This section describes landscape character and views throughout the Corridor, as well as the potential for visual impacts associated with each alternative. Because much of the Corridor is under federal land management, the approach for the visual resource assessment was coordinated with appropriate federal land managers and is consistent with both the Bureau of Land Management (BLM) and US Forest Service (USFS) visual analysis methodologies. Additionally, county and municipal plans were examined to gain an understanding of goals for visual resource preservation and community identity.

I-70 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. I-70 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 above mean sea

Visual Resource Issues

- Change to landscape setting and scenery
- Change within sensitive viewsheds:
- Adjacent to the interstate (views from communities and recreation areas)
- From the interstate itself (views from I-70)
- Compliance with USFS and BLM visual resource management prescriptions

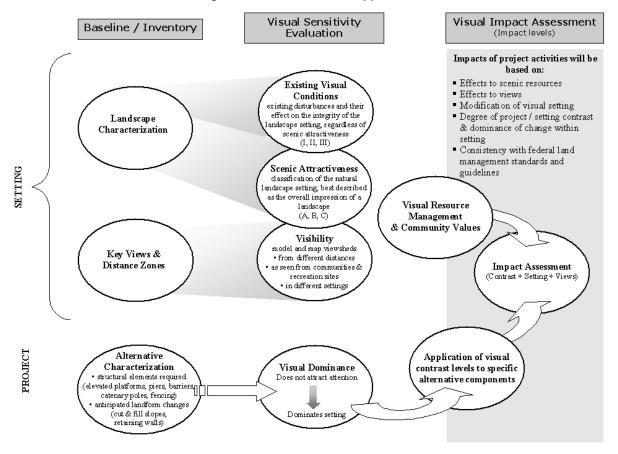
level (AMSL) to a maximum elevation of 11,000 feet AMSL at the Eisenhower-Johnson Memorial Tunnels (EJMT).

Sightseeing and recreation are major activities throughout the Corridor. An I-70 user study survey conducted in the summer of 1999 and winter of 2000 indicated that most trips along I-70 in both summer and winter are for recreational purposes. The White River National Forest (WRNF) and Arapaho and Roosevelt National Forests (ARNF) estimate that between 17 and 37 percent of these trips were for the purpose of sightseeing (USFS 2001). Corridor communities, visitors, and public land managers are dedicated to, and have a vested interest in, protecting the natural beauty along the Corridor.

3.13.1 Inventory and Assessment Methods

Aesthetic judgment, especially related to landscape views, is often considered subjective. Over the past 30 years, USFS and BLM have developed, refined, and implemented visual analysis and management systems that provide tools for assessing aesthetic qualities of the landscape in objective terms. Visual assessment of the landscape settings using these tools 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 project alternatives. Figure 3.13-1 illustrates graphically the approach taken in the assessment of visual resources in the I-70 PEIS.

Figure 3.13-1. Assessment Approach



3.13.1.1 Visual Resources Inventory Methodology

The first step in the visual resource analysis is to create an inventory of the existing environment. This involves an examination of the character of the landscape itself, as well as an examination of viewers and their sensitivity to impacts on the visual character of the landscape. 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.

- Existing Visual Conditions are rated (I, II, III) for the level of existing disturbances related primarily to development and its effect on the integrity of the landscape setting, regardless of scenic attractiveness. 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. Developed areas or town sites are assigned a "III" rating.
- The *Landscape Scenic Attractiveness* is a classification from "A" to "C" of the natural landscape setting, where "A" represents a rare example of landscape type in the region, and "C" represents areas of homogeneous features occurring for many miles without variation.

Supporting Documentation

Appendix L, Visual Resources

The second step in the inventory of visual resources is to identify *key views*. Views are divided into two major groups: (1) views from I-70 itself and (2) views to I-70. A detailed inventory of sites with views to I-70 was compiled as part of the visual resource inventory and can be grouped as follows:

- 20 communities are present within the Corridor in close proximity to I-70
- 224 designated recreation sites are present within 3 miles on either side of I-70
- 6 major roadways stem from I-70

Visibility and distance zones were calculated for all viewpoints collectively. That is, the extent in terms of linear miles of I-70 seen from all of the inventoried viewpoints when taken collectively were measured and recorded. The views were analyzed in terms of their proximity to I-70, and whether they were foreground views (0 to 0.5 mile), middleground views (0.5 to 3 miles), or background views (beyond 3 miles).

Once the inventory is completed and the affected environment is described, a systematic approach is applied to the analysis of impacts on the landscape character for each project alternative. This is described in detail in the Methods section under Environmental Consequences.

3.13.2 Affected Environment - Corridor Setting

The presence of I-70 and congestion have 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 I-70 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 I-70. 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 following 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 *Scenery Analysis Units*. Appendix L provides details of the inventory and landscape characteristics at this detailed level.

3.13.2.1 Garfield County

Just over half of the land in Garfield County is publicly owned and managed by the BLM, WRNF, 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.

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. I-70 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 WRNF, their highest rating for scenic quality.

I-70 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.

Key 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 I-70 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.

3.13.2.2 Eagle County

Eagle County is one of the fastest growing regions in Colorado. Much of this county is federally managed by WRNF and BLM. 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 I-70 and other major road corridors, with the majority of County lands 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.

Landscape Character

Eagle County was divided into nine scenery analysis units for the purposes of detailed assessment (provided in Appendix L, Visual Resources). 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 BLM (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 WRNF.

Key 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 WRNF. Due to the number of communities and recreation properties and their proximity to I-70 throughout Eagle County, I-70 is almost completely within foreground views from these sites.

Views from I-70 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.

3.13.2.3 Summit County

Most land in Summit County is publicly owned and managed by the WRNF. Privately owned lands are located predominantly along the Blue River and Snake River valley bottoms and adjacent to I-70, 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.

Landscape Character

I-70 passes through a number of scenic areas in Summit County. Entering the county (from the west) at Copper Mountain, I-70 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, I-70 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 WRNF 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 I-70, SH 9, US 6; and the Dillon Dam Reservoir. I-70 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 appearing landscape along Straight Creek, which is primarily undeveloped forest lands, is primarily related to the roadway cut-and-fill slopes associated with I-70 and the pull off/parking area near the west portal of the EJMT.

Key Views

Much of the western portion of I-70 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 I-70 between Vail and Silverthorne. Many other trails depart from locations near I-70 and extend either to the north or south of the interstate. Views along I-70 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, project 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 WRNF-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 I-70, include SH 9 and US 6.

The Straight Creek area includes sensitive views associated with the Ptarmigan Peak area.

3.13.2.4 Clear Creek County

Most land in Clear Creek County is publicly owned and mostly consists of the ARNF, with a small portion of Pike and San Isabel National Forests. Development in the county is primarily within incorporated towns and unincorporated areas along I-70 and other major roadways. Mountainous terrain and federal jurisdiction prohibit community development throughout much of the county.

Landscape Character

I-70 enters Clear Creek County from the west at the Loveland Ski Area, where dramatic views are enclosed by the Continental Divide. The ARNF has rated lands along the slopes of the Continental Divide as Class "A" scenery (their 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 in that it is the first dominant rural forest setting that appears to be comparatively undeveloped as one travels west through the Corridor. I-70 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, tipples, and mill remains visible from I-70 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.

Key Viewpoints and I-70 Views

Portions of I-70 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 ARNF. Sensitive viewpoints at Herman Gulch include designated recreation areas within the ARNF. The Continental Divide National Scenic Trail crosses under I-70 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 I-70. Views within these communities toward I-70 are dominated by large fill slope banks associated with the highway grade.

3.13.2.5 Jefferson County

The easternmost extent of the Corridor under consideration is within a small portion of Jefferson County. Starting at the western county line, I-70 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.

Landscape Character

I-70 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/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 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 Dinosaur Ridge down to the Rooney Valley floor.

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.

3.13.3 Environmental Consequences

3.13.3.1 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 L, Visual Resources, describes impacts at the detailed Scenery Analysis 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 project 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 and 6 percent, respectively).

Methods

Once the inventory is completed and the affected environment is described, a systematic approach is applied to the analysis of impacts on the landscape character for each project alternative. The first

step is to identify anticipated changes associated with alternative elements, whether the changes are in terms of change to landform, or change or addition to structures. Each anticipated change created by project elements is ranked from weak to very strong denoting the potential extent of visual contrast independent of setting context or views. This part of the assessment is independent of the surrounding landscape.

These project elements are then assessed in terms of their level of impact based on setting and viewer characteristics. Considered in terms of the setting, the assessment of impacts is made based on proximity to views—that is, whether the project element is within the foreground, middleground, or background in relation to the viewpoint. The visual impact assessment consists of an overlay of Contrast (alternative specific), Landscape Characteristic, and Views to determine whether the alternative is dominant to the characteristic landscape, subordinate to the characteristic landscape, or somewhere in between.

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. 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.

Alternative elements with the greatest potential for contrast would include the addition of structures that are large in size, numerous in quantity, and/or of high diversity in shape.

Alternative Components and Contrast

Each alternative considered in the Draft 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 project 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 L, Visual Resources, documents the degree of visual contrast associated with terrain changes and the addition of structural elements. Unique features associated with project alternatives are listed below.

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 is used as a basis for comparison of alternatives.

The quantification of **Minimal Action** footprints includes auxiliary lanes, curve safety modifications, and conceptually defined interchange modifications. It is important to note that these interchange areas are design estimations at the Tier 1 level. 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. See Table 2-4 for a complete breakdown of the Minimal Action components associated with each build alternative. Section 2.2 describes alternatives, and each alternative overview graphically sets out the extent of the alternative together with the Minimal Action components associated with that alternative.

The **Rail with IMC** alternative would use the existing Union Pacific Railroad (UPRR) 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 UPRR track; this portion of the Rail with IMC alternative would not result in visual contrast. 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 I-70 to the other, or avoid sensitive resources. Rail would include piers spaced every 80 to 100 feet along elevated portions of the alternative. These elevated portions of rail are anticipated to result in very strong visual contrast. Visual simulations of the Rail with IMC alternative are illustrated in Figure 3.13-2 and Figure 3.13-5.

The AGS alternative would be a completely elevated system. The AGS alternative would also include piers spaced every 80 to 100 feet along the entire length of the alternative. The rail or guideway portion of the AGS 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. While this elevated structure is anticipated to result in strong visual contrast, it is assumed to be somewhat less contrasting than elevated rail, which would be built with a solid elevated deck. Visual simulations of the AGS alternative are illustrated in Figure 3.13-2, Figure 3.13-3, and Figure 3.13-5.

The **Dual-Mode and Diesel Bus in Guideway** alternatives would essentially be the same as far as appearance. These alternatives, which are proposed within the median of I-70, would include multiple 3-foot-tall guideway barriers. Between Silverthorne and the EJMT, two barriers would be required to accommodate a single bus lane. From the EJMT 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 template would simply be widened, the Bus in Guideway alternatives are anticipated to result in moderate visual contrast. Other components associated with these alternatives would include cut-and-fill slopes and retaining walls where necessary to accommodate the alternative alignment within mountainous terrain. A visual simulation of the Bus in Guideway alternatives is illustrated in Figure 3.13-4.

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 (see Figure 3.13-5) 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 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. Visual simulations of the Six-Lane Highway alternative (represents both 55 and 65 mph) are illustrated in Figure 3.13-2, Figure 3.13-3, Figure 3.13-4, and Figure 3.13-5.

The **Combination** alternatives would include combinations of all project elements described above. In addition to creating a wider transportation Corridor template than single-mode alternatives, another key difference in one Combination alternative would be the fact that the rail portion of the Combination Six-Lane Highway with Rail and IMC alternative would be on grade in the median where highway widening and rail would occur. However, where no highway widening would occur as part of this Combination alternative (west of the Continental Divide), this alternative would be the same as the Rail-only alternative. Generally the combination of a transit and highway facility results in stronger contrast due to more complex components and a wider transportation template. A visual simulation of the Combination Six-Lane Highway with AGS alternative is illustrated in Figure 3.13-4.

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Visual Simulations

View Looking East within Sliver Plume



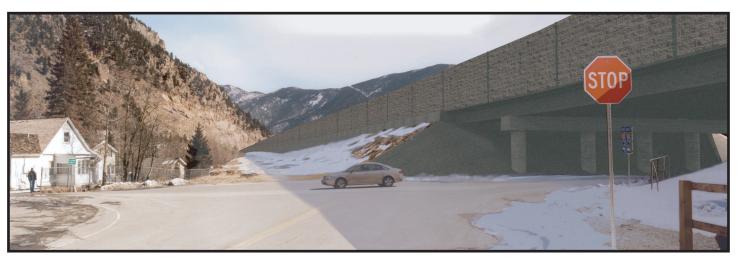
STOP

EXISTING CONDITIONS

AGS ALTERNATIVE SIMULATION



RAIL ALTERNATIVE SIMULATION



6-LANE HIGHWAY ALTERNATIVE WITH SOUND WALL MITIGATION SIMULATION(Please note that sound walls are one possible future option)

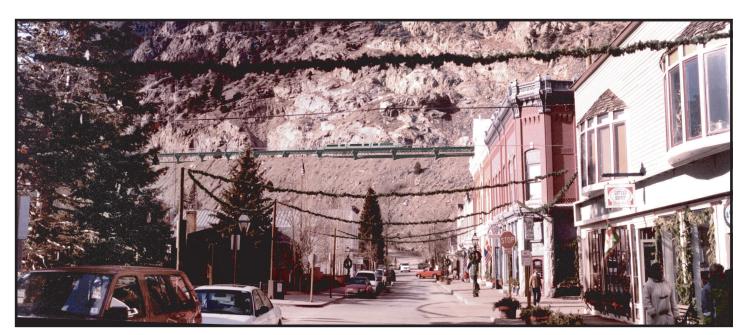
Figure 3.13-2

Visual Simulations

View Looking West from 6th & Rose in Georgetown



EXISTING CONDITIONS



AGS ALTERNATIVE SIMULATION

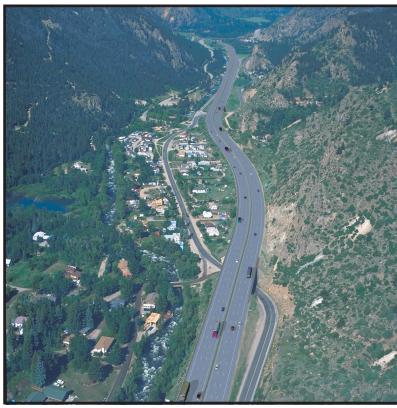


6-LANE HIGHWAY ALTERNATIVE SIMULATION

View Looking West near Lawson Toward Empire Junction



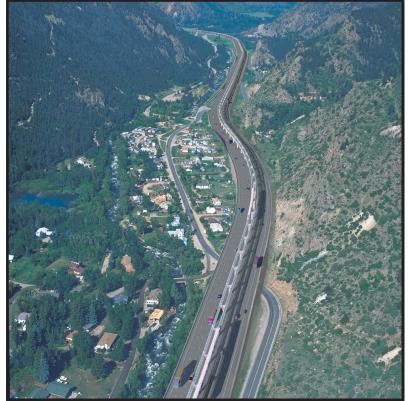
EXISTING CONDITIONS



6-LANE HIGHWAY ALTERNATIVE SIMULATION



DIESEL BUS IN GUIDEWAY ALTERNATIVE SIMULATION



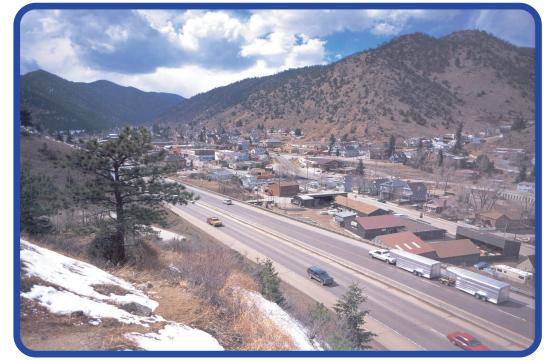
6-LANE HIGHWAY AND AGS COMBINATION ALTERNATIVE SIMULATION

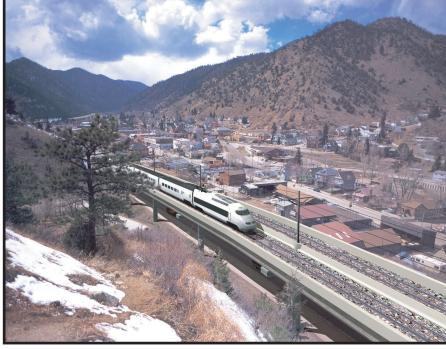
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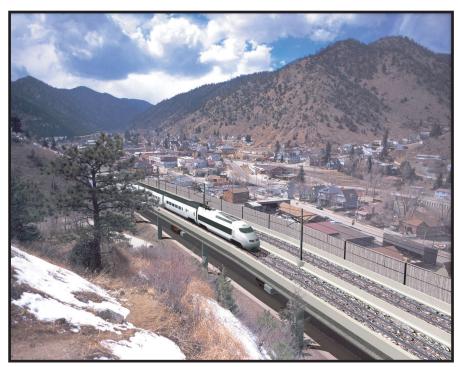
Figure 3.13-4

Visual Simulations

View Looking Northwest over Idaho Springs



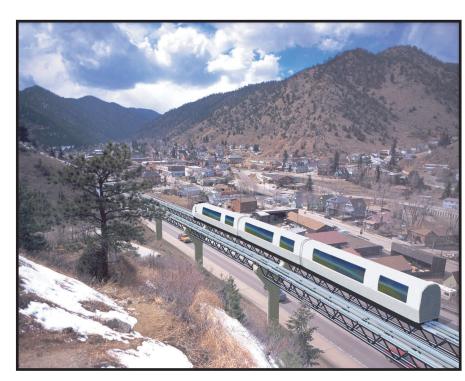




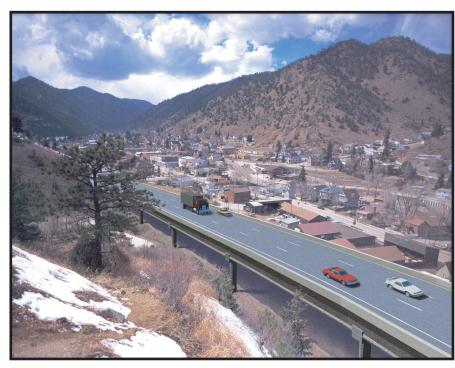
EXISTING CONDITIONS

RAIL ALTERNATIVE SIMULATION

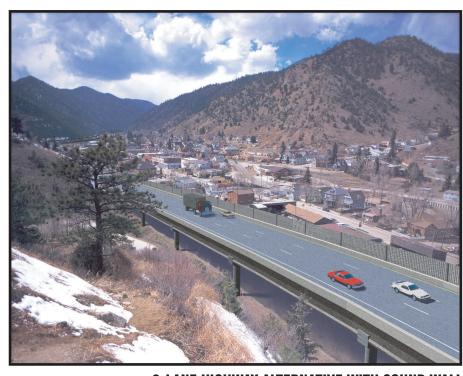
RAIL ALTERNATIVE WITH SOUND WALL MITIGATION SIMULATION (Please note that sound walls are one possible future option)







6-LANE HIGHWAY ALTERNATIVE SIMULATION



6-LANE HIGHWAY ALTERNATIVE WITH SOUND WALL MITIGATION SIMULATION (Please note that sound walls are one possible future option)

Figure 3.13-5

Garfield County

The No Action alternative would include the existing highway condition; however, no major projects are planned for construction in the next 5 to 20 years in Garfield County. Impacts on visual resources would include current roadside scars and development that is occurring along the Corridor.

Of the build alternatives, only the Minimal Action component (Glenwood Springs interchange improvement at milepost 116) would occur in Garfield County. As illustrated on Chart 3.13-1 and Chart 3.13-2, this component is anticipated to result in weak contrast and low visual impacts.

Chart 3.13-1. Visual Contrast, Project Alternatives in Garfield County

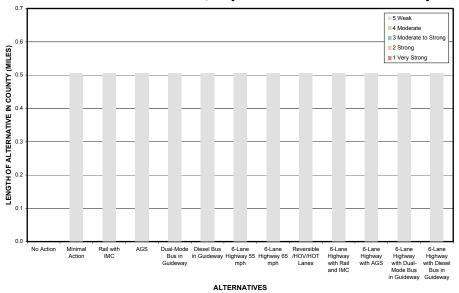
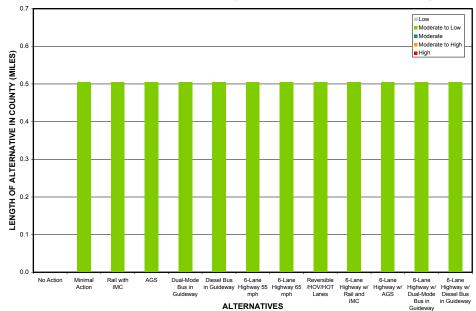


Chart 3.13-2. Visual Impacts, Project Alternatives in Garfield County



Eagle County

Alternatives proposed within Eagle County would primarily be Transit, including Rail with IMC and AGS. Local highway improvements would include additional highway widening at Dowd Canyon (mileposts 170 to 173), curve safety modifications west of Wolcott (mileposts 155 to 156), and westbound auxiliary lanes at Vail Pass (mileposts 180 to 190).

Alternatives in Eagle County would primarily be within foreground distance zones (93 percent) from sensitive community and recreation viewpoints, while middleground and background distance zones would represent a relatively minimal portion (6 percent and 1 percent, respectively).

The No Action alternative would consist of several planned or permitted projects, which are described in detail in Chapter 2, Description and Comparison of Alternatives. Impacts on visual resources would include current roadside scars and development that is occurring along the Corridor. Impacts associated with the planned projects are addressed in other environmental documents including the *Eagle County Airport Interchange EA*. The most notable changes to the landscape setting in Eagle County under the No Action alternative are anticipated to be associated with the Eagle County Airport interchange and connector road, which would include a major bridge over the broad Eagle River valley. The addition of the bridge would result in strong visual contrast associated with a large-scale, man-made facility in the rural project area.

Within Eagle County, the Rail with IMC alternative would consist of (1) the Intermountain Connection, which involves use of the UPRR 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 UPRR track, this portion of the Rail with IMC alternative is not anticipated to result in visual contrast. In areas where the new rail facility would be elevated (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 IMC 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 AGS alternative would be a completely elevated system. AGS, 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.

Local 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. Elements such as long, continuous large-scale walls or major cut-and-fill slopes are anticipated to attract attention and dominate the setting. The range of visual contrast associated with project elements is illustrated in Chart 3.13-3.

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| The strong | The

Dual-Mode Diesel Bus 6-Lane

No Action

Minimal

Rail with

AGS

Chart 3.13-3. Visual Contrast, Project Alternatives in Eagle County

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 AGS platforms along Vail Pass. Vail Pass is largely undeveloped and the addition of an elevated platform would not go unnoticed by the casual observer. Chart 3.13-4 illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each project alternative.

in Guideway Highway 55 Highway 65 /HOV/HOT

ALTERNATIVES

6-Lane Reversible

6-Lane

Highway

with Rail

and IMC

6-Lane

Highway

with AGS

6-Lane

Highway

with Dual-

Mode Bus

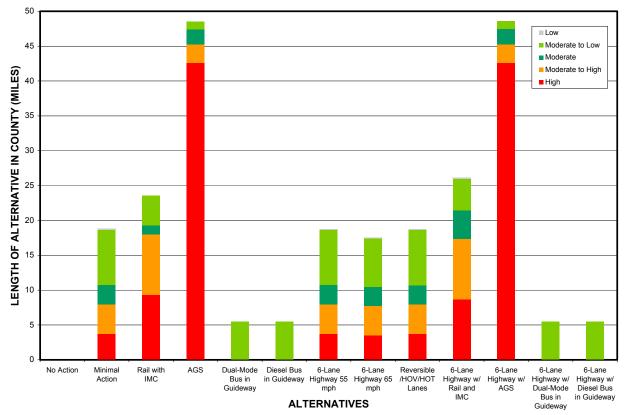
6-Lane

In Eagle County, the AGS and Combination Six-Lane Highway with AGS alternatives 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 I-70 within the county and are anticipated to result in 43.1 miles of high visual impact. The Rail with IMC and Combination Six-Lane Highway with Rail and IMC alternatives would begin at milepost 142, with IMC utilizing the existing UPRR line, therefore resulting in no visual impacts for this portion. Visual impacts would begin at milepost 171, where the new portion of IMC begins and continue throughout the rail transit portion, ranging from low to moderate to high.

The Bus in Guideway alternatives would require no change to existing I-70 in Eagle County; the buses would operate in mixed traffic on existing I-70 and, therefore, would result in no additional visual impact within the county. The low to moderate impacts shown in Chart 3.13-4 are entirely the result of Minimal Action components associated with these alternatives.

The Highway alternatives and Combination Six-Lane Highway with Bus in Guideway alternatives would require two additional 12-foot-wide lanes through Dowd Canyon resulting in localized visual impact in this area. These changes would result in impacts ranging from low to moderate to high.

Chart 3.13-4. Visual Impacts, Project Alternatives in Eagle County



Summit County

Transit alternatives proposed within Summit County would include Rail with IMC, AGS, and Bus in Guideway alternatives. The only highway improvements would be those necessary to accommodate the Bus in Guideway alternatives within the median of I-70 near the EJMT.

Project alternatives within Summit County would primarily be within foreground distance zones (77 percent) from sensitive community and recreation viewpoints, while middleground and background would be relatively minimal (10 percent and 13 percent, respectively).

The No Action alternative would consist of several planned or permitted projects, which are described in detail in Chapter 2, Description and Comparison of Alternatives. Impacts on visual resources would include current roadside scars and development that is occurring along the Corridor. Impacts associated with the planned projects are addressed in other environmental documents including the *State Highway 9 EIS*. The most notable changes to the landscape setting in Summit County under the No Action alternative are anticipated to be associated with the improvements on SH 9, which would include roadway widening, depressed median for some sections, Jersey barrier-divided section, removal of existing vegetation, cut-and-fill slopes, retaining walls, and noise walls.

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

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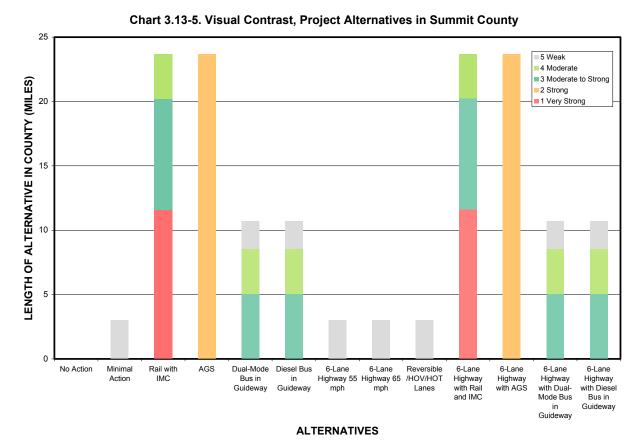
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The AGS alternative would be a completely elevated system. AGS, while relatively less visually complicated and obtrusive than the elevated rail, is anticipated to result in changes that would attract attention and result in strong visual contrast.

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 3.13-5.



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 AGS platforms in select locations between Copper Mountain and Officers Gulch and at the approach to the EJMT. Chart 3.13-6 illustrates the number of miles of high, moderate to high, moderate, low to

The Rail with IMC, AGS, Combination Six-Lane Highway with Rail and IMC, and Combination Six-Lane Highway with AGS alternatives would run the full length of I-70 (mileposts 190 to 214) within Summit County and, therefore, would have the most miles of visual impacts within the county (24 miles). The AGS and Combination Six-Lane Highway with AGS alternatives, however, are anticipated to each have 16.9 miles of high visual impact, whereas the Rail with IMC and Combination Six-Lane Highway with Rail and IMC alternatives would have only 8.7 miles of high impacts on visual resources, with another 10.3 miles in the moderate to high category.

moderate, and low visual impacts associated with each project alternative.

The Bus in Guideway and Combination Six-Lane Highway with Bus in Guideway alternatives would have 9 miles of visual impacts along I-70 resulting from a 14-foot eastbound single-lane guideway to be built from Silverthorne to EJMT (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 3.13-6 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.

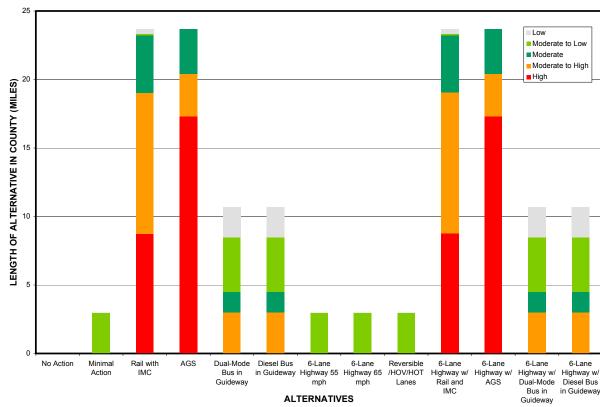


Chart 3.13-6. Visual Impacts, Project Alternatives in Summit County

Clear Creek County

Alternatives proposed within Clear Creek County would include Transit, Highway, and Combination alternatives.

Project alternatives within Clear Creek County would be almost completely within foreground distance zones from sensitive community and recreation viewpoints.

The No Action alternative would consist of several planned or permitted projects, which are described in detail in Chapter 2, Description and Comparison of Alternatives. Impacts on visual resources would include current roadside scars and development that is occurring along the Corridor. Impacts associated with the planned projects are addressed in other environmental documents including the *Gaming Area Access EIS*. The most notable changes to the landscape setting in Clear Creek County under the No Action alternative are anticipated to be associated with the Black Hawk Tunnel and Central City Parkway. The Black Hawk Tunnel and tunnel approach ramps along Floyd Hill are

assumed elements of the PEIS. Both the Black Hawk Tunnel and the Central City Parkway are anticipated to result in very strong contrast and in changes that would dominate the setting.

Within Clear Creek County, the Rail with IMC 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 IMC alternative throughout the county would be on grade and is anticipated to result primarily in moderate contrast. The AGS alternative would be a completely elevated system. AGS, 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 3.13-7.

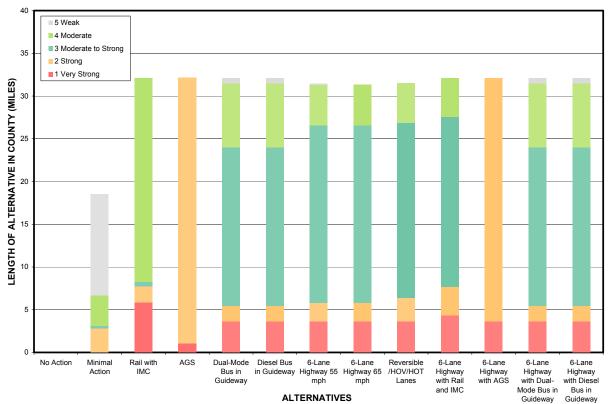


Chart 3.13-7. Visual Contrast, Project Alternatives in Clear Creek County

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 AGS platforms within foreground views from Silver Plume, Georgetown, and Idaho Springs.

Chart 3.13-8 illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each project 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 I-70. The majority of visual impacts of the AGS and Combination Six-Lane Highway with AGS alternatives would be in the high category. The majority of visual impacts of the Rail with IMC and the Combination Six-Lane Highway with Rail and IMC alternatives would be in the moderate category, with some areas of high impact.

The majority of visual impacts of the Highway alternatives, the Bus in Guideway alternatives, the Combination Six-Lane Highway with Bus in Guideway, and the Combination Six-Lane Highway with Rail and IMC alternatives would be in the moderate to high category.

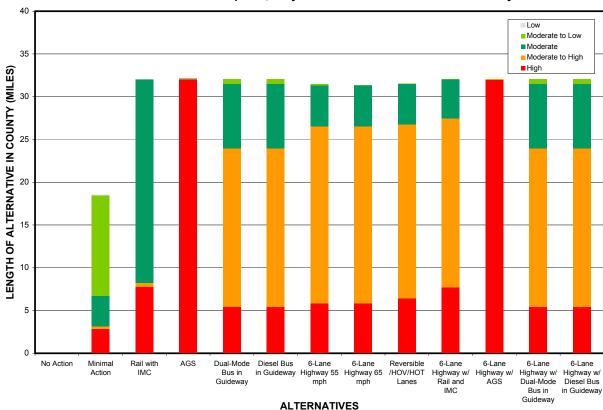


Chart 3.13-8. Visual Impacts, Project Alternatives in Clear Creek County

Jefferson County

Alternatives proposed within Jefferson County would include Transit, Highway, and Combination alternatives.

Project alternatives within Jefferson County would primarily be within foreground distance zones (83 percent) from sensitive community and recreation viewpoints, while middleground and background distance zones would represent a relatively minimal portion (16 percent and 1 percent, respectively).

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The No Action alternative would consist of several planned or permitted projects, which are described in Chapter 2, Description and Comparison of Alternatives. Impacts on visual resources would include current roadside scars and development that is occurring along the Corridor. Impacts associated with these projects are addressed in other environmental documents, such as the *Hogback Parking Facility EA*. No additional direct impacts on visual resources are anticipated to occur under the No Action alternative. Moderate visual contrast is anticipated to result from construction of the parking surface, shelters, light poles, signs, and cars utilizing the lot. Cut slope and fill slope retaining walls would also result in moderate structure contrast within foreground views of travelers on I-70.

The Rail with IMC 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. AGS, a completely elevated system, is anticipated to result in strong visual contrast.

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 3.13-9.

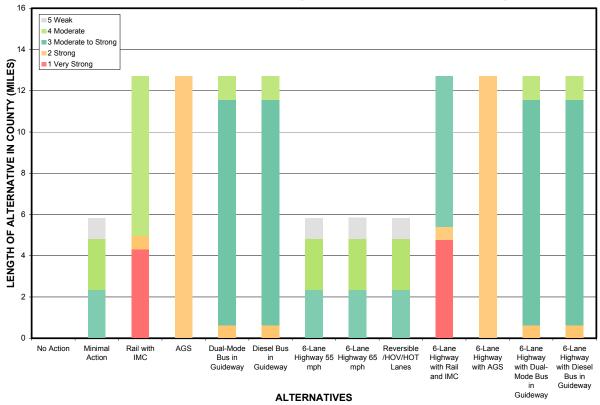


Chart 3.13-9. Visual Contrast, Project Alternatives in Jefferson County

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 AGS platforms within foreground views from Silver Plume, Georgetown, and Idaho Springs. Chart 3.13-10 illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each project alternative within Jefferson County. The eastern terminus of all project alternatives would be within Jefferson County.

The Highway 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 3.13-10 would result from Minimal Action components associated with these alternatives.

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

The AGS and Combination Six-Lane Highway with AGS alternatives in Jefferson County would have visual impacts that are primarily in high and moderate to high categories. The AGS and Combination Six-Lane Highway with AGS 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 IMC alternative would have primarily moderate impacts on visual resources along I-70 within the county. The Combination Six-Lane Highway with Rail and IMC alternative would have impacts primarily in the high and moderate to high categories.

The Bus in Guideway and Combination Six-Lane Highway with Bus in Guideway alternatives would have impacts primarily in the moderate to high category.

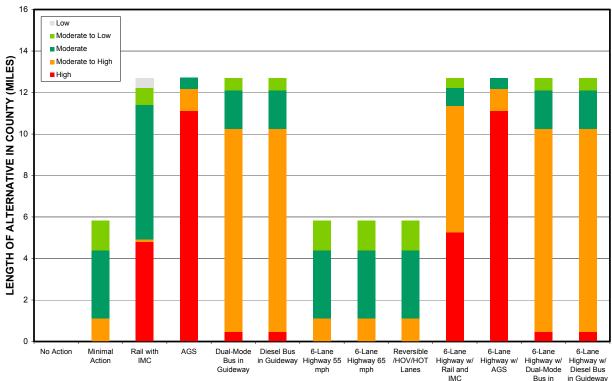


Chart 3.13-10. Visual Impacts, Project Alternatives in Jefferson County

ALTERNATIVES

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Summary of Direct Impacts

All build 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, project 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.

- The No Action alternative would consist of several planned or permitted projects, which are described in detail in Chapter 2, Description and Comparison of Alternatives. Impacts associated with these projects are addressed in other environmental documents including the *Eagle County Airport Interchange EA*, the *SH 9 EIS*, the *Gaming Area Access EIS*, and the *Hogback Parking Facility EA*. No additional construction activities would create visual impacts under the No Action alternative.
- 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.
- Elevated portions of the Rail with IMC alternative (30 percent) would result in changes that would attract attention and dominate the setting (very strong contrast). On-grade portions (70 percent) would result in changes that are noticeable but subordinate to the setting (moderate contrast). The Rail with IMC alternative is anticipated to result in among the greatest visual impacts.
- The AGS alternative, which would be a completely elevated system, is anticipated to result in changes that would attract attention and dominate the setting (strong contrast). The AGS alternative is anticipated to result in the greatest visual impacts.
- The 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).
- Changes associated with the Highway alternatives would range from very strong to weak contrast. Areas of large-scale retaining walls and major cut-and-fill slopes would result in changes that attract attention (strong contrast). Areas of elevated structures (Idaho Springs and Floyd Hill) would attract attention and dominate the setting (very strong contrast).
- The Rail portion of the Combination Six-Lane Highway with Rail and IMC alternative would be on grade within the median east of the EJMT and would result in changes that are noticeable but subordinate to the setting (moderate contrast). In areas where this alternative would be elevated, such as Idaho Springs and Floyd Hill, it would attract attention and dominate the setting (very strong contrast). The Combination Six-Lane Highway with Rail and IMC alternative is anticipated to result in among the greatest visual impacts.
- The AGS portion of the Combination Six-Lane Highway with AGS alternative would be elevated within the median, which would result in changes that attract attention and dominate the setting (strong contrast). Similar to the AGS alternative, the Combination Six-Lane Highway with AGS alternative is anticipated to result in the greatest visual impacts.
- Changes associated with the Combination Six-Lane Highway with Bus in Guideway alternatives
 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).

Chart 3.13-11 illustrates the number of miles of very strong, strong, moderate to strong, moderate, and weak visual contrast associated with each project alternative throughout the Corridor.

Chart 3.13-11. Total Miles of Visual Contrast Corridor-Wide

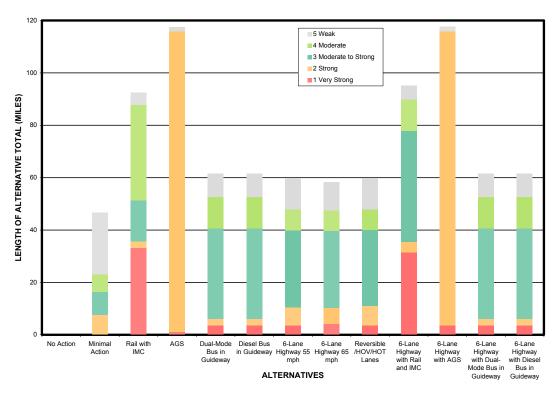
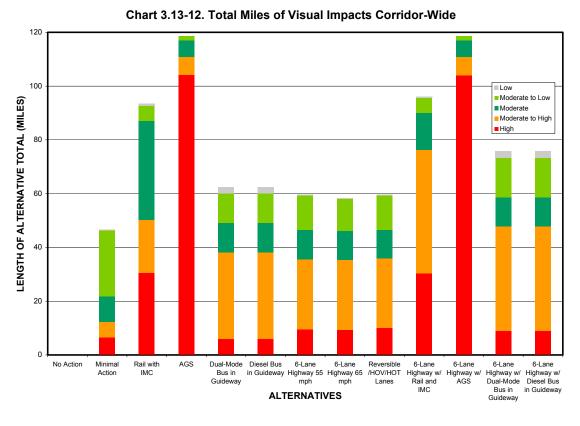


Chart 3.13-12 illustrates the number of miles of high, moderate to high, moderate, low to moderate, and low visual impacts associated with each project alternative throughout the Corridor.

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Key Roadway Views

Travelers on I-70 experience a wide range of scenery characteristics, as evident in the Scenery Analysis Units, delineated and described in detail in Appendix L. The Corridor includes various landscapes that range from mountains and mountain valleys, to canyons, to 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.

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 I-70 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 IMC alternative would be elevated for a distance of 35 miles and would include catenary poles and wires for a distance of 89 miles.
- The AGS alternative would be elevated for a distance of 118 miles.
- Bus in Guideway alternatives 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 template.

While the entire Corridor provides scenic interest, there are specific locations along the highway that are especially impressive and dramatic, and exhibit high scenic integrity. These unique locations across the Corridor are categorized into three types of vantage points:

- Gateway views provide a sense of entry or arrival to key portions of the Corridor.
- **Focal point** 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.

Figure 3.13-6 depicts Scenery Analysis Units throughout the Corridor, and locations and photographs of key roadway views with high scenic integrity throughout the Corridor. The following text provides an overview of these key roadway views along I-70. The purpose of this overview is to provide a qualitative discussion of the influences of alternatives on roadway views.

Table 3.13-1 shows generally which of the alternatives would occur in each of the key viewpoints discussed below. For a more discrete disclosure of the location of each alternative and the Minimal Action components associated with each, see Table 2-4, Minimal Action Components Associated with Each Build Alternative, and Figure 2-3, Alternative Alignment Features.

Scenic Views	No Action	Minimal Action	Rail with IMC	AGS	Dual-Mode or Diesel Bus in Guideway	6-Lane Highway 55 mph	6-Lane Highway 65 mph	Reversible/ HOV/ HOT Lanes	Combination 6-Lane Highway with Rail and IMC	Combination 6-Lane Highway with AGS	Combination 6-Lane Highway with Dual-Mode or Diesel Bus in Guideway
Glenwood Canyon											
Red Canyon											
Dowd Canyon	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х
Vail Pass and Vail Valley	X	х	X	Х		X ^a	X ^a	X ^a	Х	×	X ^a
Tenmile Canyon	Х	Х	Х	Х					Х	Х	
Straight Creek	Х	Х	Х	Х	Х				Х	Х	Х
Herman Gulch	X	X	Х	Х	Х	Х	Х	Х	Х	Х	X
Empire Area	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X
Clear Creek Canyon/Fall River Road Area	×	×	×	×	X	×	X	x	×	×	×
Floyd Hill	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Genesee "Picture Bridge"	Х	х	Х	Х	X	X ^a	X ^a	X ^a	X	Х	×

Table 3.13-1. Alternatives Present within Key Viewpoints

Glenwood Canyon

Setting. I-70 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 project alternatives are anticipated.

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^a Auxiliary lanes only – alternative not otherwise present

Red Canyon

Setting. I-70 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 I-70. 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 project alternatives are anticipated.

Dowd Canyon

Setting. Views from I-70 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 IMC, AGS, Highway, and Combination alternatives are proposed through Dowd Canyon. Both the Rail with IMC and AGS alternatives would consist of elevated structures through Dowd Canyon and would transition from the north side to south side of I-70 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 and Reversible/HOV/HOT Lane alternatives would include a wider highway template through this area with the addition of two general-purpose lanes. Views along I-70 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 would include both highway widening and transit (Rail with IMC or AGS), 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 I-70 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, and the Vail ski areas and Vail Village.

View Disruption. Within the town of Vail, Rail with IMC, AGS, Combination Six-Lane Highway with Rail and IMC, and Combination Six-Lane Highway with AGS alternatives would all include transit within the median between the existing eastbound and westbound lanes. While the median through Vail is relatively wide, the transit would contribute to a more urbanized driving experience through Vail.

Along Vail Pass, the Rail with IMC, AGS, Combination Six-Lane Highway with Rail and IMC, and Combination Six-Lane Highway with AGS alternatives would include elevated structures that would transition from the north, to the south, and back to the north side of I-70. These alternatives would result in multiple disruptions of roadway views along Vail Pass.

The driving experience would also be modified by the Minimal Action and Highway alternatives, which would include a wider highway template through this area with the addition of eastbound and westbound auxiliary lanes. Views along I-70 would change moderately as a result of these Highway alternatives.

The Combination alternatives would include eastbound and westbound auxiliary lanes and transit (Rail with IMC or AGS), 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 IMC, AGS, Combination Six-Lane Highway with Rail and IMC, and Combination Six-Lane Highway with AGS would include elevated structures. These alternatives would parallel I-70 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 EJMT, 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 IMC, AGS, Combination Six-Lane Highway with Rail and IMC, and Combination Six-Lane Highway with AGS would include elevated structures. While AGS would be a completely elevated system, the Rail with IMC and Combination Six-Lane Highway with Rail and IMC 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 I-70 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 templates 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.

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 I-70. 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 I-70 within this unit.

View Disruption. The Minimal Action, Transit, Highway, and Combination alternatives are all proposed through the Herman Gulch area. Both the AGS and Combination Six-Lane Highway with

AGS alternatives 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, and Combination alternatives, which would each result in wider transportation templates 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 I-70 would change considerably as a result of these alternatives.

The Combination Six-Lane Highway with AGS 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 Areab

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, and Combination alternatives are all proposed through the Empire area. Both the AGS and Combination Six-Lane Highway with AGS alternatives 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, and Combination alternatives, which would each result in wider transportation templates 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 AGS 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, and Combination alternatives are all proposed through Clear Creek Canyon. Both the AGS and Combination Six-Lane Highway with AGS alternatives 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, and Combination alternatives, which would each result in wider transportation templates 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 AGS 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 I-70 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, and Combination alternatives 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 template. The Combination alternatives would include both highway widening and transit, and would result in the greatest disruption of views and change in driving experience along Floyd Hill.

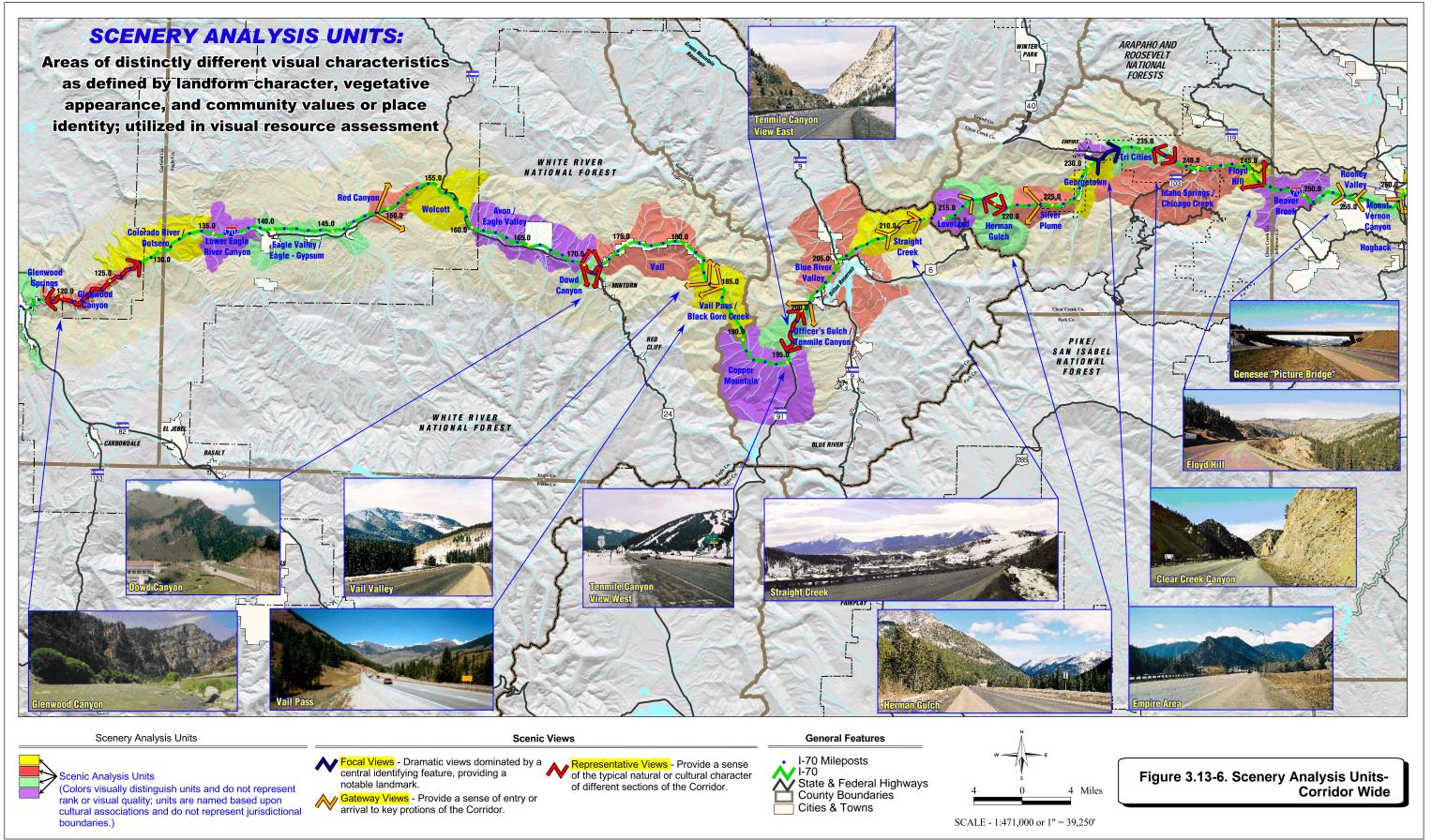
Genesee "Picture Bridge"

Setting. A local high point along I-70 coincides with a single span bridge over I-70 (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, and Combination alternatives 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 I-70. Due to local terrain constraints, locating alternatives to the south would not be feasible, and locating structures to the north of I-70 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 template, 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.

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Federal Lands Management

Management

Because of the predominance of federally managed lands within the Corridor, another key aspect of the visual resource assessment includes the consideration of visual management of federally managed, publicly owned lands. Management prescriptions describe the different degrees of modification to the visual character of the landscape allowed. Management prescriptions for all areas in the Corridor are derived from an overlay technique that combines the maps of scenic attractiveness classes, sensitivity levels, and distance zones.

Table 3.13-2 provides the management guidance associated with both the WRNF and the ARNF visual management prescriptions. Those management classifications highlighted in gray are applicable to lands directly adjacent to I-70 within the Corridor.

Visual management prescriptions for lands bordering I-70 within the WRNF include "low," "moderate," and "high" scenic integrity objectives. Eagles Nest Wilderness Area and the Gore and Tenmile mountain ranges have classifications of "high" scenic integrity objectives—one of WRNF's most stringent management prescriptions. Lands between Avon and Vail, Copper Mountain, and lands between Frisco and Straight Creek have classifications of "low" scenic integrity objectives.

Visual management prescriptions for lands bordering I-70 within the ARNF include "modification" and "retention." A Visual Quality Objective (VQO) classification of "retention"—one of ARNF's most stringent management prescriptions—is applied to areas between Herman Gulch and Silver Plume. The Loveland Ski Area is classified as "modification."

Table 5.15-2. Visual Management i rescriptions							
Visual Manageme	nt Classifications	Management Guidance					
WRNF Scenic Quality Objective	ARNF Visual Quality Objective						
Very High	Preservation	Allows ecological changes only. Management activities, except for very low visual impact recreation facilities, are prohibited.					
High	Retention	Provides for management activities that are not visually evident.					
Moderate	Partial Retention	Provides for management activities that remain visually subordinate to the characteristic landscape.					
Low	Modification	Activities may visually dominate the original characteristic landscape; however, activities of vegetative and landform alternative must borrow from naturally established form, line, color, or texture so completely and at such a scale that its visual characteristics are those of natural occurrences within the surrounding area of character type.					
Very Low	Maximum Modification	Activities of vegetative and landform alterations may dominate the characteristic landscape.					

Table 3.13-2. Visual Management Prescriptions

Potential Conflicts with Management Prescriptions

By definition, alternative components resulting in very strong and strong contrast would not be compliant within lands designated as "high" or "moderate" scenic integrity objectives, or designated as "retention" or "partial retention." Conflict with the management prescriptions could occur with the implementation of the Rail with IMC or AGS alternatives in proximity to the Eagles Nest Wilderness Area. This conflict is also anticipated to occur with the implementation of Rail with IMC, AGS, or Highway alternatives between Herman Gulch and Silver Plume. The effectiveness of mitigation to

reduce visual impacts associated with project alternatives and to potentially bring alternatives into compliance with visual management prescriptions would be considered at the Tier 2 level of study.

3.13.3.2 Indirect Impacts

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 project alternatives. Currently 13 percent of the viewshed from I-70 is developed, and community plans indicate that much more of the Corridor area will be developed in the future. Planned future development (in addition to past and present development) will consume 32 percent of the Corridor viewshed area. Pressures for additional increased development from alternatives might alter the highly valued Corridor character from a rural mountain character to an urban character.

According to the induced growth analysis (see section 3.9, Social and Economic Values), induced growth is indicated with the Highway, Transit, and Combination alternatives (to different degrees). Although many factors influence the path of development in the Corridor, if induced growth took place (as associated with specific alternatives), visual resources might come under additional pressure. Discussions with county planners were held to determine where such growth might occur. The following general patterns were agreed to:

- Highway alternatives would be associated with the greatest potential for dispersed growth/development. Highway alternatives generally would represent existing trend conditions. The most likely development pattern for induced growth associated with Highway alternatives would follow existing urban/rural ratios of growth dissemination.
- Transit alternatives would require transit centers for boarding and off-boarding of passengers.
 The most likely development pattern for induced growth associated with Transit alternatives
 would be focused in urban areas surrounding Transit centers. The level of dispersed growth in
 rural areas is assumed to be more limited for the Transit alternatives.
- Combination alternatives would be associated with the highest degree of possible induced growth. The most likely development pattern for induced growth associated with Combination alternatives would be divided equally among the two above methods of growth assignment.

Both Transit and Highway alternatives are anticipated to induce growth beyond projections in Eagle County. However, the greatest level of induced growth is anticipated to occur under the Combination alternatives in both Eagle and Summit counties. Therefore, the Combination alternatives are anticipated to result in the greatest pressure for development and change from rural Corridor character to urban Corridor character. Indirect impacts on visual resources from possible induced growth are discussed and quantified in relation to planned development impacts in Chapter 4, Cumulative Impacts Analysis.

3.13.4 Mitigation Measures

Mitigation measures for visual resources center on reducing visual contrast associated with implementation of project alternatives. Because visual contrast is most closely associated with the addition of structural elements and change to landform characteristics, the following mitigation measures are organized into those related to landform and those related to structures. Additionally, mitigation and coordination concepts related to possible induced growth are provided in section 3.9.

Mitigation measures for visual resources will be developed and refined at the Tier 2 level of study in context of a project. However, techniques to reduce impacts could include the following.

^a Management classifications highlighted in gray are applicable to lands directly adjacent to I-70 within the Corridor.

Landform

- Implement sensitive grading techniques that blend grading with the natural terrain.
- Treat all disturbed slopes for erosion control. Revegetate using native plant species as appropriate for adjacent land use and terrain.
- Reduce color contrast through rock staining in areas of new rock cuts.
- Selectively clear areas where alternatives encroach on forest edge.

Structures

- To the extent possible, use structures that are simple, slim, and low-profile with minimal bulk and horizontal emphasis, avoiding over-monumentation, reducing structure depth as compared to deck edge, and keeping structures proportional.
- Design colors of structures to complement the natural landscape.
- Design tapered and rounded forms and edges where appropriate to soften appearance and reduce perceived bulk (for example, on bridge piers).
- Use repeating colors and textures to provide continuity with other structural features such as retaining walls.

Induced Growth

The selected alternative should support transportation access for the Corridor in a way that minimizes damage to visual resources. Land use planning and controls are key factors in the protection of all environmental and community values. Mitigation planning is also important and will involve coordination with Corridor-area communities. Decision-makers will be faced with tradeoffs during the process because improved transportation access is generally associated with economic growth, and efforts to limit access for the protection of environmental and community resources might also limit economic growth.

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