Accessibility Guidelines for Outdoor Developed Areas “Trails”

Session Objectives

- Define “Trail” as it applies to the guidelines
- Identify Users of Accessible Trails
- Review a Brief History of Trail Accessibility Guidelines
- Identify When, Where and to Whom These Rules (Guidelines) Apply

Session Objectives:

- Review the Critical Components of “Accessibility Guidelines for Outdoor Developed Areas - Trails”
- Review Guideline Conditions for Exceptions
- Understand Other Power Driven Mobility Devices (OPDMD). What does this mean for trails?

What is a Trail?

- A pedestrian route developed primarily for outdoor recreation purposes.

Hiking is the experience. Not just a way to get to another facility or a transportation route.
What is not a Trail?
Pedestrian routes connecting facilities, spaces or elements within a site.

- Outdoor Recreation Access Routes (ORAR’s)
- Exterior Routes of travel (ERT’s)

Shared Use Paths
- Used for transportation

Who are we Designing and Constructing These Trails for?
Base line Statistics For Potential Hikers With Disabilities

139 Million or 45% of U.S. Population

History Of Accessible Trails

The Architectural Barriers Act Passed in 1968 (Built Environment)

• There are over 30 million people with a disability in the US
• There are over 35 million people over the age of 65 in the US
• 45% of those people have a disability
• 31% of the people in the US (93 million) are obese
• There are 16 million children under 4 years old
The Architectural Barriers Act

Whom do the Guidelines Apply to?

- Federal land management agencies
- Private entities constructing or altering trails on federal lands (concessions)
- State or public entities constructing or altering trails on federal lands (via agreements requiring federal approval or on federal property)
- Non-profit organizations entering into partnerships with federal agencies to construct, or alter trails on federal lands.

1990: Americans With Disabilities Act of 1990 (ADA)

1997: Regulatory Negotiating Committee on Accessibility Guidelines for Outdoor Developed Areas was Formed “REGNEG”

1999: REGNEG produced its proposed guidelines

2005: California State Parks Adopts Guidelines as policy

2007: Report was subjected to public review & comment under the Architectural Barriers Act (ABA) (October 2007)

2009: Report was revised “Draft Final Guidelines” and sent out for additional comments

Near Future: Trails guidelines incorporated into Architectural Barriers Act (ABA)

Are Guidelines Law?

- Access Guidelines are not law until incorporated into ABA (Federal Agencies) and ADA (State and Local Agencies)

- Until the Access Guidelines Become Law They Represent the “Best Available Information” on Accessible Trail Design.

- California State Parks and Federal Government have adopted guidelines as policy.
Title II of the ADA states:

*A public entity may not deny the benefits of its programs, activities and services to individuals with disabilities because its facilities are inaccessible.*

• This could be applied to trails on public lands

Do all trails have to be accessible?

• Guidelines mandate you follow a process to address accessibility, but do not mandate that all trails be accessible.

The Guidelines Only Apply to New Trail Construction and Trail Alterations
Alterations are defined as:

• Changes in the design, function or purpose of the trail
• Changes in the overall grade, width, or surface of an existing trail or significant reroute of an existing trail

Routine Maintenance work is exempt from the guidelines when:

• Work is Performed to Return a Trail Segment Back to the Original Design Standard

Brushing, Trail Clearing, Down Trees and Rock fall Removal

Tread maintenance: slough and berm removal, outsloping and turnpike resurfacing
Replacing Trail Features, i.e. Retaining Walls, Steps etc.

Repair or replacement of Bridges and Boardwalks

Minor Trail Reroutes that do not Change the Trail’s Design or Purpose are not Considered Alterations

Guidelines apply only to pedestrian trails. Trails designated specifically for either multiuse, equestrian, mountain bike or off highway vehicle use are exempt from the guidelines.
These guidelines only apply to pedestrian trails that are connected to a trailhead or an accessible trail. Trails not connected to either of these facilities are exempt from the guidelines.

Trailhead Is defined:
- An outdoor space developed to serve as an access point to a trail.
- A trail junction of two or more trails where no other access point is provided to the trails is not a trailhead.

Technical Provisions (Guidelines)

Trailhead Parking
No Accessible Parking
No Accessible Route from Parking to Trail
No Accessible Trail

Surface firm and stable
Must maintain slopes
When outdoor constructed features are provided at trailheads or along the trail at least 20% but not less than one of each feature shall be accessible.

Provide Trail Signage Information to include:
- Total Trail or Segment Length,
- Surface Type,
- Typical and minimum tread width,
- Typical and Maximum running slope,
- Typical and Maximum Cross Slope.

Trail signs required regardless of whether the new or altered trail is accessible.

Gates when installed shall be accessible. Operate gate handle with a closed fist.

Facilities located along trails shall meet accessible guidelines for that type of facility.

Regardless of whether or not the facility is located along an accessible trail.

Picnic facilities
Overlooks
Campsites
Fishing Piers
Clear Tread Width

36” Minimum

Exception: 32” min width for a maximum length of 24”
• A Condition Exemption Must Be Met

If tread width is less than 60”, passing spaces required every 1000’

Concrete, Asphalt and Board Surfaces

The Trail Tread Must be Firm And Stable:
• A stable surface remains unchanged by applied force so that when the force is removed the surface returns to its original condition
• A firm surface resists deformation by indentations

Other surfaces
Linear Grade or Running Slope
Shall be:

- 0%-5% for any distance
- 5.1%-8.3% for up to 200 ft
- 8.3%-10% for up to 30 ft
- 10.1%-12% for up to 10 ft
- No Linear Grades above 12%

Rest Areas are Required at The Beginning and End of Each Trail Segment in Excess of 5%

Rest Areas

Other surfaces

3%
7%
9%
11%
4%

Example

Grade or Running Slope

No more than 30% of the total trail length shall have a running slope steeper than 8.33%
Slopes
Cross Slope “A”
Linear Grade “B”
Are Key Elements of Accessibility

Cross Slopes
2% Maximum on concrete, asphalt or board surfaces

Cross Slopes
5% Maximum on other surfaces

The Area Over the Trail Tread Must be Clear of Protruding Objects to a Height of 80”
Tread obstacles concrete, asphalt & board surfaces

Standard 1/2” max height

Tread obstacles other surfaces

Standard 2” max height

Minimum spacing of 48” between obstacles (advisory)
The Trail Tread Has a Maximum Opening of \( \frac{1}{4}'' \) When They are Parallel to the Direction of Travel

\[ \frac{1}{4}'' \text{ max.} \]

\( \frac{1}{2}'' \) Max. When Openings are Perpendicular to Travel

Exception: openings can be up to \( \frac{3}{4}'' \) when one of the four conditions for exception exist

Conditions for Exceptions

- There are Four Conditions That When Present Can Act as Exceptions to the “Guidelines”
- When designing and laying out a trail make every attempt to comply with the Guidelines.
- Don’t seek out exemptions. Seek out solutions.
Conditions for Exceptions

#1. Where compliance is not feasible due to terrain

Sometimes elevation differences and a limited landform prohibit staying within the linear grade guidelines

#2. Where compliance cannot be accomplished with the prevailing construction practices

Steep Topography and No Reroute Options
Available Labor Force Lacks Requisite Skills, Knowledge or Equipment

Conditions for Exceptions

#3. Where Compliance Would Fundamentally Alter the Function or Purpose of the Facility or the Setting

• #4 Compliance is precluded by:
  • Endangered Species Act
  • National Environmental Policy Act (NEPA,CEQA)
  • National Historic Preservation Act
  • Wilderness Act
  • Other Federal, State, or Local Government Laws whose purpose is to preserve natural, historic or cultural resources
Accessible compliant trail alignments may impact Rare, Threatened or Endangered Plants

Accessible compliant trail alignments may impact Rare, Threatened or Endangered Animals

Accessible compliant trail alignments may impact significant archeological resources

Accessible compliant trail alignments may impact significant historic resources

• Historic CCC steps
Compliance with Accessibility Guidelines is Determined by following sound Planning, Design, Layout & Construction Processes. These efforts are Documented in NEPA/Environmental Review Process.

Document the basis for the determinations, and maintain the documentation with the project records.

Conditions for Exceptions

- When a condition is encountered where it is unfeasible to comply with the guidelines due to one or more of the conditional exceptions then those portions of the trail are exempt. However, those portions of the trail where the exceptions do not apply are required to comply with the technical provisions to the maximum extent feasible.
Fern Falls Trail
1.5 miles long

Steep terrain requiring steps

The remainder of the trail must be compliant

Conditions for Exceptions
• If the land management agency evaluates the trail alignment and determines that the magnitude of the exceptions make it impracticable for the entire trail to comply with the technical provisions then the entire trail is exempt from the guidelines.

Narrow ledge on cliff face constructing 36” tread unfeasible

Native American Archeological Site narrows trail alignment to a location where the lowest linear grades are 10%
Conditions for Exceptions

- Document the basis for the determinations, and maintain the documentation with the project records.
- The Access Board plans to monitor situations where the exceptions for trails result in exempting an entire trail. A provision is added that requires Federal agencies to notify the Access Board when an entire trail is exempted. The provision does not require approval or any other action on the part of the Access Board or the Federal agency.

Accessible Guidelines Quiz
Quiz:

• What is the clear trail width of an accessible trail? 36"

• Are multi-use trails required to meet accessible guidelines? No

• What is the maximum distance an accessible trail can have a linear grade 8.3%-10%? 30'

• Do facilities located on non-accessible trails need to meet accessibility guidelines? Yes

Other Power Driven Mobility Devices (OPDMD)

“Other power driven mobility device means any of a large range of devices powered by batteries, fuel, or other engines—whether or not designed solely for use by individuals with mobility impairments—that are used by individuals with mobility impairments for the purpose of locomotion, including golf cars, bicycles, electronic personal assistance mobility devices (EPAMD’s), or any mobility aid designed to operate in areas without defined pedestrian routes.”

Any device used by a person with a disability to get them to locations they could not otherwise get to without the devices assistance.

Department of Justice Rulemaking

Requires public agencies to permit use of OPDMD unless agency develops policies prohibiting such use.
Department of Justice Rulemaking

Assessment Factors used in determining OPDMD Policy Include:

• Type, size, weight, dimensions, and speed of device
• Amount of pedestrian traffic on trail
• Trail design and operational characteristics
• Safety Issues
• Harm to environment, cultural, and natural resources
• Conflicts with federal land management laws and regulations

Wheelchairs

Manually-operated or power-driven device designed primarily for use by an individual with a mobility disability for the main purpose of indoor or both indoor and outdoor locomotion.

Manually-operated or power-driven device designed primarily for use by an individual with a mobility disability for the main purpose of indoor or both indoor and outdoor locomotion.

California State Parks Policy (OPDMD)

User- Must be used by persons with disability
Size- Maximum 36” wide X Maximum 48” long
Weight- weight of device and user not to exceed 550 lbs
Noise- no greater than 70 decibels
Emissions – Zero Emissions
Location of use -

  – Class I designated trails which are either accessible or multiuse
  – Exterior routes of travel designed for pedestrian use within developed public use areas
  – Controlled access roads such as fire roads

California State Parks Policy (OPDMD)

OPDMD which do not meet criteria for types of devices allowed may not be used until a formal submittal of trail change of use is submitted and approved.

OPDMD which do meet criteria for types of devices allowed but whose use is being requested in a location not listed under approved OPDMD locations may not be used until a formal submittal of trail change of use is submitted and approved.

Trail change of use policy and process is already in place in California State Parks
Validating mobility disabilities

- May ask if person is using OPDMD because of a mobility disability
- May not ask about nature and extent of disability.
- May ask for proof of disability to include
  - National Parks of Federal Recreation Lands Access Pass
  - State disabled parking placard
- However, if person does not have proof and you don’t observe them performing physical activities contrary to a person with a mobility disability you must accept their word.

Verifying device meets criteria

- Use common sense. No need for detailed measuring
- Does device have a combustible engine?
- Does it appear to be significantly larger or heavier than allowed?
- Is devise very loud when used?
- Is device observed to be going faster than 5 MPH?
- Contact Peace Officer if there is any doubt

Session Objectives Review:

- Accessible trails are a pedestrian routes developed primarily for outdoor recreation purposes
- Hikers with disabilities represent a significant portion of our population
- These guidelines apply new trail construction or trail alterations to pedestrian trails connected to a trailhead or another accessible trail

Session Objectives Review:

- There are four conditions for exceptions to the guidelines that can exempt a portion of the trail or the entire trail
- The use of exceptions must be supported by a thorough and well documented planning, design, layout and construction prescription process
- Land managing agencies are responsible to develop their own policy regarding OPDMD and that policy should be based on assessment factors
Jason Spann at 916-445-8907 or email jspann@parks.ca.gov