ADA in the Work Zone

ASCE

Montgomery, AL

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DECEMBER 13, 2016
Today

- What’s the problem?
- What do pedestrians need?
- What are the rules?
- Elements of an Accessible Work Zone
- Project tips
PSS – CTS

- PSS – Cleveland, Ohio
  - Gary Paul – Roadway Safety Consultant
    - ADA Specialist
    - NCUTC D
    - Texas Transportation Board

- Cox Transportation Safety
  - Tim Cox - Consultant
    - NCUTC D – National Committee
    - TRB – Transportation Research Board
    - ARTBA – American Road & Transportation Builders Association
    - ATSSA – American Traffic Safety Services Association
    - IRF – International Road Federation
Where do I go?
This is Richard.
Pedestrians need – “Visible” Pathways

- Cane detectable
- Hand-trailing
- Signage
How we learned

- Workshops with pedestrians with disabilities
  - Sponsors: FHWA, ATSSA, Access Board
  - 3 workshops
    - Washington DC - Sept 2004
    - Baltimore MD - June 2006
    - Sacramento CA - June 2010
What are the rules?

**PROWAG** - Public Rights of Way Accessibility Guidelines

- Americans with Disabilities Act - 1990
  - Accessibility = civil right
  - EEOC - non-discrimination in employment
- PROWAG - from steps of buildings outwards
  - Defines accessibility not how to achieve
- Access Board
  - Defines accessibility
  - Assist in training and implementation
- Enforcement
  - US DOJ - EEOC, Accessibility
  - US DOT - FHWA for PROWAG
Rules, continued

**MUTCD** – Manual on Uniform Traffic Control Devices

- It’s the law
  - City of Sacramento
  - City of Arlington
- National Committee advises on content, changes
- Part 6 – Temporary Traffic Control
New Mexico DOT – TPAR Drawing
Elements of an Accessible Work Zone - Pathway

- **Width** - 60”
  - 48” permitted with 60” by 60” bump out every 200’
- **Composition**
  - Firm, Stable, Slip-resistant - gravel, untreated wood
- **Slope**
  - Running slope - up to 5%
  - Cross slope - 2% max
Elements cont. – Surface

Discontinuities

- Up to $\frac{1}{4}$" - no problem
- $\frac{1}{4}$" to $\frac{1}{2}$" - taper
- More than $\frac{1}{2}$" - remove
MUTCD – Section 6F.63

- Devices **SHALL** be detectable and visible.
- Devices **SHALL** have continuous top and bottom surfaces
- Top: 32” min. above the ground
- Bottom of the bottom: 2” max. above the ground
Elements cont. - Channelizers

Notes for Figure 6F.xx:
* Guidance: There should be a 2 inch gap between the hand-trailing edge and its support.
** Option: A maximum 2 inch gap between the bottom of the bottom rail and the surface may be used to provide drainage.
MUTCD – Section 6D.02

- A detectable barrier **shall** be placed across the full width of the closed sidewalk.
Elements cont. - **Ramps**

- **Width** - 48” minimum
- **Slope**
  - Running - 8% maximum
  - Cross Slope - 2% maximum
- **Edge protection** - 4” bottom “rail” to prevent roll-offs
- **Color** - yellow
Turning area - 48” by 48” at top of ramp

Landing area - 48” by 48” at bottom of ramp

Hand Rail - 100 lb per inch load capacity

Best practice; not required
Elements cont. – Signage

Sign stands

Audible signs
Temporary Pedestrian Access Route Standards

MUTCD Section 6D:

- **ADVANCE NOTIFICATION OF SIDEWALK/ROUTE CLOSURE SHALL BE PROVIDED**

- ...**ADEQUATE PEDESTRIAN ACCESS AND WALKWAYS SHALL BE PROVIDED**
Temporary Pedestrian Access Route Standards

- IS THE EXISTING ROUTE DETECTABLE AND ACCESSIBLE?

- THOSE FEATURES SHALL BE DUPLICATED IN THE ALTERNATE ROUTE
Temporary Pedestrian Access Route Standards

- A BARRIER SHALL BE PLACED ACROSS THE ENTIRE WIDTH OF THE SIDEWALK
- Do pedestrians with visual disabilities normally use the sidewalk? Detectable?
- Can we predict who will use the sidewalk?
Decision Making Process - Pedestrian Accommodation

- Leave existing facility open
- Same Side travel preferred
  - Temporary route parallel to existing

As a last resort:
Detour around construction
Project Tips

- Pre-design - Site inspection
  - Verify pedestrian volumes
  - “goat paths”
  - Viability of alternate pathways

- Project set-up
  - Accessible devices
  - Accessible pathway
  - “Folding chair” view
Resources

http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm

2.) “Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way”

3.) “Accommodating Pedestrians in Work Zones”, FHWA brochure, publish date unknown, online at:
http://safety.fhwa.dot.gov/wz/planning/fhwasa03011/

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