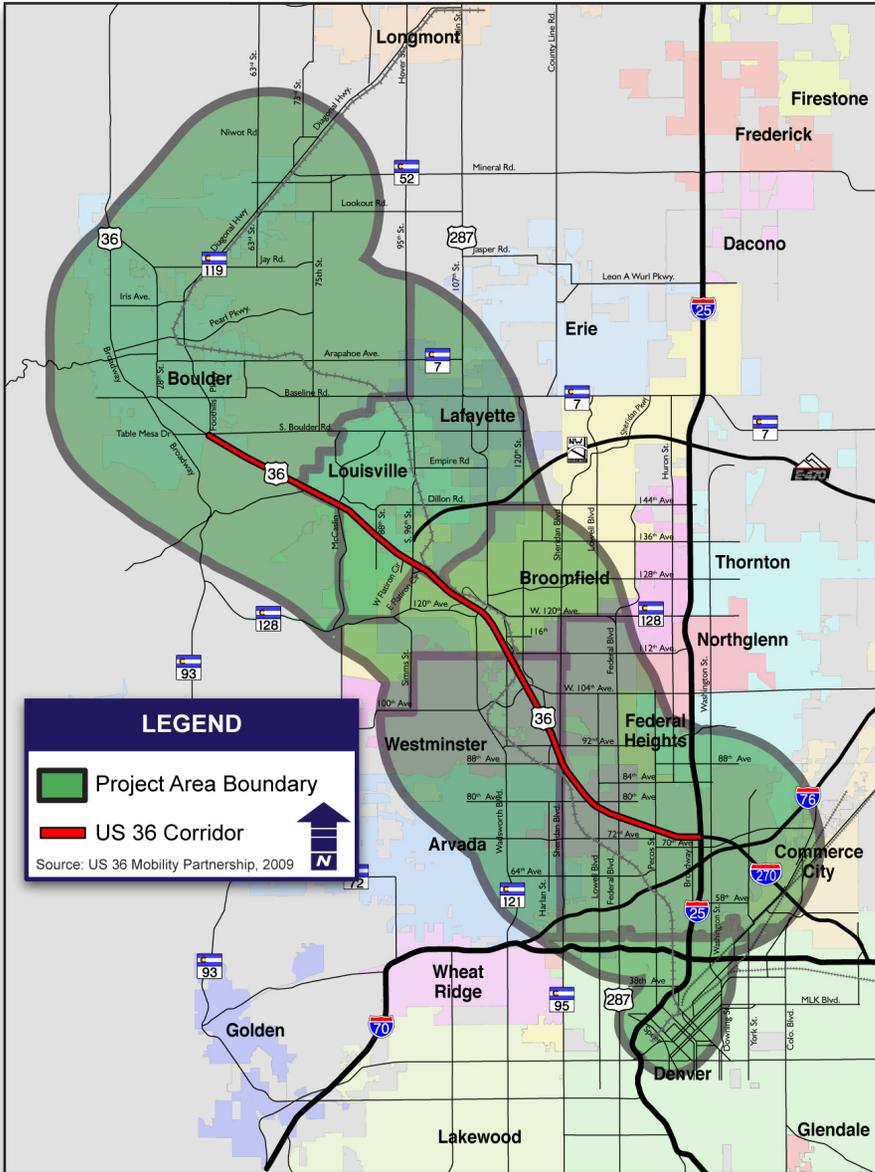




US 36 CORRIDOR
Environmental Impact Statement

WELCOME

US 36 ENVIRONMENTAL IMPACT STATEMENT



- ▶ Since 2003, the Colorado Department of Transportation (CDOT) and the Regional Transportation District (RTD), in conjunction with the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), have been studying transportation improvements between Denver and Boulder in the U.S. 36 Environmental Impact Statement (EIS) study.
- ▶ The purpose of the US 36 project is to improve mobility along the US 36 corridor from I-25 in Adams County to Foothills Parkway/Table Mesa Drive in Boulder, and among intermediate destinations.

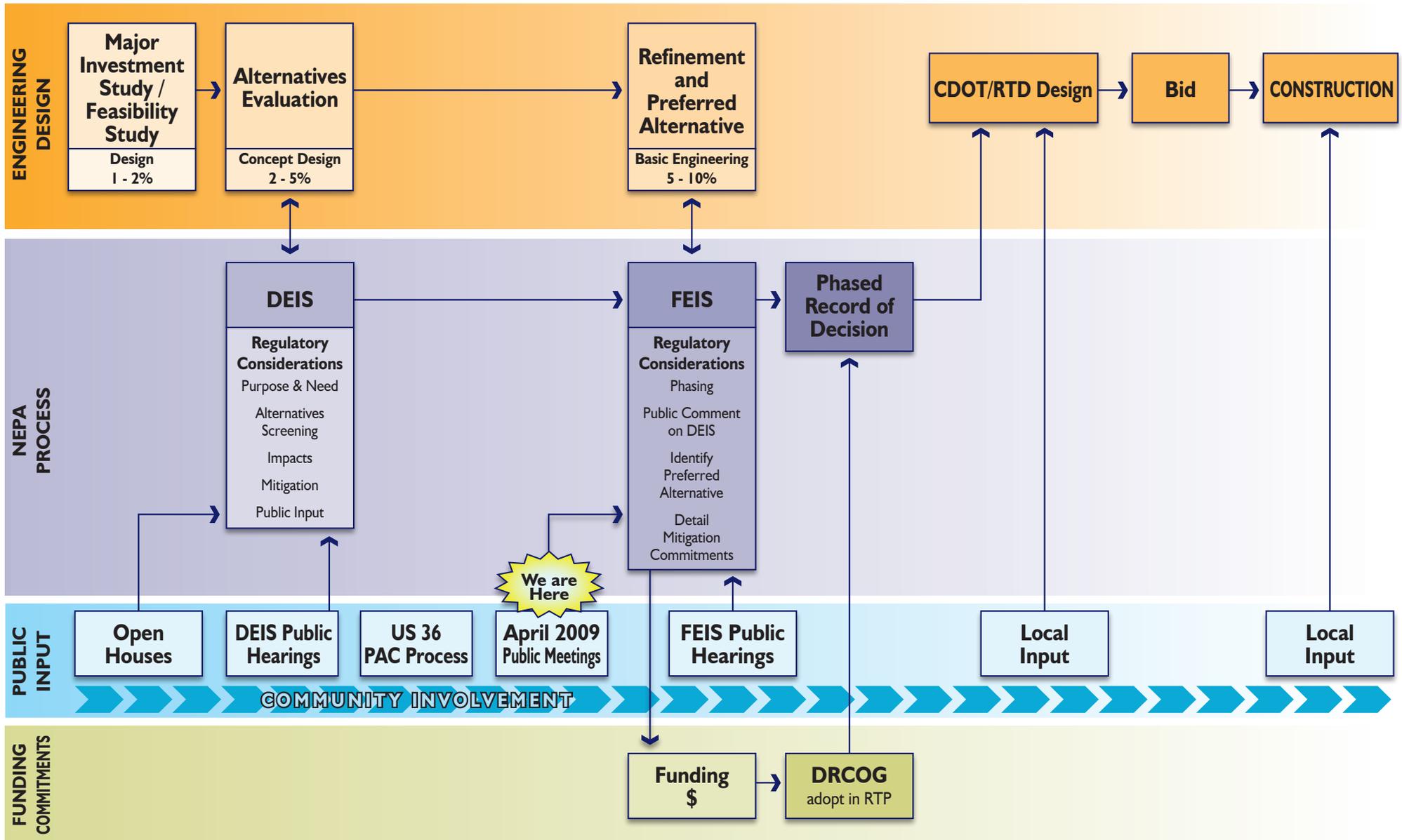
US 36 EIS Schedule

| PHASE | 2007 | 2008 | 2009 | | | | | | | | | | | | FUTURE |
|----------------------------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| | | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| Prepare DEIS | █ | | | | | | | | | | | | | | |
| Public Review | | █ | | | | | | | | | | | | | |
| Combined Alternative Development | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| Prepare FEIS | | | | | | | | | | | | | | | |
| Public Review | | | | | | | | | | | | | | | |
| Phase I Record of Decision | | | | | | | | | | | | | | | |
| Identify Funding | | | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |
| Final Design & Construction | | | | | | | | | | | | | | | █ |

US 36 EIS SCHEDULE

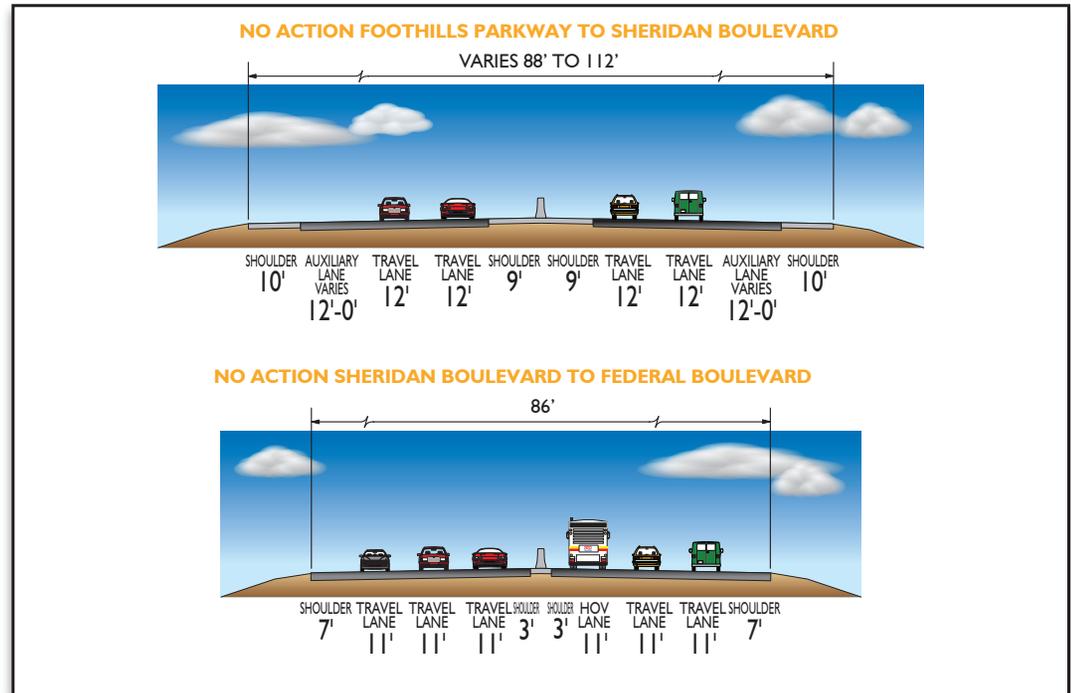
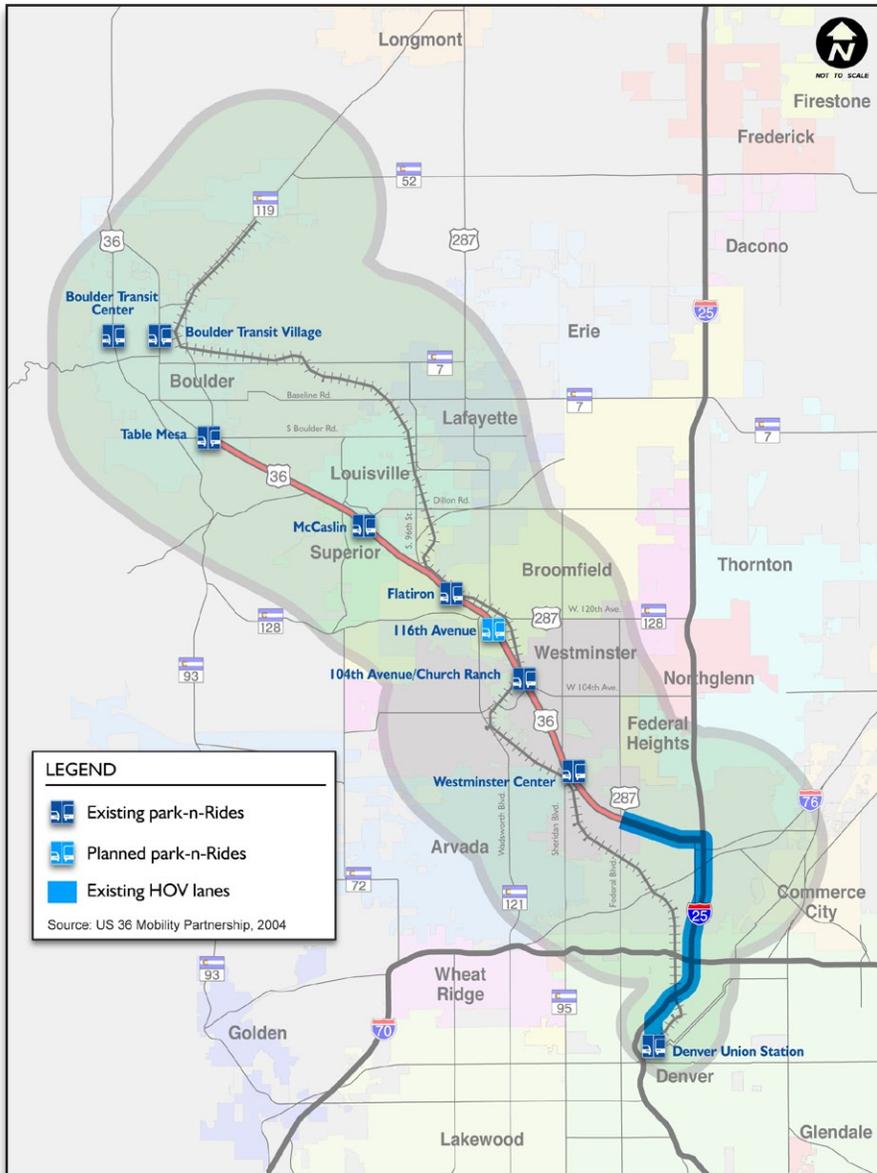
| PHASE | 2007 | 2008 | 2009 | | | | | | | | | | | | FUTURE | |
|---|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|---|
| | | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | | |
| Prepare DEIS | ■ | | | | | | | | | | | | | | | |
| Public Review | ■ | | | | | | | | | | | | | | | |
| Combined Alternative Development | | ■ | | | | | | | | | | | | | | |
| Prepare FEIS | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Public Review | | | | | | ■ | | | | | ■ | ■ | | | | |
| Phase I Record of Decision | | | | | | | | | | | | ■ | ■ | ■ | | |
| Identify Funding | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Final Design & Construction | | | | | | | | | | | | | | | ■ | |

PROJECT DEVELOPMENT FLOWCHART



PACKAGE I

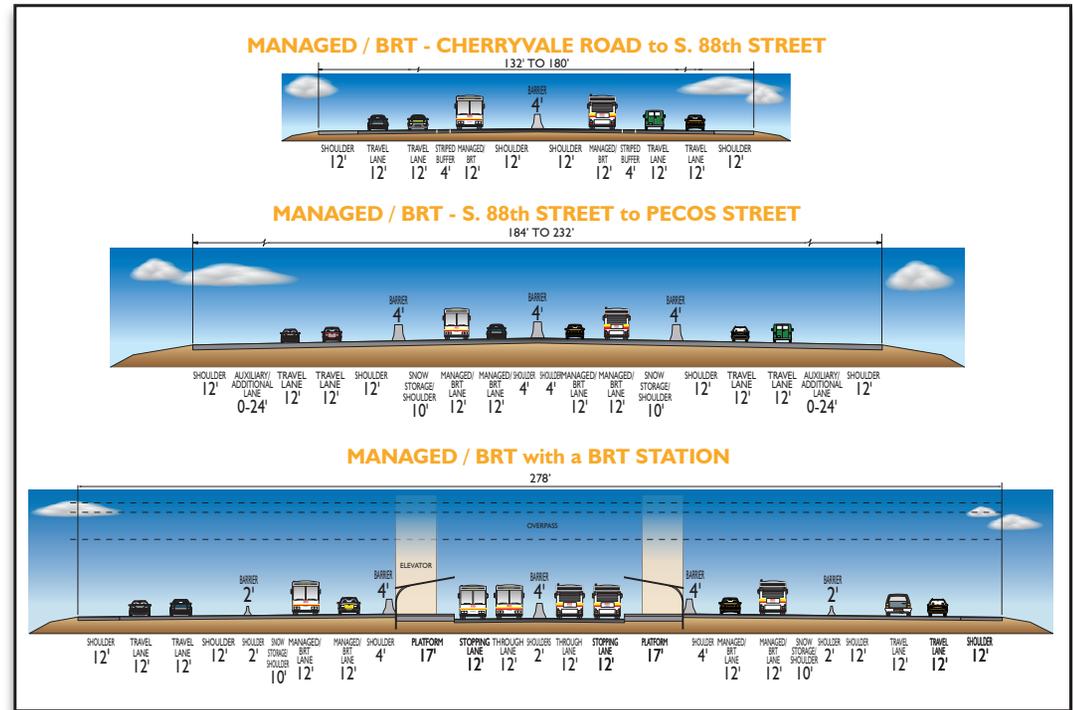
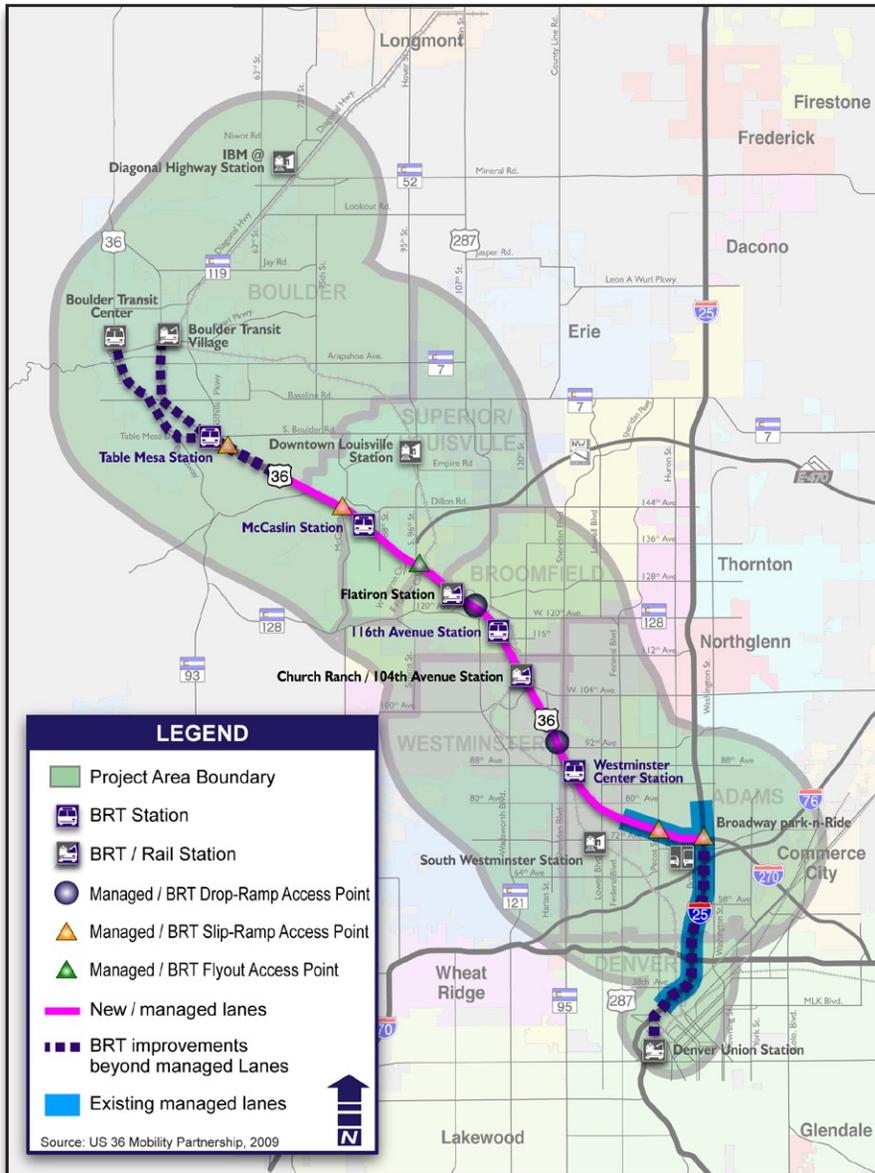
No Action



- ▶ No improvements beyond those already under way or funded for future construction
- ▶ Includes minor bus system improvements but no additional highway capacity
- ▶ Used as the basis for evaluation of build alternatives

PACKAGE 2

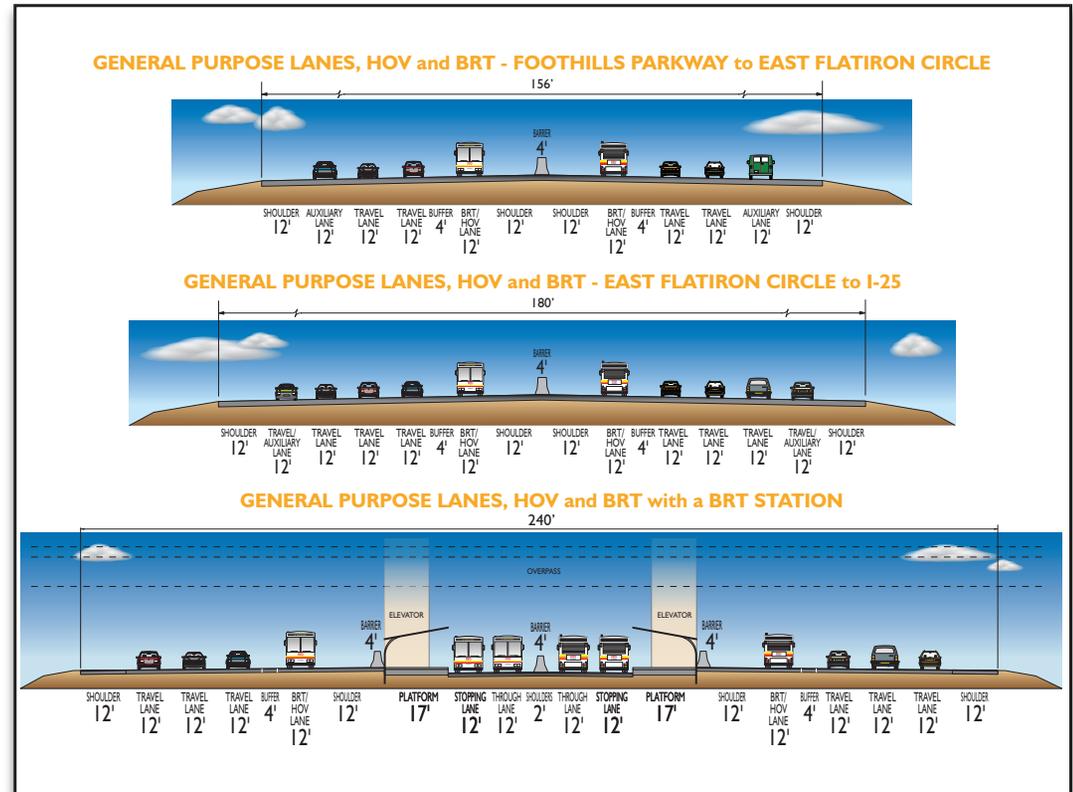
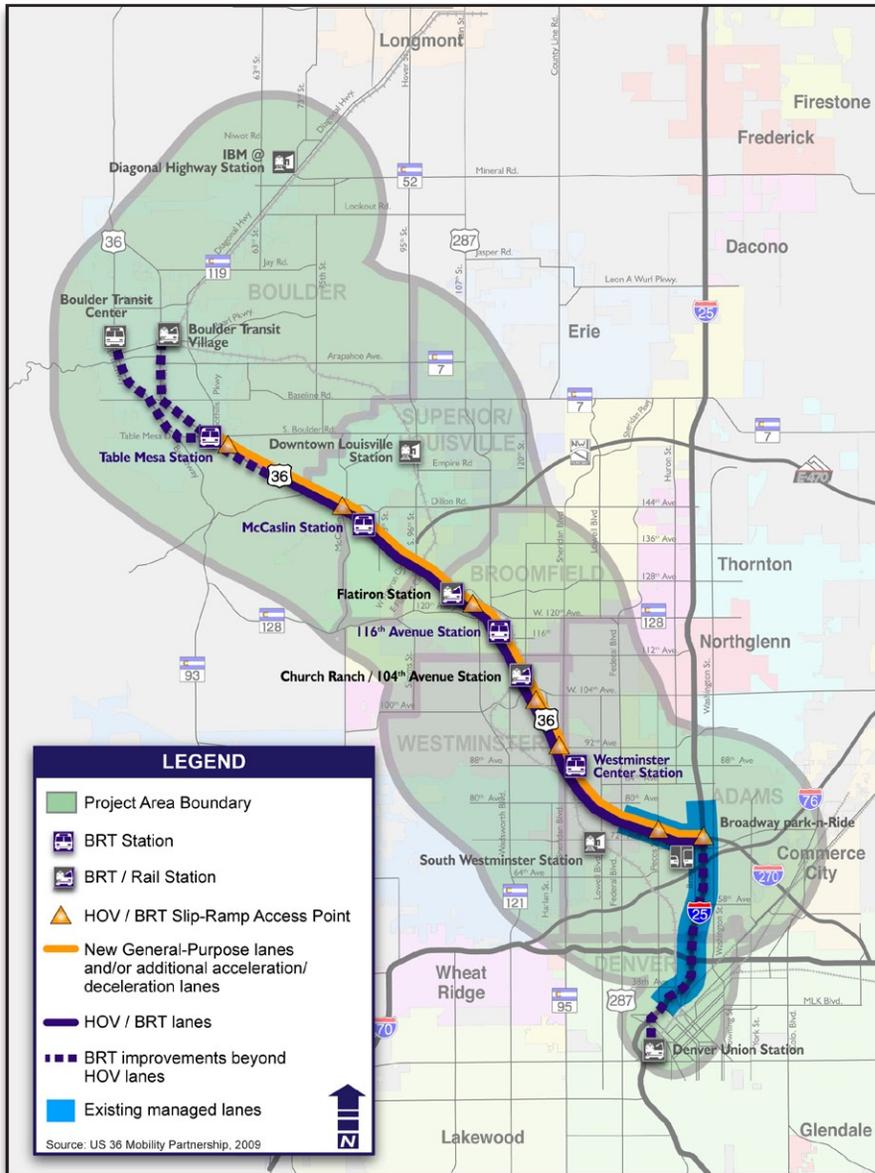
Managed Lanes, Bus Rapid Transit (BRT), and Bikeway



- ▶ Two new managed lanes in each direction in median of US 36 from I-25 to west of McCaslin interchange
- ▶ Barrier-separated managed lanes can be used by buses and HOVs for free, and SOVs for a fee
- ▶ In-line BRT stations in median of US 36 to provide rapid passenger boarding
- ▶ No additional general purpose lanes
- ▶ Transportation demand management
- ▶ Bikeway between Westminister and Boulder

PACKAGE 4

General Purpose Lanes, Bus Rapid Transit (BRT), HOV Lanes, and Bikeway



- ▶ Additional general purpose lanes from I-25 to Boulder; number of lanes varies according to demand
- ▶ Buffer-separated BRT/HOV lanes in median of US 36 from I-25 to Boulder
- ▶ In-line BRT stations in median of US 36 to provide rapid passenger boarding
- ▶ Carpools and vanpools allowed in BRT/HOV lanes; no single-occupant vehicles allowed
- ▶ Transportation demand management
- ▶ Bikeway between Westminister and Boulder

COMBINED ALTERNATIVE

Managed Lanes, Auxiliary Lanes, Bus Rapid Transit (BRT), and Bikeway

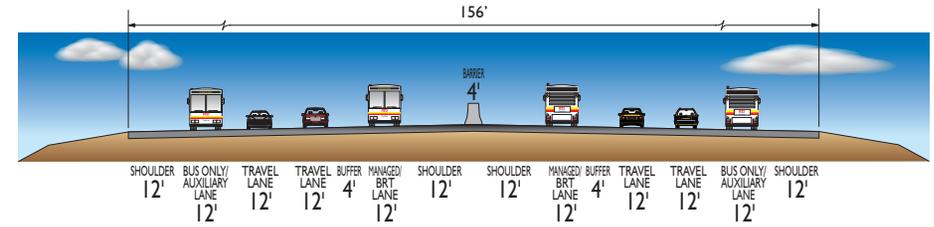


LEGEND

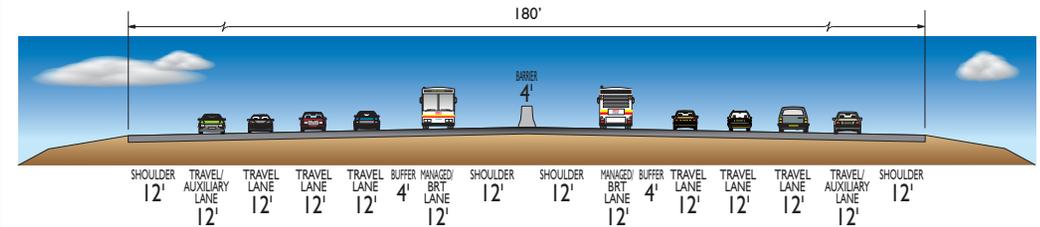
- Project Area Boundary
- BRT Station
- BRT / Rail Station
- Managed lane / BRT Access Point
- New managed lanes
- BRT improvements beyond managed lanes
- Existing managed lanes

Source: US 36 Mobility Partnership, 2009

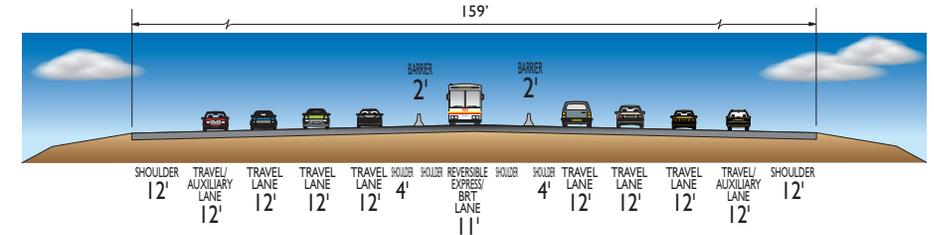
GENERAL PURPOSE LANES and MANAGED/BRT - FOOTHILLS PARKWAY to SHERIDAN



GENERAL PURPOSE LANES and MANAGED/BRT - SHERIDAN to PECOS

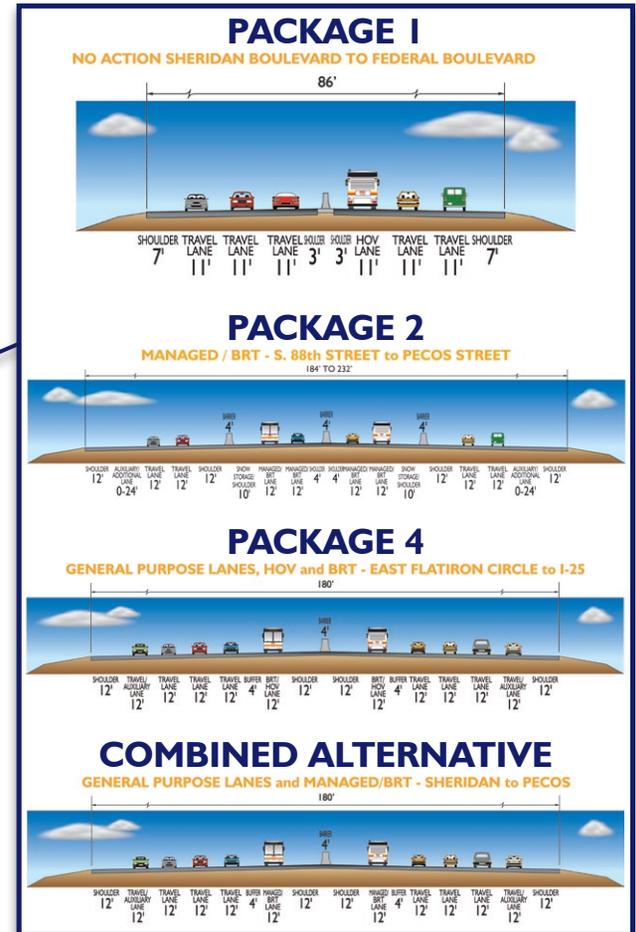
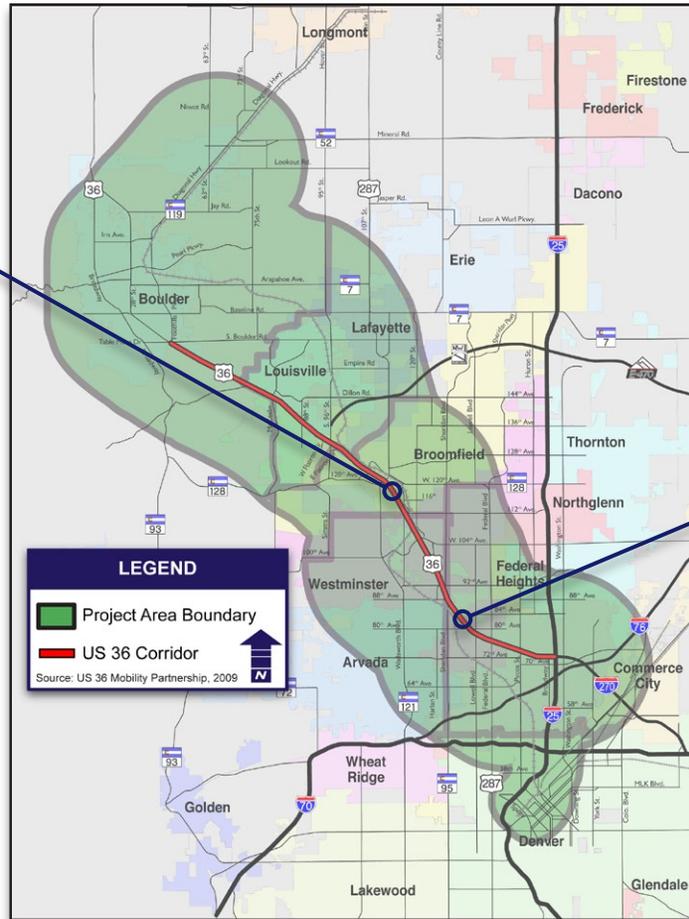
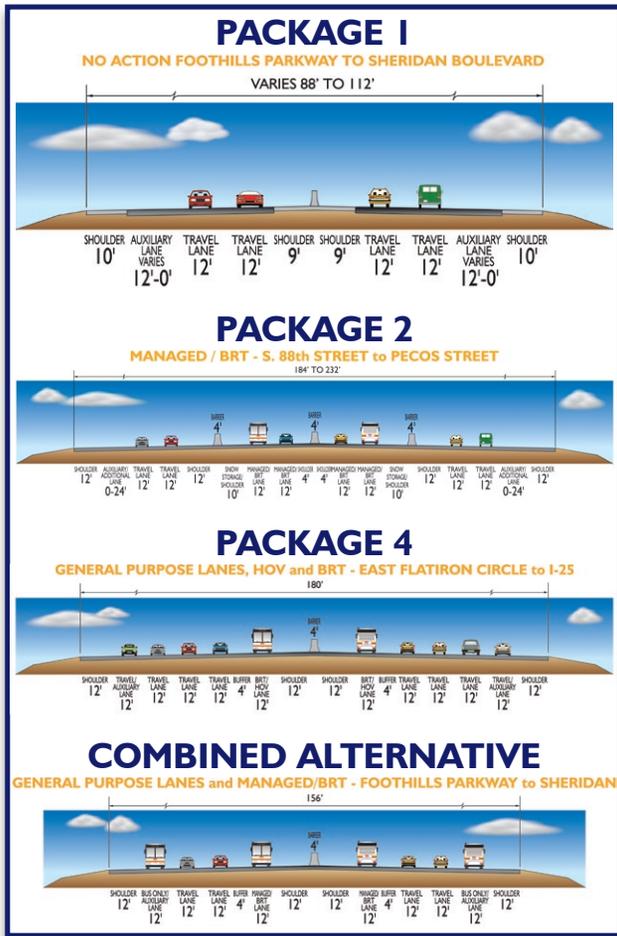


GENERAL PURPOSE LANES and MANAGED/BRT - PECOS to I-25



- ▶ One new buffer-separated, managed lane in each direction
- ▶ Managed lanes can be used by buses and HOVs for free, and SOVs for a fee
- ▶ Auxiliary lanes between most interchanges
- ▶ Improvements to all interchanges
- ▶ Ramp and side-loading BRT stations
- ▶ Transportation demand management
- ▶ Bikeway between Westminister and Boulder
- ▶ Phase I priority is to implement managed lane

PACKAGE COMPARISON



BUS RAPID TRANSIT (BRT)

PHASE I

- ▶ Regional bus service enhancements
- ▶ FastConnects and local bus service enhancements
- ▶ Ticket vending machines at BRT stations
- ▶ Fare box upgrades (systemwide)
- ▶ Fiber along US 36 and to the BRT stations
- ▶ Travel Demand Management, including marketing and branding for BRT
- ▶ Safety measures at BRT stations (e.g., cameras)
- ▶ Variable message signs at BRT stations
- ▶ Bus instrumentation to allow real time transit data collection (systemwide)
- ▶ Smart cards (systemwide)

FUTURE PHASES

- ▶ Special vehicles
- ▶ Enhanced RTD paint scheme
- ▶ Bus ramp metering bypass lanes
- ▶ Queue jumps

**NO ACTION ALTERNATIVE WILL
INCLUDE \$7.5 M FOR QUEUE JUMPS**

WHAT IS TRAVEL DEMAND MANAGEMENT?

Travel demand management (TDM) consists of methods and strategies to reduce the demand for travel, particularly single-occupant vehicle (SOV) travel, either by eliminating trips, shortening trips, changing the mode of travel, or changing the time of day when the trip is made.

US 36 TDM Elements:

- ▶ Similar to I-25 Transportation Expansion project (T-REX)
- ▶ Primarily during construction
- ▶ Establishment of an advisory task force
- ▶ Task force would identify stakeholder performance measures and programs

▶ **POSSIBLE PROGRAMS:**

Vanpools and carpools

- Matching services
- RideArrangers
- Subsidies and formation services

Financial incentives

- Transit pass subsidies
- Vanpool subsidies

Stakeholder outreach and education

- Web sites
- Alternative work schedules
- Telecommuting/compressed work week
- Preferential parking programs
- Bicycle commuting support

LEVEL OF SERVICE (LOS)

GENERAL-PURPOSE LANE LEVEL OF SERVICE COMPARISON

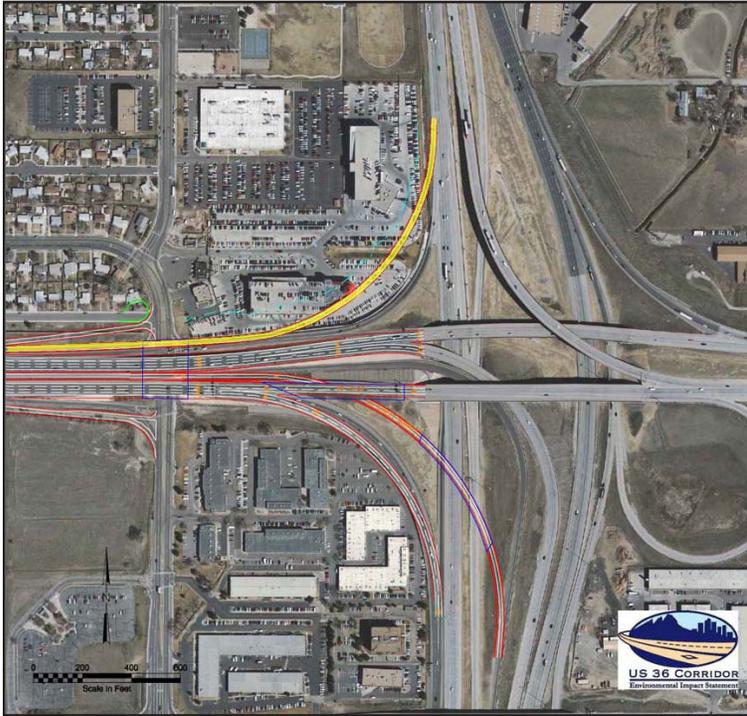
| SEGMENT | A.M. Peak Hour | | | | | P.M. Peak Hour | | | | |
|----------------------------|--------------------------------|---------------------------|-----------------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------|-----------------------------|--------------------------------|---------------------------------|
| | Package 1 No Action 2030 | Package 2 Toll 2030 | Package 4 GP+HOV 2030 | Package 1 No Action 2035 | Combined Alternative 2035 | Package 1 No Action 2030 | Package 2 Toll 2030 | Package 4 GP+HOV 2030 | Package 1 No Action 2035 | Combined Alternative 2035 |
| EASTBOUND DIRECTION | | | | | | | | | | |
| Foothills to McCaslin | D | D | C | F | E | F | F | D | F | E |
| McCaslin to West Flatiron | E | D | D | F | E | E | D | D | F | D |
| East Flatiron to Wadsworth | C | C | C | D | C | D | D | D | D | D |
| Wadsworth to Church Ranch | D | D | C | D | D | D | D | C | D | D |
| Church Ranch to Sheridan | E | D | D | D | D | E | E | D | E | E |
| Sheridan to Federal | F | F | E | F | F | F | F | D | F | F |
| Federal to Pecos | F | E | D | E | E | D | D | C | D | D |
| Pecos to Broadway | F | D | F | F | D | E | C | D | D | C |
| WESTBOUND DIRECTION | | | | | | | | | | |
| Broadway to Pecos | C | D | D | C | D | D | E | E | D | D |
| Pecos to Federal | C | C | C | D | D | D | D | C | D | D |
| Federal to Sheridan | D | D | D | D | E | E | D | D | F | E |
| Sheridan to Church Ranch | E | F | D | E | E | F | F | D | F | D |
| Church Ranch to Wadsworth | E | E | D | E | D | D | E | C | F | D |
| Wadsworth to East Flatiron | E | E | E | C | D | C | C | C | D | D |
| West Flatiron to McCaslin | E | E | D | E | D | E | E | D | F | D |
| McCaslin to Foothills | F | F | E | F | E | E | E | D | F | E |
| # of Segments at LOS E/F | 10 | 7 | 4 | 9 | 7 | 9 | 8 | 1 | 9 | 5 |
| Total E/F, AM + PM | 19 | 15 | 5 | 5 | 10 | | | | | |
| Total F, AM + PM | 7 | 6 | 1 | 13 | 2 | | | | | |

RIGHT-OF-WAY (ROW) IMPACTS

| IMPACT | SEGMENT | PACKAGE 2 | PACKAGE 4 | COMBINED ALTERNATIVE PACKAGE (PRELIMINARY - SUBJECT TO CHANGE) |
|--|---------------------|-----------|------------|--|
| Number of Residential Dwelling Units Displaced | Denver | 0 | 0 | 0 |
| | Adams | 171 | 172 | 34 |
| | Westminster | 21 | 21 | 19 |
| | Broomfield | 8 | 8 | 5 |
| | Superior/Louisville | 0 | 0 | 0 |
| | Boulder | 1 | 1 | 2 |
| | Total | | 201 | 202 |
| Number of Businesses Displaced | Denver | 0 | 0 | 0 |
| | Adams | 56 | 56 | 8 |
| | Westminster | 28 | 28 | 24 |
| | Broomfield | 21 | 18 | 5 |
| | Superior/Louisville | 0 | 0 | 0 |
| | Boulder | 33 | 33 | 0 |
| | Total | | 138 | 135 |

BROADWAY/I-25 INTERCHANGE ACCESS

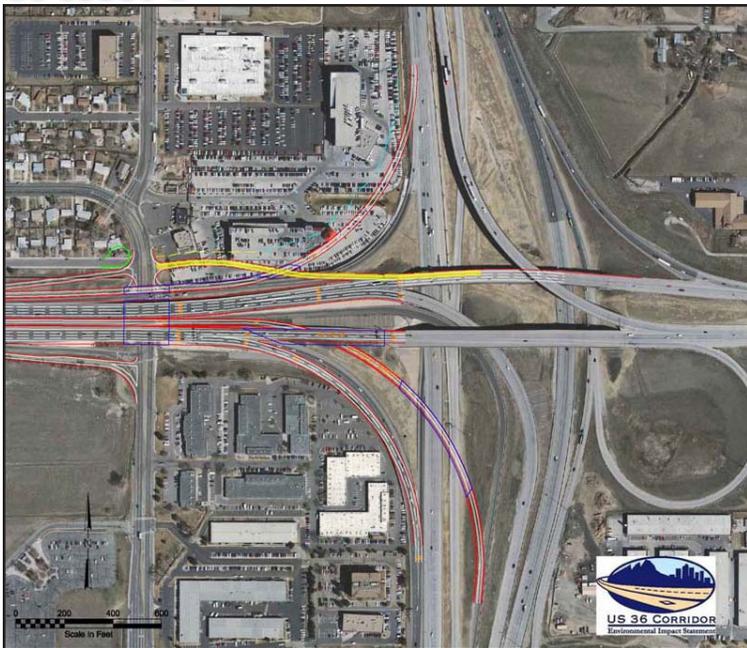
OPTION A



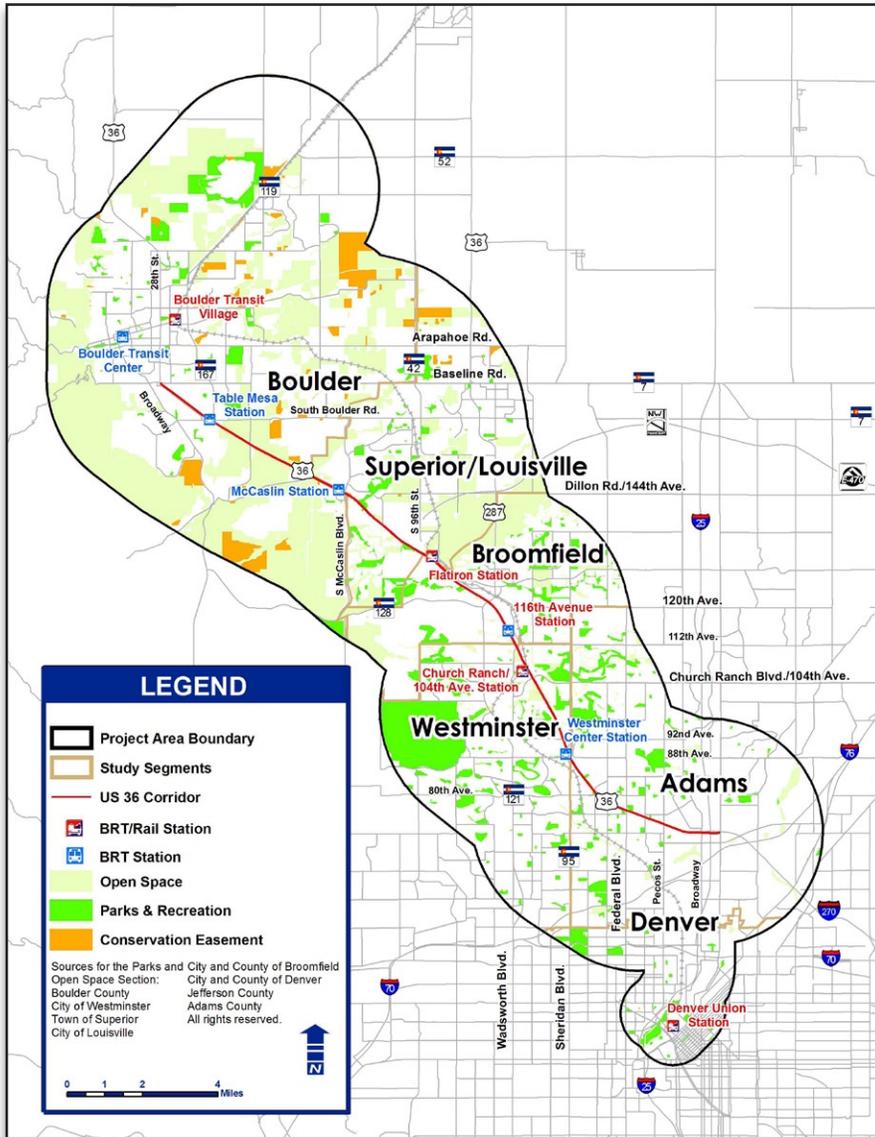
OPTION B



OPTION C



PARKS AND OPEN SPACE



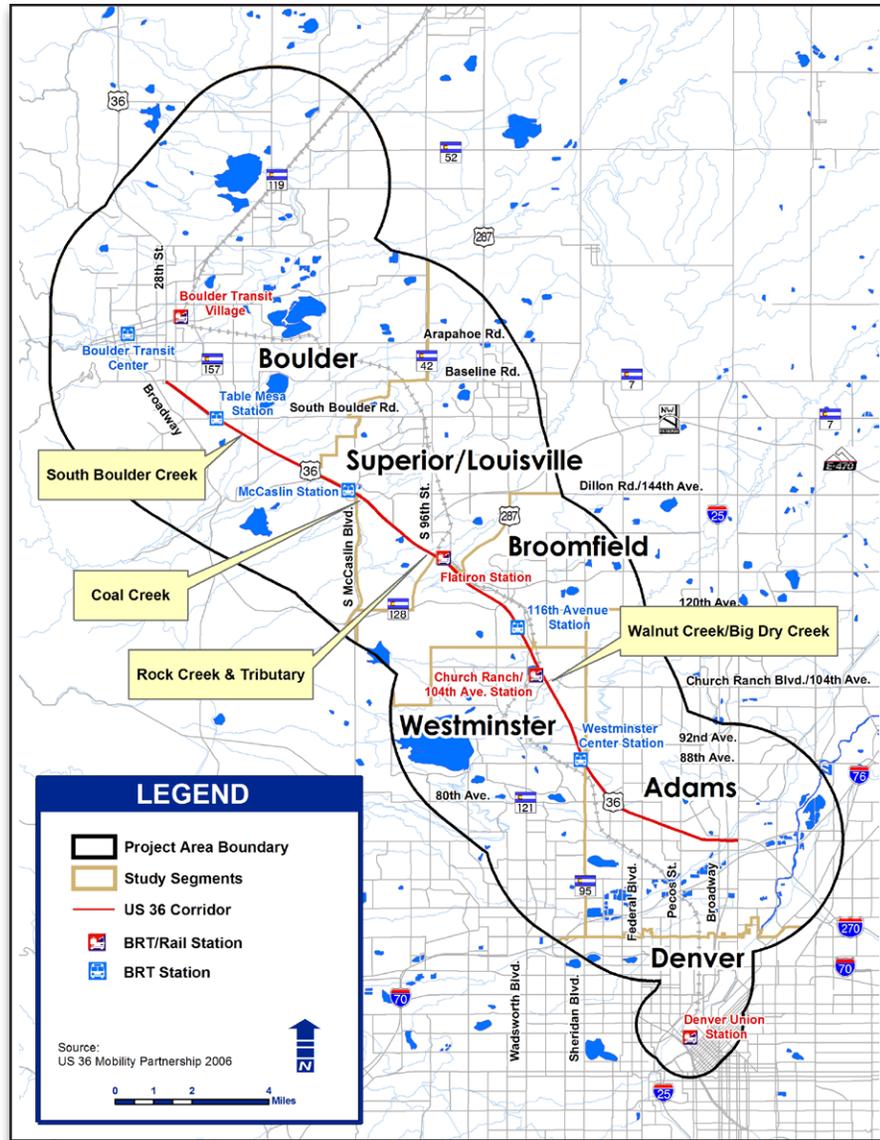
| SEGMENT | PARK/OPEN SPACE RESOURCE |
|------------------------------------|-------------------------------------|
| ADAMS | Commissioners Park |
| | Westminster Open Space |
| | Westminster Hills Park |
| | Oakwood Park |
| | Rotary Park (Section 6(f) Resource) |
| | Westminster Open Space |
| WESTMINSTER | Waddell Park |
| | Westcliff Future Park (Trendwood) |
| | Westminster Open Space |
| BROOMFIELD | Big Dry Creek Open Space |
| | Westminster Open Space |
| | Westminster Open Space |
| | Big Dry Creek Trail Crossing |
| | Westminster Open Space |
| SUPERIOR/LOUISVILLE | Allen Ditch |
| | Broomfield Open Space |
| | Broomfield Open Space |
| | East Interlocken Park |
| | East Interlocken Trail Crossing |
| ADAMS | Interlocken Golf Course |
| | Broomfield Open Space |
| | Frank Varra Park |
| SUPERIOR/LOUISVILLE | Scriffiny (Carlson) Open Space |
| | Coal Creek Trail Crossing |
| | Broomfield Open Space |
| BOULDER | City on the Hill Open Space |
| | Gallucci Open Space |
| | Jirkovsky Open Space |
| | Yunker Open Space |
| | Yunker Open Space |
| | Yunker Open Space |
| | Yunker Open Space |
| | Van Vleet Open Space |
| | Short Open Space |
| | Van Vleet Open Space |
| Van Vleet Open Space | |
| South Boulder Creek Trail Crossing | |

- ▶ Six parks and 24 open space properties would be impacted by Package 4, for a total of 42.8 acres.
- ▶ Seven parks and 24 open space properties would be impacted by Package 2, for a total of 43.2 acres.
- ▶ Six parks and 23 open space properties would be impacted by Combined Alternative Package, for a total of 42.3 acres.
- ▶ Four trail crossings would be impacted by all build packages.
- ▶ Mitigation is property specific and ranges from reseeding disturbed areas to replacing property, facilities and equipment.

Source: US 36 Mobility Partnership, 2009.

EXISTING & IMPACTED WETLANDS

Existing Wetlands in Study Area



Summary of Direct Permanent Wetland Impacts

| Segment | Package 2 Total (acres) | Package 4 Total (acres) | Combined Alternative Package Total (acres) |
|---------------------|-------------------------|-------------------------|--|
| Denver | 0.0 | 0.0 | 0.0 |
| Adams | 1.3 | 1.2 | 1.0 |
| Westminster | 3.0 | 3.0 | 3.1 |
| Broomfield | 3.4 | 2.4 | 2.4 |
| Superior/Louisville | 1.7 | 1.0 | 1.3 |
| Boulder | 12.0 | 12.8 | 12.8 |
| TOTAL | 21.4 | 20.4 | 20.6 |

Source: US 36 Mobility Partnership, 2009.

There are approximately 70 acres of wetlands and 11 acres of other waters in study area.

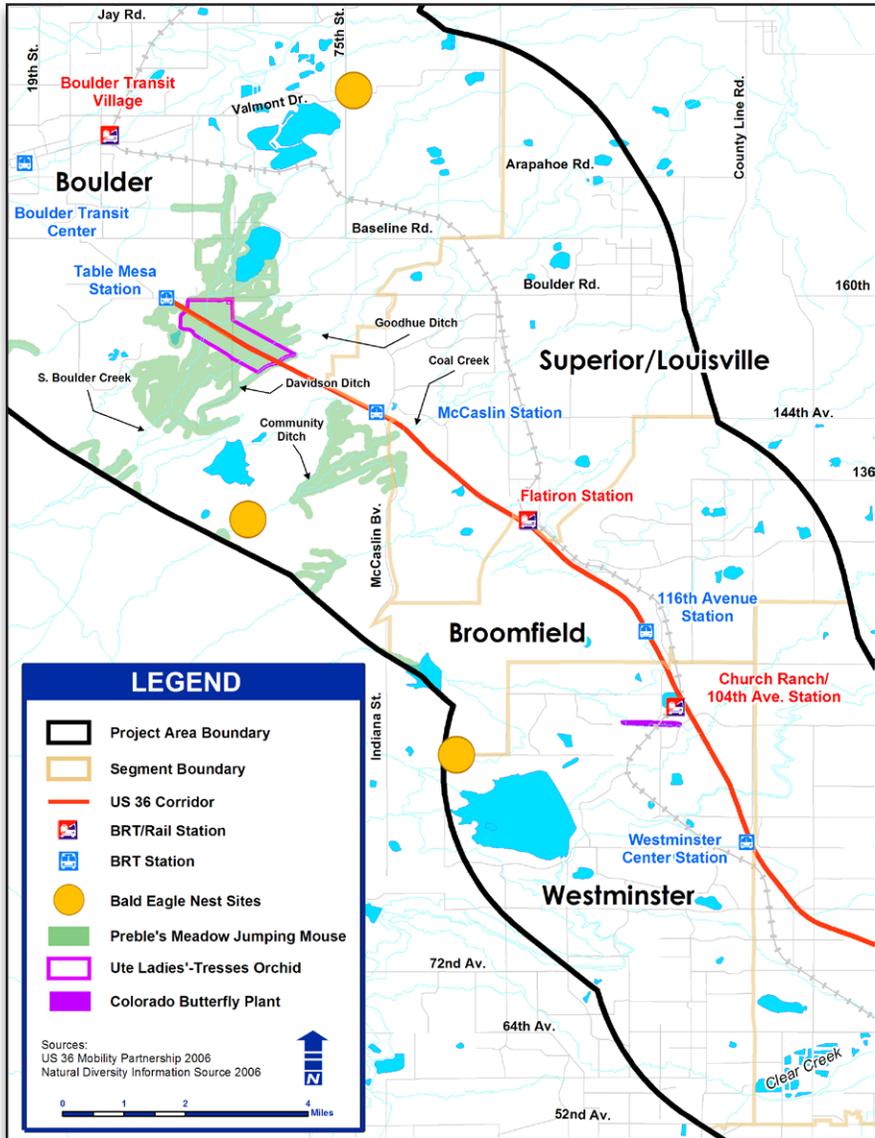
Wetland Impacts:

- ▶ Package 2 would impact approximately 21 acres of wetlands
- ▶ Package 4 would impact approximately 20 acres of wetlands
- ▶ Combined Alternative Package would impact approximately 21 acres of wetlands

Proposed Mitigation:

- ▶ All impacts (jurisdictional and non-jurisdictional) will be mitigated at a 1:1 ratio in accordance with US Army Corps of Engineers and Colorado Department of Transportation policies

WILDLIFE IMPACTS & PROPOSED MITIGATION



Direct Habitat Loss to Wildlife

| Species | THREATENED & ENDANGERED SPECIES – IMPACTED ACRES | | |
|--|--|----------------------|---|
| | Package 2 (acres) | Package 4 (acres) | Combined Alternative Package (acres) |
| Preble's Meadow Jumping Mouse | 42.3 | 49.4 | 46.0 |
| Ute Ladies'-tresses orchid | 36.9 | 40.0 | 39.5 |
| Burrowing Owl | 66.0 | 64.1 | 62.8 |
| OTHER WILDLIFE SPECIES – IMPACTED AREAS | | | |
| Black-Tailed Prairie Dog Colonies | 66.0 | 64.1 | 63.9 |

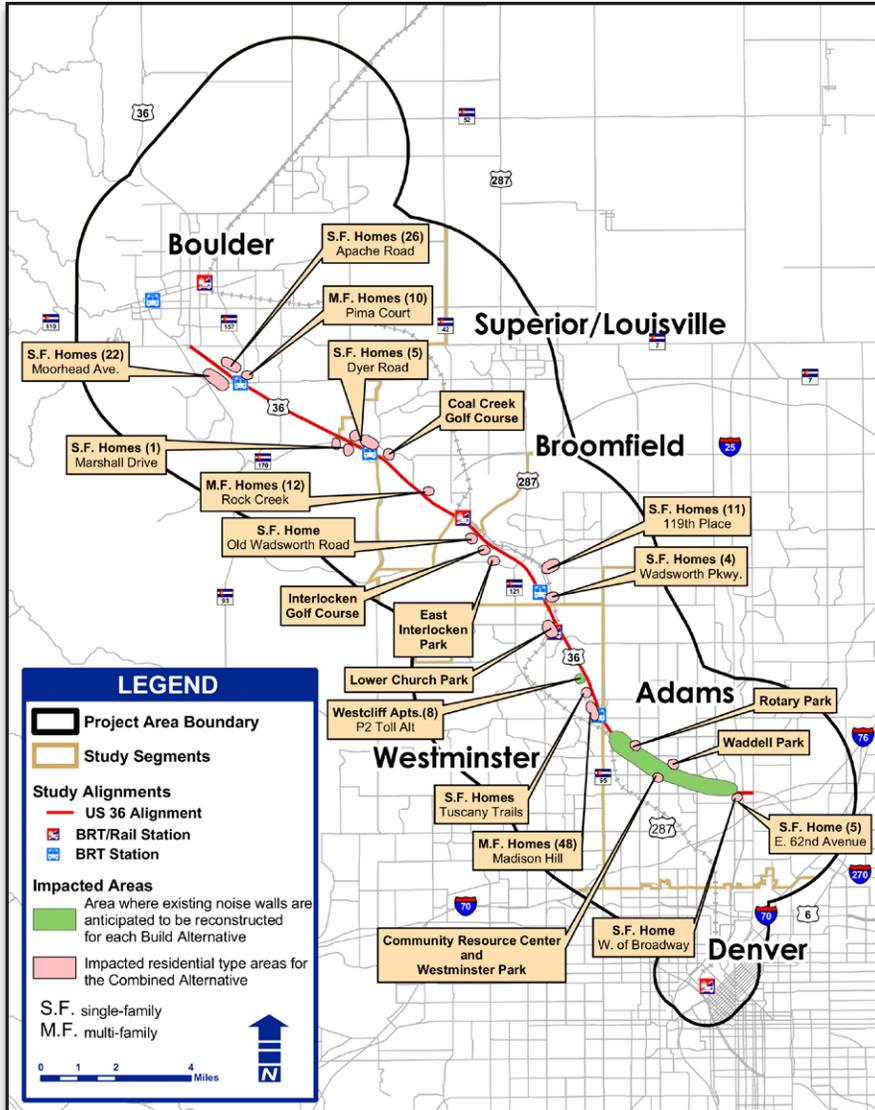
Source: US 36 Mobility Partnership, 2009.

► Mitigation includes:

- Avoidance of habitat during design
- Surveys prior to construction
- Relocation if possible
- Best Management Practices during construction
- Restoration or replacement of lost habitat

NOISE IMPACTS AND PROPOSED MITIGATION

Location of Noise Impacts & Mitigation

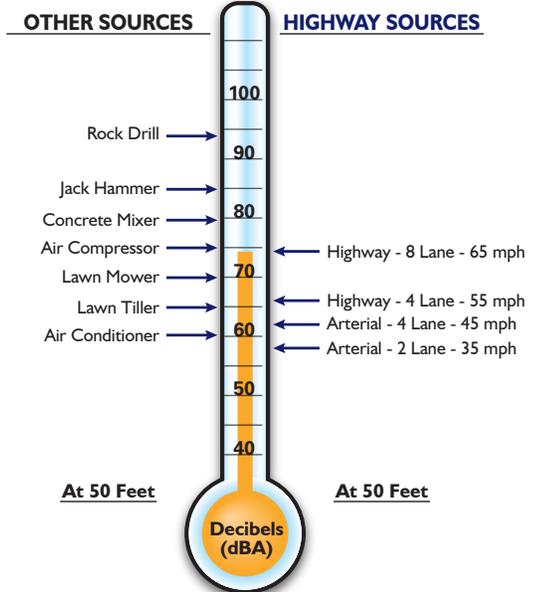


Length of Sound Wall Anticipated

| Segment | Package 1 | Package 2 | Package 4 | Combined Alternative Package |
|----------------------------|--------------------------|--------------------------|--------------------------|------------------------------|
| | Reconstructed/New (feet) | Reconstructed/New (feet) | Reconstructed/New (feet) | Reconstructed/New (feet) |
| Denver | 0 | 0 | 0 | 0 |
| Adams | 0 | 34,000 | 34,000 | 34,000 |
| Westminster | 0 | 4,200 | 2,400 | 4,200 |
| Broomfield | 0 | 0 | 0 | 0 |
| Superior/Louisville | 0 | 0 | 0 | 600 |
| Boulder | 0 | 7,900 | 7,900 | 7,900 |
| Total (linear feet) | 0 | 46,100 | 44,300 | 46,700 |

Source: US 36 Mobility Partnership, 2009

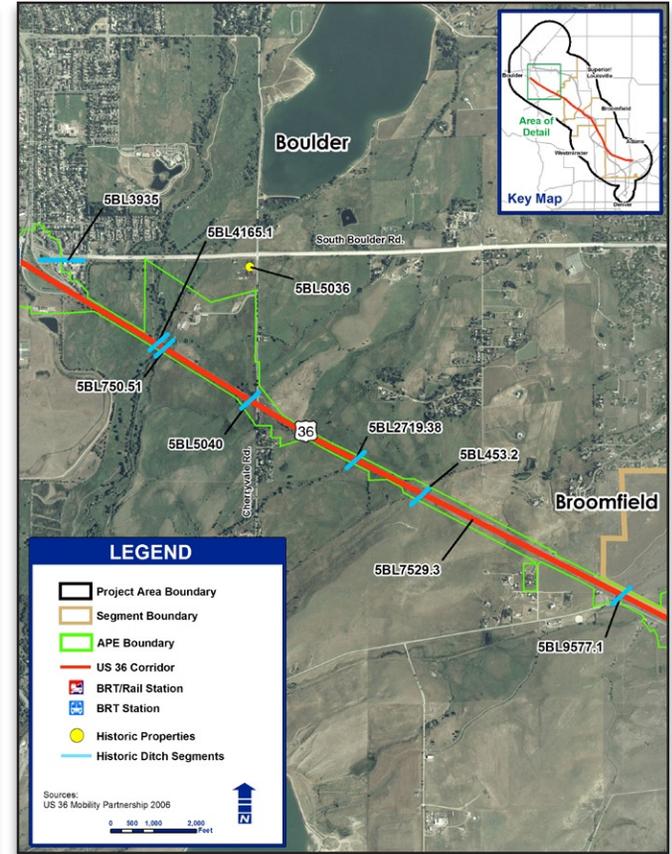
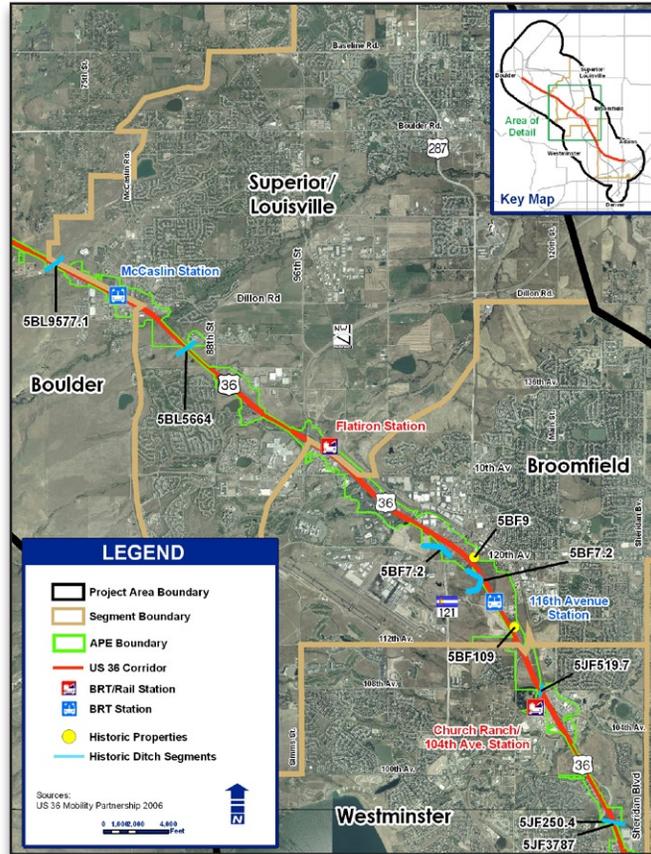
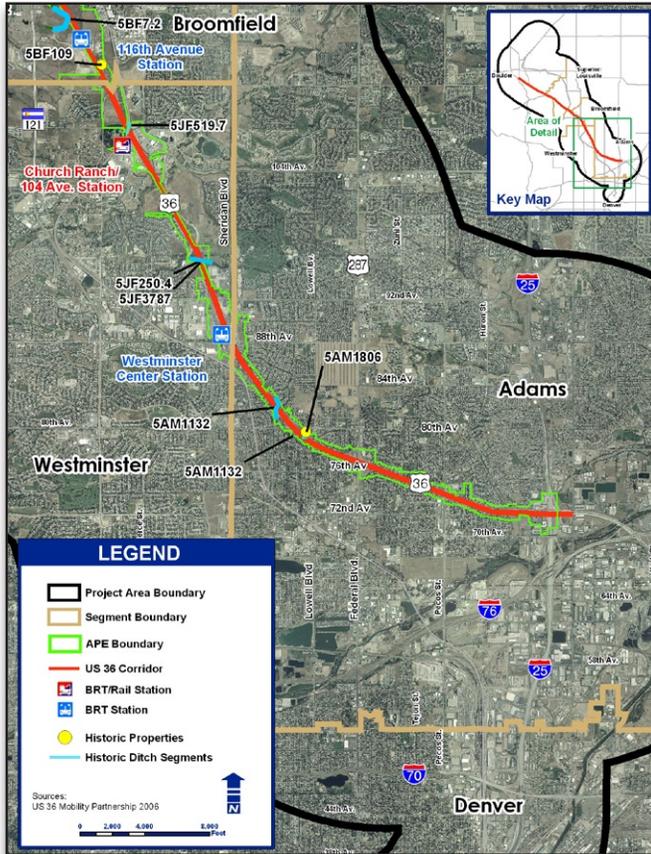
- ▶ 114 residences impacted by Package 1
- ▶ 126 residences impacted by Packages 2 and 4
- ▶ 125 residences impacted by Combined Alternative Package
- ▶ P2 and P4 noise mitigations are proposed at Madison Hills, Tuscany Trail, Apache Road/Pima Court and Moorehead Neighborhoods
- ▶ Additional noise mitigation proposed at Rock Creek Apartments for Combined Alternative Package
- ▶ Noise mitigation may include sound walls where reasonable and feasible



* CDOT threshold for noise mitigation in residential, park, church and similar use areas is 66 dbA

HISTORIC RESOURCES

POTENTIAL HISTORIC RESOURCES IN STUDY AREA



| Smithsonian Site Number | Address/Location | Property Type |
|-------------------------|------------------------------------|--------------------|
| 5AM1132/1132.3/1132.4 | Allen Ditch, no address | Irrigation ditch |
| 5AM1806 | Advent Evangelical Lutheran Church | Church |
| 5JF3787/5JF3787.2 | Nivers Canal, no address | Irrigation canal |
| 5JF250/5JF250.4 | Farmers Highline Canal, no address | Irrigation canal |
| 5JF519.7 | BNSF Segment, no address | Railroad |
| 5BF109 | 11415 Wadsworth Boulevard | Residence |
| 5BF7/5BF7.2 | Dry Creek Valley Ditch, no address | Irrigation ditch |
| 5BF9 | 8375 West 120th Avenue | Residence |
| 5BF99 | Prehistoric hearth, no address | Prehistoric hearth |
| 5BL5664 | Coal Creek Ditch | Irrigation ditch |

| Smithsonian Site Number | Address/Location | Property Type |
|-------------------------|--|----------------------|
| 5BL9577/5BL9577.1 | Louisville Reservoir Inlet, no address | Irrigation ditch |
| 5BL7529.3 | US 36, Davidson Mesa - Foothills Pkwy | Historical highway |
| 5BL453/5BL453.2 | Davidson Ditch, no address | Irrigation ditch |
| 5BL2719/5BL2719.38 | Goodhue Ditch, no address | Irrigation canal |
| 5BL5040/5BL5040.1 | Shearer Ditch, no address | Irrigation ditch |
| 5BL750/5BL750.51 | South Boulder Canyon Ditch, no address | Irrigation ditch |
| 5BL3935 | Anderson Extension Ditch, no address | Irrigation ditch |
| 5BL5036 | Viele Homestead | Residence, farmstead |
| 5BL4165/5BL4165.1 | McGinn Ditch, no address | Irrigation canal |

US 36 PREFERRED ALTERNATIVE COMMITTEE

PROCESS TO IDENTIFY A PREFERRED ALTERNATIVE

HOW THEY CAME TO BE:

In order to respond to public and jurisdiction comment, a U.S. 36 Preferred Alternative Committee (PAC), a 21-member group comprised of agency representatives, elected officials and technical staff from local jurisdictions, was convened.

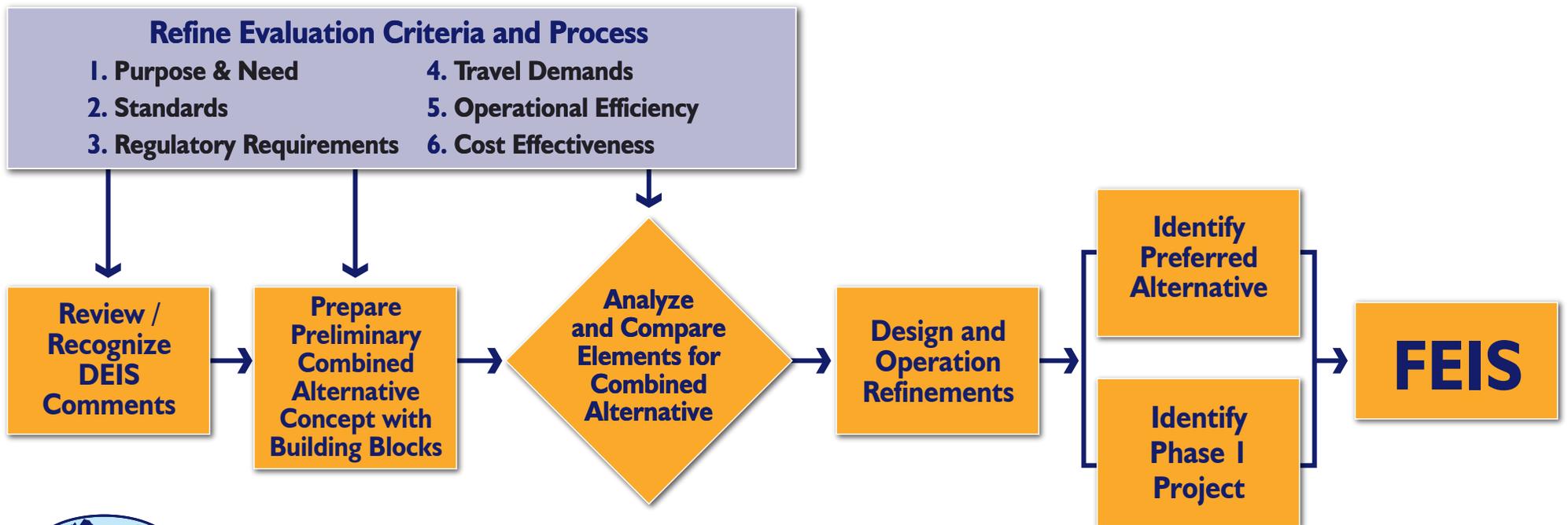
PURPOSE:

The US 36 PAC has met since January 2008 to identify the Preferred Alternative for inclusion in the U.S. 36 Final Environmental Impact Statement.

ISSUES ADDRESSED:

- ▶ Access to Broadway
- ▶ Auxiliary lanes
- ▶ Bus Rapid Transit operations and stations
- ▶ West End design options
- ▶ Access to managed lanes
- ▶ Bikeway
- ▶ Travel Demand Management

US 36 PREFERRED ALTERNATIVE COMMITTEE PROCESS:



US 36 PREFERRED ALTERNATIVE COMMITTEE

US 36 PAC Members

A 21-member group comprised of agency representatives, elected officials and technical staff from local jurisdictions.

- ▶ Adams County
- ▶ Boulder County
- ▶ Jefferson County
- ▶ City & County of Denver
- ▶ City & County of Broomfield
- ▶ City of Westminster
- ▶ City of Louisville
- ▶ City of Superior
- ▶ City of Boulder
- ▶ Federal Highway Administration
- ▶ Federal Transit Administration
- ▶ Colorado Department of Transportation
- ▶ Regional Transportation District
- ▶ U.S. Army Corps of Engineers
- ▶ 36 Commuting Solutions



The graphic features logos for DOT (Department of Transportation), RTD (Regional Transportation District), US 36 CORRIDOR Environmental Impact Statement, U.S. Department of Transportation Federal Highway Administration, and FTA (Federal Transit Administration). It includes text stating support for the U.S. 36 Combined Alternative and a quote from the committee. Signatures of Russell George (Colorado Department of Transportation), Cu Maull (Regional Transportation District), Herb S. Petty (Federal Highway Administration), and Charlene Krister (Federal Transit Administration) are present. The background shows a stylized mountain range and a city skyline.



OUTCOME

- ▶ July 2008: Reached consensus agreement on the “Recommendation for a Combined Alternative”
- ▶ The Combined Alternative Package includes both transit and highway improvements that are responsive to the public and provide long-term transportation benefits.
- ▶ It is intended that the Combined Alternative Package will be identified as the Preferred Alternative in the U.S. 36 Final EIS

PROPOSED US 36 BIKEWAY



Begin/end US 36 Bikeway

Connect to Little Dry Creek Trail via Bradburn

LEGEND

- Bikeway
- BRT Station
- BRT / Rail Station

Source: US 36 Mobility Partnership, 2008

| CROSS STREET/TRAIL/ PARK-N-RIDE | GRADE CROSSING TYPE | CONNECTION TO CROSS STREET, TRAIL, PARK-N-RIDE |
|--|-------------------------------------|---|
| 72nd Avenue | Utilize existing | Utilize existing |
| 80th Avenue | Extended Underpass | Existing Trail |
| Westminster Center park-n-Ride | Overpass | Park-n-Ride |
| Sheridan Boulevard | Underpass | Park-n-Ride |
| 92nd Avenue | Underpass | No Connection |
| Westminster Boulevard | Overpass (existing)/ Underpass | Existing Bridge Trail/SW |
| Big Dry Creek Trail | Underpass | Existing Trail |
| Church Ranch Boulevard | Underpass | Existing Trail |
| Church Ranch Park-n-Ride | Underpass to Parking | Park-n-Ride |
| Wadsworth Boulevard (Old Wadsworth) | Overpass/At Grade | No Connection |
| 112th Avenue | Underpass | No Connection |
| 116th Broomfield Park-n-Ride | Overpass | Park-n-Ride |
| 120th Avenue | Underpass | Yes (Trail along 120th for a Distance/Could Connect) |
| Wadsworth Parkway | Underpass | No Connection |
| East Flatiron Park Trail | Crossing over Existing Underpass | Existing Trail |
| East Flatiron Circle | Overpass (existing) | Existing Trail |
| Interlocken Loop | Underpass (existing) | Existing Trail |
| Rock Creek Trail | Underpass | Existing Trail |
| 88th Street | Underpass | No Connection |
| Cattle Crossing at Avista Hospital | Underpass | No Connection |
| Coal Creek Trail | Underpass | Existing Trail |
| McCaslin Boulevard | Underpass | Existing Trail |
| McCaslin Park-n-Ride | Overpass (Extended) | Park-n-Ride |
| Cherryvale Road | Underpass | No Connection |
| South Boulder Creek | Underpass | Existing Trail |
| Table Mesa park-n-Ride | Underpass | Park-n-Ride |
| Table Mesa Drive | Underpass (Under Ramp) | Existing Trail |



PUBLIC COMMENT STATION

HOW TO STAY INVOLVED

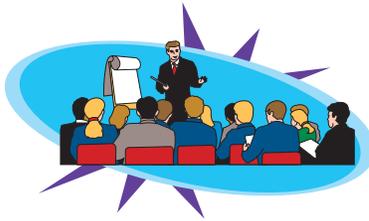


- ▶ Visit the **US 36 Web site** for current information about the project

- ▶ Sign up on the Web site to receive project updates and meeting announcements



- ▶ Attend **US 36 FEIS Public Meetings and Hearings**



- ▶ Submit a comment at a public meeting, by mail, or through the project Web site



- ▶ Request a meeting for your organization



CONTACT US

US 36 EIS Web site
www.us36eis.com

US 36 EIS Information Line
(720) 407-4713

U.S. 36 Environmental Impact Statement
c/o CDR Associates
100 Arapahoe Ave., Suite 12
Boulder, CO 80302