

## 4.5 SOCIAL IMPACTS AND COMMUNITY FACILITIES

### Summary

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This section describes the social and community characteristics of the United States Highway 36 (US 36) corridor, and the types of impacts the proposed improvements would have on community facilities. The Affected Environment subsection summarizes the US 36 corridor and describes the following characteristics, by segment:

- Population and household characteristics
- Housing types
- Neighborhood boundaries
- Travel corridors
- Community facilities
- Emergency services

The impact analysis evaluates community impacts with the following criteria:

- Number of traditional transit users accessing stations
- Potential areas of impeded access for neighborhoods and communities
- Community facilities
- Impacts to population size and growth
- Changes in emergency service response routes or access to facilities

In order to provide an overview of the US 36 corridor's social context, the study area for the affected environment analysis considers demographics and characteristics within 0.5 mile of the centerline of the improvements.<sup>1</sup> An estimated 124,335 residents live within 0.5 mile of US 36. Based on forecasts by the Denver Regional Council of Governments (DRCOG), the population within the study area is expected to grow by 0.9 percent annually, to reach 163,326 persons<sup>2</sup> by 2035, as shown in Table 4.5-1, Study Area Population.

*An estimated  
124,335 residents  
live within 0.5 mile  
of US 36.*

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<sup>1</sup> The population within 0.5 mile of the study area is overestimated because population numbers were not apportioned to the 0.5 mile footprint.

<sup>2</sup> The population reported in Chapter 1, Purpose and Need, and Section 4.23, Cumulative Impacts, will differ from population reported in this section. This is because the population reported in those sections accounts for a substantially larger analysis area (the 3-mile project area surrounding US 36, which is more appropriate for the macro-level analysis).

**Table 4.5-1: Study Area Population**

| Segment             | 2005           | 2035           | Annual Change |
|---------------------|----------------|----------------|---------------|
| Denver              | N/A            | N/A            | NA            |
| Adams               | 52,480         | 58,652         | 0.4%          |
| Westminster         | 28,242         | 39,549         | 1.1%          |
| Broomfield          | 11,738         | 22,120         | 2.1%          |
| Superior/Louisville | 17,562         | 26,207         | 1.3%          |
| Boulder             | 14,313         | 16,798         | 0.5%          |
| <b>Total</b>        | <b>124,335</b> | <b>163,326</b> | <b>0.9%</b>   |

Source: DRCOG, 2007.

Notes:

% = percent

N/A = not applicable

Based on 2000 data collected from the United States (U.S.) Census (2002), the study area has an estimated 22,271 housing units with detached single-family units representing 64 percent of the overall total as shown in Table 4.5-2, Study Area Housing Inventory.

**Table 4.5-2: Study Area Housing Inventory**

| Segment             | Single-Family Units | Multi-Family Units | Other      | 2000 Total    |
|---------------------|---------------------|--------------------|------------|---------------|
| Denver              | N/A                 | N/A                | N/A        | N/A           |
| Adams               | 6,967               | 3,315              | 92         | 10,373        |
| Westminster         | 2,106               | 747                | 16         | 2,869         |
| Broomfield          | 594                 | 691                | 15         | 1,300         |
| Superior/Louisville | 3,759               | 2,344              | 15         | 6,118         |
| Boulder             | 765                 | 823                | 21         | 1,611         |
| <b>Total</b>        | <b>14,191</b>       | <b>7,920</b>       | <b>160</b> | <b>22,271</b> |

Source: U.S. Census Bureau, 2002.

Note:

N/A = not applicable

Social and community facility impacts are generally related to population losses and redistribution. Some population losses associated with residential property acquisition for right-of-way (ROW) needs would occur under all build packages. The expected indirect effects would primarily involve population shifts to higher-density development surrounding stations where mixed-use, transit oriented development (TOD) is planned. These population impacts are not anticipated to negatively impact any community facilities or schools in the study area. Section 4.3, Economic Considerations, summarizes the area employment impacts.

## Affected Environment

The affected environment describes the social context in the study area. Communities are discussed by segment and the following characteristics are described: population and household characteristics, housing type, neighborhoods, travel corridors, and community facilities.

Information was collected for an area within 0.5 mile of the centerline of US 36, and the aggregated results are discussed. This study area was selected to provide a general description of existing conditions including demographic information, housing stock and character, neighborhoods, and community facilities adjacent to the proposed improvements. Population trends and household data were developed

based on DRCOG's 2005 estimates and 2035 forecasts.<sup>3</sup> Housing information was gathered from U.S. Census 2000 documents.<sup>4</sup> The following summarizes the definitions used to describe the housing inventory:

- **Single-family** — includes attached and detached units for a single household (i.e., house or townhome).
- **Multi-family** — includes multiple attached units that are part of a larger building (i.e., apartments or condominiums).
- **Other** — includes mobile homes, boats, and recreation vehicles.

The number of households plus a vacancy factor equals the total housing units within an area. Due to a lack of recent detailed housing data, the 2000 U.S. Census housing units and the 2005 households are not directly comparable.

Neighborhood boundaries, travel corridors, and community facilities were identified by reviewing local planning documents and field surveys. The community facility inventory included schools, community and senior centers, cultural facilities, libraries, city and town halls, recreational facilities, and medical facilities.

### **Denver Segment**

The Denver Segment is not discussed in this section because physical improvements to US 36 would not extend into this segment.

### **Adams Segment**

#### ***Population and Household Characteristics***

The Adams Segment had 52,480 residents in the study area in 2005, comprising approximately 13 percent of the total Adams County population (409,220 residents). The Adams Segment contained 18,476 households in the study area with an average size of 2.8 persons per household. This segment is anticipated to grow at a 0.4 percent annual rate over the next 30 years, reaching an estimated 58,652 residents by 2035. This segment is expected to be the slowest growing segment in the study area.

*The Adams Segment is anticipated to grow at a 0.4 percent annual rate over the next 30 years.*

#### ***Housing Inventory***

In 2000, the Adams Segment had 10,373 housing units in the study area, the majority of which were single-family units. The remaining units comprised 3,315 multi-family units and 92 other units. The housing units in the Adams Segment comprised approximately 8 percent of the total housing inventory (132,294 units) in Adams County in 2000.

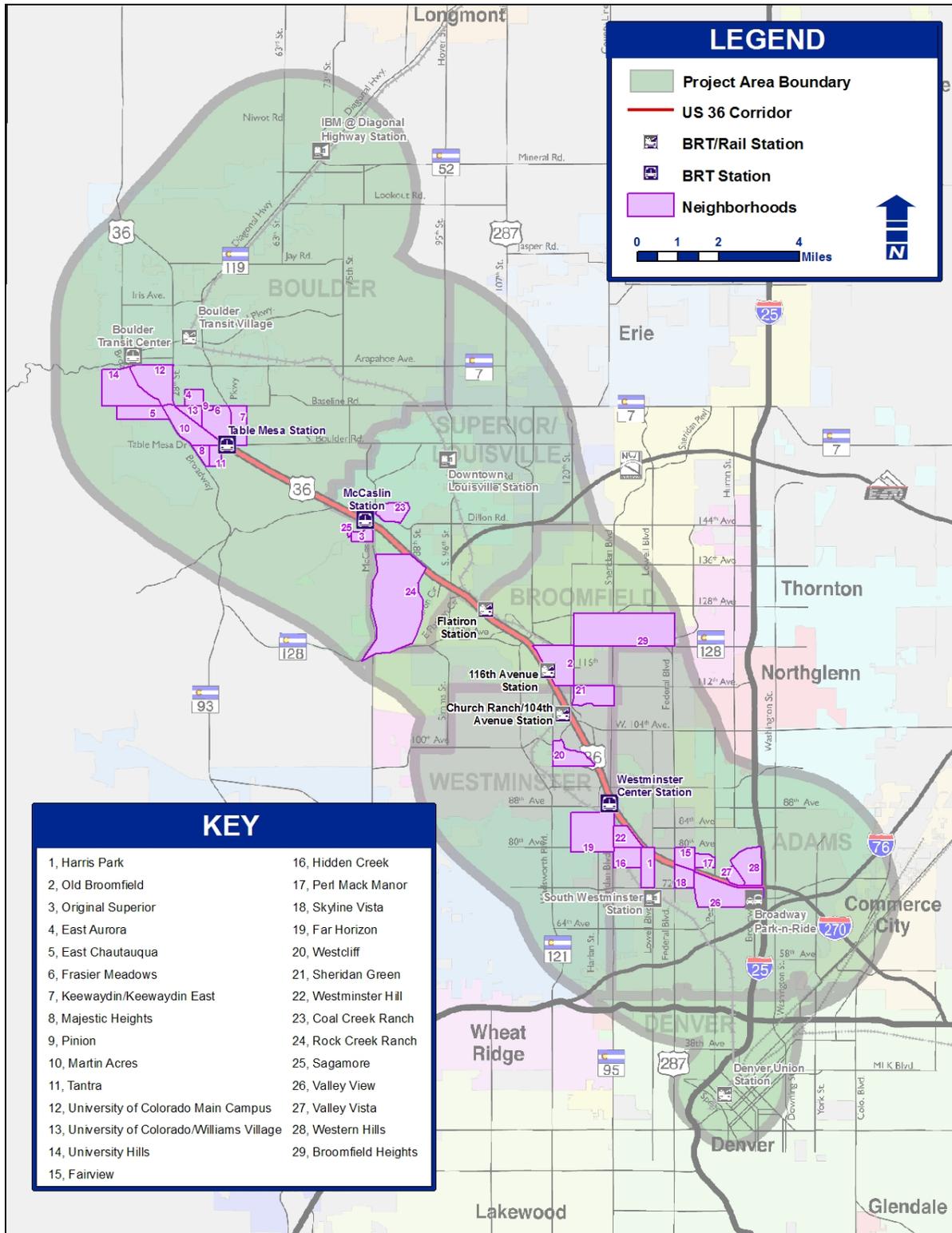
#### ***Neighborhoods***

The Adams Segment contains several neighborhoods as shown in Figure 4.5-1, Neighborhoods in Study Area, including Western Hills, Valley Vista, Perl Mack Manor, Fairview, Valley View, Skyline Vista, Harris Park, Hidden Creek, and Westminster Hill.

<sup>3</sup> This source represents the most recent land use data sets available from DRCOG at the time of the analysis (DRCOG 2007).

<sup>4</sup> This represents the most recent data available from the census at the time of the analysis.

Figure 4.5-1: Neighborhoods in Study Area



Source: US 36 Mobility Partnership, 2009.

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

### **Travel Corridors**

The major highways through the Adams Segment are US 36, Interstate 270 (I-270), I-76, and I-70, all of which connect to I-25. US 36 begins at the I-25 interchange at approximately 72<sup>nd</sup> Street and continues northwest. I-270 begins at the same interchange and heads southeast to join I-70 near Quebec Street. I-76 originates at I-70 and Wadsworth Boulevard and runs northeast to cross I-25 near 65<sup>th</sup> Avenue, continuing northeast to Nebraska. The primary east/west arterials in the segment are West 64<sup>th</sup> Avenue, 70<sup>th</sup> Avenue, and 72<sup>nd</sup> Avenue. This segment's major north/south arterial streets include Broadway, Bannock Street, Pecos Street, Federal Boulevard, and Lowell Boulevard, each of which (except Bannock Street and Lowell Boulevard) interchanges with US 36. In addition, Lowell Boulevard crosses under US 36 between Federal Boulevard and Sheridan Boulevard.

An important roadway connection from US 36 is provided to the I-25 express lanes into downtown Denver. The existing express lanes are reversible by time of day with southbound operations in morning (a.m.) hours, and northbound operations in evening (p.m.) hours. Buses and high-occupancy vehicles (HOVs) use the lanes for free. A variable pricing system allows single-occupant vehicles (SOVs) to travel in the express lanes for a fee that varies with time of day. Users from the US 36 corridor can access the lanes via US 36 or from I-25 at 70<sup>th</sup> Avenue.

### **Community Facilities**

There are several community facilities in this segment as shown in Figure 4.5-2, Schools within Study Area, and Figure 4.5-3, Community Facilities within Study Area.

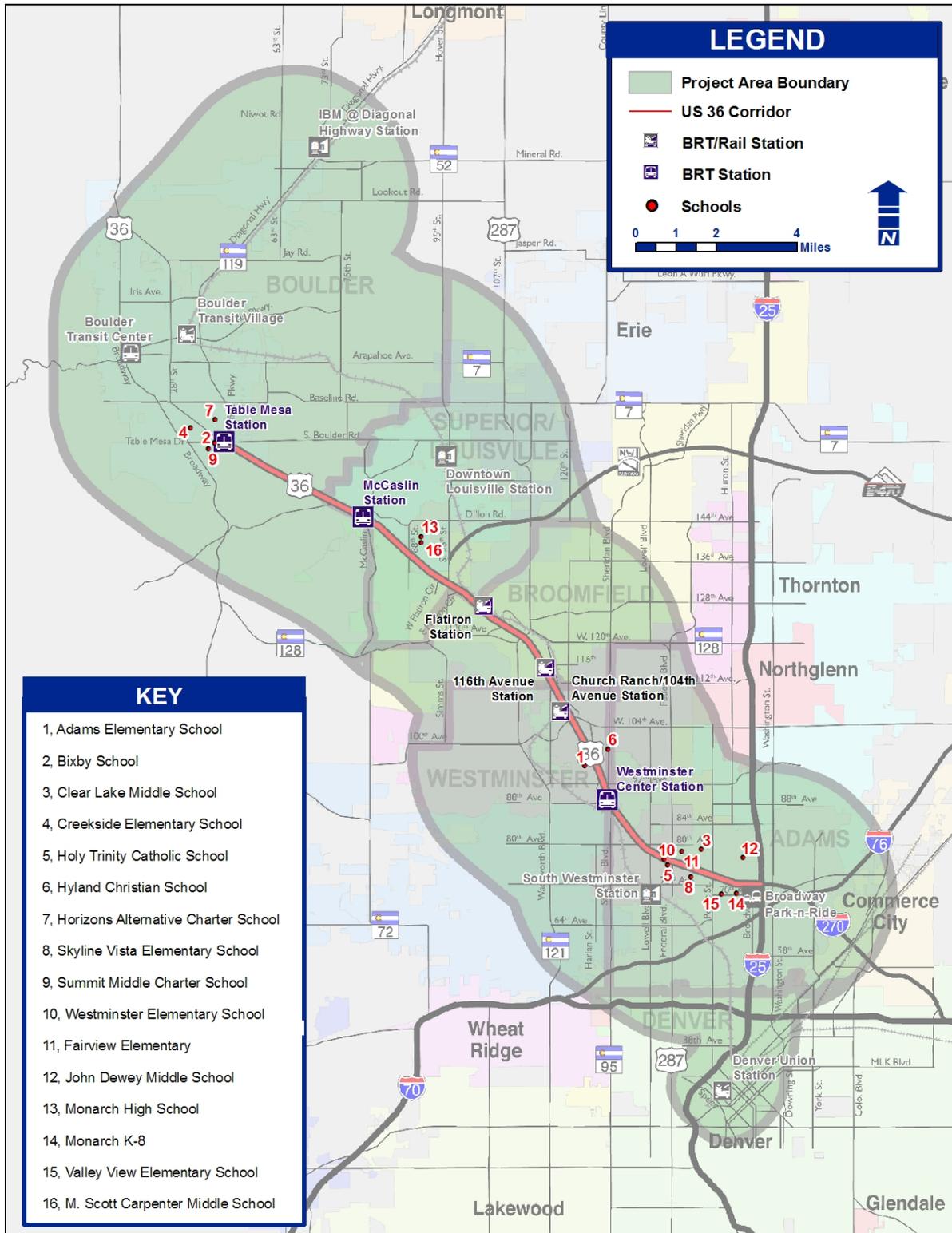
The Perl Mack Community Center at 7025 Mariposa Street is an important facility for the neighborhoods in this segment. The community center has a number of programs for a wide range of participants, and is an active facility most days and evenings. The center is also the location of the Perl Mack Aquatic Center that is used by residents for senior, adult, and youth programs. The center is south of US 36, with access from the Pecos Street interchange.

The Perl Mack Library is north of US 36 at 7611 Hilltop Circle. The Pecos Street Branch U.S. Post Office is also on the north side of US 36 at 1411 Cortez Street. Both of these facilities have access from Pecos Street.

### **Emergency Services**

Emergency services in this segment are provided by several different agencies. Fire/ambulance services are provided by the North Washington Fire District, the South Adams County Fire District, and the City of Westminster Fire District. Police services are primarily provided by the Adams County Sheriff and City of Westminster Police departments. On US 36, Colorado State Patrol is the lead agency, assisted by the Adams County Sheriff and the City of Westminster Police departments. The services use the existing connections of the arterials and collector roadways that cross US 36 in this segment. There are no emergency services facilities immediately adjacent to US 36 in this segment. Additional information on emergency services can be found in Section 4.10, Public Safety and Security.

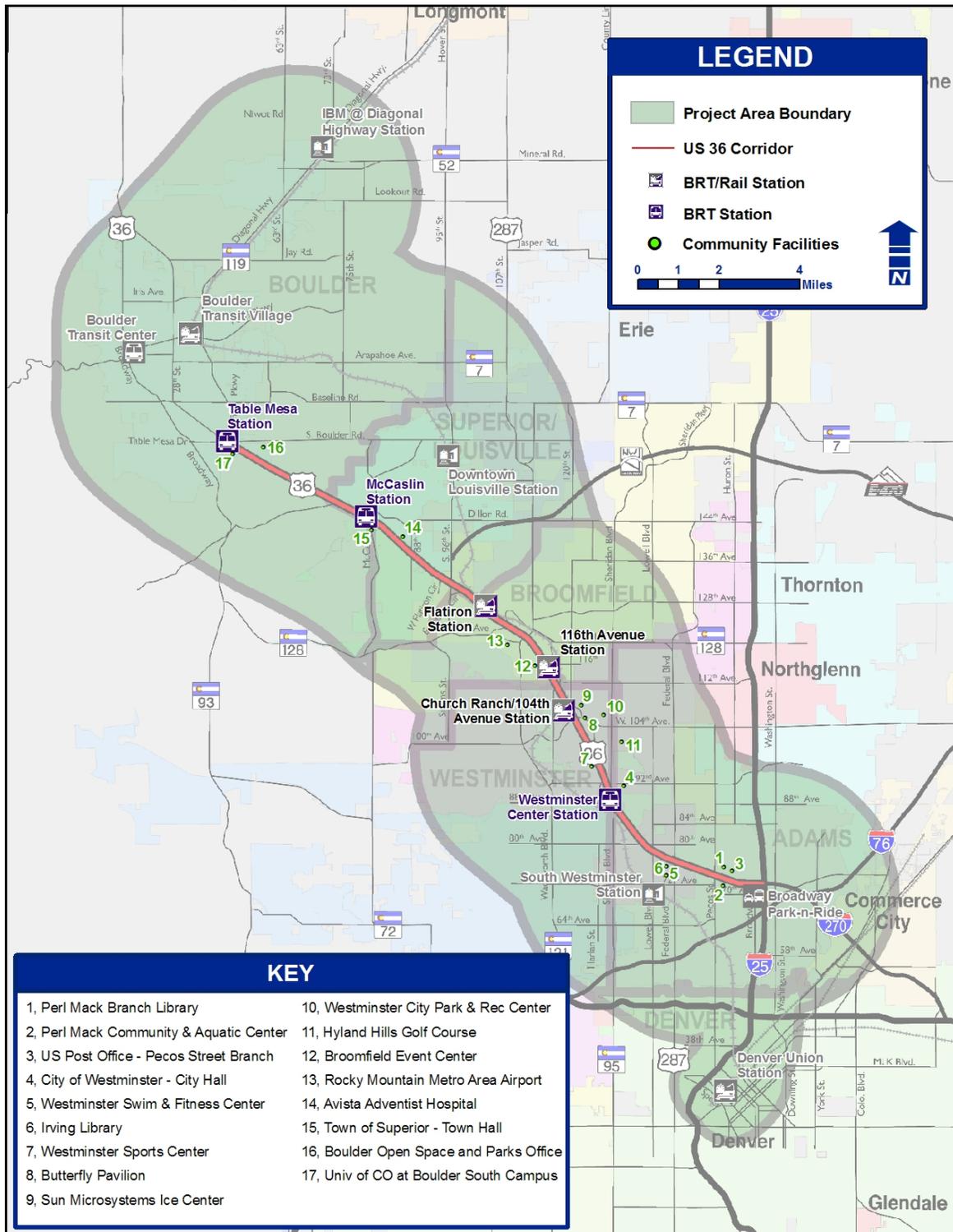
Figure 4.5-2: Schools within Study Area



Source: US 36 Mobility Partnership, 2009.

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

Figure 4.5-3: Community Facilities within Study Area



Source: US 36 Mobility Partnership, 2009.

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

## **Westminster Segment**

*The Westminster Segment is anticipated to grow 1.1 percent annually over the next 30 years.*

### **Population and Household Characteristics**

The Westminster Segment had 28,242 residents in the study area in 2005, comprising approximately 5 percent of the total Jefferson County population (535,837 residents). The Westminster Segment contained 10,394 households in the study area with an average size of 2.7 persons per household. This segment is anticipated to grow 1.1 percent annually over the next 30 years and reach an estimated 39,549 residents by 2035.

### **Housing Inventory**

In 2000, the Westminster Segment had 2,869 housing units in the study area. The majority of housing units (2,106 units) were single-family units. The remaining units were composed of 747 multi-family units and 16 other units. The housing units in this segment accounted for approximately 1 percent of the total housing inventory (212,488 units) in Jefferson County in 2000.

### **Neighborhoods**

The Westminster Segment contains several neighborhoods, shown in Figure 4.5-1, Neighborhoods in Study Area, including Far Horizon, Westcliff, and Sheridan Green.

### **Travel Corridors**

US 36 is the only limited access highway running through the Westminster Segment. The major east/west arterials in the segment include 92<sup>nd</sup> Avenue and 104<sup>th</sup> Avenue/Church Ranch Boulevard. Sheridan Boulevard and Wadsworth Boulevard serve as the north/south arterials for this segment. Wadsworth Boulevard splits to form Wadsworth Parkway at 92<sup>nd</sup> Avenue. Both roadways exist from that point northward with Wadsworth Parkway connecting with US 36 in Broomfield, and Wadsworth Boulevard crossing over US 36. Sheridan Boulevard and 104<sup>th</sup> Avenue/Church Ranch Boulevard each have interchanges on US 36.

### **Community Facilities**

There are a number of community facilities immediately adjacent to US 36, as shown in Figure 4.5-2, Schools within Study Area, and Figure 4.5-3, Community Facilities within Study Area. The City of Westminster Swim and Fitness Center is located at 3260 West 76<sup>th</sup> Avenue. This location is also the site of the Westminster Municipal Court at 3030 Turnpike Drive. The location is in the southwest quadrant of the Federal Boulevard interchange with US 36. A major ballfield complex is located in the northeast quadrant of the Federal Boulevard interchange with access from Cottonwood Drive.

West of Federal Boulevard on 74<sup>th</sup> Avenue is the Irving Street Branch (7392 Irving Street) of the Westminster Library System.

A small recreational park is associated with the former Westminster Hills Elementary School, located on the west side of US 36, north of 80<sup>th</sup> Avenue. The Advent Lutheran Church is located at West 80<sup>th</sup> Avenue and Mead Street.

Westminster City Hall is located north of US 36 and east of Sheridan Boulevard at 4800 West 92<sup>nd</sup> Avenue. The City Hall complex is also the location of the police headquarters.

Located north of US 36 on Sheridan Boulevard at West 98<sup>th</sup> Avenue is the Hyland Hills Golf Course. North of that location at 104<sup>th</sup> Avenue is the Westminster City Park and Recreation Center. Also, along

104<sup>th</sup> Avenue at 6252 West 104<sup>th</sup> Avenue is the Butterfly Pavilion and Insect Center. This facility is just east of US 36 at Westminster Boulevard.

### **Emergency Services**

The City of Westminster provides emergency services in this segment. The services use the existing connections of the arterials and collector roadways that cross US 36 in this segment. The city police department and one of several fire stations is located at 9110 Yates Street, about three blocks north and one block east of the Sheridan Boulevard interchange with US 36. The Colorado State Patrol provides police services for US 36.

### **Broomfield Segment**

#### **Population and Household Characteristics**

The Broomfield Segment had 11,738 residents in the study area in 2005, comprising approximately 25 percent of the total of the City and County of Broomfield's population (46,512 residents). The Broomfield Segment contained 4,256 households in the study area with an average size of 2.8 persons per household. The segment is anticipated to grow at a 2.1 percent annual rate over the next 30 years, to reach an estimated 22,120 residents by 2035. This segment is anticipated to be the fastest growing segment in the study area, likely as a result of high-tech and retail jobs and new developments around these business centers.

*The Broomfield Segment is anticipated to grow at a 2.1 percent annual rate over the next 30 years.*

#### **Housing Inventory**

The Broomfield Segment had 1,300 housing units in the study area in 2000, of which the majority were multi-family units. The remaining units comprise 594 single-family units and 15 other units. The housing units in the Broomfield Segment accounted for approximately 9 percent of the total housing inventory (14,317 units) in the City and County of Broomfield in 2000.

#### **Neighborhoods**

The original Broomfield town site and the Broomfield Heights neighborhoods are located in the Broomfield Segment, and are shown in Figure 4.5-1, Neighborhoods in Study Area, including Old Broomfield and Broomfield Heights.

#### **Travel Corridors**

US 36 is the major highway running through the Broomfield Segment. The major continuous east/west arterial in this segment is State Highway 128 (SH 128) that connects to 120<sup>th</sup> Avenue at Wadsworth Parkway. It is planned that 120<sup>th</sup> Avenue would be extended west across US 36 to link to SH 128. The Interlocken Loop is a major arterial in the Flatiron Crossing Activity Center that connects north to the Northwest Parkway. Wadsworth Parkway (SH 121) connects to US 287 on the north side of US 36 to serve as the major north/south arterial for this segment.

#### **Community Facilities**

A major new community facility in this segment opened for use in 2006. The Broomfield Event Center is located at 11450 Broomfield Lane in the new Arista development on the west side of US 36. The event center is a large multi-use facility that hosts minor league basketball and hockey games, as well as concerts and other activities. Attendance in the range of 6,000 to 10,000 patrons is possible at the center.

Access is currently provided from Wadsworth Parkway to the west, or Old Wadsworth Boulevard from the south.

South of US 36 and west of Wadsworth Parkway is a major regional airport formerly known as Jeffco Airport and recently renamed the Rocky Mountain Metropolitan Airport.

### **Emergency Services**

The North Metro Fire District and the City of Broomfield Police Department provide emergency services in this segment. The services use the existing connections of the arterials and collector roadways that cross US 36 in this segment. There are no emergency service facilities immediately adjacent to US 36 in this segment. The Colorado State Patrol provides police services for US 36.

### **Superior/Louisville Segment**

*The Superior/Louisville Segment is forecast to grow by 1.3 percent annually over the next 30 years.*

#### **Population and Household Characteristics**

The Superior/Louisville Segment had 17,562 residents in the study area in 2005, comprising approximately 6 percent of the total Boulder County population (294,045 residents). The Superior/Louisville Segment contained 6,789 households in the study area with an average size of 2.6 persons per household. The Superior/Louisville Segment is anticipated to grow at a 1.3 percent annual rate over the next 30 years, reaching an estimated 26,207 residents by 2035.

### **Housing Inventory**

The Superior/Louisville Segment had 6,118 housing units in the study area in 2000, with the majority of housing units being single-family units. The remaining units comprise 2,344 multi-family units and 15 other units. The housing units in the Superior/Louisville Segment accounted for approximately 5 percent of the total housing inventory (119,900 units) in Boulder County in 2000.

### **Neighborhoods**

Several neighborhoods exist in the Superior/Louisville Segment, as shown in Figure 4.5-1, Neighborhoods in Study Area, including Rock Creek Ranch, Coal Creek Ranch, Sagamore, and Original Superior.

### **Travel Corridors**

US 36 is the major highway running through the Superior/Louisville Segment. The major east/west arterials in this segment include Dillon Road, Marshall Road, and South Boulder Road. The north/south arterials for this segment include the Interlocken Loop that connects north to the Northwest Parkway, McCaslin Boulevard that intersects with US 36, and 88<sup>th</sup> Street that crosses over US 36.

### **Community Facilities**

There are several community facilities located in the Superior/Louisville Segment, as shown in Figure 4.5-2, Schools within Study Area, and Figure 4.5-3, Community Facilities within Study Area.

The Superior Town Hall is located at 124 East Coal Creek Drive, just south of US 36 along McCaslin Boulevard. A combined fire station and Boulder County sheriff substation is located south of US 36 at 2700 South Indiana Street at the intersection with Coalton Road.

### **Emergency Services**

Several agencies provide emergency services in this segment. Louisville Protection District, a special district, provides fire and rescue services for areas north of and including US 36, and the City of Louisville provides police services on the north side of US 36. The Town of Superior provides police services through the Boulder County Sheriff's department on the south side of US 36. The Colorado State Patrol provides police services for US 36. Several private ambulance companies provide ambulance services along this segment of US 36. The services use the existing connections of the arterials and collector roadways that cross US 36 in this segment. The Centura-Avista Adventist Hospital is located adjacent to US 36 at the 88<sup>th</sup> Street overpass in Louisville. Emergency services are provided by the hospital to the immediate area.

### **Boulder Segment**

#### **Population and Household Characteristics**

The Boulder Segment had 14,313 residents in the study area in 2005, comprising approximately 5 percent of the total Boulder County population (294,045 residents). The Boulder Segment contained 6,211 households in the study area with an average size of 2.3 persons per household. This segment is anticipated to grow at a 0.5 percent annual rate over the next 30 years, resulting in an estimated 16,798 residents by 2035. This segment is anticipated to be one of the slowest growing segments in the study area.

*The Boulder Segment is anticipated to grow by 0.5 percent annually over the next 30 years.*

#### **Housing Inventory**

In 2000, the Boulder Segment had 1,611 housing units in the study area. The majority of the housing units were multi-family units. The remaining units comprise 765 single-family units and 21 other units. The housing units in the Boulder Segment accounted for approximately 14 percent of the total housing inventory (119,900 units) in Boulder County in 2000.

#### **Neighborhoods**

The Boulder Segment includes a diversity of residential neighborhoods, as shown in Figure 4.5-1, Neighborhoods in Study Area, including Tantra, Majestic Heights, Martin Acres, East Chautauqua, University Hills, East Aurora, University of Colorado/Williams Village, Pinion, Frasier Meadows, and Keewaydin/Keewaydin East.

#### **Travel Corridors**

US 36 changes from a limited access highway to a four-lane divided arterial north of the interchange with Baseline Road, and continues through central Boulder as 28<sup>th</sup> Street. The major east/west arterials in the segment include Table Mesa Drive, Baseline Road, Arapahoe Road, Pearl Parkway, and Iris Avenue, which are approximately 1 mile apart. The north/south arterials in the City are Broadway, 28<sup>th</sup> Street, SH 158/Foothills Parkway, and SH 119/Diagonal Highway. At the eastern edge of the City, US 36 ties to SH 158/Foothills Parkway with a freeway-to-freeway interchange. Ramps to and from the east on US 36 connect to southbound and northbound SH 158/Foothills Parkway. Studies of traffic volumes in 2004 indicated about 40 percent of traffic on US 36 destined for Boulder in the a.m. peak hour uses SH 158/Foothills Parkway Community Facilities.

#### **Community Facilities**

The community facilities and schools within this segment appear in Figure 4.5-2, Schools within Study Area, and Figure 4.5-3, Community Facilities within Study Area.

Of particular interest is the Boulder Open Space and Mountain Parks office at 66 South Cherryvale Road, just north of US 36. This facility provides access to trails that lead into the open space system in this segment.

To the south side of US 36 is the University of Colorado Boulder South Campus. This campus is largely undeveloped at present and houses the University's tennis facility. Access is provided from Loop Road via Table Mesa Drive. The main Boulder campus for the university is located west of 28<sup>th</sup> Street between Baseline Road and Arapahoe Road.

### **Emergency Services**

Several agencies provide emergency services in this segment. The City of Boulder Fire District provides fire and rescue services, and currently, Pridemark Paramedics provide ambulance services for this segment of US 36. The Colorado State Patrol provides police services for US 36, while the City of Boulder Police Department and the Boulder County Sheriff's Department provide police services in the surrounding area of this segment. The services use the existing connections of the arterials and collector roadways that cross US 36 in this segment. There are no emergency facilities immediately adjacent to US 36 in this segment.

## **Impact Evaluation**

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The impact evaluation describes how the packages would affect traditional transit users, neighborhoods, community facilities, and population shifts.

Some population losses associated with residential property acquisition for ROW needs would occur under all build packages, particularly in the Adams Segment.

In addition, most neighborhoods and facilities are located sufficiently far enough away from the proposed improvements, so that access and use are not an issue. As a result, these packages would not create new community barriers.

The expected indirect effects would primarily involve an increase in the attractiveness of employment uses in the corridor because of decreased travel times. Analysis of travel patterns with any of the build packages indicates that longer distance work trips could be made to corridor employment areas from within and from outside the corridor.

Some additional development around transit stations could be expected. Communities in the corridor have been planning for additional station area growth both in their comprehensive planning efforts and in their community facilities planning.

### **Methodology**

The impact analysis was based on information collected in the affected environment analysis, site visits to interchanges and proposed transit stations, proposed redevelopment plans, visual surveys in the project area, and in-depth review of aerial photography of the project area. In addition, a series of public meetings were held to engage the involved community members. Using this information, evaluation criteria were developed to consider community impacts. These criteria included:

- Number of traditional transit users accessing stations
- Potential areas of impeded access for neighborhoods and communities
- Community facilities
- Impacts to population size and growth
- Changes in emergency service response routes or access to facilities

### **Traditional Transit Users**

Traditional transit users include low-income persons, minorities, school-age children, seniors, and persons living in households that do not own a vehicle. There can be overlap between these different populations (e.g., a low-income person who does not own a vehicle); therefore, impacts discussed provide the best-case scenario.

The number of traditional transit users benefiting from the improvements was estimated using information collected for a 0.5-mile radius around each transit station. One-half mile is used because it is generally considered to be the maximum distance that a pedestrian will walk to access mass transit.

### **Neighborhoods**

Impacts to neighborhoods were evaluated by answering the following questions:

- Would neighborhoods be severed from access to other portions of the community during construction?
- Would neighborhoods be permanently severed from access to other portions of the community once the improvements are complete?
- Would the mobility of residents in neighborhoods near stations be impacted during construction?
- Would the mobility of residents in neighborhoods near stations be impacted once the improvements are complete?

### **Community Facilities**

Impacts to community facilities were evaluated by answering the following questions:

- Would access of a community facility be degraded during construction?
- Would access to a community facility be permanently severed or would relocation of a community facility be required?

### **Population**

Direct impacts are the result of housing unit acquisition, required for the expanding ROW, which produces a decline in population. These impacts would be most notable in the Adams and Westminster segments. Section 4.4, Right-of-Way and Relocations, details acquisitions and relocations.

Indirect impacts would result from additional development occurring near stations. A qualitative assessment was made for each bus rapid transit (BRT) station site as described below.

### **Emergency Services**

Impacts to the provision of emergency services were assessed using three factors:

- Would the new transportation improvements from the packages affect any emergency services facilities?
- Would routes to and from the emergency services be changed or disrupted by the new transportation improvements?
- Would the response times be lengthened because of changes to the connections across US 36?

### **Package 1: No Action**

#### ***Direct Impacts***

##### **All Segments**

In Package 1, congestion and delays to traffic would not be addressed in the corridor, affecting the attractiveness of corridor land uses relative to business operations and residential opportunities. Increased delays would lead to longer commute times for work trips; reducing attractiveness of corridor employment centers. To avoid US 36, traffic would divert to adjacent arterials, increasing congestion and diminishing the attractiveness of land uses along those local routes.

Package 1 would not provide many additional benefits to traditional transit users or to persons traveling on the highway corridor. Package 1 may be compatible with existing neighborhoods because no significant changes to neighborhood residences or facilities would occur.

In Package 1, access from southbound I-25 and westbound US 36/I-270 would be maintained to Broadway, preserving direct routes for patrons to businesses and neighborhoods. Similarly, access to Yates Street and West 88<sup>th</sup> Avenue would be maintained from northbound Sheridan Boulevard at West 88<sup>th</sup> Place. This would preserve direct routes to hotels, restaurants, and office buildings visible from Sheridan Boulevard. The 80<sup>th</sup> Avenue Bridge Project would likely impact the Advent Lutheran Church, located at West 80<sup>th</sup> Avenue and Meade Street. The impacts associated with this project will be documented in the project specific environmental document being completed by the Colorado Department of Transportation (CDOT).

#### ***Indirect Impacts***

##### **All Segments**

No changes would be made to facilities in the corridor and no property relocations would be necessary. New development would follow existing trends or would be attracted towards the TOD that would occur around FasTracks stations.

### **Package 2: Managed Lanes/Bus Rapid Transit**

#### ***Direct Impacts***

##### **All Segments**

The improvements proposed in Package 2 would not generally affect community facilities. Overall access to the community facilities would be improved through reconstruction of the existing transportation elements and added capacity. Although the highway is the focal point of the majority of the improvements, interchanges, arterial crossings, transit facilities and services, and pedestrian and bicycle facilities would be improved, providing better connections within and among community areas.

Package 2 would replace outdated and aging transportation facilities. The new roadway and transit elements would operate more efficiently and would provide better opportunities for travel to and from uses in the corridor.

Multi-modal transportation opportunities would be enhanced through the implementation of the median BRT stations and services. Priority treatment for BRT and HOVs in the managed lanes would encourage more efficient travel. Mobility choices would be expanded for all users including bicycle and pedestrian travel, enhancing community areas in the corridor.

Package 2 provides an opportunity for transportation agencies in the US 36 corridor to actively manage daily traffic operations through the managed lanes. The availability of reliable transportation capacity would be attractive to certain types of businesses and residents that choose to use the managed lanes.

Package 2 would provide two new access points from the managed lanes directly to the largest activity centers in the corridor at Interlocken/Broomfield and at Westminster Center. Travel time would be more reliable to these locations using the managed lanes and would be more direct than using the adjacent local service interchanges. However, the drop-ramps would introduce freeway-oriented traffic into locations where such traffic would not operate in Package 1. Neighborhoods just south and west of the Westminster Boulevard drop-ramp would see increased traffic during peak-hours because of the drop-ramp. At the Midway Boulevard drop-ramp in Broomfield, traffic would be diverted from the local service interchanges at Wadsworth Parkway and at Interlocken Loop, to Midway Boulevard and Interlocken Boulevard. These trips would largely be employment or business oriented trips through employment and industrial areas, but re-routing would occur.

Arterials that cross US 36 would be widened and improved at Pecos Street, Federal Boulevard, Sheridan Boulevard, Church Ranch Boulevard, Wadsworth Parkway/120<sup>th</sup> Avenue, McCaslin Boulevard, and Table Mesa Drive. These improved crossings would provide better operations in interchange and transit station areas than Package 1. Pedestrian facilities would also be upgraded where needed to CDOT or local standards as the arterial crossings are rebuilt.

As previously described in Section 4.4, Right-of-Way and Relocations, the widened highway would require relocation of residences and businesses. Most of these would be in the Adams and Westminster segments. The businesses provide a number of services, including sales of goods and employment opportunities in the segments. These displacements would not result in a meaningful impact to the larger business community. Direct impacts to population are expected in the Adams and Westminster segments due to property acquisition and displacement (see Section 4.4).

The wider cross section of the improved highway would continue to act as a separating barrier between and among corridor communities and neighborhoods. Interaction and community cohesion could be diminished because of the larger transportation facility in the corridor. However, the improvements along the existing highway corridor would not further isolate or divide neighborhoods. In addition, no community service boundaries would be severed or disrupted for proposed facilities and services such as school districts, police or fire districts.

Highway and BRT station lighting would be increased when new facilities are built. This would increase lighting in adjacent neighborhoods because lighting of new highway and transit facilities would be visible from neighborhoods. Lighting would be directed on transportation facilities and away from adjacent neighborhoods.

Based on the improvements proposed under Package 2, an estimated 2,130 previous transit users would gain additional access and better transit service in the corridor. Overall, 3,930 more riders would be attracted to the BRT service in the managed lanes than in Package 1.

At Broadway, the elimination of access from southbound I-25 and from westbound US 36/I-270 would require travelers to use alternate routes to reach the adjacent residential and commercial areas. From southbound I-25, access for residents and business patrons would be available via 84<sup>th</sup> Avenue, Pecos Street, and 70<sup>th</sup> Avenue. From westbound US 36/I-270, access would be available via York Street or Pecos Street, and 70<sup>th</sup> Avenue. This change in access would require out of direction travel and would represent an inconvenience to area residents. The resulting impacts to businesses on Broadway are discussed in Section 4.3, Right-of-Way and Relocations.

Planned changes to Turnpike Drive to terminate the connection at Federal Boulevard and reroute to Grove Street would affect access to the Westminster Swim and Fitness Center and the city municipal courts. Access to parking would still be possible, but all traffic would need to use West 76<sup>th</sup> Avenue or Turnpike Drive to Grove Street to reach the facilities.

The planned replacement of the Old Wadsworth Boulevard overpass of US 36 with a new overpass at 112<sup>th</sup> Avenue would improve access to the Broomfield Event Center. The project would replace the bridge, but the connections of the local roadways would be the responsibility of others.

The closure of Loop Drive at Table Mesa Drive would require different access for the University of Colorado Boulder South Campus. The project has identified a possible connection to Tantra Drive. Coordination with the City of Boulder and the surrounding neighborhoods would be required to plan this connection, which would route additional traffic through a residential area affecting neighborhood cohesion.

Package 2 would provide additional benefits to persons traveling on the highway corridor because of the increase in capacity and reduction of congestion on the roadway. Package 2 may impact the mobility of residents in the neighborhoods around transit stations by generating additional traffic in the area during construction.

Emergency service facilities would not be physically changed by proposed improvements in Package 2 in any segment of the corridor. Changes in the interchange areas that add lanes and replace outdated facilities would assist in providing less congested roadways for emergency vehicles to travel through. Traffic analysis results for this package when compared to Package 1, show reductions in average vehicle delays for interchange locations at Broadway, Pecos Street, Federal Boulevard, Sheridan Boulevard, Church Ranch Boulevard, Wadsworth Parkway/120<sup>th</sup> Avenue, McCaslin Boulevard, and Table Mesa Drive (see Chapter 3, Transportation Impacts and Mitigation).

Reduction of access at Broadway from southbound I-25 is not expected to change emergency response routes; however, emergency response providers stated that they were concerned that the changes would result in increased response times, increased criminal activity, increased insurance rates, and concerns about grade crossing safety. The area would continue to be served from facilities west of Broadway via local streets. Routes to and from emergency facilities in the Westminster Segment would be impacted. In the Westminster Segment, the closure of access to 88<sup>th</sup> Place would require re-routing of access from northbound Sheridan Boulevard to 88<sup>th</sup> Place, then north on Yates Street to the Westminster police and fire department at 9100 Yates Street. The route would not be used by vehicles departing from the police station because a right-turn only from 88<sup>th</sup> Place to northbound Sheridan Boulevard is the only move allowed. Instead, vehicles would use 92<sup>nd</sup> Avenue to travel north, south, east, or west from the police and fire facility. Farther west, access to the Centura-Avista Adventist Hospital in the Superior/Louisville Segment would not be affected because the 88<sup>th</sup> Street over-pass would remain in place.

## ***Indirect Impacts***

### **All Segments**

Some population and employment shift could occur at three of the BRT stations. Westminster Center Station could see some population and employment increases within 0.25 to 0.5 mile walk radius. This could be especially true if Westminster Center Shopping Mall is redeveloped into a mixed-use site in the future. At 116<sup>th</sup> Avenue, the Arista Development project is moving forward. The Broomfield Event Center has been constructed and other parcels are in various stages of development. The enhanced BRT station proposed by the build packages would have some influence on the attractiveness and marketability of the site, but the strength of the influence would be limited because it would be one of many factors. In the vicinity of the McCaslin Station, the Town of Superior is planning a new Town Center adjacent to US 36, but east of the proposed BRT station. The BRT station would have a limited indirect impact on the uses in the new area.

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

### **Direct and Indirect Impacts**

#### **All Segments**

The improvements proposed in Package 4 would be similar to Package 2, and would not generally affect community facilities. Overall access to the community facilities would be improved through reconstruction of the existing transportation elements and added capacity. Although the highway is the focal point of the majority of the improvements, interchanges, arterial crossings, transit facilities and services, and pedestrian and bicycle facilities would be improved, providing better connections within and among community areas.

Similar to the other build packages, Package 4 would replace outdated and aging transportation facilities. The new roadway and transit elements would operate more efficiently and would provide better opportunities for travel to and from uses in the corridor.

Multi-modal transportation opportunities would be enhanced through the implementation of the median BRT stations and services. Priority treatment for HOVs in the managed lanes would encourage more efficient travel. Mobility choices would be expanded for all users including bicycle and pedestrian travel, enhancing community areas in the corridor. The availability of reliable transportation capacity would be attractive to certain types of businesses and residents that choose to use the BRT/HOV lanes.

Improved crossings would provide better operations in interchange and transit station areas than Package 1. Arterials that cross US 36 would be widened and improved at Pecos Street, Federal Boulevard, Sheridan Boulevard, Church Ranch Boulevard, Wadsworth Parkway/120<sup>th</sup> Avenue, McCaslin Boulevard, and Table Mesa Drive. Pedestrian facilities would also be upgraded where needed to CDOT or local standards as the arterial crossings are rebuilt.

As previously described in Section 4.4, Right-of-Way and Relocations, the widened highway would require relocation of residences and businesses. Most of these would be in the Adams and Westminster segments. The businesses provide a number of services, such as sales of goods and employment opportunities in the segments. These displacements would not result in a meaningful impact to the larger business community. Direct impacts to population are expected in the Adams and Westminster segments because of property acquisition and displacement.

No community service boundaries would be severed or disrupted for proposed facilities and services such as school, police, or fire districts. The improvements along the existing highway corridor would not further isolate or divide neighborhoods.

Planned changes to Turnpike Drive to terminate the connection at Federal Boulevard and reroute to Grove Street would affect access to the Westminster Swim and Fitness Center and the City municipal courts. Access to parking would still be possible, but all traffic would need to use West 76<sup>th</sup> Avenue or Turnpike Drive to Grove Street to reach the facilities.

The planned replacement of the Old Wadsworth Boulevard overpass of US 36 with a new overpass at 112<sup>th</sup> Avenue would improve access to the Broomfield Event Center. The project would replace the bridge, but the connections of the local roadways would be the responsibility of others.

The closure of Loop Drive at Table Mesa Drive would require different access for the University of Colorado Boulder South Campus. The project has identified a possible connection to Tantra Drive; therefore, coordination with the City of Boulder and the surrounding neighborhoods would be required to plan this connection.

However, the wider cross section of the improved highway would continue to act as a separating barrier between and among corridor communities and neighborhoods. Community cohesion and interaction could be diminished because of the larger transportation facility in the corridor.

Highway and BRT station lighting impacts would be similar to those in Package 2. Impacts of changed access and new or improved facilities would be similar for Package 4 as described for Package 2. These changes include the access changes at Broadway, Turnpike Drive/Grove Street/West 76<sup>th</sup> Avenue, West 88<sup>th</sup> Place, and Loop Drive at Table Mesa Drive.

### ***Indirect Impacts***

#### **All Segments**

Indirect impacts in Package 4 would be similar to those identified for Package 2.

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

### ***Direct Impacts***

#### **All Segments**

The improvements proposed in the Combined Alternative Package (Preferred Alternative) would be similar to Package 2 and Package 4, and would not generally affect community facilities. Overall, access to the community facilities would be improved through reconstruction of the existing transportation elements and added capacity. Although the highway is the focal point of the majority of the improvements, interchanges, arterial crossings, transit facilities and services, and pedestrian and bicycle facilities would be improved, providing better connections within and among community areas.

Similar to the other build packages, the Combined Alternative Package (Preferred Alternative) would replace outdated and aging transportation facilities. The new roadway and transit elements would operate more efficiently and would provide better opportunities for travel to and from uses in the corridor.

Multi-modal transportation opportunities would be enhanced through the implementation of the BRT stations and services. Mobility choices would be expanded for all users, including bicycle and pedestrian travel, enhancing community areas in the corridor. The availability of reliable transportation capacity would be attractive to certain types of businesses and residents that choose to use the managed lanes.

Improved crossings would provide better operations in interchange and transit station areas under the Combined Alternative Package (Preferred Alternative) than Package 1. Similar to the other build packages, arterials that cross US 36 would be widened and improved at Pecos Street, Federal Boulevard, Sheridan Boulevard, Church Ranch Boulevard, Wadsworth Parkway/120<sup>th</sup> Avenue, McCaslin Boulevard, and Foothills Parkway/Table Mesa Drive. Pedestrian facilities would also be upgraded where needed to CDOT or local standards as the arterial crossings are rebuilt, the same as Package 2 and Package 4.

As previously described in Section 4.4, Right-of-Way and Relocations, the widened highway would require relocation of residences and businesses. Significantly fewer residential acquisitions would be required with the Combined Alternative Package (Preferred Alternative) (60 compared to 201 or 202 for Package 2 and Package 4, respectively). Most of these would be in the Adams and Westminster segments, resulting in direct impacts to population. The businesses provide a number of services, such as sales of goods and employment opportunities in the segments. These displacements would not result in a meaningful impact to the larger business community. With the implementation of the Combined Alternative Package (Preferred Alternative), fewer business acquisitions would be required (37 compared to 138 and 135 for Package 2 and Package 4, respectively).

Under the Combined Alternative Package (Preferred Alternative), necessary acquisitions of property in the Boulder Segment would be slightly more than what is described in Package 2 and Package 4.

No community service boundaries would be severed or disrupted for proposed facilities and services, such as school, police, or fire districts, under the Combined Alternative Package (Preferred Alternative), and the improvements along the existing highway corridor would not further isolate or divide neighborhoods.

At Broadway, as under Package 2 and Package 4, the elimination of access from southbound I-25 and from westbound US 36/I-270 would require travelers to use alternate routes to reach the adjacent residential and commercial areas. This change in access would require out of direction travel and would represent an inconvenience to area residents. The resulting impacts to businesses on Broadway are discussed in Section 4.3, Right-of-Way and Relocations.

Planned changes to Turnpike Drive to terminate the connection at Federal Boulevard and reroute to Grove Street would affect access to the Westminster Swim and Fitness Center and the City municipal courts. Access to parking would still be possible, but all traffic would need to use West 76<sup>th</sup> Avenue or Turnpike Drive to Grove Street to reach the facilities.

Under the Combined Alternative Package (Preferred Alternative), impacts as a result of the planned replacement of the Old Wadsworth Boulevard overpass of US 36 with a new overpass at 112<sup>th</sup> Avenue would be similar to the impacts described in Package 2 and Package 4.

The connection of Loop Drive to Table Mesa Drive would be made along with improvements to the interchange. Several alternatives are being considered (see Appendix A, Corridor Reference Maps). The proposed interchange configuration will be reconsidered during future phases of project and campus development. The option of extending Tantra Drive to provide access to the University of Colorado South Campus would result in increased traffic on Tantra Drive.

The wider cross section of the improved highway would continue to act as a separating barrier between and among corridor communities and neighborhoods. Community cohesion and interaction could be diminished because of the larger transportation facility in the corridor. This would be the same as Package 2 and Package 4.

Highway and BRT station lighting impacts would be similar under the Combined Alternative Package (Preferred Alternative) to those described for the other build packages. Impacts of changed access and new or improved facilities would be similar for the Combined Alternative Package (Preferred Alternative) as described for Package 2 and Package 4.

### ***Indirect Impacts***

#### **All Segments**

Indirect impacts for the Combined Alternative Package (Preferred Alternative) would be similar to those identified for Package 2 and Package 4.

## Mitigation

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A number of mitigation treatments will be employed with implementation of any build alternative and will consist of the following:

- The project team will develop a Construction Management Plan (CMP) during final engineering to describe staging and coordination activities. The CMP will be developed in conjunction with local jurisdictions, school districts, emergency services, and affected parties.
- The project team will continue to develop information and communicate with local groups, organizations, neighborhoods, and jurisdictions during planning and implementation to minimize disruptions.
- The project team will share design details and other information with local jurisdictions to coordinate plans for redevelopment following acquisition and relocation actions.
- Noise and lighting abatement will be studied and findings incorporated into final engineering to minimize traffic noise and lighting impacts.