

3.2 SOCIAL CONDITIONS

3.2.1 Affected Environment

3.2.1.1 POPULATION AND HOUSING STATISTICS

Data from the 1990 and 2000 U.S. Census Bureau at the census tract level were used to analyze population and housing characteristics of the regional study area. Population and household projections for the regional study area were provided by the Denver Regional Council of Governments (DRCOG) and the Northern Front Range Metropolitan Planning Organization (NFRMPO).

From 1990 to 2000, substantial growth occurred in most regional study area census tracts. In 1990, the combined population of all regional study area census tracts was 708,688. By 2000, this population had increased by 421,498 to a total of 1,130,186. This represents a 59-percent growth rate over a 10-year period. According to the 2000 census, there are 422,366 households in the regional study area with an average household size of 2.5 persons per household. In 2000, the regional study area had an estimated 438,900 housing units with owner-occupied units representing 65 percent of the total.

Seven counties and 38 incorporated municipalities are located wholly or partially in the regional study area. In the majority of these communities, substantial growth is forecasted through 2035. The largest increases in population and households likely would occur in the Weld, Broomfield, and Denver county portions of the regional study area. As **Table 3.2-1** shows, population and households would double in Broomfield and Weld counties.

At the municipal level, substantial growth is anticipated in Loveland, Fort Collins, Greeley, and Brighton. The distribution of future population growth by municipal area is shown in **Figure 3.2-1**. Growth in regional study area counties and municipalities would inevitably increase the demand for housing, community services, and strain roadways between Northern Colorado and the Denver Metro Area.

3.2.1.2 PERSONS WITH DISABILITIES AND ADVANCED AGE

On February 24, 2004, Executive Order 13330—Human Service Transportation Coordination—was issued, which calls for improved coordination of federally supported transportation services for people who are transportation-disadvantaged. As defined by Executive Order 13330, persons with disabilities and persons of advanced age would be considered transportation-disadvantaged.

What's in Section 3.2?

3.2 Social Conditions

- 3.2.1 Affected Environment
 - 3.2.1.1 Population and Housing Statistics
 - 3.2.1.2 Persons with Disabilities and Advanced Age
 - 3.2.1.3 Community Facilities and Services
 - 3.2.1.4 Neighborhoods
- 3.2.2 Environmental Consequences
 - 3.2.2.1 No-Action Alternative
 - 3.2.2.2 Package A
 - 3.2.2.3 Package B
 - 3.2.2.4 Preferred Alternative
- 3.2.3 Mitigation Measures
- 3.2.4 Environmental Justice
 - 3.2.4.1 Affected Environment
 - 3.2.4.2 Specialized Outreach to Minority and Low-Income Populations
 - 3.2.4.3 Environmental Consequences
 - 3.2.4.4 Mitigation Measures

1 **Table 3.2-1 Population and Household Forecasts in the Weld, Broomfield, and**
2 **Larimer County Portions of the Regional Study Area**

County	Population			Households		
	2005	2035	Change 2005–2035	2005	2035	Change 2005–2035
Adams	335,064	526,840	191,775 (57%)	118,851	198,871	80,020 (67%)
Boulder	192,657	271,064	78,407 (41%)	77,175	114,501	37,326 (48%)
Broomfield	45,965	89,441	43,476 (95%)	16,615	34,066	17,451 (105%)
Denver	94,031	152,184	58,154 (62%)	38,205	65,921	27,715 (73%)
Jefferson	18,325	24,675	6,350 (35%)	6,866	9,864	2,998 (44%)
Larimer	237,583	374,736	137,153 (58%)	93,303	146,779	53,476 (57%)
Weld	189,371	440,104	250,733 (132%)	71,154	169,815	98,661 (139%)

Source: NFRMPO 2005 and 2035 RTP and DRCOG 2005 and 2035 RTP Traffic Analysis Zone (TAZ) Data.

3 The Americans with Disabilities Act (ADA) defines a disability as “a physical or mental
4 impairment that substantially limits one or more of the major life activities of such an
5 individual; a record of such an impairment; or being regarded as having such an
6 impairment.” For the purposes of this analysis, persons of advanced age are defined as
7 persons over 64 years of age.

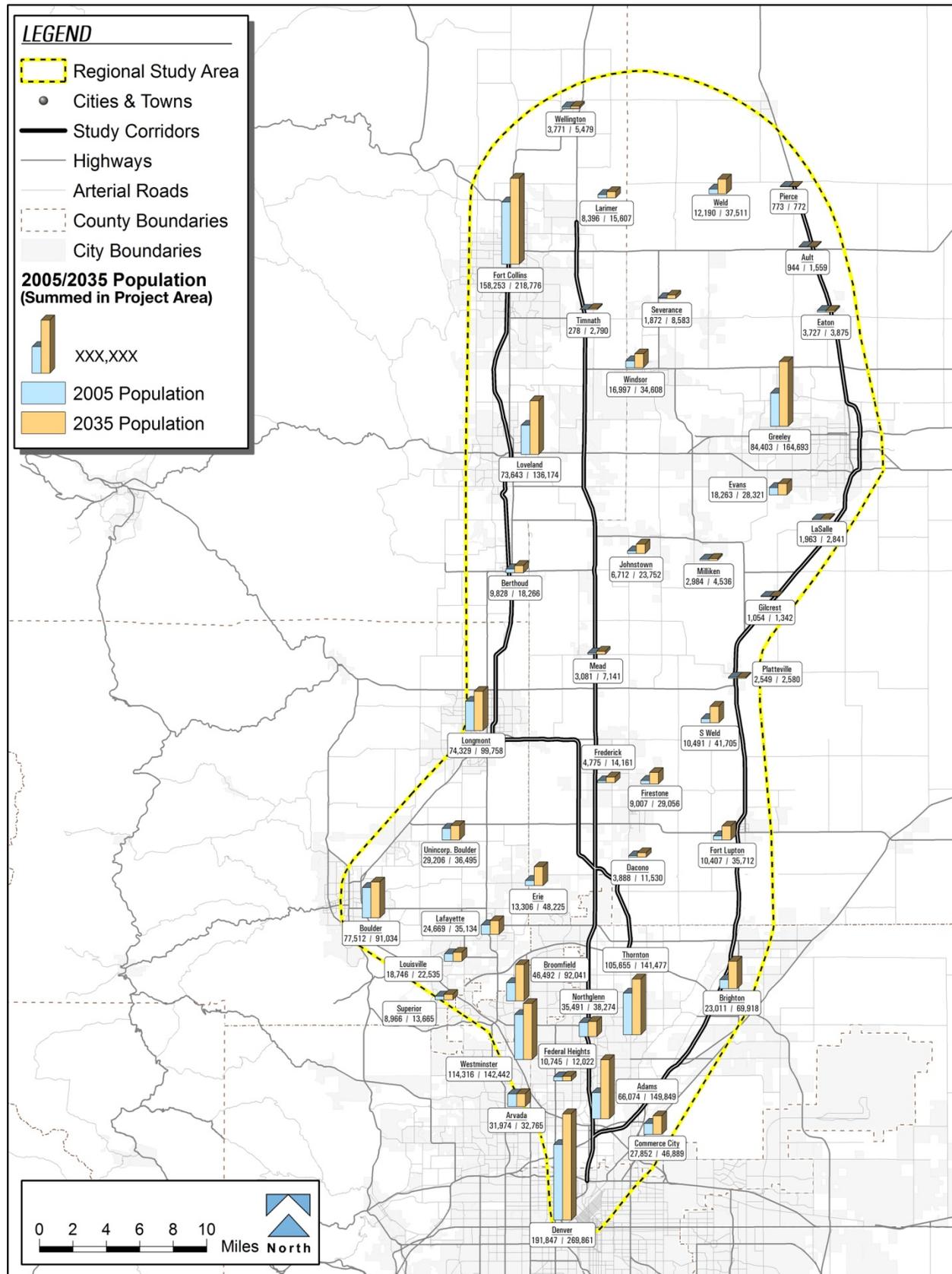
8 Persons with disabilities and persons of advanced age in regional study area census
9 tracts were compared to countywide averages to identify potential concentrations of this
10 segment of the population. In general, these populations are higher in and around urban
11 areas (Greeley, Fort Collins, Longmont, Brighton, Denver). Concentrations of persons with
12 disabilities are located between Denver and Northglenn along I-25, between Dacono and
13 Fort Lupton east of I-25 to US 85, along US 85 in Greeley and Evans, and along US 287
14 in Longmont, Niwot, Loveland, and central Fort Collins. Concentrations of persons of
15 advanced age are located along US 36 in Boulder and Louisville; between Denver and
16 Northglenn along I-25; along US 85 in Brighton, Greeley, Eaton, and Ault; and along
17 US 287 in Longmont, Loveland, and central Fort Collins.

18 **3.2.1.3 COMMUNITY FACILITIES AND SERVICES**

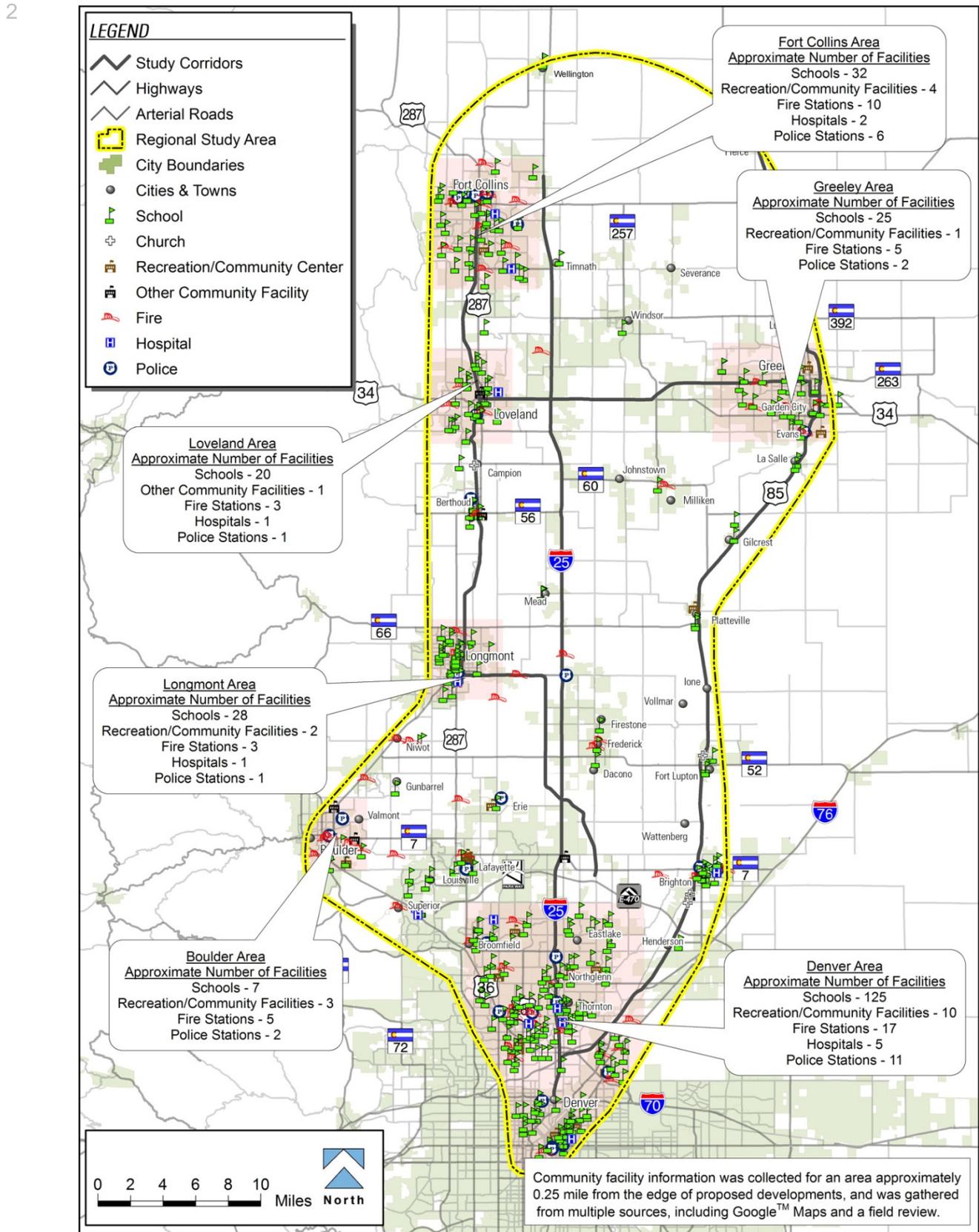
19 Community facilities and services located in the regional study area include schools,
20 hospitals, recreation/community centers, libraries, museums, churches, police stations,
21 and fire stations. Approximately 44 community facilities are immediately adjacent to major
22 highway or rail corridors, including 15 schools, 14 churches, 8 public health and safety
23 offices, 3 cemeteries, 3 community centers, and one library. Community facilities and
24 services are shown by location in **Figure 3.2-2**.

25 The regional study area is served by 12 different school districts. There are also three
26 major universities and two community colleges with satellite campuses throughout the
27 regional study area. The largest of these include the University of Colorado at Boulder, the
28 University of Northern Colorado in Greeley, and Colorado State University in Fort Collins.

1 Figure 3.2-1 Future Population Growth Summarized by Municipal Area
2
3



1 **Figure 3.2-2 Community Facilities**



1 Emergency medical response services are provided to regional study area residents by
2 local fire departments and hospitals. In addition, numerous independent agencies provide
3 emergency response services in the regional study area and several jurisdictions have
4 joined together to meet their emergency response needs.

5 *Neighborhoods*

6 Neighborhoods in the regional study area consist of very well-defined and organized
7 subdivisions to more informal single-family residential areas. Neighborhoods located adjacent
8 to major highways where physical improvements are proposed are discussed below.

9 *US 85 Corridor*

10 The US 85 corridor is largely rural in character with informal residential developments spread
11 out between rural agricultural and commercial/industrial lands. Just south of Greeley along
12 US 85, there are a few informal single-family residential developments, apartments, and
13 motels. The Southgate Mobile Home Park marks the beginning of Gilcrest. West of US 85,
14 there is a small neighborhood with both an elementary and high school. Residential
15 development in Platteville is similar to Gilcrest, with small single-family residential
16 neighborhoods, apartments, and motels. Further south along the highway towards Brighton,
17 there are several mobile home parks and motels, including Rocky Mountain Vista Mobile
18 Home Park, Sylmar Manor Mobile Home Park, and Motel 85. South of SH 7, there are a few
19 larger subdivisions intermixed with retail and commercial developments.

20 *North I-25 Corridor*

21 The northernmost portion of the regional study area (north of SH 14) is primarily rural with
22 industrial development. The area contains two residential developments: the Cloverleaf
23 Community Mobile Home Park and Waterglen, a planned unit development north of Vine
24 Drive.

25 There are several mobile home communities along the highway corridor. The Mountain Range
26 Shadows subdivision (a manufactured home community with a few mobile homes) is located
27 on the west side of I-25, south of the SH 392/I-25 interchange. Access to the Mountain Range
28 Shadows subdivision is currently from the southwest I-25 frontage road, just south of the
29 392 interchange. Other mobile home communities include the Loveland RV Village (west of
30 the US 34/I-25 interchange along US 34 next to a residential subdivision called the Rocky
31 Mountain Village), Loveland Station Campgrounds (mobile home lots and camping south of
32 the US 34/I-25 interchange), Johnson's Corner Campground (mobile home lots and camping
33 north of the SH 60/I-25 interchange), and River Valley Village (a mobile home community with
34 more than 250 units south of the SH 119/I-25 interchange).

35 Scattered suburban developments are located near Thornton and are interspersed with auto-
36 oriented commercial centers. In general, neighborhoods east and west of the corridor vary
37 from being well-defined and established to more informal clusters of residential development.

38 The southern metropolitan portion of the corridor is dominated by non-residential-oriented land
39 uses (commercial, light industry, industry) with very few scattered apartment complexes and
40 informal neighborhoods. North of the US 36/I-25 interchange, there are numerous
41 subdivisions, including Sherrelwood Estates, Metro View Park, Valley High, and Northview
42 Estates. Near Northglenn, subdivisions and apartment complexes immediately adjacent to the

1 highway corridor include Parkview, Huron Crossing, Huron Heights, Stone Mountain
2 Apartment Homes, Meadows at Timber Lake, and Webster Lake Terrace.

3 *BNSF Rail Line/US 287 Corridor*

4 In Fort Collins, residential subdivisions and apartment complexes are intermixed with
5 commercial development. Neighborhoods north of Harmony Road include Troutman Park,
6 Meadowlark, Historic Fort Collins High School, Old Town West, and Martinez Park. Between
7 Loveland and Fort Collins, a few isolated subdivisions are interspersed with open space and
8 undeveloped lands. In Loveland, several single-family residential subdivisions are adjacent to
9 the BNSF rail line. There are also several mobile home communities, including Homestead,
10 Loveland Plaza, and Lago Vista Mobile Home Parks. In Berthoud, the Blue Spruce Mobile
11 Home Park and several single-family residential neighborhoods are immediately adjacent to
12 the BNSF rail line. North of Longmont, the regional study area is dominated by rural and
13 agricultural land uses with a few isolated residential units. In Longmont at the SH 119/BNSF
14 crossing, several neighborhoods abut the BNSF rail line, including Kensington, Clark
15 Centennial, and Lanyon. These neighborhoods consist primarily of single-family homes.

16 **3.2.2 Environmental Consequences**

17 The evaluation of community impacts is based on information gathered in **Section 3.2.1**
18 *Affected Environment*. Additional site visits to the regional study area, review of aerial
19 photography, and analysis of GIS data was also conducted.

20 **3.2.2.1 NO-ACTION ALTERNATIVE**

21 Given the relatively limited scope of the No-Action Alternative, impacts would be less
22 substantial than the impacts described below for Package A, Package B, and the Preferred
23 Alternative. However, certain adverse effects on social conditions in the regional study area
24 would arise as a result of transportation needs unmet by the No-Action Alternative. These
25 would include the direct and indirect effects on communities that are typically caused by traffic
26 congestion and impaired mobility, including an increase in air emissions and noise, longer
27 travel times, traffic queues at key interchanges, neighborhood traffic intrusion, deteriorating
28 safety conditions, and lengthened emergency response times.

29 The noise analysis determined that there would be approximately 816 noise impacts
30 associated with the No-Action Alternative. Of these impacts 661 would affect Category B land
31 uses (residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals,
32 picnic areas, playgrounds, active sports areas and parks) and 155 would affect Category C
33 land uses (developed lands, properties, or activities like commercial uses). For the Category B
34 impacts, 20 would be in the Wellington East neighborhood, 12 would be in the Waterglen
35 neighborhood, 69 would be in the Mountain Range Shadows area, 82 would be in scattered
36 homes along I-25 in Larimer and Weld Counties, and 478 of them would be in neighborhoods
37 abutting I-25 in the municipalities of Broomfield, Thornton, Westminster, and Northglenn, and
38 in Adams County. Detailed noise analysis results are presented in **Section 3.6 Noise and**
39 *Vibration* and the corresponding technical reports (FHU, 2008b and 2011a; HMMH, 2008 and
40 2011).

41 In the absence of transit or capacity improvements, future population growth would most likely
42 continue to occur largely on undeveloped agricultural land at the fringe of the regional study
43 area's urbanized areas.

1 3.2.2.2 PACKAGE A

2 *Component A-H1: Safety Improvements*

3 **Population and Housing.** The population in Wellington is expected to increase by 45 percent
4 between 2005 and 2035 (from 3,771 in 2005 to 5,479 in 2035). This growth would occur
5 regardless of whether safety improvements are implemented. Four residential relocations
6 would be required between SH 1 and SH 14 (A-H1). The affected properties are dispersed
7 along I-25 south of Wellington. Given the small number of displacements in relation to the total
8 amount of comparable housing stock in this area, no effect on local or regional population
9 distribution or housing demand would be expected. The proposed improvements do not
10 involve physical changes that would directly result in increases or decreases in population.

11 **Transportation-Disadvantaged Populations.** The Waterglen neighborhood is located within
12 a census tract that contains a higher percentage of persons of advanced age than the county.
13 This census tract contains more than 4,000 persons, most of whom live near Lemay Avenue
14 (approximately three miles west of I-25). The proposed improvements do not involve service or
15 capacity changes that would increase or decrease mobility for these populations.

16 **Community Facilities and Services.** No community facilities would be acquired between
17 SH 1 and SH 14. The proposed improvements would provide safer access to community
18 facilities and services within Wellington by upgrading the SH 1/I-25 interchange and signaling
19 SH 1. Access to the Mountain Vista Greens Golf Course (2808 NE Frontage Road) would be
20 maintained in its existing location. Interchange improvements and bridge reconstruction at
21 Mountain Vista Drive and LCR 52 would result in temporary construction-related noise, dust,
22 detours, traffic delays, and out-of-direction travel.

23 Emergency service providers would benefit from increased sight distance at the SH 1 and
24 Mountain Vista Drive interchanges, wider shoulders on bridges, and replacement of existing
25 pavement and bridge structures.

26 **Neighborhoods.** The proposed improvements would not split or isolate any neighborhoods or
27 separate neighborhoods from community facilities. The noise analysis identified impacts to
28 20 receivers in the northwest quadrant of the SH 1/I-25 interchange (referred to as Wellington
29 East in the noise analysis). These receivers are immediately adjacent to the highway and
30 would be impacted under all alternatives (including the No-Action Alternative). The mitigation
31 proposed for these residences is a noise barrier which would reduce noise to below impact
32 levels. Neighborhoods in Wellington would benefit from interchange improvements and
33 signalization at SH 1. Detailed noise analysis results are presented in **Section 3.6 Noise and**
34 **Vibration** and the corresponding technical reports (FHU, 2008b and 2011a; HMMH, 2008
35 and 2011). In the southwest quadrant of the SH 1/I-25 interchange, a carpool lot with
36 80 spaces would be constructed. This facility would be located across from a single-family
37 neighborhood of approximately 39 homes. Although conveniently located, the traffic, noise,
38 and activity associated with the lot could disturb adjacent residents.

39 South of Wellington near Ronald Reagan Drive, undeveloped land has been subdivided and is
40 planned for new housing and commercial development. This has generated concern about
41 pedestrian traffic between new housing developments and commercial areas on the east and
42 west sides of I-25. As a result, Wellington's Chamber of Commerce has identified the need for

1 a pedestrian overpass in this location and is currently examining funding opportunities for this
2 structure. Safety concerns in this area are largely a result of development in Wellington and
3 would not be created or exacerbated by any of the build packages.

4 Interchange improvements at Mountain Vista Drive and improvements associated with service
5 roads, frontage roads, and bridge replacements would affect residents of the Waterglen
6 neighborhood. There would be 20 noise receptors impacted in the Waterglen neighborhood
7 (as opposed to 12 impacts resulting from the No-Action Alternative). Waterglen residents
8 would benefit from the upgraded interchange and signalization of Mountain Vista Road.
9 Construction activities would result in temporary noise, dust, detours, traffic delays, and out-of-
10 direction travel for local residents. Shared open space, pathways, and a community center
11 give this neighborhood a sense of cohesion, and these facilities would not be affected by any
12 of the build packages.

13 *Components A-H2 and A-H3: General Purpose Lanes*

14 **Population and Housing.** The population within 0.5 mile of the I-25 corridor is expected to
15 increase by 88 percent between 2005 and 2035 (from 43,536 in 2005 to 81,764 in 2035).
16 Growth would be most pronounced in the smaller municipalities of Berthoud, Dacono, Erie,
17 Firestone, Frederick, Johnstown, and Windsor. This growth is a result of a large supply of
18 developable land, easy access to I-25, and locally planned development. The need for
19 additional highway capacity is a response to this growth and would not in and of itself result in
20 increases or decreases in population.

21 Nineteen residential relocations would be required between SH 14 and E-470 (14 between
22 SH 14 and SH 60 [A-H2], and 5 between SH 60 and E-470 [A-H3]). In general, these
23 properties are dispersed along I-25 in large rural parcels that are not part of any established
24 neighborhood. Given the small number of displacements in relation to the total amount of
25 comparable housing stock in this area, no effect on local or regional population distribution or
26 housing demand would occur. Improvements in mobility could influence the distribution of
27 population. As incorporated communities adjacent to I-25 become more accessible, they could
28 attract residents, especially if opportunities for lower cost housing in the urban fringe continue.
29 In these locations, the demand for new or expanded public services and facilities would
30 increase.

31 **Transportation-Disadvantaged Populations.** Persons of advanced age and persons with
32 disabilities were identified in two census tracts adjacent to I-25 between SH 14 and E-470.
33 One of these census tracts is located in the southwest quadrant of the SH 14/I-25 interchange
34 and the other extends along the east side of I-25 between SH 52 and SH 7. Because there are
35 very few residences adjacent to I-25 in these areas, these populations are most likely to live
36 within residential subdivisions west of the SH 14/I-25 interchange and east of I-25 in Dacono.
37 Persons of advanced age are also likely to live within the Sunflower subdivision, in the
38 southwest quadrant of the SH 14/I-25 interchange. Sunflower is an adult community of
39 owner-occupied, single-family homes for people over 55 years of age. Transportation
40 improvements would improve highway safety and access to regional facilities and services for
41 these populations.

42 **Community Facilities and Services.** Six community facilities are less than 0.25 mile from
43 I-25 between SH 14 and E-470. These include: St. James Orthodox Christian Church
44 (2610 Frontage Road SE), KinderCare Learning Center (4755 Royal Vista Circle), Loveland
45 Fire Station #4 (4900 Earhart Road), Fort Collins/Loveland Airport (4900 Earhart Road),

1 Valley Dirt Rider Complex (south and west of SH 56), and the Weld County Sheriff (at the
2 Southwest Weld County Services Complex, northeast of SH 119). None of these facilities
3 would be directly impacted by the proposed improvements. Access to these facilities would be
4 maintained in their current locations. Improvements on I-25 near SH 392, however, may result
5 in temporary noise, dust, detours, traffic delays, and out-of-direction travel for the KinderCare
6 Learning Center. This would also be true near the SH 56/I-25 interchange for patrons of the
7 Valley Dirt Rider Complex.

8 Interviews with Larimer and Weld county emergency service providers indicate that the
9 proposed increase in capacity would improve emergency response and facilitate movement
10 around other vehicles. Safety improvements (e.g., adding shoulders to bridges) would also
11 facilitate emergency response. Emergency service providers would experience some out-of-
12 direction travel and traffic delays during construction. Aside from improvements to the existing
13 interchange at SH 7, Adams, Broomfield, Boulder, and Denver counties would not be affected
14 by Components A-H2 and A-H3.

15 Another safety consideration in the corridor is the shortage of truck parking. *The Study of*
16 *Adequacy of Commercial Truck Parking Facilities*, developed by Turner-Fairbank Highway
17 Research Center for FHWA in March of 2002, reported that in Colorado there is a statewide
18 demand of approximately 3,300 to 3,700 truck parking spaces and a supply of only 2,700.
19 The availability of parking is related to safety because parking is required for drivers to observe
20 Hours of Service rules set by the Interstate Commerce Commission to avoid driver fatigue.
21 When they are not observed, for lack of adequate parking or for other reasons, driver fatigue
22 has been established as a major factor in truck-related crashes. Johnson's Corner is one of the
23 current suppliers of private truck-stop parking spaces. The proposed improvements would
24 improve access to Johnson's Corner with the addition of on ramps at Exit 254 under either
25 build package. Existing access from the frontage road would be replaced so that trucks would
26 travel east on LCR 16 to the frontage road, circle around the property, and enter at the south
27 end. This configuration would not result in the removal of any truck parking spaces.

28 **Neighborhoods.** The majority of I-25 between SH 14 and E-470 (A-H2 and A-H3) is
29 undeveloped, with a few scattered rural subdivisions and isolated single-family residences.
30 Residential land uses that do exist developed around the existing highway. The proposed
31 improvements would not split or isolate any neighborhoods, separate neighborhoods from
32 community facilities, or affect community cohesion. To the extent that the proposed
33 improvements would reduce congestion and improve access, property values would increase.
34 It is also possible that property values could decrease in locations where proximity to improved
35 transportation facilities would result in increased noise and air emissions, visual impacts, or
36 access changes resulting in out-of-direction travel.

37 Interchange improvements at SH 14 would result in a new access configuration for the
38 Cloverleaf Community Mobile Home Park (in the northeast quadrant of the interchange).
39 Existing access is provided from an unsignalized intersection along SH 14. New access would
40 be from a re-aligned frontage road that would be signalized to provide safer and more direct
41 access for the Cloverleaf community. A carpool lot with 150 spaces also would be constructed
42 across the street from the Cloverleaf community. Some residents may consider the proximity
43 of this lot a convenience. Others would find the added pavement and increase in local traffic
44 and activity disruptive. However, the area surrounding the interchange is highly urbanized and
45 dominated by transportation facilities. The carpool lot would not considerably intensify this
46 effect.

1 Access to the Mountain Range Shadows subdivision would be maintained in its current
2 location from the I-25 frontage road southwest of the SH 392/I-25 interchange. To
3 accommodate highway improvements, the frontage road would shift approximately 15 feet
4 closer to the community and the centerline of I-25 would be relocated approximately 30 feet
5 farther from the community. The noise analysis identified impacts to 69 receivers within the
6 Mountain Range Shadows subdivision (with mitigation, impacts would occur at 39 receivers).
7 These receivers would be impacted under all alternatives, including the No-Action Alternative.
8 In March 2006, the project team met with residents of the Mountain Range Shadows
9 community to gather input on the SH 392 interchange design and frontage road configuration.
10 To minimize impacts to the community, the project team suggested relocating the frontage
11 road behind the community. Residents were concerned with this approach and indicated a
12 strong preference for maintaining the existing access configuration.

13 Construction activities would result in temporary noise, dust, detours, traffic delays, and out-of-
14 direction travel for regional travelers and the local residents of the communities located
15 between SH 14 and E-470 (A-H2 and A-H3).

16 *Component A-H4: Structure Upgrades*

17 Structure upgrades are limited to minor bridge rehabilitation and maintenance activities.
18 No roadway widening, bridge widening, or interchange upgrades would occur. Impacts to
19 social conditions from E-470 to US 36 (A-H4) would be the same as those discussed for the
20 No-Action Alternative in **Section 3.2.2.1**.

21 *Components A-T1 and A-T2: Commuter Rail*

22 **Population and Housing.** To capture the population that would benefit from the commuter rail
23 component, population statistics were calculated for the US 287 corridor from Fort Collins to
24 Boulder. The population within 0.5 mile of the US 287 corridor is expected to increase by
25 24 percent between 2005 and 2035 (from 82,763 in 2005 to 102,934 in 2035). Commuter rail
26 would facilitate infill and re-development in Fort Collins, Loveland, and Longmont,
27 accommodating population growth within the center of these communities, which is consistent
28 with local planning efforts. The intensity and size of Longmont would likely increase due to its
29 central location and direct connection to the FasTracks system. As the end-of-line for the
30 commuter rail alignment, Fort Collins could attract a larger portion of growth than communities
31 located mid-alignment. An increase in population around commuter rail stations would be
32 expected, especially in communities with plans for transit-oriented development. These
33 changes would not represent additional population growth, but rather a shift in its distribution.
34 In these locations the demand for new or expanded public services and facilities would
35 increase.

36 Construction of the commuter rail would require the relocation of 35 residences (18 for
37 Component A-T1 and 17 for Component A-T2). All of the displacements associated with
38 Component A-T1 occur in Longmont, immediately adjacent to the BNSF corridor. Given the
39 total amount of comparable housing stock in this area, no effect on local or regional population
40 distribution or housing demand would be expected.

41 **Transportation-Disadvantaged Populations.** Commuter rail and feeder bus connections
42 would provide a vital service to persons of advanced age and persons with disabilities within
43 the regional study area. The American Public Transportation Association reports that more that
44 50 percent of all non-drivers age 65 and older stay at home on any given day partially because
45 they lack transportation options. This translates into fewer trips for medical care and social,

1 family, and religious activities. Transportation-disadvantaged populations would benefit from
2 the regional connections that commuter rail and feeder bus service would provide. The
3 commuter rail would connect populations near its alignment to the larger communities of
4 Fort Collins, Loveland, Berthoud, Longmont, and Denver. Feeder bus service would provide
5 a linkage to the commuter rail line and a much needed connection between the communities of
6 Fort Collins, Loveland, and Greeley. Mobility and accessibility benefits would be greatest for
7 transportation-disadvantaged populations living within 0.25 mile of station sites. A quarter-mile
8 distance, which equals about a five-minute walk, is considered a convenient and acceptable
9 walking distance for most pedestrians.

10 **Community Facilities and Services.** As described in **Table 3.2-2** most community facilities
11 would benefit from new transit access. The commuter rail would not result in the relocation of
12 any community facilities. Community facilities that are within 0.25 mile of station sites would
13 experience greater benefits than those in other locations along the alignment.

14 Commuter rail and feeder bus service would improve regional connections between
15 communities in the regional study area. Residents in the northern communities of Fort Collins,
16 Loveland, Berthoud, and Longmont would be able to use transit to attend cultural events and
17 reach services in Denver. Feeder bus service would connect populations in Fort Collins and
18 Loveland to populations and services in Greeley, increasing the level of interaction between
19 these communities. Similar benefits would result from feeder bus service between Berthoud,
20 Johnstown, and Milliken.

21 Community facilities would be impacted by new rail construction and noise and vibration from
22 rail operations. Transit would ease traffic congestion and improve mobility for emergency
23 service providers. Emergency service providers would experience some out-of-direction travel
24 and traffic delays during construction and following construction, as a result of train frequency
25 and at-grade crossings. Safety concerns relating to the commuter rail operations and station
26 sites are addressed in **Section 3.21 Safety and Security.**

27 **Neighborhoods.** The commuter rail alignment would not further split any neighborhoods or
28 separate neighborhoods from community facilities. The BNSF rail line currently acts as a
29 physical and perceived barrier between development on each side of the railway in
30 Fort Collins, Loveland, Berthoud, and Longmont. This “barrier effect” would be exacerbated in
31 areas south of CSU where an additional track would be placed east of the existing track.
32 Because commuter rail would operate in an existing rail corridor, existing access to
33 neighborhoods along the rail alignment would not change.

34 In general, transit stations are located within urban areas and are compatible with surrounding
35 neighborhoods. When located within walking distance, neighborhood integrity and community
36 cohesion are strengthened by the provision of transit. The increased frequency of trains in the
37 corridor would create out-of-direction travel and travel time delay for residents traveling across
38 the BNSF. Through traffic would increase in neighborhoods adjacent to stations.

39 The requirement of passenger trains to blow their horns at at-grade crossings would increase
40 noise in all neighborhoods adjacent to the commuter rail alignment. The noise analysis
41 identified a total of 2,192 residential noise impacts along the commuter rail corridor. Of these
42 impacts 1,495 would be moderate impacts and 697 would be severe impacts. Approximately
43 half of the impacts would be in Longmont. However, it is estimated that with the
44 implementation of Quiet Zones (and noise walls located outside of Longmont), potential
45 impacts to all residences along the commuter rail corridor would be eliminated (see

1 **Section 3.6.4.5).** The vibration analysis identified impacts at a total of 40 residences within
 2 111 feet of the nearest track. Of these residences, 26 are in Longmont and 14 are in Loveland.
 3 To mitigate for vibration impacts, special trackwork at certain locations and the installation of
 4 Tire Derived Aggregate (shredded tires) beneath the tracks would eliminate all potential
 5 vibration impacts.

6 **Table 3.2-2 Impacts to Community Facilities Within 0.25 Mile of the Commuter**
 7 **Rail Alignment**

Facility	Impacts
Northside Aztlan Community Center (112 E. Willow St.)	Less than 0.25 mile from the proposed station at the Fort Collins Downtown Transit Center. The community center would benefit from improved access to transit. There would be a potential for increase in visitor numbers.
Fort Collins Police Department (300 La Porte Ave.)	Less than 0.25 mile from the proposed station at the Fort Collins Downtown Transit Center. Frequency of trains would result in minor delays and out-of-direction travel.
Anglican Church of the Ascension (701 Oval Dr.)	Adjacent to the proposed CSU Transit Station. Improved access to transit could facilitate community participation in church events and activities.
Colorado State University	Adjacent to the proposed CSU Transit Station. Improved access to transit would facilitate community participation in campus events and activities.
Beattie Elementary School (3000 Meadowlark Ave.)	Approximately 0.25 mile from the proposed alignment and 2 miles from both the proposed stations at CSU and south Fort Collins. Although buffered by a residential neighborhood, an increase in noise and vibration would be expected. Frequency of trains would result in minor delays and out-of-direction travel for students east of the BNSF.
Foothills Assembly of God (305 W. Swallow Rd.)	Adjacent to the proposed alignment and approximately 2 miles from both the proposed stations at CSU and south Fort Collins. An increase in noise and vibration would be expected. Frequency of trains would result in minor delays and out-of-direction travel for church members.
Loveland Burial Park Cemetery (500 E. 3rd St.)	Adjacent to the proposed alignment and approximately 0.5 mile from the North Loveland Transit Station. The greater distance to a station would result in modest improvements in access. Pedestrians willing to walk 0.5 mile would benefit. Although currently in an urbanized area, noise and vibration would increase.
Bill Reed Elementary School (370 W. 4th St.)	Within 0.25 of the proposed Downtown Loveland Transit Station. New access to transit would benefit school-aged children. Although currently in an urbanized area, an increase in noise and vibration would be expected.
Truscott Elementary School (410 E. 5th St.)	Within 0.25 mile from the proposed Downtown Loveland Transit Station. New access to transit would benefit school-aged children. Although currently in an urbanized area, an increase in noise and vibration would be expected.
Loveland Fire Station #1 (211 W. 6th St.)	Within 0.25 mile from the proposed Downtown Loveland Transit Station. Frequency of trains would result in minor delays and out-of-direction travel.
Abiding Love Lutheran Church (950 Cleveland Ave.)	Within 0.25 mile from the proposed Downtown Loveland Transit Station. Improved access to transit could facilitate community participation in church events and activities. Although currently in an urbanized area, an increase in noise and vibration would be expected.
First Congregational Church (800 Lincoln Ave.)	Within 0.25 mile from the proposed Downtown Loveland Transit Station. Improved access to transit could facilitate community participation in church events and activities. Although currently in an urbanized area, an increase in noise and vibration would be expected.
Trinity United Methodist Church (801 Cleveland Ave.)	Within 0.25 mile from the proposed Downtown Loveland Transit Station. Improved access to transit could facilitate community participation in church events and activities. Although currently in an urbanized area, an increase in noise and vibration would be expected.

1 **Table 3.2-2 Impacts to Community Facilities Within 0.25 Mile of the Commuter**
2 **Rail Alignment (cont'd)**

Facility	Impacts
First United Methodist Church Pre-School (533 Grant Ave.)	Within 0.25 mile from the proposed Downtown Loveland Transit Station. New access to transit would benefit pre-school attendance. Although currently in an urbanized area, an increase in noise and vibration would be expected.
Message of Life Ministries (605 18th St. SW)	Within 0.25 mile of the proposed alignment and approximately 2 miles south of the proposed Downtown Loveland Transit Station. An increase in noise and vibration would be expected. Frequency of trains would result in minor delays and out-of-direction travel for church members.
Seventh Day Adventist Church (300 SW 42nd St.)	Adjacent to the commuter rail just south of SH 60. No access improvements as no stations are planned in this location. An increase in noise and vibration would be expected.
Berthoud Elementary School (560 Bunyan Ave.)	Within 0.25 mile from the proposed Berthoud Maintenance Station. Operations would result in noise and vibration impacts. Frequency of trains would result in minor delays and out-of-direction travel. There would be visual impacts for students playing outside in the school yard.
Berthoud Fire Department (275 Mountain Ave.)	Within 0.25 mile of the proposed Berthoud Transit Station. Frequency of trains would result in minor delays and out-of-direction travel.
Berthoud Police Department (328 Massachusetts Ave.)	Within 0.25 mile of the proposed Berthoud Transit Station. Frequency of trains would result in minor delays and out-of-direction travel.
Berthoud Public Library (236 Welch Ave.)	Within 0.25 mile of the proposed Berthoud Transit Station. Frequency of trains would result in minor delays and out-of-direction travel for patrons driving to the library; however, access to the library would be improved for non-driving patrons. An increase in noise and vibration would be expected.
Longmont Police Department (225 Kimbark St.)	Adjacent to the commuter rail alignment in Longmont. Frequency of trains would result in minor delays and out-of-direction travel.
Columbine Elementary School (111 Longs Peak Ave.)	Adjacent to the commuter rail alignment in Longmont. No access improvements would occur as no stations are planned in this location. An increase in noise and vibration would be expected.
Spangler Elementary School (1440 Collyer St.)	Adjacent to the commuter rail alignment in Longmont. No access improvements would occur as no stations are planned in this location. An increase in noise and vibration would be expected.
Outreach United Resource (OUR) Center (303 Atwood St.)	Adjacent to the commuter rail alignment in Longmont. No access improvements would occur as no stations are planned in this location. An increase in noise and vibration would be expected.

3 Research has shown that the value of residential properties near a station generally increases
4 following the implementation of a transit system. The increase is highest for those properties
5 located within 0.25 mile to 1 mile from a station. For residential properties between stations,
6 there is the potential for a decrease in property valuation as a result of noise, vibration, visual
7 impacts, or access changes resulting in out-of-direction travel (Transportation Research
8 Board, 2004).

9 Several neighborhoods in Fort Collins would benefit from close proximity to transit stations.
10 These include the Martinez Park, Historic Fort Collins High School, and Troutman Park.
11 Residents of these neighborhoods would be able to reach the transit station by foot or bicycle.
12 Residents of the Meadowlark and Troutman Park neighborhoods would be farther from transit
13 stations (approximately 2 miles and 0.5 mile respectively). The added track in Fort Collins

1 would exacerbate the existing barrier between the rail corridor and the retail services provided
2 along US 287 and the Foothills Fashion Mall to the east. This would also occur in Loveland for
3 residents adjacent to Lake Loveland. Lakeside homes would be in walking distance to the
4 North Loveland Transit Station. The commuter rail, station, and associated parking would

5 intensify transportation activity in the adjacent neighborhood. Residents between the lake and
6 commuter rail line could potentially feel more isolated. For some residents, access to transit
7 would strengthen their sense of community, while for others, the opposite would be true.

8 The proposed maintenance facility at East Vine Drive and North Timberline Road would be
9 adjacent to the northern portion of the Collins Aire Park (a mobile home park). This community
10 would likely experience an increase in activity and visual impacts as a result of the new facility.
11 However, such land uses are consistent with the area, as industrial, rail, and airport uses are
12 in close proximity. The proposed maintenance facility at CR 46 and US 287 would result in an
13 increase in activity and visual impacts to the single-family residential subdivision adjacent to
14 the BNSF rail line in the northernmost portion of Berthoud. The maintenance facility would
15 magnify the presence of the rail and introduce an industrial component to the neighborhood.
16 Neighborhoods in downtown Berthoud would benefit from the new commuter rail and feeder
17 bus connections.

18 In Longmont, the commuter rail would primarily travel through single-family residential
19 neighborhoods. Because commuter rail would operate in an existing rail corridor, no
20 neighborhoods would be further divided nor would existing access or travel patterns change.
21 On Atwood Street between 3rd Avenue and 8th Avenue street parking would be removed to
22 accommodate the additional track for the commuter rail line. Although some access revisions
23 would occur, all homes would retain access to their properties from their driveways and/or
24 alleys. Some residents in this area appear to use street parking instead of the alley (i.e., alley
25 is fenced off) or driveway (i.e., driveway is used for storage). These residents would have to
26 begin using their driveway or access their property from the alley when street parking is no
27 longer available. Loss of street parking in this area would not affect Collyer Park because no
28 street parking is currently allowed in front of the park. Columbine Elementary School would
29 lose street parking, but currently has on-site parking and street parking or drop-off areas on all
30 other streets surrounding the school.

31 The widened right-of-way, operational impacts, and the acquisition of 35 residences could
32 affect community cohesion. The community of Longmont is currently divided by the BNSF rail
33 line. As a result local residents frequently experience delays when traveling across town; these
34 delays would become more frequent. Transit stations in north and south Longmont would
35 improve mobility for local neighborhoods. A station at the Sugar Mill location would support the
36 Casa Vista neighborhood (between 119 and County Line Road on Quicksilver) by connecting it
37 to the greater Longmont community.

38 Comments received from Longmont community leaders in September of 2006 indicated that
39 they feel that there would be no additional community division resulting from the commuter rail.
40 Participants also felt that if the frequency of freight trains decreased, commuter rail would
41 strengthen community cohesion.

42

1 *Components A-T3 and A-T4: Commuter Bus*

2 **Population and Housing.** The population within 0.5 mile of the US 85 corridor is expected to
3 increase by 51 percent between 2005 and 2035 (from 40,687 in 2005 to 61,517 in 2035). This
4 growth is expected to occur with or without commuter bus service. Population and housing
5 may increase around commuter bus stations; however, bus stations are less likely to attract
6 significant transit-oriented development and growth than commuter rail stations.
7 One residential relocation would be required for the construction of a bus station at US 85 and
8 42nd Street in Evans.

9 **Transportation-Disadvantaged Populations.** Persons of advanced age and persons with
10 disabilities have been identified in census tracts adjacent to US 85 in Greeley, Fort Lupton,
11 and Brighton. Commuter bus would improve mobility for these populations. Transit would give
12 non-drivers access to communities along US 85 and DIA. Mobility and accessibility benefits
13 would be greatest for transportation-disadvantaged populations living within 0.25 mile of
14 station sites or bus stops.

15 **Community Facilities and Services.** No community facilities would be acquired for the
16 commuter bus stations, maintenance facilities, queue jumps, or parking lots. Community
17 facilities would benefit from new access to transit. Eighteen community facilities are located
18 within 0.25 mile of the feeder bus line and three are within 0.25 mile of commuter bus stations.
19 Twelve of these are schools; therefore, transit improvements would expand transportation
20 options for school-aged children. Commuter bus service would improve regional connections
21 between US 85 communities. Service to DIA would improve access to the airport over the
22 No-Action Alternative. Limiting the number of stops would benefit residents that travel between
23 communities (for employment, school, or services) on a regular basis.

24 Interviews with Weld County emergency service providers indicate that transit would benefit
25 emergency response by potentially easing traffic congestion and improving mobility. Aside
26 from these benefits, emergency service providers in Adams, Broomfield, Boulder, and Denver
27 counties would not be affected by commuter bus service. Emergency service providers in
28 Weld County would experience some temporary out-of-direction travel and traffic delays during
29 construction at queue jump locations.

30 **Neighborhoods.** The majority of US 85 between Greeley and Denver is undeveloped, with a
31 few scattered rural subdivisions, isolated single-family residences, and mobile home parks.
32 The proposed improvements would not split or isolate any neighborhoods, separate
33 neighborhoods from community facilities, or affect community cohesion.

34 Impacts to neighborhoods would primarily result from the increased transportation activity at
35 bus stations. Residents adjacent to bus stations would experience noise, air, and visual
36 impacts. According to the noise analysis conducted for this project, noise associated with
37 commuter bus elements would not reach impact levels.

38 The commuter bus station at 42nd Street and US 85 is adjacent to a small single-family
39 residential neighborhood in Evans. The bus station is consistent with the character of the land
40 that surrounds this neighborhood (agriculture, industry, and rail). An increase in bus traffic,
41 noise associated with buses, and change in the visual environment would impact residents
42 adjacent to 42nd Street. As a result, the value of properties adjacent to 42nd Street could
43 decrease.

1 Residents adjacent to maintenance facilities proposed at 31st Street and west of 1st Avenue in
2 Greeley and north of Trilby and Portner Roads in Fort Collins would experience an increase in
3 bus traffic, noise, air, and visual impacts. Noise associated with these stations would not reach
4 impact levels.

5 *Summary of Key Impacts for Package A*

6 Adverse impacts associated with Package A would include:

- 7 ▶ Relocation of 59 residences
- 8 ▶ Increased noise and vibration, out-of-direction travel, and travel time delays associated
9 with commuter rail
- 10 ▶ Air emissions and visual impacts to residents near carpool lots, commuter rail, transit
11 stations, bus stations, and maintenance facilities
- 12 ▶ Exacerbated “barrier effect” in Fort Collins, Loveland, Berthoud, and Longmont
- 13 ▶ Temporary construction-related impacts such as, noise, dust, out-of-direction travel, and
14 travel-time delays
- 15 ▶ Potential re-distribution of population in response to highway capacity or transit
16 improvements

17 Beneficial impacts associated with Package A would include:

- 18 ▶ Regional connections between communities
- 19 ▶ Improvements in mobility, safety, and emergency response
- 20 ▶ Improved mobility for transportation-disadvantaged populations

21 **3.2.2.3 PACKAGE B**

22 *Component B-H1: Safety Improvements*

23 Safety improvements under this component would result in four residential relocations. One of
24 the affected properties is located in east Wellington and the others are dispersed along I-25
25 south of Wellington. Given the small number of displacements in relation to the total amount of
26 comparable housing stock in this area, no effect on local or regional population distribution or
27 housing demand would be expected. The proposed improvements do not involve physical
28 changes that would directly result in increases or decreases in population.

29 Impacts to transportation-disadvantaged populations, community facilities and services, and
30 neighborhoods are the same as those discussed for Package A, Component A-H1.

31 *Components B-H2, B-H3, and B-H4: Tolled Express Lanes*

32 Adding one additional northbound and southbound tolled express lane on I-25 would have a
33 similar affect on social resources as adding one general purpose lane in each direction under
34 Package A, Components A-H2 and A-H3. Interchange improvements for these components
35 are also the same. Because many of the direct and indirect impacts associated with tolled
36 express lanes are similar in nature to those of general purpose lanes, the following discussion
37 focuses on the differences or incremental changes between them.

1 **Population and Housing.** Twenty residential relocations would be required between SH 14
2 and E-470 (15 between SH 14 and SH 60 [B-H2] and 5 between SH 60 and E-470 [B-H3]).
3 Given the small number of displacements in relation to the total amount of comparable housing
4 stock in this area, no effect on local or regional population distribution or housing demand
5 would be expected.

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

16 Free travel lanes, access points, and frontage roads would be maintained along I-25.
17 In addition, transit options would be available to all I-25 commuters. Because a variety of
18 transportation choices would be available to all income levels, the toll lanes would not
19 adversely affect access to transportation for economically disadvantaged populations.

20 **Community Facilities and Services.** No community facilities would be acquired between
21 SH 14 and E-470 (B-H2 and B-H3). The increase in capacity would improve emergency
22 response where toll lanes are buffer-separated south of SH 60 in portions of Weld, Broomfield
23 and Adams Counties. Interviews with Larimer and Weld county emergency service providers
24 indicated that barrier-separated lanes would restrict mobility. In these locations (between
25 Harmony Road and SH 60), improvements in emergency response would not be expected.
26 Boulder and Denver counties would not be affected by Components B-H2, B-H3, or B-H4.

27 **Neighborhoods.** Toll roads can result in a redistribution of traffic into local neighborhoods as
28 drivers take alternate routes in an effort to avoid the toll. This is unlikely to occur in
29 neighborhoods along I-25 because most are set back from the highway, making local
30 roadways an unreasonable detour; in addition, the current free lanes would still be available to
31 drivers. However, traffic may increase along frontage roads adjacent to the highway. This
32 would result in an increase in traffic and traffic-related impacts (noise, visual, air emissions) for
33 the Mountain Range Shadows subdivision, which is immediately adjacent to the frontage road
34 west of I-25 and south of SH 392. The noise analysis identified impacts to 69 receivers in the
35 Mountain Range Shadows subdivision (with mitigation, impacts would occur at 39 receivers).
36 These receivers would be impacted under all alternatives. Detailed noise analysis results are
37 presented in **Section 3.6 Noise and Vibration** and corresponding technical reports
38 (FHU, 2008b and 2011a; HMMH, 2008 and 2011).

39 Although no residences would be displaced between E-470 and US 36 (B-H4), approximately
40 ten garages would need to be acquired from condominiums adjacent to I-25 near
41 120th Avenue. Neighborhoods in this segment extend east and west of the highway and have
42 developed around the interstate. Residences immediately adjacent to the highway would
43 experience an increase in traffic and traffic-related impacts (noise, visual, air emissions).

44 Numerous neighborhoods and apartment complexes abutting I-25 in Broomfield, Thornton,
45 Westminster, Northglenn, and Adams County also would experience an increase in traffic and

1 traffic-related impacts (noise, visual, air emissions). However, these impacts would be largely
2 limited to first- and second-tier homes and would not result in a deterioration of the overall
3 neighborhood.

4 Construction impacts would be greater than those identified for Package A. Maintaining access
5 to cross streets would be more difficult during construction of the barrier and tolled lanes
6 adjacent to the existing lanes. This would result in some out-of-direction travel for local
7 residents and I-25 commuters.

8 *Components B-T1 and B-T2: Bus Rapid Transit (BRT)*

9 **Population and Housing.** The introduction of BRT along the I-25 corridor represents a more
10 modest improvement in transit than commuter rail and as a result provides less incentive for
11 transit-oriented development and population growth. The location of BRT stations along I-25
12 and US 34 (e.g., center median versus along side the highway) and the distance of the
13 stations from any associated development would limit the likelihood that they would attract new
14 housing and population. No residential displacements would occur under Components B-T1 or
15 B-T2.

16 **Transportation-Disadvantaged Populations.** Public transportation would improve mobility
17 and regional connections for transportation-disadvantaged populations in the regional study
18 area. The location of BRT stations (e.g., center median versus along side the highway) and the
19 distance of the stations from these populations would result in more modest improvements in
20 access to transit when compared to commuter rail. In addition, BRT and feeder bus would not
21 provide the direct connection between communities along US 287 and US 85 and would reach
22 fewer communities (Johnstown, Milliken, Firestone) than would commuter rail and feeder bus
23 as described for Package A, Components A-T1 and A-T2 and the Preferred Alternative.
24 However feeder bus service would provide a connection between Niwot and Fort Lupton,
25 currently not included in Package A.

26 **Community Facilities and Services.** No community facilities would be acquired for the BRT
27 stations, queue jumps, or parking lots. Community facilities would benefit from new access to
28 transit. Twenty-three community facilities are located within 0.25 mile of BRT and feeder bus
29 lines and four are within 0.25 mile of BRT stations. Fifteen of these are schools; therefore,
30 transit improvements would expand transportation options for school-aged children. Service to
31 Denver Union Station would improve the regional connections provided by FasTracks.

32 Feeder bus service along Highway 52 would connect tri-town communities (Frederick,
33 Firestone, Dacono) to FasTracks Stations at Niwot or Gunbarrel, and to BRT at I-25. Service
34 to DIA would improve access to the airport over the No-Action Alternative.

35 Transit would benefit emergency response in Weld, Larimer, Broomfield, Adams, and Denver
36 Counties by easing traffic congestion and improving mobility. Boulder County would not be
37 affected by Components B-T1 or B-T2. Emergency service providers would experience some
38 temporary out-of-direction travel and traffic delays during construction at queue jump locations.

39 **Neighborhoods.** The proposed improvements would not split or isolate any neighborhoods,
40 separate neighborhoods from community facilities, or affect community cohesion. Impacts to
41 neighborhoods would primarily result from the intensification of transportation activity at BRT
42 stations and maintenance facilities. Such impacts would be anticipated near five of the twelve
43 new stations: South Fort Collins, Harmony and Timberline, Windsor, Firestone, and Downtown

1 Greeley. Residents adjacent to stations would experience noise, air, and visual impacts. The
2 noise analysis determined that noise would not reach impact levels in any neighborhoods as a
3 result of the BRT (see **Section 3.6.3.3 Package B**).

4 Impacts to the neighborhoods adjacent to the proposed maintenance facilities at 31st Street
5 and west of 1st Avenue in Greeley and north of Trilby and Portner Roads in Fort Collins would
6 be the same as those identified for Package A, Components A-T3 and A-T4.

7 *Summary of Key Impacts for Package B*

8 Adverse impacts associated with Package B would include:

- 9 ▶ Relocation of 24 residences
- 10 ▶ Increased noise, air emissions, and visual impacts to residents near frontage roads,
11 parking lots, bus routes, transit stations, and maintenance facilities
- 12 ▶ Temporary construction-related noise, dust, out-of-direction travel, travel-time delays, and
13 access revisions

14 Beneficial impacts associated with Package B would include:

- 15 ▶ Regional connections between communities
- 16 ▶ Overall improvements in safety, mobility, and emergency response, but no improvements
17 in emergency response where toll lanes are barrier-separated
- 18 ▶ Moderate improvements in mobility for transportation-disadvantaged populations

19 **3.2.2.4 PREFERRED ALTERNATIVE**

20 *I-25 Highway Improvements*

21 The Preferred Alternative includes buffer-separated tolled express lanes in each direction of
22 I-25 from SH 14 to US 36. One general purpose lane would be added in each direction of I-25
23 from SH 14 to SH 66, and 16 existing interchanges would be upgraded.

24 **Population and Housing.** The population within 0.5 mile of the I-25 corridor is expected to
25 increase by 88 percent between 2005 and 2035 (from 43,536 in 2005 to 81,764 in 2035).
26 Growth would be most pronounced in the smaller municipalities of Berthoud, Dacono, Erie,
27 Firestone, Frederick, Johnstown, and Windsor. This growth is a result of a large supply of
28 developable land, easy access to I-25, and locally planned development. The need for
29 additional highway capacity is a response to this growth and would not in and of itself result in
30 increases or decreases in population.

31 Ten businesses and twenty residential relocations would be required to implement highway
32 improvements for the Preferred Alternative. In general, these properties are dispersed along
33 I-25 in large rural parcels that are not part of any established neighborhood. Given the small
34 number of displacements in relation to the total amount of comparable housing stock in this
35 area, no effect on local or regional population distribution or housing demand would occur.
36 Improvements in mobility could influence the distribution of population. As incorporated
37 communities adjacent to I-25 become more accessible, they could attract residents, especially
38 if opportunities for lower cost housing in the urban fringe continue. In these locations, the
39 demand for new or expanded public services and facilities would increase.

1 Impacts to transportation-disadvantaged populations and the associated impact of tolling,
2 community facilities and services, and neighborhoods are the same as those discussed for
3 Package B, Components B-H2, B-H3, and B-H4.

4 *I-25 Express Bus*

5 The Preferred Alternative includes express bus service from the northern communities of Fort
6 Collins and Greeley to downtown Denver and to DIA. The bus routes would use the proposed
7 express lanes along I-25. The impacts from the construction of tolled express lanes that would
8 be used for the express bus service are discussed above in the I-25 highway improvements
9 component.

10 **Population and Housing.** Similar to BRT, the introduction of express bus service along the
11 I-25 corridor represents a more modest improvement in transit than commuter rail and as a
12 result provides less incentive for transit-oriented development and population growth. The
13 location of express bus stations along I-25 and US 34 and the distance of the stations from
14 any associated development would limit the likelihood that they would attract new housing and
15 population. However, because the express bus stations are located off to one side of the
16 interstate, there is more of a possibility for TOD than with the BRT of Package B, which may
17 result in slight increases in population and housing in the vicinity. No residential displacements
18 would occur as a result of express bus service.

19 **Transportation-Disadvantaged Populations.** Public transportation would improve mobility
20 and regional connections for transportation-disadvantaged populations in the regional study
21 area. The location of express bus stations and the distance of the stations from these
22 populations would result in more modest improvements in access to transit when compared to
23 Package A, Components A-T1 and A-T2 or the commuter rail component of the Preferred
24 Alternative. Express bus and feeder bus would not provide the direct connection between
25 communities along US 287 and US 85 and would reach fewer communities (Johnstown,
26 Milliken, Firestone) than would commuter rail and feeder bus.

27 **Community Facilities and Services.** No community facilities would be acquired for the
28 express bus stations or associated parking lots. Community facilities would benefit from new
29 access to transit. Twenty-three community facilities are located within 0.25 mile of express bus
30 and feeder bus lines. Fifteen of these are schools; therefore, transit improvements would
31 expand transportation options for school-aged children. Service to Denver Union Station would
32 improve the regional connections provided by FasTracks.

33 Feeder bus service along SH 52 would connect tri-town communities (Frederick, Firestone,
34 Dacono) to FasTracks Stations at Niwot or Gunbarrel, and to the express bus at I-25. Service
35 to DIA would improve access to the airport over the No-Action Alternative.

36 Transit would benefit emergency response in Weld, Larimer, Broomfield, Adams, and Denver
37 counties by easing traffic congestion and improving mobility. Boulder County would not be
38 affected by the express bus component.

39 **Neighborhoods.** The proposed improvements would not split or isolate any neighborhoods,
40 separate neighborhoods from community facilities, or affect community cohesion. Impacts to
41 neighborhoods would primarily result from the intensification of transportation activity at
42 express bus stations and maintenance facilities. Such impacts would be anticipated near four
43 new stations: South Transit Center in Fort Collins, Harmony and Timberline, Windsor, and

1 Firestone. Residents adjacent to stations would experience noise, air, and visual impacts.
2 Detailed noise analysis results are presented in **Section 3.6 Noise and Vibration** and
3 corresponding technical reports (FHU, 2008b and 2011a; HMMH, 2008 and 2011).

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

7 *Commuter Rail*

8 The commuter rail alignment is proposed to be located in the BNSF right-of-way and use
9 existing BNSF track from the Downtown Transit Center in Fort Collins to the Sugar Mill Station
10 in Longmont. A maintenance road would run parallel to the BNSF line. The new maintenance
11 road would follow the horizontal and vertical alignment of the existing BNSF track. East of the
12 Sugar Mill station a new track is proposed to connect the North I-25 commuter rail service to
13 the proposed FasTracks North Metro end-of-line station. The track would run parallel to
14 SH 119 east from Sugar Mill, turn south and parallel CR 7, then follow the UPRR alignment
15 across I-25 to the FasTracks North Metro end-of-line station. Commuter rail track that is not
16 within the BNSF right-of-way would not include a maintenance road.

17 Passing track is proposed for four segments along the commuter rail alignment. Passing track
18 would include a new track that would follow the horizontal and vertical alignment of the existing
19 or proposed track at the following four locations:

20 Passing track would be located at the following four locations:

- 21 ▶ Beginning at 6th Street in Loveland, continuing north to 0.04 mile south of West 57th Street
22 in Loveland. (Length = 3.7 miles)
- 23 ▶ Beginning 0.3 mile south of East CR 6c in Berthoud, continuing north to 0.4 mile north of
24 WCR 14. (Length = 4.5 miles)
- 25 ▶ Beginning in Longmont 0.05 mile west of Martin Street, continuing north along existing
26 BNSF corridor to 19th Avenue. (Length = 2.3 miles)
- 27 ▶ Beginning 0.6 mile west of I-25, continuing north along existing UPRR to 0.3 mile south of
28 CR 20. (Length = 5.2 miles)

29 **Population and Housing.** To capture the population that would benefit from the commuter rail
30 component, population statistics were calculated for the US 287 corridor from Fort Collins to
31 Boulder. The population within 0.5 mile of the US 287 corridor is expected to increase by
32 24 percent between 2005 and 2035 (from 82,763 in 2005 to 102,934 in 2035). Commuter rail
33 would facilitate infill and re-development in Fort Collins, Loveland, Berthoud, and Longmont,
34 accommodating population growth within the center of these communities, which is consistent
35 with local planning efforts. The intensity and size of Longmont would likely increase due to its
36 central location and direct connection to the FasTracks system. As the end-of-line for the
37 commuter rail alignment, Fort Collins could attract a larger portion of growth than communities
38 located mid alignment. An increase in population around commuter rail stations would be
39 expected, especially in communities with plans for transit-oriented development. These
40 changes would not represent additional population growth, but rather a shift in its distribution.
41 In these locations the demand for new or expanded public services and facilities would
42 increase.

1 Construction of the commuter rail would require the relocation of 31 residences and
2 9 businesses. More than half of the residential displacements would occur in Longmont where
3 there would be 17 full residential displacements. All of these residences are located
4 immediately adjacent to the BNSF corridor. Given the total amount of comparable housing
5 stock in this area, no effect on local or regional population distribution or housing demand
6 would be expected.

7 Impacts to transportation-disadvantaged populations and community facilities and services are
8 the same as those discussed for Package A Components A-T1 and A-T2.

9 **Neighborhoods.** The BNSF rail line currently acts as a physical and perceived barrier
10 between development on each side of the railway in Fort Collins, Loveland, Berthoud, and
11 Longmont. This “barrier effect” could be somewhat exacerbated with the addition of
12 maintenance roads, passing track, fences or retaining walls. However, because there would
13 not be additional track and, unlike Package A, on-street parking on Atwood Street would not
14 be affected by the Preferred Alternative, this effect is less than that likely to occur with
15 Package A. Because commuter rail would operate in an existing rail corridor, existing access
16 to neighborhoods along the rail alignment would not change. However, the widened right-of-
17 way, operational impacts, and the acquisition of 31 residences along the rail corridor could
18 affect community cohesion.

19 In a city like Longmont, where residents frequently experience delays when traveling across
20 town because of the existing BNSF rail line, delays would become more frequent, although the
21 duration of each delay would be much less than currently experienced because trains would
22 be much shorter. Currently, four to six freight trains travel along the BNSF rail on a typical
23 weekday, with slightly fewer on the weekends. With the proposed commuter rail, there would
24 be 46 trains per day (except between South Fort Collins and downtown Fort Collins, where
25 there would be 34 trains per day). This is the same as a train every 30 minutes, in each
26 direction, during the peak hours. In the off-peak period, there would be a train once an hour in
27 each direction (however between South Fort Collins and downtown Fort Collins, there would
28 be a train once an hour, in each direction, during peak and off-peak hours). As a result,
29 through traffic could increase in neighborhoods adjacent to stations.

30 In general, transit stations are located within urban areas and are compatible with surrounding
31 neighborhoods. When located within walking distance, neighborhood integrity and community
32 cohesion are strengthened by the provision of transit. For example, a station at the Sugar Mill
33 location would support the Casa Vista neighborhood (between SH 119 and County Line Road
34 on Quicksilver) by connecting it to the greater Longmont community.

35 The value of residential and commercial properties near a station generally increases following
36 the implementation of a transit system. The increase is highest for those properties located
37 within 0.25 mile to 1 mile from a station. For residential properties between stations, there is
38 the potential for a decrease in property valuation as a result of noise, vibration, visual impacts,
39 or access changes resulting in out-of-direction travel (Transportation Research Board, 2004).

40 The requirement of passenger trains to blow their horns at at-grade crossings would increase
41 noise in all neighborhoods adjacent to the commuter rail alignment. The noise analysis
42 identified a total of 2,192 residential noise impacts along the commuter rail corridor. Of these
43 impacts 1,495 would be moderate impacts and 697 would be severe impacts. Approximately
44 half of the impacts would be in Longmont. However, it is estimated that with the
45 implementation of Quiet Zones (and noise walls located outside of Longmont), potential

1 impacts to all residences along the commuter rail corridor would be eliminated (see
2 **Section 3.6 Noise and Vibration**). The vibration analysis identified impacts at a total of
3 40 residences within 111 feet of the nearest track. Of these residences, 26 are in Longmont
4 and 14 are in Loveland. To mitigate for vibration impacts, special trackwork at certain locations
5 and the installation of Tire Derived Aggregate (shredded tires) beneath the tracks would
6 eliminate all potential vibration impacts.

7 Overall, neighborhoods in downtown Berthoud would benefit from the new commuter rail and
8 feeder bus connections. However, the proposed maintenance facility at CR 46 and US 287
9 would result in an increase in activity and visual impacts to the single-family residential
10 subdivision adjacent to the BNSF rail line in the northernmost portion of Berthoud. The
11 maintenance facility would magnify the presence of the rail and introduce an industrial
12 component to the neighborhood.

13 *US 85 Commuter Bus*

14 The Preferred Alternative includes commuter bus service along US 85 connecting Greeley to
15 downtown Denver. In general, the proposed bus routes would run along existing roadways and
16 thus would not result in direct or indirect impacts on existing communities.

17 **Population and Housing.** The population within 0.5 mile of the US 85 corridor is expected to
18 increase by 51 percent between 2005 and 2035 (from 40,687 in 2005 to 61,517 in 2035). This
19 growth is expected to occur with or without commuter bus service. Population and housing
20 may increase around commuter bus stations; however, bus stations are less likely to attract
21 significant transit-oriented development and growth than commuter rail stations.

22 **Transportation-Disadvantaged Populations.** Persons of advanced age and persons with
23 disabilities have been identified in census tracts adjacent to US 85 in Greeley, Fort Lupton,
24 and Brighton. Commuter bus would improve mobility for these populations. Transit would give
25 non-drivers access to communities along US 85. Mobility and accessibility benefits would be
26 greatest for transportation-disadvantaged populations living within 0.25 mile of station sites or
27 bus stops.

28 **Community Facilities and Services.** No community facilities would be acquired for the
29 commuter bus stations, maintenance facilities, queue jumps, or parking lots. Community
30 facilities would benefit from new access to transit. Eighteen community facilities are located
31 within 0.25 mile of the feeder bus line and three are within 0.25 mile of commuter bus stations.
32 Twelve of these are schools; therefore, transit improvements would expand transportation
33 options for school-aged children. Commuter bus service would improve regional connections
34 between US 85 communities. Limiting the number of stops would benefit residents that travel
35 between communities (for employment, school, or services) on a regular basis.

36 Interviews with Weld County emergency service providers indicate that transit would benefit
37 emergency response by potentially easing traffic congestion and improving mobility. Aside
38 from these benefits, emergency service providers in Broomfield, Boulder, and Denver counties
39 would not be affected by commuter bus service. Emergency service providers in Adams and
40 Weld Counties would experience some temporary out-of-direction travel and traffic delays
41 during construction at queue jump locations.

42 **Neighborhoods.** The majority of US 85 between Greeley and Denver is undeveloped, with a
43 few scattered rural subdivisions, isolated single-family residences, and mobile home parks.

1 The proposed improvements would not split or isolate any neighborhoods, separate
2 neighborhoods from community facilities, or affect community cohesion.

3 Impacts to neighborhoods would primarily result from the increased transportation activity at
4 bus stations. Residents adjacent to bus stations would experience noise, air, and visual
5 impacts. According to the noise analysis conducted for this project, noise associated with
6 commuter bus elements would not reach impact levels.

7 The commuter bus station at 42nd Street and US 85 is adjacent to a small single-family
8 residential neighborhood in Evans. The bus station is consistent with the character of the land
9 that surrounds this neighborhood (agriculture, industry, and rail). An increase in bus traffic,
10 noise associated with buses, and change in the visual environment would impact residents
11 adjacent to 42nd Street. As a result, the value of properties adjacent to 42nd Street could
12 decrease.

13 Residents adjacent to the maintenance facility proposed at 31st Street west of 1st Avenue in
14 Greeley would experience an increase in bus traffic, noise, air, and visual impacts. Noise
15 associated with these stations would not reach impact levels.

16 ***Summary of Key Impacts for the Preferred Alternative***

17 Adverse impacts associated with the Preferred Alternative would include:

- 18 ▶ Relocation of 51 residences
- 19 ▶ Increased noise and vibration, out-of-direction travel, and travel time delays associated
20 with commuter rail
- 21 ▶ Air emissions and visual impacts to residents near highway widening, carpool lots,
22 commuter rail, transit stations, bus stations, and maintenance facilities
- 23 ▶ Minor exacerbated “barrier effect” in Fort Collins, Loveland, Berthoud, and Longmont due
24 to maintenance roads, passing track, and fences
- 25 ▶ Temporary construction-related impacts such as, noise, dust, out-of-direction travel, and
26 travel time delays
- 27 ▶ Potential re-distribution of population in response to highway capacity or transit
28 improvements

29 Beneficial impacts associated with the Preferred Alternative would include:

- 30 ▶ Enhanced regional connections between communities
- 31 ▶ Improvements in mobility, safety, and emergency response
- 32 ▶ Improved mobility for transportation-disadvantaged populations

33

3.2.3 Mitigation Measures

Mitigation for impacts associated with residential and public property acquisitions are addressed in **Section 3.4 Right-of-Way**.

Where feasible, retaining walls would be constructed along I-25 and the BNSF to minimize impacts to residential development.

If toll lanes are constructed, ways to make tolling more equitable would be sought. For example, payment options would be considered to enable the broadest opportunity for all economic groups to use toll facilities. This might entail providing alternative payment options for transponder purchases (for persons who don't own credit cards) and toll replenishment using cash or employer-based payroll deductions. Toll booths would not be installed so additional impacts related to idling vehicles (e.g., noise, air quality) would not occur.

Mitigation for impacts associated with noise and vibration are addressed in **Section 3.6 Noise and Vibration**.

In spite of these efforts, some community and neighborhood impacts would still occur and would not be able to be mitigated. These include operational impacts associated with the implementation of proposed improvements such as commuter rail or BRT (noise, vibration, and traffic delays) as well as increased transportation activity for residences adjacent to commuter rail, bus stations, and maintenance facilities. It is important to consider that these impacts would be highly localized. Benefits associated with access to transit, regional mobility and connectivity, as well as improvements in safety and emergency response would outweigh these impacts.

3.2.4 Environmental Justice

Environmental justice is a public policy goal of promoting the fair treatment and meaningful involvement of all people in the transportation planning and decision-making process. 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.

This section documents the presence of minority and low-income populations and minority-owned businesses in the regional study area, identifies important community resources and connections that serve these populations, and evaluates the potential for impacts to these populations and resources. Special efforts made to involve minority and low-income populations in the decision making process are also described.

This analysis has been prepared in accordance with applicable federal and state guidance for addressing environmental justice, including:

- ▶ Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Federal Register, February 11, 1994).
- ▶ DOT Order 5610.2, Order To Address Environmental Justice in Minority Populations and Low-Income Populations (Federal Register, April 15, 1997).
- ▶ FHWA Order 6640.23, Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (December 2, 1998).

- 1 ▶ FTA Circular (FTA C 4702.1A), Title VI Guidelines for FTA Administration Recipients
2 (May 13, 2007).
- 3 ▶ DOT 70 FR 74087, Policy Guidance Concerning Recipient's Responsibilities to Limited
4 English Proficient (LEP) Persons (December 14, 2005).
- 5 ▶ EPA's Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA
6 Compliance Analyses (April 1998).
- 7 ▶ CDOT's Title VI and Environmental Justice Guidelines for NEPA Projects – Rev.3
8 (May 27, 2005).

9 Due to the size and complexity of the environmental justice analysis, an *Environmental Justice*
10 *Technical Memorandum* (Jacobs, 2011b) has been prepared for this study. The technical
11 memorandum includes a thorough summary of the regulatory background for environmental
12 justice, detailed census data analysis, and the dates and locations of specialized outreach
13 activities. Appendices to the technical memorandum include minutes from small group
14 meetings, completed business surveys, and correspondence with local planning agencies.

15 **3.2.4.1 AFFECTED ENVIRONMENT**

16 *Minority Populations*

17 Minority populations are comprised of ethnic and/or racial minorities. As defined in FHWA
18 Order 6640.23, a minority is a person who is Black, Hispanic, Asian American, or an American
19 Indian or Alaskan Native. Year 2000 census data at the block level were used to identify
20 minority populations. The percentage of minorities in each census block was compared to
21 county averages. Any blocks with a higher percentage of minorities than the respective county
22 are evaluated for disproportionately high and adverse effects and are selected for outreach.
23 These blocks are shown in **Figure 3.2-3**.

24 As shown in **Figure 3.2-3**, minority populations are primarily located in and around urban
25 areas in the regional study area, although some are scattered throughout the regional study
26 area. Census blocks that do not contain minority populations were excluded from the analysis.
27 This includes blocks in which a small population has the effect of exaggerating the percentage
28 of minorities in that block. For example, there are 60 blocks with two people, one of which is a
29 minority. In these blocks, 50 percent of the population is minority. While 50 percent appears
30 high, one minority person out of a total population of two persons does not indicate a minority
31 population.

32 *Low-Income Populations*

33 FHWA Order 6640.23 defines low-income as "...a household income at or below the U.S.
34 Department of Health and Human Services (HHS) poverty guidelines." A different threshold
35 (e.g., U.S. Census Bureau poverty threshold or HUD Community Development Block Grant
36 income thresholds) may be used as long as it is not selectively implemented and is inclusive of
37 all persons at or below the HHS poverty guidelines. CDOT's recommended approach in
38 determining low-income populations is to derive the low-income threshold from a combination
39 of census average household size data at the block group level and low-income thresholds set
40 annually by HUD for the distribution and allocation of Community Development Block Grant
41 funds.

1 The percentage of low-income households in each block group was compared to county
2 averages. Any block group in the regional study area with a higher percentage of low-income
3 households than that of its respective county was evaluated for disproportionately high and
4 adverse effects and targeted for outreach. These block groups are shown in **Figure 3.2-3**.

5 As shown in **Figure 3.2-3**, low-income households are concentrated around US 287 and the
6 BNSF rail line in Lafayette, Longmont, Loveland, and Fort Collins; US 85 in Greeley, Gilcrest,
7 and Brighton; SH 119 in Boulder; and I-25 in the Fort Collins and Denver County portions of
8 the regional study area.

9 *Additional Data Sources*

10 Census data alone are too broad to accurately represent the social and economic make-up of
11 the households in the regional study area. For this reason, additional efforts were made to
12 identify minority and low-income populations and services in the regional study area. These
13 efforts included contacting local planners, non-profit organizations, health and human services,
14 chambers of commerce, and housing authorities. Locations of minority and low-income
15 populations and services identified by these contacts are shown in **Figure 3.2-4**.

16 *Minority-Owned Businesses*

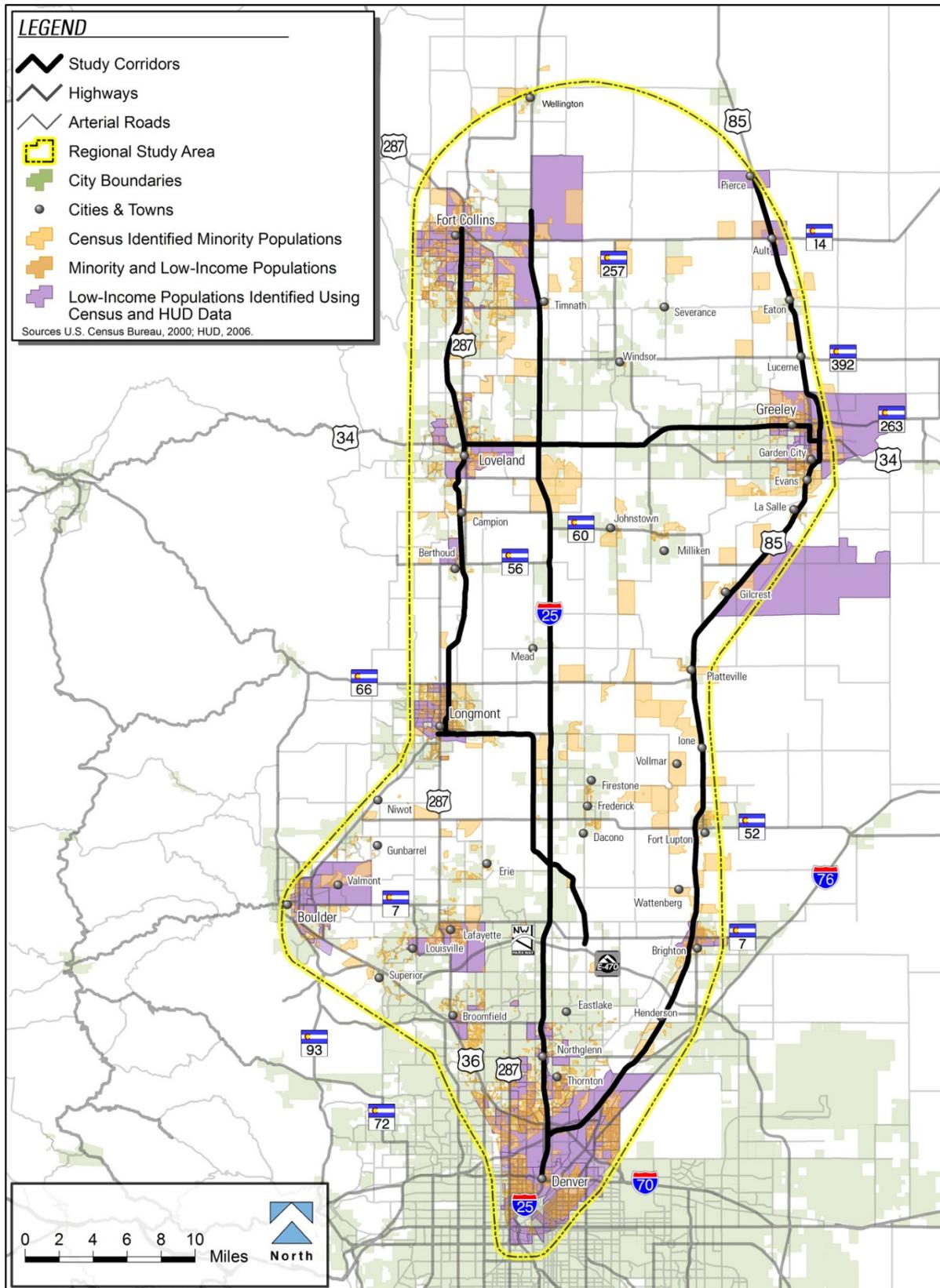
17 Minority-owned businesses were initially identified through the Colorado Office of Economic
18 Development and International Trade, Minority Business Office. In all, 56 minority businesses
19 were identified through this resource. To ensure adequate identification of minority-owned
20 businesses and gather more specific employment information, a business survey was also
21 prepared and distributed in December 2006 to 1,297 businesses throughout the regional study
22 area. Of these, 175 (14 percent) were returned. Surveys were distributed in both English and
23 Spanish and were hand-delivered to large employers and targeted locations along SH 85.
24 Results of the survey are summarized below. The complete survey is contained in the
25 *Environmental Justice Technical Memorandum* (Jacobs, 2011b) in **Appendix C**.

26 The analysis that can be derived from a survey is only as good as the response. Some
27 responses were incomplete or left unanswered. This analysis uses only those responses that
28 were answered completely.

29 Of the businesses surveyed, 17 percent are minority-owned. Approximately 113 businesses
30 reported having full-time minority employees. For 35 of these businesses, more than
31 50 percent of their full-time staff was comprised of minorities. Approximately 87 businesses
32 reported having part-time minority employees. For 68 of these businesses, more than
33 50 percent of their part-time staff is comprised of minorities.

34

1 **Figure 3.2-3** Minority and Low-Income Populations Identified Using Census and
2 **U.S. Department of Housing and Urban Development (HUD) Data**
3



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

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

13 **3.2.4.2 SPECIALIZED OUTREACH TO MINORITY AND LOW-INCOME** 14 **POPULATIONS**

15 *Political Context of Specialized Outreach Efforts*

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

25 Every effort was made to inform and involve the Hispanic/Latino community throughout the
26 project: community leaders were identified to build trust and guide public involvement efforts,
27 small group meetings were held in local communities after regularly scheduled events,
28 informational booths were set up during cultural events and activities, local print and electronic
29 media were used to announce meetings and provide information about the project, flyers were
30 posted in key community locations, and project information was hand delivered to major
31 businesses. In spite of these efforts, participation by the Hispanic/Latino community may have
32 been hindered by the political climate. In general, participation in small group meetings was
33 low (several meetings had less than 10 attendees). In addition, multiple attempts made to
34 distribute information and organize small group meetings in Greeley were met with resistance
35 by the local community. Because of this, fewer small group meetings were held in minority
36 communities than had originally been anticipated.

37 *Specialized Outreach Activities*

38 While it was expected that minority and low-income populations would receive project
39 information through the general public outreach discussed in **Chapter 9 Public and Agency**
40 *Involvement*, additional efforts were made to ensure an increased level of awareness and
41 participation in the project. These efforts included coordination with community leaders and
42 liaisons, targeted distribution of project information, translation of materials into Spanish, the
43 use of Spanish language media, attendance at cultural and community events, and use of
44 small group meetings.

1 The project team contacted approximately 42 Hispanic/Latino community and church leaders.
2 Hispanic/Latino community leaders were offered information about the project and the
3 opportunity for small group meetings. Eleven small group meetings were held in minority and
4 low-income neighborhoods at various times throughout the process. Specialized outreach
5 efforts also identified the potential for a Hmong population, an Asian ethnic group from
6 southern China and southeast Asia, in the northern communities of the regional study area.
7 Consultation with community leaders in the North Front Range revealed that the Hmong
8 population consists of five clans with patriarchs.

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

15 Hmong community leaders indicated that they would be more responsive to project fact sheets
16 and surveys than community or small group meetings. Based on this information, the project
17 fact sheet, business survey, and travel survey were translated into Hmong and given to
18 community leaders for distribution to the Hmong population.

19 *Input Received through Specialized Outreach*

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

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

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

37 In a meeting held in Brighton, attendees indicated that there were negative feelings toward
38 transit because it is unreliable, provides limited service, and requires lengthy wait times. In
39 addition, transit was not deemed feasible for those with construction jobs who are required to
40 be in several locations throughout the day. While some suggested that bus service should be
41 provided along US 85, most felt that more lanes are needed on US 85, SH 7, and I-25. Other
42 than Brighton, participants generally felt that transit would enhance employment opportunities

43

1 and increase access to shopping, cultural events, and services for minority and low-income
2 populations throughout the Front Range. Many participants also preferred transit to highway
3 widening because they considered it a cheaper, safer, and a less stressful option.

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

11 Participants also identified key community facilities, minority and low-income neighborhoods,
12 and minority-owned businesses throughout the regional study area. These include the Pullman
13 Center (12th and Garfield in Loveland); Wal-Mart (Loveland); Loveland Lake Park; Wynona
14 Elementary School (Loveland); the Hispanic neighborhoods of Cherry Street, Buckingham,
15 La Colonia, Andersonville, Poudre Valley Mobile Home Park, and Cloverleaf Mobile Home
16 Park (Fort Collins); Hispanic businesses along US 287 north of Cherry Street in Fort Collins;
17 and Hispanic businesses along US 34 east of US 287 in Longmont. Participants also preferred
18 options that included transit to these destinations.

19 Participants indicated that immigration policy is a concern for Hispanic/Latino populations
20 throughout the regional study area. Hispanic or Latino populations may not use public transit if
21 they have to show identification or are distrustful of authority. In terms of the highway options,
22 some indicated that they avoid using I-25 because they feel that Hispanic/Latino drivers are
23 pulled over more frequently by the State Highway Patrol.

24 3.2.4.3 ENVIRONMENTAL CONSEQUENCES

25 The environmental justice analysis evaluated each alternative to determine whether there is a
26 potential for disproportionately high and adverse effects to minority or low-income populations
27 when compared to populations that are not minority or not low-income in the regional study
28 area. According to *CDOT's Title VI and Environmental Justice Guidelines for NEPA Projects*,
29 *Rev. 3, a* (CDOT, 2005b) a disproportionately high and adverse effect is defined by FHWA as
30 one that is:

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

35 A disproportionately high and adverse effect may include, but is not limited to:

- 36 ▶ Bodily impairment, infirmity, illness, or death
- 37 ▶ Air, noise, water pollution, or soil contamination
- 38 ▶ Destruction or disruption of man-made or natural resources
- 39 ▶ Destruction or diminution of aesthetic values
- 40 ▶ Destruction or disruption of community cohesion or a community's economic vitality

- 1 ▶ Destruction or disruption of the availability of public and private facilities and services
- 2 ▶ Vibration
- 3 ▶ Adverse employment effects
- 4 ▶ Displacement of persons, businesses, farms, or nonprofit organizations
- 5 ▶ Increased traffic congestion, isolation, exclusion, or separation of minority or low-income
- 6 individuals within a given community or from the broader community
- 7 ▶ The denial of, reduction in, or significant delay in the receipt of, benefits of FHWA
- 8 programs, policies, or activities

9 Supporting technical documentation and other analyses prepared in conjunction with the Final
10 EIS were reviewed to determine whether the build packages overall, as well as individual
11 modal components, would have adverse impacts on the overall population, as well as minority
12 and low-income population groups. If no adverse impacts were expected for a resource, then
13 no further environmental justice analysis was undertaken with regard to that particular
14 resource. If, however, adverse effects were identified for a resource, additional environmental
15 justice analysis was performed and is described below. Note that impacts to natural resources
16 (i.e., flora and fauna, geology and soils, wetlands) were assumed not to have any direct
17 impacts or indirect effects on human populations.

18 *No-Action Alternative*

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

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

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

35 The noise analysis identified impacts to a total of 101 residential receivers between SH 14 and
36 SH 60. Sixty-nine of these are residences concentrated within the Mountain Range Shadows
37 subdivision, a community with minority populations in the southwest quadrant of the
38 SH 392/I-25 interchange. Noise impacts would occur at all 69 residences and would range in
39 intensity from 66.0 dBA to 77.5 dBA; however no residence would experience an increase of
40 more than 3.3 dBA over existing conditions. Noise level increases of less than 3 dBA generally
41 are not noticeable by most people. These receivers also would be impacted under all build
42 packages. The 32 impacted residences not part of the Mountain Range Shadows subdivision

1 represent a combination of minority and non-minority residences. Many of these are scattered
2 along North I-25 and are not part of a neighborhood or community. Because of the noise
3 impacts to the Mountain Range Shadows subdivision, there are more low-income and minority
4 communities that would be impacted by noise than non minority and low-income. However, the
5 increase in noise level is very small and would not be noticeable to most people. There are no
6 plans in the No-Action Alternative to do any noise mitigation for these impacts.

7 *Package A*

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

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

20 The four residential displacements associated with this component are located between SH 1
21 and SH 14, along the east side of I-25. They are widely distributed on rural parcels that are not
22 part of an established neighborhood. Three of the homes are located in low-income areas.

23 **Table 3.2-3** summarizes environmental justice impacts for Component A-H1: Safety
24 Improvements.

25 **Table 3.2-3 Environmental Justice Impact Summary for Component A-H1:**
26 **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.

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

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

34

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

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

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

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

34 The Mountain Range Shadows subdivision in the southwest quadrant of the SH 392/I-25
35 interchange consists of three census blocks that contain minority populations. To
36 accommodate highway improvements, the frontage road would shift approximately 15 feet
37 closer to the community and I-25 would be relocated approximately 30 feet farther from the
38 community. For all alternatives, noise impacts would occur at 69 residences within the
39 Mountain Range Shadows subdivision; however, no residence would experience an increase
40 of more than 3.3 dBA over existing conditions. In March 2006, the project team met with
41 residents of the Mountain Range Shadows community to gather input on the SH 392
42 interchange design and frontage road configuration. To minimize impacts to the community,
43 the project team suggested relocating the frontage road behind the community. Residents
44 were concerned with this approach and indicated a strong preference for the proposed

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

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

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

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

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

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

41 According to the bicycle and pedestrian analysis (**Section 4.9 Construction Impacts**), impacts
42 to bicycle and pedestrian facilities would be temporary in duration, would not be concentrated
43 in areas with minority or low-income population groups, and would be offset by the overall
44 benefits from added shoulders and sidewalks. **Table 3.2-4** summarizes environmental justice
45 impacts for Component A-H2 and A-H3: General Purpose Lanes.

1 **Table 3.2-4 Environmental Justice Impact Summary for Component A-H2**
2 **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.

3 **Component A-H4: Structure Upgrades.** Structure upgrades are limited to minor bridge
4 rehabilitation and maintenance activities. No roadway widening, bridge widening, or
5 interchange upgrades would occur. Impacts to minority and low-income populations south of
6 E-470 would be the same as those discussed for the No-Action Alternative in **Section 3.2.2.1.**

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

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

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

- 25 ▶ **Bill Reed Middle School.** This school has a high concentration of Hispanic/Latino students.
26 Existing transit to the school is limited. The school is within 0.25 mile of the proposed
27 Downtown Loveland Transit Station. Access to commuter rail would benefit school-aged
28 children. Although the school is currently located in an urbanized area, an increase in noise
29 and vibration would be expected. The commuter rail option would benefit these students by
30 providing service to the school and alleviating a long bus ride for many students.

- 1 ▶ Impacto De Fe. This largely Hispanic church in Loveland, with a historic presence, is
2 located approximately 0.5 mile from the proposed Downtown Loveland Transit Station.
3 Access to commuter rail could facilitate community participation in church events and
4 activities.
- 5 ▶ Salud Family Health Center. This health center is located approximately 0.5 mile from the
6 proposed Sugar Mill Station in Longmont. Access to commuter rail would benefit persons
7 along the Front Range who are uninsured or underinsured and in need of medical care.
- 8 ▶ St. John's Church. This church is located approximately one mile from the proposed
9 Sugar Mill Station in Longmont. Access to commuter rail could facilitate community
10 participation in church events and activities.
- 11 ▶ OUR (Outreach United Resource) Center. This medical center is located approximately
12 one mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail would
13 benefit families in need of medical care.
- 14 ▶ St. Joseph's Church. This church is located approximately 0.5 mile from the Fort Collins
15 Downtown Transit Center. Access to commuter rail could facilitate community participation
16 in church events and activities.
- 17 ▶ The Pullman Center. This community center is located less than one mile from the
18 Downtown Loveland Transit Station. Access to commuter rail could facilitate community
19 events and activities.

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

32 Minority and low-income residents on Atwood Street would lose street parking between
33 3rd Avenue and 8th Avenue. Although some access revisions would occur as a result, all
34 homes would retain access to their properties from their driveways and/or alleys. For example,
35 some residents in this area appear to use street parking instead of the alley (i.e., alley is
36 fenced off) or driveway (i.e., driveway is used for storage). These residents would have to
37 begin using their driveway or access their property from the alley when street parking is no
38 longer available. Loss of street parking in this area would not affect OUR Center because this
39 facility currently has alley access and on-site parking.

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

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

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

19 The requirement of passenger trains to blow their horns at at-grade crossings would increase
20 noise in all neighborhoods adjacent to the commuter rail alignment. The noise analysis
21 identified a total of 2,192 residential noise impacts along the commuter rail corridor. Of these
22 impacts 1,495 would be moderate impacts and 697 would be severe impacts. Approximately
23 half of the impacts would be in Longmont. Most of the noise impacts would occur in census-
24 identified minority or low-income areas. However, it is estimated that with the implementation
25 of Quiet Zones (and noise walls located outside of Longmont), potential impacts to all
26 residences along the BNSF corridor would be eliminated. CDOT and FHWA will work with
27 local agencies (who must submit quiet zone applications to the PUC) to implement quiet
28 zones, where feasible and reasonable. If quiet zones cannot be implemented, other mitigation
29 measures (such as noise barriers) have been identified as described below and in
30 **Section 3.6. Noise and Vibration.** The vibration analysis identified impacts at a total of
31 40 residences within 111 feet of the nearest track. Of these residences, 26 are in Longmont
32 and 14 are in Loveland. To mitigate for vibration impacts, special trackwork at certain locations
33 and the installation of Tire Derived Aggregate (shredded tires) beneath the tracks would
34 eliminate all potential vibration impacts.

35 An increase in bus and vehicular traffic around station sites would result in localized increases
36 in air emissions. Minority and/or low-income populations at five of the nine proposed station
37 sites (Downtown Fort Collins Transit Center, Downtown Loveland, Berthoud, North Longmont,
38 and Sugar Mill) would be affected. According to the air quality analysis prepared for this project
39 (**Section 3.5 Air Quality**), emissions associated with increased activity at stations would not
40 exceed National Ambient Air Quality Standards (NAAQS). The proximity of the station sites
41 would be beneficial for the nearby populations, especially those within walking distance.

42 The visual analysis (**Section 3.14 Visual Quality**) concluded that the introduction of retaining
43 walls, noise barriers, and new bridges would have a high visual effect to residents adjacent to
44 the rail corridor. Overall, retaining walls would impact 14 residential areas with concentrations
45 of minority or low-income populations and 7 residential areas with non-minority/non-low-
46 income populations. Retaining walls would be constructed on the east side of the rail (where
47 new track would be laid) between Mountain View Avenue and 21st Street in minority and low-

1 income portions of the Clark Centennial and Lanyon neighborhoods. Twelve residences
2 immediately adjacent to the proposed track also would be displaced from these
3 neighborhoods. Retaining walls and noise barriers would shield residences from the existing
4 rail line, lessening the visual impacts of the railroad.

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

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

17 Adverse effects would occur to two historic properties between Longmont and FasTracks
18 North Metro (A-T2). Both of these properties would be acquired for right-of-way purposes.
19 Adversely affected properties include the Old City Electric Building (5BL.1245) and Colorado &
20 Southern/BNSF Depot (5BL.1244). Both of these buildings are in Longmont adjacent to the
21 BNSF rail line within areas identified as having minority and/or low-income populations. The
22 Old City Electric Building is designated by the City of Longmont as a local landmark. Loss of
23 these buildings could negatively affect community character and cohesion for both low-income
24 and minority populations as well as non-low-income and non-minority populations.

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

29 The additional commuter rail track, operational traffic impacts, right-of-way fencing, noise,
30 vibration, and visual impacts would negatively affect minority and low-income neighborhoods
31 and community cohesion in Longmont. These impacts could reduce property values in minority
32 and low-income areas, except for the areas within walking distance of the two stations, where
33 property values would likely be increased. In addition, two stations would serve the community
34 of Longmont: SH 66 in the north and SH 119 in the south. Residents along the commuter rail
35 alignment in Longmont would have to drive or take a local bus north or south to access the rail
36 and would be unable to stop to access services between SH 66 and SH 119.

37 Comments received at a meeting with El Comite de Longmont (a Latino community
38 organization in Longmont) in September 2006 indicated that these residents feel that there
39 would be no additional community division resulting from the commuter rail. According to
40 El Comite, minority and low-income communities in Longmont rely heavily on local bus
41 service. Underserved areas that are important to the minority community include the OUR
42 Center (medical clinic) and Casa Vista (a minority neighborhood between SH 119 and County
43 Line Road on Quicksilver). A station at the Sugar Mill location would support these areas and

1 connect the Casa Vista neighborhood to the northern part of Longmont as well as Fort Collins,
2 Loveland, Boulder and Denver. **Table 3.2-5** summarizes environmental justice impacts for
3 Component A-T1 and A-T2: commuter rail.

4 **Table 3.2-5 Environmental Justice Impact Summary for Component A-T1**
5 **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.

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

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

1 An increase in bus and vehicular traffic around station sites would result in localized increases in
2 air emissions. Impacts would primarily affect minority and/or low-income populations at four of the
3 five proposed station sites (Greeley, South Greeley, Platteville, and Fort Lupton). According to the
4 air quality analysis prepared for this project, emissions associated with increased activity at
5 stations would not exceed NAAQS. **Table 3.2-6** summarizes environmental justice impacts for
6 Component A-T3 and A-T4: commuter bus.

7 **Table 3.2-6 Environmental Justice Impact Summary for Component A-T3 and**
8 **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.

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

- 12 ▶ Short-term and long-term employment opportunities would occur during the construction of
13 the facilities as well as their ongoing operation and maintenance (refer to the economic
14 analysis in **Section 3.3.2.2** for more specific information)
- 15 ▶ The provision of shoulders and sidewalks would better accommodate bicycle and
16 pedestrian travel
- 17 ▶ Safety and emergency response times would improve
- 18 ▶ Transit components would improve access to community facilities, provide broader
19 opportunities for employment, facilitate participation in regional social and cultural events,
20 promote interaction between communities, and stimulate business activity
- 21 ▶ Minority and low-income populations are concentrated around transit improvements and
22 would benefit from the transit-related components.

23 **Package B**

24 **Component B-H1: Safety Improvements.** Safety improvements under this component are
25 similar to those associated with Package A, Component A-H1. The potential for impacts exists
26 in the same two locations as under Component A-H1: near the SH 1/I-25 interchange in
27 Wellington and north of the SH 14/I-25 interchange in Fort Collins. Impacts would be the same
28 as those identified in Package A for Component A-H1. **Table 3.2-7** summarizes environmental
29 justice impacts for Component B-H1: Safety Improvements.

30

1 **Table 3.2-7 Environmental Justice Impact Summary for Component B-H1:**
2 **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.

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

10 Twenty residential relocations would be required between SH 14 and E-470 (15 between
11 SH 14 and SH 60 [B-H2] and five between SH 60 and E-470 [B-H3]). Four of the
12 15 displacements between SH 14 and SH 60 (B-H2 and B-H3) are located in census blocks
13 with minority populations and eleven are located in census blocks and block groups that do not
14 contain minority or low-income populations. None of the residential displacements between
15 SH 14 and E-470 are located in census blocks or block groups that contain minority or low-
16 income populations. In general, displaced properties are dispersed along I-25 in large rural
17 parcels that are not part of any established neighborhood.

18 Although no residences would be displaced between E-470 and US 36 (B-H4), approximately
19 10 garages would need to be acquired from condominiums adjacent to I-25 near
20 120th Avenue. None of these would be from areas with minority or low-income populations.
21 Neighborhoods in this segment extend east and west of the highway and have developed
22 around the interstate. Residences immediately adjacent to the highway would experience an
23 increase in traffic and traffic related impacts (noise, visual, air emissions). The regional study
24 area is a non-attainment area for ozone. This would affect all segments of the population.

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

31 The proposed improvements would require the relocation of 15 businesses between SH 14
32 and E-470 (13 between SH 14 and SH 60 [B-H2] and two between SH 60 and E-470 [B-H3]).
33 Assessor data indicate that these businesses provide services that include equipment storage,
34 car sales and service, warehouse, food sales, gas/convenience, and home and RV sales.
35 These businesses were not identified as being minority-owned by the Colorado Office of
36 Economic Development and International Trade, Minority Business Office; through public
37 involvement efforts; or through the business survey distributed for this project. There is no

1 evidence to suggest that these businesses have any particular connection to a minority
2 community or provide employment, goods, and/or services uniquely important to a minority
3 population group.

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

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

20 The noise analysis identified impacts to a total of 779 receivers between SH 14 and US 36
21 (B-H2). Sixty-nine of these impacted receivers are concentrated within the Mountain Range
22 Shadows subdivision. Noise levels would increase at all of the 69 residences; however, no
23 residence would experience an increase of more than 3.3 dBA over existing conditions. Noise
24 level increases of less than 3 dBA generally are not noticeable by most people. Proposed
25 mitigation would reduce the number of impacted receivers within the Mountain Range
26 Shadows subdivision to 39, an improvement over the No-Action condition. The
27 remaining impacted receivers not part of the Mountain Range Shadows subdivision, would
28 impact minority or low-income populations as well as non-minority and non-low-income
29 populations. These receivers are scattered along North I-25 and are not part of a
30 neighborhood or community.

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

41 Noise barriers would also be constructed in several residential areas from E-470 to US 36
42 (B-H4) along I-25: Thorncreek Parkway, Community Center Drive, Badding Reservoir, and
43 Brittany Ridge. Residences adjacent to the proposed barrier at Community Center Drive are
44 considered low-income. The visual analysis determined that sound walls would have a
45 moderate visual effect to the surrounding community and would reduce the visual effect of the
46 highway.

1 **Table 3.2-8 Environmental Justice Impact Summary for Component B-H2, B-H3,**
2 **and B-H4: Tolled 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.

3 **Components B-T1 and B-T2: Bus Rapid Transit (BRT).** No residential displacements would
4 occur under Components B-T1 or B-T2. Feeder bus service would provide benefits similar to
5 those described under Package A for Components A-T1 and A-T2. However, BRT would
6 improve access to some community facilities in Longmont over the No-Action Alternative and
7 Package A, and would improve access along I-25 similar to the Preferred Alternative. In
8 Longmont, the feeder bus line would run east along SH 119 and north along US 287. Frequent
9 stops would provide more direct service than commuter rail to Casa Vista, Salud Family Health
10 Center, St. Johns Church, the OUR Center, and Hispanic-owned businesses along US 287.

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

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

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

27 BRT stations in Windsor (southwest of the SH 392/I-25 interchange) and Firestone (southwest
28 of Firestone Road) would have a high visual effect to the surrounding community. The station
29 platforms would be 20 feet wide by 300 feet long, with a pedestrian overpass, parking,
30 bus bays, kiss-and-ride, lighting, and landscaping. The station in Firestone would require one
31 business relocation. This relocation would change the visual landscape for travelers, affecting

1 all population segments including minority residents of River Valley Village Mobile Home Park
2 and adjacent neighborhoods west of the Firestone Road interchange. **Table 3.2-9** summarizes
3 environmental justice impacts for Component B-T1 and B-T2: Bus Rapid Transit.

4 **Table 3.2-9 Environmental Justice Impact Summary for Components B-T1 and**
5 **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.

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

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

19 *Preferred Alternative*

20 *I-25 Highway Improvements*

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

- 25 ▶ SH1/I-25 Interchange. The Wellington East neighborhood, located in the northwest
26 quadrant of the interchange, is identified as having a concentration of minority households.
27 The residential area southwest of the interchange also includes minority households.
- 28 ▶ SH 14/I-25 Interchange. In the northeast quadrant of the interchange, the Cloverleaf
29 Community Mobile Home Park and adjacent single-family neighborhood are identified as

1 having a concentration of minorities and low-income households. A small, single-family
2 neighborhood that does not contain minority or low-income populations is located in the
3 southeast quadrant of the interchange.

4 ▶ SH 392/I-25 Interchange. In the southwest quadrant of the interchange, the Mountain
5 Range Shadows Subdivision is identified as having a concentration of minorities. A newer
6 single-family residential subdivision is located in the southeast quadrant and does not
7 contain a concentration of minorities. Although the interchange itself is a component of the
8 No-Action Alternative, general purpose lanes will be included as part of the Preferred
9 Alternative.

10 ▶ LCR 16/I-25 Interchange. The Johnson's Corner RV Park and a few single-family
11 residences are identified as having a concentration of minorities. The Johnson's Corner RV
12 Park allows short and long-term stays. There are no non-minority populations in the vicinity
13 of the interchange.

14 ▶ SH 119/I-25 Interchange. The River Valley Village Mobile Home Park and a small single-
15 family residential neighborhood abut a strip of commercial properties in the southwest
16 quadrant of the interchange. These residences are located in a census block with a
17 concentration of minorities. There are no non-minority populations in the vicinity of the
18 interchange.

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

29 Although no residences would be displaced between E-470 and US 36, approximately
30 10 garages would need to be acquired from condominiums adjacent to I-25 near
31 120th Avenue. None of these would be from areas with minority or low-income populations.
32 Neighborhoods in this segment extend east and west of the highway and have developed
33 around the interstate. Residences immediately adjacent to the highway would experience an
34 increase in traffic and traffic related impacts (noise, visual, air emissions). This would affect all
35 segments of the population.

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

42 The proposed improvements would require the relocation of ten businesses as a result of the
43 highway component. Assessor data indicate that these businesses provide services that
44 include equipment storage, car sales and service, warehouse, food sales, gas/convenience,
45 and home and RV sales. These businesses were not identified as being minority-owned by

1 the Colorado Office of Economic Development and International Trade, Minority Business
2 Office; through public involvement efforts; or through the business survey distributed for this
3 project. There is no evidence to suggest that these businesses have any particular connection
4 to a minority community or provide employment, goods, and/or services uniquely important to
5 a minority or low-income population group.

6 For the highway component, the noise analysis identified impacts to a total of 679 Category B
7 land uses (residences, motels, hotels, public meeting rooms, schools, churches, libraries,
8 hospitals, picnic areas, playgrounds, active sports areas and parks) and 161 impacts to
9 Category C land uses (developed lands, properties, or activities like commercial uses). With
10 the implementation of noise mitigation (including Quiet Zones and noise barriers),
11 181 residential (Category B) noise impacts would be eliminated. Twenty of the mitigated
12 receivers are located in Wellington East and 30 of the mitigated receivers are located in the
13 Mountain Range subdivision; both of these neighborhoods comprise minority communities.
14 Other mitigated receivers are scattered along North I-25 and are not part of a neighborhood or
15 community. Noise impacts would affect both minority and low-income populations, as well as
16 non-minority and non-low-income populations along I-25.

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

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

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

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

41 To use the new express lanes included in the highway component, tollway users in single
42 occupant vehicles would be required to pay for their travel. Impacts as a result of tolled
43 express lanes are the same as those described for Package B, Components B-H2, B-H3, and
44 B-H4. **Table 3.2-10** summarizes environmental justice impacts for the highway component of
45 the Preferred Alternative.

1 **Table 3.2-10 Environmental Justice Impact Summary for the Highway Component**
2 **of 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.

3 ***Commuter Rail***

4 Minority and low-income populations are distributed along the BNSF alignment with
5 concentrations in Fort Collins, Loveland, Berthoud, and Longmont. One hundred and sixty
6 populated census blocks and 50 block groups are adjacent to the BNSF rail line. Of these,
7 50 census blocks have higher than average populations of minorities and 21 census block
8 groups have higher than average numbers of low-income households.

9 Construction of the commuter rail would require the relocation of 31 residences. Of the
10 31 residential impacts, 14 would occur in census blocks or block groups containing minority or
11 low-income populations. All of these would occur in Longmont, in minority and low-income
12 neighborhoods adjacent to the BNSF corridor. Given the total amount of comparable housing
13 stock in this area, no effect on local or regional population distribution or housing demand
14 would be expected.

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

- 18 ▶ Bill Reed Middle School. This school has a high concentration of Hispanic/Latino students.
19 Existing transit to the school is limited. The school is within 0.25 mile of the proposed
20 Downtown Loveland Transit Station. Access to commuter rail would benefit school-aged
21 children. Although the school is currently located in an urbanized area, an increase in noise
22 and vibration would be expected. The commuter rail option would benefit these students by
23 providing service to the school and alleviating a long bus ride for many students.
- 24 ▶ Impacto De Fe. This largely Hispanic church in Loveland, with a historic presence, is
25 located approximately 0.5 mile from the proposed Downtown Loveland Transit Station.
26 Access to commuter rail could facilitate community participation in church events and
27 activities.
- 28 ▶ Salud Family Health Center. This health center is located approximately 0.5 mile from the
29 proposed Sugar Mill Station in Longmont. Access to commuter rail would benefit persons
30 along the Front Range who are uninsured or underinsured and in need of medical care.

- 1 ▶ St. John's Church. This church is located approximately one mile from the proposed
2 Sugar Mill Station in Longmont. Access to commuter rail could facilitate community
3 participation in church events and activities.
- 4 ▶ OUR (Outreach United Research) Center. This medical center is located approximately
5 one mile from the proposed Sugar Mill Station in Longmont. Access to commuter rail would
6 benefit families in need of medical care.
- 7 ▶ St. Joseph's Church. This church is located approximately 0.5 mile from the Fort Collins
8 Downtown Transit Center. Access to commuter rail could facilitate community participation
9 in church events and activities.
- 10 ▶ The Pullman Center. This community center is located less than one mile from the
11 Downtown Loveland Transit Station. Access to commuter rail could facilitate community
12 events and activities.

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

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

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

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

1 The requirement of passenger trains to blow their horns at at-grade crossings would increase
2 noise in all neighborhoods adjacent to the commuter rail alignment. The noise analysis
3 identified a total of 2,192 residential noise impacts along the commuter rail corridor. Of these
4 impacts 1,495 would be moderate impacts and 697 would be severe impacts. Approximately
5 half of the impacts would be in Longmont. Most of the noise impacts would occur in census-
6 identified minority or low-income areas. However, it is estimated that with the implementation
7 of Quiet Zones (and noise walls located outside of Longmont), potential impacts to all
8 residences along the BNSF corridor would be eliminated. CDOT and FHWA will work will work
9 with local agencies (who must submit quiet zone applications to the PUC) to implement quiet
10 zones, where feasible and reasonable. If quiet zones cannot be implemented, other mitigation
11 measures (such as noise barriers) have been identified as described below and in **Section 3.6**
12 *Noise and Vibration*). As described in **Section 3.6.4.4 Rail Noise and Vibration Mitigation**
13 *Evaluation*, noise barriers will be considered if quiet zones and/or wayside horns are not
14 feasible and reasonable.

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

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

24 An increase in commuter rail and vehicular traffic around station sites would result in localized
25 increases in air emissions. Minority and/or low-income populations located near proposed
26 stations would be affected. According to the air quality analysis prepared for this project
27 (**Section 3.5 Air Quality**); emissions associated with increased activity at stations would not
28 exceed National Ambient Air Quality Standards (NAAQS). The proximity of the station sites
29 would be beneficial for the nearby populations, especially those within walking distance.

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

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

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

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

10 The addition of passing track and maintenance roads and the resulting operational traffic
11 impacts, right-of-way fencing and noise, vibration, and visual impacts would negatively affect
12 minority and low-income neighborhoods and community cohesion in Longmont. These impacts
13 could reduce property values in minority and low-income areas, except for the areas within
14 walking distance of the two stations, where property values would likely increase. **Table 3.2-11**
15 summarizes environmental justice impacts of commuter rail in the Preferred Alternative.

16 **Table 3.2-11 Environmental Justice Impact Summary for Commuter Rail**
17 **Component for 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

18 ***I-25 Express Bus***

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

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

5 Impacts to the neighborhoods adjacent to the proposed maintenance facility at 31st Street and
6 west of 1st Avenue in Greeley would be the same as those identified for Package A,
7 Components A-T3 and A-T4. **Table 3.2-12** summarizes environmental justice impacts of
8 express bus in the Preferred Alternative.

9 **Table 3.2-12 Environmental Justice Impact Summary for the Express Bus**
10 **Component**

Minority/Low-Income Populations	Non-Minority/Non-Low-Income Populations
No residential or business property displacements	No residential or 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

11 *US 85 Commuter Bus*

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

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

25 Construction of bus stations and maintenance facilities would not require the relocation of any
26 residences or businesses. However, an increase in bus and vehicular traffic around station
27 sites would result in localized increases in air emissions. Impacts would affect minority and/or
28 low-income populations located near proposed station sites. According to the air quality
29 analysis prepared for this project, emissions associated with increased activity at stations
30 would not exceed NAAQS. **Table 3.2-13** summarizes environmental justice impacts for the
31 commuter rail component of the Preferred Alternative.

32

1 **Table 3.2-13 Environmental Justice Impact Summary for Commuter Rail**
2 **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.

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

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

20 **3.2.4.4 CONCLUSION**

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

26 ***No-Action Alternative***

27 While impacts for the No-Action Alternative would be less substantial than the impacts
28 described for Package A, Package B, and the Preferred Alternative, local populations would
29 not benefit from much-needed transportation improvements. In addition, local communities
30 would receive adverse effects resulting from transportation needs unmet. These adverse
31 effects would result in direct and indirect effects on communities that are typically caused by
32 traffic congestion and impaired mobility, including an increase in air emissions and noise,

1 longer travel times, traffic queues at key interchanges, neighborhood traffic intrusion,
2 deteriorating safety conditions, and lengthened emergency response times. The increase in
3 noise level to minority and low-income populations would be small and would not be noticeable
4 to most people. No noise abatement measures are included in the No-Action Alternative.

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

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

13 *Package A*

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

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

26 In general, impacts and benefits from Package A would be distributed across all communities,
27 including minority and low-income populations, as well as non-minority/non-low-income
28 populations. Although construction of the commuter rail under Package A would require
29 16 residential relocations within minority/low-income areas, there is no evidence these would
30 be disproportionately high and adverse effects since the mitigation commitments, including
31 relocation benefits are generous. There would be no noise impacts (after mitigation), but there
32 would be visual impacts, traffic impacts, and the potential for exacerbating the existing barrier
33 created by the BNSF corridor. As with the relocations, the visual impacts, traffic impacts, and
34 community cohesion impacts would not be considered disproportionately high and adverse
35 effects. Minority and low-income residents, as well as the overall community, would benefit
36 from safety and access improvements to businesses, residences, and community facilities.

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

42

1 *Package B*

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

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

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

19 *Preferred Alternative*

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

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

35 Impacts and benefits resulting from the Preferred Alternative would be distributed across all
36 communities, including minority and low-income populations, as well as non-minority/non-low-
37 income populations. Relative to Package A, the Preferred Alternative reduces impacts in
38 Longmont by removing the second track and adjusting the alignment to fit more closely to the
39 existing corridor (i.e. there will be no removal of parking and no relocations along Atwood
40 Street). Further, all segments of the population would benefit from safety and access
41 improvements to businesses, residences, and community facilities, from stronger regional
42 community connections resulting from the Preferred Alternative; and from mitigation
43 commitments which will, in some cases, improve conditions over existing conditions and over
44 the No-Action Alternative.

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

7 **3.2.4.5 MITIGATION MEASURES**

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

16 Mitigation has already been factored in to the analysis of impacts to minority and low-income
17 populations. CDOT and FHWA intend to install new highway traffic noise abatement measures
18 in the form of barriers (see **Section 3.6.4.5 Noise and Vibration, Impacted Receivers After**
19 *Recommended Mitigations*). If it subsequently develops during final design that these
20 conditions have changed substantially, the abatement measures will be reassessed in
21 accordance with the latest applicable guidance. A final decision regarding installation of the
22 abatement measure(s) will be made upon completion of the project's final design and the
23 accompanying public involvement processes.

24 In a similar manner, CDOT and FHWA intend to establish quiet zones at grade crossings for
25 commuter rail based on the rail noise abatement analyses accomplished thus far (see
26 **Section 3.6.4.4 Noise and Vibration, Impacted Receivers After Recommended Mitigations**).
27 The quiet zones will require lead involvement by the various local governments that control the
28 various streets that cross the commuter rail corridor. These agencies have indicated support,
29 but complete participation by the local agencies cannot be guaranteed at this time. To
30 supplement the quiet zones, CDOT and FHWA intend to construct three noise walls along the
31 rail corridor (see **Section 3.6.4.4 Noise and Vibration, Impacted Receivers After**
32 *Recommended Mitigations*). These commitments would be finalized during final design
33 through various intergovernmental agreements. If it subsequently develops during final design
34 that conditions have changed substantially, the abatement measures will be reassessed in
35 accordance with the latest applicable guidance. A final decision regarding installation of quiet
36 zones will be made upon completion of the project's final design and the accompanying public
37 involvement processes. If in the end, local governments do not want to pursue quiet zones,
38 CDOT and FHWA commit to mitigating the noise impacts by other means, including building
39 noise walls following FTA guidelines.

40 Quiet zones are the best and preferred train horn mitigation because quiet zones would
41 eliminate the noise source. The direct involvement and sponsorship of local government
42 agencies is required for quiet zone implementation, and they must apply to the PUC for quiet
43 zone approval. CDOT and FHWA cannot guarantee such local government agency actions;
44 however, CDOT and FHWA anticipate that local government agencies will agree that quiet

1 zones will be beneficial and be willing to sponsor the required PUC applications. If for any
2 reason, one or more quiet zones cannot be implemented, the recommended mitigation would
3 change to additional noise walls for those locations along the rail corridor.

4 Vibration impacts from commuter rail have been identified for several locations (see
5 **Section 3.6.4.4 Noise and Vibration, Impacted Receivers After Recommended Mitigations**).
6 CDOT and FHWA intend to eliminate these impacts through the strategic use of special
7 trackwork and tire-derived aggregate (TDA) in the construction of commuter rail line. The final
8 decision on the best methods to eliminate the rail vibration impacts will be made at final
9 design.

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

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

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

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