

This Final Environmental Impact Statement (FEIS)/Final Section 4(f) Evaluation analyzes the environmental consequences of proposed improvements to US Highway 160 (US 160) between Durango and Bayfield, Colorado. Between February 1999 and January 2002, a preliminary Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act (NEPA) to determine the potential for significant impacts. Based on the preliminary EA, the Federal Highway Administration (FHWA) and Colorado Department of Transportation (CDOT) determined an Environmental Impact Statement (EIS) was appropriate [40 Code of Federal Regulations (CFR) 1501.4 (c)]. A Notice of Intent (NOI) announcing FHWA's intention to prepare an EIS and hold a public scoping meeting was published in the *Federal Register* on December 24, 2002.

Due to expected impacts to wetlands and waters of the United States (US), and the need for a permit under Section 404 of the Clean Water Act (CWA), the US Army Corps of Engineers (USACE) was invited to be a cooperating agency for this EIS. The Section 404/NEPA merger process will provide a concurrent analysis using the Section 404(b)(1) Guidelines (40 CFR Part 230) for the alternatives analysis. This process is guided by the NEPA/404 merger process and agreement among CDOT, USACE, and FHWA (January 6, 2005). The intent of this merged process is to ensure that federal agencies make decisions together and consistent with each other's needs.

The Bureau of Land Management (BLM) was also invited to be a cooperating agency. The current alignment of US 160 bisects two parcels of land managed by the BLM. Highway improvements would require additional land from these parcels.

The proposed project is located in La Plata County, Colorado. The project length on US 160 would be 16.2 miles, extending from milepost (MP) 88.0, located east of Durango, to MP 104.2, located east of Bayfield. The project length on US 550 would be 1.2 miles, extending from MP 16.6, located at the US 160/US 550 (south) intersection, to MP 15.4, located south of the US 550/County Road (CR) 220 intersection.

On US 160, the proposed project would extend the existing four-lane highway from Grandview east to Bayfield where it would transition to a two-lane highway. Beyond MP 104.2 the roadway provides sufficient capacity and accident data do not dictate the need for capacity and safety improvements by 2025. In Gem Village, from MP 100 to MP 101, US 160 will be realigned to the south. From the west project limit to the proposed US 160/US 550 (south) intersection, a westbound auxiliary lane and an eastbound climbing lane would be required. In addition, the project would realign approximately 1.2 miles of US 550 south of US 160. The realigned portion of US 550 would be improved to a four-lane highway.

The proposed project would include reconstruction of the US 160/US 550 (south) intersection as an interchange. Grade separation of this intersection would provide the best option to address the reconnection of US 160 and US 550 due to terrain and traffic volume. The proposed project would also include reconstruction of the US 160 intersections with CR 233 (west) and SH 172/CR 234 as interchanges. The US 160 intersections with CR 233 (east), CR 232 (west), and CR 232 (east) would be eliminated, with CR 233 passing beneath US 160. The CR 222/CR 223 (west) intersection with US 160 would be signalized. Improvements would be made to the existing US 160/CR 501 intersection. Numerous direct access points to US 160 for businesses, neighborhoods, and facilities (see Figures 1.2.1 through 1.2.5) would be consolidated or improved to provide access control.

I. PURPOSE AND NEED

The purpose of this project is to improve the conditions for the traveling public along US 160 in the project corridor. Specifically, the purpose of the project is to:

- Increase travel efficiency/capacity to meet current and future needs
- Improve safety for the traveling public by reducing the number and severity of accidents and
- Control access

The need for this project is based on the projected increased travel demands on highway capacity and efficiency, and the existing substandard design that contributes to accidents associated with roadway deficiencies.

II. ALTERNATIVES

Reasonable alternatives have been developed that would address the project's purpose and need. These alternatives are practical and feasible and meet the three screening criteria of capacity, safety, and access control. Other alternatives have been considered and dismissed. The goal of the alternative development process was to arrive at a Preferred Alternative that is reasonable, satisfies the project purpose and need, and minimizes environmental impacts. Under Section 404 of the CWA, the USACE must be able to determine that the Preferred Alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA). NEPA also requires examination of the No-Action Alternative, even though it would not meet the project's purpose and need.

As part of the alternatives development process, numerous Corridor Alternatives were initially identified, including Transportation System Management (TSM), Transportation Demand Management (TDM), and Corridor Alignment Alternatives. Feasibility Alternatives in each of the 12 corridor sections were evaluated in a second-level screening. Purpose and need and major environmental and social constraints were used to screen/advance these alternatives. The highway corridor was then divided into four sections, and several Preliminary Alternatives were examined. These preliminary alternatives are combinations of the Feasibility Alternatives carried forward from the second-level screening. The four sections include Grandview, Florida Mesa and Valley, Dry Creek and Gem Village, and Bayfield. At this third level, alternatives were screened for practicability and environmental consequences. To ensure the LEDPA was not screened out at this stage, guidance included in the NEPA/404 merger document was used. The result of the third-level screening was that two action alternatives for each of the four sections were advanced and analyzed in this EIS. In each of the four sections, one of the alternatives has been identified as the Preferred Alternative.

The information included in Chapter 2, Alternatives, will allow the USACE to conduct a Section 404(b)(1) Alternatives Analysis to evaluate all the alternatives that have been dismissed, as well as those carried forward for examination in this EIS. The purpose of the USACE evaluation is to ensure that the LEDPA has not been dropped from consideration. This evaluation also ensures that the final Preferred Alternative is the LEDPA. This EIS identifies a Preferred Alternative, which FHWA believes will fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. USACE will identify a LEDPA in the final Section 404(b)(1) Alternatives Analysis. ~~prepared in conjunction with the Final EIS.~~

The Preferred Alternative would generally follow the existing alignment along the US 160 project corridor. Intersections with county roads would be upgraded to meet current design standards. Design features such as alignment shifts, retaining walls, and reduced median widths have been employed to reduce impacts to important environmental resources. Other major features of the Preferred Alternative in each section are described below.

Grandview Section Alternative G Modified (Preferred Alternative)

From the west project limit to the US 160/US 550 (south) intersection, US 160 would be four lanes with an eastbound climbing lane and a westbound auxiliary lane. From the US 550 (south) intersection to the intersection with SH 172/CR 234, US 160 would be four lanes. There would be single-point urban interchanges at CR 233 (west) and SH 172/CR 234. US 160 would remain on the existing alignment except near the SH 172/CR 234 intersection, where it would be shifted north to avoid Crestview Memorial Gardens.

US 550 would be four lanes from CR 220 to the intersection with US 160. US 550 would be realigned to the east of the existing US 550 and skirt the western edge of the Florida Mesa before connecting to US 160 with a trumpet interchange approximately 0.6 mile east of the existing US 160/US 550 (south) intersection.

Florida Mesa and Valley Section Alternative C (Preferred Alternative)

US 160 would be four lanes and generally remain on the existing alignment, with slight shifts as necessary to avoid residential structures on the north side of US 160 and the Griffin Dairy Farm complex on the south side of US 160. Continuous access roads would be constructed both north and south of the highway. CR 222 and CR 223 would be realigned and connect to access roads on both sides of US 160. A new intersection with US 160 would be created approximately 4,500 feet east of the existing CR 222/CR 223 (west) intersection. Because this is on the east side of the Florida River, new roadway connections would be made to CR 510 on the south and CR 223 on the north.

Dry Creek and Gem Village Section Alternative H (Preferred Alternative)

US 160 would be four lanes and generally remain on the existing alignment with improvements for curvature, grades, and sight distance from the CR 222/CR 223 (west) intersection to the CR 223 (east) intersection. CR 223 would be realigned and connect to US 160 approximately 1,500 feet west of the existing US 160/CR 223 (east) intersection. To reduce impacts to high quality wetlands, a 36-foot median would be used from MP 98 to MP 99 to separate opposing travel lanes. A 46-foot median would be used in all other areas. Access roads are provided on both sides of US 160 between MP 94 and MP 95 and on the north side of US 160 between MP 96 and MP 97 to consolidate direct highway access and reduce out-of-direction travel. East of the US 160/CR 223 (east) intersection, US 160 would be realigned and bypass Gem Village to the south. The realigned US 160 would leave the existing US 160 on the west side of Gem Village near MP 100 and rejoin it near MP 101. No access roads would be constructed, but access would be provided at the east end of Gem Village. A one-way slip ramp would provide access for westbound traffic at the west end of Gem Village.

Bayfield Section Alternative B (Preferred Alternative)

US 160 would be four lanes and generally remain on the existing alignment with improvements for curvature, grades, and sight distance. Three closely spaced intersections with US 160 [US 160B (west), CR 506, and CR 502] would be consolidated into a single non-signalized intersection. CR 502 would be realigned and connect to US 160 approximately 1,500 feet west of the existing US 160/CR 502 intersection. The realigned CR 502 would intersect CR 506 north of US 160 and continue south of US 160 to intersect with US 160B. This realignment would eliminate both of the existing US 160 intersections with CR 502 and CR 506. Access to US 160B would be maintained through an access road on the south side of US 160. The US 160/CR 501 intersection would remain a signalized intersection at its present location. The intersections of US 160B/CR 501 and US 160B/CR 521 would be reconstructed as a roundabout.

III. IMPACTS AND MITIGATION

In compliance with NEPA, the existing conditions of the human and natural environment that could be impacted, beneficially or adversely, by the proposed alternatives were identified and analyzed. In addition, cumulative impacts from other projects or activities in the past, present, or reasonably foreseeable future were considered. These include the Animas-La Plata Water Storage Project, existing and future oil and gas development, continued community expansion, and other roadway improvement projects. Potential induced growth impacts (indirect) were also examined.

The primary resources of concern for this project include wetlands; social and environmental justice; wildlife; special status species; and visual resources. A key element of the selection of these resources was the evaluated significance of the impacts to the resource. For example, water quality is recognized as an important resource, and impacts to water quality from all alternatives are evaluated in the EIS. However, short-term and long-term construction and indirect impacts to water quality will be mitigated through the implementation and maintenance of permanent best management practices (BMPs) for stormwater management. Therefore, water quality is not included as a “primary resource of concern” for this project. A comparison of impacts for all resources for the Advanced Alternatives can be found in Table 4.25.1, Impacts to Resources by Alternative, and a summary of mitigation measures for each resource category is found in Table 4.25.2, Summary of Mitigation Measures.

- **Wetlands** – Approximately 21 acres would be lost with the Preferred Alternatives. Wetland impacts associated with various combinations of the four highway sections, including preferred and non-preferred alternatives, range from a minimum of 20.1 acres to a maximum of 23.6 acres. High value functions that receive the greatest level of impact under any combination of alternatives include general wildlife habitat, production export/food chain support, and groundwater discharge/recharge (see Table 4.7.2, Summary of Impacts to Wetlands with High and Moderate Functions). There would also be temporary impacts due to the operation of construction equipment within the wetlands and the reconstruction and extension of existing culverts. There may be cumulative impacts from the Animas-La Plata Water Storage Project, oil and gas development on the Southern Ute Indian Reservation and on non-tribal lands, community expansion, and other roadway improvement projects. These impacts would be subject to permitting and mitigation under Section 404 of the CWA. Land use changes would probably cause changes in irrigation practices and subsequent indirect impacts to wetlands. In accordance with the definition of “waters of the United States” as

stated in 33 CFR 328.3, any area exhibiting wetland characteristics sustained solely by the application of irrigation water is not regulated under Section 404 of the Clean Water Act.

Wetland impacts have been avoided or minimized during the conceptual design and selection of the alternatives through the use of alignment shifts, minimization of medians, access control lines, and retaining walls. During the design phases of specific construction projects, further avoidance and minimization elements will be included. Unavoidable permanent impacts will be mitigated through on-site and/or off-site wetland creation or restoration, in accordance with CDOT policy, current FHWA regulations (23 CFR 777), current USACE mitigation policies, and the conditions of the USACE Section 404 permit. Compensatory mitigation would replace the wetland function that is permanently impacted. It is CDOT policy to replace all permanently impacted wetlands, regardless of their jurisdictional status under the CWA. Areas disturbed temporarily by construction will be restored to their original contours.

- **Social and Environmental Justice** – Improvements to the US 160 project corridor would directly impact businesses and individuals that own, reside on, or conduct business on parcels that are completely or partially within the new right-of-way (ROW). CDOT would negotiate with owners of such parcels to acquire needed land. For many parcels, a relatively small area would be acquired, which may not require relocation of housing units or businesses. For other parcels, however, structures that are located within the ROW would be acquired. The impact assessment includes school districts, churches, police and fire protection resources. Relocation impacts will be mitigated by implementation of the Uniform Act. CDOT will provide relocation benefits and assistance. For some of the residences and businesses that would be relocated ~~by one or more alternatives~~, it may be possible to provide on-site mitigation.

It is federal policy that no person is excluded from participating in, denied the benefits of, or subjected to discrimination by any program or activity because of race, color, or national origin. The goal of this policy is to identify and avoid discrimination and avoid disproportionately high and adverse effects on minority populations and low-income populations. Potential impacts to minority and low-income populations include: relocation of residents determined to be of low-income or minority status, proximity impacts associated with visual, noise and air quality resources, access impacts related to out-of-direction travel and consolidation of highway access, and temporary construction impacts including noise, dust, and safety issues.

Based on the information contained in this EIS, there will not be disproportionate impacts to minority and low-income populations. As a result of the US 160 project, the severity of the impacts to these populations, including relocations, noise, visual character, air quality, access, and construction, are no more severe than the impacts to other populations. The minority and low-income residential relocations are estimated to be 16 out of 58 total; with one minority business relocation out of 14 total. Taking into account the proposed mitigation, the severity of noise impacts is similar between the 141 mobile homes and the other 203 buildings along the corridor, with predicted noise levels averaging 62.0 dBA and 59.4 dBA, respectively. A 3 dBA difference in decibel level, such as this, is barely perceptible to humans. Some mobile home parks will experience noise impacts, which will be mitigated. Visual and access impacts would be predominantly shared among occupants adjacent to the highway, whether minority, low-income, or otherwise. Air quality impacts

associated with CO and other criteria pollutants are predicted to decrease under all alternatives and have an overall positive impact on residents along the corridor. Construction impacts experienced by those living along and using the roadway would be temporary in nature. Safety issues associated with construction are not expected to affect the minority and low-income population any more than other community members, and long-term traffic safety would improve for all populations. Access to all properties would be maintained during construction, with any potential impacts insignificant and temporary. Throughout the environmental analysis process, CDOT has worked with residents and the public to avoid and minimize impacts to neighborhoods and mobile home parks wherever possible. As a result of discussions with the mobile home park residents, highway access and frontage roads were modified to minimize impacts to the Narrow Gauge and Cropley mobile home parks. FHWA and CDOT commit to providing affordable replacement housing for all displaced residents up to and including housing of last resort.

- **Wildlife** – All the action alternatives would cause loss of wildlife habitat due to highway expansion and access road additions. Construction activities would also create temporary animal displacements because of increased noise levels. The species most affected would be migratory songbirds and raptors that may abandon active nests near the expanded ROW. Mitigation for nesting migratory birds and raptors directly impacted by the construction activity will be required. Raptor and migratory bird nest surveys will be conducted prior to construction to identify active nests. If active nests are identified, 0.25- to 0.50-mile seasonal buffer zones will be established around nests so abandonment does not occur as a result of disturbance.

Without mitigation, the north/south movements of elk and mule deer within their winter range and between their summer and winter range would be directly affected. Community expansion, especially in rural areas, and oil and gas development would also destroy, disrupt, and fragment elk and mule deer winter range. Without mitigation, increasing traffic and faster vehicle speeds would likely contribute to more vehicle collisions with wildlife and result in a greater number of large and small mammals killed. A wider highway corridor would also increase the barrier effect, making wildlife crossing more difficult. However, under the No Action Alternative, wildlife collisions would continue at the current rate and may even increase. Wildlife crossings and fencing will be incorporated into the roadway design to mitigate connectivity impacts for multiple species. Multi-span and single-span bridges over waterways will decrease impacts to all wildlife including deer, elk, and black bears.

- **Threatened, Endangered, and Sensitive Species** – The proposed ROW expansion could adversely affect the southwestern willow flycatcher due to loss of meadow, riparian woodland, and wetland habitat. One southwestern willow flycatcher was observed on two occasions within 100 feet of the proposed ROW in 1998 surveys of the project corridor, and again on five separate occasions in the same survey location in 2002. In addition to fragmentation and loss of nesting habitat, local community expansion in the project area (especially near Bayfield), would result in loss of individual birds due to increasing predation by domestic animals and raccoons, whose numbers tend to increase due to urbanization. Additional surveys and impact avoidance and minimization methods will be required for the southwestern willow flycatcher, as well as several other species. Consultation with the US Fish and Wildlife Service (USFWS) ~~would be required for an Incidental Take Statement~~

~~which involves permission to take these species incidentally to the action~~ under Section 7 of the Endangered Species Act has been completed. The Biological Assessment and Biological Opinion are provided in Appendix H, Biological Assessment, Biological Evaluation, and Biological Opinion. Additional surveys during final design and prior to each construction phase will be conducted for bald eagle nests, yellow-billed cuckoos, burrowing owls, and several sensitive plant species. There could also be impacts to sensitive frog and toad species because of wetlands loss. These impacts will be mitigated by creating and reconstructing wetlands. All of the alternatives, including the No Action Alternative, could increase vehicle collisions with bald eagles feeding on roadkill if wildlife collisions are not reduced. Populations and individual sensitive plant species located within the expanded ROW could be eliminated. Mitigative actions will be taken to avoid these plants.

- **Visual** – Road realignment would impact previously intact, undisturbed landscapes. The expansion of the existing highway with more paved surfaces, cleared areas, and the additional design features and structures (such as interchanges, access roads, guardrails, and retaining walls) would increase the overall visual scale and dominance of the highway in the viewshed. Other activities, such as oil and gas development and community expansion, would also contribute to the loss of uninterrupted, natural-appearing scenic vistas in the region. The visual landscape would be particularly affected in the Grandview section. To mitigate these impacts, construction of cut-and-fill slopes will be minimized, and the cut line blended into the existing terrain. Revegetation would occur as soon as possible after construction to stabilize soils and reduce visual contrasts. The original US 550 alignment at Farmington Hill will be removed and revegetated with native species including shrubs and trees. Retaining walls will include design features to add to the scenic quality of the project corridor.

IV. FINAL SECTION 4(f) EVALUATION

The intent of Section 4(f) of the US Department of Transportation Act of 1966 (as amended) is to avoid use of public parks, recreation areas, wildlife and waterfowl refuges, and historic sites by transportation projects. Section 4(f) specifies that a transportation program or project requiring the use of Section 4(f) properties may be approved only if there is no feasible and prudent alternative to using that land, and the project includes all possible planning to minimize harm to the resource. Several options were explored to avoid or minimize impacts to these resources. A Final Section 4(f) evaluation was completed for the nine historic properties that would be impacted by the project. These properties include one segment of the Denver & Rio Grande Railroad grade, and 16 segments of eight irrigation ditches that are crossed by the proposed project. Other Section 4(f) properties, including historic structures and the Little Pine River Park, would be avoided by design alterations. Since the vast majority of these properties are linear and currently cross US 160, neither the Preferred nor the other action alternatives would avoid the properties entirely. The final Section 4(f) determination is included in this FEIS. ~~A final Section 4(f) determination will be included in the FEIS.~~

V. PUBLIC AND AGENCY INVOLVEMENT

Public involvement in the decision-making process has been ongoing; ~~and will include a public hearing during the public review of the DEIS.~~ the CDOT project team met with the public eleven times during the alternatives development process. After the decision was made to prepare an EIS, another public scoping meeting was held in March 2003 to present additional alternatives. ~~There will be a public hearing to accept comments on the DEIS, and written comments will be accepted for 45 days following the Notice of Availability (NOA) of the DEIS.~~

An agency scoping meeting for this project was conducted on February 25, 1999. The following governmental agencies and community groups attended: FHWA, BLM, Southern Ute Indian Tribe (SUIT), Colorado Division of Wildlife (CDOW), La Plata County, the Town of Bayfield, and Trails 2000.

Another agency scoping meeting for the DEIS was held on March 4, 2003. Attending agencies included the BLM, USACE, and the City of Durango. Additional agencies that have been involved with this EIS are the Environmental Protection Agency (EPA), USFWS, State Historic Preservation Office (SHPO), Colorado Natural Heritage Program (CNHP), Colorado Department of Public Health and Environment (CDPHE), Natural Resources Conservation Service (NRCS), SUIT, and the SUIT Growth Fund.

This document and conceptual plans have also been subjected to a Value Engineering Study, and recommendations from this study have been factored into this EIS. Additional value engineering during the design phase would be accomplished in accordance with FHWA regulations.

A public hearing on the US 160 DEIS was held on October 13, 2005. This FEIS addresses comments made by the public and governmental agencies during the DEIS comment period. All comments are included in Appendix G, Public Hearing.

As they were received, each comment was assigned a number. If there were several points, questions, or topics in a comment, each received a letter. Each numbered and lettered comment has an associated response, also included in Appendix G, Public Hearing. Based on the comment and associated response, changes to the DEIS were made as necessary. These changes are shown in this FEIS; new text is shown with a double underline and deleted text is shown with a "strike-out." A summary of changes and their location are shown in Table 1.1, Comment Index, in Appendix G, Public Hearing.