

ENVIRONMENTAL ASSESSMENT I-25 SOUTH GAP: MONUMENT TO CASTLE ROCK

Volume 1

Project Number: NHPP 0252-450, Project Code: 21102

El Paso and Douglas Counties, Colorado

Prepared by

Federal Highway Administration

Colorado Department of Transportation

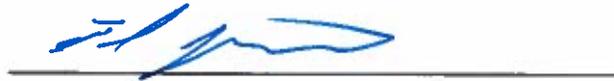


COLORADO
Department of
Transportation

April 2018

ENVIRONMENTAL ASSESSMENT SIGNATURES

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PUBLIC COMMENT PERIOD

The 30-day public comment period for this Interstate 25 (I-25) South Gap Project Environmental Assessment (EA) document begins April 27, 2018 and ends May 29, 2018.¹ The public and agency review period is the formal opportunity to provide input to the Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) on the EA, the alternatives considered and preferred alternative, and the anticipated impacts of the I-25 South Gap Project. Written comments on this EA can be submitted through the project website (i25gap.codot.gov), project email address (i25gap@codot.us), or by mail or email to the contacts listed above.

Two public hearings for this project will be held at the following times:

- Monday, May 14, 2018, at the Event Center, Douglas County Fairgrounds (500 Fairgrounds Drive, Castle Rock), from 5:30 PM to 7:30 PM
- Wednesday, May 16, 2018, at Liberty High School (8720 Scarborough Drive, Colorado Springs), from 5:30 PM to 7:30 PM

The public hearings provide a forum for attendees to learn about the I-25 South Gap Project and EA, provide written comments, or make an oral statement. Oral statements, which can be provided privately or publicly, will be recorded verbatim by a court reporter and entered into the project record. For anyone with disabilities or language needs requiring assistance to participate in the hearings, accommodations will be provided if requested.

¹ The public comment period was extended 2 days due to the Memorial Day weekend.

CDOT and FHWA will review and consider all comments. Through this process, CDOT and FHWA will determine whether to move forward with the Preferred Alternative or No Action and document any changes to the Preferred Alternative resulting from public or agency input. All comments received during the comment period, including at the hearing, will be part of the project record and issued a written response, which will be included with the final EA decision document. An EA decision document is expected in June 2018.

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LIST OF ACRONYMS AND ABBREVIATIONS

AADT	average annual daily traffic
APE	Area of Potential Effects
BMP	best management practice
C-470	Colorado State Highway 470
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and the Environment
CPW	Colorado Parks and Wildlife
EA	Environmental Assessment
FHWA	Federal Highway Administration
HOV3+	high-occupancy vehicle with three or more people
HPTE	High Performance Transportation Enterprise
I-25	Interstate 25
INFRA	Infrastructure for Rebuilding America
NEPA	National Environmental Policy Act
National Register	National Register of Historic Places
PEL	Planning and Environmental Linkages
MP	milepost
mph	miles per hour
MS4	Municipal Separate Storm Sewer System
OTIS	Online Transportation Information Systems
SB	Senate Bill
SH	State Highway
SHPO	State Historic Preservation Office
SWMP	stormwater management plan
US	United States Highway
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USC	United States Code

CHAPTER 1: INTRODUCTION AND BACKGROUND

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) propose improvements to Interstate 25 (I-25) between Monument and Castle Rock, Colorado. This Environmental Assessment (EA) describes the purpose and need, alternatives considered, preferred alternative, environmental effects and mitigation, and public and agency involvement process for the I-25 South Gap: Monument to Castle Rock Project (I-25 South Gap Project), under the requirements of the National Environmental Policy Act (NEPA). The project was developed out of common interests among CDOT, FHWA, El Paso County, Douglas County, Pikes Peak Rural Transportation Authority, Denver Regional Council of Governments, Pikes Peak Area Council of Governments; the municipalities of Castle Pines, Colorado Springs, Lone Tree, Castle Rock, Larkspur, Monument, and Palmer Lake; and private economic development organizations throughout the Colorado Springs and Denver regions to advance improvements to a critical stretch of I-25 between the Colorado Springs and Denver regions.

WHERE IS THE PROJECT LOCATED?

The I-25 South Gap Project includes the 18-mile, four-lane segment of I-25 between Monument and Castle Rock, often referred to as “the Gap” because through these points, the interstate narrows to four travel lanes (two lanes in each direction) between adjoining segments of six lanes (three lanes in each direction). **Figure 1-1** shows a map of the project limits. The Gap segment of I-25 remains as it was configured when the interstate system was originally constructed in the 1960s, while the segments north and south have been improved.

The corridor links major urban areas but is valued for its protected open spaces, scenic vistas, and rural setting. At an elevation of 7,352 feet, the crest of Monument Hill near the southern limits of the Gap corridor is the high point of I-25 through Colorado. Grades steadily climb in the southbound direction of the corridor, where over approximately 15 miles, the elevation increases approximately 1,000 feet.

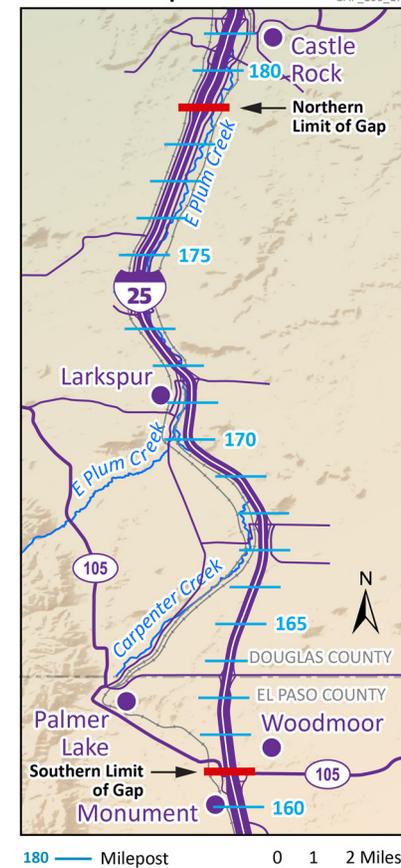
WHAT ARE THE EXISTING CORRIDOR TRAVEL CHARACTERISTICS?

I-25 is the primary vehicular connection between Colorado Springs and Denver and is the transportation backbone for travelers and commuters between the state’s largest urban centers and the communities located in between, including Monument, Larkspur, and Castle Rock. Vehicular trips through the Gap are influenced by increasing residential densities and a growing number of origin and destination points in the urban areas, that is, trips

Figure 1-1. Project Location



I-25 South Gap Corridor



1 between Colorado Springs and Denver. Projected high demand for travel between Denver and Colorado Springs means an increased traffic through the
2 Gap and continuing demand for other transportation options and improvements along the I-25 corridor.

3 Because it serves these urban areas, I-25 through the Gap displays high-volume characteristics despite its rural setting. The Gap segment of I-25 exhibits
4 weekday morning and evening rush-hour peak traffic periods indicative of weekday commuting trips that occur between Colorado Springs/Monument and
5 Denver/Castle Rock; however, these are not the most traveled periods. The peak travel periods for this corridor are higher Friday afternoon through
6 Sunday, indicative of a corridor with a higher percentage of recreational or leisure trips.

7 Traffic volumes have grown consistently, especially over the past 6 years, with an average of 79,000 vehicles currently traveling the Gap corridor each day.
8 The narrow roadway with two travel lanes in each direction and substandard shoulders (shoulders too narrow to move incidents out of the travel lane)
9 can no longer support existing or projected traffic volumes. Additionally, nearly 10 percent of traffic through the Gap consists of heavy trucks that have
10 difficulty maintaining speeds with vertical grades. The I-25 Port of Entry and truck weigh station are located near the top of Monument Hill on the
11 southern end of the Gap corridor, which add to acceleration and deceleration conflicts with the I-25 through-traffic. Crashes in the corridor occur at a rate
12 of about one each day, and CDOT's safety analysis found a moderate to high potential to improve safety performance through the entire Gap corridor.
13 These conditions slow travel through the Gap and make travel times increasingly long and unreliable.

14 HOW DID THE PROJECT DEVELOP?

15 In August 2016, CDOT began a Planning and Environmental Linkages (PEL) study to consider improvements along a 34-mile corridor on I-25 between
16 Monument and Colorado State Highway 470 (C-470) in the Denver South region. The PEL study was initiated to accomplish the following goals:

- 17 • Understand the regional corridor travel and safety needs;
- 18 • Develop a vision for future corridor improvements;
- 19 • Help CDOT define and prioritize projects based on the needs and vision;
- 20 • Engage with local corridor communities, regional travelers, and other interested stakeholders;
- 21 • Identify significant environmental or other constraints to support an efficient transition through project delivery; and
- 22 • Develop an implementation plan based on potential project costs, funding, financing, and delivery options.

23 At the time the PEL was initiated, CDOT did not have any funding identified for corridor improvements, and no projects were included in either the Pikes
24 Peak Area Council of Governments or Denver Regional Council of Governments long-range transportation plans. However, from the onset of the PEL
25 study, CDOT and stakeholders recognized the need for immediate safety and travel reliability improvements through the I-25 Gap segment between
26 Monument and Castle Rock.

- 1 The PEL divided the I-25 corridor into three segments, each with different traffic, land use, and environmental characteristics as described in **Figure 1-2**.
- 2 The Gap segment is the southern 18 miles of the PEL corridor, identified as Segment 1 in the study.

3 **Figure 1-2. I-25 PEL Corridor Segments**

Segment 1

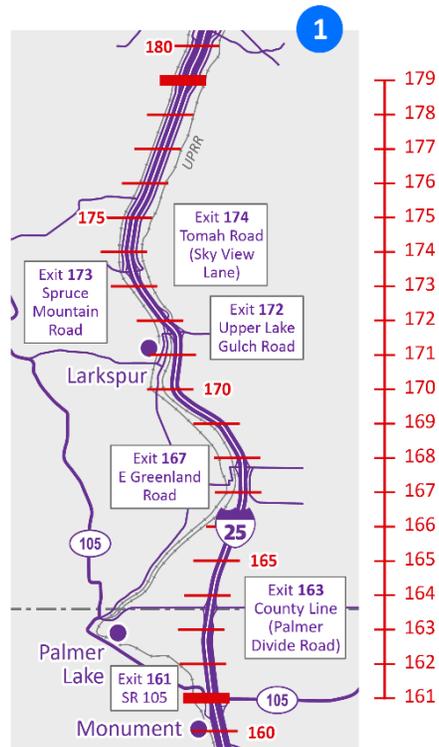
**MP 161 to MP 179:
Monument to
Castle Rock (The Gap)**

Transportation Characteristics

- Rural 4-lane
- Narrow shoulders
- Steady gradual southbound incline grade
- Hills, steep slopes, and vertically offset travel lanes
- 6 interchanges
- 2017 Average Annual Daily Traffic (AADT): 77,000-86,000 vehicles per day
- Trucks make up 8.4% of traffic

Environmental Characteristics

- High incidence of wildlife conflicts
- Many stream crossings, Preble’s Meadow Jumping Mouse habitat
- Protected open space throughout



Segment 2

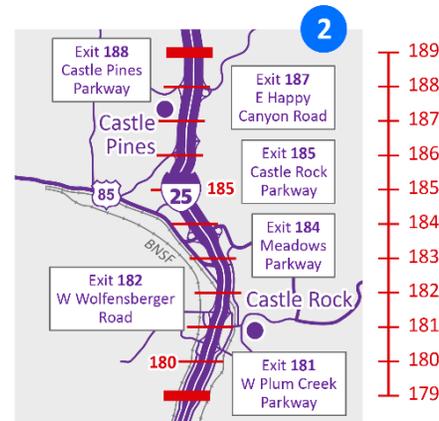
**MP 179 to MP 189:
Castle Rock to Castle Pines**

Transportation Characteristics

- Urban 6-lane
- Narrow shoulders
- 6 interchanges
- 2017 AADT: 99,000-133,000 vehicles per day
- Trucks make up 6.7% of traffic

Environmental Characteristics

- Developed and growing communities
- Nearby Plum Creek runs parallel to the highway and includes Preble’s Meadow Jumping Mouse habitat



Segment 3

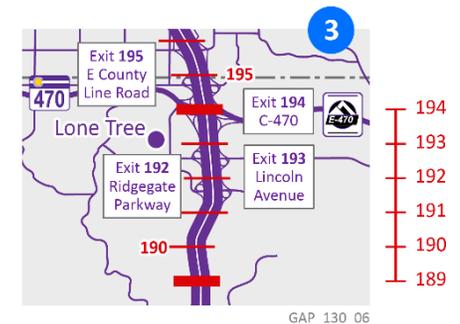
**MP 189 to MP 194:
Denver South**

Transportation Characteristics

- Urban 8-lane, recently widened on north end
- 3 interchanges
- 2017 AADT: 133,000-150,000 vehicles per day
- Trucks make up 5.3% of traffic

Environmental Characteristics

- Rapidly developing commercial and residential area



4

1 WHY DID CDOT PRIORITIZE IMPROVEMENT IN THE GAP?

2 In response to public interest and documented needs through the Gap segment of I-25, CDOT
 3 and FHWA announced in January 2017 the acceleration of design and environmental studies for
 4 the Gap concurrently with the broader PEL study so that if funding for the priority project could
 5 be secured, construction of the priority project could also be accelerated. In April, the I-25 Gap
 6 Coalition was formed by local governmental agencies and other corridor stakeholders to serve
 7 as an independent, proactive advocacy group focused on accelerating transportation
 8 improvements and identifying funding to advance project implementation. By Summer 2017,
 9 CDOT had completed a needs assessment of the PEL corridor, developed numerous concepts for
 10 improvements for each of the corridor segments, and conducted detailed engineering and
 11 environmental surveys for the Gap. By Fall 2017, CDOT and local governments had identified
 12 potential funding for about 80 percent of the \$350 million project budget and came together to apply for a federal grant (Infrastructure for Rebuilding
 13 American or INFRA grant) to complete the funding package. At this time, CDOT further accelerated the project schedule with a new target of construction
 14 by November 2018 or sooner. Preliminary engineering and this EA were initiated, and the PEL study schedule was extended. The history of the I-25 South
 15 Gap Project development is presented in **Figure 1-3**.

Expanding 1-25 between Castle Rock and Monument is crucial to meet the national security, public safety, and economic needs for southern Colorado in the years to come.

Waiting is no longer an option.

We must move this project forward now.

— *El Paso County Commissioner*
Mark Waller

16 **Figure 1-3. I-25 South Gap Project Development History Leading to this EA**

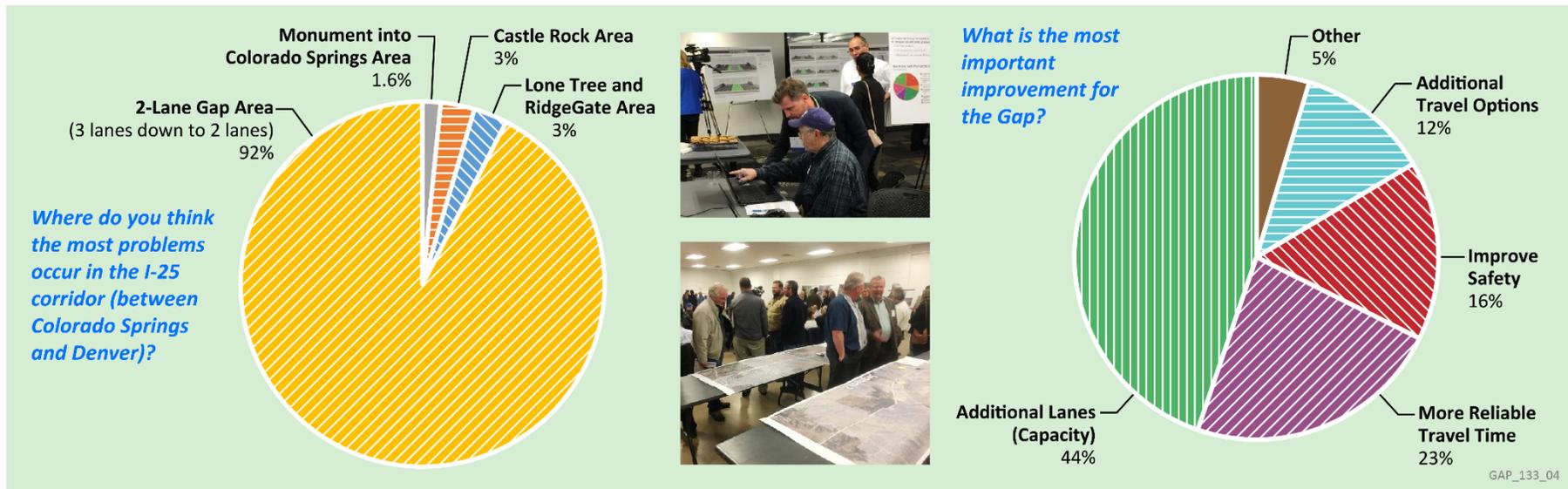


17
 18 The PEL study will resume in Summer 2018 to evaluate and prioritize future improvements and funding needs for the I-25 corridor between Colorado
 19 Springs and Denver. The I-25 South Gap Project will not preclude future recommendations that may come from the PEL study. Additional information
 20 about the range of options being considered in the PEL study is available in **Appendix A1**. The I-25 South Gap Project is described in detail in **Chapter 4** of
 21 this EA document.

HOW WERE STAKEHOLDER INVOLVED IN DEVELOPING THE I-25 SOUTH GAP PROJECT?

Throughout 2017, CDOT conducted extensive outreach with corridor communities and the public to understand the most pressing travel issues and highest priority improvements through the I-25 PEL corridor. Through this process, stakeholders remained focused on solutions to address congestion, reliability, and safety problems through the Gap as soon as feasible. Improving travel times and reliability through the Gap segment were overwhelmingly recognized as the highest priority for the regional corridor between Colorado Springs and Denver. Through input from project teams, public meetings, emails, meeting presentations, and online surveys, feedback was consistent: fix the Gap immediately by adding capacity and improving trip reliability and safety. **Figure 1-4** presents results of online surveys conducted in conjunction with the January and April 2017 PEL public meetings. **Chapter 6** of this EA document provides additional information on stakeholder involvement for the project.

Figure 1-4. Stakeholder Priorities for the I-25 PEL Corridor and Gap Segment



10

CHAPTER 2: PURPOSE AND NEED

The purpose of the I-25 South Gap Project is to enhance safety, reduce delays, and improve travel time reliability for travel on I-25 through the 18-mile bottleneck (two lanes in each direction) (the Gap) between Colorado Springs and the Denver South region.

Traffic conditions through the Gap segment of I-25 are volatile and unpredictable. The two lanes in each direction, combined with narrow shoulders, create a bottleneck (areas where traffic slows down and queues form) for travel between the adjoining existing three-lane (each direction) segments to the north in Castle Rock and south in Monument. The narrow roadway provides limited options for drivers to maneuver around slow vehicles, disabled vehicles, or other obstacles. The corridor surroundings, including grades, altitude and associated weather, and presence of wildlife along adjacent open space lands, provide challenging and unpredictable conditions for traveling through the Gap corridor.

Congestion and traffic incidents have increased as volumes have increased, and extended backups are increasingly common. A commute through the Gap can take 20 minutes without congestion and can take hours during a lane or highway closure. A disconnected I-25 frontage road system and lack of a parallel highway network exacerbate delays because drivers have no reliable alternate routes to divert to and no options for emergency detours, crossovers, or evacuation. Emergency response, law enforcement, and maintenance workers have limited space for safe staging and response and often must close one or more lanes to conduct operations, further contributing to capacity and safety concerns.

WHAT ARE THE NEEDS FOR THE PROJECT?

The I-25 South Gap Project is needed to improve safety, reduce crashes, and improve incident management; reduce delays; and improve travel reliability on I-25 through the Gap. Improving outdated infrastructure and advancing travel reliability and safety on this stretch of I-25 will address some of the most pressing challenges for regional travel between the Colorado Springs and Denver metropolitan areas.

THE NEED TO IMPROVE SAFETY AND INCIDENT MANAGEMENT

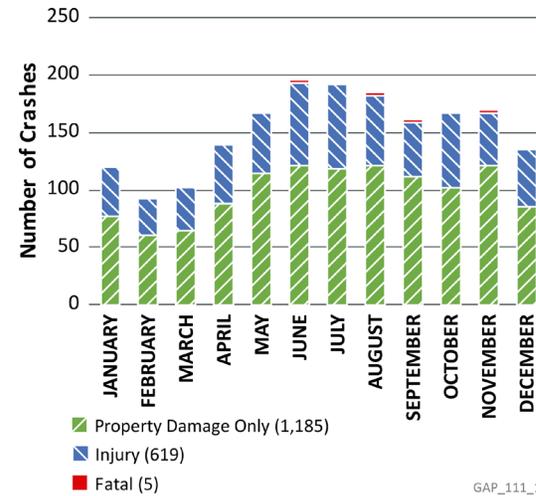
A high number of crashes occur on the corridor—averaging one each day. CDOT’s safety analysis indicates the entire length of the 18-mile Gap segment has the potential for safety to be improved, particularly in the areas of vehicular safety, wildlife-vehicle collisions, and incident response. The corridor’s crash history for the 5-year period from 2011 through 2015 is summarized below; additional details can be found in the Safety Analysis Technical

Traffic volumes through the Gap segment of I-25 are growing and projected to continue to do so. Frequent crashes (at an average of about one each day) contribute to safety concerns and travel delays and unreliable travel conditions now and will only worsen in the future. CDOT and stakeholders agree immediate action is needed.

1 Memorandum, **Appendix A2**. Details about traffic volumes referenced here can be found
 2 in the next section of this document, The Need to Reduce Travel Delays.

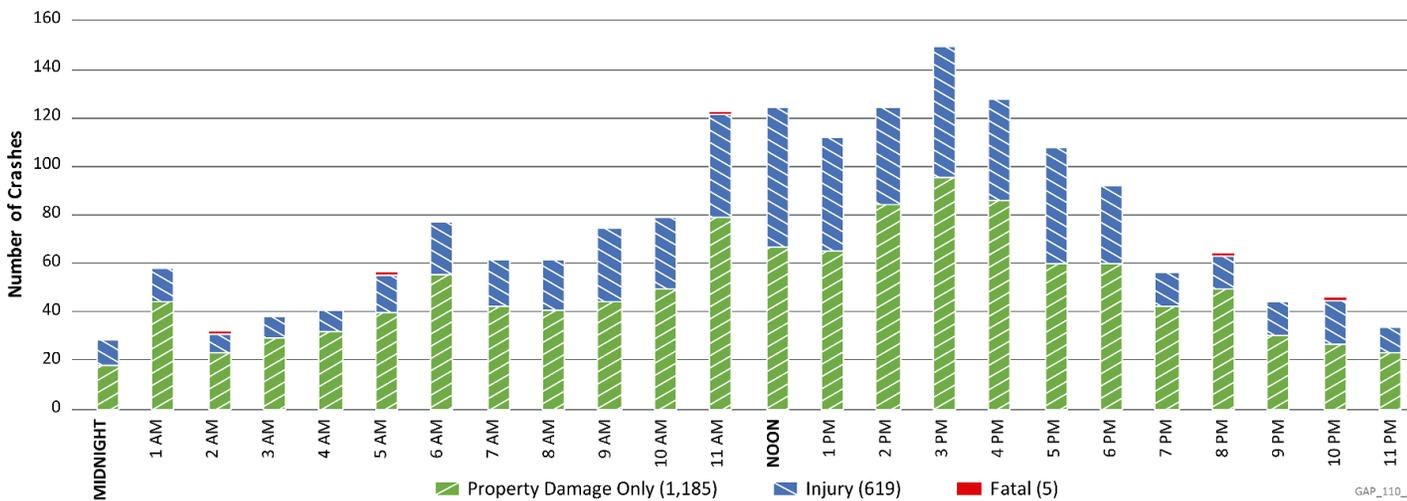
3 Of the 1,809 crashes in the Gap segment between 2011 and 2015, just over half occurred
 4 in 2014 and 2015: 413 and 529, respectively. Higher crash numbers correspond with
 5 higher traffic volumes in 2014 and 2015 compared to the previous 3 years when the
 6 number of crashes was more consistent and lower at about 300 per year. Similarly, most
 7 crashes occur during the PM peak travel times when volumes (and exposure) are the
 8 highest. As **Figure 2-1** depicts, the highest number of crashes occur in the summer
 9 months, and **Figure 2-2** describes that the highest number of crashes occur in the
 10 afternoon. However, a notable number of crashes are not congestion related and occur
 11 outside of the high-volume periods. Approximately one-third of crashes through the Gap
 12 occur in low-light driving conditions, and 10 percent involve wildlife (and occur primarily in
 13 low-light conditions). A higher than expected number of crashes occur in wet weather
 14 conditions.

Figure 2-1. Crash Distribution by Month (2011-2015)



Source: CDOT Crash Records, 2011-2015 (Appendix A2)

Figure 2-2. Crash Distribution by Time of Day (2011-2015)



Source: CDOT Crash Records, 2011-2015 (Appendix A2)

1 WHAT ARE THE ISSUES WITH VEHICULAR SAFETY?

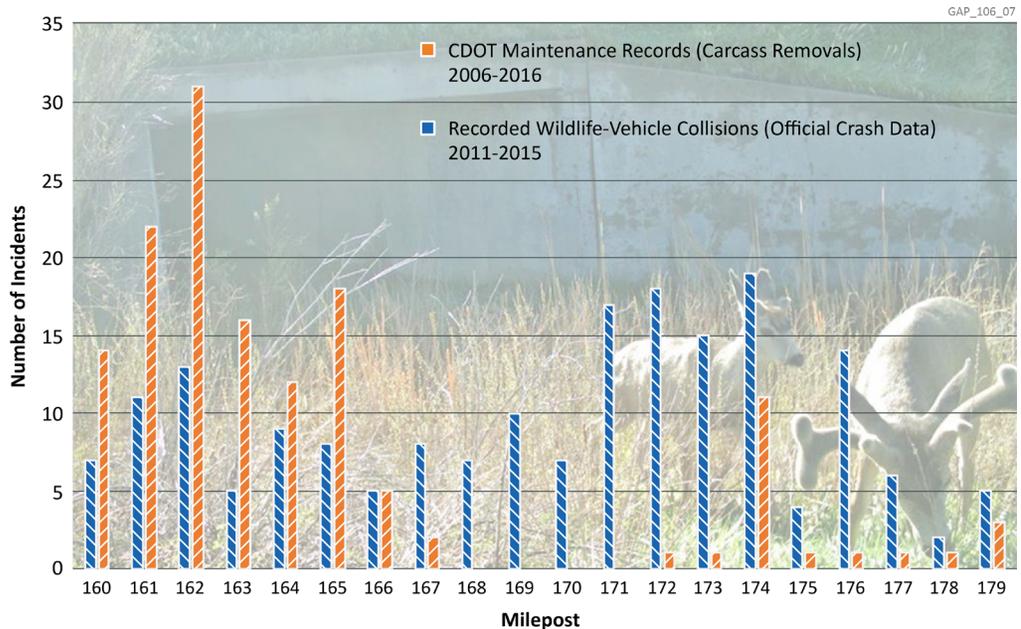
2 The majority of the crashes in the Gap between 2011 and 2015 were rear-end, followed by sideswipe in same direction and fixed-object crashes. Rear-end
 3 and sideswipe same direction crashes can be indicative of volatility or turbulence in the traffic stream. Many factors contribute to turbulence in the Gap
 4 segment, including volume demand, transitions between two- and three-lane segments, interchange influence areas, speed changes, lack of passing
 5 opportunities with slower moving vehicles negotiating steep grades, and non-regular weekend drivers who may not be familiar with the corridor’s
 6 challenges. Single-vehicle crashes, while fewer than multi-car crashes, occurred in higher numbers than expected compared to similar statewide facilities.
 7 Turbulence in the traffic stream may have contributed to these types of crashes if drivers departed the travelway as they attempted to avoid rear-end or
 8 sideswipe collisions. The most commonly struck objects in this corridor were concrete barrier, guardrail, and cable barrier, all of which are adjacent to the
 9 narrow shoulders throughout most of the corridor.

10 WHAT ARE THE ISSUES WITH WILDLIFE-VEHICLE COLLISIONS?

11 Wildlife collisions are common through the Gap corridor, representing 10 percent of the reported corridor crashes. The presence of protected wildlife
 12 habitat on both sides of the interstate, coupled with higher wildlife activity in low-light conditions for drivers and lack of crossing opportunities for
 13 animals, contribute to the high number of collisions. **Figure**
 14 **2-3** summarizes the wildlife-vehicle collisions by location in
 15 the corridor. The number of wildlife-vehicle collisions is likely
 16 underestimated, as wildlife-vehicle collisions have been
 17 demonstrated to be underreported by a factor of five
 18 (Wildlife Movement Technical Memorandum, **Appendix B1**).

19 Crash records (from the 2011-2015 safety analysis dataset)
 20 indicate that the highest number of wildlife-vehicle collisions
 21 occur in June and November, during seasonal movements,
 22 with nearly all occurring between 6:00 PM and 7:00 AM.
 23 Although crashes are recorded along the whole corridor,
 24 noticeable spikes occur between mileposts (MP) 161 and 165
 25 on the approaches to the crest of Monument Hill (MP 163.3),
 26 and from Larkspur north to Sky View Lane between
 27 mileposts 171 and 174. In addition to the official crash data,
 28 CDOT maintenance personnel records of carcass removals
 29 between 2006 and 2016 indicate that during the periods

Figure 2-3. Locations of Reported Wildlife Collisions in the Gap (2006-2016)



Source: CDOT Crash Records, 2011-2015 and CDOT Maintenance Data, 2005 -2016 (Appendix B1)

1 where seasonal animal movement is highest—late spring and late fall—one or more carcasses (mostly deer) were removed every day. As illustrated in
2 **Figure 2-3**, records of maintenance-removed carcasses are especially common on the southern end of the Gap corridor, at and approaching Monument
3 Hill. In addition to sight-distance challenges due to the vertical grades, Monument Hill is uniquely prone to adverse weather conditions and limited
4 visibility, likely contributing to the high number of crashes in this location. Finally, the Colorado Parks and Wildlife (CPW) records bear and mountain lion
5 mortalities, which identified approximately 40 mortalities within the Gap corridor, with the highest (10 instances) around MP 170. More information
6 about wildlife movement and collisions in the corridor can be found in the Wildlife Movement Technical Memorandum, **Appendix B1**.

7 Because of the high number of wildlife crashes and quality wildlife habitat in the area, CPW has identified the Gap segment in the I-25 corridor as one of
8 seven “high-risk” locations for wildlife collisions in the state (Wildlife Movement Technical Memorandum, **Appendix B1**). CPW partnered with CDOT for
9 the I-25 South Gap Project to provide information about wildlife patterns and movements throughout the corridor. In May 2017, CPW installed six
10 cameras in select locations along I-25 that potentially could provide suitable habitat and/or safe passage for large mammals under the interstate. CDOT
11 installed seven additional cameras at new locations in July 2017. The camera data, which were monitored once a month, helped document wildlife
12 movements and conflicts, as well as to understand if, how, and where animals were crossing the interstate. Between May 2017 and January 2018, the
13 cameras documented 1,242 animals, mostly deer and coyotes, throughout the corridor. Deer were observed crossing under the highway at only one
14 location, the I-25 bridge over Plum Creek north of Larkspur. The lack of suitable crossing alternatives appears to be the root cause of wildlife-vehicle
15 collisions as animals attempt to cross the interstate and are struck by vehicles. The Wildlife Movement Technical Memorandum included as **Appendix B1**
16 provides additional details.

17 WHAT ARE THE INCIDENT MANAGEMENT AND RESPONSE NEEDS?

18 Incidents are occurrences on a roadway that impede normal flow. In the I-25 South Gap corridor, incidents primarily involve crashes but also include
19 planned special events, maintenance activities, and weather events. When crashes occur, the narrow shoulders coupled with guardrail, limit the ability to
20 move disabled vehicles from the travel lanes. Reaching incidents
21 in the corridor is hampered by long distances between
22 interchanges, the lack of alternate routes, a discontinuous
23 frontage road system, lack of emergency parking, lack of
24 emergency crossovers (limited opportunities because of split
25 profiles as illustrated in **Figure 2-4**), and lack of closure gates and
26 variable messaging signs throughout and approaching the north
27 and south ends of the Gap corridor.

28 Until crashes can be cleared, there is increased exposure for
29 secondary crashes (crashes that occur in the congested

Figure 2-4. Existing Split Grades in the I-25 South Gap Corridor



Split grades—where the northbound and southbound travel lanes are at different elevations, as shown at the left—occur throughout the Gap corridor. In these locations, median crossovers are unobtainable.

1 conditions resulting from the initial crash), presenting dangerous conditions for
 2 disabled vehicles and emergency responders. FHWA estimates the likelihood of a
 3 secondary crash increases by 2.8 percent for each minute the primary incident
 4 continues to be a hazard (FHWA-HOP-16-060). As a result, lane closures or even full
 5 highway closures are often needed as crashes are investigated and cleared.
 6 Highway maintenance workers and law enforcement officers confront similar safety
 7 issues conducting operations in the corridor next to high-speed interstate traffic. In
 8 addition, the narrow roadway does not provide space for through traffic to
 9 maneuver around crashes, preventing emergency responders from reaching the
 10 scene.

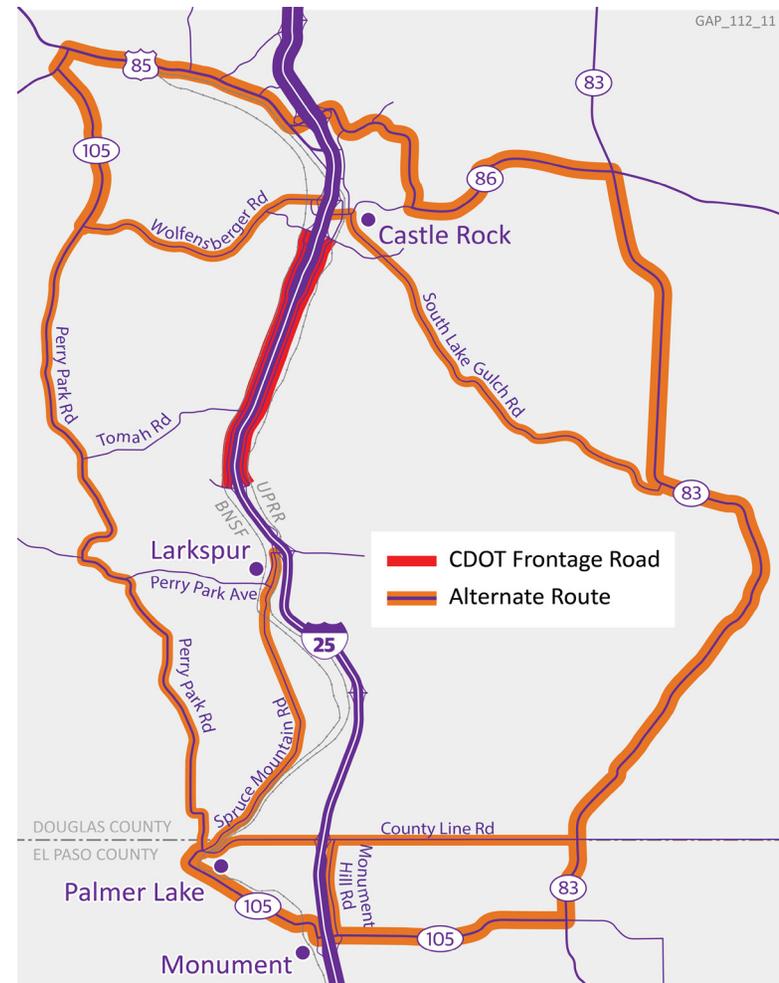
11 The nearest north-south alternate routes are State Highway (SH) 83 to the east and
 12 a combination of county and state roadways to the west, as illustrated in **Figure 2-5**.
 13 Neither of these routes provide a reasonable emergency detour if an incident
 14 occurs within the Gap because of access issues or distance to the route. Even if
 15 travelers detour to these routes before entering the Gap, these roads (particularly
 16 Perry Park Road, a narrow, winding two-lane road) are not equipped to act as
 17 alternate route to I-25. According to the traffic demand modeling conducted for this
 18 EA, the volumes on SH 83 and on SH 105/Perry Park Road are projected to increase
 19 25 percent in just the next 4 years as more drivers divert from I-25 due to the
 20 highway's deteriorating travel conditions without improvements through the Gap
 21 (Travel Demand Forecasting Technical Memorandum, **Appendix A3**).

22 The local roads in Larkspur, Palmer Lake, and Monument within the I-25 Gap
 23 segment, such as Spruce Mountain Road, cannot handle the mix of diverted
 24 interstate and local traffic volumes safely. Local roads are narrow low speed
 25 roadways through the small towns, which provide important local access but are
 26 not equipped to handle the volumes or vehicle mix associated with diverted interstate traffic.

27 These alternate routes are unreliable and cannot serve both local and interstate traffic, and there is no funding to improve these routes.

28 Colorado State Patrol has limited ability to conduct law enforcement operations in the Gap due to narrow shoulders that do not provide adequate space
 29 for safe patrolling or interacting with drivers. The deaths of two on-duty Colorado State Patrol officers in the corridor in 2014 and 2015 heightened

Figure 2-5. Alternate Routes and Frontage Roads



1 awareness of the danger of conducting law enforcement in tight spaces. Colorado State Patrol identified narrow spaces, poor visibility, inclement weather
 2 conditions, and lack of staging areas for incident response as key challenges for operations. Additionally, the diversions of vehicles on frontage roads,
 3 trucks diverting around the truck weigh station, and aggressive driving associated with passing and speed differentials present compliance challenges
 4 along the corridor.

5 I-25 at Monument Hill is one of CDOT’s most weather-affected roadways, requiring diligent maintenance. It is both the high point of north-south travel
 6 through the state and the high-point of the Palmer Divide, an east-west ridge that separates the Arkansas and South Platte River basins. As such, the
 7 Monument Hill area at an elevation of 7,352 feet is subject to unique weather patterns, more precipitation, higher winds, and more fog than Denver and
 8 Colorado Springs. Due to these factors, unexpected localized weather conditions can occur for travelers coming from either the north or south. Colorado
 9 State Patrol and CDOT’s maintenance superintendents responsible for the area report I-25 at the crest of Monument Hill to be the most challenging in
 10 their regions. Winter maintenance and emergency response are the primary difficulties facing operations and maintenance in this location.

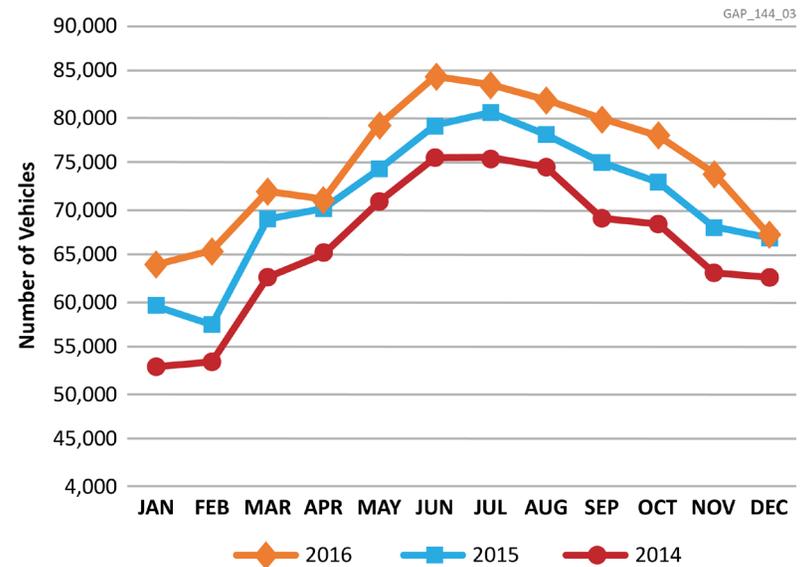
11 Incidents in the corridor have a dramatic effect on travel delays and
 12 reliability as described below.

13 **THE NEED TO REDUCE TRAVEL DELAYS**

14 Traffic volumes through the Gap segment and along the entire I-25 corridor
 15 are increasing and projected to continue as planned development in
 16 southern Castle Rock and northern Colorado Springs occurs. As volumes
 17 grow, congestion grows, and travel through the Gap takes longer. **Figure 2-6**
 18 illustrates the recent growth in overall traffic volumes recorded between
 19 2014 and 2016 near Plum Creek Parkway (MP 174).

20 **Figure 2-7** shows the monthly and weekday/weekend distribution of traffic
 21 volumes at the same location near Plum Creek Parkway in 2016. For the
 22 traffic analysis presented, weekdays are defined as Monday through
 23 Thursday, and weekends are defined as Friday through Sunday. As noted in
 24 both **Figures 2-6 and 2-7**, volumes are generally higher in the summer
 25 months. **Figure 2-7** presents the distribution of weekday and weekend traffic
 26 and illustrates that weekend volumes are generally higher than weekday

Figure 2-6. Annual Average Daily Traffic Volumes by Month at Plum Creek Parkway (MP 174), 2014 to 2016



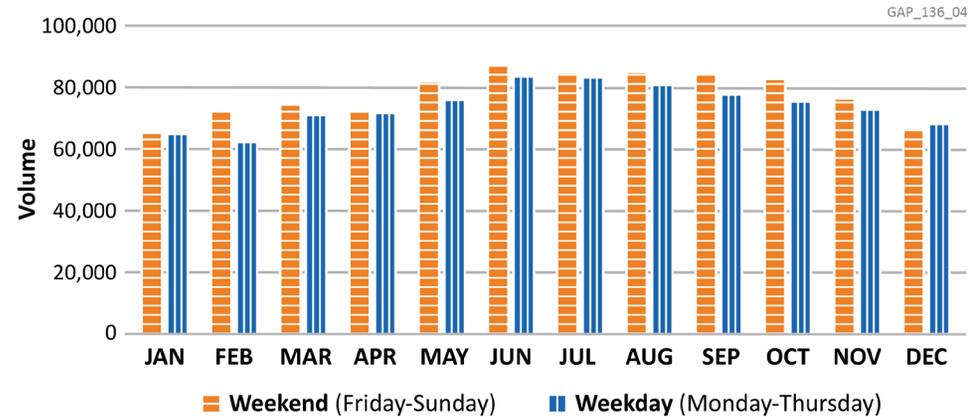
Source: CDOT Online Transportation Information System (OTIS) Database, retrieved 2018

1 volumes. Of the 30 highest-volume travel days (87,000 vehicles
 2 or greater) recorded through the Gap in 2016, 26 occurred on
 3 weekends and the other 4 occurred on Thursdays.

4 To provide additional context for how traffic conditions affect
 5 delays, travel times in 2016 through the Gap (between SH 105
 6 and Plum Creek Parkway) were reviewed to determine how
 7 many days exhibited severe delays. Free flow travel times
 8 through the Gap equate to 17 minutes, while severe delays were
 9 defined as double or more the free flow travel time (that is,
 10 more than 34 minutes). In 2016, severe delays occurred on 127
 11 days, mostly on weekends and attributed to congestion and to
 12 crashes and associated crash clearing. **Figure 2-8** summarizes the
 13 numbers and causes of severe delays for 2016. Delays attributed
 14 to weather varied depending on climactic conditions; 2016 was a
 15 mild winter. Over the 5-year period, however, crash data suggest
 16 that a higher than expected number of crashes through the Gap are in wet weather
 17 conditions. Additionally, special events account for less than 10 percent of the travel
 18 delays in the corridor in 2016 but also have an impact on travel, especially weekend travel.
 19 Events causing delays include the Renaissance Festival in Larkspur, Denver Broncos
 20 football games, and U.S. Air Force Academy football games and commencement in
 21 northern Colorado Springs.

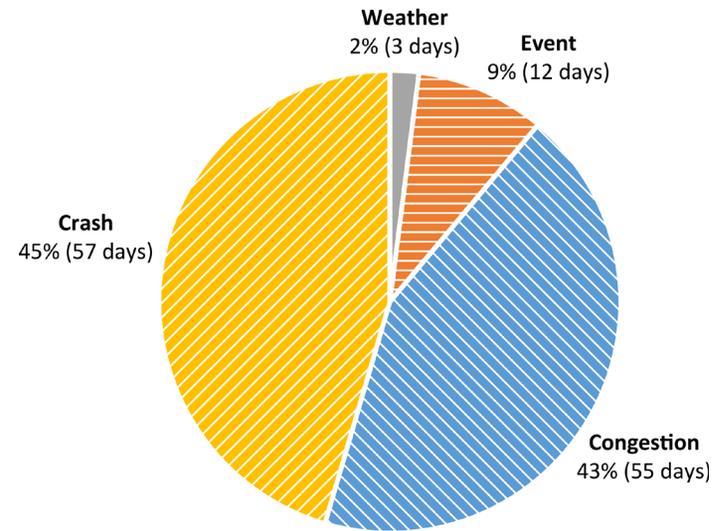
22 A travel demand model was built to project future volumes through the Gap by combining
 23 the Denver Regional Council of Governments and Pikes Peak Area Regional Council of
 24 Governments regional travel demand models for the subarea of influence of the I-25
 25 corridor between North Academy Boulevard in Colorado Springs and C-470 in Lone Tree.
 26 The horizon year for these models is 2040. To calibrate the combined model, numerous
 27 traffic counts were taken in 2017 along the mainline of I-25, ramps, and alternate routes.
 28 These counts provide a more robust characterization of traffic conditions in the corridor
 29 compared to the historical data available from the traffic recorder near Plum Creek
 30 Parkway presented in **Figures 2-6 and 2-7**.

Figure 2-7. Annual Average Daily Traffic Volumes through the Gap, by Month, 2016



Source: CDOT OTIS Database, retrieved 2018

Figure 2-8. Causes of Severe Delays in the Gap, 2016



Source: PEL Reliability Assessment, 2017 (Appendix A3)

1 **Figure 2-9** displays the current volumes from 2017 traffic counts and projected
 2 volumes from the travel demand model at the south and north ends of the Gap.
 3 As illustrated in **Figure 2-9**, existing volumes are higher north and south of the
 4 Gap, which is a trend that is projected to continue into 2040. In addition to
 5 increased volume on I-25, the model projects substantial increases in traffic
 6 volumes on SH 83 and SH 105/Perry Park Road, which are projected to triple or
 7 quadruple by 2040 as drivers divert to these roadways to avoid I-25. Projected
 8 volumes are without added capacity to the I-25 South Gap segment.

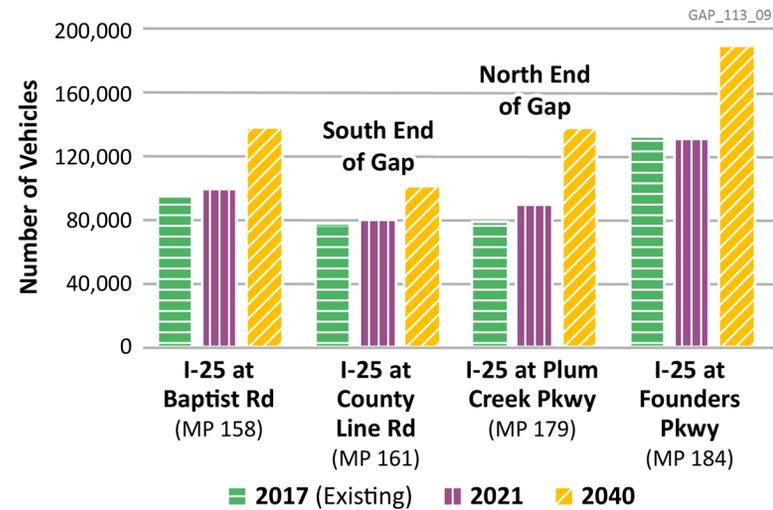
9 As traffic volumes through the Gap corridor increase, the peak travel periods are
 10 increasingly crowded, and the driving experience becomes more uncomfortable.
 11 While travel through the Gap averages 20 minutes or less most of the time, trips
 12 are taking longer than they did just a few years ago. Long travel times
 13 experienced now will only worsen in the future as volumes continue to increase.
 14 For instance, the trip from Castle Rock to Monument through the Gap on a
 15 Friday afternoon, which is the most congested period and today takes roughly 50
 16 minutes, is projected to take 2 hours in 2040 (based on the travel demand
 17 modeling projections without improvements in the Gap).

18 **THE NEED TO IMPROVE RELIABILITY**

19 Improving reliability of travel and predictability of travel times in the I-25 South Gap corridor is
 20 important now and will become even more critical as the region grows. Volatility of I-25 travel
 21 times and conditions hinder economic vitality for the region. The region’s ability to serve and
 22 support projected employment growth and sustain important freight, military, and tourism sectors
 23 is critical. Reliability is especially important for corridors like the Gap where motorists traverse
 24 longer distances, and parallel roads do not exist to provide suitable alternate options for getting to
 25 destinations on time.

26 FHWA defines travel time reliability as the consistency or dependability in travel times, as measured
 27 from day to day and across different times of the day. Reliable travel requires providing more
 28 dependable travel times. Ideally, travel through the 18-mile Gap corridor should take less than 20
 29 minutes, but unfortunately it can sometimes take up to several hours. Drivers are frustrated and

Figure 2-9. Projected Growth in Average Annual Daily Traffic Volumes 2017, 2021, and 2040



Source: Travel Demand Model (Appendix A2)

Reliability is especially important for regional corridors like the I-25 Gap where motorists traverse longer distances, and parallel roads do not exist to provide suitable alternate options for getting to destinations on time. Providing reliable travel times on I-25 is paramount to sustaining a healthy economy and maintaining a good quality of life for Front Range residents, businesses, commerce, and military.

1 have reported that even without incidents, corridor conditions, including limited maneuverability
2 and passing opportunities, variable speeds, and more and more aggressive and distracted drivers
3 on the road, make an “average” drive time through the corridor rare. With no alternate routes
4 available, there is no easy relief to the unpredictable travel times that exist today in the Gap.
5 Because travel times are unpredictable, drivers must allow extra time to get to their destination
6 but how much is not easy to calculate.

7 **Figure 2-10** illustrates the range of travel times through the Gap segment in 2016 on weekends
8 and weekdays based on travel speed data. Speeds are translated to travel times. The figure
9 illustrates average travel times shown by a solid line and shading of the range of travel times
10 through the Gap for the year 2016.

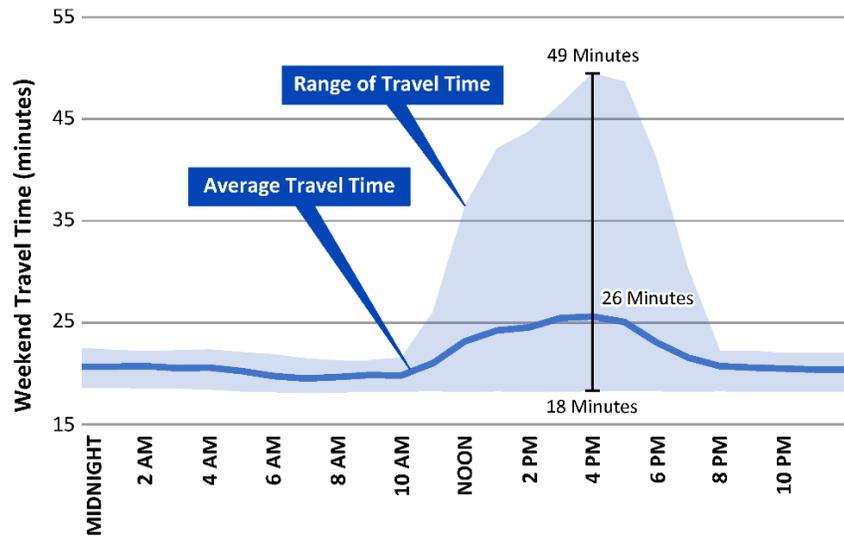
- 11 • Northbound and southbound travel speeds were obtained from data supplied to CDOT by
12 subscription through INRIX, a data provider that collects roadway speeds from mobile data
13 sources, such as cell phones. Point-to-point travel times through the 18 miles on I-25 between SH 105 in Monument and Plum Creek Parkway are
14 reported in 15-minute time periods.
- 15 • Average travel times are the typical amount of time it took to travel through the 18-mile Gap on weekdays (Monday through Thursday) and weekends
16 (Friday through Sunday) in 2016, northbound and southbound.
- 17 • The range of travel times represents the variation in travel times for 90 percent of the trips that occur through the Gap for the year. The 5 percent of
18 best and worst days, including the times where travel through the corridor took 2 hours or more, are excluded to provide a more normal “average”
19 range.

20 On the weekends, travel times are not consistent or dependable. As illustrated in **Figure 2-10**, the average trip through the Gap (for all drivers) takes about
21 20 minutes, and the average trip in the peak periods takes 23 minutes in the southbound direction and 26 minutes in the northbound direction. However,
22 the typical range of travel times in these peak periods varies greatly from a low of 17 or 18 minutes to a high of 48 or 49 minutes. This 30-minute
23 difference between the best or worst travel times is what makes planning for the trip unpredictable. Drivers must account for the extra 30 minutes by
24 either leaving early or risk arriving late. Without improvements, volumes and crashes are projected to increase, and the average travel time and the
25 variability of the range is also expected to increase.

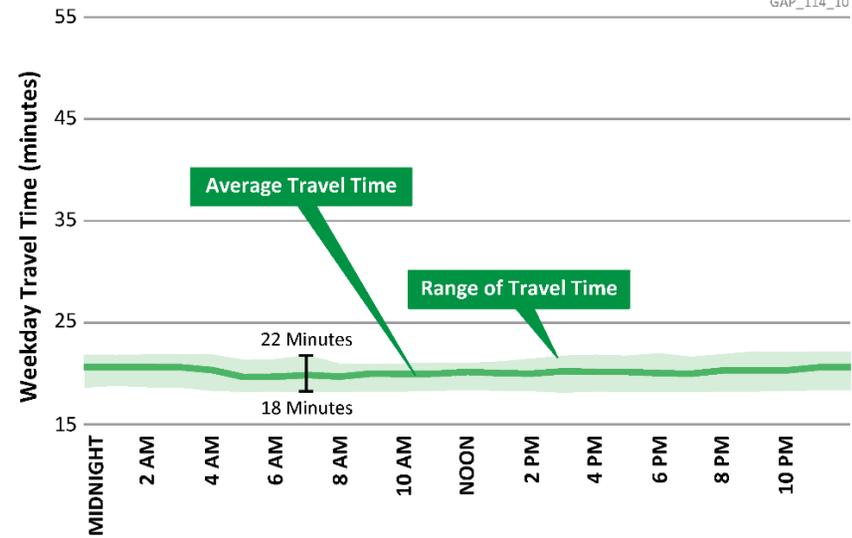
Without capacity improvements, travel through the Gap on an average weekday in 2040 is projected to take 45 minutes longer in the morning and 70 minutes longer in the afternoons. Regional travelers will spend almost twice as many hours on the road in 2040 unless improvements are implemented. The economic cost of this time spent in congestion is estimated at nearly \$1.5 billion annually (Economic Impact Study, **Appendix A8**).

1 **Figure 2-10. Average and Range of Travel Times through the Gap, Between Monument and Castle Rock, 2016**

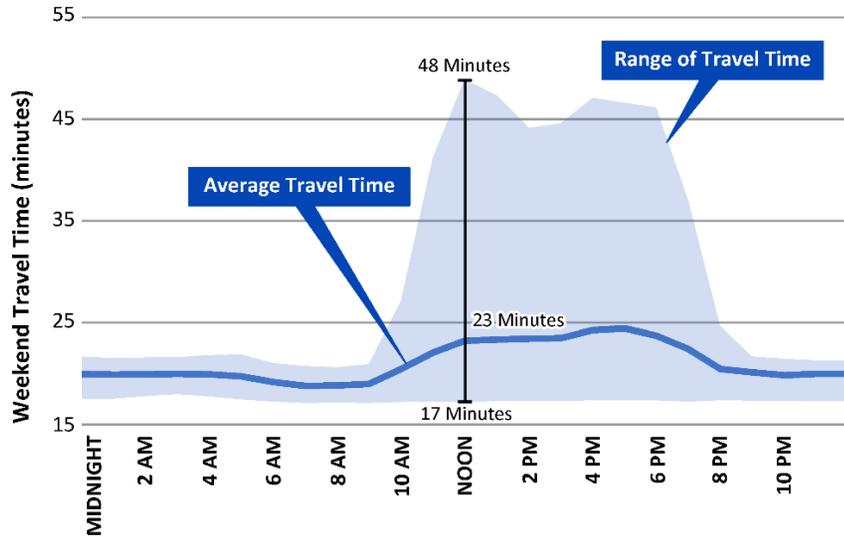
2016 NORTHBOUND WEEKEND (SH 105 to Plum Creek Parkway)



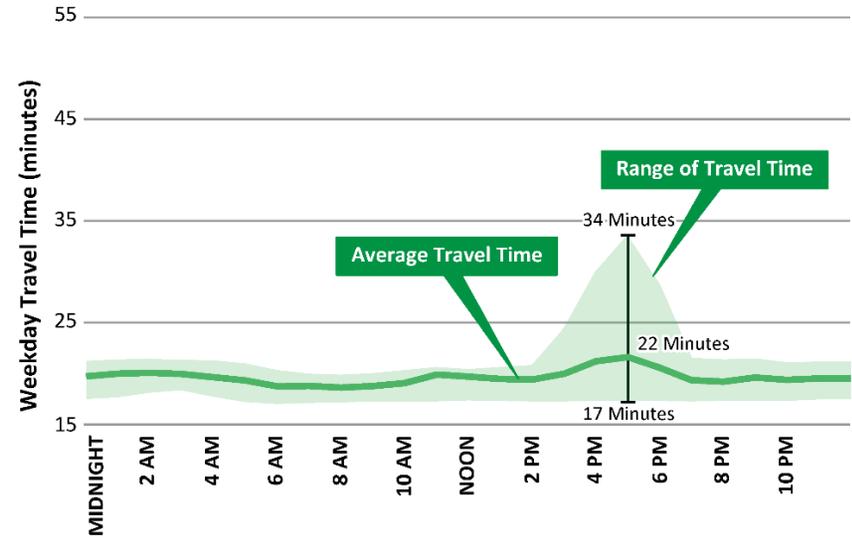
2016 NORTHBOUND WEEKDAY (SH 105 to Plum Creek Parkway)



2016 SOUTHBOUND WEEKEND (Plum Creek Parkway to SH 105)



2016 SOUTHBOUND WEEKDAY (Plum Creek Parkway to SH 105)



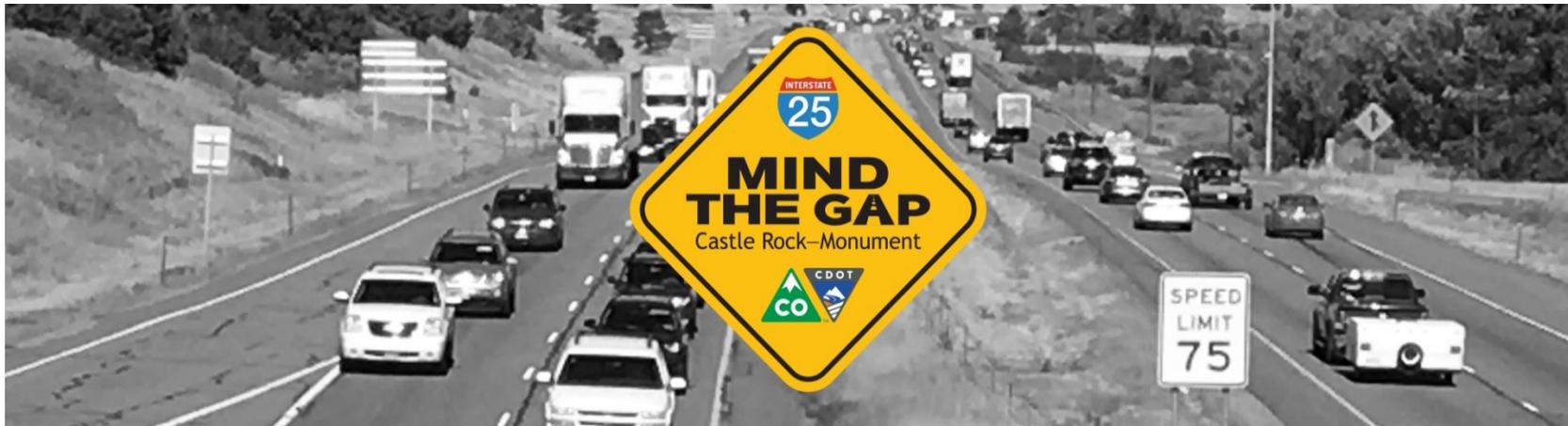
2

3 Source: INRIX, 2016

1 Feedback from corridor stakeholder groups and daily travelers reinforces the need to provide more reliable travel times through the Gap. Corridor drivers
2 have consistently provided input through the PEL and EA studies that the drive between Colorado Springs and Denver is uncomfortable and unpredictable.
3 Travel times are highly variable, and driving conditions are stressful. Drivers report issues with the variability and volatility in speeds due to posted speed
4 limits that seem too high for conditions, especially around curves; aggressive drivers that speed and follow too close trying to pass slower drivers; and the
5 mix of slow-moving trucks with passenger vehicles negotiating through the two-lanes. CDOT launched a safety campaign, Mind the Gap, in Summer 2017
6 (**Figure 2-11**) to provide information about safety and travel delays for drivers of I-25 through the Gap.

7 Lack of travel time reliability and longer travel times through the Gap adversely affects reliable transit use. The Denver Regional Council of Governments
8 and Pikes Peak Area Council of Governments, along with the Regional Transportation District and Mountain Metro Transit, report high demand for
9 regional transit and vanpool choices. The support for transit options is evidenced by growing ridership on CDOT's Bustang South Line express bus service,
10 which began in July 2015 and today carries more than 55,000 riders per year with just 7 weekday trips and 2 weekend trips between Colorado Springs and
11 Denver. Bustang service operates in the general-purpose lanes along I-25 and is subject to the corridor's congestion, delay, and unpredictability. Providing
12 reliability and schedule certainty for Bustang would likely attract and retain regular transit riders. Viable transit options benefit the entire system by
13 increasing the number of trips served more efficiently.

14 **Figure 2-11. Mind the Gap Safety Campaign** (<https://www.codot.gov/travel/mind-the-gap>)



CHAPTER 3: ALTERNATIVES CONSIDERED

Alternative concepts for the I-25 South Gap Project were first developed and evaluated as part of the PEL study as documented in the PEL Alternatives Analysis Technical Memorandum, **Appendix A1**. As the Gap project was advanced from the PEL, the project design was refined through the EA process as engineering survey, right-of-way mapping, and environmental surveys were completed. The alternatives analysis process for the EA and results are summarized here and documented in the EA Alternatives Analysis and Comparison Technical Memorandum in **Appendix A5**.

WHAT CONCEPTS DID CDOT CONSIDER FOR THE GAP AS PART OF THE PEL STUDY?

The PEL study considered a broad range of improvement concepts for each of the I-25 PEL corridor segments, developed in response to identified transportation needs. As described in **Appendix A1**, more than 100 improvement concepts were developed for the regional corridor between Monument and C-470, including 70 initial infrastructure and operational concepts for the Gap segment. PEL concepts for the Gap included adding travel lanes and improving shoulders, reconfiguring or rebuilding interchanges, reconfiguring or expanding frontage roads, adding wildlife crossings, improving or relocating truck facilities, adding or improving transit service, and implementing various options for operational and technological improvements. Concepts from the PEL that are not included in the I-25 South Gap Project will continue to be evaluated in the PEL study. The I-25 South Gap Project will not preclude future recommendations that are identified during the PEL study to be carried forward for further evaluation. Several components included in the I-25 South Gap Project are being designed to support these future elements where feasible.

WHAT ALTERNATIVES WERE CONSIDERED FOR THE I-25 SOUTH GAP EA?

To address the underlying need to balance the three-lane to two-lane bottleneck through the Gap, a third travel lane for both northbound and southbound travel was identified as a primary element of the I-25 South Gap Project. Two alternatives were considered for operation of the third lane as described below. Other project elements that would be required and are the same for both alternatives include widened shoulders, wildlife underpasses, bridge replacements, pavement resurfacing, lighting, signage, and other ancillary features.

EXPRESS LANE ALTERNATIVE

The Express Lane alternative would involve widening I-25 through the Gap to add, in each direction, a new 12-foot tolled Express Lane with a 4-foot painted buffer to separate the Express Lane from the general-purpose (non-tolled) lanes. Motorists would also be able to travel in the Express Lanes if they choose to pay a toll or would be able to use the lane for free if they ride the bus or carpool with three or more people (with a switchable transponder). The existing two general-purpose lanes in each direction would remain toll-free.

GENERAL-PURPOSE LANE ALTERNATIVE

The General-Purpose Lane alternative would involve widening I-25 through the Gap to add a new 12-foot general-purpose lane in each direction to provide three general-purpose lanes in each direction. There would be no tolled lanes under this alternative.

WHAT ARE THE SIMILARITIES AND DIFFERENCES BETWEEN THE EXPRESS LANE AND GENERAL-PURPOSE LANE ALTERNATIVES?

The comparison of the infrastructure components, environmental impacts, and operational performance of the two alternatives is summarized below. **Appendix A5** contains additional detail comparing the alternatives.

The components and performance of the Express Lane and General-Purpose Lane alternatives is similar in many ways. The primary difference between the alternatives is travel reliability now and into the future.

INFRASTRUCTURE COMPONENTS

The infrastructure improvements and construction footprint of the alternatives are comparable. Both include the same bridge replacements, wildlife underpasses, walls, lighting, and power and communications equipment. The Express Lane alternative includes a 4-foot buffer, additional signage, and tolling equipment that is not required in the General-Purpose Lane alternative. The pavement difference due to the Express Lane buffer is negligible because of construction phasing requirements. Enough pavement width needs to be provided to allow traffic to shift to the center and keep two lanes each direction open during construction. (Construction phasing is illustrated in detail in **Chapter 4**.)

ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION

Because the footprints are similar, ground-disturbing impacts to environmental resources are also similar. For both alternatives, construction would fit within CDOT's right-of-way, limiting the potential for environmental impacts. The alternatives were reviewed to determine if the operational differences associated with the operational differences between the new travel lanes would potentially result in differing social, environmental, or transportation impacts. The analysis found neither the overall impacts nor the difference in impacts was substantial (see **Appendix A5**). Where environmental impacts are anticipated, mitigation measures are included in the Preferred Alternative to avoid or minimize impacts, as described in **Chapter 5** of this EA.

OPERATIONAL PERFORMANCE

In general, the review of operational performance found both alternatives would improve safety and operational performance of the highway overall, especially compared to the No Action. Both alternatives address the bottleneck between the two- and three-lane sections of I-25, reduce I-25 congestion, and reduce travel delays. The new lane, along with wider shoulders, under both alternatives would improve safety and emergency response, and reduce secondary crashes. Congestion and crashes on local roads would also be reduced as the travel demand model projections show more trips served by I-25 and fewer diversions to local roads.

1 The primary difference between the alternatives is in travel reliability on I-25 now and into the future as volumes on the interstate increase. By 2040, the
2 General-Purpose Lane alternative will have congestion and consequently lack reliable travel times across all lanes, while the Express Lane alternative
3 offers the choice for predictability and reliability by managing volumes and speeds in the Express Lanes. Therefore, while performance between the two
4 alternatives is similar, CDOT determined that Express Lanes are a better choice because of the improved travel time reliability offered by Express Lanes,
5 which better meets the purpose and need and public concerns regarding trip reliability into the future.

6 WHY DID CDOT SELECT EXPRESS LANES AS THE PREFERRED ALTERNATIVE FOR THE I-25 SOUTH GAP PROJECT?

7 Express Lanes were selected as the Preferred Alternative for the I-25 South Gap Project because of the need for a reliable trip through the Gap. Travel
8 times that can range from 15 minutes to several hours now will only get more unpredictable as population and traffic growth continues and I-25 becomes
9 increasingly congested. Express Lanes offer a choice for users to bypass congestion and take advantage of reliable and predictable travel times in Express
10 Lanes now and into the future, and provide additional system capacity that also improves travel times in the general-purpose lanes.

11 CDOT has used Express Lanes for more than a decade as a proven way to enhance capacity and travel time reliability and encourage higher density travel
12 (serving more trips with fewer vehicles) by promoting carpooling and transit use in order to reduce overall congestion by reducing the number of vehicles
13 in the corridor. Express Lanes support transportation demand management, provide opportunities to leverage emerging technology, and allow flexibility
14 to adapt highway operations to changing travel demands and patterns. For the I-25 South Gap corridor and other regional corridors, Express Lanes provide
15 reliable transportation choices for commuters that choose to travel farther to employment centers. Express Lanes are especially effective for long,
16 regional corridors like the I-25 Gap segment that serve a high percentage of through trips where travelers can stay in the Express Lane to arrive at their
17 destinations at a predictable time. Bustang, regional bus transit, van pools, and carpools also benefit from the ability to use the Express Lanes, avoid
18 congestion, and keep reliable schedules.

19 In December 2012, the Colorado Transportation Commission adopted Policy Directive 1603.0 requiring that managed lanes (including tolled Express
20 Lanes) be strongly considered during the NEPA phase of planning and developing capacity
21 improvements on state highway facilities that are or will likely become congested. In nearly all cases
22 since the Policy Directive was adopted, evaluations of added capacity on congested highways have
23 recommended and included Express Lanes.

24 Currently, the Express Lane network includes more than 80 miles on I-25, US Highway (US) 36, C-470,
25 and I-70 in operation or under construction. Data from corridors like US 36 and the I-70 Mountain
26 Corridor demonstrate that existing Express Lanes provide a trip benefit to all corridor users, not just
27 users of the Express Lane. For example, in the first year of operation of the I-70 Mountain Corridor in
28 2016, throughput increased 14 percent, and travel times in the general-purpose lanes improved by 38

Express Lanes offer travelers a choice to opt out of congestion and take advantage of a reliable and predictable trip. When travelers make this choice, space frees up in the general-purpose lanes, resulting in a corridor that moves more vehicles and people more efficiently.

1 percent. The same pattern followed the opening of the US 36 Express Lane Project, where both travel times and safety improved. The Colorado State
2 Patrol reported that between July and December 2017, the US 36 corridor experienced 33 percent fewer crashes compared to the previous 3 years before
3 the Express Lane project. Additionally, operation of Express Lanes has demonstrated that users are willing to pay for travel time savings and reliability. In
4 the DRCOG region where Express Lanes are an available choice for many travelers, the recorded use of Express Lanes documents that on similar toll
5 facilities in the region, a certain percentage of travelers choose to use tolled lanes over free lanes for travel time savings, increased trip reliability, and
6 other perceived benefits such as safety and comfort.

7 By building the I-25 South Gap Project with Express Lanes, CDOT has more options to provide I-25 users travel choices and reliable travel times. Active
8 management of Express Lane operations provides CDOT flexibility to adapt highway operations for new technologies, such as driverless cars, or changing
9 travel behaviors, such as increased use of rideshares or longer commutes between housing and employment centers. Roadway capacity can be optimized
10 to move more people more efficiently, safely, and reliably.

11 WHY WAS THE GENERAL-PURPOSE LANE ALTERNATIVE NOT SELECTED?

12 The General-Purpose Lane alternative would address many of the project's needs and is the toll-free option, but it was not selected as the Preferred
13 Alternative because it does not provide operational flexibility to manage future congestion and provide trip reliability. As traffic volumes continue to grow
14 into the future, traffic volatility would recur, resulting in the same congested conditions in the new general-purpose lanes seen on other expanded
15 Colorado freeways that did not include Express Lanes, such as the TREX section of I-25 north of C-470. Over time, the benefits of the three general-
16 purpose lanes are eroded because all lanes are congested, and none of the travel lanes can provide a reliable trip. The general-purpose lane does not
17 encourage carpooling or support improved transit operations and long-term trip reliability for 2040 traffic projections; the General-Purpose Lane
18 alternative offers fewer choices to travelers. The General-Purpose Lane alternative provides limited flexibility to accommodate changes in traffic
19 operations in response to increased travel demand or leveraging of new technologies because under current federal law (23 USC § 129), CDOT would not
20 be permitted to convert a general-purpose lane to an Express Lane in the future.

21 WHAT CONCEPTS WERE NOT INCLUDED IN THE EA BUT WILL BE CONSIDERED IN THE PEL STUDY?

22 Many of the PEL improvement concepts developed for the Gap have been incorporated into the I-25 South Gap Project. However, CDOT and FHWA
23 recognize that the I-25 South Gap Project does not meet all the needs identified in the PEL study for providing efficient and reliable travel between
24 Colorado Springs and Denver. The PEL study will continue to evaluate improvement concepts without the Gap and regional corridor to determine which
25 best meet travel needs and provide the greatest benefit for travel between the urban areas. The PEL study's evaluation of travel needs, environmental
26 and societal costs, and other priorities through the regional corridor needs to be completed to better define corridorwide improvements, including other
27 needs in the Gap. CDOT will resume the PEL study in Summer 2018 to prioritize the next improvements along the I-25 corridor and identify funding needs
28 for those improvements. The PEL Alternatives Analysis Technical Memorandum in **Appendix A1** describes the concepts under consideration for the PEL
29 study.

1 WHAT ABOUT FOUR LANES, TRANSIT, TRUCK CLIMBING LANES, OR ADDITIONAL WILDLIFE CROSSINGS?

2 The I-25 South Gap Project would address many of today's issues with safety, travel delays, and travel time reliability through the Gap. CDOT
3 acknowledges the public's interest in other concepts not included in the EA, particularly a four-lane alternative, localized highway or frontage road
4 improvements, building a southbound truck climbing lane through the Gap, or identifying additional suitable locations for wildlife crossings (underpasses
5 or overpasses) within the Gap or the larger PEL corridor. Additionally, the I-25 South Gap Project does not address all the needs for regional travel
6 between Colorado Springs and Denver. CDOT also recognizes and shares the public's interest in more holistic and multimodal solutions, such as enhanced
7 regional transit (bus and rail) and improvements through Castle Rock and into the Denver metropolitan area. The PEL study will evaluate these and other
8 concepts.

9 WHAT IS THE NO ACTION ALTERNATIVE?

10 No Action is the condition where CDOT would not proceed with the I-25 South Gap Project (Preferred
11 Alternative). I-25 would not be expanded through the Gap, and none of the primary elements of the
12 Preferred Alternative, such as bridge replacements and wildlife underpasses, would be constructed
13 within the I-25 South Gap corridor. Some ongoing highway maintenance and localized highway
14 improvements with committed funding sources would be implemented by the 2040 planning horizon.
15 Castle Rock would continue planning and design for a new I-25 interchange at Crystal Valley. Other
16 funded projects include local road and interchange improvements in areas outside of the Gap segment. Without the Preferred Alternative, no capacity is
17 planned to be added to I-25 between Colorado Springs and Denver. No Action does not provide needed infrastructure improvements through the Gap and
18 does not address the purpose and need for the I-25 South Gap Project. However, No Action is assessed in this document as a baseline against which the
19 Preferred Alternative is compared.

20 Under No Action, safety and mobility issues through the I-25 South Gap segment could be exacerbated as communities at the north and south ends of the
21 corridor continue to infill and expand. The bottleneck effect within the Gap would worsen as volumes increase, and future demand would not be met
22 safely or reliably. Congestion-related crashes and wildlife-vehicle collisions would increase because of the increased traffic volumes. The narrow shoulders
23 would remain unsuitable and unsafe for law enforcement, first responders, and CDOT maintenance. Moving disabled vehicles and crashes from the travel
24 lanes during incidents would remain challenging, and lane or highway closures would continue and likely increase with increased crashes.

The No Action is the condition where CDOT would not proceed with the I 25 South Gap Project. It does not address transportation needs but is included as a baseline to assess the impacts of the Preferred Alternative.

CHAPTER 4: DESCRIPTION OF THE I-25 SOUTH GAP PREFERRED ALTERNATIVE

Figure 4-1 on the next page summarizes the features of the I-25 South Gap Preferred Alternative, which would widen I-25 to add a tolled Express Lane in each direction, widen shoulders, improve curves and sight distances, replace bridges, add wildlife underpasses, improve drainage and water quality, and install other supporting features. All permanent improvements are planned to stay within existing CDOT right-of-way and minimize project impacts and costs.

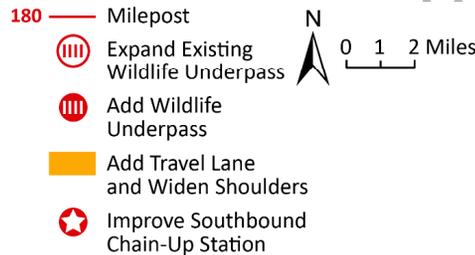
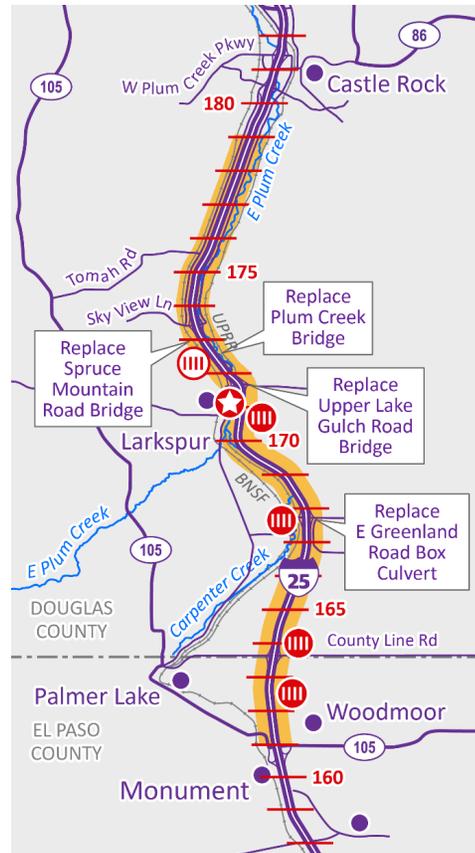
On average, the Preferred Alternative would increase the I-25 pavement width in each direction from 36 feet to 67 feet to accommodate the additional travel lane and wider shoulders to improve safety and incident response. Widening would occur primarily to the inside of the existing travel lanes in the existing median to maximize the use of existing right-of-way. Widening to the outside of the current roadway template would be required but would also be within the existing CDOT right-of-way. Vertical curves approaching the Greenland Road interchange would be flattened, and superelevation of horizontal curves would be corrected to improve safety.

The proposed typical section would include a new 12-foot Express Lane with a 4-foot buffer in each direction in the two-lane segment of the Gap corridor between approximately MP 161 and MP 179 and inside and outside shoulders of 15 and 12 feet, respectively (**Figure 4-1**). The shoulder widths narrow from the typical section in some locations, such as over the Union Pacific Railroad bridge, based on infrastructure or right-of-way constraints. Existing paved areas would be resurfaced. The project area extends north to approximately MP 181 to account for advanced highway signing and striping and other minor work needed to develop and transition the Express Lane on the north end of the corridor. On the south end of the corridor, the Express Lane is developed within the project limits, north of MP 161.

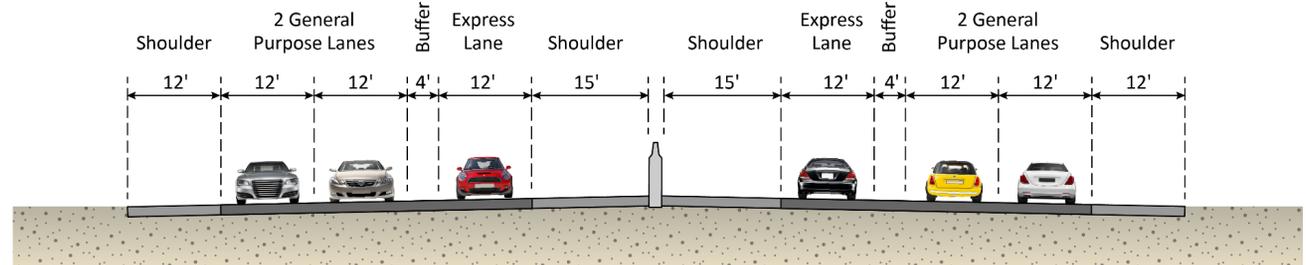
In addition, the I-25 bridges over Plum Creek, Greenland Road, and Upper Lake Gulch Road would be replaced, as would the Spruce Mountain Road bridge over I-25. While these bridges are generally old, their primary deficiencies are related to vertical clearance, meaning that they do not meet the minimum height requirements to allow tall trucks to pass safely under them. Interchange ramps would be lengthened to improve merging distances for traffic entering or exiting I-25.

The Preferred Alternative includes four new wildlife underpasses and improvement of the only existing wildlife underpass at the I-25 bridge over Plum Creek. A multidisciplinary group of structural engineers, drainage engineers, wildlife enforcement and management staff, and wildlife biologists advised on the location, dimensions, and design of the underpasses. Potential new underpass locations were evaluated based on several factors, including incidence of wildlife-vehicle collisions, adjacent land use and topography, constructability, previous analysis of wildlife movement in the area, expert local knowledge from CPW, and wildlife camera data. Based on their recommendations, four new wildlife underpasses are included in the Preferred Alternative, located at MPs 162.5, 164.0, 167.7, and 170.6 (shown in **Figure 4-1**). The selected locations provide the greatest benefit for improving wildlife

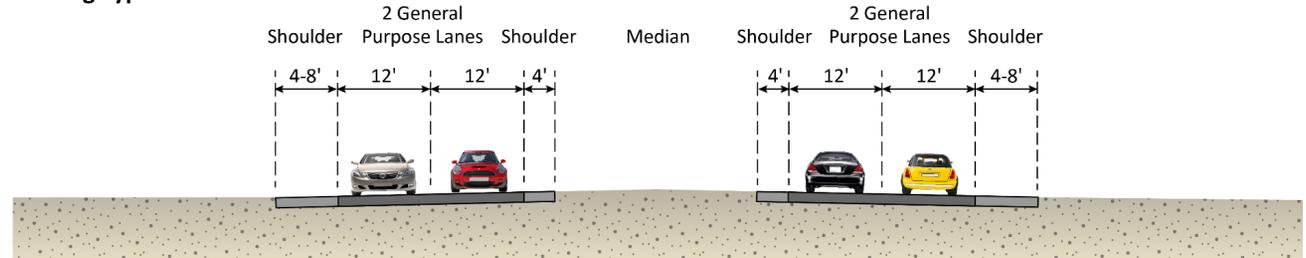
Figure 4-1. Preferred Alternative Elements, Proposed and Existing Typical Sections



Proposed Typical Section



Existing Typical Section



Key Features of the Preferred Alternative

The I-25 South Gap Project would improve and widen I-25 between Monument and Castle Rock (approximately MP 161 to 179) to:

- Add a new 12-foot Express Lane and 4-foot buffer northbound and southbound
- Widen inside and outside shoulders to allow room for disabled vehicle recovery, enforcement zones, maintenance, and detours around incidents
- Rehabilitate structures and pavement, including replacing the I-25 bridges over Plum Creek, Greenland Road, and Upper Lake Gulch Road, and replacing the Spruce Mountain Road structure over I-25
- Provide four new wildlife underpasses and expand the one existing underpass (at Plum Creek)
- Install median and retaining walls throughout the corridor
- Improve drainage and add other features such as lighting, signage, fencing, and water quality treatment facilities
- Open southbound rest area for truck chain-up in inclement weather; provide longer acceleration and deceleration lanes for entering and exiting the chain-up location

1 movement and increasing driver safety within the constraints of the project. In addition, the Plum Creek bridge (MP 172.2) (also shown in **Figure 4-1**) and
2 would be replaced to increase its suitability for large animals, such as elk, to pass underneath by increasing the width of the bridge span and removing the
3 existing center bridge pier. Wildlife fencing would be installed along both sides of I-25 to encourage deer and other animals to use the new underpasses
4 deter them from crossing the interstate. Wildlife jump-outs and deer guards would be constructed in conjunction with fencing and underpasses to allow
5 animals that potentially could enter the interstate to escape, and to deter animals from entering the interstate where gaps in the wildlife fencing are
6 unavoidable, such as at on-ramps and emergency access points. Fencing extent and jump-out locations will be determined during final design.

7 Median walls would be required for the intermittent stretches of split-grade profile, totaling about 6 miles, where the northbound and southbound travel
8 lanes differ more than 3 feet in elevation. (See **Figure 2-4** for an illustration of the split profile.) The height of the walls varies based on the degree of the
9 offset; most range from 3 to 5 feet tall, with two locations more than 9 feet tall. In addition to the walls, median barriers would be provided throughout to
10 provide physical separation between the northbound and southbound travel lanes. Breaks in the median would be required for construction access;
11 locations of median breaks would be considered in final design to determine if temporary construction access breaks could be incorporated as permanent
12 emergency crossovers. Along most of the corridor, widening would also be required on the outside of the existing pavement; retaining walls would be
13 needed in several of these locations to keep the improvements within CDOT right-of-way.

14 The Preferred Alternative includes improved lighting along the mainline in the urban section through Monument (from approximately MP 161 to 164) and
15 spot lighting at interchanges. Lighting already exists in most of these locations but would be upgraded and modernized to improve safety, reduce costs,
16 and minimize light pollution for surrounding open space properties. Lighting near the Greenland Road and Upper Lake Gulch interchange would be
17 designed to minimize light intrusion to the nearby wildlife underpass.

18 The Preferred Alternative would lengthen the entrance and exit points at the closed CDOT rest area at approximately MP 170.8 to provide an improved
19 southbound truck chain-up facility with the Gap.

20 Intelligent transportation system equipment would be installed to provide driver information, monitor driver compliance with the Express Lane
21 operations, and collect tolls electronically. The Preferred Alternative also includes communications and power systems to equip the roadway to leverage
22 current and future technology, such as variable message signs to provide driver information and lighting. Signs would be installed in advance of the access
23 points for the Express Lane to provide driver information, including how and when to enter and the pricing. The inside shoulders would be available for
24 enforcement zones to minimize Express Lane violations, such as vehicles entering the Express Lane outside the designated ingress, vehicles driving around
25 toll points, or other safety or speeding violations.

26 **Appendix A** contains additional details about the Preferred Alternative, including conceptual drawings of the roadway design (Roadway Conceptual Design
27 Drawings, **Appendix A6**) and a more detailed description of the project elements (Project Description, **Appendix A7**).

HOW WOULD THE EXPRESS LANES WORK?

The I-25 South Gap Express Lanes are expected to use a variable pricing system in which toll rates change depending on the time of day and the amount of traffic. This means when congestion is heavier during peak periods and as volumes increase in the future, the tolls would be increased accordingly to maintain reliable travel times in the Express Lanes. When congestion is minimal, the tolls would be lower. By adjusting toll rates in response to demand, CDOT can manage congestion, reduce delays, and maintain reliable travel times. A secondary benefit of the Preferred Alternative is that travel times in the adjacent general-purpose lanes would also improve due to the increased system capacity.

CDOT created a travel demand model for the I-25 South Gap Project to support project development and guide engineering. This model includes several preliminary Express Lane operational concepts and assumptions summarized below and documented in the Travel Demand Forecasting Technical Memorandum in **Appendix A3**. Following the process used for evaluating all Express Lane corridors in Colorado, the key operating assumptions for the I-25 South Gap Express Lanes are summarized below.

- Conformance with Colorado Statute (Colorado Revised Statutes 43-4-806) requiring toll revenues collected from the Express Lanes be used to maintain and improve the I-25 corridor between Monument and C-470.
- Conformance with Transportation Commission resolution TC-15-10-5, which, where feasible, allows motorcycles, transit, Bustang, and HOV 3+ (with a switchable transponder) to use the lane for free.
- Compliance with the federal requirement of maintaining a minimum Express Lane operating speed of 45 mph.
- Conformance with CDOT's practice of managing travel demand and maximizing throughput in the Express Lane.
- Assumption of three preliminary locations for ingress and egress for the Express Lane: at the north and south ends of the Gap corridor and intermediate access for the Town of Larkspur. Entering or exiting the Express Lanes outside these points would be prohibited.
- Assumption of an Express Lane surcharge in addition to the toll for vehicles with more than three axles, similar to operations on the I-25 and US 36 corridors.



For general information about using the CDOT Express Lanes and to watch “how to” videos of Commuters, Carpoolers, and Transit Riders using Express Lanes, visit the Express Lanes website

<https://www.codot.gov/programs/expresslanes/using-the-lanes>

Keep up with the latest information about the I-25 South Gap Project on the project website (i25gap.codot.gov).

1 These preliminary concepts and assumptions will continue to be refined through the design process. As these concepts and assumptions are validated,
2 final approval of the operating rules will be required by the Colorado Transportation Commission and High Performance Transportation Enterprise (HPTE)
3 Board of Directors. The final operating rules will be monitored for adjustments after implementation to ensure reliable travel times in the corridor. In its
4 2017 Annual Report, HPTE reported toll rates on US 36 and I-25 Express Lanes, which ranged from \$0.35 to \$5.15. The higher prices are for the
5 peak/highest volume periods of the day. HPTE's Board of Directors approves the business rules for CDOT's Express Lane corridors and will also make the
6 final determination on toll rates for the I-25 South Gap project several months prior to opening the new Express Lanes.

7 HOW DOES THE PREFERRED ALTERNATIVE MEET THE PURPOSE AND NEED?

8 The Preferred Alternative has been designed to address the identified needs in the Gap corridor, namely to improve safety and incident management,
9 reduce travel delays, and improve travel time reliability. Technical memoranda included in **Appendix A** provide additional information about the safety
10 and traffic performance of the Preferred Alternative.

11 HOW DOES THE PREFERRED ALTERNATIVE IMPROVE SAFETY?

12 The Preferred Alternative addresses the key safety issues through the Gap: reducing
13 vehicle crashes, reducing wildlife-vehicle collisions, and improving safety for
14 maintenance, emergency response, and law enforcement workers in the corridor.

15 VEHICLE SAFETY

16 Reduced vehicle crashes are expected due to increased capacity; wider shoulders and
17 improved drainage; improved signage, pavement markings, and delineators; interchange
18 lighting; and lengthened acceleration and deceleration lanes.

- 19 • Increased capacity provided by the new travel lane reduces congestion and
20 moderates the bottlenecks and queues that currently occur at the locations where
21 the cross section transitions from three to two lanes in each direction. The improved
22 lane balance and increased capacity results in smoother traffic flow and reduced
23 crashes associated with congestion, queuing, and turbulence.
- 24 • Wider shoulders have many safety benefits, and research has shown that increasing
25 shoulder widths to 9 feet or more reduces crashes on rural roadways by approximately 20 percent. Wider shoulders – combined with barriers that are
26 offset farther from the travelway – provide room for drivers to move into the shoulder to prevent a collision. A firm, stable shoulder provides a clear
27 recovery area. This greatly increases the chance of safe recovery for drivers who have left the travel lane in attempting to avoid a crash or an object in



Much of the safety benefit of the Preferred Alternative derives from the wide shoulders, which provide recovery areas and better stopping sight distance for drivers, room to move disabled vehicles from the travelway, and maneuverability for incident response.

1 the lane ahead. Shoulders also improve stopping sight distance at horizontal curves by providing an offset to objects such as barrier and bridge piers
2 and provide additional storage for water draining from the roadway. Additionally, shoulders provide space for broken-down vehicles to get out of the
3 travel lane, reduce potential for secondary crashes and benefit emergency response and enforcement (as discussed below), which facilitate safer
4 driving conditions.

- 5 • Improved drainage allows water to flow from the travel lanes, reducing ponding and resulting wet road conditions on driving lanes that contribute to a
6 higher-than-expected number of crashes in the I-25 South Gap corridor.
- 7 • Delineators would be installed to improve driver navigation, particularly in low-light conditions (which account for approximately one-third of crashes
8 through the Gap) and at interchanges. Lengthening of on- and off-ramps will also provide safer merging distances and reduce speed differentials with
9 traffic entering and exiting the interstate. Overhead lighting would be installed at interchanges throughout the project, and along I-25 from
10 approximately MP 164 to the southern extent of the project.

11 The design for the Express Lanes incorporates safety features to reduce the potential for crashes. The Preferred Alternative typical section, including the
12 widths of the Express Lane buffer area, travel lanes, and shoulders, conform to the desirable cross section for Managed Lane facilities (FHWA-HOP-16-
13 076). Specifically, the inside 15-foot enforcement shoulder and 4-foot buffer between the Express Lane and general-purpose lanes improve the safety and
14 operations of managed lane facilities. These features have been developed based on
15 experience with other Express Lane corridors. Narrowing of the typical section is not
16 recommended except for short sections, such as across a narrow bridge. Although the
17 specific locations for Express Lane accesses are continuing to be refined, the design will limit
18 access to specific locations (rather than provide continuous access) to limit weaving and
19 decision points for drivers. Additionally, the design includes a 4-foot buffer between the
20 Express Lane and general-purpose lanes to separate the Express Lane from the general-
21 purpose lane. Regulatory signing will be installed to explain lane transitions and enforcement
22 areas protected with bump-outs with concrete barriers will be provided to allow officers to
23 patrol from a safe location. The presence of law enforcement helps to reduce speeding and
24 promote more harmonious travel speeds.

25 WILDLIFE-VEHICLE COLLISIONS

26 Wildlife-vehicle collisions, which account for 10 percent of the reported crashes through the
27 Gap corridor, would be reduced by new wildlife underpasses that would provide
28 opportunities for animals to cross under I-25 instead of crossing the interstate at-grade and
29 being struck by a vehicle. Wildlife fencing would be included from approximately the



The presence of wildlife along the I-25 South Gap corridor results in a high number of recorded wildlife-vehicle collisions. The Preferred Alternative provides one improved and four new wildlife underpasses to reduce these conflicts and improve safety.

1 southern end of the project at MP 161 to MP 178 and would tie into the wildlife underpasses and large culverts. Wildlife fencing is a critical component to
2 the effectiveness of wildlife underpasses because it directs the animals into the crossings and deters the animals from crossing the interstate at-grade.
3 Wildlife jump-outs and deer guards would also be constructed to allow animals who have entered the fenced area to escape, and to prevent animals from
4 entering the interstate. The final extent and locations of fencing, deer guards, and jump-outs would be determined during final design. Although safety
5 data is not available to predict the expected percentage of crash reduction for wildlife crossings, CDOT and CPW recently completed a series of wildlife
6 crossings on SH 9 that have demonstrated an 86 percent reduction in wildlife-vehicle collisions (Wildlife Movement Technical Memorandum,
7 **Appendix B1**).

8 INCIDENT MANAGEMENT

9 The Preferred Alternative includes wide shoulders and other features requested by maintenance, emergency response, and law enforcement workers to
10 address safety for these activities. Responders would have more room to work on the roadside without blocking travel lanes and have reduced exposure
11 to moving traffic. Law enforcement would have adequate room for parking and interacting with drivers away from moving traffic. Maintenance would
12 have more work zone flexibility, turnarounds, and fewer incidents to work around. Effective maintenance, emergency response, and enforcement provide
13 safer conditions for the traveling public. Disabled vehicles would have room to get out of the traveled lane and, if unable, other vehicles could maneuver
14 around them to clear the way for emergency vehicles to access the scene.

15 Secondary crashes and delays due to lane or highway closures would be reduced. Through traffic could be routed around incidents, and the expected
16 improvement in response times would allow traffic to restore to normal operations faster, causing less inconvenience to the traveling public. Shoulders
17 would also provide space for emergency truck parking in inclement weather and flexibility for maintenance to establish work zones and/or reroute traffic
18 around maintenance activities.

19 Improvements to interchanges provide turnaround locations with adequate vertical clearance for emergency and maintenance vehicles that also improve
20 access to incidents. The improved interchange at Greenland Road, which is upgraded for two-way traffic from a narrow, single-lane box culvert, provides a
21 location within the Gap to reroute interstate traffic during an emergency. Crossovers in the median needed for construction (due to the split profiles) can
22 be maintained for emergency response, providing more flexibility and quicker access to disabled vehicles.

1 HOW DOES THE PREFERRED ALTERNATIVE REDUCE TRAVEL DELAYS?

2 The Preferred Alternative would add capacity to I-25 that would reduce congestion and
3 improve travel speeds on I-25 and alternate routes. Travel speeds on I-25 would be faster
4 and more consistent due to reduced turbulence from the bottleneck transitions between
5 two and three lanes and from the improved interchange on- and off-ramps that would
6 reduce disruption from merging. Improved conditions on I-25 are projected to reduce
7 diversions to local roads. The travel demand model forecast that the daily traffic volumes
8 would decrease upon opening of the Preferred Alternative by approximately 24 percent on
9 SH 83 and approximately 38 percent on SH 105/Perry Park Road because of the additional
10 capacity provided on I-25.

11 Immediately upon opening in 2021, the Preferred Alternative is projected to improve I-25
12 travel speeds across all lanes, including the existing general-purpose lanes, by at least 9 mph
13 to as much as 30 mph in the most congested Friday afternoon period. **Table 4-1** summarizes
14 the projected travel time savings with the Preferred Alternative in 2021 and 2040. As noted,
15 travel time savings in the Express Lanes is greatest when the corridor is most congested.

16 For delays in the corridor related to incidents and incident response, which account for
17 about half of the current delays, the wider shoulders provided under the Preferred
18 Alternative are expected to greatly reduce delays related to incident management by
19 providing more recovery area for drivers to avoid crashes, especially secondary crashes; adequate space to move disabled vehicles from the travelway and
20 conduct investigations and cleanup without requiring lane closures; and more space for vehicles to temporarily maneuver around crashes, even if lanes
21 are blocked. Wider shoulders also improve capacity and encourage more uniform travel speeds on high-speed roadways like I-25 by increasing driver
22 comfort. These additional travel time savings would be in addition to those included in **Table 4-1** resulting from decreased congestion.



The Preferred Alternative would provide additional lane capacity that would reduce delays and improve travel times. Turbulence related to the bottleneck transition, merging at interchanges, and maneuvering around incidents would be reduced, improving travel speeds and comfort.

1 **Table 4-1. Travel Times and Projected Travel Time Savings for the Preferred Alternative in 2021 (anticipated opening) and 2040 (design year)**

Time Period	Travel Times	2021			2040		
		No Action	Express Lane	General-Purpose Lanes	No Action	Express Lane	General-Purpose Lanes
Weekday Northbound 6:30-9:00 AM	Total Travel Time	22	18	19	43	23	31
	Travel Time Savings	--	4	3	--	20	12
Weekday Southbound 3:00-7:00 PM	Total Travel Time	24	19	21	79	26	43
	Travel Time Savings	--	5	3	--	53	36
Friday Southbound 3:00-7:00 PM	Total Travel Time	50	23	25	119	32	69
	Travel Time Savings	--	27	25	--	87	50
Sunday Northbound 11:30 AM-3:00 PM	Total Travel Time	26	19	22	40	23	29
	Travel Time Savings	--	7	4	--	17	11

2 Source: Travel Demand Model Forecasts (Appendix A3)

3 **Notes:**

4 The Preferred Alternative includes a new Express Lane and two adjacent general-purpose lanes. Travel times shown for the Express Lanes in 2021 and 2040 are for travel through the
 5 corridor using the Express Lane where available (see below). Travel times for the general-purpose lanes represent travel times in 2021 and 2040 in the general-purpose lanes with the
 6 Preferred Alternative (that is, for the new three-lane typical section, including the Express Lane). The No Action represents projected travel times without improvements.

7 Based on the current design, the Express Lanes would operate for approximately 15 miles within the Gap corridor. Therefore, the travel times shown for the Express Lane represent some
 8 travel within the general-purpose lanes. Operationally, the Gap corridor extends 21 miles between SH 105 (MP 160) and Plum Creek Parkway (MP 181) to account for the striping transitions
 9 and advanced signing required at the north and south ends of the project. Particularly on the north end, the transition extends north of MP 179 to develop and transition the Express Lane.

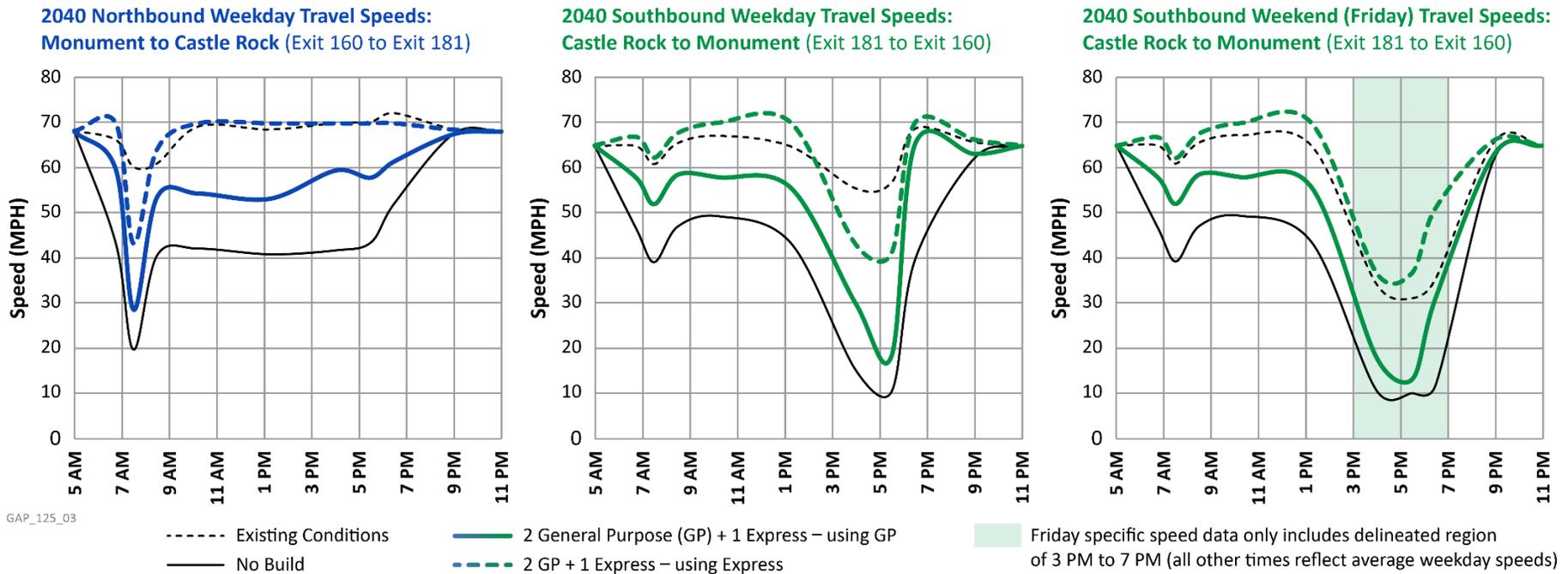
10 **HOW DOES THE PREFERRED ALTERNATIVE IMPROVE RELIABILITY?**

11 The Preferred Alternative would improve travel reliability through the Gap by providing additional capacity that improves travel times and
 12 maneuverability throughout the system over all travel periods. Reliable and faster travel times are most notable in the highest traveled peak periods
 13 because of the variable pricing the Express Lanes can implement to manage congestion. Drivers using the Express Lanes would save time by being able to
 14 make their trip faster and not have to plan a buffer to account for unpredictable travel. The Express Lanes also provide flexibility to respond to changing
 15 travel patterns and needs, while encouraging travel in off-peak periods and/or different travel choices, such as transit or carpooling. Express Lanes provide

more consistent travel speeds, which improve reliability and promote a safer and more comfortable driving experience. **Figure 4-2** compares the projected 2040 travel speeds for the No Action and Preferred Alternative through the Gap in the peak travel periods. Various lines are shown in **Figure 4-2**:

- The No Action 2040 projected travel speeds are shown as a solid black line. In all time periods, travel speeds (and times) are projected to significantly deteriorate under No Action.
- For the Preferred Alternative, two sets of lines are shown in each graph: Express Lane (dashed blue or green) and Existing General-Purpose Lanes (solid blue or green). These lines represent the travel speeds of the lanes within the Preferred Alternative.
 - The Express Lane is the travel speed within the Express Lane. In all time periods, the Express Lane offers the highest speeds.
 - The Existing General-Purpose Lanes line represents the travel speed in the existing general-purpose lanes with the Express Lane in operation (that is, the new three-lane segment). In all time periods, travel speeds in the existing general-purpose lanes are faster than No Action.
- Existing conditions (2017 average speeds) are shown as a black dashed line on **Figure 4-2** for context.

Figure 4-2. Comparison of Travel Speeds with the Preferred Alternative and No Action in 2040



Source: Travel Demand Model Forecasts (Appendix A3)

1 For the most congested time period now and in the future – Friday afternoons in the southbound direction – the Express Lane continues to provide higher
2 travel speeds than the existing condition into 2040, but still slower absolute speeds than the other, less congested time periods. The Express Lane
3 performance measure of 45 mph minimum speed is achieved within the 15 miles of the Express Lane area of the corridor but, as noted in **Table 4-1**, due
4 to operational transitions, the Gap corridor extends approximately 21 miles, and the Preferred Alternative includes 5 miles of travel in a general-purpose
5 lane where congestion cannot be managed, which is why overall speeds shown for the Express Lane drop below 45 mph in the most congested hour(s).
6 This also explains why the speed differentials are greater and why the Express Lane operates substantially better and more reliably than the general-
7 purpose lanes during these periods.

8 HOW WOULD THE PREFERRED ALTERNATIVE BE CONSTRUCTED?

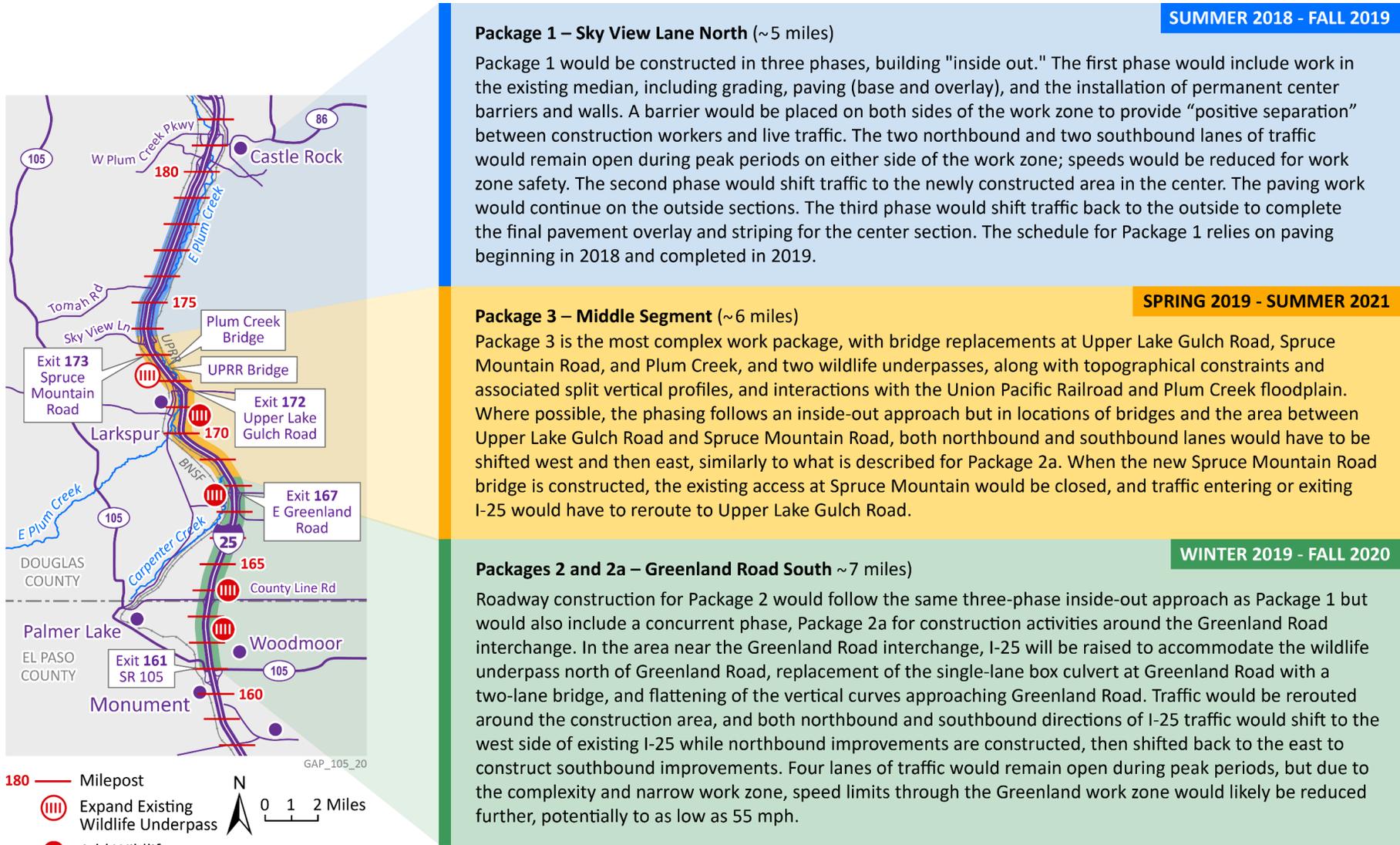
9 Construction of the I-25 South Gap Project could begin in Fall 2018 and be completed in 2021. To advance the construction schedule and allow for
10 flexibility in phasing and construction packaging, CDOT determined that the I-25 South Gap Project would follow a Construction Manager/General
11 Contractor delivery method. A contractor was selected in December 2017 and has worked with the design team to develop preliminary construction
12 phasing illustrated in **Figure 4-3**.

13 Construction is planned in three primary packages: Package 1 on the north end of the project, Package 2 on the south end, and Package 3 in the middle.
14 Constructing the north and south ends first provides benefits for the two-lane to three-lane transitions in the higher volume areas of the Gap corridor.
15 Package 3 has the most challenging physical constraints but also serves lower volumes. After completing Package 3, the new paved areas would then be
16 restriped for three travel lanes in each direction with widened shoulders.

17 Express Lanes would go through several months of operational testing and integration before they are implemented. Tolls are waived during the testing
18 period, which allows drivers the ability to use the Express Lanes for free while learning how they operate. During the testing period, HPTE will hold
19 telephone town halls and other meetings to discuss toll rates and operations of the new Express Lanes.

20 Within each package, construction would be phased to minimize disruption to travel throughout the corridor and to provide safe conditions for
21 construction workers working in the tight corridor. Two lanes of traffic in each direction would be maintained during peak periods. Access to residences,
22 businesses, and open space properties would be maintained. A Traffic Incident Management Plan would be developed and implemented to protect work
23 zone safety and maintain traffic flow through the construction area. Barriers are planned to be placed next to work zones to provide separation between
24 workers and live traffic. Traffic and speeds would likely be reduced through work zones.

1 **Figure 4-3. Preliminary Construction Packaging and Phasing Plan, Summer 2018 to Summer 2021**



2

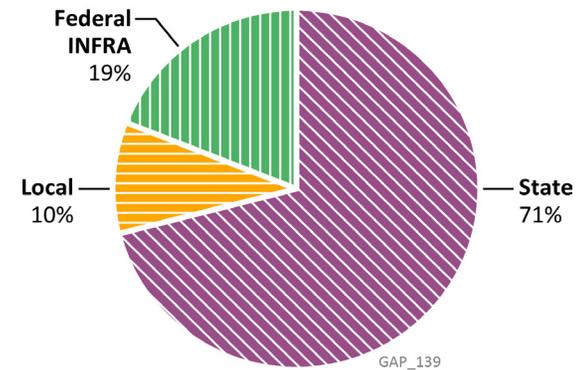
Note: Operational toll testing and integration of the Express Lanes would continue through Summer 2021, by which time the I-25 South Gap project is expected to be fully operational.

WHAT ARE THE COSTS AND FUNDING FOR THE I-25 SOUTH GAP PROJECT?

The I-25 South Gap Project budget is \$350 million. Although funds are not secured, they are reasonably expected from a planning perspective. The distribution of potential funding sources is presented in **Figure 4-4**. CDOT identified the bulk of the funding—\$250 million—from Colorado Senate Bill (SB) 267. Those funds have been set aside by the Transportation Commission, ready to be leveraged with local and federal investments to complete the funding package. Local funding of \$35 million has been preliminarily identified from El Paso County, Pikes Peak Rural Transportation Authority, and Douglas County. In November 2017, El Paso County, in cooperation with CDOT, FHWA, and Douglas County, submitted a grant request to complete the funding to the INFRA program, a new federal grant program announced in Summer 2017. Although funding sources for the project have been identified, all funding is contingent upon the total funding package being secured; that is, the CDOT-committed funds are contingent upon a successful INFRA grant, and local funding is contingent upon the state and federal funding needed to build the project. If the INFRA grant is not successful, additional funds would need to be identified to fill this funding void.

An Economic Impact Study was completed for the I-25 South Gap Project (**Appendix A8**, Economic Impact Study). The study found that the benefits for the project outweighed the costs by nearly 7:1, meaning that for every dollar spent on the project, it would generate seven dollars in benefits. Benefits derive from travel times savings, crash reductions, and reduced vehicle maintenance costs for corridor users.

Figure 4-4. Potential Funding Sources for the \$350 million I-25 South Gap Project



1 WHAT HAPPENS NEXT?

2 I-25 SOUTH GAP PROJECT ACTIVITIES

3 If approved and funded, the Preferred Alternative would move forward with the accelerated design and construction schedule. Physical construction
4 would proceed generally as outlined in **Figure 4-3**. The construction schedule is dependent on secured funding and cash flow.

5 During construction, CDOT would provide updates and traveler information, and a public information plan would be implemented (as described in
6 **Chapter 6**). Operational assessment of the Express Lanes would continue, and HPTe would provide information to users about the Express Lanes
7 operations and potential tolling schedule.

8 OTHER IMPROVEMENTS BEYOND THE I-25 SOUTH GAP PROJECT

9 Future improvements to the I-25 corridor between Colorado Springs and Denver will continue to be evaluated through the PEL study. The study will
10 resume in Summer 2018 to fulfill its original objectives to achieve the following:

- 11 • Describe the needs and vision for the regional corridor, including refining the existing corridor assessment (with the I-25 South Gap Project as part of
12 the new “existing condition” for I-25).
- 13 • Define and prioritize projects in the corridor.
- 14 • Determine project costs, funding, financing, and delivery options.
- 15 • Engage with local corridor communities, regional travelers, and other interested stakeholders.
- 16 • Identify significant environmental constraints and support efficient transition through project delivery.

17 CDOT and FHWA will continue to assess additional needs for the Gap corridor between Monument and Castle Rock and for the rest of the 34-mile corridor
18 between Castle Rock and C-470. The PEL will specifically evaluate the benefits and costs of adding an additional travel lane beyond the Preferred
19 Alternative through the Gap corridor, providing new or expanded regional transit service, and improvements to I-25 north of the Gap, all of which are of
20 great public and political interest. The PEL improvement concepts are described in the PEL Alternatives Analysis Technical Memorandum included in
21 **Appendix A1**. If additional projects – and funding – are identified that could be implemented in the near term, CDOT could potentially accelerate those
22 projects to take advantage of the construction mobilization for the I-25 South Gap Project. However, any additional projects would need to be evaluated
23 through the NEPA process before being approved for construction.

CHAPTER 5: ENVIRONMENTAL IMPACTS AND MITIGATION

Table 5-1 (on the following page) provides a summary of the affected environment (resource context) and environmental impacts of the Preferred Alternative and No Action. Resources in the table are grouped by natural resources, social resources, and other issues. Within each grouping, resources are presented in the order that corresponds to the public and agency interest in and/or potential impacts to resources as detailed below.

Natural Resources	Social Resources	Other Issues
<ul style="list-style-type: none"> • Wildlife Movement • Threatened and Endangered Species • Wetlands (Aquatic Resources) • Water Quality • Floodplains • Paleontological Resources • Vegetation • Noxious Weeds 	<ul style="list-style-type: none"> • Socioeconomics • Environmental Justice • Visual Resources • Recreational Resources • Noise • Historic Resources • Air Quality • Hazardous Materials 	<ul style="list-style-type: none"> • Section 4(f) Properties • Transportation Resources • Freight • Cumulative Impacts

An archaeological resources survey was conducted (**Appendix B15**); no important resources were identified within the project area so archeological resources are not included in **Table 5-1**. Similarly, no bicycle and pedestrian facilities, farmlands, or Section 6(f) resources are present within the project area, and these resources are not included in Table 5-1. The Preferred Alternative is anticipated to have no effects on right-of-way or land uses and negligible effects to energy, geology and soils, and utilities so these resources are also not included in **Table 5-1**. Mitigation numbers in **Table 5-1** correspond to the Mitigation Tracking Table (**Appendix B17**). Mitigation commitments are also summarized in **Table 5-2**.

The impacts presented in **Table 5-1** are based on the footprint and corresponding project description provided in **Appendix A6** and **Appendix A7**, respectively. The footprint, which assumes use of CDOT’s full right-of-way, is larger than the Preferred Alternative design and therefore is a more conservative accounting of impacts (that is, likely overestimates project impacts). Mitigation will be provided only for the actual project impacts as determined through final design. For more detailed information on resources or impacts, see the corresponding technical documentation included in **Appendix B** and referenced in **Table 5-1**.

1 **Table 5-1.Environmental Impacts of No Action and Preferred Alternative**

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
Natural Resources				
<p>Wildlife Movement See Wildlife Movement Technical Memorandum (Appendix B1)</p>	<p>Outside of mowed and existing paved areas, upland grassland is the primary habitat type within the project limits. The Gap is surrounded by undeveloped public open space and private land in conservation easements, providing abundant natural resources and wildlife habitat. Large resident populations of deer and elk in the adjacent, preserved open spaces frequently cross the interstate at-grade, due to the lack of suitable grade-separated crossings. Small mammals and large predators are also forced to cross the interstate, creating unsafe driving conditions. As a result, the Gap exhibits a high number of wildlife-vehicle collisions.</p> <p>Migratory bird nesting habitat, wetland and riparian habitat subject to Senate Bill 40 (SB 40) requirements, and general habitat protected by the Shortgrass Prairie Initiative are present in the project area. East Plum Creek is the only perennial stream in the project area which provides suitable habitat for aquatic species.</p>	<p>Wildlife-vehicle collisions would increase as traffic volumes increase; the probability of an animal crossing successfully at-grade across I-25 decreases with an increase in the number of vehicles the animal must avoid.</p> <p>No wildlife habitat would be directly affected because no construction activities or roadway widening would occur.</p>	<p>Without mitigation, the Preferred Alternative would widen the roadway, creating a longer distance for animals to cross and increasing the number of wildlife-vehicle collisions. For mitigation, new wildlife underpasses would be constructed at four locations, and one existing wildlife underpass location would be improved within the project area: (dimensions are minimum and are subject to change during final design). Dimensions are listed as height by width by length:</p> <p>MP 162.5 – An existing 24-inch culvert would be replaced with three parallel bridges. The total underpass dimension beneath I-25 would be 10 feet by 50 feet by 200 feet. The third bridge (10 feet by 50 feet by 22 feet) would carry Monument Hill Road.</p> <p>MP 164.0 – An existing 14-foot by 14-foot concrete culvert would be replaced with two parallel bridges. The total underpass dimension beneath I-25 would be 14 feet by 100 feet by 140 feet.</p> <p>MP 167.7 – An existing 14-foot by 10-foot box culvert would be replaced with two parallel bridges. The total underpass dimension beneath I-25 would be 15 feet by 100 feet by 150 feet.</p> <p>MP 170.6 – The 24-inch and 42-inch culverts would be replaced with two parallel bridges. The total underpass</p>	<p>15-22, 27</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
			<p>dimension beneath I-25 would be 16 feet by 100 feet by 160 feet.</p> <p>MP 172.2 – the existing Plum Creek bridge would be replaced by a larger, single span structure, removing the existing bridge pier and providing a larger opening to facilitate wildlife movement.</p> <p>Wildlife fencing is recommended to extend from approximately the southern limit of the project to Crystal Valley Parkway on both sides of the interstate because new median walls constructed throughout the project could act as a barrier to movement of animals, essentially trapping animals on the inside shoulder. Fencing placement would be finalized during final design. Installation of four new wildlife underpasses and one expanded existing underpass at Plum Creek, combined with wildlife fencing, wildlife jump-out ramps, and deer guards would reduce wildlife-vehicle collisions by greatly reducing the number of animals crossing the interstate and by providing safe grade-separated passage for animals under the interstate. The location and spacing of deer guards and wildlife jump-outs would be determined during final design.</p> <p>Construction activities such as vegetation removal, erosion, and noise would result in impacts to wildlife habitat, migratory birds and their nesting habitat, wetland and riparian habitat subject to SB 40 requirements, and shortgrass prairie protected by the Shortgrass Prairie Initiative. The Preferred Alternative would result in the temporary and permanent conversion of these habitats to transportation facility.</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Threatened and Endangered Species</p> <p>See and Programmatic Biological Assessment (Appendix B2) and Biological Resources Technical Memorandum (Appendix B3)</p>	<p>The study area contains suitable habitat for three federally listed as threatened species: Preble's meadow jumping mouse, Colorado Butterfly Plant, and Ute ladies' tresses orchid. No critical habitat exists within the project limits for any of the three species.</p> <p>Species-specific surveys were conducted during the blooming season for the Colorado Butterfly Plant and Ute ladies' tresses orchid; no occurrences were recorded.</p> <p>Preble's meadow jumping mouse habitat is located in the project area and is concentrated around wetlands, wet meadows, riparian areas, and upland areas within 300 feet of the 100-year floodplain of East Plum Creek, Carpenter Creek, Crystal Creek, and their associated tributaries.</p> <p>Five state-listed species have the potential to occur within the project area:</p> <ul style="list-style-type: none"> • Northern Redbelly Dace • Northern Pocket Gopher • Northern Leopard Frog • Bald Eagle • Black-tailed Prairie Dog <p>Of these five species, populations of northern leopard frogs have been previously recorded in the project area.</p>	<p>No impacts to federally threatened species in the project area would occur from No Action.</p>	<p>The Preferred Alternative would result in approximately 4.5 acres of temporary and 12.7 acres of permanent impacts to Preble's meadow jumping mouse habitat, resulting in a <i>may affect, and is likely to adversely affect</i> finding in consultation with the U.S. Fish and Wildlife Service (USFWS). A <i>may affect, but is not likely to adversely affect</i> finding is made for the Colorado Butterfly Plant and Ute ladies' tresses orchid because, although no occurrences were observed during the field surveys, suitable habitat exists within the project area. A Programmatic Biological Assessment is submitted as part of the EA process to address effects from this project to federally-listed species. Site-specific Biological Assessments are planned for separate work packages, where additional mitigation opportunities will be considered.</p> <p>Temporary and permanent impacts to state-listed species could occur because of grading, paving, and other disturbance associated with construction and operation of the Preferred Alternative; however, based on the amount of supporting habitat (wetland, wet meadow, riparian, and upland areas) within the project limits, and the lack of known occurrences/populations of any of the five state-listed species in the project area, impacts to state listed species are anticipated be minor.</p>	<p>26</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Wetlands/ Waters of the U.S.</p> <p>See Aquatic Resources Technical Memorandum (Appendix B4)</p>	<p>The project is located within the Fountain and the Upper South Platte watersheds. East Plum Creek and Carpenter Creek are the only perennial drainages in the project area, with the other creeks and minor tributaries being ephemeral and intermittent drainages, which are dry most of the year.</p> <p>Field surveys have identified wetlands and waters of the U.S. within the project limits. Wetlands are concentrated near East Plum Creek, Carpenter Creek, Dirty Woman Creek, Crystal Creek, and their associated tributaries.</p>	<p>No impacts to wetlands or waters of the U.S. in the project area would occur from No Action.</p>	<p>The Preferred Alternative is estimated to result in up to 3.51 acres of temporary and 0.77 acre of permanent impacts to wetlands. The 0.77 acre of permanent impacts are comprised of 0.31 acre palustrine emergent, 0.04-acre palustrine scrub-shrub, and 0.46-acre combination wetland. No single stream crossing or Wetland impact area exceeds 0.5 acre of permanent impact.</p> <p>Approximately 3,571 linear feet (0.62 acre) of temporary impact and 1,355 linear feet (0.18 acre) of permanent impact would occur to waters of the U.S. To comply with Section 404 of the Clean Water Act, the project would request authorization under Nationwide Permit 14.</p> <p>The project would not affect the hydrology of the area or impact adjoining wetlands or waters of the U.S</p>	<p>4-14</p>
<p>Floodplains</p>	<p>The project intersects mapped floodplain/floodway areas in the following locations:</p> <ul style="list-style-type: none"> • I-25 crosses over Crystal Creek (Zone AE) near MP 161.3 in El Paso County. The project will not alter the existing culvert or floodplain at this location. • I-25 crosses over an unnamed tributary to Carpenter Creek at MP 167.3 (Zone A) in Douglas County. The project will not alter the existing culvert or floodplain at this location. • I-25 crosses over Plum Creek and then parallels the creek from MP 172.2 to MP 176.4 in Douglas County. Discussions with the 	<p>No impacts to floodplains in the project area would occur from No Action.</p>	<p>All existing culverts have been evaluated to determine if they will adequately convey the design storm flow rates. Culverts found to be inadequate will be replaced while adequate crossings that are structurally sufficient will remain in place and be extended as needed.</p> <p>Although impacts to Plum Creek are not anticipated, the project will create a pre-project and post-project hydraulic model to confirm this conclusion. Coordination with the floodplain administrators would continue through final design.</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>County Floodplain Administrator indicate that the current FEMA mapping contains errors showing a larger floodplain than anticipated.</p> <ul style="list-style-type: none"> • Culverts and bridge at floodplain crossings are adequate to convey the 100-year flow rate. 			
<p>Water Quality See Water Quality Technical Memorandum (Appendix B5)</p>	<p>Surface waters within the project limits are primarily associated with three major drainages: Crystal Creek, Carpenter Creek, and East Plum Creek. These three major drainages, and their minor tributaries, cross the project at approximately 34 locations. The project occurs within Municipal Separate Storm Sewer System (MS4) boundaries south of MP 163.6 (Monument MS4) and north of MP 179.0 (Castle Rock MS4); however, no permanent water quality features exist within the project limits as water quality mitigations were not required when the existing I-25 infrastructure was constructed</p> <p>Within the project limits, East Plum Creek is currently listed as a Colorado Department of Public Health and the Environment (CDPHE) low-priority impaired stream for arsenic, due to its effect on aquatic life. Carpenter Creek and two unnamed tributaries of Carpenter Creek that cross the project are currently being monitored and evaluated for pH and Total Recoverable iron.</p>	<p>Roadway pollutants would continue entering nearby water bodies due to roadway runoff during precipitation events, maintenance activities, and ongoing wear of the Interstate. As traffic volumes increase, vehicle-generated pollution could increase, further degrading the water quality of the impaired waterbodies, and potentially creating new impairment concerns for streams in the project area.</p>	<p>Pollutants can enter and impair water bodies from natural and manmade causes. The ultimate source of pollutants identified in the streams in the project area could not be isolated to one cause; as a result, the impairments covered under CDOT’s MS4 are treated as if the interstate were a contributing factor. Water quality treatment would be provided in areas regulated by CDOT’s MS4 permit to decrease pollutants entering nearby streams.</p> <p>Outside of MS4 areas, roadside ditches and grass swales would be provided, where feasible, to help capture and filter water prior to entering streams, but pollutants would continue to enter streams from roadway runoff, and as traffic volumes increase, vehicle-generated pollution would increase.</p> <p>The Preferred Alternative would result in approximately 119 acres of new impervious surface because of widening the interstate to add new travel lanes and widened shoulders.</p>	<p>30</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
		<p>Permanent water quality treatment features would remain absent in the Gap. The amount of impervious surface on the I-25 mainline would remain unchanged.</p>	<p>Construction of the Preferred Alternative could potentially result in temporary impacts to water quality caused by increased soil erosion in grading areas or other areas where vegetation removal has occurred. Fuel and other construction-related hazardous materials have the potential to spill and migrate into nearby water bodies.</p>	
<p>Paleontological Resources See Paleontological Clearance Technical Memorandum (Appendix B6)</p>	<p>According to the best available geologic maps of the area, the project is underlain by the following geologic units:</p> <ul style="list-style-type: none"> • Modern artificial fill related to the existing highway structure • Holocene and Pleistocene alluvial and related deposits • Eocene Dawson Formation <p>Additionally, current scholarly opinion is that exposures in the northern portion of the project area are likely older than Eocene and more related in age to the Denver Formation in the north. Modern and Holocene deposits are considered to be too young to be paleontologically sensitive (less than approximately 11,700 years before present) and were not examined during this survey. Pleistocene deposits may contain fossil or subfossil remains, particularly of ice age mammals, and are considered to be moderately paleontologically</p>	<p>No impacts to paleontological resources in the project area would occur from No Action.</p>	<p>Paleontological resources could be inadvertently encountered and damaged during construction in areas requiring deep subsurface excavation, such as culverts, wildlife underpasses, bridges, utilities, or other areas of excavation.</p>	<p>23</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>sensitive. These deposits were poorly exposed in the project area, being predominantly covered in vegetation, and were not examined on foot during this survey. The Eocene Dawson Formation is part of the larger Denver/Dawson complex which extends along the front Range between Denver and Colorado Springs, and between the end-Cretaceous and the Eocene. The Dawson Formation (and possible age-affiliated Denver Formation exposures) examined within and just outside of the project area consisted of buff-tan to whitish, often friable and poorly cemented, matrix-supported gravel conglomerates, with finer gravel sizes (2 to 3 millimeters) in the southern portion of the project area and larger gravel sizes (2 to 5 centimeters) in the northern portion of the project area. Additionally, some reddish-orange horizons were noted within the bedrock, which may represent recent water staining or, in some cases, soil horizons. No fossils were observed within these exposures. Within the project area, only microfossils (pollen) have been recorded; however, two significant fossil plant localities are known from Castle Rock, fewer than 5 miles from the northern boundary of the project impact area, and should major excavation occur on this project, it is possible that more significant localities could be exposed.</p>			

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Vegetation and Habitat See Programmatic Biological Assessment (Appendix B2) and Biological Resources Technical Memorandum (Appendix B3)</p>	<p>Outside of mowed and existing paved areas, upland grassland is the primary type of vegetative cover within the project area. Upland forest, upland shrubland, riparian, and wet meadow are also present to a lesser extent. Vegetation supporting migratory bird nesting habitat, wetland and riparian habitat subject to SB 40 requirements, and shortgrass prairie protected by the Shortgrass Prairie Initiative are present in the project area.</p>	<p>No impacts to vegetation or habitat in the project area would occur from No Action.</p>	<p>The Preferred Alternative would result in up to 241 acres of permanent impacts to general habitat. The majority (160 acres) of the permanently impacted acreage are mowed/landscaped areas in the existing median that would be paved due to widening to the inside of the interstate. Some widening would also be needed to the outside of the existing roadway template. This widening would affect other habitat types, including Upland Forest (7.9 acres), Upland Shrubland (3.5 acres), Riparian (3.7 acres), and Wet Meadow (0.1 acre) would also be impacted by the Preferred Alternative.</p>	<p>24, 25, 29</p>
<p>Noxious Weeds See Biological Resources Technical Memorandum (Appendix B3)</p>	<p>A total of 17 species of weeds on the CDA Noxious Weed List were noted in the project area during the biological field surveys. One uncommon (List A) species occurred in the study area: purple loosestrife (<i>Lythrum salicaria</i>). Most weeds present within the study areas are typical of Colorado Front Range residential and disturbed areas.</p>	<p>No impacts to noxious weeds in the project area would occur from No Action.</p>	<p>Construction activities have the potential to spread existing populations and introduce new noxious weed populations within and adjacent to the project area, including into the high ecological value preserved open spaces adjacent to both sides of the Interstate. Up to approximately 178 acres of temporary ground disturbance would occur from construction of the Preferred Alternative.</p>	<p>28</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
Social Resources				
<p>Socioeconomic Resources See Socioeconomics Technical Memorandum (Appendix B7)</p>	<p>I-25 is a busy and expanding route for commerce and travel internationally, nationally, regionally, and locally. Tourism, freight, and the area’s economy are influenced by the operation of I-25. Continued employment and population growth of communities along the project corridor and Denver and Colorado Springs metropolitan areas will result in continued traffic growth on I-25.</p> <p>Communities along the project corridor include Monument, Woodmoor, Palmer Lake, Larkspur, and Castle Rock. These communities grew in population and median income since 2000 except Larkspur. Population in Monument and Castle Rock more than doubled and is forecast to more than double again by 2040.</p> <p>Douglas and El Paso counties grew in employment since 2000, with Douglas County jobs more than doubling. By 2040, nearly 85,000 new jobs in Douglas County and over 185,000 new jobs in El Paso County will be added. Nearly 650 businesses are located within 0.5 mile of the Gap, primarily concentrated in Larkspur and Monument.</p>	<p>As the number of vehicles traveling through the Gap increases, travel times would continue to get longer. The bottleneck effect of the four-lane segment would be amplified, further constricting the efficient flow of people and goods. These effects could adversely affect existing businesses and future development: Slower and unreliable travel times and increasing congestion could reduce business efficiency and customer traffic and could dissuade people and businesses from moving to or investing in corridor communities.</p>	<p>The Preferred Alternative would improve travel times, trip reliability, and maneuverability through the Gap, which would improve the flow of people and goods, benefitting businesses, residents, and freight locally and throughout the Front Range. Improved travel conditions would better support the development plans economic development goals of corridor communities. All the industries that rely on I-25 would be benefitted by improved travel conditions and reliability.</p> <p>Construction-related traffic congestion, noise, dust, and changes in access would temporarily affect businesses, residents, and freight travel, and increase the use of alternate routes. Construction congestion may result in recreational travelers avoiding the area, which could adversely impact some businesses. Congestion may benefit businesses like gas stations and restaurants, with more travelers exiting the interstate to frequent these businesses during congested periods. Freight costs could temporarily increase due to travel delays during construction.</p>	<p>34</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Environmental Justice (Low-Income, Minority, and Limited English Proficiency Communities) See Environmental Justice Technical Memorandum (Appendix B8)</p>	<p>Census data and site visits identified minority and low-income populations slightly exceeding the county average in several Census block groups in Douglas County in the study area. The City of Larkspur is located entirely within a low-income block group. One mobile home park neighborhood in El Paso County was observed to house minority and low-income residents. A small percentage (less than 3.5 percent) of the population in the Census tracts in the study area has limited English proficiency.</p>	<p>Temporary adverse impacts during construction would not occur. Unmet transportation needs (congestion, unreliability, impaired mobility, reduced safety) would continue. These would impact all communities regardless of income or racial/ethnic background. High noise levels would continue to impact the low-income mobile home park neighborhood.</p>	<p>The addition of a new tolled lane to the interstate would not represent a disproportionately high and adverse impact to low-income or minority communities in the corridor.</p> <p>An additional travel lane, expanded shoulders, improved interchanges, wildlife underpasses, and improved lighting would create a safer and better-functioning road for all users, including low-income and minority populations. The Preferred Alternative would benefit all users, whether they chose to travel in the Express Lane or the improved existing general-purpose lanes, which would remain free and would experience improved performance. In addition to being able to continue to travel toll-free in the general-purpose lanes, the Express Lane is expected to be toll-free for HOV 3+ users and transit, providing additional toll-free options for travel.</p> <p>A noise wall at the low-income mobile home park would reduce noise levels for residents that currently experience noise levels above abatement criteria.</p> <p>During construction, all users and nearby communities would experience temporary adverse construction impacts associated with noise and dust emissions, changes in access, and travel delays. These impacts are not expected to be disproportionate to any population.</p>	<p>No mitigation necessary.</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Visual Resources See Visual Impact Assessment Technical Memorandum (Appendix B9)</p>	<p>The project corridor contains high-quality visual landscapes through the Gap, that feature expansive views of rural valley and prairie landscapes dotted with buttes and some of Colorado's most iconic mountain views to the south and west. Open space lands protected by conservation easements cover much of the central portion of the Gap corridor, preventing the encroachment of development and preserving these views into the future. The south end of the corridor near Monument has been densely developed near I-25. The north end of the corridor, near Castle Rock has experienced some residential and commercial development, with more new developments planned.</p>	<p>No impacts to visual resources in the project area would occur from No Action.</p>	<p>The Preferred Alternative would cause some changes to the visual setting in the corridor through the introduction of new roadway and structural elements. The widened footprint of the Preferred Alternative would increase the amount of pavement within the view of interstate drivers, and the grassy center median would be eliminated. In areas of grade difference between the north and southbound lanes, elimination of the grass median will be coupled with the introduction of a concrete retaining median wall. While the 15-foot inside shoulder will provide a set-back from the median wall for drivers and passengers traveling in the centermost lane, the tallest median walls could interfere with views of the surrounding landscape for drivers.</p> <p>Noise walls, if included, would also introduce large new concrete vertical elements along specific segments of the roadway that would interfere with views from and toward the road. Two of the three potential locations for noise walls would be within the Monument area where fences, walls, and buildings are part of the existing visual landscape. One is located at the mobile home park on the west side of I-25 at the north end of the town, and the other is located at the RV park located on the east side of I-25 just north of Palmer Ridge High School. The third potential noise wall would be located in the rural area of the corridor at the Jellystone Campground on the west side of I-25 near Larkspur; in this location, the visual change from both from and toward the road would be more substantial.</p> <p>The new retaining walls that would be required in some locations along the roadway's outer edge may be visible</p>	<p>43, 44</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
			<p>from some vantage points in the area along the highway corridor, but because most potential viewers would be at some distance from the interstate, the degree of perceptible visual change they are likely to create would be low.</p> <p>Standard 8-foot wildlife fencing would be provided at the edge of CDOT’s right-of-way along most of the corridor, from approximately MP 161 to 178. In most locations, right-of-way fencing already exists, and the new wildlife fencing would be only a minimal change to the visual landscape.</p> <p>Bridge replacements along the project corridor would provide opportunity to incorporate aesthetic treatments that would benefit the visual quality of the corridor.</p> <p>The Preferred Alternative includes continuous mainline lighting at the south end of the project (from approx. MP 161 to MP 165) similar to the lighting that already exists in this segment of the highway. The change in nighttime lighting conditions in this area would not be substantial.</p> <p>Partial interchange lighting would be installed at all interchanges, most of which are already illuminated to some degree. There would be a slight increase in the numbers of light poles and in the levels of nighttime lighting visible in the interchange areas, and Upper Lake Gulch Road interchange would be newly illuminated. The lighting design and lumen types would be installed to improve highway lighting and minimize light pollution for surrounding properties.</p> <p>New signage would be installed at Express Lane ingress and egress locations. Where visible, these signs would reduce</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
			<p>the rural feel of the drive for interstate users and may briefly interfere with open views of landscapes in the mid and far background. From surrounding vantage points, most of these elements would be too far from viewer to create a noticeable change. The ingress and egress locations are limited to the three general locations, leaving long stretches of I-25 through the Gap without Express Lane signage.</p> <p>Temporary changes to the visual setting would come from construction activities in the Gap, including creation of dust and areas of exposed soil, temporary barriers, brightly colored temporary signage, storage of construction materials and equipment, and worker parking areas.</p>	
<p>Recreational Resources See Section 4(f) Resources Technical Memorandum (Appendix B10)</p>	<p>Recreational resources in the corridor study area include parks, open space, designated trails, an equestrian center, and campgrounds. The planned Colorado Front Range Trail runs roughly parallel to I-25 through much of the project corridor north of Greenland Road. The planned Colorado Front Range Trail alignment crosses under I-25 at the Plum Creek Bridge (MP 172).</p>	<p>No impacts to recreational resources in the project area would occur from No Action.</p>	<p>The Preferred Alternative is planned to be within CDOT right-of-way and would have no direct impact to recreational resources outside of the right-of-way. Where the Colorado Front Range Trail intersects the CDOT right-of-way, crossing under I-25 at the Plum Creek Bridge, the bridge reconstruction would be designed to accommodate the trail.</p>	<p>42</p>
<p>Noise See Noise Report Technical Memorandum (Appendix B11)</p>	<p>There are limited concentrations of sensitive noise receivers in the project corridor, largely because of the predominance of undeveloped protected open space lands through the Gap corridor. Noise readings found very high noise levels (greater than 75 dBA) throughout the Gap project corridor.</p>	<p>Congestion on I-25 may result in increased traffic diverting to other roads, increasing noise for sensitive receivers along those roadways.</p>	<p>The Preferred Alternative would not result in a substantial increase in noise of 10 dBA or more at any receivers. However, modeled noise levels at 273 receptors equal or exceed FHWA and CDOT Noise Abatement Criteria and are considered impacted by noise. Noise walls were recommended as feasible and reasonable for three locations:</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>The Colorado Heights Camping Resort, Monument Meadows Mobile Home Park, Yogi Bear’s Jellystone Park Camp Resort, and 14 individual residences, 1 park, and 1 business currently experience noise levels that approach or exceed CDOT Noise Abatement Criteria.</p>		<ul style="list-style-type: none"> • Colorado Heights Camping Resort • Monument Meadows Mobile Home Park • Yogi Bear’s Jellystone Park Camp Resort <p>Noise walls were considered for receptors at other locations, but were not recommended as reasonable and feasible.</p> <p>The installation of noise walls at these three locations is projected to reduce noise levels for many residents impacted by traffic noise. Per CDOT and FHWA guidelines, a survey of benefitted receptors will be conducted to determine if the noise walls are desirable for residents. The survey is expected to take place during final design.</p> <p>Construction activities would generate noise that would temporarily impact adjacent sensitive noise receivers.</p>	31-33.2
<p>Historic Resources See Historic Resources Assessments and Technical Reports (Appendix B12)</p>	<p>Fifteen sites eligible to be listed in the National Register of Historic Places were identified within the Area of Potential Effects for the project corridor. These include 7 architectural properties and 8 linear resources, 4 of which support the eligible (or assumed eligible) linear resource, and 4 of which are non-supporting to the overall eligible linear resource.</p> <p>The Section 106 process was initiated on December 1, 2017, when CDOT transmitted a letter to the State Historic Preservation Office (SHPO) delineating the project’s Area of Potential Effects</p>	<p>No impacts to historic resources in the project area would occur from No Action.</p>	<p>The project is planned to be within existing CDOT right-of-way and would not directly affect most of the historic properties within the APE, which are located outside of the right-of-way and distant from project construction activities. Five of the linear properties cross CDOT right-of-way but project activities do not change the relationship of the resources to their historic setting or diminish their integrity. As detailed in the context portion of this table, the project consulted with the State Historic Preservation Office and other consulting parties under Section 106 of the National Historic Preservation Act.</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>(APE or APE-1) for historic properties, and the Section 106 (36 Code of Federal Regulations [CFR] 800) identification methodology for historic properties within the APE; CDOT received concurrence from the SHPO on December 4, 2017. On January 26, 2018, CDOT sent a second letter to the SHPO identifying 35 potential historic properties within the APE, now identified as APE-2. In this letter, CDOT requested concurrence that five properties are <i>eligible</i> for listing in the National Register of Historic Places (National Register), two properties need data and will be treated as <i>National Register eligible</i>, 20 properties are <i>National Register not eligible</i>, four linear features (roads, railroads, etc. have supporting segments (i.e., segments that support the assumed National Register eligible resource) within the APE, and four linear features have non-supporting segments (i.e., segments that do not support the assumed National Register eligible resource) within the APE. In a letter dated February 27, 2018, the SHPO concurred with CDOT’s findings. On March 18, 2018, CDOT sent a third letter to the SHPO, slightly expanding the APE on the north and south ends of the project to include transition areas (APE-3). CDOT identified and evaluated the National Register eligibility of 2 additional resources (both National Register not eligible) within the expanded APE-3, and requested concurrence on CDOT’s <i>no</i></p>		<p>CDOT and FHWA determined, and the parties concurred, that the I-25 South Gap Project would have No Adverse Effect to historic properties.</p> <p>Although no archeological properties were identified in the APE, project construction activities requiring subsurface excavation could potentially identify and disturb previously unidentified archaeological or historic resources.</p>	47

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p><i>historic properties affected</i> determinations for 22 properties and no <i>adverse effect</i> determinations for 15 properties. The SHPO concurred with CDOT’s findings in two letters, one dated March 16, 2018, and the other received April 10, 2018.</p> <p>Simultaneous to CDOT’s coordination with the SHPO, CDOT also coordinated with five additional consulting parties three times to obtain input regarding the project’s potential to impact historic properties. These five consulting parties were Douglas County Historic Preservation Board, Castle Rock Historic Preservation Board, Town of Larkspur, Town of Monument, and El Paso County. CDOT received concurrence or no comment from these consulting parties.</p> <p>Tribal consultation was initiated in January 2018 with the following tribes: Southern Ute Indian Tribe, Northern Arapaho Tribe, Ute Mountain Ute Tribe, Ute Indian Tribe (Uintah & Ouray, Reservation), Southern Cheyenne & Southern Arapaho Tribes of Oklahoma, Northern Cheyenne Tribe, Kiowa Tribe of Oklahoma, Apache Tribe of Oklahoma, Comanche Nation of Oklahoma, and Pawnee Nation of Oklahoma. Responses were received from the Northern Cheyenne Tribe, Southern Ute Indian Tribe, Southern Arapaho Tribe, Southern Cheyenne Tribe, and Comanche Nation of Oklahoma. Of the responding tribes, the</p>			

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>Southern Ute, Southern Arapaho, and Northern Arapaho Tribes indicated interest in the project and are therefore consulting parties.</p>			
<p>Air Quality See Air Quality Technical Memorandum (Appendix B13)</p>	<p>The project is in Douglas and El Paso Counties, which are in attainment or maintenance for all air quality priority pollutants identified and monitored by the United States Environmental Protection Agency except ground level ozone. Denver Regional Council of Governments regional air quality conformity determinations show that transportation emissions in 2040 within the Denver Regional Council of Governments planning area are expected to remain below thresholds set for each priority pollutant. The Colorado Springs region is expected to continue to comply with all air quality standards in 2040.</p>	<p>No Action would not cause exceedances of regulatory thresholds for any criteria pollutants. Mobile source air toxics emissions would decrease due to improvements in vehicle technology and cleaner fuels. With No Action, traffic would become more congested than it is today, and for a larger portion of the day.</p>	<p>The Preferred Alternative would not cause exceedances of regulatory thresholds for any criteria pollutants. The Preferred Alternative would decrease congestion on I-25. Coupled with better vehicle technology and cleaner fuels, the Preferred Alternative would have a positive benefit on motor vehicle emissions and resultant pollutant concentrations as compared to No Action. The Preferred Alternative would have temporary impacts to air quality during construction due to emissions from construction equipment and dust from ground disturbance.</p>	<p>1-3</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Hazardous Materials</p> <p>See Hazardous Materials Modified Environmental Site Assessment Technical Memorandum (Appendix B14)</p>	<p>The Modified Environmental Site Assessment conducted for the project did not identify any hazardous material sites of concern within the project area. I-25 is a designated National Hazardous Material Route and is used in the transport of hazardous materials to local, regional, and national destinations. Bridges in the project area may contain asbestos and lead-based paint.</p>	<p>No impacts to hazardous materials in the project area would occur from No Action.</p>	<p>The Preferred Alternative would increase the safety of the interstate for all users, including transporters of hazardous materials, thereby reducing the potential for a hazardous material spill resulting from a crash. A disabled vehicle or truck carrying hazardous materials can be safely moved to the shoulder. Spill response would also be improved through as spill response teams can more quickly access incidents.</p> <p>During the construction period, hazardous materials would be present as necessary in the construction process, and previously unknown areas of contamination may be encountered.</p>	<p>41-46</p>
<p>Other Issues</p>				
<p>Section 4(f) Properties</p> <p>See Section 4(f) Resources Technical Memorandum (Appendix B10)</p>	<p>Section 4(f) of the United States Department of Transportation Act of 1966 (now codified in 23 CFR 774) governs FHWA’s use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historic sites for federal highway projects.</p> <p>Eight recreational Section 4(f) properties were identified along the project corridor. These include: Columbine Open Space Trail, Larkspur Community Park, Spruce Mountain Trail System, Greenland Open Space Trail, Devon’s Dog Park, New Santa Fe Regional Trail, Spruce Meadows Trail System, and five future segments of the planned Colorado Front Range Trail.</p>	<p>No use of any Section 4(f) resources would occur under No Action.</p>	<p>The Preferred Alternative avoids use that results in an adverse impact to recreational or historic Section 4(f) properties. The Preferred Alternative would not result in any direct use of recreational properties. Some change to the visual setting and noise conditions for recreational Section 4(f) properties would result due to the larger highway footprint and increased traffic volumes. These changes represent a minor increase in existing intrusions. The Section 4(f) properties would retain their qualities that qualify them for Section 4(f) protection. No changes to use or access to the recreational properties would occur.</p> <p>Five potential Section 4(f) linear historic properties intersect the existing CDOT right-of-way and may be</p>	<p>No mitigation necessary.</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>Fifteen Section 4(f) historic properties are within the project’s APE. (See Historic Resources.)</p>		<p>affected by project activities. However, use of these properties falls under Section 4(f) exemption categories. Four fall under the Section 4(f) exemption for work affecting transportation facilities under 23 CFR 774.13(a), and one would be a temporary Section 4(f) Temporary Occupancy Exception under 23 CFR 774.13(d).</p>	
<p>Transportation See Travel Demand Forecasting, PEL Traffic Reliability Assessment, and Safety Analysis Technical Memoranda in Appendix A</p>	<p>The Gap is characterized by a two-lane configuration in each direction, with tight horizontal curves, long climbing grades, and narrow shoulders. Maneuverability around slow vehicles and crashes is limited. As a result, this corridor experiences regular congestion and traffic incidents, which often propagate throughout the corridor and lead to extended queuing. Backups are further complicated by a lack of alternative routes and disconnected frontage road system. Drivers stuck during a highway closure have nowhere to divert to. When the highway is closed, there are no options for emergency evacuation.</p> <p>Frontage roads, where available, parallel freight railroad tracks with closely spaced, at-grade intersections. If a crash, weather event, or other emergency forces the closure of I-25, drivers can be stuck for hours, and emergency vehicles and snow plows have limited space for staging and response.</p>	<p>No Action does not address existing safety and mobility issues with travel through and operations in the Gap corridor.</p> <p>Safety issues would persist and worsen as volumes increase.</p> <p>Incident management would remain challenged, and lane and road closures would be expected to increase as more incidents occur.</p>	<p>The Preferred Alternative would improve transportation conditions on I-25, the I-25 frontage roads, and local roads within the subregion by increasing capacity, reducing crashes, improving infrastructure deficiencies, and facilitating better incident management on the interstate. The Preferred Alternative meets the project purpose and need to improve safety and incident management, reduce delays, and improve travel time reliability.</p> <p>Travel times and speeds through the Gap would improve across all lanes. The Express Lane offers a choice for drivers to have a reliable travel time into the future.</p> <p>Wider shoulders, intelligent transportation system improvements, wildlife underpasses, on and off-ramp improvements, and lighting improvements would improve driver safety and reduce the potential for vehicle-vehicle and animal-vehicle collisions.</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>No passenger rail service operates in the project area; however, CDOT’s regional Bustang service travels through the Gap to destinations in Colorado Springs, Monument and the Denver metropolitan area</p>	<p>Travel delays would increase as volumes increase, particularly in the peak travel periods.</p> <p>I-25 would continue to have unreliable and unpredictable travel times.</p> <p>Diversions to I-25 frontage roads and local roads would persist and increase, increasing congestion and crashes on these facilities.</p>	<p>Incident management—including emergency response, law enforcement, and roadway maintenance—would improve. Crashes and vehicle breakdowns could be moved out of the travel lanes and into the shoulder. Shoulders could also be used by first responders and law enforcement to access crashes or enforce the speed limit. During extreme weather or other events requiring highway closure, vehicles and trucks could use the shoulder as a refuge area.</p> <p>Transit service in the corridor would improve by providing improved travel times and schedule reliability for CDOT’s regional Bustang service and other privatetransit providers (such as airport shuttles) using the Express Lane. Future rail service would not be precluded.</p>	<p>No mitigation necessary.</p>
<p>Freight See Economic Impact Study (Appendix A8)</p>	<p>I-25 through the Gap is part of the Primary Highway Freight System, which represents the most critical highway portions of the U.S. freight system. The Gap is a crucial link within the larger movement of commercial goods on I-25 between Denver and Colorado Springs, and to local communities. Approximately \$60 billion worth of freight is transported through the Gap annually. I-25 serves the state’s active military installations. Of particular importance is Fort Carson in El Paso County because it is a major military deployment site with direct access to I-25.</p>	<p>Without improvements to the Gap, travel times, congestion, crashes, and delays would increase, which would increase the time and cost of moving freight through the area. The Gap bottleneck effect would become more severe,</p>	<p>Freight trucks would benefit from the reduction in bottlenecks and reoccurring congestion through the Gap under the Preferred Alternative. Travel times and speeds would improve across the system (in the general-purpose lanes as well as the Express Lanes), facilitating the efficient movement of freight to local, regional, and national destinations.</p> <p>Expanded shoulders would provide adequate room for repair or towing during truck breakdowns or could be used as temporary parking during extreme weather or highway closure.</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
	<p>A weigh station is located on both sides of I-25 near the southern terminus of the project at approximately MP 161.2. In 2017, trucks comprised approximately 8.4 percent of all vehicles traveling through the Gap.</p> <p>Long stretches of steep slopes and tight horizontal curves slows freight truck travel through the Gap and present safety concerns with the speed differentials between trucks and other traffic. Trucks generally travel 10 to 20 mph slower than cars, even without the grade issues, which introduces turbulence and conflicts in the traffic stream. When a truck breakdown, extreme weather event, or highway closure occurs, the existing narrow shoulders do not provide adequate space for trucks to safely move out of the travel lanes. The CDOT rest area on southbound I-25 at MP 170.8 is intermittently used as a truck chain-up station.</p> <p>Population and employment growth, coupled with economic shifts to online commerce and delivery on demand, mean freight’s economic role is increasing, and freight traffic is projected to increase to 11 percent of vehicles traveling through the Gap by 2040.</p>	<p>reducing the efficiency of freight movement in the corridor and negatively impacting Colorado’s economic competitiveness.</p> <p>More freight traffic would be pushed to SH 105/Perry Park Road, SH 83, and local streets, which are not meant to handle frequent freight traffic.</p>	<p>The southbound rest area would be improved to provide an improved southbound chain-up location during inclement weather. Entrance and exit driveways to the rest area would be improved to longer ramps suitable for truck acceleration and deceleration.</p>	<p>No mitigation necessary.</p>

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
<p>Cumulative Impacts See Cumulative Impacts (Appendix B16)</p>	<p>The timeframe used for the cumulative impacts assessment is 1960, the start of I-25 construction in the study area, to 2040, the design year. The geographic extents of the cumulative impacts assessment span from North Academy Blvd in Colorado Springs to C-470 to account for traffic patterns influencing the project area. Resources assessed for cumulative impacts are air quality, land use, socioeconomics, transportation resources, water quality, wetlands, and wildlife.</p>	<p>Not applicable as the No Action is included in other past, present, and reasonable foreseeable future actions.</p>	<p><i>Air Quality:</i> In combination with past, present, and reasonably foreseeable future actions, the Preferred Alternative would have a neutral cumulative effect on Air Quality. The Gap project is expected to reduce motor vehicle emissions in the long-term. Construction of the Gap project would contribute to short-term emissions increases, which in combination with other construction projects, would contribute to cumulative impacts on air quality.</p>	<p>No mitigation necessary.</p>
	<p>Areas to the south and north of the project area, including the towns of Monument and Castle Rock, have seen rapid residential and commercial development over the past few decades.</p> <p>Most of the corridor runs through a rural, undeveloped setting, much of which is protected open space and lands in conservation easements, established to preserve the rural character, open space, scenic vistas, and wildlife habitat surrounding I-25.</p> <p>South and north of the Gap, I-25 has been expanded to three and four lanes in each direction accommodate higher traffic volumes, leaving the Gap as the only four-lane segment of I-25 between Colorado Springs and Denver.</p>		<p><i>Socioeconomics:</i> In combination with other past, present, and reasonable foreseeable future actions, the Preferred Alternative would have a beneficial cumulative effect on the economy. While the economies of corridor communities would continue to grow without the Preferred Alternative, the increased mobility and reliability of the Gap corridor resulting from the Preferred Alternative would support project area communities in more fully realizing these economic benefits. Economic benefits would also be realized at a regional level; a higher-capacity, safer, more reliable connection between Colorado Springs and Denver would benefit both major metro areas.</p> <p><i>Transportation Resources:</i> In combination with other past, present, and reasonable foreseeable future actions, the Preferred Alternative would contribute to a</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
			<p>beneficial trend toward increasing regional mobility and safety. In combination with other established, in progress, and planned managed lanes in the state, the proposed Express Lane would position corridor communities to benefit fully from connection to the wider managed lane system.</p> <p><i>Threatened and Endangered Species:</i> While the Preferred Alternative would convert Preble’s meadow jumping mouse habitat to transportation use, actions impacting Preble’s meadow jumping mouse habitat are subject to compliance with the Endangered Species Act and consultation with the USFWS, including mitigation for temporary and permanent impacts to Preble’s meadow jumping mouse habitat, therefore the Preferred Alternative, in combination with other past, present, and reasonable foreseeable future actions would result in no net cumulative change to Preble’s meadow jumping mouse habitat.</p> <p><i>Wildlife Movement:</i> The Preferred Alternative would have a beneficial impact on wildlife movement because new wildlife underpasses would connect the open spaces that are currently separated by I-25. In combination with the past actions, specifically the establishment of conservation easements in the Gap area, the Preferred Alternative would contribute to a positive cumulative effect on wildlife movement and</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
			<p>habitat because—by creating a system of underpasses where animals can travel safely beneath the interstate—the habitat currently segmented by the interstate can function as a cohesive unit. Wildlife fencing would be constructed in areas where animals currently can attempt to cross the highway, however; fencing would funnel animals to wildlife underpasses.</p> <p>Future wildlife crossings (underpasses or overpasses) constructed in the Gap would further increase the permeability and movement of animals across I-25.</p> <p><i>Water Quality:</i> Past, present, and reasonable foreseeable future actions include other transportation projects and regional development, all of which increase impervious surface and runoff, along with snow maintenance materials. MS4 regulations have been established in areas of most of this development, serving to mitigate water quality impacts. The Preferred Alternative would contribute to the increase in impervious surface in the study area and would contribute to increases in the use of materials for snow maintenance. Water quality mitigations were not required when the existing I-25 infrastructure was constructed. In the MS4 areas at the north and south ends of the Gap corridor, the Preferred Alternative would incorporate water quality measures that would be an improvement over existing conditions. In combination with other past, present, and reasonable foreseeable future actions, this project would have only a negligible effect on regional water quality, because of</p>	

Resource	Context	No Action	Preferred Alternative	Mitigation Number*
			<p>a balance of increased water quality treatment in some areas and increased untreated runoff in others.</p> <p><i>Wetlands:</i> Impacts to wetlands would be isolated to the project footprint and would not indirectly affect the hydrology of surrounding properties, such as the conservation easement properties. Actions with impacts to wetlands are subject to permitting under Section 404 of the Clear Water Act and require mitigation, therefore the Preferred Alternative, in combination with other past, present, and reasonable foreseeable future actions would result in no net cumulative change to acreage of wetlands.</p>	

- 1 NOTES:
- 2 * Mitigation numbers correspond to the Mitigation Tracking Table in **Appendix B 17**.

WHAT ARE THE MITIGATION COMMITMENTS FOR THE PREFERRED ALTERNATIVE?

Table 5-2 summarizes the mitigation commitments included for the Preferred Alternative. Resources are presented in the same order as **Table 5-1**. A complete listing of project mitigations is included in the Mitigation Tracking Table included as **Appendix B17**. Additional details regarding the methodology and analysis of impacts and mitigations are found in environmental technical memoranda in **Appendix B** and referenced in **Table 5-2**. No mitigation is necessary for floodplains, environmental justice, historic resources, Section 4(f) properties, transportation resources, freight, or cumulative impacts, and these resources are not included in **Table 5-2** or the Mitigation Tracking Table.

Table 5-2. Summary of Impacts and Mitigation for the Preferred Alternative

Resource	Impact	Mitigation Commitment
<i>Natural Resources</i>		
Wildlife Movement (Appendix B1)	Interstate widening and installation of new walls (noise, fill, and median walls) making it more difficult for animals to cross the interstate without being struck by a vehicle	<p>New wildlife underpasses will be constructed at approximately the following locations: MP 162.5, MP 164.0, MP 167.7, MP 170.6. An existing underpass will be expanded at MP 172.2. Underpasses will facilitate the safe movement of animals beneath the interstate. Wildlife fencing will be constructed in conjunction with underpasses to form a connected network of crossings. Wildlife fencing will extend from approximately Crystal Valley Parkway on the north end of the project to SH 105 on the southern end of the project. Final fencing placement will be determined during final design. Wildlife jump-outs and deer guards will be constructed in addition to fencing and underpasses; the location and spacing of deer guards and wildlife jump-outs will be determined during final design.</p> <p>Wildlife underpasses would be installed at the following locations: (dimensions are minimum and are subject to change during final design). Dimensions are listed as height x width x length:</p> <p>MP 162.5 – An existing 24” culvert would be replaced with three parallel bridges. The total underpass dimension beneath I-25 would be 10 feet by 50 feet by 200 feet. The third bridge (10 feet by 50 feet by 22 feet) would carry Monument Hill Road.</p> <p>MP 164.0 – An existing 14-foot by 14-foot concrete culvert would be replaced with two parallel bridges. The total underpass dimension beneath I-25 would be 14 feet by 100 feet by 140 feet.</p> <p>MP 167.7 – An existing 14-foot by 10-foot box culvert would be replaced with two parallel bridges. The total underpass dimension beneath I-25 would be 15 feet by 100 feet by 150 feet.</p> <p>MP 170.6 – The 24-inch and 42-inch culverts would be replaced with two parallel bridges. The total underpass dimension beneath I-25 would be 16 feet by 100 feet by 160 feet.</p>

Resource	Impact	Mitigation Commitment
		MP 172.2 – the existing Plum Creek bridge would be replaced by a larger, single span structure, removing the existing bridge pier and providing a larger opening to facilitate wildlife movement.
Wildlife (Appendix B2 and B3)	Direct and indirect impacts to migratory birds and raptors	<p>A pre-construction survey for nesting birds will be completed by a qualified biologist. If active raptor nests are found, the contractor will consult with CPW/CDOT to determine the appropriately sized buffer zone for these nests.</p> <p>Follow CPW recommended buffer zones for Colorado raptors.</p> <p>CDOT Standard Specification Section 240 – Migratory Birds will be incorporated into the project special specifications.</p>
	Direct and indirect impacts to state-listed species	BMPs and avoidance will be implemented to minimize impacts. Targeted surveys for northern leopard frog will be conducted prior to construction.
Threatened/ Endangered Species	4.5 acres of temporary and 12.7 acres of permanent impacts to Preble's meadow jumping mouse habitat	<p>Follow I-25 South Gap Programmatic Biological Assessment conservation measures. Prepare site-specific Biological Assessments for construction packages and follow included mitigation stipulations (which will be defined by the site-specific consultations).</p> <p>East Plum Creek Conservation Bank credits will be debited to mitigate for impacts. Credits for permanent impacts are calculated at a 1.5:1 ratio, and temporary impacts are calculated at a 1:1 ratio. The exact number of permanent and temporary acres to be mitigated will be refined at final design.</p> <p>Follow conservation measures identified in the Biological Opinion.</p>
Wetlands and Waters of the U.S.	The project is anticipated to result in up to 3.51 acres of temporary and 0.77 acre of permanent impacts to wetlands, comprised of 0.31 acre palustrine emergent, 0.04-acre palustrine scrub-shrub, and 0.46-acre combination wetland.	<p>The exact number of permanent and temporary acres to be mitigated will be refined at final design. Mitigation for permanent impacts to wetlands will be mitigated at a 1:1 ratio, anticipating using credits from CDOT's Limon Wetland Bank.</p> <p>Temporarily disturbed wetland areas will be protected and restored on-site using BMPs, replanting, and other appropriate mitigation strategies.</p> <p>Fence wetland areas not permitted for impacts to limit unintended disturbance during construction.</p> <p>Request authorization under Nationwide Permit 14. Align permit application(s) with work packages. Follow conditions of Nationwide Permit.</p>

Resource	Impact	Mitigation Commitment
Water Quality	Erosion and stormwater runoff due to soil disturbance during construction	Comply with the Colorado Discharge Permit System General Permit for Stormwater Discharges Associated with Construction Activities and implement a Stormwater Management Plan to mitigate potential temporary impacts to water quality caused by increased soil erosion.
	Increased stormwater runoff from new paved areas	The project would result in approximately 119 acres of new impervious surface. Implement permanent BMPs to treat stormwater runoff within MS4 areas and outside of MS4 areas where feasible.
Paleontological Resources	Potential to encounter paleontological resources during excavations	Any excavation occurring outside of the current roadway outline and/or below previously disturbed levels within the current roadway outline, will require some degree of paleontological monitoring. Monitoring locations may be adjusted during final design and throughout construction. If paleontological resources are uncovered during construction in areas that are not being actively monitored, contact CDOT Paleontologist immediately.
Vegetation and Habitat	Temporary and permanent loss of vegetation and wildlife habitat	Minimize ground disturbance and tree removal to the extent feasible. Mitigate loss of approximately 241 acres of shortgrass prairie habitat through the Shortgrass Prairie Initiative. CDOT maintains a database of these impacts, which is reported to USFWS on an annual basis. Mitigation acreages will be refined during final design. Temporarily disturbed areas will be revegetated and stabilized following construction.
	Temporary and permanent impacts to SB 40 resources	Obtain an SB 40 Wildlife Certification from CPW. Follow conditions identified in SB 40 Wildlife Certification. Replace trees and shrubs.
Noxious Weeds	Potential introduction or spread of noxious weeds	Develop and follow Integrated Noxious Weed Management Plan. Minimize vegetation removal and follow BMPs for revegetation. Stabilize and revegetate areas disturbed during construction.
<i>Social Resources</i>		
Socioeconomic Resources	Property and business access disrupted during construction	CDOT will provide a detailed construction and detour plan to residents and business owners in the surrounding area as far in advance as possible.

Resource	Impact	Mitigation Commitment
Visual Resources	Introduction of new highway elements, including walls, and signs and expanded lighting into the rural landscape	Aesthetic guidelines developed with CDOT and stakeholders will be incorporated in final design to minimize visual intrusions and maximize visual harmony with the environment and existing adjacent aesthetic treatments. Guidelines will include standards for textures, colors, styles, lighting standards, and landscaping. Minimize new lighting and where needed, install dark-sky compliant lighting.
	Temporary changes to visual conditions during construction	Site construction activities, such as stockpiling and parking, will be confined to less visible areas as feasible. Implement fugitive dust BMPs. (See Air Quality mitigation measures.)
Recreational Resources	Disruption of Colorado Front Range during bridge construction (depending on the trail construction schedule)	Coordinate with Larkspur if construction (or operation) of the Colorado Front Range Trail overlaps with construction of the Preferred Alternative.
Noise	Increased traffic noise	Pending property owner and resident (if applicable) approval, walls will be built to mitigate noise at: Monument Meadows Mobile Home Park (MP 161.5, west side of I-25) – approx. 13 feet tall and 1,200 feet long. Colorado Heights Camping Resort (MP 162.5, east side of I-25) – avg. of approx. 15 feet tall, 2,600 feet long. Jellystone Park Camp Resort (MP 173.6, west side of I-25) – avg. of approx. 20 feet tall, 2,800 feet long.
	Noise during construction	BMPs will be employed as possible, potentially including neighborhood notification of construction noise, choosing construction hours with respect to nearby residents, keeping noisy activities far from sensitive receptors, properly maintaining equipment, using engine enclosures and intake silencers if appropriate, and placing stationary equipment as far from sensitive receptors as possible. Local noise ordinances (Town of Monument, El Paso County, and Douglas County) will be followed.
Air Quality	Fugitive dust emissions during construction	TA Fugitive Dust Control Plan will also be prepared, which will specify mitigation methods to reduce dust emissions during construction. Adherence to this plan will reduce temporary air pollution resulting from construction.
	Localized diesel-emitting equipment during construction Localized diesel-emitting equipment during construction	An Air Pollution Emission Notice will be filed with the Colorado Air Pollution Control Division. Use BMPs, such as using the cleanest fuels available to reduce exhaust and keeping equipment well maintained to ensure exhaust systems are in good working order.

Resource	Impact	Mitigation Commitment
Hazardous Materials	Use of hazardous materials and petroleum products Unexpected discovery and disturbance of hazardous waste sites or materials	Develop spill prevention and response plan. Follow CDOT standard specifications Follow CDOT standard specifications.
Archaeological Resources	Potential to encounter archaeological resources during excavations	If subsurface cultural materials are encountered during project construction, contact Dan Jepson at CDOT Environmental Programs Branch immediately.

1 WHAT ADDITIONAL CLEARANCES AND PERMITS ARE REQUIRED FOR THIS PROJECT?

2 In addition to the NEPA evaluation of environmental impacts provided by this EA, the Preferred Alternative must comply with federal and state laws and
3 regulations, including the Clean Water Act, the National Historic Preservation Act, Endangered Species Act, Migratory Bird Treaty Act, and others. This
4 includes formal consultation, obtaining permits, preliminary and construction surveys, reviews, and other approvals as required by local agency, state, and
5 federal regulations. Formal consultation has been initiated, and will continue throughout the life of the project, with the Albuquerque and Omaha Districts
6 of the U.S. Army Corps of Engineers (USACE), the USFWS, CDPHE, county floodplain administrators, and local municipalities. Additionally, CDOT standard
7 specifications for construction contain provisions to protect environmental resources during construction, and these will be followed.

8 The following permits are likely to be required prior to construction, but this list may change during and after final design:

- 9 • A Construction Access Permit will be required for detours and lane closures from the CDOT Region Access Control Manager; the construction
10 contractor would obtain this permit.
- 11 • An Air Pollutant Emissions Notice Permit, along with a Fugitive Dust Control Plan, will be submitted to CDPHE by the construction contractor.
- 12 • A variance from the Town of Monument, El Paso County, and Douglas County will be required for noise should there be construction at night; the
13 construction contractor would obtain this permit.
- 14 • A water-quality report would be submitted to CDOT Water Quality personnel documenting compliance with their requirements CDOT's MS4 permit,
15 where applicable.

- 1 • A Colorado Discharge Permit System Permit to protect State waters, which requires preparation and implementation of a stormwater management
2 plan to prevent stormwater runoff and sediment from leaving any construction site disturbing at least one acre of land. CDOT or the construction
3 contractor would obtain this permit from CDPHE's Water Quality Control Division.
- 4 • A Construction Dewatering Operations Permit, if groundwater were to be discharged from an excavation to any waters of the State, would need to be
5 obtained by the construction contractor from CDPHE.
- 6 • Additional cultural resources consultation may be needed if significant design changes or changes in the scope of the project occur.
- 7 • A Sewer Use and Discharge Permit will need to be obtained by the construction contractor from El Paso County.
- 8 • A Pre-Construction Notification would be submitted to the USACE, documenting that the Preferred Alternative has been requested to be authorized
9 under a Nationwide Permit Number 14.
- 10 • An SB 40 Wildlife Certification by CPW is required. CDOT is responsible for preparing and submitting the application for certification.
- 11 • A Demolition Permit from the Air Pollution Control Division.
- 12 • A Utility Permit will be required for any construction work within CDOT's ROW that installs or maintains a utility; the construction contractor would
13 obtain this permit. Other local permits might also be required, such as building or survey permits.
- 14 • Local grading/construction permits as required; the construction contractor is responsible for obtaining this permit (if necessary).

CHAPTER 6: STAKEHOLDER OUTREACH AND PARTICIPATION

WHAT OUTREACH AND OPPORTUNITIES FOR STAKEHOLDER PARTICIPATION WERE PROVIDED?

The I-25 South Gap Project included extensive stakeholder involvement and outreach. A Public Involvement Plan was prepared during the PEL study, which established stakeholder project teams to advise the project progress, including a Steering Committee comprised of local, state, and federal elected officials and staff; Technical Working Group comprised of engineering and planning staff from local, state, and federal organizations; Resource Agency Group comprised of local, state, and federal resource agencies and organizations responsible for environmental compliance and permitting; and a Project Management Team comprised of CDOT, FHWA, and consultant staff that managed the day-to-day progress of the study. The Technical Working Group was a key advisor in helping the team characterize corridor conditions, refine the scope and goals of the study, and develop and assess improvement concepts. The Resource Agency Group was actively involved in assessing the alternatives and providing input on environmental resources, impacts, mitigation, and permitting requirements. Resource agencies with wildlife expertise actively participated in the evaluation and design of wildlife undercrossings.

When the I-25 South Gap Project was accelerated, and as public interest grew, the project team developed a more robust communications plan to expand outreach, information, and comment opportunities. As part of those communications strategies, the project team used both traditional media and social media tactics to ensure timely and relevant dissemination of project related information. Specifically, as part of those communications strategies, the project team used both traditional media and social media tactics to ensure timely and relevant dissemination of project related information. The project team provided information to media about upcoming events and meetings, answer questions, and alert them to project milestones through news releases, project updates, media briefings, one-on-one outreach, and social media platforms such as Facebook and Twitter.

Communication Goals

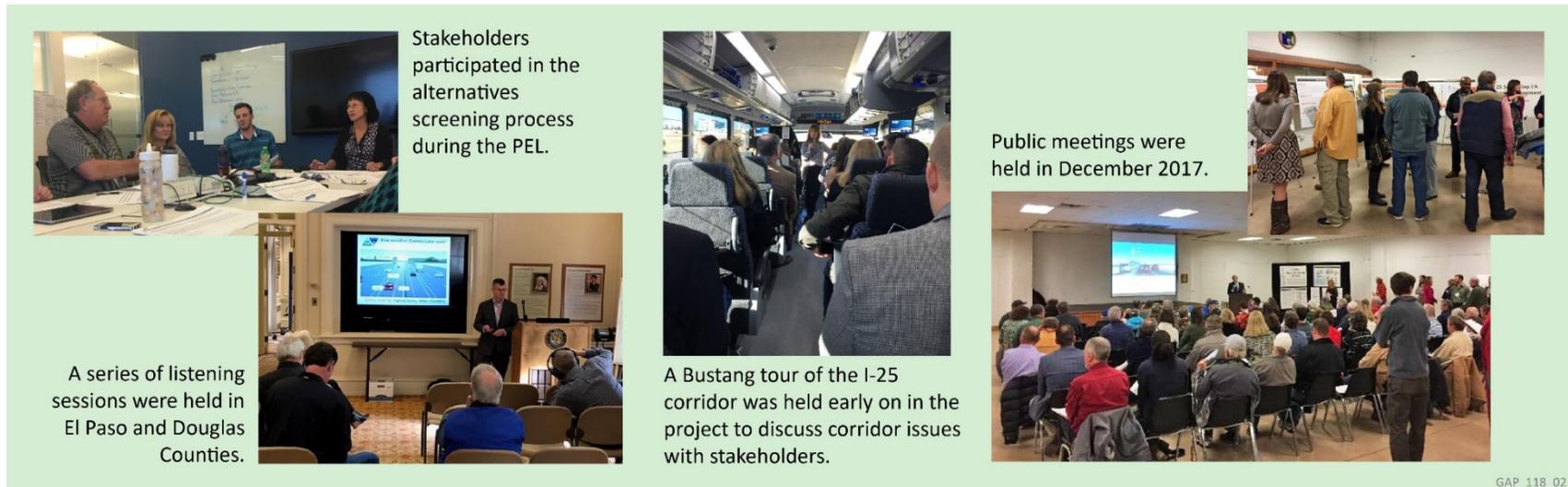
Be Proactive: Our goal is to ensure that we are providing our stakeholders and members of the media with relevant information and updates - before they ask for it. Our aim for this project is to keep this project top of mind and continue to inspire and invite public participation.

Be Responsive: Throughout the PEL and the EA, the project team worked closely with stakeholders and members of the media to provide information and answer questions as quickly and as efficiently as possible.

Provide Multiple Tools: We know people like to receive their news in many different ways. Our goal has been to cater to each of those needs and provide project information and updates in a variety of forms and on a number of different platforms.

Be Innovative and Creative: Throughout the project, we have constantly sought opportunities and ideas to improve our communication and take advantage of current events, new mediums, and stakeholder suggestions.

- 1 The outreach activities are summarized below and included in more detail in **Appendix C**.
- 2 • An elected officials bus tour of the corridor
- 3 • Stakeholder interviews and one-on-one project updates with elected officials
- 4 • Presentations before business advocacy groups, local governments, and other interested groups along the corridor
- 5 • Presentations for the El Paso County Commissioners, I-25 South Gap Coalition, Pikes Peak Area Council of Governments Board (and citizen and
- 6 technical advisory groups), Castle Rock Town Council, and Larkspur Town Council
- 7 • Public comment infrastructure, including a project website, project hotline, project email address, Facebook page, and project email updates
- 8 • Two sets of public meetings in January, April, and December 2017 in Castle Rock and Colorado Springs, respectively
- 9 • Twelve public “Listening Sessions” in El Paso and Douglas counties between January and March 2018
- 10 • Telephone Town Halls in February 2018
- 11 • Facebook Live events in March 2018
- 12 • Media briefings



13

1 **WHAT COMMENTS DID THE PUBLIC AND AGENCIES PROVIDE DURING THE EA, AND HOW WERE THEY ADDRESSED?**

2 The public has provided many comments and suggestions to the project team over the course of the I-25 South Gap Project development. Comments
 3 were received through all the outreach activities. **Table 6-1** presents a summary of some of the key themes of public comments and how they were
 4 addressed in the project development.

5 **Table 6-1. What CDOT Heard and How CDOT Responded**

What CDOT Heard	How CDOT Responded
Project priorities and schedule: CDOT heard a need to act immediately to improve travel through the Gap.	CDOT responded by accelerating design and environmental reviews to have a project ready for construction in 2019. CDOT further accelerated project development to have project construction-ready by Fall 2018. Douglas County is also moving forward with a project to improve the intersection of the west I-25 frontage road with Tomah Road.
Funding: CDOT heard concerns about the lack of transportation funding generally and for the I-25 South Gap Project specifically.	CDOT responded by prioritizing state funding made available through Senate Bill 267, and supporting the I-25 Gap Coalition, a separate local government group formed by Douglas and El Paso Counties to help advocate for immediate action and secure project funding.
Public involvement opportunities: CDOT heard concern that not enough opportunities were provided for public input.	CDOT responded by expanding the number and types of outreach opportunities, including telephone town halls, Facebook Live, small group listening sessions, presentations to interested organizations and municipalities.
Tolling: CDOT heard a lot of questions and requests for additional information about tolling operations. CDOT also heard opposition to tolling (and other project elements).	CDOT responded by evaluating Express Lane and General-Purpose Lane alternatives (Appendix A5). CDOT also conducted small listening sessions to understand public questions and concerns with tolling (and other project elements such as additional infrastructure, costs, and funding).

What CDOT Heard	How CDOT Responded
Fourth lane: CDOT heard interest in additional capacity through the I-25 Gap segment, as well as support for a fourth travel lane in each direction.	CDOT responded by providing capacity improvements within the Gap and designing the Preferred Alternative to not preclude and where possible support constructing a fourth lane in the future. Through the PEL study, CDOT will continue to evaluate additional capacity improvements along the I-25 corridor.
Transit: CDOT heard support for transit (bus and/or rail) options for regional travel between Colorado Springs, Castle Rock, and Denver.	CDOT responded by allowing Bustang, regional bus service, and other vanpools and private shuttle services to travel in the Express Lanes. CDOT's Division of Transit and Rail is also expanding Bustang service to include limited weekend service and developing improvements to the Monument ParkNRide. Additionally, through the PEL study, CDOT will continue to evaluate implementation of other transit and rail improvements along the I-25 corridor.
Other priorities: CDOT heard support for other project elements not included in the Preferred Alternative.	Through the PEL study, CDOT will continue to evaluate additional improvements along the I-25 corridor, including but not limited to: additional capacity in the form of truck climbing lanes, a fourth travel lane, auxiliary lanes, frontage road improvements, transit and rail improvements, and improvements to or addition of new I-25 interchanges.
Lighting: CDOT heard concerns about introducing light pollution in the corridor and concerns that dark conditions are unsafe for drivers.	CDOT responded by developing a preliminary "Dark Sky Compliant" lighting plan. By developing an adaptive lighting plan and other context sensitive elements, the Preferred Alternative addresses both light pollution and safety concerns.
Enforcement: CDOT heard concerns for the safety of patrol officers and maintenance workers. CDOT also heard concerns about high speeds and aggressive driving.	CDOT responded by including enforcement zones for safe patrol of the corridor.
Wildlife collisions: CDOT heard a concern for driver safety and wildlife habitat fragmentation.	CDOT responded by including four new underpasses and expanding one existing underpass to provide locations for wildlife to cross under I-25 and reduce wildlife-vehicle conflicts.

1 HOW CAN STAKEHOLDERS PROVIDE COMMENTS ON THE EA, AND WHAT HAPPENS WITH COMMENTS?

2 CDOT published this EA on April 27, 2018. Notices of its availability were provided in local newspapers, through the project website, on Spanish language
3 radio, and through media releases. CDOT will also hold a Facebook Live event, Telephone Town Halls, and a media briefing to publicize the availability of
4 the EA and the comment period. The EA is available for review on the project website and in hard copy at the following locations:

CDOT Headquarters

7328 South Revere Parkway, Unit 204A
Denver, CO 80112

CDOT Region 2

1480 Quail Lake Loop # A,
Colorado Springs, CO 80906

Douglas County Administration Building

100 Third Street
Castle Rock, CO 80104

El Paso County Administration Building

Centennial Hall
200 South Cascade, Suite 100
Colorado Springs, CO 80903-2208

FHWA

Colorado Division
12300 West Dakota Avenue, Suite 180
Lakewood, CO 80228

Larkspur Town Hall

8720 Spruce Mountain Road
Larkspur, CO 80118

Pikes Peak Library District

Monument Library
1706 Lake Woodmoor Drive
Monument, CO 80132

5 The 30-day public comment period for the EA will end on May 29, 2018. During the comment period, the public and agency are encouraged to provide
6 comments to CDOT and FHWA on the EA, the alternatives considered and preferred alternative, anticipated impacts of the I-25 South Gap Project, or
7 other topics of interest or concern. Questions regarding the EA, comment period, or project can be directed to:

Chuck Attardo
Colorado Department of Transportation
7328 South Revere Parkway, Unit 204A
Centennial, CO 80112
303-365-7211
Chuck.Attardo@state.co.us

Nnaemeka Ezekwemba
Federal Highway Administration
12300 West Dakota Avenue, Suite 180
Lakewood, CO 80228
720-963-3018
Nnaemeka.Ezekwemba@dot.gov

1 Written comments can be submitted through the project website (i25gap.codot.gov), project email
2 address (i25gap@codot.us), or by mail or email to the contacts listed above.

3 Two public hearings for this project will be held at the following times:

- 4 • Monday, May 14, 2018, at the Event Center, Douglas County Fairgrounds (500 Fairgrounds Drive,
5 Castle Rock), from 5:30 PM to 7:30 PM
- 6 • Wednesday, May 16, 2018, at Liberty High School (8720 Scarborough Drive, Colorado Springs), from 5:30 PM to 7:30 PM

7 The public hearings provide a forum for attendees to learn about the I-25 South Gap Project and EA, provide written comments, or make an oral
8 statement. Oral statements, which can be provided privately or publicly, will be recorded verbatim by a court reporter and entered into the project
9 record. For anyone with disabilities or language needs requiring assistance to participate in the hearings, accommodations will be provided if requested.

10 CDOT and FHWA will review and consider all comments. Through this process, CDOT and FHWA will determine whether to move forward with the
11 Preferred Alternative or No Action and document any changes to the Preferred Alternative resulting from public or agency input. All comments received
12 during the comment period, including at the hearing, will be part of the project record and issued a written response, which will be included with the final
13 EA decision document. An EA decision document is expected in June 2018.

14 **WHAT ADDITIONAL OPPORTUNITIES FOR STAKEHOLDER PARTICIPATION WILL BE PROVIDED?**

15 CDOT and FHWA understand the public's interest in the project's progress and construction. The following opportunities will be available for additional
16 stakeholder participation as the project advances:

- 17 • EA Public Hearing, comment period, and response to comments
- 18 • Steering Committee, Technical Working Group, and other ongoing project team meetings during design and construction
- 19 • I-25 Gap Coalition meetings
- 20 • Construction communication and alerts
- 21 • HPTE public process for determining the Express Lane toll rates

22 CDOT and the contractor will develop a Transportation Management Plan and Public Information Plan to address the construction impacts of the project
23 to the public and stakeholders. These would detail lane closures, detours, durations of impacts, access, construction noise, overall progress, bridge
24 construction, and other details of public interest. The contractor will also establish a Public Information Office to log and respond to public inquiries.
25 Presentations and briefings similar to those conducted through the EA process are expected to continue as needed and requested through the duration of
26 design and construction.

The comment period for this EA
ends on May 29, 2018.
The EA decision is anticipated in
June 2018.

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