

### 3.0 CLARIFICATIONS TO THE US 36 CORRIDOR FINAL ENVIRONMENTAL IMPACT STATEMENT

Certain issues are detailed below that have been highlighted as being confusing, shown to be in error, or requiring more clarity. Additional clarity can be found in Appendix B, US 36 Corridor Final Environmental Impact Statement and Final Section 4(f) Evaluation Comment Responses, that provides the comment responses to the public, jurisdictions, agencies, and organized groups comments.

#### 3.1 MAP CORRECTIONS IN APPENDIX A OF THE US 36 CORRIDOR FEIS

During the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a) review, it was discovered that the Phase 1 project maps in Appendix A, Corridor Reference Maps, had a labeling error. These maps were prepared to capture all work that was done during the preparation of the FEIS with various working groups and the Preferred Action Committee described in the FEIS. The group had determined where the areas of pavement rehabilitation would occur versus where full depth pavement reconstruction was required. When the engineering drawings were converted to the atlas shown in the FEIS, the dark green shape showing the full depth pavement reconstruction areas was labeled as general-purpose lanes in patchy areas; it should have been labeled as New Full Depth Pavement. This full depth pavement designation, when overlaid over the Phase 1 elements, masks the location and Phase 1 element of the managed-lane designation. This labeling error and layer conflict was corrected. The updated maps can be found in Appendix A, Maps of the Proposed Action (Phase 1), of this ROD.

Additionally, the BRT/rail station in the City and County of Broomfield location was shown in the wrong location in Appendix A, Corridor Reference Maps, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a). This station has been moved to the correct location at the Flatiron park-n-Ride in Appendix A, Maps of the Proposed Action (Phase 1), of this ROD.

#### 3.2 RTD COMMITMENT OF SERVICE

There was some question about the clarity of RTD's commitment of service in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a). 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.

There was also a request to not only have the changes in bus service that are listed in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a), but to also have a complete list of all planned bus service in the horizon-year. Table 3-1, Bus Service Assumed for the Preferred Alternative, contains this list.

**Table 3-1: Bus Service Assumed for the Preferred Alternative**

Route	Route Name	Peak Headway	Mid-day Headway	Early/Late Headway	Alignment Change
<b>Regional/Express/skyRide</b>					
AB	Boulder to DIA (via Northwest Parkway)	30	60	60	Use Northwest Parkway
BV	Boulder–Denver (all stop)	15	15	30	
BX	Boulder–Denver (express)	10	30	60	Some buses use managed lanes; some will stop at McCaslin Boulevard
BF	Broomfield–Denver (express)	15	-	-	Use new managed lanes east of Church Ranch Boulevard to DUS
BOLT	Boulder/Longmont	30	60	60	
DD	Boulder–Colorado Boulevard	40	-	-	
DM	Boulder–Fitzsimons	30	-	-	
HV	<b>Boulder Transit Village–CCS (all stop)</b>	15	60	-	New route; will use auxiliary lanes
HX	Boulder Transit Village–CCS (express)	10	-	-	Remove Flatiron Crossing stop; use new managed lanes east of McCaslin Boulevard
J	Longmont/East Boulder/University of Colorado	30	-	-	
L	Longmont–Denver	30	60	180	Use new managed lanes from Broomfield to Denver
S	Denver–East Boulder	Deleted	Deleted	Deleted	
T	Boulder–Greenwood Plaza	3 trips each way	-		Use new auxiliary lanes
31X	North Federal Express	3 trips each way	-	-	Not on US 36
80X	80 <sup>th</sup> Avenue–Denver	3 trips each way	-	-	Use existing managed lanes
86X	Westminster Express	10	-	-	Use new managed lanes from Federal Boulevard to Sheridan Boulevard

Source: US 36 Mobility Partnership, 2008.

**Notes:**

Changes compared to Package 1 (No Action) assumptions are noted in bold.

- = not applicable
- CCS = Civic Center Station
- DIA = Denver International Airport
- DUS = Denver Union Station
- US 36 = United States Highway 36

## **Potential Future FTA Involvement in the US 36 Corridor Project**

The following are the transit-related improvements intended for the Proposed Action (Phase 1) as discussed in this ROD, and clarification concerning what was described for the Preferred Alternative in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a).

### **BRT Associated Improvements in the Proposed Action (Phase 1):**

1. Extension of one managed lane each direction.
2. Increased bus service.

3. At Westminster Center, construction of two new ultimate Sheridan Boulevard bus stations (eastbound off-ramp and westbound on-ramp), and increased parking at the existing park-n-Ride.
4. Modify mainline stations at 116<sup>th</sup> Avenue.
5. Modify ramp stations at Interlocken Boulevard.
6. New bus service at Interlocken Boulevard to serve ConocoPhillips.
7. Installation of signal priority, as appropriate.
8. Installation of fiber.
9. Funding for marketing and branding.

**BRT Associated Improvements in the Preferred Alternative:**

1. Extension of one managed lane in each direction from Cherryvale Road to Pecos Street (shared use with HOVs and high-occupancy tolls).
2. If Environmental Impact Statement triggers are reached, bus-only outside eastbound and westbound lanes will be built between McCaslin Boulevard and Foothills Parkway.
3. Bus bypass lanes on all on-ramps except Foothills Parkway eastbound, Federal Boulevard, Pecos Street, and Broadway.
4. US 36 bus stations will be built at Foothills Parkway.
5. US 36 bus stations at Arista will be moved to 120<sup>th</sup> Avenue ramps.
6. Ramp bus stations are rebuilt at McCaslin Boulevard, Interlocken Boulevard, Church Ranch Boulevard, and Sheridan Boulevard.
7. Queue jump lanes at the following interchanges: McCaslin Boulevard, Interlocken Boulevard, Broomfield, Church Ranch Boulevard, and Sheridan Boulevard. The American Recovery and Reinvestment Act of 2009 funded queue jump lanes at Sheridan Boulevard, Church Ranch Boulevard, 96<sup>th</sup> Avenue, and McCaslin Boulevard will be reconstructed.
8. Increased bus service on existing routes.
9. New bus service (Activity Center Circulator/Connector).
10. Existing bus station upgrades (vending machines, VMS).
11. Installation of signal priority at intersections, as appropriate.
12. Increased parking at Westminster Center and 16<sup>th</sup> Avenue (Broomfield).
13. Modification/extension/replacement of pedestrian overpasses at Westminster, Church Ranch Boulevard, 116<sup>th</sup> Avenue, Flatiron, McCaslin Boulevard, and Table Mesa Drive.
14. Funding for marketing/branding.
15. Low floor buses with various enhancements.
16. Installation of fiber along corridor and to BRT stations.

**3.3 CORRECTION TO TABLE 8.4-1, MITIGATION SUMMARY —  
PHASE 1, OF THE US 36 CORRIDOR FEIS**

Text in the second bullet of Table 8.4-1, Mitigation Summary — Phase 1, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a) under the University of Colorado, Boulder South Campus access entry (page 8.4-2 of the FEIS) should read, “Based on an agreement with CDOT, the University of

Colorado, the City of Boulder, and Boulder County, if access Loop Drive is denied, the Local Streets Option will be used to provide access to the University of Colorado, Boulder South Campus.”

Additionally, monitoring of long-term effectiveness of mitigation measures is a good idea and can be part of the contingencies considered during the phasing of a project, as recommended in a letter from Larry Svoboda, Director, NEPA Program, U.S. Environmental Protection Agency (USEPA) (see pages 65 and 66 of Appendix B, Consultation and Coordination, of the *US 36 Corridor FEIS* [US 36 Mobility Partnership 2009a]). The final mitigation rule for wetland mitigation already addresses this to some degree, but looking for other opportunities to apply this kind of monitoring is a sound practice. CDOT would like to request partnering to occur with the local jurisdictions to help gather information over the long-term to ensure lessons learned and best management practice (BMP) improvements can be incorporated as the phased projects progress.

### **3.4 CORRECTIONS OR CLARIFICATIONS TO THE TRAFFIC ENGINEERING TECHNICAL REPORT ADDENDUM**

There was some confusion regarding the *Traffic Engineering Technical Report Addendum* (URS 2009). Specifically, on page 2-1 of the Addendum, there’s confusion as to whether the override capacity for managed lanes is 1,500 vehicles per hour or 1,500 vehicles per hour per lane. The override capacity is 1,500 vehicles per hour per lane. On page 5-2 of the Addendum, there was a question regarding Table 5.1-2, Weekday Bus Rapid Transit and Rail Delay Boardings (Year 2035), that discusses BRT ridership. There is an “N/A” in the table which actually means “0,” “not applicable.”

### **3.5 CORRECTIONS OR CLARIFICATIONS TO OPEN SPACE ISSUES**

Chapter 4, Affected Environment and Environmental Consequences, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a) states, “...of these sites, only those north of US 36, both east and west of Cherryvale Road, currently engage in active agricultural activities.” The City of Boulder pointed out in their comments on the FEIS that agricultural activities occur both north and south of US 36, and that all along US 36, open space is leased for livestock grazing. Additionally, the property that is east of Cherryvale Road and south of US 36 is also cut for hay.

The City of Louisville accurately pointed out that the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a) did not include the Damyanovich Open Space and Avista Open Space. Impact evaluations during final design often pick up these omissions, which will be addressed at that time. The Preferred Alternative would result in impacts to 1.38 acres of the Damyanovich Open Space property, and 0.45 acre of the Avista Open Space property, as well as 2.13 acres to Park S3. Phase 1 would result in impacts to 1.38 acres of the Damyanovich Open Space property, and 0.43 acre of the Avista Open Space property, as well as 0.85 acre to Park S3. These impacts will be assessed under a re-evaluation when this project goes to final design. The City of Louisville also wished to clarify that dry land agriculture is a land use in their jurisdiction. Any issues or impacts associated with this land use will be evaluated during final design.

### **3.6 CORRECTIONS OR CLARIFICATIONS OF ROADWAY ISSUES**

The City of Louisville requested clarification to the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a) page 2.6-38, Table 3.4-2, US 36 Interchange Improvements (Details), and the paragraph on McCaslin Boulevard on page 3.5-4. The two additional lanes on the McCaslin Boulevard bridge are a left-turn on westbound US 36 from northbound McCaslin Boulevard, and a loop-on from southbound McCaslin Boulevard to eastbound US 36.

### 3.7 CORRECTIONS OR CLARIFICATIONS OF SOUND WALL ISSUES

There was a discrepancy between Figure 4.9-11, Parks and Open Space in the Boulder Segment — Combined Alternative Package (Preferred Alternative), in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a) that shows a sound wall adjacent to the Dyer Road neighborhood that is not a recommended mitigation location in Section 4.13, Noise. The discussion on page 4.13-17 is correct; a sound wall is not proposed in this location.

### 3.8 CORRECTIONS OR CLARIFICATIONS OF CREEK ISSUES

The City and County of Broomfield noted that the 100-year flows for Rock Creek are 4,520 cubic feet per second. The new structure at Rock Creek has been designed to allow for 100-year flows under US 36.

In Table 4.20-2, Major Watercourse Crossings and Designated Beneficial Uses, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a), only Segment 4B of the Big Dry Creek is listed. The City of Westminster correctly states that the mainline Segment 1 should also be in this table. Segment 1 is the main stem of Big Dry Creek, including all tributaries and wetland from the source to the confluence with the South Platte River, except for specific listings in Segments 4A, 4B, 5, and 6. It is designated “Use Protected” and classified for Aquatic Life Form 2, Recreation P, and Agriculture uses.

### 3.9 CORRECTION OR CLARIFICATIONS OF NAME, LOCATION, OR COMMUNITY DETAIL ISSUES

In Table 4.2-3, Summary of Land Use and Compatibility at Bus Rapid Transit Stations, and on pages 4.3-6 and 4.6-7 of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a), the City of Westminster would like the name changed from Northwest Business Park to Circle Point Corporate Center, and from Business Park at Mandalay to Westminster Promenade.

The City of Westminster, the City of Westminster Swim and Fitness Center, the Westminster Municipal Court, the Irving Street Branch of the Westminster Library System, the recreational park associated with the former Westminster Hills Elementary School, the Advent Lutheran Church, Westminster City Hall, and the Hyland Hills Golf Course are all located in the Adams Segment and not in the Westminster Segment, as incorrectly described in the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a).

In Table 4.23-2, Past, Present, and Future Projects in the US 36 Cumulative Study Area, of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a), the City of Westminster would like to note that the Shops at Walnut Creek and Westminster Promenade should be added to the list.

DRCOG would like the plan name *Fiscally-constrained 2035 Regional Transportation Plan*, as amended (DRCOG 2009a), to be used instead of the *2035 Metro Vision Regional Transportation Plan*. This change has been made throughout this ROD.

### 3.10 CORRECTIONS AND CLARIFICATION TO SECTION 106

After the State Historic Preservation Officer (SHPO) reviewed the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009a), SHPO did not concur with the Finding of Effect for 5AM.1806/Advent Evangelical Lutheran Church. In SHPO’s opinion, a Finding of No Adverse Effect (36 CFR 800.5[b]) under Section 106 is more appropriate than the recommended finding of No Historic Properties Affected (36 CFR 800.4[d][1]). The highway is moving closer to the historic property and a new sound wall will be installed. The “pavement creep” and construction of the sound wall will have an impact on the historic property; however, that effect would not be adverse.

### 3.11 CLARIFICATION TO THE AIR QUALITY ANALYSIS

The USEPA, in their comment letter, asked the project team to clarify road dust emissions in the ROD. CDOT is providing the following explanation for road dust as a particulate matter less than 10 microns in diameter (PM<sub>10</sub>) emission. Road dust emissions were not included as part of the PM<sub>10</sub> emissions estimates shown in Tables 4.12-3 through 4.12-5 of the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009). The PM<sub>10</sub> emission estimates referenced in these tables only reflect the emissions burden analysis, which was created to evaluate each package's tailpipe emissions based on differences in vehicle miles traveled (VMT) for each of the packages, not to evaluate PM<sub>10</sub> emissions against an air quality standard. The comparisons among packages' are still valid (i.e., none of them includes road dust). Furthermore, the packages' emission estimates do not affect the PM<sub>10</sub> hot-spot analysis; the PM<sub>10</sub> analysis is qualitative and does not rely on the emissions estimates.

Since there are no requirements to perform this type of air quality burden analysis as part of NEPA air quality analysis, it is difficult to judge whether disregarding road dust emissions as part of an essentially voluntary emissions analysis represents a deficiency. Because the road dust emissions are directly proportional to VMT, the difference in PM<sub>10</sub> dust emissions among packages is expected to be directly proportional to the differences in VMT among the packages.

The USEPA also asked the team to clarify which traffic volumes were used to compare the estimated PM<sub>10</sub> concentrations to the measured concentrations at 1050 South Broadway. CDOT is providing the following explanation for additional clarity in this comparison.

The traffic units documented within the *US 36 Corridor FEIS* (US 36 Mobility Partnership 2009) are average daily traffic (ADT), not VMT, estimates. Upon further review, it appears that the 155,000 ADT represents the average traffic volume over the entire project corridor. However, this information is not important to the conclusions of the hot-spot analysis. The hot-spot analysis was evaluated with the higher volume, 196,000 ADT, at the peak location along the corridor (near the intersection of US 36 and I-25). While this traffic volume is about 10 percent higher than the 180,000 ADT being referenced near the South Broadway monitor, the important detail of this qualitative comparison is that this monitor is recording PM<sub>10</sub> values that are half of the standard or less.