

NORTH I-25  
EIS



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**Technical Memorandum**  
**ENVIRONMENTAL JUSTICE**

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## INTRODUCTION

Environmental justice is a public policy goal of promoting the fair treatment and meaningful involvement of all people in the decision-making for transportation. Satisfying this goal means ensuring that minority and low-income communities receive an equitable distribution of the benefits of transportation activities without suffering disproportionately high and adverse effects. Achieving environmental justice requires both analytical techniques as well as the full and fair participation by all potentially affected communities in the transportation decision-making process.

This technical memorandum is prepared in support of the North I-25 Final Environmental Impact Statement (Final EIS). The analysis that follows documents the presence of minority and low-income populations, minority-owned businesses, and important community resources and connections in the regional study area which serve these populations, and evaluates the potential for impacts to these populations and resources. The special efforts that were made to involve minority and low-income populations in the decision making process are also described.

## REGULATORY BACKGROUND

Environmental justice was first articulated as a national policy in 1994 when President Clinton signed Executive Order 12898 (E.O. 12898), *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. E.O. 12898 required federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations in the United States. The purpose of E.O. 12898 is to ensure that federally-assisted projects do not have disproportionately high and adverse human health or environmental effects on minority or low-income populations. For those projects that do, E.O. 12898 requires actions to avoid, minimize, or mitigate such effects.

E.O. 12898 was enacted to reinforce Title VI of the Civil Rights Act of 1964 which states, "No person in the United States shall, on the grounds of race, color or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Subsequent Orders at the federal level, including Department of Transportation (DOT) Order 5610.2 *Order To Address Environmental Justice in Minority Populations and Low-Income Populations* (U.S. DOT 1997) and Federal Highway Administration (FHWA) Order 6640.23 *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (FHWA 1998), have further defined the obligations of outlined in E.O. 12898.

On May 13, 2007 the Federal Transit Administration (FTA) issued a circular titled *Title VI Guidelines for FTA Administration Recipients* (FTA C 4702.1A). The purpose of this circular is to provide recipients of FTA financial assistance with guidance and instruction necessary to carry out Title VI of the Civil Rights Act of 1964 and comply with the requirements of DOT Order 5610.2 and the DOT Policy Guidance Concerning Recipient's Responsibilities to Limited English Proficient (LEP) Persons (70 FR 74087, December 14, 2005).

On May 27, 2005, the Colorado Department of Transportation issued *CDOT's Title VI and Environmental Justice Guidelines for NEPA Projects – Rev. 3* to assist in interpreting environmental justice mandates. The guidance outlines the process for environmental justice analysis, including data collection, public involvement, impact analysis, and mitigation requirements. The analysis that follows has been prepared in accordance with this and all other applicable guidance for addressing environmental justice.

## EXISTING CONDITIONS

The area evaluated for the presence of minority and low-income populations, minority-owned businesses, and services important to minority and low-income communities consists of the regional study area for the North I-25 project (**Figure 1**). East-west boundaries extend from US 85 and the Union Pacific Railroad (UPRR) line to approximately 3 miles west of US 287 and the Burlington Northern and Santa Fe (BNSF) rail line. North-south boundaries extend from Wellington to US 6 in Denver. The regional study area spans portions of seven counties and includes more than 35 communities.

## Minority Populations

The identification of minority populations begins with the analysis of 2000 Census data at the block level. Minority populations are comprised of ethnic and/or racial minorities. As defined in FHWA Order 6640.23, a minority is a person who is Black, Hispanic, Asian American, or American Indian or Alaskan Native. The 2006 FTA circular includes multiracial persons as a separate category of minority persons having origins in more than one of the Federally-designated racial categories. It is important to note that 2000 Census data does not list Hispanic as a racial category. Instead, Hispanic or Latino heritage is considered an ethnicity; a person of Hispanic or Latino origin can identify with any racial group. To avoid double counting, the total White, Non-Hispanic population of a geographic area is subtracted from the total population to generate the total minority population. The percentage of minorities is then compared to county averages. **Table 1** shows the percentage of minority persons in each county. These percentages serve as the thresholds by which regional study area census blocks are compared. Any blocks with a higher percentage of minorities than the respective county are evaluated for disproportionately high and adverse effects and are selected for outreach. These blocks are shown in **Figure 1**.

**Table 1** County Minority Populations

County	Population	Minority	Percent Minority
Adams	363,857	133,357	37
Boulder	291,288	47,776	16
Denver	554,636	266,639	48
Jefferson	527,056	79,640	15
Larimer	251,494	31,335	12
Weld	180,936	54,363	30

**Source:** HUD, Federal Year 2006 Income Limits; U.S. Census Bureau, 2000.

**Note:** Broomfield did not become a county until 2001 and was not included in the 2000 Census.

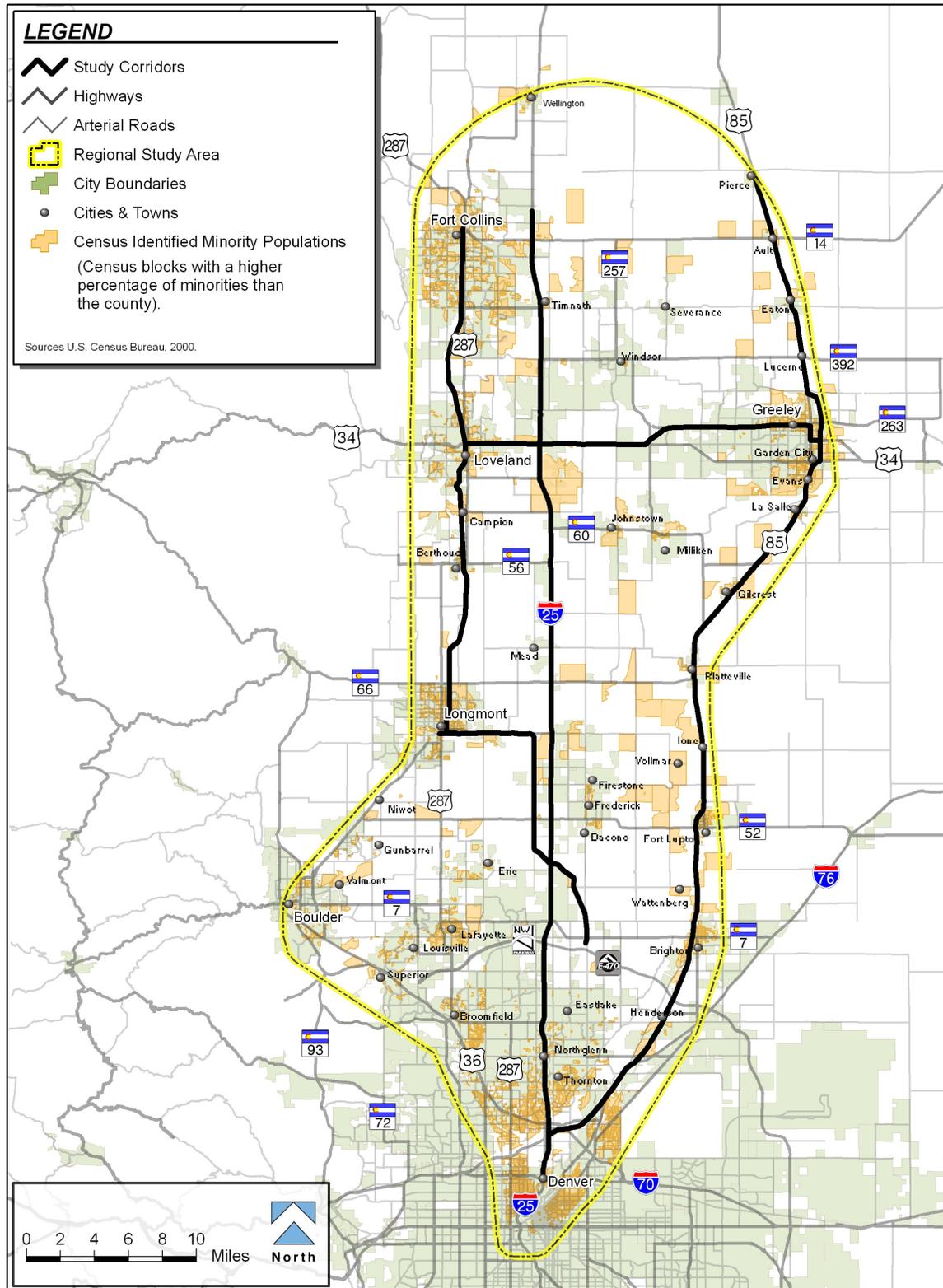
Approximately 27 percent of the census blocks within the regional study area (5,709 out of 20,778) have a higher percentage of minority persons than the respective counties. Of these 5,709 blocks, 1,112 (or 20 percent) contain very small populations. For example, there are 60 blocks with two people, one of which (or 50 percent) is a minority.

The census block with the largest total population is associated with the Colorado State University (CSU) Campus in Fort Collins. This block contains 4,124 persons, 584 (or 14 percent) of which are minorities living in university housing. Similarly, the block with the greatest total population in Boulder County has a total population of 1,302 persons, 670 (or 51 percent) of which are minority students living in university housing. In general, minority students are not permanent residents with critical social and community ties. As shown in **Figure 1**, the remaining minority populations are primarily located in and around urban areas within the regional study area, although some are scattered throughout the regional study area.

## Low-Income Populations

For purposes of privacy, the census block group is the most detailed level of data that displays income information. FHWA Order 6640.23 defines low-income as "...a household income at or below the Department of Health and Human Services (HHS) poverty guidelines." A different threshold (e.g., US Census Bureau poverty threshold or U.S. Department of Housing and Urban Development Community Development Block Grant income thresholds) may be used as long as it is not selectively implemented and is inclusive of all persons at or below the HHS poverty guidelines.

Figure 1 Census-Identified Minority Populations



CDOT's recommended approach in determining low-income populations is to derive the low-income threshold from a combination of census average household size data and the income thresholds set annually by the U.S. Department of Housing and Urban Development (HUD) for the distribution and allocations of Community Development Block Grant (CDBG) funds. HUD thresholds are developed for counties (or in some cases, Metropolitan Statistical Areas [MSA]) by household size up to an eight-person household. The thresholds are based upon household income as a percentage of median household income. In this case, households earning less than 30 percent of the Median Family Income are considered low-income. These thresholds are then adjusted to reflect the average household size for each county in the regional study area.

**Table 2** shows the percentage of low-income households in each county. These percentages serve as the thresholds by which regional study area census block groups are compared. Any block groups within the regional study area with an average household income below that of its respective county will be evaluated for disproportionately high and adverse effects and are selected for outreach. These block groups are shown in **Figure 2**.

**Table 2 County Low-Income Populations**

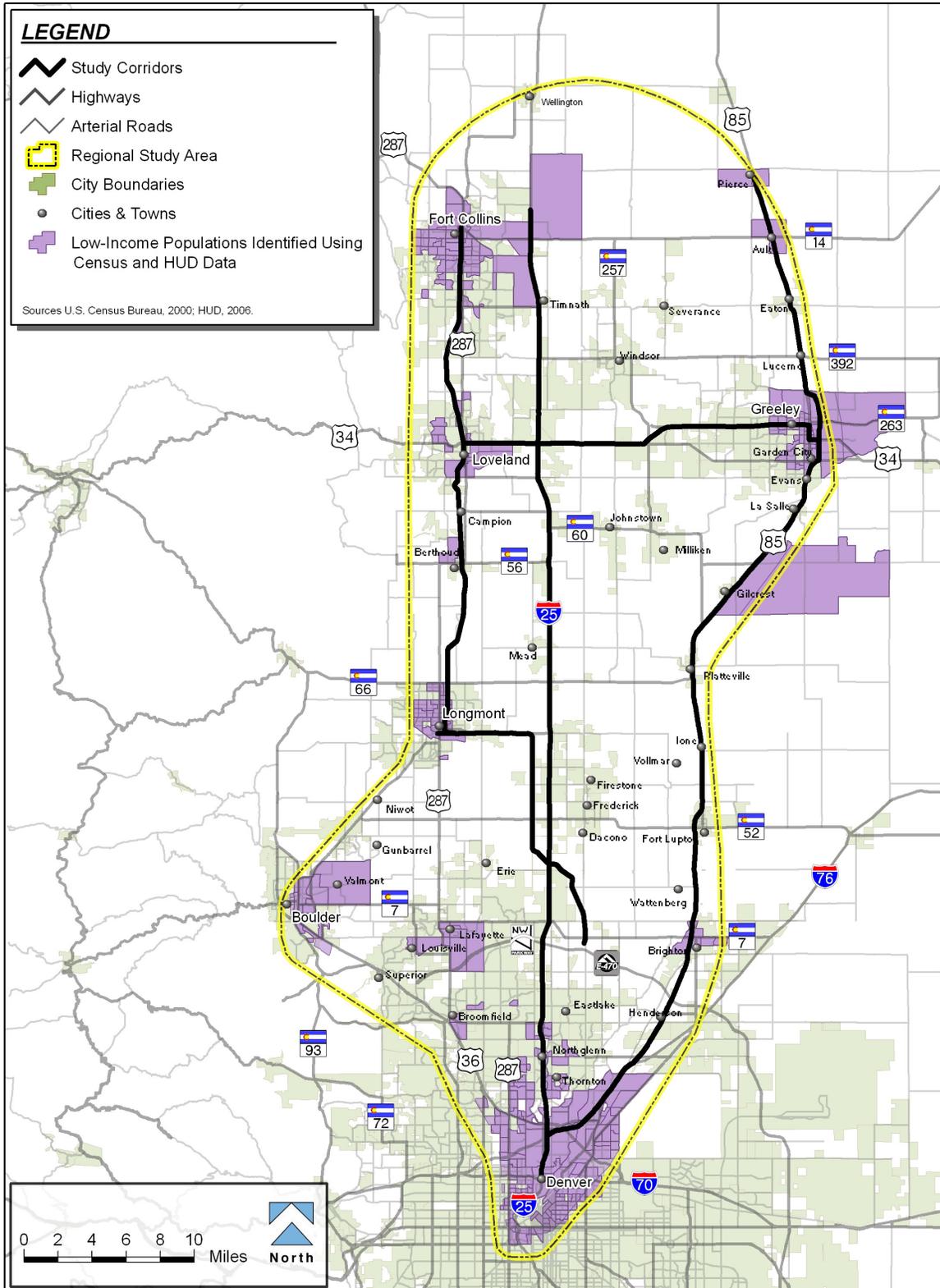
County	Low-Income Threshold	Number of Households	Number of Low-Income Households	Percent Low-Income
Adams	\$22,560	128,290	25,626	20
Boulder	\$27,322	114,793	28,266	25
Denver	\$21,453	239,415	71,000	30
Jefferson	\$21,966	206,256	31,313	15
Larimer	\$20,990	97,128	22,213	23
Weld	\$17,887	63,197	12,953	21

**Source:** HUD, Federal Year 2006 Income Limits; U.S. Census Bureau, 2000.

**Note:** Broomfield did not become a county until 2001 and was not included in the 2000 Census.

As shown in **Figure 2**, low-income populations are clustered around US 287 in Lafayette, Longmont, Loveland and Fort Collins; along US 85 in the Greeley Area; along SH 119 in Boulder; and along I-25 in Fort Collins and the Metro Denver area. It is important to note that in rural areas census block groups are often large and can be miles long. This census geography typifies many of the census block groups in the Greeley area, which extend well outside of the regional study area. These block groups may contain low-income households that do not live in the regional study area.

Figure 2 Low-Income Populations Identified Using Census and HUD Data



Concentrations of low-income households are also located in single-family homes, apartments, and mobile home parks in Longmont along the Burlington Northern Santa Fe rail line, south of Greeley along SH 85, and in Gilcrest and Brighton along SH 85.

## Additional Data Sources

Census data alone is too broad to accurately represent the social and economic make-up of the households within the regional study area. For this reason, additional efforts were made to identify minority and low-income populations and services in the regional study area.

These efforts included contacting local planners, non-profit organizations, health and human services, chambers of commerce, and housing authorities. Contacts that yielded information about minority and low-income populations are listed in **Table 3**. Locations of minority and low-income populations and services identified by these contacts are shown in **Figure 3**.

Contacts also provided suggestions for public meeting locations and places to post project information. More detailed information on public involvement activities is provided below, under **Specialized Outreach**.

**Table 3 Additional Data Sources**

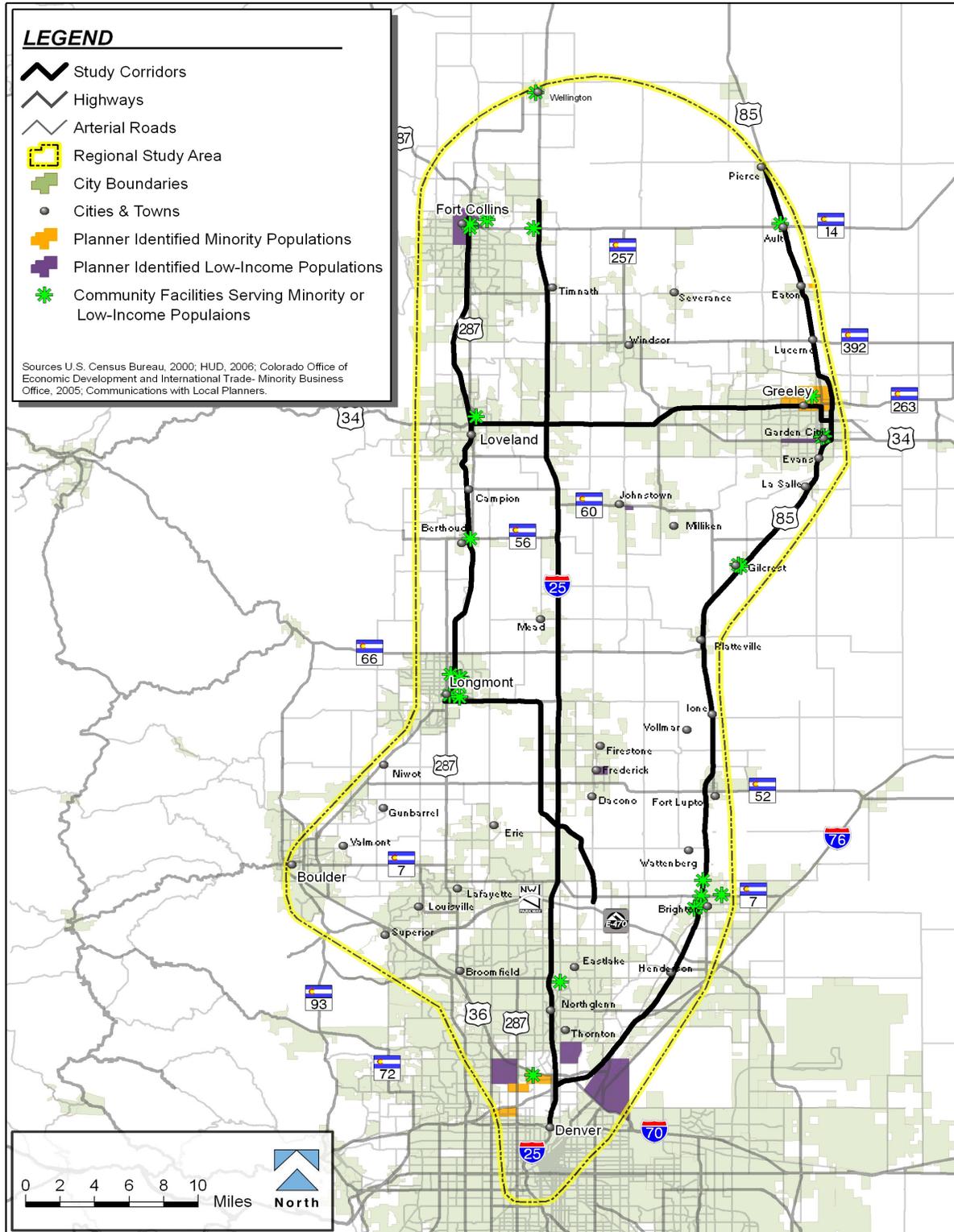
Source	Date	Source	Date
North Central Migrant Education Program	2/26/04	Town of La Salle	
Catholic Charities of Greeley	6/03/04	Boulder Emergency Family Assistance	8/11/05
Salud Family Health Center in Brighton	6/03/04	Care Housing, Inc.	8/11/05
Fort Collins Human Rights Office	6/04/04	Casa Vista	8/11/05
FISH of Broomfield County	6/08/04	Crossroads Safehouse	8/11/05
Brighton Housing Authority	6/11/04	El Comite	8/11/05
Fort Collins Neighbor to Neighbor	6/11/04	Fort Collins Home Program	8/11/05
North College Business Association	6/11/04	House of Neighborly Service	8/11/05
Loveland Housing Authority	6/15/04	OUR Center	8/11/05
Urban Renewal Committee of Greeley	6/16/04	Vineyard Christian Fellowship	8/11/05
Fort Collins Housing Authority	6/17/04	Disabled Resource Center	8/12/06
Human Services of Loveland	6/21/04	Division of Vocational Rehabilitation	8/12/06
City of Fort Collins	5/17/06	Erie Food Pantry	8/12/06
City of Greeley	5/17/06	First Call Service Center	8/12/05
City of Longmont	5/17/06	Foothills Gateway, Inc.	8/12/06
City of Westminster	5/17/06	Fort Collins Food Distribution Center	8/12/06
Town of Eaton	5/17/06	Fort Lupton Food Pantry	8/12/06
Town of Fort Lupton	5/17/06	Fort Lupton Salud Clinic	8/12/06
Town of Garden City	5/17/06	Island Grove Community Center	8/12/06
Town of Gilcrest	5/17/06	La Familia Center	8/12/06
Town of Wellington	5/17/06	Mental Health Connections	8/12/06
Town of Frederick	5/18/06	Northside Aztlan Community Center	8/12/06
Adams County	5/19/06	Planned Parenthood	8/12/06
City of Loveland	5/29/06	Respite Care, Inc.	8/12/06
Town of Ault	5/29/06	Rocky Mount SER, Brighton	8/12/06
Town of Brighton	5/29/06	The Mission Fort Collins	8/12/06
Town of Johnstown	5/29/06	Weld County Senior Nutrition	8/12/06

Eligibility for the Free/Reduced Lunch Program was obtained from the U.S. Department of Education, Institute of Education Sciences. Regional study area schools where 50 percent or more of students are eligible for the Free/Reduced Lunch Program were evaluated. Within the regional study area there are a total of 88 schools where 50 percent or more of students are eligible for the Free/Reduced Lunch Program. The majority of these schools are located in Adams County (32 schools), Denver County (17 schools), and Weld County (16 schools).

Specialized outreach efforts (described under **Specialized Outreach** below) identified the potential for a Hmong population, an Asian ethnic group from southern China and southeast Asia, in the northern communities of the regional study area. Analysis of 2000 Census data and community resources revealed that Hmong populations and persons that speak primarily Asian/Pacific Island languages are predominantly located in the Metro Denver Area with small populations in Longmont and Fort Collins. In none of the regional study area census tracts does more than 3 percent of the population speak primarily an Asian/Pacific Island language.

Consultation with community leaders in the North Front Range revealed that the Hmong population consists of five clans with patriarchs. Hmong community leaders indicated that they would be more responsive to project mailings than community or small group meetings. Based on this information, project flyers were translated into Hmong and distributed to key community locations as described under **Specialized Outreach**.

**Figure 3** Minority and Low-Income Populations and Services Identified through Additional Data Sources



## Minority-Owned Businesses

Minority-owned businesses were initially identified through the Colorado Office of Economic Development and International Trade, Minority Business Office. In all, 56 minority businesses were identified through this resource. To ensure adequate identification of minority-owned businesses and gather more specific employment information, a business survey was distributed to businesses along the following key roadway/rail corridors in the regional study area:

- ▶ I-25
- ▶ BNSF
- ▶ US 34 from US 85 to I-25
- ▶ Harmony Road (US 68) from US 287 to I-25
- ▶ US 85 from Greeley to Denver
- ▶ SH 119 from Longmont to I-25
- ▶ E-470 to DIA

Mailing addresses were obtained from parcel data and were extracted for first, second, and third tier businesses from the roadway. Using this method, surveys were delivered to 1,297 businesses. In addition to parcel based mailings, surveys were hand delivered and mailed to targeted locations within the regional study area. Targeted locations were identified using a combination of census data, field observation, and input received from small group meetings. An additional 100 surveys were distributed in the following targeted locations:

- ▶ **Longmont: east and west sides of Main Street between 3rd (SH 119) and 6th Avenues.** This area was selected because (1) it may employ/serve the Collyer Street neighborhood, which has been identified as both a minority and low-income area, (2) the area surrounding these businesses contains higher than average populations of minorities, (3) businesses are located along the Feeder Bus Service line being evaluated in the DEIS, (4) participants of the small group meeting in Longmont identified this area as one with a concentration of businesses that serve minorities.
- ▶ **Fort Collins: east and west sides of US 287 between Vine Drive and Conifer Street.** This area was selected because (1) it may employ/serve the Andersonville, La Colonia, and Buckingham communities, (2) the area surrounding these businesses contains higher than average populations of minorities, (3) businesses are just north of a commuter rail station site that is being evaluated in the DEIS, (4) participants of the first small group meeting in Fort Collins identified this area as one with a concentration of businesses that serve minorities.

Additional locations were selected based on census data and field observation (e.g., business names were in Spanish). These include:

- ▶ West side of SH 85 frontage road between 37th and 39th Avenues in Evans.
- ▶ West side of SH 85 frontage road between 42nd Avenue and the Platte River in Evans.

- ▶ East side of SH 85 between 4th Avenue and 1st Street in La Salle.
- ▶ West side of SH 85 between 4th and 6th Streets in Gilcrest.

The project team also identified major employers in the vicinity of the regional study area. Project information and business surveys were delivered to the locations listed in **Table 4**.

**Table 4 Business Survey Distribution to Major Employers**

Employer	Location
Agland, Inc.	Greeley, CO
Aims Community College	Greeley, CO
Burris Company, Inc.	Greeley, CO
Hensel-Phelps Construction	Greeley, CO
North Colorado Medical Center	Greeley, CO
Roche Constructors	Greeley, CO
RR Donnelley & Sons	Greeley, CO
Weld County School District 6	Greeley, CO
Bella Romero School District 6	Greeley, CO
State Farm Insurance	Greeley, CO
Super Walmart	Greeley, CO
Swift & Co.	Greeley, CO
Stinton Dairy	Greeley, CO
Meadow Gold Dairy	Greeley, CO
Eastman Kodak	Windsor, CO
Metal Container Corporation	Windsor, CO
Hall-Irwin Construction	Eaton, CO

Business surveys were distributed in both English and Spanish between December and March of 2006. Of the more than 1,400 businesses surveyed, 175 (13 percent) were returned. The analysis that can be derived from a survey is only as good as the response. Some responses were incomplete or left unanswered. Results of the survey are summarized below. Only those responses that were answered properly are included. The complete survey is contained in **Appendix A**.

Of the businesses surveyed, 17 percent are minority-owned. Approximately 113 businesses reported having full-time minority employees. For 35 of these businesses, more than 50 percent of their full-time staff was comprised of minorities. Approximately 87 businesses reported having part-time minority employees. For 68 of these businesses, more than 50 percent of their part-time staff is comprised of minorities.

Minority-owned businesses in the regional study area provide a variety of services that range from food and clothing to automotive and insurance services. Seventeen percent of the minority-owned businesses surveyed have been in their current location for 15 years or more.

Approximately 25 percent of businesses surveyed (minority- and non-minority owned) reported transportation concerns. Many cited long commutes and heavy congestion along I-25 and other roadways; others indicated a need for transit along roadways. Of minority-owned businesses, seventeen percent reported transportation concerns, including long commutes, high fuel prices, and the need for public transportation. When asked what mode of transportation most employees use to get to and from work, 74 percent of businesses surveyed reported that all of their employees use a vehicle. Only six businesses surveyed reported less than 50 percent of employees using a vehicle to travel to work. None of these businesses were minority-owned.

## SPECIALIZED OUTREACH

As recommended in Appendix B of *CDOT's Title VI and Environmental Justice Guidelines for NEPA Projects—Rev. 3*, specialized outreach to minority and low-income populations was conducted as part of the North I-25 DEIS public involvement process to gather comments and concerns regarding the project.

## Political Context of Specialized Outreach Efforts

Some of the public involvement and specialized outreach activities associated with the North I-25 project occurred during a local and national immigration debate, as well as during an electoral campaign where immigration was one of the key issues. Many members of the Hispanic/Latino community may have considered public meetings as a low priority event or may have been hesitant to attend public meetings for fear of persecution. Declining participation in planning processes has already been noticed in Colorado. For example, at recent planning meetings and public events for unrelated projects in Silverthorne and in Aspen, there were no Hispanic/Latino participation, even though there are known Hispanic/Latino populations in these towns.

The project team made every effort to inform and involve the Hispanic/Latino community throughout the project: community leaders were identified to build trust and guide public involvement efforts, small group meetings were held in local communities after regularly scheduled events, informational booths were set up during cultural events and activities, local print and electronic media was used to announce meetings and provide information about the project, flyers were posted in key community locations, and project information was hand delivered to major businesses. It is important to consider that participation by the Hispanic/Latino community may have been hindered by the political climate in spite of these efforts. In general participation in small group meetings was low (several meetings had less than ten attendees). In addition, the multiple attempts that were made to distribute information and organize small group meetings in Greeley were met with resistance by the local community. Because of this, fewer small group meetings were held in minority communities than had originally been anticipated.

## Specialized Outreach Activities

While it was expected that minority and low-income populations would receive project information through the general public involvement program, additional efforts were made to ensure an increased level of awareness and participation in the project. These efforts

included working with community leaders and liaisons, targeted distribution of project information, Spanish translation, the use of Spanish language media, attendance at cultural and community events, and holding small group meetings.

The project team identified local community liaisons to assist with specialized outreach activities. As leaders in their local communities, liaisons were asked to provide project information to their local communities and communicate any concerns or issues to the project team. Community liaisons also provided guidance on effective outreach strategies.

Specialized outreach included Spanish language newspapers, newsletters and mailings which announced upcoming meetings and described the project process. In addition, information in Spanish was posted to the project website throughout the project. A Spanish language translator was available at the project public meetings to answer questions.

Project fact sheets and flyers about the project and upcoming public involvement activities were delivered in both English and Spanish to many locations throughout the project where minority and low-income populations might have access to them, including:

- Adams County Housing Authority (Commerce City, CO)	- Greeley Assembly of God (Greeley, CO)
- Ault Public Library (Ault, CO)	- Greeley Planning and Zoning (Greeley, CO)
- Brighton Housing Authority (Brighton, CO)	- Hudson Public Library (Hudson, CO)
- Broomfield Planning Department (Broomfield, CO)	- Lincoln Park Library (Greeley, CO)
- CARE Housing (Fort Collins, CO)	- Longmont Public Library (Longmont, CO)
- Clinica Campesina (Lafayette, CO)	- Loveland Housing Authority (Loveland, CO)
- Commerce City Community Planning (Commerce City, CO)	- Neighbor to Neighbor (Fort Collins, CO)
- Cross Community Coalition (Denver, CO)	- OUR Center (Longmont, CO)
- Dacono Public Library (Dacono, CO)	- Rodarte Center (Greeley, CO)
- Denver Community Development (Denver, CO)	- Salud Family Health Center (Longmont, CO)
- Denver Development Services (Denver, CO)	- Sunrise Community Health Center (Greeley, CO)
- Eaton Public Library (Eaton, CO)	- Urban League of Metro Denver (Denver, CO)
- Firestone City Hall (Firestone, CO)	- Weld Chamber of Commerce (Greeley, CO)
- Fort Collins Aztlan Center (Fort Collins, CO)	- Weld County Housing Authority (Greeley, CO)
- Fort Collins Communications (Fort Collins, CO)	- Weld County Planning and Zoning (Greeley, CO)
- Fort Collins Senior Center (Fort Collins, CO)	- Weld County Social Services (Greeley, CO)
- Fort Lupton Public Library (Fort Lupton, CO)	- Windsor Severance Public Library (Windsor, CO)
- Fort Lupton School Library (Fort Lupton, CO)	- Windsor Town Hall (Windsor, CO)
- Glenn A. Jones Memorial Library (Johnstown, CO)	- Women, Infant, Children (Fort Collins, Longmont, Greeley, CO)

The project team also identified and attended local cultural and community events to distribute information about the project, answer questions, and gather comments. Fifteen events were attended between 2004 and 2006. These are listed in **Table 5**.

**Table 5 Community Events**

Date	Name of Event	Location
6/05/04	Berthoud Day	Berthoud, CO
8/24/04 and 9/17/05	Frederick Miners Day	Frederick, CO
8/07/04 and 8/13/05	Loveland Art in the Park	Loveland, CO
9/11/04 and 9/10/05	Celebrate Lafayette	Lafayette, CO
9/18/04	Greeley Fiesta	Greeley, CO
8/14/05 and 8/13/05	Milliken Beef-n-Bean Day	Milliken, CO
12/01/04	Hispanos Unidos de Greeley Expo.	Greeley, CO
08/05/05	Greeley Farmers Market	Greeley, CO
9/16/06	Mexican Independence Day	Longmont, CO
9/30/06	Bridging the Immigration Divide	Longmont, CO
9/30/06	Community Development Resource Fair	Adams County, CO

The project team contacted approximately 42 Hispanic/Latino community and church leaders throughout the project. Hispanic/Latino community leaders were offered information about the project and the opportunity for small group meetings. Small group meetings have been held in the locations listed in **Table 6**.

**Table 6 Small Group Meetings**

Date	Name of Group	Location
11/04/04	Loveland Housing Authority	Loveland, CO
8/06/05	Greeley Farmers' Market	Greeley, CO
8/13/05	Greeley Farmers' Market	Greeley, CO
7/28/05	Windsor Farmers' Market	Windsor, CO
1/23/06	Aztlan Fort Collins Town Hall Meeting	Fort Collins, CO
3/14/06	Mountain Range Shadows Subdivision	Larimer County, CO
9/21/06	El Comite de Longmont	Longmont, CO
9/21/06	A New Image, LLC	Brighton, CO
10/25/06	Templo Betel	Fort Collins, CO
11/11/06	Agua Viva Baptist Church	Loveland, CO
11/19/06	Holy Family Catholic Church	Fort Collins, CO
10/26/10	Longmont Public Library	Longmont, CO

To more specifically focus on impacts to low-income and minority populations, a public meeting was held in Longmont in October 2010 to discuss Preferred Alternative impacts specific to Longmont. Specialized outreach was used to encourage attendance of these populations at the meetings. This outreach included providing project and contact information in Spanish, personally visiting and delivering meeting notices to locations targeting these populations, and providing a translator at the meeting.

## Input Received through Specialized Outreach

Input received through specialized outreach centered on community needs and concerns regarding the proposed improvements. Participants indicated repeatedly that transit service between Longmont, Loveland, Denver, Boulder, and southwest Weld County was needed. Congestion on I-25 limits access to businesses and participation in cultural events in Metro Denver. Most residents from Greeley, Fort Collins, Loveland, and Longmont would be willing to drive to access transit service to Denver.

Participants expressed general concern about the cost of the alternatives and how alternatives would be funded. Participants disagreed about the impacts of tolling. Some felt that public transportation should be open to all and that tolling would exclude citizens. Others preferred tolling because it provided revenue for construction and would ease congestion.

Participants indicated a need for transit options to reach important community facilities (local schools and churches), regional employment centers (DIA and the Denver Technical Center), and commuter cities (Cheyenne, Fort Collins, Greeley, Longmont, Loveland, and Denver). It was also pointed out that much of the minority community does not work typical business hours and may hold multiple jobs. For transit to be effective, it would need to be flexible, affordable, accommodate persons with disabilities and bicycles, and operate on weekends and evenings.

In a meeting held in Brighton, attendees indicated that there were negative feelings toward transit because it is unreliable, provides limited service, and requires lengthy wait times. In addition, transit was not deemed feasible for those with construction jobs who are required to be in several locations throughout the day. While some suggested that bus service should be provided along US 85, most felt that more lanes are needed on US 85, SH 7, and I-25. Other than Brighton, participants generally felt that transit alternatives would enhance employment opportunities and increase access to shopping, cultural events, and services for minority and low-income populations throughout the Front Range. Many participants also preferred transit to highway widening because they considered it a cheaper, safer, and a less stressful option.

Most participants said that existing transit does not adequately serve minority and low-income communities. Some underserved locations identified by meeting participants include the OUR Medical Center (Longmont), new development east of SH 119 in Longmont, Casa Vista residential subdivision (Longmont), St. John's Church (Longmont), Casa Esperanza (Longmont), Bill Reed middle school (Loveland), Centerra (Loveland), and the Holy Catholic Church (Fort Collins). Participants preferred options that included transit to these destinations.

Participants also identified key community facilities, minority and low-income neighborhoods, and minority-owned businesses throughout the regional study area. These include the Pullman Center (12th and Garfield in Loveland); Wal-Mart (Loveland); Loveland Lake Park; Wynona Elementary School (Loveland); the Hispanic neighborhoods of Cherry Street, Buckingham, La Colonia, Andersonville, Poudre Valley Mobile Home Park, and

Cloverleaf Mobile Home Park (Fort Collins); Hispanic businesses along US 287 north of Cherry Street in Fort Collins; and Hispanic businesses along US 34 east of US 287 in Longmont. Participants also preferred options that included transit to these destinations.

Participants were concerned about immigration policy. Hispanic or Latino populations may not use public transit if they have to show identification or are distrustful of authority. In terms of the highway options, some indicated that they avoid using I-25 because they feel that Hispanic/Latino drivers are pulled over more frequently by the State Highway Patrol.

Input received through specialized outreach helped the project team understand the community resources that are important to minority and low-income communities. Meeting participants identified key community facilities, neighborhoods, businesses, underserved areas, and important relationships between communities (social, familial, employment). These resources would be given special consideration throughout impact analysis.

## ENVIRONMENTAL CONSEQUENCES

The following section provides a summary of potential impacts to minority and low-income populations from the alternatives being evaluated in the Final EIS. The environmental justice analysis evaluates each alternative to determine whether there is a potential for disproportionately high and adverse effects to minority or low-income populations when compared to populations that are not minority or not low-income in the study area. According to *CDOT's Title VI and Environmental Justice Guidelines for NEPA Projects, Rev. 3*, a disproportionately high and adverse effect is defined as one that is:

- (1) Predominantly borne by a minority and/or low-income population, or
- (2) Suffered by the minority and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority/non-low-income population.

A disproportionately high and adverse effect means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to:

- ▶ Bodily impairment, infirmity, illness or death.
- ▶ Air, noise or water pollution, or soil contamination.
- ▶ Destruction or disruption of man-made or natural resources.
- ▶ Destruction or diminution of aesthetic values.
- ▶ Destruction or disruption of community cohesion or a community's economic vitality.
- ▶ Destruction or disruption of the availability of public and private facilities and services.
- ▶ Vibration.
- ▶ Adverse employment effects.
- ▶ Displacement of persons, businesses, farms, or nonprofit organizations.

- ▶ Increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community.
- ▶ The denial of, reduction in, or significant delay in the receipt of, benefits of FHWA programs, policies, or activities.

Supporting technical documentation and other analyses prepared in conjunction with the Final EIS were reviewed to determine whether the build packages and each of their components would have any adverse impacts on all segments of the population, including minority and low-income population groups. If no adverse impacts were expected for a resource, then no further environmental justice analysis has been undertaken with regard to that particular resource. If, however, adverse effects were identified for a resource, additional environmental justice analysis was done and is described below. Note that impacts to natural resources (i.e., flora and fauna, geology and soils, wetlands) have been assumed not to have any direct impacts or indirect effects on human populations. Refer to **Chapter 2 Alternatives** of the Final EIS for detailed descriptions of the alternatives under evaluation.

## No-Action Alternative

Given the relatively limited scope of the No-Action Alternative, impacts would be less substantial than the impacts described below for Package A, Package B or the Preferred Alternative. However, certain adverse effects on minority and low-income residents in the study area would arise as a result of transportation needs unmet by the No-Action Alternative. These would include the direct and indirect effects on communities from traffic congestion and impaired mobility, including an increase in air emissions and noise, longer travel times, traffic queues at key interchanges, neighborhood traffic intrusion, deteriorating safety conditions, and lengthened emergency response times. These impacts would be experienced by all segments of the population.

Safety improvements at SH 1 and SH 392 would benefit the minority and low-income populations in these areas. While these improvements would provide some relief, traffic congestion would continue to result in traffic queues and delays for travelers.

Unlike Package A and the Preferred Alternative, and to an extent Package B, the No-Action Alternative would not provide local communities with the accessibility benefits associated with transit services. Low-income populations are often dependent on transit service and would particularly benefit from the provision of new transit services along US 287 and US 85.

The noise analysis identified impacts to a total of 101 residential receivers between SH 14 and SH 60. Sixty-nine of these receivers are residences concentrated within the Mountain Range Shadows subdivision, a community with minority populations in the southwest quadrant of the SH 392/I-25 interchange. Noise impacts would occur at all 69 residences and would range in intensity from 66 dBA to 77.5 dBA; however no residence would experience more than 3.3 dBA over existing conditions. Noise level increases of less than 3 dBA generally are not noticeable by most people. These receivers would also be impacted under Package A, Package B, and the Preferred Alternative. The 32 impacted residences not part of the Mountain Range Shadows subdivision represent a combination of minority and non-minority residences. Many of these are scattered along North I-25 and are

not part of a neighborhood or community. Because of the noise impacts to the Mountain Range Shadows subdivision, there are more low income and minority communities that would be impacted by noise than non minority and low income. However, the increase in noise level is very small and would not be noticeable to most people. There are no plans in the No-Action Alternative to do any noise mitigation for these impacts.

## Package A

**Component A-H1: Safety Improvements.** For this component, safety improvements have the potential to impact minority and/or low-income populations at two locations: near the SH 1/I-25 interchange in Wellington and north of the SH 14/I-25 interchange in Fort Collins. There are minority and non-minority populations west of the SH 1/I-25 interchange, low-income east of I-25 (from County Road 56 south to SH 14), and low-income and minority populations north of SH 14 on both sides of I-25.

Minority populations would benefit from interchange improvements and signalization at SH 1. The carpool lot in the southwest quadrant of the SH 1/I-25 interchange would be located across 6th Street from a single-family neighborhood of approximately 39 homes, which is approximately 37 percent minority. This location would be a benefit to these homes. Although conveniently located, there would be some traffic, noise, and activity associated with the lot that could disturb adjacent residents.

The four residential displacements associated with this component are located between SH 1 and SH 14, along the east side of I-25. They are widely distributed on rural parcels that are not part of an established had neighborhood. Three of the homes are located in low-income areas. **Table 7** summarizes environmental justice impacts for Component A-H1: Safety Improvements.

**Table 7 Environmental Justice Impact Summary for Component A-H1: Safety Improvements**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
Three residential property displacements; minimal traffic impacts from carpool lot.	One residential property displacement; minimal traffic impacts from carpool lot.
12 residences impacted by traffic noise. Number of impacts reduced to 6 after recommended noise abatement.	49 residences impacted by traffic noise. Number of impacts reduced to 35 after recommended noise abatement.

**Components A-H2 and A-H3: General Purpose Lanes.** These components have the potential to impact minority and/or low-income populations in four locations:

- ▶ SH 14/I-25 Interchange. In the northeast quadrant of the interchange, the Cloverleaf Community Mobile Home Park and adjacent single-family neighborhood are identified as having a concentration of minorities and low-income households. A small single-family neighborhood that does not contain minority or low-income populations is located in the southeast quadrant of the interchange.

- ▶ SH 392/I-25 Interchange. In the southwest quadrant of the interchange, the Mountain Range Shadows Subdivision is identified as having a concentration of minorities. A newer single-family residential subdivision is located in the southeast quadrant and does not contain a concentration of minorities.
- ▶ LCR 16/I-25 Interchange. The Johnson's Corner RV Park and a few single-family residences are identified as having a concentration of minorities. The Johnson's Corner RV Park allows short and long-term stays. There are no non-minority populations in the vicinity of the interchange.
- ▶ SH 119/I-25 Interchange. The River Valley Village Mobile Home Park and a small single-family residential neighborhood about a strip of commercial properties in the southwest quadrant of the interchange. These residences are located in a census block with a concentration of minorities. There are no non-minority populations in the vicinity of the interchange.

These four locations are the only areas with concentrated populations. Between these locations, scattered residences are contained within large rural census blocks that extend outward from I-25 (up to a mile).

Nineteen residential displacements would occur between SH 14 and E-470 (14 between SH 14 and SH 60 (A-H2), and five between SH 60 and E-470 (A-H3)). Of these, three are located in census blocks with minority populations and 16 are located in census blocks and block groups that do not contain minority or low-income populations. In general, displaced properties are dispersed along I-25 in large rural parcels that are not part of any established neighborhood.

The social analysis identifies the potential for impacts to residents within the Cloverleaf Community Mobile Home Park in the northeast quadrant of the SH 14/I-25 interchange. Census data indicate that this community contains minority and low-income populations. Impacts would include a new access configuration for residents of the Cloverleaf Community. Existing access is provided from an unsignalized intersection along SH 14. New access would be from a re-aligned frontage road that would be signalized to provide safer and more direct access for the Cloverleaf Community. A carpool lot with 150 spaces would also be constructed across the street from the community. Some residents may consider the proximity of this lot a convenience. Others might find the added pavement and increase in local traffic and activity disruptive. However, the area surrounding the interchange is highly urbanized and dominated by transportation facilities. The carpool lot would not considerably alter this setting.

The Mountain Range Shadows subdivision in the southwest quadrant of the SH 392/I-25 interchange consists of three census blocks that contain minority populations. To accommodate highway improvements, the frontage road would shift approximately 15 feet closer to the community and I-25 would be relocated approximately 30 feet farther from the community. For all alternatives, noise impacts would occur at 69 residences within the Mountain Range Shadows subdivision; however no residence would experience an increase of more than 3.3 dBA over existing conditions. In March 2006, the project team met with residents of the Mountain Range Shadows community to gather input on the SH 392 interchange design and frontage road configuration. To minimize impacts to the

community, the project team suggested relocating the frontage road behind the community. Residents were concerned with this approach and indicated a strong preference for the proposed

configuration. As a result, the highway would be moved approximately 30 feet east of the interstate, resulting in two property displacements from a neighborhood that does not contain minority populations.

At the Johnson's Corner truck stop and café, existing access would be replaced so that customers would have to travel east on LCR 16 to the frontage road, circle around the property, and enter at the south end. A consequence of this configuration would be the displacement of a single minority residence that would otherwise be isolated by the new access road. Near the Johnson's Corner RV Park, I-25 would be widened to the east. As a result, access to the park would not change and no displacements would occur.

Improvements near the SH 119/I-25 interchange would include a realignment of the northbound off-ramp. Residents of the River Valley Village Mobile Home RV Park would experience short-term, construction-related impacts including, noise, dust, detours, and traffic delays. No long-term impacts would occur.

The proposed improvements would require the relocation of twelve businesses between SH 14 and E-470 (eleven between SH 14 and SH 60 (A-H2) and one between SH 60 and E-470 (A-H3)). Assessor data indicate that these businesses provide services that include equipment storage, car sales and service, warehouse, food sales, gas/convenience, and home and RV sales. These businesses were not identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. There is no evidence to suggest that these businesses have any particular connection to a minority community or provide employment, goods, and/or services uniquely important to a minority population group.

The noise analysis identified impacts to a total of 757 receivers between SH 14 and US 36 (A-H2 and A-H3). Sixty-nine of these receivers are concentrated within the Mountain Range Shadows subdivision, as discussed previously. Proposed mitigation would reduce the number of impacted receivers within the Mountain Range Shadows subdivision to 39, an improvement over the No-Action condition. The remaining impacted receivers not part of the Mountain Range Shadows subdivision, are located in both minority or low-income populations as well as non-minority and non-low-income populations. These receivers are scattered along North I-25 and are not part of a neighborhood or community.

The visual analysis (**Section 3.14 Visual Quality**) determined that new retaining walls 15 feet and greater in height and new bridges would result in a high effect on visual conditions. A total of 31 retaining walls (18 for Component A-H2 and 13 for Component A-H3) would be distributed along I-25, affecting minority and low-income populations as well as non-minority/non-low-income populations. New bridges proposed at US 34 would impact visual conditions for all segments of the population. Noise barriers constructed to mitigate noise impacts at Mountain Range Shadows would also change the visual environment for homes adjacent to the highway, affecting views to the east. However, some may find the visual barrier to the highway an improvement over the existing condition.

According to the bicycle and pedestrian analysis (**Section 4.9 Construction Impacts**), impacts to bicycle and pedestrian facilities would be temporary in duration, would not be concentrated in areas with minority or low-income population groups, and would be offset by the overall benefits from added shoulders and sidewalks. **Table 8** summarizes environmental justice impacts for Component A-H2 and A-H3: General Purpose Lanes.

**Table 8 Environmental Justice Impact Summary for Components A-H2 and A-H3: General Purpose Lanes**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
Three residential property displacements; access revision.	16 residential property displacements.
No known displacement of businesses owned by minorities or of special importance to minority populations.	12 business displacements.
82 residences impacted by traffic noise. Number of impacts reduced to 52 after recommended noise abatement.	52 residences impacted by traffic noise. No noise abatement recommended for these impacts.
Retaining walls would impact residential areas; retaining walls (> 15') and new bridges would result in a high effect on visual conditions.	Retaining walls would impact residential areas; retaining walls (> 15') and new bridges would result in a high effect on visual conditions.

**Component A-H4: Structure Upgrades.** Structure upgrades are limited to minor bridge rehabilitation and maintenance activities. No roadway widening, bridge widening, or interchange upgrades would occur. Impacts to minority and low-income populations south of E-470 would be the same as those discussed for the No-Action Alternative in **Section 3.2 Social Conditions**.

**Components A-T1 and A-T2: Commuter Rail.** Minority and low-income populations are distributed along the BNSF alignment with concentrations in Fort Collins, Loveland, Berthoud, and Longmont. One hundred and sixty populated census blocks and 50 block groups are adjacent to the BNSF rail line. Of these, 50 census blocks have higher than average populations of minorities and 21 census block groups have higher than average numbers of low-income households.

Construction of the commuter rail would require the relocation of 35 residences (18 for Component A-T1 and 17 for Component A-T2). For Component A-T1, 16 of the 18 residential displacements (88 percent) would occur in census blocks or block groups containing minority or low-income populations. All of these would occur in Longmont, in minority and low-income neighborhoods adjacent to the BNSF corridor. The additional commuter rail tracks plus the displacements would exacerbate the existing barrier effect of the existing BNSF corridor, so would not result in a new impact to an established community. No residential displacements associated with Component A-T2 are located in a census block or block group with minority or low-income populations.

Commuter rail would improve access to the following community facilities that were identified through specialized outreach efforts as being important to minority and low-income populations:

- ▶ Bill Reed Middle School. This school has a high concentration of Hispanic/Latino students. Existing transit to the school is limited. The school is within 0.25 mile of the proposed Downtown Loveland Transit Station. Access to commuter rail would benefit school-aged children. Although the school is currently located in an urbanized area, an increase in noise and vibration would be expected. The commuter rail option would benefit these students by providing service to the school and alleviating a long bus ride for many students.
- ▶ Impacto De Fe. This largely Hispanic church in Loveland, with a historic presence, is located approximately 0.5 mile from the proposed Downtown Loveland Transit Station. Access to commuter rail could facilitate community participation in church events and activities.
- ▶ Salud Family Health Center. This health center is located approximately 0.5 mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail would benefit persons along the Front Range who are uninsured or underinsured and in need of medical care.
- ▶ St. John's Church. This church is located approximately one mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail could facilitate community participation in church events and activities.
- ▶ OUR (Outreach United Resource) Center. This medical center is located approximately one mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail would benefit families in need of medical care.
- ▶ St. Joseph's Church. This church is located approximately 0.5 mile from the Fort Collins Downtown Transit Center. Access to commuter rail could facilitate community participation in church events and activities.
- ▶ The Pullman Center. This community center is located less than one mile from the Downtown Loveland Transit Station. Access to commuter rail could facilitate community events and activities.

Because commuter rail would operate in an existing rail corridor, minority and low-income neighborhoods in Berthoud, Fort Collins, Longmont, and Loveland would not be newly divided nor would existing access or travel patterns change. Local residents frequently experience delays when traveling across the BNSF rail line. These delays would become more frequent and would be experienced by all segments of the population. Several neighborhoods in Fort Collins would benefit from close proximity to transit stations. These include Martinez Park (minority and low-income), Historic Fort Collins High School (minority), and Troutman Park (minority). Residents of these neighborhoods would be able to reach the transit station by foot or bicycle. Transit stations in north and south Longmont would improve mobility for minority and low-income neighborhoods, connecting residents to cultural events and employment in Fort Collins, Loveland, Boulder, and Denver. Property values would likely increase near station sites. Over time, this could make housing less affordable for existing residents.

Minority and low-income residents on Atwood Street would lose street parking between 3rd Avenue and 8th Avenue. Although some access revisions would occur as a result, all homes would retain access to their properties from their driveways and/or alleys. For example, some residents in this area appear to use street parking instead of the alley (i.e.,

alley is fenced off) or driveway (i.e., driveway is used for storage). These residents would have to begin using their driveway or access their property from the alley when street parking is no longer available. Loss of street parking in this area would not affect OUR Center because this facility currently has alley access and on-site parking.

The proposed maintenance facility at East Vine Drive and North Timberline Road would be adjacent to the northern portion of the Collins Aire Park (a mobile home park that is both minority and low-income). This community would likely experience an increase in activity and visual impacts as a result of the new facility. However, such land uses are consistent with the area, as industrial, rail, and airport uses are in close proximity

Feeder bus service would connect minority and low-income populations in Fort Collins and Loveland to populations and services in Greeley, increasing the level of interaction between these communities. Similar benefits would result from feeder bus service between Berthoud, Johnstown, and Milliken. Feeder bus service along US 34 would improve mobility for Hispanic/Latino residents in apartment complexes adjacent to the highway as well as provide access to key community facilities, such as Wal-Mart and a regional bus line that provides service to Mexico.

Construction of the commuter rail would require the relocation of 16 businesses for right-of-way acquisition. Fifteen of these would occur between Fort Collins and Longmont (Component A-T1). The remaining relocation would occur between Longmont and FasTracks North Metro (Component A-T2). Assessor data indicate that these businesses provide services that include food sales, rail related, lumber, investment services, automotive, warehouse/storage, equipment/machinery, and manufacturing. None of these businesses were identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. However, due to their proximity to minority populations along the BNSF rail line, these businesses most likely provide employment for minority persons.

The requirement of passenger trains to blow their horns at at-grade crossings would increase noise in all neighborhoods adjacent to the commuter rail alignment. The noise analysis identified a total of 2,192 residential noise impacts along the commuter rail corridor. Of these impacts 1,495 would be moderate impacts and 697 would be severe impacts. Approximately half of the impacts would be in Longmont. Most of the noise impacts would occur in census-identified minority or low-income areas. However, it is estimated that with the implementation of Quiet Zones (and noise walls located outside of Longmont), potential impacts to all residences along the BNSF corridor would be eliminated (see **Section 3.6 Noise and Vibration**). The vibration analysis identified impacts at a total of 40 residences within 111 feet of the nearest track. Of these residences, 26 are in Longmont and 14 are in Loveland. To mitigate for vibration impacts, special trackwork at certain locations and the installation of Tire Derived Aggregate (shredded tires) beneath the tracks would eliminate all potential vibration impacts.

An increase in bus and vehicular traffic around station sites would result in localized increases in air emissions. Minority and/or low-income populations at five of the nine proposed station sites (Downtown Fort Collins Transit Center, Downtown Loveland, Berthoud, North Longmont, and Sugar Mill) would be affected. According to the air quality

analysis prepared for this project (**Section 3.5 Air Quality**), emissions associated with increased activity at stations would not exceed National Ambient Air Quality Standards (NAAQS). The proximity of the station sites would be beneficial for the nearby populations, especially those within walking distance.

The visual analysis (**Section 3.14 Visual Quality**) concluded that the introduction of retaining walls, noise barriers, and new bridges would have a high visual effect to residents adjacent to the rail corridor. Overall, retaining walls would impact 14 residential areas with concentrations of minority or low-income populations and 7 residential areas with non-minority/non-low-income populations. Retaining walls would be constructed on the east side of the rail (where new track would be laid) between Mountain View Avenue and 21st Street in minority and low-income portions of the Clark Centennial and Lanyon neighborhoods. Twelve residences immediately adjacent to the proposed track also would be displaced from these neighborhoods. Retaining walls and noise barriers would shield residences from the existing rail line, lessening the visual impacts of the railroad.

As described in **Section 3.6.4.4 Rail Noise and Vibration Mitigation Evaluation**, noise barriers will be considered if quiet zones and/or wayside horns are not feasible and reasonable. Fourteen of the 16 potential locations for noise barriers are adjacent to minority and/or low-income populations. While these would reduce noise levels for the surrounding communities, they would alter the visual landscape primarily affecting minority and low-income residences adjacent to the BNSF rail line in Loveland, Berthoud, and Longmont. However, these same residences would benefit the most from the noise barriers.

The North Loveland, Downtown Loveland, Berthoud, and North Longmont stations would have a high visual effect on the surrounding community because they would require relocation of a business or residence and the station would impede views from the east to the mountains. Minority and/or low-income populations would be affected by three of these stations - Downtown Loveland, Berthoud, and North Longmont.

Adverse effects would occur to two historic properties between Longmont and FasTracks North Metro (A-T4). Both of these properties would be acquired for right-of-way purposes. Adversely affected properties include the Old City Electric Building (5BL.1245) and Colorado & Southern/BNSF Depot (5BL.1244). Both of these buildings are in Longmont adjacent to the BNSF rail line within areas identified as having minority and/or low-income populations. The Old City Electric Building is designated by the City of Longmont as a local landmark. Loss of these buildings could negatively affect community character and cohesion for both low-income and minority populations as well as non-low-income and non-minority populations.

According to the bicycle and pedestrian analysis (**Section 4.9 Floodplains**), impacts to bicycle and pedestrian facilities would be temporary in duration, would not be concentrated in areas with minority or low-income population groups, and would be offset by the overall benefits from added shoulders and sidewalks.

The additional commuter rail track, operational traffic impacts, right-of-way fencing, noise, vibration, and visual impacts would negatively affect minority and low-income neighborhoods and community cohesion in Longmont. These impacts could reduce property values in minority and low-income areas, except for the areas within walking distance of the two stations, where property values would likely be increased. In addition,

two stations would serve the community of Longmont: SH 66 in the north and SH 119 in the south. Residents along the commuter rail alignment in Longmont would have to drive or take a local bus north or south to access the rail and would be unable to stop to access services between SH 66 and SH 119.

Comments received at a meeting with El Comité de Longmont (a Latino community organization in Longmont) in September 2006 indicated that these residents feel that there would be no additional community division resulting from the commuter rail. According to El Comité, minority and low-income communities in Longmont rely heavily on local bus service. Underserved areas that are important to the minority community include the OUR Center (medical clinic) and Casa Vista (a minority neighborhood between SH 119 and County Line Road on Quicksilver). A station at the Sugar Mill location would support these areas and connect the Casa Vista neighborhood to the northern part of Longmont as well as Fort Collins, Loveland, Boulder and Denver. **Table 9** summarizes environmental justice impacts for Component A-T1 and A-T2: Commuter Rail.

**Table 9 Environmental Justice Impact Summary for Components A-T1 and A-T2: Commuter Rail**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
16 residential property displacements (all in Longmont); improved access to Front Range communities, community facilities, and services; potential degradation of community cohesion in Longmont; travel time delays at at-grade crossings.	19 residential property displacements (none in Longmont); improved access to Front Range communities, community facilities, and services; travel time delays and out-of-direction travel at at-grade crossings.
No known displacement of businesses owned by minorities; displaced businesses most likely provide services and employment for minority persons.	16 business displacements.
Approximately 2024 receivers impacted by rail noise levels. However, with the implementation of mitigation measures, there would be no noise impacts.	Approximately 231 receivers impacted by rail noise levels. With the implementation of mitigation measures, there would be no noise impacts.
Localized increase in air emissions affecting populations at five proposed station sites; emissions would not exceed NAAQS.	Localized increase in air emissions affecting populations at four proposed station sites; emissions would not exceed NAAQS.
Retaining walls would impact 14 residential areas; sound walls would result in a high effect on visual conditions at 14 locations; commuter rail stations would have a high effect on visual conditions at three locations.	Retaining walls would impact 7 residential areas; sound walls would result in a high effect on visual conditions at two locations; commuter rail stations would have a high effect on visual conditions at one location.

**Components A-T3 and A-T4: Commuter Bus.** The provision of commuter bus service would benefit minority and low-income communities along US 85. Bus stations in Greeley, South Greeley, Evans, Platteville, and Fort Lupton are all located in minority and/or low-income areas and would expand employment opportunities and services to these populations. Commuter bus service would improve regional connections between US 85 communities. Service to DIA would improve access to the airport over the No-Action Alternative. Limiting the number of stops would benefit residents that travel between communities on a regular basis.

Construction of queue jumps, bus stations, and maintenance facilities would require the relocation of five businesses. Assessor data indicate that these businesses provide services that include a convenience store, welding, and professional services. Impacted businesses were not identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. However, due to their proximity to minority populations along US 85, these businesses most likely provide employment for minority persons. Site visits indicated numerous businesses that appeared to be minority-owned (e.g., company name and signage was in Spanish). None of the businesses identified during site visits would be directly impacted by the commuter bus components. Employees and business owners would benefit from the improved access that would be provided by commuter bus service.

An increase in bus and vehicular traffic around station sites would result in localized increases in air emissions. Impacts would primarily affect minority and/or low-income populations at four of the five proposed station sites (Greeley, South Greeley, Platteville, and Fort Lupton). According to the air quality analysis prepared for this project, emissions associated with increased activity at stations would not exceed NAAQS. **Table 10** summarizes environmental justice impacts for Component A-T3 and A-T4: Commuter Bus.

**Table 10 Environmental Justice Impact Summary for Components A-T3 and A-T4: Commuter Bus**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
One property displacement; improved access to communities along US 85.	No property displacements; improved access to communities along US 85.
No known displacement of businesses owned by minorities; displaced businesses most likely provide services and employment for minority persons.	Five business displacements. Displaced businesses provide services and employment for all populations.
Localized increase in air emissions affecting populations at four proposed station sites; emissions would not exceed NAAQS.	Localized increase in air emissions affecting populations at one proposed station site; emissions would not exceed NAAQS.

**Benefits of Package A.** Package A would provide overall improvements in the operation of local and regional transportation systems. Other benefits associated with implementing Package A would include:

- ▶ Short-term and long-term employment opportunities would occur during the construction of the facilities as well as their ongoing operation and maintenance (refer to the economic analysis in Section 3.3.2.2 for more specific information)
- ▶ The provision of shoulders and sidewalks would better accommodate bicycle and pedestrian travel
- ▶ Safety and emergency response times would improve

- ▶ Transit components would improve access to community facilities, provide broader opportunities for employment, facilitate participation in regional social and cultural events, promote interaction between communities, and stimulate business activity
- ▶ Minority and low-income populations are concentrated around transit improvements and would benefit from the transit-related components.

## Package B

**Component B-H1: Safety Improvements.** Safety improvements under this component are similar to those associated with Package A, Component A-H1. The potential for impacts exists in the same two locations as under Component A-H1: near the SH 1/I-25 interchange in Wellington and north of the SH 14/I-25 interchange in Fort Collins. Impacts would be the same as those identified in Package A for Component A-H1. **Table 11** summarizes environmental justice impacts for Component B-H1: Safety Improvements.

**Table 11 Environmental Justice Impact Summary for Component B-H1 Safety Improvements**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
Three residential property displacements located east of I-25 on rural parcels between SH 1 and SH 14; minimal traffic impacts from carpool lot.	One residential property displacement located east of I-25 on rural parcels between SH 1 and SH 14; minimal traffic impacts from carpool lot.
12 residences impacted by traffic noise. Number of impacts reduced to 6 after recommended noise abatement.	49 residences impacted by traffic noise. Number of impacts reduced to 35 after recommended noise abatement.

**Components B-H2, B-H3, and B-H4: Tolloed Express Lanes.** Adding one additional northbound and southbound tolloed express lane on I-25 would have a similar effect on minority and low-income populations as adding one general purpose lane in each direction under Package A, Components A-H2 and A-H3. Interchange improvements for these components are also the same. Because many of the direct and indirect impacts associated with tolloed express lanes are similar in nature to those of general purpose lanes, the following discussion focuses on the differences between them.

Twenty residential relocations would be required between SH 14 and E-470 (15 between SH 14 and SH 60 [B-H2] and five between SH 60 and E-470 [B-H3]). Four of the 15 displacements between SH 14 and SH 60 (B-H2 and B-H3) are located in census blocks with minority populations and eleven are located in census blocks and block groups that do not contain minority or low-income populations. None of the residential displacements between SH 14 and E-470 are located in census blocks or block groups that contain minority or low-income populations. In general, displaced properties are dispersed along I-25 in large rural parcels that are not part of any established neighborhood.

Although no residences would be displaced between E-470 and US 36 (B-H4), approximately 10 garages would need to be acquired from condominiums adjacent to I-25 near 120th Avenue. None of these would be from areas with minority or low-income populations. Neighborhoods in this segment extend east and west of the highway and have

developed around the interstate. Residences immediately adjacent to the highway would experience an increase in traffic and traffic related impacts (noise, visual, air emissions). This would affect all segments of the population.

Numerous neighborhoods and apartment complexes abutting I-25 in Broomfield, Thornton, Westminster, Northglenn and Adams County would also experience an increase in traffic and traffic related impacts (noise, visual, air emissions). These neighborhoods consist of both minority/low-income and non-minority/non-low-income populations. Impacts would be largely limited to first- and second-tier homes and would not result in a deterioration of the overall neighborhood.

The proposed improvements would require the relocation of 15 businesses between SH 14 and E-470 (13 between SH 14 and SH 60 [B-H2] and two between SH 60 and E-470 [B-H3]). Assessor data indicate that these businesses provide services that include equipment storage, car sales and service, warehouse, food sales, gas/convenience, and home and RV sales. These businesses were not identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. There is no evidence to suggest that these businesses have any particular connection to a minority community or provide employment, goods, and/or services uniquely important to a minority population group.

Financial access to tolling is an issue that often emerges when addressing the impacts of express lanes. To use the new tolled express lanes, tollway users would be required to pay for their travel. Limited studies have been conducted regarding the fairness of new toll facilities and their implementation remains controversial. Equity studies conducted on express lane projects implemented in California and Texas reveal that economically disadvantaged drivers use express lanes voluntarily and are not necessarily excluded, although more frequent use is often exhibited by higher-income drivers. The studies revealed that low-income drivers approved of the express toll concepts, similar to opinions of higher-income households. Most users, even those from higher-income households, choose the express lanes judiciously when they need to benefit most from reduced congestion.

A general discussion with minority and low-income residents at a town hall meeting at the Northside Atzlan Community Center in Fort Collins (January 2006) indicated mixed feelings toward tolled express lanes. While some supported the tolling concept, others felt that tolling would exclude citizens with lower incomes. Free travel lanes, access points, and frontage roads would be maintained along I-25. In addition, bus rapid transit (BRT) and vanpools would be available to all I-25 commuters.

The noise analysis identified impacts to a total of 779 receivers between SH 14 and US 36 (B-H2). Sixty-nine of these impacted receivers are concentrated within the Mountain Range Shadows subdivision. Noise levels would increase at all of the 69 residences; however, no residence would experience an increase of more than 3.3 dBA over existing conditions. Noise level increases of less than 3 dBA generally are not noticeable by most people.

Proposed mitigation would reduce the number of impacted receivers within the Mountain Range Shadows subdivision to 39, an improvement over the No-Action condition. The remaining impacted receivers not part of the Mountain Range Shadows subdivision, would

impact minority or low-income populations as well as non-minority and non-low-income populations. These receivers are scattered along North I-25 and are not part of a neighborhood or community.

The visual analysis (**Section 3.14 Visual Quality**) determined that structural impacts associated with Components B-H2 and B-H3 would result in a high effect on visual conditions. Structural impacts include new retaining walls 15 feet and greater in height and new bridges. A total of 28 retaining walls (19 for Component B-H2 and 9 for Component B-H3) would be distributed along I-25, affecting minority and low-income populations as well as non-minority/non-low-income populations. New bridges proposed at US 34 would impact visual conditions for all segments of the population. Noise barriers constructed to mitigate noise impacts at Mountain Range Shadows would also change the visual environment for homes adjacent to the highway affecting views to the east. However, some may find the visual barrier to the highway an improvement over the existing condition.

Noise barriers would also be constructed in several residential areas from E-470 to US 36 (B-H4) along I-25: Thorncreek Parkway, Community Center Drive, Badding Reservoir, and Brittany Ridge. Residences adjacent to the proposed barrier at Community Center Drive are considered low-income. The visual analysis determined that sound walls would have a moderate visual effect to the surrounding community and would reduce the visual effect of the highway. **Table 12** summarizes environmental justice impacts for Components B-H2, B-H3, and B-H4: Tolle Express Lanes.

**Table 12 Environmental Justice Impact Summary for Components B-H2, B-H3, and B-H4: Tolle Express Lanes**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
Four residential property displacements; access revision at Cloverleaf Community Mobile Home Park.	16 residential property displacements; acquisition of 10 garages
No known displacement of businesses owned by minorities or of special importance to minority populations	15 business displacements
278 residences impacted by traffic noise. Number of impacts reduced to 168 after recommended noise abatement.	346 residences impacted by traffic noise. Number of impacts reduced to 295 after recommended noise abatement.
Retaining walls would impact residential areas; retaining walls (> 15') and new bridges would result in a high effect on visual conditions.	Retaining walls would impact residential areas; retaining walls (> 15') and new bridges would result in a high effect on visual conditions.

**Components B-T1 and B-T2: Bus Rapid Transit (BRT).** No residential displacements would occur under Components B-T1 or B-T2. Feeder bus service would provide benefits similar to those described under Package A for Components A-t1 and A-T2. However, BRT would improve access to some community facilities in Longmont over the No-Action Alternative and Package A, and would improve access along I-25 similar to the Preferred

Alternative. In Longmont, the feeder bus line would run east along SH 119 and north along US 287. Frequent stops would provide more direct service than commuter rail to Casa Vista, Salud Family Health Center, St. Johns Church, the OUR Center, and Hispanic-owned businesses along US 287.

Construction of the BRT station in Firestone would require the relocation of one business. This business provides services that include a home center and RV sales. This business was not identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. There is no evidence to suggest that this business has any particular connection to a minority community or provides employment, goods, and/or services uniquely important to a minority population group.

An increase in bus and vehicular traffic around station sites would result in localized increases in air emissions. Impacts would primarily affect minority and/or low-income populations at three of the 12 proposed stations sites (Harmony Road and Timberline, Firestone, and Greeley Downtown Transfer Center). There are no residential populations in the immediate vicinity of six of the proposed station sites. According to the air quality analysis prepared for this project, emissions associated with increased activity at stations would not exceed NAAQS.

Impacts to the neighborhoods adjacent to the proposed maintenance facility at 31st Street and west of 1st Avenue in Greeley would be the same as those identified for Package A, Components A-T3 and A-T4.

BRT stations in Windsor (southwest of the SH 392/I-25 interchange) and Firestone (southwest of Firestone Road) would have a high visual effect to the surrounding community. The station platforms would be 20 feet wide by 300 feet long, with a pedestrian overpass, parking, bus bays, kiss-and-ride, lighting, and landscaping. The station in Firestone would require one business relocation. This relocation would change the visual landscape for travelers, affecting all population segments including minority residents of River Valley Village Mobile Home Park and adjacent neighborhoods west of the Firestone Road interchange. **Table 13** summarizes environmental justice impacts for Component B-T1 and B-T2: Bus Rapid Transit.

**Table 13 Environmental Justice Impact Summary for Components B-T1 and B-T2: Bus Rapid Transit**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
No residential property displacements.	No residential property displacements.
No known displacement of businesses owned by minorities or of special importance to minority populations.	One business displacement.
Localized increase in air emissions affecting populations at three proposed station sites; emissions would not exceed NAAQS.	Localized increase in air emissions affecting populations at three proposed station site; emissions would not exceed NAAQS.
Station platforms and overpasses would result in visual impacts to the surrounding community in two locations.	Station platforms and overpasses would result in visual impacts to the surrounding community in two locations.

**Benefits of Package B.** Package B would provide overall improvements in the operation of local and regional transportation systems. Other benefits associated with Package B would include:

- ▶ Short-term and long-term employment opportunities would occur during the construction of the facilities as well as their ongoing operation and maintenance (refer to the economic analysis in **Section 3.3.2.3** for more specific information).
- ▶ The provision of shoulders and sidewalks would better accommodate bicycle and pedestrian travel.
- ▶ Safety and emergency response times would improve.
- ▶ Transit components would result in moderate improvements in mobility and would improve regional connectivity.
- ▶ Minority and low-income populations are concentrated around transit improvements and would benefit from the transit-related components.

## Preferred Alternative

### I-25 Highway Improvements

This component has the potential to impact minority and/or low-income populations in six locations. Between these locations, scattered residences are contained within large rural census blocks that extend outward from I-25 (up to a mile). Below are descriptions of the six minority and/or low-income locations:

- ▶ SH1/I-25 Interchange. The Wellington East neighborhood, located in the northwest quadrant of the interchange, is identified as having a concentration of minority households. The residential area southwest of the interchange also includes minority households.

- ▶ SH 14/I-25 Interchange. In the northeast quadrant of the interchange, the Cloverleaf Community Mobile Home Park and adjacent single-family neighborhood are identified as having a concentration of minorities and low-income households. A small single-family neighborhood that does not contain minority or low-income populations is located in the southeast quadrant of the interchange.
- ▶ SH 392/I-25 Interchange. In the southwest quadrant of the interchange, the Mountain Range Shadows Subdivision is identified as having a concentration of minorities. A newer single-family residential subdivision is located in the southeast quadrant and does not contain a concentration of minorities. Although the interchange itself is a component of the No-Action Alternative, general purpose lanes will be included as part of the Preferred Alternative.
- ▶ LCR 16/I-25 Interchange. The Johnson's Corner RV Park and a few single-family residences are identified as having a concentration of minorities. The Johnson's Corner RV Park allows short and long-term stays. There are no non-minority populations in the vicinity of the interchange.
- ▶ SH 119/I-25 Interchange. The River Valley Village Mobile Home Park and a small single-family residential neighborhood about a strip of commercial properties in the southwest quadrant of the interchange. These residences are located in a census block with a concentration of minorities. There are no non-minority populations in the vicinity of the interchange.

Safety improvements from SH 1 to SH 14 would require the relocation of these residences, as compared to the four residences affected by Packages A and B. These residences are all located in low-income areas along the east side of I-25. Twenty total residential displacements (including the three for the safety improvements) would occur as a result of the Preferred Alternative highway component. Of these, six total displacements would be located in minority or low-income identified areas (three in census blocks with minority populations and three with low-income populations). The remaining residential displacements are located in census blocks or block groups that do not contain minority or low-income populations. In general, displaced properties are dispersed along I-25 in large rural parcels that are not part of any established neighborhood.

Although no residences would be displaced between E-470 and US 36, approximately 10 garages would need to be acquired from condominiums adjacent to I-25 near 120th Avenue. None of these would be from areas with minority or low-income populations. Neighborhoods in this segment extend east and west of the highway and have developed around the interstate. Residences immediately adjacent to the highway would experience an increase in traffic and traffic related impacts (noise, visual, air emissions). This would affect all segments of the population.

Numerous neighborhoods and apartment complexes abutting I-25 in Broomfield, Thornton, Westminster, Northglenn and Adams County would also experience an increase in traffic and traffic related impacts (noise, visual, air emissions). These neighborhoods consist of both minority/low-income and non-minority/non-low-income populations. Impacts would be largely limited to first- and second-tier homes and would not result in a deterioration of the overall neighborhood.

The proposed improvements would require the relocation of ten businesses as a result of the highway component. Assessor data indicate that these businesses provide services that include equipment storage, car sales and service, warehouse, food sales, gas/convenience, and home and RV sales. These businesses were not identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. There is no evidence to suggest that these businesses have any particular connection to a minority community or provide employment, goods, and/or services uniquely important to a minority or low-income population group.

For the highway component, the noise analysis identified impacts to a total of 679 Category B land uses (residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, playgrounds, active sports areas and parks) and 161 impacts to Category C land uses (developed lands, properties, or activities like commercial uses). With the implementation of noise mitigation (including Quiet Zones and noise barriers), 181 residential (Category B) noise impacts would be eliminated. Twenty of the mitigated receivers are located in Wellington East and 30 of the mitigated receivers are located in the Mountain Range subdivision; both of these neighborhoods comprise minority communities. Other mitigated receivers are scattered along North I-25 and are not part of a neighborhood or community. Noise impacts would affect both minority and low-income populations, as well as non-minority and non-low-income populations along I-25.

Visual impacts to low-income and minority communities associated with the highway component of the Preferred Alternative would result from replacement and modification of bridges and interchanges, new retaining walls, new noise walls, and the addition of carpool lots. Overall, the reconstruction of existing bridges and interchanges would not have a noticeable visual effect on minority and low-income communities along I-25.

The number of retaining walls increased in the Preferred Alternative to minimize and avoid right-of-way impacts. The visual analysis finds that structural impacts associated with highway component of the Preferred Alternative would result in a high effect on visual conditions. Structural impacts include 99 retaining walls that are 15 feet and greater in height. Eighty-five retaining walls would be 15 feet in height or less, resulting in a moderate visual effect. These retaining walls would be distributed along I-25, affecting minority and low-income populations as well as non-minority/non-low-income populations.

Of the seven noise walls proposed to mitigate noise impacts for the Preferred Alternative, four would have moderate visual impacts on low-income and/or minority communities. These four noise walls include a 10-12 foot wall located at SH 1 and I-25 (near the Wellington East neighborhood), a 12 foot wall located south of SH 392 and north of CR 30 along I-25 near the Mountain Range Shadows community, and a 14 foot wall on the east side and a 10-12 foot wall on the west side of I-25 near Community Center Drive, both of which would impact the Stone Mountain Apartments.

Five new carpool lots are proposed as part of the highway component. Two of these carpool lots would have minor visual impacts to low-income and minority communities: a new lot located in the southwest quadrant of the SH 1/I-25 interchange near Wellington East, and a new lot located in the northeast quadrant of the SH 14/I-25 interchange near the Cloverleaf Community Mobile Home Park.

To use the new express lanes included in the highway component, tollway users in single occupant vehicles would be required to pay for their travel. Impacts as a result of tolled express lanes are the same as those described for Package B, Components B-H2, B-H3, and B-H4. **Table 14** summarizes environmental justice impacts for the highway component of the Preferred Alternative.

**Table 14 Environmental Justice Impact Summary for Highway Component for the Preferred Alternative**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
Six residential property displacements; access revision at Cloverleaf Community Mobile Home Park.	14 residential property displacements; acquisition of 10 garages.
No known displacement of businesses owned by minorities or of special importance to minority populations.	10 business displacements.
284 residences impacted by traffic noise. Number of impacts reduced to 168 after recommended noise abatement.	395 residences impacted by traffic noise. Number of impacts reduced to 330 after recommended noise abatement.
Retaining walls would impact residential areas; retaining walls (> 15') and new bridges would result in a high effect on visual conditions.	Retaining walls would impact residential areas; retaining walls (> 15') and new bridges would result in a high effect on visual conditions.

### **Commuter Rail**

Minority and low-income populations are distributed along the BNSF alignment with concentrations in Fort Collins, Loveland, Berthoud, and Longmont. One hundred and sixty populated census blocks and 50 block groups are adjacent to the BNSF rail line. Of these, 50 census blocks have higher than average populations of minorities and 21 census block groups have higher than average numbers of low-income households.

Construction of the commuter rail would require the relocation of 31 residences. Of the 31 residential impacts, 14 would occur in census blocks or block groups containing minority or low-income populations. All of these would occur in Longmont, in minority and low-income

neighborhoods adjacent to the BNSF corridor. Given the total amount of comparable housing stock in this area, no effect on local or regional population distribution or housing demand would be expected.

Commuter rail would improve access to the following community facilities that were identified through specialized outreach efforts as being important to minority and low-income populations:

- ▶ Bill Reed Middle School. This school has a high concentration of Hispanic/Latino students. Existing transit to the school is limited. The school is within 0.25 mile of the proposed Downtown Loveland Transit Station. Access to commuter rail would benefit school-aged children. Although the school is currently located in an urbanized area, an

increase in noise and vibration would be expected. The commuter rail option would benefit these students by providing service to the school and alleviating a long bus ride for many students.

- ▶ Impacto De Fe. This largely Hispanic church in Loveland, with a historic presence, is located approximately 0.5 mile from the proposed Downtown Loveland Transit Station. Access to commuter rail could facilitate community participation in church events and activities.
- ▶ Salud Family Health Center. This health center is located approximately 0.5 mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail would benefit persons along the Front Range who are uninsured or underinsured and in need of medical care.
- ▶ St. John's Church. This church is located approximately one mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail could facilitate community participation in church events and activities.
- ▶ OUR (Outreach United Research) Center. This medical center is located approximately one mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail would benefit families in need of medical care.
- ▶ St. Joseph's Church. This church is located approximately 0.5 mile from the Fort Collins Downtown Transit Center. Access to commuter rail could facilitate community participation in church events and activities.
- ▶ The Pullman Center. This community center is located less than one mile from the Downtown Loveland Transit Station. Access to commuter rail could facilitate community events and activities.

Because commuter rail would operate in an existing rail corridor, minority and low-income neighborhoods in Berthoud, Fort Collins, Longmont, and Loveland would not be newly divided nor would existing access or travel patterns change. The addition of maintenance roads, passing track, fences or retaining walls could somewhat exacerbate this "barrier effect;" however, because there would not be additional track and, unlike Package A, on-street parking on Atwood Street would not be affected by the Preferred Alternative, this effect is less than that likely to occur with Package A. Local residents frequently experience delays when traveling across the BNSF rail line. These delays would become more frequent; however, each delay would be much less than currently experienced because trains would be much shorter.

Several neighborhoods in Fort Collins would benefit from close proximity to transit stations. These include Martinez Park (minority and low-income), Historic Fort Collins High School (minority), and Troutman Park (minority). Residents of these neighborhoods would be able to reach the transit station by foot or bicycle. Transit stations in north and south Longmont would improve mobility for minority and low-income neighborhoods, connecting residents to cultural events and employment in Fort Collins, Loveland, Boulder, and Denver. Property values would likely increase near station sites. Over time, this could make housing less affordable for existing residents.

Feeder bus service would connect minority and low-income populations in Fort Collins and Loveland to populations and services in Greeley, increasing the level of interaction between these communities. Similar benefits would result from feeder bus service between Berthoud, Johnstown, Windsor, Fort Lupton, Dacono, and Milliken. Feeder bus service along US 34 would improve mobility for Hispanic/Latino residents in apartment complexes adjacent to the highway as well as provide access to key community facilities, such as Wal-Mart and a regional bus line that provides service to Mexico.

Construction of the commuter rail component of the Preferred Alternative would require the relocation of nine businesses. Of the nine impacted businesses, one is located within a census-identified low-income area. This business, a storage warehouse in Berthoud, was not identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office; through public involvement efforts; or through the business survey distributed for this project. There is no evidence to suggest that this business has any particular connection to a minority or low-income community or provides employment, goods, and/or services uniquely important to a minority or low-income population group.

The requirement of passenger trains to blow their horns at at-grade crossings would increase noise in all neighborhoods adjacent to the commuter rail alignment. The noise analysis identified a total of 2,192 residential noise impacts along the commuter rail corridor. Of these impacts 1,495 would be moderate impacts and 697 would be severe impacts. Approximately half of the impacts would be in Longmont. Most of the noise impacts would occur in census-identified minority or low-income areas. However, it is estimated that with the implementation of Quiet Zones (and noise walls located outside of Longmont), potential impacts to all residences along the BNSF corridor would be eliminated (see **Section 3.6. Noise and Vibration**). As described in **Section 3.6.4.4 Rail Noise and Vibration Mitigation Evaluation**, noise barriers will be considered if quiet zones and/or wayside horns are not feasible and reasonable.

Two of the three proposed noise barriers (at 29th Street and CR 28 in Loveland, and at CR 14 and CR 18 in Campion) are adjacent to minority and/or low-income populations. While these would reduce noise levels for the surrounding communities, they would alter the visual landscape primarily affecting minority and low-income residences adjacent to the BNSF rail line. However, these same residences would benefit the most from the noise barriers.

The vibration analysis identified impacts at a total of 40 residences within 111 feet of the nearest track. Of these residences, 26 are in Longmont and 14 are in Loveland. To mitigate for vibration impacts, special trackwork at certain locations and the installation of Tire Derived Aggregate (shredded tires) beneath the tracks would eliminate all potential vibration impacts.

An increase in commuter rail and vehicular traffic around station sites would result in localized increases in air emissions. Minority and/or low-income populations located near proposed stations would be affected. According to the air quality analysis prepared for this project (**Section 3.5 Air Quality**); emissions associated with increased activity at stations

would not exceed National Ambient Air Quality Standards (NAAQS). The proximity of the station sites would be beneficial for the nearby populations, especially those within walking distance.

The visual analysis concluded that the introduction of retaining walls, noise barriers, grade-separation, and new stations would have a visual impact on residents adjacent to the rail corridor. The Preferred Alternative increased visual impacts with the addition of a maintenance road that was not included in Package A and a greater number of retaining walls than in Package A. Retaining walls would impact 14 residential areas with concentrations of minority or low-income populations and 7 residential areas with non-minority/non-low-income populations. Retaining walls would be constructed in Longmont between Mountain View Avenue and 21st Street in minority and low-income portions of the Clark Centennial and Lanyon neighborhoods; however, these retaining walls will be shorter than 5 feet, therefore there would not be a visual impact. Retaining walls and noise barriers would shield residences from the existing rail line, lessening the visual impacts of the railroad.

Noise walls are proposed in three locations along the commuter rail alignment. One of these proposed noise walls (located along 29th Street near CR 28 in Loveland) would have high visual impact on a low-income community just east of the railroad corridor, north of 37th Street, but would eliminate 14 residential noise impacts. Of the five new grade separations for the Preferred Alternative commuter rail component, one new grade separation (located at SH 52) would impact a minority community just east of the railroad corridor.

The North Loveland and Berthoud stations would have a moderate visual effect to the surrounding minority and low-income populations because each would require a relocation of a business or residence. Because the proposed maintenance facility in Berthoud would change the visual character of the area, there would be a moderate visual effect to the low-income community across the rail corridor.

According to the bicycle and pedestrian analysis (**Section 4.9 Floodplains**), impacts to bicycle and pedestrian facilities would be temporary in duration, would not be concentrated in areas with minority or low-income population groups, and would be offset by the overall benefits from added shoulders and sidewalks.

The addition of passing track and maintenance roads and the resulting operational traffic impacts, right-of-way fencing and noise, vibration, and visual impacts would negatively affect minority and low-income neighborhoods and community cohesion in Longmont. These impacts could reduce property values in minority and low-income areas, except for the areas within walking distance of the two stations, where property values would likely be increased. **Table 15** summarizes environmental justice impacts of commuter rail in the Preferred Alternative.

**Table 15 Environmental Justice Impact Summary for the Commuter Rail Component of the Preferred Alternative**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
14 residential property displacements (all in Longmont); improved access to Front Range communities, community facilities, and services; potential degradation of community cohesion in Longmont; travel time delays at at-grade crossings	17 residential property displacements (none in Longmont); improved access to Front Range communities, community facilities, and services; travel time delays and out-of-direction travel at at-grade crossings
1 displacement of business in a census-identified minority area; business is not owned by minorities	8 business displacements
2024 residences, schools, churches, or parks impacted by rail noise or vibration. Number of impacts reduced to zero after recommended abatement	231 residences, schools, churches, or parks impacted by rail noise or vibration. Number of impacts reduced to zero after recommended abatement actions.
Localized increase in air emissions affecting populations at five proposed station sites; emissions would not exceed NAAQS	Localized increase in air emissions affecting populations at four proposed station sites; emissions would not exceed NAAQS
Retaining walls would impact 14 residential areas; One noise wall would impact a low income residential area in Loveland; commuter rail stations would have a visual impact on surrounding communities	Retaining walls would impact 7 residential areas; noise walls would result in a high effect on visual conditions at two locations; commuter rail stations would have a visual impact on surrounding communities

### **I-25 Express Bus**

No business displacements or residential displacements would occur under the express bus component. Feeder bus service would connect minority and low-income populations in Fort Collins and Loveland to populations and services in Greeley, increasing the level of interaction between these communities. Similar benefits would result from feeder bus service between Berthoud, Johnstown, Windsor, Fort Lupton, Dacono, and Milliken. Additionally, feeder bus service along US 34 would improve mobility for Hispanic/Latino residents in apartment complexes adjacent to the highway as well as provide access to key community facilities, such as Wal-Mart and a regional bus line that provides service to Mexico.

Of the eleven express bus stations proposed for the Preferred Alternative, only the Firestone station located at I-25 and SH 119 would impact a minority community. A pedestrian overpass associated with the bus station would change the visual character for the nearby River Valley Village Mobile Home Park community.

Impacts to the neighborhoods adjacent to the proposed maintenance facility at 31st Street and west of 1st Avenue in Greeley would be the same as those identified for Package A, Components A-T3 and A-T4. **Table 16** summarizes environmental justice impacts of express bus in the Preferred Alternative.

**Table 16 Environmental Justice Impact Summary for the Express Bus Component**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
No residential or business property displacements	No business property displacements
Localized increase in air emissions affecting populations at three proposed station sites; emissions would not exceed NAAQS	Localized increase in air emissions affecting populations at three proposed station site; emissions would not exceed NAAQS

**US 85 Commuter Bus**

The provision of commuter bus service would benefit minority and low-income communities along US 85. Bus stations in Greeley, South Greeley, Evans, Platteville, and Fort Lupton are all located in minority and/or low-income areas and would expand employment opportunities and services to these populations. Commuter bus service would improve regional connections between US 85 communities. Service to DIA would improve access to the airport over the No-Action Alternative. Limiting the number of stops would benefit residents that travel between communities on a regular basis.

There would be four business displacements as a result of commuter bus stations. None of these businesses were identified as being minority-owned by the Colorado Office of Economic Development and International Trade, Minority Business Office. Bus stations in Greeley, South Greeley, Platteville, and Fort Lupton would have a moderate visual effect because they would result in the relocation of a business or residence. These stations would not, however, impede views to the mountains.

Construction of queue jumps, bus stations, and maintenance facilities would not require the relocation of any residences or businesses. However, an increase in bus and vehicular traffic around station sites would result in localized increases in air emissions. Impacts would affect minority and/or low-income populations located near proposed station sites. According to the air quality analysis prepared for this project, emissions associated with increased activity at stations would not exceed NAAQS. **Table 17** summarizes environmental justice impacts for the commuter bus component of the Preferred Alternative.

**Table 17 Environmental Justice Impact Summary for Commuter Rail Component of the Preferred Alternative**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
One property displacement; improved access to communities along US 85	No property displacements; improved access to communities along US 85.
No known displacement of businesses owned by minorities; displaced businesses may provide services and employment for minority persons	Four business displacements. Displaced businesses provide services and employment for all populations.
Localized increase in air emissions affecting populations at four proposed station sites; emissions would not exceed NAAQS	Localized increase in air emissions affecting populations at one proposed station site; emissions would not exceed NAAQS.

**Benefits of the Preferred Alternative.** The Preferred Alternative would provide overall improvements in the operation of local and regional transportation systems, including commuter rail and bus transit options. Other benefits associated with the Preferred Alternative would include:

- ▶ Short-term and long-term employment opportunities would occur during the construction of the facilities as well as their ongoing operation and maintenance (refer to the economic analysis in **Section 3.3.2.3** for more specific information).
- ▶ The provision of shoulders and sidewalks would better accommodate bicycle and pedestrian travel.
- ▶ Safety and emergency response times would improve.
- ▶ The commuter rail component would improve access to community facilities, provide broader opportunities for employment, facilitate participation in regional social and cultural events, promote interaction between communities, and stimulate business activity.
- ▶ Both express bus and commuter bus transit components would result in moderate improvements in mobility and would improve regional connectivity.
- ▶ Minority and low-income populations are concentrated around transit improvements and would benefit from the transit-related components.

## CONCLUSION

In making a determination of disproportionately high and adverse effect it is important to balance the impacts of the project with the benefits. Below is a discussion of the impacts and benefits of each alternative, an analysis to determine if impacts are predominantly borne by low-income and minority communities, and an assessment on whether the impacts are appreciably more severe (disproportionately high and adverse ) for these low-income and minority communities.

### No-Action Alternative

While impacts for the No-Action Alternative would be less substantial than the impacts described for Package A, Package B, and the Preferred Alternative, local populations would not benefit from much-needed transportation improvements. In addition, local communities would receive adverse effects resulting from transportation needs unmet. These adverse effects would result in direct and indirect effects on communities that are typically caused by traffic congestion and impaired mobility, including an increase in air emissions and noise, longer travel times, traffic queues at key interchanges, neighborhood traffic intrusion, deteriorating safety conditions, and lengthened emergency response times. In addition, minority and low-income populations would not benefit from the proposed noise abatement measures, which would in many cases lower noise levels below existing conditions.

The No-Action Alternative would not provide any communities with the accessibility benefits associated with transit services and adverse impacts would affect both low-income and minority communities, as well as the general population. Therefore, impacts resulting from the No-Action Alternative would not be predominantly borne by low-income and minority communities.

Similarly, all segments of the population would be affected by the impacts. Low-income and minority populations would not receive more severe impacts than non low-income and minority populations as a result of the No-Action Alternative.

## Package A

Implementation of Package A would result in the relocation of 59 residences (23 of which are located in minority and low-income areas), increased noise and visual impacts, an increase in air emissions, and an exacerbated barrier effect for communities located along the commuter rail alignment. However, local populations would benefit from stronger regional connections between communities, improvements in mobility, safety, and emergency response, and improved mobility for transportation-disadvantaged populations.

Relocations, noise and visual impacts, would occur. While mitigation measures would reduce these impacts, they would still affect local communities. Increased air emissions would not exceed National Ambient Air Quality Standards. Because a community division already exists along the BNSF corridor, the exacerbation of the barrier effect would not result in a high and adverse impact on community cohesion. Although there would be some adverse effects, these would not be predominately borne by minority or low-income populations.

In general, impacts and benefits from Package A would be distributed across all communities, including minority and low-income populations, as well as non-minority/non-low-income populations. Although construction of the commuter rail under Package A would require 16 residential relocations within minority/low-income areas, there is no evidence these would be disproportionately high and adverse effects since the mitigation commitments, including relocation benefits are generous. There would be no noise impacts (after mitigation), but there would be visual impacts, traffic impacts, and the potential for exacerbating the existing barrier created by the BNSF corridor. As with the relocations, the visual impacts, traffic impacts, and community cohesion impacts would not be considered disproportionately high and adverse effects. Minority and low-income residents, as well as the overall community, would benefit from safety and access improvements to businesses, residences, and community facilities.

For all of Package A, no segment of the population would receive more severe impacts, or impacts of a greater magnitude than any other segment of the population. In Longmont there would be noticeable impacts; however, because the totality of the adverse impacts balanced with benefits and mitigation, the low-income and minority populations would not receive disproportionately high and adverse effects from the Package A.

## Package B

Implementation of Package B would result in the relocation of 24 residences (7 of which are located in minority and low-income areas), increased noise and visual impacts, and an increase in air emissions. However, local populations would benefit from stronger regional connections between communities (though, to a lesser degree than in Package A or the Preferred Alternative), improvements in mobility, safety, and emergency response, and improved mobility for transportation-disadvantaged populations.

Relocations, noise and visual impacts would occur. While mitigation measures would reduce these impacts, they would still impact local communities. Increased air emissions would not exceed National Ambient Air Quality Standards.

Package B would provide overall improvements in the operation of local and regional transportation systems, but to a lesser degree than Package A or the Preferred Alternative. Any adverse impacts or benefits resulting from the Package B improvements would affect both low-income and minority communities, as well as the general population. No segment of the population would receive more severe impacts, or impacts of a greater magnitude than any other segment of the population. Therefore, as a result of mitigation commitments and benefits received from Package B, it is determined that, overall, minority and low-income communities would not suffer disproportionately high and adverse effects from the alternative.

## Preferred Alternative

The Preferred Alternative is a combination of components presented in Packages A and B, and includes multimodal improvements on multiple corridors. Implementation of the Preferred Alternative would result in the relocation of 51 residences (20 of which are located in minority and low-income areas), increased noise and visual impacts, an increase in air emissions, and an exacerbated barrier effect for communities located along the commuter rail alignment (although, to a lesser degree than Package A). Benefits resulting from the alternative include enhanced regional connections between communities, improvements in mobility, safety, and emergency response, and improved mobility for transportation-disadvantaged populations.

Noise, visual, traffic circulation, and air quality impacts would occur. While mitigation measures would reduce these impacts, they would still impact local communities. Emissions of all air pollutants would increase slightly with the Preferred Alternative when compared to the No-Action Alternative. The regional study area is a non-attainment area for ozone. Because a community division already exists along the BNSF corridor, the minor exacerbation of the barrier effect would not result in a disproportionately high and adverse effect on community cohesion.

Impacts and benefits resulting from the Preferred Alternative would be distributed across all communities, including minority and low-income populations, as well as non-minority/non-low-income populations. Relative to Package A, the Preferred Alternative reduces impacts in Longmont by removing the second track and adjusting the alignment to fit more closely to the existing corridor (i.e. there will be no removal of parking and no relocations along Atwood Street). Further, all segments of the population would benefit from safety and

access improvements to businesses, residences, and community facilities, from stronger regional community connections resulting from the Preferred Alternative; and from mitigation commitments which will, in some cases, improve conditions over existing conditions and over the No-Action Alternative.

For all of the Preferred Alternative, no segment of the population would receive more severe impacts, or impacts of a greater magnitude than any other segment of the population. In Longmont there would be noticeable impacts; however, the totality of the impacts when combined with mitigation commitments and benefits received from the Preferred Alternative, would not result in disproportionately high and adverse effects to minority and low-income populations.

## MITIGATION

In accordance with U.S. DOT Order 5610.2 on Environmental Justice, DOT decision makers (i.e., FHWA) will ensure that any of their programs, policies or activities that will have a disproportionately high and adverse effect on minority populations or low-income populations will be carried out only if further mitigation measures or alternatives that would avoid or reduce the disproportionately high and adverse effect are not practicable. In determining whether a mitigation measure or an alternative is “practicable”, decision makers will take into account the social, economic, and environmental effects of avoiding or mitigating the disproportionately high and adverse effects.

Mitigation has already been factored in to the analysis of impacts to minority and low-income populations. For example, mitigation for noise impacts in Wellington reduced the effects of traffic noise to below impacts levels, avoiding a disproportionately high and adverse effect to this community. The mitigation will be carried out for that alternative even if there is not a finding of disproportionately high and adverse effects.

Mitigation for construction related impacts to minority and low-income populations could include the provision of reduced price bus passes during construction, acceptable access modifications, and translated information on construction processes and alternate modes available during construction and pre-opening day.

Right-of-way acquisition will comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). This purpose of this act is to provide fair and equitable treatment for all persons displaced from their homes, businesses or farms. Owners of property to be acquired will be compensated at fair market value for their property.

If toll lanes are constructed, ways to make tolling more equitable will be sought. For example, payment options will be considered in order to permit the broadest opportunity as possible to use toll facilities. Alternate payment options will be provided so that persons who do not have a credit card can still participate in the tolled express lanes. Toll replenishment using cash or employer-based payroll deductions could also be included in the tolling program.

A context sensitive approach to project design and mitigation is encouraged to ensure that project elements enhance the community. This will include involving the public in the development of rail or bus station design treatments.

Efforts will continue to be made to ensure meaningful opportunities for public participation during the review process. During the public review and comment period for the Final EIS, all segments of the population (including minority and low-income populations) will have the opportunity to review the project alternatives, their associated benefits, adverse impacts, and any proposed mitigation, and can propose additional mitigation that will reduce adverse effects.

## REFERENCES

ICF Consulting with Myra L. Frank & Associates, 2003. *Desk Guide: Environmental Justice in Transportation Planning and Investments*. Prepared for the California Department of Transportation Division of Transportation Planning Office of Policy Analysis & Research.

Colorado Department of Transportation, 2005. *CDOT's Title VI and Environmental Justice Guidelines for NEPA Projects*.

## **APPENDIX A: BUSINESS SURVEY**

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## APPENDIX A

### Survey of Potentially Affected Business Owners

The Colorado Department of Transportation is studying several alternatives in Northern Colorado to alleviate congestion on I-25 and make travel safer. The range of alternatives includes improvements to the roadway system and/or to the transit system. Each alternative would have different effects on businesses. As part of our investigation of the potential social and economic effects in the study area, we are contacting all local businesses that may be affected as a result of these alternatives.

In order to determine potential effects on your business and employees, we would like you to answer thirteen (13) questions. Your answers will be used to help identify which alternative is eventually chosen and to quantify social and economic impacts in the Environmental Impact Statement (EIS) that is required for this project. All of the answers you give about your business will remain confidential. All the data we gather will be discussed in general terms in order to protect the privacy of your business and your employees.

1. Name of business \_\_\_\_\_
2. Business address (Optional) \_\_\_\_\_ City \_\_\_\_\_
3. How long has your business been at this location? \_\_\_\_\_
4. What types of services does your business provide? \_\_\_\_\_
5. How many full-time and part-time employees are employed at this location?  
Full-Time \_\_\_\_\_ Part-Time \_\_\_\_\_
6. What percentage of the employees at your company are unskilled workers, e.g., manual laborers? What percentage are skilled or professional workers, e.g., electricians or engineers?  
According to the US Department of Labor "unskilled labor" is labor that requires less than two years of training or experience; "skilled labor" is labor requiring at least two years of training or experience; and "Professional" means a qualified person who holds at least a United States baccalaureate degree or a foreign equivalent degree and who is a member of the professions.  
Unskilled \_\_\_\_\_ Skilled or Professional \_\_\_\_\_
7. Approximately how many minority employees (i.e., African American, Native American, Asian, or Latino) are employed at this location? *[Actual number or percentage]*  
Full-Time \_\_\_\_\_ % Part-Time \_\_\_\_\_ %
8. Does a minority person or persons own this business?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
If Yes, Which minority group? \_\_\_\_\_
9. Are you aware of any transportation issues that your employees may have? [For instance: a long commute to work, restrictions preventing use of vehicle to get to work, etc...]. Please elaborate.  
Yes \_\_\_\_\_ No \_\_\_\_\_  
If Yes, please provide details: \_\_\_\_\_  
\_\_\_\_\_
10. Please estimate the percentage of employees using the following modes of transportation to get to work:  
Vehicle \_\_\_\_\_ % Bus/Transit \_\_\_\_\_ % Walk \_\_\_\_\_ % Bicycle \_\_\_\_\_ % Other \_\_\_\_\_ %

