



Department of
Transportation

ACCESSIBILITY FOR ALL IN THE PUBLIC RIGHT OF WAY

Lynn Godek, RLA Landscape Architect 1 & Belle Irwin, Assistant Landscape Architect
NYSDOT Landscape Architecture Bureau

MAY 28, 2026

ACCESSIBILITY IN THE PEDESTRIAN ENVIRONMENT

- What is the pedestrian environment?
- What considerations can make the pedestrian environment more accessible?
- What considerations can make the pedestrian environment safer?
- What considerations can make the pedestrian environment more usable for all?

DISABILITY STATISTICS

More than 1 in 4 (28.7%) of adults in the US have some type of disability

- 18.2% of adults age 18 and older with difficulty walking or climbing stairs
- 15.7% of adults age 18 and older with difficulty hearing
- 18.0% of adults age 18 and older with difficulty seeing

ACCESSIBILITY LAWS

- Public rights-of-way and facilities are required to be accessible for all users through the Americans with Disabilities Act (ADA) and its statutes regardless of funding source.



CONSIDERATIONS FOR MOBILITY DISABILITIES

- People with mobility disabilities may benefit from:
 - Firm level surfaces
 - Flush transitions
 - Adequate clear width
 - Curb ramps
 - Limited cross slope



CONSIDERATIONS FOR VISUAL DISABILITIES

- People with vision disabilities may benefit from information in non-visual formats
 - Audible/vibrotactile crossing information
 - Tactile indication of boundary between pedestrian and vehicular way
 - Clearly defined pathways
 - High color contrast

CONSIDERATIONS FOR HEARING DISABILITIES

- People with hearing disabilities may benefit from:
 - Good sight lines for assessing street crossing conditions
 - Information in visual or vibrotactile format



CONSIDERATIONS FOR COGNITIVE DISABILITIES

- Persons with cognitive disabilities may benefit from:
 - Straightforward, direct environments
 - Uncomplicated street crossings
 - Easy to understand symbols



RELEVANT LAWS AND REGULATIONS

Law, Regulations & Standards



The Americans with Disabilities Act

This is the law that protects the civil rights of people with disabilities in many aspects of public life.



Title II Regulations

State and Local Governments

The Title II Regulations explains the rights of people with disabilities and the obligations of state and local governments.



Title III Regulations

Public Accommodations and Commercial Facilities

The Title III Regulations explains the rights of people with disabilities and the obligations of businesses, nonprofit organizations, and commercial facilities.

ADA.gov provides the following summary:

“When we talk about what the ADA requires on ADA.gov, we are usually referring to two sources. First, the text of the ADA, also referred to as the ADA statute, passed by Congress in 1990 and later amended. Second, regulations developed by the Department of Justice that state/local governments and many businesses must follow to ensure that they do not discriminate against people with disabilities.”

Law, Regulations & Standards



Regulations

Regulations under the Americans with Disabilities Act (ADA) explain the rights of people with disabilities and the obligations of those covered by the laws.

[Learn more](#)

**US Dept. Of
Justice**



Design Standards

The ADA Standards for Accessible Design say what is required for a building or facility to be physically accessible to people with disabilities.

[Learn more](#)

US Access Board

STANDARDS – VERSION & APPLICABILITY

ADAAG

2010 Standards for Accessible Design

2006 Standard for Transportation Facilities

1991 Accessibility Guidelines

Primarily to Buildings and Sites
outside of ROW
Public Transportation Services

NYSDOT Existing curb ramps 1R
projects

28 CFR
part
35.151

+

2004
ADAAG

=

2010 ADA
Standards
for
Accessible
Design

Requires accessibility for
new and altered public
facilities

STATUS OF PROWAG RULE MAKING

- July 26, 2011 – Access Board published Proposed Draft Accessibility Guidelines for the Public ROW (PROWAG)
 - July 2013 – PROWAG Amended to include requirements for shared use paths.
 - 2015 – NYSDOT Engineering Directive with updated procedures for ADA compliance based on the Proposed PROWAG design standards
- August 8, 2023 – Access Board publishes final rule in the Federal Register
- January 17, 2025 – USDOT adopts PROWAG for transit stop projects
- USDOJ has not adopted PROWAG



STANDARDS – VERSION & APPLICABILITY

ADAAG

2010 Standards for Accessible Design

2006 Standard for Transportation Facilities

1991 Accessibility Guidelines

Primarily for Buildings and Sites outside of ROW
Public Transportation Services

NYSDOT Existing curb ramps 1R projects

PROWAG

2023 PROWAG

Transit stop projects (USDOT adopted)
Public Right-of-Way (Not adopted by USDOJ)

MUTCD

December 2023 11th Edition & refer to www.dot.ny.gov/mutcd for NYS Supplement information

NY State and local roads

UPDATES TO NYSDOT'S STANDARDS – EFFECTIVE DATES

- Highway Design Manual - limited revisions #104
- Aug 1 for Design Approval Documents
- January 1 Letting for Construction
- 608 Standard Sheet revisions in progress and clearance review pending
- Anticipating a September 1 effective date for standard sheet updates

UPDATES TO NYSDOT'S STANDARDS

- Crosswalk treatments for multilane roundabout and multilane channelized turn lanes
 - One of 4 treatments including the NYSDOT preferred option: Rectangular Rapid Flashing Beacons
- Requirements for pedestrian paths at roundabouts and intersection where crossings are not permitted
 - 2' minimum separation between pavement and sidewalk or a vertical detectable edge treatment.
- Change of grade
 - 13.3% max or provide a 2' transitional space with 2.1% running slope
- Cross slope for Pedestrian Access Route
 - 2.1%
- Requirements for clear spaces and turning spaces (landings)
 - Cross slope requirements are dependent on the intersection type and ramp type

UPDATES TO NYSDOT'S STANDARDS

CRITICAL ELEMENTS FOR THE DESIGN, LAYOUT, AND WORK ACCEPTANCE OF PEDESTRIAN FACILITIES

New and Replacement Facilities		Design and Layout Limits	Work Acceptance Limits	Reference	Inspection Methods
<i>Subject to PROWAG, Building Code of New York State, and National Manual of Uniform Traffic Control Devices</i>		<i>Department Standard and/or Negative construction tolerance</i>	<i>ADA Standard</i>	<i>2023 PROWAG unless otherwise noted</i>	<i>See Note 2</i>
6 Pedestrian Ramps <i>See Section 1 for Curb Ramps</i>					
	Clear width	48" min.		R407.4	d
	Cross slope	1:67 (1.5%) max.	1:48 (2.1%) max.	R407.3	b
	Grade <i>i.e. running slope</i>	1:13.3 (7.5%) max.	1:20 (5%) min. - 1:12 (8.3%) max.	R407.2	a
	Vertical rise, between landings	30" max.		R407.5	f
	Landing width, with no change of ped. direction	Width of widest ramp leading to landing		R407.6.2	d
	Landing width, with a change of ped. direction	60" min.		R407.6.4	d
	Landing length	60" min.		R407.6.3	e
	Landing slope, in any direction	1:67 (1.5%) max.	1:48 (2.1%) max.	R407.6.1	c
7 Railings and Guards for Pedestrian Ramps, Stairs and Elevated Surfaces					
	Ramp with a rise > 6" or stairs	Handrail required on both sides		R407.8 & R409.2	j
	Height of handrail, from walking surface or stair nosing to top of gripping surface	34" min. - 38" max.		R409.4 & BCNYS 1014.2	f
	Height of guards, for vertical drops > 30" - <i>Does not apply to highway segments, highway ramps, or highway bridges with bridge or highway barriers</i>	42" min.		BCNYS 1015.2 & 1015.3	f
	Opening limitations for guards - <i>Does not apply to highway segments, highway ramps, or highway bridges with bridge or highway barriers</i>	4" max. up to 36" from floor, then 4-3/8" max. up to 42"		BCNYS 1015.4	g
	Distance between bottom of guard and walking surface or ramp	4" max.		BCNYS 1015.4	g
	Distance between bottom of guard and walking surface on stairs	Triangle formed by riser, tread and bottom rail cannot allow passage of 6" sphere		BCNYS 1015.4	g
	Handrail clearance (between gripping surface and wall)	1.5" min.		R409.5	d
	Outside diameter of circular handrail	1.25" min. - 2" max.		R409.7.1	h
	Outside perimeter of non-circular handrail	4" min. - 6.25" max.		R409.7.2	h
	Cross section dimension of non-circular handrail	2.25" max.		R409.7.3	h

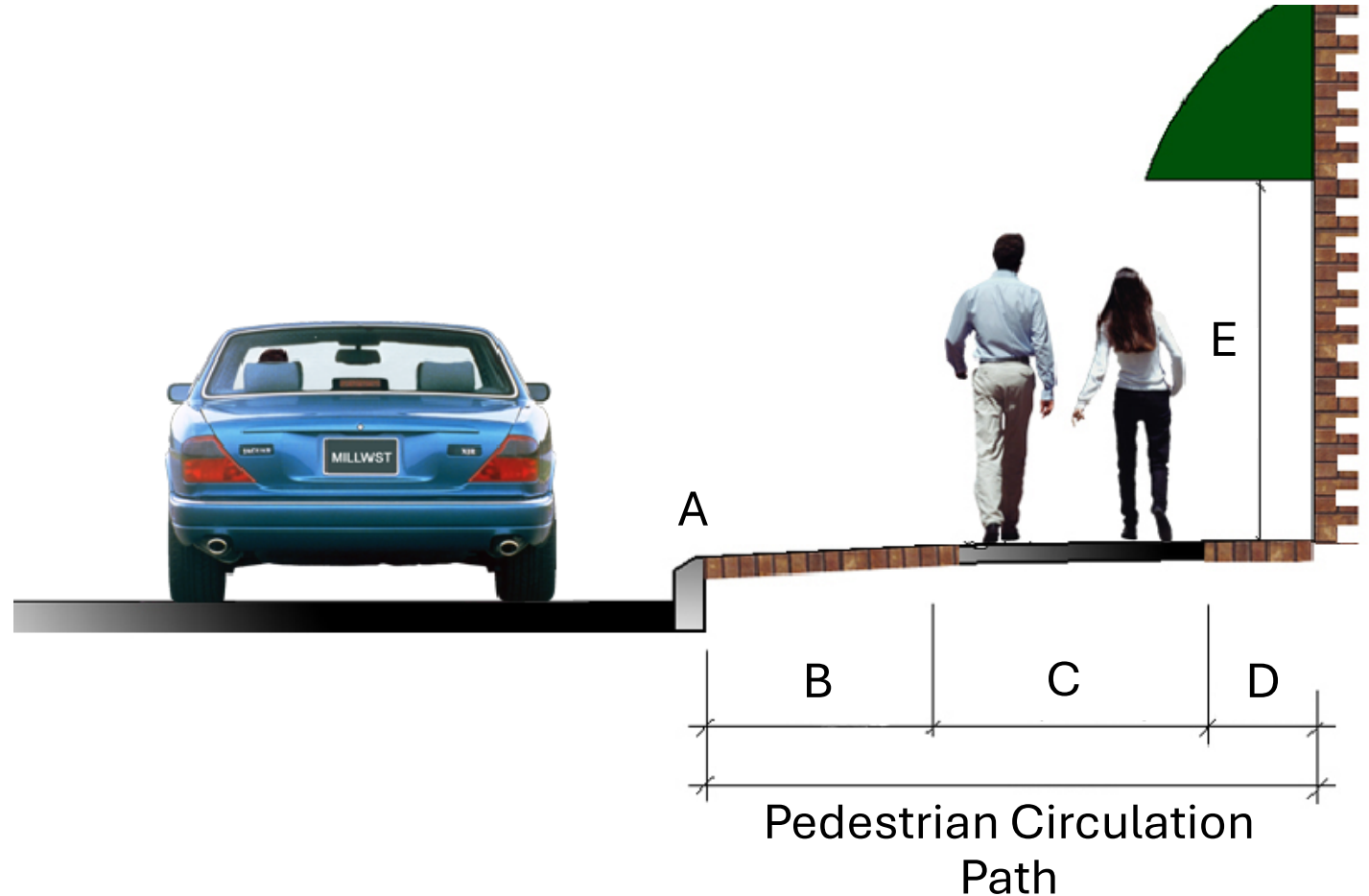
DESIGNING FOR ACCESSIBILITY

DESIGNING FOR ACCESSIBILITY

- Design the built environment to be usable by a broad spectrum of users
- Enable users to travel independently
- Integrate pedestrian facilities in planning and design - not as an afterthought

PEDESTRIAN CIRCULATION PATH

- A: Curb (back of curb to roadway)
- B: Frontage Zone (closest to the curb)
- C: Pedestrian Zone (also called the Pedestrian Access Route)
- D: Furniture Zone (closest to the building)
- E: Overhead Clearance



CONTINUOUS CLEAR WIDTH

- 3 feet is needed for one wheelchair used to navigate
- 3.5 feet is needed for a person using crutches
- 5 feet is needed to turn a wheelchair
- 5 feet is needed for one wheelchair user and a walking companion, or 6 feet is needed for two wheelchair users



CROSS-SLOPE

- Goal is to create a level area for navigating the pedestrian environment
- Building elevations and other changes in sidewalk elevations need to be taken into consideration
- Curb height needs to be taken into considerations for parking concerns

GRADE/RUNNING SLOPE

- Pedestrian facilities such as sidewalks can follow the general roadway grade
- Want to avoid “bumps” in grade when sidewalks intersect

CURB RAMPS

Terminology for compliant ramp elements and when they are needed?

- Turning space (also called a landing)
- Clear space
- Clear area
- Grade breaks
- Detectable warning surface
- Side flare



DETECTABLE WARNING SURFACES (DWS)

What is a DWS?

Raised truncated domes in a rectangular unit

Where do you place them?

Placed across the bottom of the curb ramp.

What exactly do they do?

Aid those visually impaired to identify the end of the ramp.

DWS = Pause before proceeding



DWS PLACEMENT (DWS MUST SPAN THE ENTIRE WIDTH)



CROSSING DISTANCE

- Minimize crossing distance
- Factors affecting crossing distance:
 - Number of lanes
 - Lane width
 - Curb radii
 - Medians/islands
 - Curb extensions
 - Parking lanes
 - Bike lanes
 - Transit lanes



ACCESSIBLE PEDESTRIAN SIGNALS (APS)

- Provide pedestrian signal information in usable formats, both audible and vibrotactile
- Information in redundant format benefits all pedestrians
- APS design considerations:
 - Color contrast
 - Alignment parallel toward direction of travel
 - Raised arrow
 - Vibrotactile arrow
 - Rapid tick locator



MAINTENANCE CONSIDERATIONS

- Sidewalk maintenance problems that can pose barriers include:
 - Buckled/cracked sidewalks
 - Depressed sidewalk segments
 - Overgrown vegetation
 - Snow/Ice accumulation
 - Pavers that are heaved or damaged
 - Drainage issues
 - Tree roots and other damage to sidewalks
 - Plow and other damage to detectable warning surfaces
 - Unresponsive pedestrian signals



ALTERNATE PEDESTRIAN ACCESS ROUTE

- Alternate Pedestrian Access Route is required when an existing pedestrian circulation path is temporarily closed by construction, alteration, maintenance, or other condition.
- Features within the PAR include:
 - Sidewalks
 - Shared Use Paths
 - Crosswalks
 - Pedestrian Signals
 - Access to Transit Stops and Shelters
- Location on the same side of roadway as the closed route is desirable

MINIMIZING CONSTRUCTION/MAINTENANCE IMPACTS

- Phasing of Construction
- Utilize Detailed Plans
- Effective Communication/Signage
- Effective Barriers
- Alternate Routes
- Public information



KEY REQUIREMENTS

HOW TO IMPROVE ACCESSIBILITY?

1. ADA Transition Plans

The USDOT Section 504 regulation requires FHWA to monitor the compliance of the self-evaluation and Transition Plan of Federal-aid recipients (49 CFR 27.11).

Self evaluations need to include what's in the public right-of-way.

A Transition Plan assesses the needs of persons with disabilities, and then schedules the required pedestrian accessibility upgrades. The Transition Plan is to be updated periodically to develop the STIP and MPO programs. Transition plans need to be defensible.

HOW TO IMPROVE ACCESSIBILITY?

2. Projects

- Public agencies should work to meet accessibility requirements throughout the project delivery process.
- Issues surrounding pedestrian accessibility should be addressed at the earliest stage possible to reduce or prevent conflicts with other right-of-way, planning, environmental, and design considerations.
- Projects requiring pedestrian accessibility include projects for new construction and projects altering existing street and highway facilities.

REPLACEMENT IN KIND ISN'T ALWAYS THE BEST SOLUTION...

- What are some things you might do differently?



LEARNING ASSESSMENT

LEARNING ASSESSMENT

1. True or False

The US Access Board is responsible for adopting technical standards which become the basis for regulations adopted by the US Department of Justice (DOJ).

LEARNING ASSESSMENT

2. True or False

US Department of Transportation (US DOT) has adopted the 2023 PROWAG for all transportation projects.

LEARNING ASSESSMENT

3. True or False

By following the MUTCD, designers can ensure that signs, signals, and pavement markings are accessible for all pedestrians with disabilities including visual, cognitive, and hearing disabilities.

LEARNING ASSESSMENT

4. True or False

A required treatment at a multilane roundabout or multilane channelized turn lane is any of the following (one or more)

- Rapid Rectangular Flashing Beacon (RRFB)
- Pedestrian signal
- Pedestrian hybrid beacon
- Raised pedestrian crossing

LEARNING ASSESSMENT

5. True or False

Designers that have only considered the needs of pedestrians with mobility impairments have designed a facility that is accessible for all pedestrians.

QUESTIONS?