

CDOT | ADA Transition Plan

Prepared by

**COLORADO DEPARTMENT
OF TRANSPORTATION**

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Courtesy of the Breckenridge Outdoor Education Center, www.boec.org, serving all abilities

The Colorado Department of Transportation dedicates this ADA Transition Plan to the people with disabilities who live, work and visit Colorado. This Transition Plan is dedicated to their perseverance, their patience, and their willingness to work with CDOT to make Colorado's transportation facilities increasingly accessible to the disabled community.

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I. Executive Summary

This Transition Plan sets forth in a comprehensive document the steps CDOT will take, working together with its federal, state, and local partners, as well as non-profit groups and citizens, to provide accessibility to persons with disabilities in CDOT transportation projects and services throughout the state. Included in this Transition Plan are CDOT's adopting and implementing policies and procedural directives that it will not discriminate on the basis of disability.

II. Acknowledgements

CDOT would like to thank the following individuals and entities for their participation and collaboration in the completion of this document:

- The Colorado Advisory Council for Persons with Disabilities;
- Angela Schreffler, Executive Director, Denver Regional Mobility and Access Council (DRMAC);
- The Rocky Mountain ADA Center;
- All participants in CDOT's public meetings and outreach efforts;
- Federal Highway Administration (FHWA): John Cater, Colorado Division Administrator; Randy Jensen, Program Delivery Team Leader, Colorado Division Office; Melinda Urban, Civil Rights/Operations Engineer, Colorado Division Office.
- CDOT personnel:

Name	Region
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Benjamin Lollar	R2
Bob Heidelmeier	R3
Bob Mero	R6
Brian Killian	R3
Carol Anderson	R6
Dave Stewart	R1
Don Scanga	R2
Jay Kramer	R1
Les Doehling	R3
Leslie Alexander	R2
Long Nguyen	R4

Name	Region
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Mike Coggins	R5
Phyllis Snider	HQ
Richard Zamora	HQ
Robert Shanks	R5
Rod Abbott	R2
Sean Yeates	R3
Shane Ferguson	R2
Steve Olson	R6
Tim Tuttle	R4
William Johnson	HQ

III. Introduction

The purpose of the Americans with Disability Act (ADA) Transition Plan is to describe policies, procedures and practices for implementing physical pedestrian improvements within the public right-of-way of the State of Colorado. CDOT's goal is to enhance the quality of life and the environment of the citizens of Colorado with disabilities by creating an integrated transportation system that focuses on safely moving people with disabilities by offering convenient linkages among modal choices.

This ADA Transition Plan is intended to serve as an operating document to fulfill the requirements of Section 504 of the Rehabilitation act of 1973 and Title II of the American With Disabilities Act of 1990; and to serve as an informational document for state and local partners, the citizens of Colorado, and those who travel through Colorado with special accommodation needs.

CDOT intends this to be a living document: in the Self-Evaluation section, CDOT looks backward to assess what it has accomplished. It also looks forward to develop greater means of accessibility for persons with disabilities throughout the state. CDOT's vision is to consider accessibility features in the design and construction of all projects, with the goal of using taxpayer dollars wisely and judiciously, and finding technically feasible and creative solutions to provide the best accessibility available. CDOT's aim is to focus on compliance, continuity and consistency through the creative use of limited funding.

IV. Department of Justice and Department of Transportation Requirements for the ADA Transition Plan

1. General Requirements

The landmark Americans with Disabilities Act (ADA), enacted on July 26, 1990, provides comprehensive civil rights protections to persons with disabilities in the areas of employment, state and local government services, accessibility to public accommodations, transportation, and telecommunications. The ADA is a companion civil rights legislation to Section 504 of the Rehabilitation Act of 1973. This legislation mandates that qualified individuals with disabilities shall not be excluded from participation in, denied the benefit of, or be subjected to discrimination under any program or activity. The Act also provides employees with disabilities certain protections and requires employers to make reasonable accommodation for such applicants and employees.

The ADA is nearly identical to the Rehabilitation Act, except that the ADA has provided for the development of detailed standards that were not available under the Rehabilitation Act. The statute (ADA) stipulated that none of its provisions could reduce or eliminate any accessibility

requirements that existed under the Rehabilitation Act. Therefore, this plan has incorporated the accessibility standards that were developed pursuant to the ADA, and adopted by the U.S. Department of Transportation and/or the U.S. Department of Justice .

The Rehabilitation Act of 1973, Sec. 504, 29 U.S.C. § 794 (2006); § 504 (as amended). Section 504 provides that no person shall be excluded from participation in or be denied the benefits of, or be discriminated against, under any program or activity that receives or benefits from Federal financial assistance. The specific federal regulation for implementation of Section 504 of the Rehabilitation Act by state transportation agencies such as CDOT is 49 CFR Part 27. Section 27.9 specifies that, as a condition of receiving federal financial assistance, the Colorado Department of Transportation must assure its federal funding sources that it shall operate all of its programs in accordance with the provisions of 49 CFR Part 27, Subpart A. This Subpart prohibits discrimination against persons with disabilities.

The requirements of the Rehabilitation Act apply not only to programs and activities provided and controlled directly by CDOT, but also to programs or activities of entities that receive federal funds from or through CDOT (local public entities and private contractors), even though CDOT does not control them directly. These local entities and contractors are generally referred to as “sub-recipients” to distinguish them from CDOT as the “primary recipient” of the federal funds. CDOT’s assurance to its federal funding sources that CDOT’s programs and activities will comply with the requirements of the statute and the corresponding regulations also applies to the programs and activities of each sub-recipient that receives funds from CDOT.

For CDOT and its sub-recipients, the services or activities are any that are transportation-related. These can include but are not limited to: roadways, contiguous walkways, intersections, rest areas, roadside emergency telephones, public conveyances such as buses and light rail, and literature related to any of these. The definition of services or activities also includes public meetings and notices of the meetings.

2. Specific Requirements

The ADA Transition Plan is required by the Department of Justice 28 CFR Section 35.150(d) and the Department of Transportation regulations, 49 CFR Section 27.11 to address the following aspects of accessibility:

- A. Evaluate CDOT’s current policies and practices for implementing the regulations, and notify the FHWA of the completion of this evaluation;
- B. Identify shortcomings in compliance and describe the methods used to remedy them;
- C. Modify any policies and practices that do not meet ADA requirements according to a schedule or sequence that includes milestones or measures of achievement.

- D. Take appropriate remedial steps to eliminate the effects of any discrimination that resulted from previous policies and practices;
- E. Establish a system for periodically reviewing and updating the evaluation;
- F. Where structural changes to facilities are undertaken to achieve program accessibility, develop the steps necessary to complete changes to the facility;
- G. With regard to streets, roads, or walkways over which CDOT has authority, include a schedule for providing curb ramps or other sloped areas where pedestrian walks cross curbs, giving priority to walkways serving entities covered by the Americans with Disabilities Act, including state and local government offices and facilities, transportation, places of public accommodation, and employers, followed by walkways serving other areas.
- H. Through a curb ramp inventory of CDOT's existing pedestrian facilities, identify physical obstacles in the public entity's pedestrian facilities that limit the accessibility to such facilities. The curb ramp inventory shall include at a minimum:
 - (1) Identification of physical obstacles in the public entity's pedestrian facilities that limit the accessibility of its programs or activities to individuals with disabilities;
 - (2) A detailed description of the methods that will be used to make the facilities accessible;
 - (3) A schedule for taking the steps necessary to achieve compliance with this section and, if the time period of the transition plan is longer than one year, identify steps that will be taken during each year of the transition period; and
 - (4) Indicate the official responsible for implementation of the plan.
- I. Describe the methods that will be used to make the pedestrian and building facilities accessible or how it will make its services accessible through other methods permitted by 28 CFR Part 35.150(a) and (b); and
- J. Specify the schedule for taking the steps necessary to achieve compliance with the ADA and, if the time period of the ADA Transition Plan is longer than one year, identify steps that will be taken during each year of the transition period.

K. Provide an opportunity to interested persons, including individuals with disabilities or organizations representing individuals with disabilities, to participate in the development of the Transition Plan;

V. An Overview of ADA Legal Authorities Governing CDOT

According to the Americans with Disabilities Act, a public agency is required to prepare an ADA Transition Plan if physical or structural modifications to facilities are required to provide access to programs or services. Title II of the ADA regulates government agencies, with its primary goal being to ensure that all of their programs and services are accessible to individuals with disabilities. Although the ADA Transition Plan's primary focus is identifying, evaluating and correcting or minimizing physical barriers, an analysis of the programs and services rendered by CDOT also is important to determine what physical and other changes are necessary to address the broad range of disabilities that exist within the community. The ADA Transition Plan documents what actions CDOT will take to alter its facilities or to identify and implement alternative methods of service delivery permissible under 28 CFR Part 35.150(a) and (b). The ADA requires that the ADA Transition Plan be submitted for public review before final approval and adoption. Generally, the ADA Transition Plan lists existing barriers in the public rights-of-way under CDOT's jurisdiction, and develops a plan for their removal to provide accessibility for individuals with disabilities to CDOT's facilities. CDOT is required to provide accessibility to all of its services, but is not required to remove all architectural barriers in all of its facilities.

The ADA is divided into five parts, covering the following areas. This Transition Plan is intended to primarily address Title II. The following is a brief description of the ADA in its entirety.

Title I: Employment

Under this Title, employers, including governmental agencies, must ensure that their practices do not discriminate against persons with disabilities in the application, hiring, advancement, training, compensation, or discharge of an employee, or in other terms, conditions, and rights of employment. This Transition Plan does not address employment, as Title I issues are addressed in detail through a separate Procedural Directive 600.2, "Placement of Persons with Disabilities."

Title II: Public Services

This Title prohibits state and local governments from discriminating against persons with disabilities or from excluding participation in or denying benefits of programs, services, or activities to persons with disabilities. The CDOT Transition Plan outlines the methods by which physical or structural changes will be made to effect the non-discrimination policies described in Title II, or to identify and implement alternative methods of service delivery.

Title III: Public Accommodations

Title III requires places of public accommodation to be accessible to and usable by persons with disabilities. The term "public accommodation" as used in the definition is often misinterpreted as applying to public agencies, but the intent of the term is to refer to any privately funded and operated facility serving the public. This Transition Plan does not address Title III issues because CDOT has no authority to assure that places of public accommodation (private businesses) comply with the ADA.

Title IV: Telecommunications

This Title covers regulations regarding private telephone companies and requires common carriers offering telephone services to the public, to increase the availability of interstate and intrastate telecommunications relay services to individuals with hearing and speech impairments. Although CDOT has no authority over such companies, the CDOT Transition Plan includes some provisions related to its own telecommunications as they relate to persons with disabilities under Title II of the ADA.

Title V: Miscellaneous Provisions

This title contains several miscellaneous regulations. The CDOT Transition Plan does not address Title V of the ADA.

VI. Public Participation

CDOT sought input on its ADA Transition Plan through the following means:

- CDOT requested the Colorado Advisory Council for Persons with Disabilities, review the Transition Plan and provide input. The Council is an entity created pursuant to § 24-45.5-103, C.R.S.
- CDOT held a public outreach meeting in each of the CDOT regions which provided an opportunity for input on the Transition Plan.
- CDOT distributed a CDOT Curb Ramp Survey for State Highways to representative groups, state and local agencies and interested citizens via email and at the community outreach meetings.
- Outreach to Persons with Visual Impairments: through its state and local partners, CDOT extended an invitation to persons with any type of disability to attend the public meetings referenced above, including persons with visual impairments, the ADA Transition Plan will be made available to persons who are visually impaired via large print text document when requested and made available on the CDOT Civil Rights & Business Resource Center website.
- Community Outreach: In addition to the steps described above, CDOT will seek additional input on the ADA Transition Plan from a wide range of state and local organizations, including the following:

Access & Ability	Aging Well in Jefferson County- Housing Committee
American Council for the Blind	American Legion
Arapahoe County Commission on Aging	Capitol Building Advisory Committee
Colorado Academy of Family Physicians (CAFP)	Colorado Academy of Pediatrics (CAP)
Colorado Alliance for Retired Americans	Colorado ARC
Colorado Asset Building Coalition d/b/a Colorado Community Action Association (CCAA)	Colorado Commission for the Deaf and Hard of Hearing
Colorado Commission on Community Service	Colorado Division on Aging, Older Workers Task Force
Colorado Senior Lobby	Community Inclusion
Community Preparedness Advisory Council a/k/a Citizens Corp	Denver Commission on Aging
Denver Regional Mobility Advisory Counsel	Developmental Disabilities Planning Council- Multicultural Committee
Disability Management Employee Council	Division of Behavioral Health
Douglas County Senior Council	Douglas County Senior Foundation
Early Childhood Learning Commission	Highlands Ranch Parks and Recreation Foundation
Hospital Association	Medicaid & Kids
Metro Denver Homeless Initiative	National Association of Acting or Retired Federal Employees
National Association of Retired Educators	North Central Region All Hazards Committee - Special Needs Subcommittee
Older Americans Coalition	Parent to Parent
Ready Colorado	Safe Kids Metro Denver
State Rehabilitation Council	State Youth Council
Statewide Independent Living Council (SILC)	United Veterans Committee
Zion Senior Care	

VII. Public Outreach Meetings and Curb Ramp Inventory Survey

1. Public Outreach Meetings

Working through its Local Agency Coordinators, CDOT held a public outreach meeting in each of the CDOT Regions. The purpose of the meetings was to gather input from individuals with disabilities and local entities who represent their interests on the accessibility needs on CDOT-owned or controlled property in each CDOT region. CDOT contacted the Executive Director of Denver Regional Mobility and Access Council (DRMAC), who invited the Metro Denver Front Range ADA Coordinators and Public Information Officers to the public outreach meetings at CDOT's request.

The information gathered at the public meetings will help CDOT prioritize areas of need within a Region. CDOT held the following meetings in each region:

CDOT REGION	DATE & TIME	ADDRESS
1	October 16, 2012 10:00 a.m. to 12:30	Plains Conf. Room 18500 East Colfax Avenue, Aurora, CO 80011
2	October 18, 2012 2:00 pm to 4:00 pm	CMC Large Conf. Room 1480 Quail Lake Loop, Colorado Springs, CO 80906
4	October 24, 2012 2:00 pm to 4:00 pm	Platte Conference Room 1420 2 nd Street, Greeley, CO 80631
6	October 26, 2012 2:00 pm to 4:00 pm	Large Maintenance Video Conference Room 2000 South Holly Street, Denver, CO 80222
5	October 30, 2012 2:00 pm to 4:00 pm	DGO Maintenance Video Conf. Room 20581 Highway 160 West Durango, CO 81301
3	November 2, 2012 2:00 pm to 4:00 pm	Mesa Conference Room 606 S. 9th Street Grand Junction, CO 81501

2. Curb Ramp Inventory Survey

To maximize the opportunity for public input, CDOT developed a survey tool which it offered to all attendees at the public meetings and also sent the survey via email to the organizations listed above.

Demographics of Survey Input

A. CDOT Regions which provided responses:

Answer Options	Response Percent	Response Count
Region 1	23.2%	16
Region 2	7.2%	5
Region 3	5.8%	4
Region 4	27.5%	19
Region 5	5.8%	4
Region 6	30.4%	21
	<i>answered question</i>	69
	<i>skipped question</i>	0

B. Town(s), City or Cities evaluated by attendees of the public outreach meetings:

City/County	Count	City/County	Count	City/County	Count
Adams County	1	Elizabeth	1	Manitou Springs	2
Arapahoe County	1	Englewood	2	Orchard Mesa	1
Arvada	2	Evans	3	Palisade	1
Aurora	3	Evergreen	1	Parker	2
Boulder	4	Fort Collins	4	Pueblo	3
Breckenridge	1	Frisco	1	Redlands	1
Brighton	1	Fruita	2	Silverthorne	1
Broomfield	3	Golden	1	Steamboat Springs	1
Castle Rock	1	Greenwood Village	2	Summit County	2
Centennial	3	Highlands Ranch	1	Thornton	2
Clifton	1	Jefferson County	2	Waverly	1
Colorado Springs	3	Lafayette	2	Weld County	1
Conifer	1	Lakewood	2	Wellington	1
Denver	10	Littleton	3	Wheat Ridge	1
Dillon	1	Longmont	1	Woodland Park	1
Douglas County	2	Louisville	2		

C. Percentage of individuals who responded who identified themselves as having a disability (response was optional):

Answer Options	Response Percent	Response Count
Yes	13.2%	9
No	86.8%	59
If you wish to, please state the disability or disabilities:		11
	answered question	68
	skipped question	1

D. Type of Disability (response was optional):

Multiple Sclerosis, Restricted mobility, Osteogenesis Imperfecta, Scoliosis, Anomic Aphasia, TBI (Traumatic Brain Injury, Degenerative Disc Disease/Hip implant failure, PTSD (Post Traumatic Stress Disorder), Cerebral Palsy, Osteoarthritis, Fibromyalgia, depression, balance and walking limitations.

E. Organization/Group Represented

Adams County Aging Network
 Arapahoe County Veterans Office
 Area Agency on Aging
 Aurora Commission for Seniors/Denver Regional Mobility and Access Council Transit/Accessibility Task Force
 Bicycle Aurora
 CCDC
 CDOT
 Center for Independence
 Citizen's bus improvement committee also weld advocacy network on disabilities
 City and County of Broomfield
 City of Arvada
 City of Centennial
 City of Centennial Public Works
 City of Denver
 City of Fruita
 City of Greeley
 City of Greenwood Village
 City of Louisville
 City of Loveland
 City of Thornton
 Colorado Commission on Aging
 Colorado Cross Disability Coalition
 Congressman Scott Tipton
 Connections for Independent Living
 Denver Public Works/Traffic Engineering Services
 Denver Regional Mobility & Access Council

Douglas County
 Envision Creative Support for People with Developmental Disabilities
 First Ride Transportation
 Foothills Gateway Inc.
 Greeley Center for independence, Inc.
 Jefferson County
 Jefferson County Transportation & Engineering
 Jewish Family Service
 Larimer County Mobility Council
 Loveland Public Works Department
 Malley Senior Recreation Center
 Meeting the Challenge, Inc./ Rocky Mtn ADA Ctr
 Mile High Independent Living Center
 Mountain Metro Transit
 Mountain Metropolitan Transit
 NFRMPO
 North Front Range MPO
 Pueblo ADA Advisory Committee
 Summit County Facilities
 Summit Stage Transit
 Sunrise Community Health
 SWCI
 Town of Elizabeth
 Town of Parker
 Via Mobility Services

F. Responses to Request for Prioritization on Curb Ramp Needs

Survey Question No.1: Please rank the need as you see it in your CDOT Region (including town or city) for the following accessibility items pertaining to curb ramps. Because not all curb ramps and detectable warnings (a surface on the pavement that indicates to the visually impaired a transition from the street to the sidewalk) will be installed or upgraded at the same time due to budgetary reasons, CDOT needs your help ranking the needs in a given city, town or rural area. Ranking ranged from a (1) indicating “most critical” to a (5) indicating “least critical.”

	Most Critical (1)	Critical (2)	Somewhat Critical (3)	Less Critical (4)	Least Critical (5)
Installation of curb ramps where none exist to provide access to existing sidewalks or walkways.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modification or reconstruction of existing curb ramps which have a condition that impedes the path of travel, such as utility poles, hydrants, damaged curb ramps, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modification or reconstruction of existing non-compliant curb ramps to current ADA standards.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installation of an additional curb ramp at a corner where one curb ramp exists in one direction, but one curb ramp is missing and needed to cross the street in the other direction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Installation of detectable warning panels (truncated domes) on existing curb ramps.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Accessibility Needs not listed above.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CDOT Curb Ramp Survey for State Highways							
Please rank the need as you see it in your CDOT Region (including town or city) for the following accessibility items pertaining to curb ramps. Because not all curb ramps and detectable warnings (a surface on the pavement that indicates to the visually impaired a transition from the street to the sidewalk) will be installed or upgraded at the same time due to budgetary reasons, CDOT needs your help ranking the needs in a given city, town or rural area.							
Answer Options	Most Critical (1)	Critical (2)	Somewhat Critical (3)	Less Critical (4)	Least Critical (5)	Rating Average	Response Count
Installation of curb ramps where none exist to provide access to existing sidewalks or walkways.	31	18	11	4	1	1.86	65
Modification or reconstruction of existing curb ramps which have a condition that impedes the path of travel, such as utility poles, hydrants, damaged curb ramps, etc.	16	32	14	3	0	2.06	65
Modification or reconstruction of existing non-compliant curb ramps to current ADA standards.	14	26	17	7	1	2.31	65
Installation of an additional curb ramp at a corner where one curb ramp exists in one direction, but one curb ramp is missing and needed to cross the street in the other direction.	10	20	24	9	2	2.58	65
Installation of detectable warning panels (truncated domes) on existing curb ramps.	8	16	24	11	6	2.86	65
Other Accessibility Needs not listed above	6	10	19	10	20	3.43	65
<i>answered question</i>							65
<i>skipped question</i>							4

Survey Question No. 2: The ADA (28 CFR 35.150 (d) (2)) states that priority should be given to curb ramps near state and local government offices and facilities, transportation facilities, places of public accommodation, and employers. These are locations that would receive higher pedestrian use or demand. Ranking ranged from a (1) indicating “most critical” to a (5) indicating “least critical.”

Intersections and roadway segments near the following:

	Most Critical (1)	Critical (2)	Somewhat Critical (3)	Less Critical (4)	Least Critical (5)
County-owned facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospitals, health clinics, and health centers (public and private)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public housing and homeless shelters, including senior facilities and rehabilitation facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sheriff's facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation hubs (includes bus lines and transit stations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Department of Motor Vehicle offices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
County parks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prisons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping malls, supermarkets, and strip retail centers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Major employment sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing complexes, including apartments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Single family residential areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industrial areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rest Areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CDOT Curb Ramp Survey for State Highways

The ADA (28 CFR 35.150 (d) (2)) states that priority should be given to curb ramps near state and local government offices and facilities, transportation facilities, places of public accommodation, and employers. These are locations that would receive higher pedestrian use or demand. Intersections and roadway segments near the following:

Answer Options	Most Critical (1)	Critical (2)	Somewhat Critical (3)	Less Critical (4)	Least Critical (5)	Rating Average	Response Count
County-owned facilities	15	20	17	9	2	2.41	63
Public schools	34	17	9	2	1	1.71	63
Hospitals, health clinics, and health centers (public and private)	44	9	3	7	0	1.57	63
Public housing and homeless shelters, including senior facilities and rehabilitation facilities	30	20	7	6	0	1.83	63
Sheriff's facilities	2	18	20	15	8	3.14	63
Transportation hubs (includes bus lines and transit stations)	41	16	2	4	0	1.51	63
Department of Motor Vehicle offices	9	15	20	15	4	2.84	63
County parks	6	22	18	15	2	2.76	63
Prisons	0	12	13	21	17	3.68	63
Shopping malls, supermarkets, and strip retail centers	19	27	10	7	0	2.08	63
Major employment sites	20	23	14	6	0	2.10	63
Housing complexes, including apartments	21	22	14	6	0	2.08	63
Single family residential areas	10	11	23	13	6	2.90	63
Industrial areas	2	9	23	19	10	3.41	63
Rest Areas	11	16	20	8	8	2.78	63
Other areas (please specify, 500 character limit)							8
<i>answered question</i>							63
<i>skipped question</i>							6

Survey Question No. 3: A space was provided on the survey for additional comments. A complete list of the public comments can be reviewed on the Civil Rights & Business Resource Center website: <http://www.dot.coloradoinfo/business/equal-opportunity/ADA>.

VIII. CDOT Governing Documents Relevant to the Americans with Disabilities Act and Internal Structure

Governing Documents. The Colorado Transportation Commission (“Commission”) is an eleven member commission whose members are appointed by the governor in accordance with § 43-1-106, C.R.S. Section 43-1-106 (8)(a) C.R.S. gives authority to the Commission to formulate the general policy with respect to the management, construction, and maintenance of public highways and other transportation systems in the state. The Commission has taken a leadership role in ADA compliance by updating Policy No. 605.0, initially adopted in 2004.

Policy Directive 605.0, “Comprehensive Accessibility for Persons with Disabilities” adopted June 21, 2012, by Resolution No. TC-2094, reaffirms CDOT’s commitment to ADA compliance. The Policy specifically refers to an implementation plan which includes milestones the Department will meet to comply with ADA requirements. Policy Directive 605.0 encompasses all services provided by CDOT and any entity that receives funding from CDOT for all Transportation Projects, Transportation Facilities, Building Facilities, other services, and all local agency Transportation Projects that interface with Colorado state highways and interstates regardless of the funding source. Policy 605.0 reaffirms CDOT’s commitment to adhere to the requirements of federal law regarding the Americans with Disabilities Act. As part of this effort, CDOT Executive Director Hunt issued Procedural Directive 605.1, on “ADA Requirements in CDOT Transportation Projects” on July 3, 2012.

Procedural Directive 605.1 “ADA Accessibility Requirements in CDOT Transportation Projects” is a new Procedural Directive which was drafted in response to a request from the Federal Highway Administration that CDOT bring its governing documents into compliance with relevant federal regulations. Procedural Directive 605.1 is identical in most respects to a memo and document issued by then Executive Director Tom Norton in October 2003 with the same title. Specifically, FHWA requested that CDOT update its 2003 document and eliminate the statement that CDOT would not purchase right-of-way when constructing resurfacing projects. Procedural Directive 605.1 describes a step-by-step process that requires engineers to implement the requirements of Title II of the ADA in the design and construction of transportation projects. Procedural Directive 605.1 applies federal Americans with Disabilities Act regulations to all CDOT Transportation Facilities and Building Facilities. It specifically addresses requirements on CDOT construction projects and projects involving a local agency.

Internal Structure and Regions. CDOT's Organizational Chart indicates the internal reporting structure of the Department of Transportation. See Appendix "A" The Civil Rights & Business Resource Center will continue to be the primary contact and exercise oversight of all ADA-related matters for CDOT. The Center will continue to collaborate with the Office of Policy and Government Relations on technical interpretation of federal regulations and guidance and the Office of the Attorney General concerning transportation facilities and buildings, and will work together with the Standards and Specifications Unit, Project Development Branch to conform practice in the field to correct standards. The Civil Rights & Business Resource Center's ADA Coordinator will act as the expert resource for guidance on transportation facilities and buildings.

IX. CDOT Self-Evaluation, 28 CFR Part 35, Evaluation of Services, Policies and Practices

CDOT is required to evaluate its current services, policies, and practices, and the effects thereof that do not or may not meet the requirements of the federal regulations and, to the extent modification of any such services, policies, and practices is required, CDOT must make the necessary modifications.

One component of the self-evaluation is to provide an opportunity to interested persons, including individuals with disabilities or organizations representing individuals with disabilities, to participate in the self-evaluation process by submitting comments. CDOT must maintain on file and make available for public inspection: (1) A list of the interested persons consulted; (2) A description of areas examined and any problems identified; and (3) A description of any modifications made. The following is a summary of CDOT's self-evaluation.

2003

- Memorandum issued by Executive Director October 17, 2003, "Americans with Disabilities Act Access Guidelines and Local Agency Compliance"
- Developed CDOT ADA Transition Plan
- Developed and implemented a Design Bulletin dated October 29, 2003, (2003 Number 1, Revised Standard Plan M-608-1) providing guidance on new standards for curb ramps and detectable warnings.

2004

- July 15, 2004, adopted CDOT ADA Transition Plan
- Updated Policy concerning CDOT's adherence to all required federal Americans with Disabilities Act regulations.
- Trained engineers, consultants and local agency staff on the requirements of the October 17, 2003 Memorandum.
- Internal assessment concluded that the standard consulting agreement format lacked language specifically highlighting accessibility requirements and addressed this issue in consulting agreements.

- Added language to the Intergovernmental Agreement templates that direct local agencies and their consultants to follow CDOT policies and procedures. Direction is provided in Design Bulletins through the Project Development Branch.

Interim Period

- Utilizing the Design Bulletin of October 29, 2003, which described ADA requirements for construction projects, CDOT installed and updated curb ramps and detectable warnings on all CDOT projects where required.
- Engaged in outreach to region engineers concerning design, construction, and traffic, and reviewed CDOT practices and practices of other DOT's to identify best practices related to providing accessibility during the construction process.
- Held workshops training CDOT engineers on best practices and requirements related to the construction process.
- Evaluated local agencies throughout the state to determine their level of compliance with ADA requirements on CDOT funded projects and found that the local agencies' level of compliance was high.
- Provided technical assistance on ADA-related matters to CDOT engineers and local agencies.
- Developed ongoing relationships with CDOT engineers in order to bring the Civil Rights & Business Resource Center Office into the decision-making process on any given project.
- Reviewed the Statewide Transportation Plan for ADA compliance.
- Reviewed CDOT Manuals generally for ADA compliance.
- Reviewed the Roadway Design Guide for ADA compliance.
- During the summer of 2005, the Civil Rights & Business Resource Center utilized a consultant to assess all buildings that receive pedestrian traffic from the public and corrected deficiencies on an ongoing basis or moved staff to other ADA compliant buildings.
- Implemented a Web Content Management System that has brought CDOT into compliance with the requirements of Section 508 of the Rehabilitation Act, Title II of the ADA, and § 24-85-101 through 104 C.R.S.
- Provided ADA compliance training regarding web content management system to new content owners on an ongoing basis.
- Applied ongoing analysis of accessibility features to state highways and interstates based on the timeline that CDOT would resurface all Colorado within a fifteen year period, and assessed and made corrections to projects for ADA compliance as projects were designed and built.
- Issued Policy Memo #7 Analysis of Essential Items issued March 12, 2009.
- From 10/29/2003 through bid opening day of 5/13/2012, CDOT expended approximately \$5,115,000.00 on curb ramp installation and upgrades (including concrete and detectable warnings) throughout Colorado.

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2012

- July 31, 2012: Executive Director Hunt adopted new Procedural Directive 605.1 "ADA Accessibility Requirements in CDOT Transportation Projects" including the requirement that CDOT purchase of right-of-way for resurfacing projects when necessary.
- June 21, 2012: The Transportation Commission adopted Policy 605.0 "Comprehensive Accessibility for Persons with Disabilities" on June 21, 2012.
- July 3, 2012: The Transportation Commission repealed Policy 507.0 "ADA Accessibility Policy for CDOT Construction Projects" (language was incorporated into Policy 605.0).
- Equal Opportunity Office, Standards & Specifications Unit and Office of Policy and Government Relations developed "Frequently Asked Questions" intended to ensure that ADA compliance will be integrated into all construction projects by providing interpretations of requirements for use in project design and construction.
- July 18, 2012: Executive Director Hunt repealed Procedural Directive 507.1 "Standards for Rest Areas, Pedestrian Underpasses and Overpasses" (language was incorporated into Procedural Directive 605.1).

Future Actions

- In progress: CDOT ADA Transition Plan
- In progress: Statewide Curb Ramp Inventory
- Implement Procedural Directive 605.1 "ADA Requirements in CDOT Transportation Projects"
- Periodic update of CDOT ADA Transition Plan, updated when federal regulations are modified or changed or when CDOT practice indicates a needed change.
- To comply with the provisions of 28 CFR 35.150(a)(3) and 28 CFR 35.164, develop a process for determining when a proposed action would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens, and identifying an alternative action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.
- As questions for interpretation are received, the Office of Policy and Government Relations ("OPGR"), the Equal Opportunity Office, and the Standards and Specifications Unit of the Project Development Branch will continually update "Frequently Asked Questions" which will remain posted on the Equal Opportunity website. The Transition Plan will be reviewed every two years or when a substantive change occurs in law.
- CDOT will continue to train local agencies on the requirements of the Americans with Disabilities Act and other relevant regulatory requirements.
- The input gathered from the Curb Ramp Survey and Transition Plan will be provided to the CDOT Region engineers to be considered in developing the plans for installation and upgrades of accessibility features.

- The Civil Rights Business and Resource Center will oversee the rollout of Policy 605.0 and Procedural Directive 605.1 and the Region Transition Plans.
- The Civil Rights Business and Resource Center will oversee self-assessment outreach to local entities on an annual basis and report the progress on an annual basis.

X. ADA Title II Complaint Procedure

1. Complaint Procedure for Persons with Disabilities

Discrimination Prohibited. The American with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973 prohibit a public entity from discriminating against qualified persons with disabilities in access to facilities and services that the public entity provides.

For CDOT and organizations that receive funds from CDOT, the services, facilities or activities are any that are related to the planning, design, construction, maintenance, and operation of transportation systems. This can include but is not limited to: public buildings, meeting rooms provided by vendors, roadways, contiguous walkways, intersections, rest areas, roadside emergency telephones, public conveyances such as buses or other passenger vehicles operated by agencies under contracts with CDOT, enhancement projects, and related literature and other communication pertaining to any of these facilities or services.

2. Who May File

Any person with a disability who believes that they have been the subject of disability-related discrimination may use the CDOT Grievance Form or email the Equal Opportunity Office with the information set forth below.

3. How to File a Complaint

If a person believes that he or she has been discriminated against by CDOT or any organization that receives funds from CDOT for any of its programs, services, facilities or activities, the person should provide:

- A. The full name, address, and telephone number, and the name of the person who was allegedly discriminated against;
- B. The name of the organization that has allegedly discriminated, its address and telephone number, and any other identifying information;
- C. A description of the allegedly discriminatory actions that that are the basis for the complaint (dates of the actions, names of those who allegedly discriminated, and witnesses);

D. Any other information that is necessary to support the complaint.

E. Provide copies of relevant documents and keep originals.

F. Complaints must be delivered to:

Civil Rights & Business Resource Center
Colorado Department of Transportation
4201 East Arkansas Avenue
Denver, Colorado 80222
Office: (303) 757-9393
Website: <http://www.coloradodot.info/business/equal-opportunity>

4. Conducting an Investigation

The complainant and the Civil Rights Manager of the Colorado Division of the Federal Highway Administration will be notified within 5 working days of the receipt of the complaint by the Civil Rights & Business Resource Center, and the CDOT Civil Rights & Business Resource Center or other authorized representative will commence an investigation into the merits of the complaint, within 30 days. If necessary, the CDOT Civil Rights & Business Resource Center or other authorized representative, will contact the complainant directly to obtain additional facts or documentation relevant to the complaint.

The CDOT Civil Rights & Business Resource Center shall prepare a written decision, after full consideration of the merits of the complaint, no later than 90 days following the receipt of the complaint. A copy of the written decision shall be mailed to the complainant and the Civil Rights Manager of Federal Highway Administration ("FHWA"), Colorado Division no later than five working days after preparation of the final written decision.

If you have any questions about this complaint process, call the Civil Rights & Business Resource Center toll-free number: 800-925-3427 or local 303-757-9303. Communication with hearing impaired persons will be accomplished through the Colorado Relay system: 711 or (800-659-3656).

If the complainant is dissatisfied with the written decision, he or she may file a written appeal with the Civil Rights Manager of Federal Highway Administration ("FHWA"), Colorado Division, no later than 30 days of the date of the mailing of the decision. The appeal must contain a statement of the reasons why the complainant is dissatisfied with the written decision, and must be signed by the complainant or by someone authorized to do so on the complainant's behalf. The FHWA will act upon the appeal in accordance with its procedures and a copy of the CDOT Civil Rights & Business Resource Center's written decision shall be forwarded to the complainant no later than five working days after preparation of the decision.

The CDOT Civil Rights & Business Resource Center shall maintain the confidentiality of all files and records relating to complaints filed, unless disclosure is authorized or required by law.

Any retaliation, coercion, intimidation, threat, interference, or harassment for the filing of a complaint, or used to restrain a complainant from filing, is prohibited and should be reported immediately to the CDOT Civil Rights & Business Resource Center.

5. ADA Complaint Record Retention

The Equal Opportunity Office shall keep a record of all complaints filed for non-compliance with ADA and Section 504 of the Rehabilitation Act of 1973 for a minimum of three years.

6. Dissemination of ADA Non-Discrimination Policy

CDOT Policy 605.0 “Comprehensive Accessibility for Persons with Disabilities” was updated and adopted by the Transportation Commission on June 21, 2012 by resolution No. 2094. This Policy is posted on the CDOT Intranet, and has been provided to all organizations from which CDOT solicited public input in the development of this Transition Plan.

XI. Building Facility Review to Assess Accessibility

The ADA requires accessibility for persons with disabilities to all Building Facilities which are open to the public that are owned or leased by CDOT. CDOT assessed its buildings in 2005 using a Building Facilities Checklist which adhered to standards that were current at the time. As a result of that review, all CDOT buildings open to the public were determined to be compliant with the standards, deficiencies were corrected, or alternative methods of service delivery permissible under 28 CFR Part 35.150(a) and (b) were identified. Where CDOT identified physical barriers, the barriers were either corrected or services were relocated to other buildings that are accessible.

CDOT Property Management sends all new construction plans to an outside code reviewer to ensure compliance, including ADA. For vehicle storage facilities this review includes the office areas and restrooms.

CDOT has updated its 2004 Building Facilities Checklist to reflect requirements of the USDOJ 2010 Standards. The Checklist is available on the Civil Rights & Business Resource Center webpage, <http://www.coloradodot.info/business/equal-opportunity/ADA>. This Checklist is intended to act as a resource for CDOT to periodically review CDOT Building Facilities and accessibility to services. The Civil Rights & Business Resource Center will continue to act as a resource on ADA compliance in CDOT Building Facilities, including rest areas.

XII. Transportation Facility Assessment and Review

Utilizing the Design Bulletin of October 29, 2003, which described ADA requirements for construction projects, from that date forward, CDOT installed and updated curb ramps and detectable warnings on all CDOT projects where required. CDOT has committed to review its governing documents and confirm that they are in compliance with current ADA laws and

regulations. Procedural Directive 605.1 “ADA Accessibility Requirements in CDOT Transportation Projects” applies federal Americans with Disabilities Act regulations to all CDOT Transportation Facilities and Building Facilities. It specifically addresses requirements on CDOT construction projects and projects involving a local agency. As stated above, Procedural Directive 605.1 requires that all CDOT Transportation Projects undergo an assessment of current accessibility features present, and a determination of needs for installation or upgrades of existing or installation of new accessibility features.

Policy Directive Policy 605.0 “Comprehensive Accessibility for Persons with Disabilities” was adopted by the Transportation Commission by Resolution No. 2094 on June 21, 2012, and updated an existing policy in place since 2004. CDOT has developed “Frequently Asked Questions” (FAQ) regarding Procedural Directive 605.1. The intent of this document, which is posted on CDOT’s Civil Rights & Business Resource Center’s website, is to provide ongoing analysis of issues that arise regarding this Procedural Directive. The FAQ document will continue to evolve, and CDOT employees are requested to continue to provide questions to the Office of Policy and Government Relations, which will work with the Civil Rights & Business Resource Center and the Standards & Specifications Unit to continually develop the document.

CDOT will continue to systematically review its Policy Directives and Procedural Directives for Compliance with ADA law and regulations.

XIII. Communications

In accordance with the ADA and the implementing regulations and § 24-85-101 through 104, C.R.S., CDOT has assessed its information technology system(s) and developed and implemented a plan to provide persons who are blind or visually impaired effective access to information stored electronically by CDOT.

CDOT has taken and will continue to take appropriate steps to ensure that communications with applicants, participants, and members of the public with disabilities, and companions with disabilities are as effective as communications with others. This includes provision of auxiliary aids (sign language interpreters, readers, Braille, large print text) as required by 28 CFR 35.160(a) and (b)(1) and 49 CFR 27.7(c). In determining what types of auxiliary aids and services are necessary, CDOT shall give primary consideration to the requests of individuals with disabilities.

CDOT has notified, and will continue to notify the public and other interested parties that auxiliary aids will be provided upon request (e.g. via public meeting announcement) 28 CFR 35.160(a) and (b)(1) and 28 CFR 35.163(a) and 49 CFR 27.7(c).

CDOT has modified its website to provide accessibility to individuals with hearing or visual impairments, 28 CFR 36.160(a), and 49 CFR 27.7(c). CDOT has published the Colorado Relay number on its website and will continue to make the number available on meeting announcements, flyers, emails and other documents. 28 CFR 35.161 and 49 CFR 27.7(c).

CDOT shall exercise oversight of local agency projects to Assess Title II Compliance. CDOT Local Agency Coordinators (liaisons between CDOT and local agencies on CDOT funded projects) will include in their discussions with local agencies the necessity to communicate effectively with persons who have hearing or visual impairments.

Through a series of steps beginning in 2004 and continuing into October 2009, the CDOT Information Technology Office has accomplished the following:

- A. Implemented a Web Content Management System (WCMS) that complies with the requirements of Section 508 of the Rehabilitation Act, Title II of the ADA, and Colorado Revised Statute 24-85-101-104. This system is in operation and manages the content for the new external CDOT website. The new external website (www.coloradodot.info) was officially launched and all of the content for the website was completely moved to the new site. This new site is developed in Plone, an open source web content management system which is ADA compliant. Initial and ongoing training is occurring via the Web Services Team to staff members that are responsible for content. ADA standards are discussed and methods of content management to comply with those standards are related to content owners.
- B. CDOT implemented mandatory training for all employees who will be using the system to author and publish content to the public. Part of the curriculum and course materials address standards related to accessibility of materials for persons with visual impairments, and how to manage content to satisfy the representation of that content to end-users. This system allows compliance of consistent branding, security, taxonomy, policies and standards and accountability.
- C. In 2010, the Colorado Governor consolidated all information technology staff of all departments of state government into one department-the Office of Information Technology (OIT). CDOT continues to work with the state OIT staff to provide IT solutions for business needs. In essence CDOT identifies a business need and works with state OIT staff to develop a solution.

XIV. Statewide Curb Ramp Inventory

1. Introduction

CDOT sought to develop a system which would inventory curb ramps across the state with limited resources. Given the current demands on the transportation infrastructure and the needs of Colorado's citizens and visitors, CDOT determined that it would not be cost-effective to conduct a physical field analysis across the state. Such a project would require tremendous resources. So CDOT developed a database -- spatial ESRI SDE point feature class dataset -- which could be viewed both spatially (as a map) or in tabular form in a Microsoft Access database. In order to view the spatial data, the viewer must utilize ESRI compatible software.

CDOT's goal was to develop a database which would provide a foundation upon which each of CDOT's six Regions could build. The inventory database was intended to document the presence or absence of curb ramps where a pedestrian crossing, whether marked or unmarked, crosses a roadway within CDOT jurisdiction including Highways, Ramps, Frontage Roads, and CDOT Facilities, including rest areas. In addition to identifying the geospatial location of present or absent curb ramps, the tabular data includes thirty two attributes with sixteen populated during this survey.

2. Data Collection Methodology and Rationale

The initial collection of the ADA Curb Ramp Inventory utilized existing intersection data, video logs, aerial imagery and supplemental data procured from the Regions and local jurisdictions to perform an "identify and locate" desktop collection. Using this collection methodology allowed CDOT to visually locate existing curb ramps with observable ramp characteristics and to assess intersections where curb ramps were absent in a safe, efficient and cost effective manner.

Utilizing existing inventory data supplied by the Regions and local authorities enhanced the collection process by providing reliable data that could be integrated into the inventory, further reducing collection time. Over a six month period, CDOT completed a base inventory of present and absent curb ramps with characteristics attributed for 13,579 intersections and 43,732 intersection corners across the state.

The following photos show visual examples of CDOT's analysis:



ADA CURB RAMP INVENTORY



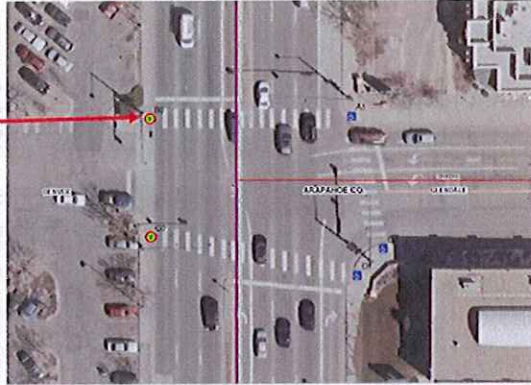
Examples of locations where curb ramps should be reviewed:

- Not already existing according to most up-to-date imagery
- Sidewalk, crosswalk, or discernible pedestrian path is present

Legend

Symbol	Does a curb ramp exist?	Is a sidewalk present?	Is a discernible path present?
	Yes	Yes	Yes
	No	Yes	Yes
	No	No	Yes

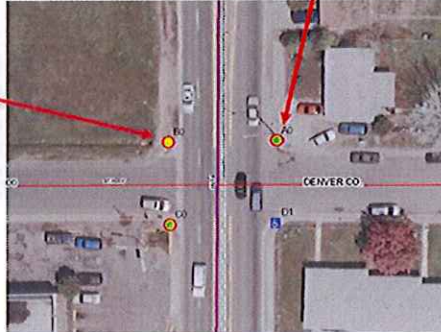
Sidewalk, but no curb ramp



Sidewalk, but no curb ramp



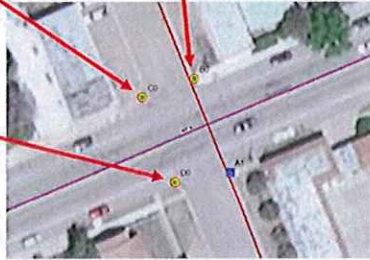
Discernible path or sidewalk, but no curb ramp



Sidewalk and crosswalk, but no curb ramp



Sidewalk, but no curb ramp



Sidewalk, but no curb ramp



3. Other Accessibility Features

CDOT focused on curb ramps as the main component of its inventory. It also collected data on other accessibility features when available, including truncated domes and accessible pedestrian signals.

The CDOT Region offices provided accessible pedestrian signal data. Accessible pedestrian signals are signals with audible and vibrotactile indications to assist pedestrians who are blind or have low vision. In order to ensure that pedestrian signal communications are inclusive of persons with visual impairments, it is important to provide pedestrian signals in usable formats; both audible and vibrotactile. Research shows that pedestrians in general move together and cross faster with audible signals, thus reducing vehicle delay while enhancing safety for pedestrians.

4. Curb Ramp Standards

The curb ramp standards upon which CDOT's analysis is based may be found at:

<http://www.coloradodot.info/business/designsupport/standard-plans/2006-m-standards/2006-m-standards-pdfs/42-curb-ramps/curb-ramps-m-608-1-all.pdf>

5. Data Elements Collected in CDOT Curb Ramp Inventory

Note: The yellow highlighted text in the table below was populated by the CDOT GIS Unit at CDOT Headquarters through the methodology described in sections 1, 2, and 3 above. The elements included in the white areas of the table cannot be determined through the methodology described in sections 1, 2, and 3, and will be completed on an ongoing basis by CDOT Regions as the accessibility needs of each region are determined.

Field Name	Description	Populated from
ROUTE	CDOT route name	Existing
REFPT	CDOT reference point	Existing
DES1	Designation ID in counter-clockwise order: edges of street, medians, inner islands, center island	Derived
RAMPID	15-character Ramp ID: Route_Refpt_RampAlphaRampNumber (i.e. 285D_262.688_A1)	Existing
SecRoute	Secondary route name	Existing
SecRefPt	Secondary reference point	Existing

isExisting	Does a curb ramp exist? Yes/No	Imagery
isSidewalk	Is a sidewalk present? Yes/No	Imagery
isPedPath	Is a discernible path present? Yes/No	Imagery
isCrosswalk	Is a marked crosswalk present? Yes/No	Imagery
GIS_X	X coordinate	spatial analysis
GIS_Y	Y coordinate	spatial analysis
isNear	Is the curb ramp located near a Level 1 priority facility (eg. hospital, school, transit stop, government building, etc.)? Yes/No	spatial analysis
Review	Review to determine if curb ramp needed? Yes/No	data analysis
RunSlope	Running slope in %	field inventory,
XSlope	Cross slope in %	field inventory,
isLanding	Is there a landing? Yes/No	field inventory,
LandingWidth	Width of the landing in inches	field inventory,
LandingLength	Length of the landing in inches	field inventory,
Width	Ramp width in inches	field inventory
ClearSpaceWid	Width of Clear Space in inches	field inventory
ClearSpaceLen	Length of Clear Space in inches	field inventory
ObstrType	Is there an obstruction in the pedestrian pathway? e.g. Fire hydrant, speed limit sign, signal pole, etc...	wind shield, Google street view, aerial/ field verification
isFlush	Is the transition flush? Yes/No 1/4" vertical or 1/2" beveled 2:1 ration	field inventory,
isProtected	Is the curb ramp protected from cross travel? Yes/No	field inventory, windshield, aerial

isTruncDome	Is a truncated dome present? Yes/no	field inventory
isContrast	Is there truncated dome texture contrast? Yes/No (Light on dark or dark on light)	field inventory
isPedSignal	Is there a pedestrian signal? Yes/No	Imagery/ field verification
isAudible	Is an audible pedestrian signal present? Yes/No	Existing from Regions
ButtonType	Closed fist, Tactile, Audible, Covered	Field inventory
isButtonAcces	Is the pedestrian push button accessible from the sidewalk and/or ramp? Yes/No 4'x4' x 2% cross slope <=10" side reach	Field Inventory
Ownership	Who owns the property? CDOT,Local, Private, Unknown	ROW plans, local info
EngRegion	CDOT engineering region	Existing
Priority	Intersection priority according to description below:	spatial analysis
Constructed	Date constructed	pavement management, as-builts
Condition	Good/Fair/Poor	field inventory
inCompliance	dated standard or none	as-builts
SafeHarbor	Was curb ramp constructed within SafeHarbor dates? Yes/no	decision tree
CurbType	1A -1D, 2A - 2B, 3A - 3B	field inventory
InspDate	Date	field inventory

6. Curb Ramp Prioritization

CDOT included in its initial Curb Ramp Inventory a prioritization based on population density; large urbanized areas (200,000 or more) where accessibility features would be utilized by the greatest number of people with disabilities, mid-sized urbanized areas (50,000 to 199,999), small urbanized areas (5,000 to 49,000 people) and rural areas (less than 5,000).

CDOT's jurisdiction with regard to curb ramps is limited to corners that are adjacent to State Highways, Interstate Highways, and local highways and streets at their intersections with either State or Interstate Highways.

Understanding that people with disabilities in rural or less-populated areas have needs of equal importance as those located in more heavily populated areas, CDOT prioritized the areas in its initial curb ramp inventory based on access to the greatest number of individuals and the location of critical public buildings.

With this as an assumption, CDOT located all existing ramps and generated a unique identifier for each. CDOT then populated the ramps with attributes that could be derived from existing datasets and imagery.

CDOT also requested available curb ramp data from all of Colorado's 332 local jurisdictions, including cities, and counties or cities that are also counties. To date, thirty-three local authorities have responded and eight provided data. In the areas where the local data was not available, other characteristics such as dimensions will require expanded collection efforts.

The purpose of the inventory is to both identify existing curb ramps and to identify intersections where curb ramps were not present. Based on this information, CDOT then made a preliminary determination whether conditions indicated a curb ramp could potentially be required.

Three ramp statuses were identified during collection; existing, not existing and "Review". If a curb ramp existed, further determination would be made by the CDOT Region whether the curb ramp required any upgrades or improvements. If a curb ramp wasn't present, the location was identified as "not existing" and a determination would be made by the CDOT Region whether a curb ramp was needed. In identifying "Review" locations, CDOT attempted to determine whether a discernible pedestrian path existed. A discernible pedestrian path includes sidewalks, paths, trails, marked and unmarked crossings. It would include corners at discernible pedestrian paths which could be utilized by persons using wheelchairs and corners of mixed use paths for use by pedestrians and bicycles where the path intersects with State highways.

In determining which intersections that potentially could require curb ramps ("Review") CDOT also performed an "isNear" analysis. The "isNear" analysis used existing data to identify intersection corners that were in proximity to Level 1 and Level 2 facilities. Level 1, Level 2 facilities are described below, and ranked based on their importance to the person with a disability. This was accomplished by geocoding facility addresses and first identifying those facilities that were within a one block buffer of a CDOT roadway. CDOT then performed a

distance analysis to locate existing and not existing curb ramps that were within a one block radius of the facilities. If a “not existing” curb ramp location fell within that radius, it was identified as “Review.”

7. Curb Ramp Location Priorities

(Based on Facility levels and priority descriptions)

High Priority (Level 1)

Intersections and roadway segments serving Level 1 facilities including:

- County-owned facilities
- Public schools
- Hospitals, health clinics, and health centers (public and private)
- Public housing and homeless shelters, including senior facilities and rehabilitation facilities
- Sheriff’s facilities
- Transportation hubs (includes bus lines and transit stations)
- Department of Motor Vehicle offices
- County parks
- Prisons

Medium Priority (Level 2)

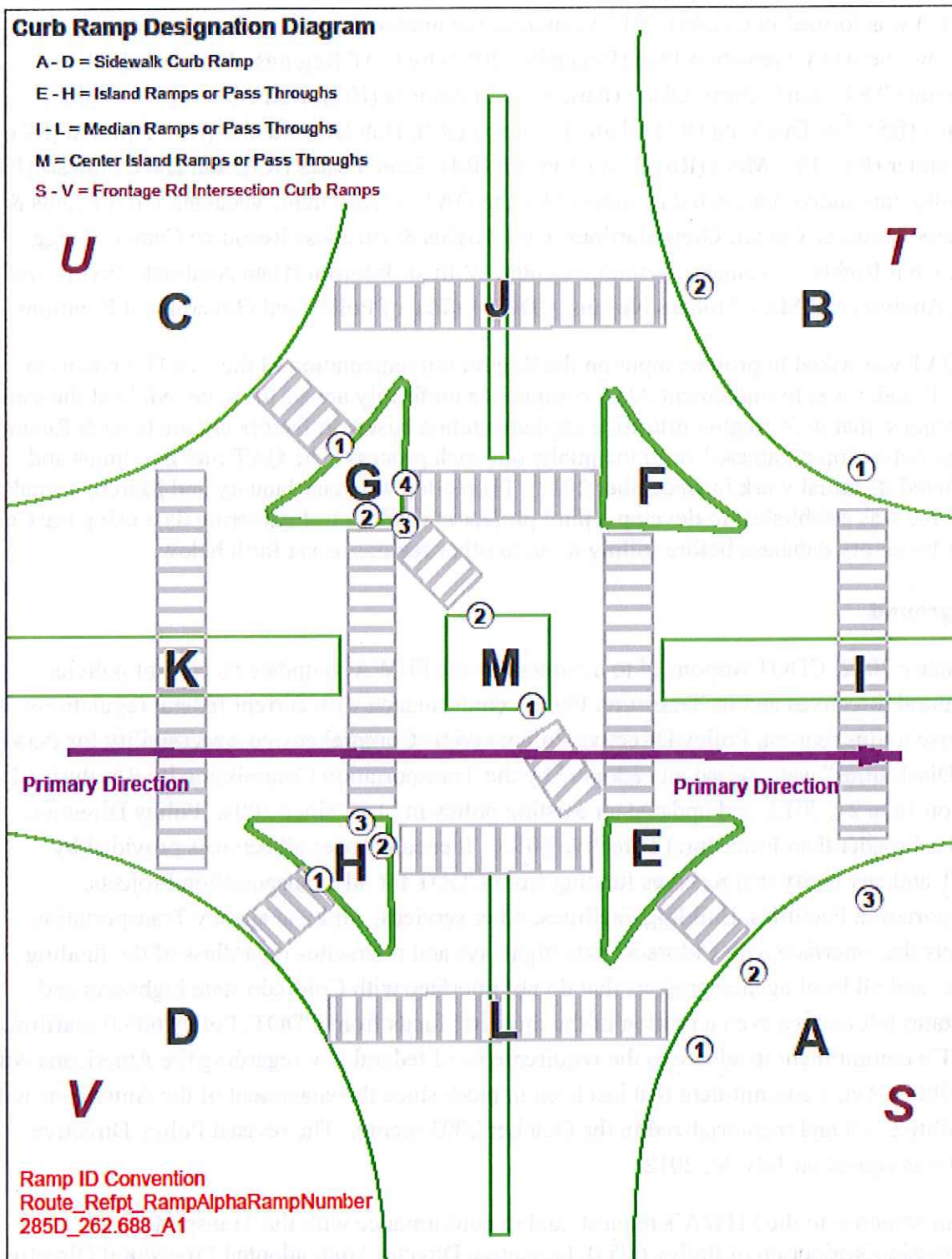
Intersections and roadway segments serving Level 2 facilities including:

- Shopping malls, supermarkets, and strip retail centers
- Major employment sites
- Housing complexes, including apartments

Low Priority (Level 3)

- Single family residential areas
- Industrial areas
- Other areas not classified as high or medium priority

This schematic below will be utilized to assess the curb ramp status at each intersection and determine whether the accessibility features are adequate or require enhancements.



8. CDOT's Quick Action Team "(QAT)" Recommendations

As part of the ongoing development of the CDOT ADA Transition Plan, a Quick Action Team ("QAT") was formed in October 2012 to analyze the implementation of Procedural Directive 605.1 and the ADA Transition Plan (December 2012) by CDT Regions. It included the following CDOT staff: Steve Olson (R6), Richard Zamora (HQ), Rod Abbott (R2), Mike Coggins (R5), Les Doehling (R3), Shane Ferguson (R2), Bob Heidelmeier (R3), Ajin Hu (R2), Jay Kramer (R1), Bob Mero (R6), Long Nguyen (R4), Sean Yeates (R3), and Dave Stewart (R1). The following individuals acted as support for the QAT: Greg Diehl, Manager, Civil Rights & Business Resource Center, Greg Martinez, Civil Rights & Business Resource Center, Gregg Ernst, Civil Rights & Business Resource Center, William Johnson (Data Analyst); Phyllis Snider (Data Analyst) and Mary Frances Nevans, CDOT Office of Policy and Government Relations.

The QAT was asked to provide input on the Region implementation of the CDOT Transition Plan. The aim was to implement ADA compliance uniformly across the state, while at the same time request that each Region prioritize implementation based on factors unique to each Region and the public input gathered from the public outreach process. The QAT met five times and completed its initial work in December 2012. Thereafter, between January and March, a smaller task force was established to develop a pilot project in order to test gathering data using the Curb Ramp Inventory database before rolling it out to other regions as set forth below.

Background

In January 2012, CDOT responded to a request by the FHWA to update its current policies, procedural directives and its Transition Plan in conformance with current federal regulations. In response to this request, Policy Directive Policy 605.0 "Comprehensive Accessibility for Persons with Disabilities" was revised and adopted by the Transportation Commission by Resolution No. 2094 on June 21, 2012, and updated an existing policy in place since 2004. Policy Directive 605.0 is broader than Procedural Directive 605.1. It encompasses all services provided by CDOT and any entity that receives funding from CDOT for all Transportation Projects, Transportation Facilities, Building Facilities, other services, all local agency Transportation Projects that interface with Colorado state highways and interstates regardless of the funding source, and all local agency projects that do not interface with Colorado state highways and interstates but receive even a portion of the projects' funds from CDOT. Policy 605.0 reaffirms CDOT's commitment to adhere to the requirements of federal law regarding the Americans with Disabilities Act, a commitment that has been in place since the enactment of the Americans with Disabilities Act and memorialized in the October 2003 memo. The revised Policy Directive 605.0 was signed on July 30, 2012

Also in response to the FHWA's request, and in conformance with the Transportation Commission's adoption of Policy 605.0, Executive Director Hunt adopted Procedural Directive 605.1 "ADA Accessibility Requirements in CDOT Transportation Projects." The new

Procedural Directive is substantively identical in most respects to a memo issued by prior Executive Director Tom Norton in October 2003 with the same title with one significant exception: the FHWA requested that CDOT eliminate the statement that CDOT will not purchase right-of-way when constructing resurfacing projects. Procedural Directive 605.1 eliminates this statement, and applies federal Americans with Disabilities Act regulations to all CDOT Transportation Facilities and Building Facilities. It specifically addresses requirements on CDOT construction projects and projects involving local agencies. Procedural Directive 605.1 was signed on July 30, 2012, with a 6 month window of time to comply with the ROW requirement.

Region Analysis

Chief Engineer Harris has stated that all FY13-14 projects must be ADA compliant. Looking forward at projects five years into the future and reviewing Transportation Improvement Programs (“TIP”) and Statewide Transportation Improvement Programs (“STIP”) each Region will develop a plan for integrating accessibility features into construction projects and maintenance projects. The threshold requirement is set forth in PD 605.1:

Any entity that receives funding from CDOT for any Transportation Project (i.e., a local agency, a private non-profit corporation, or a private contractor) must include Accessibility Features required by the authorities set forth herein and illustrated in Exhibit A to this Procedural Directive, regarding the Transportation Facility within the scope of the Project when:

1. The entity completes a resurfacing project with a design of 1.5 inches or greater in depth/thickness and/or completes a more extensive project, including but not limited to: reconstruction, major rehabilitation, widening, mill and fill 1.5 inches or greater, and projects of similar scale and effect, regardless of any change in final elevation. *See Memorandum “Clarification of FHWA’s Oversight Role in Accessibility dated 9-12-06” See Exhibit “B”*; or
2. The project alters curbs and/or pedestrian pathways. Examples include, but are not limited to: vehicle or pedestrian signal installation when the installation alters the curb or pedestrian pathway, utility work, or removing or altering portions of the sidewalk.

The goal is to avoid, minimize, or mitigate impacts to project delivery due to time required for ROW acquisition, design and construction requirements. A programmatic approach to curb ramp delivery may provide improved economies of scale, minimize change in scheduling due to ROW acquisition, and provide the community with increased confidence that CDOT is responding, prioritizing and maximizing the use of its limited resources to meet the needs of all our constituents. The delivery of necessary ramps, updated ramps, and ramps that require ROW acquisition in a cost-effective manner necessitates thinking from conception through construction. A “boots on the ground” approach statewide is not financially feasible, therefore

CDOT is using technology through a GIS survey of the intersections across the state to provide a baseline upon which to build. It is anticipated that the Region engineers will continually update data by Region. To better assess the scope of the curb ramp status, the Regions will need to perform additional investigations to amend the inventory from DTD, which is described in Section XIV of this Transition Plan. The urban and rural settings in each Region include numbers of corridors which increase the difficulty associated with maintaining an inventory of curb ramps. Curb ramps are complex elements, with a number of controlling criteria, and they are often installed on crowded corners that have other critical elements such as Traffic Signal poles and controllers, utility boxes, and other items needed in an urban area. A physical inventory of each ramp is required to determine if it is compliant with the current standards, this includes, but is not limited to: width, slope, landing details. The relative location of the existing ramps within the CDOT ROW is also important: it is possible for ramps to be constructed on ROW of CDOT, local agency, private property or a combination of these. CDOT is responsible for continued maintenance and operations of the ramps located on CDOT owned or controlled property.

Cost of Upgrading or Installation of Accessibility Features When ROW Does Not Belong to CDOT

A common estimate used for the construction of a curb ramp is \$2,500 (for ramp only), which does not include any markups, voice signals, removal and most importantly the cost associated with the purchase of ROW. The ROW development and acquisition process is estimated to be significantly more expensive than the construction process, and could be as high at \$7,500 per ramp for nominal land acquisition cost and modest internal costs for survey, title, ROW plans, staff time etc. This amount also depends on the value of ROW acquisition; land cost in an urban area could be significant. If the direct acquisition cost is under \$5,000, then \$7,500 would be a reasonable estimate (including all other steps required before the actual acquisition). This estimated total cost assumes a modest land acquisition cost and no appraisals. This cost could be significantly higher in expensive urban land areas and if CDOT and owner appraisals become necessary. This does not include the increased time required for research and resulting schedule impacts to the individual project. Consequently, each Region must develop a cost-effective process to deliver the ramps with minimal impact to the overall program. Delivering curb ramps through the process required by Procedural Directive 605.1 will lead to a change in project duration, reduced scopes of work for projects, reduced project limits, and a decrease in the overall level of services.

The summary below shows the associated time and related cost impacts that will result when it is necessary to obtain ROW to install or upgrade a curb ramp. The degree of the impacts is dependent upon who owns the non-CDOT ROW that will need to be used. The time estimates assume several ramps on a typical resurfacing project and cooperative ownership (i.e. condemnation proceedings are not necessary). Also, the time frame estimates assume that ROW

information has (already) been provided with accurate design line work that can be relied upon to determine the maximum ROW needs.

Type:	Relative Resources Costs	Schedule Impacts (Months)
100% in CDOT ROW	Low	1-2 months, depending whether ROW mapping is necessary
100% in Local Government ROW	Low to Moderate	3-4 assumes local agency will donate necessary ROW interest. ROW plans should specify parcel that local agency will donate necessary ROW.
100 % in Other Government ROW (e.g. USFS, BLM, State Land Board)	High	6-9 for small # of ramps on typical resurfacing project, i.e., minor rehab
100% in Private ROW	Moderate to High	9-10 months (longer if condemnation is necessary)
100% unknown ownership	high	9 months to 1 year (longer if condemnation is necessary)

Analysis of Project

The following analysis was developed by the QAT to assist CDOT Regions in their analysis of curb ramp needs.

(1) Determine Curb Ramp Need on (foreseeable) projects

- Review existing ADA Curb Ramp Inventory (including GIS survey).
- Obtain permissions to enter for needed survey work.
- Confirm existing geometric configuration- Survey and plot information relative to: width, slope, length, landing dimensions, etc. on a project level basis.
- Update existing database with confirmed existing geometrics
- Does proposed geometric configuration comply with current standards? If not,
 - Does configuration fall under safe harbor provision?
 - Alternative configuration?
 - Design variance letter?
- Classify the ramp need:
 - New construction -- no issues,
 - Constrained conditions -- need to coordinate with ADA coordinator,
 - Technical exception or variance need to coordinate with ADA coordinator.

(2) ROW Verification of Proposed Ramps (without any condemnation – if condemnation required, add 3 to 9 months)

- 100% in CDOT ROW – (1 Month from ROW receipt of sufficient design)
- 100% in Local Government ROW (3-4 Months from ROW receipt of sufficient design)
 - Confirm ownership and prepare ROW plans
 - Confirm donation by local agency.
 - Develop MOU or other property transfer agreement
- 100% in Other Government ROW (6-9 Months from ROW receipt of sufficient design)
 - Confirm ownership and prepare ROW plans
 - If not donated, prepare valuation (value finding or appraisal)
 - Develop MOU or other property transfer agreement
- 100% in Private ROW (9-10 Months from ROW receipt of sufficient design)
 - Develop detailed ROW plans for acquisition process
 - Valuation determination by value finding or appraisal
 - Acquisition process
- 100% unknown ownership (9 Months to One Year from ROW receipt of sufficient design and definitive title work)
 - Develop detailed ROW plans for acquisition process
 - Valuation determination by value finding or appraisal
 - Acquisition process
- When ROW makes determinations as to ownership, first step: standardize the expectation of what engineering groups would provide. Need to know the design and need it laid out accurately on ROW maps and design plans.
- The Region ROW Unit will perform layout to verify the need for ROW.
- If no ROW is required for the ramp, then the ramp will go back to design.

- If ROW is required, then the ROW Unit will:
 - Work with the designer to prepare ROW plans.
 - Valuation determination will be made by value finding or appraisal
 - Good faith negotiations will ensue.
 - Once all locations are acquired, a ROW clearance is issued and project is advertised.

(3) Analysis of Future Projects: Recalculating Scheduling Projects Based on ROW Acquisition

- Identify all curb ramps in all resurfacing projects for current projects extending out 5 years that may require ROW acquisition.
- If projects require ROW acquisition, move these out of the resurfacing projects and into a Region wide curb ramp replacement project.
- Purchase the ROW (if applicable to Region).
- Possibly construct all curb ramps as a separate project. (note: must be completed prior to not after a project is completed) or install contemporaneously with construction.
 - If separate project installed prior to construction:
 - Annual project could be assigned to a different RE on a rotating basis. Similar to preventive maintenance projects.
 - Region Materials Engineer provides a list of all resurfacing projects for a certain FY.
 - Each curb ramp in the project limits is analyzed to determine if sufficient ROW is available to reconstruct the curb ramp.
 - Ramps are sorted based on ROW requirements, for example those requiring minimal or no ROW are packaged together and sent to the designer for inclusion in a project.
- For all projects that are currently in the delivery pipeline:
 - Remove from current project delivery pipeline and reschedule in a future period that allows for funding, design and ROW and ROW acquisitions issues to be addressed. Look at 5 year plan and incorporate ADA compliance.
 - Maintain current order in the project delivery process, allocated/shift resources from other projects. The design, ROW, and construction resources are finite; something has to give to allow for the delivery of additional and/or enhanced curb ramps.
- Over time, fill in missing data elements, inventorying the current condition, build on GIS database.
- Regarding major rehabilitation, reconstruction, widening and other projects that impact the location and configuration of the ramps, design ramps and construct as part of the project.
- Minor rehabilitation and other projects that require reconfigurations of existing ramps in their existing locations, or the installation of ramps where none currently exist. These may be completed before the project is delivered; however, it should be noted that federal regulations do not permit the installation of curb ramps after a project has been completed; the ramps must be installed either before or during the completion of the project.
- Corridors Projects: specific and significant corridors that have a number of noncompliant ramps and are not scheduled for roadway work in near future. Complete these projects

with a Region wide curb ramp replacement project; however, the ramps must be installed prior to not after the project is completed.

- New commitment to purchase ROW may require different approach to project planning starting from funding and design. This may cause a change in scheduling of up to 18 months.

Estimated Costs

The analysis below was included in order to assist CDOT Regions with a cost estimate of ADA compliance regarding curb ramps. The QAT arrived at an estimated cost estimate based on the GIS database curb ramp numbers throughout the state, broken out by Region.

Statewide total

- 13,579 intersections were viewed.
- 43,732 total points were collected
- 18,376 existing ramps were identified, located and attributed
- 25,356 intersection corners were identified as not having curb ramps
- 2,801 intersections corners were identified as not having existing curb ramps but potentially requiring curb ramps

Totals by Regions

Region	1	2	3	4	5	6	Total
Existing	1,097	2,820	2,449	3,972	908	7,130	18,376
Not Existing	3,428	5,790	4,291	6,573	3,968	1,306	25,356
Review	279	586	408	635	319	574	2,801

The following chart indicates an approximate analysis of curb ramp assessments and the costs of this assessment based on the numbers above. These numbers will continue to be refined as the Regions upload additional information into the existing GIS database.

Cost Estimate by Region for ADA Curb Ramp Compliance						
Region	No. Existing Ramps	Est. Cost of Ramp Upgrade (1, 3)	Est. ROW for Existing Ramps (2)	Total - Upgrades		
1	1097	\$2,056,875.00	\$2,056,875.00	\$4,113,750.00		
2	2820	\$5,287,500.00	\$5,287,500.00	\$10,575,000.00		
3	2449	\$4,591,875.00	\$4,591,875.00	\$9,183,750.00		
4	3972	\$7,447,500.00	\$7,447,500.00	\$14,895,000.00		
5	908	\$1,702,500.00	\$1,702,500.00	\$3,405,000.00		
6	7130	\$13,368,750.00	\$13,368,750.00	\$26,737,500.00		
Statewide Totals:	13782	\$34,455,000.00	\$34,455,000.00	\$68,910,000.00		
Region	No. New Ramps	Est. Cost New Ramps (3)	Est. Cost New Ramp ROW (4)	Total New Ramps	Region Totals	
1	279	\$697,500.00	\$1,255,500.00	\$1,953,000.00	\$6,066,750.00	
2	586	\$1,465,000.00	\$2,637,000.00	\$4,102,000.00	\$14,677,000.00	
3	408	\$1,020,000.00	\$1,896,000.00	\$2,856,000.00	\$12,039,750.00	
4	635	\$1,587,500.00	\$2,857,500.00	\$4,445,000.00	\$19,340,000.00	
5	319	\$797,500.00	\$1,435,500.00	\$2,233,000.00	\$5,638,000.00	
6	574	\$1,435,000.00	\$2,583,000.00	\$4,018,000.00	\$30,755,500.00	
Statewide Totals:	2801	\$7,002,500.00	\$12,604,500.00	\$19,607,000.00	\$88,517,000.00	

Notes:

- 1 Assumes 75% of existing ramps will require upgrade @ \$2500 per ramp
- 2 Assumes 25% of ramps will require ROW to upgrade @ \$7500 per ramp
- 3 Assumes \$2500 per ramp for construction
- 4 Assumes 60% of new ramps will require ROW @ \$7500 per ramp

QAT Proposed ADA Curb Ramp Inventory Pilot Project

In order to implement Procedural Directive 605.1 and the ADA Transition Plan, CDOT must collect specific data elements on the curb ramps identified in the Curb Ramp Inventory Database as requiring additional information. These ramps fall into two categories: those within a designated project, and those that are currently not included in a designated project.

The QAT proposes that the process needed for the collection of data elements be developed and refined through the use of an ADA Inventory Pilot Project. The Pilot Project will focus on implementing and refining two phases of data acquisition necessary to populate required data elements within the ADA Curb Ramp Inventory Database.

- Phase 1 will focus on the field collection of the physical geometrics of existing curb ramps within designated project areas by field crews. This will include identifying best practices and methods for measuring and collecting the required data. Resources utilized during this pilot project will allow for a more accurate assessment to complete statewide inventory collection.
- Phase 2 will determine ROW ownership, analysis of potential ramp types required and an evaluation of ROW requirements based on identified ramp types. This will also include an assessment of the feasibility/value of populating the ROW data element and an estimation of resources needed to complete on a statewide basis.

The goal is to refine the data collection process prior to implementation by all other regions. Importantly, the pilot project would utilize and build on to the database immediately so that it can be used to its fullest potential.

Pilot Project to Collect Data for Curb Ramp Inventory Database. The QAT proposes that teams be developed and equipped to perform Geometric Data Collection (Phase 1) and ROW and Ramp Analysis (Phase 2). The QAT has identified the means and methods for collecting the data needed to complete the Curb Ramp Inventory Database, and the criteria for prioritizing the collection/completion of the database of planned project delivery. The ADA Pilot Project will occur between May through September 2013 and is proposed for the Denver Regional Council of Governments (DRCOG) MPO area.

The ADA Pilot Project will focus on planned or anticipated projects, and their associated corridors, identified in a number of project lists including but not limited to:

- The Statewide Transportation Improvement Plan (STIP),
- Surface Treatment and Advanced Surface Treatment Plan (STP), and
- Responsible Acceleration of Maintenance and Partnerships (RAMP).

The identified inventory of engineering and maintenance projects will be prioritized based on those that will be programmed for delivery in the DRCOG MPO area as described below. Data collection will be optimized to collect as much data as possible within the budget and time

constraints of the pilot project within the DRCOG MPO. Priority will be given to corridors that are anticipated to have projects delivered in the following order:

1. Near term (1-2 years)
2. Mid-term projects (2-5 years)
3. Long term (>5years)
4. Anything outside the planned project delivery corridors

Phase 1 – Field collection of curb ramp geometrics

The field collection of curb ramp geometric data will require personnel in the field to utilize GPS enabled iPads with an ArcGIS Mobile Application installed to update the Curb Ramp Inventory data elements based on observations of curb ramp characteristics. This will include the on-site identification of the physical ramp characteristics detailed in Table 1, performing actual measurements (i.e. Length, Width, Slope, etc.) of the existing ramps, as well as identification of physical obstacles (utility poles, manholes, utility valves, signs, etc.) and condition. The field collection could also be utilized to field verify ramp characteristics that have already been populated for existing ramps, such as crosswalks, audible signals, pedestrian signals, etc.

Project Specifications:

DTD has project funding in the amount of \$400,000 available for the ADA Curb Ramps Inventory. The Pilot Project includes the following:

- Resources
 - Personnel
 - 4 – Interns for field collection crew (4 months).
 - 1 – Office GIS Intern to perform QA/QC, support field collection efforts and manage the inventory database (9 months).
 - Tools
 - GPS enabled iPads – 4 units required for field crew members.
 - ArcGIS Mobile Application – This application is free and will be installed on the iPads.
 - Measuring instrument
 - Smart level
 - Measuring tapes (20 ft)
 - Safety Equipment
 - Personal Protection Equipment
 - Work zone signage and equipment (as needed)
 - M&S Standards
 - Transportation - 2 vehicles

- Training - The teams would require training at different levels that would be provided by the Center of Equal Opportunity ADA staff, including Greg Martinez.
 - 1 week of training to include:
 - Data collection tool usage
 - Field collection methods
 - ADA definitions
 - Safety Regulations
 - A step-by-step guide on measuring curb ramps and adding the data into the Curb Ramp Inventory Database, so that this approach can be deployed in other regions.
 - Database maintenance
 - Training for office GIS intern on the queries and checks
 - Updating of master database
- Table 1: Data to be field collected
 - Running Slope %
 - Cross Slope %
 - Landing Present
 - Landing Dimensions
 - Ramp Width
 - Clear space Dimensions
 - Obstruction Type
 - Flush Transitions
 - Protected Ramp
 - Truncated Dome
 - Contrasting Truncated Dome
 - Pedestrian Signal Button Type
 - Pedestrian Signal Button Accessibility
 - Condition
 - Inspection Date

Data Collection Process Overview

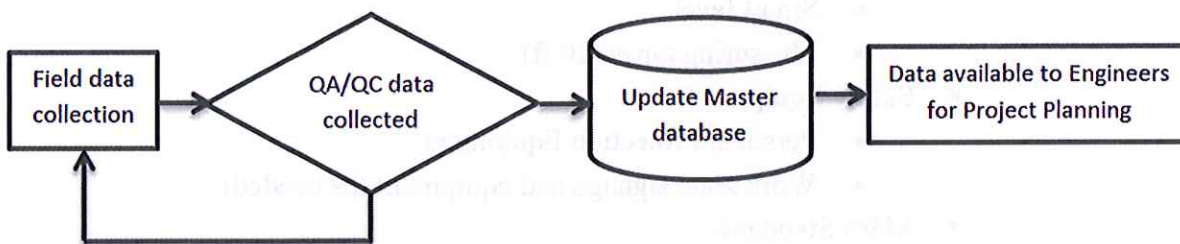


Figure 1

- Field Data Collection will involve the four field crew interns, in teams of two, performing a site visit to each existing curb ramp within previously identified project extents. During the site visit they will observe and measure specific characteristics of the curb ramp and record that data into designated database fields using ArcGIS Mobile application installed on the iPads.
- QA/QC Data Collected will be performed by the office GIS intern and is a process to determine if field data collected is accurate and complete. The process will involve a series of queries and checks to ensure that measurements and data entered fall within certain expected parameters and to field verify or recollect if they do not.
- Update Master Database will be the responsibility of the office GIS intern. Once the QA/QC process has been completed, the approved changes to the data will be synchronized with the master database. The synchronization will occur on a regular schedule to ensure that the Engineers are receiving the most current data.
- Data Available to Engineers for Project Planning is the culmination of the field collection process. Once the master database has been updated with all current changes the database will be available for Phase 2 of the pilot project.

Phase 2 – ROW and Ramp Analysis

Once data collection has been completed a ROW and Ramp Analysis will be conducted to determine ROW ownership, analysis of potential ramp types required and an evaluation of ROW requirements based on identified ramp types. This will also include an assessment of the feasibility/value of populating the ROW data element and an estimation of resources needed to complete on a statewide basis

Project Specifications

- Resources
 - Personnel
 - 2 FTE Interns – (6 months)
 - PE1 – Engineering data evaluator
 - PLS1 – Survey/ROW plan evaluator
- Training
 - Familiarize 2 FTEs with M&S Standards
 - Training in OTIS functionality

ROW and Ramp Analysis Overview

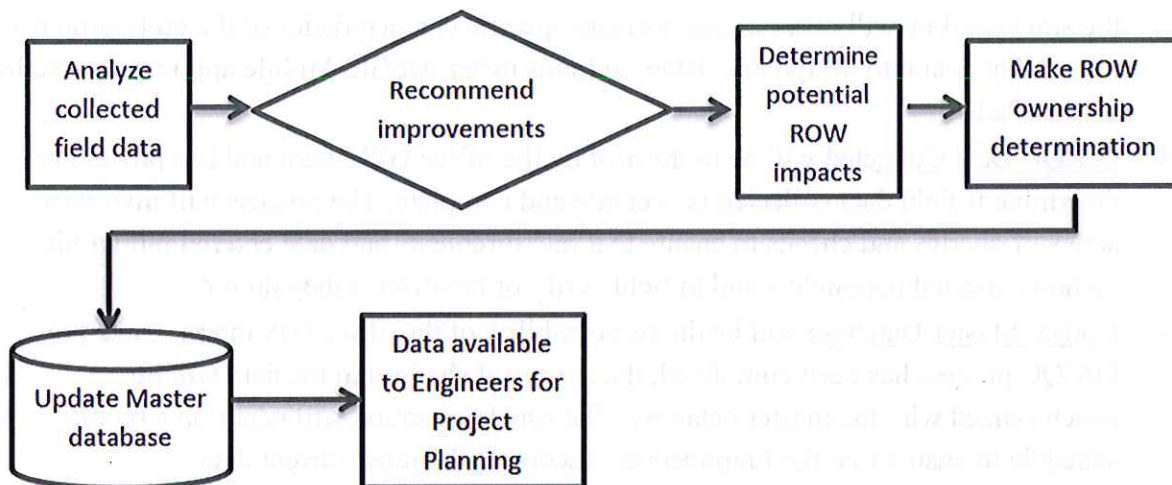


Figure 2

- Analyze collected field data - The PE1 evaluator will analyze the collected field inventory data for each location
- Recommend Improvements -, The PE1 Evaluator will culminate his/her analysis with a recommendation for the type/nature of needed ADA improvements.
- Determine potential ROW impacts - The PE1's recommendation shall be in sufficient detail for the PLS1 evaluator to understand the boundaries of the area of impact "on the ground" for the recommended ADA improvements.
- Make determination of ROW Ownership - The PLS1 evaluator will complete the data inventory with a determination of: (1) in CDOT ROW (i.e. no ROW needs to be acquired; (2) at least partially on private property (i.e. ROW needs to be acquired; (3) at least partially on local/public property (ROW needs to be acquired); or (4) unknown and/or further research needed. If possible, it would be helpful if these four fields in the database could accommodate very brief comments. The PLS1 evaluator will only make the determination set forth above - the analysis will not go so far as to either: (1) quantify the area of ROW needed; or (2) estimate the cost of any necessary ROW acquisition.
- Update Master Database - The PLS1 evaluator will then update the master database with the ROW ownership data
- Data Available to Engineers for Project Planning is the culmination of the Ramp and ROW Analysis data collection process.

Estimated Expenses for Budget Purposes	Cost
Phase 1	
1 Office GIS Intern for 9 months @ 1560 hours x rate of \$20 per manhour x 1.14	\$35,568
4 interns for 4 months @ 694 hours per intern x rate of \$20 per manhour x 1.14	\$63,293
2 EEO subject matter experts to train the team	
4 GPS enabled iPads	\$2,400
2 vehicles for 4 months @ 5,000 miles/month @ .50/mile	\$20,000
Region support staff (ADA Specialist, Greg Martinez, PLS and ROW Staff, but not ROW Managers)	
Data Collection oversight (Greg Diehl, Phyllis Snider / Greg Martinez)	
Phase 2	
1 PLS I for 6 months @ 1040 hours x rate of \$28 per manhour x 1.14	\$33,197
1 PE I for 6 months @ 1040 hours x rate of \$31 per manhour x 1.14	\$36,754
Total	\$191,212

Figure 3 Note: All subject matter experts, oversight and support staff will charge to their respective cost center

Next Steps

The ADA Curb Ramp Inventory database will be useful to Engineers during the project planning phase to identify any needed ADA curb ramp upgrades or construction. The data will also be used to flag any non-compliant existing curb ramps or locations that require ADA access that are not currently included in a designated project. At the conclusion of the ADA Pilot Project, a review will be conducted by the Chief Engineer and senior management team of the work accomplished and the associated costs to determine if a statewide inventory collection is feasible. If a statewide collection project is approved, an approach for Region implementation will be determined. CDOT will document its ongoing compliance with ADA requirements and will include its progress in an addendum to this ADA Transition Plan, until such time as it develops an updated Transition Plan reflecting any changes in governing law.

Approved this 23rd day of April, 2013.



Colorado Department of Transportation, Chief Engineer

XV. Appendices and Documents Referenced in the ADA Transition Plan

The following documents are available on the CDOT Civil Rights & Business Resource Center website: <http://www.coloradodot.info/business/equal-opportunity>

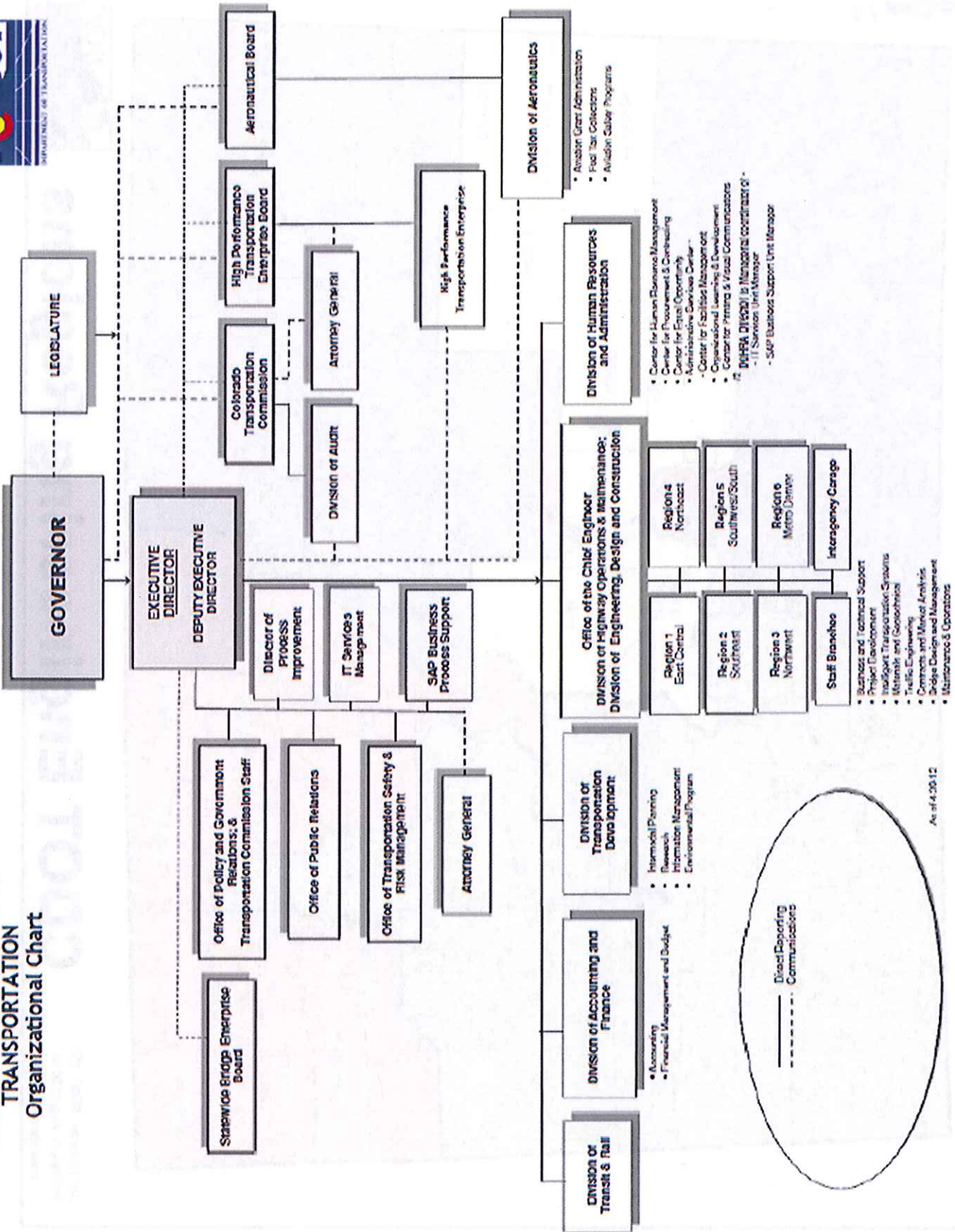
- Transportation Commission Policy 605.0 “Comprehensive Accessibility for Persons with Disabilities”
- CDOT Procedural Directive 605.1 “ADA Requirements in CDOT Transportation Projects”
- Building Facility Checklist (Assess Compliance with Section 504 and ADA Title II)
- Frequently Asked Questions
- Curb Ramp Inventory Database

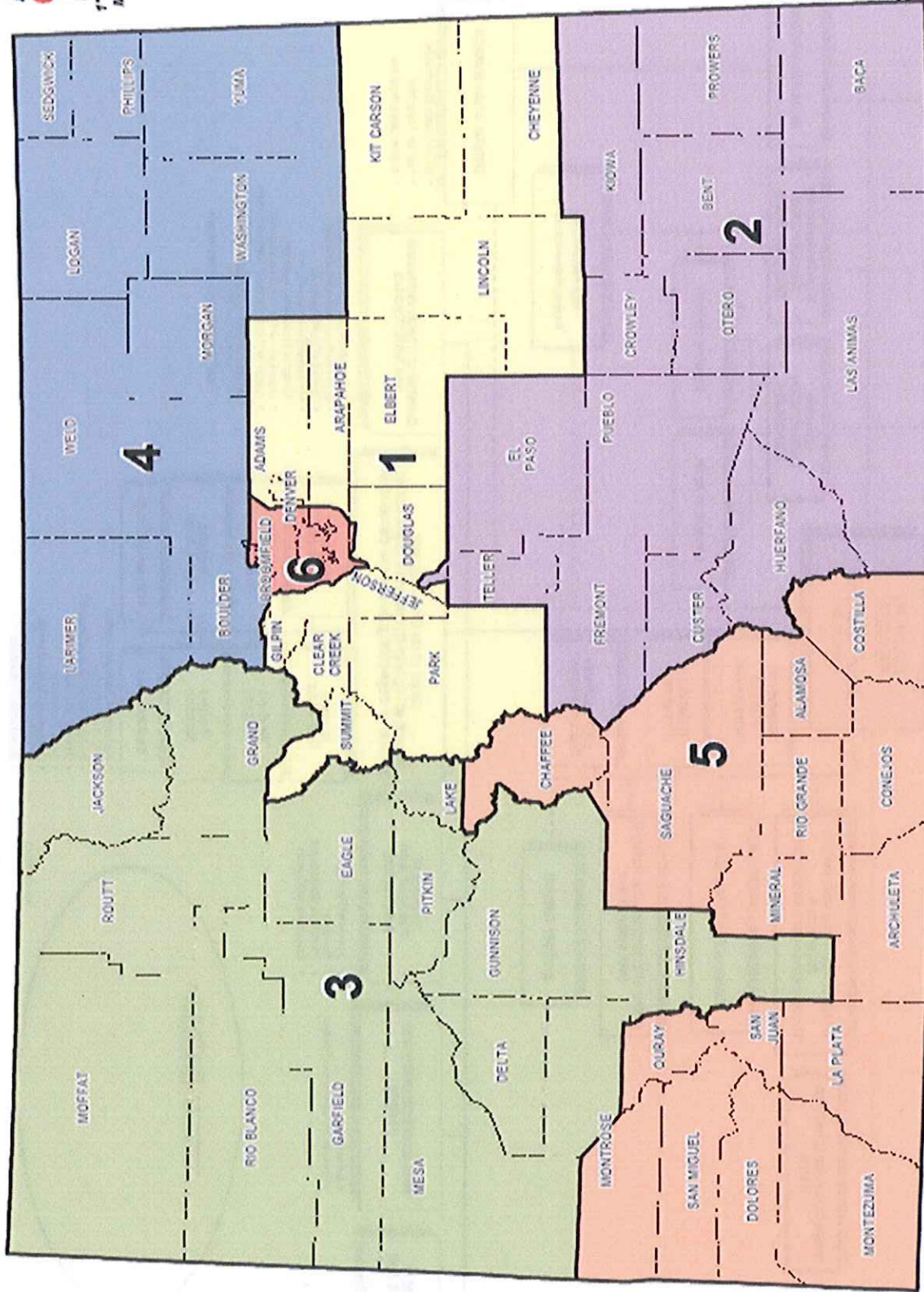
The following documents are attached as appendices:

- CDOT Organizational Chart
- Map of CDOT Regions

Appendix A

COLORADO DEPARTMENT OF TRANSPORTATION Organizational Chart

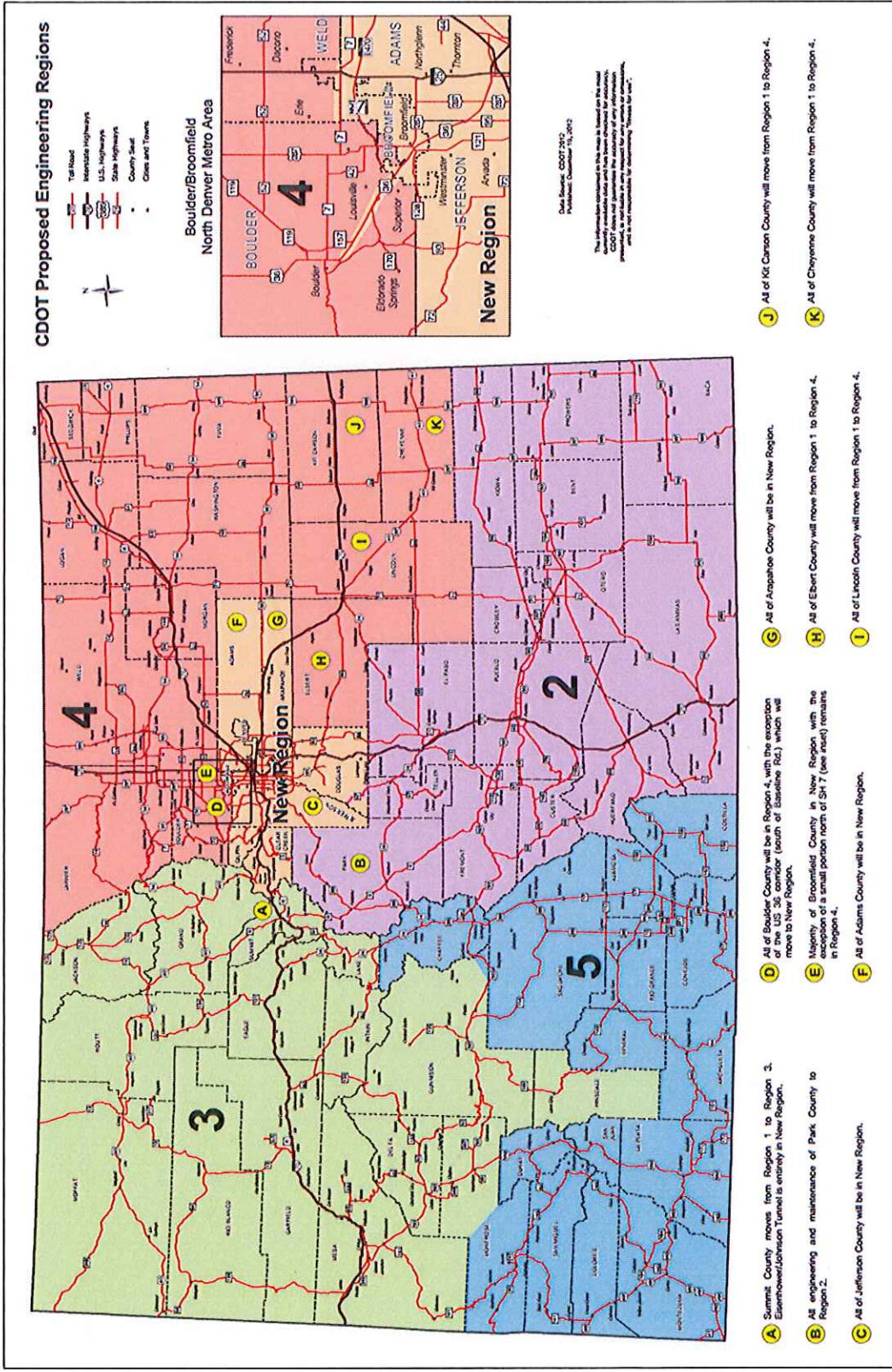




CDOT Engineering Regions

Data Source: CDOT 2011
 Published: August 2012
www.dot.state.co.us

CDOT Proposed Engineering Regions effective July 1, 2013



- A** Summit County moves from Region 1 to Region 3. Eisenhower/Johnson Tunnel is entirely in New Region.
- B** All engineering and maintenance of Park County to Region 2.
- C** All of Jefferson County will be in New Region.
- D** All of Boulder County will be in Region 4, with the exception of the US 36 corridor (south of Baseline Rd.) which will move to New Region.
- E** Majority of Broomfield County in New Region with the exception of a small portion north of SH 7 (see inset) remains in Region 4.
- F** All of Adams County will be in New Region.
- G** All of Arapahoe County will be in New Region.
- H** All of Elbert County will move from Region 1 to Region 4.
- I** All of Lincoln County will move from Region 1 to Region 4.
- J** All of Kit Carson County will move from Region 1 to Region 4.
- K** All of Cheyenne County will move from Region 1 to Region 4.

