Executive Summary

- The US 6/Wadsworth Environmental Assessment (EA) analyzes the impacts of the
- 2 Colorado Department of Transportation's (CDOT) proposal for roadway improvements at
- 3 the US 6 (also known as 6th Avenue) and Wadsworth Boulevard (Wadsworth)
- 4 interchange and along Wadsworth between 4th and 14th Avenues. Chapter 1 describes
- ${\scriptstyle 5}$ the purpose and need for the action. The alternatives for implementing the action
- 6 considered and evaluated in the EA are described in Chapter 2. Chapter 3 presents the
- $_7$ social and environmental consequences of the alternatives. An evaluation of effects to
- ${\scriptstyle 8}$ historic and park resources protected by Section 4(f) of the Department of Transportation
- 9 Act is presented in Chapter 4. Comments and coordination with the public and other
- agencies is described in Chapter 5. Chapter 6 is a list of references. Other supporting
 materials are included in appendices.

WHERE IS THE PROPOSED PROJECT LOCATED?



D.C.

The proposed US 6/Wadsworth project centers around the US 6 and
Wadsworth interchange in the heart of the City of Lakewood. The study
area includes both US 6 and Wadsworth. Both roadways serve a broad
cross section of local and regional travelers. The east-west limits along
US 6 are from the eastern interchange ramps with Wadsworth west to
Garrison Street. On Wadsworth, the project limits are 4th Avenue to
14th Avenue.

¹⁹ Wadsworth is a regionally important highway and is the longest
²⁰ continuous roadway connecting communities across the western Denver
²¹ metropolitan area. Wadsworth links northern Lakewood with Lakewood's
²² City Commons at Alameda Avenue south of the project area, provides
²³ regional access to large commercial developments at Wadsworth and

- ²⁴ Colfax Avenue, and will soon provide access to the large West Corridor ²⁵ light rail station at Wadsworth and 13th Avenue, currently being
- ²⁶ constructed by the Regional Transportation District.

WHY DID CDOT PREPARE THIS EA?

- 27 The National Environmental Policy Act requires that the environmental effects of federally
- ²⁸ funded roadway projects be considered before deciding on a course of action. The
- ²⁹ process provides an opportunity for CDOT to develop project alternatives that meet
- 30 transportation needs while minimizing social, environmental, and community impacts. In
- the case of the proposed US 6/Wadsworth project, CDOT made numerous changes to
- ³² the conceptual design plans to respond to community input and minimize impacts.
- 33 Regulatory agencies, affected municipalities, and interested members of the public are
- $_{\mbox{\tiny 34}}$ afforded the opportunity to comment on the project before a decision is made about
- 35 whether to design and construct the proposed roadway improvements.

WHY DO WE NEED THIS PROJECT?

- The proposed US 6/Wadsworth project is needed to meet existing and future
- ² transportation needs for CDOT and Lakewood. The proposed project would provide
- 3 additional roadway capacity, improve operational efficiency, improve safety, and provide
- 4 additional travel options for pedestrians and bicyclists. It would also replace a structurally
- 5 deficient bridge and address neighborhood concerns about cut-through traffic. These
- 6 needs are described in more detail in Chapter 1.

HOW DID CDOT COME UP WITH A PLAN FOR THE ROADWAY IMPROVEMENTS?



Hundreds of people attended open houses and other briefings to learn about the US 6/Wadsworth study and provide input. 7 CDOT, the Federal Highway Administration (FHWA), Lakewood, area

- 8 residents, businesses, and commuters have prioritized making improvements
- 9 to fix the transportation problems in the study area through previous planning
- 10 efforts. The US 6 and Wadsworth project is included in the Denver Regional
- ¹¹ Council of Governments' fiscally constrained regional long-range transportation ¹² plan.
- 13 CDOT began working with FHWA, Lakewood, the Regional Transportation
 14 District, and other stakeholders in 2007 to develop alternatives for possible
 15 roadway improvements. After two levels of screening and evaluation, and
 16 consideration of more than 20 detailed criteria, an alternative was identified that
- 16 consideration of more than 20 detailed criteria, an alternative was identified that
- 17 could meet the purpose and need for the project and would best balance
- 18 transportation benefits with environmental and community impacts. This
- ¹⁹ alternative is called the Build Alternative in the EA. Public input was sought and ²⁰ received throughout the alternatives development process.

WHAT IS CDOT PROPOSING TO BUILD?

- ²¹ CDOT proposes to replace the existing US 6/Wadsworth interchange and widen
- ²² Wadsworth between 4th and 14th Avenues. Associated with these roadway changes,
- ²³ CDOT also proposes to improve drainage flows of McIntyre, Lakewood, and Dry Gulches,
- ²⁴ and realign and widen these gulches; extend noise walls along US 6 to approximately
- ²⁵ Garrison Street; and construct and maintain water quality ponds to filter roadway
- ²⁶ pollutants from stormwater runoff.
- ²⁷ The interchange design, referred to as a tight diamond with loop, would be a diamond ²⁸ interchange with a loop ramp in the northwest quadrant of the interchange. The loop ramp
- ²⁹ would allow evening rush-hour traffic traveling west on US 6 to exit to southbound
- 30 Wadsworth without stopping at a signal or yielding to through traffic. All of the interchange
- at acceleration and deceleration lanes would be lengthened, all weave sections would be
- 32 eliminated, and the structurally deficient bridge would be replaced. The operation of the
- ³³ interchange is illustrated on the following page.
- ³⁴ Along Wadsworth, the Build Alternative would add a travel lane in each direction and a
- 35 multi-use sidewalk on both sides of Wadsworth. A raised median would be added to the
- ³⁶ center of the roadway to direct left turns and U-turns.

Northwest Quadrant

Interchange

- Reconstructed loop off-ramp from westbound US 6 to southbound Wadsworth.
- A grade-separated or at-grade pedestrian crossing at on-ramp and loop ramp will be determined at final design.
- 8 New longer on-ramp from northbound and southbound Wadsworth to westbound US 6 provides adequate acceleration and merge distances for vehicles entering US 6.
- Continuous lane on US 6 between on-ramp and Carr St. off-ramp provides safer merging conditions.

Frontage Road

- Frontage road access is shifted north and changed to two-way traffic between the 6th Ave. Business Center and Wadsworth.
- 6 Channel improvements to Lakewood Gulch to reduce floodplain.

Northeast Quadrant

Interchange

New longer off-ramp from westbound US 6 to northbound Wadsworth provides adequate deceleration and vehicle queue distances for vehicles accessing Wadsworth. Free flow movement onto Wadsworth.

Frontage Road

- Frontage road is reconfigured to provide access directly to Wadsworth. Provides two-way operation that reduces neighborhood cut-through traffic.
- 12 New noise walls next to the frontage road.



The reconstructed interchange would operate more efficiently, reduce congestion, and eliminate safety concerns.

WHAT ARE THE SOCIAL AND ENVIRONMENTAL CONSEQUENCES OF THE PROPOSAL?



The proposed US 6/Wadsworth project would have mostly beneficial effects to social and natural resources in the study area.

This EA evaluates the potential environmental consequences of

- ² implementing the proposed project (or Build Alternative). All
- 3 environmental resources were reviewed for presence in the study area
- 4 and assessed for potential impacts. Some resources are not evaluated
- 5 in detail in this EA because they were not present in the study area,
- 6 would not be impacted by the Build Alternative, or standard construction
- 7 precautions would protect the resources from significant damage.
- 8 Environmental issues or resources evaluated in detail include
- ${\scriptstyle 9}$ transportation, pedestrian and bicycle facilities, noise, right-of-way and
- ¹⁰ relocations, socioeconomics, environmental justice, land use, historic
- 11 properties, hazardous substances, floodplains, water resources, and
- 12 wetlands. Table ES-1 summarizes impacts to these resources.

¹³ The majority of impacts of the Build Alternative would be beneficial.
¹⁴ Congestion would be reduced and general safety would improve for
¹⁵ local and regional travelers, access to and from the numerous
¹⁶ businesses along Wadsworth would be safer to navigate, and the safety
¹⁷ and convenience of travel for pedestrians and bicyclists would be greatly
¹⁸ improved. Improving drainage channels within the study area would
¹⁹ reduce flooding hazards, enhance riparian habitat and wildlife migration,
²⁰ and provide an opportunity for wetlands to establish naturally. Water
²¹ quality would be improved because stormwater runoff would be filtered
²² to reduce pollutants being discharged into the South Platte River basin.
²³ Noise walls included in the Build Alternative would decrease noise levels
²⁴ dramatically at residences near US 6. Improved capacity on the major
²⁵ roadway network and reconfiguring the frontage roads surrounding the
²⁶ interchange would reduce neighborhood cut-through traffic, improve
²⁷ business and neighborhood access, and improve air quality around

²⁸ intersections. Right-of-way needs would require acquisition of property and

- ²⁹ displacement of businesses and residences. Four historic properties would be
- 30 adversely affected, and three small wetlands totaling 0.02 acre would be lost.

HOW MUCH PROPERTY DO YOU NEED TO ACQUIRE, AND HOW HAVE YOU COORDINATED WITH AFFECTED PROPERTY OWNERS?

- 31 Approximately 31.1 acres of property would need to be acquired from 96 property
- 32 owners through 114 acquisition parcels, including 45 residential, 65 commercial, and
- ³³ 4 publicly owned parcels. Property acquisitions would range from small slivers to
- ³⁴ entire parcels. A total of 14 residences and 28 businesses would need to be
- ³⁵ relocated. All acquisitions and relocations will comply fully with the Uniform
- ³⁶ Relocation Assistance and Real Property Acquisition Policies Act of 1970.

37 CDOT is committed to maintaining open communication with property owners and

38 stakeholders affected by the proposed project. The study team has held four public

- 1 meetings to present the progress and preliminary findings of the study, conducted
- ² one-on-one meetings with numerous property and business owners, and attended
- 3 more than 20 meetings with neighborhood and business groups since the summer of
- 4 2007. Team members have contacted all owners of potentially affected properties
- 5 and have met with many of these owners to explain the proposed action, understand
- 6 its effect on owners' properties, and explain CDOT's right-of-way acquisition process
- 7 and the rights owners and tenants have under the Uniform Act. CDOT continues to
- Is respond to owners and stakeholders who contact the study team with questions or o comments, with the intent of maintaining open lines of communication and providing
- 10 as much information as is known at the time.

WHAT HISTORIC PROPERTIES ARE IN THE STUDY AREA, AND HOW WOULD THEY BE AFFECTED?



three historic districts identified within the study area.

11 There are nine commercial and residential properties within the study 12 area that are individually eligible for the National Register of Historic ¹³ Places. In addition, three historic districts (a school complex and two 14 residential neighborhoods) are located in or partially within the study 15 area. None of the historic districts would be adversely affected by the ¹⁶ Build Alternative, and adverse effects to five of the nine individual 17 historic properties would be avoided.

¹⁸ Four historic homes located along the frontage road in the northeast 19 quadrant of the interchange would need to be acquired. Despite 20 extensive efforts to redesign or modify the interchange design, CDOT 21 determined that avoiding these impacts would not be prudent and 22 feasible. To mitigate for these losses, CDOT is working with the

23 Colorado State Historic Preservation Office and local preservation

24 groups to implement one or more historic preservation projects that would add to the 25 local historical record.

WHERE ARE THE WETLANDS IN THE STUDY AREA, AND WHY COULDN'T YOU DESIGN AROUND THEM?



Drainages in the study area have been heavily modified by past development. While the US 6/Wadsworth project would destroy several small wetlands, proposed widening of gulches would improve conditions for new wetlands and natural riparian areas to establish.

²⁶ Three small, low quality, palustrine emergent wetlands comprising a 27 total of 0.02 acre are located within the study area along the edges of 28 McIntyre, Lakewood, and Dry Gulches. These wetlands would be ²⁹ destroyed by the realignment of the gulches. Mitigation would include

30 replacement of at least 0.02 acre of wetlands.

31 Impacts to these wetlands could not be avoided because substantial 32 realignment and widening of the drainage channels of the three

- 33 gulches are needed. The channels have been highly modified. They
- ³⁴ support little riparian habitat or wetlands because they are narrow,
- ³⁵ have high flows, and are subject to scour. The drainages are also
- ³⁶ considerably undersized to carry a 100-year flood. The proposed
- 37 channel improvements would provide greater opportunity for wetlands 38 to establish than under existing conditions.

WHAT HAPPENS IF CDOT DOES NOTHING?



Traffic congestion, inefficient roadway operations, and poor pedestrian and bicycle facilities characterize the US 6/Wadsworth project area.

This EA provides an analysis of the impacts of doing nothing

- 2 (the No Build Alternative). Without a significant investment in
- 3 roadway improvements, the existing transportation problems
- ⁴ in the study area would worsen. Traffic would become
- 5 increasingly congested, particularly in the morning and
- 6 evening peak rush hours. Bus and pedestrian activity
- τ associated with the new Wadsworth light rail station at 13th
- 8 Avenue will increase, but the surrounding roadway and
- 9 sidewalk network would not support this demand.

Flooding during large storm events would continue, and the
benefits of channel and culvert improvements would not be
realized. No systems would be constructed to filter stormwater
runoff. Noise walls would not be constructed, and severe noise
would persist for residences adjacent to US 6 west of
Wadsworth.

¹⁶ The No Build Alternative would not require a large capital expenditure or require any ¹⁷ property acquisition, and it would not affect historic properties or wetlands.

WHAT HAPPENS NEXT?

- 18 FHWA and CDOT are providing this EA for agency and public comment. A public
- 19 hearing will be scheduled in Lakewood at Lakewood City Council Chambers (480 S.
- ²⁰ Allison Parkway, Lakewood, CO 80226). Newsletters announcing the public hearing
- ²¹ will be sent to all individuals on the mailing list. The public hearing also will be
- 22 advertised in newspapers, websites, neighborhood newsletters, and flyers distributed
- ²³ throughout the study area. Interested individuals can attend the public hearing to
- ²⁴ provide comments or learn more about the EA study and its recommendations.
- ²⁵ Written comments can be provided in person at the public hearing, on the project
- ²⁶ website at <u>http://us6wadsworth.com/</u>, or via mail, fax, or email to:

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- 27 After consideration of public comments, CDOT and FHWA will determine whether to
- ²⁸ issue a Finding of No Significant Impact (FONSI), revise the EA, or prepare an
- 29 Environmental Impact Statement to further analyze environmental impacts. If CDOT
- 30 and FHWA determine that a FONSI is appropriate, CDOT would proceed with final
- 31 design. Right-of-way acquisition and construction are dependent on funding and, if
- ³² additional funds are not secured, these activities may be delayed.

	Impacts of the No Build Alternative		Impacts of the Build Alternative		Mitigation Measures for the Build Alternative		
Transportation							
	Safety, capacity, and operational issues of the existing transportation network would not be addressed	٨	Capacity, safety, and operational efficiency would be enhanced for all modes of travel	>	Roadway improvements will be coordinated with transit and other development needs		
				>	Lane closures during construction will comply with CDOT's Lane Closure Strategy		
Pe	destrian and Bicycle Facilities						
>	Narrow, missing, or obstructed sidewalks, uncontrolled access, and traffic congestion create unsafe conditions for pedestrians and bicyclists	>	New sidewalks and improved roadway crossings would enhance mobility and safety for pedestrians and bicyclists	>	Final design will consider other measures to enhance safety of interchange ramp crossings		
		>	Several free-flow interchange ramp crossings would remain; pedestrians and bicycles would have difficulty crossing at these locations, particularly during rush hours	>	Signage and access to pedestrian and bicycle routes will be provided during construction		
		>	Pedestrian and bicycle routes could be disrupted during construction				
No	ise						
\$	High noise levels would persist for residences near US 6 west of Wadsworth where no noise walls are present	>	Without noise mitigation, projected noise for residences along US 6 would increase 2 to 7 decibels	>	Noise walls will be constructed to reduce noise noticeably at approximately 380 residences		
		>	Construction equipment and activities would intermittently generate loud noise	>	Measures to reduce construction noise disturbance will be included in specifications		
Right-of-Way and Relocations							
♦	No right-of-way (ROW) acquisition would be required, and no residential or business displacements would occur	>	Approximately 31.1 acres of property would be required from 96 ownerships; acquisitions would range from small slivers of property to entire parcels	>	All acquisitions and relocations will comply fully wit federal and state requirements, including the Uniform Relocation Assistance and Real Property		
			14 residences and 28 businesses would be displaced		Acquisition Policies Act of 1970, as amended		
Socioeconomics							
\$	Residences and businesses along Wadsworth would continue to be affected by cut-through traffic, limited pedestrian and bicycle connections, traffic noise, and indirect neighborhood access	♦	Community cohesion would be enhanced by better north- south and east-west pedestrian connections, improved pedestrian and vehicular access to neighborhoods and businesses, improved neighborhood traffic conditions, and reduced noise levels more compatible with residential areas	♦	CDOT will provide advance notice of construction activities that are likely to result in traffic disruption CDOT will coordinate with emergency service providers to minimize disruption of service		
		>	Construction could disrupt access and travel through the project area for residents, businesses, and emergency service providers				
Environmental Justice							
>	No disproportionately high and adverse impacts would occur in areas of minority or low-income populations	>	No disproportionately high and adverse impacts would occur in areas of minority or low-income populations	>	No mitigation measures are necessary		

EXHIBIT ES-1: SUMMARY OF IMPACTS AND MITIGATION, US 6/WADSWORTH ENVIRONMENTAL ASSESSMENT

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	Impacts of the No Build Alternative		Impacts of the Build Alternative		Mitigation Measures for the Build Alternative			
Land Use								
 ♦ 	Traffic and pedestrian safety and mobility goals presented in adopted land use and neighborhood plans would not be advanced	>	Improvements would support land use goals for traffic management and safety, landscaping, recreational amenities, noise mitigation, multimodal connections and safety, and drainage improvements	>	Final design and ROW negotiations by CDOT will coordinate with Lakewood to address compatibility with land use plans and potential allowances for non-conforming properties that may result from			
>	Future growth and implementation of planned land uses could be hampered by traffic congestion and limited sidewalk facilities	>	ROW acquisition would affect land use for some individual parcels but roadway changes would not influence regional land use patterns or induce growth		ROW acquisition			
Historic Properties								
 ♦ 	No historic properties would be affected	>	Reconstruction of the interchange would require acquisition (and demolition) of four historic properties	\$	Mitigation measures identified in a Memorandum of Agreement among CDOT, FHWA, the Colorado SHPO, and other interested parties will be implemented			
Hazardous Materials								
>	No effect on known sites of concern for hazardous materials	>	Construction would affect seventeen sites of concern for environmental (petroleum-related) contamination	>	Further testing and survey of potentially contaminated properties will be conducted			
		>	Lead-based paint, asbestos, or other hazardous materials could be encountered during demolition activities	>	Project specifications for hazardous materials will be prepared and implemented during construction			
Floodplains								
>	Flood waters would continue to overtop Wadsworth during large storms	>	CDOT roadways would be removed from the 100-year floodplain, and overtopping would not occur	>	design and coordinate with the appropriate loca			
		>	Wider and more natural channels would improve the natural values of floodplains		federal agencies to conduct hydraulic analysis and obtain necessary floodplain permits			
Water Resources/Quality								
>	Water from roadways that may contain petroleum, sediment, or other pollutants would continue to flow into streams/gulches untreated	>	An increase of approximately 3 acres of impervious (paved) surfaces would, without water quality treatment, increase pollutant runoff and erosion into receiving waterways	\$	Permanent water quality treatment features will be constructed and maintained to treat roadway runoff and improve water quality			
		>	Construction activities would expose soils and could cause erosion or sedimentation of gulches	۵	Required plans and permits will be prepared and followed during construction to minimize impacts to surface waters from erosion and sedimentation			
Wetlands and Waters of the United States								
>	No wetlands or waters of the United States would be affected	>	Channel widening and realignment would disturb 0.02 acre of wetland areas in gulches	>	Wetlands will be replaced at a 1:1 ratio, and a Section 404 permit will be obtained			
		>	Wider channels would provide an opportunity for wetlands and riparian habitat to establish					
Cumulative Impacts								
 ♦ 	The No Build Alternative would not take any action that could combine with other projects to create cumulative effects	>	Beneficial cumulative effects would occur to a variety of environmental and community resources as redevelopment projects in the area comply with current development requirements	٨	No mitigation required			