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## Understanding ADA Regs and Transition Plans

ACCESSOLOGY

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*Continuing Education for Design Professionals*

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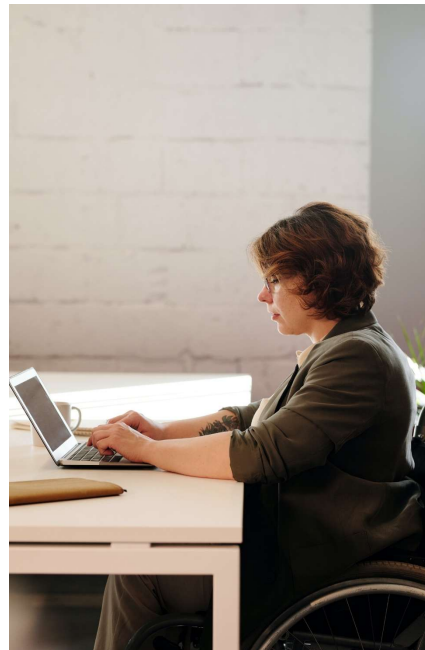
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## What We'll Discuss Today

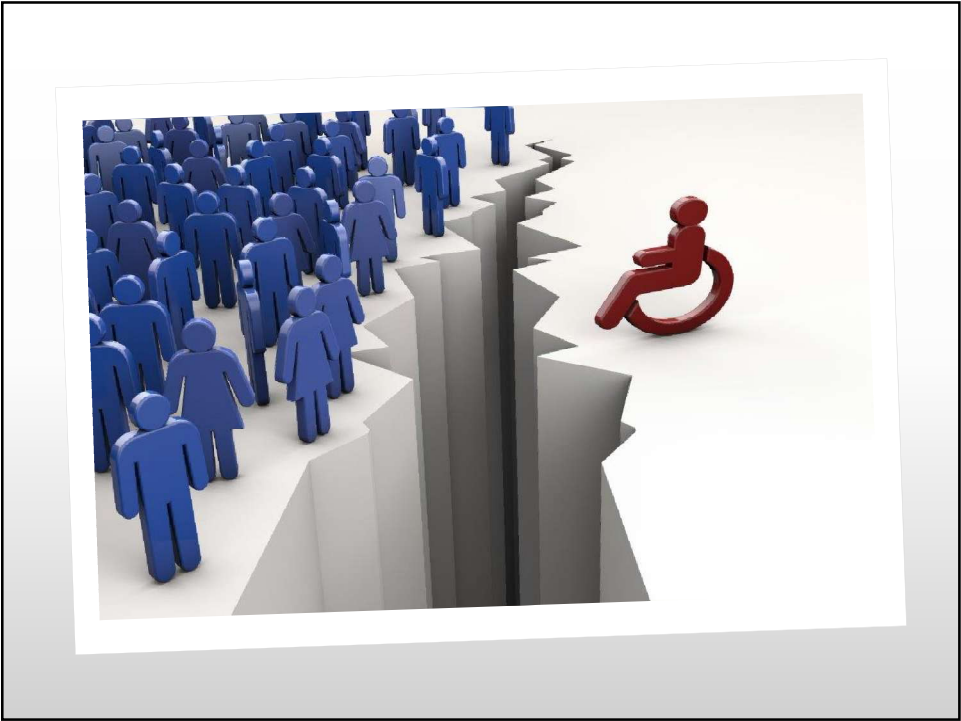
- Federal and state laws governing accessibility
- ADA General Requirements
- Transition Plan Development
- Pictures from actual inspections
- Consequences of non-compliance



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## 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

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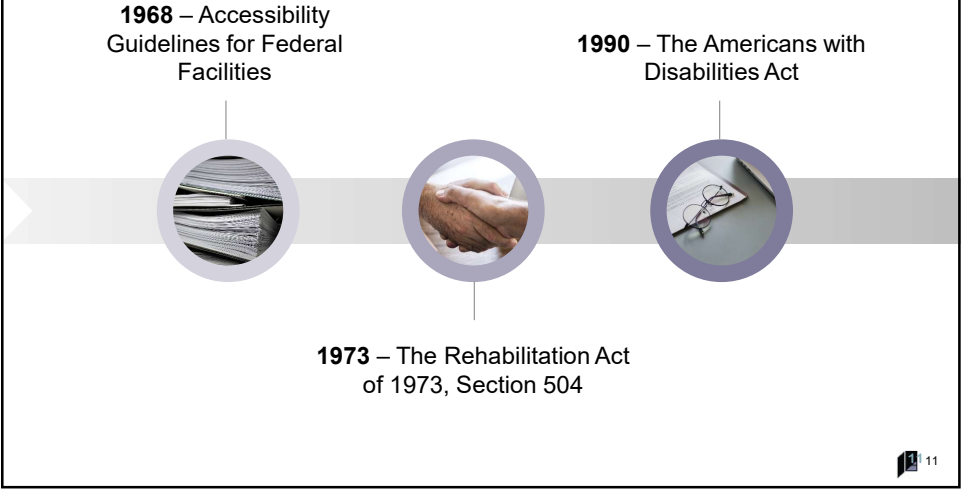
## What Laws Apply?

- Federal and state laws governing accessibility
- Aren't they all the same?
- Does it really matter?
- Isn't ADA the most stringent?
- It's all about wheelchair access, right?
- Isn't it really the architects' decision?
- Nobody ever complains, so it's okay, right?



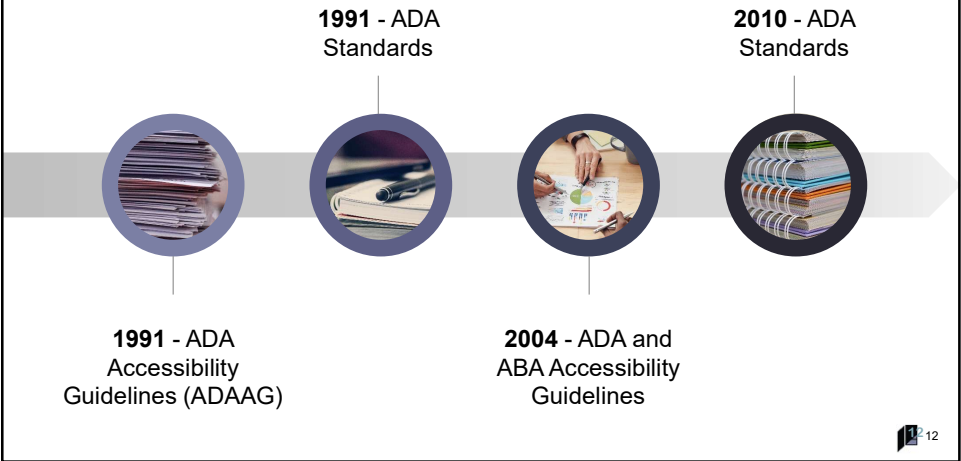
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# Federal Accessibility Standards and Guidelines



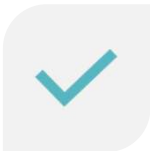
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# Federal Accessibility Standards and Guidelines



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# Section 504 Covers:



PROGRAMS



SERVICES



ACTIVITIES

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## DOJ has Determined:

- Sidewalks are programs
- Curb ramps are programs



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## Legal Cases Have Confirmed It



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## Civil Rights vs. Construction Laws

### **Federal Law**

- Required by all states
- Attorney's fees built into the law
- Damages vary by law
- National jurisdiction

### **Building Code**

- Adopted by local jurisdictions
- Apply in addition to Federal laws, not instead of
- State or local jurisdiction

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## How Was the Law Compiled?

Select group to study issues

Recommendations forwarded

An ANPRM issues for comment

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## How Was the Law Compiled?

Comments incorporated into next phase, NPRM

NPRM goes out for public comment

Comments are incorporated into proposed rule

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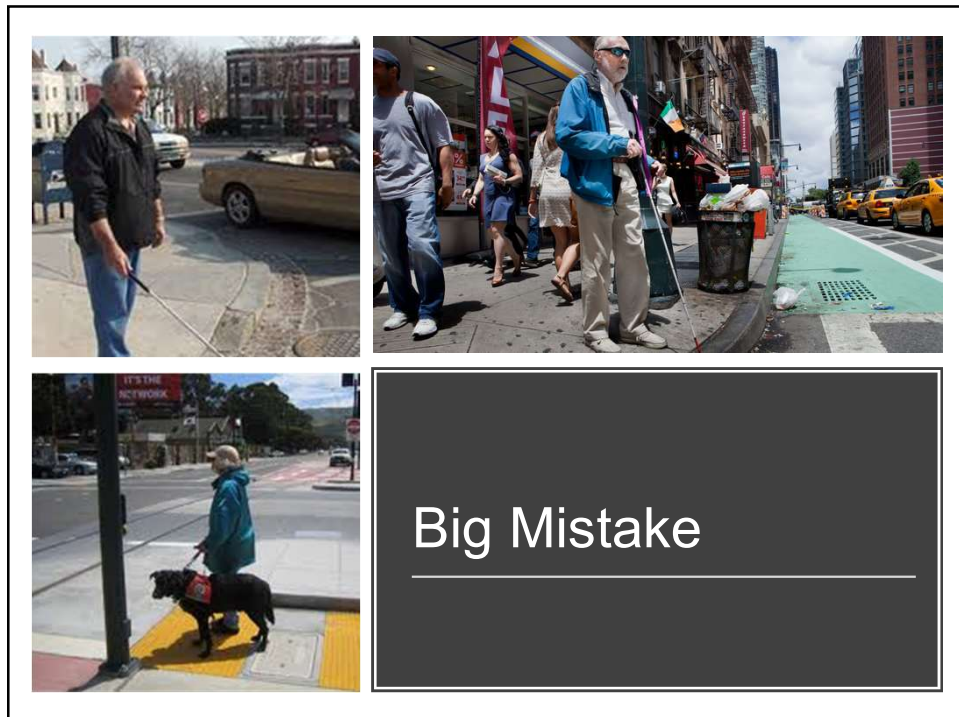
## How Was the Law Compiled?

Proposed rule goes out for public comment

Comments are evaluated and added

Final rule is published

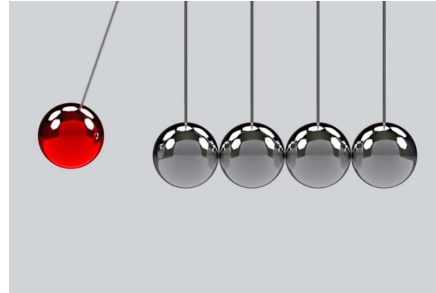
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### Effective Organization

80% of the comments from all three comment phases came from the disability community, which made the pendulum swing.



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## The Reaction

- 1995 Committee was put together
- Recommendations were made
- Standards were reopened
- New standards were published in the Federal Register July 23, 2004
- New standards were ADOPTED July 23, 2010

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## Safe Harbor – Existing Facilities

- Elements that comply with 1991 Standards do not need to be modified to meet the 2010 Standards unless those elements are altered on or after March 15, 2012.
- Safe Harbor does not apply to elements in existing facilities that were not subject to specific requirements in the 1991 Standards

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- (A) Residential Facilities and dwelling units
- (B) Amusement Rides
- (C) Recreational boating facilities
- (D) Exercise machines and equipment
- (E) Fishing piers and platforms
- (F) Golf Facilities
- (G) Miniature golf facilities
- (H) Play Areas

Elements  
in 2010  
Standards  
Not  
Subject to  
Safe  
Harbor

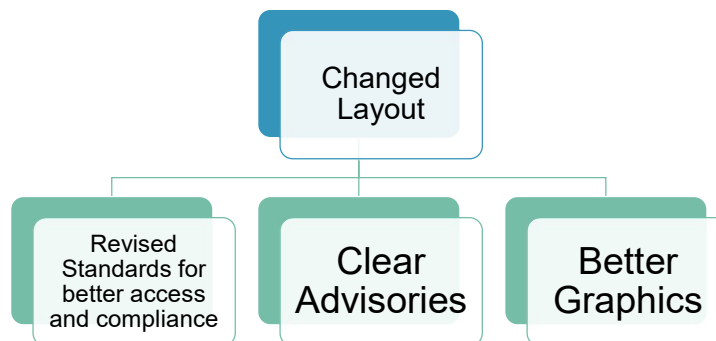
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- I. Saunas and steam rooms
- J. Swimming pools, wading pools, and spas
- K. Shooting facilities with Firing positions
- L. Miscellaneous:
  - (1) Team or player seating
  - (2) Accessible route to bowling lanes
  - (3) Accessible route in court sports facilities

Elements  
in 2010  
Standards  
Not  
Subject to  
Safe  
Harbor

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## 2010 ADAAG



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# Consistency

ADA and ABA guidelines have been merged

The document has been harmonized with model building codes and industry standards

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# ADA-ABA GUIDELINES

1 – Application

2 – Scoping

3 – Building Blocks

4 – Accessible Routes

5 – General Site & Building Elements

6 – Plumbing Elements & Facilities

7 – Communication Elements & Features

8 – Special Rooms, Spaces & Elements

9 – Built-in Elements

10 – Recreation Facilities

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## Chapters 1 & 2

### Application and Scoping Requirements

**ADA** – 100 or 200

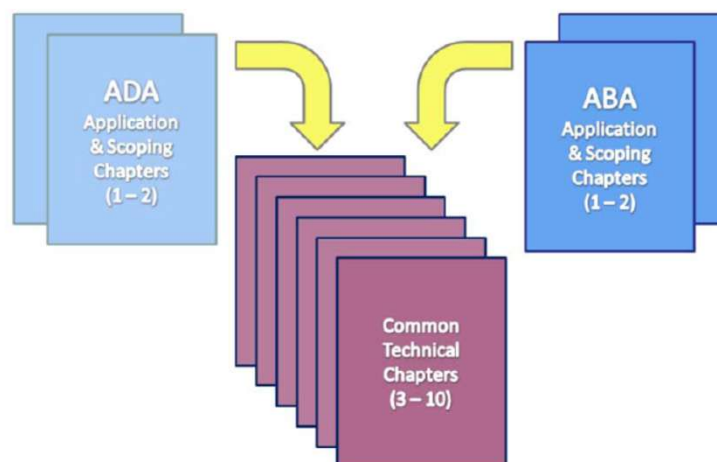
**ABA** – F100 or F200

(80% the same)

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## ADA/ABA Document



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# ADA Is A Federal Law

- The ADA (law) is administered by the Department of Justice
- The guidelines are written by USATBCB, or Access Board
- Guidelines become standards when they are adopted for enforceability

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## Five Titles of the ADA

<b>Title I</b>	Employment
<b>Title II</b>	State and Local Governments (28 CFR Part 35)
<b>Title III</b>	Places of Public Accommodation
<b>Title IV</b>	Telecommunication
<b>Title V</b>	Misc., including requirements for the U.S. Access Board to develop design guidelines

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## Five Governing Authorities

**Department of Justice** – Overall authority

**Department of Transportation** - Transportation related operations and infrastructure

**Department of Defense** – Military Installations

**US Postal Service** - Post Offices

**Department of Housing and Urban Development** – Housing programs and multi-family projects.

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Warning:

DOJ has initiated “**Project Civic Access**” specifically for Title II entities

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## National Cases

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- All 50 States
- All size villages, cities, towns, counties
- Other cases include school districts, colleges and universities

[www.ada.gov/enforcement](http://www.ada.gov/enforcement)

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## DOJ Action in 2015

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McLennan County, Texas	11/16/15
Galveston County, Texas	9/28/15
San Juan County, New Mexico	9/28/15
Cedar Rapids, Iowa	9/1/15
Robeson County, North Carolina	7/29/15
Lumpkin County, Georgia	7/29/15
Champaign County, Illinois	7/20/15
Merced County, California	7/20/15

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# DOJ Action in 2015

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Yakima County, Washington	7/20/15
Pennington County, South Dakota	6/1/15
Chaves County, New Mexico	5/12/15
Madison County, New York	4/22/15
Rapid City, South Dakota	3/2/15
Washington County, Missouri	2/18/15
Nueces County, Texas	1/30/15

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# Supreme Court Decisions

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## Title I

- 3 cases were a split decision;
- 5 cases are wins for persons with disabilities
- 7 cases are losses for persons with disabilities

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# Supreme Court Decisions

## Title II

5 cases are wins for persons with disabilities

0 losses

## Title III

3 cases are wins for persons with disabilities

0 losses

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In 2010, at the 20<sup>th</sup> anniversary of the signing of the ADA, all federal agencies recommitted to enforcing the ADA



Funding is their  
only leverage



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# Federal Recommitment

FAA – Airports

DOT – Bus and Train stations, bus and para-transit operations


FHWA – Authority given to enforce the development of ADA Transition Plans


DOJ – Title II Entities through Project Civic Access, and teamed with HUD on multi-family and housing authority cases



DOE – K – 12s

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# The Letters



  
Federal Highway  
Administration

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Employment  
Emergency  
Planning  
Specialty Facilities

In July 2020, at the virtual 30<sup>th</sup> anniversary of the signing of the ADA, the focus became clear:

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# Examples of Specialty Facilities



Hudson Yard Vessel



Mount Vernon



Indianapolis Motor  
Speedway



Idaho State Capitol



Orpheum Theater



Milwaukee Riverwalk

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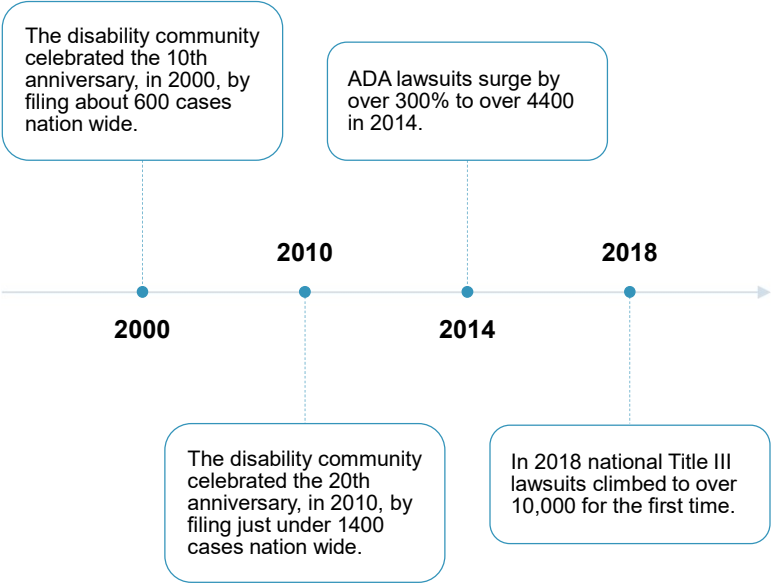
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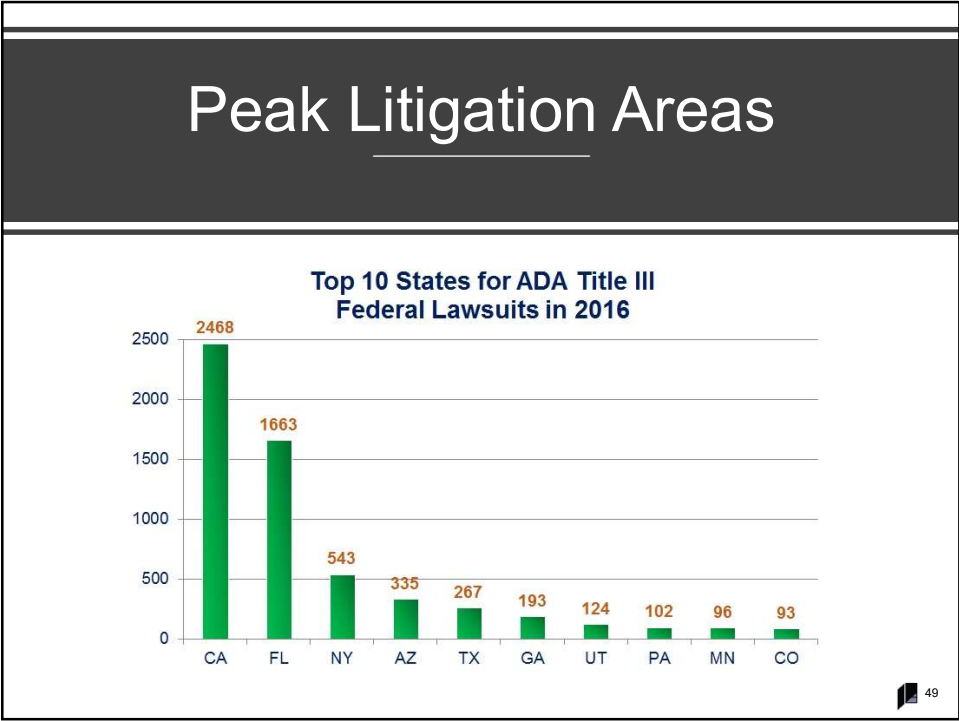
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# Private Litigation

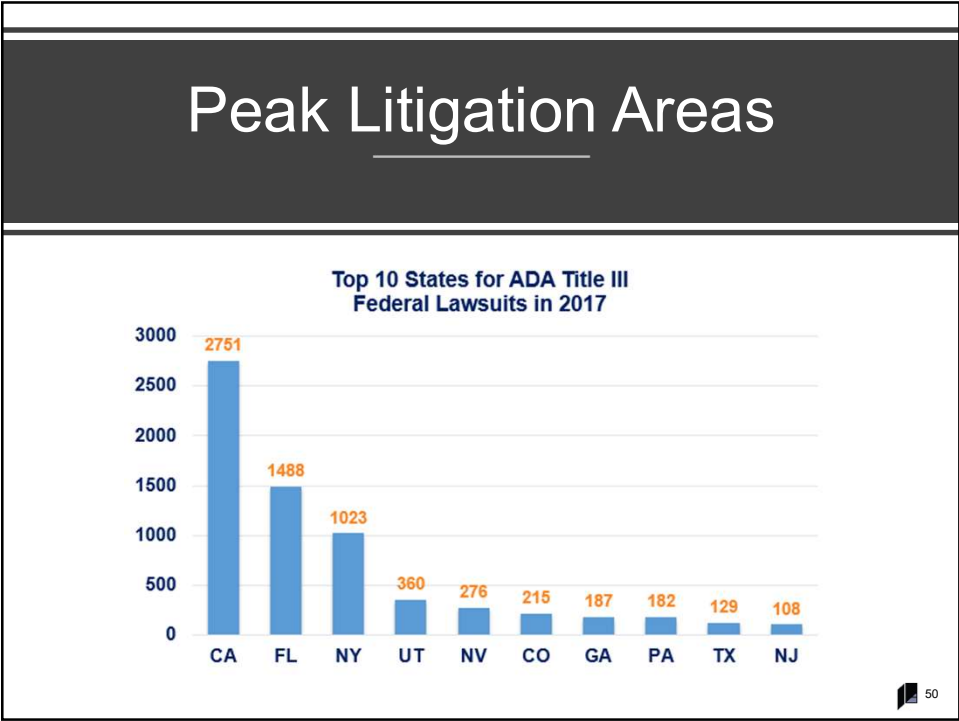
Meanwhile, back in the private sector ....



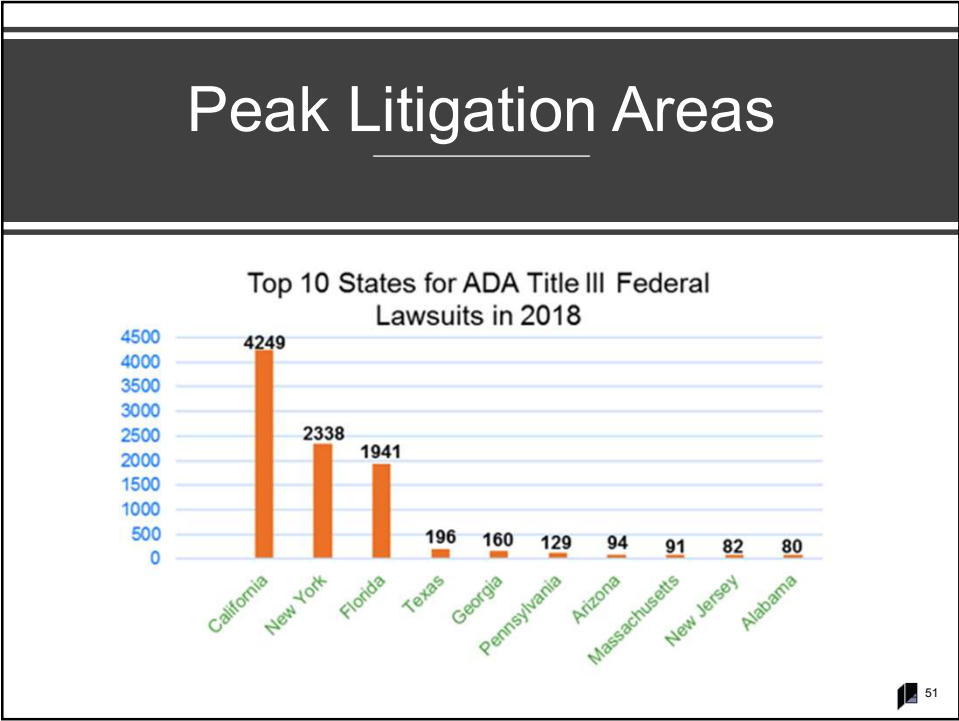




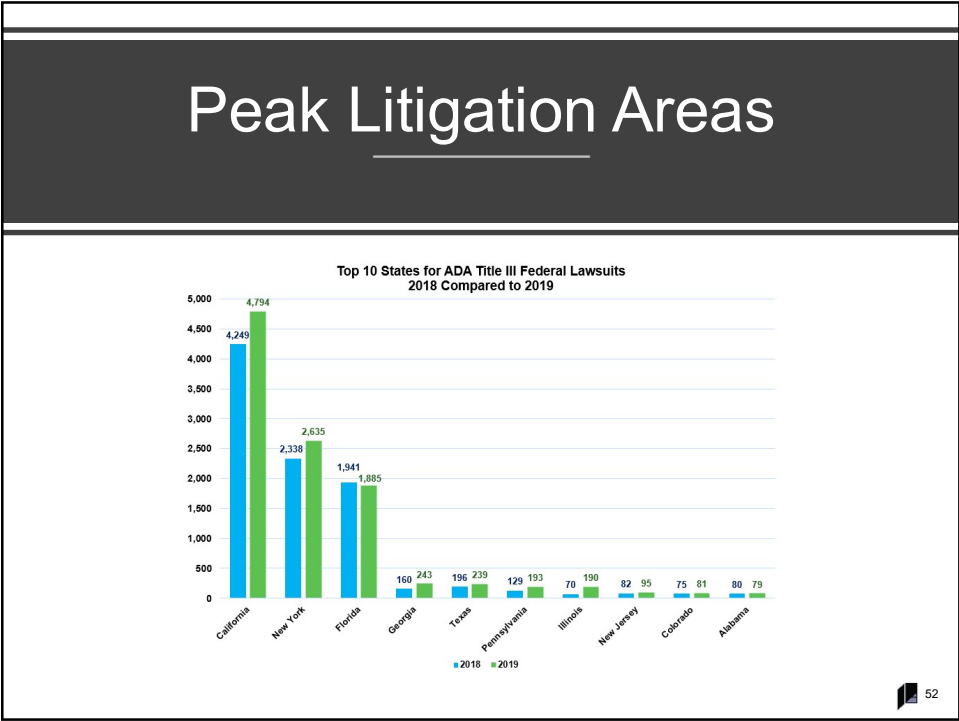
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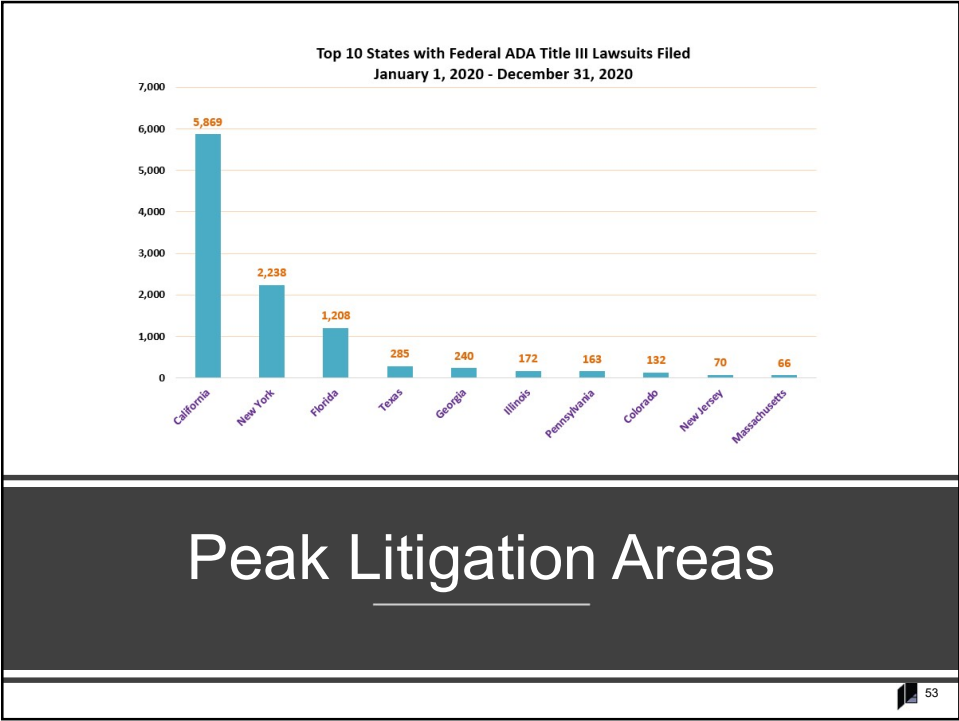
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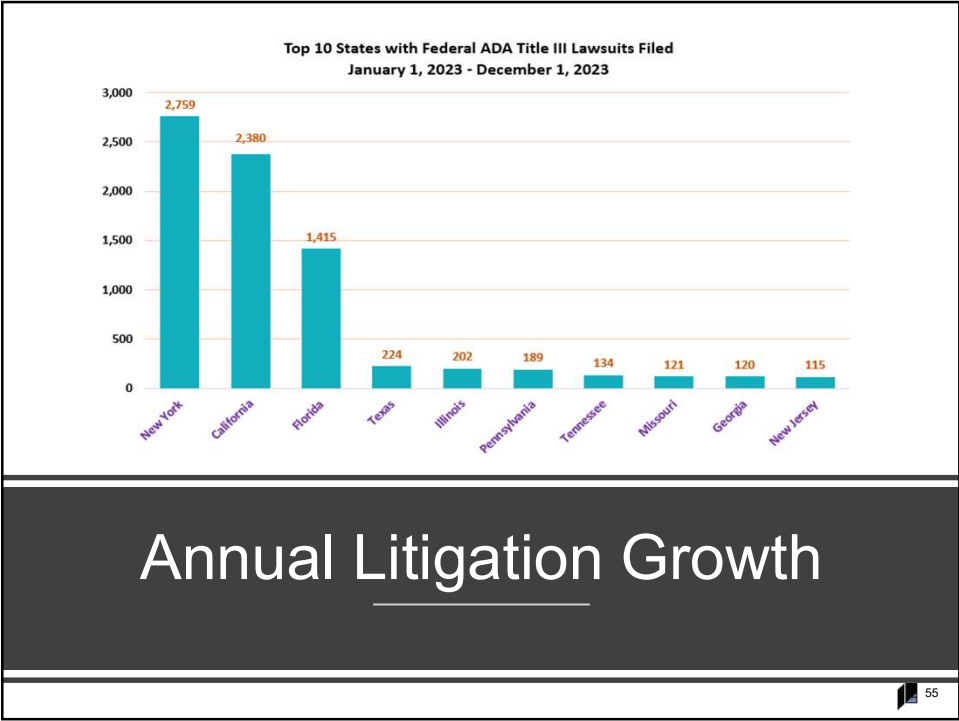
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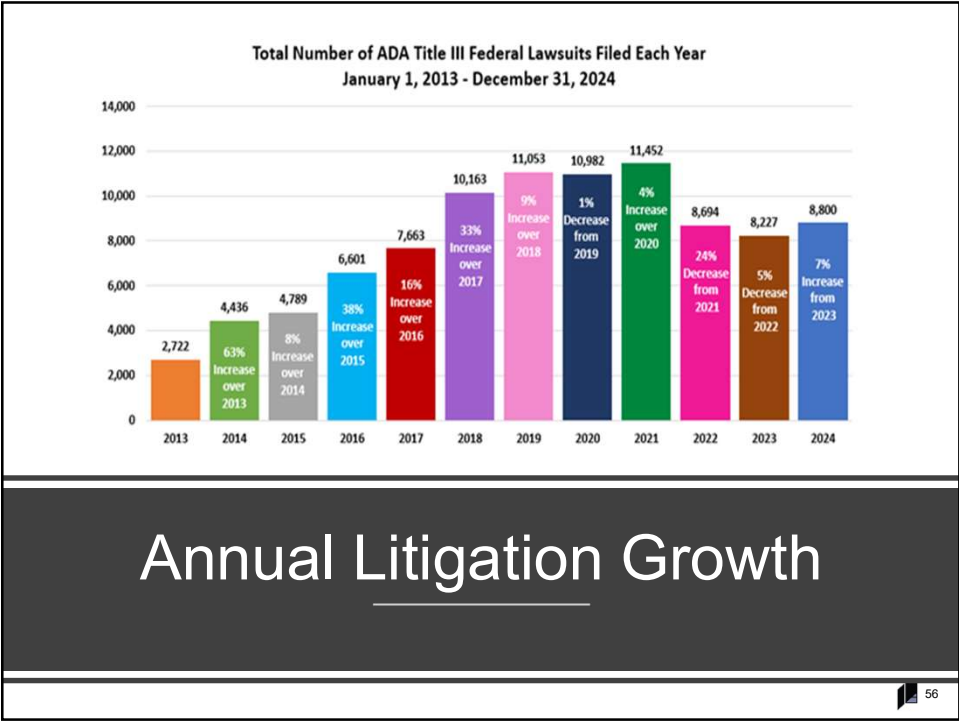
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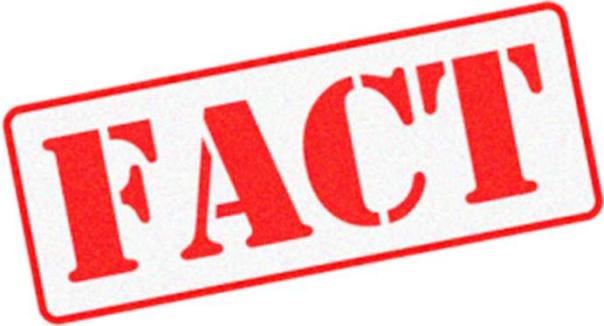


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# Title II Concerns



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City of Los Angeles, \$1.3 Billion Out of Court Settlement

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## Steps to Compliance

- Step 1** - Designating an ADA Coordinator
- Step 2** - Providing Public Notice about ADA Requirements & Establishing a Grievance Procedure.
- Step 3** - Gather where you are!
- Step 4** - Developing internal design standards, specifications, details
- Step 5** - Developing Self Evaluation and Transition Plan
- Step 6** - Approving a schedule and budget to implement the Transition Plan
- Step 7** - Monitoring progress on implementation of the Transition Plan

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### STEP 1: Designating an ADA Coordinator

Person Must be familiar with agency operations

Person must be trained or knowledgeable in ADA and other nondiscrimination laws (Title VI, Title VII)

**Person must have sufficient authority, time, and resources to accomplish the duties**

Possible needs for others to have ADA responsibilities, but ONE PERSON IN CHARGE.

Suggested position locations – Office of CEO, Civil Rights Office, Legal Department, Planning, Public Information...

Regardless of where...must have authority to impact programs

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## Step 2: Providing Notice about the ADA Requirements

The public must be notified about rights under the ADA and the responsibility of the agency under the ADA.

Notice should be on-going/continuous.

Each entity must decide what is effective

Accessible website is recommended at a minimum

Provide the ability to offer comments and follow-up

Public outreach should involve activists, advocacy groups, general citizens, organizations that support the rights of the disabled, elected official, Governor's Council, as well as other agencies (local and State).

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## Step 2: (con't) Establishing a Grievance Procedure

The grievance procedure should include:

A description of how and where a complaint under Title II may be filed with the government entity;

a description of the time frames and processes to be followed by the complainant and the government entity;

information on how to appeal an adverse decision; and,

a statement of how long complaint files will be retained.

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## Step 2: (con't) Establishing a Grievance Procedure

The procedure should enable the filing of complaints in a variety of forms and formats.

Once a state or local government establishes a grievance procedure under the ADA, it should be distributed to all agency heads.

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## Step 3: Gather Where You Are

No doubt work has been done in the past 30+ years ...

Was there an original Transition Plan?

How complete was it?

Is ADA a line item in the budget?

Has anyone reviewed new construction for compliance?

Has HR updated job descriptions and hiring/firing practices?

Have programs ever been reviewed?

When was the last Emergency Plan put in place?

Does it include people with disabilities?

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## Step 4: Developing Internal Design Standards, Specifications and Details

- Use the ADAAG, IBC, and PROWAG
  - Detectable Warnings
  - Policy on use of Accessible Pedestrian Signals
  - Transit/Para-transit & access to stations
  - Furniture/Landscaping Zones
  - Shared Use Paths
  - Trails
- Tolerances should enable compliance
- Don't spec at the limit!**
- Temporary pedestrian facilities/detours
- MUTCD
- PROWAG
- 

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## Step 5: Developing Self-Evaluation & Transition Plan

### Implementation Plan Components

1. A list of physical barriers that limit accessibility to services/programs
  2. A detailed outline of the methods proposed to address the barriers
  3. A schedule for achieving compliance
  4. The name of the official responsible for the plan's implementation (likely department level)
- 

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## Conduct Self-Evaluation

- Programs, Policies, and Practices
- Emergency Programs
- Facilities (Interior and Exterior)
- Transit Stops (bus, train, light rail)
- Vehicles (subway cars, buses, taxis)
- Airports
- Housing programs
- Park programs
- Police/Fire programs

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## Programs, Policies, and Practices

### **Program Access**

All community programs must be accessible to those with disabilities (28 CFR 35.149)

Existing facilities

Community programs

Boards and Commissions

Communication

Methods of achieving program accessibility

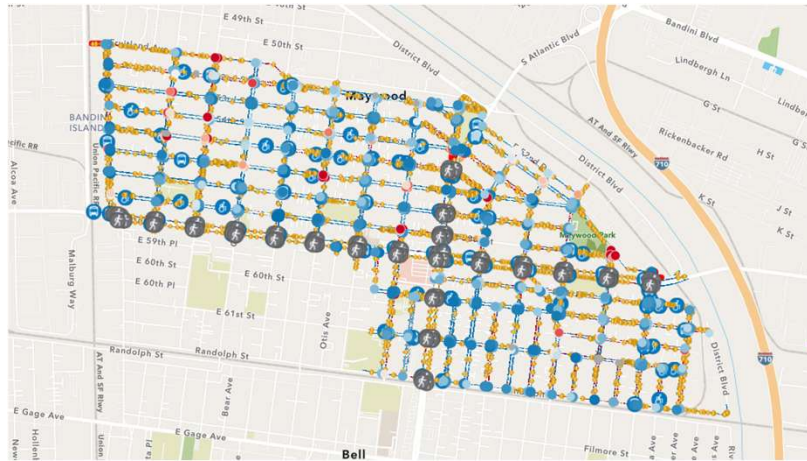
### **Policies and Practices**

Non-discrimination requirements of Title II

Employment (hiring/firing practices, job descriptions)

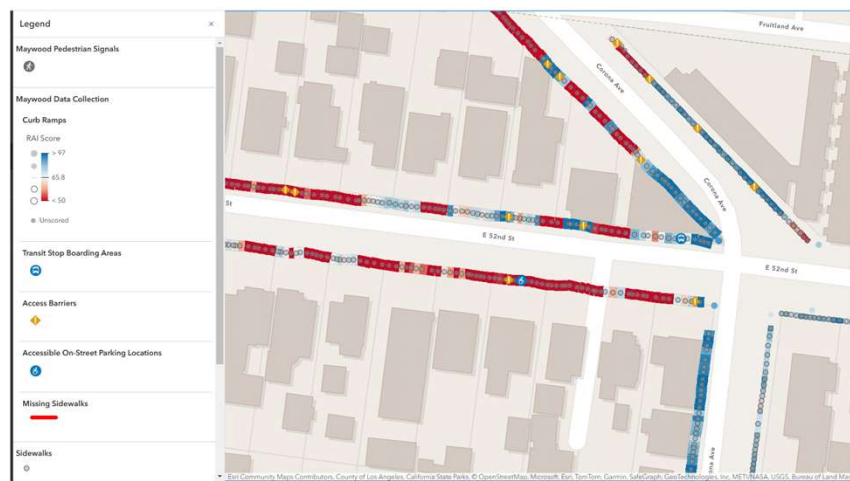
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## Signalized Intersections



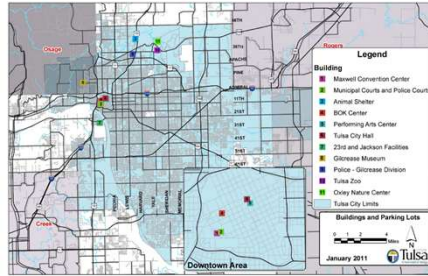
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## Sidewalk Corridors

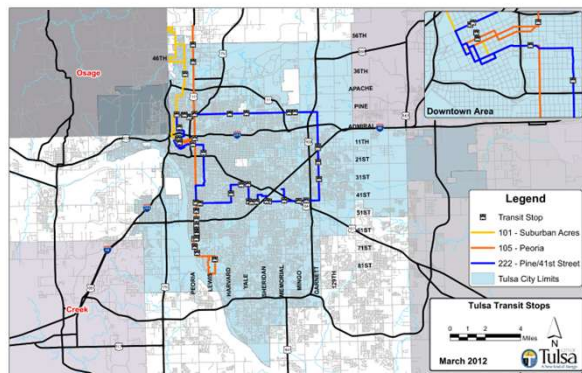


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# Buildings & Parking Lots



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# Transit

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## Conduct Field Assessments

### Field Investigations

- Extensive photos of site investigations
- Detailed data collection forms
- Data management / GIS based system

All public facilities should be included

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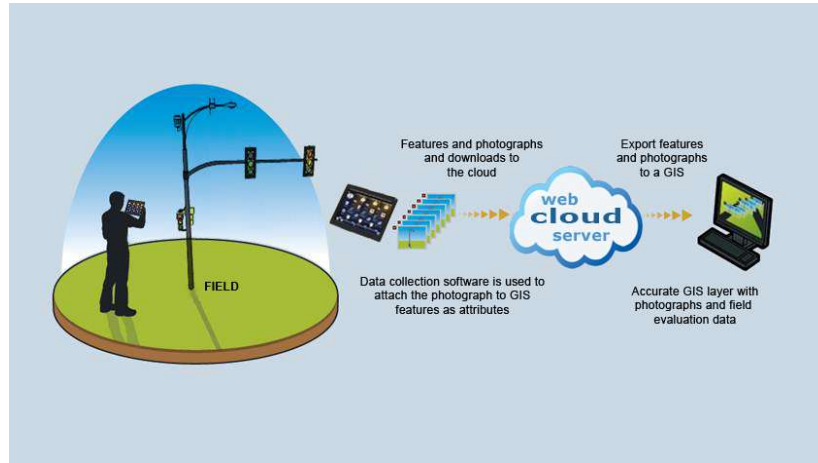
## ArcGIS / GPS based Data Collection

- Integrated data collection system
- Fully customizable field forms
- Integrated digital video camera
- Field data and photos/videos sync with ArcGIS



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## Data Collection Process




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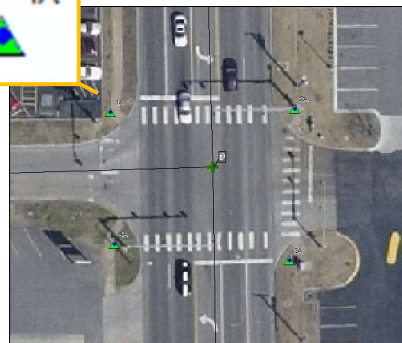
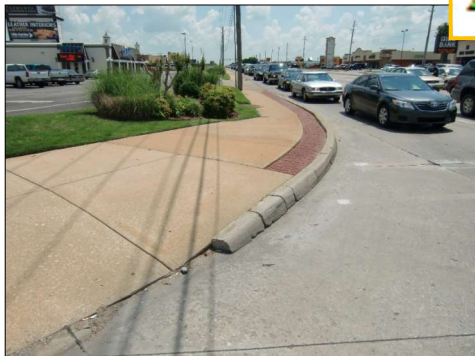
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## GIS – ArcMap Display

## Photo Hyperlink Display

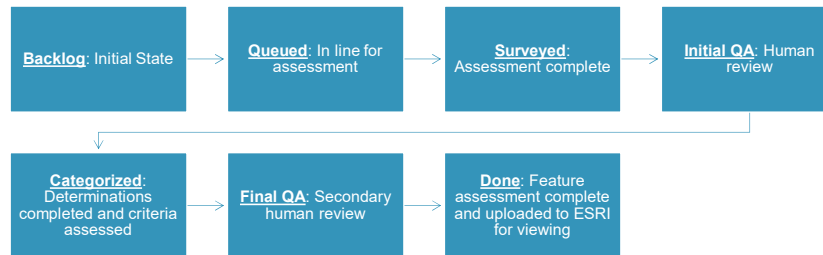
### LEGEND

-  Intersection
-  Ramp with integrated Photos



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## Data Processing Methodology



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## Step 6: Approving Schedule and Budget

Schedule actions each year to address barriers

Regularly occurring programs

say \$X each year for X years

Building, resurfacing, renovation projects...others

Prioritization for exterior elements

Government Centers/Transit/Public Services...

Pedestrian Level of Service

Citizen requests/complaints

Population Density

Presence of Disabled Community

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Evaluation  
Criteria  
Example

Prioritization Factors

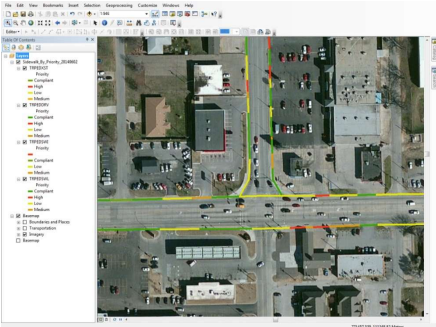
- Severity of issue
- Design
- Height of operable parts
- Clear Floor Space
- Signage
- On an accessible route

Ranking Factors

- Where is it?
- Are there others?
- Number of existing complaints
- Age of element
- Age of building/ code
- Funding availability

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Sidewalk  
Prioritization



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## Develop Cost Projections

- Improvement construction costs
- Architectural/Engineering and surveying costs
- Project contingency



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## Web Site Accessibility

A Title II entity (and all entities subject to 504 compliance) must make their websites fully compliant with Section 508. This includes:

- Descriptive language is required (language should be a text equivalent of the picture)
- Links PDF documents must have enhancement
- Videos must be captioned

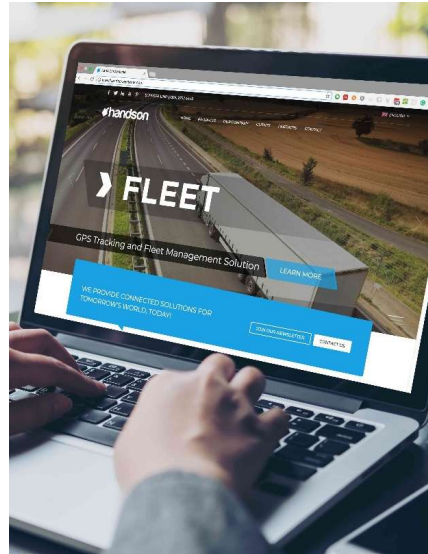
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## Web Site Accessibility

### FONTS:

There are two main concerns:

- Ensuring that default font sizes are not too small
- Ensuring that text can be expanded to 200%



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## Web Site Accessibility

### FONTS:

12-14 points/pixels for body is generally recommended for body text (depending on audience)

Ensure that default fonts are no smaller than 9 points/pixels.

The WCAG Guidelines recommend ensuring that text can be zoomed to 200%

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## Don't Forget

Links to documents and .pdfs that are often overlooked.

Get the website evaluated, but make sure it's a complete evaluation. There are a lot of companies willing to "help" with this.

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## Step 7: Monitoring the Progress

Use Transition Plan in annual planning cycle

Establish baseline from initial inventory

Transition Plan is a "**Living Document**"

UPDATE regularly (annually recommended, no more than 4 years)

Develop a tracking system to monitor progress

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## What about the State Laws?

- States are given a choice
  - Each state can send their version of the standards to DOJ for certification.
  - No state can be less restrictive than the Federal laws
- 

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## Construction Laws:

- There is no requirement to do a thing to remove barriers until construction activity occurs
  - The scope of the project determines what is required to do toward compliance.
- 

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## 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!**
- 

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## Federal Laws:

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

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## Federal Laws:

- The courts will apply a 20% rule to construction projects and accumulate it over time
- Close enough isn't good enough!




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## These Standards Are NOT optional

**2010 ADA and ABA:**  
Compliance **required**  
March 15, 2012



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## ADA (Federal) Enforcement

- 100% complaint driven
- Attorney's fees are built into the law
- Advance notification is NOT required

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## The Federal Process

- A violation is found
- A call is made to the entity
- They ask for the ADA Coordinator
- They ask for the Transition Plan
- A case is filed and three years are given for resolution

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## The Private Process

- A violation is found
- A letter is sent to the owner
- Owner responds ... nothing gets filed (might even get free assistance with the issue)

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## NO RESPONSE?

**EITHER:**  
A second letter will be sent, sometimes by an attorney

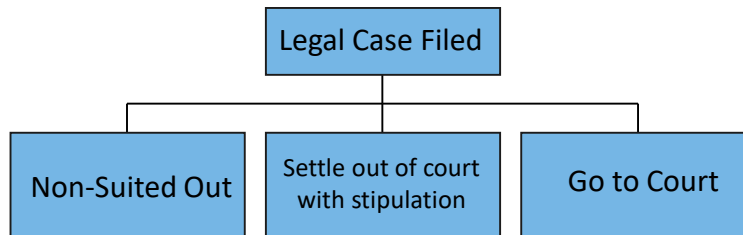
**OR**  
A case is filed

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## If Filed ...



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## Take Control

Building owners are always held responsible. The building owner determines who else is responsible and should be joined into the case



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## ADA Culture of Compliance

**Title II – Government Services:** Must ensure that individuals with disabilities are not excluded from programs, services, and activities (pedestrian facilities are an example of a program).

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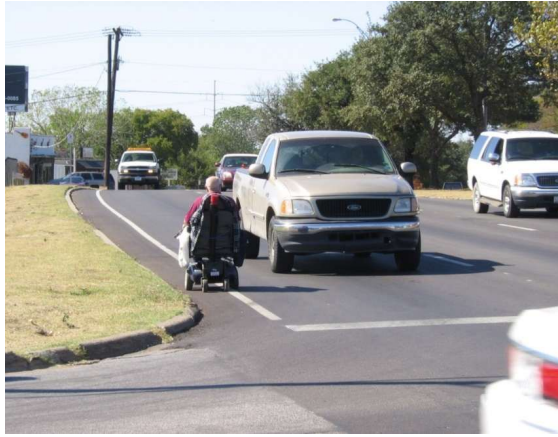
## US Population Statistics

According to the National Center on Aging, as of January, 2011 we are turning 65 at the rate of 10,000 people per DAY and will continue to do so until 2026



3-3-1918

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## Title II - State and Local Governments

### Basic Requirement:

Must ensure that individuals with disabilities are not excluded from programs, services, and activities (pedestrian facilities are an example of a program)

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## The Pedestrian Environment



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## Existing Facilities

Undue Burden 28 CFR  
35.150(a)(3)

- Based on all resources available for a program
- Claims must be proven and accompanied by a written statement of reasons and signed by the head of the public entity
- What constitutes undue burden will often be decided in courts



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## Maintaining Accessibility (28 CFR 35.133)

State & local governments must maintain the accessible features of facilities in operable working conditions

Maintenance examples: sidewalks that are in disrepair; overgrown landscaping; snow accumulation; broken elevator; work zone accessibility (if construction activity affects pedestrian facilities – provide alternate route if more than temp. disruption)



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## Let's talk about the PROW Guidelines (PROWAG)



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### Public Right-of-Way Accessibility Guidelines (PROWAG)

Originally intended to supplement the ADAAG to provide standards specific to public rights-of-way; most recently formatted as a stand-alone document

Applicable to new construction and alterations (of existing facilities)

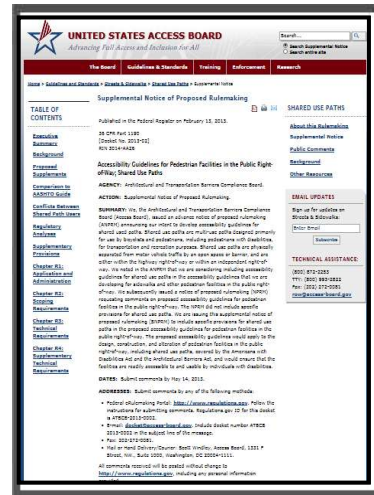
Undergoing the rulemaking process (2011 Notice of Proposed Rule Making published w/ updated guidelines)



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## Supplemental Notice of Proposed Rulemaking Public Right-of-Way Accessibility Guidelines (PROWAG)

2013 Version incorporates shared use path guidelines into the 2011 PROWAG (web only)



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## Rulemaking Update

- Final Rule has been published
- It's been adopted by GSA and most state DOTs
- Waiting for the Department of Justice to adopt



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## Way before it was published ....

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”

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## What Should State and Local Agencies Do?

- Develop Policy
- Work it into your standards
- Educate
- Enforcement at local level

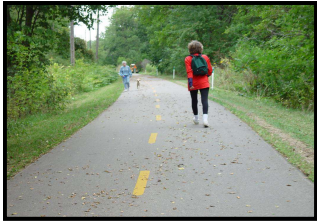


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# Types of Pedestrian Facilities



Sidewalks



Shared-use Paths



Shoulders

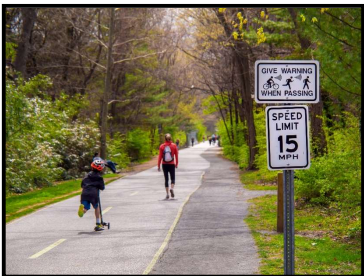
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111

# Types of Pedestrian Facilities



Pedestrian Access Route  
Pedestrians only



Shared Use Path  
Pedestrians and bikes

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# Types of Pedestrian Facilities



Pedestrian Access Route  
Pedestrians only



Shared Use Path  
Pedestrians and bikes


113

# Trail Pedestrian recreation



PAR vs. SUP  
vs. Trails

114




## Key elements were highlighted

- Crosswalk width
- On street parking
- Walking speed and pedestrian signal phase timing
- Elevators at overpasses and underpasses
- Same side alternate circulation routes

---

115



## Key elements were highlighted

- Cross slope in crosswalks
- Detectable Warnings
- Accessible pedestrian signals
- Roundabouts and round about signalization
- Alterations vs. maintenance

---

116

These issues were addressed in the 2nd draft:

Reference manual on uniform traffic control devices (MUTCD) for crosswalk width

Reduced scoping in on street parking to be consistent with parking lots

Set walking speed at 3.5 fps

Increase vertical access allowances at overpasses and underpasses (ramps, lifts or elevators)



117

117

Modified the technical requirements to be more consistent with MUTCD

Provided relief for maximum cross slope limits in pedestrian cross walks at mid block and through street locations.

Clarified the placement of detectable warnings on curb ramps landings and blended transitions.

These issues were addressed in the 2nd draft:

118

These issues were addressed in the 2nd draft:

Clarified the new construction requirements for APS installation

Limited pedestrian signalization at roundabouts and channelized turn lanes.

Clarified maintenance vs. alterations



119

Alterations  
vs.  
Maintenance

Alterations

- Open-graded surface course
- Cape seals
- Mill & Fill / Mill & Overlay
- Hot in-place recycling
- Microsurfacing / Thin lift overlay
- Addition of new layer of asphalt
- Reconstruction
- New construction

Maintenance

- Crack filling and sealing
- Surface sealing
- Chip seals
- Slurry seals
- Fog seals
- Scrub sealing
- Joint crack seals
- Joint repairs
- Dowel bar retrofit
- Spot high-friction treatments
- Diamond grinding
- Pavement patching

120

## Alteration Requirements

Alteration Type	Address Ramps? *	Address Sidewalks?
Addition of a new layer of asphalt	Yes	No
Cape seals (combo of chip / slurry)	Yes	No
Hot in place recycling (HIPR)	Yes	No
Microsurfacing / thin-lift overlay	Yes	No
Mill & Fill / Mill & Overlay	Yes	No
Reconstruction	Yes	Yes
New construction	Yes	Yes

\* Curb ramps are needed wherever a sidewalk or other pedestrian walkway crosses a curb.

121

Here are the results of the 10 highlighted issues:

Accessible pedestrian signals (The clear level area in front of the controls may slope consistent with the adjoining pedestrian route)



122

## The Reality Is ...

Most funds are used to repair, alter or maintain existing elements. Not build new ones.



123

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



124



## What is “Technically Infeasible”?

With respect to an alteration of a building or a facility, that it has little likelihood of being accomplished because existing structural conditions would require removing or altering a **load bearing member** which is an essential part of the structural frame;

---

125




## What is “Technically Infeasible”?

or because other existing physical or **site constraints** prohibit modifications or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements.

---

126



## NOTE:

Cost is NOT a trigger of infeasibility in alterations!

---

127



## Planning is KEY!

- **Compliance is measured by the governing standards ...**
- ADA
- IBC
- 504
- Civil Rights Restoration Act
- State or local codes

---

128





## Who is subject?

All privately funded places of public accommodation, and state and local government entities are covered by this requirement. Regardless of whether state or local governments directly or indirectly manage or delegate the development of facilities in the public right of way to the private sector, the same obligations apply.

---

129



## Physical Constraints

All project will have physical constraints from existing conditions. Know them and plan for the resolution early in the process.

- Coordinate efforts with all parties involved in the project
- 

130

## 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.

---

131

## Case Study:

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There's a problem placing a compliant curb ramp in a preferred location due to utilities underground.



132

## Case Study:

### Consider these options:

- Use an alternate form of the curb ramp (parallel, combination, perpendicular)
- Identify an alternate location for the ramp
- Widen the crosswalk to include the curb ramp

133

## Case Study:

### Consider these options:

- Borrow space from the parking lane or roadway
- Adjust the horizontal and/or vertical roadway geometries
- Extend the curb ramp through the gutter-pan area
- Raise the roadway surface at the gutter

134

## Case Study:

### Consider these options:

- Lower the curb height
- Raise the crosswalk
- Add a curb extension to “grab” needed (and often more level) space for pedestrian facilities at corners.

135

## Case Study:

### Consider these options:

- Shield the sides of a ramp with signs, sidewalk furnishings, and setbacks to eliminate the need for space-intensive flared sides: or
- Ramp a sidewalk down to an intermediate level landing

136

## If Alternatives Don't Work With Project Constraints:

**Favor approaches that have less user interruption, such as:**

- Modify curb ramp flare space requirements (the flare is not part of the required pedestrian access route) or use returned curbs

137

## If Alternatives Don't Work With Project Constraints:

- Construct a single curb ramp that can do the work of two
- Shave millimeters from a landing or decimals from the running or cross slope of a ramp

138

## If Alternatives Don't Work With Project Constraints:

- Use a short length of blended or warped sidewalk that can be replaced during a future improvement to connect to existing undisturbed facilities
- Blend non-conforming pavements in segments that provide as much planarity as possible for the wheelbase of a mobility device

139

## 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.

140

## Project Scope:

- Project Scope defines the purpose of the project.
- Physical constraints further define the scope



141

## Project Scope:

This new parallel curb ramp on a large-radius suburban corner curves down to the street and is otherwise usable, but the ped-button isn't.

Installation on a signal pole, it is out of horizontal reach range for this pedestrian.



142

## How do you know if you Maximized Accessibility?

An owner 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?

143

Whichever provides the MOST access!



144



## REMEMBER:

### **Someone may not agree:**

- You may have to defend any decision you make, even if approved by a local authority.
- Ensure decisions are carefully thought out and documented.

145

## Suggestions for Consideration:

- Expand the depth of the analysis and think outside the box
- Seek assistance from people with disabilities in the community
- Recognize that the first solution to a problem will not often be the best
- Keep track of everything considered. Document the analysis work, findings, and decisions.

146

## Suggestions for Consideration:

- Select the solution that best balances the needs of all users
- Network with others. Consult with peers in other agencies and firms.
- Attend continuing education classes that focus on accessible design
- Develop, adopt, and use a standard method of design review and approval

147

## Most Importantly ...

Be prepared to defend your decisions in a potentially adversarial situation.



148

All  
Projects,  
All Types  
of  
Funding

- Plan access features
- Establish design criteria
- Consult technical information
- Research products
- Confirm budget
- Consult technical consultant

149

Communication is Key!



150



## Planning the scope of work

- What does the project intend to do?
  - What pedestrian accessibility features need to be incorporated?
  - Where are the project limits?
  - How will the new intersect with the existing conditions?
- 

151



## Planning the scope of work

- How will the project be funded?
  - How realistic is the budget?
  - What citizens with disabilities are in the area?
  - Have they made any complaints known?
- 

152

## Planning the scope of work

- 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

153

## Best Practices



- Crosswalks provide unmistakable routes
- Signage can help avoid a lot of problems.

154

## Remember:

ADA requires accessible routes to be maintained in an accessible condition



155

## Surfaces



3-156

156

## Surfaces

### Surface requirements:

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

### Desired:

- Smooth and free of rough textures



3-157

157

## Surfaces



Properly installed and well-maintained brick can work.

3-158

158



## Surfaces

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



159

## 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

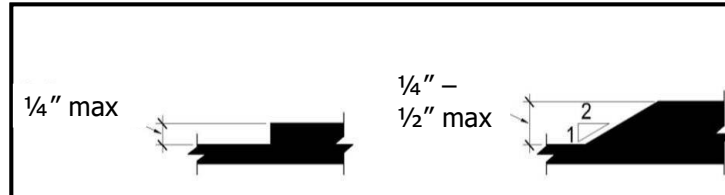
NCA's website - <http://www.ncaonline.org/>

160

160



## Pedestrian Access Route (PAR)



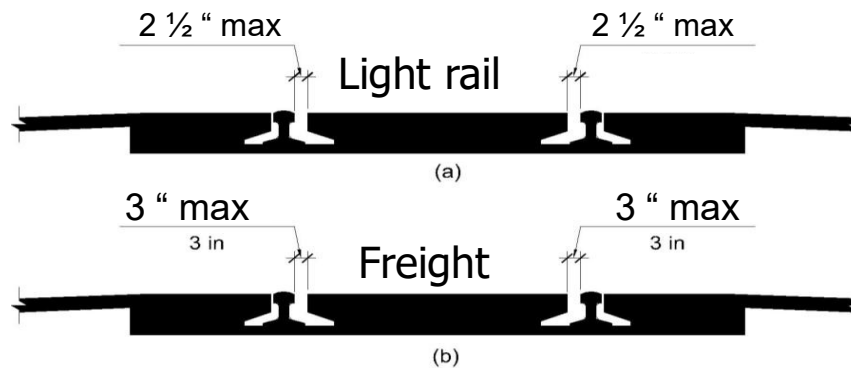
Changes in level provisions – does not apply to grade breaks



161

161

## Pedestrian Access Route (PAR)



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

162

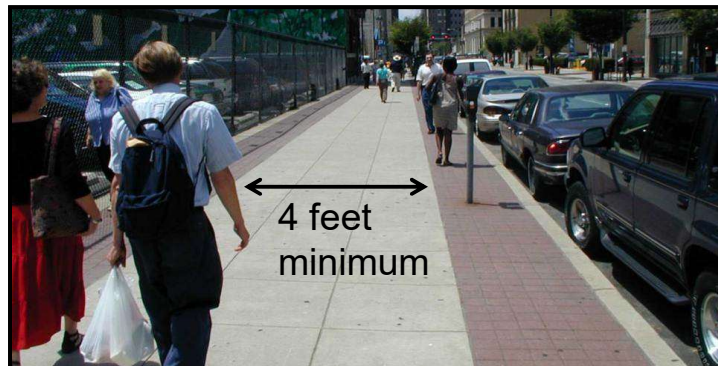
## Pedestrian Access Route



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

163

## Pedestrian Access Route (PAR) Width



Width exclusive of the curb - 4 feet minimum

164

## Pedestrian Access Route Width

---



Watch for obstructions to the required path of travel.



165

## Pedestrian Access Route



Continues around all obstructions

---

166

## Pedestrian Access Route (PAR) Running slope

Running slope - can follow adjacent roadway grade



167

## Pedestrian Access Route (PAR) Running slope

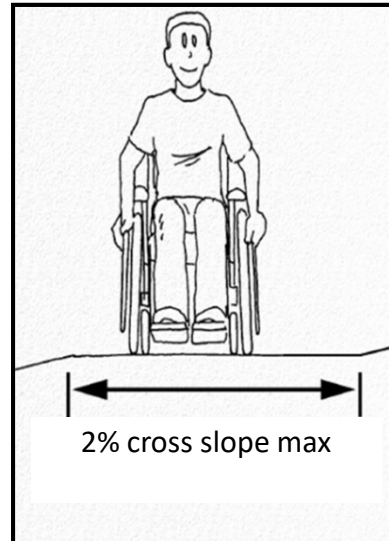
What it looks like if the building guidelines are applied



168

## Pedestrian Access Route (PAR) Cross Slope

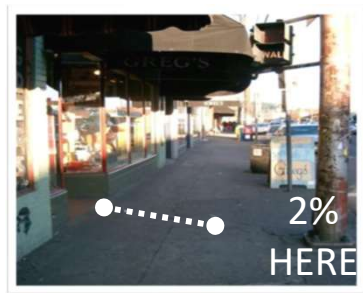
- 0% best for wheelchair users
- Some slope needed for drainage
- Max cross slope 2%
- Design accordingly



169

## Pedestrian Access Route (PAR)

Cross Slope: 2% maximum



170

## Pedestrian Access Route(PAR)

If you have the space  
this can work



171

## Ramps



172



## Ramps

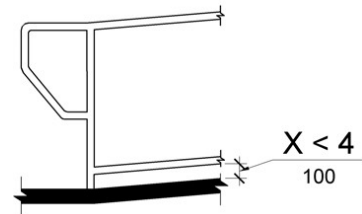
- Slope: 1:12 max.
- Cross slope: 1:48 max.
- Clear width: 36" min.
- Rise: 30" max.
- Level landings
- Handrails (both sides)
- Edge protection



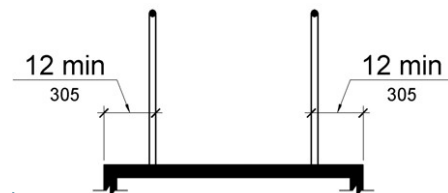
173

## Ramps – Edge Protection

Barrier (rail or curb) ►



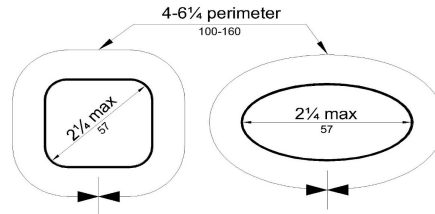
Extended Platform ►



174

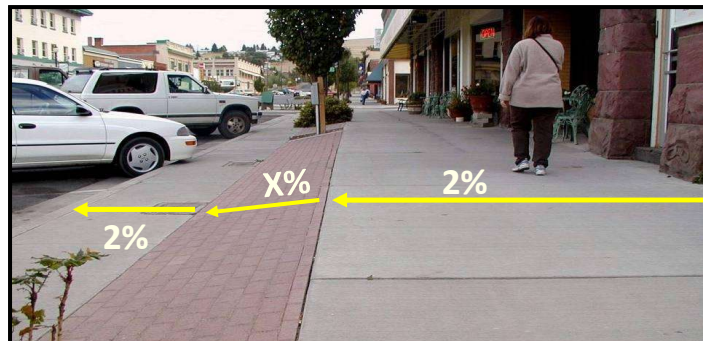
## Handrails

- Knuckle clearance: 1 ½" min. (not absolute)
- Diameter: 1 ¼" – 2" (instead of 1 ½" max.)
- Applies to outer diameter (clarification)
- Circular & noncircular cross sections



175

## Pedestrian Circulation



Slope determines requirements

176



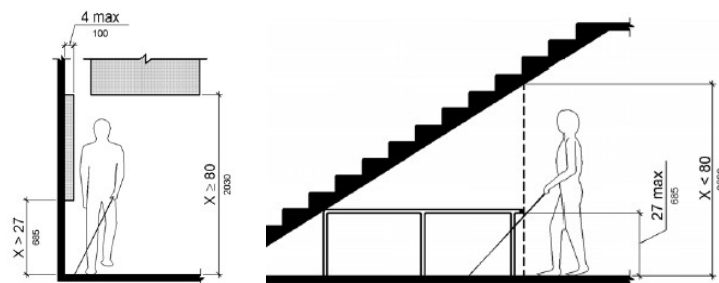
## Pedestrian Circulation



Watch overhead requirements for the entire route

177

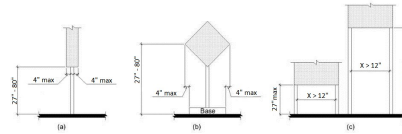
## Protruding Objects



178

## Pedestrian Circulation Area

- Objects between 27" and 80" may not protrude more than 4"
- Post mounted objects must not protrude more than 4" beyond the base

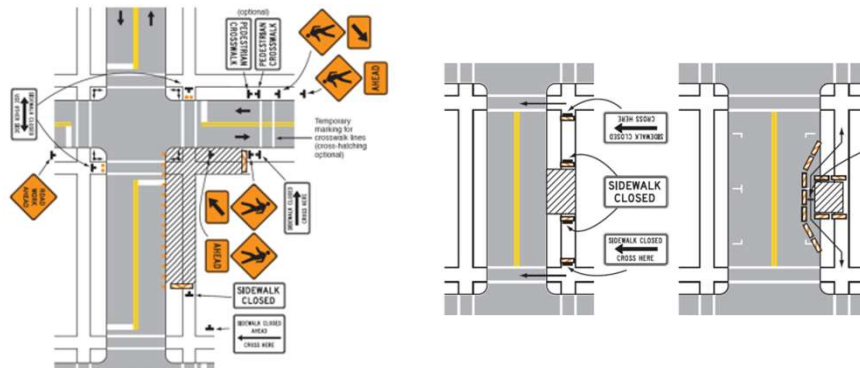


179

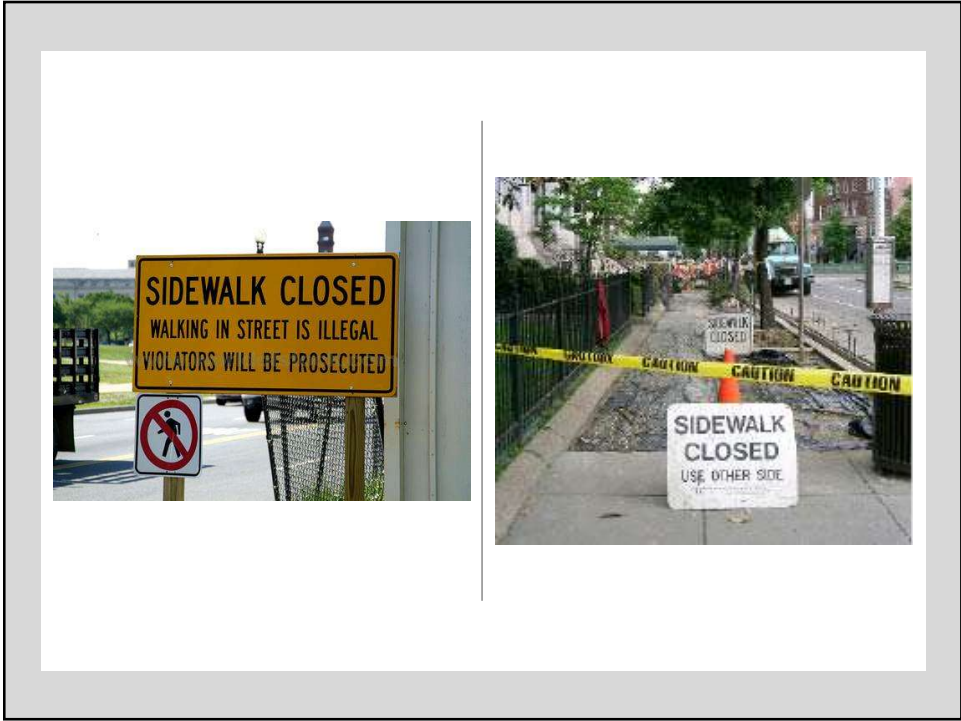
179

## Alternate Pedestrian Access Routes and Work Zones

- Reference to MUTCD Part 6
- Temporary Traffic Control



180



181



182

# Alternate PAR

Pedestrian delineation with a continuous detectable edge



183



# Alternate PAR

Pedestrian delineation with a continuous detectable edge

184

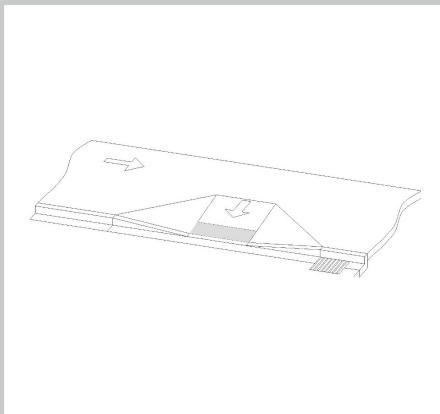


## Curb Ramps and Blended Transitions

185

## Perpendicular Curb Ramp

Perpendicular to the curb or street being crossed



186

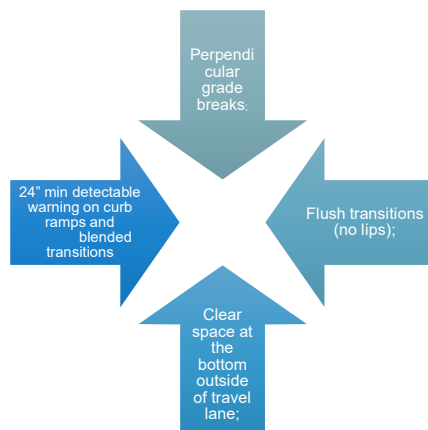
## Curb Ramp Basics

- 4' minimum width
- 1:12, or 8.3%, max running slope (with length limit as exception to slope limit);
- 1:48, or 2.08%, 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;

187

187

## Curb Ramp Basics



188

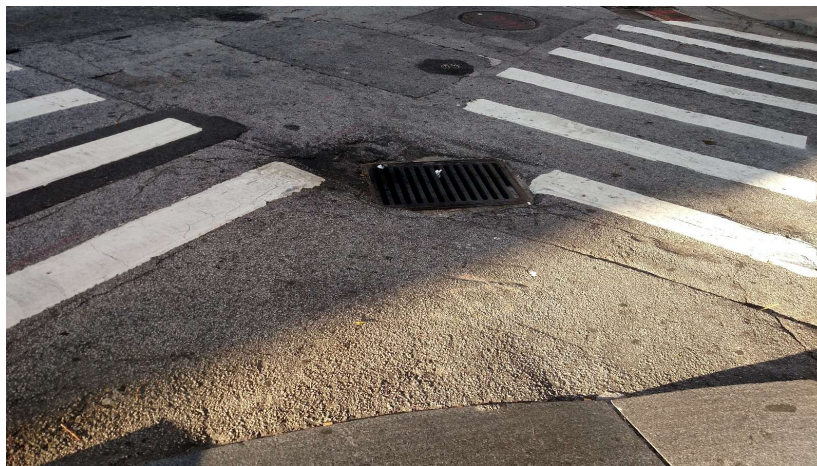


Counter  
slopes and  
level  
changes are  
a liability



189

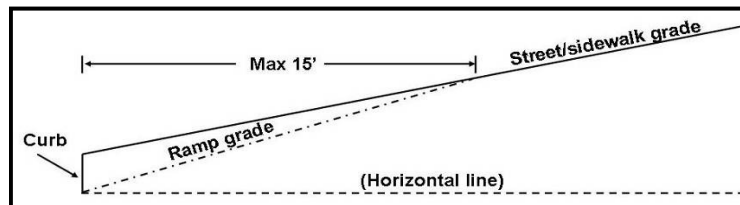
Connecting to what?



190

190

## 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

191

## Curb Ramps

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

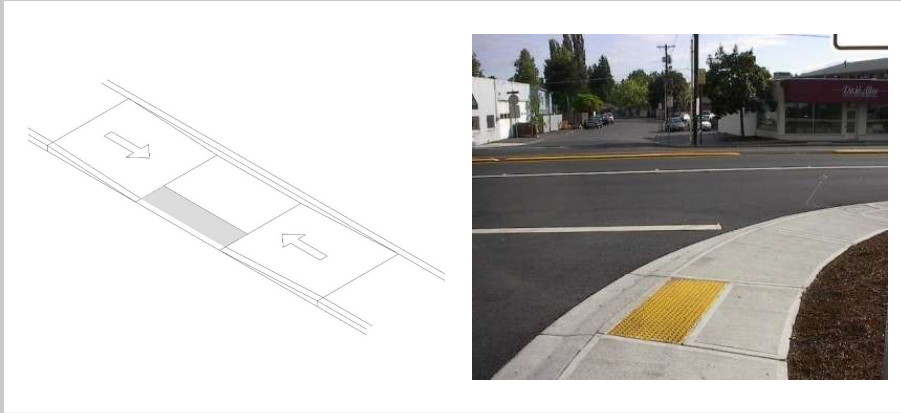


192



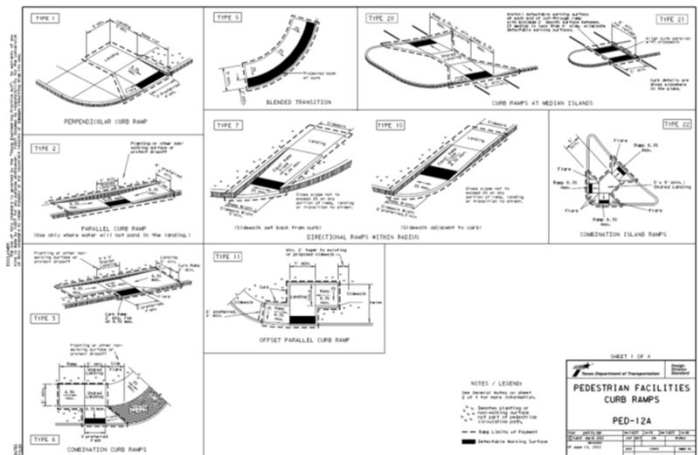
# Parallel Curb Ramp

Parallel to the curb or street being crossed



193

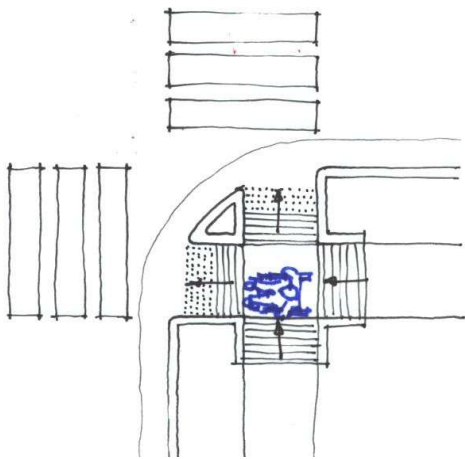
## TX-DOT Standards



194



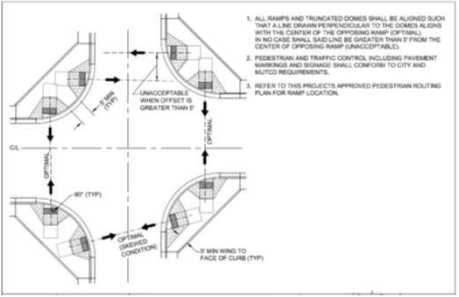
# Combination Curb Ramp



197

197

We recommend developing standards for dual directional ramps



198

# Curb Ramps & Blended Transitions



Perpendicular



Parallel



Blended Transition



Steps at Corner:  
Before

Sometimes it's  
tough!





But it CAN be done!



201



202

Effective November 23, 2013



New construction and alterations

203

203

## Covered

Facilities constructed or altered by:

- Federal agencies
- Non-federal entities constructing facilities on federal land on behalf of federal agencies e.g., a concession contract, partnership agreement, or similar arrangement

## Not Covered

- Facilities subject to ADA
- ADA facilities built or altered with Federal grants and loans (ABA)

204

## Options for those Not Covered

**ADA-** However, where no standard exists...

General non-discrimination prohibition and program accessibility requirements for state and local governments apply (includes TRAILS, PICNIC AND CAMPING ELEMENTS, VIEWING AREAS)

Local authorities can ADOPT the ODAAG for local enforcement

205

## Scoping

### **ABA Chapter 2: Scoping Requirements**

F244 Camping Facilities

F245 Picnic Facilities

F246 Viewing Areas

F247 Trails

F248 Beach Access Routes

### **Architectural Barriers Act (ABA) Standards (2015)**

Note: This edition includes new provisions for outdoor developed areas and emergency transportable housing.

Adopted by the:  
Department of Defense (2008)  
General Services Administration (2005)  
U.S. Postal Service (2005)



206

## Technical Requirements

### **ABA Chapter 10: Recreation Facilities**

- **1011** - Outdoor Constructed Features
- **1012** - Parking Spaces within Accessible Camping Units and Picnic Units
- **1013** - Tent Pads and Tent Platforms
- **1014** - Camp Shelters
- **1015** - Viewing Areas
- **1016** - Outdoor Recreation Access Routes
- **1017** - Trails
- **1018** - Beach Access Routes
- **1019** - Conditions for Exceptions

207

207

## Conditional Exceptions

- Apply on a provision-by-provision basis
- Where full compliance with a technical provision is not possible because of the limitations and constraints included in the conditional exceptions... “extent practicable”

208

208



## Conditional Exceptions

When applying conditional exceptions to portions of the trail results in exempting the entire trail or beach access route from the technical provisions...

Notify the Board where an entire trail or beach access route is exempted

209

## ADA “Accessible Route”

How does it apply?

210



211

## Categories of Disability

- Autism
- ADHD
- Blind/Low vision
- Deaf/Hard of Hearing
- Dementia

- Mental Illness
- Intellectual Disability
- Learning Disability
- Physical Disabilities

212

## Federal Law (ADA):

Don't forget the 20% rule for construction projects



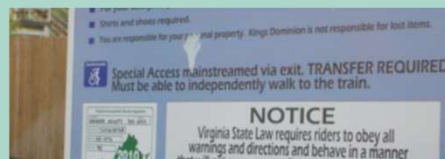
213

213



## Amusement Rides

Sections 234 and 1002



214

## Amusement Rides

Floor and ground surfaces

Turning space (5ft or T-turn)

Slope not to exceed 2%

Vertical discontinuities (5/8")

Gaps (not to exceed 3")

Clear floor space requirements

Protrusion exceptions



215

## Amusement Rides

Must have one of the following per ride:

Wheelchair space - OR -

Ride designed for transfer

Use of transfer device

Which one is entirely your choice



216

216



## Recreational Boating Facilities

Sections 235 and  
1003



217

## Recreational Boating Facilities

- Accessible boats slips are required according to the table in Section 235.2. If the number of slips is not clear, each 40 feet of boat slip edge along the perimeter of the pier shall be counted as one boat slip.
- Accessible boat slips shall be dispersed between different types of slips provided.
- Number of boarding piers at boat launch ramps required to be accessible.



218

## Boarding Piers at Boat Launch Ramps

Where boarding piers are provided at boat launch ramps, at least 5 percent, but no fewer than one, of the boarding piers shall comply with 1003.3.2.



219

## Gangway Slope – Connecting floating facilities



Design for 1:12 maximum slope OR provide at least an 80 foot gangway

220



## Gangway Small Facilities

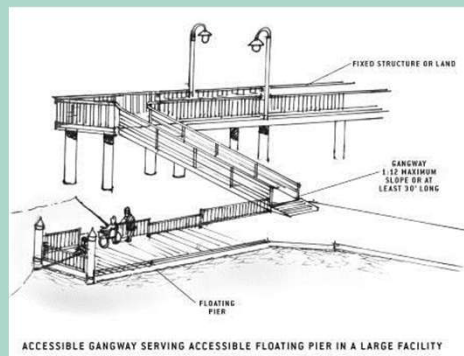


Less than 25 boat slips, the slope of the gangway may exceed 1:12 (8:33%), if the gangway is at least 30 feet long

221

## Accessible Gangway

- Accessible routes serving floating piers/platforms
- Use boating gangway exceptions
- Design gangway to 1:12 OR provide up to a 30 ft. gangway



222

## Transfer Methods

Not required by the standards



223

## Fishing Piers and Platforms

Sections 237 and  
1005



224



## Fishing Piers and Platforms

- Served by an accessible route
- When a railing is provided, at least 25% of the railing must be no higher than 34"
- Disperse lower railing areas



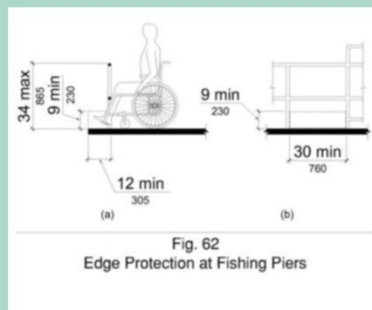
**Exception:** where a guard is provided which complies with ICC/IBC

225

225

## Fishing Piers and Platforms

- Edge protection where railings are provided
- 2 inch minimum
- 30 inches x 48 inches clear space
- At least one maneuvering space



226

226

## Exercise Equipment

Sections 235 and 1003



227

## Exercise Machines and Equipment

At least one of each type of equipment offered must have an accessible route to it and clear floor space serving it



228

## Play Areas

Sections 240 and  
1008



229

Questions?

230




**ACCESSOLOGY**

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