Executive Summary

ES.1 Where is the I-70 Mountain Corridor located?

The I-70 Mountain Corridor (the Corridor) traverses the Rocky Mountains of Colorado. The portion of the Interstate 70 (I-70) highway examined in this document extends for 144 miles between Glenwood Springs on the west and the Denver metropolitan area on the east. It traverses the rugged terrain and outstanding scenery of central Colorado, including the steep grades leading up to the Continental Divide and Vail Pass and the narrow, steep walled Clear Creek and Glenwood Canyons.

The I-70 highway is the only east-west interstate to cross Colorado and the only continuous east-west highway in the study area (**Figure ES-1**). The highway is the major corridor for access to established communities along it, as well as recreational areas that are important contributors to the quality of life and the economic base in the state. The Corridor passes through five counties (Garfield, Eagle, Summit, Clear Creek, and Jefferson) and directly serves more than 20 communities. In addition, the I-70 Mountain Corridor connects to several north-south highways (State Highway [SH] 82, SH 131, United States Highway [US] 24, SH 9, US 40, SH 103, US 6, SH 119, and C-470) and provides access to many outlying communities and counties. The Corridor provides access to the White River National Forest and the Arapaho and Roosevelt National Forests, two of the most visited National Forests in the United States. Destinations along the Corridor also include a number of major ski resorts that attract local, national, and international visitors. Recreational travel is the most predominant contributor to peak traffic in the Corridor, especially during summer and winter weekends and holidays.

The project study limits, which are shown in **Figure ES-1**, extend 144 miles from Glenwood Springs in western Colorado to C-470 on the western edge of metropolitan Denver. The I-70 Mountain Corridor includes the I-70 highway and its associated infrastructure and in these study limits is referred to as the Corridor throughout this document.

In addition to serving local community and recreational trips, the I-70 highway is an important freight corridor in Colorado. Heavy vehicles—trucks, buses, and recreational vehicles—represent about 10 percent of traffic along the Corridor now, and heavy vehicles will continue to rely on the Corridor for east-west intra- and inter-state travel as no alternate routes exist. The variation in speeds between these vehicles and faster moving automobiles (particularly on steep grades) contributes to safety, mobility, and congestion problems in the Corridor.

Figure ES-1. I-70 Mountain Corridor

ES.2 Why did the Colorado Department of Transportation prepare this document?

The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA) (lead agencies) prepared this Final Programmatic Environmental Impact Statement (PEIS) to provide reader-friendly, concise information about the major findings of the I-70 Mountain Corridor National Environmental Policy Act (NEPA) process. The document is supported by additional data and analyses contained in technical reports. **Chapter 9, References** contains a full list of these reports. These technical reports are available on the attached CDs, on the project website (**http://www.i70mtncorridor.com**), and by request.

This document details the first tier of a Programmatic NEPA process. It is a stand-alone document that compiles data and analysis developed for the I-70 Mountain Corridor since the lead agencies issued a Notice of Intent to prepare a PEIS in January 2000. This document encompasses data gathered and presented over that 10-year period, provides background on CDOT's efforts to develop a Consensus Recommendation for needed transportation solutions with stakeholders, responds to comments received on the Revised Draft PEIS issued in September 2010, and identifies the Preferred Alternative for the Corridor.

The decisions being made at the programmatic level regarding the transportation solution evaluated in this document include travel mode, capacity, and general location. In this programmatic process, the lead agencies identify a program of improvements. This broad analysis is referred to as Tier 1 of the NEPA process. The Tier 1 decision will not directly result in construction or impacts. To carry out the program of improvements, subsequent NEPA processes, referred to as Tier 2 processes (with their own specific purpose and need), will be initiated to develop and evaluate specific projects consistent with the Tier 1 decision. The Tier 1 decision will not be revisited during Tier 2 processes unless other laws (such as the Clean Water Act), require revisiting them. Although mitigation strategies are proposed at Tier 1 based on potential impacts, additional and specific mitigation measures will be developed and committed to in Tier 2 processes.

ES.3 Why are improvements needed on this Corridor?

Population and employment growth (with accompanying traffic growth) in the Corridor and Denver metropolitan area has noticeably increased traffic volumes on the I-70 highway for more than 15 years. Recreational travelers currently experience substantial traffic delays on weekends and holidays on the eastern side of the Corridor. The western side of the Corridor experiences work trip delays during the week. Congestion periods on both sides of the Corridor will expand with corresponding population and employment resulting in weekday congestion on the eastern side of the Corridor.

Existing and projected travel demands in this Corridor exceed the design capacity of the facility and result in severe congestion for extended periods of time. In the future, travelers will experience substantial travel time delays that restrict mobility and accessibility along the Corridor.

This substantial congestion has a negative impact on the local and statewide economy, decreases mobility, including for freight traffic, compromises the ability of emergency service providers to respond promptly to emergencies and increases accidents.

ES.4 How bad will traffic get in the future without improvements?

Drivers traveling in the eastern part of the Corridor (between Silverthorne and C-470) during weekend peak hours typically experience an extra hour of driving time compared to free flow conditions; on weekdays, the extra time occasioned by peak traffic conditions amounts to 20 minutes. If no

improvements are made beyond those included in the No Action Alternative, congestion in the Corridor will continue to worsen, for example:

- Weekend travel time in 2035 will be about three times higher than in 2000.
- Weekday travel time in 2035 would be more than double what weekday travel time was in 2000.
- Traffic will be especially congested between Copper Mountain and Denver on weekends in 2035, requiring two more hours to make that trip during weekend peak hours. On weekdays, the morning and afternoon peak periods will experience an extra 1 hour and 35 minutes.
- The Eisenhower-Johnson Memorial Tunnels are expected to have 55 percent more weekend traffic in 2035 than in 2000. Weekday demand at the Eisenhower-Johnson Memorial Tunnels is expected to increase 85 percent.

ES.5 What is the purpose and need for this project?

The purpose for transportation improvements is to increase capacity, improve accessibility and mobility, and decrease congestion for travel demand (projected to occur in 2050) to destinations along the I-70 Mountain Corridor as well as for interstate travel, while providing for and accommodating environmental sensitivity, community values, transportation safety, and ability to implement the proposed solutions for the Corridor.

Safety plays a strong role in mobility, accessibility, and congestion. As such, in areas where safety problems currently exist, safety is considered inherent in the project needs.

The project purpose and specific needs form the basis for developing and evaluating alternative transportation solutions for the I-70 Mountain Corridor, as they are measurable and apply throughout the Corridor. However, addressing transportation needs in the Corridor requires careful consideration of the physical, environmental, and community constraints and requirements created by the mountain and valley terrain of the Corridor. The protection of the narrow mountain valleys, existing historic communities, and extensive natural resources is critical to the State of Colorado and the communities in the Corridor; and these resources (along with natural hazards) define critical constraints for transportation solutions in the Corridor. Alternatives must meet the transportation needs and be developed in a manner that provides for and accommodates the following:

1. **Environmental Sensitivity –** Avoid and minimize adverse impacts on and, where possible, enhance environmental resources, including, but not limited to, stream sedimentation, water quality, wildlife crossings, and impacts on wetlands.
2. **Respect for Community Values –** Avoid and minimize adverse impacts on and, where possible, enhance air quality, historic resources, noise levels, visual resources, and social and economic values, as well as minimize the transportation system's footprint on the mountain communities. Consider the possible growth changes and economic effects that might occur, depending on the ease or difficulty of access.
3. **Safety –** Improve, where possible, problematic roadway geometric conditions (such as, tight curves and lane drops) and consider the safety characteristics of the modes of travel. Many safety conditions along the I-70 Mountain Corridor directly affect the project needs, specifically the mobility, accessibility, and congestion elements.
4. **Ability to Implement –** Consider technical feasibility (that is, overall use of a mode and the feasibility of the technology) as well as affordability in terms of capital costs, maintenance and operational costs, user costs, and environmental mitigation costs. Understanding the construction impacts on existing mobility and to the communities along the Corridor is important to evaluating implementation of alternatives.

ES.6 Who are the Corridor stakeholders?

Since the Corridor serves such a vital function for a variety of transportation needs, many stakeholders care about improving mobility and accessibility of the I-70 highway and care about the manner in which this is done. Examples of stakeholders include the people who live and work in the mountain communities, people who live and work in the Denver metropolitan area, regular recreational users of the Corridor (including skiers), freight haulers, recreational business owners including the ski resorts, commuters, environmental groups, and inter- and intra-state business interests. Representatives of local, state, and federal agencies and governments also are stakeholders.

ES.7 How were stakeholders informed of and involved in the process?

The Colorado Department of Transportation developed and implemented a public and agency information and involvement program to engage stakeholders throughout the PEIS process. The program included:

- Notices published in the *Federal Register* and local newspapers
- Newsletters, project website, telephone information line, and media releases
- Scoping meetings, public open houses, and public hearings
- Community interviews and internal coordination and planning meetings with local communities; special interest groups; and federal, local, and state agencies
- Consultation with Native American tribes
- Outreach to minority and low-income populations
- Involvement of numerous committees and project teams (see **Section ES.8**)
- Establishment of the I-70 Mountain Corridor Context Sensitive Solutions team and development of the I-70 Mountain Corridor Context Sensitive Solutions process
- Formation of the Collaborative Effort team to reach consensus on a recommended alternative for the Corridor. The Collaborative Effort team also met at milestones through the completion of the PEIS (see **Section ES.18**)
- Creation of a Project Leadership Team to complete the PEIS and Record of Decision
- Formation of three Issue Task Forces to develop mitigation strategies for addressing impacts to cultural resources, environmental resources, and community values

ES.8 How were stakeholders involved in decision making?

Stakeholders (including counties, municipalities, community associations, special interest groups with various affected interests, and interested members of the public) attended scoping meetings and served on the many project committees and teams. Stakeholders became more involved through the development of the I-70 Mountain Corridor Context Sensitive Solutions process in 2007 (see **Section ES.11**). Also in 2007, CDOT (working with an independent facilitator) formed a 27-member Collaborative Effort team comprised of agencies and stakeholders to reach consensus for recommended Corridor transportation solutions. In June 2008, the Collaborative Effort team identified a "Consensus Recommendation" that included a multimodal solution, an incremental and adaptive approach to transportation improvements, and commitment to continued stakeholder involvement. That Consensus Recommendation became the lead agencies' Preferred Alternative in the PEIS. In June 2008, the I-70 PEIS Project Leadership Team was formed to facilitate completion of the NEPA process. The Project Leadership Team formed a Cultural Resources Task Force, Environmental Issue Task Force, and a Community Values Task Force. Other project committees and teams are listed below:

- **Technical Advisory Committee (TAC) –** A cross-section of local, state, and federal agencies, counties, municipalities, community associations, and special interest groups with various affected interests formed to provide technical expertise relevant to the project and knowledge about resource areas and issues. The TAC merged with the Mountain Corridor Advisory Committee later in the process.
- **Mountain Corridor Advisory Committee (MCAC) –** Representatives from counties, municipalities, community associations, and special interest groups with various affected interests.
- **I-70 Coalition** – Representatives of more than 30 political jurisdictions that adopted an intergovernmental agreement in January 2004 to address Corridor transportation issues and respond to the PEIS in a coordinated fashion. I-70 Coalition members include representatives from cities and counties located along the Corridor, Denver Regional Council of Governments, and Roaring Fork Transit Authority. In 2006, the Coalition expanded to include private partners including Vail Resorts, Inc., Intrawest Corporation, Gart Companies, the Vail Valley Partnership, and Summit County Chamber of Commerce. Also in 2006, Jefferson County and the City of Golden joined as new governmental members. Some representatives of the I-70 Coalition also participated in the I-70 Mountain Corridor PEIS Project Leadership Team and Collaborative Effort team processes.
- **Federal Interdisciplinary Team** – Decision makers from federal and state agencies, who provided expertise relevant to the resources managed by their respective agencies.
- **A Landscape Level Inventory of Valued Ecosystem Components (ALIVE) Committee –** Wildlife professionals from federal and state agencies who identified wildlife habitat of high ecological integrity, wildlife habitat linkages, and barriers to wildlife crossings along the Corridor.
- **Stream and Wetland Ecological Enhancement Program (SWEEP) Committee –** Representatives from federal and state agencies, watershed associations, and special interest groups. Members identified and addressed environmental issues related to the improvement of wetlands, streams, and fisheries in the Corridor.
- **Section 4(f) and 6(f) Ad Hoc Committee –** Representatives of state, federal, tribal, and historic preservation entities. Section 4(f) and 6(f) Ad Hoc Committee members identified and inventoried Section 4(f) and Section 6(f) properties, which include historic resources, recreation properties, and waterfowl and wildlife refuges, within the Corridor.
- **Finance Committee –** Representatives of state, federal, and county agencies. Finance Committee members explored the potential affordability and economic feasibility of the alternatives.
- **Peer Review Committee –** Seven technical experts in their respective fields provided guidance and suggestions on the inputs to the 2025 travel demand model as it was being developed and reviewed model outputs.

ES.9 What is the SWEEP Memorandum of Understanding?

The Stream and Wetland Ecological Enhancement Program committee drafted a Memorandum of Understanding, which focuses on enhancing stream and wetland ecology in the Corridor, in 2008. The agreement is intended to establish common ground among agencies and organizations with interests in stream and wetland ecology in the Corridor to create mitigation strategies and systems and define collaboration among the interested parties. The Memorandum of Understanding was signed on January 4, 2011. The Colorado Department of Transportation is committed to working toward the goals outlined in the Memorandum of Understanding included in **Appendix D, SWEEP Memorandum of Understanding** of this document.

ES.10 What is the ALIVE Memorandum of Understanding?

In April 2008, CDOT, FHWA, U.S. Fish and Wildlife Service, United States Forest Service, Bureau of Land Management, and Colorado Division of Wildlife signed a Memorandum of Understanding documenting their commitment to identify mitigation and conservation measures during future (Tier 2) processes to reduce animal-vehicle collisions and increase habitat connectivity for terrestrial and aquatic species. This landscape-based ecosystem approach for consideration of wildlife needs and conservation identifies measures to improve existing aquatic and terrestrial ecosystem connectivity across the I-70 Mountain Corridor between Denver and Glenwood Springs. The Colorado Department of Transportation is committed to implementing the terms outlined in the Memorandum of Understanding included in **Appendix E, ALIVE Memorandum of Understanding**.

ES.11 What is the I-70 Mountain Corridor Section 106 Programmatic Agreement?

In 2008, the lead agencies and other signatories executed a *Section 106 Programmatic Agreement among the United States Forest Service, Bureau of Land Management, Advisory Council on Historic Preservation, and the Colorado State Historic Preservation Officer regarding implementation of the Interstate 70 Mountain Corridor Project, September 2008,* in compliance with Section 106 of the National Historic Preservation Act (see **Appendix B, I-70 Mountain Corridor Section 106 Programmatic Agreement**). In this agreement, developed over several years, the lead agencies committed to initiate, before Tier 2 undertakings, development of design guidelines and historic context(s) for the I-70 Mountain Corridor. The guidelines are consistent with the principles of Context Sensitive Solutions and CDOT's *Policy Memo 26, Context Sensitive Solutions (CSS) Vision for CDOT,* which was issued in October 2005 to explain CDOT's commitment and vision for Context Sensitive Solutions in Colorado. The intent of the engineering design criteria, aesthetic guidelines, and the historic context is to guide future undertakings on the Corridor.

The Historic Context Working Group developed a Multi-Property Document Form for the I-70 Mountain Corridor. This document is to be used in all future NEPA documents as part of the Section 106 process. The Multi-Property Document Form supports the consistent evaluation and preservation of historic resources in the communities along the Corridor during planning, design, and construction of future projects.

ES.12 What is the I-70 Mountain Corridor Context Sensitive Solutions Process?

The Federal Highway Administration defines Context Sensitive Solutions as:

> *Context Sensitive Solutions is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSS [Context Sensitive Solutions] is an approach that considers the total context within which a transportation improvement project will exist. CSS principles include the employment of early, continuous and meaningful involvement of the public and all stakeholders throughout the project development process.*

Although the lead agencies are committed to the I-70 Mountain Corridor Context Sensitive Solutions approach described here, it is recognized that government agencies cannot cede statutory or regulatory responsibilities.

The principles of Context Sensitive Solutions apply to any transportation project aiming to bring the full range of stakeholder values to the table and actively incorporate them into the design process and final

results. The Colorado Department of Transportation developed, adopted, and endorsed the I-70 Mountain Corridor Context Sensitive Solutions process to consider the total "context" of the proposed transportation projects—not just the study's physical boundaries (see **Appendix A, I-70 Mountain Corridor PEIS Context Sensitive Solutions**). The Colorado Department of Transportation NEPA Manual includes guidance on incorporating Context Sensitive Solutions in the NEPA process. In Section 3.3, the manual states that Context Sensitive Solutions "represents an evolution in the philosophical approach to transportation and supports the social, economic, and environmental context of the facility... It should be reflected in the way the NEPA process is implemented."

In 2007, CDOT formed an I-70 Mountain Corridor Context Sensitive Solutions team of 150 public and agency stakeholders to develop Context Sensitive Solutions Guidance for the Corridor. The I-70 Mountain Corridor Context Sensitive Solutions process is built on a commitment to collaborative decision making. The key principles of collaborative decision making are:

- Principle-based
- Outcome-driven
- Multidisciplinary

To achieve a truly collaborative process, the I-70 Mountain Corridor Context Sensitive Solutions team developed a 6-Step Process that can be used for all projects at any phase of the project life cycle. This process is based on the three principles above and uses the constructs of Decision Science to guide effective, collaborative decision making. The six steps are:

- **Step 1 – Define Desired Outcomes and Actions**: Using the I-70 Mountain Corridor Context Sensitive Solutions Guidance and other relevant materials, this step establishes the project goals and actions. It also defines the terms to be used and decisions to be made.
- **Step 2 – Endorse the Process**: This step establishes participants, roles, and responsibilities for each team. The process is endorsed by discussing, possibly modifying, and then finalizing with all teams the desired outcomes and actions to be taken.
- **Step 3 – Establish Criteria**: This step establishes criteria, which provide the basis for making decisions consistent with the desired outcomes and project goals. The criteria measure support for the Core Values for the I-70 Mountain Corridor.
- **Step 4 – Develop Alternatives or Options**: The project staff works with the Project Leadership Team, stakeholders, and the public to identify alternatives or options relevant to the desired outcomes, project-specific vision, and goals.
- **Step 5 – Evaluate, Select, and Refine Alternative or Option**: The process of analyzing and evaluating alternatives applies the criteria to the alternatives or options in a way that facilitates decision making. This may be a one-step or multi-step process depending on the complexity of the alternatives and the decision.
- **Step 6 – Finalize Documentation and Evaluate Process**: Documentation should be continuous throughout the process. Final documentation will include each of the previous steps, final recommendations, and the process evaluation.

These steps are intended to provide a clear, repeatable, and scalable process that is fair and understandable. The order of the steps is as important as the activities within each step.

The I-70 Mountain Corridor Context Statement states:

- The I-70 Mountain Corridor is a magnificent, scenic place. Human elements are woven through breathtaking natural features. The integration of these diverse elements has occurred over the course of time.

- This Corridor is a recreational destination for the world, a route for interstate and local commerce, and a unique place to live.
- It is our commitment to seek balance and provide for twenty-first-century uses.
- We will continue to foster and nurture new ideas to address the challenges we face.
- We respect the importance of individual communities, the natural environment, and the need for safe and efficient travel.
- Well-thought-out choices create a sustainable legacy.

The I-70 Mountain Corridor Core Values, in concert with the I-70 Mountain Corridor Context Statement, represent a vision and goals for the I-70 Mountain Corridor. They are:

- Sustainability
- Safety
- Healthy Environment
- Biological Resources
- Climate and Air Quality
- Hazardous Materials
- Wetlands and Water Resources
- Wildlife
- Historic Context
- Communities
- Mobility and Accessibility
- Aesthetics
- Life Cycle Phases (planning, project development, project design, project construction, and operations, maintenance, and monitoring)

The I-70 Mountain Corridor Context Sensitive Solutions Guidance is the how-to-get-it-done-right instructions for all future Tier 2 processes, all design projects, and all future construction on the Corridor. It includes design and aesthetic guidelines and provides a structured process for stakeholder engagement. The Guidance commits to form collaborative stakeholder teams (called Project Leadership Teams) on all Corridor projects. The I-70 Mountain Corridor Context Sensitive Solutions Guidance authorizes Project Leadership Teams to create Issue Task Forces to address specific issues outside the Project Leadership Teams' area of expertise. The I-70 Mountain Corridor Context Sensitive Solutions Guidance document is available on the project website at **www.i70mtncorridorcss.com**, and should be amended as needed to remain flexible to address and incorporate innovations, new techniques, advanced technologies, and emerging trends in the Corridor.

To be in compliance with the I-70 Mountain Corridor Context Sensitive Solutions Guidance, the I-70 Mountain Corridor PEIS Project Leadership Team was formed in October 2008 to collaborate in the NEPA process (including completion of the Revised Draft PEIS, the Final PEIS and Record of Decision). The I-70 Mountain Corridor PEIS Project Leadership Team formed a Cultural Resources Issue Task Force, Environmental Issue Task Force, and Community Values Issue Task Force to develop potential mitigation strategies for impacts to resources identified. The suggested mitigation strategies are incorporated into the Final PEIS. This does not indicate that all strategies will be implemented—the decision on specific mitigation will be made on a project-by-project basis during Tier 2 processes.

ES.13 How were alternatives developed?

A systematic screening process with public and agency input led to the development of more than 200 alternative elements, which consist of various components based on the following seven alternative element families:

- Transportation management
- Localized highway improvements
- Fixed guideway transit
- Rubber tire transit
- Highway
- Alternate routes
- Aviation

Although not an alternative element family, tunnels were considered separately because they are major infrastructure projects that apply to highway and transit families.

After evaluation and screening, the lead agencies advanced more than 80 alternative elements from the alternative element families listed above. These alternative elements are represented in the range of alternatives evaluated in this document (see **Section ES.14**). The alternative elements advanced combined to form the components of 21 Action Alternatives. An Action Alternative is a package of transportation components evaluated on its ability to address the project needs and evaluation criteria.

ES.14 How were alternatives evaluated?

Alternatives were evaluated based on their ability to address the project purpose and need, while providing for and accommodating environmental sensitivity, community values, transportation safety, and ability to implement the proposed solutions for the Corridor.

In recognition of the need for a long-term sustainable transportation vision, the evaluation uses both a 2035 planning horizon and a longer-term 2050 horizon. Data for the year 2035 are based on available traffic and population projections from a variety of sources and provide the foundation for developing and evaluating alternatives. The 2035 planning horizon also provides a "stepping stone" that allows projections of transportation needs out to 2050. The year 2050 provides a long-term horizon for developing solutions for the Corridor. The alternatives are developed and evaluated based on a variety of performance measures that can be reliably established for 2035 and for their ability to meet travel demand in 2050.

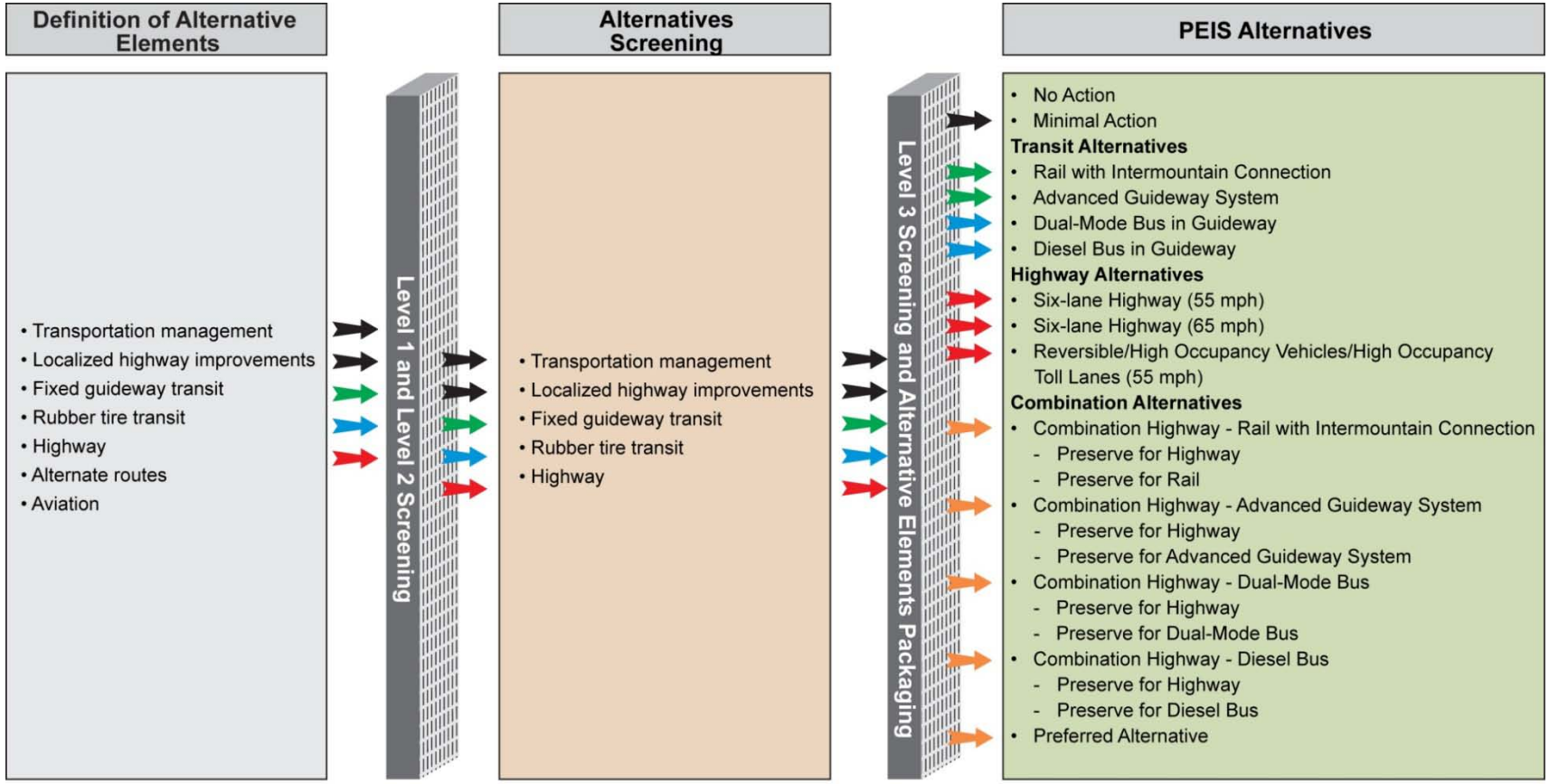
This evaluation used the following three sequential levels of screening:

- **Level 1** screening uses an initial conceptual level of evaluation and screening based on purpose and need.
- **Level 2** screening uses criteria based on purpose and need and Corridor issues applied to many alternative elements at a greater level of detail.
- **Level 3** screening uses detailed screening and refinement of the remaining alternative elements.

Through this three-step screening process, alternative elements were eliminated, combined, modified, or enhanced into the components of the Action Alternatives that were advanced for further analysis as described in this document.

Figure ES-2 shows the alternative screening process. **Chapter 2, Summary and Comparison of Alternatives** of this document provides additional details about the screening and evaluation process and includes descriptions of the Action Alternatives.

Figure ES-2. Alternatives Screening Process



This project began in 2000, and the travel demand model relies on travel and socioeconomic data from the year 2000 (including data from the 2000 U.S. Census as well as the I-70 User Survey) to provide a thorough snapshot of baseline conditions in the Corridor. The 2000 data set characterizes Corridor conditions and provides a base year to compare to future year projections.

The year 2000 remains valid as a base year for the Tier 1 process of this document because during the development of the PEIS, no major changes have taken place in the 144-mile Corridor that notably alter the snapshot of Corridor conditions provided by the year 2000 data set. No major infrastructure improvements have been implemented in the Corridor since 2000, and travel patterns and needs of Corridor users have not changed substantially. Confirmation of the travel demand model performance is provided by a comparison of the future trendline projected by the model with actual counts for 2008. The actual counts are approximately 17 percent lower than the model's projection for 2008. This is a reasonable discrepancy, however; the economic conditions in the nation and the State of Colorado coupled with abnormally high petroleum prices during the year of 2008 likely depressed travel. As the economy rebounds, it is expected the demand for travel in the Corridor will again follow the long-term trendline projected by the model.

ES.15 What alternatives were advanced for detailed analysis in this document?

The evaluation process resulted in 22 alternatives, including the No Action Alternative and the Preferred Alternative. The 22 alternatives advanced for analysis in this document include:

- No Action Alternative
- Minimal Action Alternative
- Transit Alternatives
  - Rail with Intermountain Connection
  - Advanced Guideway System
  - Dual-mode Bus in Guideway
  - Diesel Bus in Guideway
- Highway Alternatives
  - Six-Lane Highway 55 mph
  - Six-Lane Highway 65 mph
  - Reversible/High Occupancy Vehicle (HOV)/High Occupancy Toll (HOT) Lanes
- Combination Alternatives
  - Combination Six-Lane Highway with Rail with Intermountain Connection
    - Build Transit with Highway Preservation
    - Build Highway with Transit Preservation
  - Combination Six-Lane Highway with Advanced Guideway System
    - Build Transit with Highway Preservation
    - Build Highway with Transit Preservation
  - Combination Six-Lane Highway with Dual-mode Bus in Guideway
    - Build Transit with Highway Preservation
    - Build Highway with Transit Preservation
  - Combination Six-Lane Highway with Diesel Bus in Guideway
    - Build Transit with Highway Preservation
    - Build Highway with Transit Preservation
- Preferred Alternative (Consensus Recommendation)

Many of the alternatives share common alternative elements. Some of the alternatives consist of the same transit or roadway components combined into different packages.

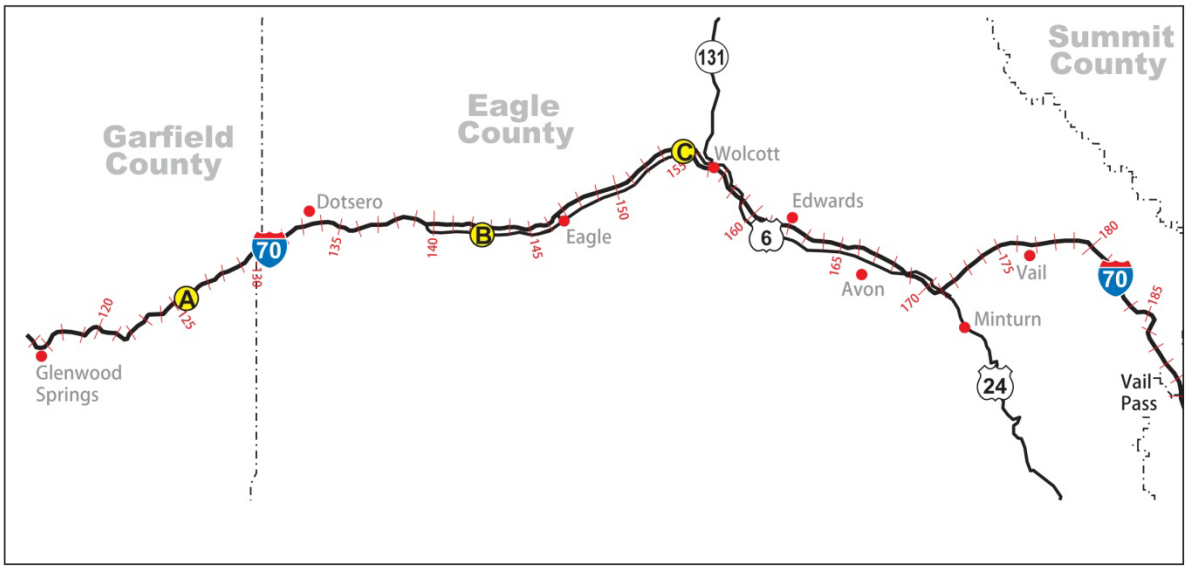
ES.16 What is the No Action Alternative?

The No Action Alternative includes only ongoing highway maintenance and improvements with committed funding sources highly likely to be implemented by the 2035 planning horizon whether or not any other improvements identified in this process are constructed. The No Action Alternative is assessed and used as a baseline for environmental analysis and represents what would exist if no action were taken. The No Action Alternative includes the following elements and is shown on **Figure ES-3.**

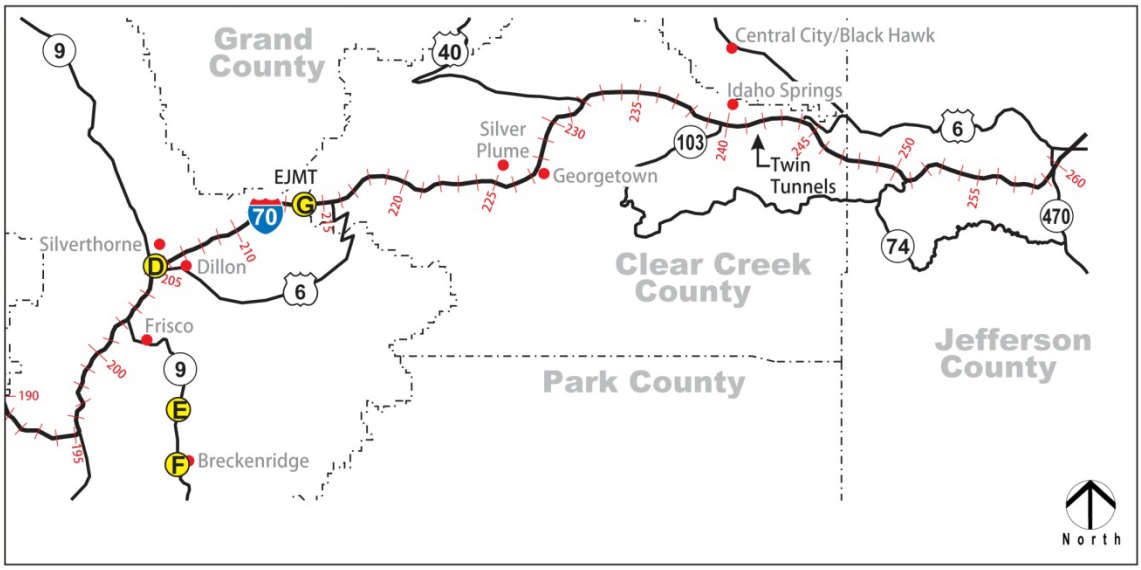
- Eagle County Regional Airport Interchange improvements
- Upgrading SH 9 between Frisco and Breckenridge to four lanes
- Overlay and shoulder widening on US 6 between milepost 153 and milepost 158
- Two new park-and-ride facilities at Silverthorne (milepost 206) and Breckenridge (SH 9)
- Enhancements to Hanging Lake Tunnel in Glenwood Canyon, and Eisenhower-Johnson Memorial Tunnels
- Routine safety, resurfacing, bridge repairs, sediment control, and other maintenance activities

Figure ES-3. No Action Alternative

Western Portion of Corridor



Eastern Portion of Corridor



Highway
- (B) Eagle County Regional Airport Interchange
- (C) US 6 Improvements
- (E) Widening SH 9 from I-70 to Breckenridge

Park-and-Ride Facilities
- (D) Silverthorne
- (F) Breckenridge

Tunnel Enhancement
- (A) Hanging Lake
- (G) EJMT

GENERAL IMPROVEMENTS NOT SHOWN ON MAP
- Routine Safety
- Resurfacing
- Bridge Repairs
- Other Maintenance Activities
- Sediment Control

Note: EJMT = Eisenhower-Johnson Memorial Tunnels

ES.17 What is the Minimal Action Alternative?

The Minimal Action Alternative provides a range of local transportation improvements along the Corridor without providing major new highway capacity or dedicated transit components. These improvements include:

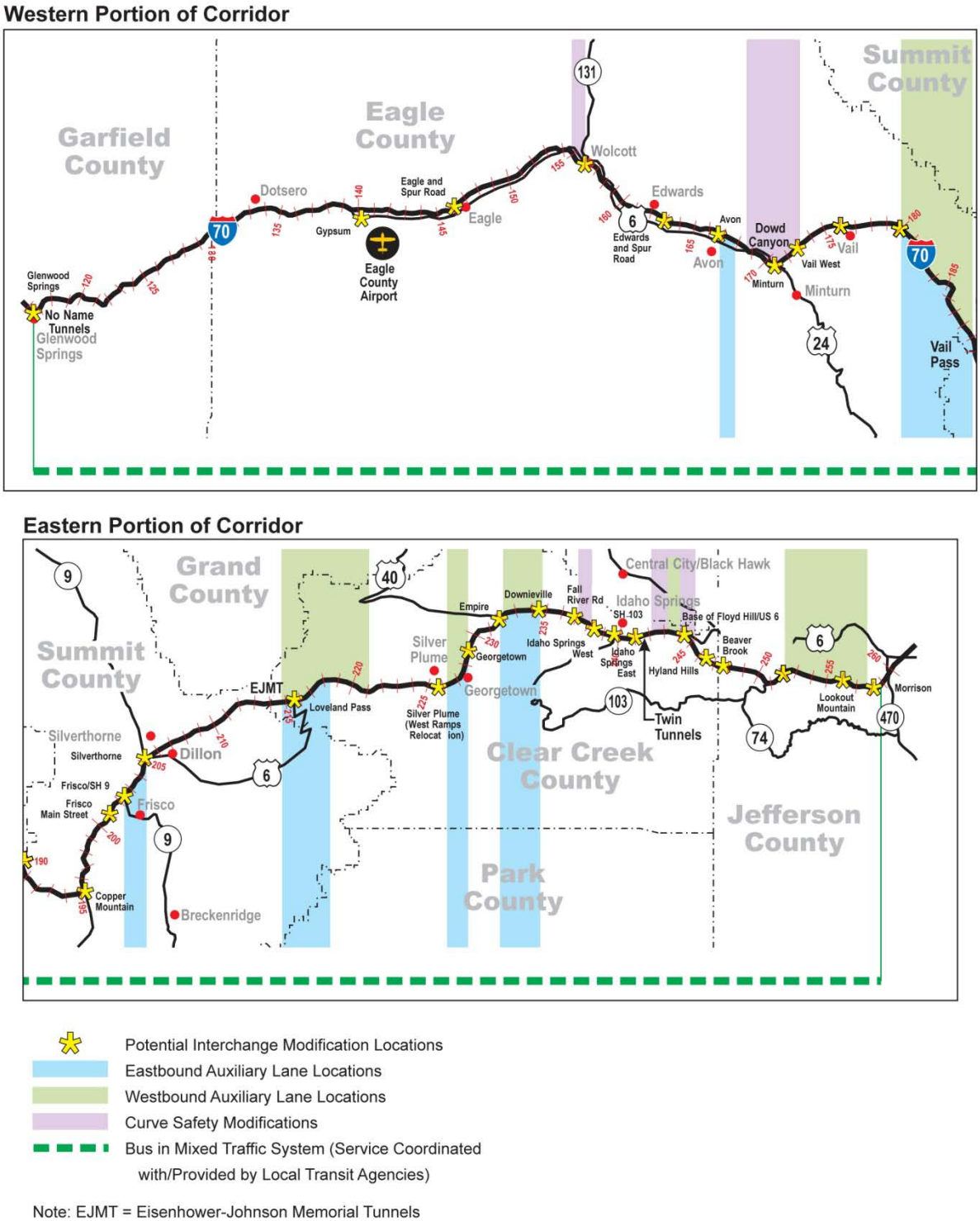
- **A transportation management program** that includes Transportation Demand Management (TDM), Transportation System Management (TSM), and Intelligent Transportation Systems (ITS).
- **Interchange modifications** to 30 interchanges.
- **Auxiliary lane improvements** for slow-moving vehicles at 12 locations.
- **Curve safety modifications** proposed in four locations to increase design speed on mainline curves.
- **Frontage road improvements** from Hidden Valley to US 6 Frontage Road.
- **Bus service in mixed traffic** connects existing bus transit systems in the Corridor. Although eliminated as a standalone alternative, bus service in mixed traffic is included the Minimal Action Alternative to provide a Corridorwide transit option where none currently exists.

Figure ES-4 shows these improvements by area. The early action projects listed in **Section ES.23** are included in all the Action Alternatives.

What is TDM / TSM / ITS?

- TDM increases roadway effectiveness by encouraging traveler behaviors that reduce vehicular demand during peak periods, such as ridesharing and telecommuting.
- TSM improves the operation of the physical roadway infrastructure, through the use of ramp metering (regulates the amount of traffic entering freeways through the use of a traffic signal based on traffic conditions) and traffic operations plans.
- ITS uses advanced applications of electronics and communications to achieve TSM and TDM goals, such as enhanced traveler information and variable message signs.

Figure ES-4. Minimal Action Alternative



Note: EJMT = Eisenhower-Johnson Memorial Tunnels

ES.18 What components are included in the Action Alternatives evaluated in the PEIS?

Components that form the Action Alternatives include:

- Minimal Action Alternative components
- Transit Alternative components
- Highway Alternative components
- Tunnels
- Combination Alternatives and Preservation Options

These components are summarized below.

ES.18.1 Variations in the Minimal Action Alternative Among Action Alternatives

The Minimal Action Alternative components discussed above are included in each of the Action Alternatives, except as described below:

- All Action Alternatives with six-lane highway capacity have auxiliary lane improvements in only the following locations:
  - Eastbound Avon to William J. Post Boulevard (milepost 168)
  - Both directions on the west side of Vail Pass
  - Eastbound Frisco to Silverthorne
  - Westbound Morrison to Chief Hosa

  Auxiliary lanes are not needed in locations where six lanes are included as part of the Highway improvements.
- The Preferred Alternative Minimum Program of Improvements does not include four interchange modifications in the Idaho Springs area, curve safety modifications at Fall River Road, or auxiliary lanes between mileposts 221 and 252.
- Transit alternatives do not have curve safety modifications at Dowd Canyon and only have auxiliary lane improvements at the eastbound Eisenhower-Johnson Memorial Tunnels to Herman Gulch and westbound Downieville to Empire.
- With the Six-Lane Highway (65 miles per hour [mph]) Alternative only, the curve safety modification at Dowd Canyon is replaced by tunnels.
- Action Alternatives, except the Minimal Action Alternative, do not include bus in mixed traffic as a standalone component because a more extensive transit system is provided and buses in mixed traffic do not provide travel time improvement commensurate with the added cost. However, promoting the use of shuttle and bus services in mixed traffic in the Corridor is part of the non-infrastructure components included for the Action Alternatives as a strategy to provide short-term options ahead of implementing capacity improvements.

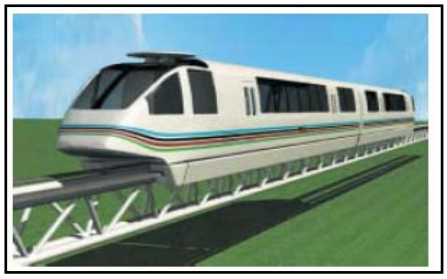
ES.18.2 Transit Alternative Components

Three Transit Alternative components were advanced for consideration in this document. All Transit Alternative components, unless noted, operate between the Eagle County Regional Airport on the west end of the Corridor to the Denver metropolitan area on the east, connecting with the end of line Jeffco Government Center light rail station for the Regional Transportation District's West Corridor line near C-470. Transit alignments are generally located along the I-70 highway alignment but not necessarily always within the highway right-of-way. All transit systems connect with the Jeffco Government Center light rail station near C-470 and local and regional transit services at most stations along the route, such as Roaring Fork Transportation Authority, ECO Transit, and Summit Stage.

Potential Transit Station Locations (for all Transit alternatives)

- Eagle County Regional Airport
- Town of Eagle
- Edwards/Wolcott
- Avon/Beaver Creek
- Vail
- Copper Mountain
- Frisco
- Silverthorne
- Loveland
- Georgetown
- Empire
- Idaho Springs
- US 6 / Gaming Station
- El Rancho
- Jeffco Government Center light rail station near C-470

- **Rail with Intermountain Connection** combines a new heavy rail transit system from the Jeffco Government Center light rail station near C-470 to the Eagle County Airport with an upgraded Intermountain Connection using existing track in the Eagle area. This alternative would add new track between Minturn and Vail and upgrade the existing Union Pacific Railroad track between the Minturn interchange and the Eagle County Regional Airport. It is a primarily on-grade electric facility generally located adjacent to the I-70 highway with portions in the median. Where needed, it could include elevated sections to minimize impacts. The Rail with Intermountain Connection assumes an electric multiple unit technology and is representative of established technologies available when the study began in 2000.
- **Advanced Guideway System** is generally a high-speed fixed guideway transit system. It is capable of being fully elevated for throughout its reach. It is located along the general alignment of the I-70 highway. It could be located north, south, or in the median of the I-70 highway (but not necessarily always within the highway right-of-way). The specific technology for the Advanced Guideway System has not been defined but is intended to represent a modern, "state-of-the-art" transit system. For the purposes of analysis in this document, the advanced guideway technology is assumed to be an urban magnetic levitation (maglev) system. However, the actual technology would be identified in a Tier 2 process.



Example of Advanced Guideway System

- **Bus in Guideway (Dual-Mode and Diesel)** consists of a bidirectional guideway generally located within the median of the I-70 highway between the Eagle County Regional Airport and the Jeffco Government Center light rail station near C-470. The guideway is dedicated to special buses with guideway attachments such as guide wheels used for steering control, permitting a narrow guideway and safer operations. The specific technology and alignment would be determined in a Tier 2 process. Two vehicle types are considered in this document: dual-mode and diesel. The dual-mode buses use electric power in the guideway and diesel power when operating outside the guideway in the general purpose lanes. The diesel buses use diesel power at all times. Because buses can drive outside the guideway in general purpose lanes, buses provide continuous routing without transfers between several Denver metropolitan area locations and off-Corridor destinations (such as Central City, Black Hawk, Winter Park Resort, Keystone Resort, Arapahoe Basin Ski Area, and Breckenridge).

Bus in Guideway

ES.18.3 Highway Alternative Components

Two Highway alternative components are incorporated into some of the Action Alternatives. These include:

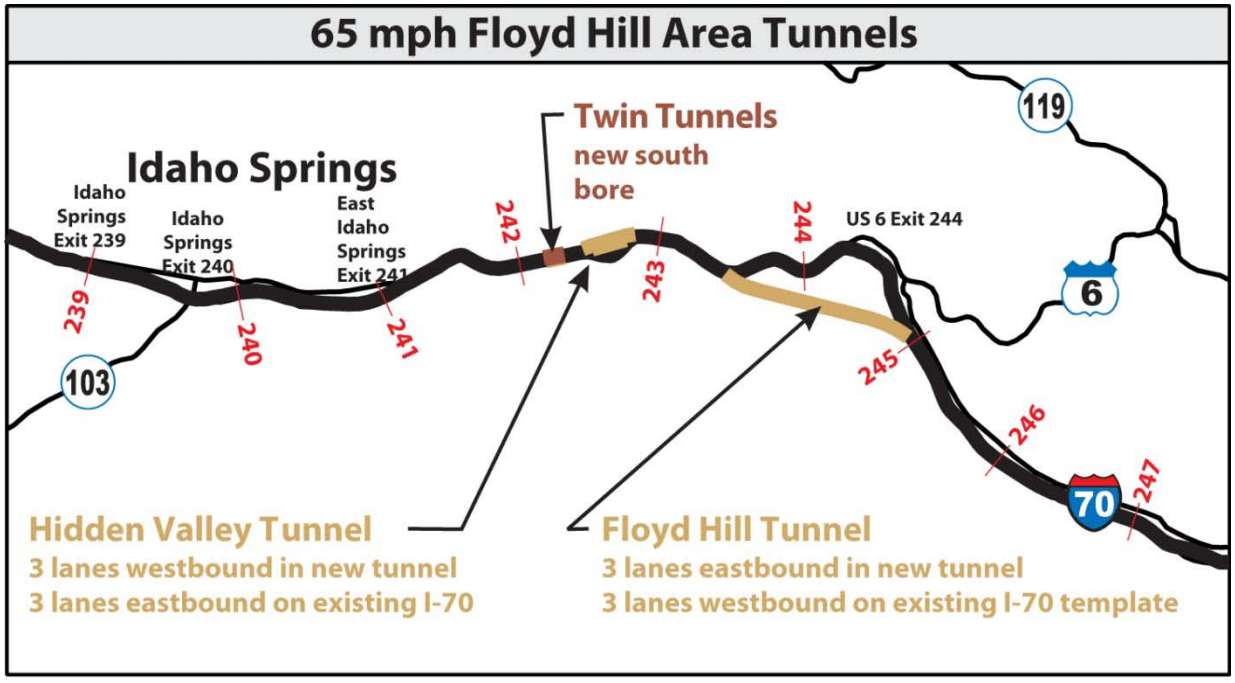
- **Six-Lane Highway (55 mph and 65 mph)**: Adds six-lane capacity in Dowd Canyon between milepost 170 and milepost 173 (Eagle-Vail to Vail West) and between the Eisenhower-Johnson Memorial Tunnels at the Continental Divide (milepost 213.5) and Floyd Hill (milepost 247). Under both speed designs (55 mph an 65 mph), a structured lane configuration is assumed in Idaho Springs to minimize impacts of highway widening on the community.
- **Reversible/HOV/HOT Lanes**: A reversible lane accommodates HOV and HOT lanes and changes traffic flow directions as needed to accommodate peak traffic demand. High occupancy toll lanes allow high occupancy vehicles (3 or more persons) to use the facility for free, while low occupancy vehicles use the facility for a fee. It includes two additional reversible traffic lanes and is built 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. The only entry and exit points for the lanes are at US 6 and the Empire Junction interchange. This component includes one additional general purpose lane (which is not barrier-separated or reversible) in each direction at Dowd Canyon (milepost 170 to milepost 173). A structured lane configuration is assumed in Idaho Springs as with the Six-Lane Highway alternatives.

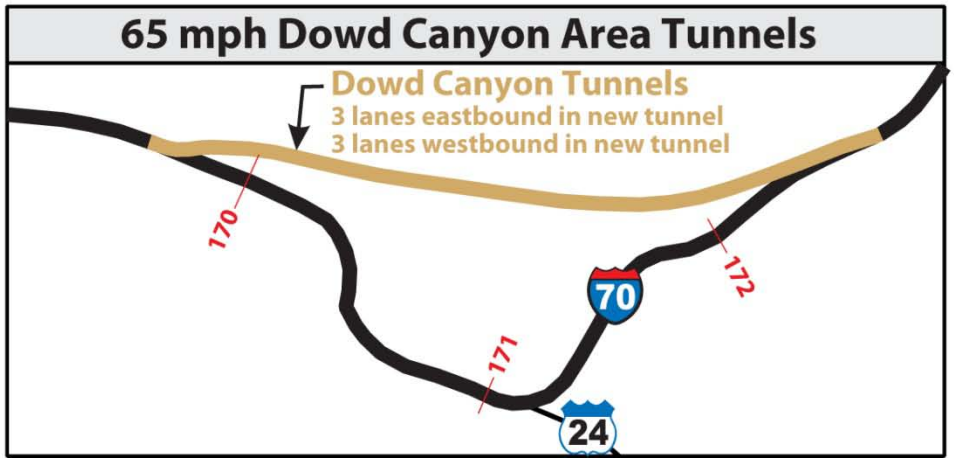
ES.18.4 Tunnels Common to Most Action Alternatives

The Action Alternatives include the following new or rebuilt tunnels:

- For all Action Alternatives, except the Minimal Action Alternative, new (third) tunnel bores are required at both the Eisenhower-Johnson Memorial Tunnels and the Twin Tunnels to accommodate improvements.
- For the Six-Lane Highway 65 mph Alternative, three new tunnels are required to accommodate the higher speed. The locations are in the Dowd Canyon area and the Floyd Hill area (westbound Hidden Valley Tunnel and eastbound Floyd Hill Tunnel). **Figure ES-5** shows these tunnels.

Figure ES-5. 65 mph Local Tunnel Alternatives





ES.19 What is the Collaborative Effort team?

The Colorado Department of Transportation commenced a Collaborative Effort team to address the stakeholders' desire to be involved in the identification of the Preferred Alternative. An interview process involving more than 50 stakeholders throughout the Corridor was conducted by the U.S. Institute for Environmental Conflict Resolution to identify stakeholder issues and make recommendations regarding a process for developing consensus on a Preferred Alternative. Stakeholders voiced a range of procedural interests, concerns, and suggestions, ranging from a lack of trust and confidence in agency decision making to acknowledgement that not all stakeholder groups have identical interests to voicing a desire for alternatives to be able to adapt better to future trends and conditions.

Based on interview results, CDOT formed a 27-member Collaborative Effort team that included one representative from each of the following entities:

- Blue River Group, Sierra Club
- City of Idaho Springs
- Clear Creek County
- Colorado Association of Transit Agencies
- Colorado Dept. of Transportation Region 1
- Colorado Dept. of Transportation Region 3
- Colorado Environmental Coalition
- Colorado Motor Carriers Association
- Colorado Rail Passenger Association
- Colorado Ski Country USA
- Colorado Trout Unlimited
- Denver Mayor's Office
- Denver Metro Chamber of Commerce
- Eagle County
- Federal Highway Administration
- Federal Transit Administration
- Garfield County
- Rocky Mountain Rail Authority
- Sierra Club, Rocky Mountain Chapter
- Summit Chamber
- Summit Stage
- Town of Frisco
- Town of Georgetown, Georgetown Trust
- Town of Vail
- U.S. Army Corps of Engineers
- United States Forest Service
- Vail Resorts

The Collaborative Effort team's objective was to reach consensus for Corridor transportation solutions that address stakeholder issues, consistent with the project purpose and need statement. The lead agencies participated in the development of the Consensus Recommendation for the Corridor. During the consensus building process, they agreed to adopt the Consensus Recommendation as the Preferred Alternative if all of the stakeholders could reach consensus. The Collaborative Effort team has convened at key project milestones during completion of this PEIS, and will continue to meet through the implementation of the Preferred Alternative.

ES.20 How was the Preferred Alternative (Consensus Recommendation) developed?

In June 2008, the Collaborative Effort team identified a "Consensus Recommendation" that included a multimodal solution, an incremental and adaptive approach to transportation improvements, and a commitment to continued stakeholder involvement. The lead agencies identified the Preferred Alternative for the I-70 Mountain Corridor based on the Consensus Recommendation (see **Appendix C, Consensus Recommendation**) developed by the Collaborative Effort team (see **Section ES.18**).

The Collaborative Effort process and the Consensus Recommendation adhered to the purpose and need, provided for the long-range transportation needs beyond 2035 by establishing a vision for 2050, and agreed that the Preferred Alternative had to meet a 2050 purpose and need. The Consensus Recommendation identifies multimodal solution of transit and highway improvements based on proven needs to enhance the Corridor, its environment, and its communities. The criteria below informed the Collaborative Effort's recommendation and will serve as criteria of effectiveness moving forward:

1. The solution should improve safety and mobility for all users.
2. The solution should be responsive and adaptive to broader global trends that will affect the way we make travel decisions in the future.
3. The solution will meet the purpose and need and all environmental and legal requirements.
4. The solution should preserve, restore, and enhance community and cultural resources.
5. The solution should preserve and restore or enhance ecosystem functions.
6. The solution should be economically viable over the long term.

The Consensus Recommendation is fully evaluated and referred to in this document as the Preferred Alternative.

ES.21 What is the Preferred Alternative?

The Preferred Alternative is a multimodal solution and includes three main components identified by the Collaborative Effort team: non-infrastructure components, an Advanced Guideway System, and highway improvements. The Preferred Alternative is presented as a range of improvement options from a Minimum Program of Improvements to a Maximum Program of Improvements. The **Minimum Program of Improvements** is detailed below.

1. **Non-infrastructure Related Components –** These are strategies that can begin in advance of major infrastructure improvements to address some of the immediate issues in the Corridor. These strategies and the potential tactics for implementation require actions and leadership by agencies, municipalities, and other stakeholders beyond the lead agencies. The strategies include, but are not limited to:
   - Increased enforcement
   - Bus, van, or shuttle service in mixed traffic
   - Programs for improving truck movements
   - Driver education
   - Expanded use of existing transportation infrastructure in and adjacent to the Corridor
   - Use of technology advancements and improvements to increase mobility without additional infrastructure
   - Traveler information and other intelligent transportation systems
   - Shift passenger and freight travel demand by time of day and day of week
   - Convert day trips to overnight stays
   - Promote high occupancy travel and public transportation
   - Convert single occupancy vehicle commuters to high occupancy travel and/or public transportation
   - Implement transit promotion and incentives
   - Other travel demand management measures to be determined
2. **Advanced Guideway System–** The Advanced Guideway System is a central part of the Preferred Alternative and includes the commitment by the lead agencies to the evaluation and implementation of an Advanced Guideway System within the Corridor, including a vision for transit connectivity beyond the study area and local accessibility to such a system. Additional information is necessary to advance implementation of an Advanced Guideway System in the Corridor. Information needs include the feasibility of high-speed rail passenger service, potential station locations and local land use considerations, transit governance authority, alignment, technology, termini, funding requirements and sources, transit ridership, potential system owner/operator, interface with existing and future transit systems, and the role of an Advanced Guideway System in freight delivery both in and through the Corridor.

   The Colorado Department of Transportation commits to fund studies to support the additional information needs to determine the viability of an Advanced Guideway System. Funding has been secured. Studies will engage the Collaborative Effort team and follow the I-70 Mountain Corridor Context Sensitive Solutions process.
3. **Highway Improvements –** Additional highway improvements are needed to address current Corridor conditions and future demands. Those improvements will be planned taking into consideration all elements of the Preferred Alternative and local land use planning. Improvements, which are illustrated in **Figure ES-6**, are listed in two categories: specific highway improvements and other highway projects. All of the improvements in both categories are included as the Minimum Program of Improvements for the Preferred Alternative. No priority has been established for improvements. The “specific highway improvements” are called out

specifically as the triggers for consideration of the future highway capacity improvements included in the Maximum Program of Improvements.

- **Specific highway improvements** include six-lane highway from Floyd Hill through the Twin Tunnels, including a bike trail and frontage roads from Idaho Springs to Hidden Valley and Hidden Valley to US 6; Empire Junction (US 40 and the I-70 highway) interchange improvements; eastbound auxiliary lane from Eisenhower-Johnson Memorial Tunnels to Herman Gulch; and westbound auxiliary lane from Bakerville to Eisenhower-Johnson Memorial Tunnels.
- **Other highway projects** include truck operation improvements, curve safety improvements west of Wolcott, safety improvements and six-lane highway capacity through Dowd Canyon, interchange improvements at 26 locations along the Corridor, and auxiliary lanes in four additional locations along the Corridor.

In developing the Preferred Alternative, the Collaborative Effort team recognized that the Minimum Program of Improvements may not provide adequate highway capacity to meet long-term transportation needs. Based on information available today, the Minimum Program of Improvements alone does not meet the 2050 purpose and need for the Corridor, and additional highway capacity is needed. To address long-term needs, additional highway capacity improvements were added to the Minimum Program of Improvements to comprise the Maximum Program of Improvements with the condition that prior to taking action to add capacity, the Collaborative Effort team must review and consider certain "triggers" (see **Section ES.23**).

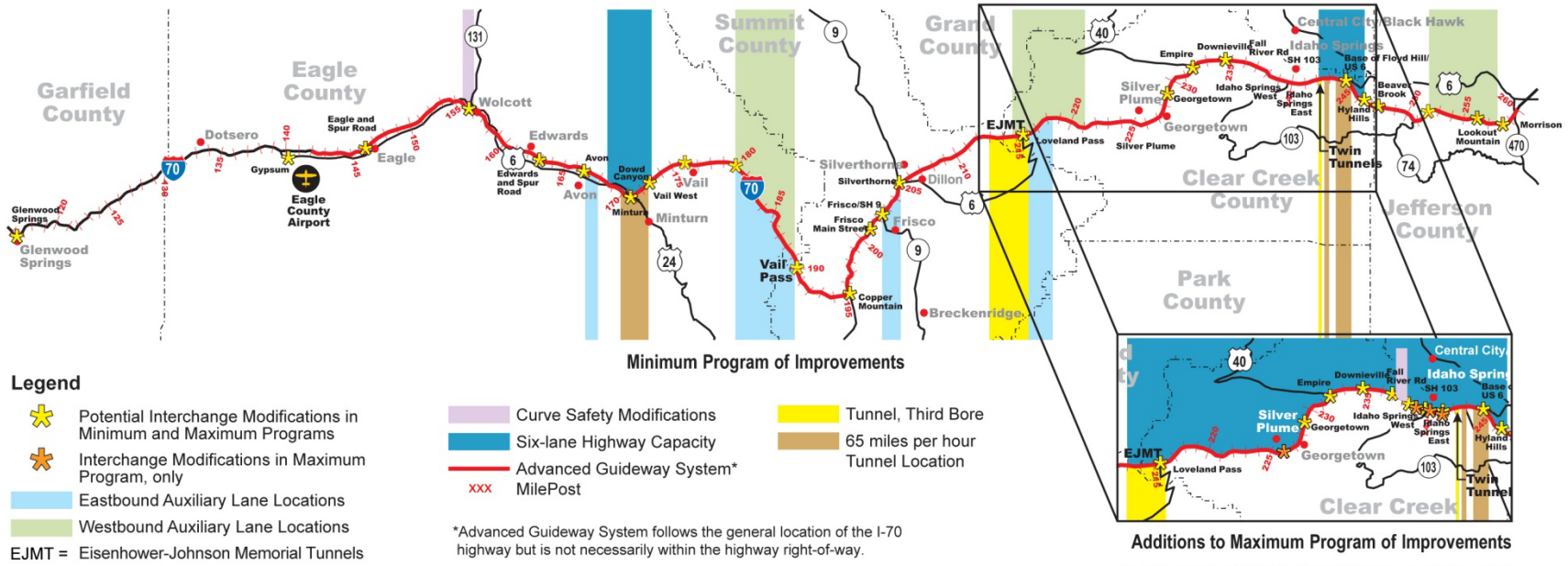
The **Maximum Program of Improvements** is comprised of all of the components of the Minimum Program of Improvements plus six-lane capacity from the Eisenhower-Johnson Memorial Tunnels to the Twin Tunnels, four additional interchange modifications in the Idaho Springs area, and a curve safety modification project at Fall River Road. Based on information available today and for the purposes of NEPA disclosure, all of the improvements identified in the Maximum Program of Improvements are assumed to be needed to meet the 2050 purpose and need.

Triggers for Additional Capacity Improvements

- Triggers create a mechanism for defining the specifics of future transportation solutions consistent with the Corridor vision.
- Triggers are used to evaluate the future needs to meet 2050 demand and are based on completion of specific highway improvements, feasibility of Advanced Guideway System, and global, regional, and local trends.

Figure ES-6 illustrates the transportation improvements associated with the Preferred Alternative. The base map shows the improvements included in the Minimum Program of Improvements, while the call-out box details the improvements that would be added to the base improvements of the Minimum Program to comprise the Maximum Program. **Chapter 2, Summary and Comparison of Alternatives** of this document provides additional detail about the Preferred Alternative, other alternatives considered for the Corridor, and the process for reaching consensus on the Preferred Alternative and how it can be implemented.

Figure ES-6. Preferred Alternative



Additions to Maximum Program of Improvements

The Maximum Program of Improvements includes all the Minimum Program of Improvements plus the additions shown here, including six-lane highway capacity from Eisenhower-Johnson Memorial Tunnel to the Twin Tunnels, four additional interchange modifications in Clear Creek County, and curve safety modifications at Fall River Road.

This figure illustrates the locations of the transportation components of the Preferred Alternative. Transportation improvements for the Preferred Alternative are characterized as a range from a Minimum Program of Improvements to a Maximum Program of Improvements. The Minimum Program includes all the improvements in the base map, while the Maximum Program includes all the improvements on the base map plus those in the call out map. In developing the Preferred Alternative, the Collaborative Effort team reached consensus that the Preferred Alternative should include the elements in the Minimum Program of Improvements. The Minimum Program of Improvements, however, does not provide adequate highway capacity to meet a 2050 purpose and need based on information available today. To meet the 2050 purpose and need, additional highway capacity was added to the Minimum Program of Improvements to comprise the Maximum Program of Improvements with the condition that adding this additional highway capacity requires consideration of "triggers" prior to taking action. For NEPA documentation and analysis purposes, all of the improvements identified in the Maximum Program of Improvements are assumed to be needed for the Preferred Alternative to meet the 2050 purpose and need. The review and trigger processes that guide the planning decisions for implementing the Preferred Alternative are described in **Section 2.7.2**.

ES.22 Has the technology for the Advanced Guideway System been identified?

No. A technology for the Advanced Guideway System has not been identified. For the purposes of NEPA analysis, this document analyzes a maglev system as a representative technology for the Advanced Guideway System. A specific Advanced Guideway System technology would be determined in subsequent study or a Tier 2 process. As noted in **Section ES.20**, CDOT has secured funds for studies to support the additional information needs to determine the viability of an Advanced Guideway System

ES.23 How will improvements in this Corridor be implemented, and how will stakeholders be involved in this process?

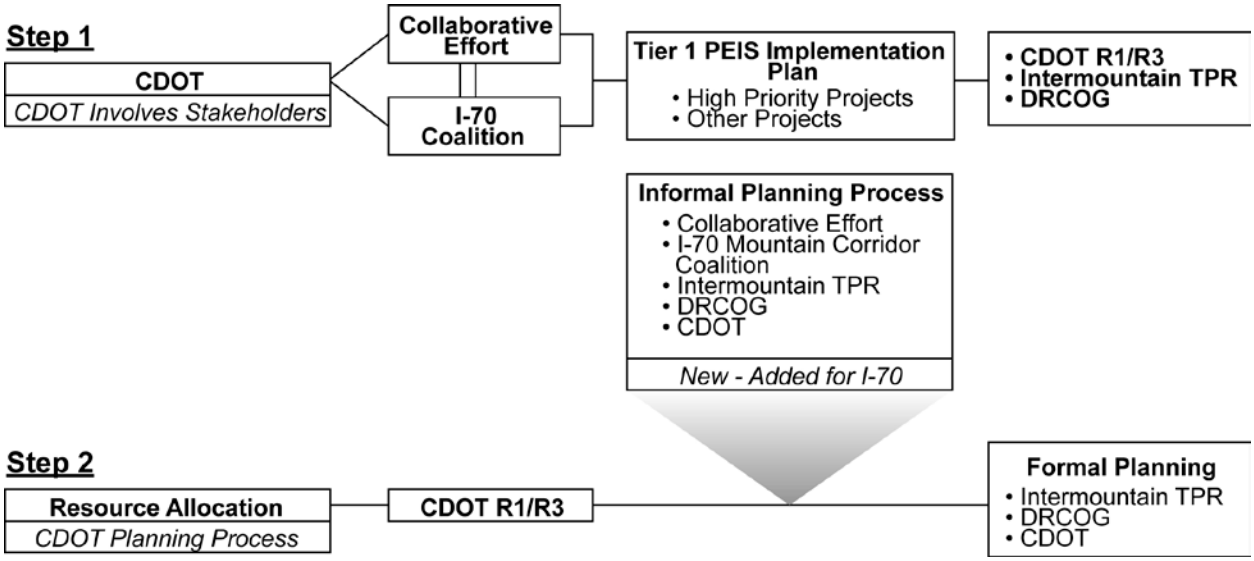
All Preferred Alternative components, including transit, must go through CDOT's established planning process. Because the transportation planning process identifies and prioritizes projects, the Preferred Alternative components will be defined into projects. The statewide planning process involves coordination with 15 transportation planning regions and metropolitan planning organizations to identify and prioritize projects to be included in the short-range (six-year) Statewide Transportation Improvement Program, which is updated every four years through the Project Priority Programming Process (4P) guidance adopted by the Colorado Transportation Commission. Projects must be consistent with the vision of the long-range (minimum 20 years) Statewide Transportation Plan to be included. To facilitate the 4P process, each CDOT engineering region meets individually and jointly with transportation planning regions in their area to discuss project selection and prioritization within that transportation planning region. Funding availability is considered in the identification and prioritization of projects. Sequencing, funding, and construction of projects within the Corridor are balanced among other statewide priorities and needs.

For the I-70 Mountain Corridor improvements, CDOT and the stakeholders will:

- Guide and monitor the implementation of projects in the Corridor; and
- Assess the Corridor's needs and priorities for recommendations by the Collaborative Effort, including assessments of larger projects for feasible options to phase and implement through planning and Tier 2 processes.

Figure ES-7 indicates how implementation for the Preferred Alternative fits into the established planning process. The Colorado Department of Transportation and stakeholders communicate the priorities identified from the Preferred Alternative with the appropriate transportation planning regions and metropolitan planning organizations. The Collaborative Effort team and I-70 Coalition have defined roles (unique to the I-70 Mountain Corridor) in prioritizing improvements of the Tier 1 decision. The membership and roles of these groups are described in **Section ES.8**. As noted in Step 2, CDOT will work directly with the planning partners to facilitate the integration of information from the Collaborative Effort and other interested stakeholders into the formal 4P process. The implementation process does not supersede the CDOT planning process. It is a tool to inform the planning process regarding priorities on the Corridor.

Figure ES-7. Planning Process



Key of Abbreviations/Acronyms

CDOT = Colorado Department of Transportation
DRCOG = Denver Regional Council of Governments
PEIS = Programmatic Environmental Impact Statement
R1/R3 – Region 1/Region 3
TPR = Transportation Planning Region

In addition, the Preferred Alternative includes a requirement to convene the Collaborative Effort or a stakeholder group with similar composition every 2 years to review Corridor conditions and effectiveness of improvements. This review will identify considerations and priorities for the Corridor.

The Colorado Department of Transportation is committed to advancing all elements of the Tier 1 decision through the federally mandated planning process. The Colorado Department of Transportation will pursue current and future priorities identified through stakeholder engagement in this process regardless of mode, including the Advanced Guideway System and non-infrastructure improvements. The Colorado Department of Transportation will work with stakeholders to identify additional funding and innovative approaches to construct the Preferred Alternative.

ES.24 In what order would improvements be made?

The Preferred Alternative includes an adaptive management approach that allows Corridor stakeholders and agencies to assess impacts of improvements and funding availability over time before new improvements are implemented. This flexibility is needed to meet long-term transportation needs while adapting to changes in local and regional conditions.

Some planning, design, construction, and maintenance activities can take place before signing a Record of Decision. These activities are “early action projects.” Early action projects must be common elements to all the Action Alternatives identified in **Chapter 2, Summary and Comparison of Alternatives** and have a clear need. Early action projects must demonstrate that they have logical termini and independent utility and cannot restrict consideration of alternatives for other reasonably foreseeable transportation improvements (23 Code of Federal Regulations 771.111(f)). Additionally, if the No Action Alternative is selected, these projects are still needed. Early action projects include::

- Empire Junction (US 40/I-70) improvements
- I-70/Silverthorne interchange
- Eagle interchange

- Minturn interchange
- Edwards interchange
- Black Gore Creek and Straight Creek Sediment Control
- I-70 Wildlife Fencing
- Clear Creek Sediment Control Action Plan

The evaluation and implementation of the Advanced Guideway System will be concurrent with highway improvements if at all possible. The Colorado Department of Transportation is committed to initiating Advanced Guideway System feasibility studies as soon as possible and has secured funding to begin those studies.

ES.25 What are the triggers for additional highway capacity improvements?

As explained in **Section ES.20**, the Preferred Alternative includes a set of improvements ranging from a Minimum Program to Maximum Program of Improvements. Additional highway capacity in the Maximum Program of Improvements will be implemented only after evaluating the need for those improvements based on certain triggers. The use of triggers is consistent with the needs of the Corridor and recognizes that future travel demand and behavior is uncertain and that additional transportation solutions should be based on proven need. The triggers create a mechanism for defining specific timing and nature of the capacity improvements on the Corridor. This decision process considers the needs of the Corridor; triggers are a mechanism to determine actual additional capacity improvements. Based on the agreed-upon triggers, additional highway capacity improvements may proceed if and when:

- The "Specific Highway Improvements" are complete and an Advanced Guideway System is functioning from the Front Range to a destination beyond the Continental Divide, OR
- The "Specific Highway Improvements" are complete and Advanced Guideway System studies that answer questions regarding the feasibility, cost, ridership, governance, and land use are complete and indicate that an Advanced Guideway System cannot be funded or implemented by 2025 or is otherwise deemed unfeasible to implement, OR
- Global, regional, local trends or events have unexpected effects on travel needs, behaviors, and patterns and demonstrate a need to consider other improvements, such as climate change, resource availability, and/or technological advancements.

The Colorado Department of Transportation will convene a committee that retains the Collaborative Effort member profile to check in at least every two years to review progress made on the above triggers. At these check-in points, the committee will:

- Review the current status of all projects
- Identify unmet needs in the Corridor
- Consider the triggers in evaluating the need for additional capacity improvements beyond those specified in the Minimum Program of Improvements

In 2020, regardless of the status of the triggers, there will be a thorough reassessment of the overall purpose and need and effectiveness of the implementation of components of the Preferred Alternative. At that time, the lead agencies (in conjunction with the stakeholder committee) may reconsider the full range of improvement options.

ES.26 Why are both transit and highway improvements needed?

Through the alternatives development, screening, and evaluation process, the lead agencies and stakeholders determined that no single mode improvement alone would meet the purpose and need of the project. This is because the relationship of capacity and congestion is not direct. Lack of capacity may lead to congested conditions but increased capacity will not necessarily reduce congestion as the additional capacity can also result in more people traveling and using any additional capacity. As a result, both increased capacity and decreased congestion need to be addressed. The transit component provides enough additional capacity to be able to relieve some of the highway congestion and still be able to also improve accessibility and mobility. Another benefit of the combined improvements is that they offer travelers different options for traveling along the Corridor depending on their travel purpose.

Analysis shows that the only alternatives with network capacity to accommodate the 2050 travel demand are the Combination alternatives, including the Preferred Alternative. The No Action Alternative reaches network capacity between 2010 and 2025. The Minimal Action Alternative performs slightly better but still reaches network capacity in the eastern portion of the Corridor by 2015. The Transit alternatives reach network capacity in 2030, and the Highway alternatives reach network capacity between 2035 and 2040. The Combination alternatives provide a network capacity to 2050 if both transit and highway elements are constructed. Based on information available today, the Preferred Alternative meets network capacity needs only if the Maximum Program of Improvements is fully implemented.

ES.27 How do Denver metropolitan area residents access the Advanced Guideway System?

Denver metropolitan area residents access the Advanced Guideway System at its eastern terminus, the Regional Transportation District's Jeffco Government Center light rail station. Riders either drive or use the Regional Transportation District transit network to access the Advanced Guideway System station.

Stakeholders have advocated for expanding the terminus to locations east in Denver and Denver International Airport. However, the study terminus is based on the purpose and need for the project. In this case, the purpose and need focuses on mobility, and accessibility, congestion, and capacity in the I-70 Mountain Corridor, which has distinct needs, travel patterns, and trip purposes from the Denver metropolitan area and other areas in Colorado. The eastern terminus at C-470/Jeffco Government Center light rail station was chosen because it marks a change in travel patterns where the Corridor connects to the Denver metropolitan area and its higher traffic volumes. This location also represents a transition to Denver metropolitan area transportation systems, including urban highways and transit systems, such as the Regional Transportation District FasTracks rail system. The pattern of travel (and carpooling) is well established at the east end of the Corridor, and while trips bound for the Corridor may come from many locations, nearly all that originate in the Denver metropolitan area pass through the I-70/C-470 system interchange. Expanding the service area to include Denver metropolitan area locations directly is not necessary to meet travel demand, would not result in substantially greater ridership, and would be extremely costly and disruptive to existing development. Additional information about the study limits is presented in **Section 1.5, "What are the study limits and why were they selected?"**

This terminus does not preclude other transportation improvement studies, including NEPA studies, outside the Corridor, and the Advanced Guideway System can operate independently of other systems. Future rail studies (such as the Colorado State Passenger and Freight Rail Plan and Colorado Interregional Connectivity Study) are planned to address rail connectivity. Transit feasibility studies in the Corridor are planned to specifically address viability of the Advanced Guideway System, including effects of connections on technology and ridership projections. These studies would further take into account the metropolitan travelers' needs, quality of life, and connectivity to other transit systems.

ES.28 Do the Action Alternatives make traveling the Corridor safer?

Improving safety was one of the key factors considered during the development and evaluation process, and all alternatives were evaluated on their ability to address the safety issues identified in the Corridor.

Alternatives that include a Fixed Guideway Transit component provide a safer means of transportation for travelers than highway vehicle travel. National crash rates for rail modes are markedly lower than the comparable rates for motor vehicles. Buses operating in general purpose lanes are on average safer than automobile travel but result in more crashes than rail technologies in fixed guideways.

Highway safety is similar among the Action Alternatives because all Action Alternatives include components to address safety problem areas. Some notable safety problem areas in the Corridor addressed by all Action Alternatives include:

- Wolcott curve
- Dowd Canyon (not included with the single mode Transit alternatives)
- Silverthorne interchange
- Eisenhower-Johnson Memorial Tunnels to Herman Gulch (eastbound)
- Base of Floyd Hill (Twin Tunnels to the US 6 interchange)

A comparison of fatality rates was used to measure safety performance among the alternatives. The No Action Alternative is projected to have the highest fatality rates at 0.50 per 100 million person miles. By comparison, the Minimal Action Alternative, with its components that address most highway safety problems, has a fatality rate of 0.37. Highway alternatives are estimated to have fatality rates ranging between 0.40 and 0.42. Higher fatality rates are related to higher travel speeds under the Highway alternatives as compared with the Minimal Action Alternative, which maintains congestion and associated lower travel speeds. Alternatives with transit, reflecting different transit technologies and usage, have fatality rates ranging from 0.31 to 0.36. The Combination alternatives, including the Preferred Alternative, have projected fatality rates ranging from 0.31 to 0.36 per 100 million person miles, and the majority of those are on the highway.

ES.29 Are there other ways to decrease congestion without the Advanced Guideway System and/or adding highway capacity?

The Preferred Alternative includes non-infrastructure components that include the following elements (see **Section ES.20** for a complete list):

- Promoting public transportation and high-occupancy travel
- Promoting transit with incentives for more bus, van or shuttle traffic in the Corridor
- Increasing traffic law enforcement
- Shifting traveler and freight demand by time of day and day of week

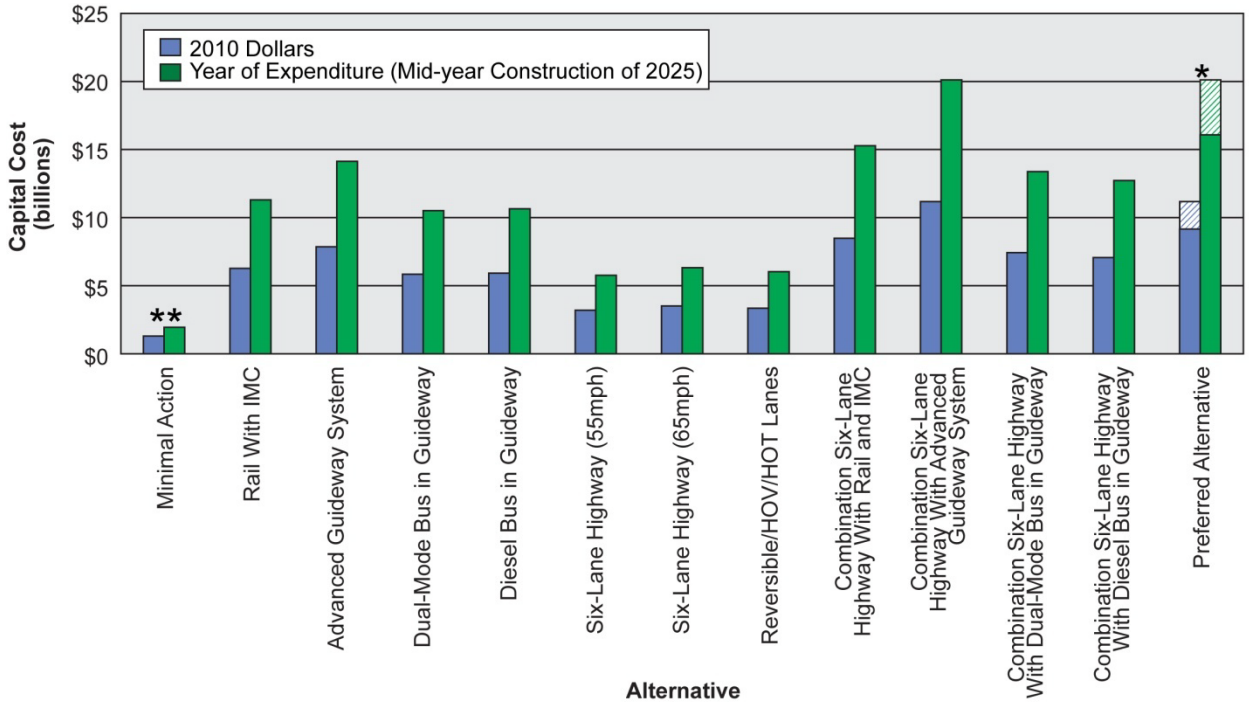
Although these measures can improve operational efficiency for the I-70 Mountain Corridor, alone they cannot address this project's long-term purpose and need to increase capacity, improve accessibility and mobility, and decrease congestion.

ES.30 How much will this project cost?

The Preferred Alternative identifies a minimum and maximum range of multimodal improvements ranging in cost from $16.1 billion to $20.2 billion (in year of expenditure assuming the midyear of construction of 2025). The Action Alternatives evaluated in this document range in cost from $1.9 billion to $20.2 billion (in year of expenditure assuming the midyear of construction for the whole alternative is

2025). **Chart ES-1** shows the capital costs by alternative. See **Chapter 2, Summary and Comparison of Alternatives** for descriptions of the alternatives and **Chapter 5, Financial Considerations** for additional information on the costs and funding sources.

Chart ES-1. Capital Costs by Alternative



* The cost for the Preferred Alternative is presented as a range. The solid and hatched bars together show the cost if the Preferred Alternative is fully implemented to meet the 2050 purpose and need. The solid bar alone shows the cost of the Minimum Program only. The cost is presented as a range because the adaptive management component of the Preferred Alternative allows it to be implemented based on future needs and associated triggers for further action. Section 2.7.2 of this document describes the triggers for implementing components of the Preferred Alternative.

** The methodology focuses on year of expenditure cost to a mid-year of construction of 2020 for the Minimal Action Alternative.

ES.31 Is there enough funding to implement the Preferred Alternative?

No. The Colorado Department of Transportation does not have enough available revenue sources allocated to fund the improvements identified by the Preferred Alternative. To fully implement the Preferred Alternative, additional funding sources must be secured. Lawmakers and citizens will need to recognize the I-70 Mountain Corridor as a key component for Colorado's economy and should be a high priority for the state in order to attract funding opportunities.

Options for innovative funding sources include public/private partnerships, tolling, bonding/loans, and Corridor-specific resources (which are funding sources that apply to limited geographic areas and require voter approval, constitutional amendments, or both). **Chapter 5, Financial Considerations** provides details about costs and funding.

ES.32 What are the types of environmental impacts of greatest concern?

Resources shown to be of greatest concern to the public and stakeholders include:

- Air quality
- Wildlife
- Historic properties
- Water resources (watersheds, rivers, streams, creeks, wetlands)
- Fish and fishing streams
- Regulated materials (hazardous substances/waste, petroleum products, mining contaminants)
- Noise
- Visual conditions
- Recreation resources
- Social and economic considerations (including induced growth and land use)

Impacts to these resources, including construction impacts, are summarized below. A full discussion of impacts to the 16 environmental resources analyzed in this document is presented in **Chapter 3, Affected Environment and Environmental Consequences**.

ES.32.1 How will air quality be impacted?

For all the alternatives, emissions for most air pollutants in 2035 and 2050 are anticipated to be less than current day emissions, even though 2035 and 2050 traffic volumes will be higher than 2000 volumes. Emissions in the future are projected to be lower because stricter regulations are being enacted to control emissions and older, higher-polluting vehicles will continue to be replaced by newer, low-polluting vehicles. Improvements in air quality related to emissions controls may decrease in effectiveness in the future as emission reductions become more difficult to achieve with technological advances. If this occurs, trends in air pollution from vehicles may be more closely correlated with amount of travel.

Emissions of particulate matter (primarily re-entrained dust from winter roadway sanding operations) do not follow the same trends. Re-entrained dust emissions increase as traffic volumes increase. Therefore, re-entrained dust in 2035 and 2050 is anticipated to be higher than 2000 emissions under all alternatives because 2035 and 2050 traffic volumes are higher. Construction of the Action Alternatives generates vehicle- and dust-related air emissions. Generally, the quantity of construction-related emissions is proportionate to the scope of construction. The act of boring new tunnels, which occurs under all Action Alternatives, generates substantial dust if not properly managed.

ES.32.2 How will wildlife be impacted?

The Action Alternatives have varying effects on habitat for birds and mammals, including deer, elk, bighorn sheep, lynx, and other species. Habitat loss occurs when transportation improvements are constructed. In addition, the improvements may further impede the ability of wildlife to move across the I-70 highway.

The Colorado Department of Transportation examined habitat connectivity and animal-vehicle collisions through the interagency ALIVE committee. The ALIVE committee identified 13 zones along the I-70 Mountain Corridor where the I-70 highway interferes with wildlife migration for species including elk, mule deer, bighorn sheep, and Canada lynx. These locations are referred to as linkage interference zones and are identified in the ALIVE Memorandum of Understanding (see **Appendix E, ALIVE Memorandum of Understanding**). By focusing on areas of known migration and wildlife use, and creating wildlife crossings, animal-vehicle collisions can be reduced and habitat connectivity increased.

ES.32.3 How will historic properties be affected?

Historic resources identified in the I-70 Mountain Corridor include several nationally significant properties, including the Georgetown-Silver Plume National Historic Landmark District and the nationally significant portions of the interstate itself, along with many sites of statewide and local significance. Towns throughout the Corridor contain historic buildings and associations, and historic mining sites are abundant in the Corridor. Research suggests that hundreds of properties are officially eligible for listing or listed in the National Register of Historic Places within the Area of Potential Effect, and many more are likely to be identified once intensive surveys are completed.

Potential direct effects include physical destruction, alteration, or removal of historic properties, including archaeological and historic archaeological sites. Indirect effects generally include changes to a property's setting or use, or the introduction of visual, atmospheric, or audible elements that diminish a property's historic integrity.

As many as 76 different historic properties could be directly affected by one or more of the Action Alternatives. None of the Action Alternatives affect all 76 properties but the Action Alternatives affect different properties, and each of the 76 properties is affected by one or more of the Action Alternatives. The impacts for the Preferred Alternative fall within the range of the other Action Alternatives. Without more detailed design, it is difficult to quantify the numbers of historic properties that may be subject to indirect effects. Based on footprint size and whether there are transit or highway improvements, certain Action Alternatives have greater potential for indirect effects than others, but the details of these effects will not be understood until the Tier 2 processes.

The lead agencies worked closely with local communities and other agencies to develop the I-70 Mountain Corridor Section 106 Programmatic Agreement, which stipulates specific procedures for identifying and evaluating effects to historic properties during Tier 2 processes (see **Appendix B, I-70 Mountain Corridor Section 106 Programmatic Agreement**).

ES.32.4 How will water resources be impacted?

All Action Alternatives have an impact on water quality. This impact largely results from contamination from vehicles on the I-70 highway surface that is washed into nearby streams by stormwater runoff or snow plowing activities. The increase in runoff associated with the Action Alternatives ranges from a low of a 2 percent increase to a high of a 43 percent increase. The Preferred Alternative ranges from a 16 percent to a 24 percent increase in runoff compared to the No Action Alternative.

The implementation of mitigation strategies to control sediment and pollutant loading into waters associated with all the Action Alternatives will improve water quality. The No Action Alternative would not improve water quality.

The Stream and Wetland Ecological Enhancement Program (SWEEP) committee developed a Memorandum of Understanding, which focuses on enhancing stream and wetland ecology in the Corridor. The agreement is intended to establish common ground among agencies and organizations with interests in stream and wetland ecology in the Corridor to create mitigation strategies and systems and define collaboration among the interested parties. The Memorandum of Understanding was signed on January 4, 2011 (see **Appendix D, SWEEP Memorandum of Understanding**). The Colorado Department of Transportation is committed to working toward the goals outlined in the Memorandum of Understanding.

ES.32.5 How will fish and fishing streams be impacted?

Removal, modification, or disturbance of habitat for aquatic species, including important fishing streams, will occur with the Action Alternatives. Impacts on Gold Medal and "high-value" fisheries are greatest for the Combination alternatives, including the Preferred Alternative, and Rail with Intermountain Connection Alternative because these alternatives have the widest overall footprints and encroach more into streams adjacent to the Corridor.

Alternatives that add more traffic lanes—the Combination, Highway, and Bus in Guideway alternatives—require additional winter maintenance (such as the use of liquid deicers and traction sand), thereby leading to increased water quality impacts when compared to alternatives with less new roadway construction.

The SWEEP Memorandum of Understanding, described in **Section ES.31.4** above, was developed specifically to identify and mitigate impacts to fish and aquatic species (see **Appendix D, SWEEP Memorandum of Understanding**).

ES.32.6 How will regulated materials be impacted?

Regulated materials are hazardous substances, hazardous waste, and petroleum products. A key issue of concern along the Corridor is the presence of hazardous waste or contamination from historic mining activities (including mill sites, mine waste and mine tunnel drainage). Construction activities increase the likelihood for encountering existing and unknown contamination. Impacts could include disturbing tailings and contaminated water trapped in old mining tunnels, especially in areas where mining activities were prevalent. Transportation of hazardous materials through the Corridor and the potential for accidental spills is also of concern.

The Colorado Department of Transportation has standard protective procedures to assure worker, local community, environmental, and traveler safety when encountering regulated materials. Additional analysis will be done during Tier 2 processes to carefully identify the extent and nature of regulated materials of concern and to develop management plans to protect public health and the environment during construction.

ES.32.7 What noise impacts will result?

Noise levels in the Corridor vary depending on the distance to the I-70 highway. The Colorado Department of Transportation considers a noise impact to occur when the loudest hour of noise is at or above 66 decibels (dBA) or when there is an increase of 10 dBA or more affecting sensitive noise receptors (such as residences, schools, and parks). Increases in noise levels of less than 3 dBA are generally considered imperceptible to humans. Increases of 3 dBA to 5 dBA are noticeable, and increases of 10 dBA are perceived as a doubling of loudness. Background highway noise is generally louder than background transit noise but transit alternatives introduce noise sources with different frequency and time characteristics that are likely noticeable even when it is less loud than the highway.

The No Action Alternative noise increases range from 0 dBA to 2 dBA. The Minimal Action Alternative noise increases range from 0 dBA to 4 dBA. The remaining Action Alternatives increase noise levels between 1 dBA (imperceptible) and 5 dBA (noticeable). The Preferred Alternative noise increases range between 1 dBA to 5 dBA, similar to those of the other Action Alternatives. Tier 2 processes will reevaluate noise impacts at specific locations based on details of specific proposed improvements using the latest noise regulations and guidance. Specific mitigation strategies to reduce noise in affected areas will be considered in Tier 2 processes.

ES.32.8 How will visual conditions be impacted?

Action Alternatives with larger footprints or more elevated features are more likely to be visible and create a stronger visual contrast. The Advanced Guideway System Alternative generates a noticeable visual impact because it is planned to be elevated throughout most or all of the Corridor with supporting piers placed every 80 to 100 feet and a lattice structure underneath the guideway deck. The Combination Highway and Advanced Guideway System Alternative and the Preferred Alternative result in the greatest adverse visual impact by adding both highway capacity and the Advanced Guideway System elements.

ES.32.9 How will recreation resources be impacted?

The Action Alternatives physically impact recreation resources adjacent to the I-70 highway, and indirectly affect resources farther afield, due to changes in visitation resulting from access and capacity changes. In general, the Combination alternatives impact recreation resources the most because they have both the largest footprint and the biggest increase in capacity (and thus recreation use). Increased visitation benefits commercial recreation providers operating on National Forest System lands but strains the sustainability of National Forest System land resources in some highly visited areas (both developed recreational facilities and dispersed recreation areas) not equipped to handle additional visitation. Increased visitation also places increased pressure on some Corridor municipalities to provide services, such as parking. The Transit alternatives have fewer direct impacts than the Highway alternatives but result in higher increases in visitation. The Highway alternatives have more direct impacts than the Transit alternatives, but result in only modest visitation increases because the former have less capacity than the Transit alternatives and therefore induce fewer recreation-oriented trips. The Preferred Alternative directly affects between approximately 65 and 90 recreation sites with the low end of the range similar to the Transit alternatives and the high end of the range similar to the Combination alternatives. The Highway alternatives' impacts fall in a range between the Transit and Combination alternatives. Up to five recreation resources developed through funding from the Land and Water Conservation Fund program (referred to as Section 6(f) resources) could be impacted by the Action Alternatives; any impacts to these resources require special approval and, if no alternatives exist to avoid the resource, replacement of land.

Close coordination with the United States Forest Service in the development of recreation and land management techniques to effectively manage any increases in visitation rates is a key mitigation strategy to mitigate impacts to National Forest System lands due to the increased access.

ES.32.10 What will be the effects on social and economic conditions in the Corridor?

All alternatives including the No Action Alternative and the Action Alternatives affect the local economies and character of the mountain communities. The Action Alternatives likely suppress local economies during construction, but after construction, all Action Alternatives except for the Minimal Action Alternative meet or surpass a Gross Regional Product of $4 billion a year. The Combination alternatives have the greatest positive effect on the local economy. The effect of the Preferred Alternative is a range, depending on the extent of transportation improvements that are implemented.

All Action Alternatives except the Minimal Action Alternative are expected to induce population and employment growth in the Corridor. The amount and type of induced growth varies. Transit alternatives and Combination alternatives, including the Preferred Alternative, likely induce the most growth. Growth in established communities along the I-70 highway is expected to be less than in unincorporated areas because of constraints and lack of developable land in existing Corridor communities, particularly in the eastern portion of the Corridor in Clear Creek County. Eagle County, Summit County, and Garfield County, which have more land area available for development, are all likely to experience this induced growth. Clear Creek County is not expected to see as much induced growth because its land areas are

constrained and not developable due to slopes and geologic hazards, and a large portion of the county consists of National Forest System lands and other public lands. Economic growth places pressure on property values, community services, and other social infrastructure. The adaptive management approach of the Preferred Alternative allows improvements to be implemented over time, which may allow communities to better manage effects of economic and population growth.

The Action Alternatives likely suppress economic growth during construction, due to worsening travel conditions on the I-70 highway. Construction is phased and occurs in different areas of the Corridor at different times during the construction period. Dispersing construction activities through the Corridor over time minimizes economic hardship. Because the scope of construction is greater in the eastern portion of the Corridor, Clear Creek County experiences more impacts from construction than other Corridor counties.

ES.32.11 Summary of Impacts and Mitigation

Impacts to all environmental resources explained in detail in **Chapter 3, Affected Environment and Environmental Consequences**, and mitigation strategies are summarized in **Table 3.19-1.**

ES.33 What public and agency comments were received on the Revised Draft PEIS?

This Final PEIS responds to comments received on the Revised Draft PEIS released in September 2010. Comments and responses are presented in **Appendix F, Response to Comments**.

The lead agencies received more than 1,100 comments from more than 550 agencies, organizations, and individuals on the Revised Draft PEIS. Most comments require explanation, clarification, or factual corrections, and some resulted in changes to the PEIS. Many comments require more detailed information than can be addressed with information at the Tier 1 level and will be addressed in Tier 2 processes. A complete accounting of comments received during the comment period and the lead agencies' responses to those comments is contained in **Appendix F, Response to Comments**.

Comments were generally supportive of the Collaborative Effort process to reach a Consensus Recommendation and Preferred Alternative, the development and use of the I-70 Mountain Corridor Context Sensitive Solutions process in the Corridor, and the format and readability of the PEIS document. Other comments included both support of and opposition to details of the PEIS analyses and identification of the Preferred Alternative. Comments fell into broad categories as follows:

- **Transportation needs**. Most comments were supportive of multimodal options but some commenters expressed preferences for only highway or only transit options. Some commenters questioned traffic and travel demand projections as either too high or too low; others expressed similar questions about transit ridership projections – that projections were too high, too low, or not fully developed. Many comments expressed concern about the termini and connectivity of Transit alternatives, particularly at the east end of the Corridor. Comments generally supported the 50-year vision and use of a longer planning horizon. Comments received about safety centered on concerns about tunnels, auxiliary lanes, speed enforcement, location-specific needs, and slow moving vehicles.

- **Process, Collaborative Effort, and I-70 Mountain Corridor Context Sensitive Solutions**. Many commenters expressed praise for the lead agencies for the Revised Draft PEIS document and the process used to develop the Preferred Alternative. Some expressed concerns about the need to clarify implementation of the Preferred Alternative, including how Tier 2 processes would be developed within the statewide planning process, how the Collaborative Effort and

stakeholder involvement would be formalized, and how various agreements and processes (including the I-70 Mountain Corridor Context Sensitive Solutions process, the SWEEP and ALIVE Memoranda of Understanding, and the Section 106 Programmatic Agreement) would be implemented in Tier 2 processes.

- **Alternatives**. Comments on alternatives represented the largest category of comments received. Comments centered on preferences, including support of and opposition to the Preferred Alternative, as well as support for or opposition to the other alternatives evaluated in the document (particularly support for Bus in Guideway transit). Comments also voiced support for/interest in alternatives not carried forward, particularly alternate and parallel routes, car ferry or "autotrain," aviation alternatives, expanding or improving existing rail, reversible lanes, buses in mixed traffic (as a stand-alone option), and the Winter Park Ski Train. Other comments voiced general support for the non-infrastructure component, with particular interest in truck restrictions, expanding shuttle or regional bus service, use of variable messaging, and speed enforcement. Many commenters expressed particular interest in tunnel construction.

- **Environmental Analysis**. Comments were received about nearly every environmental resource analyzed but the majority of comments about environmental analyses focused on air quality, economic analyses, land use and growth projections and impacts of induced growth, noise and potential noise mitigation, and wildlife crossings. Some commenters asked for additional detail regarding construction impacts. Comments expressed support for the Corridor-specific agreements for mitigation strategies for Tier 2 processes contained in the I-70 Mountain Corridor Context Sensitive Solutions Process, SWEEP and ALIVE Memoranda of Understanding, and Section 106 Programmatic Agreement and requested that the role of these agreements in Tier 2 processes be clearly defined.

- **Implementation, funding, and cost**. These comments asked for clarification of priority and timing of implementation, expressed concern about the project costs and CDOT's ability to implement the Preferred Alternative, and voiced support for alternative financing (tolling, public private partnerships, community investments such as bonding or user taxes). Other comments questioned cost estimates and related details, such as transit ridership and fare projections.

ES.34 Where can stakeholders review this Final Programmatic Environmental Impact Statement?

The lead agencies distributed this document for a 30-day public review period beginning on March 11, 2011. The review period ends on April 11, 2011.

Notice announcing availability of the document was published in the *Federal Register* on March 11, 2011. Notices were also placed in 15 local newspapers. These notices provide information about the dates of the review period and how and where to review copies of the document and its supporting materials. A newsletter providing an update on the NEPA process and details about the availability of the Final PEIS for review was distributed to approximately 35,000 people in early March 2011. Copies of the Final PEIS (mostly on CDs) have been distributed to more than 600 agencies, groups, and individuals, including each individual or organization that provided comments on the Revised Draft PEIS, as detailed in **Chapter 8, Distribution List**. Letters accompanied the documents, which explain how commenters can find copies of their comments on the Revised Draft PEIS and the lead agencies' responses to those comments (see **Appendix F, Response to Comments**).

The project website at **http://www.i70mtncorridor.com** is the easiest place to view and download the I-70 Mountain Corridor Final PEIS, Appendices, and Technical Reports. **Table ES-1** lists the locations throughout the Corridor where hard copies are available for viewing. Electronic (CD-ROM) copies of the

document are available by request, and hard copies are available for purchase for $180, consistent with the Colorado Open Records Act. Individuals with extenuating circumstances or disability may receive a hard copy free of charge.

Table ES-1. Locations to View Printed Copies of the Final PEIS

City/Town	Location	Street Address, Zip Code
Aspen	Pitkin County Library	120 N. Mill Street, 81611
Aurora	Colorado Department of Transportation, Region 1	18500 East Colfax Avenue, 80011
Avon	Avon Branch Library	200 Benchmark Road, 81620
Black Hawk	Gilpin County Public Library	15131 Highway 119, 80422
Breckenridge	Summit County Library, South Branch	504 Airport Road, 80424
Denver	Colorado Department of Transportation Headquarters	Room 277, 4201 E. Arkansas Avenue, 80222
Denver	Denver Public Library	10 West 14th Avenue Parkway, 80204
Eagle	Colorado Department of Transportation, Region 3	714 Grand Avenue, 81631
Empire	Empire Town Hall	30 E. Park Avenue, 80438
Evergreen	Evergreen Public Library	5000 Highway 73, 80439
Fraser	Fraser Valley Library	421 Norgren Street, 80442
Frisco	Summit County Library, Main Branch	0037 CR 1005, 2nd Floor, 80443
Georgetown	John Tomay Memorial Library	605 6th Street, 80444
Glenwood Springs	Colorado Department of Transportation, Region 3	202 Centennial Street, 81601
Glenwood Springs	Glenwood Springs Branch Library	413 9th Street, 81601
Golden	Colorado Department of Transportation, Region 1	425C Corporate Circle, 80401
Grand Junction	Colorado Department of Transportation, Region 3	606 South Ninth, 81501
Gypsum	Gypsum Public Library	48 Lundgren Boulevard, 81637
Idaho Springs	Idaho Springs Public Library	219 14th Avenue, 80452
Lakewood	Federal Highway Administration Colorado Division	12300 W. Dakota Ave., Suite 180, 80228
Lakewood	Belmar Library	555 S. Allison Pkwy., 80226
Leadville	Lake County Public Library	1115 Harrison Avenue, 80461
Silver Plume	Silver Plume Town Hall	710 Main Street, 80476
Silverthorne	Summit County Library, North Branch	651 Center Circle, 80498
Vail	Town of Vail Public Library	292 West Meadow Drive, 81657

Please contact the following individuals for requests or additional information concerning this document:

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ES.35 What are the next steps in the PEIS process?

Remaining steps to complete the first tier NEPA process for the I-70 Mountain Corridor PEIS after this document is issued include:

- Hold 30-day review for the Final PEIS. Publicize availability of the Final PEIS, distribute informational newsletter, and hold small group meetings or briefings if requested.
- Hold I-70 Mountain Corridor PEIS Project Leadership Team and Collaborative Effort team meetings through completion of the Record of Decision, as appropriate.
- Prepare and publish Record of Decision.

The Record of Decision is the final document solidifying the Tier 1 decision regarding travel mode, capacity, and general location. Tier 2 processes will define and evaluate alternatives, alignment, interchange design, exact station locations, exact location of transportation improvements, location of design or mitigation elements and bike paths, among other things, consistent with the Tier 1 Record of Decision. Tier 2 processes will also evaluate design details and specific environmental and community impacts and identify and agree to specific mitigation commitments associated with impacts. For the first transit-focused Tier 2 process, the transit technology decision will be made and then incorporated into subsequent Tier 2 processes. The technology and alignment decisions may influence other decisions, such as station location or maintenance facility location. **Section ES.21** describes the implementation plan for Tier 2 processes.

Tier 2 processes may consider tolling and non-tolling alternatives. The public will have an opportunity to comment on all of these decisions during Tier 2 processes.

All Tier 2 processes will follow the I-70 Mountain Corridor Context Sensitive Solutions process and other Corridor-specific agreements, including the SWEEP Memorandum of Understanding, ALIVE Memorandum of Understanding, Section 106 Programmatic Agreement for historic properties, and other mitigation strategies described in **Section 3.19, Mitigation Summary** of this document. A Collaborative Effort Committee team will meet at least once every two years through 2020 to review the status of Tier 2 processes and consider the need for additional capacity improvements based on specific milestones or triggers included in the Preferred Alternative.

In 2020, there will be a thorough assessment of the overall purpose and need and effectiveness of implementation of the Tier 1 decision. At that time, the lead agencies and the stakeholder committee may consider the full range of improvement options.