The Safety Dance

Incorporating Appropriate Roadway Treatments for People with Disabilities

Complying with the Americans with Disabilities Act using the ADA Standards for Transportation Facilities and the Public Rights of Way Accessibility Guidelines

Safe Streets Summit
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Dean Perkins, Architect, ADA Coordinator
Introduction

• Brief overview of ADA
• New Concepts
• Key Features of Accessibility
  ◦ Sidewalks, curb ramps, detectable warnings, accessible pedestrian signals, parking, alternate paths, etc.
• Public Involvement concerns
• Random Images
  ◦ Some Good, Some Not So Good
Background of the ADA

- 1990 Americans with Disabilities Act
  - July 26, 1990 - enacted
  - July 26, 1991 - ADA Standards issued
  - January 26, 1992 - effective date
  - July 23, 2004 - new ADA guidelines (ADA/ABA)
  - Nov 23, 2005 - new PROW guidelines (PROWAG)
  - Nov 29, 2006 - FHWA adopts ADA Standards for Transportation Facilities (ADASTF)
  - July 23, 2011 - Access Board issues NPRM for PROWAG (public comments)
  - Adoption as standards - pending
The Future of Accessibility within Public Rights of Way(?)

USDOT / FHWA recommends using PROWAG criteria where ADASTF do not address an issue

- Frederick D. Isler, Associate Administrator for Civil Rights - January 23, 2006

RECOMMENDATION:

Start learning PROWAG!

(July 26, 2011 version is the latest)

Pedestrian Access Route (PAR)

R302.3 Continuous Width

- The minimum continuous and unobstructed clear width of a pedestrian access route shall be 4 ft. exclusive of the width of the curb.
The Sidewalk 'Zone' System

- Curb Zone
- Furniture Zone
- Pedestrian Zone (PAR)
- Frontage Zone
Zone System: Residential
Zone System: Commercial
A difference between AR & PAR!
For sidewalks within the public right of way . . .

Sidewalk grade – ADASTF vs. PROWAG
• ADASTF: Provide accessible route (AR)
• PROWAG: Match roadway grade (PAR)
Ramps - “supported slopes” i.e., Bridges

- 5' min. Landing
- 30' - 40' max. Depending on slope (see below)
- 5' min. Landing

“Level” means: 2% or less slope

<table>
<thead>
<tr>
<th>SLOPE</th>
<th>MAXIMUM RISE</th>
<th>MAXIMUM HORIZONTAL PROJECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:12 TO &lt; 1:16</td>
<td>30 760</td>
<td>30 9</td>
</tr>
<tr>
<td>1:16 TO &lt; 1:20</td>
<td>30 760</td>
<td>40 12</td>
</tr>
</tbody>
</table>

Fig 16
Components of a Single Ramp Run and Sample Ramp Dimensions
Curb Ramps and Detectable Warnings

- Curbs are an 'edge cue' for pedestrians who are blind or have low vision
- Curbs are a barrier for persons in wheelchairs
- Curb ramps remove the barrier for wheelchairs
- Curb ramps remove edge cue for peds with vision impairments
- Detectable warnings are a replacement cue to indicate location of the street
Perpendicular Curb Ramps
R305.2.1

- Perpendicular Curb Ramp
  - Place DW at back of curb or at grade break
Directional/Linear Ramps
R305.2.1

- Greater than 5 feet setback...
  - Place DW on bottom landing if level landing is more than 5' deep at any point

These can be very hard to construct correctly
Directional/Linear Ramps

R305.2.1

- Equal to or less than 5 feet setback from bottom of curb ramp...
  - Place DW at grade break if level landing at bottom of ramp is 5' deep or less

These are much easier to build
Parallel Ramps
R305.2.2

- SIDEWALK
- Ramp
- LANDING
- 24"
Detectable Warnings
Equivalent to “STOP” or “YIELD” signs

- Detectable warnings help delineate the edge of the street for a pedestrian who is blind or has low vision
  - DWs, generally, do not designate the best crossing location
  - DWs, generally, do not provide directional information
Detectable Warnings

To align or not to align . . .

- Detectable warnings ‘warn’ of roadway edge
- Dome alignment typically *NOT* used as directional cue
  - Other methods: traffic sounds, sidewalk curbs, APSs (if available), etc.
- In a perfect world, truncated domes would be aligned with the crossing
  - Easier to construct and use
- However, not all curb ramp configurations or site conditions permit TD alignment
Detectable Warnings
To align or not to align . . .

- So...
  - Dome alignment is *desirable, but not required*
Accessible Pedestrian Signals
R209 & MUTCD 4E.09-4E.13

• For pedestrians with vision impairments
• Used in conjunction with pedestrian signal timing
• Add “non-visual” information:
  ◦ Tactile features
  ◦ Audible tones
  ◦ Vibrating surfaces
  ◦ Speech messages
• Must indicate which crossing is served by each device
  ◦ If less than 10’ apart, must ‘speak’ to you
Accessible Pedestrian Signals
R209 & MUTCD 4E.09-4E.13

Speakers
On-Street Parking Spaces
R214

- Accessible parking spaces per block perimeter
  - Approx. 4% of total
  - Table R214

- Accessible parking spaces are best located where the street has the least crown & grade and close to key destinations (i.e., near crosswalks?)
Parallel Parking Spaces
R309

If sidewalk is \( \leq 14 \) ft. wide, side access aisle is not required
Parallel Parking Spaces
R309

If sidewalk is >14 ft. wide, side access aisle* IS required

* Need not be marked
Alternate PARs

- R205 specifies that the alternate pedestrian access route shall be:
  - Provided on the same side of the street as the disrupted route, to the maximum extent feasible
  - Where exposed to adjacent construction, traffic or other hazards, shall be protected with a *pedestrian barricade or channelization device*
    - Continuous, stable, non-flexible
    - Consist of features identified in the MUTCD Chapter 6F
      - Plastic tape is not acceptable!!!
      - Rows of barrels and/or cones is not acceptable... unless they are connected by a continuous 'detectable' edge
12. For pedestrian longitudinal channelizing devices, the device shall have a minimum of 8" continuous detectable edging above the walkway. A gap not exceeding a height of 2" is allowed to facilitate drainage. The top surface of the device shall be a minimum height of 32" and have smooth connection points between the devices to facilitate hand trailing. The bottom and the top surface of the device shall be in the same vertical plane. If pedestrian drop-off protection is required, the device shall have a footprint or offset of at least 2’, otherwise the device must be 42” in height above the walkway and be anchored or ballasted to withstand a 200 lb. later point load at the top of the device.
Construction Work Zones

- Unfortunately, too many bad examples...
Public Involvement

- Are you including your ALL customers?
  - How do you identify your ‘public’?
    - Census, School Board, Community offices, Social service agencies, transit providers, etc.
    - Sociocultural Effects Evaluation
    - Transportation Outreach Planner Tool
  - General project announcements
    - Newspapers, Internet, PSAs, Flyers, etc.
  - Targeted project announcements
    - Advocacy groups, CILs, Elder centers, etc.
Public Involvement

• How do you interact with your customers with disabilities?
  ◦ Public meetings: When in project, How often, What time of day/week, etc.
  ◦ Where located: Near project, Near transit, etc.
  ◦ Provide accommodations: alternate formats, etc.
    • "If you need an accommodation due to a disability . . ."

• How do you ensure equity for all users?
  ◦ Seek input: Go to them, don’t wait for them to come to you; especially traditionally underserved communities
Resources

U.S. Access Board
- Accessibility Guidelines - ADAAG
- www.access-board.gov

U.S. Dept. of Justice - ADA
- Accessibility Regulations & Standards for Buildings & Sites
- www.ada.gov

U.S. Dept. of Transportation - FHWA
- Accessibility Guidance & Standards for Transportation Facilities & Public Rights of Way

Florida Dept. of Transportation - FDOT
- ADA information on Website
- www.dot.state.fl.us/projectmanagementoffice/ADA
Random Images

- Some good
- Some not so good
This is what we want...
Not this . . .

Or this . . .
Well Done!
Combination return curb and flared side
Full Width ... Good!
This CAN be fixed.
Very good! Measure before you build
(Identity withheld)
Contact Your ADA Coordinator

or

Dean Perkins, Architect
FDOT ADA Coordinator
850-414-4359
dean.perkins@dot.state.fl.us
Thank You!

Merci!  Todah Rabbah

Arigato!  Dhanya Vaad!

Gracias!  Xie Xie!

Shokran!  Danke!

Live long and prosper!