# Table of Contents

## EXECUTIVE SUMMARY

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES.1</td>
<td>Why did the Colorado Department of Transportation prepare this Revised Draft Programmatic Environmental Impact Statement?</td>
</tr>
<tr>
<td>ES.2</td>
<td>Why are improvements needed on this Corridor?</td>
</tr>
<tr>
<td>ES.3</td>
<td>How bad will traffic get in the future without these improvements?</td>
</tr>
<tr>
<td>ES.4</td>
<td>What is the purpose and need for this project?</td>
</tr>
<tr>
<td>ES.5</td>
<td>Who are the Corridor stakeholders?</td>
</tr>
<tr>
<td>ES.6</td>
<td>How were members of the public and stakeholders informed of and involved in the process?</td>
</tr>
<tr>
<td>ES.7</td>
<td>How were agencies and stakeholders involved in the decision-making?</td>
</tr>
<tr>
<td>ES.8</td>
<td>How were alternatives developed?</td>
</tr>
<tr>
<td>ES.9</td>
<td>How were alternatives evaluated?</td>
</tr>
<tr>
<td>ES.10</td>
<td>What is the outcome of this process?</td>
</tr>
<tr>
<td>ES.11</td>
<td>What alternatives were advanced for detailed analysis in this document?</td>
</tr>
<tr>
<td>ES.12</td>
<td>What is the No Action Alternative?</td>
</tr>
<tr>
<td>ES.13</td>
<td>What is the Minimal Action Alternative?</td>
</tr>
<tr>
<td>ES.14</td>
<td>What components are included in the remaining Action Alternatives?</td>
</tr>
<tr>
<td>ES.15</td>
<td>What is the Collaborative Effort Team?</td>
</tr>
<tr>
<td>ES.16</td>
<td>What is the I-70 Mountain Corridor Context Sensitive Solutions Process?</td>
</tr>
<tr>
<td>ES.17</td>
<td>How was the Preferred Alternative (Consensus Recommendation) developed?</td>
</tr>
<tr>
<td>ES.18</td>
<td>What does the Preferred Alternative consist of?</td>
</tr>
<tr>
<td>ES.19</td>
<td>How much will this project cost?</td>
</tr>
<tr>
<td>ES.20</td>
<td>Is the money for this project available?</td>
</tr>
<tr>
<td>ES.21</td>
<td>How will stakeholders be involved with implementing necessary improvements in this corridor?</td>
</tr>
<tr>
<td>ES.22</td>
<td>In what order would improvements be made?</td>
</tr>
<tr>
<td>ES.23</td>
<td>What are the triggers for additional highway and non-Advanced Guideway System transit capacity improvements?</td>
</tr>
<tr>
<td>ES.24</td>
<td>What are some of the other highway improvements that can be made?</td>
</tr>
<tr>
<td>ES.25</td>
<td>Why are both transit and highway improvements needed?</td>
</tr>
<tr>
<td>ES.26</td>
<td>How do metro Denver residents access the Advanced Guideway System?</td>
</tr>
<tr>
<td>ES.27</td>
<td>Do the dual-mode transportation improvements make traveling the Corridor safer?</td>
</tr>
<tr>
<td>ES.28</td>
<td>Are there other ways to decrease congestion without the Advanced Guideway System and/or widening the highway?</td>
</tr>
<tr>
<td>ES.29</td>
<td>Why do we need highway and transit improvements?</td>
</tr>
<tr>
<td>ES.30</td>
<td>What is the Stream and Wetland Ecological Enhancement Program?</td>
</tr>
<tr>
<td>ES.31</td>
<td>What is A Landscape Level Inventory of Valued Ecosystem Components?</td>
</tr>
<tr>
<td>ES.32</td>
<td>What are the types of environmental impacts of greatest concern?</td>
</tr>
<tr>
<td>ES.33</td>
<td>How can the public provide input on this document?</td>
</tr>
<tr>
<td>ES.34</td>
<td>What are the next steps in the Programmatic Environmental Impact Statement process?</td>
</tr>
</tbody>
</table>
INTRODUCTION

1. What is this document and its purpose? ................................................................. I-1
2. What is a Programmatic National Environmental Policy Act process? ............... I-1
3. Why are the lead agencies doing this document? ............................................... I-2
4. What changed since the 2004 Draft Programmatic Environmental Impact Statement and how were comments received on the 2004 Draft Programmatic Environmental Impact Statement addressed? ............................................................................... I-2
5. What decisions are addressed programmatically at Tier 1 and what decisions will be addressed at Tier 2? ........................................................................ I-4
6. What has been the decision-making process to get to the Preferred Alternative? .... I-5
7. What happens after the Tier 1 Record of Decision (Implementation Plan)? ........ I-5
8. What is Context Sensitive Solutions and how does it work with future National Environmental Policy Act processes and other decision-making on the Corridor? ........................................................................................................ I-12
9. How were the I-70 Mountain Corridor Context Sensitive Solutions Guidelines developed? ................................................................................................................. I-13
10. How is the I-70 Mountain Corridor Context Sensitive Solutions Guidance to be used? ...................................................................................................................... I-13
11. What additional information is included in the I-70 Mountain Corridor Context Sensitive Solutions Guidance? ........................................................................ I-14

CHAPTER 1. PURPOSE AND NEED

1.1 What's in Chapter 1? .......................................................................................... 1-1
1.2 Why was this Corridor study initiated? ............................................................... 1-1
1.3 What other studies have been completed or are related to this Corridor? .......... 1-3
1.4 What are the horizon years of analysis for the study? ....................................... 1-4
1.5 What are the study limits and why were they selected? ...................................... 1-5
1.6 What is the purpose and need for transportation improvements in the Corridor? ..., 1-5
1.7 What are the Corridor's features? ..................................................................... 1-8
1.8 Who uses this Corridor and for what reasons? .................................................. 1-9
1.9 What future growth is expected to occur in the Corridor? ............................... 1-12
1.10 What is the current and projected travel demand? ........................................ 1-14
1.11 How are the needs demonstrated by transportation problems in the Corridor? ..., 1-19
1.12 How is the project purpose and need used to evaluate potential solutions? ....... 1-26

CHAPTER 2. SUMMARY AND COMPARISON OF ALTERNATIVES

2.1 What's in Chapter 2? ........................................................................................ 2-1
2.2 How were alternatives developed? .................................................................. 2-2
2.3 What process was used to evaluate and screen alternatives? .......................... 2-2
2.4 How were stakeholders (communities and agencies) involved? ..................... 2-5
2.5 Which alternative elements were eliminated and why? .................................. 2-5
2.6 What alternatives were advanced? .................................................................. 2-23
2.7 What was the decision-making process for identifying the Preferred Alternative? 2-42
2.8 How do the Alternatives compare? ............................................................... 2-48
2.9 How can the Preferred Alternative be implemented? .................................... 2-70
CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

What does Chapter 3 cover? ................................................................. 3-1
What is the context of the resource evaluations? .................................. 3-1
Why is this analysis focused on specific issues? ................................. 3-2
What is the general methodology for the natural and human environment resource evaluations? ............................................................... 3-3
How did the lead agencies collect and update data for environmental analyses? .......................................................... 3-3
How were impacts quantified? ............................................................... 3-4
What is the difference between direct and indirect impacts? .................. 3-5
How are impacts defined at Tier 1 versus Tier 2? ................................. 3-5
What is the programmatic approach to mitigation planning? .................. 3-6
How do I read Chapter 3? ................................................................. 3-7

3.1 Climate and Air Quality Resources .................................................. 3.1-1
3.1.1 What are the air quality resources of concern to this project and why are they important? ......................................................... 3.1-1
3.1.2 What study area and process was used to analyze air quality resources? ................................................................. 3.1-1
3.1.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? ................................................. 3.1-2
3.1.4 What are the areas of air quality interest identified in the Corridor? ................................................................. 3.1-2
3.1.5 How do the alternatives potentially affect air quality and climate? .................................................................................. 3.1-2
3.1.6 What will be addressed in Tier 2 processes? .................................. 3.1-6
3.1.7 What are the mitigation strategies for air quality? ......................... 3.1-6

3.2 Biological Resources ......................................................................... 3.2-1
3.2.1 What are the biological resources in the Corridor and why are they important? ................................................................. 3.2-1
3.2.2 What process was used to analyze biological resources? .................... 3.2-2
3.2.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? ................................................. 3.2-3
3.2.4 What are the areas of biological resources interest identified in the Corridor? ........................................................................ 3.2-4
3.2.5 How do the alternatives affect biological resources? ....................... 3.2-10
3.2.6 What will be addressed in Tier 2 processes? ................................ 3.2-17
3.2.7 What are the approaches to programmatic mitigation planning for biological resources? ............................................................. 3.2-17

3.3 Wetlands and Other Waters of the U.S.............................................. 3.3-1
3.3.1 What are wetlands and other waters of the U.S. and why are they important? ................................................................. 3.3-1
3.3.2 What process was used to analyze wetland resources and other waters of the U.S.? ......................................................... 3.3-2
3.3.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? ................................................. 3.3-2
3.3.4 What are the areas of wetlands and other waters of the U.S. interest identified in the Corridor? ................................................................. 3.3-3
3.3.5 How do the alternatives potentially affect wetlands and other waters of the U.S.? ................................................................. 3.3-5
### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3.6</td>
<td>What will be addressed in Tier 2 processes?</td>
<td>3.3-6</td>
</tr>
<tr>
<td>3.3.7</td>
<td>What are the approaches to programmatic mitigation planning for wetlands and other waters of the U.S.?</td>
<td>3.3-7</td>
</tr>
<tr>
<td>3.4</td>
<td>Water Resources</td>
<td>3.4-1</td>
</tr>
<tr>
<td>3.4.1</td>
<td>What are water resources and why are they important?</td>
<td>3.4-1</td>
</tr>
<tr>
<td>3.4.2</td>
<td>What study area and process was used to analyze water resources?</td>
<td>3.4-1</td>
</tr>
<tr>
<td>3.4.3</td>
<td>What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues?</td>
<td>3.4-2</td>
</tr>
<tr>
<td>3.4.4</td>
<td>What are the water resources of interest identified in the Corridor?</td>
<td>3.4-3</td>
</tr>
<tr>
<td>3.4.5</td>
<td>How do the Action Alternatives potentially affect water resources?</td>
<td>3.4-4</td>
</tr>
<tr>
<td>3.4.6</td>
<td>What will be addressed in Tier 2 processes?</td>
<td>3.4-11</td>
</tr>
<tr>
<td>3.4.7</td>
<td>What are the approaches to programmatic mitigation planning for water resources?</td>
<td>3.4-12</td>
</tr>
<tr>
<td>3.5</td>
<td>Geologic Hazards</td>
<td>3.5-1</td>
</tr>
<tr>
<td>3.5.1</td>
<td>What are the geologic hazards in the Corridor and why are they important?</td>
<td>3.5-1</td>
</tr>
<tr>
<td>3.5.2</td>
<td>What study area and process was used to analyze geologic hazards?</td>
<td>3.5-1</td>
</tr>
<tr>
<td>3.5.3</td>
<td>What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues?</td>
<td>3.5-2</td>
</tr>
<tr>
<td>3.5.4</td>
<td>What are the areas of geologic hazard interest identified in the Corridor?</td>
<td>3.5-2</td>
</tr>
<tr>
<td>3.5.5</td>
<td>How do the alternatives potentially affect geologic hazards?</td>
<td>3.5-2</td>
</tr>
<tr>
<td>3.5.6</td>
<td>What will be addressed in Tier 2 processes?</td>
<td>3.5-5</td>
</tr>
<tr>
<td>3.5.7</td>
<td>What are the approaches to programmatic mitigation planning for geologic hazards?</td>
<td>3.5-5</td>
</tr>
<tr>
<td>3.6</td>
<td>Regulated Materials and Historic Mining</td>
<td>3.6-1</td>
</tr>
<tr>
<td>3.6.1</td>
<td>What are the concerns related to regulated materials and historic mining and why are they important to this project?</td>
<td>3.6-1</td>
</tr>
<tr>
<td>3.6.2</td>
<td>What process was used to analyze regulated materials and historic mining sites?</td>
<td>3.6-1</td>
</tr>
<tr>
<td>3.6.3</td>
<td>What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues?</td>
<td>3.6-2</td>
</tr>
<tr>
<td>3.6.4</td>
<td>Where are the areas of regulated materials and historic mining in the Corridor?</td>
<td>3.6-2</td>
</tr>
<tr>
<td>3.6.5</td>
<td>How do the alternatives potentially affect regulated materials and historic mining sites?</td>
<td>3.6-2</td>
</tr>
<tr>
<td>3.6.6</td>
<td>What will be addressed in Tier 2 processes?</td>
<td>3.6-5</td>
</tr>
<tr>
<td>3.6.7</td>
<td>What are the approaches to programmatic mitigation planning for regulated materials and historic mining sites?</td>
<td>3.6-8</td>
</tr>
<tr>
<td>3.7</td>
<td>Land Use and Right-of-Way</td>
<td>3.7-1</td>
</tr>
<tr>
<td>3.7.1</td>
<td>What are the land use and right-of-way concerns for this project and why are they important?</td>
<td>3.7-1</td>
</tr>
<tr>
<td>3.7.2</td>
<td>What study area and process was used to analyze land use and right-of-way?</td>
<td>3.7-1</td>
</tr>
</tbody>
</table>
3.7.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.7-2
3.7.4 What are the areas of land use and right-of-way interest identified in the Corridor? .................................................................3.7-2
3.7.5 How do the alternatives potentially affect land use and right-of-way? ..................3.7-5
3.7.6 What will be addressed in Tier 2 processes? .................................................................3.7-9
3.7.7 What are the approaches to programmatic mitigation planning for land use and right-of-way? ................................................3.7-10

3.8 Social and Economic Values .................................................................3.8-1
3.8.1 What are the social and economic values of concern to this project and why are they important? .................................................................3.8-1
3.8.2 What study area and process was used to analyze social and economic values? .................................................................3.8-1
3.8.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.8-2
3.8.4 What are the areas of social and economic interest identified in the Corridor? .................................................................3.8-2
3.8.5 How do the alternatives potentially affect social and economic values? ........3.8-3
3.8.6 What will be addressed in Tier 2 processes? .................................................................3.8-7
3.8.7 What are the approaches to programmatic mitigation planning for social and economic values? .................................................................3.8-8

3.9 Environmental Justice ........................................................................3.9-1
3.9.1 What is environmental justice and how is it important to this project? ..............3.9-1
3.9.2 What study area and process was used to analyze environmental justice? .................................................................3.9-1
3.9.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.9-2
3.9.4 What are the areas of interest for environmental justice in the Corridor? .................................................................3.9-2
3.9.5 How do the alternatives potentially affect minority and low-income populations? .................................................................3.9-4
3.9.6 What will be addressed in Tier 2 processes? .................................................................3.9-6
3.9.7 What are the approaches to programmatic mitigation planning for environmental justice? .................................................................3.9-7

3.10 Noise ..................................................................................................3.10-1
3.10.1 What concerns related to noise are important to this project? ...............3.10-1
3.10.2 What study area and process was used to analyze noise? .........................3.10-1
3.10.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.10-2
3.10.4 What are the areas of noise interest identified in the Corridor? ...............3.10-4
3.10.5 How do the alternatives potentially affect noise? .........................................3.10-4
3.10.6 What will be addressed in Tier 2 processes? ...............................................3.10-7
3.10.7 What are the approaches to programmatic mitigation planning for noise? .................................................................3.10-7
3.11 Visual Resources ..............................................................................................3.11-1
3.11.1 What are the visual resources related to this project and why are they important? .................................................................3.11-1
3.11.2 What study area and process were used to analyze visual resources? 3.11-1
3.11.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.11-1
3.11.4 What are the areas of visual interest identified in the Corridor? ..........3.11-2
3.11.5 How do the alternatives potentially affect visual resources? ............3.11-6
3.11.6 What will be addressed in Tier 2 processes? ......................................3.11-8
3.11.7 What are the approaches to programmatic mitigation planning for visual resources? .................................................................3.11-8

3.12 Recreation Resources and Section 6(f) Discussion ....................................3.12-1
3.12.1 What are recreation and Section 6(f) resources and why are they important? .............................................................................3.12-1
3.12.2 What study area and process was used to analyze recreation and Section 6(f) resources? .................................................................3.12-1
3.12.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.12-2
3.12.4 What are the areas of recreation and Section 6(f) resources interest identified in the Corridor? .................................................................3.12-2
3.12.5 How do the alternatives potentially affect recreation and Section 6(f) resources? .............................................................................3.12-5
3.12.6 What will be addressed in Tier 2 processes? ......................................3.12-8
3.12.7 What are the approaches to programmatic mitigation planning for recreation resources? .................................................................3.12-9

3.13 Historic Properties and Native American Consultation ..................................3.13-1
3.13.1 What are historic properties and why are they important? .....................3.13-1
3.13.2 What study area and process was used to analyze historic properties? 3.13-1
3.13.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .................................................................3.13-2
3.13.4 How did the Federal Highway Administration and Colorado Department of Transportation consult with Native American tribes? ........3.13-3
3.13.5 What are the areas of historic properties interest identified in the Corridor? ..................................................................................3.13-4
3.13.6 How do the alternatives potentially affect historic properties? ............3.13-4
3.13.7 What will be addressed in Tier 2 processes? ......................................3.13-7
3.13.8 What are the approaches to mitigation planning for historic properties? 3.13-8

3.14 Section 4(f) Discussion .....................................................................................3.14-1
3.14.1 What is Section 4(f)? ..............................................................................3.14-1
3.14.2 What process was followed for this first tier Section 4(f) Discussion? 3.14-2
3.14.3 What is the project’s purpose and need? ..................................................3.14-4
3.14.4 What alternatives are being considered in the Programmatic Environmental Impact Statement? .................................................................3.14-4
3.14.5 What are the Section 4(f) properties that are potentially used by the alternatives advanced in the National Environmental Policy Act process? ..............3.14-6
3.14.6 What are the potential uses of the Section 4(f) properties? ..................3.14-12
3.14.7 What alternatives were considered that potentially avoid Section 4(f) properties in the Corridor? .................................................................3.14-18
3.14.8 What are constraints and opportunities to avoid Section 4(f) properties associated with the Combination Alternatives? ..........................3.14-26
3.14.10 What planning to minimize harm has been incorporated? ................3.14-29
3.14.11 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with? ..................3.14-30
3.14.12 What can we conclude from this Discussion? ................................3.14-32
3.14.13 What will be addressed in Tier 2 processes? ...............................3.14-33

3.15 Paleontology ..........................................................................................3.15-1
3.15.1 What is paleontology and why is it important to this project? ..........3.15-1
3.15.2 What study area and process was used on this project to analyze paleontological resources? .................................................................3.15-1
3.15.3 What agencies have Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .........................................................3.15-1
3.15.4 What are the areas of paleontology interest identified in the Corridor? 3.15-2
3.15.5 How do the alternatives potentially affect paleontological resources? ...3.15-2
3.15.6 What will be addressed in Tier 2 processes? ................................3.15-3
3.15.7 What are the approaches to programmatic mitigation planning for paleontological resources? .................................................................3.15-3

3.16 Energy ......................................................................................................3.16-1
3.16.1 What are the concerns related to energy and why are they important to this project? .................................................................3.16-1
3.16.2 What study area and process was used to analyze energy? ..........3.16-1
3.16.3 What agencies have the Colorado Department of Transportation and Federal Highway Administration coordinated with and what are their relevant issues? .........................................................3.16-2
3.16.4 What are the areas of energy interest identified in the Corridor? ......3.16-2
3.16.5 How do the alternatives potentially affect energy? .........................3.16-2
3.16.6 What will be addressed in Tier 2 processes? ...............................3.16-4
3.16.7 What are the approaches to programmatic mitigation planning for energy? .................................................................3.16-4

3.17 Irreversible and Irretrievable Commitment of Resources ....................3.17-1
3.17.1 What is an irreversible and irretrievable commitment of resources and why is it important to this project? .........................................................3.17-1
3.17.2 What process was used to determine the commitment of resources due to this project? .................................................................3.17-1
3.17.3 What are the areas of interest in these resources in the Corridor? ....3.17-1
3.17.4 How do the alternatives affect these resources? ...........................3.17-2
3.17.5 What are the project effects on resources in 2050? .........................3.17-3
3.17.6 What will be addressed in Tier 2 processes? ...............................3.17-3
3.17.7 What are the mitigation strategies for this resource? ......................3.17-3

3.18 Short-Term Uses versus Long-Term Productivity ...............................3.18-1
3.18.1 What is the relationship between local short-term uses and long-term productivity and why is it important to this project? ..........................3.18-1
Table of Contents

3.18.2 What process was used to determine the impacts of short-term uses on long-term productivity due to this project? ........................................ 3.18-1
3.18.3 What are the areas of interest related to short-term uses and long-term productivity in the Corridor? .................................................. 3.18-1
3.18.4 How do the alternatives affect short-term uses and long-term productivity? .......................................................................................... 3.18-1
3.18.5 What are the project effects on resources in 2050?.............................. 3.18-2
3.18.6 What will be addressed in Tier 2 processes?........................................ 3.18-3
3.18.7 What are the mitigation strategies for short-term uses?........................ 3.18-3

3.19 Mitigation Summary ........................................................................................................ 3.19-1

CHAPTER 4. CUMULATIVE IMPACTS ANALYSIS
4.1 What is in Chapter 4? ...............................................................................................4-1
4.2 What are cumulative impacts and why are they important? .................................4-1
4.3 What resources are examined as part of the cumulative effect analysis? ...............4-1
4.4 What is the geographic scope for cumulative impact analysis? ..............................4-2
4.5 What is the time frame for cumulative impact analysis? .........................................4-3
4.6 What methods were used to estimate cumulative impacts? ....................................4-5
4.7 What past, present, and reasonably foreseeable future actions were considered? .4-9
4.8 What are the anticipated cumulative impacts? .......................................................4-10
4.9 What are the cumulative benefits? .........................................................................4-26
4.10 What measures will be taken to address issues related to cumulative impacts? 4-26
4.11 What conclusions can be made? ...........................................................................4-27
4.12 What’s next and how will analysis differ from Tier 1 to Tier 2? ..............................4-27

CHAPTER 5. FINANCIAL CONSIDERATIONS
5.1 What’s in Chapter 5?................................................................................................5-1
5.2 How were cost estimates determined? ....................................................................5-1
5.3 What is the cost of the Preferred Alternative? ..........................................................5-1
5.4 How much funding is currently allocated to the I-70 Mountain Corridor? 5-2
5.5 What are the sources for current funding and their limitations? ..............................5-3
5.6 Is there enough funding to implement the Preferred Alternative? ..........................5-4
5.7 What are potential funding sources and their limitations? 5-4
5.8 What innovative funding sources might be available? 5-5

CHAPTER 6. PUBLIC AND AGENCY INVOLVEMENT
6.1 What’s in Chapter 6?................................................................................................6-1
6.2 What are the objectives of the public and agency information and involvement program? 6-1
6.3 How were agencies and stakeholders involved in the public and agency information and involvement program? 6-2
6.4 How did you involve members of the public and local organizations in the public and agency information and involvement program? 6-5
6.5 How did you involve minority and low-income populations? 6-6
6.6 What public and agency input was received? 6-6
6.7 How were the stakeholders involved in the decision making process? 6-6
6.8 What public and agency involvement opportunities will be provided going forward from this point in the process? 6-7

GLOSSARY OF TERMS

LIST OF PREPARERS AND CONTRIBUTORS

Revised Draft PEIS
I-70 Mountain Corridor
Page viii
September 2010
# Table of Contents

Figure 2-12. 2035 Peak Period Peak Direction Travel Time by Alternative ........................................... 2-51  
Figure 2-13. 2035 Peak Period Peak Direction Hours of Congestion by Alternative ............................. 2-53  
Figure 2-14. Corridor Congestion and Additional Demand Accommodated by Alternative .................... 2-55  
Figure 2-15. Transit Share by Alternative ............................................................................................ 2-57  
Figure 2-16. Fatality Rates by Alternative ......................................................................................... 2-59  
Figure 2-17. Year of Network Capacity by Alternative .......................................................................... 2-61  
Figure 2-18. Capital Costs by Alternative ............................................................................................ 2-69  

Figure 3.2-1. Life Zones and Elevations ............................................................................................... 3.2-5  
Figure 3.2-2. Key Wildlife Habitat ....................................................................................................... 3.2-7  
Figure 3.2-3. Fisheries and Vegetation ................................................................................................. 3.2-9  
Figure 3.3-1. Wetlands ............................................................................................................................ 3.3-4  
Figure 3.4-1. I-70 Corridor Watersheds ............................................................................................... 3.4-5  
Figure 3.5-1. Geologic Hazards in the Corridor .................................................................................... 3.5-3  
Figure 3.6-1. Regulated Materials and Historic Mining Sites .................................................................... 3.6-15  
Figure 3.7-1. Land Ownership in the Corridor ....................................................................................... 3.7-3  
Figure 3.8-1. Social and Economic Conditions in the Corridor ............................................................... 3.8-4  
Figure 3.10-1. Communities Measured for Noise Levels ......................................................................... 3.10-3  
Figure 3.11-1. Eastern View of Tenmile Canyon .................................................................................. 3.11-2  
Figure 3.11-2. Eastern View of Herman Gulch .................................................................................... 3.11-3  
Figure 3.11-3. Western View at Buffalo Overlook .................................................................................. 3.11-3  
Figure 3.11-4. Scenery Analysis Units: Garfield to Summit Counties ....................................................... 3.11-4  
Figure 3.11-5. Scenery Analysis Units: Summit to Jefferson Counties ..................................................... 3.11-5  
Figure 3.12-1. Recreation Sites in the I-70 Mountain Corridor ................................................................. 3.12-4  
Figure 3.13-1. Historic Properties in the Corridor .................................................................................. 3.13-5  
Figure 3.14-1. Potential Section 4(f) Properties .................................................................................... 3.14-7  
Figure 3.14-2. Georgetown-Silver Plume National Historic Landmark District ...................................... 3.14-9  
Figure 3.14-3. Recreation Activities in Clear Creek County Greenway ................................................... 3.14-11  
Figure 3.14-4. Potential 4(f) Properties (Mileposts 223-230) .................................................................. 3.14-14  
Figure 3.14-5. Potential Section 4(f) Properties (Mileposts 238-241) ...................................................... 3.14-18  
Figure 3.15-1. Areas of Paleontological Sensitivity in the Corridor ......................................................... 3.15-3  
Figure 4-1. Cumulative Impacts Study Area .......................................................................................... 4-4  

Figure 4-2a. Changes That Have Occurred in the Georgetown Area with the Development of I-70 to Its Current State (in 2000) ........................................................................................................ 4-6  
Figure 4-2b. Changes That Have Occurred in the Georgetown Area with the Development of I-70 to Its Current State (in 2000) ........................................................................................................ 4-7  

Figure 4-3. Changes to the Georgetown Area from 1901 to the Present .............................................. 4-8  

Figure 5-1. Capital Cost by Alternative ................................................................................................. 5-2  

# List of Charts

Chart ES - 1. Capital Costs by Alternative .............................................................................................. ES-23  
Chart 3.2-1. Vegetation, Direct Impacts (Acres) ..................................................................................... 3.2-11  
Chart 3.2-2. Habitat Loss, Direct Impacts (Acres) .................................................................................. 3.2-12  
Chart 3.2-3. Impacts on Gold Medal and “High-Value” Fisheries (Acres) .............................................. 3.2-14  
Chart 3.4-1. Predicted Corridor Stream Loading Impacts by Alternative ............................................. 3.4-7  
Chart 3.7-1. Summary of Properties within Project Footprint by Alternative ....................................... 3.7-7  
Chart 3.12-1. Summary of Potential Impacts on Recreation Resources by Alternative ...................... 3.12-6  
Chart 4-1. Corridor Cumulative Impacts on Land Use by 2035 ............................................................... 4-12  
Chart 5-1. Capital Costs by Alternative ................................................................................................. 5-2
List of Tables
Table 2-1. Transportation Management Alternative Elements ................................................... 2-7
Table 2-2. Localized Highway Improvement Alternative Elements ........................................ 2-9
Table 2-3. Fixed Guideway Transit Alternative Elements ...................................................... 2-12
Table 2-4. Rubber Tire Transit Alternative Elements .............................................................. 2-15
Table 2-5. Highway Improvement Alternative Elements ....................................................... 2-17
Table 2-6. Alternate Route Alternative Elements ................................................................. 2-19
Table 2-7. Aviation Alternative Elements .............................................................................. 2-21
Table 2-8. Tunnel Alternative Elements ............................................................................... 2-22
Table 2-9. Minimal Action Components Associated with Action Alternatives ..................... 2-40
Table 2-10. Components of Preferred Alternative .............................................................. 2-45
Table 2-11. Protected Species Impact Determinations ......................................................... 2-64
Table 3.1-1. Estimated Pollutant Emissions by Alternative.................................................. 3.1-3
Table 3.2-1. Vegetation Communities and Associated Life Zone .......................................... 3.2-5
Table 3.2-2. Gold Medal and “High-Value” Fisheries ............................................................ 3.2-8
Table 3.2-3. Protected Species Impact Determinations ......................................................... 3.2-16
Table 3.4-1. Summary of Stream Channel Impacts (Miles) .................................................. 3.4-9
Table 3.6-1. Federal and State Superfund Sites, Generators, and Releases ............................. 3.6-3
Table 3.6-2. Listed Storage Tank Sites .................................................................................. 3.6-3
Table 3.6-3. Summary of Impacts ....................................................................................... 3.6-9
Table 3.7-1. Summary of Corridor County Master Plan Topics Related to the Corridor ....... 3.7-4
Table 3.10-1. Measured Noise Levels 2001–2004 ............................................................... 3.10-4
Table 3.10-2. 2035 Predicted Noise Levels ........................................................................ 3.10-5
Table 3.12-1. Indirect Impacts on Forest Land Visitation: Annual Change in Destination Trips (In Millions) ................................................................................ 3.12-7
Table 3.13-1. Comparison of Direct Impacts on Historic Properties .................................... 3.13-6
Table 3.14-1. Potential for Use of Historic Properties by Alternative ................................. 3.14-13
Table 3.14-2. Potential Use of Section 4(f) Parks, Recreation Areas, and Wildlife Refuges .......................................................................................................................... 3.14-17
Table 3.16-1. Daily Operational Energy Consumption – Based on 2035 Travel Demand .... 3.16-5
Table 3.16-2. Construction Energy Consumption – Based on 2035 Travel Demand, in Billion British Thermal Units .................................................................................. 3.16-6
Table 3.19-1. Mitigation Strategies ....................................................................................... 3.19-3
Table 4-1. Cumulative Impacts Issues .................................................................................. 4-2
Table 4-2. Cumulative Impacts (acres) on Key Wildlife Habitat in the Corridor .................. 4-13
Table 4-3. Annual Carbon Dioxide Emissions .................................................................... 4-26

List of Technical Reports Contained in Electronic Appendix
I-70 Mountain Corridor PEIS Travel Demand Technical Report
I-70 Mountain Corridor PEIS Transportation Analysis Technical Report
I-70 Mountain Corridor PEIS Alternatives Development and Screening Technical Report
I-70 Mountain Corridor PEIS Safety Technical Report
I-70 Mountain Corridor PEIS Climate and Air Quality Technical Report
I-70 Mountain Corridor PEIS Biological Resources Technical Report
I-70 Mountain Corridor PEIS Wetlands and Other Waters of the U.S. Technical Report
I-70 Mountain Corridor PEIS Water Resources Technical Report
I-70 Mountain Corridor PEIS Geologic Hazards Technical Report
I-70 Mountain Corridor PEIS Regulated Materials and Historic Mining Technical Report
Table of Contents

I-70 Mountain Corridor PEIS Land Use Technical Report
I-70 Mountain Corridor PEIS Social and Economic Values Technical Report
I-70 Mountain Corridor PEIS Environmental Justice Technical Report
I-70 Mountain Corridor PEIS Noise Technical Report
I-70 Mountain Corridor PEIS Visual Resources Technical Report
I-70 Mountain Corridor PEIS Recreation Resources Technical Report
I-70 Mountain Corridor PEIS Historic Properties and Native American Consultation Technical Report
I-70 Mountain Corridor PEIS Section 4(f) Evaluation Technical Report
I-70 Mountain Corridor PEIS Paleontological Resources Technical Report
I-70 Mountain Corridor PEIS Energy Technical Report
I-70 Mountain Corridor PEIS Cumulative Impacts Technical Report
I-70 Mountain Corridor PEIS Financial Considerations Technical Report
I-70 Mountain Corridor PEIS Cost Estimates Technical Report
I-70 Mountain Corridor PEIS Public and Agency Involvement Technical Report