

SECTION 9

Final Section 4(f) Evaluation

Introduction

Section 4(f) of the U.S. Department of Transportation Act of 1966 was enacted to set forth guidelines by which to preserve the natural beauty of the countryside, public parks and recreation lands, wildlife and waterfowl refuges, and historic sites. The Section 4(f) requirements are found in the United States Code at Title 49, Subtitle 1, Chapter 3, Subchapter 1, Section 303, which reads as follows:

“It is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.

The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities.

The Secretary may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if—

- 1. there is no prudent and feasible alternative to using that land; and*
- 2. the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”*

Section 4(f) applies to both publicly and privately owned historic sites, but only to publicly owned parks, recreational areas, and wildlife/waterfowl refuges.

Section 4(f) applies to historic properties that have been officially determined to be eligible for listing or are listed on the National Register of Historic Places (NRHP) or contribute to a historic district that is eligible for or listed on the NRHP.

NRHP eligible and listed sites also are protected by Section 106 of the National Historic Preservation Act, as set forth in the Advisory Council on Historic Preservation regulations 36 CFR 800. Federal agencies must consult with the State Historic Preservation Office (SHPO) and the Advisory Council regarding the effect of their undertaking on historic properties. Section 4(f) is related to Section 106 in that the determinations of the SHPO regarding eligibility and effect are taken into account when determining impacts to Section 4(f) properties.

A “Use” of Land under Section 4(f)

FHWA regulations at 23CFR771.135(p)(1) state that a Section 4(f) use occurs in any of the following cases:

- “(i) When land is permanently incorporated into a transportation facility;
- (ii) When there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purposes...; or
- (iii) When there is a constructive use of land.”

Constructive use of land occurs “when the transportation project does not incorporate land from a section 4(f) resource, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the resource are substantially diminished.”

Section 4(f) Properties Evaluation and Summary

The Proposed Action providing for I-25 improvements through the Colorado Springs Urbanized Area would result in the use of three Section 4(f) properties. These are all historic sites that are eligible for or listed on the National Register of Historic Places. The three Section 4(f) resources are as follows:

- United States Air Force Academy
- WPA Flood Wall at Monument Creek
- St. Mary's Church

For each of these resources, the Proposed Action would use land of an historic property. The location of these resources is depicted in Figure 9-1.



FIGURE 9-1
Location of Sites with a Section 4(f) Use

Through the Section 106 process completed for the I-25 Environmental Assessment, it was determined that the NRHP status or eligibility of these resources would not change as a result of the Proposed Action or due to avoidance, minimization, or mitigation measures. The Section

106 eligibility and effects determinations in the I-25 Environmental Assessment received concurrence by the SHPO in February 2004. It was determined that the Proposed Action will have an adverse effect on the Air Force Academy and the WPA Flood Wall, but no adverse effect on St. Mary's Church.

U.S. Air Force Academy

The United States Air Force Academy is considered eligible for listing on the National Register of Historic Places, and has been designated as resource number 5EP595 by the Colorado State Historic Preservation Officer.

The U.S. Air Force Academy is the youngest of the nation's military service academies, as it is predated by the U.S. Military Academy, U.S. Naval Academy, U.S. Coast Guard Academy and U.S. Merchant Marine Academy. Construction of the Air Force Academy began in 1955 and was completed in 1962. In April 2004, the Cadet Area of the Academy was designated as a National Historic Landmark by the National Park Service.

The 18,455-acre Air Force Academy is situated in the foothills of the Rampart Range of the Rocky Mountains. The Academy property is characterized by its vast open and natural landscape with dramatic panoramic views of the mountain backdrop and forested foothills -- characteristics that were an important factor in the decision more than 40 years ago to locate the Academy north of Colorado Springs.

The Academy's original Master Plan in the 1950s specified the layout for the Modernist-style architecture of the Cadet Area, including the well-known Cadet Chapel, separated by distance and topography from base housing and other supporting land uses needed for Academy operations. Extensive use of natural open space was a key element of the overall plan for the Academy. Today, the Academy remains largely open and natural, although it has experienced some modernization over time (e.g. the addition of buildings, roads, runways, and static aircraft displays) in response to contemporary needs. Nevertheless the qualities of the cultural and natural landscape remain intact and largely unchanged.

The built environment of the Academy, together with the previous ranching and human settlement uses of the land, form an historic cultural

landscape. This landscape includes the major elements of the Academy's original site planning, design, and architecture.

According to the National Park Service, an historical cultural landscape is "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." (*National Park Service Director's Order #28: Cultural Resource Management Guidelines*).

The Air Force Academy cultural landscape also includes transportation facilities. Prior to construction of I-25, the Old Denver Highway had carried north-south traffic in the same general vicinity as I-25 for decades. Also traversing the eastern portion of the Academy is a freight railroad line that was established in 1871. Thus a major north-south transportation corridor has existed in this location since even before Colorado became a State in 1876.

Interstate 25 was planned concurrently with the Air Force Academy, and traverses through about seven miles of Academy property, on an easement granted by the Air Force. In accordance with the original site plan from the 1950s, the only two access points to the Academy are the North Gate Interchange at Exit 156, and the South Gate Interchange at Exit 150. Figure 9-2 shows the boundaries of the Air Force Academy and the I-25 easement. The figure shows that for the length of the seven-mile easement, the land on both sides of I-25 is Air Force Academy property. The Cadet Area (National Historic Landmark), located about 2.5 miles from I-25, is the main academic area and primary visitor destination.

The Academy been determined to meet NRHP eligibility criteria under Criterion Consideration (g) for properties that have achieved historical significance due to their exceptional importance within the past fifty years.

The Air Force Academy meets NRHP Criteria (a) and (c) for its national significance and association with U.S. military history, and for association with the local history of earlier ranching and the rural residential uses of the land.

The Air Force Academy meets Criterion (c) for the exceptional significance of the architectural design of the Academy buildings in the Academic and

Cadet areas. The outstanding site planning and the International style buildings at the Academic and Cadet areas, including the nationally renowned Cadet Chapel, meet Criterion (c) for exceptional national significance of the Modernist buildings, designed by the prominent architectural firm of Skidmore Owings & Merrill. The site plan included the entire 18,455-acre campus, using landscape design to integrate the buildings and campus with the natural landforms at the site.

In addition, the Air Force Academy is eligible under Criterion (c) as an historic cultural landscape, as discussed above.

The term "historic cultural landscape" encompasses the wide range of cultural resource types present at the Academy that exemplify the evolution of human occupation and use of the land. The historic cultural landscape includes the mid-nineteenth and early twentieth century historic cultural resources in addition to the 1950s Academy and the natural setting.

Impacts to Property

The Proposed Action includes three highway changes that would affect the U.S. Air Force Academy. These are:

- Connection of Powers Boulevard to I-25, with modifications to the North Gate Interchange
- Relocation of the Ackerman Overlook
- Widening of I-25 to six lanes for five miles and to eight lanes for two miles.

Two of these changes, the connection of Powers Boulevard and the relocation of Ackerman Overlook, require expansion of the existing I-25 easement on Air Force Academy land, resulting in a permanent use of an historic property.

The third change, widening the highway to six and eight lanes, will not result in modifications to the easement. No additional land from the historic property will be needed to widen I-25.

Connection of Powers Boulevard to I-25, with modifications to the North Gate Interchange

Connecting Powers Boulevard and modifying the North Gate Interchange will require an additional 48.4 acres of Air Force Academy property. These changes will include new acceleration and deceleration lanes resulting in wider pavement,

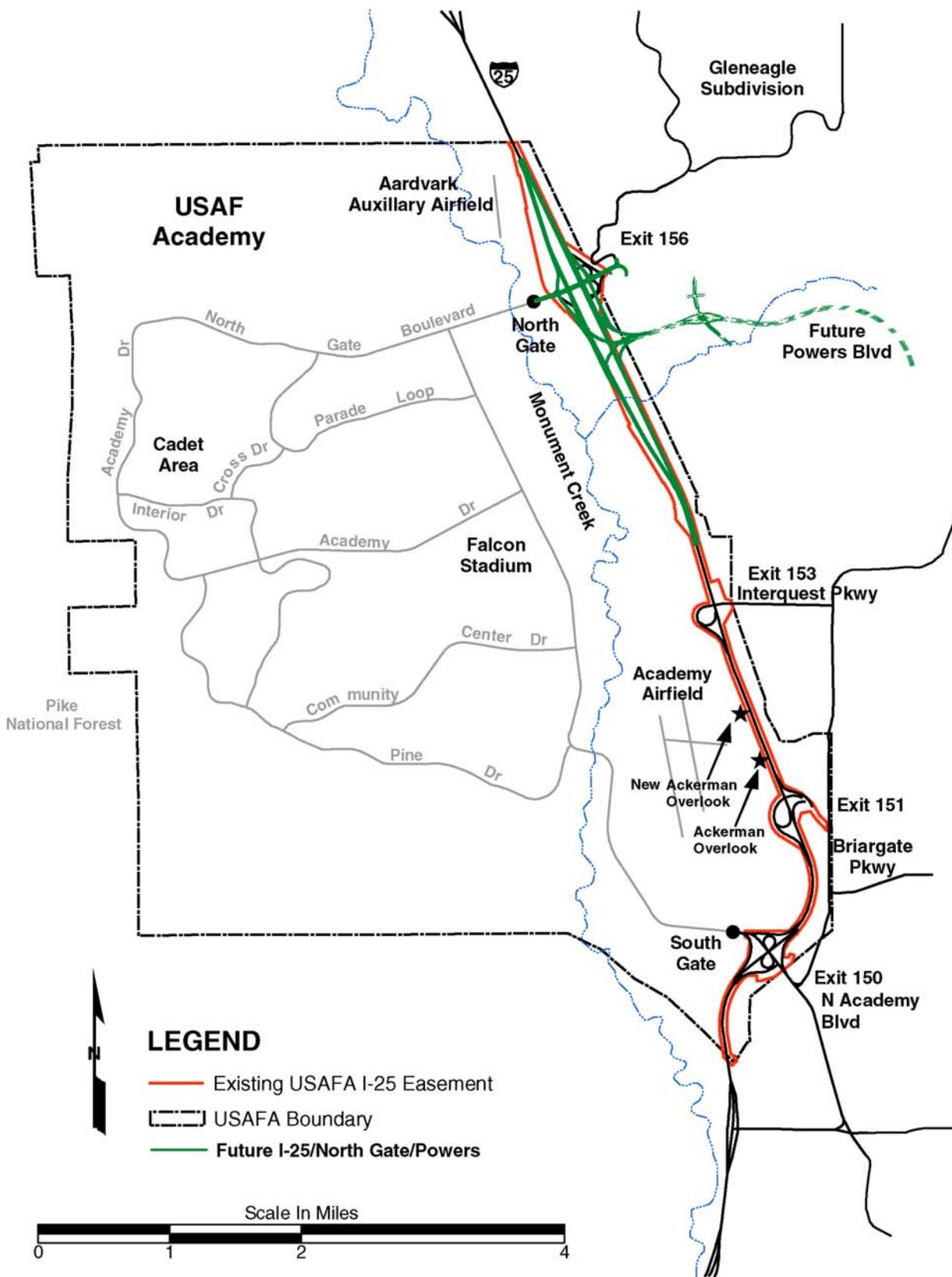


FIGURE 9-2
 Location of Interstate 25 Easement on U.S. Air Force Academy (USAFA) Property

and will require new overhead signs and lighting. The configuration for the planned improvements for North Gate/Powers is shown in Figure 9-3.

In addition to the use of land from the Academy, the improvements will affect the existing rural character and feel of the North Gate Interchange, which is the main visitor entrance to the Academy. The existing North Gate Interchange has a more rural character, in part because traffic movements are separated from each other using the existing terrain. Users of any exit or entrance ramp see little of each other, and there are no traffic signals. Visitors arriving at the Academy from the north use the southbound exit ramp and their attention is immediately drawn to Academy features including the security gate, natural terrain and mountain backdrop. For motorists passing over North Gate on I-25, the view is dominated by the scenic vistas of the Academy grounds. This “entry experience” was included as part of the original site planning for the Air Force Academy.

The new ramps connecting Powers Boulevard to I-25 will involve the introduction of frontage roads and signalized intersections on North Gate Boulevard. These changes will introduce new visual elements and alter the rural character of the existing configuration. Because these changes will effect this aspect of the original site plan, part of the consultation among CDOT, FHWA and the Air Force Academy focused on finding ways to modernize the interchange while maintaining the entryway experience for visitors.

The outcome of the consultation process, described later in this section, was a design that the parties agreed would accomplish the purpose and need for the project while minimizing affects on the entry experience. The design keeps new or modified roadway elements at or below existing grade and utilizes existing topography to fit with the natural terrain and to separate traffic movements.

The design maintains the entryway experience because it retains many of the original elements of the plan. It conforms well to the landscape, with major entry ramps depressed into the terrain, and keeps traffic movements visually separated to a large degree.

The primary change to the entryway experience is that visitors who today have free-flow ramp movements to North Gate will pass through

signalized intersections. While this will appear more urban in character, the change is not so substantial that it impairs the visitor experience, because once beyond the signal, the view remains the same as it is today.

For those passing through the Academy on I-25, the interchange modifications will not alter the broad expanse of the landscape beyond the roadway edge. The landscape will remain open and will continue to represent the wide range of cultural resource types that exemplify the evolution of human occupation and use of the land.

Relocation of the Ackerman Overlook

The Ackerman Overlook is a roadside pulloff area adjacent to the southbound lanes of I-25 just north of the Briargate Interchange (Exit 153). It is used by motorists to stop and view the scenery of the mountains, the Air Force Academy campus, and frequent air operations that include parachuting and glider flights. The overlook is not itself an historic resource, but is part of the I-25 easement on U.S. Air Force Academy property.

The existing overlook is located too close to the southbound I-25 exit ramp for Briargate Parkway, inducing some motorists to cut through the overlook to get around congested mainline traffic and exit to Briargate. This is dangerous for overlook visitors and for mainline traffic alike. Additionally, the facility is located within the Air Force Academy’s crosswind runway clear zone.

Due to these safety concerns, FHWA has determined that the overlook must either be relocated or permanently closed. Since the existing overlook is heavily used by motorists to view the scenery of the mountains and the Air Force Academy site, FHWA, in consultation with the Air Force Academy, determined that the overlook should be relocated rather than closed. Relocation of the overlook will require the use of additional property from the Air Force Academy, which is a significant historic property.

CDOT, FHWA and the Air Force Academy consulted on the best possible location for the relocation of the Ackerman Overlook. Issues and constraints were developed as part of a visual and landscape design process.

Issues pertinent to relocation of the overlook included:

- Providing a safe and accessible overlook for motorists
- Discouraging use of the overlook for pass-through motorists
- Providing interpretation of the Air Force Academy in an area accessible to pedestrians (this area also must be Americans with Disabilities Act accessible)
- Ensuring that no structures at the overlook, such as above-grade signs, are visible to passing motorists.

As a result of consultation, it was decided that the overlook would be replaced with a safer, larger facility about 2,300 feet north of its existing location as part of the Proposed Action. The area chosen for the relocated overlook addresses the issues and constraints identified above.

The relocation of the Ackerman Overlook will result in the conversion of 5.2 acres of predominantly short-grass prairie to a roadway use. This land is part of a significant historic property, the Air Force Academy. The relocation will require wider pavement for entrance and exit ramps and signing. The new location will not be visually intrusive but will use land that has historic significance.

Because the existing overlook is heavily used, CDOT, FHWA and the Air Force Academy determined that it should not be eliminated, but instead should be replaced at a safer location.

The new overlook will be accessed only from the southbound lanes on the west side of I-25. The off-ramp to the overlook will follow a gentle drainage into a below-grade parking lot. A pedestrian plaza will be located below the planned parking. The plaza will have a 3-½ foot high retaining wall on the west edge and expansive views of Cheyenne Mountain, the Air Force Academy air control towers, Pikes Peak, the Cadet Chapel, and Falcon Stadium. Interpretive messages can be displayed on this wall, presenting information on the Air Force Academy, Mr. Jasper D. Ackerman, and the natural and cultural history of the area.

Landscaping will help re-vegetate the area into a natural prairie. A natural stand of deciduous trees across the remnant of old highway will be

enhanced with native plants to better frame the view. A short segment of the old highway grade, which has been destroyed by a landing strip, will be removed to create a more natural setting.

Based on consultation with SHPO, the relocation of the Ackerman Overlook will have no adverse effect on the Air Force Academy. The design uses existing topography and provides a safe pedestrian overlook in a shallow depression, which lessens the negative impact of the overlook to the landscape. It also provides a safe and fully accessible location for motorists to stop and view the scenery. The overlook will not be visible from the Cadet Area or other important vantage points on the Air Force Academy property.

Widening of I-25 to six lanes for five miles and to eight lanes for two miles

The Proposed Action includes construction of two additional lanes in each direction for the southern two miles of the Air Force Academy (between the southern boundary and Briargate interchange) and the construction of one additional lane in each direction from Briargate interchange to the north boundary of the Academy (a distance of approximately five miles).

The addition of these lanes will not require an expansion of the existing interstate easement. The additional roadway pavement will slightly alter the appearance of the historic cultural landscape along the eastern edge of the Academy boundary. However, the additional pavement will not alter the broad expanse of the landscape beyond the roadway edge. The landscape will remain open and will continue to represent the wide range of cultural resource types that exemplify the evolution of human occupation and use of the land. Therefore the Proposed Action will not substantially impair the characteristics that make the cultural landscape eligible for the NRHP.

Avoidance Alternatives

Since the Air Force Academy is an historic resource protected under the provisions of Section 4(f), avoidance alternatives were considered for those aspects of the Proposed Action that would result in a use of the property – i.e., connection of Powers Boulevard to I-25 and the relocation of the Ackerman Overlook. These avoidance alternatives were determined to be not feasible and prudent, as discussed below.

Avoidance Alternatives for Connection of Powers Boulevard to I-25, with modifications to the North Gate Interchange.

A Powers Boulevard connection to I-25 has long been included in regional transportation and land use plans. An environmental assessment that was prepared for north Powers Boulevard provided for a multi-level interchange on Air Force Academy property to replace the existing North Gate interchange (that is also on Academy property). During the development of the I-25 EA, CDOT, FHWA and the Academy agreed to reconsider the original interchange configuration.

During the consultation process, several avoidance alternatives were considered: (1) No-Action Alternative; (2) Connect Powers to North Gate Road east of the Academy with no improvements to the existing North Gate interchange; (3) Connect Powers Boulevard to Interquest Parkway with no improvements to the existing Interquest interchange; (4) Connect Powers Boulevard to Baptist Road and reconstruct the existing Baptist Road interchange. These are discussed in further detail below.

1. No-Action Alternative

The No-Action Alternative would not provide capacity improvements on I-25 or provide a Powers Boulevard connection. Therefore it would not require any new use of Air Force Academy land. However, this alternative would not meet the purpose and need for relieving current and future congestion on I-25.

Under this alternative, Interstate 25 mainline traffic demand would exceed the capacity of the current two through-lanes in each direction, resulting in bumper-to-bumper traffic throughout much of the day.

The No-Action Alternative would keep intact the existing North Gate Interchange, which over time would become less able to meet the ever-increasing travel demand. Therefore, the No-Action Alternative would result in delays for all who use Interstate 25 for access to the Air Force Academy, including employees, visitors, suppliers, high school students (civilians attend school on the base) and attendees of special events.

For the reasons discussed above, the No-Action Alternative would not be feasible and prudent.

2. Connect Powers to North Gate Road east of the Academy with no improvements to the existing North Gate interchange

This alternative would not require additional easements from the Academy. Therefore freeway-to-freeway traffic would be handled on the existing partial cloverleaf interchange that is on Academy property. The existing interchange design has inadequate ramp lengths and short weave distances on I-25. This alternative is not feasible and prudent because the existing configuration could not accommodate both Powers Boulevard traffic volumes and North Gate traffic.

3. Connect Powers Boulevard to Interquest Parkway with no improvements to the existing Interquest interchange

As with the North Gate alternative described above, this alternative would not require additional easements from the Academy. Therefore freeway-to-freeway traffic would be handled on the existing trumpet interchange that is on Academy property. This alternative is not feasible and prudent because the existing configuration could not accommodate both Powers Boulevard traffic volumes and Interquest traffic.

4. Connect Powers Boulevard to Baptist Road and reconstruct the existing I-25/Baptist Road interchange

This alternative would require an extension of the Powers Boulevard freeway for several miles north of its planned terminus, through highly developed residential and commercial areas, resulting in substantial social and environmental impacts. Extending the freeway would require crossing numerous drainages which are habitat for the threatened Preble's meadow jumping mouse, would require major changes to the local street system, and would have substantial impacts on adjacent land uses. For these reasons, this alternative would not be feasible and prudent.

Potential alternatives to connect Powers Boulevard with I-25 at locations further north than Baptist Road were also considered, but were determined to be not feasible and prudent for similar reasons as the Baptist Road avoidance alternative.

Interchange Concepts that Use Academy Property but Were Found to be Not Feasible and Prudent

As discussed above, there were no feasible and prudent alternatives that would avoid use of Academy land for the connection of Powers Boulevard to I-25. Therefore CDOT, FHWA and the Air Force Academy considered a range of alternatives that use property from the Academy.

During a design charette convened by the three parties, it was made clear that the Academy would not allow Powers Boulevard to connect to I-25 except at an existing interchange. This limited the investigation of interchange concepts to the North Gate location.

In the charette, the three agencies identified key issues and constraints that would be the basis for determining a workable interchange concept for the North Gate location:

- Managing traffic at the interchange to handle Powers/I-25 and North Gate/I-25 traffic and special event traffic at the Air Force Academy
- Minimizing impacts to the Air Force Academy
- Remaining sensitive to existing visual conditions
- Avoiding environmental impacts, including impacts to the Preble's meadow jumping mouse
- Maintaining safety and design standards
- Maintaining access for the Air Force Academy and local residential areas on North Gate
- Providing adequate security for the Air Force Academy
- Minimizing impacts to local development

Six interchange concepts were evaluated, utilizing the above criteria. None of these six concepts was selected, because they were found to be not feasible and prudent. Instead, the three participating agencies during the design charette selected a modified version of Concept 4 together with elements from other concepts to develop the final version included in the I-25 Proposed Action. The selected concept (previously shown in Figure 9-3) allows for access from the Academy onto

southbound Powers and from northbound Powers to the Academy. A brief description of each interchange concept is provided below.

Concept 1: Realign Powers Along North Gate Boulevard to Improved North Gate Interchange

Concept 1 is depicted in Figure 9-4. This freeway-to-freeway interchange realigns Powers Boulevard along North Gate Boulevard. A new east-west local road north of North Gate would be needed to provide access to the Gleneagle subdivision. This concept is not feasible and prudent because it would impact properties along North Gate, including the historic Reynolds Ranch; would bring freeway traffic to the front door of the Air Force Academy; and would require relocation of the Air Force Academy gatehouse and Santa Fe Trail (portions of which are on historic railroad grade). The multi-level interchange also would result in a visual impact to the Academy.

Concept 2: Realign Air Force Academy Entrance to Meet Powers South at a New Interchange

As shown in Figure 9-5, Concept 2 is a stretched version of the interchange in Concept 1. Powers Boulevard would be constructed south of North Gate and under I-25 in a northwesterly direction, providing free-flowing movement from Powers to North Gate at the Air Force Academy. This concept is not feasible and prudent for the same reasons described for Concept 1, except that it would not impact properties along North Gate.

Concept 3: Collector/Distributor Roads with Diamond Interchange at North Gate and New Powers Connection

Concept 3, depicted in Figure 9-6, utilizes a collector/distributor road to access North Gate and Powers. It includes two interchanges: North Gate with a diamond configuration and a new freeway-to-freeway interchange at Powers. Access to the Gleneagle subdivision would be provided by the collector/distributor road. This concept is not feasible and prudent because its footprint would result in increased visual impacts over a greater distance, and the collector/distributor system could be confusing to motorists expecting a direct freeway-to-freeway connection.

Concept 4: Diamond Interchange at North Gate with New Powers Connection and Limited Air Force Academy Access

Concept 4 consists of a split-diamond interchange at North Gate with braided ramps to the Powers Boulevard freeway-to-freeway interchange, as shown in Figure 9-7. This concept consists of four access points and is not fully directional. It is not feasible and prudent because it does not provide direct Powers Boulevard access to and from the Academy.

Concept 5: New Powers Interchange and No Interchange at North Gate

Concept 5 (see Figure 9-8) would remove the ramps at North Gate and construct a freeway-to-freeway interchange connecting I-25 with Powers. This concept is not feasible and prudent because it eliminates I-25 access to and from the Air Force Academy, Gleneagle, and the surrounding area.

Concept 6: Powers Alignment East of I-25 with North Connection at Diamond Interchange at North Gate

As shown in Figure 9-9, Concept 6 consists of a diamond interchange at North Gate, with the Powers alignment running parallel to I-25 on the east side to an alignment north of existing North Gate. The connection to Powers from I-25 is handled with ramps north of the existing North Gate Interchange.

In Concept 6, a northbound exit ramp to Powers Boulevard and a southbound entrance ramp to I-25 are still provided south of North Gate. This concept is not feasible and prudent because it does not provide direct Powers Boulevard access to and from the Academy. Also, the ramp system could be confusing to motorists expecting a direct freeway-to-freeway connection. Concept 6 also would negatively impact wetlands and habitat of the threatened Preble's meadow jumping mouse, as well as the historic Reynolds Ranch.

As a result of the design charrette, the three participating agencies selected a modified version of Concept 4 for inclusion as part of the I-25 Proposed Action. The selected version allows for access from the Academy onto southbound Powers and from northbound Powers to the Academy. The selected concept was previously shown in Figure 9-3.

Avoidance Alternatives for Relocation of the Ackerman Overlook

Three avoidance alternatives were considered, as described below.

1. No-Action Alternative

The No-Action Alternative is considered not feasible and prudent because the current location of the Ackerman Overlook has severe safety and accessibility issues, as previously discussed. At the same time, providing an overlook for motorists is a primary concern of both the Air Force Academy and CDOT, and eliminating the overlook entirely is not an option.

2. Relocate the Ackerman Overlook within the Existing I-25 Easement

Replacing the overlook within the I-25 easement would require an elongated design similar to the existing configuration because there is not much distance between the roadway edge and the easement boundary. While locations north of the existing overlook may exist that would improve the traffic weave condition, use of an elongated configuration would not address the problem of cut-through traffic using the overlook to bypass congested traffic. Therefore this alternative is not feasible and prudent.

3. Relocate the Ackerman Overlook on a New Location not on Air Force Academy Property

Relocating the overlook to the east side of I-25, off of Air Force Academy property, would not be suitable because the user's view would be dominated by the highway in the foreground. There would be poor views of installation and its flight operations. Relocating the overlook to the north or south of the Academy would provide even poorer views due to increased distance and inferior vantage points. For these reasons, this alternative is considered not feasible and prudent.