

## EXECUTIVE SUMMARY

The Federal Highway Administration (FHWA), in cooperation with the Colorado Department of Transportation (CDOT) and the City and County of Denver (CCD), is proposing to add a third northbound lane and a raised median, along with other improvements, to Federal Boulevard between Alameda Avenue and the 6th Avenue eastbound on-ramp. This area of Federal Boulevard is an urban section of State Highway 88, which is why CDOT is involved in the project. The purpose of the proposed Federal Boulevard project is threefold: to improve the safety and efficiency of Federal Boulevard; to accommodate the transportation needs of area residents and existing businesses and; to provide multi-modal travel options and connections in the general vicinity. Figure ES-1 shows the proximity of the study area within west Denver. A map of the study area is shown in Figure ES-2.

This stretch of Federal Boulevard currently has three times the number of accidents compared to similar roadways in Colorado. Based on a study of accidents from 2001-2003, a total of 556 accidents within the proposed project limits was reported. The majority of the accidents were rear-end collisions, followed by sideswipe and broadside collisions. These types of accidents and others are attributed to unsafe conditions caused by: a continuous painted two-way-left-turn-lane, narrow lane widths that vary from nine to ten feet, numerous access points along Federal Boulevard, and fixed objects such as lightpoles that are close to the roadway. During the three-year accident period, two pedestrian fatalities were reported.

Currently, 43,000 vehicles per day use Federal Boulevard between Alameda Avenue and 6th Avenue. By 2030, 60,000 vehicles per day will use the roadway (projected).

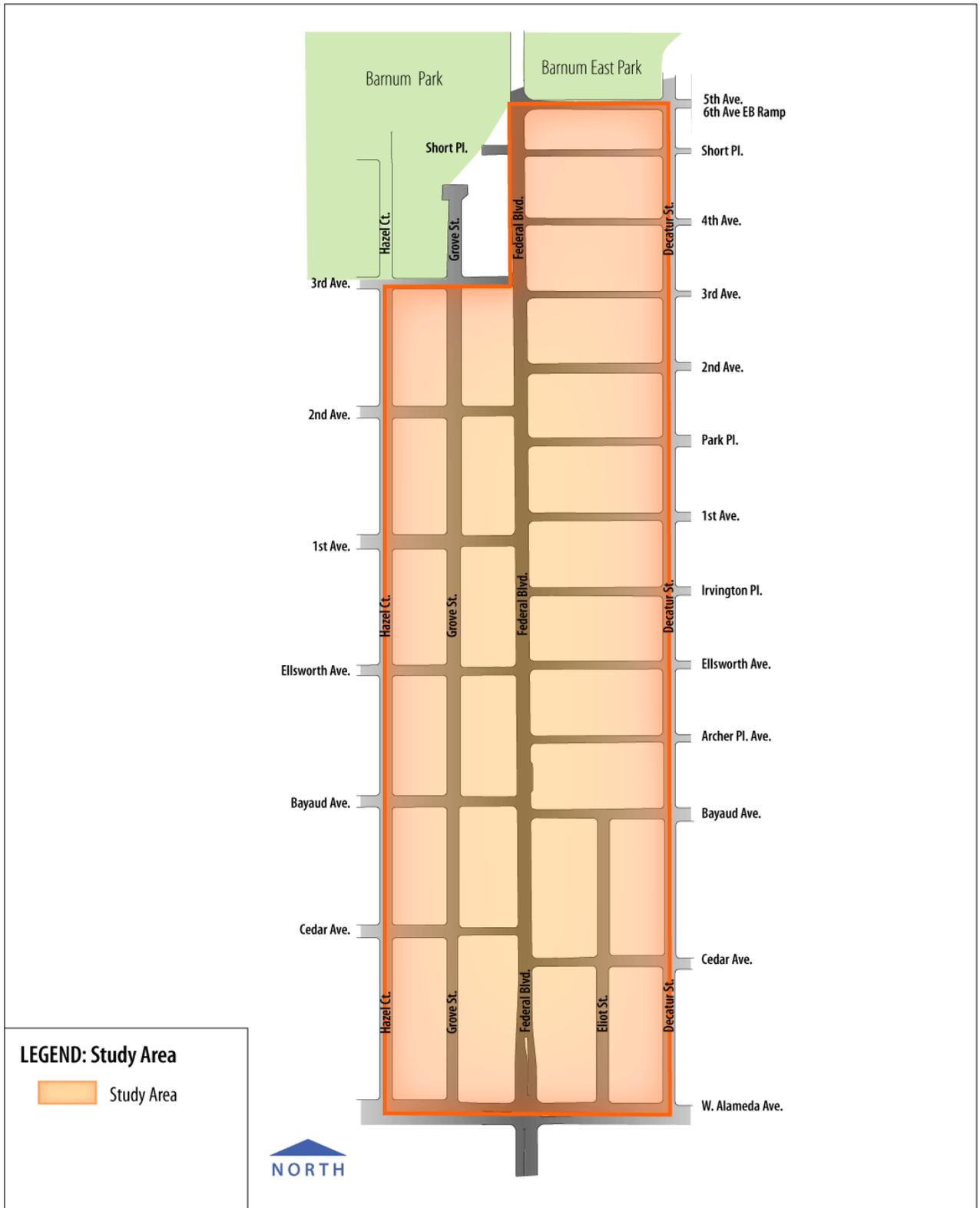
In the course of this environmental analysis, alternatives were developed and screened using a three-level screening process. This process included: Level 1 - Fatal Flaw Analysis; Level 2 - Purpose and Need Analysis; and Level 3 - Refinement of Alternatives. A “fatal flaw” is an aspect(s) of an alternative that is unacceptable to the project. Based on the results of the Level 3 screening, Alternative 3 Curved (Alternative 3 C) was selected as the Build Alternative to be evaluated in this Environmental Assessment (EA) – along with the No Action Alternative.

The Build Alternative involves widening Federal Boulevard to increase capacity and improve safety conditions for both vehicles and pedestrians. The alignment contains eight slight curves that are designed to minimize or avoid building impacts, including one building that is eligible for the National Register of Historic Places. Major elements of the Build Alternative alignment include:

- Addition of a third northbound lane.
- Widening of existing lanes to 11 feet.
- Construction of a 16-foot raised median.
- Widening of a pedestrian zone to 8 feet (5-foot sidewalk plus 3-foot buffer zone). The pedestrian zone would be widened to 13.5 feet in areas where no additional direct or indirect impacts to existing buildings would occur and as funding allows.
- Potential installation of a stoplight and realignment of Bayaud Avenue.
- Sidewalks and curb ramps brought up to the Americans with Disabilities Act (ADA) standards.
- Stormwater drainage improvements to meet Municipal Separate Storm Sewer System (MS4) permit requirements as regulated by the Colorado Department of Public Health and Environment (CDPHE).



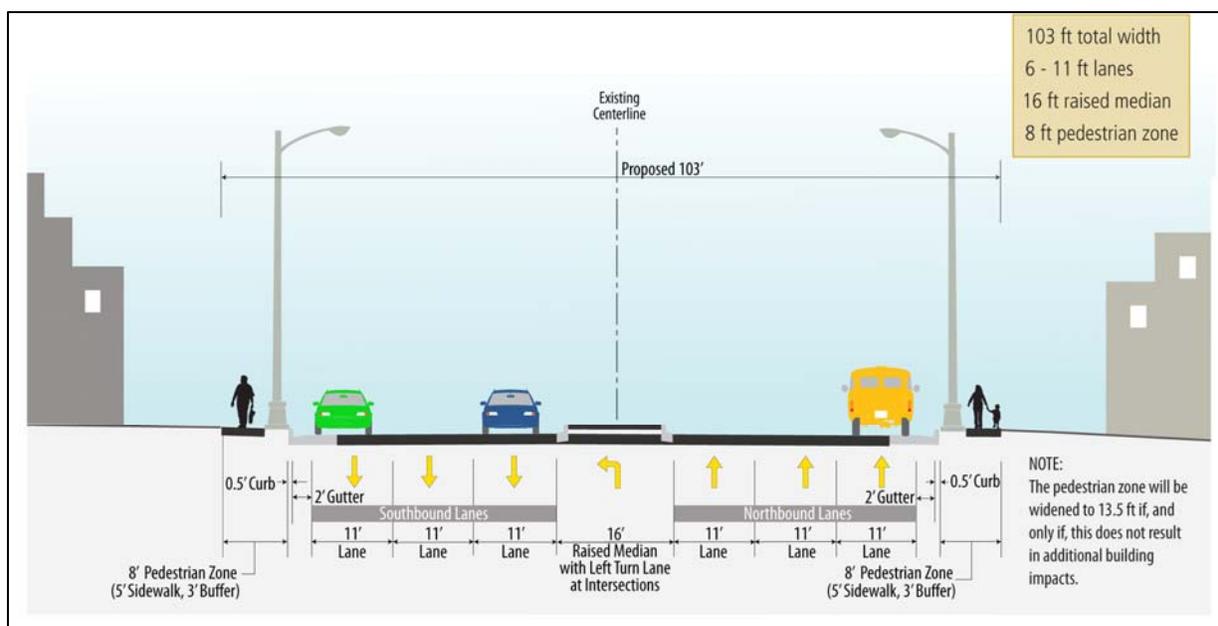
## Regional Map



## Study Area Map

The proposed improvements would extend from Alameda Avenue to 5th Avenue, which is approximately 0.84 mile, and would widen the existing roadway, including the pedestrian zone, from approximately 68 feet to 103 feet. The cross section for Alternative 3 Curved is shown in Figure ES-3.

**Figure ES-3**  
**Alternative 3 Curved**



## Land Use

The proposed transportation improvements would not change the designation of Federal Boulevard as a commercial corridor as designated in *Blueprint Denver*, which was adopted by the CCD in 2002 and serves as an integrated land use and transportation plan. However, the transportation investment will set the stage for how the corridor will function over time. A portion of the businesses along Federal Boulevard will be relocated, and redevelopment of these parcels is likely to happen over time. Planning efforts for redevelopment are not part of this project and would be initiated at the local level by the CCD.

## Social Characteristics

Two neighborhoods are located within the study area, Barnum and Valverde. Both neighborhoods are experiencing population growth, which is expected to continue in the future. The Federal Boulevard corridor and surrounding neighborhoods are diverse, ethnically rich, and include both low income and minority populations. The area has a number of businesses, schools, and churches that serve the community.

According to the U.S. Census, the percent of persons in poverty at the Citywide level is 14.3 percent (*U.S. Census Bureau, Housing and Household Economic Statistics Division*). Of the census block groups that are adjacent to Federal Boulevard along the study area, between 13 percent and 28 percent of the population is in poverty.

The average household income for the four neighborhoods bordering the study area is below the CCD average of \$55,128. Over 37 percent pay more than one-third of their income on housing. Between 20 and 25 percent of the housing units in the study area are overcrowded, meaning there is more than one person per room.

Approximately half of the businesses that would be impacted by the Build Alternative are known to be minority owned. This information was collected through interviews with local business owners and/or occupants. A more detailed discussion of property acquisitions, business relocations, and mitigation is discussed in the Right-of-Way section below.

### **Economic**

The property acquisitions and displacement of businesses would impact the local economy. Approximately 41 percent of the businesses in the project area would be affected by this project. The full property acquisitions would potentially cause the city, county, and state to lose the ability to collect property taxes totaling \$123,495 per year. Affected businesses that collect sales tax would be displaced. Unless such businesses relocate within the CCD, the CCD would lose the ability to collect \$84,570 in annual sales taxes from these businesses, if they were to cease operation entirely or relocate outside of the CCD. Future sale and redevelopment of the remainder of these properties, however, would likely offset the losses in property and sales tax. However, after final design and construction, some of the parcels or portions of some parcels may not be needed for right-of-way. The portion of the parcels acquired but not needed for right-of-way could be declared surplus and returned to private ownership. Parcels returned to private ownership would be reassessed for property taxation purposes.

Where appropriate and feasible, the following mitigation measure will be employed to minimize or avoid construction and permanent impacts on economic conditions in the area:

- CDOT will work with each displaced business to determine a suitable relocation site. The CCD will offer resources to assist displaced businesses.
- Ideally, any new location for displaced businesses will remain in the CCD such that sales taxes will continue to be collected by the CCD; however, it is not guaranteed that the businesses will remain in the CCD. See Section 3.2.7 for additional mitigation measures.

### **Right-of-Way**

The Build Alternative would require acquisition of approximately 4.9 acres of property. Of the 75 property acquisitions affected, 54 would be partial acquisitions and 21 would be full acquisitions. Several of these properties are owned by the same people. In addition, six outdoor advertising signs would also be acquired.

Forty-three businesses and two residential occupants would be displaced as a result of the property acquisitions. Many properties have multiple businesses located within them. Also, there would be one personal property relocation (e.g. a shed).

For any person(s) whose real property interests may be impacted by this project or any businesses that may be displaced, the acquisition of those property interests and business displacements would comply fully with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, (Uniform Act)*.

It is not yet known whether potential displacements are dependent on their present location for continued viability. If a displaced business is identified with such a dependency, the CCD would work closely with such businesses to identify a suitable site for their relocation. Relocation needs for businesses within the community will vary by business type.

## **Transportation**

Under the Build Alternative, a third northbound lane is proposed along with a raised median. The third northbound lane would increase the capacity of the roadway and would therefore generally decrease congestion at intersections compared to the No Action Alternative. The raised median would have openings at many of the intersections, although new travel patterns may develop since driveways would not have median openings. In addition, due to the construction of a raised median, several accident types such as approach turn, broadside, pedestrian, head-on and sideswipe opposite accidents would likely decrease.

## **Noise**

Under the Build Alternative, traffic noise levels would increase from 0 to 2 decibels (dBA) relative to existing conditions. Thirty-four homes and thirteen apartment units would be affected by noise levels that meet or exceed the noise abatement criteria (NAC) of 66 dBA. However, no severe noise impacts are predicted. A severe noise impact is defined as occurring when a receiver, such as a house, is either exposed to absolute exterior noise levels of 75 dBA or greater, or a projected increase of 30 dBA or more over existing noise levels (CDOT, 2002).

Based on the modeling of residential sites, outdoor noise levels at the commercial buildings bordering Federal Boulevard are expected to range between 60 and 70 dBA equivalent sound level (Leq), depending on the distance from the roadway. None of the commercial sites are expected to meet or exceed the noise abatement criteria for commercial activities of 71 dBA.

Mitigation was considered for areas along Federal Boulevard that meet or exceed the CDOT NAC. However, construction of a noise barrier would not be feasible to reduce noise levels due to numerous driveways, cross streets, and sidewalks along Federal Boulevard. As a result, mitigation for the impacted residences is not recommended.

## **Water Resources**

Impacts to Water Resources for the Build Alternative will be beneficial. Currently, storm run-off enters the storm drain system without the benefit of treatment. Because the proposed alternative will disturb more than once acre, the project is required by the Colorado Department of Transportation (CDOT) Municipal Separate Storm Sewer System (MS4) and the National Pollutant Discharges Elimination System (NPDES) to provide water quality features. Under the Build Alternative, water quality extended detention basins (EDB) have been proposed along Federal Boulevard to provide water quality treatment from runoff exiting the site. During the design phase additional alternatives, such as tree lawns or a regional water quality facility, will be investigated further.

Impacts during construction will be minimized through the use of a Stormwater Management Plan (SWMP). The SWMP is designed to prevent negative impacts to water quality through the use of Best Management Practices (BMPs) such as inlet protection and silt fencing. Therefore,

impacts from the build alternative will be positive due to the placement of EDBs, and will be minimal due to construction.

### **Hazardous Materials**

During a site investigation and records search, it was determined that soil and groundwater contamination is likely, due to the presence of several underground storage tanks (UST) and leaking underground storage tanks (LUSTs) within the study area. Three properties have LUSTs and it is likely petroleum contaminated soil would be encountered at one or more sites. Mitigation for any hazardous materials encountered during construction will be as follows: CDOT Standard Specification, Section 250 will be used to address issues related to transporting, handling, monitoring, and disposal of any hazardous or solid waste materials encountered during construction including contaminated soils, lead-based paint, contaminated groundwater, and other toxic substances.

If deemed necessary, a materials management plan will be prepared regarding the removal and disposal of contaminated soils and/or groundwater. A Health and Safety Plan will also be developed to protect workers during construction.

### **Other Resources**

The following resources either had minor or no impacts:

- Air Quality
- Vegetation and Wildlife
- Farmlands
- Noxious Weeds
- Threatened and/or Endangered Species
- Historic and Archaeological Resources
- Paleontology
- Section 6(f)
- Visual Quality/Aesthetics
- Parks and Recreation Resources
- Wetlands
- Floodplains
- Utilities
- Geology

Detailed assessments of the existing environment, environmental impacts, a cumulative impact assessment, and proposed mitigation of the impacts are described in Chapter 3 of this EA.

### **Construction and Cost**

Construction of the Build Alternative would commence mid-year in 2009. The current estimated cost of the Build Alternative is between \$29,000,000 and \$32,400,000 (2006 dollars). The cost

of the No Action Alternative is estimated at \$3 million every seven years for general maintenance (resurfacing, sidewalk repairs, etc.)

### **Public Involvement**

Public meetings, workshops, one-on-one meetings with local businesses were held throughout the scoping and alternatives development and screening processes. Small group meetings were also held with affected property owners and businesses to inform them of the right-of-way acquisition process under the *Uniform Relocation Assistance and Real Property Acquisition Policies Act* (Uniform Act).

This EA will be circulated for a 30-day public comment period. A public hearing will be held on December 4, 2007, from 5:00 p.m. to 7:00 p.m., to present the environmental investigation findings, the proposed mitigation measures, and to solicit public comments. Following the comment period, comments will be addressed and a decision document will be prepared.

This EA provides decision-makers and the community with information on the potential impacts of the No Action and Build Alternatives. The environmental study process has included detailed technical analyses and agency and community involvement.