

RESOURCES

Accessibility Guidebook for Outdoor Recreation and Trails,
USDA Forest Service, 2006.

This user-friendly, plain English guidebook has lots of design tips, illustrations and photos. It can be downloaded in PDF or it can be used online in the HTML (default) version. Both versions are available on the FS accessibility webpage:

www.fs.fed.us/recreation/programs/accessibility

Forest Service Trails Accessibility Guidelines (FSTAG)

Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG)

These are the documents that cover accessibility on Forest Service lands only. They are available at the Forest Service website above.

Local Management Planning Guide

Appalachian Trail Conference, Harpers Ferry, WV. 1997.

The LMPG provides policy direction for planning decisions regarding the A.T.

Backcountry Sanitation Manual

Appalachian Trail Conference and Green Mountain Club. 2002.

Appalachian Trail Design, Construction, and Maintenance

Birchard, William and Proudman, Robert.

Appalachian Trail Conference, Harpers Ferry, WV. 2000.

Accessible Gates for Trails and Roads

Groenier, James Scott, 2006

T&D Pub Number: 0623 2340

Accessible Gate Latch

Groenier, James Scott, 2006

T&D Pub Number: 0623 2331

The Forest Services' San Dimas and Missoula Technology and Development Centers have developed a number of publications in their popular and informative *Tech Tip* series dealing with accessibility. Of particular interest to trail managers are the two listed above. To view and download them, go to: www.fs.fed.us/eng/t-d.php Follow prompt to log on with user name and password "t-d", then click "T&D Pubs", then type "accessible" in the lower search box, click "All" button and submit your search.

APPENDIX A

Overview of the FSTAG Implementation Process

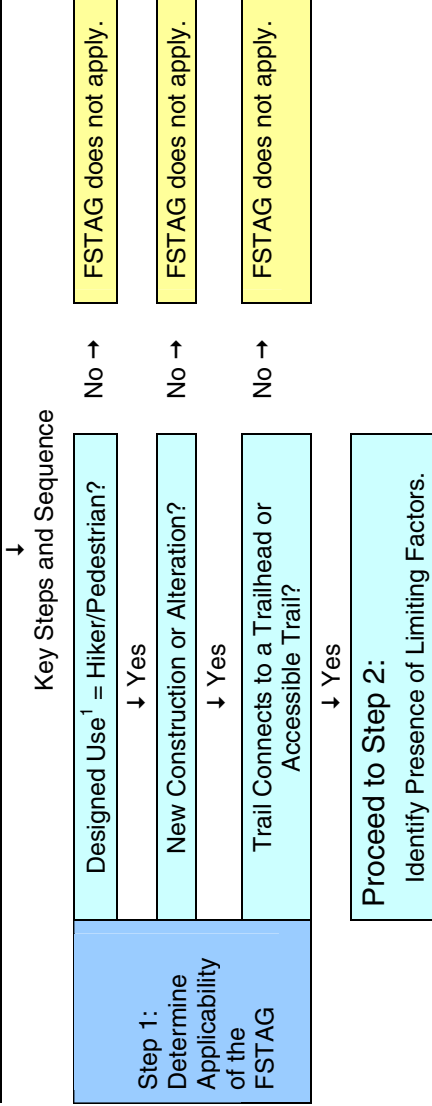
This provides a graphic summary of the FSTAG implementation process. The overview outlines FSTAG steps and process sequencing. The detailed information, definitions and technical provisions that are critical to understanding and implementing the complete FSTAG process are provided in the FSTAG preamble and technical provisions.

The FSTAG must be applied prior to initiating any project involving the new construction or alteration of any National Forest System trail with the designated of hiker/pedestrian.

Overview of Process
Assessment Pre-Work

Before applying the FSTAG, assessment pre-work includes but is not limited to:

1. Analysis of existing conditions, including potential opportunities and constraints (e.g., NEPA analysis).
2. Identification/verification of the desired trail class for the trail or trail segment.
3. Identification/verification of the Designed Use of the trail or trail segment.¹



Step 2: Identify Presence of Limiting Factors										
<p>General Exception 1 (7.1.2.1)</p> <p>Note: Sequence for identifying limiting factors may vary and does not need to occur in the order illustrated here.</p>	Trail Grade	Yes →	Document length of trail exceeds 20% for 40' or more?	Does condition for departure exist?	Yes →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	Yes →	FSTRAG may still apply. Proceed to limiting factor for surface.
	Trail Grade	No →	Document length of trail does not exceed 20% for 40' or more?	Does condition for departure exist?	No →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	No →	FSTRAG applies between terminus and this limiting factor or prominent feature.
	Surface	Yes (the surface is NOT firm and stable).	Document surface firmness and data source.	Does condition for departure exist?	Yes →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	Yes →	FSTRAG does not apply. Document applicable condition for departure.
	Surface	No (The surface IS firm and stable)	Document surface firmness and data source.	Does condition for departure exist?	No →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	No →	FSTRAG may still apply. Proceed to limiting factor for minimum trail width.
	Minimum Trail Width	Yes →	Document minimum trail width and data source.	Does condition for departure exist?	Yes →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	Yes →	FSTRAG applies between terminus and this limiting factor or prominent feature.
	Minimum Trail Width	No →	Document minimum trail width and data source.	Does condition for departure exist?	No →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	No →	FSTRAG does not apply. Document applicable condition for departure.
	Trail Obstacle	Yes →	Document obstacle type, dimensions and data source.	Does condition for departure exist?	Yes →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	Yes →	FSTRAG may still apply. Proceed to Step 3: Apply Technical Provisions.
	Trail Obstacle	No →	Document obstacle type, dimensions and data source.	Does condition for departure exist?	No →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	No →	FSTRAG applies between terminus and this limiting factor or prominent feature.
	Trail Obstacle	Yes →	Document obstacle type, dimensions and data source.	Does condition for departure exist?	Yes →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	Yes →	FSTRAG does not apply. Document applicable condition for departure.
	Trail Obstacle	No →	Document obstacle type, dimensions and data source.	Does condition for departure exist?	No →	Is limiting factor more than 500' from trail terminus?	No →	Prominent feature present?	No →	FSTRAG applies between terminus and this limiting factor or prominent feature.

Step 3: Apply Technical Provisions (7.3.1 to 7.3.8)	Trail Grade	Yes →				Comply with trail g technical provision 7.3.1.1.	Proceed to Step 4: calculate cumulative deviation percentage.
	Trail grade complies with 7.3.1.1?	Does condition departure exist?	No →	Yes →	Deviation permitted. Measure and record length of devia	→	
				No →	Deviation not permitted.	→	
	Trail Cross Slope	Yes →				Comply with trail c slope technical provision 7.3.1.2.	
	Trail cross slope complies with 7.3.1.2?	Does condition departure exist?	No →	Yes →	Deviation permitted. Measure and record length of devia ²	→	
				No →	Deviation not permitted.	→	
	Resting Interval	Yes →				Comply with resting interval technical provision 7.3.2.	
	Resting intervals comply with 7.3.2?	Does condition departure exist?	No →	Yes →	Deviation permitted. Measure and record length of devia ²	→	
				No →	Deviation not permitted.	→	
	Surface	Yes →				Comply with surface technical provision 7.3.3.	
	Surface complies with 7.3.3?	Does condition departure exist?	No →	Yes →	Deviation permitted. Measure and record length of devia ²	→	
				No →	Deviation not permitted.	→	
Clear Tread Width	Yes →				Comply with clear t width technical provision 7.3.4.		
Clear tread	Does condition departure	No →	Yes →	Deviation permitted ² Measure and record length of devia	→		

	width complies with 7.3.4?		exist?	No →	Deviation not permitted.	→	Comply with clear tread width technical provision 7.3.4.	
Passing Space	Passing spaces comply with 7.3.5?	Does condition for departure exist?	Yes →	Yes →	Deviation permitted. ² Measure and record length of deviation.	→	Comply with passing space technical provision 7.3.5.	Proceed to Step 4: calculate cumulative deviation percentage.
				No →	Deviation not permitted.	→		
Tread Obstacles	Tread obstacles comply with 7.3.6?	Does condition for departure exist?	Yes →	Yes →	Deviation permitted. ² Measure and record length of deviation.	→	Comply with tread obstacle technical provision 7.3.6.	Proceed to Step 4: calculate cumulative deviation percentage.
				No →	Deviation not permitted.	→		
Protruding Objects	Protruding objects comply with 7.3.7?	Does condition for departure exist?	Yes →	Yes →	Deviation permitted. ² Measure and record length of deviation.	→	Comply with protruding objects technical provision 7.3.7.	Proceed to Step 4: calculate cumulative deviation percentage.
				No →	Deviation not permitted.	→		
Openings	Openings comply with 7.3.8?	Does condition for departure exist?	Yes →	Yes →	Deviation permitted. ² Measure and record length of deviation.	→	Comply with trail grade technical provision 7.3.8.	Proceed to Step 4: calculate cumulative deviation percentage.
				No →	Deviation not permitted.	→		

Step 4: Calculate Cumulative Deviation Percentage General Exception 2 (7.1.2.2)	Cumulative Deviation Percentage Do permitted deviations occur on less than 15 percent of total trail length?	Yes →			Apply FSTAG technical provisions to entire trail. ³
		Yes →			
	No, deviations occur on more than 15%. →	Is first deviation located more than 500' from trail terminus?	No →	Does prominent feature exist?	Apply FSTAG technical provisions to segment of trail between terminus and prominent feature. ³
				Yes →	

¹ Excerpt from Forest Service Trail Fundamentals (www.fs.fed.us/r3/measures/Inventory/Trails.htm)

Definition of Designed Use: “The intended use that controls the desired geometric design of the trail, and determines the subsequent maintenance parameters for the trail... Of the actively Managed Uses that the trail is developed and managed for, the Designed Use is the single design driver that determines the technical specifications for the trail.”

Excerpt from Access Board Recommendations for Accessibility Guidelines: Outdoor Developed Areas, Final Report (page 11):

“The accessibility guidelines for trails apply to those which are designed and constructed for pedestrian use. These guidelines are not applicable to trails primarily designed and constructed for recreational use by equestrians, mountain bicyclists, snowmobile users, or off-highway vehicle users, even if pedestrians may occasionally use the same trails. People use these categories of trails by means of transportation other than foot travel or personal mobility device. Design and constructed requirements for equestrians, mountain bikes, OHVs, and snowmobiles are based on the specific requirements for the intended mode of transportation. For the safety of trail users, pedestrian use may not always be permitted on these trails in order to minimize conflicts between motorized and non-motorized recreation. These trails do not preclude use by a person with a disability since it is planned that all trail users would be using the one or more alternative means of transportation for which the trail is designed and constructed. The design and construction of pedestrian trails without consideration of these proposed guidelines, by contrast, could present barriers to some trail users because the intended use is by foot or personal mobility device. For these reasons, the committee intentionally limited the application of the proposed guidelines to pedestrian use trails.

It should be noted that the definition used in these proposed guidelines is not the only definition used by trail designers and manager. Rather, it was developed to specifically define the scope of these guidelines.

² If at any point during Step 3 the occurrence of one or more conditions of departure results in permitted deviations from technical provisions on more than 15% of the trail length, proceed to Step 4.

³ Refer to the FSTAG for detailed instructions, definitions, and technical provisions 7.0 through 7.3.10.