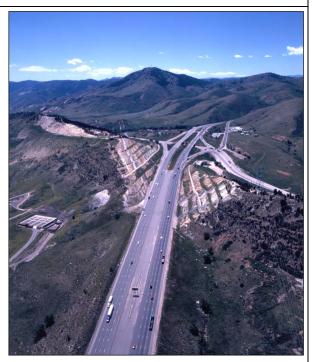
Hogback Landscape Unit (Milepost 259)

Overview

The Hogback (also know as Dakota Hogback and Dinosaur Ridge) is a sharp-crested ridge with steep slopes on both sides, formed by the erosion of steeply tilted rock layers. Vegetation along this ridge includes a mosaic of grassland, mountain scrub, and juniper woodland. Jefferson County open space surrounds much of this ridge, which is highly valued for recreation and educational opportunities and for geologic and paleontological resources. This area is also a popular migration corridor for many raptors, including eagles, hawks, kestrels, merlins, falcons, turkey vultures, and ospreys. The Scenic Attractiveness of lands within the Hogback unit consists of Class B, indicating that lands have some distinctive features but overall are typical examples of the landscape.



Hogback Ridge, view south



The I-70 highway cut through Hogback Ridge, view west

Landscape Character

- Sharp-crested ridge with steep slopes on both sides formed by erosion of steeply tilted rock layers
- Formed along eroded flanks of large, tightly folded anticlines and synclines
- Located in foothills east of Front Range
- Formed by vertical and steeply dipping layers of Dakota sandstone
- Abrupt change in elevation from Dinosaur Ridge down to Rooney Valley floor
- Mosaic of grassland, mountain scrub, and juniper woodland

Landscape Context

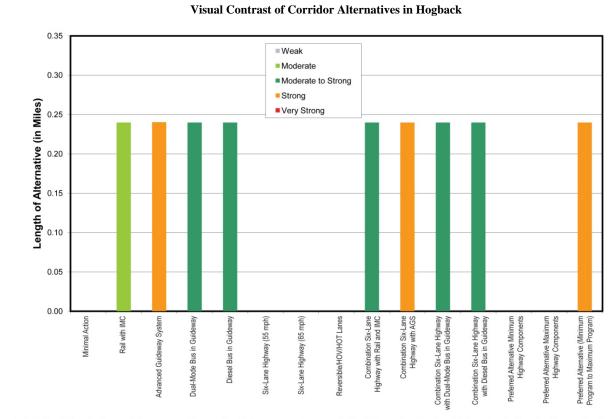
(Source: Central Mountain Community Plan)

- Jurisdiction: unincorporated Jefferson County
- Many lands within Jefferson County open space designation
- Close proximity parks include Matthews/Winters Park and Hogback Park
- The I-70 highway cut exposes colorful array of geologic bedding layers
- This area is valued for its recreation and educational opportunities; geologic and paleontological resources
- Easy access from Front Range communities

Hogback Landscape Unit (Milepost 259)

Key Viewpoints and the I-70 Highway Views

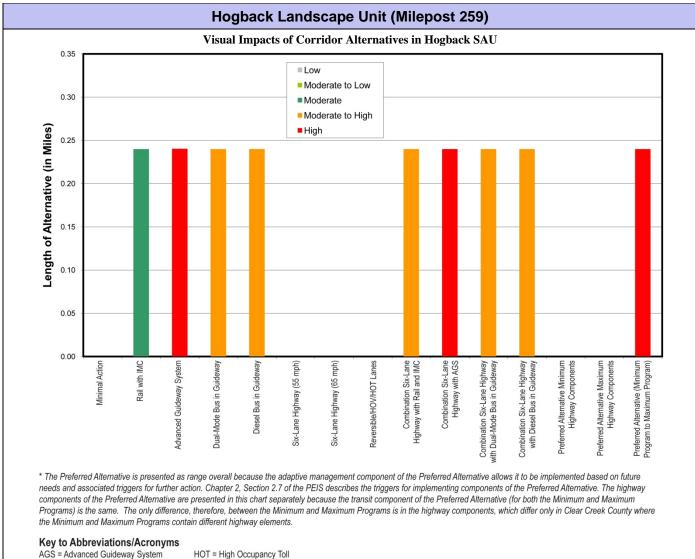
Sensitive viewpoints in proximity to the Hogback unit include residences of Golden. Many hiking and bike trails are located within these Jefferson County open space lands. The Dinosaur Ridge Hogback dominates views from the I-70 highway in this unit. The I-70 highway passes through a major cut in the Hogback Ridge that has exposed colorful banding of geologic bedding layers.



* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

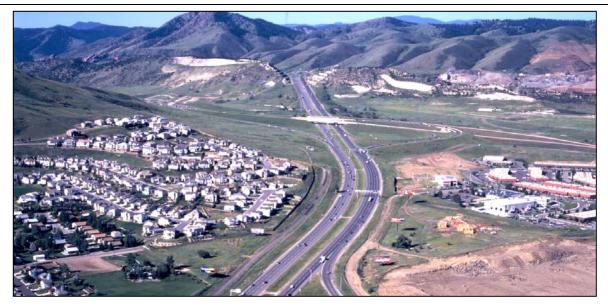


HOV = High Occupancy Vehicle

Rooney Valley Landscape Unit (Mileposts 259 to 261)

Overview

Simple, homogeneous landscape features, flat terrain, and open and expansive views to the Front Range characterize the Rooney Valley area. Vegetation in this area is predominantly grass/forb meadows and an occasional yucca. The Scenic Attractiveness of lands within the Rooney Valley unit consists of Class B, indicating that lands have some distinctive features but overall are typical scenic attractiveness. In addition to residential development, modifications to the landscape include clay mining, a major electric power line, billboards, eroded slopes, and the the I-70 highway and C-470 corridors.



Rooney Valley, view west

Landscape Character

- Flat terrain with open and expansive views to Front Range
- Front Range sedimentary, soft rock flatlands
- Close to Golden Fault
- Grass/forb meadows characterized by Parry oatgrass, side oats gramma, needle grass, Indian ricegrass, little bluestem, wormwood; forbs, such as blanketflower and wild blue flax; occasional yucca
- Modified by clay mining
- Traversed by a major electric power line, the I-70 highway and C-470 corridors

Landscape Context

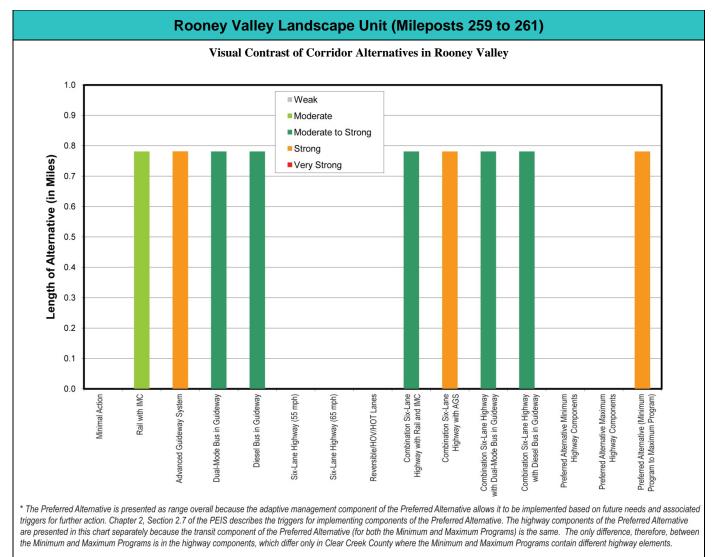
(Source: Rooney Valley Master Plan)

- Jurisdiction: unincorporated Jefferson County, town of Golden
- Includes last major undeveloped area in Lakewood
- Many lands within Jefferson County open space designation
- Recreation areas include Green Mountain Park, Hogback Park, several trails
- Views from the I-70 highway dominated by residential and commercial development
- Combination of elevation and openness allows for expansive views

Rooney Valley Landscape Unit (Mileposts 259 to 261)

Key Viewpoints and the I-70 Highway Views

Sensitive viewpoints within the Rooney Valley unit include residences, roadways, and recreation areas. Residential viewpoints are located primarily within the communities of Genesee and Golden, as well as within dispersed unincorporated Jefferson County. Views from the I-70 highway in this unit are dominated by residential and commercial development typical of the western fringe of the Denver metropolitan area.

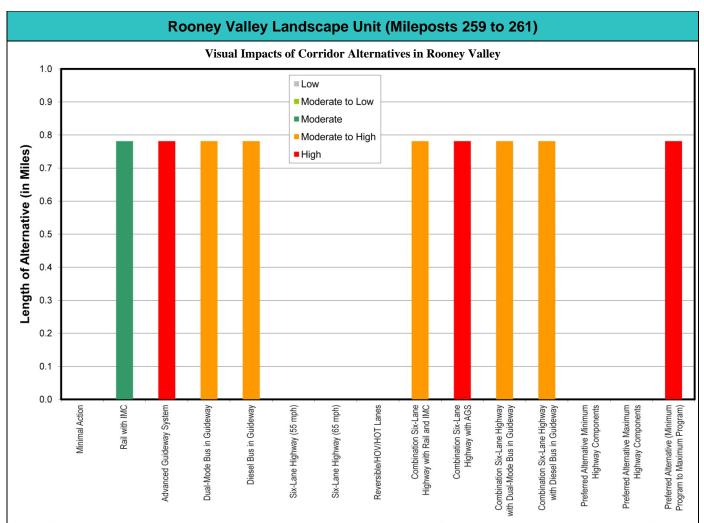


Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle HOT = High Occupancy Toll IMC = Intermountain Connection

I-70 Mountain Corridor PEIS August 2010





* The Preferred Alternative is presented as range overall because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Chapter 2, Section 2.7 of the PEIS describes the triggers for implementing components of the Preferred Alternative. The highway components of the Preferred Alternative are presented in this chart separately because the transit component of the Preferred Alternative (for both the Minimum and Maximum Programs) is the same. The only difference, therefore, between the Minimum and Maximum Programs is in the highway components, which differ only in Clear Creek County where the Minimum and Maximum Programs contain different highway elements.

Key to Abbreviations/Acronyms

AGS = Advanced Guideway System HOV = High Occupancy Vehicle

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)	
Alternatives	Attributes
 Minimal Action Glenwood Springs interchange (mp 116) * Gypsum interchange (mp 140) * Eagle interchange and Spur Road (mp 147) * West of Wolcott curve safety modification (mp 155 to 156)* Edwards interchange and Spur Road (mp 163) * Avon interchange (mp 167) * Avon to Post, Uphill auxiliary lane (mp 167 to 168)* Minturn interchange (mp 171) * Dowd Canyon curve safety modification (mp 170 to 173)* 	 Interchange and auxiliary lane improvements and curve safety modifications Moderate cut-and-fill slopes
Rail with Intermountain Connection	 Existing railroad track, new Intermountain Connection, elevated and on grade Minimal Action components with an asterisk, except Dowd Canyon curve safety modification and Avon to Post auxiliary lane, are included in this alternative
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk, except Dowd Canyon curve safety modification and Avon to Post auxiliary lane, are included in this alternative
Bus in Guideway	Minimal Action components with an asterisk, except Dowd Canyon curve safety modification and Avon to Post auxiliary lane, are included in this alternative
Six-Lane Highway 55 miles per hour (mph)	Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	 Elevated roadway entrance to tunnel Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Reversible/High Occupancy Vehicle (HOV)/High Occupancy Toll (HOT) Lanes	Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Existing on-grade track, new Intermountain Connection, elevated and on grade Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	Minimal Action components with an asterisk are included in this alternative • Elevated structure
I-70 Mountain Corridor PEIS	Technical Reports

West Corridor Landscape Units: Glenwood Springs to Dowd Canyon (Mileposts 113 to 172)	
Preferred Alternative (Minimum and Maximum Programs)	Minimal Action components with an asterisk are included in this alternative
	• Elevated structure

Vail Landscape Unit (Mileposts 172 to 182)		
Alternatives	Attributes	
Minimal Action: Vail West interchange (mp 173) /Simba Run*	Interchange improvements	
Rail with Intermountain Connection	 Elevated and on-grade structure Moderate cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative 	
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	
Bus in Guideway	Minimal Action components with an asterisk are included in this alternative	
Six-Lane Highway 55 mph	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative 	
Six-Lane Highway 65 mph	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative 	
Reversible/HOV/HOT Lanes	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Rail and Intermountain Connection	 Elevated and on-grade structure Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Bus in Guideway	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative 	
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	

Vail Pass/Black Gore Creek Landscape Unit (Mileposts 182 to 190)		
Alternatives	Attributes	
 Minimal Action West side of Vail Pass, Downhill or Uphill auxiliary lanes (mp 180 to 190) * 	Auxiliary lane improvements	
Rail with Intermountain Connection	Elevated structure	
Advanced Guideway System	Elevated structure	
Six-Lane Highway 55 mph	Minimal Action components with an asterisk are included in this alternative	
Six-Lane Highway 65 mph	Minimal Action components with an asterisk are included in this alternative	
Reversible/HOV/HOT Lanes	Minimal Action components with an asterisk are included in this alternative	
Combination Six-Lane Highway with Rail and Intermountain Connection	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Bus in Guideway	Minimal Action components with an asterisk are included in this alternative	
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	

Copper Mountain Landscape Unit (Mileposts 190 to 195)	
Alternatives	Attributes
Minimal Action: Copper Mountain interchange (mp 195)*	Interchange improvements
Rail with Intermountain Connection	Elevated structure
	Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	Elevated structure
	Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and	Elevated structure
Intermountain Connection	Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced	Elevated structure
Guideway System	Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum and Maximum	Elevated structure
Programs)	Minimal Action components with an asterisk are included in this alternative

Officers Gulch and Tenmile Canyon Landscape Unit (Mileposts 195 to 201)	
Alternatives	Attributes
Minimal Action: Frisco/Main Street interchange (mp 201)*	Interchange improvements
Rail with Intermountain Connection	 Elevated and on-grade structure Moderate retaining walls Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	Elevated structureMinimal Action components with an asterisk are included in this alternative
Bus in Guideway	Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Elevated and on-grade structure Moderate retaining walls Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Minimal Action components with an asterisk are included in this alternative

Blue River Valley Landscape Unit (Mileposts 201 to 208)		
Alternatives	Attributes	
Minimal Action • Frisco/SH 9 interchange (mp 203)* • Silverthorne interchange (mp 205)*	Interchange improvements	
Rail with Intermountain Connection	 On-grade Moderate-scale retaining walls Minimal Action components with an asterisk are included in this alternative 	
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	
Bus in Guideway	 On-grade, in median Minimal Action components with an asterisk are included in this alternative 	
Six-Lane Highway 55 mph	Minimal Action components with an asterisk are included in this alternative	
Six-Lane Highway 65 mph	Minimal Action components with an asterisk are included in this alternative	
Reversible/HOV/HOT Lanes	Minimal Action components with an asterisk are included in this alternative	
Combination Six-Lane Highway with Rail and Intermountain Connection	 On-grade Moderate-scale retaining walls Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Advanced Guideway System	Elevated structure Minimal Action components with an asterisk are included in this alternative	
Combination Six-Lane Highway with Bus in Guideway	 On-grade Small-scale retaining walls Minimal Action components with an asterisk are included in this alternative 	
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	

Straight Creek Landscape Unit (Mileposts 208 to 214)	
Alternatives	Attributes
Rail with Intermountain Connection	Elevated and on-grade structureThird tunnel bore
Advanced Guideway System	Elevated structureThird tunnel bore
Bus in Guideway	On-grade, in medianThird tunnel boreTransition from an open to a closed median
Six-Lane Highway 55 mph	On-gradeThird tunnel bore
Six-Lane Highway 65 mph	On-grade Third tunnel bore
Reversible/HOV/HOT Lanes	On-gradeThird tunnel bore
Combination Six-Lane Highway with Rail and Intermountain Connection	On-gradeThird tunnel bore
Combination Six-Lane Highway with Advanced Guideway System	Elevated structureThird tunnel bore
Combination Six-Lane Highway with Bus in Guideway	 On-grade Small-scale retaining walls Third tunnel bore Transition from an open to a closed median
Preferred Alternative (Minimum and Maximum Programs)	Elevated structureThird tunnel bore

Loveland Landscape Unit (Mileposts 214 to 217)		
Alternatives	Attributes	
Minimal Action: Loveland Pass interchange (mp 216)*	Interchange improvements	
Rail with Intermountain Connection	 On-grade Third tunnel bore Moderate-scale retaining walls Minimal Action components with an asterisk are included in this alternative 	
Advanced Guideway System	 Elevated structure Third tunnel bore Minimal Action components with an asterisk are included in this alternative 	
Bus in Guideway	 On-grade Third tunnel bore Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative 	
Six-Lane Highway 55 or 65 mph	 Third tunnel bore Large scale retaining walls Large cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative 	
Reversible/HOV/HOT Lanes	 Third tunnel bore Small-scale retaining walls Major cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Rail and Intermountain Connection	 On-grade Third tunnel bore Major cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Third tunnel bore Minimal Action components with an asterisk are included in this alternative 	
Combination Six-Lane Highway with Bus in Guideway	 On-grade Third tunnel bore Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative 	
Preferred Alternative (Minimum Program)	 Elevated structure Third tunnel bore Minimal Action components with an asterisk are included in this alternative 	
I-70 Mountain Corridor PEIS	Technical Reports	

Loveland Landscape Unit (Mileposts 214 to 217)	
Preferred Alternative (Maximum Program)	Third tunnel bore
	Large scale retaining walls
	Large cut-and-fill slopes
	Transition from an open to a closed median
	• Minimal Action components with an asterisk are included in
	this alternative

Herman Gulch Landscape Unit (Mileposts 217 to 221)	
Alternatives	Attributes
Minimal Action:	Auxiliary lane improvements
 Eisenhower-Johnson Memorial Tunnels to Herman Gulch (Downhill) auxiliary lane (mp 215 to 218)* Bakerville to Eisenhower-Johnson Memorial Tunnels (Uphill) auxiliary lane (mp 215 to 221) 	
Rail with Intermountain Connection	 On-grade and elevated Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 On-grade in median Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Small-scale retaining walls Minor cut-and-fill slopes Transition from an open to a closed median
Six-Lane Highway 65 mph	 Small-scale retaining walls Minor cut-and-fill slopes Transition from an open to a closed median
Reversible/HOV/HOT Lanes	 Small-scale retaining walls Major cut-and-fill slopes Transition from an open to a closed median
Combination Six-Lane Highway with Rail and Intermountain Connection	 On-grade Small-scale retaining walls Major cut-and-fill slopes Transition from an open to a closed median
Combination Six-Lane Highway with Advanced Guideway System	Elevated structureMinor cut-and-fill slopes
Combination Six-Lane Highway with Bus in Guideway	 On-grade in median Minor cut-and-fill slopes Transition from an open to a closed median
Preferred Alternative (Minimum Program)	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative

Herman Gulch Landscape Unit (Mileposts 217 to 221)	
Preferred Alternative (Maximum Program)	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative Small-scale retaining walls Minor cut-and-fill slopes
	Transition from an open to a closed median

Silver Plume Landscape Unit (Mileposts 221 to 227)	
Alternatives	Attributes
 Minimal Action Silver Plume to Georgetown, Downhill, auxiliary lane (mp 226 to 228) Georgetown to Silver Plume, Uphill, auxiliary lane (mp 226 to 228) Silver Plume interchange (mp 226)* 	Interchange and auxiliary lane improvements
Rail with Intermountain Connection	 On-grade and elevated Large-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 On-grade in median Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Moderate-scale retaining walls Moderate cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	 Moderate-scale retaining walls Moderate cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Small-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 Small-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum Program)	 Elevated structure Minimal Action components with an asterisk are included in this alternative

Silver Plume Landscape Unit (Mileposts 221 to 227)	
	 Elevated structure Minimal Action components with an asterisk are included in this alternative Small-scale retaining walls Moderate cut-and-fill slopes

Georgetown Landscape Unit (Mileposts 227 to 232)	
Alternatives	Attributes
 Minimal Action Silver Plume to Georgetown, Downhill, auxiliary lane (mp 226 to 228) Georgetown to Silver Plume, Uphill, auxiliary lane (mp 226 to 228) Georgetown interchange (mp 228)* 	Interchange and auxiliary lane improvements
Rail with Intermountain Connection	 On-grade and elevated Large-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 On-grade in median Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Moderate-scale retaining walls Moderate cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	Moderate-scale retaining wallsModerate cut-and-fill slopes
Reversible/HOV/HOT Lanes	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Small-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 Small-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum Program)	 Elevated structure Minimal Action components with an asterisk are included in this alternative

Georgetown Landscape Unit (Mileposts 227 to 232)		
Preferred Alternative (Maximum Program)	 Elevated structure Small-scale retaining walls Minimal Action components with an asterisk are included in this alternative 	
	ape Unit (Mileposts 232 to 233)	
Alternatives	Attributes	
 Minimal Action: Downieville to Empire, Uphill, auxiliary lane (mp 232 to 234)* Empire to Downieville, Downhill, auxiliary lane (mp 232 to 234) Empire interchange (mp 232)* 	Interchange and auxiliary lane improvements	
Rail with Intermountain Connection	 Elevated structure Moderate-scale retaining walls Minimal Action components with an asterisk are included in this alternative 	
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative 	
Bus in Guideway	 On-grade in median Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative 	
Six-Lane Highway 55 mph	 Small-scale retaining walls Moderate cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative 	
Six-Lane Highway 65 mph	 Small-scale retaining walls Moderate cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative 	
Reversible/HOV/HOT Lanes	 Small-scale retaining walls Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative 	
Combination Six-Lane Highway with Rail and Intermountain Connection	 Moderate-scale retaining walls Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative 	

Georgetown Landscape Unit (Mileposts 227 to 232)	
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative
Preferred Alternative (Minimum Program)	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Maximum Program)	 Elevated structure Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative

Alternatives	nont Scenery Analysis Unit (Mileposts 233 to 237) Attributes
Minimal Action	Interchange improvements
Downieville interchange (mp 234)*	Interchange improvements
Rail with Intermountain Connection	 On grade and elevated Moderate-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 On-grade in median Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Large-scale retaining walls Moderate cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	 Large-scale retaining walls Moderate cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum Program)	 Elevated structure Minimal Action components with an asterisk are included in this alternative

Lawson, Downieville, and Dumont S	Scenery Analysis Unit (Mileposts 233 to 237)
 Preferred Alternative (Maximum Program) Elevated structure Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Downieville to Empire auxiliary lane, are included in this alternative 	
Idaho Springs/Chicago Creek	Landscape Unit (Mileposts 237 to 243)
Alternatives	Attributes
Minimal Action	Curve safety modification and interchange improvements
 Fall River Road curve safety modification (mp 237 to 238)* Idaho Springs interchanges (mp 239, 240, 241)* 	
• Fall River Road interchange (mp 238)*	
Rail with Intermountain Connection	 Elevated structure Moderate-scale retaining walls Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structure Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 Elevated structure Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Large-scale retaining walls Moderate cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	 Large-scale retaining walls Moderate cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	 Large-scale retaining walls Major cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Elevated structure Large-scale retaining walls Major cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative

Lawson, Downieville, and Dumont Scenery Analysis Unit (Mileposts 233 to 237)	
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minor cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 Elevated structure Minor cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Large-scale retaining walls Moderate cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative

Floyd Hill Landscape Unit (Mileposts 243 to 246)	
Alternatives	Attributes
 Minimal Action: Base of Floyd Hill/US 6 interchange (mp 244)* Black Hawk Tunnel off-ramp to Hidden Valley off-ramp (mp 243 to 244)* East of Twin Tunnels curve safety modification (mp 242 to 245)* 	 Interchange improvements Connection to Black Hawk tunnel ramps
Rail with Intermountain Connection	 Elevated structures Large-scale retaining walls Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structures Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 Elevated structures Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Elevated structures Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	 Elevated structures Large-scale retaining walls Major cut-and-fill slopes New tunnel bore Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	 Elevated structures Large-scale retaining walls Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Elevated structures Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structures Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative

Floyd Hill Landscape Unit (Mileposts 243 to 246)	
Combination Six-Lane Highway with Bus in Guideway	 Elevated structures Major cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Large-scale retaining walls Moderate cut-and-fill slopes Third tunnel bore Minimal Action components with an asterisk are included in this alternative

Beaver Brook Lands	cape Unit (Mileposts 246 to 252)
Alternatives	Attributes
 Minimal Action Hyland Hills/Beaver Brook interchange (mp 247 / mp 248)* 	Interchange improvements
Rail with Intermountain Connection	 On-grade and elevated Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk are included in this alternative
Bus in Guideway	 On-grade in median Moderate cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 55 mph	 Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Six-Lane Highway 65 mph	 Minor cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Reversible/HOV/HOT Lanes	 Major cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 Major cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 On-grade in median Moderate cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Minimal Action components with an asterisk are included in this alternative

Mount Vernon Canyon Landscape Unit (Mileposts 252 to 259)	
Alternatives Attributes	
 Minimal Action: Lookout Mountain interchange (mp 256)* Morrison to Chief Hosa Uphill, auxiliary lane (mp 253 to 259)* Morrison interchange (mp 259)* 	Interchange and auxiliary lane improvements
Rail with Intermountain Connection	 On-grade and elevated Minimal Action components with an asterisk, except the Morrison to Chief Hosa auxiliary lane, are included in this alternative
Advanced Guideway System	 Elevated structure Minimal Action components with an asterisk, except the Morrison to Chief Hosa auxiliary lane, are included in this alternative
Bus in Guideway	 On-grade in median Large cut-and-fill slopes Transition from an open to a closed median Minimal Action components with an asterisk, except the Morrison to Chief Hosa auxiliary lane, are included in this alternative
Combination Six-Lane Highway with Rail and Intermountain Connection	 On-grade in median Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Advanced Guideway System	 Elevated structure Minor cut-and-fill slopes Minimal Action components with an asterisk are included in this alternative
Combination Six-Lane Highway with Bus in Guideway	 On-grade in median Large cut-and-fill slopes Moderate-scale retaining walls Transition from an open to a closed median Minimal Action components with an asterisk are included in this alternative
Preferred Alternative (Minimum and Maximum Programs)	 Elevated structure Minimal Action components with an asterisk, except the Morrison to Chief Hosa auxiliary lane, are included in this alternative

Hogback Landscape Unit (Milepost 259)	
Alternatives	Attributes
Rail with Intermountain Connection	On-grade structure
Advanced Guideway System	Elevated structure
Bus in Guideway	On-grade structure in median
Combination Six-Lane Highway with Rail and Intermountain Connection	On-grade structure in median
Combination Six-Lane Highway with Advanced Guideway System	Elevated structure in medianMinor cut-and-fill slopes
Combination Six-Lane Highway with Bus in Guideway	On-grade in medianMinor cut-and-fill slopes
Preferred Alternative (Minimum and Maximum Programs)	• Elevated structure

Rooney Valley Landscape Unit (Mileposts 259 to 261)		
Alternatives	Attributes	
Rail with Intermountain Connection	On-grade structure	
Advanced Guideway System	Elevated structure	
Bus in Guideway	On-grade in medianTransition from an open to a closed median	
Combination Six-Lane Highway with Rail and Intermountain Connection	Moderate cut-and-fill slopesTransition from an open to a closed median	
Combination Six-Lane Highway with Advanced Guideway System	Elevated structureModerate cut-and-fill slopes	
Combination Six-Lane Highway with Bus in Guideway	Moderate cut-and-fill slopesTransition from an open to a closed median	
Preferred Alternative (Minimum and Maximum Programs)	• Elevated structure	