6. Presentations and Discussion: ADA Compliance and Universal Design Considerations

Martin DuPont
ADA Specialist, City of Tucson

Sherry Santee
Physical Therapist, UA Disability Resources Center
What Is the American with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation

• Why ADA and Universal Design is important for Broadway
How does ADA Apply to Streets

• Designed to Serve all Users
• Pedestrian Facility Design
  – Architectural Barriers Act (ABA) of 1968
  – Rehabilitation Act of 1973 (Section 504)
  – American with Disabilities Act of 1990
• Communications & Information Access

Reference: access-board.gov
How ADA is Enforced

• Design Standards
  – Includes Proposed standards for Pedestrian Facilities in Public Right-of-Way

• Department of Justice Audit
DOJ Settlement Agreement with City of Tucson

- Project Civic Access
- Notice: November 2004
- Audit: January 2005
- Settlement Agreement: July 2005
- 4-Year Agreement
  - First 3-years spent making corrections
  - Final year spent monitoring
“Reframing” Disability & Universal Design
Emerging Frame

The environment creates and perpetuates barriers that disable or exclude people with impairments.
**Universal Design**

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

<table>
<thead>
<tr>
<th>Our responsibility</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify and remove barriers to access</td>
<td>• Inclusive and welcoming environments</td>
</tr>
<tr>
<td>• Incorporate access into design initially</td>
<td>• Sustainable design</td>
</tr>
<tr>
<td></td>
<td>• Equitable, respectful experience for all</td>
</tr>
</tbody>
</table>
1. **Equitable use** | The design is useful and marketable to people with diverse abilities.
2. **Flexibility in use** | The design accommodates a wide range of preferences and abilities.
3. **Simple and intuitive use** | Use of the design is easy to understand, regardless of the user’s experience, knowledge, language skills, or current concentration level.
4. **Perceptible information** | The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities.
5. **Tolerance for error** | The design minimizes hazards and the adverse consequences of accidental or unintended actions.

6. **Low physical effort** | The design can be used efficiently and comfortably and with a minimum of fatigue.

7. **Size and space for approach and use** | Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user’s body size, posture, or mobility.

Center for Universal Design | [http://www.ncsu.edu/project/design-projects/udi/center-for-universal-design/the-principles-of-universal-design/](http://www.ncsu.edu/project/design-projects/udi/center-for-universal-design/the-principles-of-universal-design/)
How do we design to include these principles?
An example of a Universally Designed entrance
How do Universal Design principles relate to roadway and pedestrian features?

Such as:

- Sidewalks
- Driveway crossings
- Intersection crossings
- Bus stops
- Other pedestrian amenities
Progressive examples of Sidewalk Design

- Sidewalk meeting minimum standards
- City standard sidewalk widths and buffer
- Higher level of accommodation
Example 4’ Wide Sidewalk “Congestion Issues”  

Source: Kimley Horn Associates
Example 4’ Wide Sidewalk “Congestion Issues”

Source: Kimley Horn Associates
Increasing width to about 8' would alleviate "congestion". Source: Kimley Horn Associates
Example City Standard Sidewalk

Source: Community Design + Architecture
Example City Standard Sidewalk

Source: Community Design + Architecture
Example Grant Road Design Concept Report Sidewalk

Source: Community Design + Architecture
Example Grant Road Design Concept Report Sidewalk.

Source: Community Design + Architecture
Progressive examples of Driveway Design

- Examples of existing conditions that create challenging travel
- Higher level of accommodation
Extreme slope and no connecting sidewalk

Source: Tucson DOT
Numerous driveways create challenging terrain.
Smotherer, more level curbs are easier to travel
Interactive Exercise/Discussion

- What do you think the user experiences are like in the following examples?
- In what ways is the design challenging?
- In what ways is it designed well?
- Other thoughts? Questions?
Some median refuge, but level path of travel close to fast-moving traffic.
Protected wide median refuge
Marked crossing with guides @ HAWK

Source: Tucson DOT
PELICAN Median harbors all users

Source: Kimley Horn Associates