

# ADA Training

Federal Highway Administration

PART 1 – ADA History and Background

11-18-2010

Presented by:  
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Federal Highway Administration – Idaho Division



# What is ADA?



# What is ADA?

The Americans with Disabilities Act is a Civil Rights statute that prohibits discrimination against people with disabilities in all aspects of life, including transportation, public services, employment housing, public accommodations, education, communication, worship, recreation, and health services.

This includes physical, vision, hearing and cognitive disabilities.



# The Need for Accessible Programs and Facilities

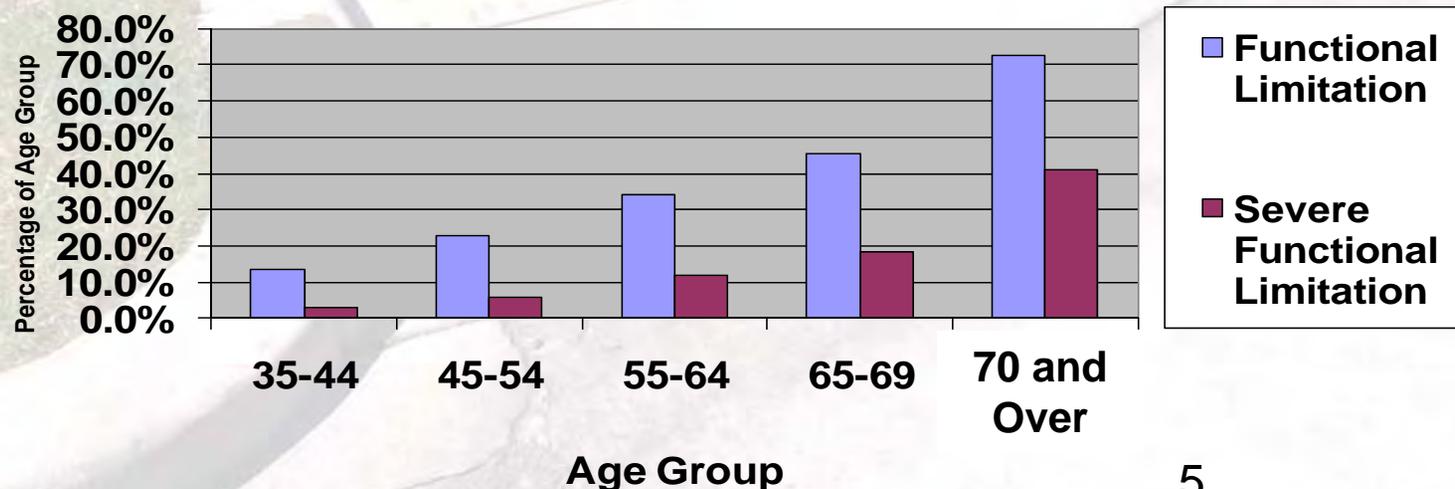
- 18.1% (51.2 million) of the U.S. population over the age of 15 has a disability—a physical or mental impairment, substantially limiting daily activities (*2002 Census*)
- Another 11.5% (32.5 million had a severe disability)
- 17 million Americans have serious hearing disabilities (*2000 Census*)
- 10 - 12 million have visual impairments
- **44,000 (2.5%) are disabled in Nebraska**



# The Need for Accessible Programs and Facilities

- 70 percent of us will eventually have a temporary or permanent disability that makes climbing stairs impossible

Age Progression of Physical Limitation - US Population



# Title II of the ADA

- Title II of the ADA covers programs, activities, and services of public entities.
- A public entity is
  - Any state or local government
  - Any department, agency, special purpose district, or other instrumentality of a State or local government; or
  - Certain commuter authorities [...]



# History of ADA

- ADA was signed into law on 7/26/1990
  - Architectural Barriers Act (1968)
  - Rehabilitation Act (1973)
    - Section 504
- Title II Regulations – 1/26/1992
  - Covers state and local governments
  - Any facility altered or constructed after January 26, 1992 must comply with ADAAG or UFAS (or PROWAG)



# Title II of the ADA

- ADA Title II prohibits all public entities—even those completely independent from Federal funding—from discriminating against people with disabilities.
- 28 CFR 35.149-35.151 addresses the requirement that public entities ensure that their programs and activities are accessible to, and usable by, persons with disabilities.



# How Does ADA Affect Nebraska?

- Under the ADA, designing and constructing facilities that are not usable by people who have disabilities constitutes discrimination.
- Under the ADA, programs that are not accessible for individuals with disabilities constitutes discrimination



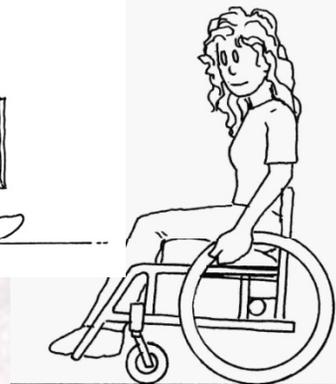
# Roles and Responsibilities

- Department of Justice
  - 28 CFR
- U. S. Department of Transportation
  - 49 CFR
- The Federal Highway Administration (FHWA)
  - 23 CFR



# Accessibility in Public ROW

- Major barriers for people in wheelchairs, power chairs or scooters, vision impairments, etc.
- Without ramps, people usually cannot access sidewalks
- “Sensitivity to Accessibility”



# Common Barriers



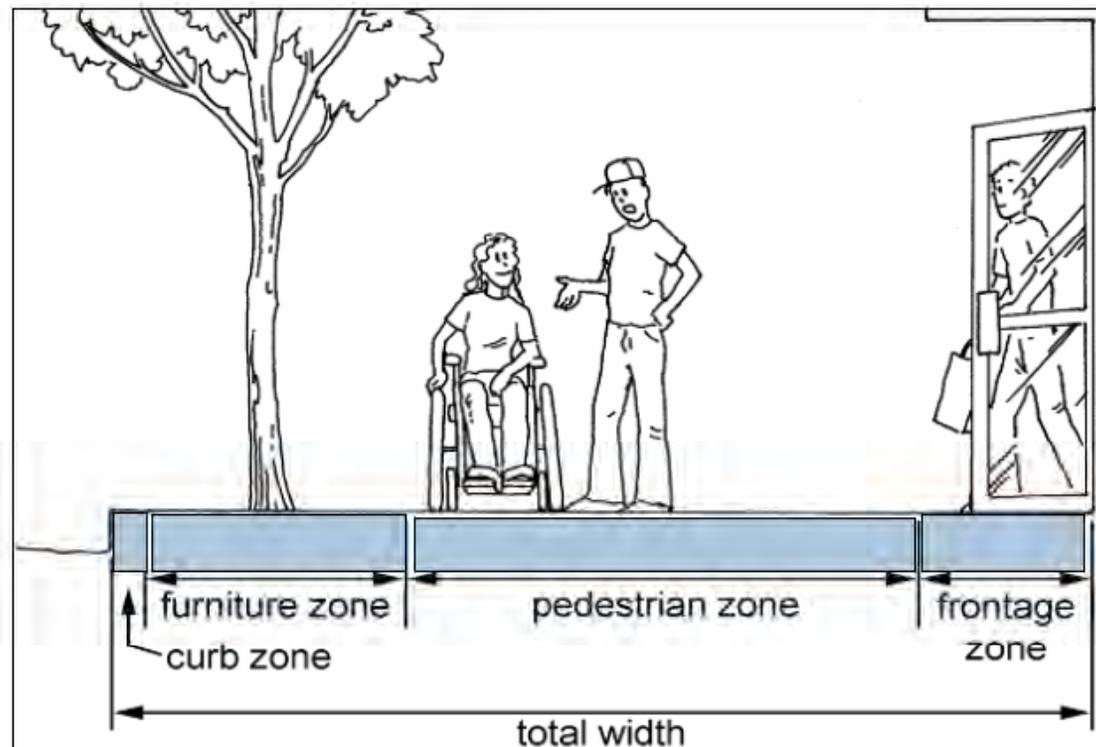


## Typical Tree Root maintenance Issue



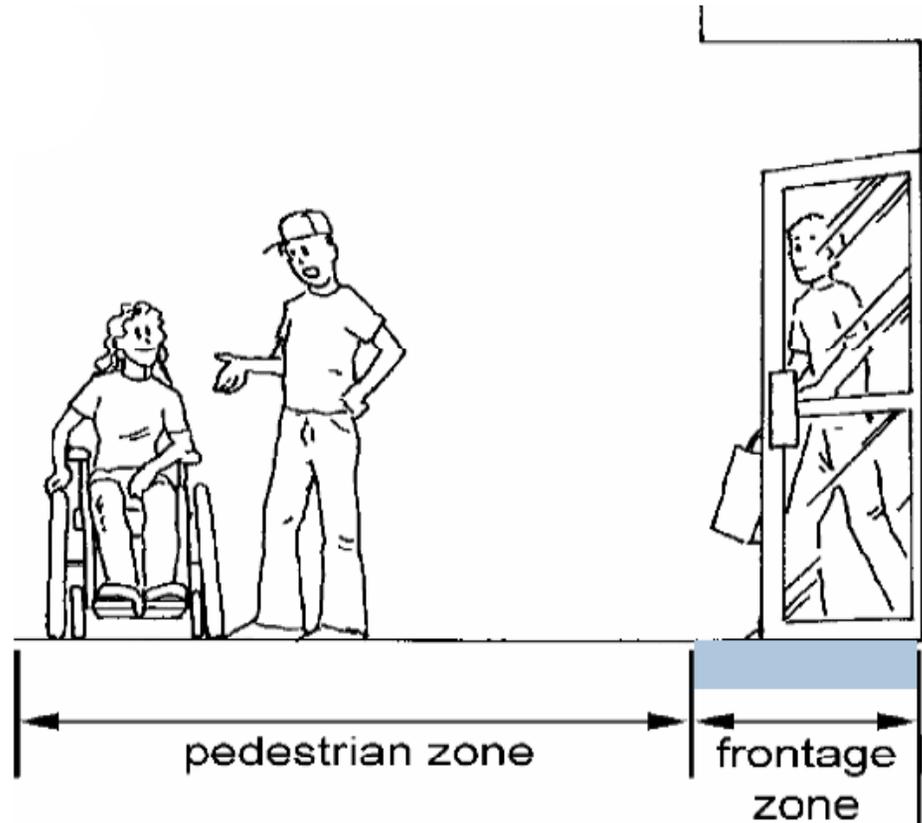
# The Sidewalk Zone System

- Curb Zone
- Furniture Zone
- Pedestrian Zone
- Frontage Zone



## Frontage Zone

- Room for doors, planter boxes, signs on buildings, etc.
- Must be free of overhanging and protruding obstacles



## Zone System Summary: residential



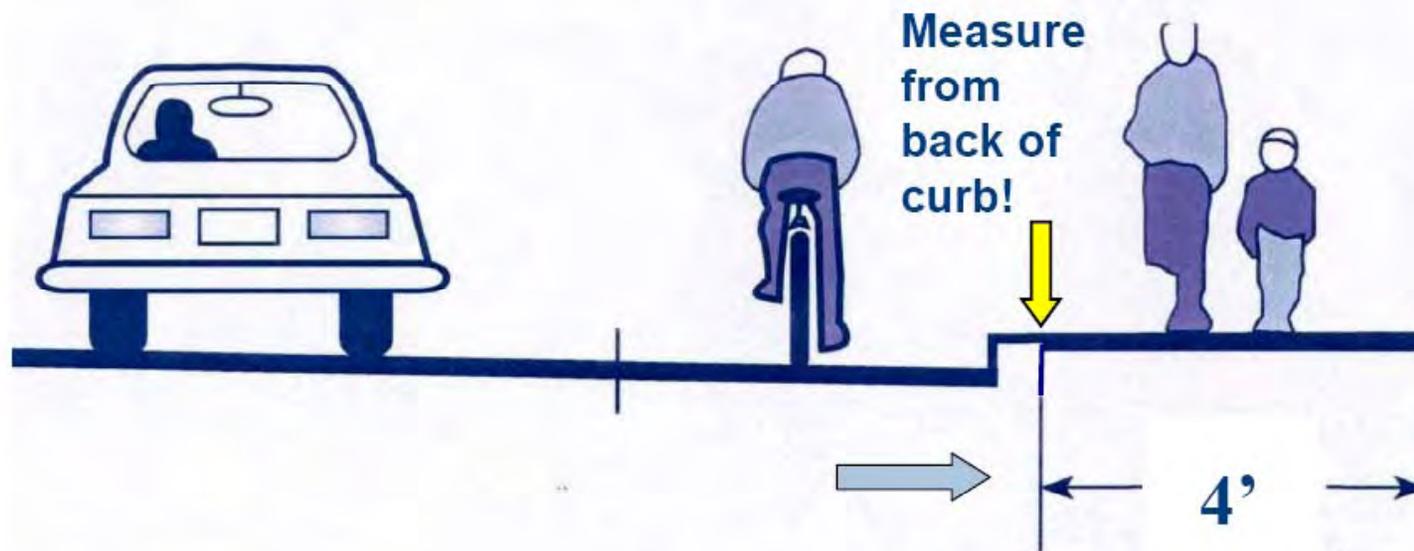
## Zone System Summary: commercial



## R301.3 Width

### R301.3.1 Continuous Width

- The minimum continuous and unobstructed clear width of a pedestrian access route shall be 4.0 ft, exclusive of the width of the curb.

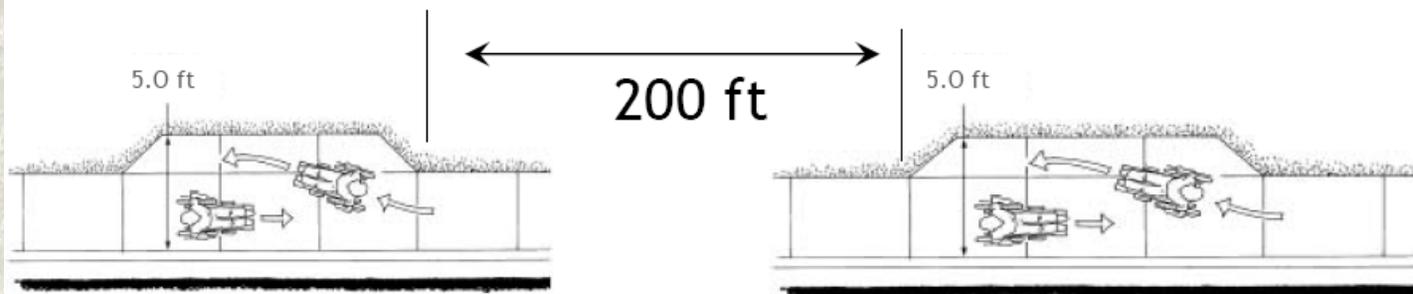


## R301.3 Width

### R301.3.2 Width at Passing Spaces

- Walkways in pedestrian access routes that are less than 5.0 ft in clear width shall provide passing spaces at intervals of 200 ft maximum. Pedestrian access routes at passing spaces shall be 5.0 ft wide for a distance of 5.0 ft

19



## 3 feet for one wheelchair user



# Common Ramp Errors

- **Not providing a landing**
- **Cross Slope is too steep (2% maximum)**
- **Lip in Curb Line**
- **Not reviewing the pedestrian path of travel with the design**
- **Not reviewing drainage features especially cross slopes on ramps**
- **Selecting the wrong ramp type**
- **Not using retaining walls for difficult locations**
- **Not working around existing obstructions**
- **Not using a smart level**



**No Level Landing**



**Cross Slope too Steep**

# Transition Plan

- Recipients with 15 or more employees and public entities with 50 or more employees under Section 504 and the ADA at 49 CFR 27.11, were required to develop Transition Plans
- At a minimum, Transition Plans require
  - Identify physical obstacles in facilities that limit accessibility of programs, services, or activities
  - Describe in detail the methods the entity will use to make the facilities accessible
  - Provide a schedule for making the modifications, and if longer than 1 year
  - Indicate the name of the official who is responsible for implementation



# Ramp Inventory

- 28 CFR 35.105 & 49 CFR 27.11(c)(2)(i)(ii)
  - All public entities must undergo a self-evaluation
  - Must be complete by January 26, 1992
  - All physical barriers identified for removal by January 26, 1995



# ADA Requirements

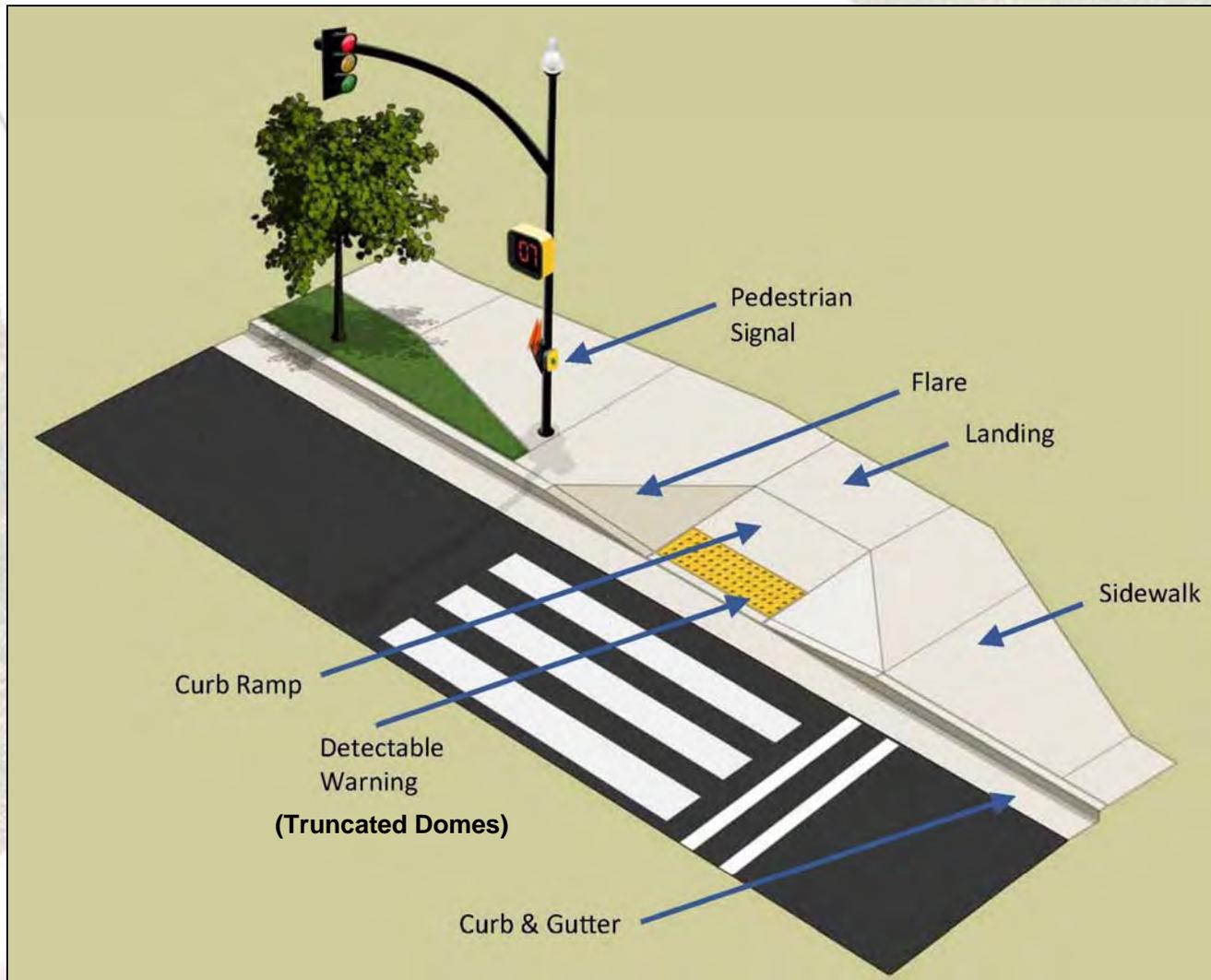
- ADA Standards for Accessible Design (ADAAG)
  - Developed more for buildings and facilities
  - <http://www.ada.gov/stdspdf.htm>
- Draft Guidelines for Accessible Public Rights-of-Way (PROWAG)
  - Best Practices for public rights-of-way
  - <http://www.access-board.gov/prowac/draft.htm>
  - FHWA supports use of PROWAG
  - <http://www.fhwa.dot.gov/environment/bikeped/prwaa.htm>



# ADA Requirements

- PROWAG Chapter 3 covers technical provisions for accessible public rights-of-way
  - R303 Curb Ramps
  - R304 Detectable Warning Surfaces
- Maximum and minimum slopes and dimensions are absolute.

# Typical Ramp



# ADA Requirements

## R303 Curb Ramps

- Running Slope
  - 8.3% (12:1) maximum
  - Not required to exceed 15' in length
- Cross Slope
  - 2% maximum
- Flare Slopes
  - 10% maximum, where the pedestrian circulation path crosses the curb ramp
  - Measured parallel to the curb

**LEGEND**

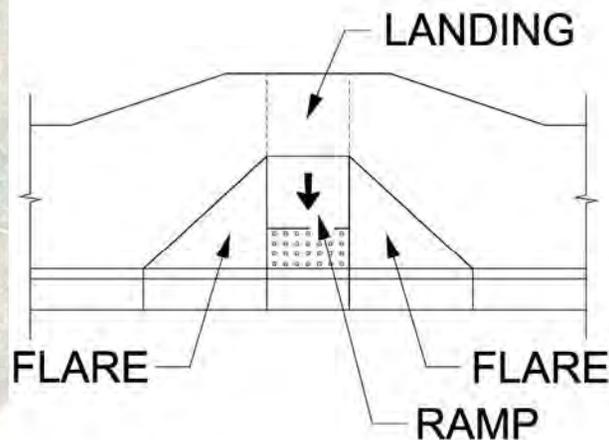
	1.5% ± 0.5% (2% MAX) SLOPE
	7.3% ± 1.0% (8.3% MAX) SLOPE
	9.0% ± 1.0% (10.0% MAX) SLOPE

SLOPES SHOWN ARE ABSOLUTE MAXIMUMS. THE CONTRACTOR SHOULD ACCOUNT FOR CONSTRUCTION TOLERANCES TO PREVENT EXCEEDING THE MAXIMUM SLOPES.

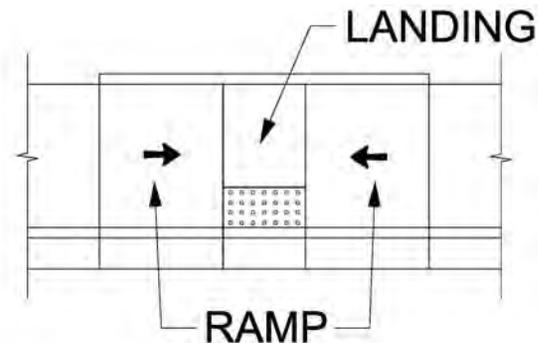
# ADA Requirements

## R303 Curb Ramps

- Landing
  - 4' by 4' minimum
  - 2% maximum slope (running and cross slopes)
  - Can be either at the top or bottom of the ramp



PERPENDICULAR  
RAMP



PARALLEL  
RAMP

# ADA Requirements

## R303 Curb Ramps

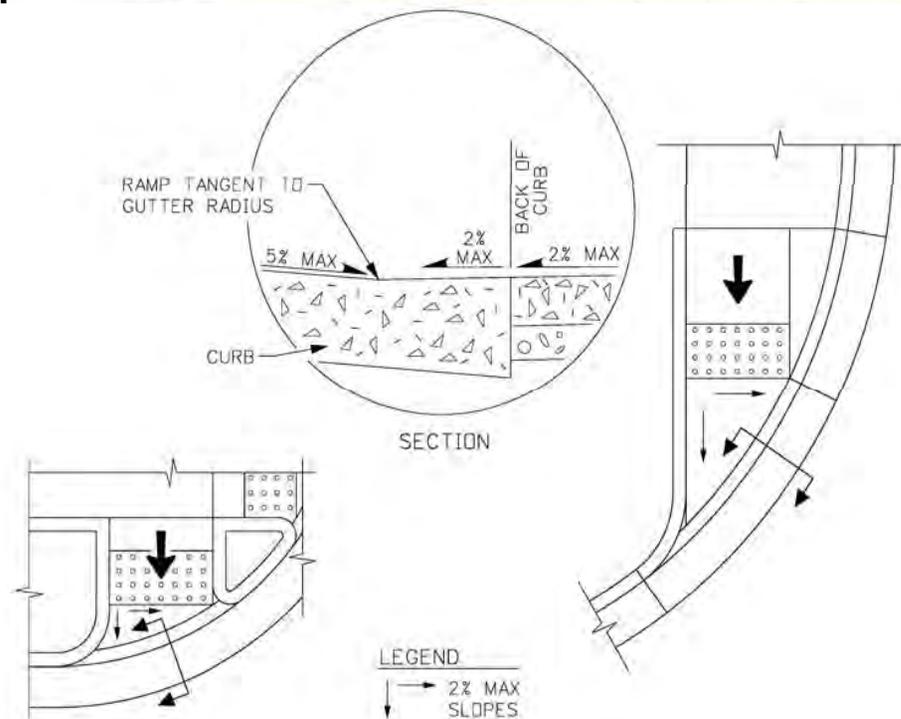
- Common Elements
  - 4' minimum width on landings and curb ramps
  - Surfaces of curb ramps and landings shall be free of discontinuities
  - Joints shall not be more than ½" wide.

# ADA Requirements

## R303 Curb Ramps

- Common Elements

- Grade breaks shall be perpendicular to the direction of ramp run

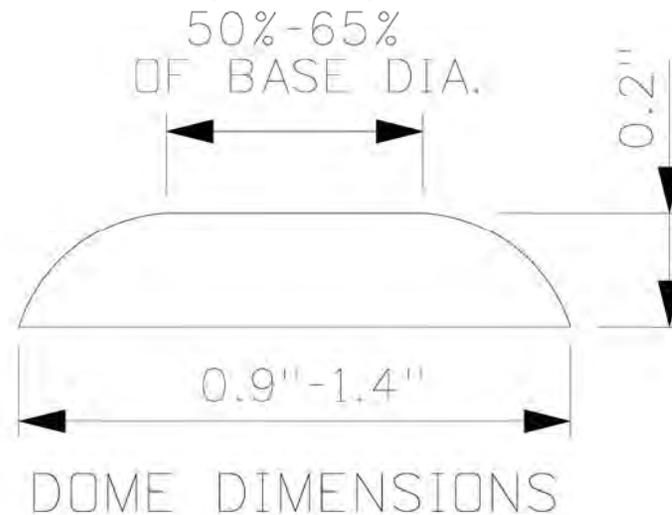




# ADA Requirements

## R304 Detectable Warning Surfaces

- Dome size
  - Base diameter: 0.9" min. to 1.4" max. (23-26mm)
  - Top diameter: 50% to 65% of base diameter maximum
  - Height of 0.2 inches (5mm)



# Detectable Warnings

- Are required at locations where a walk crosses or adjoins a vehicular way, first required in 1991 (ADAAG)
- FHWA May 6, 2002 Memorandum ADAAG Detectable Warnings (Truncated Domes)-reinstated
- ADAAG Requirements for Detectable Warnings (March 2003) and they “shall contrast visually with adjoining surfaces, either light on dark or dark on light”



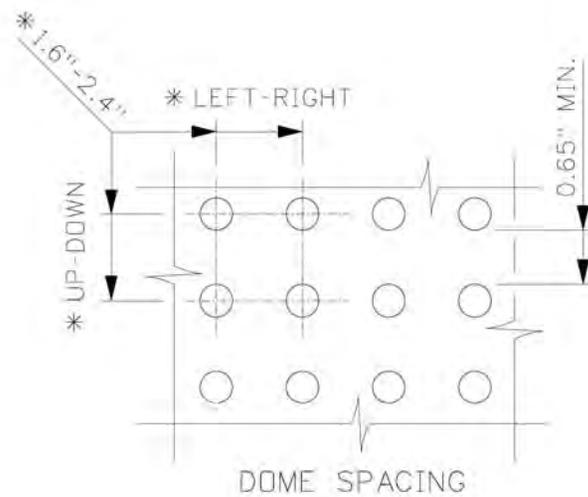
Texas DOT

# ADA Requirements

## R304 Detectable Warning Surfaces

- Dome Spacing

- Center to center spacing of 1.6" (41mm) minimum to 2.4" maximum (61mm)
- Base to base spacing of 0.65" minimum measured between most adjacent domes (17mm)



# ADA Requirements

## R304 Detectable Warning Surfaces

- Contrast
  - Detectable warning surfaces shall contrast visually with adjacent walkway surface, either light-on-dark or dark-on-light
  - Safety yellow is considered to provide necessary contrast

# ADA Requirements

## R304 Detectable Warning Surfaces

- Examples of Detectable Warning types that don't meet ADA Requirements

### Stamped Concrete

- Non-uniform domes
- No color contrast
- Durability issues



# ADA Requirements

## R304 Detectable Warning Surfaces

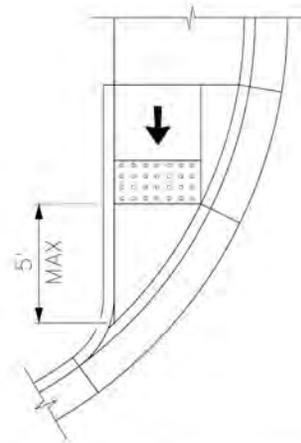
- Size
  - 24” minimum in the direction of travel
  - Must span full width of the curb ramp or landing



# ADA Requirements

## R304 Detectable Warning Surfaces

- Location and Alignment
  - At least one corner of the leading edge of the detectable warning surface must be within 8" of the face of curb
  - No other point on the leading edge of the detectable warning surface may be more than 5' from the back of curb



SKewed RAMP INSTALLATION

# END PART 1

## Questions?

## Thank You !

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## Americans with Disabilities Act (ADA) Training

### Instructors

Mr. Jason Giard & Mr. Ed Johnson

### Date and Time

November 18, 2010

8:30 AM – 3:00 PM

- PART 1 – ADA History and Background 8:30 – 9:00
- PART 1A – ADA Nomenclature 9:00 – 9:15
- PART 2 – Inspection and Measurement 9:15 – 10:00
- Break 10:00 – 10:15
- PART 3 – Construction 10:15 – 10:40
- PART 4 – Grades and Running Slopes 10:40 – 11:30
- PART 5 – Temporary Traffic Control 11:30 - 1200
- Lunch 12:00 – 1:00
- PART 6 – Transition Plan 1:00 – 1:20
- Nebraska photos 1:20 – 3:00
- PART 7 – Videos (as time permits)

