

4.6 ENVIRONMENTAL JUSTICE

Summary

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, issued in February 1994, as well as the President’s February 11, 1994 *Memorandum on Environmental Justice*, are intended to ensure that federal departments and agencies identify and address disproportionately high and adverse human health or environmental effects of their policies, programs, and activities on minority and low-income populations. EO 12898 requires that “each federal agency shall make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...” The memorandum further specifies that “each federal agency shall analyze environmental effects, including human health, economic, and social effects, of federal actions on minority communities and low income communities, when such analysis is required by NEPA.”

Title VI of the Civil Rights Act of 1964 also requires each federal agency to actively ensure non-discrimination on the basis of race, color, ethnicity, and national origin. Supplemental legislation provides the same protection from discrimination based on sex, age, disability, or religion. EO 12898 is primarily a reaffirmation of the principles of Title VI, but adds low-income populations to minority populations in evaluating policies, programs, and activities and ensures that procedures are in place to further protect groups which have been traditionally under served.

Following EO 12898, guidance and advisory documents were developed to encourage better decision making during the planning and implementation of major transportation projects. In April 1997, the U.S. Department of Transportation (USDOT) issued Order 5610.2 on Environmental Justice to address *Environmental Justice in Minority and Low Income Populations*.

The Council on Environmental Quality (CEQ) has oversight of the federal government’s compliance with EO 12898 and National Environmental Policy Act of 1969 (NEPA). CEQ, in consultation with the U.S. Environmental Protection Agency (USEPA) and other affected agencies, developed the December 1997 guidance, *Environmental Justice Guidance under the National Environmental Policy Act*, to further assist federal agencies with their NEPA procedures and to effectively identify and address environmental justice concerns.

In December 1998, the Federal Highway Administration (FHWA) issued Order 6640.23 *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* that requires FHWA to implement USDOT Order 5610.2 and incorporate environmental justice principles into FHWA programs, policies, and activities.

Key objectives of transportation planning are to achieve safety and mobility, and to achieve environmental justice. The three fundamental environmental justice principles as stated in EO 12898 are:

1. Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental affects, including social and economic impacts, on minority populations and low-income populations.
2. Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
3. Prevent the denial of, reduction in or significant delay in the receipt of benefits of the project by minority and low-income populations.

FHWA's *Overview of Transportation and Environmental Justice Brochure* (2000), notes that the implementation of environmental justice principles is intended to:

- Assist in making better transportation decisions with the needs of all people in mind.
- Assist in the design of facilities that fit more harmoniously within their host communities.
- Enhance the public involvement process and ensure full and fair participation by all potentially affected communities.

Methodology

The environmental justice analysis for the United States Highway 36 (US 36) Final Environmental Impact Statement (FEIS) was completed in accordance with Presidential EO 12898, Title VI of the Civil Rights Act of 1964, the USDOT and FHWA orders, and CEQ's *Environmental Justice; Guidance Under the National Environmental Policy Act* and followed the October 2005 Guidance of the Colorado Department of Transportation (CDOT): "Title VI and Environmental Justice Guidelines for NEPA Projects," Version 3, which provides guidelines to incorporate environmental justice into NEPA documentation.

The environmental justice evaluation process for the US 36 Environmental Impact Statement (EIS) evaluates a broad range of alternatives, uses a strong public involvement process, and strives to identify, avoid, minimize, and mitigate adverse effects and impacts, and to enhance project benefits.

This section documents minority and low-income populations within the project area and adjacent to the US 36 corridor. The analysis discusses the impacts and benefits from this project. The environmental justice analysis intentionally seeks out public input and feedback on potential impacts to these populations from the proposed project. Therefore, specific outreach efforts made by the US 36 Mobility Partnership to involve minority and low-income populations in the decision-making process are presented. Where high and adverse impacts cannot be avoided, measures to minimize and/or mitigate these impacts are provided.

What Population Groups are Addressed

EO 12898 and Title VI, as well as the USDOT and FHWA Orders on Environmental Justice, address persons belonging to the following focused populations:

- **Minority** — People of the following origins: Black, Asian, American Indian and Alaskan Native, Native Hawaiian or Other Pacific Islander, and Hispanic.
- **Low-income** — Households whose household income is at, or below, the U.S. Department of Health and Human Services (HHS) poverty guidelines.

How Low-Income and Minority Populations Impacts are Evaluated

CEQ provides policy guidance for the implementation of NEPA. The CEQ guidance (CEQ 1997) states that minority and low-income populations should be identified when either of two criteria exists:

1. The minority or low-income population of the affected area exceeds 50 percent, or
2. The population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographical analysis.

The CEQ guidance noted above was used to determine where areas of low-income and minority persons reside adjacent to the US 36 corridor. Areas were identified that met criteria 1 and 2. For more specific information on the environmental justice evaluation performed for the US 36 EIS, refer to the *Environmental Justice Technical Appendix* (CH2M Hill 2005).

Low-Income Households

CDOT and Regional Transportation District (RTD) reviewed the United States (U.S.) Census 2000 data as the base data set at the census block group level and refined and updated the data using U.S. Department of Housing and Urban Development (HUD) data to identify areas where low-income households reside in the corridor. Upon consultation with FHWA, the Federal Transit Administration (FTA), and the USEPA, CDOT and RTD used 30 percent of area median income for each of the counties to measure the low-income population. Additional information about this methodology is provided in the *Environmental Justice Technical Appendix* (CH2M Hill 2005). The HUD data were used (in accordance with CDOT's September 2004 guidance) because these data are county-specific, and therefore are the best measure of local conditions. In addition, data from HUD are more inclusive of low-income households than the poverty thresholds from the U.S. Census 2000 or HHS data. The calculation of low income using this methodology results in a definition of low income that accounts for a higher percentage of population than using only the U.S. Census and/or HHS data.

Minority Populations

U.S. Census 2000 data were used to identify minority populations within the corridor. Minority information was collected and presented by person/population within census block groups, and the geographic unit used to map minority populations for this FEIS. The block group is a combination of census blocks. U.S. Census block groups were used for minority populations to be consistent with low-income household data. Low-income household data are collected by the census in block groups, rather than at the smaller census block level, to protect the confidentiality of low-income households. Using block groups in lieu of census blocks does not appreciably change the calculations of minority households.

Disproportionately High and Adverse Impacts

EO 12898 and subsequent guidance identify disproportionately high and adverse effects as either of the following:

- An impact that is predominantly borne by minority populations or low-income households.
- An impact that will be experienced by these populations in a way that is appreciably more severe or greater in magnitude than would be experienced by non-minority or non-low-income populations.

Environmental Justice Analysis Process

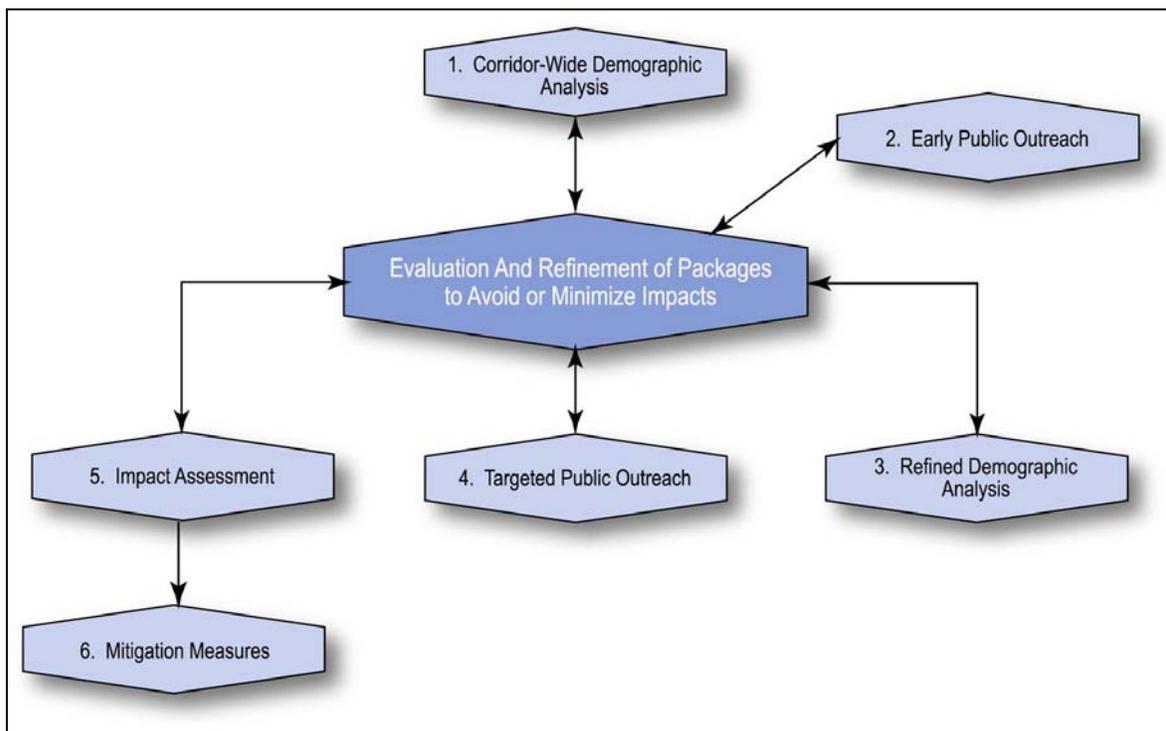
Community and environmental considerations were fully integrated into the NEPA process from the beginning and have been considered during scoping, alternatives development, public and agency involvement, and environmental analysis. This process has incorporated efforts to minimize adverse impacts to minority populations and low-income households and to incorporate features into the project to address the concerns of these communities.

Figure 4.6-1, Implementation of Environmental Justice Process, illustrates the following steps that were taken to analyze impacts and involve affected communities:

- Corridor-wide demographic analysis.
- Early public outreach to low-income households and minority populations.
- Refinements to the demographic analysis informed by local knowledge and experience.
- Targeted public outreach.
- Assessment of impacts to all communities including low-income and minority communities described in this FEIS.

- An analysis of whether or not the impacts identified would be predominantly borne by low-income households and/or minority populations or if the impacts would be appreciably more severe or greater in magnitude to these populations.
- Identification of impact mitigation measures if efforts to avoid or minimize impacts are unavailable or impracticable.

Figure 4.6-1: Implementation of Environmental Justice Process



Source: US 36 Mobility Partnership, 2004.

Continuous efforts were made during all phases of the NEPA process to avoid, minimize, and/or mitigate impacts; these efforts were guided by the evolving demographic analysis and increasingly focused public outreach activities.

Environmental Justice Analysis Summary

The Adams Segment has the highest percentages of minority and/or low-income populations in the project area.

The Adams Segment has the highest percentages of minority and low-income populations in the project area. All of the build packages would impact these communities. The impacts are also evaluated against potential benefits to communities such as safer, more reliable and efficient transportation systems, better access to transit and transit stations, and improved mobility across the corridor.

The US 36 Corridor FEIS examined the full range of environmental and social impacts required by NEPA for all of the build packages. Of the resource areas evaluated, right-of-way (ROW) and relocations, parks and open space, visual impacts, noise, and construction, were identified as having the greatest potential for presenting adverse impacts to minority and low-income populations and were therefore evaluated in greater detail. The environmental justice analysis concluded that for Package 2 and Package 4 there would be 171 and 172 displacements, respectively, to minority and low-income communities in the Adams Segment. The Combined Alternative Package (Preferred Alternative) would only have 41 displacements in this same segment.

Although the number of displacements would be reduced with the Combined Alternative Package (Preferred Alternative), additional individuals would experience temporary construction impacts. The analysis also identified measures for each of these resource areas to minimize these impacts.

It should be noted that the initial design concept for improvements along the existing US 36 highway began along the centerline with expansion equally to each side. However, in some segments, particularly the segment between Interstate 25 (I-25) and Federal Boulevard, expansion projects have already widened the highway to the edges of the ROW. As a result, substantial property acquisitions would be needed along the north and south sides of US 36 to widen the highway on each side of centerline. Therefore, CDOT and RTD evaluated design options to widen US 36 to the north and to the south, and compared these options to widening from the centerline. Results showed that widening from the centerline or to the north would require more property acquisitions than widening to the south. As a result, the designs of Package 2 and Package 4 were refined to widen US 36 to the south to reduce the overall number of full or partial property acquisitions that would be required. The design of the Combined Alternative Package (Preferred Alternative) was modified to reduce the cross-section, thereby minimizing the number of property acquisitions that would be required.

The Combined Alternative Package (Preferred Alternative) will continue to be modified to avoid and minimize impacts to minority persons and low-income households. A focused and proactive environmental justice outreach program is ongoing to keep the public informed and to incorporate their ideas.

Affected Environment

The first step in the analysis was to describe the demographics and character of the communities on a corridor-wide basis and then on a segment-specific basis.

Existing Corridor Conditions

The planning context for the environmental justice analysis included an analysis of the population of low-income and minority persons in the Denver metropolitan area (eight counties that comprise the Denver Regional Council of Governments [DRCOG]), and in the US 36 project area, shown in Table 4.6-1, Low-Income Households and Minority Populations in the Denver Metropolitan Area and the US 36 Project Area.

Table 4.6-1: Low-Income Households and Minority Populations in the Denver Metropolitan Area and the US 36 Project Area

Geography	Percentage of Low-Income Households ¹ (%)	Percentage of Minority Population ² (%)
Denver Metropolitan Area	16	28
US 36 Project Area	18	29

Source: U.S. Census, 2002; HUD, 2003.

Notes:

¹ Low-income is measured in households and minorities in persons.

² Percentage of total population within the project area that includes 216,574 total households and 554,261 persons.

% = percent

US 36 = United States Highway 36

The percentage of low-income households in the Denver metropolitan area is 16 percent, and the percentage of minority population is 28 percent. These percentages compare to low-income households and minority populations in the US 36 project area of 18 and 29 percent, respectively. The percentage of low-income households and minority populations in the US 36 project area is slightly greater (2 percent and 1 percent, respectively) than the low-income households and minority populations of the eight-county DRCOG metropolitan area.

Figure 4.6-2, Minority Population within the US 36 Project Area, shows the percent minority population within the project area. Figure 4.6-3, Low-Income Households within the US 36 Project Area, shows the percent of low-income households within the project area. These figures show the general demographic characteristics of the low-income and minority populations within the project area and adjacent to the corridor. The figures demonstrate concentrations of low-income households and minority populations on either end of the corridor; that is, Denver, Adams, and Boulder segments.

Early Public Involvement Efforts Related to Existing Conditions in the US 36 Corridor

Early public involvement efforts are key to addressing environmental justice issues and provide information to CDOT and RTD about people's perceptions of impacts and benefits and an understanding of the communities which would be affected by the project. Public outreach in the US 36 corridor provided opportunities to communities comprised of low-income households and minority populations to have a say in decisions that would impact them. The public involvement approach was designed to reach these communities to disseminate information, to gather input, and to connect with communities. The approach was based on the *Environmental Justice in Colorado's Statewide and Regional Planning Process Guidance* (CDOT 2003) in order to focus on two key concepts: (1) a sincere agency-wide commitment to involving low-income and minority communities in the decision-making process, and (2) building the agency's capacity to earn trust and build lasting relationships with low-income and minority communities. Additional information on the comments and feedback received during these public outreach activities is provided in Chapter 6, Public Involvement Program, and the *Public Involvement Program Technical Report Addendum* (CDR Associates 2009). Project documents, outreach materials, notices, comments, and project updates are also provided at the project website at: <http://www.us36eis.com/documents>.

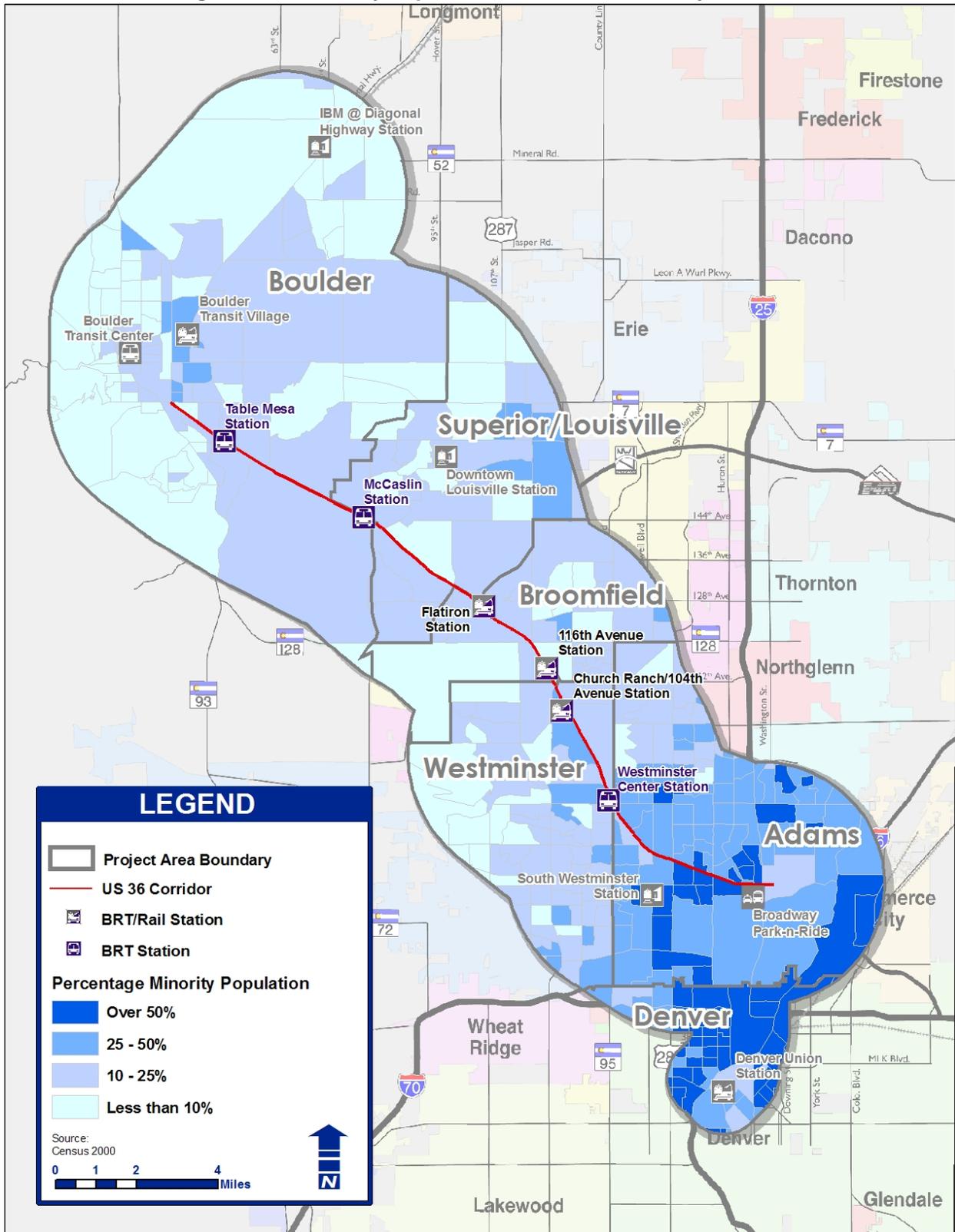
Public outreach began with a general, corridor-wide approach, which included:

- Advertising project information and announcements in both English and Spanish at diverse media outlets serving the affected communities, including local newspapers, radio, and television.
- Providing Spanish translation and documents at public workshops.
- Providing project website and telephone project information in both English and Spanish.
- Meeting with local officials.
- Meeting with members of other project teams active in the corridor to identify formal and informal community leaders, and organizations with whom to discuss the approach.

The public involvement team members brought visual and written information indicating how the project might impact local areas. The team posed the following questions:

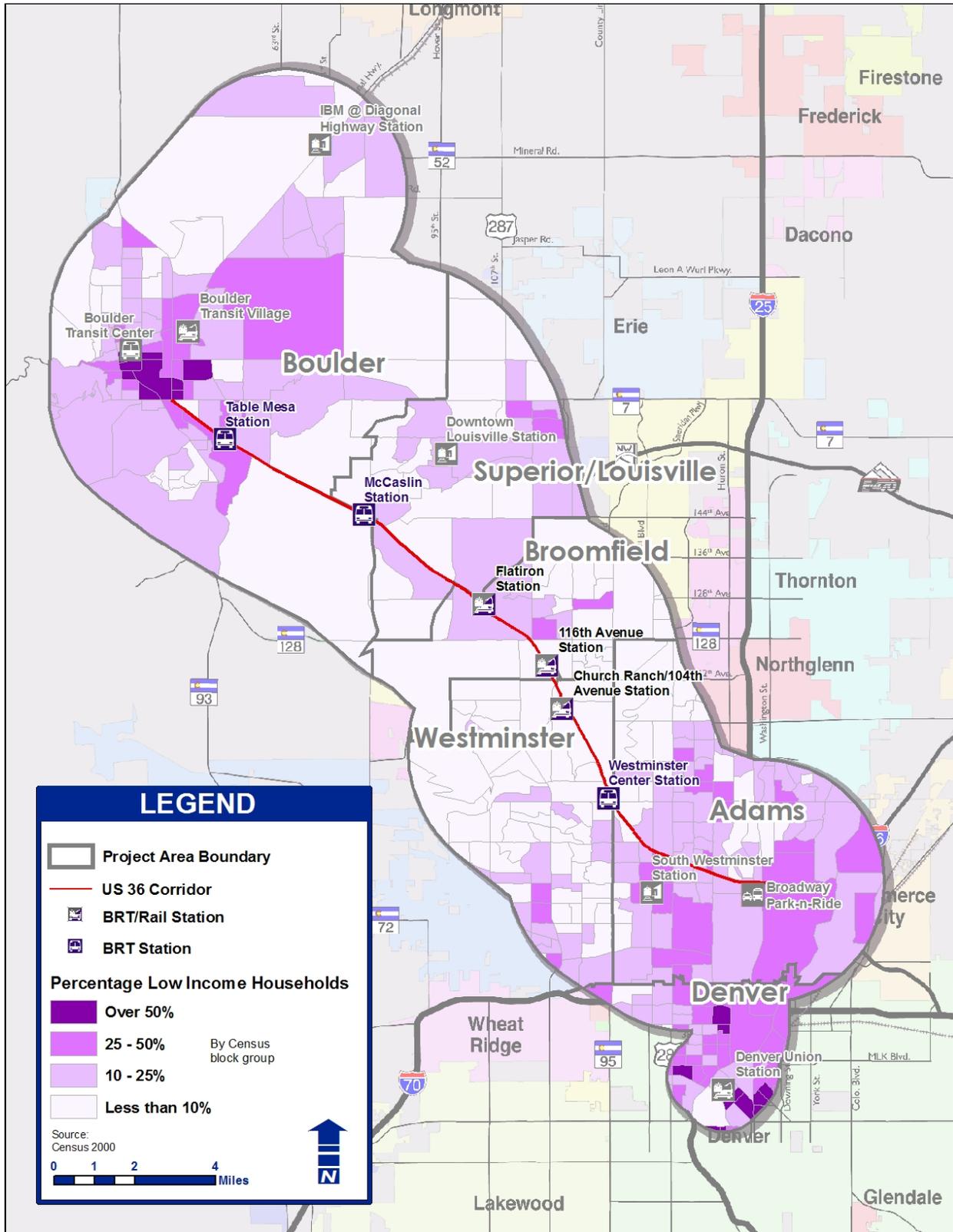
- Where do people need to go, and how are they served now?
- What do you see as possible impacts and benefits of the potential action?
- What is important about the fabric of this community that we need to pay attention to?
- What fears and hopes do you have if a station is developed near you? If there is additional traffic or expanded highway facilities?
- How do people living and working here communicate about local issues?
- How do they want to keep informed about the project?
- How would they like to participate?
- What meetings might we be invited to?
- What local publications are useful for informing people?

Figure 4.6-2: Minority Population within the US 36 Project Area



Note: The 116th Avenue Rail Station is not a part of the 2004 FasTracks Program. Additional stations were added in the early planning stages of the US 36 Environmental Impact Statement. Exact rail station locations and additional stations may be reconsidered in the U.S. Army Corps of Engineers/Regional Transportation District Northwest Rail Environmental Assessment/Environmental Evaluation.

Figure 4.6-3: Low-Income Households within the US 36 Project Area



Note: The 116th Avenue Rail Station is not a part of the 2004 FasTracks Program. Additional stations were added in the early planning stages of the US 36 Environmental Impact Statement. Exact rail station locations and additional stations may be reconsidered in the U.S. Army Corps of Engineers/Regional Transportation District Northwest Rail Environmental Assessment/Environmental Evaluation.

Refined Demographic Analysis

The demographic analysis was refined to become more segment-specific and was supplemented by local planning knowledge and the experience of the public involvement team. The following describes low-income and minority populations by segment.

Impacted Communities within Project Area Segments

In general, an analysis of the low-income household and minority communities in the US 36 corridor identified that in the western end of the corridor, the percentage of low-income households and minority populations continue to decrease from east to west. As part of the refined demographic analysis, detailed maps were prepared showing both the percentages and absolute numbers of minority populations and low-income households within the 3-mile study area, and within 300 and 1,000 feet of the US 36 corridor (based on U.S. Census 2000 data). The maps and additional analysis of the demographic characteristics of the US 36 corridor are included in the *Environmental Justice Technical Appendix* (CH2M Hill 2005). While there are low-income households and minority populations in Westminster, Broomfield, Superior, Louisville, Boulder and Denver, these populations fall within the project area but not within 300 and 1,000 feet of US 36 and would not experience direct adverse impacts from the project. These low-income households and minority populations would not experience impacts to minority and/or low-income populations from the build alternatives in the US 36 corridor. The Adams Segment contains the highest percentages of minority and/or low-income populations within the 300 and 1,000-foot impact area.

Denver Segment

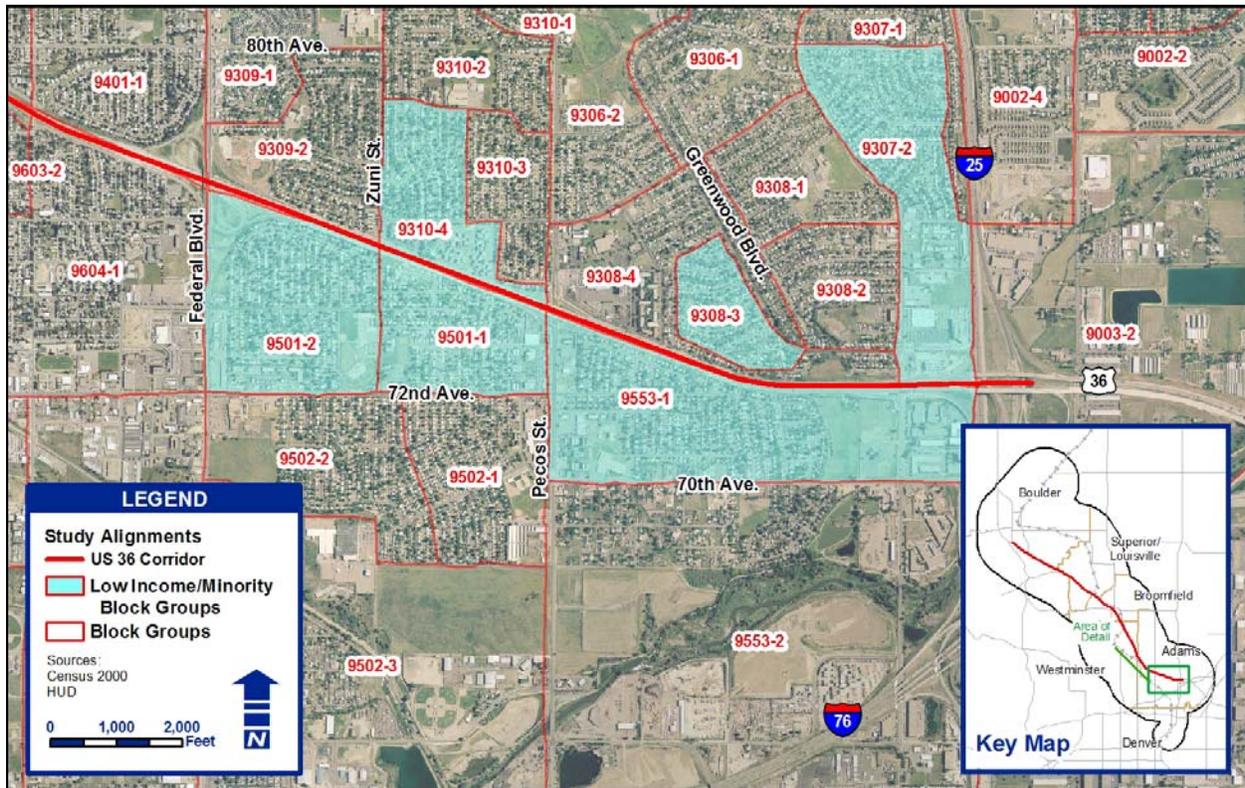
The Denver Segment includes communities with over 50 percent low-income households or minority populations. Direct impacts to low-income households and minority populations in the Denver Segment are not discussed in this section because physical improvements to US 36 would not extend into this segment. However, because there are large absolute numbers of low-income populations, and these populations exceed the percentage of the low-income population in the corridor, focused outreach efforts were made in the appropriate communities.

Adams Segment

The communities in the Adams Segment have the greatest possibility of experiencing adverse impacts predominantly borne by minority populations and/or low-income households from the build packages. In the Adams Segment, the low-income and minority populations meet the thresholds in CEQ guidance for a concentration of low-income and minority populations in the corridor. There are approximately 8,255 minority persons in the Adams Segment within 1,000 feet of the US 36 corridor. When compared to a total population of 26,004 persons within 1,000 feet of the US 36 corridor, minorities represent 31 percent of the total. In this segment, there are 1,595 low-income households within 1,000 feet of the US 36 corridor. When compared to a total household population of 10,073 households, low-income households account for 15 percent of the total. There are six block groups in the Adams Segment in which concentrations of low-income and/or minority persons reside. These block groups are displayed in Figure 4.6-4, Low-Income and Minority Block Groups in the Adams Segment.

Within the Adams Segment, 60 percent of the minority population resides in census block groups where the majority of the population is low-income or minority. The greatest number of minority populations reside north and south of US 36 between I-25 and Federal Boulevard. South of US 36, the land use is characteristically single-family residential with commercial land use along the north-to-south major arterials (Pecos Street and Federal Boulevard). The proximity of residential uses adjacent to the US 36 ROW is most concentrated in the Adams Segment where single-family dwelling units parallel US 36 for the entire length of the segment. Many of these dwellings were constructed 40 years ago when US 36 was a four-lane highway, and some of the residential units are occupied by minority persons and low-income households.

Figure 4.6-4: Low-Income and Minority Block Groups in the Adams Segment



Westminster Segment

In the Westminster Segment, there are fewer low-income and minority persons within the project area and within 300 and 1,000 feet of US 36 than in the Adams Segment. Of the low-income and minority populations in this segment, there are no persons who reside in block groups with 50 percent or more low-income or minority populations. Therefore, a focused, neighborhood-specific public outreach approach was not implemented.

Broomfield Segment

There are no low-income or minority communities in this segment in which the populations of the affected area exceed 50 percent, or in which the low-income or minority population is meaningfully greater than the general population. Additionally, there were not large absolute numbers of these populations in this segment. Therefore, a focused, neighborhood-specific public outreach approach was not implemented.

Superior/Louisville Segment

There were no low-income or minority communities in this segment in which the populations of the affected area exceed 50 percent, or in which the low-income or minority population is meaningfully greater than the general population. Additionally, there were not large absolute numbers of these populations in this segment. Therefore, a focused, neighborhood-specific public outreach approach was not implemented.

Boulder Segment

Boulder has a large student population who reside in low-income households and there are some block groups with 50 percent or more low-income populations. However, there are no minority populations in the Boulder Segment that reside in block groups with 50 percent or more minority populations. Focused outreach efforts were made in the appropriate communities because there are large absolute numbers of low-income populations in this segment.

Public Outreach Targeted for Low-Income and Minority Populations Based on Refined Demographic Analysis

Once the demographic analysis was further refined, the public involvement approach became more focused. This more focused, neighborhood-specific approach within the Denver, Adams, and Boulder segments involved:

- Contacting and conducting key-person interviews with formal and informal community leaders, groups, and organization representatives.
- Identifying community liaisons to help disseminate information in their communities, organize meetings for CDOT and RTD if appropriate, and accompany CDOT and RTD to individual and small group meetings.
- Identifying potentially impacted businesses that are either minority-owned or important to low-income and minority persons (especially if the businesses serve as a focal point for the community).

The following section notes the individuals and organizations that were contacted by segment and geographical area for the focused neighborhood-specific approach. For a comprehensive list of outreach activities, refer to the *Public Involvement Program Technical Report Addendum* (CDR Associates 2009).

Denver Segment

Tailored outreach efforts began in the Denver Segment in the northeast Denver neighborhoods of Globeville, Sunnyside, Highland, and Chaffee Park, which the demographic analysis and outreach program identified as having a high percentage of low-income or minority populations. A summary of meetings held with Denver Segment stakeholders is listed below. Although physical improvements to the US 36 corridor do not extend to the Denver Segment, these communities are within the project area; bus rapid transit (BRT) service would operate in this segment; and the communities may experience indirect impacts from the US 36 corridor improvements; therefore, focused outreach was performed to contact these residents.

Some of the key contacts made in these neighborhoods, either through telephone contacts, one-on-one meetings, or small group meetings, included the following individuals, and civic, religious, and educational groups and organizations:

- Councilwoman Judy Montero
- I-70 East EIS Project Team
- El Centro Su Teatro
- Holy Transfiguration of Christ Cathedral
- Colorado People's Environmental and Economic Network
- Lower Downtown Transportation Committee.
- Cross-Community Coalition
- Romelio Carillo, community activist in Globeville

- Five Points Business Association
- Quigg Newton Homes
- Sunnyside United Neighbors
- Laradon Hall
- Ellen Salvador, Elyria-Swansea-Globeville Senior Group
- Highland United Neighbors
- Globeville Civic Association
- Globeville Neighborhood Association
- Garden Place Elementary School
- Highland Economic and Community Health Organization

Adams Segment

Outreach efforts were undertaken in the Adams Segment through telephone contacts, one-on-one meetings, or small group meetings. In addition, all residents residing adjacent to US 36 received direct-mail notification of public involvement activities. Focused outreach targeted the Perl Mack Manor, Valley Vista, Western Hills, Valley View, and Skyline Vista communities.

There is a row of homes and apartments that back up to the sound walls along US 36. Most of the multi-family housing is located on the north side of US 36, with apartments along I-25 and west of Pecos Street between US 36 and 80th Avenue. This area includes many of the older and more urbanized neighborhoods in unincorporated areas of Adams County. The primary ethnicities are Hispanic and white. There is also a small number of Hmong households, the majority of which are located west and north of the segment and are located a distance from US 36 outside of the areas identified as having adverse impacts. Contacts were made with Yang Chee, who serves as a liaison to the Hmong community, who communicated information to this group and representatives from a local citizens' group, Community Oriented Governance, which also coordinated with the Hmong community by distributing information on the project. Because of the location of the Hmong community, Hmong translation services at outreach meetings were not required. Important community centers in this area include churches, Skyline Vista Park, and the Perl Mack Community Center. Two schools in this area include a middle school north of US 36 just west of I-25, and a school south of US 36 near Zuni Street and 72nd Avenue.

Some of the key contacts made with stakeholders in low-income and minority neighborhoods in the Adams Segment included the following residents and civic, religious, and educational groups and organizations:

- Iglesia Vida Nueva, Reverend Dan Nelson
- Westminster Senior Center
- Westminster Community Oriented Governance Meetings
- Yang Chee, Hmong representative and community activist
- 40 Assets
- Baker Elementary School
- Holy Trinity Church and School
- Catholic Charities
- Skyline Vista Elementary School

- M. Scott Carpenter Middle School
- Skyline Vista Elementary School-Management and Planning Team
- Perl Mack Community Center
- Valley Lutheran Church, Pastor Erwin Franco
- Local Realtors-Paisano Realty and Remax Realty

There are also a large number of businesses in the Adams Segment that are directly adjacent to US 36, several of which are located at major intersections with Federal Boulevard and Pecos Street. In 2005 and 2006, project representatives contacted 22 businesses that are directly adjacent to US 36 including restaurants, retail establishments, automobile dealerships, hotels, and office complexes. Business representatives were invited to share information about their businesses and their roles in the community, and the businesses were added to the project mailing list. Additionally, local realtors were contacted to solicit information about the neighborhoods of Skyline Vista, Valley View, and Valley Vista.

In April 2006, CDOT and RTD held a neighborhood meeting to update Adams County residents between Federal Boulevard and Broadway on the status of the US 36 corridor plans and to discuss potential impacts and means of reducing impacts. The workshop was held at Skyline Vista Elementary School at 7395 Zuni Street in Westminster.

Boulder Segment

The U.S. Census income-level maps indicate areas of low-income households where there are large quantities of known student rentals. Some of these rentals occur in South Boulder, in proximity to the highway and north and west of the planned Boulder Transit Village. Within 3 miles, but not within 0.5 mile of the planned Boulder Transit Village, are three mobile home parks with low-income and minority populations. The outreach efforts with stakeholders in the Boulder Segment included:

- City of Boulder Housing and Human Services, John Pollak
- El Centro Amistad
- Intercambio de Comunidades
- Orchard Grove Mobile Home Park
- Thistle Community Housing; Mapleton Park
- San Juan Del Centro multi-family housing complex and on-site Learning Center
- Boulder Mobile Manor
- Sacred Heart of Jesus Christ Church
- People's Clinic
- Consultation with Nino Gallo, a local activist, on outreach to Latino communities
- Dedicated mailings in Spanish and English

Public Workshops held in July 2006

Additional public workshops were held in July 2006 at Westminster Park and Recreation Center, Ranum High School in Denver, and Spice of Life Event Center in Boulder to discuss the separation of the rail and highway projects, and to solicit input regarding packages and a preferred highway alternative. These workshops attracted more than 300 attendees; although the workshops did not only target low-income households and minority communities, they did include residents of these populations and were a key source of dialogue and feedback. During these workshops, concerns were expressed about the project and

some support was expressed for Package 1. Refer to Chapter 6, Public Involvement Program, for additional information on comments received.

Concerns That Have Been Identified

The following key concerns and interests were expressed by low-income and minority community members during the focused public outreach performed in the Denver, Adams, and Boulder segments. These concerns were considered during alternative screening/development and preliminary engineering, and these concerns will continue to be a primary consideration as the project progresses.

Denver Segment

- Access to affordable transportation to and from employment centers such as Denver, Commerce City, and Westminster; to grocery and other shopping centers; to schools; and to health services. The recent closing of a local public health clinic and elimination of Route 47 bus service has heightened this concern.
- Diesel emissions and noise pollution from existing and future increases in highway use. Ongoing and substantial impacts to air quality (among other health and quality of life indicators) from past transportation projects (i.e., I-25 and I-70) have made members of these neighborhoods wary of projects that would approach or pass through this area.
- Concerns about their communities receiving an equal share of transit and other public expenditures in the region.
- Maintaining and improving the level of existing transit services in the area.

Adams Segment

- Connecting activity centers in the US 36 corridor with those outside of the corridor.
- Interest in transit, and specifically rail, for improving access to Denver events.
- Concerns about inducing regional growth in population and pollution.
- Impact on and access to Covenant Village Hospital was mentioned on one occasion.
- Impacts to property values due to plans to widen the highway.
- Concerns about the acquisition and relocation process and the need to know if and when property acquisitions will take place.
- Construction impacts to neighborhoods on the south side of the highway such as noise and dust.
- Concerns about impacts to neighborhoods from an increase in noise from the highway and support for higher sound walls.
- Expediting decision process to provide clarity about the status of property acquisitions.

Boulder Segment

- Concerns about preserving low-income housing and new development infringing on low-income housing.
- Interest in improving transportation access from low-income communities to employment and health centers.
- Mitigation of noise levels from the highway.
- Impacts to property values from the highway.

Business Outreach

Data were collected about businesses potentially impacted by construction or displacements from the Adams County Economic Development, the Colorado Office of Economic Development and International Trade, 40 Assets, and the Colorado Minority Business Office. As part of the focused outreach process, information regarding minority ownership and numbers of minorities employed and served at these businesses was informally requested during personal interviews. Information was also gathered during residential and public outreach meetings to solicit information about where people shop and work, and to cross check the business activity information received from other sources.

As part of the outreach process, information regarding minority business ownership was solicited.

The purpose of the business outreach in the Adams Segment was to:

- Introduce or increase awareness of the project and share information about opportunities for involvement.
- Solicit business information regarding the number of employees; demographics, such as low-income or minority populations; employees' transportation needs and concerns; and business clientele.
- Obtain relevant community information.
- Identify questions or concerns regarding the project and follow-up activities for ongoing/focused outreach.

The following is a list of potentially-impacted businesses identified during the NEPA process.

- Subway – 7260 North Broadway, Denver, 80221
- China Kitchen – 7262 North Broadway, Denver, 80221
- Discount Smoker – 7264 North Broadway, Denver, 80221
- Go Chevrolet – 7320 North Broadway, Denver, 80221
- Mountain States Toyota (former location) – 7300 North Broadway, Denver, 80221
- 7-Eleven – 7270 North Broadway, Denver, 80221
- D'Muluye Enterprise – 7310 North Broadway, Denver, 80221
- Venture Inn – 7333 Pecos Street, Thornton, 80221
- Aracely's Beauty Salon and Mex Insurance – 1620 West 74th Way, Thornton, 80221
- Double Tree – 8773 Yates Drive, Westminster, 80031 (not in Adams Segment)
- Sheridan Park 7 – 8620 Wolff Court, Westminster, 80031 (not in Adams Segment)
- Sheridan Park 4 – 8671 Wolff Court, Westminster, 80031 (not in Adams Segment)

Per the suggestion of the Colorado Minority Business Office, the businesses listed above were researched on the website (www.state.co.us/oed/mbo). None of the impacted businesses are registered with the state as minority-owned or disadvantaged businesses. CDOT and RTD identified other businesses that serve or are important to low-income and minority populations in Segment 2. These include:

- Old Santa Fe Restaurant
- Avanza Food Stores
- Shepherd of the Valley Lutheran Church
- Briarwood North Apartments

- Valli-Hi Motel
- Turnpike Liquors
- Ames Tool Systems
- Paycheck Loans
- Brewskis
- Great Scott Eatery
- Black Angus
- The Espresso Lane

Most individuals at businesses contacted during this process expressed an appreciation for the outreach effort and some existing knowledge of the potential improvements in the corridor. The contacted businesses represent a mix of enterprises, ranging from small business to chain or corporate ownerships. From the information provided, it was determined that two hotels located next to the US 36 ROW may be serving as long-term housing for those employed in the area, and on variable incomes. Several businesses identified concern about construction impacts. Business owners and employees believe that improvements will not necessarily mean that their business will benefit based on negative experiences during previous construction activity. Businesses want to ensure that construction and displacement impacts are addressed and mitigated. Convenient access to business locations is connected to the importance of visibility from the highway and roadways. Access and visibility are important to retaining local/existing clientele and attracting new clientele.

Additional information about the US 36 Public Involvement Program (PIP) and business surveys is presented in Chapter 6, Public Involvement Program.

Impact Evaluation

The environmental justice analysis in this FEIS identifies and evaluates the environmental and interrelated social and economic effects of the US 36 improvements, and identifies impacts that would be predominantly borne by low-income households and/or minority populations, or would be more severe or greater in magnitude to these populations. The environmental justice analysis concluded that for Package 2 and Package 4 there would be 171 and 172 displacements, respectively, to minority and low-income communities in the Adams Segment. The Combined Alternative Package (Preferred Alternative) would have 41 displacements in this same segment. Although the number of displacements would be reduced with the Combined Alternative Package (Preferred Alternative), there would be additional individuals experiencing temporary construction impacts. Mitigation measures to avoid, minimize, and reduce these impacts are presented in the Mitigation subsection below. Effects to these populations from impacts to parks and open space, visual resources, and noise are also addressed. Mitigation measures addressing impacts from these resource areas are also presented.

The evaluation focuses on all of the build packages and addresses both direct and indirect impacts to these populations.

During the EIS alternative screening and development, methods were used to avoid and reduce impacts and increase positive impacts to low-income and minority populations.

The determination of whether or not there are disproportionately high and adverse impacts to minority populations and low-income households was completed. Disproportionately high and adverse impacts are based on either a comparatively high percentage of minority populations or low-income households, or the fact that impacts are greater in these neighborhoods than other areas in the corridor. However, these impacts are balanced with the potential benefits to these communities, enhancements, and mitigation

measures that can also be of benefit in the long-term. This analysis must be completed before the determination of disproportionately high and adverse impacts can be made.

As described previously, the Adams Segment contains the highest percentages of low-income households and minority populations that would be impacted by the build alternatives.

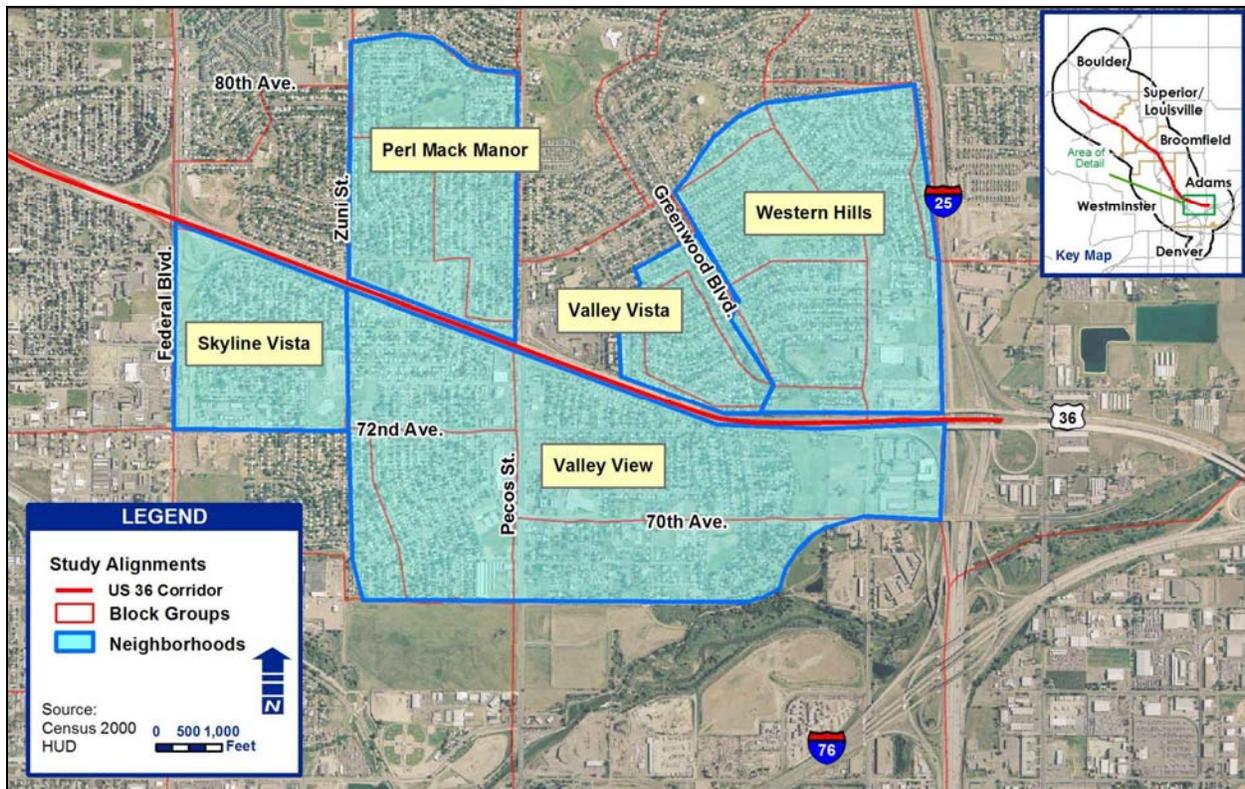
Low-income and minority populations in the Adams Segment meet the thresholds in CEQ guidance for a concentration of low-income and minority populations in the corridor. Residential growth in the Adams Segment has historically grown in proximity to the existing highway ROW, with some homes having yards that actually back to the highway's existing sound walls. Census data point to low-income and minority populations in this area. Therefore, building in any direction away from the center line of the existing highway will mean affecting adjacent properties that have a reasonable chance of being owned by a minority person or person from a low-income household.

The communities in the Adams Segment along the US 36 corridor include the following neighborhoods:

- Perl Mack Manor
- Valley Vista
- Western Hills
- Valley View
- Skyline Vista

Figure 4.6-5, Neighborhoods in the Adams Segment Relative to Impacted Low-Income and Minority Communities, shows these neighborhoods in relation to impacted low-income and minority communities.

Figure 4.6-5: Neighborhoods in the Adams Segment Relative to Impacted Low-Income and Minority Communities



Package 1: No Action

Direct and Indirect Impacts

All Segments

Analysis of Package 1 in this section is included as a basis for comparison to the build packages and does not include extensive analysis of the individual elements of Package 1. For a detailed description of Package 1 projects refer to Chapter 2, Alternatives Considered. Package 1 does not propose new build elements for US 36. However, the package assumes that the current transportation facilities and services in the US 36 corridor would remain in place and includes planned or committed improvements in the *2035 Metro Vision Regional Transportation Plan*, as amended (*Fiscally-constrained Element*) (DRCOG 2009). This package also includes new transit facilities and services approved in the locally funded FasTracks Program.

Because Package 1 includes no new build elements for US 36, there would be no action that would result in direct environmental justice impacts (positive or negative) specific to the highway corridor.

Environmental justice impacts are caused by, and related to, a project's implementation. Environmental justice effects for the approved FasTracks components will be evaluated in conjunction with the NEPA analysis for each of those projects. Under Package 1, the benefits of this project would be lost and this alternative would not meet the Purpose and Need of the project, which is an indirect impact.

Implementation of any of the build packages would provide benefits to low-income households and minority populations that would not be provided by Package 1, such as: a safer, more reliable and improved transportation system, improved mobility across the corridor, improved accessibility to jobs, improved transit service hours, and aesthetic improvements relative to the aging transportation facilities now in place. Package 1 would result in a loss of long-term benefits to low-income households and minority individuals such as: increased access to transit, redistribution of traffic, increased mobility, and overall economic development.

Package 2: Managed Lanes/Bus Rapid Transit

Direct Impacts

Adams Segment

The Adams Segment contains the highest percentages of minority and/or low-income populations in the US 36 project area.

Based on the environmental justice analysis, communities in the Adams Segment would experience adverse impacts from Package 2 as a result of residential and business relocations; construction, noise, air quality, parks and open space, and visual impacts; and loss of access from I-25/US 36/I-270 to Broadway. The Mitigation subsection describes measures to reduce impacts to low-income households and minority populations.

Specific impacts for Package 2 and avoidance and minimization measures are discussed below by resource.

Right-of-Way and Relocation

Residential Impacts

As discussed in Section 4.4, Right-of-Way and Relocations, the implementation of Package 2 would result in the displacement of 171 residences in the Adams Segment. As of 2005, there were 18,476 housing units in the Adams Segment. The median income for the Adams Segment was \$41,445, which is

12 percent less than the median income for Adams County and 19 percent lower than the Denver metropolitan average.

Residential impacts are predominantly borne by communities within the Adams Segment, considering that the total residential displacements for Package 2 is 201. Therefore, approximately 85 percent of the total residential displacements would be experienced by the communities in the Adams Segment. These acquisitions would not prohibit community activities or result in impacts to community cohesion since US 36 was built prior to the development of many of these communities. The communities developed around US 36 because of the ability to easily access employment centers and public facilities. The acquisitions would be mitigated in accordance with the Uniform Relocation and Real Property Acquisition Policies Act, as described below. In addition, available housing inventory in the neighborhood would give relocated owners an opportunity to relocate within or near their existing community.

In order to address impacts due to property acquisitions, CDOT and RTD will make efforts to plan ROW acquisition as soon as funding and approvals are received so as not to leave residents and businesses in hardship situations and to plan appropriately. All requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 United States Code [USC] 4601 et seq.) and Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 Code of Federal Regulations [CFR] 24 et seq.) and other statutes, as well as coordination with existing housing assistance programs, will be implemented to avoid and mitigate impacts to communities. As part of the development of the Combined Alternative Package (Preferred Alternative), the number of acquisitions would be decreased to 65 as a result of a modified footprint, as discussed in the Combined Alternative Package (Preferred Alternative) subsection. A relocation plan will be implemented to detail relocation strategies, methodologies, and mitigation.

All requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will be implemented.

Business Impacts

Package 2 would require the displacement of 56 businesses in the Adams Segment. The businesses include restaurants, retail establishments, automobile dealerships, hotels, and office complexes. As of 2005, there were 21,723 in the Adams Segment, of which 52 percent were service-related positions. The economic analysis completed for this study (refer to Section 4.3, Economic Considerations) states that total employment in the Adams Segment is projected to grow 1.4 percent annually from 2005 to 2035. This is the slowest employment growth projected for the corridor. There are approximately 138 businesses that would be impacted by the proposed improvements in Package 2, with the Adams Segment representing approximately 43 percent of commercial acquisitions. This would result in an associated displacement of employees from this segment. Due to the slow employment growth projected for this segment, it is likely that the employment lost would be difficult to replace. However, some of the displaced employees would be relocated to other businesses or locations and there would also be a slight increase in construction job opportunities. Minority-owned firms represent about 10 percent of businesses with paid employees in Adams County based on the most recent available information contained in the *Economic Census of Minority and Women-Owned Businesses in Adams County* (U.S. Census Bureau 1997). Although these displacements would likely result in impacts to minority or low-income individuals as a result of job loss, the displacements would be similar to the impacts of the general population.

Closure of access from southbound I-25 and westbound US 36/I-270 to Broadway is included in all of the build packages. The residents and businesses in this area perceive this as a negative impact and one that could threaten the viability of these neighborhoods, real estate, and businesses, in addition to lengthening emergency response times to this area. This change was approved in a 1985 Environmental Assessment (updated in 1998) and associated 1990 Interstate Access Request, and carried forward in the analysis of

this EIS. Currently, the access is only one directional exit from southbound I-25 to Broadway, and one directional exit from westbound US 36/I-270. These are incomplete interchanges and do not meet current FHWA policy for interstate operations. The access between US 36 and Broadway from the westbound entrance ramp and eastbound exit ramp would not be affected.

Under all of the build packages, the access to this area would be from southbound I-25 via 84th Avenue, Pecos Street, and 70th Avenue. Access from westbound US 36/I-270 could occur via York Street, Pecos Street, and 70th Avenue. Out-of-direction travel could be as much as 4.3 miles, most likely less, depending on the origination and destination. Because the “out-of-directional” routes to access the freeways are already used by most drivers originating in the Broadway area, these drivers will be able to find similar routes exiting the freeways if the Broadway exits are removed. However, the loss of the convenience of the local exits from the freeways would impact the neighborhoods and businesses.

The perception in the community is that the loss of the local exits from southbound I-25 and westbound US 36/I-270 to Broadway would cause job loss, reduced customer base for the businesses in this area, lower desirability for future development in this area, and would combine to reduce the viability of commercial land uses in this location.

Parks and Open Space

The Adams Segment includes park resources that are the most traditional of all of the segments in the project area. The Westminster Hills, Oakwood, Rotary, Commissioners, and Waddell parks all have urban-type parkland amenities, including sports fields and picnic facilities. Impacts to minority and low-income populations in the Adams Segment would result from the need to acquire approximately 6.0 acres of park and open space resources for Package 2 (2.9 acres of parkland and 3.1 acres of open space). However, the impacts to minority populations and low-income households would not be expected to be greater than the impacts to the general population in all communities along the US 36 corridor. Impacts would occur at Commissioners Park (0.1 acre); Westminster Hills Park (0.3 acre); Oakwood Park (1.8 acres); Rotary Park (0.6 acre); and Westminster Open Space (3.1 acres). These impacts would be due to widening US 36 and constructing interchange improvements. Retaining walls were added to Package 2 to minimize impacts to Westminster and Oakwood parks. However, construction requires acquisition of more than half of this park acreage to accommodate the widening of US 36. The Hyland Hills Metro Park and Recreation District received funds from the Land and Water Conservation Fund (LWCF) (Grant No. 177) for the development of Rotary Park. Therefore, this property is characterized as a Section 6(f) resource under the 1965 LWCF Act (16 USC 4601-4). As a Section 6(f) resource, the impacted 0.6 acre of parkland must be replaced with lands of equal value, location, and usefulness.

The total loss of parkland and open space in the corridor is estimated at 42.8 acres for Package 2 Option A, and 51.7 acres for Package 2 Option B. While the loss of parkland and open space within the Adams Segment (6.0 acres) represents a modest 12 to 14 percent of parkland lost in Package 2, it does represent a loss of important park resources to this segment.

Oakwood Park includes an open field, a dirt path, and a picnic area, and does not represent a major recreational resource. A retaining wall on the south side was added to reduce the amount of land acquisitions. Direct impacts to Oakwood Park would be avoided by the Combined Alternative Package (Preferred Alternative). CDOT will continue to work with local officials and the community on mitigation measures, which may include:

- Enhance the remaining Oakwood Park to include additional recreational amenities.
- Create a linear park with the remaining portion of Oakwood Park, connecting to Rotary Park.
- Create a multi-use trail from Oakwood Park to the park-n-Ride facility at Sheridan Boulevard to serve the local community.

Rotary Park is on the north side of US 36 and includes a baseball field, an open field, and a playground. Both Package 2 and Package 4 include acquisition of property on the south side of Rotary Park along the

US 36 ROW (direct impacts to Rotary Park would be avoided by the Combined Alternative Package [Preferred Alternative]). The property is an undeveloped portion of the park with an open field. This would represent 8 to 10 percent of the park but does not adversely affect future activities. A retaining wall would be built along US 36 north of the current wall to decrease the amount of land acquisition needed. It may be possible to minimize harm to this park as additional modifications are made to Package 2 and Package 4 during further engineering. As the project proceeds, CDOT will continue to work with local officials and the community on mitigation measures, which may include:

- Enhance Rotary Park, or other parks owned by the Hyland Hills Park and Recreation District, to compensate for the impacts to Rotary Park.
- Create a multi-use trail from Rotary Park to the park-n-Ride facility at Sheridan Boulevard to serve the local community.

Commissioners Park is located on the north side of US 36 and includes a basketball court, picnic area, and trail. Package 2 would require the permanent acquisition of property at the south side of the park along the US 36 ROW to accommodate the proposed widening of US 36. The property is a grassy area with picnic benches and a trail. The trail and picnic area could be replaced after construction. The area represents about 4.7 percent of the park. A retaining wall would be built along US 36 north of the current wall to decrease the amount of land acquisition needed. It may be possible to minimize harm to this park as additional modifications are made to Package 2 during further engineering. As the project proceeds, CDOT will continue to work with local officials and the community on mitigation measures. Mitigation measures may include replacement of the trail and picnic area after construction and enhancing this park or other parks owned by the Hyland Hills Parks and Recreation District to compensate for the impacts. Compensation for parkland acquisition will be negotiated with the public lands' representatives. At a minimum, compensation shall include comparable replacement of parkland and facilities within approximately 2 miles of the affected parkland or adequate compensation, based on fair market appraisals. All acquisition mitigation measures must conform to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC 4601 et seq.) and Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 CFR 24 et seq.). Compensation for Section 6(f) resources acquisition must be approved by the National Park Service for the replacement of lands, in cooperation with public entities, as appropriate. Section 6(f) of the LWCF Act requires that any Section 6(f) property affected by this proposed project be replaced by recreation property of equal value and usefulness. To minimize impacts to low-income and minority populations, CDOT and RTD will coordinate with local jurisdictions to evaluate appropriate replacements or other acceptable mitigations. These mitigation measures are anticipated to reduce adverse impacts to minority and/or low-income populations in the Adams Segment.

For more information related to parks and open space mitigation measures, see Section 4.9, Parks and Open Space; Chapter 7, Final Section 4(f) Evaluation; and the Mitigation subsection below.

Visual

Implementation of Package 2 would include the addition of wider pavements and replacement of sound walls throughout the Adams Segment. The walls offer some unifying features, although the walls are low in overall visual quality when viewed from US 36. However, the walls are effective in blocking the views of US 36 from adjacent (single-story) residential properties. Package 2 would have both short-term construction impacts as well as long-term operational impacts on visual resources. Impacts come from highway and interchange improvements, such as widening the highway, sound and retaining walls, and bridge structures. In Package 2 the entire US 36 corridor from Adams County to Boulder would be widened, causing displacement of homes, businesses, and commercial establishments. These changes represent a visual alteration to the local communities in the corridor.

The larger footprint of US 36 results in visual changes that would impact low-income households and minority populations. New and reconstructed sound walls on US 36 for Package 2 would total 46,100

linear feet. Of these, 34,000 linear feet of sound walls would be reconstructed in the Adams Segment. The sound walls within the Adams Segment represent 73 percent of the total required for noise mitigation on US 36 for Package 2. Therefore, the visual impact of the sound walls to low-income and minority populations would be expected to be greater than the impacts to the general population in all communities along the US 36 corridor.

An offsetting visual benefit of sound walls is that the walls also hide the wider pavements from area residents. The addition of walls where none currently exist is considered a possible visual benefit to residents located adjacent to the ROW. The visual effects of construction are discussed below under Construction and in Section 4.11, Visual and Aesthetic Resources. These walls offer some unifying features, although the walls are low in visual quality when viewed from US 36. Views of US 36 from adjacent, low rise, residential properties are blocked by the highway sound walls. Multi-story structures, including some townhomes and apartments, rising above the existing sound walls would retain direct views of US 36.

The US 36 corridor from Adams County to Boulder would be widened, causing displacement of homes, businesses, and commercial establishments. These changes would represent a visual alteration to the local community. Some homes which previously had views of back yards or other homes may lose these views because of property acquisitions, and some homes will be closer to the highway and sound walls.

Although the sound walls would reduce the visual effect of the widened highway on residents, the walls would create a tunnel effect on vehicle passengers, which would reduce view potential. From southeast to northeast, the more outstanding impacts would be modifications to, and development of, new interchanges. Bridges and aerial structures complicate the experience of the viewer, add mass, and disrupt viewsheds. In addition, several of the overpasses along US 36 are relatively new and have aesthetic stonework treatment and landscaping that would be affected during construction.

The US 36 managed-lane ramp to and from I-25, and the improvements at Pecos Street, Federal Boulevard, Lowell Boulevard, and the bikeway in the area would not be visually disruptive compared to the effects of widening US 36.

Noise

Existing noise levels in the US 36 corridor generally range from 63 to 73 decibel dBA (A-weighted scale sound levels expressed in decibel notation). Existing loudest-hour noise levels range from 65 to over 70 where there is no existing sound walls, and 65 dBA where there are existing sound walls. Increased traffic traveling under Package 1 would elevate noise along the US 36 corridor, based on anticipated automobile volumes in 2035. Therefore, noise impacts to low-income and minority communities would occur under all the packages. Under Package 2, average loudest-hour noise levels in 2035 are predicted to increase about 3 dBA over existing conditions, due to additional traffic capacity and the shifting of the highway outward toward residences. In addition, there would be increased noise impacts during construction (see Section 4.13, Noise, for additional information). Implementation of Package 2 would include the replacement of existing sound walls in the entirety of the Adams Segment.

The existing sound walls would be removed to accommodate the proposed highway improvements. The height of the new walls should be designed to achieve between 5 and 10 dBA of noise reduction in the closest homes. New and reconstructed sound walls on US 36 for Package 2 would total 46,100 linear feet. Of these, 34,000 linear feet of sound walls would be reconstructed in the Adams Segment. The sound walls within the Adams Segment represent 73 percent of the total required for noise mitigation on US 36 for Package 2.

Noise mitigation measures during construction and operations are detailed in Section 4.13, Noise, and included in the Mitigation subsection below. Low-income households and minority populations in the Adams Segment would experience adverse impacts from noise during construction and operations; however, noise impacts would similarly affect all residents of the corridor.

Construction

In the Adams Segment, within 300 feet of the Package 2 improvements, there are 382 low-income households (representing about 17 percent of the households), and 2,557 minority persons (representing about 41 percent of the population). Residents in this proximity to the alignment would be exposed to noise, dust, visual degradation, traffic congestion, and other construction-related impacts during construction of any of the build packages. Permanent sound walls would be installed at the beginning of construction, when feasible throughout the corridor, which will reduce some of these impacts.

The construction of Package 2 is anticipated to directly create approximately 3,000 new jobs in the corridor over 5 years and about 1,800 spin-off jobs over 5 years. These jobs represent potential employment opportunities for minority and low-income persons. Access to this employment is discussed in the Mitigation subsection below.

In addition, Package 2 is expected to restrict access to 30 to 35 businesses in the vicinity of the Pecos Street interchange and five to 10 businesses in the vicinity of the Federal Boulevard interchange. This represents from 29 to 35 percent of the 115 to 155 businesses impacted in the US 36 corridor during construction.

During construction activities there would be temporary impacts to transit facilities, including the RTD local and regional bus routes, such as increased congestion and longer trips. Although these delays would affect all populations, the impacts would be more severe to traditional transit users, defined as low-income, minority, populations over 65, and no car households, since these populations rely more on public transportation. These impacts would be the same for Package 2, Package 4, and the Combined Alternative Package (Preferred Alternative).

Package 2 is not expected to sever or degrade access to neighborhoods or community facilities during construction or upon project operation, and established neighborhoods would not be divided. For more information refer to Section 4.5, Social Impacts and Community Facilities.

Section 4.22, Construction-Related Impacts, provides mitigation measures to be implemented during the construction phase including an overall construction management plan to be developed by CDOT and RTD to address communications, community impacts, visual protection, air quality, safety controls, noise controls, and traffic controls to minimize impacts to the low-income households and minority populations in this corridor and to maintain access to local businesses, residences, and emergency services.

Indirect Impacts

Indirect impacts caused by the proposed action are later in time, or farther removed in distance, but are still reasonably foreseeable. Indirect impacts 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 residential displacements discussed in Section 4.4, Right-of-Way and Relocations, in the Adams Segment would have a high and adverse impact on minority and low-income persons. Although a relocation plan would be in place to attempt to relocate persons within the same community, this may not always be possible. If housing is not available in the same community, then affected populations may be required to adjust to new social surroundings, move to new schools, and travel farther to stay involved in their existing community activities. The residential displacements related to all build packages could result in a decrease in the population of the impacted communities with impacts to community cohesion, if comparable replacement housing is not available in the area and residents leave for other communities. Community institutions, including schools, churches, and other community-related facilities could be impacted through the loss of active community members who support these institutions.

Implementation of Package 2 may result in changes to the character of the community that people leave and the communities where they relocate. These are intangible psychological/social impacts that are difficult to predict and to quantify. Relocating residents of neighborhoods can reduce social support and

interaction systems and reduce community cohesiveness. People who relocate may have additional expenses associated with longer distances to current jobs, loss of employment, loss of access to quality schools, child care, medical care, religious institutions, and familiar shopping sources and loss of business activity in the community. The communities where people relocate can also experience impacts from an influx of new residents with associated social and economic impacts. As part of the relocation process, a relocation mitigation and enhancement plan would be developed to identify potential social issues and build a partnership with the agencies and communities for collaborative problem solving. This plan is anticipated to reduce adverse impacts to minority and/or low-income populations and neighborhoods in the Adams Segment as a result of relocation.

The indirect benefit of the build packages would result from the economic stimulus provided by indirect employment opportunities (jobs caused as a result of new demand generated from increases in personal income from construction employment), and the improved mobility and transportation safety afforded to the US 36 corridor.

The loss of commercial properties could result in a decrease in the sales tax base if these properties are not replaced with comparable businesses. In addition, loss of community businesses that provide essential services may not be replaced by similar businesses, which may necessitate establishing different shopping patterns. Communities that would be impacted by the project have initiated planning activities to try to increase economic benefits from the project. Refer to Section 4.3, Economic Considerations, and 4.4, Right-of-Way and Relocations, for additional information. In some instances, property values in areas where relocations occur can increase.

Package 2 includes managed lanes that BRT vehicles and high-occupancy vehicles (HOVs) would use at no cost. Managed lane single-occupant vehicle (SOV) users would pay a toll to use these lanes. Various studies of tolled express lane projects (I-15 in San Diego County, California; State Route 91 in Orange County, California; and the Quick Ride Program on I-10 in Houston, Texas) have focused on the use of express lanes by low-income populations. The evaluations found that low-income drivers use the express lanes and approve of these lanes as much as higher-income drivers. The majority of SOV commuters, even those from higher-income households, do not use the tolled lanes for every trip. Even if individuals choose not to pay a toll to use the express lanes as an SOV, drivers may experience benefits from the additional lane if using BRT or HOV. For example, based on 2035 traffic forecasting, between Boulder's Table Mesa Station and DUS for the morning (a.m.) peak hours, BRT and HOV are expected to experience time savings over the general-purpose lanes. Following implementation of the project, RTD and CDOT will continue to conduct periodic use surveys and evaluate tolling impact to adjust operational procedures if warranted.

Transponders are free, but an account must be set up with a reserve balance to pay for each use. Studies show that methods for electronic toll collection should be considered and arrangements should be provided for individuals who may not have a credit card (CDOT 2006). Tolling programs should consider not excluding low-income drivers because of requiring upfront expenditures or requiring computers or credit cards for enrollment. For example, access to transponders could be a problem for some individuals if one needs either a credit card or lump sum deposit to open an account. In the future, technology changes, such as License Plate Tolling, currently being implemented on E-470, would provide options for low-income drivers that would not require setting up an account. Additionally, outreach programs will continue to foster community dialogue to identify concerns with tolling programs. Additional information on the tolling program is included in Chapter 5, Financial Analysis, and can be found in the general funding response in the Clarification and Detail for Common Comments section of Volume III of this FEIS.

All build packages include interchange and intersection improvements. All of the build packages would remove the westbound off-ramp access to Broadway from southbound I-25 and eastbound I-270. The ramps at I-25 and US 36 at Broadway are being redesigned to improve connections and reduce merge queues. However, neighborhood travelers that would otherwise have used this ramp to access businesses and residences along Broadway would have to use other routes, which would present an inconvenience to

local residents. Based on a variety of concerns, CDOT/FHWA commit that prior to any change to local access from the highway system to Broadway, a separate study will be undertaken. Additional information on the I-25/US 36/I-270 loss of access to Broadway is provided in Chapter 2, Alternatives Considered.

Additionally, the Pecos Street and Federal Boulevard ramps will undergo minor design modifications. The frontage road traffic at the Federal Boulevard interchange will be rerouted to 76th Avenue and Grove Street causing minor increases in traffic on this street. An important element of the proposed configuration is the decision to widen US 36 primarily to the south in order to minimize overall impacts to property south of the Federal Boulevard interchange. This would not be the case for the Combined Alternative Package (Preferred Alternative) as many of the property acquisitions south of the Federal Boulevard interchange would be avoided by reducing the US 36 cross section.

For all of the build packages, the eastbound US 36 ramp to southbound Federal Boulevard would be relocated to the south and west. This area adjacent to Turnpike Drive is currently used for recreation. Turnpike Drive would be vacated east of Grove Street and north of 76th Avenue in all build packages. Because the land uses south of Turnpike Drive are for recreation, it is likely the relocated US 36 off-ramp would need to consider a design variance to limit impacts. The design will be revisited during subsequent design phases to identify design modifications to alleviate impacts such as pedestrian trails, bikepaths, or pocket parks. These design modifications will be coordinated with the local jurisdictions.

Benefits to Low-Income and Minority Populations from Package 2

Implementation of any of the build packages would include many benefits to communities, including a safer, more reliable and improved transportation system; improved mobility across the corridor; improved accessibility to jobs; improved transit service hours; and aesthetic improvements relative to the aging transportation facilities now in place. These benefits are expected to be shared across demographic groups and communities.

Implementation of any of the build packages would include many benefits to communities.

Although low-income and minority populations in the Adams Segment communities may experience adverse impacts as a result of implementation of the build packages, these impacts should be evaluated against the benefits to these communities and to the enhancements and mitigation measures that can also be of benefit in the long term. Benefits to these communities are described below.

Increased Access to Transit and Redistribution of Traffic

Access to transit would be enhanced for the communities experiencing high and adverse impacts, particularly for the community in the Adams Segment. Out-of-pocket expenses for transit are generally less expensive than the cost of owning and operating a car.

All of the build packages would contribute to the transformation of the Broadway park-n-Ride as a major transit hub at the eastern end of the corridor. The proposed Activity Center Circulator/Connector route to Interlocken Loop would stop at the Broadway park-n-Ride, providing service to Boulder, Denver, and the major activity centers throughout the corridor. In addition, with Package 2 and Package 4, the service would connect to all median BRT stations, and would provide transfer opportunities at the park-n-Ride facilities along the corridor. The Broadway park-n-Ride would serve as a focal point for the neighborhood and would improve access for residents traveling to and from employment and educational facilities in downtown Denver and Boulder, as well as points in between. Given its location between the proposed South Westminster Commuter Rail Station along the Northwest Rail Corridor, and the Commerce City Rail Station along the North Metro corridor, the Broadway park-n-Ride is situated to become a more important transit connection as the rail corridors are implemented.

Transit alternatives would also contribute to relief of local street congestion and would benefit communities where there are low-income households and minority populations as well as the overall

corridor. Low-income and minority neighborhoods would not experience different neighborhood traffic impacts than other corridor neighborhoods. Redistribution of traffic into neighborhoods is not anticipated to occur in the US 36 corridor. Refer to Chapter 3, Transportation Impacts and Mitigation, for more information on traffic impacts. Discussion of transit oriented development plans and impacts to communities are included in Section 4.2, Land Use.

Increased Mobility and Safety

Low-income and minority populations would be provided with increased reliability and mobility by virtue of the increase in bus service associated with Package 2, and the decrease in congestion on US 36, as discussed in Chapter 3, Transportation Impacts and Mitigation.

Within Adams County, improved connections would be designed to connect the Clear Creek trail system with the US 36 bikeway system. The proposed bikeway would begin at Bradburn Boulevard at the existing Little Dry Creek Trail. An on-street bike route would go north from Little Dry Creek Trail along Bradburn Boulevard to US 36. Only signing improvements are planned along Bradburn Boulevard. A separated bikeway would then continue on the south side of US 36 to Sheridan Boulevard and the Westminster Center BRT Station, with a direct connection to the transit facilities. The US 36 bikeway system would then provide a separated path all the way to Boulder.

In the Adams Segment, both the Pecos Street and Federal Boulevard interchanges would be reconstructed in their existing configuration. These facilities, including sidewalks, would be upgraded to meet current CDOT standards, and all build packages would substantially reduce vehicle delay at these interchanges. In the case of the Pecos Street interchange, the total average intersection delay would be reduced by over 1 minute in the evening peak hour. At the Federal Boulevard interchange, the total average intersection delay would be reduced by over 40 seconds in the morning peak hour.

Additionally, the Lowell Boulevard bridge would be reconstructed in all of the build packages. These structures would be upgraded to meet current CDOT standards, including pedestrian facilities, and would provide a safer operating environment.

Preliminary designs will be refined to include equitable and comparable highway access to low-income and or minority communities to the extent practicable. Final designs would be optimized with the objective of supplying access points throughout the system while maintaining the goals of the express lanes and the overall integrity of the system.

Economic Development

The implementation of Package 2 would provide economic development benefits to the corridor. Some of these benefits would be direct benefits such as the construction employment that would be created in order to build the package. Efforts will be made within the Adams Segment to connect contractors with local residents to fill construction jobs. Some of the proposed mitigation measures focus on how to bring these benefits to the affected communities. Other benefits would be indirect economic benefits related to increasing access to jobs and the attraction of employers to the area as a result of improved mobility. As discussed above, residents and businesses in the area of US 36 and Broadway perceive that the closure of access from southbound I-25 and westbound US 36/I-270 to Broadway would create negative impacts. As a result of this perceived impact and the additional out-of-direction travel, economic development opportunities in this area could be diverted to other areas.

Package 4: General-Purpose Lanes, High-Occupancy Vehicle, and Bus Rapid Transit

Direct Impacts

Communities in the Adams Segment with high percentages of minority and/or low-income populations in proximity to the project improvements would experience adverse impacts from physical improvements of US 36 with any of the build packages.

Adams Segment

Communities in the Adams Segment on US 36 would experience adverse effects from Package 4. Impacts from this package are similar to Package 2. The Mitigation subsection below describes mitigation measures to reduce impacts to low-income households and minority populations.

Specific impacts for Package 4 and avoidance and minimization measures are discussed below, by resource.

Right-of-Way and Relocation

Residential Impacts

Residential impacts in the Adams Segment would be similar to those described under Package 2. As discussed in Section 4.4, Right-of-Way and Relocations, the implementation of Package 4 would require the acquisition and relocation of 172 residences in the Adams Segment. Residential impacts are predominantly borne by the communities in the Adams Segment considering that 202 total residential relocations are estimated for Package 4. Therefore, approximately 85 percent of the total residential relocations would be experienced by the communities in the Adams Segment.

Mitigation measures presented later are anticipated to reduce these impacts from property acquisition and relocation. In order to address impacts due to property acquisitions, CDOT and RTD will make efforts to plan ROW acquisitions as soon as funding and approvals are received so as not to leave residents and businesses in hardship situations, and to plan appropriately. All requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC 4601 et seq.) and Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 CFR 24 et seq.) and other statutes, as well as coordination with existing housing assistance programs, will be implemented to avoid and mitigate impacts to communities. As part of the development of the Combined Alternative Package (Preferred Alternative), the number of acquisitions would be decreased as a result of a modified footprint, as discussed in the Combined Alternative Package (Preferred Alternative) subsection. CDOT and RTD will develop a relocation mitigation and enhancement plan in collaboration with the community to detail relocation strategies, methodologies, and mitigation to address direct and indirect social and economic impacts to communities.

Business Impacts

Package 4 would impact 135 businesses, similar to Package 2, and would therefore have the same impacts as discussed under Package 2.

Parks and Open Space

For Package 4, impacts to minority and low-income populations would result from the need to acquire approximately 5.5 acres of parkland and open spaces (2.4 acres of parkland and 3.1 acres of open space). Impacts would be to Westminster Hills Park (0.3 acre); Oakwood Park (1.5 acres); Rotary Park (0.5 acre); and Westminster Open Space (3.1 acres). However, the impacts to minority populations and low-income households would not be expected to be greater than the impacts to the general population in all communities along the US 36 corridor.

Package 4 would impact fewer acres of park and open space resources in the Adams Segment than Package 2, but more acres than the Combined Alternative Package (Preferred Alternative). These acquisitions would primarily result from widening US 36 and constructing interchange improvements. Refer to Package 2 for a discussion of the impacts and mitigations of the acquisitions in Oakwood and Rotary parks in Package 2. These same impacts and mitigations would apply to Package 4. By implementing avoidance measures during conceptual design, impacts to Commissioners Park were avoided in Package 4.

The total loss of parks and open space are estimated at 43.2 acres for Package 4 Option A, and 51.8 acres for Package 4 Option B. This represents 11 to 13 percent of the total acreage of parkland lost in Package 4; however, it does represent a loss of important park resources to the Adams Segment.

Package 4 would create the need to acquire approximately 0.5 acre of Rotary Park. As a Section 6(f) resource, the impacted 0.5 acre of parkland must be replaced with lands of equal value, location, and usefulness.

Compensation for parkland acquisition will be negotiated with the public lands' representatives. At a minimum, compensation shall include comparable replacement of parkland and facilities within approximately 2 miles of the affected parkland or adequate compensation, based on fair market appraisals. All acquisition mitigation measures must conform to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC 4601 et seq.) and Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 CFR 24 et seq.). Section 6(f) of the 1965 LWCF Act (16 USC 4601-4) requires that any Section 6(f) property affected by this proposed project be replaced by recreation property of equal value and usefulness. To minimize impacts to low-income and minority populations, CDOT and RTD will coordinate with local jurisdictions to evaluate appropriate replacements or other acceptable mitigations. These mitigation measures are anticipated to reduce adverse impacts to minority and/or low-income populations in the Adams Segment.

For more information related to parks and open space and potential mitigation measures to avoid impacts, see Section 4.9, Parks and Open Space; Chapter 7, Final Section 4(f) Evaluation; and the Mitigation subsection below.

Visual

Visual impacts in the Adams Segment under Package 4 would be the same as those described under Package 2.

Noise

Noise levels under Package 4 are predicted to be 1 dBA louder than under Package 2. This slight difference is because the general-purpose lanes in Package 4 are projected to carry more traffic volume than the managed lanes in Package 2. The discussion of noise impacts and mitigation measures in the Adams Segment under Package 4 would be the same as those described under Package 2.

Construction

In the Adams Segment, within 300 feet of Package 4 improvements, there are 365 low-income households (representing about 17 percent of the households), and 2,525 minority persons (representing about 42 percent of the population). Residents in this proximity to the alignment would be exposed to noise, dust, visual degradation, traffic congestion, and other construction-related impacts during construction of all of the build packages. It is anticipated that permanent sound walls will be installed at the beginning of construction when feasible, which will reduce some construction impacts. The impacts to minority populations and low-income households would not be expected to be greater than the impacts to the general population in all communities along the US 36 corridor.

The construction of Package 4 is anticipated to directly create approximately 2,700 new jobs in the corridor over 5 years and about 1,600 spin-off jobs over 5 years, which is slightly less than would be created under Package 2. These jobs may represent potential employment opportunities for minority and low-income persons.

In addition, Package 4 is expected to restrict access to the same businesses during construction as Package 2 (30 to 35 businesses in the vicinity of the Pecos Street interchange, and 5 to 10 businesses in the vicinity of the Federal Boulevard interchange). This represents from 29 to 35 percent of the 115 to 155 businesses impacted by construction in the US 36 corridor. As discussed above, impacts to transit services would be the same under Package 4, as under Package 2.

Package 4 is not expected to sever or degrade access to neighborhoods or community facilities during construction or upon project operation, and established neighborhoods would not be divided. For more information refer to Section 4.5, Social Impacts and Community Facilities.

Section 4.22, Construction-Related Impacts, details mitigation measures to be implemented during the construction phase including an overall construction management plan to be developed by CDOT and RTD to address communications, community impacts, visual protection, air quality, safety controls, noise controls, and traffic controls to minimize impacts to the low-income households and minority populations in this corridor and to maintain access to local businesses, residences, and emergency services. With these mitigation and avoidance measures, the impacts to minority populations and low-income households would not be expected to be greater than the impacts to the general population in all communities along the US 36 corridor.

Indirect Impacts

Indirect impacts under Package 4 would be the same as those described under Package 2.

Benefits to Low-Income and Minority Populations from Package 4

As described under Package 2, implementation of any of the build packages would include many benefits to communities including a safer, more reliable and improved transportation system, improved mobility across the corridor, improved accessibility to jobs, improved transit service hours, and aesthetic improvements relative to the aging transportation facilities now in place. These benefits are expected to be shared across demographic groups and communities.

Although low-income and minority populations in the Adams Segment communities may experience adverse impacts as a result of implementation of the build packages, these impacts should be evaluated against the benefits to these communities and to the enhancements and mitigation measures that can also be of benefit in the long term. Benefits to low-income and minority populations include:

- Increased access to transit and redistribution of traffic
- Increased reliability and mobility in general
- Overall economic development

Some of the mitigation measures in the Mitigations subsection below focus on how to bring these benefits to the affected communities.

Increased Access to Transit and Redistribution of Traffic

Increased access to transit under Package 4 would be the same as those described under Package 2.

Increased Mobility

Increased mobility under Package 4 would be similar to those described under Package 2.

Economic Development

Economic benefits would be similar to those discussed under Package 2.

Combined Alternative Package (Preferred Alternative): Managed Lanes, Auxiliary Lanes, and Bus Rapid Transit

As described above, communities in the Adams Segment with high percentages of minority and/or low-income populations in proximity to the project improvements would experience adverse impacts from physical improvements of US 36 with any of the build packages.

Direct Impacts

Adams Segment

Impacts from this package would be similar to Package 2 and Package 4 except that the number of residential and business impacts would be greatly decreased, as discussed below. However, there would be additional construction impacts to the residential neighborhoods that are located adjacent to US 36 because these residences would be relocated in Package 2 and Package 4, but would not be relocated with the Combined Alternative Package (Preferred Alternative), as discussed in the Construction subsection. The Mitigation subsection below describes mitigation measures to reduce impacts to low-income households and minority populations.

Right-of-Way and Relocation

In general, the number of residential and business impacts for the Combined Alternative Package (Preferred Alternative) would be less than those described for Package 2 and Package 4 as a result of a smaller cross section.

Residential Impacts

As discussed in Section 4.4, Right-of-Way and Relocations, the implementation of the Combined Alternative Package (Preferred Alternative) would require the acquisition and relocation of 41 residences in the Adams Segment. These impacts would be notably fewer than those described for Package 2 and Package 4, which are 171 and 172, respectively. Residential impacts are predominantly borne by the communities in the Adams Segment which would account for approximately 63 percent of the total residential relocations, a lower percentage than for Package 2 or Package 4.

Mitigation measures are anticipated to reduce these impacts from property acquisition and relocation. In order to address impacts due to property acquisitions, CDOT and RTD will make efforts to plan ROW acquisitions as soon as funding and approvals are received so residents and businesses are not left in hardship situations, and so residents and businesses may plan appropriately. All requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC 4601 et seq.), the Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 CFR 24 et seq.), and other statutes, as well as coordination with existing housing assistance programs, will be implemented to avoid and mitigate impacts to communities.

Business Impacts

The Combined Alternative Package (Preferred Alternative) would require relocation of 24 businesses, fewer than those required for Package 2 or Package 4. Nine businesses in the Adams Segment would be relocated, compared to 56 businesses for Package 2 and Package 4. Impacts from the closure of access from southbound I-25 and westbound US 36/I-270 to Broadway would be similar to those described above for Package 2.

Parks and Open Space

Impacts to minority and low-income populations from the implementation of the Combined Alternative Package (Preferred Alternative) would result from the need to acquire approximately 0.6 acre of parkland and open spaces (0.6 acre of parkland and less than 0.1 acre of open space) in the Adams Segment. Impacts would be to Commissioners Park (0.1 acre); Westminster Hills Park (0.5 acre); and Westminster Open Space (less than 0.1 acre). The Combined Alternative Package (Preferred Alternative) would also impact Waddell Park (less than 0.1 acre). These impacts are similar to those described under Package 2. However, in contrast to the other build packages, the Combined Alternative Package (Preferred Alternative) would not result in direct impacts to Oakwood Park or Rotary Park, a Section 6(f) resource. Similar to the other build packages, the impacts to minority populations and low-income households under the Combined Alternative Package (Preferred Alternative) would not be expected to be greater than the impacts to the general population in all communities along the US 36 corridor.

The park and open space acquisitions in the Adams Segment would primarily result from widening US 36 and constructing interchange improvements. The total loss of parks and open space are estimated at 42.3 acres for the Combined Alternative Package (Preferred Alternative). Impacts to the Adams Segment represent 1.4 percent of the total acreage lost in the Combined Alternative Package (Preferred Alternative), which would be less than the loss projected in Package 2 and Package 4.

For more information related to parks and open space and potential mitigation measures to avoid high and adverse impacts, see Section 4.9, Parks and Open Space; Chapter 7, Final Section 4(f) Evaluation; and the Mitigation subsection below.

Visual

Transportation improvements to the US 36 corridor for the Combined Alternative Package (Preferred Alternative) would have similar visual effects to Package 2 and Package 4. However, in most locations the Combined Alternative Package (Preferred Alternative) would result in less roadway widening and a smaller cross-section width than Package 2 and Package 4. The narrower roadway width would result in less visual impact for travelers on US 36 than Package 2 and Package 4, due to both the highway width itself, and the need for fewer modifications to existing bridge structures. The Combined Alternative Package (Preferred Alternative) would require fewer retaining walls than Package 2 and more than Package 4. Within this alternative, the amount of retaining walls would be reduced and replaced with slopes to minimize visual impacts to open space areas.

Noise

The implementation of the Combined Alternative Package (Preferred Alternative) is predicted to increase loudest-hour noise levels by an average of 2 dBA over existing conditions, similar to Package 2 and Package 4. This increase would be due to the shifting of general-purpose lanes outward to accommodate the managed lanes and the additional capacity that the managed lanes would create.

Under the Combined Alternative Package (Preferred Alternative), some of the properties would be acquired to make room for the expanded roadway, and some of the existing noise walls would be removed and rebuilt along the edge of the expanded road. With the replacement of the noise barriers, it is not anticipated that existing properties behind these noise walls would be impacted by noise.

Construction

In the Adams Segment, within 300 feet of the Combined Alternative Package (Preferred Alternative) improvements, there are 329 low-income households (representing about 17 percent of the households), and 2,288 minority persons (representing about 44 percent of the population) (US 36 Mobility Partnership 2009). Residents in this proximity to the alignment would be exposed to noise, dust, visual degradation, traffic congestion, and other construction-related impacts during construction of all of the build packages. It is anticipated that permanent sound walls will be installed at the beginning of construction when

feasible to minimize the construction impacts to the adjacent residences. As discussed previously, the number of residential and business relocations would be greatly reduced for the Combined Alternative Package (Preferred Alternative), as compared to Package 2 and Package 4. As a result of the design modification, the number of people affected by construction impacts would be increased and the buffer would be smaller since these persons would be closer to the construction activities. In many cases the construction activities would occur directly behind residential property adjacent to US 36.

The construction of the Combined Alternative Package (Preferred Alternative) is anticipated to directly create approximately 3,000 new jobs in the corridor over 5 years (this is the same as Package 2 and higher than Package 4). Approximately 1,800 spin-off jobs would be created over 5 years under the Combined Alternative Package (Preferred Alternative), which is also the same as Package 2 and slightly higher than Package 4. These jobs may represent potential employment opportunities for minority and low-income persons.

In addition, the Combined Alternative Package (Preferred Alternative) is expected to restrict access to between 150 and 215 businesses during construction of the US 36 corridor; these restrictions would be the same as Package 2 and Package 4. However, similar to Package 4, the Combined Alternative Package (Preferred Alternative) would not provide drop-ramps to provide access to center managed lanes and would not connect Midway Boulevard to Interlocken Boulevard via a bridge over US 36.

As described above, impacts to transit services would be the same for the Combined Alternative Package (Preferred Alternative) as Package 2 and Package 4. The Combined Alternative Package (Preferred Alternative) is not expected to sever or degrade access to neighborhoods or community facilities during construction or upon project operation, and established neighborhoods would not be divided. For more information, refer to Section 4.5, Social Impacts and Community Facilities; and Section 4.22, Construction-Related Impacts. These sections detail mitigation measures to be implemented during the construction phase, including an overall Construction Management Plan to be developed by CDOT and RTD to address communications, community impacts, visual protection, air quality, safety controls, noise controls, and traffic controls to minimize impacts to the low-income households and minority populations in the corridor and to maintain access to local businesses, residences, and emergency services. Even with these mitigation and avoidance measures and the benefits to low-income and minority communities, the impacts to minority populations and low-income households would be expected to be greater than the impacts to the general population in all communities along the US 36 corridor. The majority of construction related impacts to residential communities would occur in the Adams Segment since there are more residences that are adjacent to US 36 in this area, compared to the rest of the corridor.

Indirect Impacts

Indirect impacts under the Combined Alternative Package (Preferred Alternative) would be the same as those described under Package 2 and Package 4.

Benefits to Low-Income and Minority Populations from the Combined Alternative Package (Preferred Alternative)

As described under Package 2, implementation of any of the build packages would include many benefits to communities including a safer, more reliable and improved transportation system; improved mobility across the corridor; improved accessibility to jobs; improved transit service hours; and aesthetic improvements relative to the aging transportation facilities now in place. These benefits are expected to be shared across demographic groups and communities.

Although low-income and minority populations in the Adams Segment communities may experience adverse impacts as a result of implementation of the build packages, these impacts are evaluated against the benefits to these communities and to the enhancements and mitigation measures that can also be of benefit in the long term. Benefits to low-income and minority populations include:

- Increased access to transit and redistribution of traffic
- Increased reliability and mobility in general
- Overall economic development

The Mitigation subsection below focuses on how to bring these benefits to the affected communities.

Increased Access to Transit and Redistribution of Traffic

Increased access to transit with the Combined Alternative Package (Preferred Alternative) would be the same as those described under Package 2 and Package 4.

Increased Mobility

Increased mobility under the Combined Alternative Package (Preferred Alternative) would be similar to those described under Package 2 and Package 4.

Economic Development

Economic benefits under the Combined Alternative Package (Preferred Alternative) would be similar to those discussed under Package 2 and Package 4.

Conclusion

In making a determination of disproportionately high and adverse it is important to balance the impacts with the benefits. In the case of the Combined Alternative Package (Preferred Alternative), the number of relocations would be reduced to 65 residential displacements. Although this reduces the inconvenience of being relocated for many, the remaining residences would experience increased impacts from construction. For the relocated residences there may be some benefits realized, such as not living adjacent to US 36, that probably would not be considered adverse. As a result of design refinements, the Combined Alternative Package (Preferred Alternative) would have the least overall impacts to the low-income and minority communities and individuals as compared to Package 2 and Package 4.

The Combined Alternative Package (Preferred Alternative) alignment follows the existing US 36 facility. The additional elements of the Combined Alternative Package (Preferred Alternative), such as interchange improvements and managed lanes, are uniform throughout the corridor and do not focus on any specific land use or population. CDOT and RTD went through many design iterations to avoid and minimize impacts to communities near the highway. Extensive public involvement activities were conducted throughout the EIS process to gather input on impacts and mitigation measures from affected communities.

The inclusion of mitigation measures such as the relocation, mitigation, and enhancement plan and early construction of the sound walls will help to offset the majority of the impacts to these communities. Also, other benefits to the project, including reduced travel time and increased reliability through the use of managed lanes, outweigh the impacts to these communities. Impacts to a relatively small number of people in these communities is balanced by the overall benefit to the populations in this segment.

Taking into consideration all of these impacts and benefits, FHWA and FTA have determined there are no disproportionately high and adverse impacts to low-income and minority populations as a result of this project.

Mitigation

Avoidance and Minimization

During the development of alternatives, all of the build packages were modified to avoid and minimize property acquisition impacts to minority persons and low-income households.

During the development of the alternatives, all of the build packages were modified to avoid and minimize property acquisition impacts to low-income households and minority persons, wherever possible. These modifications included the following measures:

- Early screening efforts during the alternatives analysis measured impacts to low-income and minority populations and considered this in the evaluation process. Every attempt was made to minimize and/or avoid impacts. For more information, refer to Chapter 2, Alternatives Considered.
- The addition of retaining walls at the Federal Boulevard, Pecos Street, and McCaslin Boulevard interchanges, and along much of the Boulder Segment, to avoid property and open space acquisitions.
- For Package 2 and Package 4, shifting US 36 south from Federal Boulevard to Pecos Street to avoid displacement of one row of parcels (an estimated 100 residences including single-family homes and apartment units) on the north side of US 36 in the Adams Segment. This area has the greatest population of minority persons and low-income households in the corridor.
- For the Combined Alternative Package (Preferred Alternative), minimizing the cross-section of US 36 in the Adams Segment greatly reduced the number of property acquisitions.

Mitigation measures have been identified for each of the resource areas where adverse effects are anticipated. Input from the affected neighborhoods and communities will be used to assist in identifying specific mitigation measures. As discussed previously, all requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC 4601 et seq.) and Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 CFR 24 et seq.) and other statutes, as well as coordination with other existing housing assistance programs will be implemented to avoid and mitigate impacts to communities. It is also probable that, when the Combined Alternative Package (Preferred Alternative) is selected and the engineering is refined, relocation impacts will be lessened.

With implementation of these measures and those shown in Table 4.6-2, Mitigation Measures – Environmental Justice, the high and adverse impacts would be reduced to low-income and minority communities from construction and operation of any of the build packages.

Table 4.6-2: Mitigation Measures — Environmental Justice

Impact	Impact Type	Mitigation Measures
Residential and commercial private property acquisitions	Construction	<ul style="list-style-type: none"> • Refer to Section 4.4, Right-of-Way and Relocations. • All acquisitions and relocations will fully comply with the Uniform Act (42 USC 4601 et seq.) and Uniform Relocation Assistance and Real Property Acquisition for federal and federally-assisted programs (49 CFR 24 et seq.) and other statutes. • Relocation benefits will be provided to all eligible persons regardless of race, color, religion, sex, or national origin. Benefits which eligible owners or tenants may be entitled to will be determined on an individual basis and explained in detail by an assigned ROW Specialist. • Design in engineering phases will be refined to reduce ROW requirements. • A variety of ways to structure ROW acquisition needs will be considered, including easements and license agreements. • CDOT and RTD will coordinate with Adams County, municipalities, and agencies to engage a contractor for additional outreach to meet with affected property and business owners to provide counseling and assistance in applying for funding. This will include research to summarize loans, grants, and federal aid available, and research of demographically similar areas. • All residential units that are being displaced will be considered for an RTD program to provide ECO passes for a year. • CDOT and RTD will conduct meetings and develop a relocation mitigation and enhancement plan in collaboration with the community to address indirect social/psychological/economic impacts to communities.
Loss of parkland and open space	Construction	<ul style="list-style-type: none"> • CDOT and RTD will coordinate with local jurisdictions to evaluate appropriate replacements or other acceptable mitigation measures. • Compensation for parkland acquisition will be negotiated with the public land's representatives. At a minimum, compensation shall include comparable replacement of parkland and facilities within approximately 2 miles of the affected parkland or adequate compensation, based on fair market appraisals. • All acquisition mitigation measures must conform to the Uniform Act. • Compensation for resource acquisitions shall be approved by the National Park Service in cooperation with public entities, as appropriate. Section 6(f) of the 1965 Land and Water Conservation Fund (LWCF) Act (16 USC 4601-4) requires that the Section 6(f) property at Rotary Park be replaced by recreation property of equal value and usefulness. This is only for Package 2 and Package 4. • Design meetings will be held with the appropriate officials during final design to discuss how additions to Rotary Park could best be designed to meet the needs of the community. This is only for Package 2 and Package 4. • The design for the eastbound US 36 ramp to southbound Federal Boulevard will be revisited during subsequent design phases to identify design modifications to alleviate impacts. These design modifications will be coordinated with the local jurisdictions.
Visual impacts related to larger interchanges, wider pavements, sound walls, and retaining walls	Construction/ Operations	<ul style="list-style-type: none"> • Design meetings will be held with the community during final design to determine the most context-sensitive solution.
Noise	Construction/ Operations	<ul style="list-style-type: none"> • Existing sound walls will be reconstructed early in the construction schedule, where possible, to mitigate for construction noise.

Table 4.6-2: Mitigation Measures — Environmental Justice

Impact	Impact Type	Mitigation Measures
General construction impacts to the community	Construction	<ul style="list-style-type: none"> • Refer to the Construction Mitigation outlined in Section 4.22, Construction-Related Impacts. • CDOT and RTD will implement an overall Construction Management Plan to address communications, community impacts, visual protection, air quality, safety controls, noise controls, and traffic controls to minimize impacts to low-income households and minority populations and to maintain access to local businesses, residences, and emergency services. Hotel vouchers will be offered to residents in the Adams Segment should any nighttime construction be anticipated. • Efforts will be made within the Adams Segment to connect contractors with local residents to fill construction jobs. • During the construction contracting process, goals will be established for the use of small and disadvantaged businesses. • Access to local businesses will be maintained during construction and signs will be used to enable customers to access businesses during construction. • CDOT and RTD will coordinate to minimize impacts to local and regional bus routes.
Financial equity of managed lanes on low-income populations	Operations	<ul style="list-style-type: none"> • In Package 2 and the Combined Alternative Package (Preferred Alternative), tolling costs will be set to give consideration to not exclude low-income drivers from participating. Transponders are free, but an account must be set up with a reserve balance to pay for each use. Technology changes, such as License Plate Tolling being implemented on E-470, would provide options for low-income drivers that would not require setting up an account. Details of the tolling program are included in Chapter 5, Financial Analysis. • During design and after implementation of the project, CDOT and RTD will conduct meetings with low-income and minority communities to assess the operations and equity of the tolling program and managed lanes.

Source: US 36 Mobility Partnership, 2006.

Notes:

- CDOT = Colorado Department of Transportation
- CFR = Code of Federal Regulations
- ROW = right-of-way
- RTD = Regional Transportation District
- Uniform Act = Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- US 36 = United States Highway 36
- USC = United States Code

For other resource-specific mitigation measures refer to the following sections and chapter:

- Section 4.3, Economic Considerations
- Section 4.4, Right-of-Way and Relocations
- Section 4.9, Parks and Open Space
- Section 4.11, Visual and Aesthetic Resources
- Section 4.13, Noise
- Section 4.22, Construction-Related Impacts
- Chapter 7, Final Section 4(f) Evaluation