1 Introduction

This Tier 1 EIS addresses a 150-mile-long portion of U.S. 50 through southeastern Colorado, from near the City of Pueblo east to the vicinity of the Colorado-Kansas state line (see Figure 1-1). FHWA, CDOT, and local governments have identified the need to improve safety and mobility on this mostly two-lane highway, which traverses four counties. This document was prepared by CDOT and the FHWA, which are the lead agencies for the project. The USACE and U.S. Environmental Protection Agency (EPA) are cooperating agencies for the document. Cooperating agencies are federal agencies with jurisdiction by law or special expertise in a particular resource or resource analysis. The USACE and EPA provide advice and recommendations to CDOT and FHWA on the scope and content of the environmental analyses. The U.S. Fish and Wildlife Service (USFWS) is a participating agency for this EIS. Participating agencies are federal agencies that have an interest in the project and provide input during the NEPA process, especially pertaining to development of the purpose and need, range of alternatives, methodologies, and analysis of alternatives (FHWA 2015).
The purpose of this introductory chapter is to describe what studies have been done in the past and how previous plans have been incorporated into this study. It also describes the tiered approach to addressing NEPA and why tiering was selected to evaluate the U.S. 50 corridor. Compliance with NEPA is required because of the likelihood of using federal funds and/or requiring federal approvals for future right-of-way acquisition and highway improvements along the corridor.

1.1 PREVIOUS STUDIES

Numerous safety and environmental studies have been prepared by CDOT for portions of U.S. 50 during the past several decades. Due to a lack of funding, however, only a few short segments of the highway were improved. By the late 1990s, it became apparent to CDOT and the communities along the U.S. 50 corridor that a new approach was needed.

In 2000, CDOT and the communities along the corridor began to develop a corridor-wide vision for the future of the highway to improve safety and mobility in the Lower Arkansas Valley. This shared vision is documented in *A Corridor Selection Study: A Plan for U.S. 50*, which was completed in 2003. This study provided a plan for addressing long-term transportation needs for U.S. 50 users. The study examined the following three alternative regional corridors to serve U.S. 50 needs:

- A corridor one to 10 miles north of the existing highway
- A corridor on or near the existing highway
- A corridor one to 10 miles south of the existing highway

After extensive public input, the study concluded that transportation improvements would be made on or near the existing U.S. 50 corridor based on the following decision criteria:

- Public acceptance
- Utilization of existing infrastructure/right of way
- Ability to phase construction and use improvements to match funding
- Consistency/conformity with local/regional plans
- Maintenance of traffic during construction
- Potential economic benefits to local communities
- Ability to meet local mobility needs
- Future flexibility

The study also recommended development of NEPA analyses for the entire U.S. 50 corridor, which resulted in this Tier 1 EIS. The vision developed in the planning study provided the basis for the purpose
and need for this Tier 1 EIS. The study vision called for a safe roadway on or near the existing roadway alignment that maintains a free flow of traffic at a consistent speed for the movement of people and goods along and through the Lower Arkansas Valley, while providing flexibility to accommodate future transportation needs. A detailed discussion of the project’s purpose and need is included in Chapter 2, Purpose and Need.

Other regional and statewide reports and plans have been completed that support the community vision identified in the 2003 study. These reports and plans also demonstrate statewide support for addressing the transportation needs of the corridor. These planning efforts are summarized in Table 1-1.

### Table 1-1. U.S. 50-Related Planning Efforts

<table>
<thead>
<tr>
<th>Planning Document</th>
<th>Prepared By</th>
<th>Type</th>
<th>Visions for U.S. 50 Included in the Study or Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Colorado Mobility Study 2003</td>
<td>CDOT</td>
<td>Regional</td>
<td>U.S. 50 serves as a Colorado freight corridor; improving U.S. 50 would enhance the movement of freight in Colorado.</td>
</tr>
<tr>
<td>2003 Strategic Investment Plan</td>
<td>Transportation Commission of the State of Colorado</td>
<td>Statewide</td>
<td>U.S. 50 is a substantial statewide corridor; addressing system quality, mobility, and safety deficiencies would provide a regional and statewide transportation system, as well as economic benefits.</td>
</tr>
<tr>
<td>Southeast Transportation Planning Region Corridor Vision 2003</td>
<td>CDOT</td>
<td>Regional</td>
<td>“To increase the east-west mobility … as well as to improve safety and maintain system quality to provide the necessary mobility … for region residents, tourists and freight movements by providing interstate level mobility for southern Colorado … to ensure continued and increased economic development in the Region.”</td>
</tr>
<tr>
<td>Pueblo Transportation Planning Region Corridor Vision 2035</td>
<td>PACOG</td>
<td>Regional</td>
<td>To “improve safety as well as to maintain system quality and to increase mobility” (Pueblo Area Council of Governments [PACOG] 2008).</td>
</tr>
<tr>
<td>2040 Regional Transportation Plan, Southeast Transportation Planning Region</td>
<td>CDOT</td>
<td>Regional</td>
<td>U.S. 50 is listed by the Southeast Transportation Planning Region (TPR) to be a regional priority corridor. According to the Statewide Plan, the movement of industrial and agricultural freight along U.S. 50 and other freight routes is critical to the local and state economy.</td>
</tr>
<tr>
<td>Statewide Transportation Improvement Program 2016–2019</td>
<td>CDOT</td>
<td>Funding</td>
<td>Identified funding for the U.S. 50 Tier 1 EIS.</td>
</tr>
</tbody>
</table>
1.2 TIERED NEPA PROCESS

Tiering is a process for evaluating the environmental consequences of a project in two steps, known as tiers. The first tier examines a large area or a broad set of issues when a project is still in the formative stage. The first tier allows an agency to determine a corridor’s needs and focus on broad environmental issues that may directly affect early planning decisions, such as the type of transportation mode, the general location of the project, and major design features.

The second tier generally involves the preparation of a detailed NEPA analysis addressing the consequences of one or more specific projects and including project impacts, costs, and mitigation strategies. This may take the form of a Tier 2 EIS, EA, or Categorical Exclusion (CE). Tier 2 studies may be conducted by CDOT and/or local governments.

A tiered NEPA approach for U.S. 50 was selected for a number of reasons. Based on past trends and uncertainty over the amount and timing of future federal and state funding, a corridor-wide, 150-mile improvement to U.S. 50 could not be implemented as a single project. In addition, a tiered approach would provide an understanding of the long-term consequences (both positive and negative) of corridor-wide improvements. Mitigation strategies also could be developed on a corridor-wide basis to maximize the financial investment. This long-term, high-level understanding could not be developed by looking at projects individually.

The objective of this Tier 1 EIS effort is to provide decisions that CDOT and the communities can use to plan and program future improvements. In the NOI for the U.S. 50 Tier 1 EIS in the Federal Register (71 FR 4958), published January 30, 2006, FHWA anticipated the following decisions would be made based on the outcomes of this document:

- Modal choice
- Selection of a preferred general corridor location for U.S. 50
- Evaluation of access management
- Identification of independent, stand-alone projects
- Plan for further action

Using the tiered NEPA decision-making process allows environmental analysis to shape these transportation planning decisions, with input from all involved agencies, communities, and the public. This also provides a level of predictability for CDOT and the communities so that certain location decisions will not be revisited later in the process.
1.3 PROJECT AREA AND STUDY AREA LIMITS

To adequately assess highway needs, the project area for this Tier 1 EIS has been defined as one to four miles wide aligning on the existing U.S. 50 facility and extending from Pueblo, Colorado, at I-25 to the Colorado-Kansas state line (see Figure 1-2). This area was generally used to assess the existing conditions of the U.S. 50 corridor, which are discussed further in Chapter 4. The project area encompasses the study area limits, which is where the Tier 1 corridor alternatives considered by this project would be located.

The study area is a site 1,000 feet wide centered on the corridor alternatives, beginning on or near the existing U.S. 50 at I-25 in Pueblo, Colorado, and extending to approximately one mile east of Holly, Colorado, in the vicinity of the Colorado-Kansas state line. The study area limits were used to assess potential impacts, as described in Chapter 4. Selection of the project area and study area limits, including the eastern and western termini, was based on the recommended improvements of previous planning studies.

Note that the City of Lamar, Colorado (between approximately milepost 426.5 and milepost 437.7), is excluded from the project area, as shown in Figure 1-2, and, therefore, also excluded from the study area. This location was studied under the separate U.S. 287 at Lamar Reliever Route Environmental Assessment (FONSI signed November 10, 2014). The EA identified a proposed action that bypasses Lamar to the east beginning at the southern end of U.S. 287 near County Road (CR) C-C and extending nine miles to SH 196. More information on the U.S. 287 at Lamar Reliever Route project, as well as the EA and FONSI, is available online at http://www.coloradodot.info/projects/us287lamar.
1.4 LOGICAL PROJECT TERMINI

As stated in the NOI, transportation improvements are proposed on U.S. 50 between Pueblo, Colorado, and the vicinity of the Colorado-Kansas state line. These approximate limits were identified during a prior U.S. 50 planning study, reflecting extensive public input from the communities along the U.S. 50 corridor and the identification of the need for improvements along the corridor. The following discussion explains the project termini, or project limits, in more detail.

1.4.1 Logical Western Terminus

As shown in Figure 1-3, U.S. 50 connects to I-25 in Pueblo, Colorado, where travelers may continue to other destinations north or south on I-25 or west of the city on U.S. 50. As the largest community along U.S. 50 in Colorado, Pueblo is an important destination for residents along the corridor, particularly the communities within the Lower Arkansas Valley. I-25 also is a substantial link to other large communities along the Colorado Front Range, as well as other Rocky Mountain States, Canada, and Mexico; therefore, I-25 in Pueblo is a logical western terminus for this study.

1.4.2 Logical Eastern Terminus

The easternmost community along U.S. 50 within Colorado is Holly, which is located approximately two miles west of the Colorado-Kansas state line. For shopping, services, and other regional-trip purposes, residents of Holly travel west to Lamar, Colorado, which is a distance of 27 miles, rather than east to Garden City, Kansas, which is 73 miles to the east (see Figure 1-3).

Based on consultation with the Kansas Department of Transportation (KDOT), no U.S. 50 improvements are anticipated on the Kansas side for the foreseeable future. In the long term, however, KDOT intends to upgrade the corridor consistent with its congressional designation as a high-priority corridor on the National Highway System (NHS). Therefore, the selection of an eastern project terminus approximately one mile east of Holly (in the vicinity of the Colorado-Kansas state line) allows flexibility for CDOT to match any future KDOT improvements in the two miles between the end of the project and the state line.
Figure 1-3. Logical Termini of U.S. 50 Corridor Improvements
1.5 U.S. 50 TIER 1 EIS CONTENTS

Based on requirements set forth in regulations from the Council on Environmental Quality (CEQ) for implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500–1508) and FHWA’s Technical Advisory 6640.8A, and proceeding according to the NOI for U.S. 50 filed by FHWA (71 FR 4958), this document includes the following substantive chapters and discussion topics:

- Chapter 2, Purpose and Need—This chapter includes a discussion of the transportation issues experienced on U.S. 50 and provides the reasons why improvements are needed to the highway within the project area. These issues relate to improving safety and mobility for local, regional, and long-distance users of U.S. 50.
- Chapter 3, Alternatives Considered—This chapter discusses the processes used to develop and screen transportation solutions to arrive at the range of reasonable alternatives that were considered by project planners and designers and discussed in this document. It describes the steps that were followed to identify the type and location of transportation improvements that would meet the purpose and need.
- Chapter 4, Affected Environment, Environmental Consequences, and Mitigation—This chapter includes a discussion of the environmental and social resources that exist within the project area and identifies the potential impacts of alternatives considered. Mitigation strategies also are presented as they relate to each identified resource.
- Chapter 5, Section 4(f) Evaluation—This chapter identifies and evaluates Section 4(f) resources potentially used by the Build Alternatives.
- Chapter 6, Identification of Preferred Alternative and Summary of Impacts—This chapter identifies a preferred alternative by further screening the Build Alternatives. The screening process assesses impacts on the rural and agricultural environment, natural environment, and community and built environment, along with consideration of public input. While the Build Alternatives comprise a four-lane rural expressway and consider all alternatives, the Preferred Alternative generally narrows the Build Alternatives to one around-town corridor for each location, with a few exceptions. The chapter summarizes the Preferred Alternative’s impacts by resource.
- Chapter 7, Community Outreach and Agency Involvement—This chapter consists of a description of the processes, actions, and outcomes of community and agency participation. It includes a discussion of EIS tiering, the roles and responsibilities of Agency and Community Working Groups, and the efforts made to engage the public.
- Chapter 8, Mitigation Strategies—This chapter discusses strategies that would be undertaken to mitigate adverse environmental effects if the Build Alternatives are constructed.