Public Works Role in Pedestrian Mobility

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Agenda

• Challenges Faced by Disabled Pedestrians
• Key Elements of PROWAG
• Test Your Knowledge--Snapshot Assessments
• Resources
Characteristics of Pedestrians

• People with *mobility disabilities* may have limited agility, speed, endurance. May have balance issues.

• They benefit from
  – Firm level surfaces
  – Adequate clear width
  – Curb ramps
  – Limited cross slope
Characteristics of Pedestrians

• People with *vision disabilities* get information from sounds, textures, contrast.

• They benefit from information in non-visual formats:
  – Audible/vibrotactile crossing information
  – Tactile indication of boundary between ped and vehicular way
  – Clearly defined pathways
  – High color contrasts
Characteristics of Pedestrians

• People with hearing disabilities rely on vision.
• They benefit from:
  – Good sight lines for assessing street crossing conditions
  – Information in visual or vibrotactile format
Characteristics of Pedestrians

• Persons with *cognitive disabilities* have different information processing and decision-making skills.

• They benefit from:
  – Straightforward, direct environments
  – Uncomplicated street crossings
  – Easy-to-understand symbols
Public Right-of-Way Accessibility Guidelines

What Does PROWAG Say About the Walking Environment?
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.

Measure from back of curb!
Pedestrian Zone

• Must be free of temporary and permanent obstacles and protruding objects

• Protruding object is any feature that extends more than 4 inches into the pedestrian path at a height above 27 inches and less than 80 inches.
Limits of Protruding Objects

- Objects above headroom clearance can protrude any amount.
- Protruding objects cannot reduce the minimum width of accessible routes.
- Objects with leading edges within cane sweep can protrude any amount.

Diagram:
- 4” max (4 1/2” max for handrails).
- Area of Cane Detection.
Surfaces

• Surfaces must be firm, stable, & slip resistant.
• Examples of non-accessible surfaces include grass, crushed stone, sand and mulch.
Walkway Cross Slope

• The cross slope of the walkway of a pedestrian access route shall be 2 percent maximum.
Grade

• If sidewalk is in ROW and along road or bridge, follow general parallel roadway grade (sidewalk serves the road).

• If sidewalk is in ROW and not along road, max allowable grade is 5% (may need to provide ramp, lift or elevator).
Curb Ramps

• The implementing regulations under Title II of the ADA require curb ramps for existing facilities, as well as for all new construction.

• At the base of the ramp, must be visual and tactile contrast (Detectable Warning Surfaces) to alert the visually impaired they are about to enter the street.
Detectable Warnings—
Truncated Domes

• Need to be placed anywhere the curb is missing at a street crossing.

• Truncated domes serve as a replacement cue for the curb.
Communications

• Communications with public with disabilities must be as effective as with others.

• Think about this before simply putting up a sign for pedestrians.
Maintaining Accessibility

• State & local governments (28 CFR 35.133) must maintain the accessible features of facilities in operable working condition to provide ready access to individuals with disabilities.
Alternate Pedestrian Access Route

• Required when an existing pedestrian circulation path is temporarily closed by construction, alteration, maintenance, utility work or other condition.
Alternate Pedestrian Access Route (2)

• Alternate pedestrian access routes shall comply with both PROWAG and the Manual on Uniform Traffic Control Devices:
  – Advance notice of sidewalk closures required
  – Alternate route shall be as detectable and accessible as the closed facility
  – Temporary facilities shall be detectable
Alternate Pedestrian Access Route (3)

• Where provided, pedestrian barricades and channelizing devices shall comply with the MUTCD, including:
  – Channelizing devices shall be detectable by cane, with continuous bottom and top surfaces
  – Longitudinal channelizing devices shall be interlocked (no gaps)
Keep These Key Elements in Mind

as We Look at a Few Snapshots from Around the United States
Accessible Sidewalk?
Accessible Crosswalk?
Accessible Parking?
An All-Too-Common Problem
PROWAG Compliant?
Protruding Objects
Adequate Contrast?
Appropriate Use of DWS?
What Do You Think?
What Do You Think?
Is This Okay?
Failure to Maintain
Failure to Maintain
PROWAG Compliant Construction?
PROWAG Compliant Construction?
PROWAG Compliant Construction?
Communicates with All Users?
Compliant Alt. Ped. Access Route?
Portable Ramp on Alternate Pedestrian Access Route
PROWAG Training Available from WV Local Technical Assistance Program

- ADA Self-Evaluations and Transition Plans (0.5-day)
- PROWAG Overview (0.5-day)
- Designing Pedestrian Facilities for Accessibility (1-day)
- Designing Pedestrian Facilities for Accessibility with Field Activities (1.5 days)
Questions?

Thanks for Your Participation