B4 CLARIFICATION AND DETAIL FOR COMMON COMMENTS

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If you do not see a response within the following general response sections below as it relates to your comment, see the individual response provided in the United States Highway 36 (US 36) Corridor Final Environmental Impact Statement (FEIS) Response to Comments section.

### **General Responses**

### Air Quality/Emissions/Human Health

Impacts to air quality resulting from the proposed project have been analyzed and documented in Section 4.12, Air Quality, of the US 36 Corridor Final Environmental Impact Statement and Final Section 4(f) Evaluation (US 36 Corridor FEIS) (US 36 Mobility Partnership 2009). The air quality analysis shows that operation of the project would not cause significant air quality impacts, and that future emissions would stay within levels that are considered to be acceptable under the U.S. Environmental Protection Agency (USEPA) standards.

Temporary air quality impacts would result during construction. Dust and erosion would occur from earthwork and construction. Increased air emissions from construction would also occur, but would be minor. These temporary impacts are documented in Section 4.22, Construction-related Impacts, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009). Colorado Department of Transportation (CDOT) follows practices to mitigate, or lessen, air quality impacts during construction. These mitigation measures are discussed at the end of Section 4.12, Air Quality, and Section 4.22 of the *US 36 Corridor FEIS*.

Construction in the US 36 corridor would be phased due to the size of the project and funding constraints. Construction would be implemented in phases that would occur many years from one another.

Research into the health impacts of Mobile Source Air Toxics (MSATs) is ongoing. For different emission types, there are a variety of studies that show that some either are statistically associated with negative health outcomes through epidemiological studies (frequently based on emission levels found in occupational settings), or that animals demonstrate negative health outcomes when exposed to large doses. There have been other studies and papers that suggest MSATs have health impacts. However, noting that unresolved issues still remain, the Health Effects Institute, a non-profit organization jointly funded by USEPA and industry, has undertaken a major series of studies to determine whether MSAT hot spots exist, and what the health implications are if they do. The final summary of these studies is not expected to be completed for several more years.

### **Bikeway**

### Bikeway Development/Support

The alternative packages for the US 36 Corridor Project were developed in response to the assessment of transportation needs identified in the US 36 corridor as part of the public scoping process. A range of alternatives was considered to address the various transportation needs. Bicycle and pedestrian facilities were identified as a supportive element that would be included in any of the build packages, specifically in response to Need #4, Expand Mode of Travel Options, in the project Purpose and Need.

The alignment of the bikeway was developed through the engineering process and the subsequent evaluation of impacts.

An Alternative Modes Working Group, consisting of representatives from local governments in the corridor and members from the bicycling community, provided input in the development of the bikeway, including the specific bikeway alignment and the need for it to be a continuous bikeway facility.

The US 36 bikeway is envisioned as a regional commuter facility. The design for the bikeway includes grade-separated crossings (underpasses/overpasses) where it crosses over or under major cross-streets for most of the corridor. At Bradburn Boulevard, the bikeway transitions away from US 36 to on-street facilities before it connects to the existing Little Dry Creek Trail. Full access/connections are not provided at every cross-street or existing trail. Connections are provided at the US 36 park-n-Rides, at major interchanges (e.g., Wadsworth Parkway, McCaslin Boulevard, etc.), and at some existing trails where necessary (e.g., trails used to transition from one side of US 36 to the other). Future additional connections to the bikeway would not be precluded.

#### **Bikeway Maintenance**

For bikeway maintenance, CDOT's draft procedural directive 1602.1 (August 17, 2009), Bike and Pedestrian, states that "bikeways, which are adjacent to or are an integral part of state highways, including the shoulder area, and which are not separated by a physical barrier from that portion of the highway used by motor vehicles, shall be maintained by the Department of Transportation." This kind of bikeway is not proposed as part of the Combined Alternative Package (Preferred Alternative).

Additionally, the draft procedural directive states that "bikeways within the ROW of controlled-access state highways will be maintained by the Department, except where a maintenance agreement provides otherwise," and that "responsibilities for operation, maintenance, and policing of facilities in CDOT ROW shall be determined and outlined prior to construction of such facilities." For portions of the bikeway located within CDOT right-of-way (ROW), details about maintenance will be negotiated through an Intergovernmental Agreement (IGA) with the various US 36 corridor local jurisdictions.

Finally, "all bikeways other than those defined above shall be the maintenance responsibility of others." The portions of the bikeway located outside of CDOT ROW will be the responsibility of the jurisdictions.

#### Support for Anticipated Use

Bicycle and pedestrian facilities were identified as a supportive element that would be included in any of the build packages. Representatives from local governments in the corridor and members from the bicycling community provided input in the development of the bikeway.

Trails in the Denver metropolitan area, including the C-470 and Cherry Creek bikepaths, exemplify the need for multi-modal options. This facility would support travelers that would like to make trips along the entire corridor and have inter-corridor connections.

### Additional Access to the Bikeway

The US 36 Corridor FEIS (US 36 Mobility Partnership 2009) outlined locations for bikeway connections and crossings (see Table 2.6-6, Bikeway Crossings and Connections of the US 36 Corridor FEIS) throughout the corridor. Local jurisdictions can create connections between their facilities and the US 36 bikeway. Where the bikeway may pass near local bikepaths, jurisdictions can apply for federal or other funding, and required permits to complete these connections. Examples include but are not limited to Cherryvale Road, 88<sup>th</sup> Street, 112<sup>th</sup> Avenue, McCaslin Boulevard, Church Ranch Boulevard, 92<sup>nd</sup> Avenue, Sheridan Boulevard, and Wadsworth Parkway.

#### Safety

The bikeway is intended to be a separate transportation facility along US 36. CDOT is considering safety in all design aspects of the bikeway. This could include bikeway widths, separation from traffic, undercrossing lighting, signage, and crossings. In final design, these safety aspects will continue to be refined.

### **Combined Alternative Package (Preferred Alternative)**

# Support for the Combined Alternative Package (Preferred Alternative) and the Preferred Alternative Committee Process

This response pertains to comments or questions about how the Preferred Alternative was developed and advanced from the Draft Environmental Impact Statement (DEIS). It also describes the Preferred Alternative Committee (PAC) process, how public comment and feedback from the DEIS were considered, and the collaborative effort which took place among the corridor jurisdictions to reflect public input.

The Combined Alternative Package (Preferred Alternative) is responsive to comments received during the DEIS comment period, which identified public and agency interest in minimizing community and environmental impacts and reducing project costs, while providing increased mobility improvements throughout the US 36 corridor (see Volume III, Response to DEIS Comments, of the US 36 Corridor FEIS [US 36 Mobility Partnership 2009]).

Following the DEIS public comment period, the PAC was formed to respond to public and jurisdiction comments. The PAC, a 21-member group comprised of agency representatives, elected officials, and technical staff from local jurisdictions, first convened in January 2008. The purpose of the PAC was to recommend a Preferred Alternative for inclusion in the FEIS. The PAC members represented the following jurisdictions and agencies:

- Adams County
- Boulder County
- Jefferson County
- City and County of Denver
- City and County of Broomfield
- City of Westminster
- City of Louisville
- City of Superior
- City of Boulder
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- CDOT
- Regional Transportation District (RTD)
- USACE (U.S. Army Corps of Engineers)
- 36 Commuting Solutions

The PAC participated in a collaborative process to consider public comments received, evaluate corridor elements, identify a Preferred Alternative, and outline implementation phases.

In July 2008, the PAC recommended a multi-modal transportation solution known as the Combined Alternative Package to be advanced through the National Environmental Policy Act of 1969 (NEPA) process. This package was recommended as the Preferred Alternative in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009).

#### Construction Phasing

The intent of the US 36 Corridor Project is to build what it can in the ultimate configuration as early phases are prepared and constructed. Sound and retaining walls will be built in conjunction with roadway

improvements. In construction areas, an approach would be to build the sound wall before constructing the roadway elements; to protect the public from additional construction noise.

Another intent would also be to consider building a few extra feet of roadway width, if it is economically feasible to do so and would aid in traffic flow during construction. However, the project will not build the auxiliary lanes widths in the first phase nor any of the bus-only lanes until the triggers are met (as described in the *US 36 Corridor FEIS* [US 36 Mobility Partnership 2009]). Although the project will minimize "throw-away" pieces that are not built at the ultimate locations, the project will consider building retaining walls in interim locations, if the ROW or impact savings (such as business, residence, endangered species, or wetlands impacts) of that action outweigh the cost of those walls.

### Pursuit of Future Funding

This response describes CDOT's and RTD's approach to finding funding for the Combined Alternative Package (Preferred Alternative) for Phase 1 and future phases.

CDOT and RTD are committed to working with the corridor jurisdictions and other local partners to pursue funding opportunities for the implementation of project improvements. The Executive Summary (page ES-25) of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009) explains the current funding commitment from CDOT and RTD to implement Phase 1, and explains the approach for the implementation of future phases.

### **Final Design**

During the final design process, CDOT coordinates efforts with local jurisdictions to review project plans and provide input. Public stakeholders can stay involved by communicating and coordinating through their local jurisdictions.

During the Environmental Impact Statement (EIS) process, project design is usually only taken to 5 or 10 percent of final design. Refinement of this design occurs after a Record of Decision (ROD) is prepared, signed, and funding is identified. Additional details are developed during final design, such as constructability, traffic detours, elevation resolution, and further minimization of impacts. These refinements include input from the associated jurisdiction during the final design process where ramp realignments, retaining wall use, impacts (such as ROW), avoidance or minimization, and verification of final project element locations can occur.

### Retaining Walls

The retaining wall locations may be placed in areas to minimize impacts to adjacent properties or environmental resources and may not be in the ultimate location of the Combined Alternative Package (Preferred Alternative) if the impact savings is more important than the added cost that would be incurred by building a retaining wall twice. It is most favorable to build these walls in their ultimate location but such decisions will be made on a case-by-case basis during final design.

#### Right-of-way

ROW parcels identified in the US 36 Corridor FEIS (US 36 Mobility Partnership 2009) as partial acquisitions (as shown with blue shading in Appendix A, Corridor Reference Maps, of the US 36 Corridor FEIS), where the occupant can remain but a small part of the land would be acquired, would be further verified during final design, and in some cases, the acquisition may be avoided altogether. Sometimes these partial acquisitions are for permanent easements where the state would need access to a feature, such as the sound wall, in order to maintain it. Sometimes a partial acquisition is for a temporary easement that would be required during construction but not after construction is complete. The full acquisitions (as shown with red shading in Appendix A of the US 36 Corridor FEIS) are more likely to be total property acquisitions, even with project refinement.

### I-25/Broadway Interchange

The Interstate 25 (I-25)/Broadway interchange is depicted in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009) as having a system-to-system ramp from southbound I-25 to westbound US 36. This would eliminate the existing ramp from southbound I-25 and the westbound US 36 off-ramp to Broadway that currently exist. These improvements are not proposed as part of Phase 1, the proposed action covered in this ROD.

This interchange configuration is based on a 1985 Environmental Assessment, which was updated in 1998, and an Interstate Access Request (IAR) for the I-25/US 36/I-270/I-76 interchange, which was prepared in 1990. During the EIS and PAC process, Adams County and local stakeholders raised concerns about the elimination of local access at Broadway. Impacts associated with the proposed closure are presented in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009). Based on public comments, potential impacts, and the length of time that has elapsed between the Finding of No Significant Impact (FONSI) and IAR for this action, the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009) recommends that prior to any construction occurring at the I-25/Broadway interchange, a separate study be undertaken. This study would evaluate local access in the area and reevaluate the proposed federal action of closing access, prior to a final determination on local access to the interstate(s) for this area.

### Pecos Street Safety

The access to Broadway, and the associated increase in traffic on Pecos Street, will not change until after an additional study has been conducted regarding this and other concerns in the area. Additionally, this action is not anticipated to occur until Phase 3, as described in the US 36 Corridor FEIS (US 36 Mobility Partnership 2009). However, if vehicular/pedestrian safety is a current concern on Pecos Street, this matter is under Adams County jurisdiction.

### **NEPA Process and Alternatives Evaluation**

### Project Study Area

The physical limits of the US 36 FEIS are from I-25 in Adams County to Foothills Parkway/Table Mesa Drive in Boulder. These limits were considered to meet the following criteria:

- Connect logical termini and be of sufficient length to address environment matters on a broad scope.
- Have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made).
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

While the FEIS focused on the physical limits stated above, improvements and impacts beyond these limits were considered in the FEIS. For example, bus service into Denver Union Station (DUS) and the Boulder Transit Center were evaluated as part of the alternatives analysis. Also, rail improvements in this area are being considered as part of the *Northwest Rail Corridor Environmental Assessment/ Environmental Evaluation* (RTD [In process]).

### Multi-modal Alternatives in the US 36 Corridor

The US 36 FEIS provides information about the anticipated air quality impacts, transportation benefits, climate change impacts, and safety impacts. The Combined Alternative Package (Preferred Alternative) includes numerous elements that will encourage travel through modes other than the single-occupant vehicle (SOV). The managed lane will result in express bus and high-occupancy vehicle (HOV) travel times that are as much as 28 minutes faster than general-purpose lane traffic. Also included are increased and enhanced bus service, queue jumps and bus ramp metering bypass lanes, the corridor bikeway, and

measures to reduce travel demand, all of which will serve to provide a competitive alternative to automobile travel.

#### Alternatives Evaluation

The alternatives evaluation process used for the NEPA process is described in Chapter 2, Alternatives Considered, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009). The requirements for considering alternatives are defined in Council on Environmental Quality's (CEQ) regulations, as described in 40 Code of Federal Regulations (CFR) 1502.14: "Agencies shall rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." CEQ guidance provides a definition for reasonable alternatives as those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. "Fast" trains were examined and dropped from detailed evaluation because they were not considered practical and feasible, as described on page 2.2-5 of the *US 36 Corridor FEIS*.

### Benefits of the Combined Alternative Package (Preferred Alternative)

The Combined Alternative Package (Preferred Alternative) as described in Chapter 2, Alternatives Considered, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009) will only marginally increase air pollution compared to Package 1 (No Action). The Combined Alternative Package (Preferred Alternative) increases air pollution the least among the build packages. For more on air quality impacts, see Section 4.12, Air Quality, of the *US 36 Corridor FEIS*.

The Combined Alternative Package (Preferred Alternative) will provide a faster way of commuting between Denver and Boulder for the managed-lane users when compared to the general-purpose lane users and Package 1 (No Action). In addition, due to the 28 minutes in travel time savings in the managed lane, bus rapid transit (BRT) in the Combined Alternative Package (Preferred Alternative) is projected to increase corridor bus boardings by 200 percent when compared to Package 1 (No Action).

### Noise

The general noise response addresses common issues, concerns, and questions related to noise issues.

### Impacts

Noise impacts resulting from the proposed project have been analyzed and documented in Section 4.13, Noise, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009). Noise levels were measured at residences within 200 feet of the US 36 corridor to evaluate the worst-case conditions. Residences located greater than 200 feet from the alignment are generally considered second or third row receivers (i.e., they are blocked by other residences or buildings). It is agreed that noise from US 36 can be heard from long distances; however, noise mitigation, including sound walls, is not effective at such distances.

When future noise levels would exceed CDOT's noise abatement criteria (NAC), mitigation, such as sound walls, will be provided if it is reasonable and feasible to do so, and would depend on the sound wall effectiveness compared to the number of people it would benefit. Many areas of the US 36 corridor have existing sound walls that would be replaced after construction, and new sound walls are proposed in some areas.

#### Sound Walls/Maintenance

The US 36 Corridor FEIS (US 36 Mobility Partnership 2009) identified several areas as being eligible for noise mitigation. During final design, details such as height, length, placement, end points, wraps, aesthetics, and absorption will be determined. It should be noted that the sound walls are not designed to reduce noise levels to a certain level, such as 66 decibels (A-weighted scale) (dBA). They are designed to provide a 5 to 10 dBA of reduction, which is generally feasible.

In keeping with CDOT procedures regarding agreements for the maintenance of walls, an IGA will be prepared with local agencies during final design regarding the handling of graffiti on walls that are along CDOT ROW. These walls shall be maintained by the state on the highway side, and by the local agency on the local agency side (at no cost to the state). Graffiti on walls and concrete surfaces shall be painted over with paint conforming to approved federal color numbers or removed by power washing (following applicable Colorado Department of Public Health and Environment (CDPHE) or local agency power washing guidelines for how to handle the wastewater and paint chips). Graffiti on control cabinets, poles, signs, etc., shall be removed by power washing or painted over with a paint that matches the color of the original surface.

#### Boulder Noise Concerns - Table Mesa Drive to Baseline Drive

The US 36 corridor extends between I-25 in Adams County and Foothills Parkway/Table Mesa Drive in Boulder County. The CDOT noise analysis procedures are consistent with FHWA regulations and require the noise analysis to be conducted within a 500-foot study zone in all directions if sensitive receivers are present. Extending the study area 500 feet along US 36 from the end of roadway improvements (west of Foothills Parkway/Table Mesa Drive), allows for noise mitigation for receptors beyond the project limit. Noise studies west of Bear Creek are outside of this 500-foot noise evaluation area and therefore do not meet CDOT criteria for noise mitigation consideration from this project.

### Reduce Speed Limits

CDOT Region 4, the City of Boulder, and the Martin Acres Homeowner's Association (HOA) representative are working together to evaluate whether or not the 65 miles per hour speed limit is appropriate for the portion of US 36 between Baseline Road and Table Mesa Drive. This process includes field studies of the current speeds, along with safety data and other items. This study is being done in compliance with the *Manual for Uniform Traffic Control Devices* (FHWA 2009) requirements for setting speed limits. Information from this study is not yet available, but contact can be made with the CDOT Region 4 engineer in charge of this corridor at (303-757-9011), the Martin Acres HOA, or the City of Boulder Transportation Department for more information.

### **Public Involvement**

#### **Ongoing Involvement**

This is a general response to address comments regarding how to stay informed about the US 36 corridor improvements through construction.

To stay informed about US 36 corridor design and implementation of improvements now that the FEIS is complete, the following sources are available for the latest information:

- Visit the CDOT website for current information about the project and improvements: www.dot.state.co.us
- Visit the RTD website for current information about the project: www.RTD-FasTracks.com
- Get involved with 36 Commuting Solutions: www.36commutingsolutions.org
- Contact your local government representative
- Contact the CDOT Public Relations Office: 4201 East Arkansas Avenue Denver, CO 80222 303-757-9228 info@dot.state.co.us

There is an ongoing commitment from CDOT and RTD to inform the public about Phase 1 design and implementation, as well as subsequent construction phases. A public involvement strategy will be put in place for the project's implementation/construction stages.

Throughout all phases of project implementation, CDOT and RTD will work with local jurisdictions. Following the implementation of Phase 1 improvements, CDOT and RTD will continue to work with the jurisdictions to determine and prioritize what elements of the remaining phases will be implemented.

#### Notification During the EIS

This response applies to the comments received where people asked how the public was involved, or if they claim to have never been contacted.

To learn about the ways in which corridor stakeholders have been involved in the US 36 EIS, please reference Chapter 6, Public Involvement Program, of the US 36 Corridor FEIS (US 36 Mobility Partnership 2009), and/or the Public Involvement Program Technical Report Addendum (CDR Associates 2009). These resources document how and when the public was contacted, how stakeholders were involved, and what kind of feedback was provided from the public to the project.

Potentially impacted stakeholders were identified and the project team made repeated attempts to contact these stakeholders. Section 6.5, Continuous Outreach and Communication, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009) describes the different strategies implemented by the project team to communicate with the public throughout the corridor. Additionally, the public involvement process included early identification and ongoing coordination and communication with property owners along the corridor to inform and update them of project developments.

### **Right-of-way**

Environmental Impact Statement Process: Minimization of Impacts

The project team has worked to minimize and avoid property acquisitions throughout the EIS process. With the design of the Combined Alternative Package (Preferred Alternative), the project team reduced ROW acquisitions by approximately 70 percent compared to Packages 2 and 4; however, some property acquisitions would still be required.

### Project Phasing

As described in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009), the project has been divided into three phases (Phase 1, Phase 2, and Phase 3). ROW acquisitions for each phase would be dependent on funding and approval for that phase since property cannot be acquired until there is a ROD.

The US 36 Corridor ROD covers Phase 1 of the project, which has funding identified through 2035 (future RODs will cover later phases). The impact footprints in Appendix A, Corridor Reference Maps, of the *US 36 FEIS* (US 36 Mobility Partnership 2009) should be reviewed to determine if a property would be impacted by Phase 1. The impact footprints in Appendix A are worse-case impacts based on conceptual level design of the Combined Alternative Package (Preferred Alternative). It is possible that some impacts may be further minimized as the design of the Combined Alternative progresses.

As a result of the phasing process, retaining walls built in earlier phases may or may not be built at their final locations. For example, in areas where constructing a retaining wall in its complete build-out location would result in additional impacts to environmental resources (such as wetlands or floodplains), the retaining walls would be constructed for the limits of the respective phase. Retaining walls would be constructed at their complete build-out location in areas where there would not be additional impacts to environmental resources compared to the phased location.

### Notification and Timing of Acquisition

Throughout the EIS process, the project team has worked to include project stakeholders on the mailing and distribution lists. Project newsletters, mailings, public meeting information, and other notifications have been sent to stakeholders as documented in Chapter 6, Public Involvement Program, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009).

When funding for a project formally materializes and the design of the transportation improvements is advanced to the point where ROW impacts are specifically identified, a written notice of intent to acquire will be delivered or sent to the impacted parties. Such notice will include detailed illustrations of the boundary of each affected ownership and the portion of such ownership that will be acquired. Such notice will also identify CDOT's central point of contact for the acquisition process and an advisement of certain statutory rights afforded to impacted parties. Delivery of this notice will officially start the ROW acquisition and relocation (if applicable) process. Federal and state statutes and regulations require CDOT to allow affected parties a reasonable period of time to constructively work through the ROW acquisition and relocation (if applicable) processes. It is difficult to predict when such formal notices will be delivered.

CDOT understands that it is difficult for impacted parties to have ROW impacts identified in the FEIS without providing a definitive time frame for the formal initiation of the ROW process. In an attempt to address this uncertainty, impacted parties can contact the CDOT Region 6 Right-of-way Manager, a position currently occupied by Greg Jamieson, at 303-757-9917, and inquire as to when formal ROW acquisition process for a certain property is predicted to begin.

### Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

The acquisition of real property interests will comply fully with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), and the Fifth Amendment of the United States Constitution. The Uniform Act applies to all acquisitions of real property and displacements of people resulting from federal or federally-assisted programs or projects.

CDOT understands that many of the residents living near the US 36 corridor, especially on the eastern end, are long-term residents or residents on fixed incomes. CDOT recognizes that there is a sensitive population in this community and, as a result, this population may need special relocation assistance through the process.

#### Property Improvements Prior to Acquisition

If a homeowner invests in remodeling, it will very likely increase the value of the property and increase the amount that CDOT pays for the property when it is acquired, since CDOT pays fair market value. Fair market value is usually increased by remodeling and other upgrades. However, the amount of increase is never dollar for dollar. For example, if a homeowner spends \$5,000 to upgrade a bathroom, this action may increase the fair market value \$1,000 to \$4,000 or so, but it is doubtful that it will increase it \$5,000 or more. So, owners considering remodeling need to think about it two ways: (1) from a financial investment perspective (i.e., what will the return be on their investment); and (2) from a quality of life perspective (i.e., if the property would not be acquired for a few years, the homeowner may use and enjoy the remodel in the time frame between the investment and CDOT's acquisition). This intangible benefit may have meaning beyond financial investment depending on the timing of the acquisition. For additional information on timing, please contact the current CDOT Right-of-way Manager, Greg Jamieson, at 303-757-9917.

### **Transit-related**

This general response addresses common issues, concerns, and questions identified in transit-related comments.

### Barrier versus Buffer Separation

The comments received from the DEIS indicated that the public wanted more access to the managed lane than what the barrier-separated lane could offer. The bus service plan that RTD is planning to use will result in the need for buses to move from the general-purpose lanes to the managed lane and back, but this would likely occur at the beginning and end of trips, and not between every BRT station. Ultimately, local buses that are planned to stop at every station will likely use the auxiliary lanes which are being added between interchanges as part of the Combined Alternative Package (Preferred Alternative) (Phases 2 and 3), rather than the managed lane.

### BRT Service

RTD is committed to providing high quality and high frequency express bus service on US 36. A part of this commitment is to make maximum use of the major transit and transportation investment, the managed lanes. Express buses that leave from Boulder heading eastbound will use the managed lanes as much as feasible, subject to the drivers' discretion. This may mean that buses leaving Table Mesa Drive traveling eastbound will get into the managed lanes at Cherryvale Road and stay there all the way to Denver. It may mean that express buses will stop to pick up passengers at McCaslin Boulevard, but then enter the managed lanes as soon as is feasible, and again, stay there all the way to Denver. Other express bus service may be initiated at the McCaslin or Flatiron stations. Then those buses would also enter the managed lanes as soon as feasible and stay there all the way to Denver. This language has been added to the ROD.

### Median versus Ramp Bus Rapid Transit

The project team prepared an analysis of the tradeoffs between median BRT stations and side loading (or ramp) stations. The analysis found that there could be a 1- to 3-minute savings in express bus time traveled for the median stations when compared to the ramp stations. The median stations would, however, cause a much greater ROW requirement, impacting residential and business properties as well as resources (such as wetlands, parks, and wildlife habitat). The ramp stations provide for greater operational flexibility than the median stations and support increased service throughout the corridor (and not just for the end-to-end trips). In addition, the capital cost for median stations is much greater than for the ramp stations. For these reasons, the local elected officials in the corridor and at CDOT and RTD have recommended a package that does not include median stations.

It is anticipated that most buses will not get "stuck in traffic" because of a proposed flexible bus operating plan which designates some buses to run the entire length of the corridor in the new managed lane without stopping (except at the beginning and end of trips), while others will initiate at a particular BRT station and then move into the managed lane. For buses that stop at a particular BRT station, the Combined Alternative Package (Preferred Alternative) will include ramp metering bypasses for buses, and auxiliary lanes and special lanes (called queue jumps) for buses to proceed in front of mixed traffic to avoid a long queue at a traffic signal.

### Resource Allocation Between Rail Service and US 36 Bus Rapid Transit

The decision to pursue both rail and BRT in the US 36 corridor was made and documented in the *Major Investment Study* (RTD 2001), and in the public vote on the *FasTracks Plan* (RTD 2004). Rail provides a competitive travel time to automobile travel times in the future, as does BRT. From the Boulder Transit Village, rail passengers will take approximately 43 minutes to get to DUS, BRT passengers will take 36 minutes, and an automobile traveler using the US 36 general-purpose lanes will take 53 minutes. The rail stations will provide opportunities for transit-oriented development (TOD). Rail serves different travel markets than BRT, including travel to and from Longmont, Louisville, East Boulder, Gunbarrel,

and South Westminster. Rail provides an alternative transportation choice for travelers extending beyond the US 36 corridor and depending on its timing, will provide a relief to construction on US 36. Rail also provides an opportunity to extend north to Loveland and Fort Collins, thereby laying the foundation for a statewide rail system.

### Northwest Rail Corridor Issues Regarding Speed of Travel

The Northwest Rail Corridor was placed adjacent to the BNSF Railway line, which was constructed to minimize grade climbs and descents so it does not take the most direct route between Denver and Boulder just by virtue of the distance covered.