

Accessibility Guidebook for Outdoor Recreation and Trails



Janet Zeller
Accessibility Program Manager

Ruth Doyle
Santa Fe National Forest Landscape Architect

Kathleen Snodgrass
Project Leader

USDA Forest Service
Technology and Development Program
Missoula, MT

**4E42A85—FHWA Accessible Facility and
Program Guidebook**

May 2006

This document was produced in cooperation with the Recreational Trails Program of the Federal Highway Administration, U.S. Department of Transportation.

This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

The contents of this report reflect the views of the authors, who are responsible for the accuracy of the data presented herein. The contents do not necessarily reflect the official policy of the Department of Transportation.

This report does not constitute a standard, specification, or regulation. The United States Government does not endorse products or manufacturers. Trade or manufacturer's names appear herein only because they are considered essential to the object of this document.



The Forest Service, United States Department of Agriculture (USDA), has developed this information for the guidance of its employees, its contractors, and its cooperating Federal and State agencies, and is not responsible for the interpretation or use of this information by anyone except its own employees. The use of trade, firm, or corporation names in this document is for the information and convenience of the reader, and does not constitute an endorsement by the Department of any product or service to the exclusion of others that may be suitable.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Acknowledgments

It has taken the effort of lots of people to integrate the various aspects of accessibility guidelines and the outdoor environment into one easy-to-use document. The authors gratefully acknowledge the contributions of those who provided advice and photographs:

Pete Antos-Ketcham, Green Mountain Club of the Appalachian Trail Conservancy

Peter Axelson, Beneficial Designs, Inc.

Rory Calboun, Washington State Interagency Committee for Outdoor Recreation

Brad Cownover Bureau of Land Management

Christopher Douwes, Federal Highway Administration

Jill Gravinck, Northeast Passage, University of New Hampshire

Peggy Greenwell, United States Access Board

Peter Jensen, Peter S. Jensen and Associates, LLC

Thomas Kokx, Thomas Kokx Associates

Patti Longmuir, PEL Consulting

Teresa Martinez, Appalachian Trail Conservancy, Southwest and Central Virginia

Holli McClain, Bureau of Land Management

Morgan Sommerville, Appalachian Trail Conservancy, North Carolina

and Forest Service employees:

Jim Beard, Coconino National Forest

Larry Blocker, Northern Region

Cathy Briggs, National Forests in Florida

Nancy Brunswick, Cibola National Forest

Mary Chislock, Sequoia National Forest

David Dercks, Eastern Region

Marti Dodds, Prescott National Forest

Chuck Frayer, Pacific Northwest Region

Mary Gebhart, White Mountain National Forest

Bill Hamele, Washington Office

Chris Hartman, Intermountain Region

Steve Hennig, Alaska Region

Bill Hughes, Southern Region

Thomas Iraci, Pacific Northwest Region

Debby Kriegel, Coronado National Forest

Nora Laughlin, Alaska Region

Jim B. Miller, Washington Office

Lis Novak, Intermountain Region

Kim Round, San Juan National Forest

Jane Ruchman, Gallatin National Forest

Tom Savage, Gifford Pinchot National Forest

Karen Schroyer, Wasatch-Cache National Forest

Jaime Schmidt, Chugach National Forest

James Schwartz, Washington Office

Nancy Snoberger, National Forests of Texas

Shanay A. Stowe, Sequoia National Forest

Jim Thompson, Northern Region

Brian Vachowski, Missoula Technology and Development Center

Ramiro Villalvazo, Washington Office

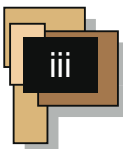
Thomas E. Wright, George Washington and Jefferson National Forest, Dry River Ranger District

Alan Yamada, San Dimas Technology and Development Center

The authors are indebted to the MTDC publications and support staff who created an attractive and easy-to-read report from our raw material: **Ian Grob**, **Heather Hall**, **Damien Hoffman**, **Jim Kautz**, **Bert Lindler**, **Sara Lustgraaf**, **Heather Matusiak**, **Jerry Taylor Wolf** and **Mary Trankel**. The authors are particularly grateful for the illustrations produced by **Deb Mucci**.

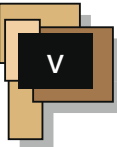
ontents

Introduction	1
The Outdoors Are for Everyone—Fundamentals of Outdoor Recreation and Trails Accessibility	2
Why Accessibility Is Important	2
What Terms Should Be Used?	3
The Law Requires Accessibility	4
Universal Design	5
Program Accessibility	6
Transition Plans	8
Accessibility Evaluation Surveys	9
So Many Guidelines, So Little Time—Applying Accessibility Guidelines to Your Site	11
The History of Accessibility Guidelines	11
Current Accessibility Guidelines	11
Accessibility Guidelines Under Development	12
Guidelines for the Outdoor Environment	12
What If the Guidelines Appear to Conflict With Each Other?	14
All the Rest—Other Important Tools for Accessible Recreation	18
Built Environment Image Guide	18
Recreation Opportunity Spectrum	18
Wilderness Access Decision Tool	19
Appalachian Trail Conservancy’s <i>Backcountry Sanitation Manual</i>	19
Accessibility Guidebook for Outfitters/Guides Operating on Public Lands	19
Accessibility Guidebook for Ski Areas Operating on Public Lands	20
Cooperative Publications	20
Standard Forest Service National Trail Specifications	20
<i>Trail Construction and Maintenance Notebook</i>	20
Sidewalks and Trails	21
Equestrian Design Guidelines for Trails, Trailheads, and Campgrounds	21
The <i>Facilities Toolbox</i>	21
Infra	21
Recreation & Heritage Resources Integrated Business Systems	22
Deferred Maintenance	22
Construction and Maintenance Practices	23
Designing Access Into the Outdoor Environment	25
Terminology	25
The Purpose of the FSORAG and FSTAG	26



Applying the Forest Service Outdoor Recreation Accessibility Guidelines	27
Using the Conditions for Departure in the FSORAG	27
Getting From Here to There—Outdoor Recreation Access Routes	31
Slopes and Resting Intervals for ORARs	32
Surfaces for ORARs	34
Clear Tread Width and Passing Spaces for ORARs	35
Tread Obstacles on ORARs	37
Protruding Objects and ORARs	37
Openings in ORAR Surfaces	37
Edge Protection for ORARs	38
Getting to the Water—Beach Access Routes	38
Slopes and Resting Intervals for Beach Access Routes	40
Maneuvering Space for Beach Access Routes	40
Surface and Clear Tread Width on Beach Access Routes	41
Passing Spaces on Beach Access Routes	41
Changes in Level on Beach Access Routes	41
Protruding Objects on Beach Access Routes	41
Openings in Beach Access Routes	41
Edge Protection for Beach Access Routes	41
Providing Creature Comforts and Conveniences—Constructed Features	42
Reach Ranges and Operability Requirements	43
Grab Bars	46
Constructed Features for Picnic Areas	46
Picnic Units	46
Picnic Tables	47
Cooking Surfaces, Grills, and Pedestal Grills	49
Constructed Features for Campgrounds	50
Camping Units	50
Camp Living Areas	50
Campground Parking Spurs	50
Parking Spurs for Double Camp Units	53
Camp Unit Identification	53
Camp Unit Tent Pads and Tent Platforms	54
Fire Rings, Fireplaces, and Wood Stoves	55
Utilities	56
Water Hydrants	57
Utility Sinks	58
Other Constructed Features	59
Benches	59
Trash, Recycling, and Other Essential Containers	60
Viewing Areas at Overlooks	61
Telescopes and Periscopes	63

Storage Facilities for Assistive Devices _____	64
Pit Toilets in General Forest Areas _____	65
Warming Huts _____	69
Outdoor Rinsing Showers _____	69
Signs _____	71
Applying the Forest Service Trails Accessibility Guidelines _____	73
Is It a Trail or an Outdoor Recreation Access Route? _____	73
Understanding Trail Terminology _____	74
Trail Construction Techniques _____	75
Using the Conditions for Departure in the FSTAG _____	76
Using the General Exceptions in the FSTAG _____	80
Documenting Decisions _____	82
Technical Provisions—How To Make a Hiker/Pedestrian Trail Accessible _____	83
Grade and Cross Slope for Trails _____	83
Resting Intervals on Trails _____	84
Surfaces of Trails _____	85
Clear Tread Width of Trails _____	85
Passing Spaces on Trails _____	86
Tread Obstacles on Trails _____	86
Protruding Objects and Trails _____	87
Openings in Trail Surfaces _____	87
Edge Protection for Trails _____	88
Signs for Trails _____	89
Constructed Features Associated With Trails _____	90
Overview of the FSTAG Implementation Process _____	91
Overview Chart of the FSTAG Implementation Process _____	97
Acronyms _____	104
Definitions _____	105
Resources _____	107
Source Documents _____	107
Links _____	107
Tips in This Guidebook _____	110



This document is intended to help Forest Service personnel apply the Forest Service Outdoor Recreation Accessibility Guidelines and Forest Service Trail Accessibility Guidelines. These guidelines only apply within National Forest System boundaries. Both are based on the draft accessibility guidelines for outdoor developed areas created by the Architectural and Transportation Barriers Compliance Board (Access Board).

When the Access Board finalizes its accessibility guidelines for outdoor developed areas, the Forest Service will revise the Forest Service Outdoor Recreation Accessibility Guidelines and the Forest Service Trail Accessibility Guidelines to incorporate the Access Board's standards, where those provisions are a higher standard, as supplemented by the Forest Service. The supplementation will ensure the agency's application of equivalent or higher guidelines and universal design, as well as consistent use of agency terminology and processes.

