

Land Use Impacts Technical Memorandum

I-25 Improvements Through the Colorado Springs Urbanized Area Project

CDOT Project No. IM 0252-316

Project Control No. 12210

Colorado Department of Transportation

February 2003
(Updated December 2003)

Table of Contents

1.0 Project Description (Proposed Action)	1
2.0 Existing Conditions	2
3.0 Methodology	2
4.0 Impacts of No-Action Alternative	2
5.0 Direct Impacts of Proposed Action	5
6.0 Indirect Impacts of Proposed Action	11
7.0 Mitigation	11

1.0 Project Description (Proposed Action)

The Proposed Action would widen Interstate 25 (I-25) from South Academy Boulevard (Exit 135) to State Highway 105 (Exit 161, Monument), a distance of approximately 26 miles. Within these limits, a six-lane cross-section (three through-lanes in each direction) would be built south of the U.S. Highway 24 Bypass to South Academy and north of Briargate to SH 105. Additionally, for the 12-mile central portion from the US 24 Bypass (Exit 139) to Briargate Parkway (Exit 151), the Proposed Action consists of an eight-lane cross section (four through-lanes in each direction).

In the eight-lane cross-section, the inside (left-most) lane in each direction would be open to general traffic during off-peak hours; during morning and evening peak hours, this lane would be reserved for use by carpools and buses only. To accommodate this flexible use, the high-occupancy-vehicle (HOV) lane would not be barrier-separated from the general-purpose lanes, but would be demarcated by appropriate signage and striping.

The non-barrier HOV treatment also allows for decommissioning of the lanes back to general-purpose operation in the event that the lanes do not result in adequate peak-period usage to justify HOV operations. This will depend in part upon public willingness to fund expanded transit operations that would use the HOV lanes. The HOV lanes are projected to be marginally successful without transit system expansion, but could become solidly successful if used by buses on hypothetical future routes (currently unfunded). Express bus service between Colorado Springs and Monument began in 2002 as a 3-year "demonstration project."

In conjunction with the additional laneage, the Proposed Action includes interchange reconstruction at several locations. These include major reconstruction of existing interchanges at:

- Exit 141 – Cimarron (U.S. Highway 24)
- Exit 142 – Bijou Street
- Exit 145 – Fillmore
- Exit 147/148 – North Nevada Avenue and Rockrimmon Boulevard (consolidated)
- Exit 156 – North Gate Road, plus freeway-to-freeway ramps for Powers Boulevard
- Exit 158 – Baptist Road

For each of the interchange reconstruction projects, numerous design alternatives were considered and evaluated. These alternatives were presented for review and input at advertised public meetings.

Additionally, minor geometric changes will be made at Exit 146, Garden of the Gods Road. The existing southbound-only ramps at Exit 147 A (Corporate Centre Drive) will be closed, with access via a local street connection to the reconfigured Nevada/Rockrimmon interchange. In conjunction with freeway widening on U.S. Air Force Academy property, the Ackerman Overlook will be relocated to a safer location.

2.0 Existing Conditions

As indicated in Figure 1, the predominant land uses in the northern portion of the project area, from SH 105 to the Interquest Interchange, are agricultural, vacant, and low-density residential. This area is dominated by the U.S. Air Force Academy to the west. To the east, the area is primarily agricultural, however low-density residential development is increasing. From the Interquest Interchange to Garden of the Gods Road, the corridor is characterized by commercial and industrial land uses to the east, and low- to medium-density residential to the west, with an area of commercial development along west Garden of the Gods Road. From Garden of the Gods Road to South Academy Boulevard, predominant land uses include industrial/commercial and park land to the east of I-25, and medium-density residential and commercial property to the west. South of Academy Boulevard, land use returns to a mix of commercial and industrial to the east, and low- to medium-density residential and vacant land to the west of I-25.

At the southern end of the project, land to the east of I-25 is predominantly medium- to low-density residential with Fort Carson to the west. Figure 2 indicates a similar pattern of land use proposed for the year 2020. Year 2020 land use information has been used for this analysis because it is the latest available land use data.

3.0 Methodology

Data on existing and proposed land use were obtained from the following sources:

- *City of Colorado Springs Comprehensive Plan*
- *Air Force Academy Comprehensive Plan*
- *City of Colorado Springs Intermodal Transportation Plan*
- *PPACG Destination 2025*
- *Master Plan for the Pikes Peak Greenway*
- *El Paso County Parks, Trail, and Open Space Master Plan*
- *El Paso County Tri-Lakes Comprehensive Plan*

Regional, county, and municipal planning documents were reviewed to determine the consistency of the I-25 Improvement Project with current land use goals and objectives.

4.0 Impacts of No-Action Alternative

Without additional corridor improvements, further deterioration of existing levels of service (LOS) along the I-25 Corridor would occur due to the increase in traffic volumes. The congestion and delays currently experienced during peak traffic periods would become much worse and would extend through more hours of the day. As a result of the increase in congestion and delays, air quality could potentially deteriorate to the degree that the region may fail to meet air quality conformity. As a result, the No-Action Alternative would be inconsistent with comprehensive and land use plans for the area.

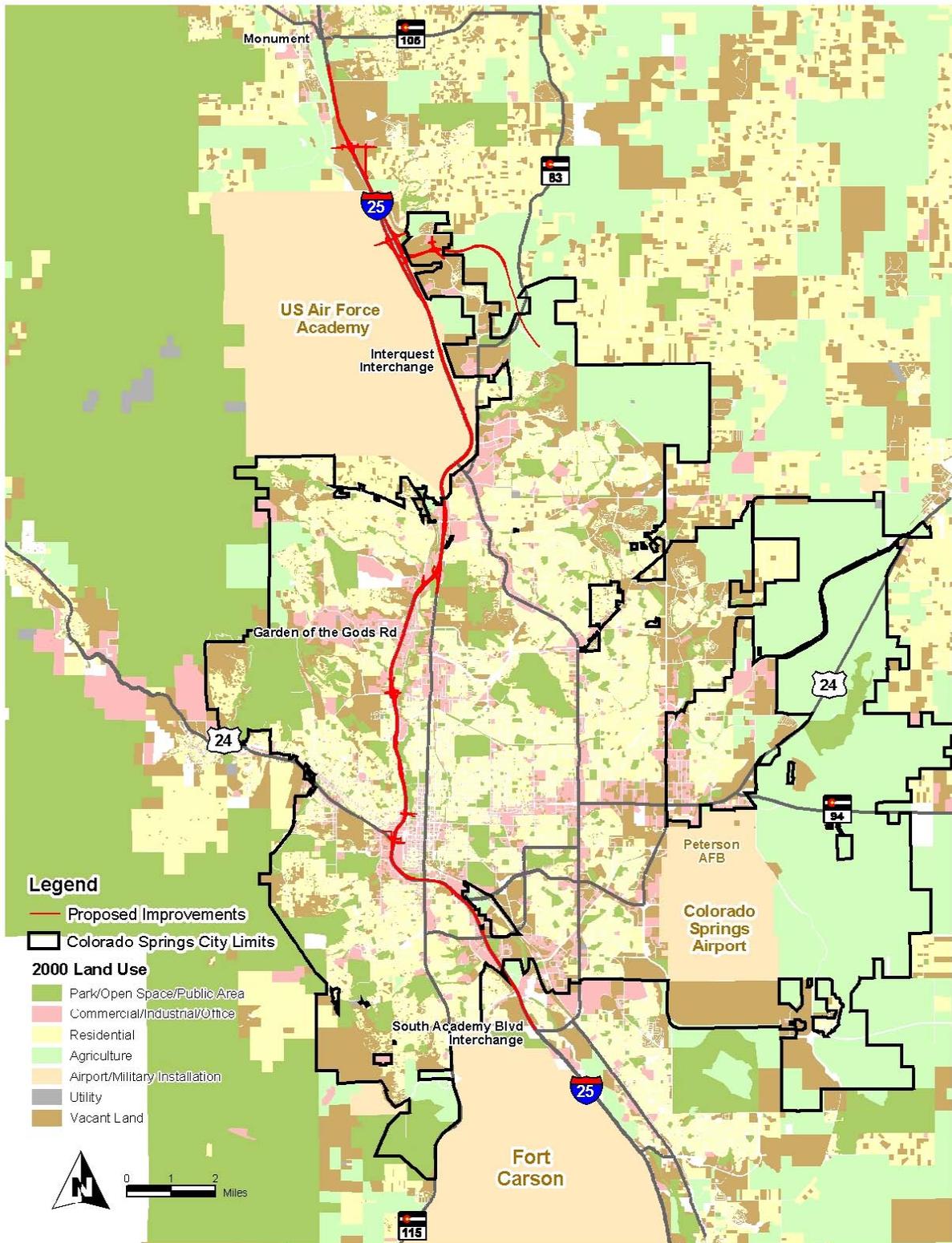


FIGURE 1
Land Use as of Year 2000

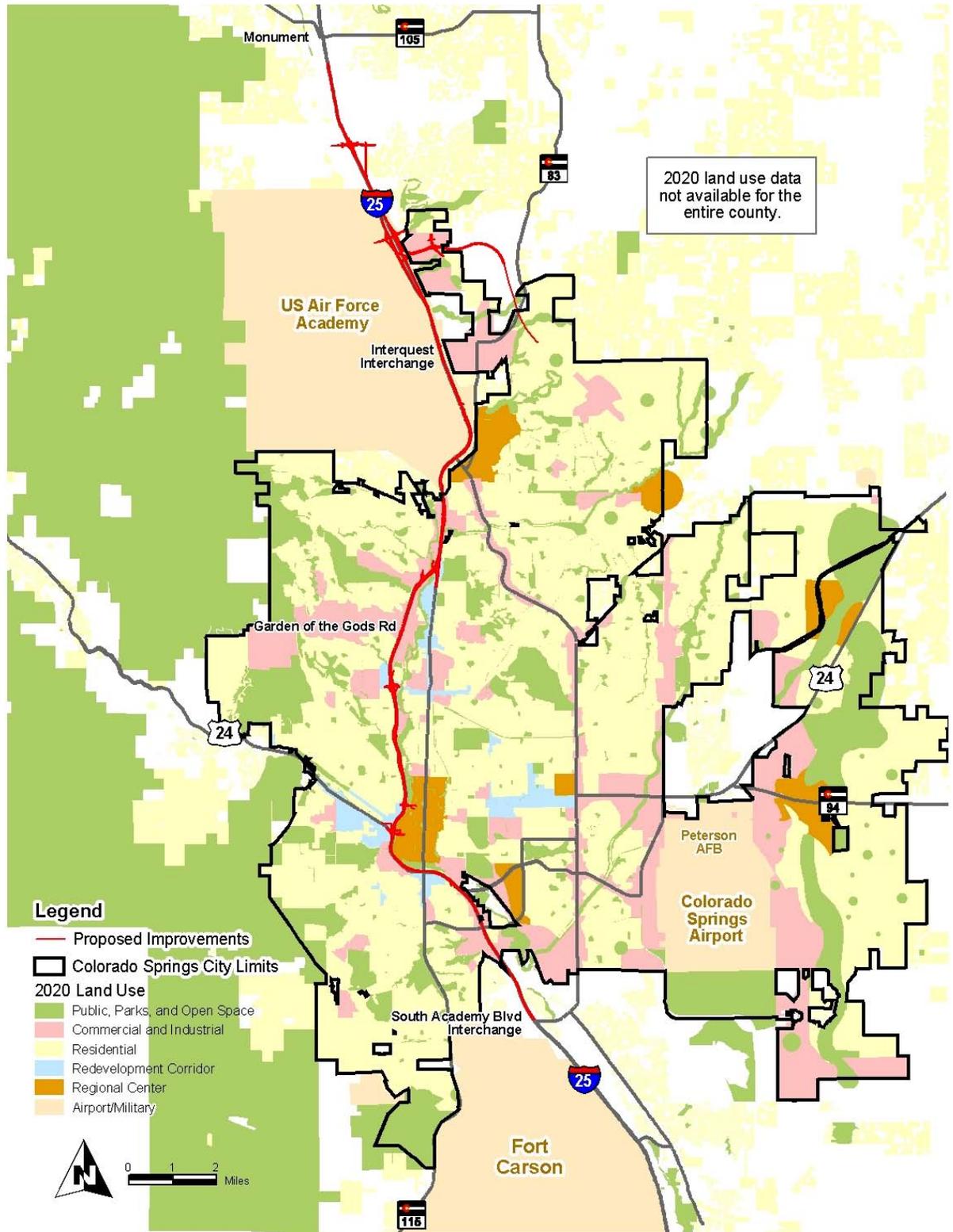


FIGURE 2
Proposed Land Use as of Year 2020

Regional and local community plans are developed to ensure economic, social and physical health, as well as the safety and welfare of the community. Deviations from these plans may lead to the degradation of the community, reduced employment opportunity, inefficient development of infrastructure, and reduced sustainability. Due to the relationship between access and development, the provision of transportation infrastructure is an important element in land use planning. It is therefore important that the vision for land use is closely correlated with proposed transportation improvements. To assure this condition, the *PPACG Destination 2025 Plan Regional Transportation Plan* is closely correlated to local population, employment and land use projections prepared by local member governments.

5.0 Direct Impacts of Proposed Action

This section considers potential impacts to land use and zoning within the I-25 corridor by the Proposed Action. Because the project involves improvements to an existing facility and the amount of additional right-of-way required is minimal, the project will not open new areas for development or directly cause a loss of farmland. The Proposed Action will address transportation needs caused by increased growth by providing improved transportation for current and proposed El Paso County land use.

Land use planning programs rely on reasonable consistency between transportation projects and comprehensive land use plans. Without that consistency, it is difficult to accomplish desired planning objectives. Land use along the I-25 corridor is guided by numerous plans. Table 1 identifies land use, transportation, and other plans that affect development within the I-25 corridor. The table also indicates the specific elements of each plan that relate to I-25, and addresses the consistency of the project with the plan's goals and objectives. The purpose of the consistency determination is to assure that the final project conforms to and supports the planning objectives of the affected area.

TABLE 1
Consistency of I-25 Improvements with Land Use Plans

Plan	Relevance to I-25 Improvements	Consistency of I-25 Improvements with Plan
City of Colorado Springs Comprehensive Plan	<p>Coordinating and linking land use and transportation planning is a prime objective.</p> <p>Provides key policies and strategies encourage the following:</p> <ul style="list-style-type: none"> • Regional Transportation System • Trails and Open Space System • Natural/Scenic Greenways • Land Use and Intermodal Transportation System • Pedestrian- and transit-oriented development • Neighborhood connectivity • Mutually supportive transportation and land use • Integrated regional and local transportation systems • Accessibility to trails • Alternative modes • Integrated park system (connected by trails) • Protection of parks, trails, open space 	<p>Existing and planned land uses were considered when improvements to I-25 were designed for the Proposed Action.</p> <p>I-25 and interchange improvements will facilitate movement between I-25 and surface streets, creating a more efficient regional transportation system.</p> <p>Improvements will provide improved pedestrian and bicycle access across I-25 at various interchanges.</p> <p>I-25 improvements will have minimal impacts on trails, open space, and parks.</p> <p>I-25 improvements will provide two new trail connections—Smith Creek Trail at the Northgate interchange and Midland Trail at the Cimarron Interchange.</p> <p>I-25 improvements will maintain and improve trail crossings in project area.</p> <p>I-25 improvements include HOV lanes between Briargate and US 24 Bypass for use during peak periods.</p> <p>I-25 improvements include noise mitigation at three locations to protect uses in Monument Valley Park and visual screening for one location in Monument Valley Park.</p>
City of Colorado Springs Intermodal Transportation Plan	<p>Compiles information from Major Thoroughfare Plan, Truck Route Plan, Transit Plan, and Bicycle Plan, and incorporates a plan for travel demand management programs and pedestrian facilities.</p> <p>Plan Objectives:</p> <ul style="list-style-type: none"> • Protect pedestrian safety and provide motility, particularly in high pedestrian use areas such as schools, residential neighborhoods, parks, and other community gathering places. • Preserve mobility for emergency response vehicles and maintain emergency access to people and property. 	<p>Improvements will provide improved pedestrian and bicycle access across I-25 at various interchanges and enhance pedestrian mobility and safety.</p> <p>Improved capacity will preserve or improve mobility for emergency response vehicles traveling along or across I-25.</p> <p>Adjacent land use was an important consideration in the design of I-25 main line and interchange improvements.</p>

TABLE 1
 Consistency of I-25 Improvements with Land Use Plans

Plan	Relevance to I-25 Improvements	Consistency of I-25 Improvements with Plan
City of Colorado Springs Intermodal Transportation Plan (concluded)	<ul style="list-style-type: none"> • Incorporate emergency response goals into long-range planning and current projects. • Work with Public Safety agencies to ensure adequate consideration of emergency response needs. • Enhance opportunities for pedestrian access and movement by developing, promoting, and maintaining pedestrian networks and environments. • Include improvements to pedestrian facilities as part of City transportation improvement projects. • Promote and encourage bicycling as a mode of transportation not restricted to recreation • Pursue strategies to reduce or eliminated areas of conflict between modes (i.e., bicycles and cars) • Design and maintain transportation facilities to be compatible with adjacent land uses. • Coordinate and integrate the planning and development of transportation system facilities to meet the needs of users of various transportation modes. • Review and update design standards for the arterial roadway system to ensure compliance with AASHTO design standards and accommodation of bicycle and pedestrian requirements. • Major area of public concern is the existence of major physical barriers to east-west bicycle travel. • Improve coordination of multi-use trail crossings of roadways. 	<p>Roadway improvements and interchanges were designed based on an extensive public outreach program that solicited and addressed community concerns and avoided, minimized, or mitigated community impacts.</p> <p>The I-25 Improvements Project will provide access for multi-use trail crossings at numerous cross streets and drainages.</p> <p>I-25 improvements will provide two new trail connections—Smith Creek Trail at the Northgate interchange and Midland Trail at the Cimarron Interchange.</p>
USAFA General Plan	<p>Key Strategies:</p> <ul style="list-style-type: none"> • Maintain land east of I-25 as a buffer zone. • Maintain visual quality of Academy entry sequence at the highest level (from freeway, to interchange to access road to Academy gate) • Maintain visual quality of approach sequence to the Academy sub areas at the highest level 	<p>Personnel from the USAFA have participated in the design of project facilities affecting the Academy throughout the development process. Close communication with USAFA staff has resulted in a design that is consistent with the USAFA General plan</p>

TABLE 1
Consistency of I-25 Improvements with Land Use Plans

Plan	Relevance to I-25 Improvements	Consistency of I-25 Improvements with Plan
USAFA General Plan (concluded)	<ul style="list-style-type: none"> Principle 1 - Preserve important views and vistas (including key points along I-25). General recommendation: Relocate existing I-25 airfield overlook to a safer vantage point and a more positive overall image of the Academy. 	I-25 improvements project will relocate the existing I-25 airfield overlook to a safer location and will provide a better location for a scenic overlook .
El Paso County Policy Plan	Establishes broad goals and policies for various issues and resources, including transportation. However, the plan does not specifically reference I-25.	The proposed improvements are consistent with the broad transportation goals provided in the plan.
PPACG Destination 2025	<p>Key Elements:</p> <ul style="list-style-type: none"> Mobility Goal Objective 8: Protect and enhance bicycle and pedestrian safety. Mobility Goal Objective 12: Plan, design, build, and manage the capacity of the transportation system to be consistent with approved land use and transportation plans. 	<p>Improvements will provide improved pedestrian and bicycle access across I-25 at various interchanges and enhance pedestrian mobility and safety.</p> <p>Adjacent land use was an important consideration in the design of I-25 main line and interchange improvements.</p>
Master Plan for the Pikes Peak Greenway (PPG)	<p>I-25 presents an imposing barrier to residents accessing PPG from the west.</p> <p>Major Theme:</p> <p>The PPG should establish and maintain a mutually supportive relationship with I-25. Adverse impacts on the PPG should be mitigated and positive opportunities that would enhance that relationship should be pursued.</p> <p>Key recommendations:</p> <ul style="list-style-type: none"> Provide pedestrian and bicycle access points across I-25 at adequate, regular intervals along the PPG corridor. Enhance and integrate the visual relationship between PPG and I-25 by placing compatible, supplementary landscaping in visibly strategic locations. Promote attractive design features such as lighting and landscaping along I-25 that are visible from the PPG corridor. Where appropriate, frame and enhance views of the creek by motorists on I-25. Incorporate the greenway landscaping and linear park theme into the proposed buffer strip on the west side of I-25, provide direct access from the buffer strip across I-25 to the PPG corridor, and promote the development of a bike path within the strip. Make park-and-ride south of Woodmen Road into a multi-modal access point. 	<p>Improvements will provide improved pedestrian and bicycle access across I-25 at various interchanges and enhance pedestrian mobility and safety.</p> <p>I-25 will have minimal impacts on trails and open space and Parks.</p> <p>Adjacent land use was an important consideration in the design of I-25 main line and interchange improvements.</p> <p>An extensive analysis of visual impacts was conducted for this EA.</p> <p>The I-25 improvements will maintain or improve existing pedestrian access across I-25.</p> <p>I-25 improvements will provide two new trail connections—Smith Creek Trail at the Northgate interchange and Midland Trail at the Cimarron Interchange.</p>

TABLE 1
Consistency of I-25 Improvements with Land Use Plans

Plan	Relevance to I-25 Improvements	Consistency of I-25 Improvements with Plan
Master Plan for the Pikes Peak Greenway (PPG) (concluded)	<ul style="list-style-type: none"> • Investigate opportunities to link the west side via an on-street bike route along Fontanero Street, a new underpass or overpass connecting the Mesa Valley Trail, and other possible pedestrian crossings associated with the I-25 improvements. • Assure that re-construction of I-25, the I-25/Bijou Street Interchange, and Colorado Avenue is carried out in a way that enhances the creek corridor including attractive structures, adequate room for trails, access improvements, and provision of vegetated, landscaped buffer zones between new improvements and the stream edge. • Promote more landscaping along the east side of I-25 including tree plantings with an “urban riparian forest theme” – enhancing, featuring, and expanding the existing cottonwood/willow forest along the stream. • Utilize CDOT trail segment along the northbound exit ramp from the Hwy 24 Bypass to I-25. 	
El Paso County Parks, Trail, and Open Space Master Plan	The proposed 3-mile trail connecting the New Santa Fe Trail and Fox Run Park would cross I-25 near Baptist Road.	The I-25 improvements would not preclude this proposed trail.
El Paso County Tri-Lakes Comprehensive Plan	<p>Lack of pedestrian and bicycle trails identified as problematic.</p> <p>Key Themes:</p> <ul style="list-style-type: none"> • To establish a visual overlay to preserve the unique character of the I-25 corridor from County Line Road to the Academy Boulevard exit. • To visually enhance and define I-25 as the entry to the County, the Town of Monument, and the City of Colorado Springs. <p>Key Objectives/Actions:</p> <ul style="list-style-type: none"> • Support upgrading or replacing the I-25 Interchanges at SH105 and Baptist Road. • Preserve I-25 corridor for future expansion and transportation options. • Amend the 2020 Long Range Transportation Plan to include an I-25 Interchange at Higby Road. 	<p>Improvements will provide improved pedestrian and bicycle access across I-25 at various interchanges and enhance pedestrian mobility and safety.</p> <p>An extensive analysis of visual impacts was conducted for this EA.</p> <p>The project includes redesigned Northgate and Baptist Interchanges.</p> <p>I-25 improvements will provide two new trail connections—Smith Creek Trail at the Northgate interchange and Midland Trail at the Cimarron Interchange.</p> <p>The project incorporated an extensive public involvement process.</p>

TABLE 1
 Consistency of I-25 Improvements with Land Use Plans

Plan	Relevance to I-25 Improvements	Consistency of I-25 Improvements with Plan
El Paso County Tri-Lakes Comprehensive Plan (concluded)	<ul style="list-style-type: none"> • Provide for noise attenuation, safety, and visual screening along transportation corridors by incorporating techniques such as setbacks, buffers, berms, and vegetation treatments. • Promote cooperation between private land owners, developers, El Paso County, the Town of Monument, the City of Colorado Springs, CDOT, and the U.S. Air Force Academy to coordinate planning and development of the I-25 corridor. • Plan for and protect the functional integrity of the transportation corridors that parallel I-25. • Reduce adverse visual impact from signs, communication towers, lighting, and land uses along the I-25 Corridor. • Incorporate provisions for an I-25 Visual Overlay Zone as part of the El Paso County Land Use Development Code and Subdivision Regulations. • Incorporate provisions for native landscaping as part of future development along the I-25 corridor. 	

6.0 Indirect Impacts of Proposed Action

According to Council on Environmental Quality (CEQ) regulations, indirect effects are caused by the action and occur later in time or farther in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. (40 CFR 1508.8)

The construction of transportation facilities is often considered a contributor to urban sprawl, as improved access to vacant land under some circumstances makes it prime for development. This is often referred to as induced growth, a situation where growth is attracted to an area due to easy access and limited traffic congestion. This concern is especially applicable to the construction of new access to undeveloped areas, assuming that all of the other supporting development stimulants are in place.

Generally, these impacts are induced by the initial action. The Proposed Action will provide the beneficial effect of improving mobility throughout the corridor. The result of improved mobility and travel times on the existing roadway may contribute to some development and changes in land use; however, the role of transportation improvements in creating these impacts is unclear.

Community development is the result of the interactions among a complex system of economic, social, and political variables. Land use and comprehensive planning processes, zoning, and building permit approvals should consider these variables, including existing and proposed transportation facilities, and encourage appropriate development of the area.

El Paso County is desirable as a residential community with or without roadway improvements. The per capita income of El Paso County is relatively high, and the historic and future growth trends are among the largest in the state. The region's growth will be influenced by numerous factors such as impacts to the economy, the cost of housing, and other capital projects. In addition, the area from the North Academy Interchange to the South Academy Interchange is generally well developed. It is unlikely that land use in this area will be influenced by highway improvements.

7.0 Mitigation

The Proposed Action is consistent with existing land use plans and the PPACG *Destination 2025 Regional Long Range Transportation Plan*. No mitigation is required.

