

Public Rights of Way Accessibility Guidelines

ACCESSOLOGY



Public Rights of Way



Making The Way Right for the Public

PROWAG Part 1

Laws and Regulations



Americans ^{with} Disabilities Act



Why Was ADA Necessary?

- At the time ... 43,000,000 people with disabilities in the US (now, 59,000,000)
- Only 12% were employed
- Of the 88% unemployed, 80% wanted to work and were considered employable
- Develop sustainable communities

Previous Regulations

- Architectural Barriers Act (ABA)
- Rehabilitation Act of 1973, specifically Section 504

Architectural Barriers Act (ABA) of 1968

Requires that buildings and facilities that are designed, constructed, or altered with Federal funds, or leased by a Federal Agency, comply with Federal standards for physical accessibility.

Rehabilitation Act of 1973

Included several sections. The section Title II entities must be aware of today is Section 504.

504 Covers:

- Programs
- Services
- Activities

DOJ has Determined:

- Sidewalks are programs
- Curb ramps are programs

Legal Cases Have Confirmed It

ADA Is an Employment Based, Civil Rights Law

Applies To ALL Commercial Facilities and Places of Public Accommodation

Authority to Individual States

- States are given a choice
- Texas uses the federal ADAAG Standards adopted as a State standard

The State Laws

Are Construction Laws

Construction Laws:

- You aren't required to do a thing to remove barriers until construction activity occurs
- What you do determines what you're required to do toward compliance.

Federal Laws:

- Building owners are required to be removing barriers every year until all barriers are removed, regardless of planned construction
- The Department of Justice has initiated the priority for barrier removal
- **NOBODY IS GRANDFATHERED!**

- The courts will apply a 20% rule to construction projects and accumulate it over time.
- **CLOSE ENOUGH IS NOT GOOD ENOUGH!**

Let's talk about the **PROW Draft Guidelines (PROWAG)**

Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (2011)

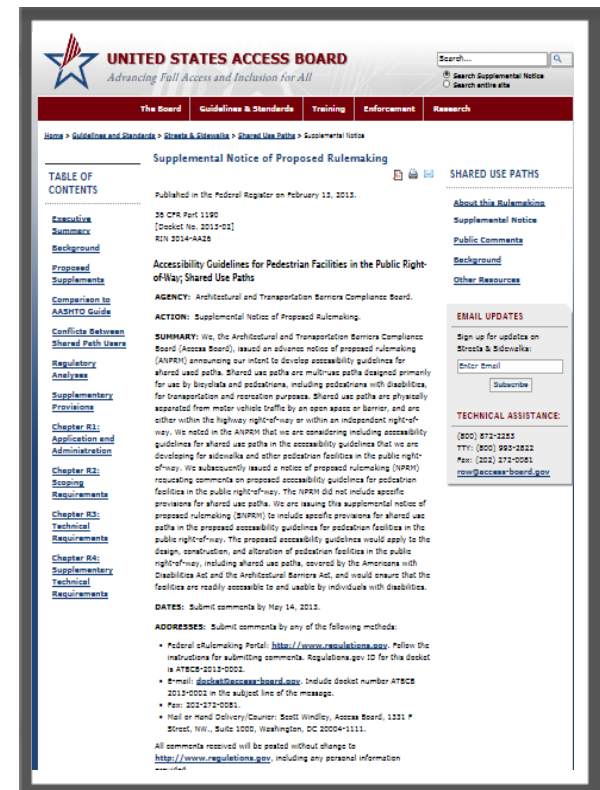
- Preamble
- Regulatory Assessment
- Text of the Proposed Rule
 - Technical Provisions
 - Advisory Notes
 - Illustrations



Supplemental Notice of Proposed Rulemaking

Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way; Shared Use Paths (2013)

Incorporates shared use path guidelines into the 2011 PROWAG (web only)



Rulemaking Update

- Draft of the Final Rule has been presented to the Board
- Will be submitted to the Office of Management and Budget for review
- Goal is to publish the Final Rule in 2016

The Department of Justice and Department of Transportation must adopt



No Standards for the Right of Way??

FHWA Memo 1/23/06

Public Right of Way Accessibility
Guidelines (PROWAG) –

“recommended best practices, and can be considered the state of the practice that could be followed for areas not fully addressed by the present ADAAG standards”

What can State and Local Agencies do in the meantime?

- Policy
- Standards
- Education
- Enforcement at local level



Texas has Officially Adopted **PROWAG!**

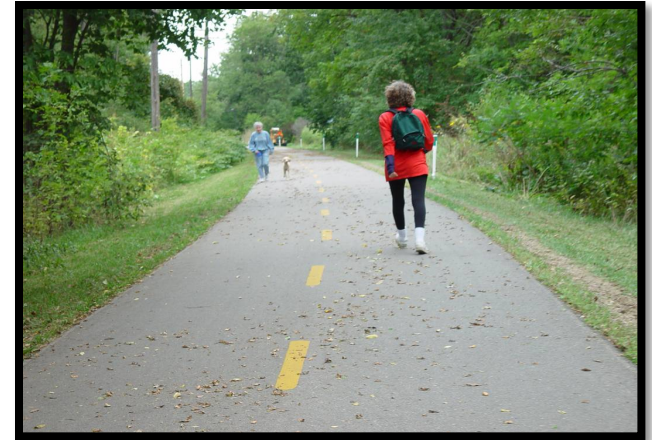
Therefore, the federal time line
doesn't mean much to you.

You need to comply now.

Types of Pedestrian Facilities



Sidewalks



Shared-use Paths



Shoulders

PAR vs. SUP vs. Trails



**Pedestrian Access Route
Pedestrians only**



**Trail Pedestrian
recreation**

**Shared Use Path
Pedestrians and bikes**



Surfaces



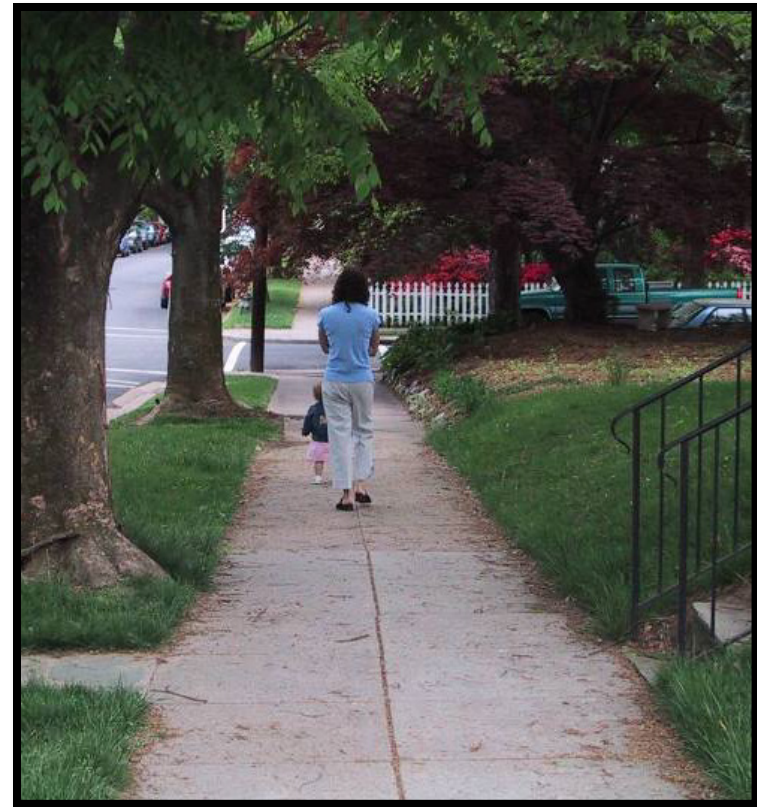
Surfaces

Surface requirements:

- Firm, stable, and slip-resistant
- No large openings or gaps

Desired:

Smooth and free of rough textures





Properly installed and well maintained brick can work.

Surfaces



Sometimes it is all about how its installed or the material choice

Shared Use Paths and Trails



National Trails Surface Study

- Loose surface materials:
- Generally need special treatment (e.g., binders, consolidants, compaction, and grid forms)
- Frequent maintenance

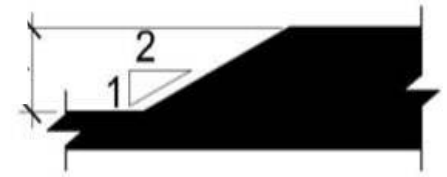
NCA's website - <http://www.ncaonline.org/>

Pedestrian Access Route (PAR)

1/4" max



1/4" –
1/2" max



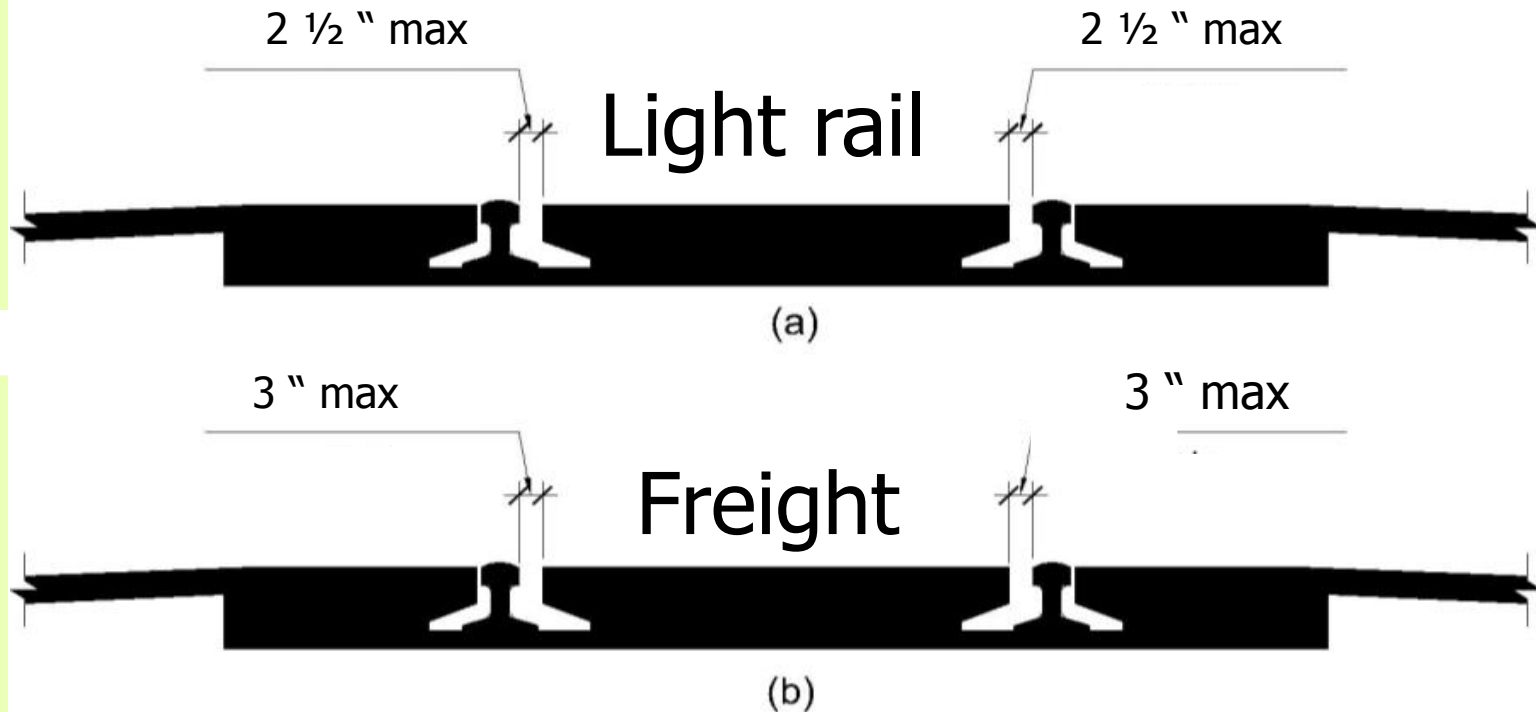
Changes in level provisions – does not apply to grade breaks

Pedestrian Access Route (PAR)



Horizontal openings no more than $\frac{1}{2}$ inch
in the direction of travel

Pedestrian Access Route (PAR)



Flange way gap provision for light rail and freight rail at pedestrian rail grade crossing

Pedestrian Access Route (PAR) Width



Width - 4 feet minimum
exclusive of the curb

Pedestrian Access Route (PAR) Width

Public Rights of Way Accessibility Guidelines and Requirements



Pedestrian Access Route (PAR) Width



Continues around all obstructions

Pedestrian Access Route (PAR) Running slope



Running slope - can follow adjacent roadway grade

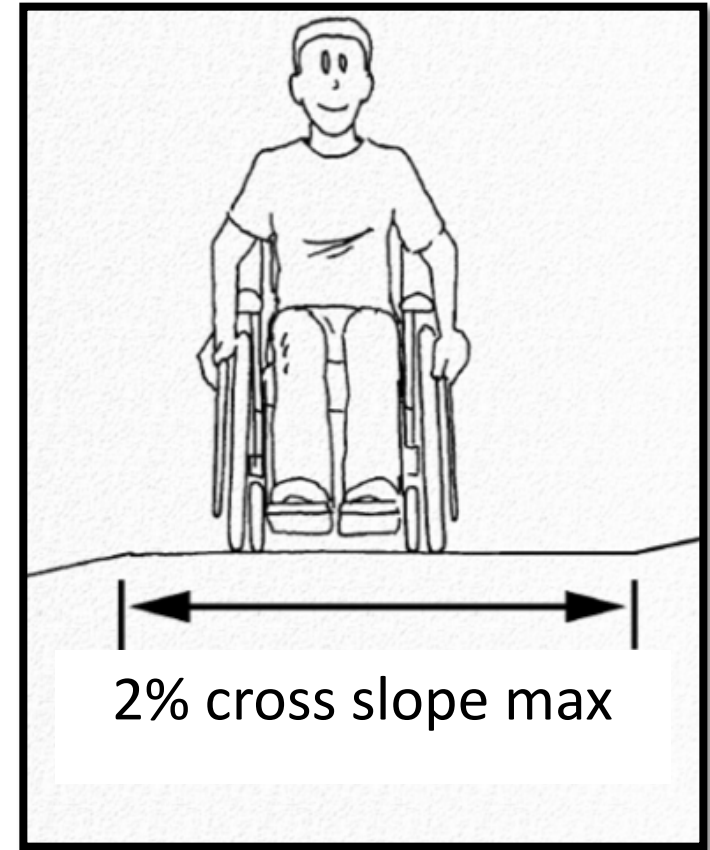
Pedestrian Access Route (PAR) Running slope



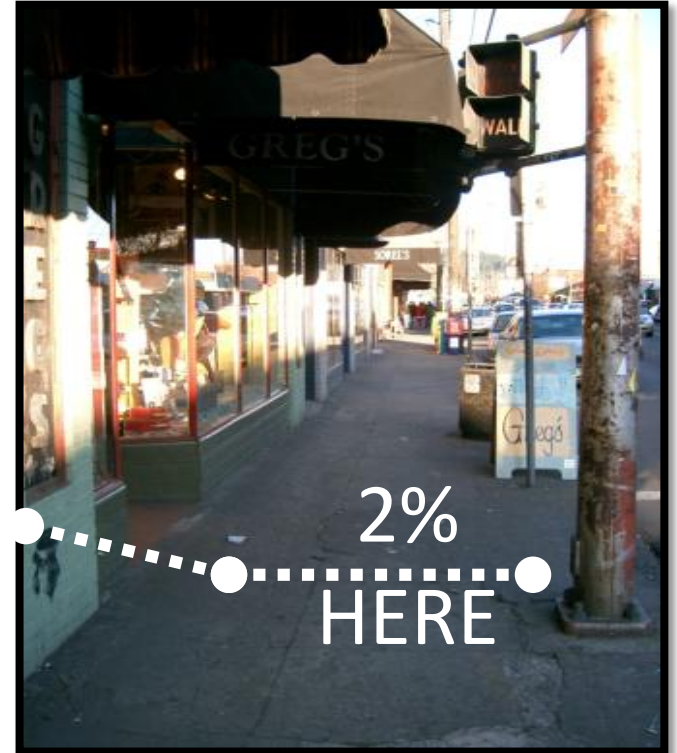
What it looks like if the building guidelines
are applied

Pedestrian Access Route (PAR) Cross slope

- 0% best for wheelchair users
- Some slope needed for drainage
- Max cross slope 2%
- Design accordingly

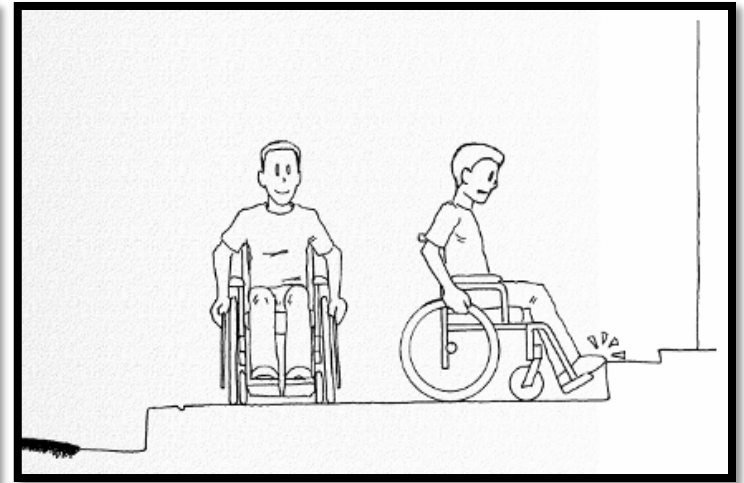
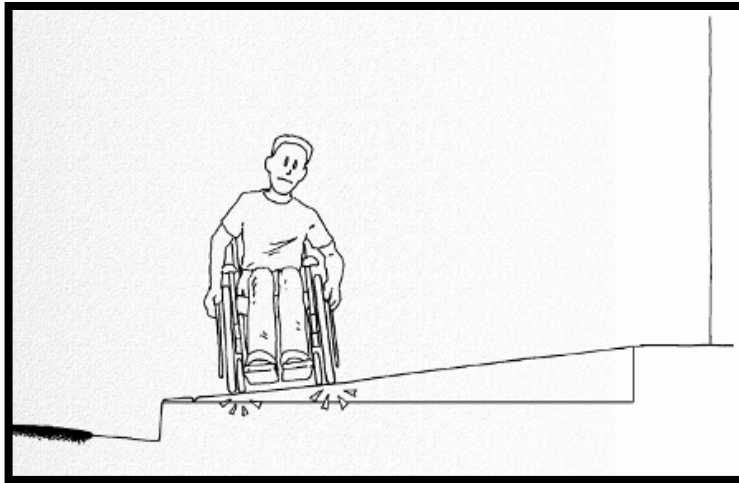


Pedestrian Access Route (PAR)



Cross Slope: 2% maximum

Pedestrian Access Route (PAR)



Building entrance elevations create problems

Pedestrian Access Route (PAR)



Building entrance elevations create problems

Pedestrian Access Route (PAR)



If you have the space this can work

Pedestrian Circulation Path



Interesting solution –

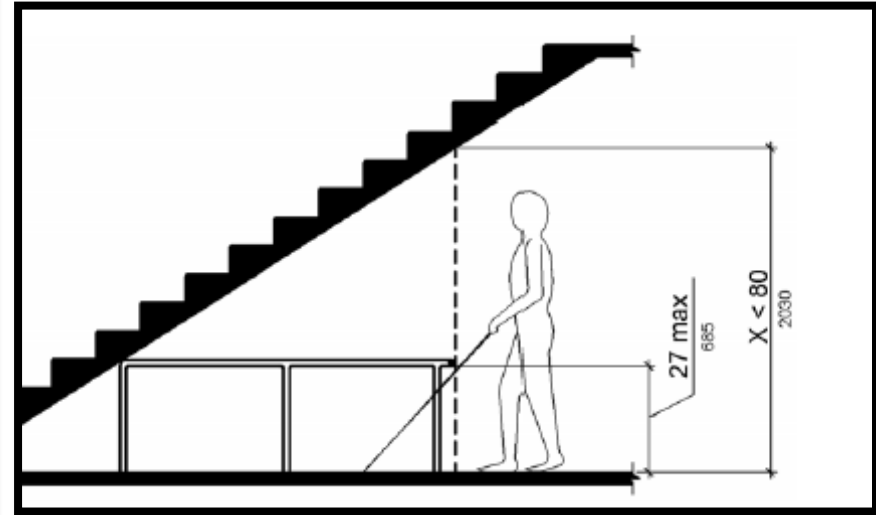
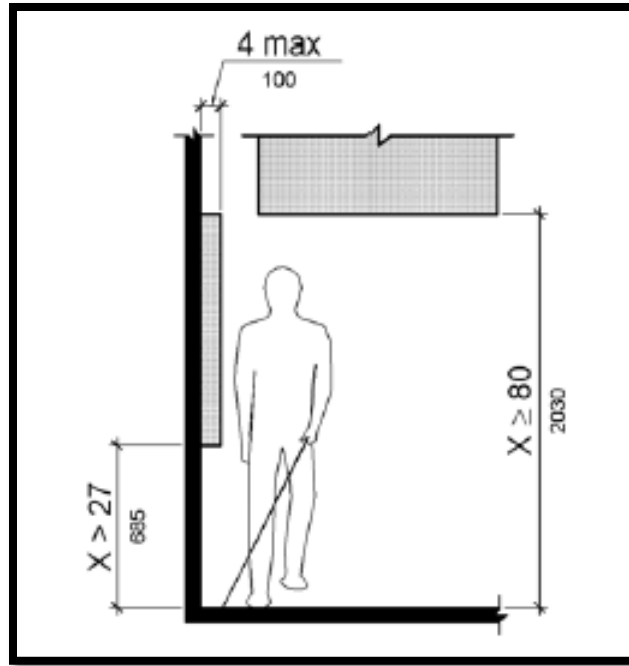
Circulation path vs PAR

Pedestrian Circulation Area



No protruding objects the entire width

Protruding Objects



Alternate Pedestrian Access Routes and Work Zones

Alternate PAR



Pedestrian delineation with a continuous detectable edge

Alternate PAR



Pedestrian delineation with a continuous detectable edge

Curb Ramps and Blended Transitions

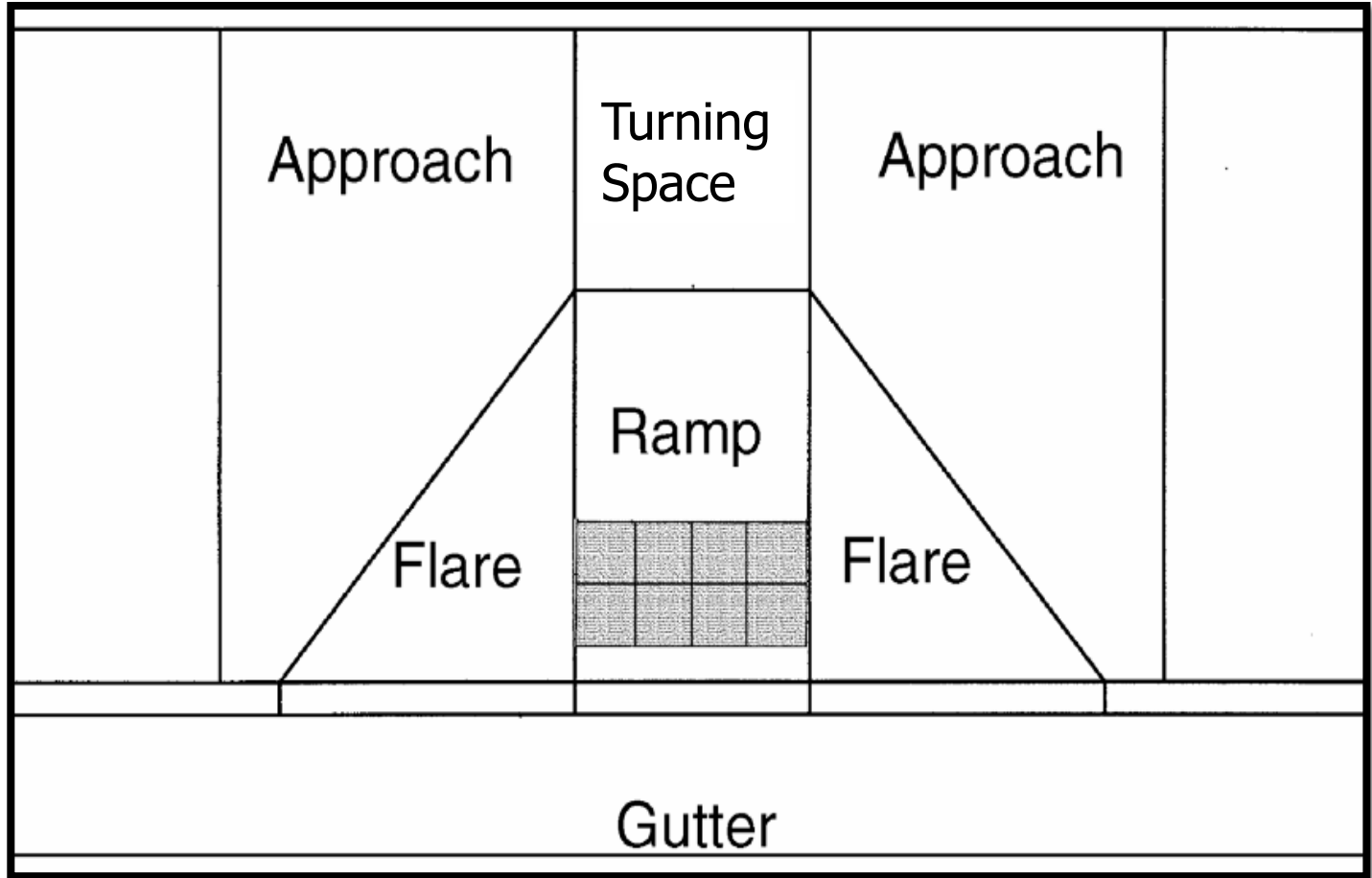
Curb Ramp Basics

- 4' minimum width
- 1:12, or 8.3%, max running slope (with length limit as exception to slope limit);
- 1:48, or 2%, max cross slope with exceptions for some crossings;
- Turning space at the top of perpendicular curb ramp and the bottom of a parallel curb ramp;

Curb Ramp Basics

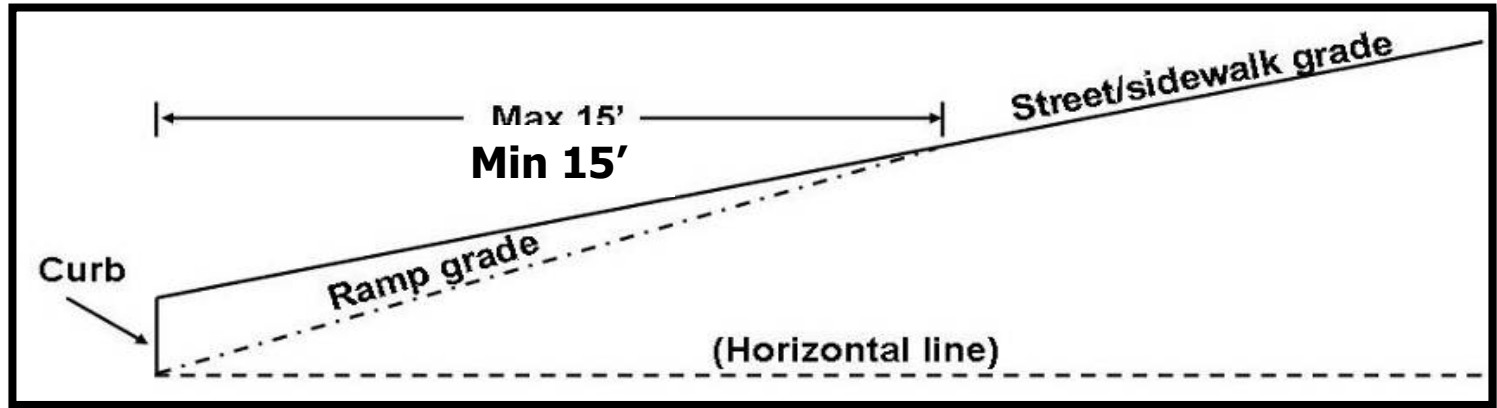
- Perpendicular grade breaks;
- Flush transitions (no lips);
- Clear space at the bottom outside of travel lane;
- 24” min detectable warning on curb ramps and blended transitions

Anatomy of a Curb Ramp



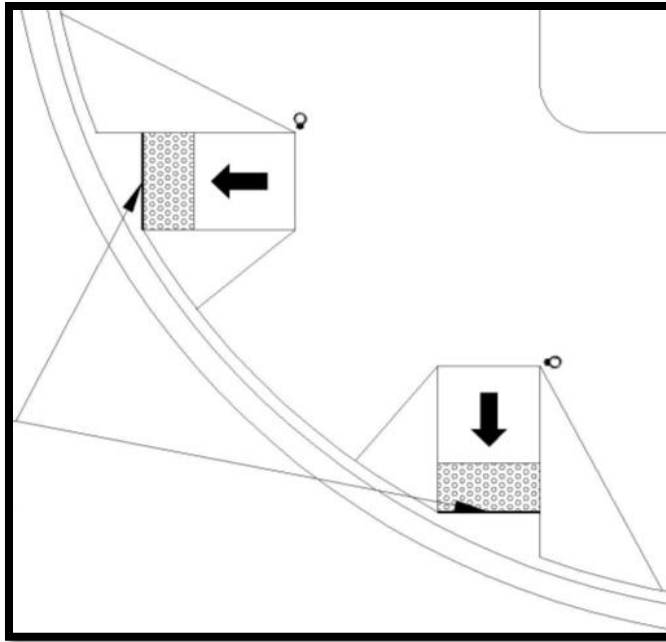
The 'cookie cutter' curb ramp

Curb Ramps



- Maximum curb ramp slope 1:12 (8.3%)
- When 'chasing grade,' the curb ramp length is not required to exceed 15 feet.
- Consistent slope

Perpendicular Curb Ramps



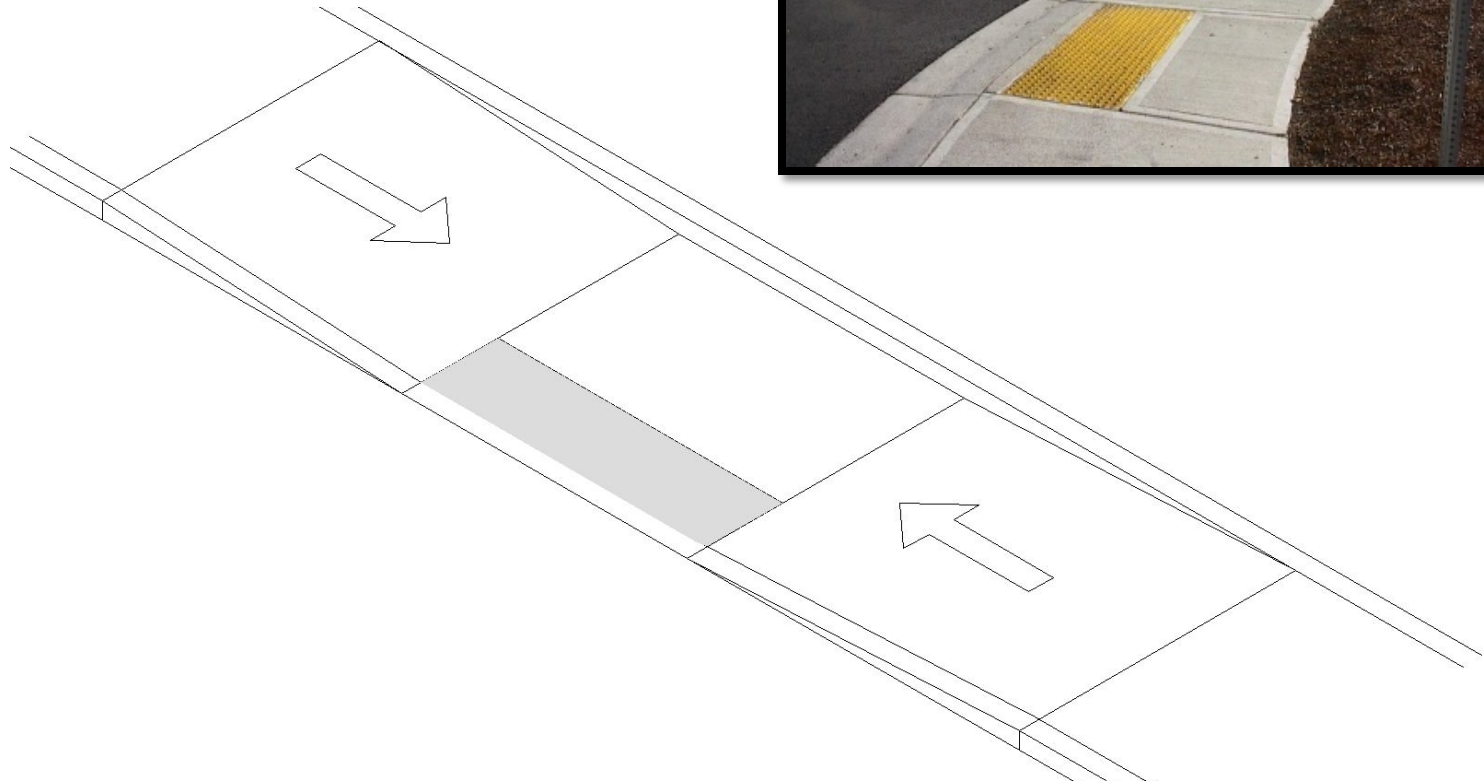
Perpendicular to the curb or street being crossed

Curb Ramps



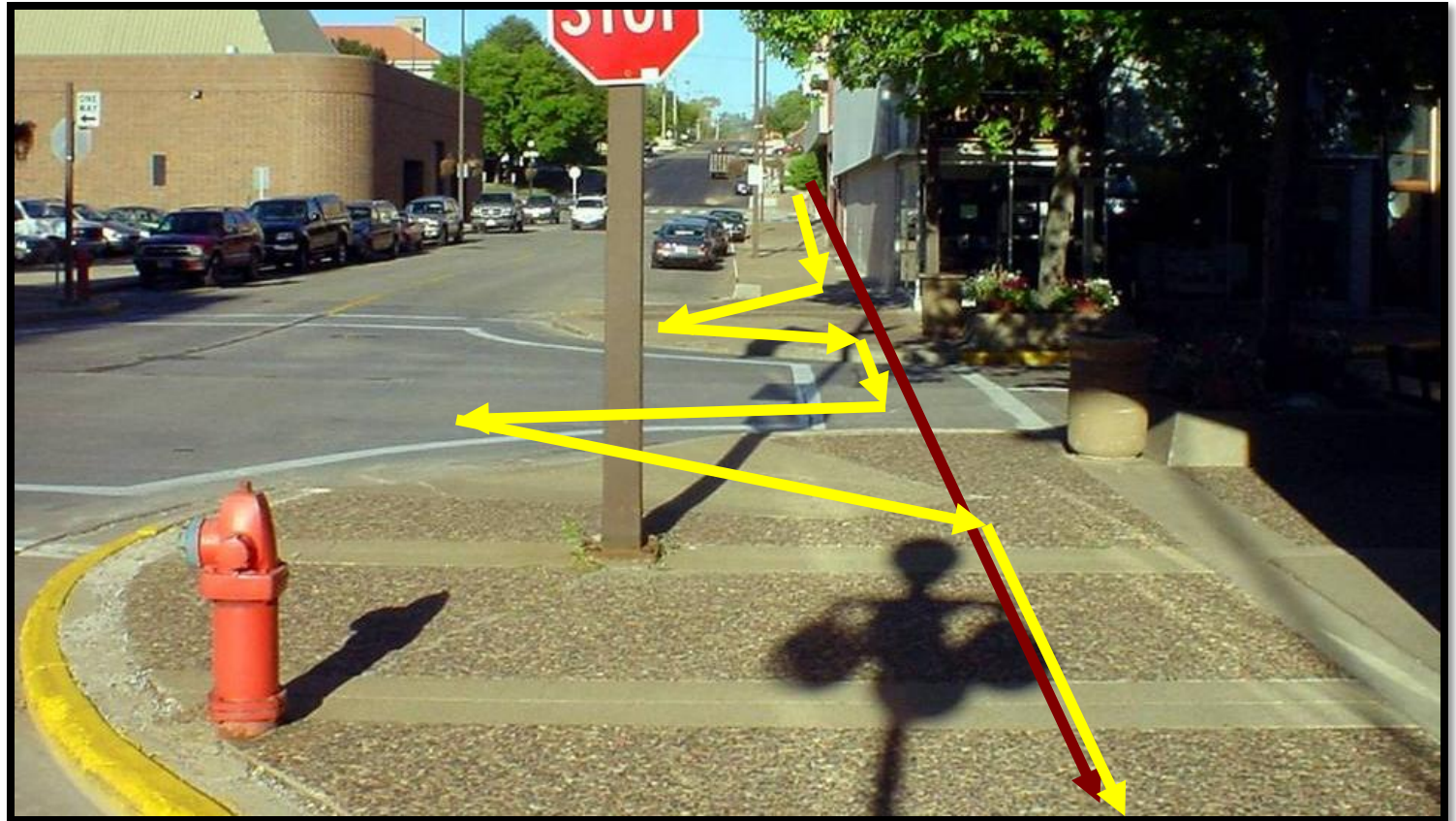
Turning space is required at the top of curb ramps for changing direction (4' x 4' min)

Parallel Curb Ramp



Parallel to the curb or street being crossed

Curb Ramps & Blended Transitions



A ramp for each street crossing

Curb Ramps & Blended Transitions

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Perpendicular



**Blended
Transition**



Parallel



Sometimes it's tough!

Steps at Corner:
Before



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But it CAN be done!



Curb Ramps What's New?

Curb Ramps

- Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20
- Adjacent surfaces at transitions shall be the same level.
- Landings are required at curb ramps and must be 36" deep.

Detectable Warning Devices

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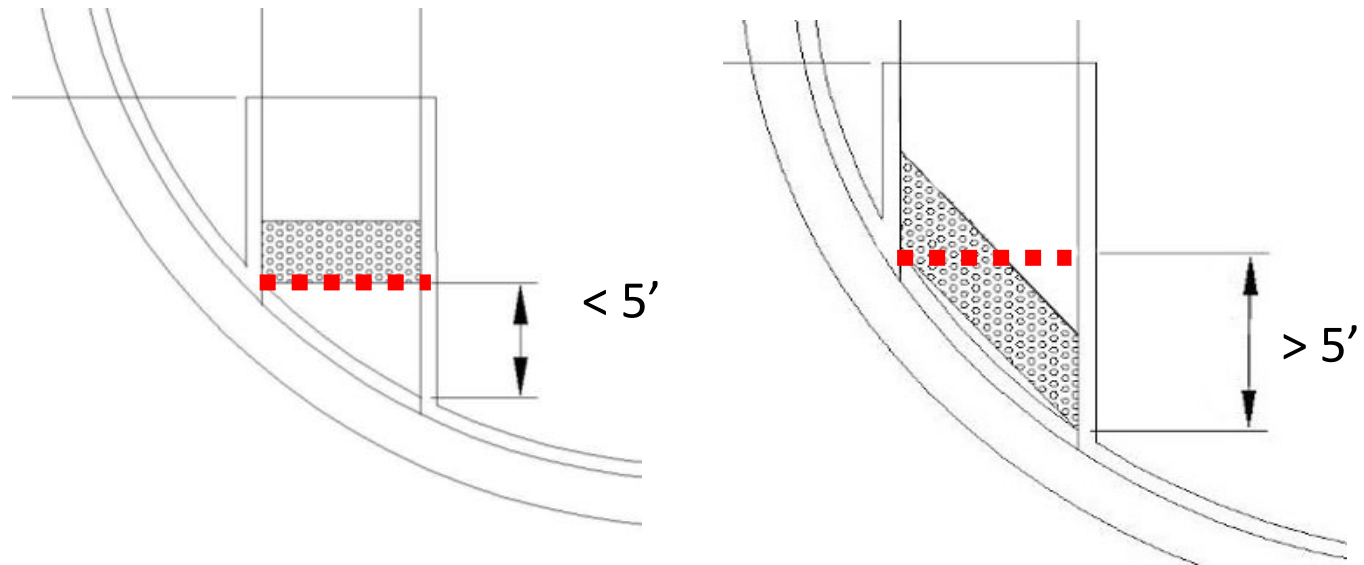


Detectable Warning Devices

Provide warning to the visually impaired that they are about to enter a hazardous area

- Required at all street crossings, railroad and boarding platforms - driveways??
- Raised domes with in-line or radial arrangement
- 24" min. and full width of curb ramp
- Contrasting in color
- FHWA Memo

Detectable Warning Devices



- Place DW on curb ramp at grade break if the level landing at bottom of ramp is less than 5' deep.
- Place DW on bottom landing if landing is more than 5' deep at any point.

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Pedestrian Crossings



- Continuation of PAR
- Walking Speed – 3.5 ft/sec

Pedestrian Crossings



- The guidelines do not tell you when to mark
- Or how to mark (look at MUTCD part 3)

These are all over America



Accessible Signals

Accessible Pedestrian Signals

— www.apsguide.org



Pedestrian Push Button Location

Location

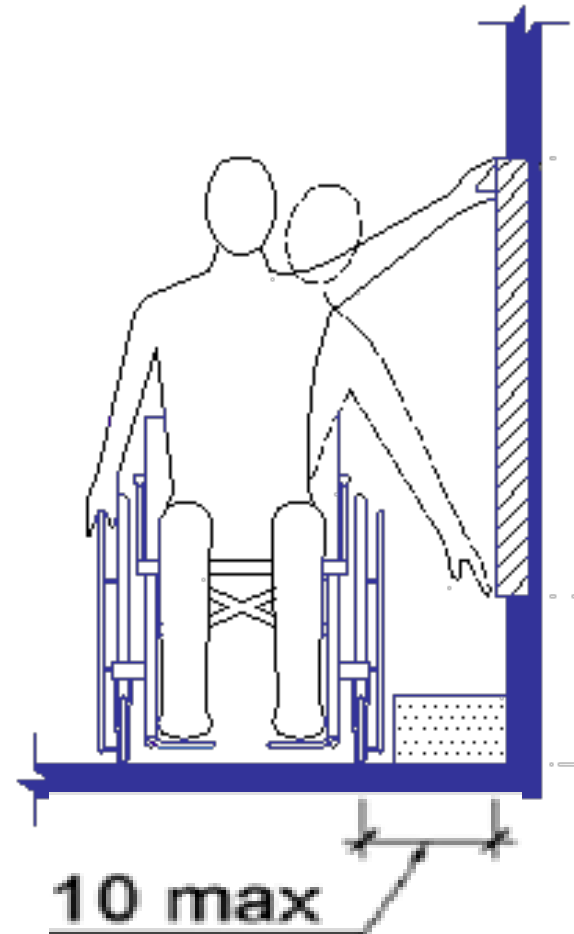
- Reachable from level landing
- Accessible route to ramp
- 5 ft from the crosswalk
- 1.5-6 ft from edge of curb or pavement

See MUTCD Fig. 4E-4

Accessible Pedestrian Signals Reach Ranges

Max. Reach – 48"
Min. Reach – 15"
(forward & side)

Side reach within 10"



Accessible Pedestrian Signals

Consistency is important!

Button

- Face of button parallel to crosswalk
- Mounted at 42" (48" max)
- Max. 5 lbs pressure needed to activate

Sign

- Adjacent to button – explains purpose and use
- Must clearly indicate crosswalk direction



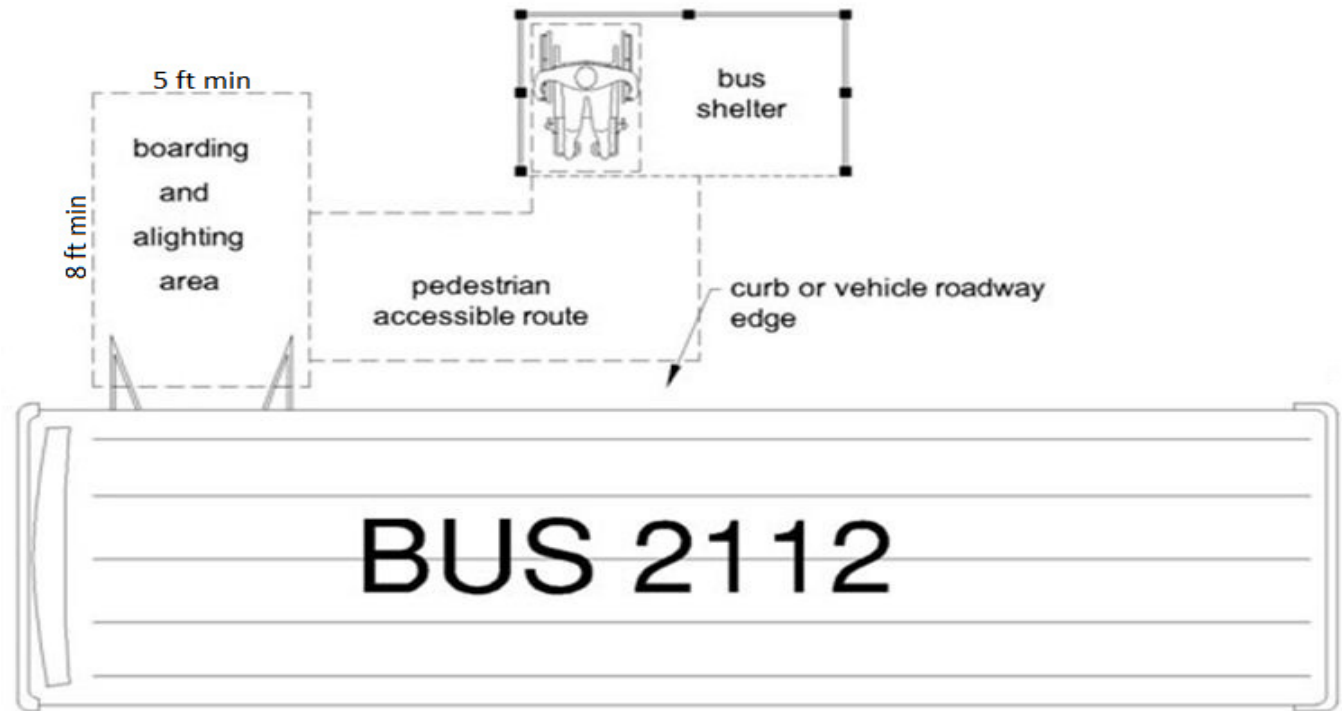
Transit Stops and Shelters

Transit Stops & Shelters



- Connect boarding areas and shelters to a pedestrian access route
- Clear space in shelter if seating is provided

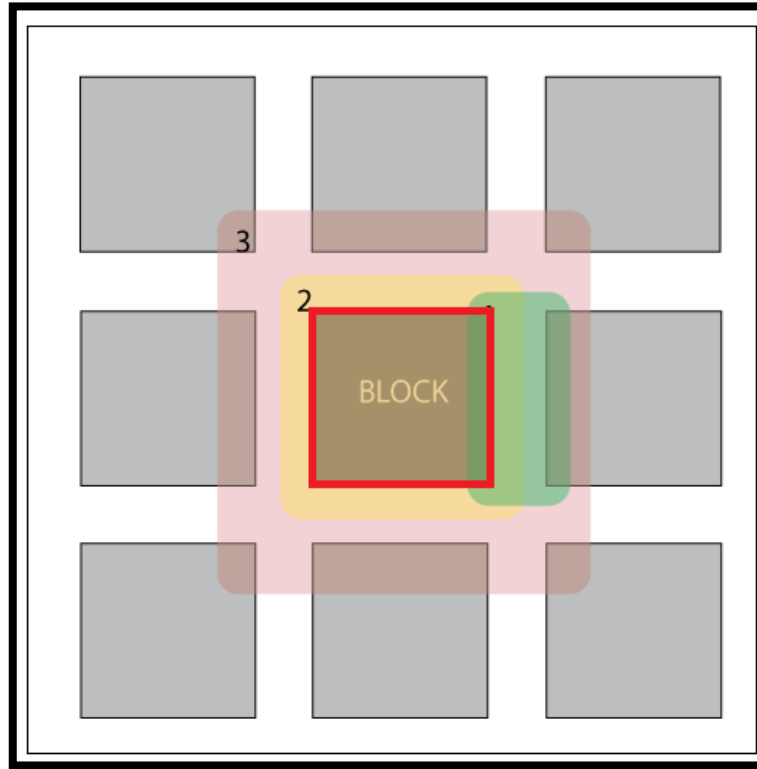
Transit Stops & Shelters



Connect boarding areas and shelters and pedestrian network with a PAR

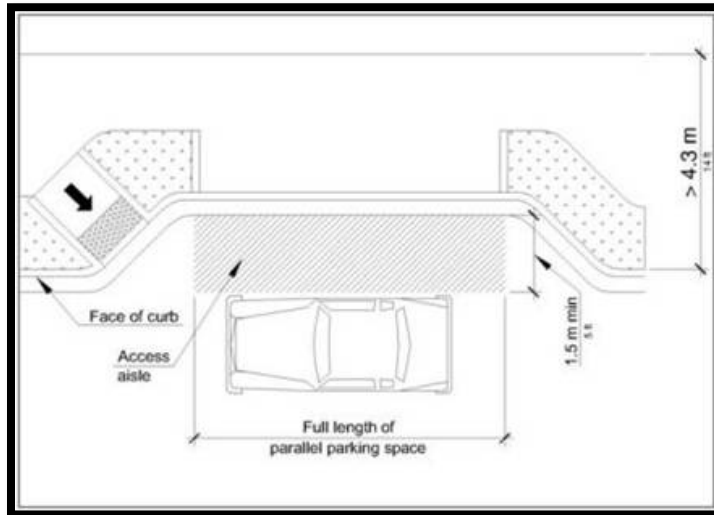
On-Street Parking

On-Street Parking



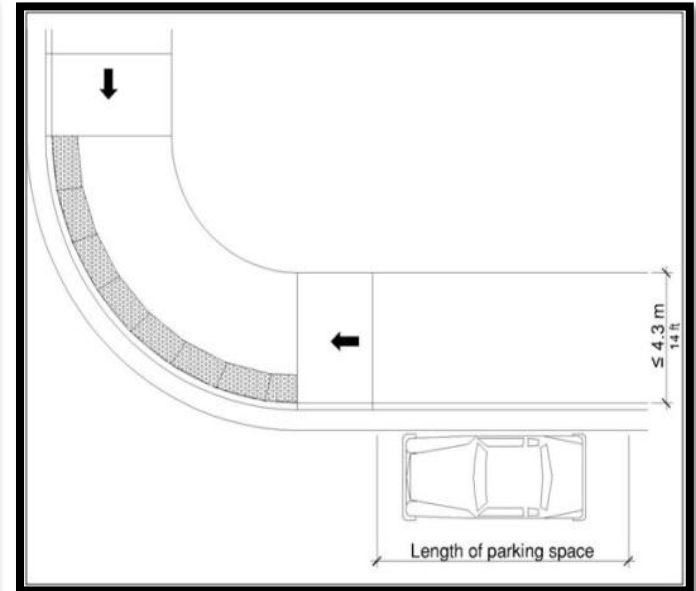
- Number of accessible spaces is based upon total on a block perimeter
- Marked or metered only
- Scoping Section R214

On-Street Parking



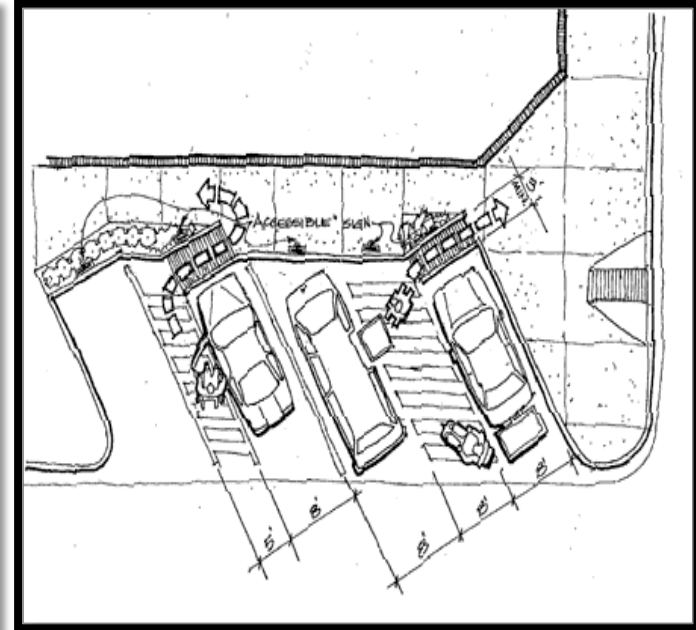
Where the width of the adjacent sidewalk or available right-of-way exceeds 14 ft. an access aisle is required

On-Street Parking



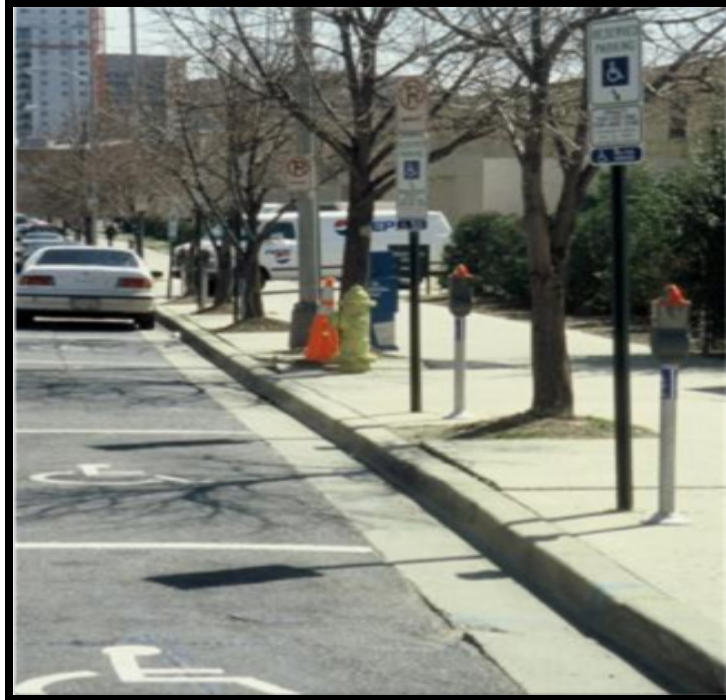
Narrow sidewalks – an access aisle is not required

On-Street Parking



Angled (or perpendicular) on-street parking

On-Street Parking



Parking meters

- Information must be visible from a point 3.3 ft. max above the center of the clear space
- Meet operable parts requirements
- Located at the head or foot of space

Each altered element must be accessible to and usable by people with disabilities, to the **maximum extent feasible**.

Complaints are measured by function,
usability and willingness:

Equivalent Facilitation is recognized

Accessibility Obligations

- New construction is required to meet current standards
- Alterations to existing facilities must be accessible to the maximum extent feasible within the scope of the project



- Existing facilities that have not been altered can not deny access to persons with disabilities

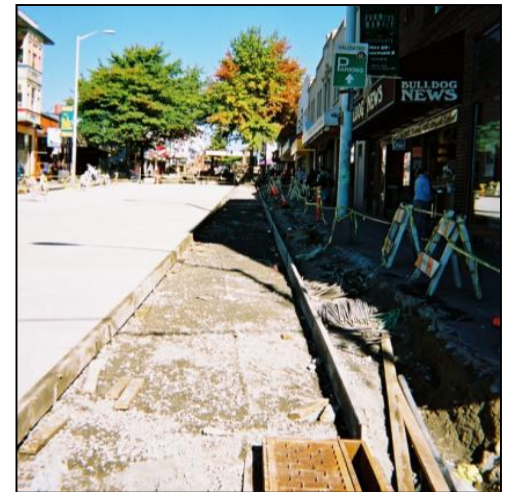
Alterations

- In alterations, it may not be possible to meet all of the accessibility requirements
- Follow new construction provisions to the maximum extent possible



Alterations

- Accessible to the **maximum extent feasible**.....
-within the scope of the project
- **Document, Document, Document!**



Analyzing Accessibility Alternatives

Several potential solutions may be available, here's a generic two step process to make the decision on accessibility alternatives:

FIRST: Consider using work-around alternatives that won't affect usability for people with disabilities.

Be Realistic –Think it through!

- The lip at the bottom of a curb ramp can be hidden by pooling water or other means and can be a danger to a person with a mobility device, whereas:
- The flared side is not part of the required access route so it can be altered with little significance to access.

Counter slopes and level changes are a liability

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How do you know if you Maximized Accessibility?

A citizen may have one idea, the designer another idea and the engineer yet another idea on how to solve an access problem.

What do you choose?

**Whichever provides the MOST
access!**

Best Practices

- Accessible design is a safety best practice.
- Installation of APS devices is safer for everyone, especially with low or no vision.
- Detectable warnings replace curbs so people know there's a vehicular hazard ahead

- Wheelchair users are safer when all four wheels are on the ground, smooth transitions avoid dangerous conditions.
- Steep slopes and cross slopes are also a danger to those with mobility aides or bad balance
- Heaving or broken sidewalks are also dangerous

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Accessible routes are required to be maintained in an accessible condition.

Exterior Violations Are The Cause of The Majority of The ADA Law Suits



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