

PEL Questionnaire

This questionnaire is intended to act as a summary of the Planning process and ease the transition from the planning study to a National Environmental Policy Act (NEPA) analysis. Often, there is no overlap in personnel between the planning and NEPA phases of a project, and much (or all) of the history of decisions and similar information is not passed along. Different planning processes take projects through analysis at different levels of detail. Without knowing how far or in how much detail a planning study went, NEPA project teams often re-do work that has already been done.

Planning teams need to be cautious during the alternative screen process; alternative screening should focus on Purpose and Need/corridor vision, fatal flaw analysis, and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision cannot be considered viable alternatives, even if they reduce impacts to a particular resource. This questionnaire is consistent with 23 *Code of Federal Regulations* (CFR) 450 (Planning regulations) and other Federal Highway Administration (FHWA) policy on the Planning and Environmental Linkages (PEL) process.

Instructions: These questions should be used as a guide throughout the planning process. The questionnaire should be filled out as the study progresses. It is a beneficial tool to keep leadership and program managers up to date on a study's progress. When a PEL study (i.e., corridor study) is started, this questionnaire will be given to the project team. Some of the basic questions to consider are "What did you do?", "What didn't you do?", and "Why?". When the team submits the study to FHWA for review, the completed questionnaire will be included with the submittal. FHWA will use this questionnaire to assist in determining if an effective PEL process has been applied before NEPA processes are authorized to begin. The questionnaire should be included in the planning document as an executive summary, chapter, or appendix.

1. Background:

a. *What is the name of the PEL document and other identifying project information (e.g., subaccount or STIP numbers)?*

Interstate 25 (I-25) Colorado Springs Denver South Connection

Colorado Department of Transportation (CDOT) Project Number: NHPP 0252-450

CDOT Project Code: 21102

b. *Who is the lead agency for the study? (FHWA, FTA, CDOT, Local Agency)*

FHWA

c. *Provide a brief chronology of the planning activities (i.e., the PEL study) including the year(s) the studies were conducted. (Include project start date and end date.)*

- August 2016: Project start and commencement of scoping.
- Winter 2016/2017: Developed draft Purpose and Need, which was presented at the January 2017 public meetings.

- February 2017: Held a workshop with the Technical Working Group to develop an initial range of alternatives. Presented concepts to public at April 2017 public meetings.
- Spring-Fall 2017: Developed, calibrated, and validated the travel demand model network for the PEL Study Area.
- July 2017: Completed the Safety Assessment Report for the Study Area.
- September 2017: Completed Initial Corridor Assessment (ICA) summarizing data gathered to assess the existing conditions in the Study Area, including geometrics, traffic, and environmental resources.
- Summer-Winter 2017: Completed Level 1 and Level 2 alternatives evaluation.
- December 2017: Conducted Environmental Assessment scoping meetings for the I-25 South GAP Project, an early-action project generated through the PEL Study.
- June 2018: Environmental Assessment/Finding of No Significant Impact completed for I-25 South Gap Project.
- Fall 2018-Winter 2019: Completed Level 3 alternatives evaluation.
- Spring 2019: Developed PEL Study recommendations

d. Provide a description of the existing transportation corridor, including project limits, length of study corridor, modes, number of lanes, shoulder, access control and surrounding environment (urban vs. rural, residential vs. commercial, etc.)

The corridor being studied is a 33-mile segment of I-25 between State Highway (SH) 105 and Colorado Highway 470/E-470 (C/E-470). I-25 is a full access control interstate facility; rural between mile post (MP) 161 and MP 179 and urban between MP 179 and MP 194. The number of travel lanes varies between two and four in each direction. Note that construction of the I-25 South Gap Project between MP 161 and MP 179 will increase the minimum number of lanes in the corridor to three in each direction, including an express lane (EL) in each direction. Transit service currently consists of Regional Transportation District light rail (north of RidgeGate Parkway only) and regional bus service between Colorado Springs and the Denver Tech Center/Downtown area. More information can be found in in Chapter 1, Section 1.1, Study Area, of the PEL Report.

e. Who was the sponsor of the PEL study? (CDOT, Local Agency [name the local agency], Other)

Colorado Department of Transportation (CDOT)

f. Who was included on the study team (Name and title of agency representatives, PMT, TWG, consultants, etc.)?

The core study team included CDOT, FHWA, and consultant staff. However, numerous technical experts, agency representatives, and elected officials participated in the PEL Study to identify transportation needs, establish a purpose and goals, explore and evaluate solutions, and develop recommendations. Participants are listed below by group and in alphabetical order by organization and then last name.

Executive Oversight Committee

Colorado Department of Transportation

- Mark Andrew, Region 2 Program Engineer
- Chuck Attardo, Project Environmental PEL Lead
- Jim Bemelen, Design Coordinator
- Carrie DeJacombo-Wiedner, Region 1 Program Engineer
- Nick Farber, High Performance Transportation Enterprise (HPTE) Acting Director
- Shannon Ford, Region 2 Environmental Lead
- John Gregory, Project Manager
- John Hall, Project Director
- Paul Jesaitis, Region 1 Director
- David Krutsinger, Director, Division of Transit and Rail (DTR)
- Josh Laipply, Chief Engineer
- Mike Lewis, former Executive Director
- Paul Neiman, Resident Engineer
- Johnny Olson, former Deputy Executive Director
- Debra Perkins-Smith, former Director, Division of Transportation Development (DTD)
- Tamara Rollison, Region 1 Communications Lead
- Karen Rowe, Region 2 Director
- David Spector, former HPTE Director
- Herman Stockinger, Director of the Office of Policy and Government Relations
- Jeff Sudmeier, Chief Financial Officer
- Rebecca White, Director of Transportation Asset Management and Planning Director
- Richard Zamora, Region 1 Deputy Transportation Director

Federal Highway Administration

- Shaun Cutting, Program Delivery Team Leader
- Emeka Ezekwemba, Area Engineer
- Vershun Tolliver, Assistant Division Administrator
- Melinda Urban, Senior Area Engineer

Project Management Team

Colorado Department of Transportation

- Mark Andrew, Region 2 Program Engineer

- Chuck Attardo, Project Environmental PEL Lead
- Sean Brewer, former CDOT Environmental Programs Branch (EPB) PEL Lead
- Kelly Brown, HPTE Representative
- Carrie DeJacombo-Wiedner, Region 1 Program Engineer
- Daniel Eybs, DTR Representative
- Shannon Ford, Region 2 Environmental Lead
- Rob Frei, Region 2 Environmental
- John Gregory, Project Manager
- John Hall, Project Director
- Lesley Mace, Region 2 Traffic
- Paul Neiman, Resident Engineer
- Michelle Peulen, Region 2 Communications Lead
- Tamara Rollison, Region 1 Communications Lead
- Karen Rowe, Region 2 Director
- Sharon Terranova, DTR Representative

Federal Highway Administration

- Emeka Ezekwemba, Area Engineer
- Tricia Sergeson, Transportation Specialist
- Melinda Urban, Project Liaison

Steering Committee

Colorado Department of Transportation

- Chuck Attardo, Environmental PEL Lead
- Kelly Brown, HPTE Representative
- Carrie DeJacombo-Wiedner, Region 1 Program Engineer
- Nick Farber, HPTE Acting Director
- Randy Grauberger, Southwest Chief & Front Range Passenger Rail Commission Director
- John Hall, Project Director
- Josh Laipply, Chief Engineer
- Mike Lewis, former Executive Director
- Paul Neiman, Resident Engineer
- Tamara Rollison, Region 1 Communications Lead
- Karen Rowe, Region 2 Director
- Rocky Scott, Transportation Commissioner
- Herman Stockinger, Director, Office of Policy and Government Relations
- Richard Zamora, Region 1 Deputy Director

Colorado State Elected Officials

- Dale Anderson, Liaison for Congressman Doug Lamborn
- Terri Carver, Colorado State Representative
- Robin Coran, Liaison for Congressman Ken Buck
- Kelly Fleming, Liaison for Colorado State Representative Terri Carver
- Bob Gardner, Colorado State Senator
- Tim Geitner, Colorado State Representative
- Mark Jackson, Liaison for Congressman Ken Buck
- Annie Larson, Liaison for Senator Cory Gardner
- Polly Lawrence, former Colorado State Representative
- Paul Lundeen, Colorado State Senator
- Dan Nordberg, former Colorado State Representative
- Annie Oatman-Gardner, Liaison for Senator Michael Bennet
- Shane Sandridge, Colorado State Representative

Federal Highway Administration

- Shaun Cutting, Program Delivery Team Leader
- Emeka Ezekwemba, Area Engineer
- Vershun Tolliver, Assistant Division Administrator

Local Jurisdictions

- Michael Penny, City of Castle Pines Manager
- Tera Radloff, City of Castle Pines Mayor
- Rachel Beck, Colorado Springs Chamber & Economic Development Council, Government Affairs Representative
- John Suthers, City of Colorado Springs Mayor
- Art Griffith, Douglas County Capital Improvements Engineer
- Abe Laydon, Douglas County Commissioner
- Roger Partridge, Douglas County Commissioner
- Lora Thomas, Douglas County Commissioner
- Cami Bremer, El Paso County Commissioner
- Longinos Gonzalez, Jr., El Paso County Commissioner
- Jennifer Irvine, El Paso County Engineer
- Stan VanderWerf, El Paso County Commissioner
- Mark Waller, El Paso County Commissioner
- Holly Williams, El Paso County Commissioner
- Norm Steen, Teller County Commissioner Representing PPACG
- Kevin Bracken, Town of Castle Rock Councilman
- Bob Goebel, Town of Castle Rock Public Works Director
- Jason Gray, Town of Castle Rock Mayor
- George Teal, Town of Castle Rock Councilman

- Linda Black, Town of Larkspur Program Development Manager
- Matt Krimmer, Town of Larkspur Manager
- Don Wilson, Town of Monument Mayor
- John Cressman, Town of Palmer Lake Mayor
- Terri Hayes, Tri-Lakes Chamber of Commerce President and Chief Executive Officer (CEO)

Metropolitan Planning Organizations

- Andrew Gunning, PPACG Executive Director
- John Liosatos, PPACG Transportation Director
- Doug Rex, DRCOG Executive Director

Technical Working Group and Resource Agency Group

Colorado Department of Transportation

- Mark Andrew, Region 2 Program Engineer
- Chuck Attardo, Project Environmental/PEL Lead
- Jim Bemelen, Design Coordinator
- Sean Brewer, former CDOT EPB PEL Lead
- Kelly Brown, HPTE Representative
- Luis Calderon, CDOT Drainage Representative
- Daniel Eybs, DTR Representative
- Nick Farber, HPTE Director
- Shannon Ford, Region 2 Environmental Lead
- Randy Grauberger, Southwest Chief and Front Range Passenger Rail Commission Director
- John Gregory, Project Manager
- Susie Hagie, Landscape and Aesthetics Representative
- John Hall, Project Director
- Shannon Hart, Professional Right of Way (ROW) Lead
- Lizzie Kemp, Planning Manager
- Telecia McCline, Design Coordinator
- Patricia McKinney-Clark, Utilities Manager
- Lesley Mace, Region 2 Traffic
- Rob Martindale, Railroad Coordinator
- JoAnn Mattson, Planning Specialist
- Anthony Meneghetti, HPTE Representative
- Paul Neiman, Resident Engineer, Gap Construction Manager
- Jason Nelson, Region 2 Traffic
- Beth Ondrak, Incident Management Representative
- Jeff Peterson, Wildlife Specialist

- Michelle Peulen, Region 2 Communications Lead
- Larry Quirk, Construction Representative
- Tamara Rollison, Region 1 Communications Lead
- Karen Rowe, Region 2 Director
- Matt Russman, Maintenance Representative
- Basil Ryer, Landscape and Aesthetics Representative
- Paul Scherner, Region 1 Traffic
- Jill Scott, Intelligent Transportation Systems (ITS) Representative
- Terrene Shendleman, Real Estate Specialist
- David Singer, CDOT EPB Representative
- Rick Solomon, Permit Representative
- Justin Stadler, Survey Representative
- Barbara Stocklin-Steely, Historian
- Sharon Terranova, DTR Liaison
- Nancy Terry, Right of Way Manager
- David Thomas, Lead Geotechnical Engineer
- Francesca Tordonato, Region 1 Environmental Program Manager
- Tracy Vance, Utilities Lead
- Rose Waldman, Noise Program Manager
- Richard Zamora, Region 1 Deputy Transportation Director
- Carrie DeJacommo-Wiedner, Region 1 Program Engineer
- Bob Wilson, Marketing and Communication Specialist
- Maria Johnson, Contract Administrator
- David Krutsinger, DTR Director
- Mike Timlin, DTR Manager

Federal Highway Administration

- Emeka Ezekwemba, Area Engineer
- Stephanie Gibson, Environmental Program Manager
- Tricia Sergeson, Transportation Specialist

Local Jurisdictions

- Michael Penny, City of Castle Pines Public Works Director
- Travis Easton, City of Colorado Springs Public Works Director
- John Cotten, City of Lone Tree Public Works Director
- Jane Boand, Douglas County Land Conservancy
- Duane Cleere, Douglas County Traffic Operations Manager
- Art Griffith, Douglas County Capital Improvements Engineer
- Kathie Haire, Douglas County Principal Traffic Engineer
- Andy Hough, Douglas County Environmental Resources Manager
- Kati Rider, Douglas County Planning Manager

- Brad Robenstein, Douglas County Drainage and Flood Control Engineer
- Cheryl Matthews, Douglas County Open Space Director
- Jennifer Irvine, El Paso County Engineer
- Ryan Germeroth, Town of Castle Rock Transportation Planning and Traffic Engineering Manager
- Bob Goebel, Town of Castle Rock former Public Works Director
- Thomas Reiff, Town of Castle Rock Transportation Planner
- Linda Black, Town of Larkspur Program Development Manager
- Matt Krimmer, Town of Larkspur Manager
- Larry Manning, Town of Monument Planning Director
- Steve Sheffield, Town of Monument Assistant Public Works Director
- Tom Tharnish, Town of Monument Public Works Director

Metropolitan Planning Organizations

- Steve Cook, DRCOG Transportation Modeling and Operations Manager
- Jacob Riger, DRCOG Senior Planner
- Ken Prather, Pikes Peak Area Council of Government PPACG Senior Transportation Planner

Resource Agencies

- Corey Adler, Colorado Parks and Wildlife (CPW)
- Brandon Marette, CPW
- Matt Martinez, CPW
- Karen Voltura, CPW
- Lisa Lloyd, Environmental Protection Agency (EPA)
- Shannon Snyder, EPA
- Brooke Davis, United States Army Corps of Engineers (USACE)
- Alison Michael, United States Fish and Wildlife Service (USFWS)

Other Organizations

- Tracy Sakaguchi, Colorado Motor Carriers Association (CMCA)
- Derek Slack, E-470 Public Highway Authority
- Sydney Macy, The Conservation Fund Senior Vice President

Consultant and Contractor Team

- Jeff Berna, PEL Manager
- Shane Binder, Traffic Engineer
- Chris Bisio, Consultant Project Manager
- Jon Bottom, Traffic Engineer
- Jacqueline Dowds-Bennett, Traffic Engineer

- Tim Harris, Senior Advisor
- Matt Hogan, Construction Project Engineer
- Myron Hora, Environmental Advisor
- Don Hunt, Geotechnical Engineer
- Amy Kennedy, Environmental Staff
- Julie Kintsch, Environmental Staff
- Kurt Kolleth, PEL Roadway Lead
- Mike McNish, Construction Project Manager
- Marla McOmber, Geospatial Lead
- Martin Merklinger, Bridge Engineer
- Laura Meyer, Alternatives Evaluation and PEL Documentation
- Matt Nork, Lead Bridge Engineer
- Michelle Pinkerton, Design Manager
- Steve Pouliot, Lighting Design Lead
- Colleen Roberts, PEL Staff
- Bill Schiebel, Geotechnical Engineer
- Troy Slocum, Drainage Lead
- Will Voss, Roadway Lead
- Cinamon Watson, Communications
- Jennifer Webster, Stakeholder Involvement
- George Woolley, PEL Staff and I-25 South Gap Project NEPA
- Mandy Whorton, PEL Manager, Advisor and I-25 South Gap Environmental Assessment (EA) Project Manager
- Sarah Zarzecki, Utilities Lead

g. List the recent, current or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

The No Action Alternative for the PEL Study is documented in Chapter 3, Section 3.1 of the PEL Study report. All of these projects were considered in this study. The following projects relate directly to the Purpose and Need and/or recommendations of this study:

- The I-25 South Gap Project, an early action project emerging from this PEL Study, is currently under construction. This project addresses safety, incident management, travel time reliability, and mobility between MP 161 and MP 179. Construction is scheduled for completion in 2022.
- Castle Rock is pursuing development of a new interchange at Crystal Valley Parkway and I-25 (MP 179) to address growth and development in the area and alleviate pressure on the Plum Creek Parkway and I-25 interchange. The conceptual design of the I-25 mainline recommendation in this study assumes this interchange would be implemented prior to or in conjunction with the initial phase of I-25 improvements as described in Chapter 5.
- Construction is currently in progress to widen C-470 from Wadsworth Boulevard to I-25 and provide ELs in both directions. Future NEPA

studies will need to determine if/how the recommended ELs on I-25 will connect with the C-470 ELs, as well as the E-470 tolled facility.

Two transit initiatives are being studied that would influence future projects along I-25 in the Study Area.

- The CDOT DTR is considering locations for a future transit station in Castle Rock, from which Bustang bus service could be provided. This is consistent with the recommendation in this PEL Study to expand regional bus service in the Study Area as a means of improving mobility. DTR's evaluation of stations is discussed further in the PEL Study report in Chapter 4, Section 4.2.3, and the Transit technical memorandum (TM) (Appendix H).
- The CDOT DTR is moving ahead with an alternatives study and environmental impact study for passenger rail along the Front Range between Pueblo and Fort Collins. This initiative builds on the Interregional Connectivity Study (ICS) completed in 2014, which recommended a high-speed rail alignment and stations along I-25 in the PEL Study Area. This is consistent with the recommendation in this PEL to add passenger rail along I-25 as a means of improving mobility. More information can be found in Chapter 4, Section 4.2.3, and in the Transit TM (Appendix H).

2. Methodology used:

- a. Did the Study follow the FHWA PEL Process? If the Study was conducted by another US DOT Agency, provide a crosswalk table to demonstrate how the FHWA Process was utilized.**

Yes, the PEL Study followed FHWA and CDOT PEL guidance regarding the integration of transportation planning and the NEPA process.

- b. How did the Study meet each of the PEL Coordination Points identified in 23 USC 168?**

FHWA representatives were an integral part of the project team working closely with CDOT and consultant staff on all aspects of the PEL Study. FHWA representatives participated regularly in meetings for the Steering Committee (SC), Project Management Team (PMT), Technical Working Group (TWG), and Resource Agency Group (RAG), and provided input and comments on each of the following coordination points:

- Determine reason for PEL Study and desired outcome
- Develop purpose and need, goals, and objectives
- Evaluate and screen alternatives and identify environmental impacts and potential mitigation
- Finalize PEL document

- c. What NEPA terminology/language was used and how did you define them? (Provide examples or list)**

The Purpose and Need is defined and identified in Chapter 2.

A Purpose and Need statement is used in PEL and NEPA studies to articulate and focus on the specific problems to be addressed. The Purpose and Need is the foundation of the alternatives process because alternatives are developed and evaluated based on their ability to meet the Purpose and Need. The Purpose and Need statement is not mode-specific or partial to a specific solution. It typically has three important parts: the Purpose, the Need, and the Goals. The Purpose defines the transportation problem to be solved. The Need provides data to support the problem statement (Purpose). The Goals describe other issues that need to be resolved as part of a successful solution to the problem.

The No Action Alternative is defined and identified in Chapter 3, Section 3.1.

The No Action Alternative does not meet the Purpose and Need, but serves as a baseline comparison for mobility, safety, travel time reliability, and environmental analysis purposes. The No Action Alternative consists of transportation infrastructure projects in the Study Area that are reasonably foreseeable or in progress. Reasonably foreseeable projects include those with identified or committed funding that would be constructed whether any improvements or recommendations cited in this PEL Study are implemented.

Mitigation measures are discussed and defined in Chapter 6.

Mitigation measures identify a proposed method or mechanism to minimize, rectify, reduce, or compensate for adverse impacts expected from federally-funded actions.

d. How do you see these terms being used in NEPA documents?

The terms used in this PEL Study, such as Purpose and Need, No Action Alternative, and mitigation measures, are terms that are used in NEPA documents. For example, future NEPA studies will describe the Purpose and Need of the project, establish a No Action Alternative to serve as a baseline for analysis, evaluate the No Action Alternative and build alternatives based on their ability to meet the purpose and need and their environmental impacts, identify measures to mitigate impacts, and identify a Preferred Alternative that meets the purpose and need while minimizing impacts.

e. What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps?

CDOT and FHWA worked collaboratively throughout the study and were joint decision-makers for all steps of the process. In all instances, decisions were based on input from local, state, and federal agencies obtained during monthly RAG/TWG meetings. During each of the following four key steps, CDOT and consultants presented information and solicited input from the study participants (listed under Question 1.f) and the public:

- **Establish and Purpose and Goals:** The study's Purpose statement defines the transportation problem to be solved and was developed by the consultant team with review and approval by CDOT and FHWA. The draft Purpose and Need was discussed at the November 2016 PMT meeting and subsequently vetted with the SC, TWG, RAG, and public. Secondary goals and objectives were discussed concurrently with the alternatives evaluation criteria beginning with the May 2017 TWG alternatives workshop. The goals were identified through coordination with local jurisdictions, state and federal resource agencies, and the public.
- **Understand the Needs:** Beginning in September 2016, the PEL Study team collected available data on existing conditions and corridor issues and solicited input from local jurisdictions, state and federal resource agencies, stakeholders, and the public. Data collection included geometric design, system operational features, existing structures, traffic, travel forecasting, safety, intelligent transportation system technology, and environmental resources. This collective set of information was evaluated to identify transportation needs to be addressed in the study.
- **Explore and Evaluate Solutions:** The consultant team evaluated corridor-wide and segment-specific concepts for how to address the identified transportation needs. The study team held a workshop with the TWG in February 2017 to develop an initial range of alternatives. The study team completed three levels of alternatives evaluation to determine how well alternatives met the purpose and need and achieved goals. The Level 1 screening criteria and process were discussed at the May 2017 TWG meeting with results presented at the June 2017 meeting. The Level 2 criteria were presented in June 2017 with results presented later that month at a RAG/TWG alternatives workshop. Following preparation of the I-25 South Gap EA, the PEL alternatives process resumed with presentation of the Level 3 evaluation process at the September 2018 RAG/TWG meeting. FHWA participated in numerous PEL Study team meetings during the Level 3 evaluation to provide input on the travel demand modeling, screening criteria, environmental review, and evaluation results. The Level 2 and Level 3 evaluations potential environmental impacts associated with the various alternatives. The study team vetted results with study participants, shared information with the public, and solicited feedback.
- **Develop Recommendations:** The study team, with input from the SC and TWG, reviewed the evaluation results and developed a mainline recommendation and supplemental elements to achieve and satisfy the Purpose and Needs of the corridor. Environmental considerations for recommended actions were evaluated to identify key resource issues. A TWG workshop was held in April 2019 to discuss and validate the results.

f. How should the PEL information below be presented in NEPA?

This PEL Study and supporting technical studies were prepared consistent with NEPA. When projects are advanced to the NEPA planning phase, the information in this PEL Study can be referenced and used as a foundation and guide for determining the NEPA class of action for the project, developing the project's purpose and need, identifying key issues and concerns, developing the

approach for agency and public outreach, developing a No Action Alternative and build alternatives, and identifying potential impacts and mitigation measures.

- Purpose and Need – The Purpose and Need statement for the PEL Study is broad, to cover the entire Study Area. Based on the scope of specific projects advanced in this corridor, the Purpose and Need may need to be narrowed.
- Environmental resource data – Most data collected for the PEL Study were collected in 2017 and will be useful in scoping future projects in this corridor. Depending on the time lapse, some data may need to be updated. Within the limits of the I-25 South Gap EA, project-level data are available, including field data for many resources. These data can be used in future projects within the timeframe that each resource data set remains valid.
- Safety Assessment Report – These assessments should be based on the most recent 5 years' worth of crash data and may not be useful in future studies.
- Traffic Demand Model – The regional DRCOG 2040 model was used in this PEL Study. DRCOG has since released several minor updates and may switch to a 2045 model in the next year or so.
- Alternatives Evaluation – The alternatives evaluation and recommendations were conducted and developed with full participation from local, state, and federal agencies, as well as the public. The results can be used for project development and referenced in future NEPA studies.
- Public and Agency Input – The extensive agency coordination and public involvement program conducted for this PEL Study can be referenced in future NEPA studies and used to understand goals, objectives, and perspectives of Study participants.

3. Agency coordination:

- a. Provide a synopsis of coordination with federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.***

The RAG met monthly starting in February 2017 and was made up of representatives of state and federal resource and regulatory agencies. The TWG included corridor jurisdictional representatives from Public Works and Open Space staffs, key CDOT Traffic Engineering staff, and consultant technical experts. In February 2018, the TWG and RAG combined because of similar interests and participation and continued to meet jointly through April 2019. A subset of the RAG also formed a wildlife advisory group that worked to identify wildlife mitigation throughout the corridor and provide technical expertise to the design and implementation of wildlife crossings for the I-25 South Gap Project.

Throughout the course of the PEL Study, the TWG/RAG provided substantial input and guidance regarding issues, constraints, and requirements in their jurisdictions and participated collaboratively to listen to, understand, and resolve differences with other organizations. The TWG/RAG meetings followed a workshop format where CDOT summarized the study progress or analysis in a

presentation, followed by an open discussion with the group. Several longer workshops were held with the TWG/RAG to confirm the study scope and success factors (November 2016), develop a range of PEL alternatives (February 2017), review alternatives evaluation (June 2017), kick off the NEPA phase of the I-25 South Gap Project (November 2017), and review the recommendations and implementation plan (March 2019).

A full description of TWG/RAG coordination and list of participants is available in Chapter 7 of the PEL Study report.

b. *What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved in the PEL study? This includes all federal agencies if the study is being led by a local agency or transit-oriented study seeking to utilize the FHWA PEL Process.*

CDOT coordinated with representatives from the following agencies:

- City of Castle Pines
- City of Colorado Springs
- City of Lone Tree
- CDOT HPTE
- CDOT DTR
- Colorado Transportation Commission
- DRCOG
- Douglas County
- El Paso County
- FHWA
- PPACG
- Town of Castle Rock
- Town of Larkspur
- Town of Monument
- Town of Palmer Lake

c. *What steps will need to be taken with each agency during NEPA scoping?*

The steps necessary to scope future projects in the Study Area will depend on the location of the project, potentially affected resources, and level of NEPA documentation required. CDOT will coordinate with relevant transportation agencies during the NEPA scoping process. During these meetings, CDOT will present the PEL Study findings, solicit input on the proposed action, and validate agency perspectives and concerns documented during the PEL Study.

4. Public coordination:

a. *Provide a synopsis and table of your coordination efforts with the public and stakeholders.*

Stakeholder coordination involved a range of methods, including meetings, telephone town halls, media outreach, social media and networking, project updates and frequently asked questions, informational mini-campaigns, and collateral materials, as listed in Table 1.

Table 1. Stakeholder Involvement and Public Coordination

Outreach Type	Participants	Purpose
Individual Stakeholder Interviews	Castle Rock Economic Development Council President Frank Gray CMCA Director of State Issues Tracy Sakaguchi Colorado Representative Paul Lundeen Colorado Representative Terri Carver Colorado Springs Chamber and Economic Development Corporation CEO Dirk Draper Colorado Transportation Commissioner Rocky Scott Douglas County Open Space and Natural Resources Director Cheryl Matthews	Inform initial stakeholder outreach
Castle Rock Focus Group	Castle Rock town manager and public works director, president of the Castle Rock Chamber and Economic Development Council, and several large developers in the region	Discuss development issues in Castle Rock
Safety Focus Group	Colorado State Patrol and Port of Entry staff	Understand issues related to safety, emergency response, and truck operations
Stakeholder Group	Numerous organizations	Provide an opportunity for stakeholders that regularly used or more closely depended on I-25 to be more actively engaged, beyond the public meetings

Outreach Type	Participants	Purpose
Public Meetings	General public	Five sets of meetings were held in Douglas County and El Paso County to inform the public and solicit input on the PEL Study purpose, process, and results.
Small Group Meetings and Presentations	Numerous organizations	Present high-level project overview and status, with additional information tailored to the event or requested by the organization
Telephone Town Halls	General public	Seek input about a variety of transportation issues
Traditional and Social Media	General public	Provide alerts and information about upcoming project events, meetings, and milestones
Project Website	General public	Provide information about the purpose and status of the PEL Study; provide alerts and information about upcoming project events, meetings, and milestones; disseminate information from meetings and make the PEL Report available

A comprehensive list of public and stakeholder interviews and meetings is available in Chapter 7 of the PEL Study report.

5. Corridor Vision/Purpose and Need:

a. What was the scope of the PEL study and the reason for doing it?

CDOT initiated the I-25 PEL: Colorado Springs Denver South Connection PEL Study to develop a plan of action to move projects forward along I-25 between the Town of Monument and C/E-470, a critical corridor for regional and statewide travel between the metropolitan areas of Colorado Springs and Denver. This study aims to identify transportation priorities in advance of secured construction

funding, positioning CDOT to accelerate the environmental analyses and to save time in implementing projects when construction funds are identified.

b. What is the vision for the corridor?

The vision for the PEL Study was to conduct an open and transparent process that builds partnerships and provides a roadmap to improve safety, travel reliability, and mobility on this vital stretch of I-25, with special focus on advancing an early action construction project in the “Gap” area between Monument and Castle Rock.

c. What were the goals and objectives?

The following goals were identified to supplement the Purpose and Need:

- Be compatible with the built and natural environment.
- Support corridor communities’ land use, development, and economic goals.
- Integrate and leverage technological innovations and advanced transportation system management strategies.

d. What is the PEL Purpose and Need statement?

The Purpose and Need statement for this PEL Study is to enhance safety and improve incident management, improve travel time reliability, and improve mobility on I-25 between Monument and C/E-470.

e. What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

The Purpose and Need developed under this PEL Study was developed to address the overarching transportation needs identified corridor-wide. Under future NEPA studies for specific projects in the corridor, a more focused Purpose and Need statement should be developed to address the specific needs of the project.

6. Range of alternatives considered, screening criteria and screening process:

a. What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)

The PEL Study looked at lane configurations, interchanges, structures, alternate/parallel routes, other infrastructure elements, multimodal elements, and operational elements. A comprehensive list of the initial range of alternative concepts considered is available in the *Alternatives Analysis – Levels 1 and 2* presented under Alternatives Evaluation (Appendix F).

b. How did you select the screening criteria and screening process?

The alternatives evaluation process and criteria were developed by the study team and vetted with the SC, PMT, TWG, and RAG.

c. For alternative(s) that were screened out, briefly summarize the reasons for eliminating or not recommending the alternative(s). (During the initial screenings, this generally will focus on fatal flaws)

Level 1 – Alternatives were eliminated if they did not meet the Purpose and Need.

Level 2 – The elevated travelway was not recommended because of the high costs and impacts of building an elevated section through the rural Gap and because a vertically separated lane did not provide maneuverability or the incident response benefits of building at-grade.

Level 3 – None of the modeling scenarios evaluated were eliminated, but several were not recommended because they did not compare favorably to other scenarios in addressing one or more of the identified needs or were not consistent with project goals.

d. How did the team develop Alternatives? Was each alternative screened consistently?

The consultant team evaluated corridor-wide and segment-specific concepts for how to address the identified transportation needs. The study team held a workshop with the TWG in February 2017 to develop an initial range of alternatives. Through each level of evaluation, the criteria and performance metrics were applied consistently to the alternatives being evaluated. Alternatives recommended as “core concepts” in Level 1 were carried forward into Level 2 and Level 3 (refer to Chapter 3). Alternatives recommended as “supplemental elements” were retained and documented in the PEL Study recommendations (refer to Chapter 4).

e. Which alternatives were recommended? Which should be brought forward into NEPA and why?

The PEL Study resulted in a recommendation for the ultimate lane configuration and operation of I-25 and several supplemental elements in the Study Area. This recommendation includes extension of the northbound and southbound ELs currently under construction from the terminus at Crystal Valley Parkway north to C/E-470; construction of an additional travel lane (operations undefined) in both directions between SH 105 and C/E-470, and auxiliary lanes in both directions between Crystal Valley Parkway and Plum Creek Parkway, Plum Creek Parkway to Wolfensberger Road, and Wolfensberger Road to Meadows/Founders Parkway. The PEL Study also recommends the following:

- Expanding regional bus service (Bustang) and continuing evaluation of a new transit station in the Castle Rock area
- Adding passenger rail along I-25
- Relocating northbound and southbound Port of Entry and chain up stations
- Further analysis of interchanges, auxiliary lanes, and climbing lanes in specific locations
- A wildlife overpass at MP 166.3 and further evaluation of wildlife structures in identified high-risk areas

- Continued consideration for upgrades and application of technology and system management
- Coordination between CDOT and local jurisdictions regarding anticipated impacts to frontage roads

The recommended improvements should be brought forward into NEPA because they are expected to enhance safety and improve incident management, improve travel time reliability, and improve mobility on I-25 between Monument and C/E-470

f. Did the public, stakeholders, and agencies have an opportunity to comment during this process? Summarize the amount of public interest in the PEL Study.

Yes; see response to Questions 3 and 4. Approximately 800 people attended one or more of the PEL Study meetings, with the highest attendance at the January 2017 public meetings.

g. Were there unresolved issues with the public, stakeholders and/or agencies?

- The I-25 mainline recommendation includes an additional travel lane in each direction between Monument and Lone Tree. The operations of the additional travel lane were not defined by the PEL Study. For example, the future lane could be a general purpose (GP) lane, EL, or a lane designated for autonomous vehicles. Some local government stakeholders and members of the public were not satisfied that CDOT left this decision unresolved and wanted the PEL Study team to commit to a GP lane option between SH 105 and Plum Creek Parkway. This decision will be made during the NEPA phase. The PEL Study recommends improvements between SH 105 in Monument and C/E-470 in Lone Tree. The PEL Study did not evaluate problems and/or identify needs north of C/E-470. The PEL Study Project Management Team established C/E-470 as the northern logical limit because it is a major system-to-system connection. In addition, CDOT has two studies currently in progress north of the limits for this PEL Study. First, a multi-disciplinary team is developing CDOT's Express Lanes Management Plan. Improving reliable trips on I-25 north of the PEL Study limits is a major component of the plan. Second, CDOT has a Managed Motorway Study in progress north of the limits for this PEL Study. The team working on the Managed Motorway Study is attempting to improve interstate operations by linking all the ramp metering along I-25 through the Denver Technology Center into one system.
- Some local government stakeholders and members of the public expressed concern about potential use of peak period shoulder lanes (PPSLs) as an interim solution in this corridor because of the important role that shoulders play for incident management and emergency response. However, the PEL Study identifies PPSLs as a potentially cost-effective interim option to building new ELs. The Peak Period Shoulder Lane Memorandum (Appendix L) was prepared as part of the PEL Study. The technical memo identifies areas along the Castle Rock to Lone Tree Corridor that would require shoulder widening to implement

this option. The PEL Study and technical memo also acknowledge that a future NEPA team would need to analyze shoulder pavement depth and drainage to determine if the PPSL would provide a substantial cost savings over constructing the ELs.

- The PEL Study included the evaluation of three transit station locations in Castle Rock. The evaluation was led by the CDOT/FHWA PEL PMT, but it also included CDOT's DTR, Castle Rock, Douglas County, and representatives of Pine Canyon Ranch. Advantages and disadvantages for each station location were documented for all three sites in the Transit TM (Appendix H). The Walker/Pine Canyon property site had more advantages than the Douglas County/3rd Street and I-25/Wolfensberger Road Interchange sites, but a preferred site was not identified in the PEL Study. This remains an unresolved issue that DTR has agreed to address. DTR is planning to request money from the CDOT Transportation Commission in September 2019 to identify a preferred site and develop conceptual transit station designs for the preferred site.
- As documented in Chapter 4 of the PEL Study report and the Transit TM (Appendix H), this PEL Study recommends passenger rail as a long-term improvement in the Study Area. The PEL Study team did not prepare a recommended alignment and/or service plan for passenger rail. The PEL Study provides some additional context to the environmental and social constraints in the Study Area. This information indicates that the recommended ICS alignment between Monument and Castle Rock could be challenging to implement and that development of a passenger rail corridor on the west side of I-25 may be less contentious than along the east side of I-25 in this area. This remains an unresolved issue. The Front Range Passenger Rail EIS and Service Development Plan will address these questions.

7. Planning assumptions and analytical methods:

a. What is the forecast year used in the PEL study?

2040

b. What method was used for forecasting traffic volumes?

Because the geographic area considered by the PEL Study includes portions of both the DRCOG and the PPACG metropolitan planning areas, the study team created a travel demand model for this project by extending DRCOG's FOCUS 2.0 model into northern El Paso County. This involved combining both the networks and the trip matrices of the models from the two metropolitan planning organization (MPO) regions.

Data inputs used to forecast traffic volumes included the following:

- Traffic counts on both weekdays and weekends along I-25 (between C-470 and Monument) and on parallel routes (SH-105 and SH-83)
- Travel times from INRIX (calendar year 2016, as well as on the days that traffic counts were collected in 2017)
- Travel patterns from StreetLight Data (calendar year 2016) to assist in creation of an inter-MPO trip matrix

- Toll transaction data on US 36 to estimate local travelers' values of time on an existing express lane facility

More details are available in Appendix G.

c. *Are the planning assumptions and the corridor vision/purpose and need statement consistent with the long-range transportation plan?*

Federal regulations and planning and transportation studies at the state, regional, and local level create the planning context for this PEL Study. Maintaining infrastructure, while improving safety, mode choice, and overall operational efficiency of the transportation system, are common goals across all levels of transportation planning in the state. Through engagement with federal, state, and local representatives during the process of this PEL Study, these goals collectively aided in the development of the Purpose and Need. Refer to Chapter 1, Section 1.2, of the PEL Study report for more details on the planning context.

The Purpose and Need for this PEL Study also supports Policy Directive 1603.0, which requires managed lanes to be strongly considered during the planning and development of capacity improvements on state highway facilities.

d. *What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs and network expansion?*

Yes. The baseline network for traffic modeling and land use came from the approved models of DRCOG and PPACG. Only minor capacity adjustments were made to calibrate volume and travel time measurements the study team collected in 2017.

8. *What pieces of the PEL can transfer directly to the NEPA phase of a project?*

Documentation of the alternative's evaluation, agency coordination, and public involvement can be included by reference in future NEPA studies as appropriate. Depending on the time lag between the PEL Study and future NEPA studies, some of the environmental data collected could be used.

9. *Resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:*

a. *In the PEL study, at what level of detail were the resources reviewed and what was the method of review?*

Environmental resources were identified based on Study Area characteristics and are consistent with NEPA, FHWA, and CDOT guidelines. This PEL Study also considered resources with additional regulatory requirements, such as the Endangered Species Act (ESA), the Clean Water Act (CWA), and the National Historic Preservation Act (NHPA) (Section 106), as well as resources that typically are of concern for the general public, such as traffic noise.

A detailed description of Study Area resources in the built and natural environment, and the regulations pertaining to each resource, can be found in the ICA (Appendix B). The information on Study Area existing conditions was

compiled and mapped using readily available data from local, regional, state, and federal agencies, aerial imagery, and U.S. Geological Survey (USGS) topographic maps.

The planning-level environmental analyses conducted for this PEL Study were used to inform the evaluation of potential transportation improvements in the Study Area as presented in Chapter 3 and identify environmental considerations relevant to the PEL Study mainline recommendation as presented in Chapter 6.

Depending on the nature of the resource, impacts were assessed either from the edge of construction limits or from right-of-way (ROW) limits. Construction limits were used for natural resources such as wetlands. ROW limits were used for resources and adjacent land outside of CDOTs existing ROW that would be affected if incorporated into CDOT ROW to implement the PEL Study recommendations, such as parks and private property.

Detailed descriptions of methodologies used to assess potential resource impacts during alternatives evaluations can be found in Appendix F. Environmental resource considerations relative to the I-25 mainline recommendation were qualitative and general (refer to Chapter 6). A summary of resources reviewed is provided in Table 2.

b. Is this resource present in the area and what is the existing environmental condition for this resource?

Existing resource conditions in the Study Area are fully documented in the ICA in Appendix B. A summary of resources reviewed is provided in Table 2.

c. What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

Resource considerations during NEPA will depend on the location and level of NEPA required for each future project in the corridor. The PEL Study documents the existing conditions (based on readily available 2017 data) with a focus on high quality/ sensitive resources. This information was used to identify environmental constraints that could influence future project development, but is not comprehensive as described in the response to Questions 9.d and 10. A summary of resources reviewed is provided in Table 2.

d. How will the data provided need to be supplemented during NEPA?

The information on Study Area existing conditions was compiled and mapped using readily available data from local, regional, state, and federal agencies, aerial imagery, and USGS topographic maps. This information should be supplemented and updated as appropriate based on the nature of the proposed future project and the lapse in time between this PEL Study and initiation of NEPA. Consideration for future NEPA studies of projects in this corridor are summarized in Chapter 6, with more details available in Appendix B. A summary of resources reviewed is provided in Table 2.

Table 2. Summary of NEPA Resources

Resource	Context	Evaluation Approach	Future NEPA-Phase Data Needs*	Future NEPA-Phase Impact and Mitigation Considerations
Air Quality*	Maintenance area for carbon monoxide and PM ₁₀ ; non-attainment area for ozone.	Assessed in ICA. Evaluate in future NEPA phases.	Modeling inputs including the type of lane proposed, toll rate, and access points.	Regional and project-level conformity must be achieved.
Farmland*	Prime, unique, or farmlands of statewide importance are present in Study Area.	Assessed in ICA. Soils with characteristics of prime or unique farmland, farmland of statewide importance, or farmland of local importance were evaluated against the conceptual design construction limits.	Updated soil data should be obtained to make an accurate determination of impacts to protected farmlands.	Identify the amount of farmland potentially converted and conduct consultation with the Natural Resources Conservation Service as needed. Based on minor impacts anticipated, consultation beyond completion of a Farmland Conversion Impact Rating form is not expected.
Geologic Resources and Soils	30 different soil types present in Study Area.	Evaluate in future NEPA phases	Ground conditions as identified in geotechnical study.	Evaluate in future NEPA phases.
Water Quality	51 water ways traverse the Study Area; 5 are listed on the Colorado Department of Public Health and Environment 303(d) list of impaired streams	Assessed in ICA. Evaluate in future NEPA phases	Current 303(d) list.	Assess impacts and identify permanent features for the protection of water quality.
Floodplains*	Present in numerous locations along the Study Area.	Assessed in ICA. Evaluated the GIS data and hard-copy FIRM data from FEMA were used to identify potential for floodplain encroachment.	Current FIRM data.	Floodplain modeling likely required to assess impacts at floodplain crossings.
Wetlands/ Waters of the US*	Streams and associated wetlands parallel and cross under I-25 throughout the Study Area.	Assessed in ICA. The National Hydrology dataset, National Wetland Inventory, and Colorado Wetland Inventory were reviewed to identify potential impacts to wetlands and other waters of the U.S.	Delineation and functional assessment.	Perform delineation, functional assessment, and impact assessment; avoid, minimize, and mitigate impacts in accordance with the current USACE mitigation policies and Section 404 Permit conditions.
Vegetation and Noxious Weeds	Not inventoried; present in Study Area.	Evaluate in future NEPA phases.	General habitat assessment.	Evaluate in future NEPA phases.
Fish	Not inventoried; habitat present in Study Area.	Evaluate in future NEPA phases.	General habitat assessment.	Evaluate in future NEPA phases.
Wildlife*	High-quality habitat present in Study Area.	Assessed in ICA. Potential for impediment to wildlife movement considered.	General habitat assessment.	Evaluate wildlife movement as a core environmental issue and consider throughout the design processes of projects, with appropriate consultation with CPW
Threatened/ Endangered Species (MBTA)*	10 federal and 10 state listed species have the potential to occur within or downstream of the Study Area. Suitable habitat for migratory birds exists throughout the Study Area.	Assessed in ICA. Occupied and designated critical habitat for Preble's meadow jumping mouse evaluated against the construction limits of the conceptual design.	Current species list and general habitat assessment.	Consult with the USFWS to determine effect to listed and eligible resources
Historic Resources*	Numerous known and potentially historic resources present in Study Area including railroad ROW, interstate structures, properties, and a canal.	Assessed in ICA. Identified properties listed and eligible for listing on the National Register of Historic Places and supplemented this information with county assessor's data to identify buildings of historic age, Evaluated potential for resource impacts against the construction limits of the conceptual design.	COMPASS search and field survey.	Conduct Section 106 review and consultation with the SHPO and appropriate consulting parties
Archaeological Resources	Not evaluated	Evaluate in future NEPA phases	COMPASS search and field survey.	Evaluate in future NEPA phases.
Paleontological Resources	Not evaluated	Evaluate in future NEPA phases	Field assessment.	Evaluate in future NEPA phases.

Resource	Context	Evaluation Approach	Future NEPA-Phase Data Needs*	Future NEPA-Phase Impact and Mitigation Considerations
Land Use (including conservation easements)*	Commercial, residential, and large tracts of preserved open space (conservation easements)	Assessed in ICA. Considered compatibility with local plans and development. Evaluated conservation easement boundaries against the estimated ROW of the conceptual design.	Current data for existing and planned land use.	Evaluate compliance with local land use plans, master plans, and other overarching community guidance documents; coordinate with Douglas County Land Conservancy, The Conservancy Fund, and Douglas County Open Space regarding unavoidable impacts to conservation easements.
Socio-economic Resources	School, churches, businesses, and other resources present in Study Area	Potential for impact considered through ROW evaluation	Current inventory of resources and socio-economic data.	Evaluate in future NEPA phases.
Environmental Justice (EJ)*	EJ populations present in Study Area	Assessed in ICA. Potential for impact considered	Current socio-economic data.	Reengage local communities, identify potential for disproportionately high and adverse effects.
Right of Way*	Existing ROW varies; additional ROW will be needed	Assessed in ICA. Evaluated parcel data from El Paso and Douglas counties against estimated ROW of the conceptual design.	Current parcel data.	For unavoidable impacts, acquisition of property must conform with state and federal requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act).
Transportation Resources*	Frontage roads, parallel local roads, bridges over I-25, and railroads	Assessed in ICA. Potential for impact considered	Current inventory of infrastructure.	Coordinate with local jurisdictions and BNSF regarding ROW needs and potential realignment or relocation of infrastructure.
Utilities	Not inventoried; present in Study Area	Evaluate in future NEPA phases	Current inventory of infrastructure.	Evaluate in future NEPA phases.
Parks/ Recreational Resources*	Open space and trails present in Study Area	Assessed in ICA. Evaluated resource boundaries against estimated ROW of conceptual design.	Current parks and recreation data.	Assess potential for impact; resume communication and outreach with entities involved during the PEL Study including Douglas County Open Space and El Paso County Trails and Open Space.
Noise*	Numerous noise-sensitive land uses exist in the Study Area	Assessed in ICA. Developed 66-dBA and 71-dBA noise contours to evaluate potentially impacted land uses.	Data inputs necessary for a noise impact analysis compliant with CDOT's Noise Analysis and Abatement Guidelines (if project is a Type 1 project in accordance with 23 CFR 772)	Determine if noise impact analysis is required based on the specific project being advanced.
Visual Resources/ Aesthetics*	Protection of views from the I-25 corridor is a consistent theme in local plans and aesthetic guidelines were established through the South I-25 Corridor EA and US 85 EIS	Assessed in ICA. Potential for impact considered	Validate existing inventory of visual setting.	Prepare a visual impact analysis consistent with current FHWA guidance and apply aesthetic guidelines to the design as appropriate.
Hazardous Materials/ Waste*	No sites representing a high level of risk to future projects were identified	Assessed in ICA. Resource locations evaluated against the construction limits of the conceptual design.	Geosearch.	Complete and initial site assessment to determine if additional investigations are warranted.
Cumulative Impacts*	Evaluate in future NEPA phases	Evaluate in future NEPA phases	Project-level impact and mitigation information.	Identify cumulative impacts during project development based on the direct and indirect impacts.
Section 6(f)*	Hangman's Gulch Trail	Assessed in ICA. Resource locations evaluated against the estimated ROW of the conceptual design.	Current LWCF resource data.	Evaluate for potential conversion.
Section 4(f)*	Numerous historic and recreation resources present in Study Area	Assessed in ICA. Resource locations evaluated against the estimated ROW of the conceptual design.	Current resource data.	Existing and planned park and recreational facilities that could be impacted should be evaluated for Section 4(f) applicability and use.

Note: Project-level information collected and evaluated as part of the I-25 South Gap EA is available in the ICA (Appendix B). Resources marked with an asterisk are discussed further in Chapter 6 of the PEL Study report.

dBA – A-weighted-decibel

FEMA – Federal Emergency Management Agency

FIRM – flood insurance rate maps

GIS – geographic information system

LWCF – land and water conservation fund

MBTA - Migratory Bird Treaty Act

PM₁₀ – particulate matter 10 micrometers or less in diameter

SHPO – State Historic Preservation Officer

10. List resources that were not reviewed in the PEL study and why? Indicate whether or not they will need to be reviewed in NEPA and explain why.

Environmental resource data was collected during the PEL Study to identify the presence of high quality or sensitive resources and major environmental constraints that could influence future project development. Only data readily available through local, regional, state, and federal agencies, aerial imagery, and USGS topographic maps was compiled. The following resources were not reviewed in the PEL Study and will need to be evaluated during NEPA depending on the nature of the project and potential for impacts:

- Geologic resources and soils
- Noxious weeds
- Archaeological resources
- Paleontological resources
- Social resources
- Economic resources
- Utilities
- Section 4(f) – historic and recreation properties identified, but the applicability of Section 4(f) was not evaluated.

11. Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where it can be found.

The potential for cumulative impacts was considered and documented in Chapter 6.

12. Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.

Strategies to minimize and avoid direct impacts to resources will be project-specific and could include alignment shifts, reduced shoulder widths, steepening slopes, or using retaining walls. Mitigation for unavoidable impacts is resource-specific and documented in Chapter 6.

13. What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

When finalized, the PEL Study with all technical appendices will be posted on CDOT's project website at <https://www.codot.gov/projects/I25CSDEN>.

14. Are there any other issues a future project team should be aware of?

- a. *Examples: Utility problems, access or ROW issues, encroachments into ROW, problematic land owners and/or groups, contact information for stakeholders, special or unique resources in the area, etc.***

As documented in Chapter 5, the I-25 mainline recommendation and supplemental element recommendations will have impacts on existing and planned infrastructure. CDOT and local jurisdiction(s) within and adjacent to the Study Area should continually coordinate as projects develop.

Low-light conditions were identified as a potential safety issue between Monument and Castle Rock. As documented in Chapter 6 and in the Recreation Resources TM in the ICA (Appendix B), the absence of light in the corridor when driving at night is considered an integral part of the scenic integrity of the corridor. This scoping input should be considered when evaluating safety measures during project development in future NEPA phases.

Refer to responses to Question 6.g for additional issues future NEPA teams should be aware of.

15. Provide a table of identified projects and/or a proposed phasing plan for corridor build out.

The PEL Study recommendations documented in Chapter 4 and the implementation plan documented in Chapter 5 are intended to augment the early action project being implemented in the Study Area between Monument and Castle Rock (I-25 South Gap Project). The recommendations of the PEL Study are summarized in Table 3.

Table 3. Summary of PEL Study Recommendations	
I-25 Mainline	
Lane Configuration	Extend the northbound and southbound ELs constructed as part of the I-25 South Gap Project north to C/E-470 Add an additional travel lane in each direction throughout the length of the corridor from SH 105 to C/E 470
Multimodal	
Bus	Expand Bustang service and facilities, including a transit station in the Castle Rock area
Passenger Rail	Add passenger rail along I-25
Trails	Consider accommodating the Colorado Front Range Trail crossing on future overpasses over I-25 (trail depicted on Figures 6-1 through 6-3 in Chapter 6) Coordinate with local municipalities on future structures over I-25 or larger culverts crossing under I-25 to accommodate regional trails Coordinate with local jurisdiction on new trail underpass at Spring Gulch in Castle Pines
Truck Facilities	
Climbing Lanes	Maintain existing climbing lanes as future widening along I-25 occurs. Provide future consideration for additional climbing lanes at: <ul style="list-style-type: none"> – Southbound between MP 188.0 and 190.0 – Northbound between MP 185.3 and 186.0
Port of Entry	Relocate northbound and southbound facilities to more accommodating locations; the Larkspur rest area was identified as a potential location for a new Port of Entry
Chain Up Stations	Relocate to better suited locations along I-25 before vertical grades steepen; the southbound Larkspur rest area was identified as a chain up location starting winter 2019
Other Highway	
Interchanges	Further analyze: <ul style="list-style-type: none"> – Interchange improvements timed with I-25 mainline improvements – I-25 and US 85 direct connects (northbound I-25 to northbound US 85 and southbound US 85 to southbound I-25) – I-25 and C/E-470 direct connects to and from the south

<p>Auxiliary Lanes</p>	<p>Maintain existing auxiliary lanes in the corridor</p> <p>Further evaluate additional auxiliary lanes at these locations:</p> <ul style="list-style-type: none"> – Northbound and Southbound between Baptist Road and SH 105 (just south of the Study Area) – Northbound and Southbound between Crystal Valley Parkway and Plum Creek Parkway – Northbound and Southbound between Wolfensberger Road and Meadows/Founders Parkway – Northbound and Southbound between Meadows/Founders Parkway and Castle Rock Parkway – analysis during the PEL Study indicates that the proximity of the Castle Rock Parkway interchange to the Meadows/Founders Parkway interchange created short weave lengths; coordination between the local jurisdiction and CDOT may be needed to resolve this issue
<p>Wildlife Crossings</p>	<p>Construct wildlife overpass at MP 166.3 Coordination with Harmony Ranch is needed for this to move forward.</p> <p>Evaluate upsizing culverts and constructing new underpasses at locations near Larkspur and near the Sky View Lane interchange area.</p> <p>Further evaluate the need for crossings (deer-sized or smaller) between Castle Rock and C/E-470 and fencing at the I-25/Happy Canyon Creek bridge.</p>
<p>Technology and System Management</p>	<p>Continue consideration for upgrades of existing technologies</p> <p>Evaluate additional technologies that may be applicable as standalone projects or elements of future projects</p>
<p>Frontage Roads</p>	<p>Coordinate between CDOT and local jurisdictions regarding anticipated impacts to frontage roads. For example, the frontage road west of I-25 will need to be relocated before the Crystal Valley interchange is constructed.</p>

The phasing strategy for the I-25 mainline recommendation is as follows:

- I-25 through the Study Area is a critical link for regional and statewide travel between the metropolitan areas of Colorado Springs and Denver. Approximately three-quarters of the trips on this corridor are pass-through trips with origins and destinations outside the Study Area. For this reason, providing a reliable travel time throughout the corridor is the top priority. Extending the EL north of the Gap to C/E-470 is the primary means of achieving this objective; it creates continuity throughout the corridor, maximizes effectiveness of the EL currently under construction within the Gap, and allows for a potential direct connect to the C/E-470 managed lanes. Depending on funding limitations, interim options to providing a continuous managed lane on I-25 in the Study Area include converting a GP lane to an EL or implementing a PPSL.
- Following extension of the EL to C/E-470, it is recommended one additional travel lane in each direction be constructed between SH 105 and C/E-470. The PEL Study documents the benefits of an additional travel lane north and south of Plum Creek Parkway, but does not recommend which segment be constructed first.

16. Provide a list of what funding sources have been identified to fund projects from this PEL?

Currently, no funding has been identified for either study or design of the recommendations in this PEL Study. However, the following funding sources were identified and documented in Chapter 5, Section 5.2. With the exception of the Cities of

Castle Pines and Lone Tree, the identified funding sources contributed funding to the I-25 South Gap Project.

- U.S. Department of Transportation Infrastructure for Rebuilding America (INFRA) Grant Program
- Federal-aid National Highway Performance Program (NHPP)
- National Highway Freight Program/Freight Improvement Program (FIP)
- CDOT Highway Users Tax Fund
- CDOT Senate Bill 14-267
- CDOT Senate Bill 18-001
- Funding Advancements for Surface Transportation and Economic Recovery (FASTER) Act - Bridge Enterprise
- CDOT HPTE
- Pikes Peak Transportation Authority (PPRTA)
- Douglas County
- City of Castle Pines
- City of Lone Tree

A key component of the PEL Study's vision is to build partnerships to create a roadmap to improve safety, travel time reliability, and mobility on this vital stretch of I-25. Federal, state, and local funding contributions should all be considered. Local support is especially important as it helps make other funding applications competitive when compared to other projects nationally. Although Colorado Springs, Monument, Larkspur, Castle Rock, Arapahoe County, CPW, and private landowners are not identified here, they should also be considered for potential partnering opportunities.