

# **Socioeconomic 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)



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# 1.0 Project Description

## 1.1 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

### 2.1 Population and Neighborhoods

#### 2.1.1 Population

With a population that is projected to reach 604,000 by the year 2010, El Paso County is one of the fastest growing counties in the United States. Table 1 lists the population estimates for Colorado Springs and El Paso County since 1960 and provides population forecasts provided by the Pikes Peak Area Council of Governments (PPACG) for 2010 and 2025.

TABLE 1  
Populations of Colorado Springs and El Paso County (Selected Years)

Year	City of Colorado Springs	El Paso County
1960	70,194	143,742
1970	135,501	235,972
1980	215,150	309,424
1990	281,140	397,014
1991	290,733	403,731
1992	298,755	420,705
1993	307,126	435,018
1994	315,590	454,220
1995	325,000	465,885
1996	323,185	472,924
2000	360,890	516,929
2010*	422,800	604,000
2025*	501,300	718,800

Source: U.S. Census Bureau (See Colorado Springs web site: <http://www.springsgov.com>)

\* PPACG *Destination 2025* (2001)

Colorado Springs is the largest municipality in El Paso County, with a population of 360,890 in 2000. The city accounts for about 70 percent of the county’s population of 516,929, a proportion that has increased from less than 50 percent in 1960. Other communities in El Paso County include Monument (2,000 residents) and Palmer Lake (2,200) to the north, Fountain (15,200) to the south, and Manitou Springs (5,000) to the west.

The PPACG published its long-range plan *Destination 2025 Regional Long Range Transportation Plan* in 2003. The plan forecasts the county population will increase by more than 200,000 residents, or 40 percent, between 2000 and 2025. Much of this growth is anticipated to occur on the city perimeter, reflecting the limited infill opportunities in Colorado Springs. The most growth is predicted to occur north along I-25, from Palmer Lake to Black Forest, and south of the city near Security and Widefield.

## 2.1.2 Neighborhoods

In addition to Colorado Springs, other population centers in the county include Monument and Palmer Lake to the north; Security, Widefield, and Fountain to the south; and Manitou Springs, Cascade, and Green Mountain Falls to the west. Colorado Springs comprises a variety of distinctive and diverse neighborhoods. Neighborhoods and homeowner associations (HOA) adjacent to the I-25 corridor are listed in Table 2.

TABLE 2  
Neighborhoods Within Project Area (From North to South)

Neighborhood/Homeowner Associations	Location with respect to I-25
Springcrest	East of I-25 between Old Ranch Road and Springcrest Road
Briargate	East of I-25 between Briargate Parkway and Briargate Blvd.
Raven Hills	West of I-25 and Mark Dabling Road between Woodmen Road and Rockrimmon Road
Falcon Estates	East of I-25 between Fuller Road and Woodmen Road
Raven Crest	West of I-25 and Mark Dabling Road and South of Rockrimmon Road
Yorkshire Estates	East of I-25 and south of Woodmen Road
Golden Hills	West of I-25 and Mark Dabling Road and South of Woodmen Road
Pulpit Rock	East of I-25 and Pulpit Rock Drive and South of Dublin Road
Pinecliff	West of I-25 between Popes Valley Road and Elkton Drive
Eagle Rock	East of I-25 and Nevada between Eagle Rock Road and Austin Bluffs Parkway
Cragmoore	East of I-25 and Nevada between Austin Bluffs Parkway and Winters Ave.
Holland Park	West of I-25 between Garden of the Gods Road and Fillmore St.
Mesa Springs	West of I-25 between Fillmore St. and Uintah St.
Rosswell Park Area*	East of I-25 and south of Fillmore St
Holiday Village Mobile Home Park*	East of I-25 and North of Fillmore St.
North End	East of I-25 and Monument Creek between the Denver and Rio Grande Railroad and Uintah St.

TABLE 2  
Neighborhoods Within Project Area (From North to South)

Neighborhood/Homeowner Associations	Location with respect to I-25
Near West Side	West of I-25 between Uintah St. and Colorado Ave.
Near North End	East of I-25 East of I-25 and Monument Creek between Cache la Poudre Street and Bijou Street
Westside	West of I-25 between Colorado Ave and Rio Grande St.
Downtown Partnership	East of I-25 and South of Uintah St.
Mill Street	North and East of I-25 between Fountain Blvd and Las Vegas St.
Hillside	North and East of I-25 between Pikes Peak Ave and Las Vegas St
Ivywild	South and West of I-25 between 8 <sup>th</sup> Street and South Nevada Ave.
Stratton Meadows Area*	South and West of I-25 and East of Nevada Ave.
Quail Lake	West of I-25 and South of Lake Ave.

\* These neighborhoods are not represented by a Homeowner Association.

## 2.2 Income

Median household income in Colorado Springs in 1999 was \$45,100 and, in El Paso County, it was \$46,800. Both figures are within four percent of the \$47,2000 median household income for the state. Figure 1 illustrates median household income by Census Tract. Per capita income information is shown by Census Tract in Figure 2.

## 2.3 Employment

With estimated total employment of 236,200 in 2000, El Paso County is the second-largest labor market in the state, after the Denver metropolitan area where 1.4 million persons were employed. Unemployment in El Paso County was 4.7 percent of the civilian labor force in 2000, slightly higher than the 4.3 percent figure for Colorado.

The Census Bureau classifies employment by industry, which illustrates the character and diversity of a region's economy. Except for military employment, little difference existed in 2000 between El Paso County and the state with respect to the five industries with the largest employment, as shown in Table 3. This suggests the county's economy is nearly as diverse as the much larger state economy. Figure 3 shows the geographic location of jobs by Traffic Analysis Zones for the year 2000.

The military employed 23,700 persons in El Paso County in 2000—86 percent of Armed Forces employees in Colorado. These jobs are based at Fort Carson, the U.S. Air Force Academy, Peterson Air Force Base, Schriever Air Force Base, Cheyenne Mountain Air Force Station (North American Aerospace Defense Command, or NORAD), and the new Northern Command (homeland defense facility). Military employment accounts for 8.5 percent of the County's total labor force, far above the 1.2 percent statewide level of military employment. The bases also employ a substantial number of civilian support staff.

TABLE 3  
Employment by Industry

Industry	El Paso County	Colorado
	Percent of Total Labor Force	
<b>5 Largest Industry Employers in Colorado</b>		
Education, health, social services	15.6	16.1
Retail trade	11.1	11.1
Professional, scientific, management	10.5	11.0
Manufacturing	9.7	8.6
Arts, entertainment, recreation, food services	7.6	8.6
<b>Military employment</b>		
Armed Forces	8.5	1.2

Source: U.S. Census Bureau 2000

According to the Southern Colorado Economic Forum at the University of Colorado–Colorado Springs, total active duty military plus civilian employment in the region was more than 43,000 workers in 2001. The U.S. Air Force Academy and Fort Carson are accessed locally from I-25, while the other bases are located on U.S. 24 east of Colorado Springs and may be accessed regionally from I-25.

The Pikes Peak Area Council of Governments predicts that employment in the region will grow by nearly 40 percent between 2000 and 2025, proportional to population growth. PPACG forecasts that job growth will be dispersed across El Paso County, while the most concentrated employment centers will remain along I-25, and along the commercial corridors on Academy Boulevard and on Powers Boulevard in the eastern Colorado Springs.

I-25 will remain an important regional transportation corridor in the future. PPACG’s planned improvements, such as the Powers Boulevard extension, will improve circulation within the city but will not reduce the importance of I-25 as a regional travel corridor.

## 2.4 Housing

### 2.4.1 Single-family Housing

The housing market in Colorado Springs, like many other housing markets, has followed a pattern of peaks and valleys as local and national economic forces affect the economics of home buying. Tens of thousands of new single-family homes and apartment units were built in the boom years of the early 1970s, and home building surged again in the early 1980s. Permits for single-family homes in Colorado Springs peaked in 1986 with 5,327 units, then dropped during a cyclical economic downturn. Activity has recently increased, with the number of single-family permits ranging from 3,338 to 3,945 since 1995, and multi-family permits ranging from 1,090 to 1,420 during the same period.

New homes are being built in well-planned communities throughout the metro area. Nearly all areas with land available for growth—especially north along the I-25 corridor, west amid scenic foothills, and south and east near the airport—are sites for new residential construction.

## 2.4.2 Multi-family Housing

In the late 1970s and early 1980s, Colorado Springs experienced a boom in apartment construction. Recent economic and population growth resulted in absorption of these units and record low apartment vacancy rates. In response, approximately 15 new multifamily complexes are under construction or have been completed since 1995, representing a 10 percent increase in the total number of units. Average rental rates are provided in Table 4.

TABLE 4  
Average Rental Rates

	<b>Studio</b>	<b>One Bedroom</b>	<b>Two Bedroom with One Bath</b>	<b>Three Bedroom</b>
Pre-1980 Construction	\$395	\$433	\$547	\$684
1980 Construction	\$485	\$586	\$617	\$844
1990 Construction	\$635	\$700	\$726	\$934

Source: Palmer McAllister Co., Inc, January 1999

## 2.5 Emergency Services

### 2.5.1 Colorado Springs Police Department

The mission of the Colorado Springs Police Department (CSPD) is to “promote the quality of life in Colorado Springs by providing police services with integrity and a spirit of excellence, in partnership with our Community.” In addition to law enforcement, the CSPD fulfills this mission through a variety of community groups and services. The Department has representatives on hundreds of community groups and boards, and directly provides the following services to the community.

- Apartment Managers Hotline Program
- Business Watch
- Cadet Program
- Citizen Advisory Committees
- Citizen Traffic Programs
- Community Observation Program
- Crime Free Multi-Housing Program
- Crime Prevention
- Graffiti Removal Program
- Neighborhood Watch
- PACT - Raid

## 1.2 Proposed Action

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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.

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- Senior Victim Assistance Team (SVAT)
- Speed Watch Program
- Traffic Complaint Report

The CSPD has three Area Commands:

- Falcon Area Command, located at 7850 Goddard Street ,serves the north portion of Colorado Springs.
- Gold Hill Area Command, located within the Police Operations Center (POC) Facility at 705 South Nevada Avenue, serves the central and western portion of Colorado Springs.
- Sand Creek Area Command, located at 4125 Center Park, serves the southeastern portion of Colorado Springs.

### 2.5.2 Colorado Springs Fire Department and Emergency Medical Services

The Colorado Springs Fire Department (CSFD) has staffed emergency response resources deployed throughout the City in order to reach the site of an incident within 8 minutes from the time of the call 90 percent of the time. If an emergency is not primarily law enforcement-related, the CSFD is generally the agency that responds to 911 calls for help. The Department fully staffs 18 engine companies, five truck companies, one Hazmat team, and two medical squads. The CSFD is the first response agency to every type of perceived emergency involving the health of people in the community. All firefighters maintain a minimum medical certification of Emergency Medical Technician (EMT) and are capable of providing basic level medical care, including Cardiopulmonary Resuscitation (CPR), automatic heart defibrillation (AED), and first aid for injuries. Most of the Department’s response units also have firefighters with the certification of Paramedic (PM) who are able to provide more highly advanced care.

## 3.0 Methodology

Socioeconomic data were obtained from the following sources:

- Economic and Housing Forecasts
  - PPACG Socioeconomic Zonal Forecasts, 2000-2025 - This data set provides comprehensive forecasts in five-year increments from 2000-2025 at the TAZ level for housing units, population, income, employment, school and college enrollments, military population and group quarters population.
  - El Paso County Military Profile (PPACG, 1999)
  - El Paso County Statistical Profiles (PPACG, 1999)
  - Housing Market Analysis of the Colorado Springs MSA (PPACG, 2000)
- 2000 Census Data - Data collected from the U.S. Census Bureau include median and per capita incomes, available housing, and housing values, by census block group.

- Discussions with residents – Data concerning neighborhood impacts and relocations were obtained through discussions and outreach with residents in affected communities. These data were considered in the project design to avoid, minimize, and mitigate disruptions to neighborhoods and communities.
- Community Organizations – Community service organizations that assist and/or provide services to communities in the project area were contacted by telephone to solicit comments and concerns regarding direct and indirect impacts from the project. Opportunities to meet with representatives of CDOT to discuss the project were offered to each organization. Coordination with these organizations will continue as the project proceeds.
- Public Meetings – As part of the general public involvement plan for the project, public meetings were held throughout the Colorado Springs Metropolitan Area, including areas of increased minority and low-income populations near the Fillmore and Cimmaron/Bijou Interchanges.
- Meetings with Affected Citizens - In addition to the general public meetings, citizens who were subject to relocation due to the project, or were living in close proximity to construction areas, were identified and invited to meetings to discuss concerns and issues related to the project.
- Private Meetings - Private meetings with residents and business representatives in communities affected by right-of-way (ROW) acquisition were conducted to record and address the community and individual concerns.

## 4.0 Impacts of No-Action Alternative

The No-Action Alternative would not directly impact population, income, or employment, but it would make local and regional trips on I-25 slower and less efficient. The congestion and delays currently experienced during peak traffic periods would deteriorate further and for longer periods, as illustrated in Table 5.

TABLE 5  
Traffic Congestion with No-Action Alternative<sup>1</sup>

Measure	2000	No-Action 2025
Congested miles on I-25	16	26 <sup>2</sup>
Congested weekday hours on I-25	4 <sup>3</sup>	10 <sup>4</sup>

<sup>1</sup> Congestion is operating at Level of Service E or F.

<sup>2</sup> Includes I-25 through entire study area

<sup>3</sup> Includes 1 hour in AM peak period, 3 hours in PM peak period

<sup>4</sup> Includes daytime from nearly dawn to dusk

Employees traveling to and from work would experience increased congestion. Similarly, tourists to destinations such as Garden of the Gods, the U.S. Air Force Academy, and the Olympic Training Center would experience traffic congestion and increased travel times. Gross revenues from tourism totaled \$1.2 billion in 2002, according to the Colorado Springs Convention and Visitors Bureau. Tourism visits to the region, an important component of the city's economy, could decline under the severely congested conditions that would result under the No-Action Alternative.

## 5.0 Direct Impacts of Proposed Action

I-25 is an existing transportation corridor. Apart from providing a new connection for Powers Boulevard (a regional facility with no local access), the Proposed Action would not introduce new transportation infrastructure to areas that do not already have access to the interstate. Improvements to I-25 would, however, help maintain access to the region's major businesses and employment centers, including military bases, that are located along the interstate.

The existing, substandard southbound off and on ramps at Corporate Drive (Exit 148B) will be closed, but access to the adjacent business area ("Furniture Row" and others) will be replaced by a new connection to North Nevada Avenue. This will avoid the access degradation that could otherwise result.

Construction of the Proposed Action would have positive, short-term impacts on the local economy. The overall cost of improvements is on the order of approximately a half billion dollars, but expenditures would occur over a number of years, depending upon availability of project funding.

During construction the project would employ construction workers, and contractors and workers in industries that provide supplies and support. Construction workers have been employed on I-25 safety projects in the region since the late 1990s, so continued activity on this scale would not represent a major change to existing conditions in the regional employment market. Relocation assistance would be provided to 11 businesses that occupy commercial parcels identified for full acquisition. Employees of the relocated businesses would be affected by moving work addresses, but at this time the locations, change in distance from home to workplace, and the number of employees affected cannot be determined.

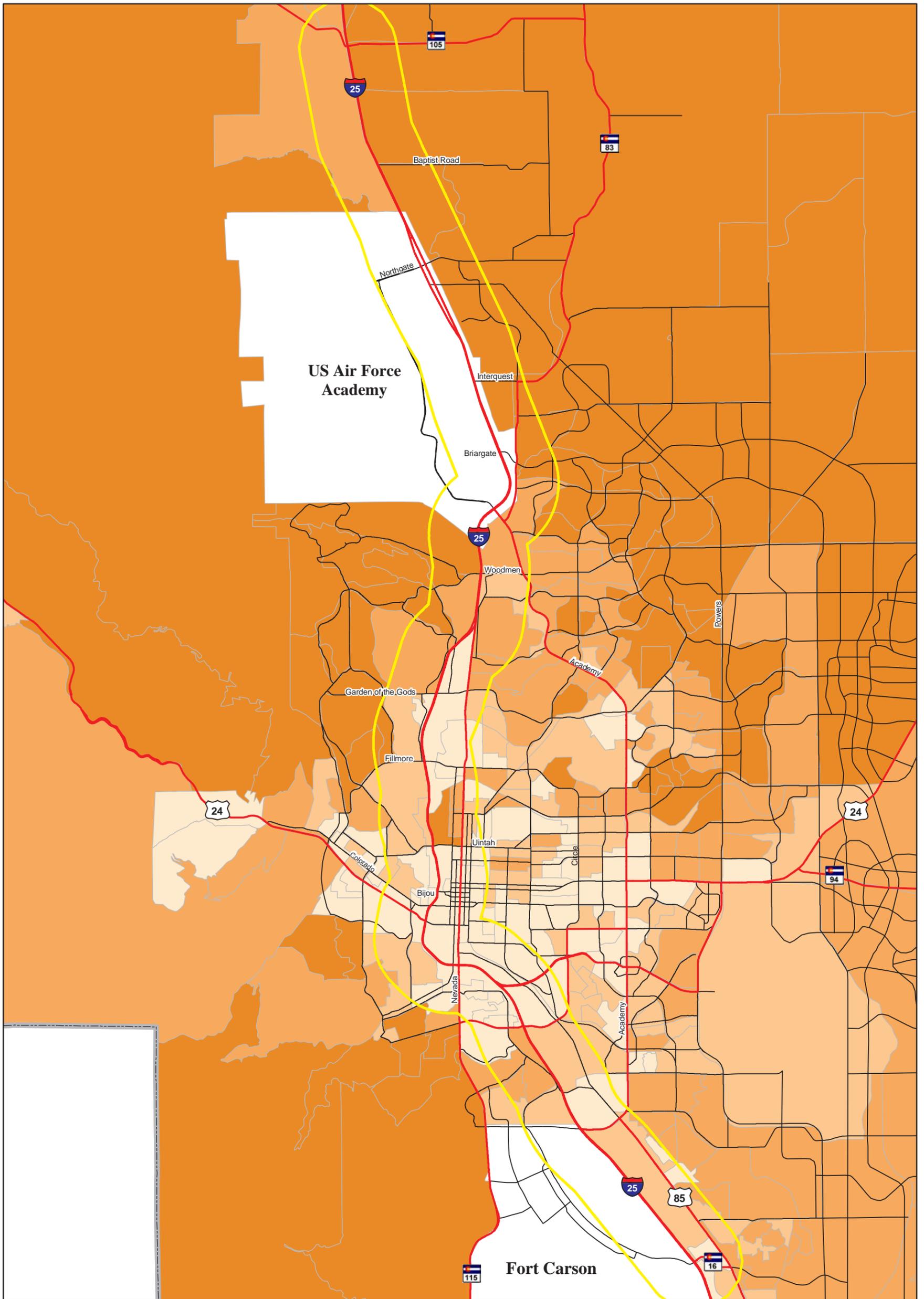
The impact on the sales tax base of local governments is negligible as well. The project would create only temporary disruption to 11 of the nearly 13,400 privately owned businesses in Colorado Springs, and lost property taxes on the 17 properties acquired would be insignificant relative to all property taxes. Neither school districts nor special tax districts would be affected by the Proposed Action.

Project payrolls would increase local household income, business revenues, and may increase income for local businesses. The Proposed Action would not have substantial or long-term impacts on regional income levels.

The Proposed Action provides a number of benefits in the study area, including reducing congestion and improving efficient movement of goods and services through the community. The Proposed Action also is consistent with PPACG's long-term planning, and enhances opportunities to meet the *Destination 2025 Regional Long Range Transportation Plan* goal to "improve access to regional activity destinations for all citizens."

## 6.0 Mitigation

The Proposed Action will not adversely impact population, employment, tax revenues, or income levels in the region, and no mitigation measures are necessary.



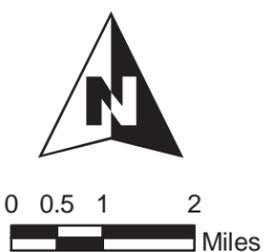
**Figure 1 Median Household Income**

*I-25 Environmental Assessment*

**Legend**

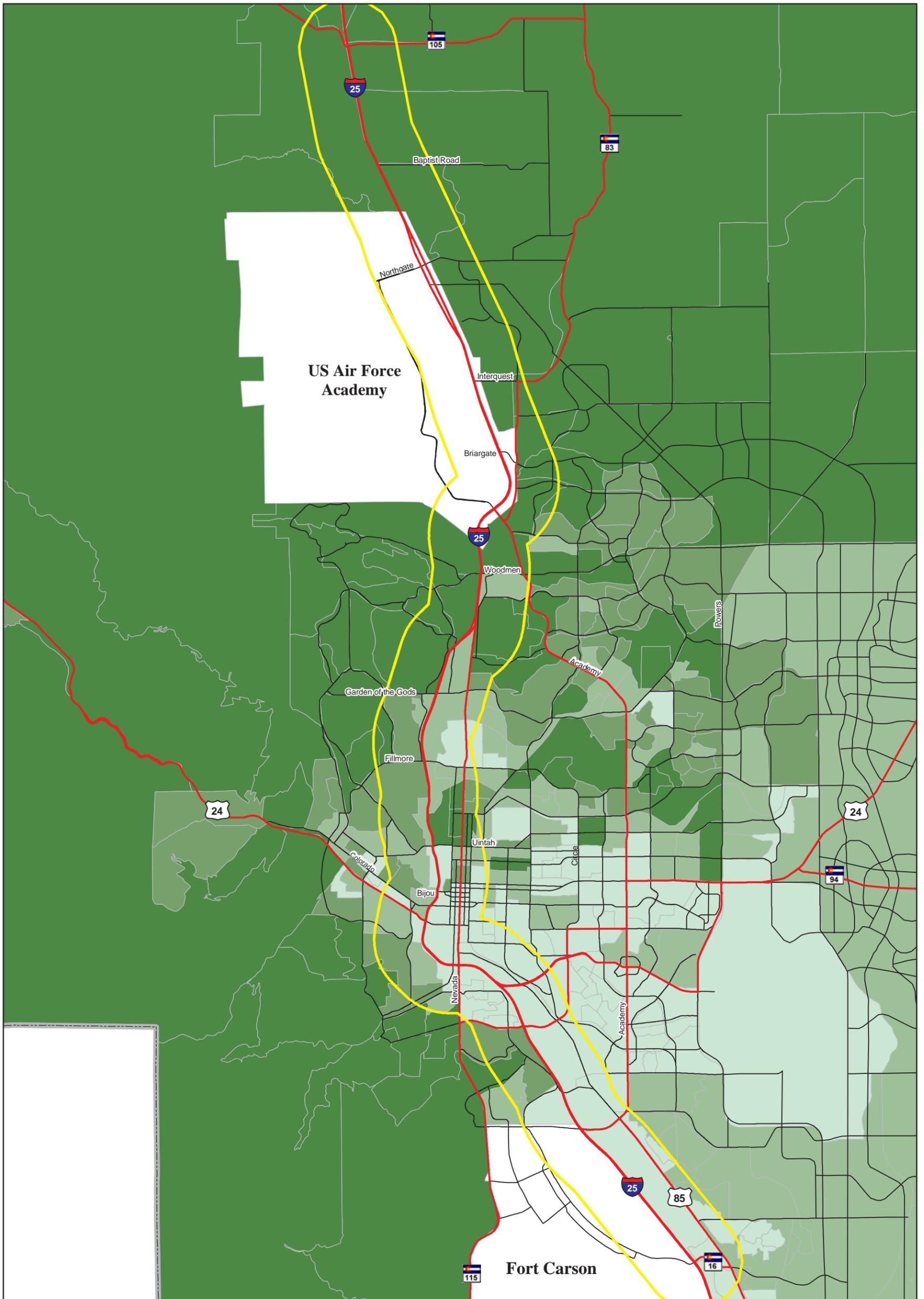
Median Household Income by Census Tract

- 60001 - 110630
- 45001 - 60000
- 35001 - 45000
- 11178 - 35000



Projection:  
Colorado State Plane Central Zone  
North American Datum 1983 (NAD83)

Sources:  
City of Colorado Springs  
Colorado Springs Utilities  
US Census Bureau



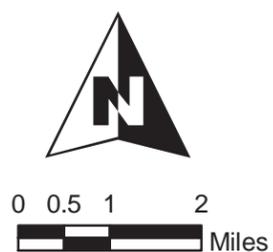
**Figure 2 Per Capita Income**

*I-25 Environmental Assessment*

**Legend**

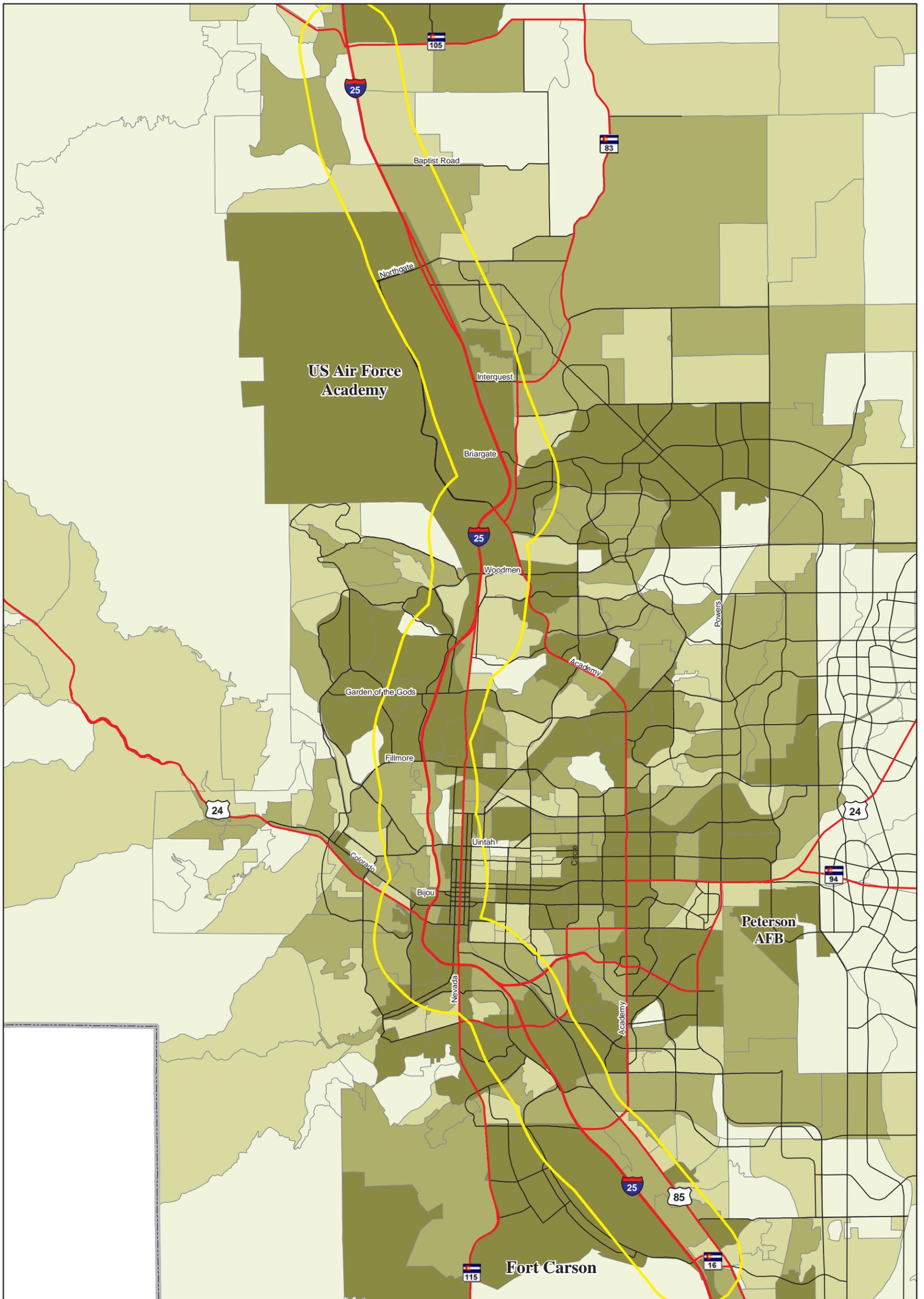
Per Capita Income by Census Tract

- 25001 - 89534
- 21001 - 25000
- 17001 - 21000
- 10076 - 17000



Projection:  
Colorado State Plane Central Zone  
North American Datum 1983 (NAD83)

Sources:  
City of Colorado Springs  
Colorado Springs Utilities  
US Census Bureau



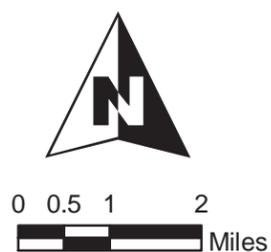
**Figure 3 Employment Areas**

*I-25 Environmental Assessment*

**Legend**

**2000 Jobs by TAZ**

- 534 - 17931
- 168 - 533
- 36 - 167
- 0 - 35



Projection:  
Colorado State Plane Central Zone  
North American Datum 1983 (NAD83)

Sources:  
City of Colorado Springs  
Colorado Springs Utilities  
Pikes Peak Regional Council  
of Governments