

# Executive Summary

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1 This Environmental Assessment (EA) analyzes the impacts of the Colorado Department of  
2 Transportation's (CDOT) proposal for improvements to a 4-mile segment of United States Highway  
3 24 (US 24) in western El Paso County, Colorado.

4 The National Environmental Policy Act of 1969 (NEPA) requires that the environmental effects of  
5 federally funded or federally permitted projects be considered before deciding on a course of action.  
6 The process provides an opportunity for the Federal Highway Administration (FHWA) and CDOT  
7 to develop project alternatives that meet transportation needs while minimizing social,  
8 environmental, and community impacts. A No Action Alternative is evaluated concurrent to the  
9 action alternatives to serve as a baseline for comparison. This EA complies with NEPA and  
10 documents CDOT's and FHWA's decision-making process.

11 **Chapter 1, Purpose and Need** of this document describes the purpose and need for the action.  
12 **Chapter 2, Alternatives** describes the alternatives that were developed and evaluated to determine  
13 which would best meet the purpose and need, and describes the Proposed Action. **Chapter 3,**  
14 **Affected Environment and Environmental Consequences** presents the No Action Alternative  
15 and the consequences of the Proposed Action upon the social, environmental, and community  
16 resources. **Chapter 4, Section 4(f) Evaluation** includes an evaluation of transportation uses for  
17 historic properties and park and recreation resources protected under Section 4(f) of the United  
18 States Department of Transportation Act of 1966. **Chapter 5, Agency Coordination and Public**  
19 **Involvement** describes coordination with the residents, business owners, and resource management  
20 agencies during the course of the EA. **Chapter 6, References** contains a list of references used in  
21 the preparation of this EA. Supporting materials can be found in the appendices.

## 22 Where is the project located?

23 The proposed US 24 project is in southwestern Colorado Springs, as shown in **Exhibit ES-1** and  
24 **Exhibit ES-2**. The project's limits encompass a 4-mile segment along US 24 from the Interstate 25  
25 (I-25) interchange (milepost 303.8) west to the Manitou Avenue interchange (milepost 299.1). The  
26 study area includes US 24, existing interchanges at the east and west ends, and several north-south  
27 city streets that intersect US 24. The north-south limits of the study area are approximately  
28 1,000 feet north and 1,000 feet south from the US 24 centerline.

29 US 24 connects downtown Colorado Springs with the City of Manitou Springs. East of I-25, US 24  
30 has the local street name of Cimarron Street. From I-25 west to 31st Street US 24 parallels Colorado  
31 Avenue, which has the additional designation of Business US 24. West of 31st Street, Colorado  
32 Avenue is renamed to Manitou Avenue and US 24 remains parallel with Manitou Avenue.

33 **EXHIBIT ES-1**  
34 The Study Area is on US 24 in Colorado Springs



Not to scale  
Study Area - Milepost 300 (Manitou Springs) to Milepost 304 (I-25)

35 EXHIBIT ES-2  
36 US 24 Study Area



## 37 Why is this project needed?

38 As illustrated in **Exhibit ES-1**, US 24 is the only highway route into the Rocky Mountains  
 39 for nearly 50 miles north and south of Colorado Springs. Few substantial changes have been  
 40 made to US 24 in this area since it was built in 1964, and today's transportation planning  
 41 looks to forecasted travel needs in the year 2035.

42 Today, US 24 serves local and regional travelers in almost equal numbers. US 24 is the only  
 43 route for regional weekday commuters who travel between mountain communities (such as  
 44 Woodland Park) and the Colorado Springs metropolitan area. The lack of gateway routes  
 45 into the mountains results in regional weekend traffic to destinations such as national  
 46 forests, ski resorts, and gaming communities with travelers funneling through US 24. These  
 47 regional users travel on US 24 predominantly during the busiest weekday and weekend travel  
 48 times, exacerbating congested conditions during peak travel periods.

49 US 24 is heavily used by local travelers because it provides connections to local destinations,  
 50 such as neighborhood grocery stores, and it connects to I-25 for north-south regional  
 51 destinations. Local cross streets, used to access neighborhoods and commercial areas,  
 52 intersect US 24 and add traffic volumes, which  
 53 slow speeds. The intersections on US 24 are  
 54 spaced at approximately one-half-mile intervals.  
 55 For signalized intersections, the current traffic  
 56 volumes exceed the available capacity and result  
 57 in queues from one intersection backing into the  
 58 adjacent intersection. Driveways and streets  
 59 connecting to the north-south streets are so  
 60 close to US 24 that turns into these driveways or  
 61 streets cause queues that back up onto US 24.  
 62 Just north of US 24 on 21st Street, Naegle Road  
 63 is an example of this problem. Further, at  
 64 unsignalized intersections, such as US 24 and  
 65 Ridge Road, unacceptable delays to traffic crossing or entering US 24 result as drivers wait  
 66 for adequate gaps in the US 24 traffic.



*US 24 and 8th street during the morning commute*

67 El Paso County has been among the fastest-growing counties in the nation for the last three  
 68 decades. The El Paso County and Teller County population totaled 146,000 when US 24 was  
 69 built nearly a half century ago. By 2009, the population had reached 626,000 and is  
 70 forecasted to reach 956,000 by 2035 (State of Colorado, 2010). This regional growth,  
 71 combined with drivers traveling more miles than in past years, has overloaded US 24 in the  
 72 study area to the point it no longer has adequate capacity for current and future travelers.

## 73 How was this plan developed?

74 US 24 is an important transportation corridor for the Pikes Peak Area Council of  
75 Governments (PPACG). It is part of PPACG's Congestion Management System, and is  
76 identified for widening in its *Fiscally Constrained Long-Range Transportation Plan* for 2035. US 24  
77 improvements were first incorporated into the *Transportation Improvement Program (TIP)* and  
78 *Statewide Transportation Improvement Program (STIP)* in 2003. In addition, as of August 2011, the  
79 STIP and TIP identified funding to acquire select right-of-way under protective buying, as  
80 described in 23 Code of Federal Regulations (CFR) Section 710.503. This process of  
81 protective buying prevents imminent development and increased costs of the identified  
82 parcel.

83 With input from area residents, businesses, and commuters, CDOT, FHWA, PPACG, El  
84 Paso County, the City of Colorado Springs, and the City of Manitou Springs have developed  
85 numerous plans for US 24 in and near the study area over the past three decades. Nearly all  
86 of these plans recommend some combination of improvements to address the  
87 transportation issues on US 24. These plans provided a starting point for this EA to begin  
88 development of a solution for current conditions and those foreseeable by 2035.

89 CDOT began this EA in 2004, working with FHWA, PPACG, local municipalities,  
90 residents, and business owners to evaluate issues and concerns and to develop conceptual  
91 alternatives intended to address those issues and concerns. CDOT afforded these  
92 stakeholders opportunities to help develop and comment on the project alternatives. In  
93 response to community input and to minimize environmental impacts, CDOT made  
94 numerous changes to the conceptual design for this EA. **Chapter 5, Agency Coordination  
95 and Public Involvement** describes the agency coordination and public involvement  
96 conducted during the plan development.

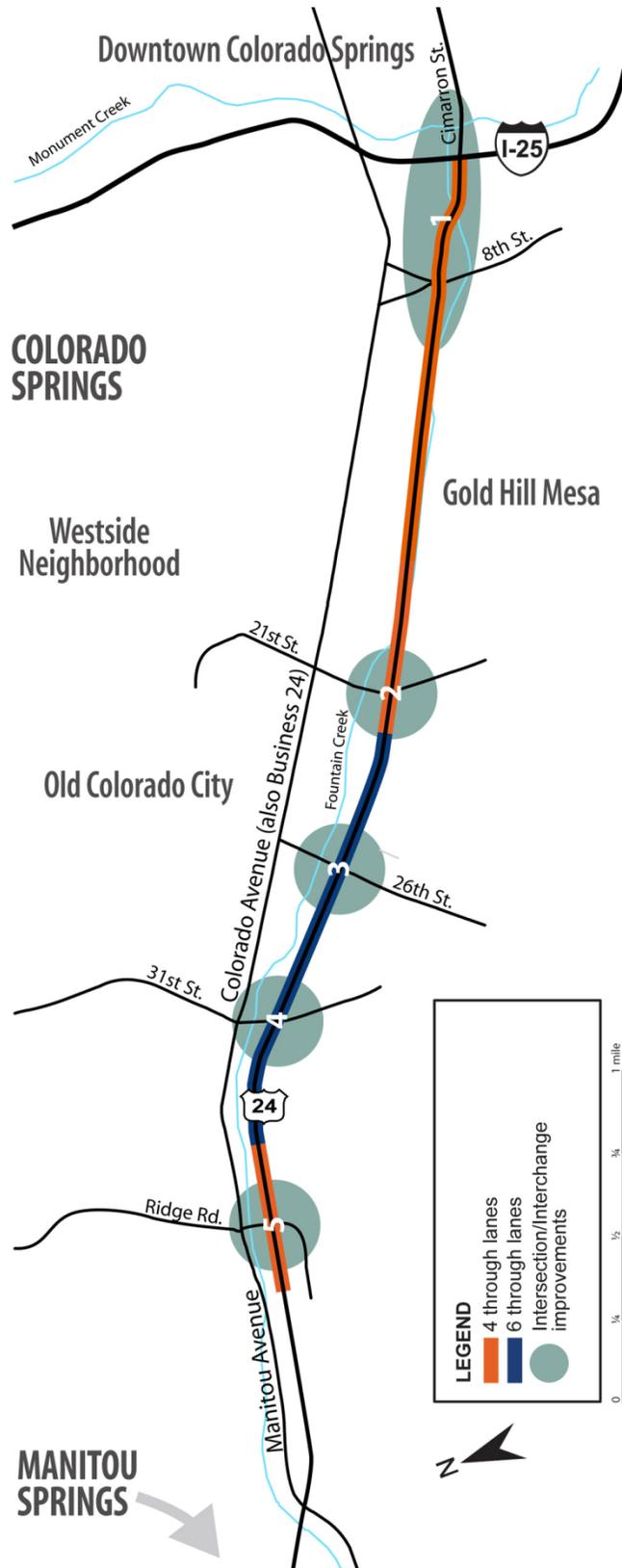
97 After three levels of alternatives screening and evaluation, a Preferred Alternative was  
98 identified that meets the purpose and need for the project while balancing the transportation  
99 needs of local and regional travelers with socioeconomic, environmental, and community  
100 impacts. The Preferred Alternative is the Proposed Action in this EA.

## 101 What is the Proposed Action?

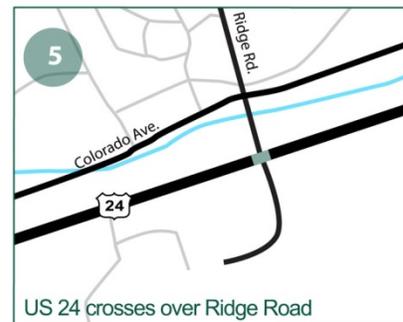
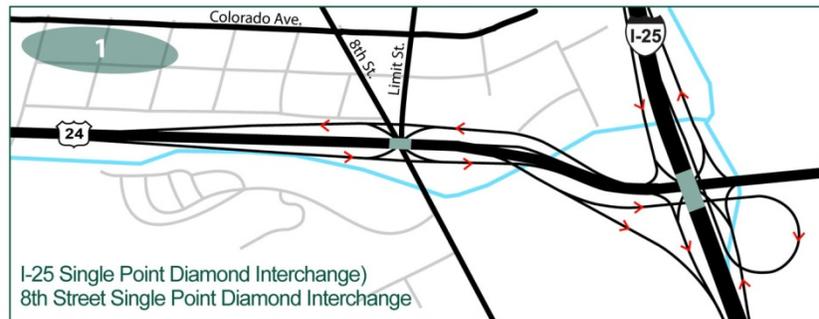
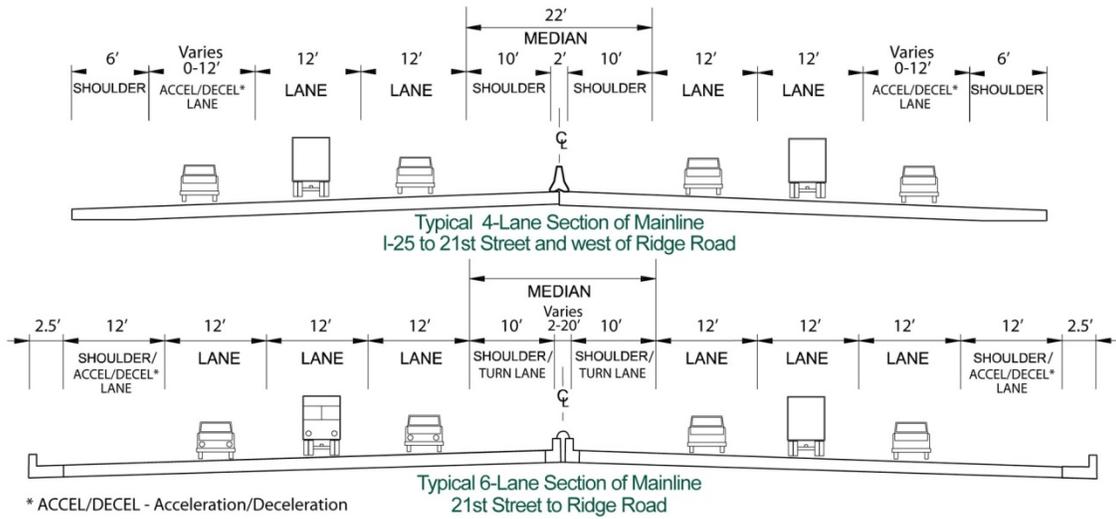
102 Under the Proposed Action, US 24 through-lanes would be designed for a travel speed of  
103 50 miles per hour and meet or exceed American Association of State Highway and  
104 Transportation Officials standards. The Proposed Action is shown in **Appendix A** and  
105 illustrated in **Exhibit ES-3** and **Exhibit ES-4**. The Proposed Action on the US 24 corridor  
106 includes the following elements:

- 107 • **Maintain four through-lanes** (two in each direction) **between I-25 and 21st Street**.
- 108 • **Add two through-lanes, between 21st Street and just west of Ridge Road**, for a  
109 total of six through-lanes (three in each direction).
- 110 • **Replace nine bridges on US 24 and cross streets** to accommodate the profile changes  
111 to US 24. Over Fountain Creek, these bridges would be built to comply with current  
112 state and local standards to reduce flooding hazards in the study area.

113 EXHIBIT ES-3  
114 Proposed Action – US 24 Corridor Overview



115 **EXHIBIT ES-4**  
 116 Proposed Action – Typical Section, Design Details – NOT TO SCALE



- 117 • **Due to replacement of the nine bridges, realign and widen Fountain Creek at**  
118 bridge crossings and locations where the roadway overlaps the existing channel to  
119 provide an armored low-flow channel and a widened stabilized area to accommodate the  
120 100-year flood.
- 121 • **Build single-point diamond interchange (SPDI) with a loop ramp for eastbound-**  
122 **to-northbound travel at US 24 and I-25.** This interchange design replaces the tight  
123 diamond interchange identified in the *I-25 Improvements through the Colorado Springs*  
124 *Urbanized Area EA* (CDOT, 2004a). Since that EA was approved, traffic forecasts and  
125 future traffic operations have been revised by PPACG, making an SPDI design more  
126 efficient operationally.
- 127 • **Naegle Road from 21st Street to 25th Street would be closed because the**  
128 **intersection of 21st Street and Naegle Road is too close to the US 24 and 21st**  
129 **Street interchange.** There is inadequate room to provide a turn lane for vehicles at  
130 Naegle Road.
- 131 **The existing 25th Street bridge over Fountain Creek would be removed because it**  
132 **would no longer connect to Naegle Road and, therefore, provide no function.** The  
133 existing 25th Street would be ended north of the Fountain Creek.
- 134 • **Replace the existing at-grade intersections with interchanges at 8th Street and at**  
135 **21st Street,** which also includes directional interchange ramps and  
136 acceleration/deceleration lanes.
- 137 • **Upgrade the US 24 and 26th Street at-grade intersection,** which also includes left  
138 and right turn lanes.
- 139 • **Widen the intersection of US 24 and 31st Street. Widen the 31st Street and**  
140 **Colorado Avenue intersection.** South of US 24, 31st Street would be rebuilt to better  
141 align with the highway intersection.
- 142 • **Replace the existing at-grade intersection with an overpass that carries US 24**  
143 **over Ridge Road.** Ridge Road would be widened between High Street and Colorado  
144 Avenue and improvements would be made to the Ridge Road and Colorado Avenue  
145 intersection.
- 146 • **All improvements tie into the unimproved, existing US 24 approximately 1,800**  
147 **feet west of Ridge Road.** Because neither existing nor future congestion is a problem  
148 between Ridge Road and Manitou Avenue, no changes to US 24 are proposed west of  
149 Ridge Road.
- 150 • **Build sidewalks on the north-south cross streets** at all intersections and as a part of  
151 all interchanges.
- 152 • **Connect the Midland Trail from 21st to 25th Street,** with north-south trail  
153 connections at each of the interchanges and intersections along the US 24 corridor. The  
154 trail would be built to meet the City of Colorado Spring's trail design standards and to  
155 allow clearance under the bridges for bicycle, pedestrian, and equestrian crossings.  
156 Completing this east-west bicycle and pedestrian trail system was an opportunity  
157 resulting from the required roadway right-of-way acquisitions and the channel re-grading  
158 required by the bridge replacements. The trail would improve pedestrian and bicycle  
159 mobility in the study area and is consistent with community planning.

- 160 • **Incorporate Transportation System Management** elements such as signal timing,  
161 turn lanes, and consideration for transit stops.

162 The Proposed Action also includes various environmental mitigation measures such as  
163 enhancements to park and recreation resources, noise barriers, and permanent water quality  
164 features such as stormwater detention/treatment ponds. These are discussed in more detail  
165 in **Chapter 3, Affected Environment and Environmental Consequences**.

166 A detailed illustration of the Proposed Action is included in **Appendix A**.

## 167 **What are the benefits of the Proposed Action?**

168 The Proposed Action reduces congestion and improves mobility and safety for local and  
169 regional travelers. Increased capacity on US 24 and improved traffic flow on its major cross  
170 streets would reduce neighborhood cut-through traffic, eliminate queues extending from one  
171 intersection to the adjacent intersection, and improve air quality locally around intersections.

172 Channel and structure modifications made as part of the Proposed Action would markedly  
173 reduce flooding hazards within the study area by reducing the size of the Fountain Creek  
174 floodplain. As a result, 68 properties with residential or commercial structures and another  
175 55 housing units at the A-1 Mobile Village trailer park would no longer be in the 100-year  
176 floodplain. Prior to entering Fountain Creek, stormwater would be treated through  
177 permanent water quality features that would be implemented as part of the project (such as  
178 grassed swales and ponds), thus improving water quality in the creek. Noise barriers included  
179 at three locations would reduce noise levels at numerous residences near US 24.

180 As part of the Proposed Action, completing the segment of the Midland Trail between  
181 21st Street and 25th Street would improve pedestrian and bicycle mobility in the study area  
182 and is consistent with community planning. The safety and convenience of travel for  
183 bicyclists and pedestrians would be improved with increased trail connections between parks  
184 and recreation facilities.

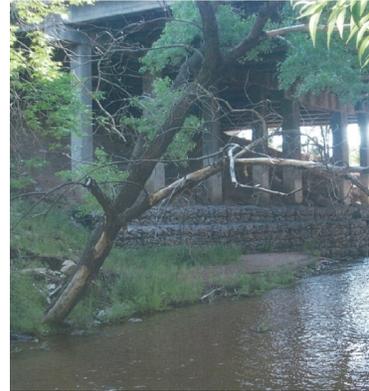
## 185 **What environmental resources were evaluated?**

186 The US 24 EA and Section 4(f) Evaluation evaluates the potential environmental impacts of  
187 implementing the Proposed Action and compares them to the No Action Alternative.  
188 CDOT reviewed a broad spectrum of social, environmental, and community resources for  
189 their presence in the study area and assessed them for potential impacts. Resources evaluated  
190 in detail include transportation, floodplains, right-of-way, historic resources, parks and  
191 recreation resources, traffic noise, social resources, environmental justice, land use,  
192 hazardous materials, water quality, and wetlands. Cumulative impacts also are described; that  
193 is, impacts that could result from individually minor but collectively significant actions over  
194 time, including consideration of other projects in the area.

## 195 How would the project affect Fountain Creek?

196 Fountain Creek runs adjacent to US 24 through the entire study area. East of 31st Street,  
197 95 percent of US 24 is within the 100-year floodplain, as are hundreds of homes and  
198 businesses. Fountain Creek's 100-year floodplain and water quality would be improved  
199 under the Proposed Action.

200 As a result of the Proposed Action's improvements to  
201 US 24 and the required changes on the north-south  
202 connecting streets, the nine bridges over Fountain Creek  
203 must be rebuilt. None of these bridges currently convey the  
204 floodwaters of a 100-year storm. 23 CFR, Part 650 –  
205 Bridges, Structures, and Hydraulics prescribes the policies  
206 and procedures that the FHWA is directed to implement in  
207 the "location and hydraulic design of highway  
208 encroachments on floodplains." The Proposed Action  
209 would reconstruct these bridges in a manner that would  
210 reduce flooding hazards within the study area. To  
211 accommodate the new bridge improvements, the Fountain  
212 Creek channel would be widened and/or deepened at each  
213 bridge to convey larger volumes of stormwater runoff,  
214 thereby removing US 24 from Fountain Creek's floodplain. The Proposed Action would  
215 reduce the area of the floodplain in the study area from 378 acres to 228 acres. This would  
216 reduce the risk of flooding for 68 properties with residential or commercial structures within  
217 the floodplain, along with another 55 housing units at the A-1 Mobile Village trailer park.  
218 The Proposed Action also includes several water quality features and best management  
219 practices (BMPs) to improve water quality in Fountain Creek. Stormwater runoff from the  
220 roadway will be collected and treated in detention ponds and swales before being released  
221 into Fountain Creek. Drop structures and other bank stabilization measures will be  
222 implemented to reduce channel erosion and sedimentation.



*Fountain Creek Parallels US 24*

223 The Proposed Action provides an opportunity to restore and enhance the ecological  
224 condition of Fountain Creek and complements other restoration actions taking place  
225 upstream and downstream. Work in the Fountain Creek floodplain would temporarily  
226 disturb 0.02-acre of wetlands and up to 5.17 acres of waters of the United States, primarily at  
227 bridge crossings. This would disrupt the creek bed and banks, and increase the potential for  
228 erosion during construction. The temporary construction impacts will be mitigated through  
229 implementation of BMPs as described in **Chapter 3, Affected Environment and**  
230 **Environmental Consequences.**

## 231 How much additional right-of-way is needed for the highway?

232 Approximately 78 acres of land would need to be acquired through acquisition of all or part  
233 of 109 parcels. This includes 81 commercial, 3 mixed-use, 14 public, and 11 residential  
234 parcels. Property acquisitions would range from small slivers to entire parcels. A total of  
235 24 residences would be displaced, 20 of which are on properties zoned for residential and 4  
236 that are in mined-use zoning. The Proposed Action would relocate 67 businesses, and  
237 acquire 10 vacant commercial properties. All acquisitions and relocations will comply fully

238 with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,  
239 as amended (Uniform Act).

240 CDOT is committed to maintaining open communication with property owners and  
241 stakeholders affected by the Proposed Action. Team members have contacted all owners of  
242 potentially affected properties and have met with many of these owners to explain the  
243 Proposed Action and to describe how it affects their properties. During these meetings,  
244 CDOT also explained the right-of-way acquisition process and the rights that owners and  
245 tenants have under the Uniform Act. CDOT continues to respond to owners and  
246 stakeholders who contact the project team with questions or comments, with the intent of  
247 maintaining open communication and providing as much information as is known at the  
248 time.

249 During final design, CDOT will examine opportunities where design refinement can  
250 minimize impacts of right-of-way requirements and will coordinate with property owners in  
251 accordance with the Uniform Act.

## 252 **How would the project affect historic properties?**

253 Twenty-four historic properties and one historic district are present within the project's Area  
254 of Potential Effect, predominantly consisting of single-family residences dating from the late  
255 1800s to early 1900s, a segment of the Colorado Midland Railroad, and the Westside  
256 Historic District (a large, residential historic district). Two historic properties were assumed  
257 eligible for the purpose of Section 106 of the National Historic Preservation Act evaluation  
258 because eligibility could not be determined due to restricted access.

259 Due to extensive effort during planning and preliminary design, the project team was able to  
260 avoid impacts to the Midland Terminal Railroad Roundhouse at 21st Street, which is listed in  
261 the National Register of Historic Places. However, CDOT was not able to avoid adverse  
262 effects to all of the historic properties that have been identified. Four of the evaluated  
263 individual properties would be acquired in the Proposed Action. Two historic commercial  
264 buildings and two historic homes located near proposed interchanges would need to be  
265 acquired. In addition, 14 percent of one hotel/motel property would be acquired but it is not  
266 expected to be an adverse effect. Despite a broad evaluation of interchange design options,  
267 CDOT determined that avoiding these impacts would not be possible. CDOT, FHWA, the  
268 Colorado State Historic Preservation Officer (SHPO), and local preservation groups have  
269 reached an agreement on how to mitigate the impacts to these historic properties. Mitigation  
270 being considered includes, but is not limited to, interpretive signing, architectural salvage  
271 from historic buildings, and investigation into the reuse of the Chief Petroleum sign. These  
272 and other agreements have been documented in a Memorandum of Agreement located in  
273 **Appendix H.**

## 274 **How would the project affect neighborhoods?**

275 The route that US 24 follows today has been a transportation route for more than 100 years,  
 276 beginning with the Midland Trail, the Colorado Midland Railroad, and now as a highway  
 277 corridor. As a result, neighborhoods in the study area have grown up around the trail, rail,  
 278 and highway corridor. The Proposed Action reduces congestion for through-trips on US 24  
 279 and, thus, reduces cut-through traffic from neighborhood streets. The Proposed Action  
 280 would improve travel conditions and connectivity for bicyclists and pedestrians, providing  
 281 opportunities to connect to parks and trails. The project would improve the Fountain Creek  
 282 channel and reduce flooding hazards. Noise barriers located between 11th Street and  
 283 14th Street on the north side of US 24, near the A-1 Mobile Homes and residences on the  
 284 south side of US 24 on Red Canyon Place, would reduce highway noise.

## 285 **What happens if the Proposed** 286 **Action is not built?**

287 This EA provides an analysis of the consequences of  
 288 doing nothing: the No Action Alternative. Without a  
 289 significant investment in roadway improvements, traffic  
 290 congestion would increase (particularly in the morning  
 291 and evening peak hours) and traffic operations at  
 292 several locations would fail to meet acceptable levels of  
 293 service.

294 Under the No Action Alternative, flooding during large storm events would continue and  
 295 pollutants from stormwater runoff would continue to flow directly into Fountain Creek.  
 296 High-traffic noise levels would persist for residences adjacent to the highway.

297 The No Action Alternative would not require any property acquisition and it would not  
 298 affect historic properties.

## 299 **Has the public participated in this project?**

300 Members of the public have been involved from the start of the project and have helped  
 301 shape the project outcomes. Since 2004, the project team has held nine public meetings to  
 302 present the progress and preliminary findings of the study. CDOT right-of-way staff  
 303 conducted one-on-one meetings with numerous property and business owners, and  
 304 participated in dozens of meetings with small groups, neighborhood organizations, and  
 305 business groups (including organizations such as City of Colorado Springs' Trails, Open  
 306 Space and Parks program and the Organization of Westside Neighborhoods). Individuals  
 307 have contributed through several working groups and committees that are described in  
 308 **Chapter 5, Agency Coordination and Public Involvement.**

309 In addition to meetings, various communication practices have been employed as this EA  
 310 was conducted, including newsletters and postcards, an active website, a project hotline, and  
 311 an email address where individuals can ask questions or request information.



*Two open house participants comment on the US 24 corridor elements*

## 312 Where can I get more information?

313 Information can be obtained in several ways. The project website at  
314 [www.coloradodot.info/projects/us24west](http://www.coloradodot.info/projects/us24west) has information regarding the project, the NEPA  
315 process, and related activities. Copies of the EA can be reviewed at the locations listed in  
316 **Chapter 5, Agency Coordination and Public Involvement**. In addition, individuals can  
317 attend the Public Hearing (details are listed below) to learn more or provide comments  
318 about the EA study and its recommendations and conclusions.

319 The project team can be contacted by calling the project hotline at (719) 477-4970 or by  
320 emailing the project team at [us24winfo@wilsonco.com](mailto:us24winfo@wilsonco.com). Written comments by be mailed to  
321 US 24 EA Comments c/o Wilson & Company 5755 Mark Dabling Boulevard, Suite 220,  
322 Colorado Springs, Colorado 80919-2200.

## 323 What is the next step?

324 FHWA and CDOT will provide the US 24 West EA and the Section 4(f) Evaluation for  
325 agency and public comment. A 45-day comment period will begin with the publishing of the  
326 EA. Within the comment period, CDOT will conduct a Public Hearing. Invitations  
327 announcing the Public Hearing will be sent to all individuals on the mailing list. The Public  
328 Hearing will be advertised in newspapers, websites, neighborhood newsletters, and flyers  
329 distributed throughout the study area. Interested individuals can attend the Public Hearing to  
330 provide comments or learn more about the EA and the Section 4(f) Evaluation. Written  
331 comments can be provided in person at the public hearing or on the project website at  
332 [www.coloradodot.info/projects/us24west](http://www.coloradodot.info/projects/us24west).

333 After considering public comments, FHWA may prepare a Decision Document that may  
334 determine a recommendation for Section 4(f) and determine whether to issue a Finding of  
335 No Significant Impact (FONSI), revise the EA, or prepare an Environmental Impact  
336 Statement to further analyze environmental consequences. If it is determined that a FONSI  
337 is appropriate and a FONSI has been approved, CDOT could proceed with final design,  
338 depending on funding and regional priorities. As noted previously, as of August 2011, the  
339 STIP and TIP identified funding to acquire select right-of-way under protective buying, as  
340 described in 23 CFR Section 710.503. The process of protective buying prevents imminent  
341 development and increased costs of the identified parcel. Future right-of-way acquisition and  
342 construction are dependent on funding availability and would begin when sufficient funds  
343 are secured.

344 **Chapter 3, Affected Environment and Environmental Consequences**, provides  
345 descriptions of the existing environment in the study area and describes how the project  
346 could potentially affect natural and man-made resources if constructed. A summary of the  
347 impacts and mitigations that have been identified in **Chapter 3, Affected Environment**  
348 **and Environmental Consequences** is provided in **Exhibit ES-5**.

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Transportation	<ul style="list-style-type: none"> <li>▪ Traffic conditions would continue to deteriorate in the study area with most locations operating at Level of Service (LOS) E or F in the evening peak travel hour.</li> <li>▪ Increasing congestion would cause longer travel times through the study area.</li> <li>▪ Congestion would result in more cut-through traffic through the neighborhoods.</li> <li>▪ Continued congestion at US 24 intersections could affect the timeliness of bus service and could affect timely transfers between bus routes.</li> <li>▪ As funding becomes available, some improvements would be constructed including the connection of new trail segments, which would be constructed by the City of Colorado Springs Parks Department.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traffic operations would be improved.</li> <li>▪ The single-point diamond interchange (SPUI) proposed at the I-25 interchange would eliminate the tight curve and low speeds on the southbound off-ramp.</li> <li>▪ The interchange ramps between 8th Street and I-25 would be connected to allow continuous flow of traffic between the two interchanges.</li> <li>▪ Flyover ramps at the I-25 interchange would allow access without stopping at either the 8th Street or I-25 interchanges.</li> <li>▪ Traffic operations to the intersection on 8th Street would be improved.</li> <li>▪ The existing right-in/right-out at the 14th Street intersection would be removed.</li> <li>▪ Naegle Road from 21st Street to 25th Street would be closed.</li> <li>▪ The existing 25th Street bridge over Fountain Creek would be removed.</li> <li>▪ Express bus service on US 24 would be accommodated.</li> <li>▪ Bus operations on Colorado Avenue and surrounding roads would be improved.</li> <li>▪ Construction could temporarily impact bus stops for transit routes that cross US 24.</li> <li>▪ Sidewalks would be added on each of the cross streets along US 24.</li> <li>▪ A segment of the Foothills Trail would be temporarily impacted by construction.</li> <li>▪ The Midland Trail system would improve local pedestrian and bike mobility.</li> <li>▪ During construction congestion in and surrounding the construction area would increase during times of lane closures and detours would temporarily increase traffic volumes on adjacent neighborhood streets.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDOT will construct a cul-de-sac on 25th Street south of Vermijo Avenue.</li> <li>▪ CDOT will construct an on-street trail on Ridge Road from Colorado Avenue south to Red Rock Canyon Open Space.</li> <li>▪ CDOT will work with Mountain Metro Transit to ensure access is maintained to bus stops on 26th Street during construction.</li> <li>▪ Bridges over Fountain Creek will be built to meet the City of Colorado Springs trail design standards.</li> <li>▪ CDOT will relocate Midland Trail at each grade crossing during construction, until the permanent trail can be constructed as part of each bridge improvement.</li> <li>▪ CDOT will place signs along the Midland Trail notifying users that the trail may flood.</li> <li>▪ CDOT will reconstruct and slightly realign the Midland Trail between 8th Street and 11th Street.</li> <li>▪ CDOT will reconstruct the on-street trail of the Foothills Trail on 31st Street in its current location.</li> <li>▪ CDOT will collaborate with the City of Colorado Springs Parks, Recreation &amp; Cultural Services Department (or Trails, Open Space &amp; Parks program [TOPS], as appropriate) on the alignment and design of trails to be constructed.</li> <li>▪ A traffic control plan will be developed to minimize traffic disruption during construction.</li> <li>▪ Construction phasing and other activities will be planned to minimize the impact to the traveling public and emergency service providers.</li> <li>▪ CDOT will develop a Public Information Plan during construction which will provide coordination with all stakeholders.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Floodplains	<ul style="list-style-type: none"> <li>▪ US 24 and much of the adjoining land, including hundreds of residential and commercial properties, would remain in the 100-year floodplain of Fountain Creek and its tributaries.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Construction would cause delays for the traveling public and in cars or those on public transit and may cause out-of-direction travel.</li> <li>▪ The bridges crossing Fountain Creek at 8th Street, 21st Street, 26th Street, 31st Street, Ridge Road, and two US 24 bridges would be rebuilt in accordance with current state and local design standards. This includes re-grading Fountain Creek upstream and downstream of each bridge.</li> <li>▪ The size of the floodplain of Fountain Creek would be reduced from approximately 378 acres to 228 acres.</li> <li>▪ US 24 and bridges on the mainline and side streets would be removed from the floodplain.</li> <li>▪ Roadway embankments encroach into the Fountain Creek floodplain at three locations: on the north bank from 8th Street to 15th Street, on the south bank between 25th Street and 31st Streets, and on the south bank from 31st Street and Ridge Road.</li> <li>▪ The design would strive to maintain the low-flow channel in its current location whenever possible to protect existing large trees and stream-side vegetation</li> <li>▪ Minor changes are anticipated at the confluences of each tributary creek to Fountain Creek.</li> <li>▪ US 24 and its intersections would no longer be overtopped during the 100-year flood.</li> <li>▪ An estimated 68 properties with residential or commercial structures in the floodplain would no longer be in the floodplain.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Any lane closures during construction will comply with CDOT's Lane Closure Strategy.</li> <li>▪ Advance notice will be provided for extended lane closures.</li> <li>▪ Detours for vehicles, bicycles, and pedestrians will be identified with adequate signing to minimize out-of-direction travel.</li> <li>▪ CDOT will coordinate with the USACE to re-grade the Fountain Creek channel from I-25 to Ridge Road to accommodate the 100-year flood, stabilize the newly constructed slopes, and minimize erosion during construction.</li> <li>▪ Bridges will be sized to accommodate the 100-year flood.</li> <li>▪ The design will utilize retaining walls to provide adequate channel width and depth in confined areas.</li> <li>▪ Disturbed areas will be stabilized and re-vegetated with native species.</li> <li>▪ CDOT will place signs along Midland Trail notifying users that portions of the trail are within the 100-year floodplain.</li> <li>▪ During the final design, CDOT will coordinate with the appropriate local and federal agencies to conduct hydraulic analysis, confirm limits of improved floodplain, and provide a Conditional Letter of Map Revision.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Right-of-Way	<ul style="list-style-type: none"> <li>▪ Improvements included in the No Action Alternative are likely to require the acquisition of additional ROW. The amount of ROW acquisition and whether residential or business relocations would be required is not yet known.</li> </ul>	<p>However, the Midland Trail system from I-25 to 31st Street would remain within the floodplain along with 55 units of manufactured housing at A-1 Mobile Village.</p> <ul style="list-style-type: none"> <li>▪ Acquisition of approximately 78 acres of ROW from 109 properties (81 commercial, 3 mixed-use, 14 public, and 11 residential), affecting 75 ownerships. Of the 109 impacted properties, 87 would be acquired in total and the remaining 22 would require partial acquisition.</li> <li>▪ There would be relocation for each residential unit and each business including a total of 24 households or residential units and 77 businesses would require relocation.</li> </ul>	<ul style="list-style-type: none"> <li>▪ For any person(s) whose real property interests may be impacted by this project, the acquisition of those property interests will fully comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act).</li> <li>▪ All property acquisition and relocation shall comply fully with federal and state requirements, including Uniform Act defined previously. CDOT requires Uniform Act compliance on any project for which it has oversight responsibility, regardless of the funding source. Additionally, the Fifth Amendment of the United States Constitution provides that private property may not be taken for a public use without payment of "just compensation." All impacted residential or commercial properties will be provided notification of CDOT's intent to acquire an interest in their property, including a written offer letter of just compensation specifically describing those property interests. A ROW specialist will be assigned to each property owner to assist them with this process.</li> </ul>
Historic Properties	<ul style="list-style-type: none"> <li>▪ Improvements are not expected to result in impacts to historic properties.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 14 No Historic Properties Affected, 6 No Adverse Effects, and 5 Adverse Effects. The historic district received an Adverse Effect determination because of the acquisition and demolition of two contributing properties.</li> <li>▪ Adverse effects to two historic commercial properties (5EP5335 and 5EP5336), two historic residences (5EP5285 and 5EP 5288), and the Westside Historic District (5EP5364).</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDOT, the Colorado State Historic Preservation Officer (SHPO), and local preservation groups have reached an agreement on how to mitigate the impacts to these historic properties. Mitigation will include, but is not limited to, interpretive signing, architectural salvage from historic buildings, and investigation into the reuse of the Chief Petroleum sign. These and other agreements have been documented in a Memorandum of Agreement which can be found in <b>Appendix H</b>.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Parks and Recreation Resources	<ul style="list-style-type: none"> <li>▪ Improvements to the 8th Street intersection would involve widening 8th Street north of US 24.</li> <li>▪ Would have the potential to impact the Midland Trail at 8th Street.</li> <li>▪ Connect the Midland Trail between 21st Street and 26th Street and into Manitou Springs on properties currently under lease and with new license agreements or would be constructed on-street. This would add to the trail system and improve pedestrian and bike access to Manitou Springs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Would affect Foothills Trail, Vermijo Park, 21st Street pocket park, and Midland Trail.</li> <li>▪ Acquisition of commercial structures between Blunt Park and US 24 could result in a change to the visual environment.</li> <li>▪ Require realignment of Midland Trail between 8th Street and 11th Street, a distance of approximately 1,584 feet (0.3 mile).</li> <li>▪ Midland Trail would be connected between 21st Street and 26th Street.</li> <li>▪ Trail Crossings at 21st, 26th, 31st Streets, and Ridge Road would have to be temporarily detoured while the grade separated crossing was constructed.</li> <li>▪ The full acquisition of the 21st Street pocket park.</li> <li>▪ Approximately 2.2 acres of Vermijo Park would have temporary impacts for the grading of Fountain Creek.</li> <li>▪ Less than 0.1 acres of Vermijo park would be used for new sidewalk along the eastern edge of the park.</li> <li>▪ A retaining wall would be constructed between Vermijo Park and the Fountain Creek channel, which could alter views toward US 24.</li> <li>▪ Approximately 780 linear feet (0.15 mile) of Foothills Trail would be reconstructed in its current on-street location.</li> <li>▪ Vehicular access to Red Rock Canyon would be changed from the at-grade intersection at Ridge Road to 31st Street or Manitou Avenue via US 24.</li> <li>▪ Temporary detours and an increase in construction-related traffic, noise and dust would be expected throughout construction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Midland Trail will be realigned between 8th Street and 11th Street.</li> <li>▪ CDOT will provide advance notice to the community prior to the relocation of the Prospector Sculpture at the 21st Street pocket park.</li> <li>▪ CDOT will provide \$50,000 to the City of Colorado Springs to prepare a park plan for Vermijo Park.</li> <li>▪ The Foothills Trail will be reconstructed in place along 31st Street with new streetscape.</li> <li>▪ CDOT will provide advanced notice to users regarding temporary trail relocations during construction.</li> <li>▪ CDOT will seek community input and will coordinate with the City of Colorado Springs Parks, Recreation &amp; Cultural Services Department (or Trails, Open Space &amp; Parks program [TOPS], as appropriate) with regard to the design and aesthetics of these trails.</li> <li>▪ CDOT will relocate Midland Trail at each grade crossing during construction, until the permanent trail can be constructed as part of each bridge improvement.</li> <li>▪ All trees greater than 2 inches in diameter at breast height (DBH) will be mitigated at a 1 to 1 basis. Non-native trees will be replaced with native trees.</li> <li>▪ A letter from CDOT to the City of Colorado Springs explaining the proposed mitigation for Parks and Trails was signed by the City, indicating their agreement, and is included in <b>Appendix I</b>.</li> <li>▪ Mitigation for temporary construction related impacts such as detours, out-of-direction travel, and air emissions are addressed in <b>Section 3.1, Transportation Resources</b> and <b>3.13.4, Air Quality</b>.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Traffic Noise	<ul style="list-style-type: none"> <li>▪ Growth in traffic would increase noise along US 24 in the study area between 1-3 decibels.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traffic noise would affect 29 residences and one child-development center.</li> <li>▪ Short-term noise impacts would occur as the direct result of construction activities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Noise walls ranging from 15 to 18 feet in height and 870 to 1,490 in length will be constructed at three locations:               <ol style="list-style-type: none"> <li>1. North side of US 24 from 11th Street to 14th Street</li> <li>2. The A-1 mobile home park on the south side of US 24</li> <li>3. The residences on the south side of US 24 on Red Canyon Place</li> </ol> </li> <li>▪ During final design of the project, all mitigation recommendations will undergo an abatement evaluation to refine barrier dimensions and siting, and assure that conditions and homeowners/residents desires for noise abatement have remained consistent with conditions evaluated in this document.</li> <li>▪ Area residents will have the opportunity to provide input on design elements related to noise mitigation, including design, grading and landscaping, and color and material of noise barriers, with the goal of constructing an aesthetically pleasing and economically viable project.</li> <li>▪ Construction noise impacts will be mitigated by limiting work to daytime hours when possible, as described by CDOT and City of Colorado Springs requirements.</li> <li>▪ Require the contractor to use well-maintained equipment, particularly with respect to mufflers.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Social Resources	<ul style="list-style-type: none"> <li>▪ Would not address congestion on US 24. Adverse effects on socioeconomic conditions would include longer travel times, neighborhood cut-through traffic, deteriorating safety conditions, an increase in localized air pollution and noise, and lengthened emergency response times.</li> <li>▪ Would not support planned development/re-development in the study area. Access to Gold Hill Mesa would become increasingly difficult, which could make residential and commercial units less desirable.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Would benefit local residents, businesses, and regional commuters by reducing congestion, and improving mobility and connectivity along US 24.</li> <li>▪ The US 24 overpass of Ridge Road improves safety for motorized and non-motorized travelers to the Red Rock Canyon Open Space and to the neighborhood south of US 24.</li> <li>▪ Sidewalks would be provided to safely accommodate pedestrians.</li> <li>▪ Access to US 24 at 14th Street would be removed.</li> <li>▪ Acquisition and relocation of residential and commercial properties.</li> <li>▪ Employees of the relocated businesses would have to travel to a new location.</li> <li>▪ Improved traffic operations would increase the geographic market area of the businesses.</li> <li>▪ Shoulders would provide access to emergency service providers.</li> <li>▪ During construction, temporary detours, out-of-direction travel, and construction related noise would affect local residents, businesses, and regional commuters.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDOT will provide advance notice to emergency service providers, local schools, homeowners associations, and local businesses of upcoming construction activities.</li> <li>▪ The acquisition of those property interests will fully comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act).</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Environmental Justice	<ul style="list-style-type: none"> <li>▪ May require additional ROW and may result in the relocation of minority or low-income residents. The projects included in the No Action Alternative were not designed when this analysis was conducted, and the ways in which impacts would be distributed are not yet known.</li> <li>▪ Adverse effects to minority and low-income populations include those that are typically caused by traffic congestion and impaired mobility (e.g., longer travel times, neighborhood cut-through traffic, deteriorating safety conditions, an increase in localized air pollution and noise, and lengthened emergency response times).</li> <li>▪ Worsening congestion on local streets as drivers seek alternatives to US 24, could affect the timeliness of transit routes serving the area.</li> <li>▪ Properties adjacent to US 24 would continue to be subject to 100-year flooding from Fountain Creek.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The majority of residential acquisitions are located in census blocks with higher-than-average percentages of low-income households. These impacts would be predominately borne by low-income populations.</li> <li>▪ Increased dust, dirt, noise, traffic, and access disruptions during construction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDOT will follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.</li> <li>▪ CDOT will make a public information plan available throughout construction.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>▪ Would only partially support the relevant goals and objectives presented in adopted land use plans.</li> <li>▪ Would improve intersection geometry at both 8th Street and 21st Street and complete the Midland Trail which might require ROW acquisition and the conversion of existing land to transportation uses.</li> <li>▪ Would not fully address transportation needs within the US 24 study area and would be unable to accommodate the additional traffic associated with anticipated growth and redevelopment. Unaddressed transportation needs could hinder redevelopment within the study area.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consistent with planned land uses.</li> <li>▪ Supports the goals and objectives of adopted land use plans and policies.</li> <li>▪ Conversion of residential, commercial, and public land to a transportation use.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No land use specific mitigation measures are necessary.</li> <li>▪ Local planning jurisdictions have the authority to make land use decisions and approve land use change and development.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Hazardous Materials	<ul style="list-style-type: none"> <li>▪ Potential to encounter contaminated structures, soils or groundwater.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The following three existing recognized environmental conditions (REC's) are impacted:               <ul style="list-style-type: none"> <li>○ Leaking Underground Storage Tank Site - Acorn Food Store</li> <li>○ Voluntary Cleanup Program Site - Pikes Peak Humane Society</li> <li>○ Historical Landfill - Martin Drake Power Plant</li> </ul> </li> <li>▪ Some highway bridge structures are known to have been painted with lead-based paint.</li> <li>▪ If a portion of Gold Hill Mesa property is acquired for ROW, research should be conducted with El Paso County to determine if there are institutional or engineering controls on the property that require special handling of the soil if it is excavated.</li> <li>▪ The acquisition of approximately 78 acres of land and the displacement of 24 residences and 77 businesses. All such acquisitions involve some risk of encountering various common hazardous materials, such as asbestos or lead-based paint, that would not normally be listed on any database of hazardous material sites.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CDOT will inspect and test for asbestos, lead-based paint, and hazardous material on any bridges, buildings, and other structures.</li> <li>▪ Prior to acquisition of any site a site specific Initial Site Assessment Phase 1 ESA will be conducted.</li> <li>▪ For leaking underground storage tank (305 South 8th Street) and the underground chemical plume (633 South 8th Street), CDOT will undertake file review at Colorado's Division of Oil and Public Safety and/or Department of Public Health and Environment and further inquiries with the property owners.</li> <li>▪ Regarding the historic landfill associated with the power plant, CDOT will initiate further discussion with Colorado Springs Utilities to determine if soils or groundwater have been impacted or would be impacted.</li> <li>▪ CDOT will conduct a Phase II Environmental Site Assessment for 305 South 8th Street, 633 South 8th Street, and 700 South Conejos Street.</li> <li>▪ CDOT will prepare a Materials Handling Plan in accordance with CDOT Standard Specification 250.</li> </ul>
Water Quality	<ul style="list-style-type: none"> <li>▪ Stormwater from roadways that contain contaminants would continue to discharge into Fountain Creek and its tributaries.</li> <li>▪ Increasing congestion would increase pollutant concentrations in stormwater runoff, resulting in further degradation in surrounding water bodies.</li> <li>▪ New impervious areas would be added, however, these projects have not been designed so it would not be possible to estimate the new impervious area.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Add 42 acres of impervious surface area.</li> <li>▪ Channel realignments would be necessary in three locations.</li> <li>▪ During construction, soil-disturbing activities and the placement of new fill would expose surfaces subject to erosion.</li> <li>▪ Wider drainage areas provide opportunity for wetlands to re-establish.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Permanent water quality treatment features to filter roadway runoff and improve water quality.</li> <li>▪ During construction, silt fences, diversion berms, vehicle tracking control, inlet and outlet protection, street sweeping, and concrete washout locations will be established.</li> <li>▪ Temporary stream crossings and diversion will be designed to minimize water quality and habitat impacts. Native vegetation will be installed and implemented in the affected areas.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Wetlands and Waters of the US	<ul style="list-style-type: none"> <li>▪ No wetlands or waters of the United States would be impacted permanently.</li> <li>▪ Drainage conditions in Fountain Creek and its tributaries would be unchanged, and erosion and sedimentation would continue to result in marginal riparian conditions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact Wetland 1, which is 0.02 acre.</li> <li>▪ Impact to waters of the US estimated as the area of Fountain Creek below the ordinary high water mark.</li> <li>▪ Temporarily impact a total of 5.17 acres of waters of the US.</li> <li>▪ Temporary impacts to Monument Creek at the confluence with Fountain Creek may occur.</li> <li>▪ While these areas would be disturbed during construction, the acreage of waters of the US would be permanently enlarged.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The requirements under the CDPS MS4 permit and the New Development Redevelopment Program (NDRD) will be followed during design and construction.</li> <li>▪ CDOT requirements under the "Consent Decree" (January, 2009) with the CDPHE will be implemented.</li> <li>▪ CDOT will obtain a Colorado Discharge Permit System (CDPS) General Permit for Stormwater Discharges Associated with Construction Activities from the Water Quality Control Division of CDPHE.</li> <li>▪ A Construction Dewatering Permit will be required.</li> <li>▪ A Stormwater Management Plan will be developed.</li> <li>▪ Erosion and sediment BMPs will be implemented.</li> <li>▪ Impacted wetlands will be mitigated at a 1:1 ratio, adjacent to existing wetlands. The mitigation will be the use of the Limon Mitigation Bank because the project area is in the service area for this bank.</li> <li>▪ Realignment of Fountain Creek represents improved stream function, flood conveyance, bank stability, and riparian habitat potential.</li> <li>▪ CDOT will obtain a Section 404 permit from the USACE.</li> </ul>
Archaeological Resources	<ul style="list-style-type: none"> <li>▪ No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>▪ All recorded sites (5EP2161, 5EP2165, 5EP365) lie outside of the anticipated limits of construction and would not be impacted by construction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ In the unlikely event that cultural deposits are discovered during construction, CDOT would follow its standard practice of ceasing work, consulting with the CDOT archaeologist, and evaluating materials in consultation with the Colorado SHPO to determine if mitigation is required.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Paleontological Resources	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>No fossils were observed within the study area and no records of fossils from within the study area were found.</li> </ul>	<ul style="list-style-type: none"> <li>If any sub-surface bones or other potential fossils are found anywhere within the study area during ground disturbance, the CDOT Staff Paleontologist will be notified immediately to assess their significance and make further recommendations.</li> </ul>
Native American Consultation	<ul style="list-style-type: none"> <li>No Impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Consulting tribes are offered the opportunity to identify concerns about cultural resources and comment on how the project might affect them</li> </ul>	<ul style="list-style-type: none"> <li>If it is found that the project would impact properties that are eligible for inclusion in the National Register and are of religious or cultural significance to one or more consulting tribes, their role in the consultation process may also include participation in resolving how best to avoid, minimize, or mitigate those impacts</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Proposed Action is not expected to exceed NAAQS for pollutants.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation necessary.</li> </ul>
Visual Resources	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Improve visual consistency and quality within the US 24 corridor.</li> <li>Accentuate existing views of Pikes Peak and Cheyenne Mountain.</li> <li>New infrastructure components, such as retaining walls, noise walls, and jersey barriers that would obstruct views to and from the project area.</li> <li>Improve short-range views along the north and south side of US 24.</li> </ul>	<ul style="list-style-type: none"> <li>Coordinated architectural aesthetic treatments of new structural elements in accordance with the <i>US 24 I-25 to Ridge Road Aesthetic Guidelines</i> (THK, 2009).</li> </ul>
Fish and Wildlife	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Grade-separated crossing of US 24 at Ridge Road would improve wildlife crossing opportunities from north to south of US 24.</li> <li>Minor habitat loss as a result of vegetation removal during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Construction activities would be carried out in accordance with CDOT's standard BMPs and re-vegetation requirements.</li> <li>Active nesting survey will be conducted within the study area prior to the start of any construction activities to ensure compliance with Migratory Bird Treaty Act of 1918 (MBTA).</li> <li>CDOT may be required to obtain a Senate Bill 40 Wildlife Certification permit from CDOW.</li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Threatened and Endangered Species	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Federal or state-listed threatened and endangered species and state species of special concern are either not present or are unlikely to occur in the study area.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation necessary.</li> </ul>
Vegetation and Noxious Weeds	<ul style="list-style-type: none"> <li>Construction of the 8th Street and the 21st Street improvements could disturb vegetation and noxious weeds.</li> </ul>	<ul style="list-style-type: none"> <li>Natural vegetation and noxious weeds would be disturbed during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Areas disturbed during construction will be re-vegetated with native species.</li> <li>All trees greater than 2 inch diameter breast height (DBH) will be mitigated at a 1:1 basis.</li> <li>Non-native trees will be replaced with native trees.</li> <li>Noxious weeds survey will be conducted.</li> <li>An Integrated Noxious Weed Management Plan will be developed and implemented during construction.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Major utility lines are in the study area and may result in conflicts.</li> </ul>	<ul style="list-style-type: none"> <li>Utilities will be avoided through design modification, or where conflicts cannot be avoided, utilities will be relocated.</li> <li>Buried utilities may be protected with encasements.</li> </ul>
Farmlands	<ul style="list-style-type: none"> <li>No farmlands are present in the study area.</li> </ul>	<ul style="list-style-type: none"> <li>No farmlands are present in the study area.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation necessary.</li> </ul>
Cumulative Impacts	<ul style="list-style-type: none"> <li>CDOT would not take any action under the No Action Alternative and would not create cumulative impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Beneficial cumulative impacts to landscape patterns, water quality, air quality, transportation patterns, and visual resources.</li> <li>The level of traffic noise would increase with traffic volumes, except in five areas of the US 24 corridor where noise barriers would be constructed as mitigation, as described above.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation necessary.</li> </ul>
Section 4(f) Resource: 21st Street Pocket Park	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Full acquisition</li> </ul>	<ul style="list-style-type: none"> <li>The Prospector Sculpture will be relocated to a location along US 24.</li> </ul>
Section 4(f) Resource: Vermijo Park	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Partial acquisition of 0.01 acres.</li> <li>Removal of the existing baseball field.</li> </ul>	<ul style="list-style-type: none"> <li>CDOT will provide \$50,000 to plan Vermijo Park.<sup>1</sup></li> </ul>

**EXHIBIT ES-5**

## Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Section 4(f) Resource: Midland Trail	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Partial acquisition of 0.3 miles</li> </ul>	<ul style="list-style-type: none"> <li>Realign the Midland Trail between 8th Street and 11th Street to ensure a connection with the full trail.</li> </ul>
Section 4(f) Resource: 5EP5285 1815 Sheldon Avenue	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Full acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Details are included in the signed MOA.<sup>2</sup></li> </ul>
Section 4(f) Resource: 5EP5288 1803 Sheldon Avenue	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Full acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Details are included in the signed MOA.<sup>2</sup></li> </ul>
Section 4(f) Resource: 5EP5335 CITGO Lubricants 302 South 10th Street	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Full acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Details are included in the signed MOA.<sup>2</sup></li> </ul>
Section 4(f) Resource: 5EP5336 Chief Petroleum Company 301 South 10th Street	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Full acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Details are included in the signed MOA.<sup>2</sup></li> </ul>
Section 4(f) Resource: 5EP5218 Timber Lodge 3627 West Colorado Avenue	<ul style="list-style-type: none"> <li>No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>Partial acquisition of 0.43 acres</li> </ul>	<ul style="list-style-type: none"> <li>CDOT will replace the existing vegetation and trees to maintain the visual screen and wooded setting of the property. All trees greater than 2 inches in diameter at breast height (DBH) will be mitigated at a 1 to 1 basis. Non-native trees will be replaced with native trees.</li> <li>Details are included in the signed MOA.<sup>2</sup></li> </ul>

**EXHIBIT ES-5**  
 Summary of Impacts and Mitigation, US 24 EA

Resource	Impacts of the No Action Alternative	Impacts of the Proposed Action	Mitigation Measures for the Proposed Action
Section 4(f) Resource: 5EP5364 Westside Historic District	<ul style="list-style-type: none"> <li>▪ No impacts expected.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Full acquisition of 2 contributing properties</li> </ul>	<ul style="list-style-type: none"> <li>▪ Details are included in the signed MOA.<sup>2</sup></li> </ul>

<sup>1</sup> The City of Colorado Springs owns and maintains this park. CDOT consulted with the City of Colorado Springs Parks, Recreation & Cultural Services Department to determine these mitigation measures. See the letter from the City of Colorado Springs Parks, Recreation & Cultural Services Department in **Appendix I**.

<sup>2</sup> The MOA is included in **Appendix H** and mitigation considered includes, but is not limited to: interpretive signing, architectural salvage from historic buildings, and investigation of the reuse of the Chief Petroleum sign.