2.0 CHAPTER 2 ALTERNATIVES

2.1 INTRODUCTION

To address the project Purpose and Need (described in Chapter 1 – Purpose and Need), a wide range of alternative solutions that could improve safety and local and regional mobility on and around Interstate 25 (I-25) through the City of Pueblo (City) were rigorously explored and objectively evaluated. This chapter describes the alternative development process and summarizes the methods for evaluation and screening.

To provide the reader with an understanding of the I-25 corridor setting, the Corridor Context section (Section 2.2), describes the history of Pueblo, from the early 1600s through to the present day. This context allows the reader to consistently evaluate the future opportunities in the context of Pueblo's early beginnings. This section is followed by a brief description of the highway's Current Conditions (Section 2.3) and a discussion of Context Sensitive Solutions (Section 2.4) and how using this approach facilitated the decision-making process, resulting in transportation solutions that meet the project Purpose and Need, are sensitive to the environment, and reflect community values.

A discussion of the Alternatives Development Process and evaluation and screening of alternatives (Section 2.5) and the Final Detailed Alternatives (Section 2.6) takes the reader through each step in the alternatives screening process. The chapter concludes with Preliminary identification of a Preferred Alternative (Section 2.7) and how this alternative ties back to the project Purpose and Need. A discussion of available funding sources and phasing of the Preferred Alternative is included in Chapter 5 – Phased Project Implementation.

2.2 CORRIDOR CONTEXT

The City sits at the confluence of Fountain Creek and the Arkansas River. Historical development patterns of the region can be traced back to the 1600s and 1700s when all of Colorado was part of the Spanish Empire administered and controlled from New Spain (Mexico). Transportation to and through the Pueblo area by explorers, trappers, and traders was by way of the Arkansas River. In 1872, William J. Palmer, a retired Civil War general and railroad visionary, founded the Denver and Rio Grande Railway (D&RG) through what is now the City of Pueblo. The rail line became pivotal in the development of Pueblo first as a trade and shipping center and later as a steel manufacturing center. By 1887, Pueblo sat at the crossroads of six major railroads traveling north-south and east-west.

Early urban growth and development in Pueblo occurred along with the steel boom between 1860 and the 1920s. During that time, horse-drawn streetcars, which later were converted to electrified streetcars, served the transportation needs of the City until 1947, when they were replaced by rubber-tired vehicles. Following World War II, Colorado leaders saw the economic opportunities that a new highway would present for business and residential growth along the Front Range. Construction of the Pueblo Highway (later named I-25) through Pueblo began in 1949. Consistent with highway construction of the time, I-25 was built in a narrow right-of-way (ROW) compared to today's standards. Highway engineers purchased only what was needed for the highway. Although citizens and community leaders of Pueblo generally favored construction of the highway, neighborhoods and commercial areas adjacent to the road were heavily impacted. Several neighborhoods were severed, with I-25 becoming an east-west barrier between neighbors and affecting access to local grocers, churches, schools, and other neighborhood-level commercial areas and local streets. Homes in the path of the highway were either purchased and demolished or suffered a reduction in the size of their yards. Ten years later, I-25 was dedicated, marking a new era for Pueblo and its role as a transportation hub in southern Colorado.

2.3 CURRENT CONDITIONS OF I-25

Today, I-25 is a north-south highway extending from the border of Mexico to Wyoming through the central areas of New Mexico, Colorado, and Wyoming. The route serves as a strategic international corridor under the North American Free Trade Act and as an economic lifeline for the City.

Pueblo is the largest city in southern Colorado and is the only available source of many services required by residents in the southern part of the state. United States Highway (US) 50 is a major route serving east-west travel through Pueblo, which further bolsters the City's role as a

transportation hub. No other state highways or major roads provide a north-south alternative to I-25.

Through Pueblo, I-25 is among the oldest segments of the interstate in Colorado, and it actually predates the Interstate Highway System. Since opening in 1959, only a few improvements have been made to this segment of I-25. Today, there is recent evidence indicating that this stretch of highway has reached, and in some cases exceeded, its service life.

Because the economic vitality of Pueblo is connected to I-25, it is essential that the Colorado Department of Transportation (CDOT) address the deteriorating condition of this segment of the highway. The City recently invested significant resources to restore the historic downtown area by adding attractions such as a performing arts center, new library campus, children's museum, convention center, and river park and walkway near the historic location of the Arkansas River. The downtown area has undergone significant restoration of buildings, which has stimulated reuse of office buildings and stores. The continued success of these investments is directly dependent on good, safe access for local and regional travelers on I-25.

Many residents of Pueblo remember the impacts that construction of the highway had on their community. Today, residents and the business owners are aware of both the benefits and impacts from I-25 that they experience on a daily basis. Therefore, when CDOT, the Federal Highway Administration (FHWA), and the Pueblo Area Council of Governments (PACOG) began to study the transportation problems on I-25 in 2000, citizens, business people, City elected officials, and City staff answered CDOT's call to be actively involved in the planning and design of improvements for what is now referred to as the New Pueblo Freeway.

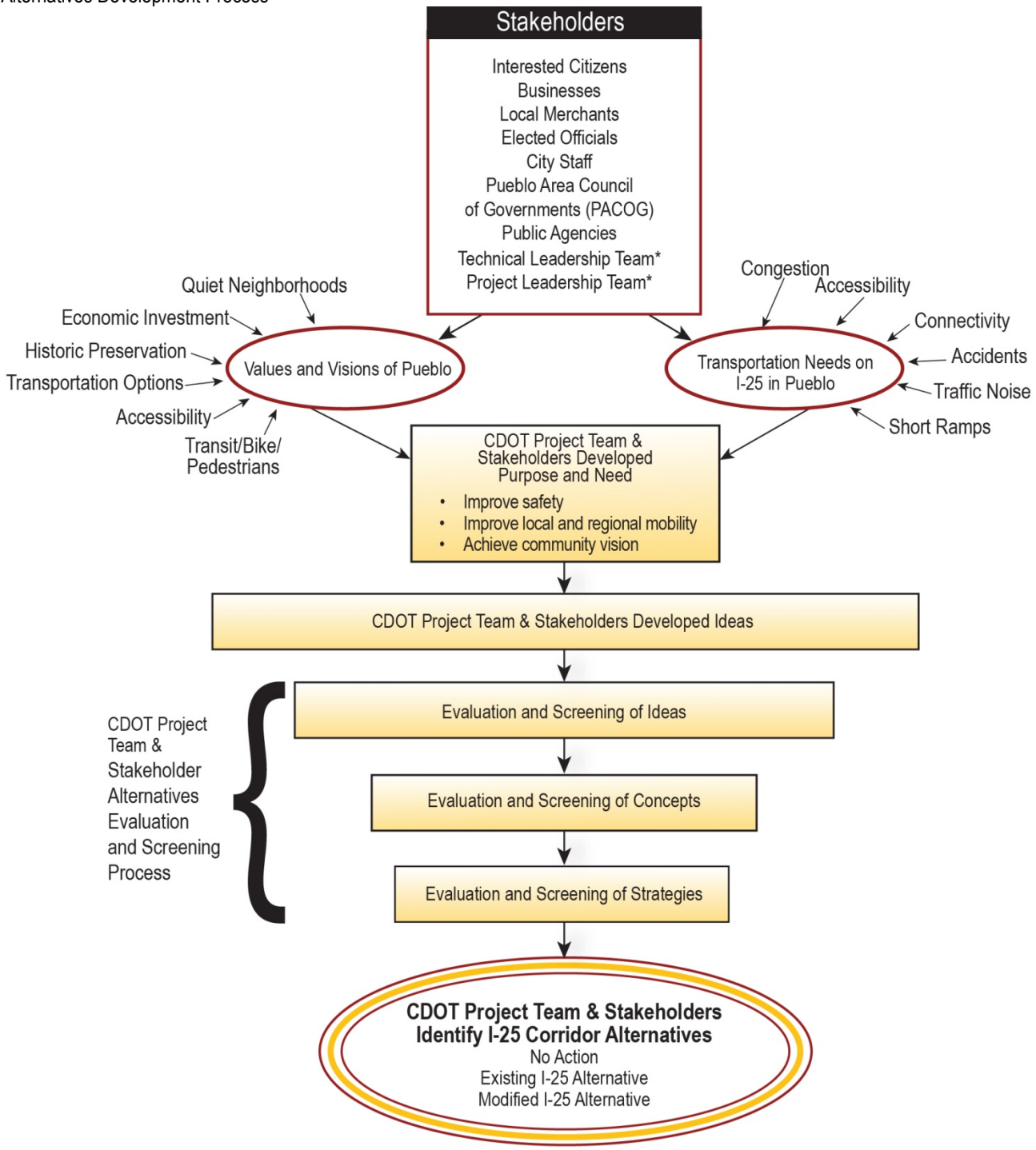
2.4 CONTEXT-SENSITIVE SOLUTIONS AND THE ALTERNATIVES DEVELOPMENT PROCESS

CDOT recognized that improvements to I-25 through Pueblo required a multi-disciplinary approach to developing alternatives that would involve a working team of transportation and highway design professionals, environmental managers, public involvement specialists, and a wide range of community stakeholders with an interest in the project's outcome. To implement this approach, the CDOT Project Team followed the guidelines of the National Cooperative Highway Research Program (NCHRP) Report 480, *A Guide to Best Practices for Achieving Context Sensitive Solutions* (NCHRP, 2002), for studying improvements to I-25 through Pueblo. Using the Context Sensitive Solutions process outlined in the report, the CDOT Project Team developed and followed an effective decision-making process that resulted in transportation solutions that meet the Purpose and Need for the project, are sensitive to environmental and community resources, and reflect community values. A Technical Leadership Team made up of engineers, planners, and safety personnel from CDOT, the City of Pueblo, Pueblo County, PACOG, Colorado State Patrol, City Police, and the consultant team provided technical input during the evaluation and screening process. (Project leadership teams and committees are described in Chapter 6 – Comments and Coordination.)

The Alternatives Development Process shown in Exhibit 2-1 began with identifying transportation problems and understanding the values and vision of the citizens of Pueblo. The CDOT Project Team met with as many stakeholders as possible at the beginning of the project and continued public involvement through the Alternatives Development and Evaluation stage. The stakeholders included interested citizens, businesses, local merchant groups, elected officials, City and County staff, PACOG staff, and the Technical Leadership Team and Project Leadership Team. These meetings resulted in a list of I-25 corridor transportation problems, as well as community issues and values. The CDOT Project Team and stakeholders used this list to write a draft Purpose and Need statement, which was later refined through agency and public scoping meetings. From these early meetings, a Community Vision (included in Chapter 1 – Purpose and Need, Exhibit 1-6) was crafted that constitutes an important element in the Alternatives Development Process.

The next step in the Alternatives Development Process was to brainstorm ideas for potential solutions to improve I-25 through Pueblo. Through an extensive public outreach process detailed in Chapter 6 – Comments and Coordination, a series of public and agency meetings were held to engage the CDOT Project Team and stakeholders in identifying and documenting a full range of possible

EXHIBIT 2-1
Alternatives Development Process



*Participants on the Technical Leadership Team and Project Leadership Team are listed in Section 6.2.1 and 6.2.2 of the Comments and Coordination Chapter.

SUMMARY OF PURPOSE & NEED AND COMMUNITY VISION

Purpose

The **purpose** of the New Pueblo Freeway project is to:

- Improve safety by addressing deteriorating roadways and bridges and unsafe road characteristics on I-25.
- Improve local and regional mobility within and through the City of Pueblo to meet existing and future travel demands.

Need

The **need** of the New Pueblo Freeway project is to address:

- **Safety problems.** This corridor has high accident rates that exceed state averages, segments with narrow lanes, areas where shoulders are too narrow to safely accommodate a broken-down vehicle, on and off ramps with inadequate lengths to maneuver vehicles, and inadequate spacing of interchanges to safely merge into highway traffic.
- **Mobility problems.** In this segment there are interchanges that do not connect to appropriate City streets, a lack of alternative routes for north-south and east-west connectivity, areas of reduced speed, insufficient capacity for projected traffic forecasts and poor levels of service, aging bridges with inadequate bridge sufficiency ratings, and conflicts with local and regional travel.

Community Vision

The community feels that I-25 improvements must:

- Balance regional trips with local trips
- Be a safe facility
- Preserve environmental, community, business, and the neighborhood values
- Reflect the culture, history, and character of Pueblo
- Consider the connection between improvements and the surrounding land use
- Be maintainable
- Be user friendly
- Be understandable
- Communicate information clearly
- Be comfortable to drive
- Provide personal safety features
- Meet drivers' expectations
- Be multi-modal
- Provide fair treatment for those impacted
- Accommodate future travel needs and technology improvements

This vision requires the continuing partnership between public agencies, the citizens, and private developers to support, implement, and fund improvements.

solutions. The meetings also focused on developing criteria to evaluate the solutions. The foundations of the evaluation criteria were the Purpose and Need and the Community Vision.

To ensure a comprehensive and rigorous evaluation of solutions, the CDOT Project Team used three levels of evaluation and screening: Evaluation and Screening of Ideas, Evaluation and Screening of Concepts, and Evaluation and Screening of Strategies. At each step, solutions were assessed against the evaluation criteria developed for that step to evaluate the strengths and weaknesses of each solution. A No Action Alternative is always considered as part of the alternative screening process.

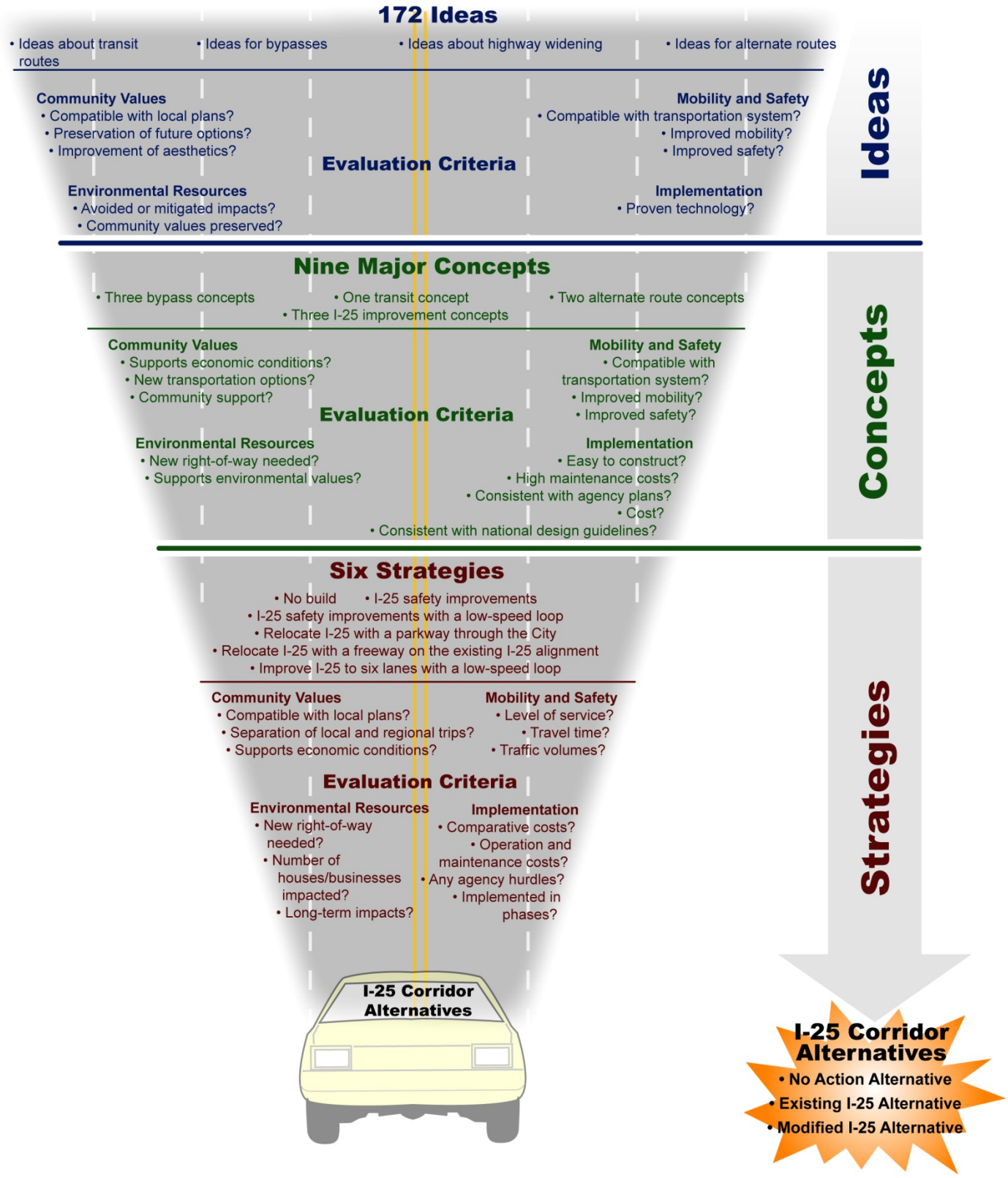
Solutions not meeting the project Purpose and Need were either eliminated or enhanced and modified and taken to the next step of evaluation and screening. **Exhibit 2-2** shows the three-level screening process that resulted in the No Action Alternative, the Existing I-25 Alternative, and the Modified I-25 Alternative for the New Pueblo Freeway project.

2.5 ALTERNATIVES DEVELOPMENT, EVALUATION, AND SCREENING

This section describes the development and evaluation of ideas, concepts, strategies, and alternatives for the project and discusses the criteria used for measuring effectiveness in meeting the identified needs. Using the Purpose and Need and the Community Vision statement included in **Chapter 1 – Purpose and Need**, criteria for evaluating alternatives were developed by the CDOT Project Team and the stakeholders. Criteria were classified into four categories: 1) Community Values, 2) Environmental Resources, 3) Mobility and Safety, and 4) Implementation.

Evaluation and Screening of Ideas involved evaluating how well stakeholder ideas met the criteria developed for that stage of the process. Ideas not meeting the criteria were either modified and included as features in the final Build Alternatives or set aside because they did not meet the Purpose and Need. Ideas that met the Purpose and Need were developed into concepts under the following categories: Bypasses, Alternative Routes, Transit, and I-25 Improvement Concepts.

EXHIBIT 2-2
Alternatives Evaluation Criteria and Screening Process



Similar to evaluation and screening of ideas, the concepts were evaluated using evaluation criteria developed from the Purpose and Need and the Community Vision. Concepts were ranked on how well they met the criteria, screened based on the Purpose and Need, then modified into six strategies and sent on to strategy screening.

During evaluation and screening of Strategies, the six strategies were again evaluated based on the evaluation criteria developed from the Purpose and Need and the Community Vision. One of the strategies was identified for additional evaluation and later modified into the Existing I-25 Alternative, which proceeded through detailed evaluation in the Draft Environmental Impact Statement (DEIS). A more detailed discussion of the alternatives evaluation and screening process follows, and an illustration of the process is presented in **Exhibit 2-2**.

2.5.1 Screening of Ideas

The evaluation criteria shown in **Exhibit 2-3** were developed with the help of stakeholders through Technical Leadership Team meetings, citizen meetings, a Colorado State Fair information booth, and a project hot line. As stated above, the criteria were used to evaluate the strengths and weaknesses of each idea and fell into four subject areas: 1) Community Values, 2) Environmental Resources, 3) Mobility and Safety, and 4) Implementation. The CDOT Project Team and stakeholders evaluated more than 500 individual ideas gathered in outreach meetings, which were subsequently refined to 172 ideas when duplications and similar suggestions were combined. The ideas represented a large variety of solutions to the City's transportation problems, ranging from major improvement concepts such as constructing a beltway around the City to specific, localized improvements such as adding a traffic signal at a particular intersection.

This screening of these 172 ideas resulted in 19 ideas that were combined into nine major concepts, which were then advanced to the next level of evaluation and screening. **Exhibit 2-4** shows the nine major concepts and illustrates examples of stakeholder ideas that provided the basis for each concept.

EXHIBIT 2-3
Criteria Used for Evaluation of Ideas

Community Values

- Can this idea be compatible with local plans, goals, and objectives?
- Does this idea preserve future transportation mobility options?
- Does this idea improve the aesthetics of the community?

Environmental Resources

- Can environmental impacts be avoided or mitigated with this idea?
- Can the environmental community and the neighborhood values be preserved with this idea?

Mobility and Safety

- Can this idea be compatible with the existing or planned transportation system within Pueblo?
- With this idea, will mobility within the study area be improved to meet existing and future travel demands?
- Does this idea improve safety on I-25 within Pueblo?

Implementation

- Is this idea a proven transportation technology?

EXHIBIT 2-4
Nine Major Concepts Developed from Ideas from the Public

Bypass Concepts

Concepts	Ideas from the Public*
Double Decking I-25 The second deck would be four lanes (two lanes each direction) for high speed and limited access. Existing I-25 would function as it does today.	✓ Build a parallel route to I-25 ✓ Double Deck I-25
I-25 Bypass Build a high-speed bypass east or west of Pueblo. This new road would be four lanes (two lanes each direction) with limited access. Existing I-25 would function as it does today.	✓ Build a beltway on the east side of Pueblo ✓ Build a perimeter road around Pueblo ✓ Extend Stem Beach to the east and connect it up again on the north end of town ✓ Build an I-25 bypass on the west side of Pueblo ✓ Build a bypass around Pueblo with limited access
Tunnel under existing I-25* The in-tunnel road would be four lanes (two lanes each direction) with limited access. The existing I-25 highway would become a lower-speed facility and would no longer be classified as an interstate.	✓ Increase capacity of I-25 by tunneling under the existing I-25

Alt Route Concepts

Concepts	Ideas from the Public*
Lower-Speed Alternate Route Build a lower-speed route around the City as a beltway that would serve local trips which would normally travel on I-25. This would be a new four-lane (two lanes each direction) road.	✓ Build alternate routes (a beltway) around Pueblo ✓ Build a loop road around the town ✓ Make an alternate route for trucks
High Speed Alternate Route Build a high-speed, limited-access alternate route around the City with what is traditionally referred to as a beltway around Pueblo. This would be a new four-lane (two lanes each direction) highway.	✓ Build a loop road around the town ✓ Make an alternate route for trucks

I-25 Improvement Concepts

Concepts	Ideas from the Public*
Eight Lanes on I-25 Add four lanes (two in each direction) to I-25 for a total of eight lanes. Straighten curves, widen shoulders, and improve the horizontal and vertical alignments. Build acceleration/deceleration lanes only at interchanges.	✓ Provide 8 lanes on I-25 (4 in each direction) ✓ Straighten the curves on I-25
Six Lanes on I-25 Add two lanes (one in each direction) to I-25 for a total of six lanes. Straighten curves, widen shoulders, and improve the horizontal and vertical alignments.	✓ Provide 6 lanes on I-25 (3 in each direction) ✓ Straighten the curves on I-25
Four lanes on I-25 with Continuous Acceleration/Deceleration Lanes Keep I-25 at four lanes (two lanes each direction) and add continuous acceleration/deceleration lanes the entire length of I-25. Straighten curves, widen shoulders, and improve the horizontal and vertical alignments.	✓ Shift I-25 east between 13th and Abriendo Street ✓ Maintain 4 lanes on I-25 (2 lanes each direction) Bring existing highway up to design standards ✓ Straighten the curves on I-25

Transit Concept

Concept	Ideas from the Public*
HOV Lanes on I-25 Build two High Occupancy Vehicle (HOV) carpool lanes (one lane each direction) on I-25 and increase bus service throughout Pueblo. Improvements to I-25 would be necessary to address safety and mobility problems on the highway.	✓ Build carpool lanes on I-25 ✓ HOV lanes on I-25

*Transportation System Management (TSM) and Travel Demand Management (TDM) ideas were included in all of the concepts.

The remaining ideas did not become concepts but were addressed in the following manner:

- **Best Combined with Others.** Ninety-four ideas were placed into this category (which included solutions such as adding a left-turn bay at a particular intersection). While these ideas might improve local mobility and safety at a single location, the benefits from these improvements over the entire study area were minor unless combined with other ideas.
- **Amenities, Features, and Goals.** Thirty-five ideas fell into this category (which included items such as adding more landscaping, noise walls, and bicycle crossings). Separately, these ideas did not constitute stand-alone concepts. However, these ideas were eventually carried forward and included as features in the final Build Alternatives that resulted from the steps in the Alternatives Development Process.
- **Mobility between Pueblo and Other Destinations in Colorado.** Thirteen ideas were placed in this category. Some examples of these types of ideas included construction of a monorail between Denver and Pueblo and building a light rail line between Colorado Springs and Pueblo. These ideas were eliminated from further study and analysis because they would not improve local mobility or safety on I-25 within Pueblo, as stated in the Purpose and Need for this project.
- **Transportation System Management (TSM) and Travel Demand Management (TDM).** Eleven ideas fell into this grouping and included ideas such as improved signal timing, additional signage, adding/removing signals, and emergency pull-offs. These solutions alone would not meet the project Purpose and Need. As discussed in the I-25 New Pueblo Freeway Alternatives Analysis and Project Development Report (**Appendix A**), they have been included as enhancements to the alternatives because they will aid in slightly improved local mobility at the location specified but do not address corridor-wide capacity needs. Many of the TSM and TDM ideas fell outside of the project limits and were forwarded to the City of Pueblo and Pueblo County as the agencies responsible for the operation and maintenance of local roads other than I-25. Because the TSM and TDM ideas would improve local mobility, they were included in all of the concepts and Build Alternatives.

2.5.2 Screening of Concepts

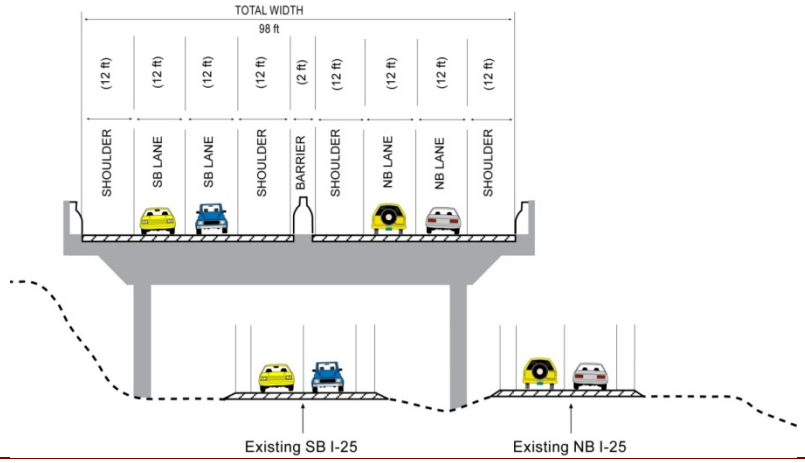
The nine major concepts shown and described in **Exhibits 2-5 through 2-13** were formed using the 19 ideas that resulted from the ideas screening and grouped as follows:

- Three Bypass Concepts
  - Double decking I-25
  - I-25 bypass east or west of Pueblo
  - Tunnel under existing I-25
- Two Alternate Route Concepts
  - Lower-speed alternate route
  - High-speed alternate route
- One Transit Concept
  - High-occupancy vehicle (HOV) lanes on I-25
- Three I-25 Improvement Concepts
  - Four lanes on I-25 with continuous acceleration/deceleration lanes
  - Six lanes on I-25
  - Eight lanes on I-25

TDM – Travel Demand Management is the art of influencing travel behavior for the purpose of reducing or redistributing travel demand. The primary purpose of TDM is to reduce the number of vehicles at a time using highway facilities while providing a wide variety of mobility options for those who wish to travel. Some examples of TDM include telecommuting, ridesharing, and alternative (flex) work schedules.

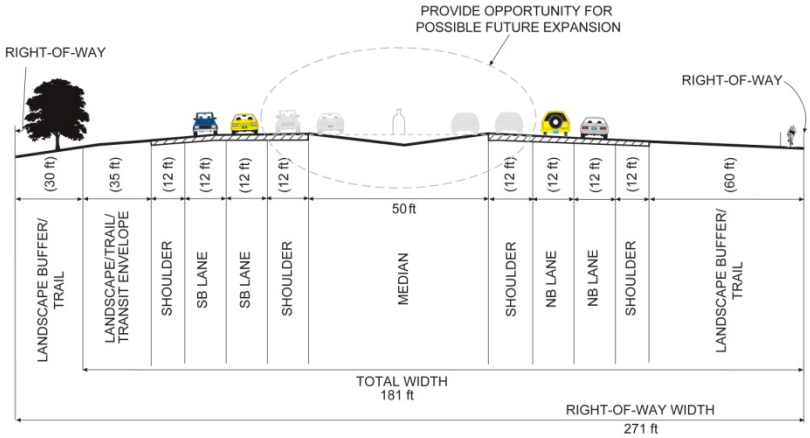
TSM – Transportation System Management is the improvement of vehicular flow by implementing low-cost measures that increase the efficiency of the existing road and avoid the need for major roadway expansion. There are four categories of improvements: 1) improve the efficiency of an existing highway network; 2) reduce vehicle use in congested areas; 3) improve transit services; and 4) improve internal transit management efficiency. TSM ideas include better signal synchronization.

BYPASS CONCEPTS



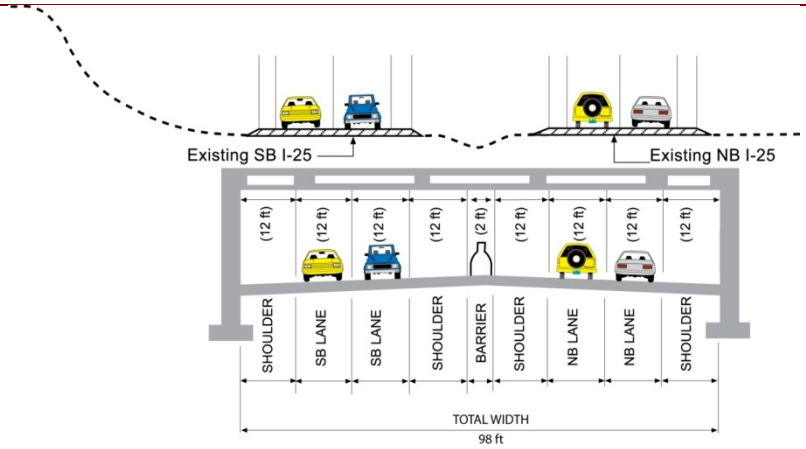
1) EXHIBIT 2-5
Double Decking I-25

The second deck would be four lanes (two lanes each direction) for high-speed and limited access. Existing I-25 would function as it does today.



2) EXHIBIT 2-6
I-25 Bypass

Build a high-speed bypass east or west of Pueblo. This new road would be four lanes (two lanes each direction) with limited access. Existing I-25 would function as it does today.

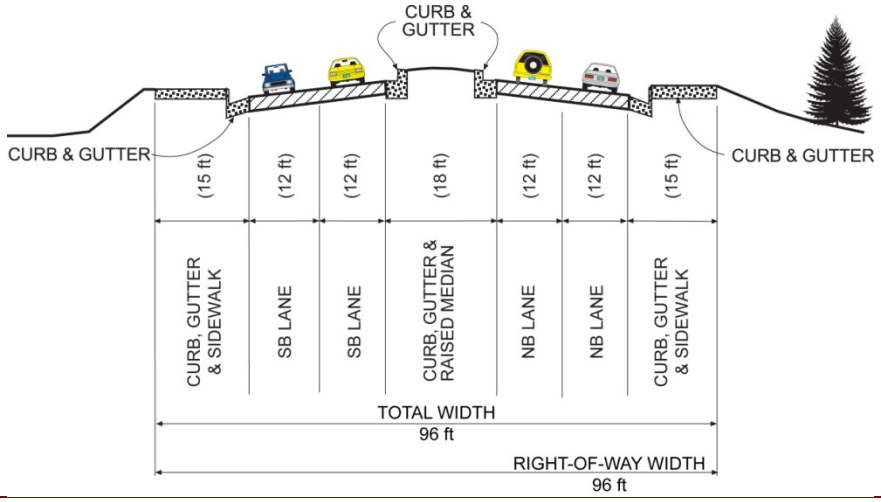


3) EXHIBIT 2-7
Tunnel Under Existing I-25

The in-tunnel road would be four lanes (two lanes each direction) with limited access. The existing I-25 highway would become a lower-speed facility and would no longer be classified as an interstate.

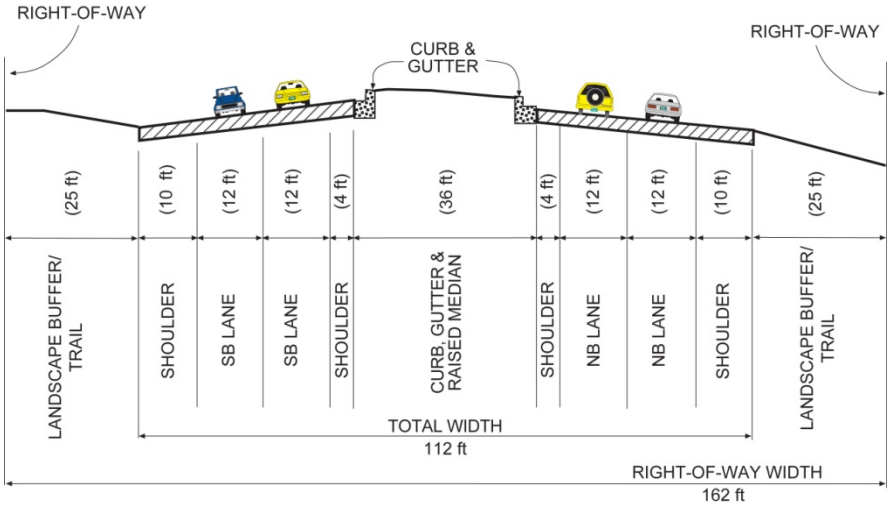
ft = feet; NB = Northbound; SB = Southbound

ALTERNATE ROUTE CONCEPTS



4) EXHIBIT 2-8
Lower-Speed Alternate Route

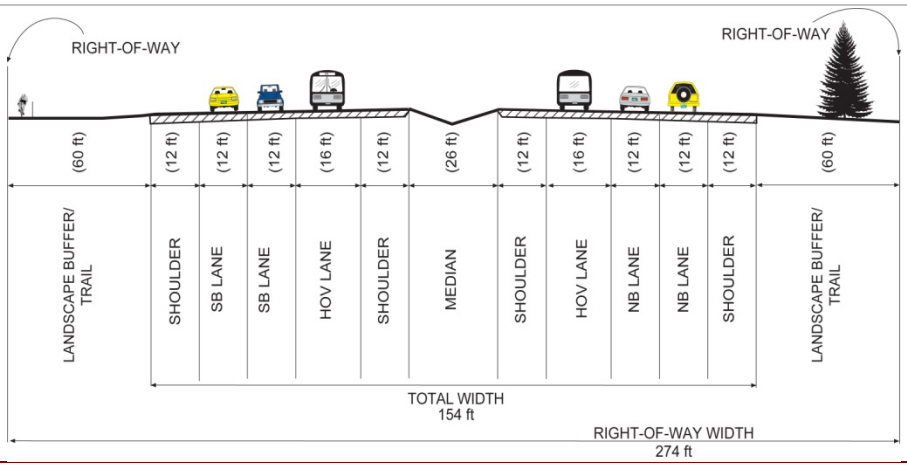
Build a lower-speed route around the City as a beltway that would serve local trips that would normally travel on I-25. This would be a new four-lane (two lanes each direction) road.



5) EXHIBIT 2-9
High-Speed Alternate Route

Build a high-speed, limited access alternate route around the City with what is traditionally referred to as a beltway around Pueblo. This would be a new four-lane (two lanes each direction) highway.

TRANSIT CONCEPT

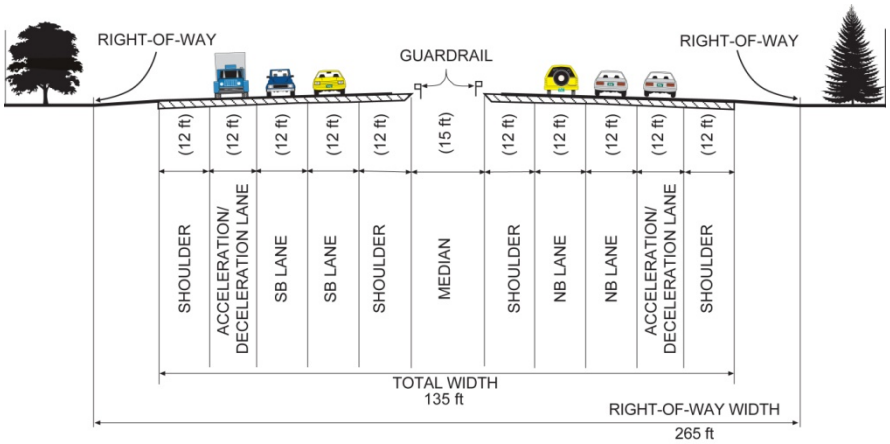


6) EXHIBIT 2-10
HOV Lanes on I-25

Build two HOV lanes (one lane each direction) on I-25 and increase bus service throughout Pueblo. Improvements to I-25 would be necessary to address safety and local and regional mobility problems on the highway.

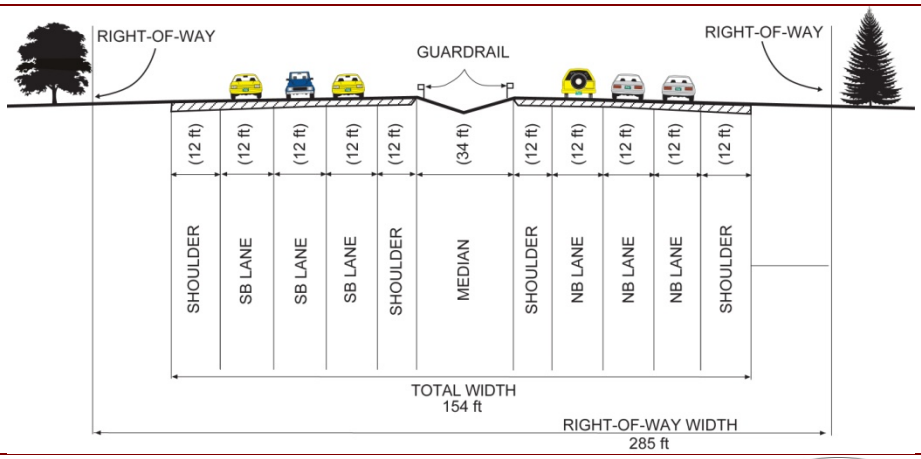
ft = feet; NB = Northbound; SB = Southbound; HOV = High Occupancy Vehicle

I-25 IMPROVEMENT CONCEPTS



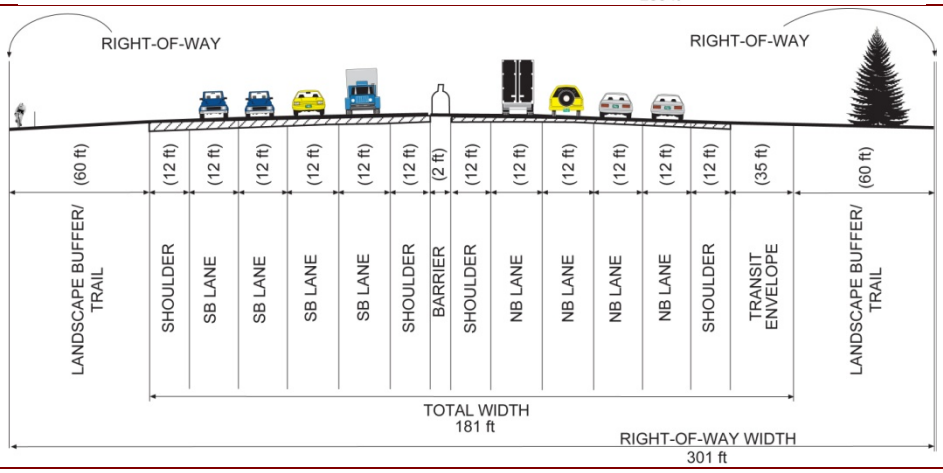
7) EXHIBIT 2-11
Four Lanes on I-25 with Continuous Acceleration/ Deceleration Lanes

Keep I-25 at four lanes (two lanes each direction) and add continuous acceleration/ deceleration lanes the entire length of I-25. Straighten curves, widen shoulders, and improve the horizontal and vertical alignments. Build acceleration/deceleration lanes as needed between interchanges.



8) EXHIBIT 2-12
Six Lanes on I-25

Add two lanes (one lane each direction) to I-25 for a total of six lanes. Straighten curves, widen shoulders, and improve the horizontal and vertical alignments. Build acceleration/deceleration lanes only at interchanges.



9) EXHIBIT 2-13
Eight Lanes on I-25

Add four lanes (two lanes each direction) to I-25 for a total of eight lanes. Straighten curves, widen shoulders, and improve the horizontal and vertical alignments. Build acceleration/ deceleration lanes only at interchanges.

ft = feet; NB = Northbound; SB = Southbound

The nine major concepts described and illustrated in **Exhibits 2-5 through 2-13** were evaluated by the CDOT Project Team and the stakeholders using the evaluation criteria listed in **Exhibit 2-14.** The concepts were ranked based on how well they met the evaluation criteria.

Exhibit 2-15 shows how each concept ranked among other related concepts and briefly describes the strengths and weaknesses of each concept. Four of the nine concepts were eliminated because they failed to meet the Purpose and Need, and the remaining concepts were further developed into five strategies that are illustrated in **Exhibits 2-17 through 2-21**. The results of the evaluation and screening are summarized below.

Once ranked, the remaining concepts and their elements were re-organized into the following six strategies:

- No-Action
- I-25 Safety Improvements
- I-25 Safety Improvements with a Low-Speed Loop
- Relocate I-25 East or West of Pueblo with a Parkway
- Relocate I-25 East or West of Pueblo with a Highway
- Improve I-25 with Six Lanes and a Low-Speed Loop

The six strategies represent combinations of concepts that support each other and strengthen the weaknesses of a single concept. The ranking of each concept was used as an aid to determine which concepts best complemented one another.

Exhibit 2-16 illustrates the concepts used to develop each of the six strategies. The strategies are illustrated in **Exhibits 2-17 through 2-21**

2.5.3 Screening of Strategies

Evaluation of the six strategies occurred during strategy screening. The No Action strategy includes only the transportation improvements that are already programmed in the 20-year, *Pueblo Area 2035 Long Range Transportation Plan* (PACOG, 2008). There would be no major transportation projects on I-25 between 29th Street and Pueblo Boulevard; therefore, an illustration of the No Action strategy is not included. The other five strategies are described and illustrated in **Exhibits 2-17 through 2-21**. These strategies were evaluated in a quantitative rather than qualitative way, and resulted in selection of a transportation corridor and the next step in alternative development.

The six alternative strategies were screened using the Purpose and Need.

EXHIBIT 2-14
Criteria Used for Evaluation of Nine Concepts

Community Values

- How well does this concept support current economic community investments?
- Does this concept provide new transportation options and flexibility?
- Will this concept have community support?

Environmental Resources

- Can this be built within the existing road ROW?
- How well does this support Pueblo's environmental values regarding the natural and man-made environments?

Mobility and Safety

- Is travel time on I-25 improved?
- Does this improve access to major destinations throughout Pueblo?
- Does this concept eliminate existing physical barriers to mobility, such as roads or railroad tracks?
- Does this concept improve high accident locations?

Implementation

- How easy is this to construct while maintaining traffic during construction?
- Would maintenance costs be decreased with this concept?
- Is this concept consistent with existing agency plans and policies?
- What is the capital cost of this concept?
- How consistent is this with national design guidelines?

EXHIBIT 2-15
Screening Results for Screening of Nine Concepts

Concept	Ranking	Strengths and Weaknesses and Reasons for Ranking	Screening Results
		BYPASS CONCEPTS	
Double Decking I-25	Eliminated	This project would be built within the existing roadway ROW and, once constructed, would improve travel time on I-25. This concept would not support environmental and community values; it does poorly in improving local mobility because it would limit access to I-25 and the local road network during and after construction due to the significant elevation differences. Implementation of this concept would be extremely difficult because I-25 would be closed during construction and, given the narrow highway ROW, no temporary lanes could be constructed to keep traffic traveling on I-25. Because of the potential for significant visual impacts, this concept had strong community opposition. Furthermore, this concept would not reflect the culture, history, and character of Pueblo, as is stated in the Community Vision.	This concept was eliminated from further consideration because it could not meet the local mobility needs as stated in the Purpose and Need. I-25 would become more of a physical barrier to local mobility than it is today because it would limit access to and from I-25 and the local road network during and after construction due to the significant elevation differences.
I-25 Bypass East or West of Pueblo	1	A bypass around Pueblo would provide new travel options. It would be easy to construct because existing I-25 traffic would not have to be rerouted. The new road could be designed consistent with national design guidelines. A bypass around Pueblo scored poorly in the environmental category. Significant ROW would be required in open, undeveloped natural areas. A bypass does not support economic community investments. It would not improve access to major destinations, and it would not be consistent with local or regional plans.	Bypasses were incorporated into strategies and carried forward in the analyses.
Tunnel Under Existing I-25	Eliminated	A tunnel would be built within the existing highway ROW and, once constructed, would improve travel time on I-25. Mineral Palace Park and Fountain Creek would be heavily impacted during construction. Rerouting of I-25 traffic or construction of a parallel roadway during construction would be problematic for the entire length of the project. Implementation of this concept would be extremely difficult because I-25 would be closed during construction and, given the narrow highway ROW, no temporary lanes could be constructed. A tunnel would have engineering challenges because of the high water table next to the Arkansas River. Maintaining I-25 traffic while	This concept was eliminated from further consideration because it could not meet the local mobility needs as stated in the Purpose and Need. It would not improve access to destinations within Pueblo because access to the highway would be limited.

EXHIBIT 2-15
Screening Results for Screening of Nine Concepts

Concept	Ranking	Strengths and Weaknesses and Reasons for Ranking	Screening Results
		constructing a tunnel under I-25 would not be possible without constructing a roadway parallel with I-25.	
		ALTERNATE ROUTE CONCEPTS	
Lower-Speed Alternate Route	1	This concept would provide a safe and continuous way around the city that would improve access to major destinations and eliminate barriers to local mobility. It supports the economic community investments and would provide new transportation options. A lower-speed alternate route is consistent with local plans and with national design guidelines. There would be some degree of inconsistency with environmental values since some of the route would require new ROW. As a stand-alone concept, this would not include the safety and local and regional mobility improvements needed on I-25.	A lower-speed alternate route was incorporated into a strategy and carried forward in the analyses.
High-Speed Alternate Route	2	This concept would provide a safe and continuous way around the City. A high-speed alternate route would have limited access; therefore, travel time would be improved. It would support the economic community investments and would provide new transportation options, but not to the level that the lower-speed alternate route would. There would be some degree of inconsistency with environmental values since some of the route would require new ROW. As a stand-alone concept, this would not include the safety and local and regional mobility improvements needed on I-25. This concept has similar strengths and weaknesses as the lower-speed alternate route concept; however, it did not score as high in the local mobility criteria as the lower-speed concept because of reduced local access.	A high-speed alternative route was incorporated into a strategy and carried forward in the analysis.
		TRANSIT CONCEPT	
HOV lanes on I-25	Eliminated	HOV lanes support economic investments, provide new transportation options, provide access to major destinations, and are consistent with local plans. HOV lanes do not address regional mobility issues on I-25 due to the requirement that only HOVs could use the lanes.	This concept was eliminated from further consideration because it could not meet the regional mobility and capacity needs as stated in the Purpose and Need. The lower demand for transit services on I-25 would not make this option feasible to meet travel demands. The analysis did reveal local mobility and accessibility improvements from improvements to transit service off of I-25; therefore, this element was included in all strategies developed.

EXHIBIT 2-15
Screening Results for Screening of Nine Concepts

Concept	Ranking	Strengths and Weaknesses and Reasons for Ranking	Screening Results
I-25 IMPROVEMENT CONCEPTS			
Four Lanes on I-25 with Continuous Acceleration/ Deceleration Lanes	2	Of the three I-25 improvement concepts, this concept would require the least amount of ROW. Construction would result in improvements to existing high-accident locations. The regional mobility benefits of this concept were much less than widening I-25. This concept does not eliminate barriers to east-west local mobility. This concept scored poorly in community values, regional and local mobility, and implementation criteria that put it second in the rankings behind the six lanes on I-25 concept.	The strengths of this concept allowed the four lanes on I-25 concept to be incorporated into a strategy and carried forward in the analyses. A detailed traffic operations analysis to determine the number of lanes (four or six) required to satisfy capacity needs was deferred until the screening of strategies.
Six Lanes on I-25	1	This concept would improve safety by addressing high-accident locations. Travel time and access to major destinations is improved. This concept does the best in supporting economic community investments and is consistent with existing local and state plans. Because of highway widening, this concept ranked low in supporting environmental values and in eliminating barriers to east-west local mobility.	The six lanes on I-25 concept was incorporated into a strategy and carried forward in the analyses. A detailed traffic operations analysis to determine the number of lanes (four or six) required to satisfy capacity needs was deferred until the screening of strategies.
Eight Lanes on I-25	Eliminated	Widening I-25 to eight lanes improved the travel time and access to major destinations. This concept scored poorly in its ability to be built in the existing ROW and in its support of environmental values, as additional ROW needs would impact surrounding communities. The magnitude of environmental disturbance would not be consistent with Pueblo citizens' desire to protect natural and man-made environments to the extent possible.	Increasing the capacity of I-25 to this degree exceeds the need for regional mobility and capacity as described in the Purpose and Need for the project.

Source: CDOT Project Team, 2010.

HOV = high-occupancy vehicle I-25 = Interstate 25 ROW = right-of-way

EXHIBIT 2-16
Strategies Developed from Concepts

Concepts	Strategies
A concept was not developed for a No Action strategy	No Action
Four Lanes on I-25 with Continuous Acceleration/Deceleration Lanes	I-25 Safety Improvements
Four Lanes on I-25 with Continuous Acceleration/Deceleration Lanes Low-Speed Alternate Route	I-25 Safety Improvements with a Low-Speed Loop
I-25 Bypass East or West of Pueblo	Relocate I-25 East or West of Pueblo and Existing I-25 Becomes a Parkway
I-25 Bypass East or West of Pueblo High-Speed Alternate Route	Relocate I-25 East or West of Pueblo and Existing I-25 is Maintained as a Highway
Six Lanes on I-25 Lower-Speed Alternate Route	Improve I-25 with Six Lanes and a Low-Speed Loop

Source: CDOT Project Team, 2010.

I-25 = Interstate 25

EXHIBIT 2-17
I-25 Safety Improvements Strategy

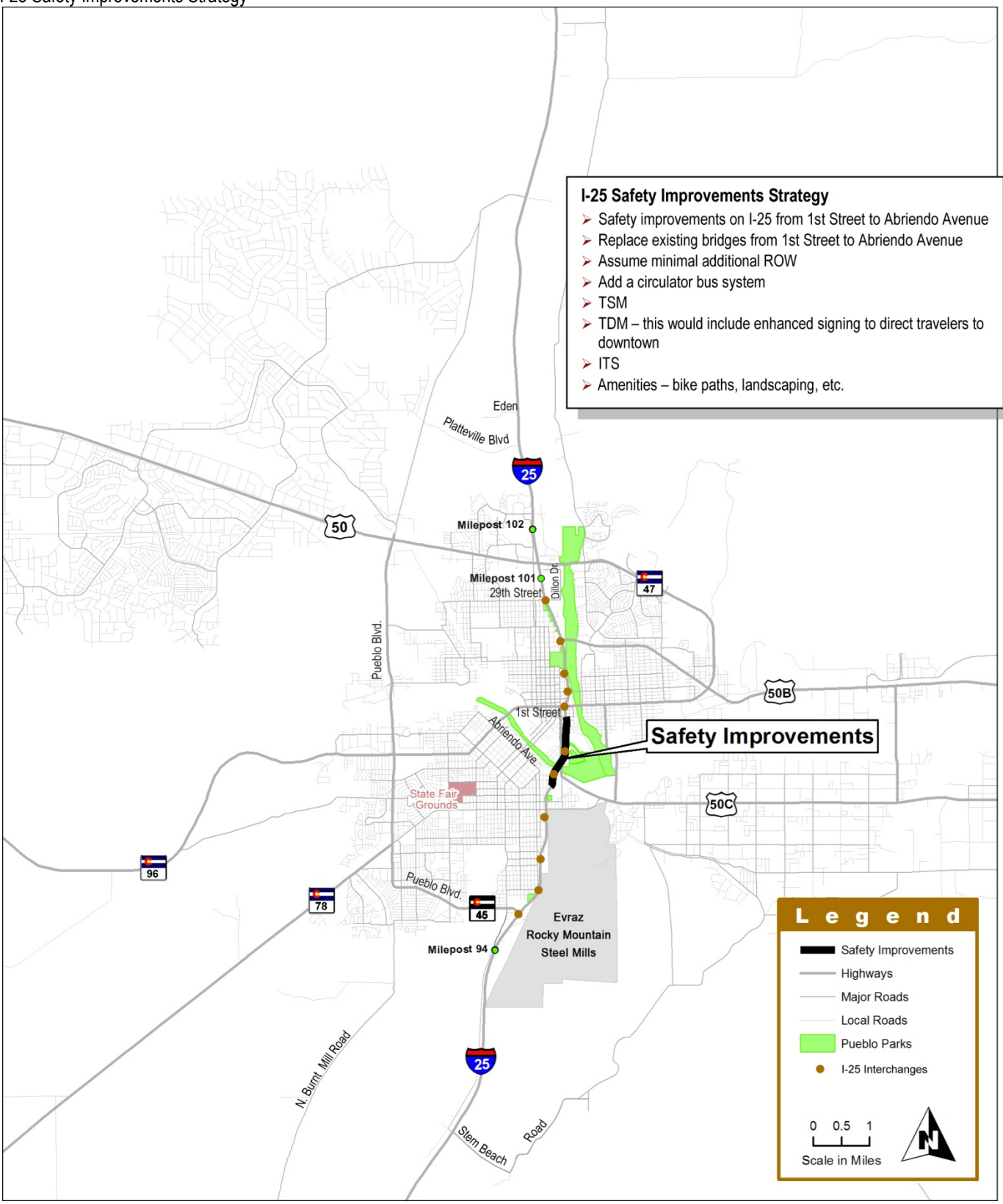


EXHIBIT 2-18
I-25 Safety Improvements with a Low-Speed Loop Strategy

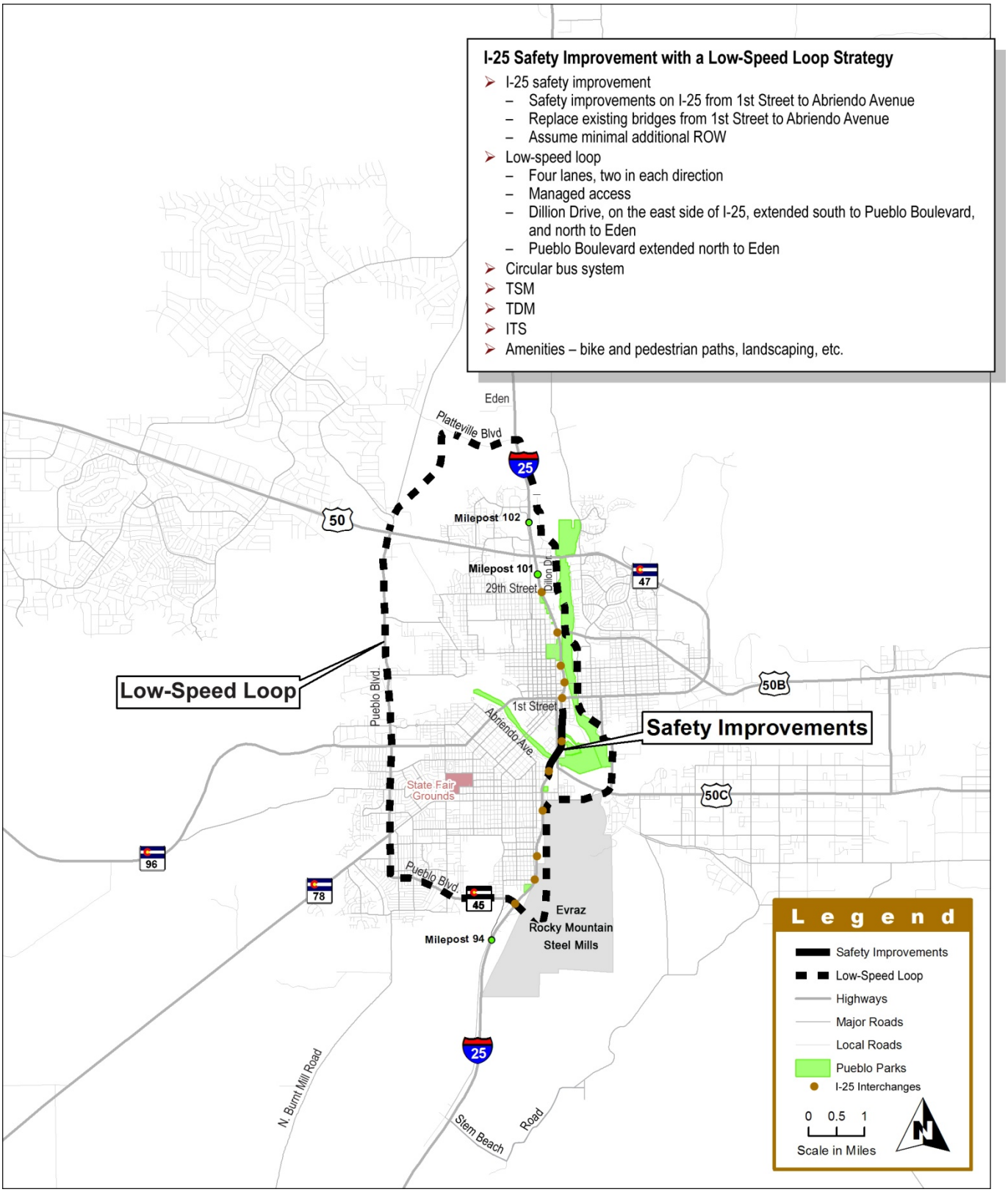


EXHIBIT 2-19
Relocated I-25 East or West of Pueblo with a Parkway Strategy

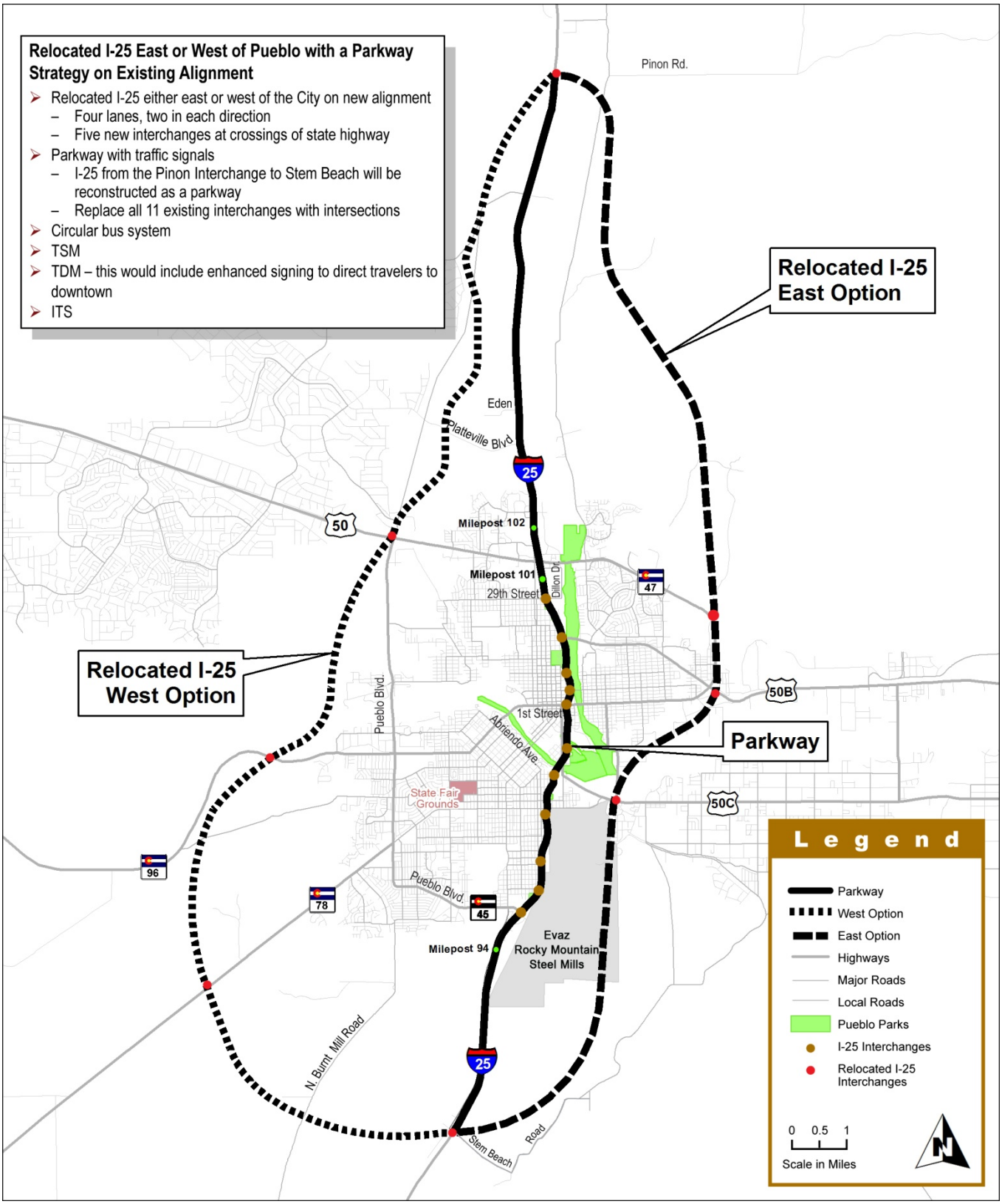


EXHIBIT 2-20
Relocated I-25 East or West of Pueblo with a Highway Strategy

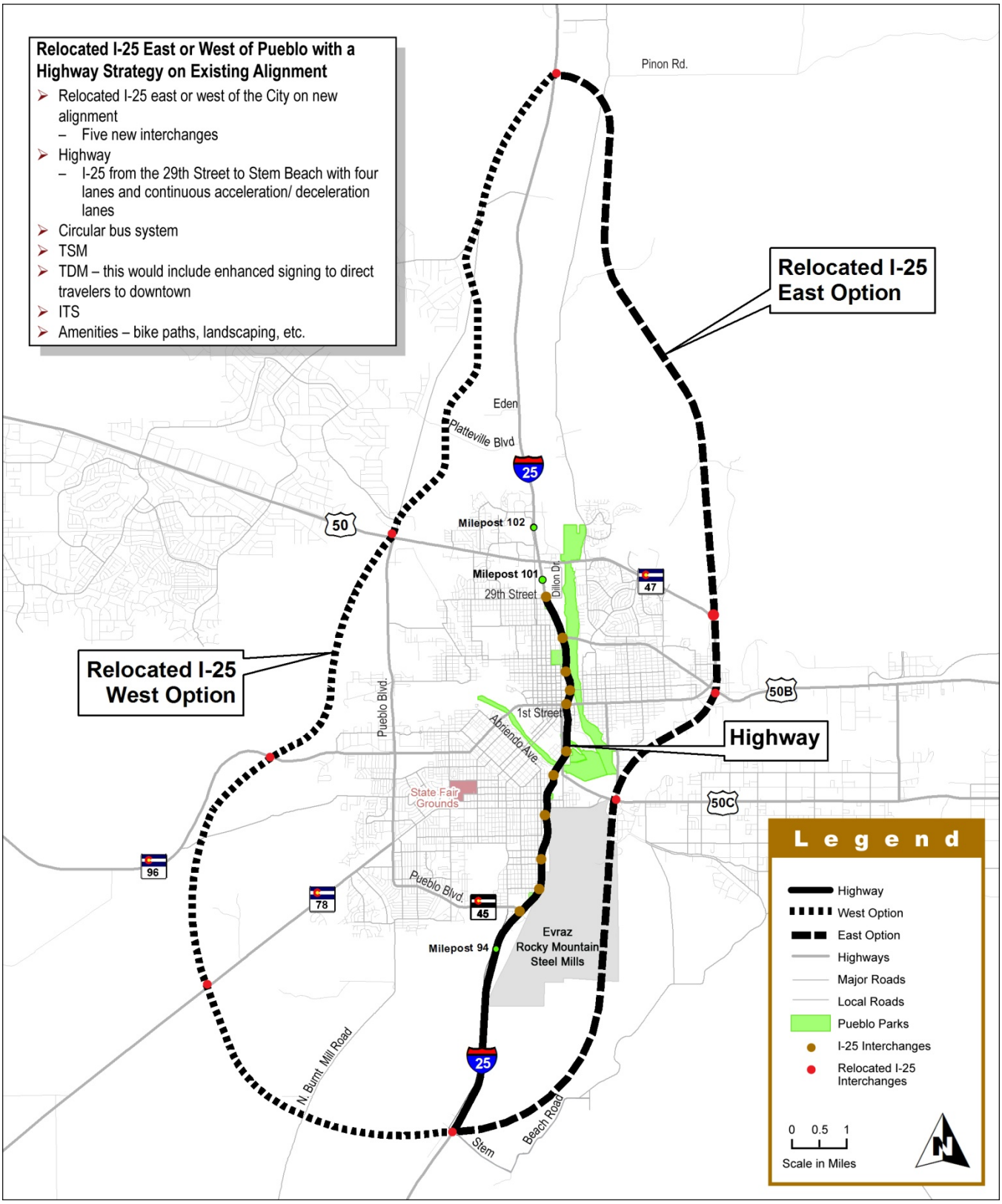


EXHIBIT 2-21
Improve I-25 with Six Lanes and a Low-Speed Loop Strategy

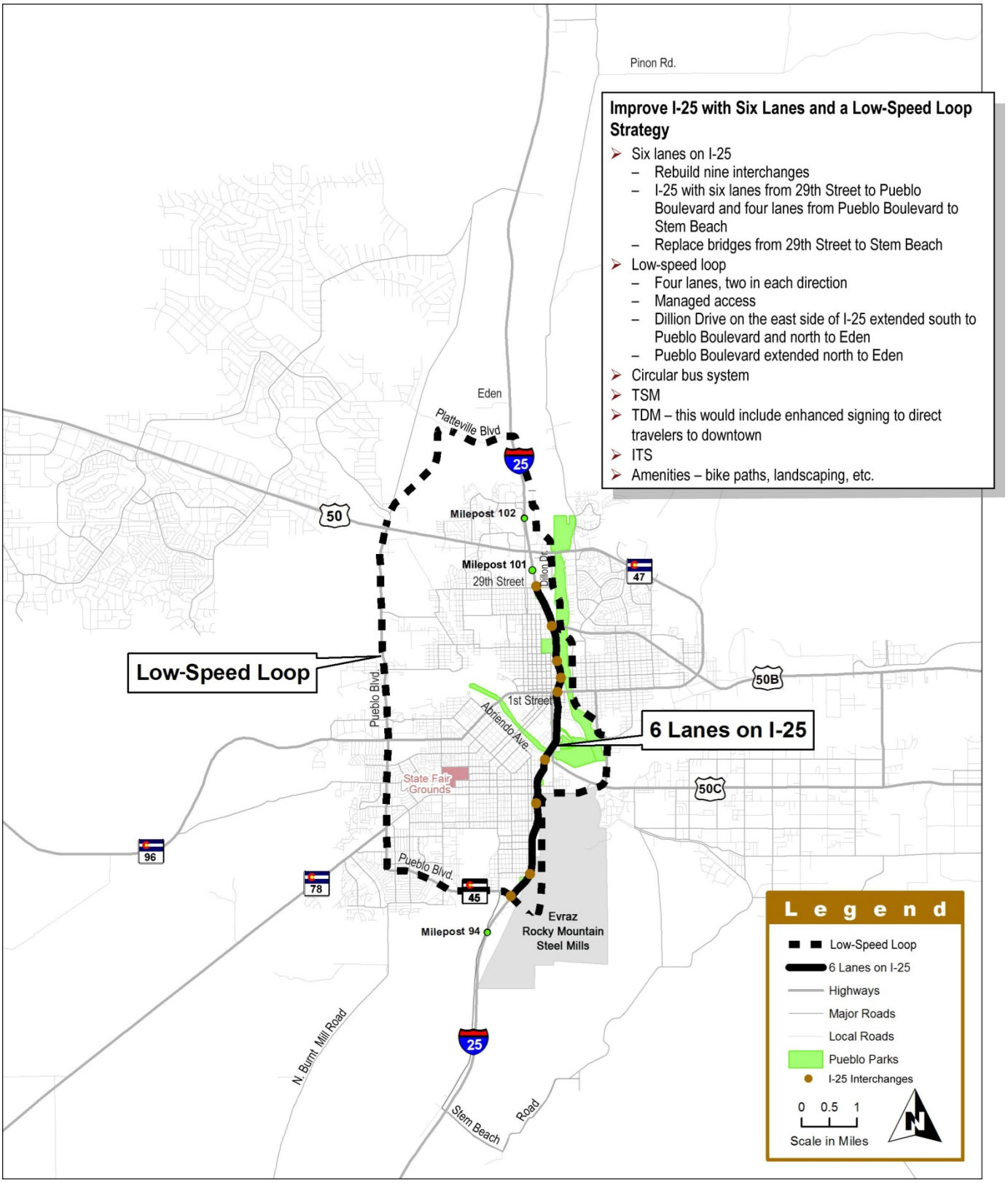


EXHIBIT 2-22
Criteria for Evaluation of Strategies

Community Values

- Is it compatible with neighborhood and local business plans/ goals/objectives?
- Does it promote local trips on local roads and regional trips on I-25?
- Does it support current and ongoing economic investments in the community?

Environmental Resources

- How much new ROW would be needed?
- How many houses/ businesses would be within the new ROW?
- What could be the long-term impacts to the natural and man-made environment?

Mobility and Safety

- What would be the level of service in the PM peak?
- What would be the travel time on I-25 between Stem Beach Road and Pinon Road?
- What would the I-25 traffic volumes be?
- Does it improve high accident locations?

Implementation

- What is the comparative cost?
- What are the additional operation and maintenance costs?
- Does it have a major agency or legislative hurdle?
- Can it be implemented in segments that are functional and fundable?

The evaluation criteria listed in **Exhibit 2-22** were applied to each of the six alternative strategies, including the No Action strategy, to identify their strengths and weaknesses, which are summarized in **Exhibit 2-23**. A detailed traffic analysis was completed to determine if each strategy provided adequate capacity to meet projected capacity needs as stated in the Purpose and Need. The analysis showed that safety improvements without additional capacity were not sufficient to address congestion on I-25. More information on the results of the traffic analysis is included in the *I-25 New Pueblo Freeway Alternatives Analysis and Project Development Report* (**Appendix A**).

Except for one build strategy, all strategies were eliminated from further study because they failed to meet the Purpose and Need. The reasons for elimination are also included in **Exhibit 2-23**.

The result of the analysis led to the selection of Alternative Strategy 6: Improve I-25 with Six Lanes and provide a Low-Speed Loop. Strategy 6 underwent further refinement by the CDOT Project Team and the stakeholders and became one of the final Build Alternatives, referred to as the "Existing I-25 Alternative." One refinement was to reduce the Low-Speed Loop to the extension of Dillon Drive south to US 50B. The No Action strategy was also retained because it serves as a baseline for comparison of the Build Alternatives.

EXHIBIT 2-23
Evaluation Results of Screening of Six Strategies

Alternative Strategy	Strengths and Weaknesses	Screening Results
1. No Action (retained)	This strategy was retained because it serves as a baseline for comparison of the Build Alternatives.	
2. I-25 Safety Improvements (eliminated)	This strategy has low capital costs and reduces accident rates between 1st Street and Abriendo Avenue. There would only be a few environmental impacts due to the minimal need for ROW acquisition. This strategy scored poorly on community values and travel time. This strategy does very little to address regional mobility problems on I-25. It does not address safety on I-25 north of 1st Street or south of Abriendo Avenue because those areas are not part of this strategy. This strategy is not compatible with local plans and does not support future economic community investments as stated in the Community Vision.	This strategy was eliminated from further consideration because it does not provide adequate capacity to meet projected capacity needs as stated in the Purpose and Need. Interchanges would remain unconnected to appropriate City streets, and conflicts with local and regional travel would still exist, which are stated as needs in the Purpose and Need. Local mobility would not be improved because this strategy does not promote local trips on local roads.

EXHIBIT 2-23
Evaluation Results of Screening of Six Strategies

Alternative Strategy	Strengths and Weaknesses	Screening Results
		Safety problems north of 1st Street and south of Abriendo Avenue, identified in **Chapter 1 – Purpose and Need** and **Exhibit 1-4**, are not addressed by this strategy.
3. I-25 Safety Improvements with a Low-Speed Loop (eliminated)	This strategy has medium capital costs, reduces accident rates between 1st Street and Abriendo Avenue, and slightly improves regional and local mobility on I-25 by providing another route for local trips on the Low-Speed Loop. This strategy does not address safety on I-25 north of 1st Street or south of Abriendo Avenue. New ROW would be required along the length of the Low-Speed Loop. To implement this strategy would require restricting access in places where access exists today. This strategy is not compatible with local plans (e.g., neighborhoods are not reconnected). It does not support existing economic community investments, and I-25 would still experience congested conditions in several locations.	This strategy was eliminated from further consideration because it does not provide adequate capacity to meet projected capacity needs as stated in the Purpose and Need. I-25 interchanges would remain unconnected to appropriate City streets and aging bridges would not be replaced. Therefore, limited safety and local mobility improvements are realized with this strategy. Safety problems north of 1st Street and south of Abriendo Avenue, identified in **Chapter 1 – Purpose and Need**, **Exhibit 1-4**, are not addressed by this strategy.
4. Relocate I-25 East or West of Pueblo and Existing I-25 Becomes a Parkway (eliminated)	CDOT would continue to own and maintain I-25. If it was relocated to the east or the west of Pueblo, the existing I-25 would become a parkway owned and maintained by the City. This strategy would separate local and regional trips and, with local trips on the parkway and regional trips on the relocated highway, safety would improve on both roadways. This strategy has a very high capital cost due to the extensive construction for a brand new highway. It would require significant ROW acquisition for the relocated I-25. This strategy scored poorly on community values because traffic would be bypassing downtown. There would be no ability to phase improvements and achieve incremental benefits. The entire I-25 bypass would have to be constructed before the existing I-25 could be converted to a parkway. A bypass west of the City would add 24 miles of new highway, and a bypass east of the City would add 22 new miles. Each of these bypasses would be a new highway that would impact undisturbed natural areas; would not be compatible with neighborhood and local business plans, goals, and objectives; and would not support ongoing economic investments in the community. Conversion of I-25 to a parkway would require CDOT to transfer ownership of the parkway to the City. However, the City would not agree to assume ownership and maintain the parkway. Relocating I-25 east or west of Pueblo would significantly impact the current economic structure of the City. Bypassing downtown and community investments such as the new HARP project, the Art Museum, and the Convention Center was believed to be potentially damaging to these facilities. Local goals and objectives, as stated in the Community Vision, would not be met by this strategy.	This strategy was eliminated because the relocation of I-25 outside of the City would not address the safety and local mobility problems on the future parkway (existing I-25), including the deteriorating roadway and bridges and inappropriate connections to local streets, as stated in the Purpose and Need.

EXHIBIT 2-23
Evaluation Results of Screening of Six Strategies

Alternative Strategy	Strengths and Weaknesses	Screening Results
5. Relocate I-25 East or West of Pueblo and Existing I-25 is Maintained as a Highway (eliminated)	This strategy would involve making improvements to shoulders, lengthening on/off ramps, and making improvements to interchanges on the existing I-25, all of which would improve safety. Improvements would be made to aging bridges, congestion would be reduced, and there would be fewer conflicts with local and regional travel. Therefore, some of the regional mobility problems would be addressed on I-25. This strategy has extremely high capital costs due to the extensive construction needed for a brand new highway. A significant amount of ROW, including undeveloped land, would have to be purchased. Local trips would still be in conflict with regional travelers. A bypass west of the City would add 24 miles of new highway, and a bypass east of the City would add 22 new miles. Each of these bypasses would be a new highway that would impact undisturbed natural areas; would not be compatible with neighborhood and local business plans, goals, and objectives; and would not support ongoing economic investments in the community.	This strategy was eliminated because it would not improve safety by addressing existing I-25 deteriorating roadway and bridges or by addressing unsafe road characteristics of I-25, as stated in the Purpose and Need.
6. Improve I-25 with Six Lanes and a Low-Speed Loop (retained)	This strategy was chosen by the CDOT Project Team and the stakeholders as the best of the six strategies. This strategy scored high with community values criteria and can be implemented in segments that are functional and fundable.	This strategy was retained because it fully addresses the safety problems and local and regional mobility issues identified in **Chapter 1 – Purpose and Need**. Additionally, this strategy meets the projected capacity needs as outlined in the Purpose and Need. After selection of this strategy, it was refined to reduce the low-speed loop to an extension of Dillon Drive south to US 50B.

Source: CDOT Project Team, 2010

CDOT = Colorado Department of Transportation
I-25 = Interstate 25
HARP = Historic Arkansas Riverwalk of Pueblo
ROW = right-of-way

2.5.4 Interchanges

With the general corridor location for I-25 determined at the end of screening of strategies, the Alternatives Development Process proceeded with the CDOT Project Team and the stakeholders studying the best interchange types and locations. The number of existing interchanges (11 in all) through the study area needed to be reduced because of their close proximity to each other. Current design standards recommend spacing of the interchanges to be at 1-mile intervals. In some instances, interchanges needed to be relocated.

This interchange study process began with consideration of three major interchange systems: 1) Interchanges at State Highways, 2) Interchanges for Local Connections, and 3) Interchanges for Regional Destinations. These systems were presented to the stakeholders and evaluated using criteria that measured community values, environmental resources, local and regional mobility and safety, and implementation.

The interchange analysis resulted in a recommended plan for I-25 that included the following interchanges:

- A diamond interchange at US 50B with one-way frontage roads to 29th Street.
- A split-diamond interchange between 13th Street on the north and 1st Street on the south. Frontage roads would be provided between the ramps at 13th Street and 1st Street. Additional exit ramps would be provided in both the southbound and northbound directions generally located near 6th Street.

- A split-diamond interchange between Abriendo Avenue on the north and Northern Avenue on the south. One-way frontage roads would connect the ramps.
- A single-point diamond interchange at Indiana Avenue.
- A partial cloverleaf interchange at Pueblo Boulevard.

The development and evaluation of interchanges are described in the *I-25 New Pueblo Freeway Alternatives Analysis and Project Development Report*, included in Appendix A. This interchange plan was completed for each of the alternatives to be fully evaluated in the DEIS.

2.6 FINAL DETAILED ALTERNATIVES

Development of a second Build Alternative evolved while the CDOT Project Team and the stakeholders were in the process of conducting the analyses for alternative interchanges. This "new" Build Alternative (named the Modified I-25 Alternative) is similar to the Existing I-25 Alternative; however, between Ilex Street and Indiana Avenue, the highway would move to a new alignment east of the existing I-25. This alignment shift results in fewer impacts to the Bessemer Neighborhood, and the railroad adjacent to the Evraz Rocky Mountain Steel Mills would not have to be moved. The final alternatives moved forward to the DEIS detailed evaluation include:

- No Action Alternative
- Existing I-25 Alternative
- Modified I-25 Alternative

Descriptions of the final alternatives are provided below.

2.6.1 No Action Alternative

Throughout the process, the No Action Alternative was presented for input from stakeholders in multiple formats and venues. This alternative consists of no capital improvements in the I-25 corridor study area but does include routine maintenance such as pavement overlays and restriping of the existing facility, as defined in PACOG's fiscally constrained *Pueblo Area 2035 Long Range Transportation Plan* (PACOG, 2008), and eventually the replacement of deficient structures. These routine maintenance projects have committed funding, as described in the *Pueblo Area 2035 Long Range Transportation Plan*, and will occur sometime over the next 20 years. As with the Build Alternatives, the No Action Alternative underwent a thorough analysis to measure how well it met the project Purpose and Need and Evaluation Criteria. Analysis of the No Action Alternative in the DEIS provides a benchmark, enabling decision-makers to compare the magnitude of the environmental effects of each of the Build Alternatives to the scenario of not making any improvements to I-25 through Pueblo. An overview of the roadway, interchange, network, bicycle, and pedestrian features of the No Action Alternative is provided and illustrated in Exhibit 2-24.

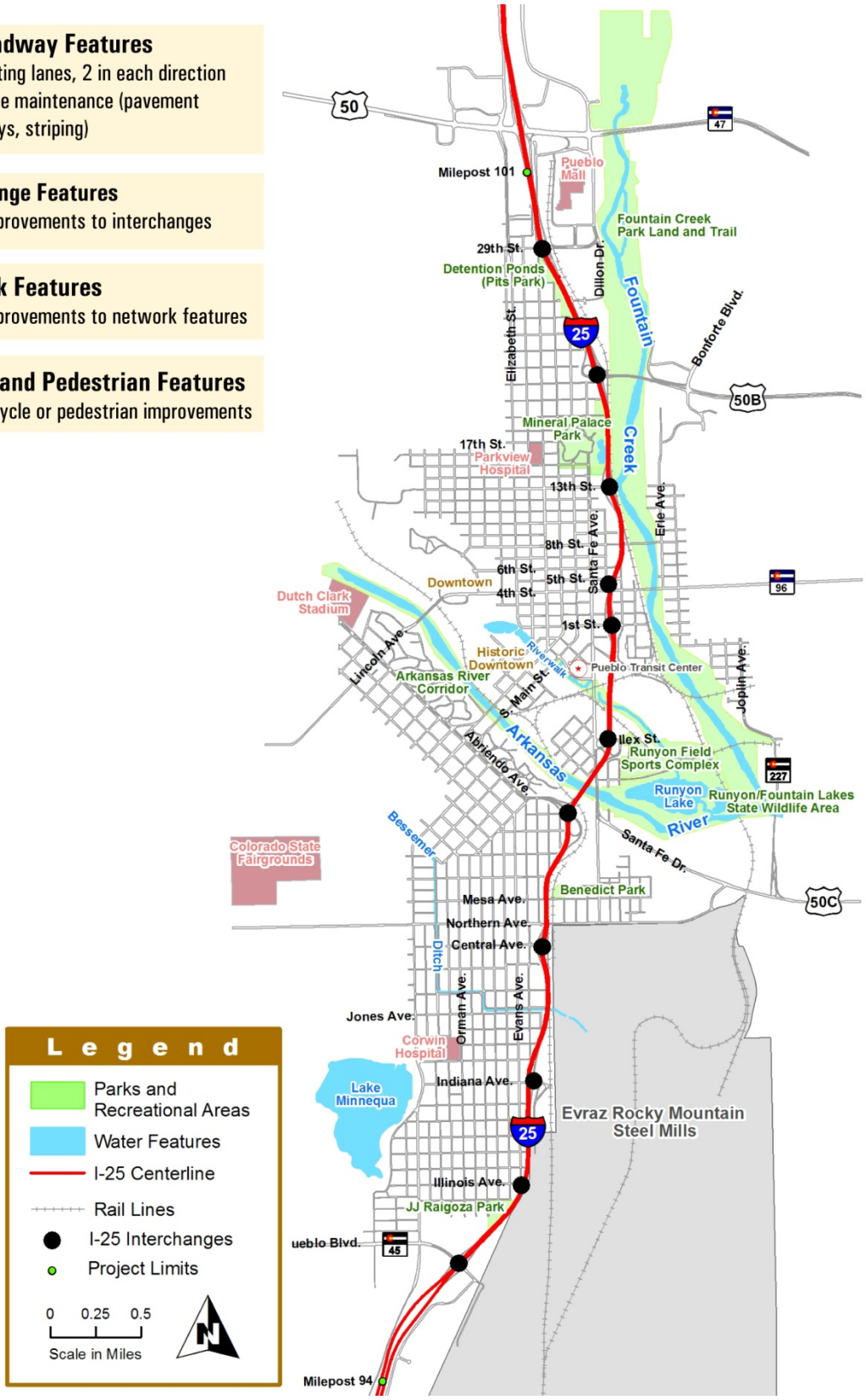
EXHIBIT 2-24
No Action Alternative

I-25 Roadway Features
- 4 existing lanes, 2 in each direction
- Routine maintenance (pavement overlays, striping)

Interchange Features
- No improvements to interchanges

Network Features
- No improvements to network features

Bicycle and Pedestrian Features
- No bicycle or pedestrian improvements



2.6.2 Existing I-25 Alternative

The Existing I-25 Alternative was the result of modifications and refinements to Strategy 6, "Improve I-25 with Six Lanes and a Low-Speed Loop," described above. The alternative was developed by the CDOT Project Team and stakeholders during the alternative interchange analysis task. At that time, the full Low-Speed Loop was reduced to an extension of Dillon Drive south to US 50B due to potential impacts to the natural environment. An overview of the roadway, interchange, network, bicycle, and pedestrian features of this Build Alternative is provided and illustrated in Exhibit 2-25. Detailed drawings of the Existing I-25 Alternative are shown in Exhibits 2-26 through 2-29.

To meet projected capacity needs, the Existing I-25 Alternative would widen I-25 to six lanes (three in each direction) from just north of 29th Street to Pueblo Boulevard on its current alignment. As shown in Exhibit 2-25, the Existing I-25 Alternative reconstructs the interchanges at US 50B, Indiana Avenue, and Pueblo Boulevard; provides access to 29th Street via a frontage road; and creates split-diamond interchanges between 13th Street and 1st Street and Abriendo Avenue and Northern Avenue.

The Existing I-25 Alternative would improve connectivity off of I-25 by extending Dillon Drive south from 26th Street to US 50B. It would also extend Abriendo Avenue across I-25 to Santa Fe Drive. This connection would provide improved access between the neighborhoods west and east of I-25.

The Existing I-25 Alternative would generally match the current I-25 elevation, except in a few areas where a change in the highway grade is necessary to address safety problems. For example, through downtown, I-25 will be 25 to 40 feet higher than it is currently, which will eliminate the steep vertical curves in this area. There will also be a 20- to 30-foot rise in elevation at the Indiana Avenue interchange in order to develop a full interchange at Indiana Avenue and provide enough clearance for east-west traffic moving underneath I-25.

Mitigation elements such as noise walls also have been included in the design of the Existing I-25 Alternative (as described in more detail in Section 3.5 Noise). North of the Arkansas River, 10,525 linear feet of noise walls are proposed for residential areas along 31st Street, from 24th to 29th Street and from 20th to 21st Street, all west of I-25, along with residences on the east side of I-25 from Beech Street to 1st Street. South of Nevada Avenue, noise walls to the west of I-25 are proposed for the Abriendo Avenue residences, the Evans Avenue residences, near the neighborhoods between Maryland Avenue and Reno Avenue, and between Indiana Avenue and Illinois Avenue. Noise mitigation for Mineral Palace Park and Benedict Park is also proposed; however, details of the type of noise mitigation will be determined during final design.

Water quality ponds proposed for the Existing I-25 Alternative are shown in Exhibits 2-26 through 2-29. Additional information regarding treatment of highway runoff is provided in Section 3.15 Water Quality.

Refinement Elements of the Existing I-25 Alternative

Each of the two Build Alternatives was refined through a series of neighborhood meetings where the surrounding neighbors, business owners and operators, and users of the roadways were invited to provide input on the alternatives to be evaluated in detail. These meetings brought several refinements to the original designs of the Build Alternatives that have lessened their impacts to the neighborhoods and businesses and increased the effectiveness of the improvements.

The Existing I-25 Alternative was refined with the help of the stakeholders in the following ways:

- The Dillon Drive extension was realigned on the west side of Fountain Creek. Exhibit 2-30 describes and illustrates how stakeholder input changed the design.
- The one-way frontage roads were realigned within the downtown area to require less property and leave a better local street network. This request came from property owners and City staff. By bringing the frontage roads closer to the highway, fewer properties were impacted.

EXHIBIT 2-25
Existing I-25 Alternative

I-25 Roadway Features

Six lanes (three in each direction) just north of 29th Street to Pueblo Boulevard

Standard shoulders and acceleration/ deceleration lanes

1. Straighten I-25 through downtown
2. Relocate UPRR

Interchange Features

3. Diamond interchange at US 50B with one-way frontage roads to 29th Street
4. Split-diamond interchange between 13th Street and 1st Street with one-way frontage roads between ramps; additional southbound and northbound exit ramps near 6th Street
5. Split-diamond interchange between Abriendo Avenue and Northern Avenue with one-way frontage roads connecting the ramps
6. Single-point diamond interchange at Indiana Avenue
7. Partial cloverleaf interchange at Pueblo Boulevard

Network Features

8. Extend Dillon Drive south from 26th Street to US 50B
9. Connect Abriendo Avenue and Santa Fe Drive (US 50C)

Bicycle and Pedestrian Features

10. Build sidewalks along Dillon Drive extension and US 50B bridge
11. Expand sidewalks on the Mesa Avenue overpass to connect Benedict Park to the west side of I-25
12. Build trail from just north of US 50B bridge to Mineral Palace Park
13. Construct a bike/pedestrian bridge between Mineral Palace Park and the Fountain Creek Trail
14. Build trail between Runyon Field and J.J. Raigoza Park

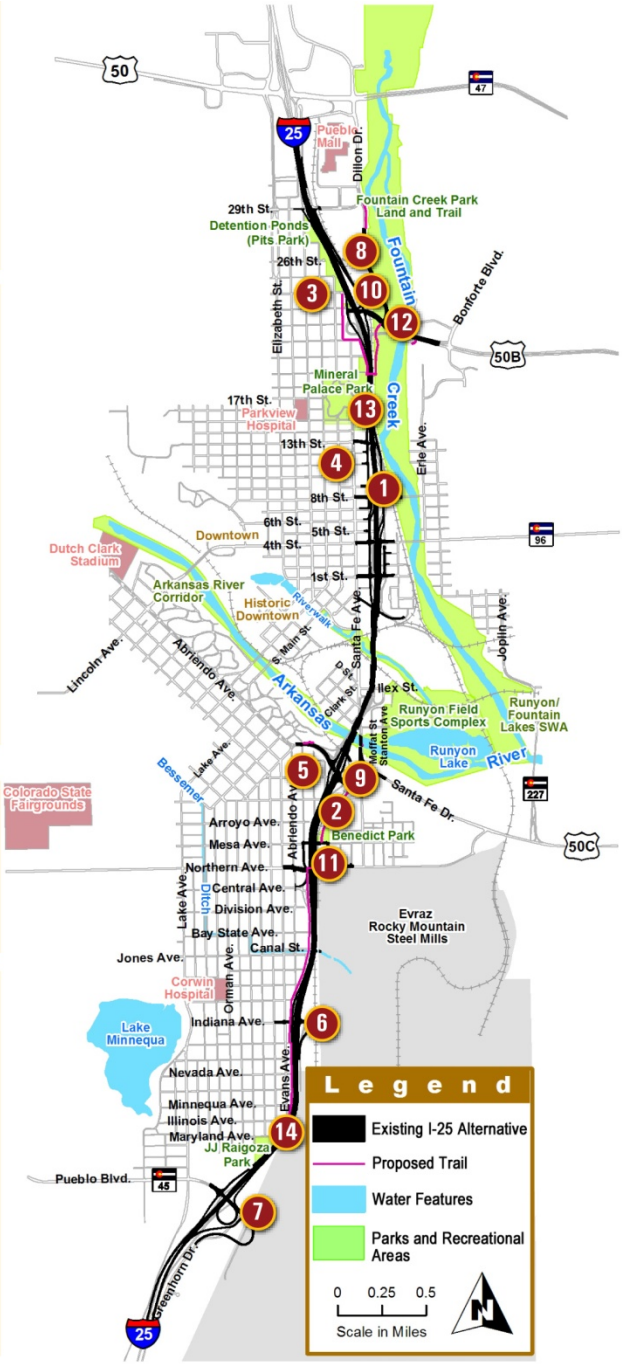
Other Features

Accommodates Circulator Bus System

Transportation Systems Management

Travel Demand Management

Intelligent Transportation Systems



*Detailed maps of the Existing I-25 Alternative are available in Appendix E.

EXHIBIT 2-26
Detailed Map of Both Build Alternatives – Milepost 101 to 15th Street

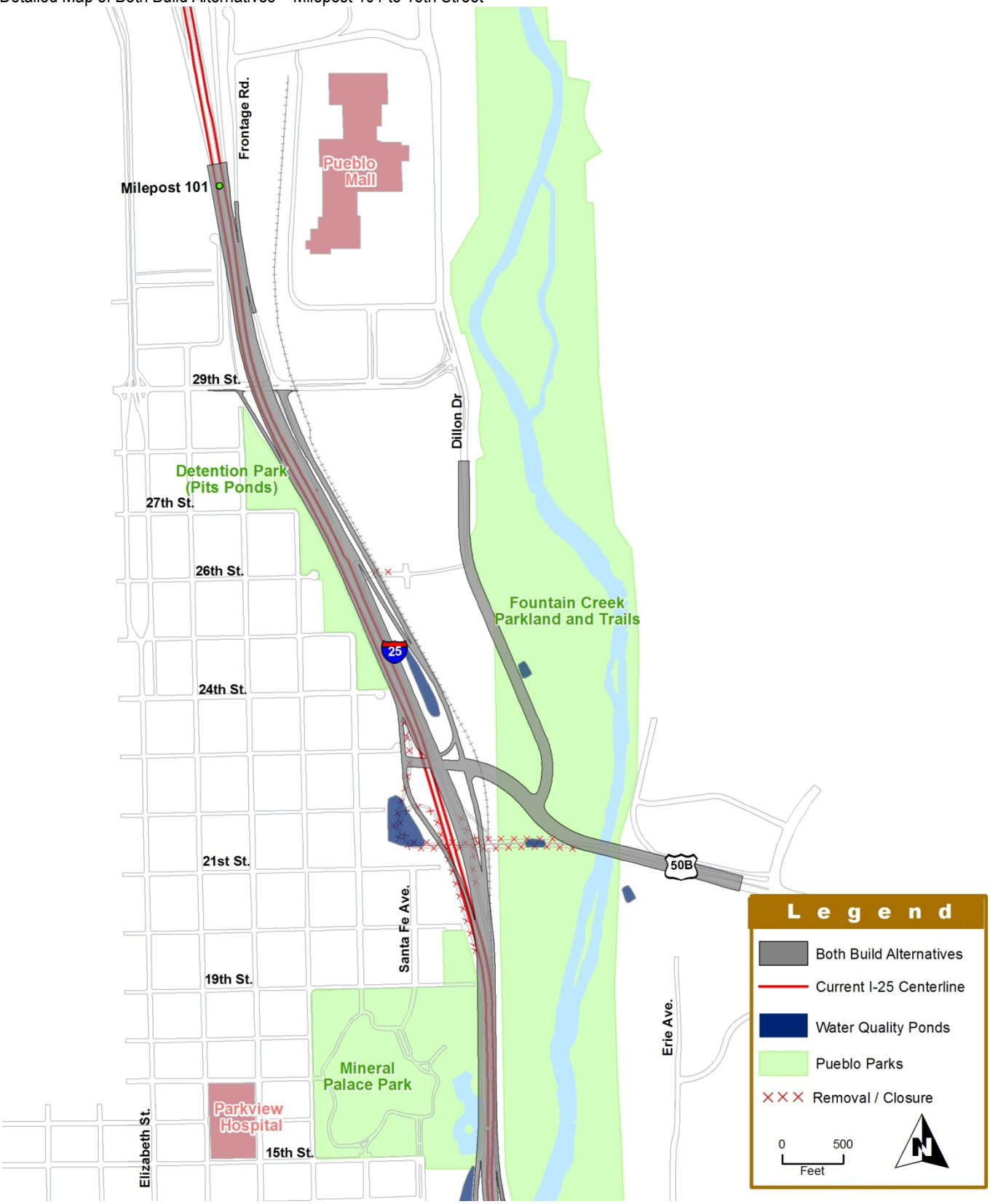


EXHIBIT 2-27
Detailed Map of Both Build Alternatives – US 50B to Kelly Street

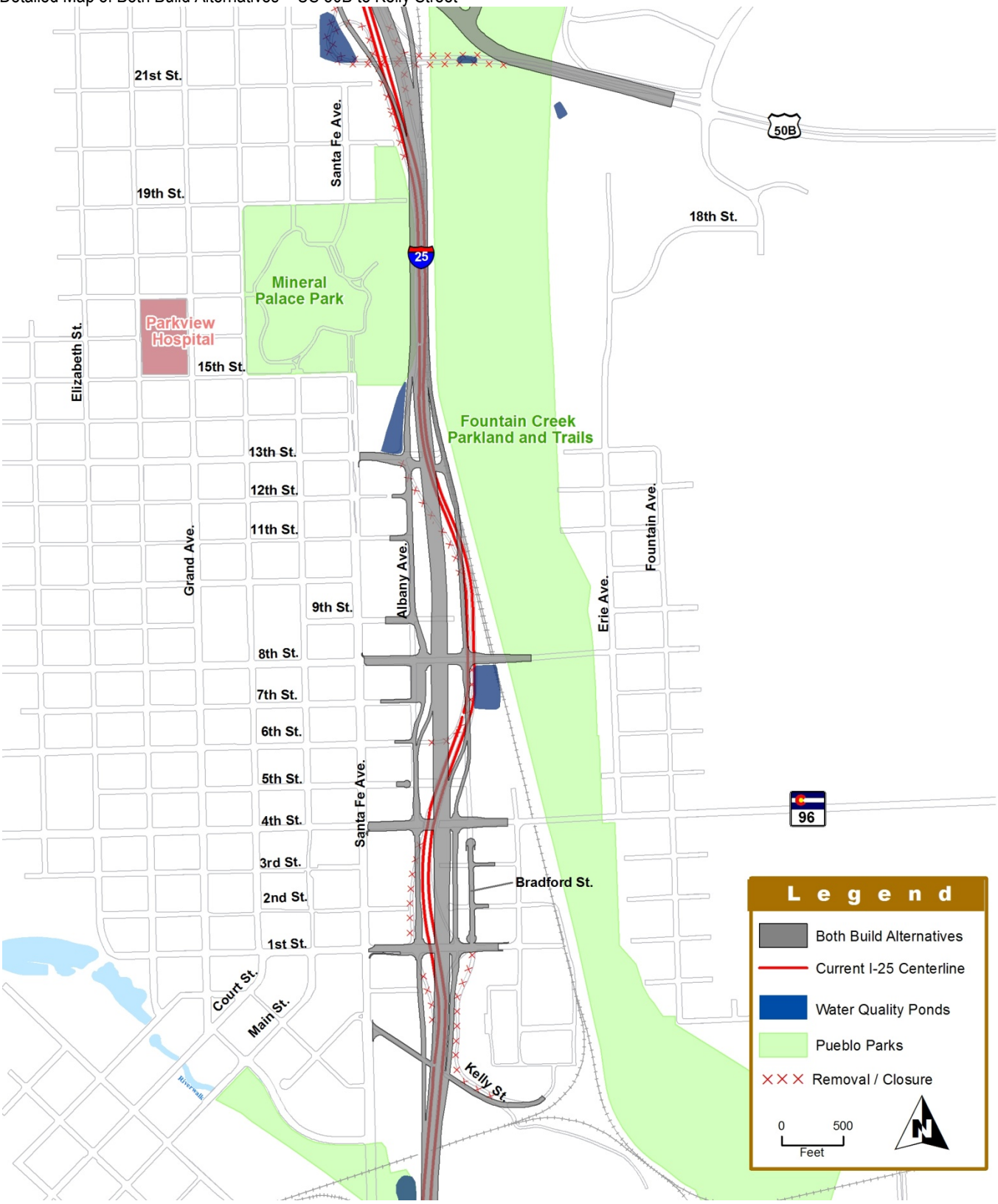
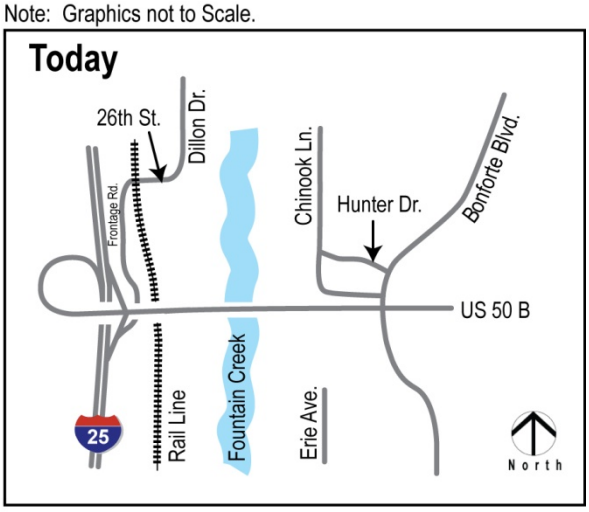


EXHIBIT 2-28
Detailed Map of the Existing I-25 Alternative – Kelly Street to Jones Avenue

EXHIBIT 2-29
Detailed Map of the Existing I-25 Alternative – Jones Avenue to Milepost 94

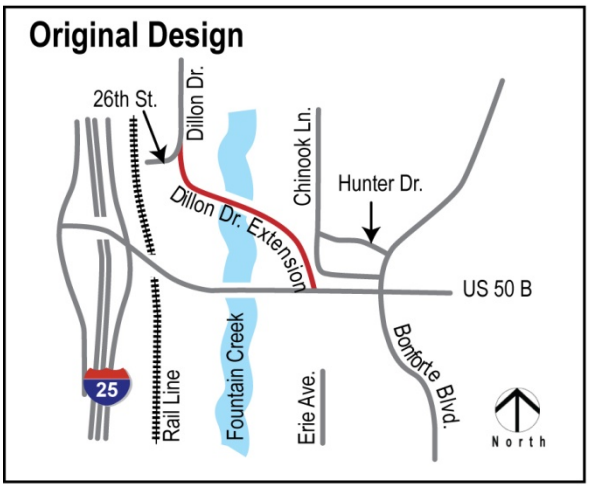
EXHIBIT 2-30
Existing I-25 Alternative and the Modified I-25 Alternative - The Dillon Drive Extension

Note: Graphics not to Scale.



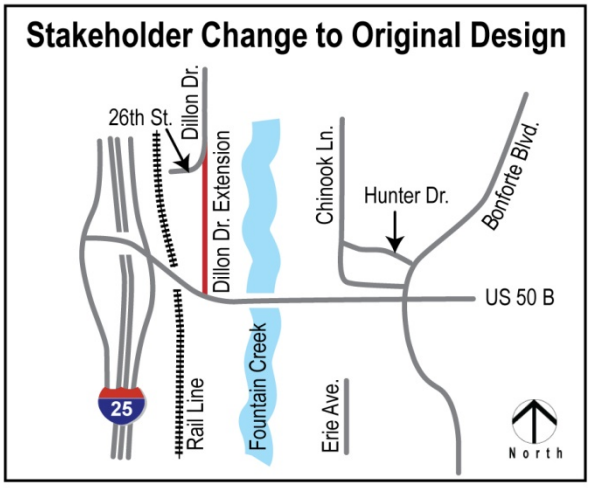
Today

Dillon Drive does not currently extend south of 26th Street; 26th Street crosses the railroad tracks at-grade and intersects with the remaining section of the old I-25 frontage road.



Original Design

CDOT Project Team members designed an extension of Dillon Drive to provide a connection with US 50B. The plan was to cross Fountain Creek and connect to US 50B on the east side of the river to line up with a City- proposed future connection to Erie Avenue; this would provide a Dillon Drive connection to neighborhoods south of US 50B. Stakeholders, specifically, those from the Creekside development, loudly voiced their objections to this design. They believe that constructing Dillon Drive on the east side of the creek would result in increased noise to their neighborhood and would cause stream bank instability that might affect their properties. Before crossing the rail tracks, 26th Street would be dead-ended because the proposed improvements to the I-25 and US 50B interchange would require closure of the existing frontage road.



Stakeholder Change to Original Design

In response to stakeholder input, the CDOT Project Team redesigned the Dillon Drive extension to remain on the west side of Fountain Creek. The CDOT Project Team studied the effects to the City's long-term goal of connecting Dillon Drive south to Erie Avenue and found the connectivity can be provided by extending Erie Avenue north to US 50B. Vehicles from neighborhoods south of US 50B can turn west on to US 50B and then turn north onto Dillon Drive. The team confirmed the ability of the US 50B improvements to successfully handle the additional traffic should the City make the connection in the future.

- The split-diamond interchange configuration between Abriendo Avenue and Northern Avenue was included in this alternative based on stakeholder input, as described and illustrated in Exhibit 2-31.
- The alley behind Evans Avenue between Minnequa Avenue and Illinois Avenue will be transformed into a new north-south trail on the west side of the noise wall. This design option was reviewed and endorsed by each individual homeowner along Evans Avenue. An illustration of the new trail is shown in Exhibit 2-32.

2.6.3 Modified I-25 Alternative

To meet projected capacity needs, the Modified I-25 Alternative would widen I-25 to six lanes (three in each direction) from just north of 29th Street to Pueblo Boulevard on its current alignment. The Modified I-25 Alternative, shown in Exhibit 2-33, was developed from the Existing I-25 Alternative by the CDOT Project Team and stakeholders and shares the design characteristics of the Existing I-25 Alternative, with the exception of one area of the corridor, as described in the next paragraph.

In the southern part of the corridor between the Arkansas River and Canal Street, implementing the Existing I-25 Alternative would require moving the Union Pacific railroad (UPRR) tracks 150 feet to the east to make room for widening I-25. Concern about moving the rail line led to the idea of relocating I-25 to a new alignment to the east at approximately Ilex Street. Moving I-25 to the new alignment in this area would allow the UPRR rail line south of the Arkansas River to remain in place. At approximately Minnequa Avenue, I-25 would bridge over the railroad tracks and run on the west side of the tracks, rejoining the existing I-25 alignment just south of Indiana Avenue. A large-scale map of the central area is shown in Exhibit 2-34.

The Modified I-25 Alternative was found to have unexpected benefits in the southern end of the corridor. By straightening I-25 at Ilex Street, I-25 would leave the existing alignment and continue south. The roadway no longer used as I-25 would be available to become an extension of Santa Fe Avenue (see Exhibit 2-34), providing a local road that drivers could use to travel north-south through Pueblo without having to drive on I-25. This extension is not possible under the Existing I-25 Alternative.

A second unexpected benefit of the Modified I-25 Alternative is that a new east-west direct connection would be made between Abriendo Avenue and Santa Fe Drive (see Exhibit 2-34). This connection would provide improved access between the neighborhoods west and east of I-25. An overview of the roadway, interchange, network, bicycle, and pedestrian features of this Build Alternative is provided and illustrated in Exhibit 2-33. Detailed drawings of the Modified I-25 Alternative are shown in Exhibits 2-26, 2-27, 2-34, and 2-35.

The Modified I-25 Alternative would generally match the current I-25 elevation in areas where the alignment follows the current highway alignment, except in one key area where a change in the vertical grades is necessary to address safety problems. Through the downtown area, I-25 will be 25 to 40 feet higher than it is currently, which will eliminate the steep vertical curves in this area while providing enough clearance for east-west traffic moving underneath I-25.

Mitigation elements such as noise walls are also included in the Modified I-25 Alternative preliminary design (as described in more detail in Section 3.5 Noise). In the area north of the Arkansas River, 10,525 linear feet of noise walls are proposed for residential areas along 31st Street, from 24th to 29th Street and from 20th to 21st Street, all west of I-25, along with residences on the east of I-25 from Beech Street to 1st Street. South of the Arkansas River, noise walls to the west of I-25 are proposed near the neighborhoods between Maryland Avenue and Reno Avenue, between Indiana Avenue and Illinois Avenue, and near the Evans Avenue Residences. Noise mitigation for Mineral Palace Park is also proposed; however, details of the type of noise mitigation will be determined during final design.

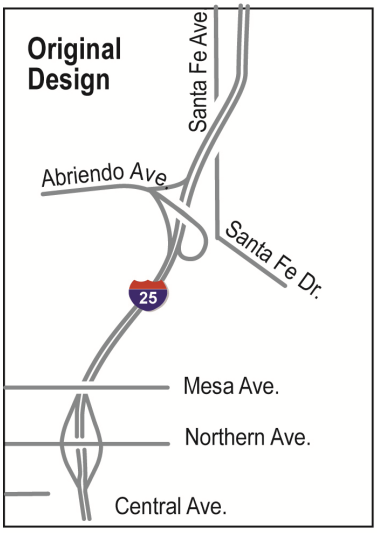
The water quality ponds proposed for the Modified I-25 Alternative are shown in Exhibits 2-26, 2-27, 2-34, and 2-35. Additional information regarding treatment of highway runoff is provided in Section 3.15 Water Quality.

EXHIBIT 2-31
Existing I-25 Alternative - Split-Diamond Interchange at Abriendo Avenue and Northern Avenue

Note: Graphics not to Scale.

Today

There is currently a "trumpet interchange" interchange at Abriendo Avenue. There is no access to the east of I-25, and no connection exists between Abriendo Avenue and Santa Fe Drive. Mesa Avenue and Northern Avenue bridge over I-25 and do not have interchanges with the highway. Northern Avenue is a major east-west arterial street that eventually becomes State Highway 78 at Prairie Avenue, which is about 1.7 miles west of I-25. The Central Avenue diamond interchange is 1 block south of Northern Avenue. Similar to the Abriendo Avenue interchange, the Central Avenue interchange does not provide access east of I-25 due to the presence of the Evraz Rocky Mountain Steel Mills property.



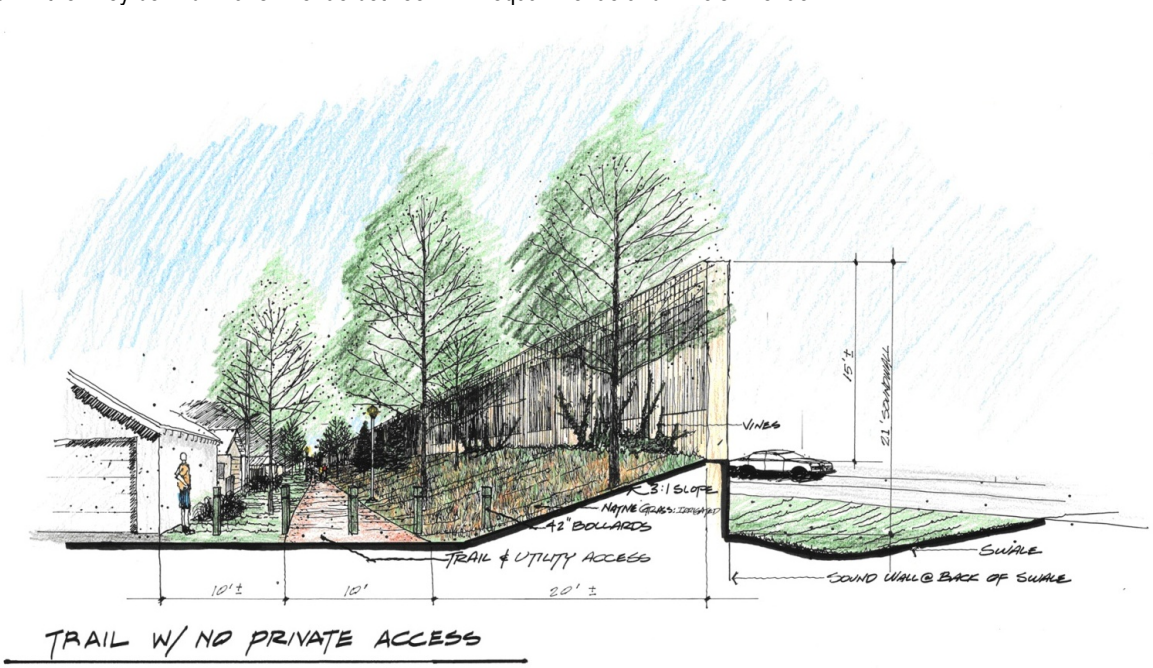
Original Design

To improve east-west local mobility in this area, the CDOT Project Team looked at two different options. For one option, the team designed an interchange at Northern Avenue, which is a major east-west arterial street, and closed the existing interchange at Central Avenue because Central Avenue is a discontinuous minor street. A second design option involved closing the existing Central Avenue interchange and constructing an interchange at Abriendo Avenue and Santa Fe Drive to provide the needed east-west local mobility (not shown on the map). When the CDOT Project Team took both options to the City planners and communities, neither option was preferred. The stakeholders recommended the design team look at other options, and changes were made accordingly.

Stakeholder Change to Original Design

When the CDOT Project Team took the original design to the stakeholders for their input, there were concerns about the lack of access at Abriendo Avenue. Stakeholders expressed the importance of access at Abriendo Avenue and at Northern Avenue. The CDOT Project Team found that providing a split-diamond interchange between Abriendo Avenue and Northern Avenue would enhance local mobility and reconnect Santa Fe Drive and Abriendo Avenue, re-establishing the east-west link that was lost when I-25 was constructed in the 1950s. As shown in the graphic, Mesa Avenue bridges over both I-25 and the interchange frontage roads.

EXHIBIT 2-32
Proposed Trail in the Alley behind Evans Avenue between Minnequa Avenue and Illinois Avenue



Refinement Elements of the Modified I-25 Alternative

Presentations were made to the stakeholders on several occasions, and their input was gathered on how the three alternatives would affect the neighborhoods, businesses, and cross-town travel. This input resulted in refinements to the two Build Alternatives that addressed concerns such as access into neighborhoods from local streets, access into neighborhoods from interchanges, noise wall heights next to homes, and access to destinations such as Runyon Field Sports Complex. Through this intensive stakeholder process, the Modified I-25 Alternative was refined in the following ways:

- The Dillon Drive extension was re-aligned on the west side of Fountain Creek. **Exhibit 2-30** describes and illustrates how stakeholder input changed the design.
- The one-way frontage roads were realigned within the downtown area to require less property and leave a better local street network. This request came from property owners and City staff. By bringing the frontage roads closer to the highway, fewer properties were impacted.
- The alley behind Evans Avenue between Minnequa Avenue and Illinois Avenue will be transformed into a new north-south trail on the west side of the noise wall. This design option was reviewed and endorsed by each individual homeowner along Evans Avenue. An illustration of the new trail is shown in **Exhibit 2-32**.
- Stanton Avenue was developed, beginning at a new intersection with Santa Fe Avenue at D Street, as shown in **Exhibit 2-34**. A new Stanton Avenue would run east from Santa Fe Avenue, go under I-25, and turn south at the Runyon Field Sports Complex. The road would continue south over the Arkansas River, intersect with Santa Fe Drive, and connect to the existing Santa Fe Avenue. This new configuration would allow for Locust Street to be connected to B Street west of Santa Fe Avenue. The request for this change came from the Bessemer Neighborhood east of I-25. Residents were extremely concerned about the neighborhood losing direct access from downtown. The request sent the CDOT Project Team “back to the drawing board” and resulted in Stanton Avenue being redesigned on a bridge over the Arkansas River.
- The split-diamond interchange configuration between Abriendo Avenue and Northern Avenue was included in this alternative based on stakeholder input, as described in **Exhibit 2-36**.

EXHIBIT 2-33
Modified I-25 Alternative

I-25 Roadway Features

Six lanes (three in each direction) just north of 29th Street to Pueblo Boulevard

Standard shoulders and acceleration/deceleration lanes

1. Straighten I-25 through downtown
2. Relocate I-25 to the east between Abriendo Avenue to Indiana Avenue to eliminate relocation of the UPRR

Interchange Features

3. Diamond interchange at US 50B with one-way frontage roads to 29th Street
4. Split-diamond interchange between 13th Street and 1st Street with one-way frontage roads between ramps; additional southbound and northbound exit ramps near 6th Street
5. Split-diamond interchange between Abriendo and Northern Avenues with one-way frontage roads connecting the ramps
6. Single-point diamond interchange at Indiana Avenue
7. Partial cloverleaf interchange at Pueblo Boulevard

Network Features

8. Extend Dillon Drive south from 26th Street to US 50B
9. Connect Abriendo Avenue and Santa Fe Drive (US 50C)
10. Extend Santa Fe Avenue from Ilex Street to Minnequa Avenue
11. Rebuild Stanton Avenue south over the Arkansas River, intersect with Santa Fe Drive and connect to Santa Fe Avenue

Bicycle and Pedestrian Features

12. Build sidewalks along Dillon Drive extension and US 50B bridge
13. Expand sidewalks on the Mesa Avenue overpass to connect Benedict Park to the west side of I-25
14. Build sidewalks along Stanton Avenue to connect to the HARP trail and Benedict Park
15. Build trail from just north of US 50B bridge to Mineral Palace Park
16. Construct a bike/pedestrian bridge between Mineral Palace Park and the Fountain Creek trail
17. Build trail between Runyon Field and J.J. Raigoza park

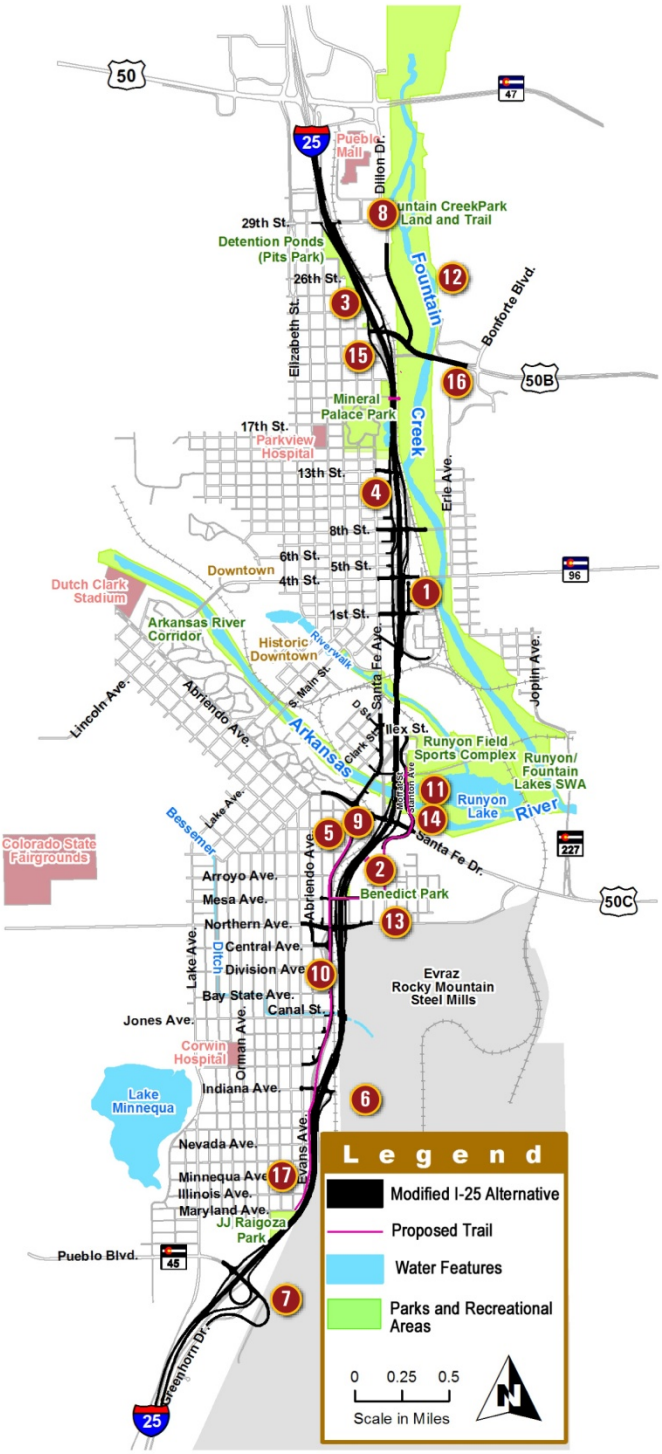
Other Features

Accommodates Circulator Bus System

Transportation Systems Management (TSM)

Travel Demand Management (TDM) (By Others)

Intelligent Transportation Systems (ITS)



*Detailed maps of the Modified I-25 Alternative are available in AppendixE.

EXHIBIT 2-34
Detailed Map of the Modified I-25 Alternative – Kelly Street to Jones Avenue

EXHIBIT 2-35
Detailed Map of the Modified I-25 Alternative – Jones Avenue to Milepost 94

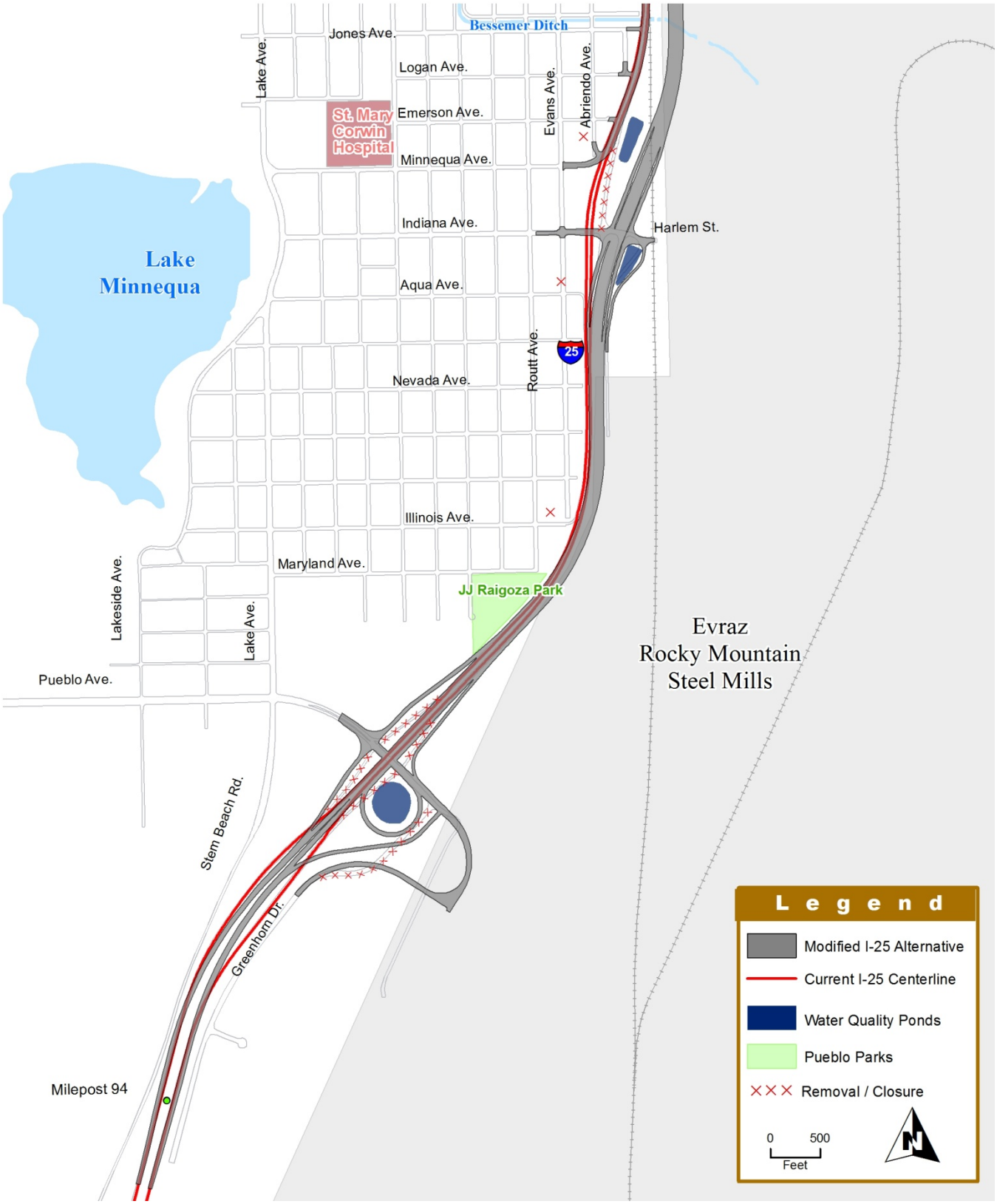


EXHIBIT 2-36
Modified I-25 Alternative Split-Diamond Interchange at Abriendo Avenue and Northern Avenue

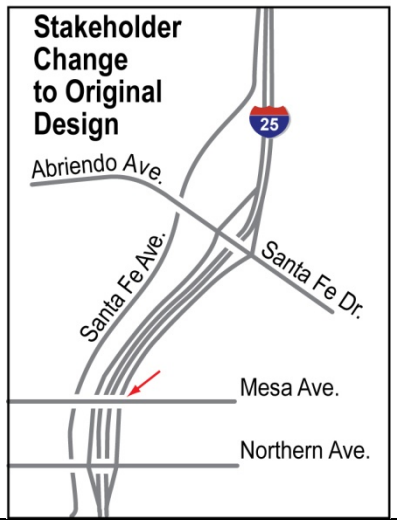
Note: Graphics not to Scale.

Today

There is currently a "trumpet interchange" interchange at Abriendo Avenue. There is no access to the east of I-25, and Abriendo Avenue and Santa Fe Drive do not connect. Mesa Avenue and Northern Avenue bridge over I-25 and do not have interchanges with the highway. Northern Avenue is a major east-west arterial street that eventually becomes State Highway 78 at Prairie Avenue, which is about 1.7 miles west of I-25. The Central Avenue diamond interchange is 1 block south of Northern Avenue. Similar to the Abriendo Avenue interchange, the Central Avenue interchange does not provide access east of I-25 due to the presence of the Evraz Rocky Mountain Steel Mills property.

Original Design

In the Modified I-25 Alternative, I-25 would leave its existing alignment and be relocated to the east for roughly 2 miles between Ilex Street on the north and just south of the entrance to the Evraz Rocky Mountain Steel Mills. At this southern location, the highway would rejoin the existing alignment through the rest of the project corridor. The existing I-25 roadway would be reused to provide an extension of Santa Fe Avenue. A split-diamond interchange between Abriendo Avenue and Northern Avenue was proposed. This would provide an opportunity for Abriendo Avenue to reconnect to Santa Fe Drive, as it did before I-25 was constructed in the 1950s. Within this design, the split-diamond frontage roads would intersect with Mesa Avenue and Northern Avenue. When this design was taken to the stakeholders, the nearby neighborhoods stated a strong preference for not providing access from I-25 to Mesa Avenue.



Stakeholder Change to Original Design

As shown in the graphic with a red arrow, the CDOT Project Team responded to the stakeholders and redesigned the split-diamond frontage roads to go under Mesa Avenue. This change appeals to the neighborhoods because they want to keep the Mesa Avenue bridge more pedestrian friendly to provide easy access between neighborhoods on both sides of I-25.

2.6.4 Bicycle and Pedestrian Accommodations for the Existing I-25 Alternative and the Modified I-25 Alternative

The Community Vision for the New Pueblo Freeway charges the CDOT Project Team with finding a multi-modal and forward-looking solution. Extensive bicycle and pedestrian facilities are planned as a part of both Build Alternatives.

A consistent concern heard from the citizens of Pueblo was that I-25 is a barrier between neighborhoods, particularly for bicycles and pedestrians. Parks and open spaces are on the opposite side of the highway and are only accessible by car. Trails were discussed extensively during the neighborhood meetings to refine the Build Alternatives, and the participants actively expressed the need for trails and sidewalks to reconnect neighbors, neighborhoods, parks, and businesses.

The completion of proposed trails and sidewalks will provide continuous bicycle and pedestrian access between 29th Street in the north to Pueblo Boulevard in the south. Neighbors will be able to access trails near their homes that will provide families with safe, non-motorized access to Mineral Palace Park, Benedict Park, JJ Raigoza Park, Historic Arkansas Riverwalk of Pueblo, the Runyon Field Sports Complex, the Runyon/Fountain Lakes State Wildlife Area, and the Fountain Creek Park Land and Trail system.

2.7 PRELIMINARY IDENTIFICATION OF A PREFERRED ALTERNATIVE

After careful consideration of the goals and objectives identified in Chapter 1 – Purpose and Need, as well as the potential impacts resulting from the No Action Alternative and both Build Alternatives (compared in Chapter 3 – Affected Environment and Environmental Consequences), FHWA and CDOT have preliminarily identified the Modified I-25 Alternative as the Preferred Alternative for improvements to I-25 through Pueblo, subject to public and agency review and comment. An overview of the Modified I-25 Alternative is shown in Exhibit 2-33.

2.7.1 Meeting the Project's Purpose and Need

The Modified I-25 Alternative is preliminarily identified by FHWA and CDOT as the Preferred Alternative for the New Pueblo Freeway. The rationale for this decision is based on how well each alternative meets the Purpose and Need for the project. Both Build Alternatives address the safety and capacity elements of the Purpose and Need. In addition, the Modified I-25 Alternative best meets the local and regional mobility elements as described below.

- Both Build Alternatives would restore some connectivity to neighborhoods that were previously divided by the original construction of I-25. However, the Modified I-25 Alternative provides additional connectivity to the north and south with the extension of Stanton Avenue north and west to Santa Fe Avenue and south to Santa Fe Drive. Residents of the Bessemer Neighborhood east of I-25 would be more connected to the rest of the neighborhood, as well as the community resources in the Grove Neighborhood and Downtown Neighborhood. This opportunity is not available under the No Action Alternative or the Existing I-25 Alternative.
- The Modified I-25 Alternative improves north-south local and regional mobility by converting the existing I-25 south of the Arkansas River to an extension of Santa Fe Drive to facilitate local trips more efficiently and maintain regional trips on I-25 (see Exhibit 2-34 for more detail). This opportunity is not available under the No Action Alternative or the Existing I-25 Alternative.
- The Modified I-25 Alternative improves east-west local mobility over the Existing I-25 Alternative by providing a more direct connection to I-25 at Abriendo Avenue. Under the Existing I-25 Alternative, drivers on Abriendo Avenue would have to turn at a signalized intersection at Santa Fe Drive to remain on Abriendo Avenue (see Exhibit 2-28). For the Modified I-25 Alternative, this is a direct connection that does not require a turn at a signal (see Exhibit 2-34).
- The extension of Santa Fe Avenue under the Modified I-25 Alternative provides a benefit to residences on the south end between Minnequa Avenue and Logan Avenue by returning the functionality of their properties. When I-25 was originally constructed, homes that had access to Schley Avenue lost that access, and their front doors were adjacent to the new highway. As a result, access to these homes was provided only through the back alley. With the extension of Santa Fe Avenue, access to the front of these homes would be restored.

2.7.2 Other Factors Considered

In addition to the Purpose and Need, other factors were considered in the identification of the Preferred Alternative,

including a comparison of potential impacts to the environment under each alternative; the cost effectiveness of each alternative; the recommendation of local officials; and consistency with other regulatory requirements, in particular Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 404 of the Clean Water Act, both of which have specific requirements that must be met by the Preferred Alternative. Each of these elements is summarized below.

- Cost. The construction cost of each alternative was considered; however, the costs between the two alternatives were too similar to be a differentiating factor. The Existing I-25 Alternative would cost approximately $710.1 million to construct, and the Modified I-25 Alternative would cost approximately $760.6 million to construct.
- Support from Local Officials. The City Parks and Recreation Department expressed support for the Modified I-25 Alternative in a letter dated July 13, 2010. Preference for the Modified I-25 Alternative is based on improved trail connections and facilitation of north-south movement in the corridor. Other City departments will have the opportunity to comment on the Preferred Alternative during the formal comment period for the DEIS. City officials participated in the development of the Build Alternatives. Support for the Modified I-25 Alternative has also been provided by the Project Leadership Team. (For information on the membership, roles and responsibilities, and contributions of this team, refer to Chapter 6 – Comments and Coordination.)
- Support from the Public. The CDOT Project Team used an extensive public involvement approach during the development of each alternative, as discussed earlier in this chapter and in Chapter 6 – Comments and Coordination. Throughout the many opportunities to provide input, the public has consistently expressed preference for the Modified I-25 Alternative.
- Project Impacts. Both Build Alternatives share the same impacts in the North Area and South Area of the project. The only difference in impacts occurs in the Central Area of the project between Ilex Street and the Evraz Rocky Mountain Steel Mills. These differences are as follows:
  - Wetlands impacts would differ by less than 1 acre, with the Modified I-25 Alternative impacting 0.88 acre more wetlands area than the Existing I-25 Alternative.
  - Impacts to waters of the U.S. (as defined by the U.S. Army Corps of Engineers) are nearly equal for the two alternatives. Under the Existing I-25 Alternative, the single bridge piers currently in place at the Arkansas River crossing would be removed and replaced; however, they would be placed in the same locations as the existing piers and designed to occupy a slightly smaller footprint. For the Modified I-25 Alternative, 18 new bridge piers would be placed in the Arkansas River to support the bridges for I-25, two ramps, and the extension of Stanton Avenue, resulting in 0.02 acre of impacts to the Arkansas River.
  - Although the Modified I-25 Alternative would impact seven additional historic properties compared to the Existing I-25 Alternative, the Modified I-25 Alternative would have fewer impacts to properties within the Steelworks Suburbs Historic District, with 56 being fully or partially acquired compared to 68 properties under the Existing I-25 Alternative.
  - Both Build Alternatives would impact Benedict Park. While the initial impact would be greater under the Modified I-25 Alternative, the Modified I-25 Alternative allows for the construction of a new 4.30-acre park to replace the existing Benedict Park, resulting in a net benefit to the park. The Existing I-25 Alternative would reduce the size of the existing park to 1.50 acres and create a new 2.55-acre park across the roadway from the existing Benedict Park.
  - Although the Modified I-25 Alternative would impact more of the Runyon/Fountain Lakes State Wildlife Area than the Existing I-25 Alternative, the impacts are minor and do not affect the recreational use.
  - There is very little difference between the Existing I-25 Alternative and Modified I-25 Alternative in terms of impacts to other resources. Both alternatives would impact minimal amounts of wildlife habitat, including Arkansas darter and plains leopard frog habitat. The Modified I-25 Alternative would impact one additional hazardous material site than the Existing I-25 Alternative, but it would also require less impervious surface area (3 acres less than the Existing I-25 Alternative), which would result in lower pollutant levels than the Existing I-25 Alternative.

With mitigation, most project impacts can be avoided or minimized.

- **Section 4(f) of the U.S. Department of Transportation Act of 1966.** Section 4(f) stipulates that FHWA and other Department of Transportation agencies cannot approve the use of land from publicly owned parks or recreational areas, wildlife or waterfowl refuges, or public or private historical sites unless the following conditions apply:
  - A determination is made that there is no feasible and prudent alternative to the use of land from the property, and the action includes all possible planning to minimize harm to the property resulting from such use; or
  - The use of property, including any measures to minimize harm, will have a *de minimis* impact on the property.

  Section 4(f) legislation requires the selection of an alternative that avoids the use of Section 4(f) property if that alternative is deemed feasible and prudent. The Section 4(f) regulation states that, if there is no feasible and prudent alternative that avoids use of Section 4(f) properties, FHWA "may approve only the alternative that causes the least overall harm in light of the statute's preservation purpose" (23 Code of Federal Regulations [CFR] 774).

  Based on the Section 4(f) Evaluation, included here as **Chapter 4 – Section 4(f) Evaluation**, the Modified I-25 Alternative, with the proposed mitigation, appears to cause the least overall harm to Section 4(f) properties. This identification of the Modified I-25 Alternative is subject to public and agency review and comment on the DEIS. Of the 39 properties for which a transportation use has been identified, a comparison of the Build Alternatives indicates that the Existing I-25 Alternative would result in greater harm to five properties. The Modified I-25 Alternative would result in greater harm to four properties. For all other properties, the relative harm is considered equal. The key differences are described below.

  Mitigation for impacts to Benedict Park included in the Modified I-25 Alternative would provide a larger contiguous park (4.30 acres compared to the 1.92-acre existing park), more amenities, and improved access, resulting in a net benefit to the park and its users. This park plan is made possible through property acquisition and is only feasible under the Modified I-25 Alternative, which requires a full acquisition of the current Benedict Park. The Modified I-25 Alternative avoids impacts to the mainline of the UPRR and avoids the High Line Rail, a unique and visible feature of the historic Colorado & Wyoming Railroad. In addition, as previously noted, the Modified I-25 Alternative has fewer impacts to properties within the Steelworks Suburbs Historic District.

- **Section 404 (b)(1) Guidelines.** Waters of the U.S., including wetlands, are regulated by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

  Section 404 (b)(1) guidelines require that the Preferred Alternative selected be the least environmentally damaging practicable alternative (LEDPA), that is, the practical alternative that results in a proposed discharge (of dredged or fill material) that would have the least adverse effect on the aquatic environment.

  Generally, the analysis of reasonable alternatives provides the information for the evaluation of practicable alternatives under the 404 (b)(1) guidelines. The overall project purpose is used to determine whether practicable alternatives exist to a proposed project. According to 40 CFR 230.10(a)(2), "[a]n alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." No discharge of dredged or fill material will be permitted "if there is a practicable alternative to the proposed discharge that would have a less adverse impact on the aquatic ecosystem."

SECTION 404(B)(1) GUIDELINES OF THE CLEAN WATER ACT

What is the LEDPA?

The least environmentally damaging practicable alternative (LEDPA) is the practical alternative that results in a proposed discharge (of dredged or fill material) that would have the least adverse effect on the aquatic environment.

When is an alternative considered practicable?

An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. [40 Code of Federal Regulations 230.10(a)(2)]

As described in Chapter 3 – Affected Environment and Environmental Consequences, the alternatives developed for the project have avoided the majority of wetlands and waters of the U.S. within the study area, as summarized below.

- Wetlands impacts differ by less than 1 acre, with the Modified I-25 Alternative impacting 0.88 acre more wetlands area than the Existing I-25 Alternative. The wetland resources impacted by both Build Alternatives are unavoidable and may be mitigated within the watershed, potentially providing wetlands of equal or greater functional value than those impacted.
- Impacts to waters of the U.S. (as defined by the U.S. Army Corps of Engineers) are nearly equal for the two Build Alternatives. Under the Existing I-25 Alternative, the single bridge piers currently in place at the Arkansas River crossing would be removed and replaced; however, they would be placed in the same locations as the existing piers and designed to occupy a slightly smaller footprint. For the Modified I-25 Alternative, 18 new bridge piers would be placed in the Arkansas River to support the bridges for I-25, two ramps, and the extension of Stanton Avenue, resulting in 0.02 acre of impacts to the Arkansas River.
- Although the Existing I-25 Alternative has the least adverse effect on the aquatic environment, the Modified I-25 Alternative (with the proposed mitigation) appears to cause the least overall harm to Section 4(f) properties. The selection of the Existing I-25 Alternative as the LEDPA would cause non-compliance with Section 4(f) legislation and thus is not considered practicable. Therefore, FHWA and CDOT have identified the Modified I-25 Alternative as the LEDPA for detailed evaluation, and this was concurred upon by the U.S. Army Corps of Engineers in December 2010. This coordination is documented in Appendix B.

2.7.3 Conclusion

FHWA and CDOT have preliminarily identified the Modified I-25 Alternative as the Preferred Alternative for the New Pueblo Freeway because it best meets the project Purpose and Need and, with the proposed mitigation, appears to cause the least overall harm to Section 4(f) properties. This is consistent with the requirements of Section 4(f) of the U.S. Department of Transportation Act of 1966 and Section 404 (b)(1) of the Clean Water Act. Feedback provided during the DEIS public review process will be considered by FHWA and CDOT prior to making the final selection of the Preferred Alternative in the Record of Decision (ROD).

Implementation of the project is estimated to cost approximately $760.5 million (based on preliminary design estimates in 2010 dollars), including design, ROW acquisition, and construction. This comprises more than the $120 million in funds from the Bridge Enterprise Program (funded by State Bill [SB] 09-103 FASTER legislation), which is identified in PACOG's *Pueblo Area 2035 Long Range Transportation Plan* (PACOG, 2008) fiscally constrained plan. The scale of the preliminarily identified Preferred Alternative and funding limitations dictate that the project be constructed in phases. Three phases, designated as Phase 1, Phase 2, and Phase 3, are proposed; phasing of the project is discussed in greater detail in Chapter 5 – Phased Project Implementation.

Phase 1, currently the only funded phase of the project, would be constructed first and consists of three packages that include the replacement of the structurally deficient bridges at Ilex Street, Northern Avenue, and Indiana Avenue. These packages were included in the first construction phase because these three bridges have the lowest sufficiency rating of all the bridges in the corridor (CH2M HILL, 2011a). These improvements are considered a reasonable expenditure of funds and would incrementally contribute to addressing the Purpose and Need of the project even if no additional transportation improvements are made in the area. The improvements proposed for each package in Phase 1 would have independent utility in that they would provide transportation benefits, would be a reasonable expenditure of funds even if no additional improvements are made in the area, and each element connects logical termini.

Because this DEIS addresses regional transportation needs, the study considered environmental matters on a broad scope. More detail on project cost and phased implementation is provided in Chapter 5 – Phased Project Implementation.