



UNITED STATES ACCESS BOARD
WASHINGTON, DC

Regulatory Assessment
Accessibility Guidelines for Outdoor Developed Areas

April 2007

This assessment has been developed and reviewed
in accordance with the Access Board's information quality guidelines
(www.access-board.gov/about/policies/infoquality.htm).

TABLE OF CONTENTS

CHAPTER 1 BACKGROUND

1.1	Introduction	4
1.2	Federal Agencies Affected by Guidelines	4
1.3	Need for Guidelines for Outdoor Developed Areas	5
1.4	Guidelines History	6
1.5	Baselines	7
1.6	Costs	11
1.7	Benefits	15

CHAPTER 2 CAMPING AND PICNIC AREAS

2.1	Introduction	16
2.2	Camping and Picnic Area Projects Covered by Guidelines	16
2.3	Picnic Tables, Fire Rings and Pedestal Grills	19
2.4	Other Camping and Picnic Elements	26
2.5	Recreational Vehicle and Tent Camping Spaces	27
2.6	Outdoor Recreation Access Routes	30
2.7	Ground Surfaces	31
2.8	Costs	34

CHAPTER 3 TRAILS

3.1	Introduction	39
3.2	Trail Projects Covered by Guidelines	39
3.3	Technical Provisions and Exceptions for Accessible Trails	41
3.4	Review of Trail Projects	43
3.5	Costs	44

CHAPTER 4 OTHER OUTDOOR DEVELOPED AREAS

4.1	Introduction	47
4.2	Beach Access Routes	47
4.3	Outdoor Rinsing Showers	47
4.4	Designated Viewing Areas	48
4.5	Warming Huts	48
4.6	Wood Stoves and Fireplaces	48
4.7	Storage Facilities for Mobility Devices	49
4.8	Pit Toilets	49
4.9	Costs	49

APPENDIX A: CAMPING AND PICNIC AREA PROJECTS

DATA REQUEST	51
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APPENDIX B: CAMPING AND PICNIC AREA PROJECTS

DATA SUMMARY	64
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APPENDIX C: TRAIL PROJECTS DATA REQUEST	110
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APPENDIX D: TRAIL PROJECTS DATA SUMMARY	115
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CHAPTER 1

BACKGROUND

1.1 Introduction

The Access Board prepared this regulatory assessment pursuant to Executive Order 12866 for a notice of proposed rulemaking (NPRM) to issue accessibility guidelines for outdoor developed areas. The guidelines apply to the construction or alteration of camping and picnic areas, trails, and other outdoor developed areas by Federal agencies. The Architectural Barriers Act requires these facilities to be accessible to individuals with disabilities.¹

The Access Board is required by the Rehabilitation Act to establish minimum accessibility guidelines for facilities covered by the Architectural Barriers Act.² After the Access Board publishes the accessibility guidelines for outdoor developed areas, the General Services Administration and Department of Defense will adopt the guidelines as the accessibility standards that Federal agencies are required to use when constructing or altering outdoor developed areas covered by the Architectural Barriers Act.³

1.2 Federal Agencies Affected by Guidelines

The accessibility guidelines for outdoor developed areas affect the Federal agencies listed below that manage public lands which have among their uses camping and picnicking, hiking, and other outdoor recreational activities.⁴ Information on camping and picnic areas, trails, and other outdoor developed areas constructed or altered by the Federal land management agencies is presented in subsequent chapters.

¹ 42 U.S.C. § 4151 (1). In addition to facilities constructed or altered by Federal agencies, the Architectural Barriers Act covers facilities leased by Federal agencies; facilities financed by a Federal grant or loan, if the facilities are subject to design standards issued under the law authorizing the grant or loan; and facilities constructed by the Washington Metropolitan Area Transit Authority. 42 U.S.C. § 4151 (2) - (4). The accessibility guidelines for outdoor developed areas do not apply to these other facilities.

² 29 U.S.C. § 792 (b) (3).

³ The Architectural Barriers Act requires the General Services Administration to prescribe accessibility standards for facilities covered by the Architectural Barriers Act, except for Department of Defense and certain other facilities. 42 U.S.C. § 4152. The Architectural Barriers Act requires the Department of Defense to prescribe accessibility standards for its facilities, including Army Corps of Engineers facilities. 42 U.S.C. § 4153.

⁴ The number of acres and annual visits on the Forest Service lands is from USDA Forest Service, Recreation Quick Facts (http://www.fs.fed.us/recreation/programs/facts/facts_sheet.shtml). The number of acres and annual visits on the Department of the Interior lands is from information provided by the agencies and DOI Quick Facts (http://mits.doi.gov/quickfacts/tables_all.cfm). The number of acres and annual visits on the Army Corps of Engineers' lands is from Corps National Camping Facilities (<http://corpslakes.usace.army.mil/employees/recreation/pdfs/NationalMatrix05.pdf>).

Department of Agriculture

The Forest Service manages 155 National Forests and 22 National Grasslands on 192 acres in 42 states, territories, and commonwealths. The National Forests and Grasslands receive 205 million visits annually.

Department of the Interior

The National Park Service manages 58 National Parks and 332 other recreational and cultural sites on 85 million acres in 53 states and territories. The National Parks and the other National Park Service recreational and cultural sites receive 271 million visits annually.

The Fish and Wildlife Service manages 545 National Wildlife Refuges on 94 million acres in 52 states and territories. The National Wildlife Refuges receive 73 million visits annually.

The Bureau of Land Management manages 3,496 recreational sites on 262 million acres in 12 western states. The Bureau of Land Management recreational sites receive 56 million visits annually.

The Bureau of Reclamation manages 1,070 recreational sites on 9 million acres in 17 western states. The Bureau of Reclamation recreational sites receive 90 million visits annually.

Department of Defense

The Army Corps of Engineers manages 4,000 recreational sites at 456 projects (mostly lakes) on 12 million acres in 43 states. The Army Corps of Engineers recreational sites receive 375 million visits annually.

1.3 Need for Guidelines for Outdoor Developed Areas

The Access Board has issued accessibility guidelines for many of the facilities covered by the Architectural Barriers Act. These guidelines are known as the Architectural Barriers Act Accessibility Guidelines (ABAAG).⁵ ABAAG contains provisions that apply to some facilities constructed or altered in outdoor developed areas by the Federal land management agencies such as parking areas, visitor centers, restrooms and bathing facilities, fishing piers and platforms, and boating docks and marinas. However, ABAAG does not address other spaces and elements constructed or altered in outdoor

⁵ 36 CFR Part 1191. ABAAG is available on the Access Board website at: <http://www.access-board.gov/ada-aba.gov>. The General Services Administration has adopted ABAAG as the Architectural Barriers Act Accessibility Standard (ABAAS) for facilities subject to its authority. 41 CFR § 102-76.60. The Department of Defense plans to adopt ABAAG in July 2007 as the accessibility standard for facilities subject to its authority.

developed areas by the Federal land management agencies such as recreational vehicle and tent camping spaces, picnic tables, fire rings, and pedestal grills.

The accessibility guidelines for outdoor developed areas contain provisions for the construction or alteration of spaces and elements in outdoor developed areas that are not addressed in ABAAG. The guidelines also establish new provisions for outdoor recreation access routes, trails, and beach access routes. Finally, the guidelines provide exceptions for conditions that exist in the outdoor environment.

The accessibility guidelines for outdoor develop areas will enable the Federal land management agencies to comply with the Architectural Barriers Act when constructing or altering spaces and elements in outdoor developed areas that are not addressed in ABAAG.

1.4 Guidelines History

The accessibility guidelines for outdoor developed areas are consensus guidelines that were developed through regulatory negotiation.⁶ The Federal land management agencies participated on the regulatory negotiation committee that developed the guidelines along with other organizations whose interests are affected by the guidelines.⁷ The regulatory negotiation committee worked on the guidelines for two years from June 1997 to September 1999.⁸

The accessibility guidelines for outdoor developed areas initially were intended to also apply to state and local governments and private entities under the Americans with Disabilities Act.⁹ However, the Access Board was unable to find sufficient information

⁶ Regulatory negotiation is a supplemental rulemaking process that involves negotiation among various interest groups and the agency to reach consensus on a rule.

⁷ The other organization that participated in the regulatory negotiation included the American Society of Landscape Architects; American Camping Association; American Trails; Appalachian Trail Conservancy; Association of Blind Athletes; Department of Transportation, Federal Highway Administration; Hawaii Commission on Persons with Disabilities; KOA, Inc.; National State Park Directors; National Association of State Trail Administrators; National Center on Accessibility; National Council on Independent Living; National Park and Recreation Association; National Spinal Cord Injury Association; New York State Department of Environmental Conservation; Paralyzed Veterans of America; Partners for Access to the Woods; Rails to Trails Conservancy; State of Washington, Interagency Committee on Outdoor Recreation; TASH; and Whole Access.

⁸ The regulatory negotiation committee's report, "Recommendations for Accessibility Guidelines: Outdoor Developed Areas," is available on the Access Board website at: <http://www.access-board.gov/outdoor-rec-rpt.htm>. The Access Board reformatted the regulatory negotiation committee's report for the notice of proposed rulemaking (NPRM) to be consistent with ABAAG's format.

⁹ The Americans with Disabilities Act requires facilities constructed or altered by state and local governments, and places of public accommodation and commercial facilities constructed or altered by private entities to be accessible to individuals with disabilities, 42 U.S.C. §§ 12132, 12134, and 12183. The Access Board is required to establish minimum accessibility guidelines for facilities covered by the Americans with Disabilities Act. 29 U.S.C. § 792 (b) (3) and 42 U.S.C. § 12204.

to prepare a regulatory assessment of the impacts of the guidelines on State and local governments and private entities that construct or alter camping and picnic areas, trails, and other outdoor developed areas. The Access Board subsequently decided to limit the application of the guidelines to the Federal land management agencies under the Architectural Barriers Act.¹⁰

1.5 Baselines

Regulatory actions are compared to a baseline to estimate their costs and benefits. The baseline is a reasonable assessment of what would happen in the absence of the regulatory action, the status quo. The accessibility policies and practices of the Federal land management agencies have evolved over 30 years. The Federal land management agencies' accessibility policies and practices before and after the regulatory negotiation committee recommended the accessibility guidelines for outdoor developed areas are discussed below.

Federal Land Management Agency Accessibility Policies and Practices Before the Regulatory Negotiation Committee

Since 1978, the Federal land management agencies had a separate obligation under section 504 of the Rehabilitation Act to ensure that their newly constructed or altered facilities are accessible to individuals with disabilities.¹¹ The Federal land management agencies initially used the American National Standard Institutes' (ANSI) accessibility standard for buildings and then the Uniform Federal Accessibility Standards (UFAS) as the accessibility standard for their facilities.¹² Although the ANSI standard and UFAS did not contain specific provisions for camping and picnic areas, trails, and other outdoor developed areas, the Federal land management agencies applied the technical provisions

¹⁰ The Access Board will conduct a separate rulemaking in the future to issue accessibility guidelines for outdoor developed areas constructed or altered by state and local governments and private entities under the Americans with Disabilities Act when sufficient information is available to prepare a regulatory assessment of the impacts of the guidelines on those entities.

¹¹ The Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978 (PL 95-602) amended section 504 of the Rehabilitation Act (29 U.S.C. § 794) to prohibit discrimination on the basis of disability under any program or activity conducted by any Executive agency or by the United States Postal Service, and to require the head of each agency to promulgate regulations to carry out the amendments. Each of the Federal land management agencies has issued regulations pursuant to section 504 of the Rehabilitation Act that require their newly constructed or altered facilities to be accessible to individuals with disabilities. See: 7 CFR § 15e.151 (Department of Agriculture); 32 CFR § 56.8 (c) (3) (Department of Defense); and 43 CFR § 17.551 (Department of Interior). The Federal land management agencies have issued a series of directives and memoranda to their personnel beginning in the 1980's through the present emphasizing their obligation under section 504 of the Rehabilitation Act to make their outdoor recreation facilities accessible to individuals with disabilities. The directives and memoranda are too numerous to reference in this note, but are available on file at the Access Board.

¹² UFAS was adopted as the accessibility standard for Federal facilities in 1984. 49 FR 31528, August 7, 1984.

in the ANSI standard and UFAS for accessible routes, clear floor and maneuvering space, ground surfaces, and reach ranges to the extent possible when constructing or altering these facilities.¹³

In 1985, the Access Board convened a Federal Working Group on Access to Recreation Facilities to review existing practices for designing accessible outdoor recreation facilities. All the Federal land management agencies participated in the working group, and recommended provisions for designing accessible camping and picnic areas and trails. The National Park Service published these provisions in 1989 to use as a supplement to UFAS.¹⁴

In 1992, the National Park Service entered into a cooperative agreement with the Indiana University, Department of Park and Recreation Administration, to establish a National Center on Accessibility for developing best practice materials and training programs on accessibility for outdoor recreation facilities. The National Center on Accessibility has trained over 1,850 National Park Service personnel from 240 parks on best practices for designing accessible outdoor recreation facilities, including camping and picnic areas and trails. The National Center on Accessibility has also provided training programs on designing accessible outdoor recreation facilities for the other Federal land management agencies.

In 1993, “Universal Access to Outdoor Recreation: A Design Guide” was published. The design guide was developed through a public/private partnership between Project Play and Learning in Adaptable Environments, Inc. (PLAE) and the Forest Service.¹⁵ The design guide included provisions for accessible camping and picnic areas and trails and was used by the Forest Service.

The Federal land management agencies also assigned accessibility managers and accessibility coordinators at the national, regional, and local levels to provide direction and support for implementing the agencies’ accessibility policies and practices.

Thus, prior to the regulatory negotiation committee, the Federal land management agencies were for the most part at the forefront: demonstrating best practices, publishing design guides, providing training, and assigning accessibility managers and accessibility coordinators to ensure that the construction and alterations of camping and picnic areas and trails were accessible to individuals with disabilities.

¹³ The practice of using the ANSI standard to design accessible outdoor recreation facilities was illustrated in “A Guide to Designing Accessible Outdoor Recreation Facilities” published by the Department of the Interior in 1980. The publication is available in the Access Board’s library.

¹⁴ The provisions for designing accessible camping and picnic areas and trails were published in DESIGN, Summer 1989, “Access to Outdoor Recreation Trails” and DESIGN, Fall 1989, “Accessible Picnic Areas and Campgrounds.” DESIGN is a quarterly publication of the National Park Service, Park Practice Program. The publications are available in the Access Board’s library.

¹⁵ The design guide is available in the Access Board’s library.

Federal Land Management Agency Accessibility Policies and Practices After the Regulatory Negotiation Committee

As discussed earlier in this chapter, the Federal land management agencies, as well as the National Center on Accessibility, were members of the regulatory negotiation committee that recommended the accessibility guidelines for outdoor developed areas. The regulatory negotiation committee built on the earlier work of the Federal land management agencies. The Federal land management agencies in turn used the work of the regulatory negotiation committee to refine their accessibility policies and practices.

The Forest Service prepared the “Forest Service Outdoor Recreation Accessibility Guidelines” (FSORAG) and “Forest Service Trails Accessibility Guidelines” (FSTAG) based on the work of the regulatory negotiation committee.¹⁶ The Forest Service amended the Forest Service Manual to require all construction and alteration projects in the National Forest System to use FSORAG and FSTAG.¹⁷ FSORAG goes beyond the guidelines recommended by the regulatory negotiation committee for certain elements and spaces.

The National Center on Accessibility prepared best practice bulletins for designing accessible camping and picnic areas and accessible trails based on the work of the regulatory negotiation committee.¹⁸ The National Park Service and other Federal land management agencies in the Department of Interior currently use these best practice bulletins for their construction and alteration projects.

The Army Corps of Engineers prepared “Recreation Facility and Customer Service Standards” for its construction and alteration projects.¹⁹ The Army Corps of Engineers’ standards are based on general considerations of public convenience, resource protection, and sustainability. The Army Corps of Engineers’ standards require all campsite living areas to have firm and stable ground surfaces at cooking and eating areas and at tent pads. The Army Corps of Engineers’ standards also include provisions for accessibility that require all new picnic tables, fire rings and pedestal grills to be accessible. The Army Corps of Engineers construction and alteration projects also use best practices for accessible design.²⁰

¹⁶ FSORAG and FSTAG are available on the Forest Service’s website at: <http://www.fs.fed.us/recreation/programs/accessibility/>.

¹⁷ The amendments to the Forest Service Manual are available on the Forest Service’s website at: <http://www.fs.fed.us/recreation/programs/accessibility/>.

¹⁸ The National Center on Accessibility’s best practices bulletins are available on its website at: <http://www.ncaonline.org/monographs/index.shtml>.

¹⁹ The Army Corps of Engineers “Recreation Facility and Customer Service Standards” are available on its website at: <http://www.usace.army.mil/inet/usace-docs/eng-manuals/em1110-1-400/toc.htm>.

²⁰ The Army Corps of Engineer’s accessibility policies, including best practices for accessible design, are on its website at: <http://corpslakes.usace.army.mil/employees/access/access.html>.

Baselines for Regulatory Assessment

The Access Board used two baselines for this regulatory assessment. The first baseline assesses the costs associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices as described below:

- Forest Service – FSORAG and FSTAG. The Forest Service currently requires all its construction and alteration projects to use FSORAG and FSTAG. FSORAG and FSTAG generally meet or exceed the level of accessibility in the guidelines. Thus, the Forest Service’s projects will not incur any additional costs associated with the guidelines compared to FSORAG and FSTAG.
- Department of the Interior – Best Practice Bulletins. The Federal land management agencies in the Department of the Interior currently use the National Center on Accessibility’s best practice bulletins. However, the agencies have not formally required all their construction and alteration projects to use the best practice bulletins. Therefore, this baseline assumes 50 percent to 75 percent of the agencies’ projects use the best practice bulletins.²¹ The best practice bulletins generally meet the level of accessibility in the guidelines. Thus, the percentage of the agencies’ projects that will incur additional costs associated with the guidelines range from a lower bound of 25 percent to an upper bound of 50 percent.
- Army Corps of Engineers – Recreation Facility and Customer Service Standards and Best Practices. The Army Corps of Engineers currently require all its construction and alteration projects to use its “Recreation Facility and Customer Service Standards” and also currently recommend that the projects use best practices for accessible design. The Army Corps of Engineers “Recreation Facility and Customer Service Standards” generally meet or exceed the level of accessibility in the guidelines, except for recreational vehicle parking areas and trails.²² The baseline assumes 50 percent to 75 percent of the Army Corps of Engineers’ projects use best practices for designing accessible recreational vehicle

²¹ As discussed in the subsequent chapters, the Access Board reviewed a sample of the Federal land management agencies’ construction and alteration projects. The review showed the percentage of the Department of the Interior projects that met or exceeded the guidelines were as follows: recreational vehicle parking areas 44 percent (4 of 9 projects); picnic tables 70 percent (17 of 24 projects); tent pads 71 percent (5 of 7 projects); pedestal grills 75 percent (9 of 12 projects); fire rings 80 percent (12 of 15 projects); trails 94 percent (17 of 18 projects); and outdoor recreation access routes 100 percent (15 of 15 projects).

²² The Army Corps of Engineers “Recreation Facility and Customer Service Standards” require recreational vehicle parking areas to be at least 12 feet wide, and the guidelines require recreational vehicle parking areas to be at least 20 feet wide at accessible camping spaces.

parking areas and trails that meet the level of accessibility in the guidelines.²³ Thus, the percentage of the Army Corps of Engineers' projects that will incur additional costs for recreational vehicle parking areas and trails associated with the guidelines ranges from a lower bound of 25 percent to an upper bound of 50 percent.

The second baseline assesses the costs associated with the accessibility guidelines for outdoor developed areas if accessibility were not required by the Access Board or otherwise. That is, the second baseline attempts to evaluate how the Federal land management's agencies would construct or alter the elements and spaces covered by the guidelines in the absence of any accessibility requirements.

1.6 Costs

Elements and Spaces Covered by Guidelines

The accessibility guidelines for outdoor developed areas cover the elements and spaces listed in Table 1.1.

Table 1.1 – Elements and Spaces Covered by Guidelines

Outdoor Developed Areas	Elements and Spaces Covered by Guidelines
Camping and Picnic Areas	Parking Areas in Camping Spaces Tent Pads and Platforms Picnic Tables Fire Rings Pedestal Grills Trash Containers Water Hydrants Utility Hook-Ups Benches Outdoor Recreation Access Routes
Trails	Trails Designated for Pedestrian Use That Connect to a Designated Trailhead or an Accessible Trail
Other Outdoor Developed Areas	Beach Access Routes Outdoor Rinsing Showers Designated Viewing Areas Telescopes and Periscopes Warming Huts Wood Stoves and Fireplaces Storage Facilities for Mobility Devices Pit Toilets

²³ As discussed in the subsequent chapters, the Access Board reviewed a sample of the Federal land management agencies' construction and alteration projects. The review showed that 60 percent of the Army Corps of Engineers projects (3 of 5 projects) provided recreational vehicle parking areas at least 20 feet wide at accessible camping spaces, and that 100 percent of the Army Corps of Engineers projects (4 of 4 projects) met the guidelines for trails.

Annual Expenditures on Construction or Alteration of Elements and Spaces Covered by Guidelines

Establishing the Federal land management agencies annual expenditures on the construction or alteration of the elements and spaces covered by the accessibility guidelines for outdoor developed areas required a project-by-project review. The Access Board requested data from the Federal land management agencies on camping and picnic projects and trails projects funded in FY 2004 that included elements and spaces covered by the guidelines.²⁴

The Forest Service prepared a regulatory assessment for FSORAG and FSTAG.²⁵ The Forest Service provided data from its regulatory assessment for FSORAG and FSTAG. The National Park Service provided data from its Project Management Information System (PMIS). The other Federal land management agencies in the Department of the Interior, and the Army Corps of Engineers conducted data calls to their regional and field offices to provide project data. The data is summarized in Table 1.2. Some of the projects included the construction or alteration of general parking areas, restrooms, and other facilities covered by existing accessibility standards, or the construction or alteration of roads and other infrastructure that are not subject to accessibility standards. Thus, the total project costs overstate the expenditures on elements and spaces covered by the guidelines.

Table 1.2 – FY 2004 Projects That Included Construction or Alteration of Elements and Spaces Covered by Guidelines

Agency	Camping & Picnic Areas		Trails	
	Number of Projects	Total Project Costs	Number of Projects	Total Project Costs
Department of Agriculture				
Forest Service	Not available	\$6.9 million (FY 2003)	Not available	Not available
Department of the Interior				
National Park Service	46	\$14.0 million	33	\$2.7 million
Fish and Wildlife Service	2	\$0.2 million	3	\$0.3 million
Bureau of Land Management	6	\$1.8 million	1	\$25,000
Bureau of Reclamation	8	\$1.1 million	3	\$1.2 million
Department of Defense				
Army Corps of Engineers	25	Not available	4	\$1 million
Total	87	\$24.0 million	44	\$5.2 million

²⁴ The Access Board also requested the Federal land management agencies to provide data on other outdoor developed areas projects. As discussed in Chapter 4, the agencies reported that they did not fund any other outdoor developed areas projects that included elements and spaces covered by the guidelines for or that data was not available.

²⁵ The Forest Service’s regulatory assessment is available on its website at: <http://www.fs.fed.us/recreation/programs/accessibility/>.

The number of projects that include the construction or alteration of elements and spaces covered by the accessibility guidelines for outdoor developed areas will vary each fiscal year based on the specific projects funded, and the total costs of the projects will also vary based on the scope of work of the projects.

Review of Projects

The Access Board reviewed 43 camping and picnic area projects and 26 trail projects that included the construction or alteration of elements and spaces covered by the accessibility guidelines for outdoor developed areas for this regulatory assessment, as shown in Table 1.3.²⁶ The purpose of the review was to assess the level of accessibility of the elements and spaces, and the additional costs associated with accessibility. The results of the review are discussed in the subsequent chapters.

Table 1.3 – Projects Reviewed for Regulatory Assessment

Agency	Camping & Picnic Area Projects	Trail Projects
Department of Agriculture		
Forest Service	12	4
Department of the Interior		
National Park Service	9	11
Fish and Wildlife Service	2	3
Bureau of Land Management	6	1
Bureau of Reclamation	8	3
Department of Defense		
Army Corps of Engineers	6	4
Total	43	26

Costs Associated with Guidelines

The Access Board used the project reviews to develop models for estimating the additional annual costs associated with the accessibility guidelines for outdoor developed

²⁶ The Federal land management agencies selected the projects reviewed by the Access Board. The Access Board requested the agencies to select at least one project from each of their regions, where applicable; and to pick projects that represent diverse settings and terrains. The projects were either funded in FY 2004, or were funded in a prior fiscal year but the work was completed in FY 2004. The Forest Service selected projects that were reviewed in its regulatory assessment for FSORAG and FSTAG. The Forest Service requested that a camping and picnic area project at the White Mountain National Forest, which was reviewed in its regulatory assessment, not be included in this regulatory assessment because there were significant personnel changes at the White Mountain National Forest and it would be difficult to provide additional information about the project. Nine of the trail projects reviewed in the Forest Service’s regulatory assessment involved only maintenance and repair work, and are not included in this regulatory assessment because the guidelines do not apply to maintenance and repair work. Another trail project in the Santa Fe National Forest reviewed in the Forest Service’s regulatory assessment is not included in this regulatory assessment because the trail did not connect to a designated trail head or an accessible trail, and is not covered by the guidelines. The review included all the camping and picnic area projects funded by the Fish and Wildlife Service, Bureau of Land Management, and Bureau of Reclamation in FY 2004 that included the construction or alteration of elements and spaces covered by the guidelines.

areas compared to the baselines discussed earlier in this chapter. The models are discussed in the subsequent chapters.

The additional annual costs associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices (baseline 1) are shown in Table 1.4 and range from \$0.5 million to \$1.1 million.

Table 1.4 – Additional Annual Costs Associated with Baseline 1: Guidelines Compared to Agencies’ Current Accessibility Policies and Practices

Agency	Camping & Picnic Areas	Trails	Other Outdoor Developed Areas	Total
Department of Agriculture				
Forest Service	\$0	\$0	\$0	\$0
Department of the Interior				
National Park Service	\$126,588 to \$244,951	\$180,000 to \$340,000	\$0 to \$50,000	\$306,588 to \$634,951
Fish and Wildlife Service	\$12,873	\$20,000 to \$40,000	\$0 to \$50,000	\$32,873 to \$102,873
Bureau of Land Management	\$21,098 to \$33,971	\$20,000	\$0 to \$50,000	\$41,098 to \$103,971
Bureau of Reclamation	\$21,098 to \$42,196	\$20,000 to \$40,000	\$0 to \$50,000	\$41,098 to \$132,196
Department of Defense				
Army Corps of Engineers	\$36,000 to \$72,000	\$20,000 to \$40,000	\$0 to \$50,000	\$56,000 to \$162,000
Total	\$217,657 to \$405,991	\$260,000 to \$480,000	\$0 to \$250,000	\$477,657 to \$1,135,991

The additional annual costs associated with the accessibility guidelines for outdoor developed areas if accessibility were not required by the Access Board or otherwise (baseline 2) are shown in Table 1.5 and range from \$2.0 million to \$2.6 million.

Table 1.5 – Additional Annual Costs Associated with Baseline 2: Guidelines Compared to Accessibility Not Required by Access Board or Otherwise

Agency	Camping & Picnic Areas	Trails	Other Outdoor Developed Areas	Total
Department of Agriculture				
Forest Service ²⁷	\$0 to \$320,000	\$157,000 to \$166,000	\$0 to \$50,000	\$157,000 to \$536,000
Department of the Interior				
National Park Service	\$485,254	\$660,000	\$0 to \$50,000	\$1,145,254 to \$1,195,254
Fish and Wildlife Service	\$21,098	\$60,000	\$0 to \$50,000	\$81,098 to \$131,098

²⁷ The Forest Service’s additional annual costs for camping and picnic area and trail projects are from its regulatory assessment for FSORAG and FSTAG. The Forest Service used a different methodology in its regulatory assessment than the Access Board used in this regulatory assessment. The differences between the methodologies are discussed in the subsequent chapters.

Agency	Camping & Picnic Areas	Trails	Other Outdoor Developed Areas	Total
Bureau of Land Management	\$63,294	\$20,000	\$0 to \$50,000	\$83,294 to \$133,294
Bureau of Reclamation	\$84,512	\$60,000	\$0 to \$50,000	144,512 to \$194,512
Department of Defense				
Army Corps of Engineers	\$266,049	\$80,000	\$0 to \$50,000	\$346,049 to \$396,049
Total	\$920,207 to \$1,240,207	\$1,037,000 to \$1,046,000	\$0 to \$300,000	\$1,957,207 to \$2,586,207

Thus, the guidelines are not an economically significant regulatory action compared to either of the two baselines, and the Access Board has not prepared a full cost-benefit analysis of the guidelines.²⁸

1.7 Benefits

Individuals with disabilities, and their families and friends, will benefit from accessible facilities in outdoor developed areas. The U.S. Census Bureau reports that there are 51.2 million Americans with disabilities in the civilian non-institutionalized population in 2002.²⁹ Among the population age 15 and older, 2.7 million individuals used a wheelchair, and another 9.1 million used a mobility aid such as a cane, crutches, or walker. Many of the benefits to these individuals resulting from accessible facilities in outdoor developed areas are currently being realized under the Federal land management agencies' current accessibility policies and practices. The Access Board's accessibility guidelines for outdoor developed areas will contribute to the benefits, and justify issuing the guidelines.

²⁸ Under Executive Order 12866, "economically significant" regulatory actions generally are actions that have an annual effect on the economy of \$100 million or more.

²⁹ U.S. Census Bureau, Americans With Disabilities: 2002 (<http://www.census.gov/hhes/www/disability/sipp/disab02/awd02.html>).

CHAPTER 2

CAMPING AND PICNIC AREAS

2.1 Introduction

This chapter discusses the provisions in the accessibility guidelines for outdoor developed areas that apply to the construction and alteration of camping and picnic areas. The provisions cover the following elements and spaces: picnic tables, fire rings, pedestal grills, trash containers, water hydrants, utility hook-ups, benches, recreational vehicle and tent camping spaces, and outdoor recreation access routes.

2.2 Camping and Picnic Area Projects Covered By Guidelines

The number of camping and picnic areas managed by the Federal land management agencies is shown in Table 2.1.³⁰

Table 2.1 – Camping and Picnic Areas Managed by Federal Agencies

Agency	Camping Areas		Picnic Areas	
	Campgrounds	Camp Sites	Picnic Areas	Picnic Sites
Department of Agriculture				
Forest Service	4,300	122,000	1,496	Not available
Department of Interior				
National Park Service	1,024	17,264	738	3,649
Fish and Wildlife Service	Not available	Not available	Not available	Not available
Bureau of Land Management	1,237	17,510	Not available	Not available
Bureau of Reclamation	350	Not available	Not available	Not available
Department of Defense				
Army Corps of Engineers	Not available	101,000	Not available	Not available

The Federal land management agencies spend a small portion of their capital improvement funds on the construction and alteration of elements and spaces covered by the accessibility guidelines for outdoor developed areas. The Forest Service reported in its regulatory assessment for FSORAG and FSTAG that \$75 million was spent on facilities improvements in the National Forest System in FY 2003, and that \$6.9 million of this amount, or 9 percent of the total, was spent on the elements and spaces covered by FSORAG.

The Access Board requested data from the other Federal land management agencies on camping and picnic area projects funded in FY 2004 that included the construction or

³⁰ The number of camping and picnic areas provided by the Forest Service is from USDA Forest Service, Recreation Quick Facts (http://www.fs.fed.us/recreation/programs/facts/facts_sheet.shtml). The number of camping and picnic areas provided by the National Park Service data is from its Asset Management System. The number of camping areas provided by the Bureau of Land Management and Bureau of Reclamation is from DOI Quick Facts (http://mits.doi.gov/quickfacts/tables_all.cfm). The number of camping areas provided by the Army Corps of Engineers is from Corps National Camping Facilities (<http://corpslakes.usace.army.mil/employees/recreation/pdfs/NationalMatrix05.pdf>).

alteration of elements and spaces covered by the accessibility guidelines for outdoor developed areas. The data provided by the other Federal land management agencies is presented in Table 2.2.³¹ Some of the projects included the construction or alteration of general parking areas, restrooms, and other facilities covered by existing accessibility standards, or the construction or alteration of roads and other infrastructure that are not subject to accessibility standards. Thus, the total project costs overstate the expenditures on elements and spaces covered by the accessibility guidelines for outdoor developed areas.

Table 2.2 – FY 2004 Camping and Picnic Area Projects That Included Construction or Alteration of Elements and Spaces Covered by Guidelines

Agency	Number of Projects	Total Project Costs
Department of the Interior		
National Park Service	46	\$14.0 million
Fish and Wildlife Service	2	\$0.2 million
Bureau of Land Management	6	\$1.8 million
Bureau of Reclamation	8	\$1.1 million
Department of Defense		
Army Corps of Engineers	25	Not available

The Access Board reviewed 43 camping and picnic area projects for this regulatory assessment that included the construction or alteration of elements and spaces covered by the accessibility guidelines for outdoor developed areas, as shown in Table 2.3.³²

Table 2.3 – Camping and Picnic Area Projects Reviewed for Regulatory Assessment

Agency	Projects Reviewed	Total Project Costs
Department of Agriculture		
Forest Service	12	\$6.1 million
Department of Interior		
National Park Service	9	\$4.5 million
Fish and Wildlife Service	2	\$0.2 million
Bureau of Land Management	6	\$1.8 million
Bureau of Reclamation	8	\$1.1 million
Department of Defense		
Army Corps of Engineers	6	\$2.2 million
Totals	43	\$15.9 million

³¹ The number of projects and total project costs for the National Park Service is from its Project Management Information System (PMIS). Camping and picnic area projects that are smaller components of larger park wide projects, or are part of annual cyclical maintenance programs, or are funded through external fund raising may not be identified through the PMIS. The number of projects and total project costs for the Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, and Army Corps of Engineers are from information provided by their regional and field offices in response to data calls.

³² Additional information on selection of the projects is provided in note 26.

The projects were requested to provide data using the form in Appendix A. The responses from the projects are summarized in Appendix B. If a data field is not filled in, the project did not provide the requested data.

The projects ranged in cost from \$1,129 to \$4,000,000. As noted above, some of the projects included the construction or alteration of general parking areas, restrooms, and other facilities covered by existing accessibility standards, or the construction or alteration of roads and other infrastructure that are not subject to accessibility standards. The costs for elements and spaces covered by the accessibility guidelines for outdoor developed areas are shown in Table 2.4. The table does not include 15 projects that included work not covered by the guidelines but did not disaggregate the costs for elements and spaces covered by the guidelines. More than half the projects spent under \$300,000 on elements and spaces covered by the guidelines, and more than a third of the projects spent less than \$50,000.

Table 2.4 – Costs for Elements and Spaces Covered by Guidelines

Agency	Less than \$50,000	\$50,000 – \$99,999	\$100,000 – \$199,999	\$200,000 – \$299,999	Over \$300,000
Department of Agriculture					
Forest Service	3	1	3	4	1
Department of Interior					
National Park Service	3	1			
Fish and Wildlife Service					
Bureau of Land Management	3				
Bureau of Reclamation	4	1			
Department of Defense					
Army Corps of Engineers	3		1		
Total	16	3	4	4	1

Fourteen (14) projects constructed new camping and picnic areas, and the other 29 projects altered existing camping and picnic areas. Twenty-four (24) projects involved camping areas only; 12 projects involved picnic areas only; and 7 projects involved both camping areas and picnic areas. The number of campsites in the camping areas is shown in Table 2.5. The table does not include a park-wide project that altered several existing camping areas.

Table 2.5 – Number of Campsites in Camping Areas

Agency	10 or Fewer	11 - 25	26-50	More than 50
Department of Agriculture				
Forest Service		2	8	
Department of Interior				
National Park Service	2			3
Fish and Wildlife Service	1	1		
Bureau of Land Management	1	1	2	
Bureau of Reclamation	3		1	
Department of Defense				
Army Corps of Engineers		2	2	1
Total	7	6	13	4

The number of picnic tables in the picnic areas is shown in Table 2.6.

Table 2.6 – Number of Picnic Tables in Picnic Areas

Agency	10 or Fewer	11 - 25	More than 25
Department of Agriculture			
Forest Service	4		1
Department of Interior			
National Park Service	1	2	1
Fish and Wildlife Service			
Bureau of Land Management	4		
Bureau of Reclamation	3	1	1
Department of Defense			
Army Corps of Engineers	1		
Total	13	3	3

2.3 Picnic Tables, Fire Rings and Pedestal Grills

When a new camping area is constructed, the accessibility guidelines for outdoor developed areas require a certain number of accessible camping spaces to be provided. For camping areas with 100 or fewer camping spaces, the guidelines require at least 2 accessible spaces where 2 to 25 spaces are provided; at least 3 accessible spaces where 26 to 50 spaces are provided; at least 4 accessible spaces where 51 to 75 spaces are provided; and at least 5 accessible spaces where 76 to 100 spaces are provided.³³ If the accessible camping spaces are equipped with picnic tables, fire rings or pedestal grills, the guidelines require these elements to be accessible.

When a new picnic area is constructed, the accessibility guidelines for outdoor developed areas require at least 50 percent, but not fewer than two, of the picnic tables, fire rings and pedestal grills provided in the picnic area to be accessible where more than one of each element is provided.³⁴

When an existing camping area or picnic area is altered, the accessibility guidelines for outdoor developed areas require the altered elements and spaces to meet the requirements for new construction.³⁵ For example, if an existing picnic area with 10 picnic tables is altered and 4 old picnic tables are replaced with 4 new picnic tables, the guidelines require the 4 new picnic tables to be accessible. If the same picnic area is altered the next year and the other 6 old picnic tables are replaced with 6 new picnic tables, the guidelines require only one of the new picnic tables to be accessible to meet the new construction requirement for at least 50 percent of the picnic tables in the picnic area to be accessible.

³³ Outdoor Developed Areas Accessibility Guidelines, section T218.2.

³⁴ Outdoor Developed Areas Accessibility Guidelines, sections T206.2, T207.2, and T208.2.

³⁵ Outdoor Developed Areas Accessibility Guidelines, section T202.3.

Picnic Tables

The accessibility guidelines for outdoor developed areas require accessible picnic tables to have at least one wheelchair space with knee and toe clearance under the table.³⁶ The wheelchair space can be located at the end of the picnic table without any loss of seating space at the sides of the table. Accessible picnic tables are commercially available. A review of the Federal Supply Schedule in July 2006 shows that 33 manufacturers represent that their picnic tables are accessible.³⁷

Forty-one (41) of the projects reviewed for this regulatory assessment provided new picnic tables. The length of the picnic tables ranged from 6 feet to 12 feet. The majority of the picnic tables provided were 8 feet long. Twenty-three (23) projects provided picnic tables from manufacturers on the Federal Supply Schedule.³⁸ Thirteen (13) projects provided picnic tables from a manufacturer on the Federal Supply Schedule that makes an extra heavy duty picnic table in accessible and non-accessible designs. The picnic table is available in a variety of materials, including wood, aluminum, several types of vinyl clad steel, and recycled plastic. Depending on the material, the cost for an 8 foot long picnic table made by the manufacturer ranges from \$212 to \$668 for the non-accessible design, and from \$262 to \$718 for the accessible design (or \$50 additional cost for the accessible design compared to the non-accessible design made from the same materials) on the Federal Supply Schedule in July 2006.³⁹

The 10 other projects that provided picnic tables from manufacturers on the Federal Supply Schedule, got the picnic tables from manufacturers who either make 8 foot picnic tables only in accessible designs, or who make 8 foot picnic tables in accessible and non-accessible designs and sell both designs of the same type picnic table for the same price. The picnic table costs reported by the projects are shown in Table 2.7.⁴⁰ The additional

³⁶ Outdoor Developed Areas Accessibility Guidelines, sections T206.4 and T306.2.

³⁷ Federal Supply Group 78, Category 192 37B, Park and Recreational Tables, Benches, Outdoor Pool and Patio Furniture and Bleachers (<http://www.gsaelibrary.gsa.gov/ElibMain/SinDetails>). The Access Board did not attempt to verify whether the picnic tables actually meet the accessibility guidelines for outdoor developed areas.

³⁸ As for the other 18 projects, 7 projects did not identify the manufacturers; 6 projects provided picnic tables from manufacturers that are not on the Federal Supply Schedule; and 5 projects provided custom made picnic tables. Some of the projects were contracted out and the contractors may not have used the Federal Supply Schedule.

³⁹ The costs do not include shipping and assembly. There is no difference in shipping costs and assembly time for accessible and non-accessible designs of the same type picnic table. The cost for an 8 foot long picnic table ranges from \$296 to \$931 for the non-accessible design, and from \$366 to \$1001 for the accessible design (or \$70 additional cost for the accessible design compared to the non-accessible design made from the same materials) in the same manufacturer's catalogue in July 2006.

⁴⁰ The Forest Service projects provided only accessible picnic tables, but seven of the Forest Service projects also reported cost information for comparable models of non-accessible picnic tables for cost comparison. The Forest Service requested that cost information for the comparable model non-accessible picnic tables reported by Shawnee National Forest not be included in Table 2.7 because the accessible

costs for accessible picnic tables in the same project cannot be provided for the Fish and Wildlife Service projects and Army Corps of Engineers projects because the same projects did not report costs for accessible and non-accessible picnic tables. Five projects provided custom made picnic tables, and four of the custom made picnic tables ranged in price from \$1000 to \$1400. Four projects reported that the picnic table costs were the contractor's price, and included installation. Two projects reported that the picnic table costs included site work costs, and were not able to separate the site work costs and the picnic table costs. With a few exceptions, the additional costs reported by the projects for accessible picnic tables are within the range of additional costs shown on the Federal Supply Schedule and in the manufacturer's catalogues.

Table 2.7 – Picnic Table Costs Reported by Projects

Agency	# Projects Provided Tables	# Projects Reported Costs Lowest Cost – Highest Cost		Additional Cost for Accessible Tables in Same Project
		Accessible Tables	Non-Accessible Tables	
Department of Agriculture				
Forest Service	12 Projects	12 Projects \$208 - \$1654	8 Projects \$149 - \$1400	\$0 - \$200
Department of Interior				
National Park Service	8 Projects	5 Projects \$200 - \$1000	6 Projects \$145 - \$1000	\$0 - \$139
Fish and Wildlife Service	2 Projects	1 Project \$2050	1 Project \$524	Not Available
Bureau of Land Management	6 Projects	6 Projects \$450 - \$1000	1 Project \$475	\$175
Bureau of Reclamation	8 Projects	8 Projects \$178 - \$1100	1 Project \$650	\$50
Department of Defense				
Army Corps of Engineers	5 Projects	4 Projects \$100 - \$320	1 Project \$354	Not Available

Thirty-two (32) projects met or exceeded the number of accessible picnic tables required by the accessibility guidelines for outdoor developed areas as shown in Table 2.8. Two National Park Service projects did not provide sufficient information to determine whether the projects met or exceeded the number of accessible picnic tables required by the guidelines. One Army Corps of Engineers project provided the number of picnic tables with wheelchair spaces required by the guidelines, but the wheelchair spaces did not have sufficient knee clearance required by the guidelines.

picnic tables provided as part the picnic area project included site preparation and installation costs, and the cost information reported for the comparable model non-accessible picnic tables did not include site preparation and installation costs.

Table 2.8 – Projects That Met or Exceeded Number of Accessible Picnic Tables Required by Guidelines

Agency	# Projects Provided Tables	# Projects Met Guidelines	# Projects Exceeded Guidelines
Department of Agriculture			
Forest Service	12		12
Department of Interior			
National Park Service	8	1	3
Fish and Wildlife Service	2		1
Bureau of Land Management	6	1	4
Bureau of Reclamation	8	3	4
Department of Defense			
Army Corps of Engineers	5	2	1
Total	41	7	25

The number of additional accessible picnic tables needed by the other six projects that did not provide the number of accessible picnic tables required by the accessibility guidelines for outdoor developed areas is shown in Table 2.9.⁴¹

Table 2.9 – Additional Accessible Picnic Tables Needed by Projects That Did Not Provide Number of Accessible Picnic Tables Required by Guidelines

Agency Project	# Accessible Tables Provided by Project	# Additional Accessible Tables Needed by Project
Department of Interior		
National Park Service Project	3	4
National Park Service Project	2	9
Fish and Wildlife Service Project	0	2
Bureau of Land Management Project	2	2
Bureau of Reclamation Project	3	10
Department of Defense		
Army Corps of Engineers Project	0	2

Fire Rings

Fire rings are commercially available in various sizes and features. The outside diameter of fire rings ranges from 26 inches to 56 inches, with 30 inches the most common size. The height of fire rings ranges from 7 inches to 24 inches. Higher fire rings are partially filled with aggregate to provide an elevated fire surface. Fire rings have cooking grates that provide about 300 square inches of cooking surface. There are single level and adjustable multi-level cooking grates. Fire rings have one or two walls. Dual walls provide a heat barrier that reduces the outer wall temperature and are safer to operate.

The accessibility guidelines for outdoor developed areas require accessible fire rings to have a fire surface at least 9 inches above the ground, and a cooking surface between 15 inches and 34 inches above the ground.⁴²

⁴¹ The two National Park Service projects, the Bureau of Land Management project, and the Bureau of Reclamation project were picnic area projects. At least 50 percent of the picnic tables provided in picnic areas must be accessible.

Twenty-nine (29) projects reviewed for this regulatory assessment provided new fire rings. Nineteen (19) projects provided fire rings from manufacturers on the Federal Supply Schedule.⁴³ Twelve (12) projects provided fire rings from a manufacturer on the Federal Supply Schedule that makes fire rings in accessible and non-accessible designs. The cost for a 30 inch diameter fire ring made by the manufacturer is \$86 for a non-accessible design with a 9 inch height and \$140 for an accessible design with an 18 inch height (or \$54 additional cost for the accessible design compared to the non-accessible design) on the Federal Supply Schedule in July 2006.⁴⁴ The additional cost for accessible fire rings made by the other manufacturers ranged from \$66 to \$178 on the Federal Supply Schedule and in the manufacturer's catalogues in July 2006.⁴⁵

The fire ring costs reported by the projects are shown in Table 2.10.⁴⁶ The additional costs for accessible fire rings in the same project cannot be provided for the Army Corps of Engineers projects because the same projects did not report costs for accessible and non-accessible fire rings. Three projects reported that the fire ring costs were the contractor's price, and included installation. One project reported that the fire ring costs included site work costs, and were not able to separate the site work costs and the fire ring costs. With a few exceptions, the additional costs reported by the projects for accessible fire rings are within the range of additional costs shown on the Federal Supply Schedule and in the manufacturer's catalogues.

⁴² Outdoor Developed Areas Accessibility Guidelines, sections T307.3 and T308.3. The operable parts on fire rings are required to be within reach ranges and meet technical provisions for operable parts.

⁴³ Federal Supply Group 78, Category 192 371, Park and Playground Equipment (<http://www.gsaelibrary.gsa.gov/ElibMain/SinDetails>).

⁴⁴ The same fire rings cost \$120 for the non-accessible design and \$195 for the accessible design (or \$75 additional cost for the accessible design compared to the non-accessible design) in the manufacturer's catalogue in July 2006. The fire rings have a single wall and single level cooking grate. A heat shield option is available on the accessible fire ring for \$48. The fire rings are also available in other diameters and heights.

⁴⁵ Some manufacturers make non-accessible fire rings only with a single wall and accessible fire rings only with a dual wall, and the additional costs for accessible fire rings made by these manufacturers are on the high end of range.

⁴⁶ The Forest Service projects provided only accessible fire rings, but seven of the Forest Service projects also reported cost information for comparable models of non-accessible fire rings for cost comparison. The Wasatch-Cache National Forest reported that accessible fire rings cost \$300 more than non-accessible fire rings. This figure is not included the last column of Table 2.10 to be consistent with the regulatory assessment prepared by the Forest Service for FSORAG and FSTAG. The Wasatch-Cache National Forest prefers accessible fire rings over the non-accessible fire rings because accessible fire rings offer other external benefits, including increased facility for children and the elderly. The next highest range of additional costs for accessible fire rings, which is \$120 as reported by Gallatin National Forest, is used in the last column of Table 2.10.

Table 2.10 – Fire Ring Costs Reported by Projects

Agency	# Projects Provided Fire Rings	# Projects Reported Costs Lowest Cost – Highest Cost		Additional Cost for Accessible Fire Rings in Same Project
		Accessible Fire Rings	Non-Accessible Fire Rings	
Department of Agriculture				
Forest Service	10 Projects	10 Projects \$127 - \$600	7 Projects \$106 - \$450	\$0 - \$120
Department of Interior				
National Park Service	5 Projects	3 Projects \$125 - \$232	3 Projects \$60 - \$129	\$50 - \$103
Fish and Wildlife Service	2 Projects	2 Projects \$119 - \$675	0 Projects	
Bureau of Land Management	4 Projects	4 Projects \$120 - \$450	1 Projects \$85 - \$400	\$50
Bureau of Reclamation	4 Projects	4 Projects \$155 - \$300	1 Project \$300	\$0
Department of Defense				
Army Corps of Engineers	4 Projects	2 Projects \$145 - \$225	2 Projects \$50 - \$80	Not Available

Twenty-four (24) projects met or exceeded the number of accessible fire rings required by the accessibility guidelines for outdoor developed areas as shown in Table 2.11. Two National Park Service projects did not provide sufficient information to determine whether the projects met or exceeded the number of accessible fire rings required by the guidelines.

Table 2.11 – Projects That Met or Exceeded Number of Accessible Fire Rings Required by Guidelines

Agency	# Projects Provided Fire Rings	# Projects Met Guidelines	# Projects Exceeded Guidelines
Department of Agriculture			
Forest Service	10		10
Department of Interior			
National Park Service	5	2	
Fish and Wildlife Service	2		2
Bureau of Land Management	4		4
Bureau of Reclamation	4	3	1
Department of Defense			
Army Corps of Engineers	4	2	
Total	29	7	17

The number of additional accessible fire rings needed by the other three projects that did not provide the number of accessible fire rings required by the accessibility guidelines for outdoor developed areas is shown in Table 2.12.⁴⁷

⁴⁷ The National Park Service project replaced 200 fire rings in a camping area, and provided only 2 accessible fire rings. At least 8 accessible fire rings must be provided in camping areas with 200 camping spaces.

Table 2.12 – Additional Accessible Fire Rings Needed by Projects That Did Not Provide Number of Accessible Fire Rings Required by Guidelines

Agency Project	# Accessible Fire Rings Provided by Project	# Additional Accessible Fire Rings Needed by Project
Department of Interior		
National Park Service Project	2	6
Department of Defense		
Army Corps of Engineers Project	0	2
Army Corps of Engineers Project	0	3

Pedestal Grills

The accessibility guidelines for outdoor developed areas require the cooking surfaces on pedestal grills to be between 15 inches and 34 inches above the ground.⁴⁸ Most pedestal grills have adjustable cooking grates and can be installed so that the highest grate setting is 34 inches above the ground. There is no additional cost incurred by installing pedestal grills so that the cooking surface is at an accessible height.

Nineteen (19) projects reviewed for this regulatory assessment provided new pedestal grills. The accessible pedestal grills ranged in cost from \$122 to \$575. Most of the projects reported no additional costs for the accessible pedestal grills.⁴⁹

Fifteen (15) projects met or exceeded the number of accessible pedestal grills required by the accessibility guidelines for outdoor developed areas as shown in Table 2.13. The four projects that did not provide the number of accessible pedestal grills required by the guidelines needed to provide two additional accessible pedestal grills to meet the guidelines.

Table 2.13 – Projects That Met or Exceeded Number of Accessible Pedestal Grills Required by Guidelines

Agency	# Projects Provided Grills	# Projects Met Guidelines	# Projects Exceeded Guidelines
Department of Agriculture			
Forest Service	5		5
Department of Interior			
National Park Service	2	1	1
Fish and Wildlife Service	0		
Bureau of Land Management	3	1	1
Bureau of Reclamation	7	3	2
Department of Defense			
Army Corps of Engineers	2	1	
Total	19	6	9

⁴⁸ Outdoor Developed Areas Accessibility Guidelines, section T308.3.

⁴⁹ Three Forest Service projects and a Bureau of Land Management project reported additional costs ranging from \$5 to \$100 for accessible pedestal grills.

2.4 Other Camping and Picnic Elements

The projects also provided new trash containers, water hydrants, utility hook-ups, and benches.

Trash Containers

Eleven (11) projects reviewed for this regulatory assessment provided new trash containers. The accessibility guidelines for outdoor developed areas require operable parts on trash containers to be within reach ranges and to meet certain operation requirements.⁵⁰ The trash containers provided by 10 projects met the guidelines. One project did not provide sufficient information to determine whether the trash containers met the guidelines. The trash containers ranged in cost from \$10 to \$3000. Most of the projects reported no additional costs for accessible trash containers.⁵¹

Water Hydrants

Nine (9) projects reviewed for this regulatory assessment provided new water hydrants. The accessibility guidelines for outdoor developed areas require water hydrant spouts serving accessible camping spaces and picnic tables to be between 28 inches and 36 inches above the ground, and the controls to meet certain operation requirements.⁵² The water hydrant spouts provided by four projects met the guidelines. Three projects did not provide sufficient information to determine whether the water hydrant spouts met the guidelines. Most of the projects reported no additional costs for accessible water hydrant spouts.⁵³

Utility Hook-Ups

Six (6) projects reviewed for this regulatory assessment provided new electric, water, and sewage hook-ups for recreational vehicle camping spaces. The accessibility guidelines for outdoor developed areas require operable parts on electric and water hook-ups serving accessible camping spaces to be within reach ranges and to meet certain operation requirements.⁵⁴ The electric and water hook-ups provided by four projects met the guidelines. The projects reported no additional costs for accessible electric and water hook-ups.

⁵⁰ Outdoor Developed Areas Accessibility Guidelines, section T209.1 and T309.3.

⁵¹ One Forest Service project reported \$30 additional costs for accessible trash containers.

⁵² Outdoor Developed Areas Accessibility Guidelines, sections T217.1, T317.3, and T317.4.

⁵³ Two Forest Service Projects reported additional costs of \$350 and \$700 for water hydrant spouts. The spout that cost an additional \$700 has an automatic shut-off. The accessibility guidelines for outdoor developed areas do not require an automatic shut-off.

⁵⁴ Outdoor Developed Areas Accessibility Guidelines, sections T217.1 and T317.4.

Benches

Five (5) projects reviewed for this regulatory assessment provided new benches. The accessibility guidelines for outdoor developed areas require at least 50 percent of benches provided in an area to meet certain requirements for seat height and back support; and at least 50 percent of the benches meeting these requirements are also required to have at least one arm rest.⁵⁵ The benches provided by four projects met or exceeded the guidelines. The projects reported no additional costs for accessible benches.

2.5 Recreational Vehicle and Tent Camping Spaces

When a new camping area is constructed, the accessibility guidelines for outdoor developed areas require a certain number of accessible camping spaces to be provided in each camping area.⁵⁶ For camping areas with 100 or fewer camping spaces, the guidelines require at least 2 accessible spaces where 2 to 25 spaces are provided; at least 3 accessible spaces where 26 to 50 spaces are provided; at least 4 accessible spaces where 51 to 75 spaces are provided; and at least 5 accessible spaces where 76 to 100 spaces are provided.⁵⁷ When an existing camping area is altered, the guidelines require the altered camping spaces to meet the requirements for new construction.⁵⁸ For example, if an existing camping area has 30 camping spaces and 10 of the camping spaces are altered, the guidelines require 3 of the altered camping spaces to be accessible.⁵⁹

Recreational Vehicle Parking Areas

⁵⁵ Outdoor Developed Areas Accessibility Guidelines, sections T213.2, T313.3, T313.4, and T313.5.

⁵⁶ The accessibility guidelines for outdoor developed areas require accessible camping spaces to be identified by signs. Outdoor Developed Areas Accessibility Guidelines, sections T222 and T322. Signs are not required where all the camping spaces are accessible, or where the spaces are assigned upon arrival or through a reservation system. The Federal land management agencies have established reservation systems for their camping areas as part of the E-government initiative, and would not be required to provide signs at accessible camping spaces. Information on the Federal land management agencies' reservations systems is available on the web at: <http://www.recreation.gov/reservinf.jsp>.

⁵⁷ Outdoor Developed Areas Accessibility Guidelines, section T218.2.

⁵⁸ Outdoor Developed Areas Accessibility Guidelines, section T202.3.

⁵⁹ The number of accessible camping spaces required in an alteration is based on the total number of camping spaces in the camping area, and not the number of camping spaces altered. The example assumes that none of the camping spaces in the camping area were accessible prior to the alteration. If 3 of the camping spaces were accessible prior to the alteration, none of the altered camping spaces are required to be accessible because the total number of accessible camping spaces required for new construction (i.e., 3 accessible camping spaces in a camping area with 30 camping spaces) was met.

Recreational vehicle parking areas in camping spaces are typically at least 12 feet to 14 feet wide.⁶⁰ The accessibility guidelines for outdoor developed areas require recreational vehicle parking areas that are constructed or altered in accessible camping spaces be at least 20 feet wide to accommodate recreational vehicles equipped with a lift or ramp.⁶¹ Where camping spaces are designed for both recreational vehicle and tent camping, the guidelines permit the parking areas in 50 percent of the accessible camping spaces to be at least 16 feet wide.⁶² Where general parking areas are constructed or altered for recreational vehicles, the guidelines require at least one accessible parking space that is at least 12 feet wide and that has an adjacent access aisle at least 8 feet wide.⁶³

Twenty-two (22) projects reviewed for this regulatory assessment constructed or altered recreational vehicle parking areas in camping spaces. In 14 projects, the camping spaces were designed for both recreational vehicle and tent camping. Fourteen (14) projects met or exceeded the number of accessible recreational vehicle parking areas required by the accessibility guidelines for outdoor developed areas as shown in Table 2.14. Three Bureau of Reclamation projects did not provide sufficient information to determine whether the projects met or exceeded the guidelines.

Table 2.14 – Projects That Met or Exceeded Number of Accessible Recreational Vehicle Parking Areas Required by Guidelines

Agency	# Projects Constructed or Altered RV Parking Areas	# Projects Met Guidelines	# Projects Exceeded Guidelines
Department of Agriculture			
Forest Service	8	2	5
Department of Interior			
National Park Service	1		
Fish and Wildlife Service	1		1
Bureau of Land Management	3		3
Bureau of Reclamation	4		
Department of Defense			
Army Corps of Engineers	5	3	
Total	22	5	9

⁶⁰ The Army Corps of Engineers “Recreation Facility and Customer Service Standards” (<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em1110-1-400/toc.htm>) require recreational vehicle parking areas to be at least 12 feet wide and 70 feet long to accommodate a trailer plus a towing vehicle such as a car or truck. The Bureau of Reclamation “Recreation Facility Design Guidelines” (<http://www.usbr.gov/pmts/architecture/recfac/index.html>) provide for recreational vehicle parking areas to be at least 14 feet wide and 60 feet long. The Army Corps of Engineers standards and Bureau of Reclamation guidelines recommend that recreational vehicle parking areas have hardened surfaces for public convenience and ease of maintenance.

⁶¹ Outdoor Developed Areas Accessibility Guidelines, section T318.2.1. Accessible recreational vehicle parking areas are required to meet technical provisions for slope.

⁶² Outdoor Developed Areas Accessibility Guidelines, sections T218.2.1 Exception and T318.2.2.

⁶³ Outdoor Developed Areas Accessibility Guidelines, sections T218.3 and T318.2.3. Accessible parking spaces and access aisles in general parking areas are required to have a firm and stable surface and meet technical provisions for slope.

The number of additional accessible recreational vehicle parking areas needed by the other five projects that did not provide the number of accessible recreational vehicle camping spaces required by the accessibility guidelines for outdoor developed areas is shown in Table 2.15.⁶⁴

Table 2.15 – Additional Accessible Recreational Vehicle Parking Areas Needed by Projects That Did Not Provide Number of Accessible Recreational Vehicle Parking Areas Required by Guidelines

Agency Project	# Accessible RV Parking Areas Provided by Project	Additional Accessible RV Parking Areas Needed by Project
Department of Agriculture		
Forest Service Project	2	1
Department of Interior		
National Park Service Project	6	6
Bureau of Reclamation Project	1	1
Department of Defense		
Army Corps of Engineers Project	0	2
Army Corps of Engineers Project	0	3

Tent Pads and Tent Platforms

Tent pads and tent platforms in camping spaces are typically at least 12 feet by 12 feet, or 144 square feet. The accessibility guidelines for outdoor developed areas require that tent pads or tent platforms constructed or altered in accessible camping spaces have at least 4 feet wide clear space around the tent pads or tent platforms.⁶⁵ A tent pad or tent platform that is 12 feet by 12 feet, plus 4 feet wide clear space around the tent pad or tent platform, occupies 400 square feet of ground space.

Seventeen (17) projects reviewed for this regulatory assessment constructed or altered tent pads or tent platforms in camping spaces. Fourteen (14) projects met or exceeded the number of accessible tent pads or tent platforms required by the accessibility guidelines for outdoor developed areas as shown in Table 2.16. The three projects that did not provide the number of accessible tent pads or tent platforms required by the guidelines needed to provide one additional accessible tent pad or tent platform to meet the guidelines

⁶⁴ The Forest Service project provided one 20 feet wide and nine 16 feet wide recreational vehicle parking areas. The National Park Service project provided thirty 16 feet wide recreational vehicle parking areas. The Bureau of Reclamation project provided one 16 feet wide recreational vehicle parking area. One Army Corps of Engineers project provided 12 feet wide recreational vehicle parking areas. The other Army Corps of Engineers project did not provide any information about the width of the recreational vehicle parking areas.

⁶⁵ Outdoor Developed Areas Accessibility Guidelines, section T318.3. Accessible tent pads and tent platforms and the surrounding clear space are required to have a firm and stable ground surface and meet technical provisions for slope. Accessible tent platforms are also required to have edge protection and a means to access the tent platforms.

Table 2.16 – Projects That Met or Exceeded Number of Accessible Tent Pads or Tent Platforms Required by Guidelines

Agency	# Projects Constructed or Altered Tent Pads or Tent Platforms	# Projects Met Guidelines	# Projects Exceeded Guidelines
Department of Agriculture			
Forest Service	9	1	7
Department of Interior			
National Park Service	3		2
Fish and Wildlife Service	1		1
Bureau of Land Management	2		2
Bureau of Reclamation	1		
Department of Defense			
Army Corps of Engineers	1		1
Total	17	1	13

2.6 Outdoor Recreation Access Routes

When a new camping area is constructed, the accessibility guidelines for outdoor developed areas require an outdoor recreation access route to connect the accessible elements and spaces within the area.⁶⁶ Where a new picnic area is constructed, the guidelines require an outdoor recreation access route to connect at least 40 percent, but no fewer than two, of the accessible picnic tables, fire rings, pedestal grills, or benches within the area.⁶⁷ When an existing outdoor recreation access route is altered, it is required to meet the guidelines.⁶⁸

Twenty-six (26) projects reviewed for this regulatory assessment constructed new camping and picnic areas, or altered existing outdoor recreation access routes. All 26 projects provided outdoor recreation access routes that met the requirements of the accessibility guidelines for outdoor developed areas as shown in Table 2.17.

Table 2.17 – Projects That Met Guidelines for Outdoor Recreation Access Routes

Agency	# Projects Worked on Access Routes	# Projects Met Guidelines
Department of Agriculture		
Forest Service	10	10
Department of Interior		
National Park Service	6	6
Fish and Wildlife Service	1	1
Bureau of Land Management	4	4

⁶⁶ Outdoor Developed Areas Accessibility Guidelines, sections T204 and T304. Outdoor recreation access routes are required to have a firm and stable ground surface and meet technical provisions for clear tread width, openings, obstacles, passing space, cross slope and running slope, resting intervals, edge protection, and protruding objects.

⁶⁷ Outdoor Developed Areas Accessibility Guidelines, section T204.2, Exception 2.

⁶⁸ Outdoor Developed Areas Accessibility Guidelines, sections T202.3.

Agency	# Projects Worked on Access Routes	# Projects Met Guidelines
Bureau of Reclamation	4	4
Department of Defense		
Army Corps of Engineers	1	1
Total	26	26

2.7 Ground Surfaces

As further discussed below, the accessibility guidelines for outdoor developed areas require ground surfaces at accessible camping and picnic elements, accessible tent pads and tent platforms, and outdoor recreation access routes to be firm and stable.

Accessible Camping and Picnic Elements

When a new camping or picnic area is constructed, or the ground surfaces at an existing camping or picnic areas are altered, the accessibility guidelines for outdoor developed areas require clear spaces with firm and stable ground surfaces to be provided at accessible camping and picnic elements.⁶⁹

Thirty-five (35) projects reviewed for this regulatory assessment constructed new camping and picnic areas, or altered the ground surfaces at existing camping and picnic areas. All the projects provided pads with firm and stable surfaces in the accessible camping spaces and picnic sites that included space for the picnic tables, fire rings and pedestal grills as shown in Table 2.18.⁷⁰ Ten (10) projects reported data on pad sizes and costs. The pad sizes ranged from 196 square feet to 1200 square feet. The larger pads combined the cooking and eating areas, recreational vehicle parking areas, and tent pads. Some projects included the costs for clearing and grading the site, adding fill, and providing timber or block borders around the perimeter of the pads in the figures.

⁶⁹ Outdoor Developed Areas Accessibility Guidelines, sections T202.3 Exception, T306.2, T306.3, T 306.4, T307.2, T308.2, T309.2, T313.2, T317.2. The minimum size of the clear spaces vary from 30 inches by 48 inches at accessible trash containers, benches, utilities, and wheelchair spaces at picnic tables; 48 inches by 48 inches at accessible fire rings and pedestal grills; 60 inches by 60 inches at accessible water hydrant spouts; and 3 feet wide around accessible picnic tables. The clear spaces are also required to meet technical provisions for slope.

⁷⁰ Many projects provided pads in all the camping spaces and picnic sites for public convenience and ease of maintenance. The Army Corps of Engineers “Recreation Facility and Customer Service Standards” (<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em1110-1-400/toc.htm>) require all campsites to have pads that are up to 625 square feet. The Bureau of Reclamation Recreation “Facility Design Guidelines” (<http://www.usbr.gov/pmts/architecture/recfac/index.html>) provide for all campsites to have pads that are 650 square feet.

Table 2.18 – Projects That Provided Pads with Firm and Stable Ground Surfaces at Accessible Camping and Picnic Elements

Agency	# Projects Provided Firm & Stable Pads	# Projects Reported Data on Pad Size & Cost	Pad Sizes (Sq. Ft.)	Pad Costs
Department of Agriculture				
Forest Service	12	4	345 - 1033	\$960 - \$5020
Department of Interior				
National Park Service	5	0		
Fish and Wildlife Service	1	0		
Bureau of Land Management	5	2	196 – 225	\$2256 - \$3375
Bureau of Reclamation	6	1	200	\$2300
Department of Defense				
Army Corps of Engineers	6	3	400 -1200	\$1000 - \$8125
Total	35	10		

Accessible Tent Pads and Tent Platforms

The accessibility guidelines for outdoor developed areas require accessible tent pads and tent platforms, and the 4 feet wide minimum clear space around the accessible tent pads or tent platforms, to have firm and stable ground surfaces.⁷¹

Seventeen (17) projects reviewed for this regulatory assessment constructed or altered tent pads or tent platforms. All the projects provided accessible tent pads or tent platforms with firm and stable ground surfaces as shown in Table 2.19.⁷² Two projects reported data on tent pad or tent platform sizes and costs. Some projects provided larger pads that combined the cooking and eating areas and the tent pads, and did not report separate data on tent pad sizes and costs.

Table 2.19 – Projects That Provided Accessible Tent Pads or Tent Platforms with Firm and Stable Ground Surfaces

Agency	# Projects Provided Firm & Stable Tent Pads or Tent Platforms	# Projects Reported Data on Tent Pad or Tent Platform Size & Cost	Tent Pad or Tent Platform Sizes (Sq. Ft.)	Tent Pad or Tent Platform Costs
Department of Agriculture				
Forest Service	9	1	144	\$360
Department of Interior				
National Park Service	3	0		

⁷¹ Outdoor Developed Areas Accessibility Guidelines, sections T304.x.

⁷² Many projects provided firm and stable ground surfaces at all the tent pads for public convenience and ease of maintenance. The Army Corps of Engineers “Recreation Facility and Customer Service Standards” (<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em1110-1-400/toc.htm>) require all tent pads to have firm and stable ground surfaces such as crushed stone screenings for a durable all-weather surface. The Bureau of Reclamation “Recreation Facility Design Guidelines” (<http://www.usbr.gov/pmts/architecture/recfac/index.html>) provide for all tent pads to have firm and stable ground surfaces.

Agency	# Projects Provided Firm & Stable Tent Pads or Tent Platforms	# Projects Reported Data on Tent Pad or Tent Platform Size & Cost	Tent Pad or Tent Platform Sizes (Sq. Ft.)	Tent Pad or Tent Platform Costs
Fish and Wildlife Service	1	0		
Bureau of Land Management	2	0		
Bureau of Reclamation	1	1	388	\$1416
Department of Defense				
Army Corps of Engineers	1	0		
Total	17	2		

Outdoor Recreation Access Routes

The accessibility guidelines for outdoor developed areas require outdoor recreation access routes to have firm and stable ground surfaces.⁷³

Twenty-six (26) projects reviewed for this regulatory assessment constructed new camping and picnic areas, or altered existing outdoor recreation access routes. All 26 projects provided outdoor recreation access routes with firm and stable ground surfaces.⁷⁴ Three projects reported data on the size and costs of the outdoor recreation access routes as shown in Table 2.20.

Table 2.20 – Projects That Provided Firm and Stable Ground Surfaces at Outdoor Recreation Access Routes

Agency	# Projects Provided Access Routes	# Projects Reported Data on Access Route Size & Cost	Access Route Length x Width (Ft.)	Access Route Costs
Department of Agriculture				
Forest Service	10	0		
Department of Interior				
National Park Service	6	2	400 x 6 300 x 4	\$16,800 \$8,244
Fish and Wildlife Service	1	0		
Bureau of Land Management	4	1	75 x 5	\$4,890
Bureau of Reclamation	4	0		
Department of Defense				
Army Corps of Engineers	1	0		
Total	26	3		

⁷³ Outdoor Developed Areas Accessibility Guidelines, sections T318.3.2.

⁷⁴ Many projects provided routes with firm and stable ground surfaces for public convenience and ease of maintenance. The Army Corps of Engineers “Recreation Facility and Customer Service Standards” (<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em1110-1-400/toc.htm>) require all campsites to provide routes with firm and stable ground surfaces to the pads where the picnic tables, fire rings and pedestal grills are located.

Surface Materials Used

The projects used a variety of materials to provide firm and stable ground surfaces as shown in Table 2.21. Some projects did not report data on materials or costs. Some projects included expenses for clearing and grading the site, adding fill, and providing timber or block borders around the perimeter of the area in the figures.

Table 2.21 – Firm & Stable Surface Materials and Costs

Materials	# Projects	Costs (Sq. Ft.)				
		Less than \$1	\$1 - \$2.99	\$3 – \$4.99	\$5 - \$10	More than \$10
Compacted:						
Gravel/aggregate	10	2	4		1	
Crusher/quarry fines	5		1			1
Decomposed granite	2		1	1		
Limestone	1					
Gravel/reject sands	1		1			
Concrete	13		2	2	2	2
Asphalt	3					1
Hardened sand	1					
Soil stabilizer	1					

2.8 Costs

The Access Board developed a model based on the project reviews to estimate the additional costs associated with the accessibility guidelines for outdoor developed areas compared to the baselines discussed in Chapter 1.

The model is based on the following assumptions:

- The number of camping and picnic area projects funded annually by each Federal land management agency that include the construction or alteration of elements and spaces covered by the guidelines is the same as in FY 2004.
- All projects are new construction.
- The projects are equally divided between camping areas and picnic areas.
- Camping areas have between 26 and 50 camping spaces. The guidelines require at least 3 of the camping spaces to be accessible. The camping spaces are designed for recreational vehicle and tent camping. In the absence of the guidelines, a parking area (12 feet by 60 feet) with a hardened surface is provided in each camping space for recreational vehicles and cars. The guidelines require the parking area in at least 2 of the accessible camping spaces to be 20 feet wide, and permit the parking space in the other accessible camp space to be 16 feet wide. In the absence of the guidelines, a firm and stable tent pad (12 feet by 12 feet) is provided in each camping space. The guidelines require a firm and stable clear space 4 feet around the tent pad in the accessible camping spaces. Each camping space has a picnic table, fire ring and pedestal grill. The guidelines

require the picnic tables, fire rings and pedestal grills in the accessible camping spaces to be accessible.

- Picnic areas have 10 picnic tables, fire rings and pedestal grills. The guidelines require at least 5 picnic tables, fire rings and pedestal grills to be accessible.
- The native surface in the camping and picnic areas is not firm and stable. In the absence of the guidelines, a firm and stable pad is not provided for the cooking and eating or living areas. In the accessible design, a firm and stable pad (20 feet by 30 feet) is provided for the cooking and eating or living areas that provides the clear space at the accessible elements and connects the accessible elements, as required by the guidelines.
- In the accessible camping spaces, the parking areas, tent pads, and pads for the eating and cooking or living areas adjoin each other.
- The accessible design does not increase the size of the camping space or require additional site work other than described above.

Additional Unit Costs for Accessible Elements and Spaces

The model uses the following additional unit costs for accessible elements and spaces:

- Picnic Tables. The additional cost for an accessible picnic table ranges from \$0 to \$70 on the Federal Supply Schedule and in manufacturers' catalogues. The model uses the middle of the range (\$35).
- Fire Rings. The additional cost for an accessible fire ring ranges from \$54 to \$178 on the Federal Supply Schedule and in manufacturers' catalogues. The model uses the middle of the range (\$116).
- Pedestal Grills. There is no additional cost for an accessible pedestal grill.
- Parking Areas. The parking area for a recreational vehicle in the absence of the guidelines is 720 square feet (12 feet by 60 feet). The parking area for a recreational vehicle in an accessible camping space is 960 square feet for a 16 feet wide space, and 1,200 square feet for a 20 feet wide space. Thus, the parking area in an accessible camping space is an additional 240 square feet for a 16 feet wide space and 480 square feet for a 20 feet wide space. The projects used a variety of materials to provide a hardened surface for the parking areas, including compacted gravel, asphalt, and concrete. The costs for the materials ranged from less than \$1 per square foot to more than \$10 per square foot. The model uses the middle of the range (\$5 per square foot). The cost for an additional 240 square feet for a 16 feet wide parking area is \$1,200; and the cost for an additional 480 square feet for a 20 feet wide parking area is \$2,400.

- Tent Pads. The tent pad in the absence of the guidelines is 144 square feet (12 feet by 12 feet). The 4 feet of clear space around the tent pad in the accessible camping space is 256 square feet. The projects used a variety of materials to provide a firm and stable surface for the tent pads and clear space around the tent pads, including soil stabilizer and crushed stone fines. The costs for the materials ranged from less than \$1 per square foot to \$5 per square foot. The model uses the middle of the range (\$2.50). The cost for 4 feet of clear space around the tent pad is \$640.
- Pads for Cooking and Eating or Living Areas. The pad for the cooking and eating or living area is 600 square feet (20 feet by 30 feet). The projects used a variety of materials to provide a firm and stable surface for the pads, including soil stabilizer and crushed stone fines. The costs for the materials ranged from less than \$1 per square foot to \$5 per square foot. The model uses the middle of the range (\$2.50). The cost for a firm and stable pad for the cooking and eating or living area is \$1,500.

Baselines

As discussed in Chapter 1, the Access Board used two baselines for this regulatory assessment. The first baseline assesses the costs associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices. The second baseline assesses the costs associated with the guidelines if accessibility were not required by the Access Board or otherwise.

Additional Annual Project Costs Associated with Guidelines

Based on the model, the additional annual costs for camping and picnic area projects associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices are shown in Table 2.22 and range from \$0.2 million to \$0.4 million.

Table 2.22 – Additional Annual Project Costs Associated with Baseline 1: Guidelines Compared to Agencies’ Current Accessibility Policies and Practices

Agency	Camping & Picnic Areas
Department of Agriculture	
Forest Service	\$0
Department of the Interior	
National Park Service	\$126,588 to \$244,951
Fish and Wildlife Service	\$12,873
Bureau of Land Management	\$21,098 to \$33,971
Bureau of Reclamation	\$21,098 to \$42,196
Department of Defense	
Army Corps of Engineers	\$36,000 to \$72,000
Total	\$217,657 to \$405,991

The additional annual costs for camping and picnic area projects associated with the accessibility guidelines for outdoor developed areas if accessibility were not required and the Federal land management's agencies' projects do not include any accessible designs are shown in Table 2.23 and range from \$0.9 million to \$1.2 million.

Table 2.23 – Additional Annual Project Costs Associated with Baseline 2: Accessibility Not Required by Access Board or Otherwise

Agency	Camping & Picnic Areas
Department of Agriculture	
Forest Service ⁷⁵	\$0 to \$320,000
Department of the Interior	
National Park Service	\$485,254
Fish and Wildlife Service	\$21,098
Bureau of Land Management	\$63,294
Bureau of Reclamation	\$84,512
Department of Defense	
Army Corps of Engineers	\$266,049
Total	\$920,207 to \$1,240,207

Limitations

The model has the following limitations that may result in overestimating or underestimating the costs:

- The number of camping and picnic area projects funded each year that include the construction or alteration of elements and spaces covered by the guidelines will vary each year. To reliably predict the number of projects funded each year would require an analysis of hundreds of projects over several years.
- The majority of projects (67 percent) funded in FY 2004 were alterations to existing camping and picnic areas, and not new construction. Many of these projects only replaced the picnic tables, fire rings or pedestal grills, and did not involve any alterations to the ground surface. The guidelines do not require firm

⁷⁵ The Forest Service's additional annual costs for camping and picnic area projects are from its regulatory assessment for FSORAG and FSTAG. The Forest Service used a different methodology in its regulatory assessment than the Access Board used in this regulatory assessment. The Forest Service asked the personnel who worked on the 13 projects reviewed for its regulatory assessment whether accessible designs would be used in the absence of accessibility requirements. The Forest Service personnel from 7 projects responded that accessible designs would be used for all the elements and spaces in project in the absence of accessibility requirements because the public prefers accessible designs or there were other reasons for using accessible designs. The Forest Service personnel from the other 6 projects responded that accessible designs would be used for only some of the elements and spaces in the project in the absence of accessibility requirements because the public prefers accessible designs or there were other reasons for using accessible designs. The Forest Service estimated the percentage increase in the project costs for accessible designs used solely to meet accessibility requirements to range from 0 percent to 4.7 percent. The Forest Service reported that it expended \$6.9 million in FY 2003 on camping and picnic projects that would be subject to FSORAG, and multiplied this expenditure by 0 percent and 4.7 percent to estimate the lower and upper range of additional annual costs associated with FSORAG if accessibility were not required.

and stable ground surfaces to be provided where elements in existing facilities are replaced and the ground surface is not altered. Modeling costs on new construction is simpler, but overestimates the costs for alterations.

- The model assumes camping areas have between 26 and 50 camping spaces because 43 percent of the camping projects reviewed were in that size range. Another 43 percent of the camping projects reviewed have 25 or fewer camping spaces. The guidelines require camping areas with 25 or fewer camping spaces to provide one less accessible camping space, which would reduce the additional costs associated with the guidelines by \$4,700 per project. Thirteen percent of the camping projects reviewed have more than 50 camp spaces, and the guidelines require these larger camping areas to provide additional accessible camping spaces.
- The model assumes picnic areas have 10 or fewer picnic tables, fire rings and pedestal grills because 62 percent of the picnic projects reviewed were in that size range. The other 32 percent of the picnic projects have more than 11 picnic tables, fire rings and pedestal grills, and the guidelines require these larger picnic areas to provide additional accessible picnic tables, fire rings and pedestal grills.
- The model assumes that the native surface in the camping and picnic areas is not firm and stable. Some camping and picnic areas have native surfaces that are firm and stable. Other projects construct firm and stable pads for cooking and eating or living areas in camping and picnic areas for customer convenience, resource protection, or sustainability, and the costs for the pads should not be associated with the guidelines. If pad costs are not associated with the guidelines, the project costs are reduced by \$4,500 for the camping projects, and \$7,500 for the picnic area projects.

CHAPTER 3

TRAILS

3.1 Introduction

This chapter discusses the provisions in the accessibility guidelines for outdoor developed areas that apply to the construction and alteration of trails.

3.2 Trail Projects Covered By Guidelines

The trail miles managed by the Federal land management agencies are shown in Table 3.1.⁷⁶

Table 3.1 – Trail Miles Managed by Federal Agencies

Agency	Trail Miles
Department of Agriculture	
Forest Service	125,000 – 155,000 Total Miles 23,000 – 30,000 Miles Designated Hiker/Pedestrian Use
Department of Interior	
National Park Service	17,135 Total Miles 8,884 Miles Designated Hiker/Pedestrian Use
Fish and Wildlife Service	Not available
Bureau of Land Management	Not available
Bureau of Reclamation	Not available
Department of Defense	
Army Corps of Engineers	Not available

The accessibility guidelines for outdoor developed areas cover projects involving the construction of new trails and the alteration of existing trails that are designated for pedestrian use, and that connect to a designated trailhead or an accessible trail.⁷⁷ The guidelines distinguish between “maintenance and repair” and an “alteration” with regard to existing trails.⁷⁸ Maintenance and repair are work performed to return a trail to the condition or standard to which it was originally designed or built. Examples of maintenance and repair include clearing trails of encroaching brush and grasses; filling ruts; installing drainage structures to prevent erosion of the trail tread; and constructing retaining walls to support the trail tread. An alteration is work performed to change the original purpose, intent, or design of a trail. Examples of an alteration include changing the grade, width, or tread surface of a significant portion of an existing trail. Only projects that involve an alteration of existing trails are covered by the guidelines.

⁷⁶ The Forest Service trail miles are based on in its Infra System as of May 2006. Not all units completed reporting to the database. The Forest Service extrapolated the data nationwide. The National Park Service trail miles are based on its Facility Management Software System as of July 2006.

⁷⁷ Outdoor Developed Areas Accessibility Guidelines, sections T104.4, T201.1, T202.3, and T203.1.

⁷⁸ Outdoor Developed Areas Accessibility Guidelines, sections T104.1 and T202.3, and Advisory T202.3.

The Federal land management agencies spend a small portion of their capital improvement funds on the construction or alteration of trails covered by the accessibility guidelines for outdoor developed areas. The Forest Service reported in its regulatory assessment for FSORAG and FSTAG that \$35 million was spent in FY 2005 to improve 1,378 trail miles in the National Forest System, and estimated that 28 to 30 of these trail miles, or 2 percent of the total, are designated hiker/pedestrian trails and connect to a designated trail head or an accessible trail.⁷⁹

The Access Board requested data from the other Federal land management agencies on trail projects funded in FY 2004 involving the construction or alteration of trails that are designated hiker/pedestrian trails and connect to a designated trail head or an accessible trail. The data provided by the other Federal land management agencies is presented in Table 3.2.⁸⁰

Table 3.2 – FY 2004 Trail Projects Covered by Guidelines

Agency	Number of Projects	Total Project Costs
Department of the Interior		
National Park Service	33	\$2.7 million
Fish and Wildlife Service	3	\$0.3 million
Bureau of Land Management	1	\$25,000
Bureau of Reclamation	3	\$1.2 million
Department of Defense		
Army Corps of Engineers	4	\$1 million

The Access Board reviewed 26 trail projects for this regulatory assessment involving the construction or alteration of trails covered by the accessibility guidelines for outdoor developed areas, as shown in Table 3.3.⁸¹

Table 3.3 – Trail Projects Reviewed for Regulatory Assessment

Agency	Trail Projects Reviewed	Total Project Costs
Department of Agriculture		
Forest Service	4	\$0.3 million
Department of Interior		
National Park Service	11	\$1.7 million
Fish and Wildlife Service	3	\$0.3 million

⁷⁹ The Forest Service extrapolated from the proportion of hiker/pedestrian trail miles to total trail miles on its lands that 254 to 267 of the trail miles improved in FY 2005 are designated hiker/pedestrian trails. The Forest Service further extrapolated from a review of trail projects funded in FY 2003 at 13 national forests and a national scenic trail that 28 to 30 of the estimated 254 to 267 hiker/pedestrian trail miles improved in FY 2005 connect to a designated trailhead or an accessible trail.

⁸⁰ The number of projects and total project costs for the National Park Service is from its Project Management Information System (PMIS). Trail projects that are funded through external fund raising, or constructed or altered by volunteer organizations may not be identified through the PMIS. The number of projects and total project costs for the Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, and Army Corps of Engineers are from information provided by their regional and field offices in response to data calls.

⁸¹ Additional information on selection of the projects is provided in note 26.

Agency	Trail Projects Reviewed	Total Project Costs
Bureau of Land Management	1	\$25,000
Bureau of Reclamation	3	\$1.2 million
Department of Defense		
Army Corps of Engineers	4	\$1.0 million
Total	26	\$4.5 million

3.3 Technical Provisions and Exceptions for Accessible Trails

The accessibility guidelines for outdoor developed areas contain technical provisions for accessible trails. The technical provisions are summarized in Table 3.4. There are specific exceptions to the technical provisions where compliance with a provision would result in any of the following conditions:

- Cause substantial harm to cultural, historic, religious, or significant natural features or characteristics;
- Substantially alter the nature of the setting or the purpose of the facility, or portion of the facility;
- Require construction methods or materials that are prohibited by Federal, state or local law; or
- Not be feasible due to terrain or prevailing construction practices.

A specific exception to a technical provision does not require compliance with the technical provision only where the condition for the exception exists. For example, where compliance with the technical provision for clear tread width would cause substantial harm to a significant natural feature, the trail would be required to comply with the technical provision for clear thread width before and after the significant natural feature; and the trail would have to comply with all the other technical provisions, unless specific exceptions also apply to the other technical provisions.

Table 3.4 – Technical Provisions for Accessible Trails and Specific Exceptions

Section	Technical Provision	Specific Exception
T303.3 Surface	Trail surface must be firm and stable.	Compliance not required where any condition for exceptions applies.
T303.4 Clear Tread Width	Clear tread width must be 36 inches minimum.	Clear tread width permitted to be reduced to 32 inches minimum where any condition for exceptions applies. Compliance not required where 32 inches minimum clear tread width cannot be provided because any condition for exceptions applies.
T303.5 Openings	Openings in trail surfaces must not permit passage of ½ inch diameter sphere.	Openings that do not permit passage of ¾ inch diameter sphere permitted where any condition for exceptions applies.

Section	Technical Provision	Specific Exception
	Elongated openings must be perpendicular or diagonal to dominant direction of travel.	Compliance not required where openings that do not permit passage of ¾ inch diameter sphere cannot be provided because any condition for exceptions applies. Elongated openings permitted to be parallel to dominant direction of travel if opening does not permit passage of ¼ inch sphere.
T303.6 Tread Obstacles	Tread obstacles must not exceed 2 inches high maximum.	Tread obstacles permitted to be 3 inches high maximum where running and cross slopes are 1:20 or less. Compliance not required where tread obstacles greater than 3 inches high exist because any condition for exceptions applies.
T303.7 Passing Space	Passing spaces must be provided at intervals of 1000 feet maximum where clear tread width is less than 60 inches. Passing spaces must be 60 inches by 60 inches minimum; or a T-shaped space within a 60 inch square minimum with arms and base 36 inches wide minimum that extend 48 inches minimum beyond the intersection.	Compliance not required where any condition for exceptions applies.
T303.8 Slopes	Cross slope must not exceed 1:20. Running slope must not exceed: 1:20 for any distance 1:12 for up to 200 feet 1:10 for up to 30 feet 1:8 for up to 10 feet Resting intervals required between each segment where running slope exceeds 1:20 No more than 30 percent of total trail length must exceed running slope of 1:12.	For open drainage structures, 1:7 running slope permitted for 5 feet maximum and 1:10 cross slope permitted at bottom of open drain. Compliance not required where any condition for exceptions applies.
T303.9 Resting Intervals	Resting intervals must be 60 inches long minimum and at least as wide as the widest portion of the trail leading to the resting interval. Resting interval cross slope must not exceed 1:20 in all directions.	Compliance not required where any condition for exceptions applies.
T303.10 Edge Protection	Where edge protection is provided, it must be 3 inches high minimum.	
T321.1 Protruding Objects	Protruding objects on trails must comply with technical provisions for	Compliance not required where 80 inches high minimum vertical clearance cannot be

Section	Technical Provision	Specific Exception
	protruding objects. Protruding objects on trails must have 80 inches high minimum vertical clearance.	provided because any condition for exceptions applies. Barrier must be provided where vertical clearance is less than 80 inches high.
T322.2 Trail Signs	Signs must be placed at trailhead and designated access points identifying trails complying with technical provisions for accessible trails.	

Where applying the specific exceptions to the technical provisions would result in any of the following conditions, a general exception exempts the trail from having to comply with any of the provisions beyond the first point where the specific exceptions apply:

- Combination of running slope and cross slope exceeds 40 percent for over 20 feet;
- Trail obstacle 30 inches high or more runs across the full tread width;
- Trail surface is not firm and stable for 45 feet or more;
- Tread width is less than 12 inches wide for a distance of 20 feet or more; or
- Trail is not required to comply with any of the technical provisions for more than 15 percent of the trail.⁸²

3.4 Review of Trail Projects

The 26 trail projects that were reviewed for this regulatory assessment were requested to provide data on the projects using the form in Appendix C. The responses from the projects are summarized in Appendix D. Thirteen (13) projects constructed new trails only; 10 projects altered existing trails only; and 3 projects both constructed new trails and altered existing trails. The projects ranged in size from altering an existing 150 foot trail segment to a prominent feature, to constructing a new 6 mile trail. Approximately half the trails (12 projects) were one-half mile or less. The projects ranged in cost from a low of \$12,177 plus volunteer labor to alter 1.3 miles of existing trail and construct 0.7 miles of new trail, to a high of \$800,000 to construct a new trailhead and 0.5 miles of new trail. Approximately half the projects (12 projects) cost less than \$100,000.

All but one project met all the technical provisions for accessible trails or applied the specific exceptions for certain technical provisions. A Bureau of Reclamation project that involved the construction of 6 miles of new trail did not meet the technical

⁸² Outdoor Developed Areas Accessibility Guidelines, section T303.2. The segment of the trail between the trailhead and the first point where the specific exceptions apply is exempt from the technical provisions if the trail segment is 500 feet or less in distance, unless there is a prominent feature on the trail segment in which case the segment of the trail between the trailhead and the prominent feature must comply with the technical provisions.

provisions for running slope and resting intervals, and did not indicate whether any conditions existed for applying specific exceptions to the technical provisions. A total of 6 projects applied the specific exceptions to the technical provisions as shown in Table 3.5, and cited one or more of the conditions for the exceptions.⁸³

Table 3.5 – Specific Exceptions to Technical Provisions

Technical Provisions	Number of Projects Applying Specific Exceptions to Technical Provisions
T303.8 Running Slope	4
T303.8 Cross Slope	2
T303.9 Resting Intervals	3
T303.6 Tread Obstacles	1
T303.7 Passing Space	1

The most commonly cited condition for the exceptions (5 projects) was that compliance with the technical provision would not be feasible due to terrain or prevailing construction practices. Two projects cited the condition that compliance with the technical provision would cause substantial harm to cultural, historic, religious, or significant natural features or characteristics. One project cited the condition that compliance with the technical provision would substantially alter the nature of the setting or the purpose of the facility, or portion of the facility.

One project applied the general exception exempting a trail from all the technical provisions because the specific exceptions to the technical provisions would result in more than 15 percent of the trail not complying with any of the technical provisions. A variety of materials were used to provide firm and stable trail surfaces. Thirteen (13) projects constructed or replaced wooden boardwalks or bridges over wet or muddy land for all or part of the trails. The other trail surface materials included native soils, crushed and compacted stone, asphalt, and concrete. Eighty-five (85) percent of the projects (22 projects) responded that, if accessibility were not required, the trails would still have been constructed with firm and stable surfaces. Fifty-four (54) percent of the projects (14 projects) responded that, if accessibility were not required, the trails would still have been constructed with 3 feet minimum clear tread width. The Federal land management agencies reported that trails that connect to a designated trailhead generally receive heavier use and are constructed with firm and stable surfaces, wider tread widths, and gentler slopes for resource protection and sustainability.

3.5 Costs

Trail design and construction costs are very site specific. The costs will vary depending on the length of the trail; the terrain or landform the trail will be traversing (e.g., elevation changes, water seeps or springs, rock croppings, protected areas); the type and

⁸³ Three projects claimed a specific exception for the technical provision for edge protection. There is no specific exception for edge protection. The technical provision for edge protection only applies where edge protection is provided. The persons completing the data form may not have understood the application of the technical provision for edge protection, and claimed a specific exception where no edge protection was provided.

number of structures needed to sustain the trail (e.g., retaining walls, bridges, drain lenses, puncheons); the tools and equipment used (e.g., hand tools, power tools, mechanized equipment); materials (e.g., native materials, imported materials); and labor resources. An accessible trail generally will cost more than a non-accessible trail. The features that will generally add costs to an accessible trail include tread width; slopes, especially if it results in lengthening the trail; and firm and stable surfaces. However, some trails are designed and constructed with wider tread ways, gentler slopes, and firm and stable surfaces for sustainability and other reasons not associated with accessibility, especially trails that connect to designated trail heads and are visited more frequently by the public. The project reviews showed that 54 percent of the trails would have been constructed with 3 feet minimum clear tread width if accessibility were not required, and that 85 percent of the trails would have been constructed with firm and stable surfaces if accessibility were not required. Thus, it is not possible to estimate specific additional costs associated with accessibility for all trail projects.

For this regulatory assessment, the Access Board used a model that assumes the number of projects funded annually by Federal land management agencies for the construction and alteration of trails that are designated for pedestrian use and that connect to a designated trailhead or another accessible trail is the same as in FY 2004. The model further assumes that the trails are one-half mile or less; that the projects cost less than \$100,000; and that the additional costs associated with accessibility are approximately 20 percent or \$20,000. The first two assumptions are based on the majority of projects reviewed in FY 2004, and may not be true for all future years. The last assumption is a reasonable estimate based on the fact that some projects will be constructed with wider tread ways, gentler slopes, or firm and stable surfaces for reasons not associated with accessibility, and that the conditions for applying specific exceptions to the technical provisions will not result in disproportionately higher costs.

As discussed in Chapter 1, the Access Board used two baselines for this regulatory assessment. The first baseline assesses the costs associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices. The second baseline assesses the costs associated with the guidelines if accessibility were not required by the Access Board or otherwise.

Based on the model, the additional annual costs for trail projects associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices are shown in Table 3.6 and range from \$0.2 million to \$0.5 million.

Table 3.6 – Additional Annual Costs for Projects Associated with Baseline 1: Guidelines Compared to Agencies’ Current Accessibility Policies and Practices

Agency	Trails
Department of Agriculture	
Forest Service	\$0
Department of the Interior	
National Park Service	\$180,000 to \$340,000

Agency	Trails
Fish and Wildlife Service	\$20,000 to \$40,000
Bureau of Land Management	\$20,000
Bureau of Reclamation	\$20,000 to \$40,000
Department of Defense	
Army Corps of Engineers	\$20,000 to \$40,000
Total	\$260,000 to \$480,000

The additional annual costs for trail projects associated with the accessibility guidelines for outdoor developed areas if accessibility were not required by the Access Board or otherwise are shown in Table 2.23 and range from \$0.9 million to \$1.2 million.

Table 3.6 – Additional Annual Costs for Projects Associated with Baseline 2: Accessibility Not Required by Access Board or Otherwise

Agency	Camping & Picnic Areas
Department of Agriculture	
Forest Service ⁸⁴	\$157,000 to \$166,000
Department of the Interior	
National Park Service	\$660,000
Fish and Wildlife Service	\$60,000
Bureau of Land Management	\$20,000
Bureau of Reclamation	\$60,000
Department of Defense	
Army Corps of Engineers	\$80,000
Total	\$1,037,000 to \$1,046,000

⁸⁴ The Forest Service's additional annual costs for trail projects are from its regulatory assessment for FSORAG and FSTAG. The Forest Service used a different methodology in its regulatory assessment than the Access Board used in this regulatory assessment. The Forest Service improved 1,378 trail miles in FY 2005. The Forest Service extrapolated from its total trail miles and trail miles designated for hiker/pedestrian use that 28 to 30 of the improved trail miles would be subject to FSTAG. The Forest Service further extrapolated from a review of 5 trail construction projects funded in FY 2003 that 20 percent of the 28 to 30 trail miles improved in FY 2005 that would be subject to FSTAG would incur additional costs associated with FSTAG and that the additional costs per mile for accessible design would be \$29,700.

CHAPTER 4

OTHER OUTDOOR DEVELOPED AREAS

4.1 Introduction

This chapter discusses the provisions in the accessibility guidelines for outdoor developed areas that apply to the construction and alteration of beach access routes, outdoor rinsing showers, designated viewing areas, warming huts, wood stoves and fireplaces, storage facilities for mobility devices, and pit toilets.

Where the accessibility guidelines for outdoor developed areas are expected to add costs to the construction or alteration any of the outdoor developed areas described in this chapter, the Access Board requested the Federal land management agencies to identify construction and alteration projects funded in FY 2004 that involved work on the outdoor developed areas. Their responses are discussed in this chapter.

4.2 Beach Access Routes

A beach access route is a pedestrian path that crosses the beach and extends to the water. The accessibility guidelines for outdoor developed areas require a beach access route to be provided when a new beach is constructed.⁸⁵ At existing beaches, the guidelines require a beach access route to be provided when a new pedestrian route is constructed from a developed site to, or along the edge of, the beach.⁸⁶ At existing beaches, the beach access route can be a permanent or temporary surface.⁸⁷ Products for providing beach access routes are commercially available, and range in cost from \$2.25 to \$10.00 per square foot.⁸⁸ The Federal land management agencies did not identify any projects in FY 2004 that involved the construction of new beaches, or the construction of new pedestrian routes at existing beaches.

4.3 Outdoor Rinsing Showers

Outdoor rinsing showers are generally provided at beaches to rinse off sand. They may also be provided at campgrounds. Outdoor rinsing showers are not intended for bathing, and can be open or have walls. The accessibility guidelines for outdoor developed areas require outdoor rinsing showers to have clear space for a wheelchair, a grab bar, and two

⁸⁵ Outdoor Developed Areas Accessibility Guidelines, sections T205 and T305. Beach access routes are required to meet technical provisions for openings, obstacles, passing space, turning space, cross slope and running slope, edge protection, and protruding objects.

⁸⁶ Outdoor Developed Areas Accessibility Guidelines, section T205.3.

⁸⁷ Outdoor Developed Areas Accessibility Guidelines, section T205.3, Exception 1.

⁸⁸ Information on beach access route products is available on the National Center on Accessibility website: <http://www.ncaonline.org/products/index.php4?cat=Beach%20Surfaces>.

spray heads.⁸⁹ The guidelines also require that the operable parts be within reach ranges and meet certain operation requirements. The Forest Service identified two projects that involved the construction of outdoor rinsing showers. A project funded by the Forest Service in FY 2002 to reconstruct a campground in the Apalachicola National Forest included the installation of an outdoor rinsing shower that met the guidelines. The Forest Service reported that the accessible unit cost \$600 more than an inaccessible unit. A project funded by the Forest Service in FY 2003 to reconstruct a picnic and day use area in the Shawnee National Forest included the installation of a combination shower tower and drinking fountain costing \$4,000 that met the guidelines.

4.4 Designated Viewing Areas

Designated viewing areas are areas that are designed and constructed to provide an unobstructed view of a mountain range, vista or other point of interest. The accessibility guidelines for outdoor developed areas require designated viewing areas to have a wheelchair turning space and to design safety barriers and guardrails so as to provide unobstructed viewing opportunities for persons seated in a wheelchair and persons of short stature.⁹⁰ The guidelines also require at least 20 percent of new telescopes and periscopes installed at a designated viewing area to have clear space for a wheelchair and to be usable from a seated position.⁹¹ Where only one telescope or periscope is provided, the guidelines require that it also be usable from a standing position. The guidelines also require that the operable parts be within reach ranges and meet certain operation requirements. The guidelines are not expected to increase the cost of constructing or altering designated viewing areas.

4.5 Warming Huts

Warming huts are enclosed spaces used for temporary protection from the weather. The accessibility guidelines for outdoor developed areas require warming huts to have a wheelchair turning space.⁹² The guidelines also require warming huts that have doors to comply with the technical provisions for doors. The guidelines are not expected to increase the cost of constructing or altering warming huts.

4.6 Wood Stoves and Fireplaces

⁸⁹ Outdoor Developed Areas Accessibility Guidelines, sections T220 and T320. On post mounted showers, a vertical or circular grab bar must be affixed to the post. On wall mounted showers, a horizontal grab bar must be affixed to the wall. One spray head must be located between 48 inches and 54 inches above the ground or floor, and the other spray head must be located at least 72 inches above the ground or floor.

⁹⁰ Outdoor Developed Areas Accessibility Guidelines, sections T211 and T311.

⁹¹ Outdoor Developed Areas Accessibility Guidelines, sections T212 and T312.

⁹² Outdoor Developed Areas Accessibility Guidelines, sections T219, T319, and T408.

The accessibility guidelines for outdoor developed areas require wood stoves and fireplaces to have clear space for a wheelchair, and the operable parts to be within reach ranges and meet certain operation requirements.⁹³ The guidelines are not expected to increase the cost of constructing or altering wood stoves or fireplaces.

4.7 Storage Facilities for Mobility Devices

The accessibility guidelines for outdoor developed areas require facilities such as ski areas, where persons who use wheelchairs transfer from one type of mobility device to another type of mobility device (e.g., from a wheelchair to adaptive ski equipment), to provide at least one storage facility for mobility devices.⁹⁴ The guidelines also require the operable parts of the storage facilities to be within reach ranges and meet certain operation requirements. Storage facilities for mobility devices cost \$875.⁹⁵ The Federal land management agencies did not identify any projects in FY 2004 that involved the construction of storage facilities at new ski areas, or the alteration of storage facilities at existing ski areas.

4.8 Pit Toilets

Pit toilets are holes that are dug in the ground and covered by a toilet bench. They are usually located in remote areas. Pit toilets can be open or have walls. The accessibility guidelines for outdoor developed areas require pit toilets to have clear space for a wheelchair, and the toilet bench seat to be 17 inches minimum and 19 inches maximum above the ground or floor.⁹⁶ The guidelines also require pit toilets that have walls to provide grab bars. The guidelines will increase the cost of constructing and altering pit toilets that have walls due to the additional wall space needed to provide clear space for a wheelchair and the grab bars. The Federal land management agencies did not have information available on the number of pit toilets with walls that were constructed or altered on Federal lands in FY 2004, but the number is expected to be small.

4.9 Costs

The accessibility guidelines for outdoor developed areas are not expected to increase the cost of constructing or altering designated viewing areas, warming huts, or wood stoves and fireplaces. The provisions for beach access routes will add some costs to construction and alteration projects for beaches. However, the Federal land management agencies did not identify any projects funded in FY 2004 that included the construction of new beaches or the construction of new pedestrian routes at existing beaches, and it is

⁹³ Outdoor Developed Areas Accessibility Guidelines, sections T210 and T310.

⁹⁴ Outdoor Developed Areas Accessibility Guidelines, sections T215 and T315.

⁹⁵ American Bicycle Security Company, Wheel Chair Security Locker, Model 201CW. Information on the locker is available on the web at: <http://www.ameribike.com/catalog/bike/200-series/200.html>.

⁹⁶ Outdoor Developed Areas Accessibility Guidelines, sections T216, T316, and T409.

likely that such projects will be rare. The provisions for outdoor rinsing showers and storage facilities for mobility devices will add less than \$1,000 to project costs. Only the Forest Service identified two projects funded in FY 2004 that included the construction of outdoor rinsing showers. The other Federal land management agencies did not have data on projects that included the construction of outdoor rinsing showers or storage facilities for mobility devices. Nor did the Federal land management agencies have any data available on projects that included the construction or alteration of pit toilets with walls.

As discussed in Chapter 1, the Access Board used two baselines for this regulatory assessment. The first baseline assesses the costs associated with the accessibility guidelines for outdoor developed areas compared to the Federal land management agencies current accessibility policies and practices. The second baseline assesses the costs associated with the guidelines if accessibility were not required by the Access Board or otherwise.

The Forest Service will not incur any additional costs associated with the accessibility guidelines for outdoor developed areas for the other elements and spaces discussed in this chapter using the first baseline because all its new construction and alteration projects are required to use FSORAG, which generally meets or exceeds the accessibility guidelines for outdoor developed areas. Since the other Federal land management agencies either did not identify any projects funded in FY 2004 that included the construction or alteration of the other elements and spaces discussed in this chapter or did not have any data available on such projects, the Access Board did not develop a model based on specific assumptions for estimating the additional costs for such projects associated with the guidelines. Rather, the Access Board assumed that in the case of the other Federal land management agencies that under both the first baseline and the second baselines the additional annual costs associated with the guidelines for the other elements and spaces discussed in this chapter will range from \$0 to \$50,000 for each agency. The Access Board also assumed in the case of the Forest Service that under the second baseline the additional annual costs associated with the guidelines for the other elements and spaces discussed in this chapter will range from \$0 to \$50,000.⁹⁷

⁹⁷ The Forest Service did not address in its regulatory assessment of FSORAG and FSTAG the additional costs associated with FSORAG for the other elements and spaces discussed in this chapter in the absence of accessibility requirements.

APPENDIX A
CAMPING AND PICNIC AREA PROJECTS
DATA REQUEST

FY 2004 Camping and Picnic Area Projects

The Access Board is collecting information on camping and picnic area construction and alteration projects undertaken by Federal agencies in FY 2004 as part of a regulatory assessment of the costs and benefits of proposed accessibility guidelines for outdoor developed areas. This form is divided into five parts:

- **Part 1** collects general information about the projects.
- **Part 2** collects information on camping and picnic elements such as picnic tables, fire rings, pedestal grills, trash containers, benches, and utilities.
- **Part 3** collects information on tent pads and platforms.
- **Part 4** collects information on campground parking spaces, including recreational camping vehicle and trailer spaces, and parking spaces adjacent to tent camping spaces and camp shelters.
- **Part 5** collects information on outdoor recreation access routes that connect accessible elements and spaces within camping and picnic areas.

The relevant scoping and technical provisions of the proposed accessibility guidelines are summarized in each part. Scoping provisions specify what accessible features must be provided, and how many elements must be accessible when multiple elements are provided. Technical provisions specify the design criteria for accessible features.

There will be a conference call on _____ to go over the form. To participate in the conference call, call _____ and enter this pass code: _____.

If you have questions as you complete the form, please call or e-mail the following individuals at the Access Board:

Bill Botten	202-272-0014	botten@access-board.gov
Peggy Greenwell	202-272-0017	greenwell@access-board.gov
Jim Raggio	202-272-0040	raggio@access-board.gov

April 13, 2005

Part 1 – General

Facility:

Location:

Camping/Picnic Area:

Name of Person Completing Form:

Telephone Number:

E-Mail Address:

What type of work did the project involve?

_____ Construction of a new camping or picnic area

_____ Alterations to an existing camping or picnic area

Briefly describe the scope of work of the project (e.g., constructed 10 new tent pads; replaced 10 picnic tables).

If the project involved alterations to an existing camping area:

How many camping spaces are provided in the camping area? _____

How many of the camping spaces were accessible before the project was undertaken? _____

If the project involved alterations to an existing picnic area:

How many picnic tables are provided in the picnic area? _____

How many of the picnic tables were accessible before the project was undertaken? _____

What was the total cost of the project?

If accessible features in camping and picnic areas benefit others in addition to individuals with disabilities, or accessible features are provided for reasons in addition to providing access to individual with disabilities, describe the additional benefits or reasons below.

Part 2 – Camping and Picnic Elements

Where camping and picnic elements are provided, the proposed accessibility guidelines require a minimum number of the elements to be accessible as summarized below.

Element	Minimum Number of Accessible Elements Required
Picnic Tables	In picnic area, 50 percent; 100 percent if two or fewer
Fire Rings	In accessible camping spaces, each one
Pedestal Grills	One wheelchair space at accessible picnic tables, where table top perimeter is 24 linear ft. or less If table top perimeter exceeds 24 linear ft., call Access Board for number of wheelchair spaces
Fireplaces Wood Stoves	Each one
Trash Containers	Each one; 50 percent in multi-bin containers
Benches	50 percent; 100 percent if one One armrest on 50 percent of accessible benches
Utility Sinks	5 percent
Utilities	Where serving accessible elements, each one

If manufactured or prefabricated camping and picnic elements were provided as part of the project, fill-in the information requested below for each element that was provided.

1 Element	2 Manufacturer	3 Number of Elements Provided			4 Cost Per Element	
		Accessible	Non-Accessible	Total	Accessible	Non-Accessible
Picnic Tables						
Fire Rings						
Pedestal Grills						
Fireplaces						
Wood Stoves						
Trash Containers						
Benches						
Utility Sinks						

If picnic tables were provided, what is the length of the accessible table _____ (ft) and the non-accessible table _____ (ft)?

If utilities were provided as part of the project, specify the type of utility provided such as hand pump, sewage hook-up, or electrical service in column one and fill-in the information requested below.

1 Utility (Specify Type)	2 Number of Elements Provided			3 Cost Per Element	
	Accessible	Non-Accessible	Total	Accessible	Non-Accessible

If custom made camping and picnic elements were provided as part of the project, list the elements in column one and fill-in the information requested below. Do not list ground surfaces, tent pads or platforms, parking spaces, or toilets in column one.

1 Element	2 Number of Elements Provided			3 Cost Per Element	
	Accessible	Non-Accessible	Total	Accessible	Non-Accessible

If accessible camping and picnic elements were provided as part of the project and any technical provisions in the proposed accessibility guidelines summarized below were not met, check the technical provisions that were not met.

Accessible Element	Check (✓)	Technical Provisions Not Met
Picnic Tables		Wheelchair space 30 in. by 48 in. min.
		Wheelchair knee space 27 in. high; 30 in. wide; 19 in. deep min.
		Wheelchair toe clearance 9 in. high min.; extend 5 in. min. beyond knee clearance
Fire Rings		Fire surface height 9 in. min. above ground
		Raised edge 24 in. max. to building fire surface
Pedestal Grills		Cooking surface height 15 in. to 34 in. above ground
		Operable parts
Fireplaces, Wood Stoves		Operable parts
Trash Containers		Operable parts (exception for hinged lids and controls designed to keep out large animals)
Benches		Seat height 17 in. to 19 in. above ground
		Back support full length of bench
		Armrest with sufficient structural strength
Utility Sinks		Height 34 in. max. above ground
		Bowl bottom 15 in. min. above ground
		Operable parts
Utilities		Water spouts 28 in. to 36 in. above ground
		Operable parts (exceptions for hand pumps and sewage hookups)

Where the technical provisions refer to operable parts, the operable parts must be placed within one of the reach ranges specified below; must be operable with one hand; and must not require tight grasping, pinching, twisting of the wrist, or more than 5 lbs. force to activate.

Reach Ranges	Unobstructed	Obstructed
Forward Reach		Depth of obstruction 25 in. max. Clear ground space must extend beneath the element for a distance not less than the reach depth over the obstruction
High Reach	48 in. max.	48 in. max. for reach depth to 20 in. max.
Low Reach	15 in. max.	44 in. max. for reach depth greater than 20 in. to 25 in. max.
Side Reach	Obstruction up to 10 in. max. permitted between clear ground space and element	Depth of obstruction 24 in. max. Height of obstruction 34 in. max.
High Reach	48 in. max.	48 in. max. for reach depth to 10 in. max.
Low Reach	15 in. max.	46 in. max. for reach depth greater than 10 in. to 24 in. max.

If a new camping or picnic area was constructed, or if an existing camping or picnic area was altered and the ground surface was also altered, fill-in the information requested below.

The proposed accessibility guidelines require certain spaces at accessible camping and picnic elements specified below to be firm and stable, and not exceed 1:50 slope in all directions or 1:33 slope where necessary for drainage. In existing camping and picnic areas, where camping and picnic elements are replaced and the ground surface is not altered, the proposed accessibility guidelines do not require the ground surface to meet these requirements.

Accessible Element	Space
Picnic Tables	Wheelchair space 30 in. by 48 in. min
	Clear space 36 in. min. (from back edge of seat) around usable portion of table
Fire Rings, Pedestal Grills, Fireplaces, Wood Stoves	Clear space 48 in. by 48 in. min. at usable portion of fire ring or cooking surface
Trash Containers, Benches, Utility Sinks, Utilities (Except Water Spouts)	Clear space 30 in. by 48 in. min.
Water Spouts	Clear space 60 in. by 60 in. min.

Is the native surface firm and stable? Yes ____ No ____

If the native surface is not firm and stable, describe how a firm and stable surface was provided at the accessible camping and picnic elements; the total number of square feet of firm and stable surface provided; and the cost per square foot for providing a firm and stable surface.

Does the ground surface at the accessible camping and picnic elements have a 1:50 slope in all directions or 1:33 slope where necessary for drainage? Yes ____ No ____

If additional costs were incurred to provide a 1:50 slope in all directions or 1:33 slope where necessary for drainage, estimate the costs.

Exceptions are permitted where compliance with certain technical provisions would:

- (1) Cause substantial harm to cultural, historic, religious, or significant natural features or characteristics;**
- (2) Substantially alter the nature of setting or the purpose of the facility;**
- (3) Require construction methods or materials prohibited by federal, state or local law; or**
- (4) Not be feasible due to terrain or prevailing construction practices.**

**Do any of these conditions apply to the project? Yes ____ (Condition #: ____)
No ____**

If accessible camping spaces were provided as part of the project, fill-in the information requested below.

The proposed accessibility guidelines require accessible camping spaces to be identified by a sign displaying the International Symbol of Accessibility, unless all the camping spaces are accessible, or the camping spaces are assigned upon arrival or through a reservation system.

**Are the camping spaces assigned upon arrival or through a reservation system?
Yes ____ No ____**

Are the accessible camping spaces identified by a sign displaying the International Symbol of Accessibility? Yes ____ No ____

What is the cost for providing a sign displaying the International Symbol of Accessibility?

Part 3 –Tent Pads and Platforms

Where tent pads and platforms are provided, the proposed accessibility guidelines require a minimum number of the spaces to be accessible in accordance with the table below. If more than 500 tent pads and platforms are provided, call the Access Board for the number of accessible spaces required.

Number of Camping Spaces	Minimum Number of Accessible Camping Spaces Required
1	1
2 to 25	2
26 to 50	3
51 to 75	4
76 to 100	5
101 to 150	7
151 to 200	8
201 to 300	10
301 to 400	12
401 to 500	13

If tent pads and platforms were provided as part of the project, fill-in the information requested below.

Camping Space	Number of Camping Spaces Provided		
	Accessible	Non-Accessible	Total
Tent Pads			
Tent Platforms			

If accessible tent pads or platforms were provided as part of the project and any technical provisions in the proposed accessibility guidelines summarized below were not met, check the technical provisions that were not met.

Accessible Camping Space	Check (✓) Technical Provisions Not Met
Tent Pads	<input type="checkbox"/> Clear space 48 in. min. around tent pad
	<input type="checkbox"/> Firm and stable surface at tent pad and clear space around tent pad
	<input type="checkbox"/> 1:50 slope or 1:33 slope where necessary for drainage at tent pad and clear space around tent pad
	<input type="checkbox"/> Tent pad surface allows use of tent stakes
Tent Platforms	<input type="checkbox"/> Clear space 48 in. min. around tent platform
	<input type="checkbox"/> Firm and stable surface at tent platform and clear space around tent platform
	<input type="checkbox"/> 1:50 slope or 1:33 slope where necessary for drainage at tent platform and clear space around tent platform
	<input type="checkbox"/> Curb 3 in. min. or other means of edge protection on tent platform
	<input type="checkbox"/> Tent platform approachable by ramp, transfer, or directly from adjacent ground surface

Is the native surface firm and stable? Yes ____ No ____

If the native surface is not firm and stable, describe how a firm and stable ground surface was provided at the accessible tent pads and platforms; the total number of square feet of firm and stable ground surface provided; and the cost per square foot for providing a firm and stable ground surface.

If additional costs were incurred to provide a 1:50 slope or 1:33 slope where necessary for drainage at the accessible tent pads and platforms, estimate the costs.

Part 4 – Campground Parking Spaces

If recreational camping vehicle and trailer spaces were provided as part of the project, fill-in the information requested below.

Where recreational camping vehicle and trailer spaces are provided, the proposed accessibility guidelines require a minimum number of the spaces to be accessible in accordance with the table below. If more than 500 recreational camping vehicle and trailer spaces are provided, call the Access Board for the number of accessible spaces required.

Number of Camping Spaces	Minimum Number of Accessible Camping Spaces Required
1	1
2 to 25	2
26 to 50	3
51 to 75	4
76 to 100	5
101 to 150	7
151 to 200	8
201 to 300	10
301 to 400	12
401 to 500	13

Number of recreational camping vehicle and trailer spaces provided as part of project: _____

Number of accessible recreational camping vehicle and trailer spaces provided as part of project: _____

If accessible recreational camping vehicle and trailer spaces were provided as part of the project and any technical provisions in the proposed accessibility guidelines summarized below were not met, check the technical provisions that were not met.

Check (✓) Technical Provisions Not Met	
<input type="checkbox"/>	Spaces 20 ft. wide min. One space permitted to be 16 ft. wide min., where two accessible spaces are adjacent to each other
<input type="checkbox"/>	50 percent of spaces permitted to be 16 ft. wide min., where spaces also designed for tent camping
<input type="checkbox"/>	1:50 slope or 1:33 slope where necessary for drainage

If the project included work on general use parking areas in campgrounds with recreational camping vehicle and trailer spaces, fill-in the information requested below.

In campgrounds with recreational camping vehicle and trailer spaces, the proposed accessibility guidelines require each general use parking area to provide at least one accessible parking space for recreational camping vehicles and trailers.

Do the general use parking areas where work was performed as part of the project provide at least one accessible parking space for recreational camping vehicles and trailers? Yes ____ No ____

If accessible recreational camping vehicle and trailer parking spaces were provided in general use parking areas as part of the project and any technical provisions in the proposed accessibility guidelines summarized below were not met, check the technical provisions that were not met.

Check (√) Technical Provisions Not Met	
<input type="checkbox"/>	Parking spaces 12 ft. wide min.
<input type="checkbox"/>	Access aisle 8 ft. wide min. extending full length of parking space
<input type="checkbox"/>	Firm and stable surface at parking space and access aisle
<input type="checkbox"/>	1:50 slope or 1:33 slope where necessary for drainage at parking space and access aisle

If parking spaces were provided adjacent to tent camping and camp shelter spaces as part of the project, fill-in the information requested below.

Are accessible parking spaces provided adjacent to accessible tent camping and camp shelter spaces that were provided as part of the project? Yes ____ No ____

If accessible parking spaces were provided adjacent to accessible tent camping and camp shelter spaces as part of the project and any technical provisions in the proposed accessibility guidelines summarized below were not met, check the technical provisions that were not met.

Check (√) Technical Provisions Not Met	
<input type="checkbox"/>	Parking spaces 16 ft. wide min.
<input type="checkbox"/>	1:50 slope or 1:33 slope where necessary for drainage

Part 5 – Outdoor Recreation Access Routes

If a new camping or picnic area was constructed as part of the project, fill-in the information requested below.

Where a new camping or picnic area is constructed, the proposed accessibility guidelines require outdoor recreation access routes to be provided. Outdoor recreation access routes must coincide with or be located in the same general area as the general circulation path.

In a picnic area, outdoor recreation access routes must connect at least 40 percent of the accessible picnic tables, fire rings, pedestal grills, and benches in the area; and all the other accessible elements and spaces in the area.

In a camping area, outdoor recreation access routes must connect all the accessible elements and spaces in the area.

Were outdoor recreation access routes provided to connect the accessible elements and spaces that are required to be connected by the proposed accessibility guidelines? Yes ____ No ____

If the ground surface in an existing camping or picnic area was altered, fill-in the information requested below.

Where the ground surface in an existing camping or picnic area is altered, the proposed accessibility guidelines require outdoor recreation access routes to be provided in the locations where the ground surface is altered. Outdoor recreation access routes must coincide with or be located in the same general area as the general circulation path.

In a picnic area, the outdoor recreation access routes must connect all the accessible picnic tables, fire rings, pedestal grills, and benches in the locations where the ground surface is altered until at least 40 percent of these elements are connected; and all the other accessible elements and spaces in the locations where the ground surface is altered.

In a camping area, outdoor recreation access routes must connect all the accessible elements and spaces in the locations where the ground surface is altered.

**In the locations where the ground surface was altered, were outdoor recreation access routes provided to connect the accessible elements and spaces that are required to be connected by the proposed accessibility guidelines?
Yes ____ No ____**

If outdoor recreation access routes were provided as part of the project and any technical provisions in the proposed accessibility guidelines summarized below were not met, check the technical provisions that were not met.

Check (✓) Technical Provisions Not Met	
	Firm and stable surface
	Clear tread width 36 in. min.
	Clear width not reduced by protruding objects
	Openings not permit passage of ½ in. diameter sphere Elongated openings perpendicular or diagonal to dominant direction of travel Elongated openings parallel to dominant direction of travel permitted if opening does not permit passage of ¼ in. diameter sphere
	Tread obstacles not exceed 1 in. max.
	Passing space provided at 200 ft. intervals where clear tread width less than 60 in.
	Cross slope not exceed 1:33 or 1:20 where necessary for drainage
	Running slope: 1:20 or less for any distance 1:12 max. for 50 ft. max. 1:10 max. for 30 ft. max.
	Resting intervals 60 in. long min. and as wide as segment leading to resting interval provided where running slope exceeds 1:20 at distances no greater than: 50 ft. apart where running slope is 1:12 max. 30 ft. apart where running slope is 1:10 max. Resting interval slope not exceed 1:33 in all directions (1: 20 cross slope permitted where necessary for drainage)
	Where edge protection provided, edge 3 in. high min.

Exceptions are permitted where compliance with certain technical provisions would:

- (1) Cause substantial harm to cultural, historic, religious, or significant natural features or characteristics;
- (2) Substantially alter the nature of setting or the purpose of the facility;
- (3) Require construction methods or materials prohibited by federal, state or local law; or
- (4) Not be feasible due to terrain or prevailing construction practices.

Do any of these conditions apply to the project? Yes ___ (Condition #: ___) No ___

What is the cost per square foot for providing outdoor recreation access routes within the camping or picnic area?

What is the cost per square foot for providing paths within the picnic or camping area without regard to the technical provisions in the proposed accessibility guidelines for outdoor recreation access routes?

APPENDIX B
CAMPING AND PICNIC AREA PROJECTS
DATA SUMMARY

Department of Agriculture

Forest Service

1. Gallatin National Forest, Campground
2. San Juan National Forest, Paradise Horse Campground
3. Santa Fe National Forest, Paliza Campground
4. Wasatch-Cache National Forest, East Marsh Campground
5. Payette National Forest, Sheep Rock Picnic Area
6. Los Padres National Forest, Arroyo Seco Family Campground and Live Oak Day Use Area
7. Mt. Baker-Snoqualmie National Forest, Middle Fork Campground
8. Apalachicola National Forest, Carmel Lake Recreation Area, Camping Area, and Silver Lake Recreation Area, Picnic Area
9. George Washington and Jefferson National Forests, Cane Patch Campground
10. Sam Houston National Forest, Cagle Recreation Area, Campground
11. Shawnee National Forest, Pounds Hollow Picnic and Day Use Area
12. Chugach National Forest, Quartz Creek Campground and Quartz Creek Picnic Area

Department of Interior

National Park Service

13. Glacier National Park, Park Wide Campgrounds
14. Voyageurs National Park, Jenos Campground
15. Hawaii Volcanoes National Park, Kulaniokaiki Campground
16. Pinnacles National Monument, Picnic Area
17. Gulf Islands National Seashore, Fort Pickens Campground
18. Gulf Islands National Seashore, Davis Bayou Campground
19. Manassas National Battlefield Park, Brownsville Picnic Area
20. Valley Forge National Park, Picnic Area
21. Acadia National Park, Blackwoods Campground

Fish and Wildlife Service

22. Willapa National Wildlife Refuge, Long Island, Camping Area
23. Kenai National Wildlife Refuge, Rainbow Lake, Camping Area

Bureau of Land Management

24. Sand Flats Recreation Area, Juniper Campground
25. Storm King Trailhead, Picnic Area
26. Sourdough Creek Campground
27. Parker Strip Area, Bullfrog Day Use Area
28. Egin Lake Recreation Area, Campground and Day Use Area
29. Pit River Recreation Area, Campground and Day Use Area

Bureau of Reclamation

- 30. Emigrant Lake Recreation Area, Picnic Area
- 31. Northshore Park, Picnic Area
- 32. Salton Sea State Recreation Area, Picnic Area
- 33. Rifle Gap State Park, Cottonwood Campground and Picnic Area
- 34. Lake Berryessa, Oak Shores Day Use Park
- 35. Keyhole State Park, Arch Rock Area, Campground
- 36. Keyhole State Park, Pronghorn Area, Campground
- 37. Keyhole State Park, Homestead Area, Campground

Department of Defense

Army Corps of Engineers

- 38. Black Warrior and Tombigbee Lakes, Foscue Creek Park, Campground
- 39. Greens Ferry Lake, Dam Site Park, Campground
- 40. Truman Lake, Bucksaw Park, Campground
- 41. Truman Lake, Bucksaw Park, Picnic Area
- 42. Raystown Lake, Seven Points Recreation Area, Valley Camp Loop
- 43. Berlin Lake, Mill Creek Recreation Area, Maplewood Camping
Area

1. Forest Service Camping Area Project						
Camping Area: Campground			Forest Service Region: 1			
Forest: Gallatin National Forest			State: Montana			
Website: www.fs.fed.us/r1/gallatin/			Acres: 1.8 million			
Alteration			Urban Areas Served:			
Camping Units: 30			Annual Visits: 3 million			
Accessible Units Before Project: 0			Terrain: Rural, mountainous			
Accessible Units After Project: 2 RV, 3 Tent			Native Surface Firm & Stable: Varies			
Total Project Cost : \$87,000						
Work Covered By Guidelines: Picnic tables, fire rings, water hydrants, tent pads and platforms, living area pads, outdoor recreation access route			Work Not Covered By Guidelines:=			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.		30	\$1100	3	0	
Fire Rings		35	\$300	3	0	
Water Hydrants		5	\$1200	5	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 2 16 Ft. Wide Spaces: 33 Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 3 Tent Pads Non-Accessible: 2 Tent Pads Guidelines Require: 3 Accessible Tent Pads or Tent Platforms			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	35	345			\$3.50	
Tent Pads/Platforms	5					
RV Spaces						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Concrete, compacted gravel						
Cost Per Square Foot:						
Additional Information Provided: Accessible picnic tables are locally built and cost includes delivery. Accessible fire ring costs are contracted prices and cost \$120 more. Accessible water hydrant faucets with automatic shut-off cost \$700 more. Accessible living area pads cost \$150 more for native surfaces and \$800 more for imported surfaces. Accessible tent platforms cost \$1350 more.						

2. Forest Service Camping Area Project						
Camping Area: Paradise Horse Campground			Forest Service Region: 2			
Forest: San Juan National Forest			State: Colorado			
Website: www.fs.fed.us/r2/sanjuan/			Acres: 1.8 million			
Alteration			Urban Areas Served:			
Camping Units: 12			Annual Visits: 1.9 million			
Accessible Units Before Project: 0			Terrain: Rural, high desert mesa and mountains			
Accessible Units After Project: 12 RV, 12 Tent			Native Surface Firm & Stable: Yes			
Total Project Cost : \$1,034,700						
Work Covered By Guidelines: Picnic tables, fire rings, parking spurs, living area and tent pads, outdoor recreation access route			Work Not Covered By Guidelines: Replaced flush toilets, rehabilitated water system			
Cost of Work Covered By Guidelines: \$213,732						
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	16	\$528	2	0	
Fire Rings	R.J. Thomas	12	\$182	2	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
36 Ft. Wide Spaces: 4 (Double Spurs) 20 Ft. Wide Spaces: 8 Guidelines Require: 2 RV (20 Ft.) or 1 Double Spur (36 Ft.)			Accessible: 12 Tent Pads Non-Accessible: 0 Guidelines Require: 2 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area & Tent Pads Combined	12	960	Compacted Aggregate		\$1.00	
RV Spaces	12					
Project Involved Work on Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided: Accessible fire rings cost \$56 more. Most of additional costs associated with accessibility attributed to achieving acceptable grades.						

3. Forest Service Camping Area Project						
Camping Area: Paliza Campground			Forest Service Region: 3			
Forest: Santa Fe National Forest			State: New Mexico			
Website: www.fs.fed.us/r3/sfe/			Acres: 1.6 million			
Alteration			Urban Areas Served:			
Camping Units: 31			Annual Visits: 11 million			
Accessible Units Before Project: 0			Terrain: Rural, mountainous			
Accessible Units After Project: 3 RV, 8 Tent			Native Surface Firm & Stable: No			
Total Project Cost : \$157,250						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, trash containers, bench, parking spurs, tent pads, outdoor recreation access route			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Custom made	40	\$1000	3	0	
Fire Rings	R.J. Thomas	31	\$400	3	0	
Pedestal Grills	R.J. Thomas	29	\$300	3	0	
Trash Containers	McClintock	4	\$3000	4	0	
Benches	Custom made	1	\$1600	1	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 3 16 Ft. Wide Spaces: 7 Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 8 Tent Pads Non-Accessible: 4 Tent Pads Guidelines Require: 3 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads			Edged Crusher Fines			
Tent Pads	12		Stabilized Crusher Fines			
RV Spaces	10		Asphalt			
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Edged Crusher Fines						
Cost Per Square Foot:						
Additional Information Provided: Accessible picnic tables cost \$4 more. Accessible fire rings cost \$30 more. Accessible trash containers cost \$30 more. Used 4,250 square yards of edged crusher fines for living area pads, tent pads, and outdoor recreation access route at a unit cost of \$10 per square yard. Used 4,200 square feet of asphalt for parking spurs at a unit cost of \$15 per square yard. Parking spurs include 3 accessible double spurs. Accessible single parking spurs cost \$80 more, and accessible double parking spurs cost \$250 more. Tent pads cost \$500. Accessible tent pads cost \$545 more.						

4. Forest Service Camping Area Project						
Camping Area: East Marsh Campground			Forest Service Region: 4			
Forest: Wasatch-Cache National Forest			State: Utah			
Website: www.fs.fed.us/r4/wcnf/			Acres: 1.2 million			
Alteration			Urban Areas Served: Salt Lake City			
Camping Units: 46			Annual Visits: 4.9 million			
Accessible Units Before Project: 0			Terrain: Urban, mountainous			
Accessible Units After Project: 10 RV, 38 Tent			Native Surface Firm & Stable: Yes			
Total Project Cost : \$378,000						
Work Covered By Guidelines: Picnic tables, fire rings, parking spurs, tent pads, living area pads, outdoor recreation access route			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	46	\$800	3	0	
Fire Rings	R.J. Thomas	46	\$600	3	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 10 16 Ft. Wide Spaces: 36 Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 38 Tent Pads Non-Accessible: 8 Tent Pads Guidelines Require: 3 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	46		Compacted Gravel		\$2.50	
Tent Pads	46	144	Compacted Gravel		\$2.50	
RV Spaces	46					
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided: Picnic table and fire ring costs are contracted prices and include excavation, installation, and grading. Accessible fire rings cost \$300 more. Estimated \$2.50 per square foot for firm and stable surfaces includes mobilization, grubbing, grading, and compacted gravel. Outdoor recreation access routes provided as part of roadway construction contract.						

5. Forest Service Picnic Area Project						
Picnic Area: Sheep Rock Picnic Area			Forest Service Region: 4			
Forest: Payette National Forest			State: Idaho			
Website: www.fs.fed.us/r4/payette/			Acres: 2.3 million			
New Construction			Urban Areas Served:			
Picnic Units: 3			Annual Visits: 616,000			
Accessible Units: 3			Terrain: Rural, mountainous			
			Native Surface Firm & Stable: Yes			
Total Project Cost : \$135,000						
Work Covered By Guidelines: Picnic tables			Work Not Covered By Guidelines:			
Cost of Work Covered By Guidelines: \$1,800						
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	3	\$600	2	0	
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Day Use Pads	3	400	Soil Stabilizer			
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot: \$2 approximately						
Additional Information Provided: Picnic table costs are contracted prices. Site preparation, including mobilization, clearing, grubbing, grading, and soil stabilizer estimated to cost \$1,500.						

6. Forest Service Camping & Picnic Areas Project						
Camping Area: Arroyo Seco Family Campground Picnic Area: Live Oak Day Use Area				Forest Service Region: 5		
Forest: Los Padres National Forest				State: California		
Website: www.fs.fed.us/r5/lospadres/				Acres: 2 million		
Alteration				Urban Areas Served: Los Angeles		
Camping Units: 33 Picnic Units: 170 Person Capacity				Annual Visits: 1.5 million		
Accessible Camping Units Before Project: 4 Accessible Camping Units After Project: 33 Tent				Terrain: Urban, mountainous		
Accessible Picnic Units Before Project: 0 Accessible Picnic Units After Project: 170 Person Capacity				Native Surface Firm & Stable: Varies		
Total Project Cost : \$101,680						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, recycling containers, water hydrants, bench, day use pads, tent pads, outdoor recreation access route				Work Not Covered By Guidelines:		
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft. Wood Concrete	Belson (Frame)	20	\$550	3 Camp	0	
		80	\$900	50% Picnic	0	
Fire Rings		20		Same	0	
Pedestal Grills	Belson	100	\$278	Same	0	
Recycling Containers		7	\$850	7	0	
Water Hydrants		5	\$1200	5	0	\$850
Benches	Sitecraft	1	\$750	1	0	
Camping Spaces Provided By Project						
Tent Camping Spaces						
Accessible: 29 Tent Pads						
Non-Accessible: 0						
Guidelines Require: 3 Accessible Tent Pads						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Day Use Pads	20		Decomposed Granite		\$4.60	
Tent Pads	29					
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Decomposed Granite						
Cost Per Square Foot: \$4.60						
Additional Information Provided: Twenty parking spurs improved. No RV hook-ups. Used 10,784 square feet of decomposed granite. Accessible day use pads cost \$1.20 per square foot more. Base material at \$28 per ton would have been added to non-accessible surfaces, and actual costs of accessible and non-accessible surfaces would have been similar. Outdoor recreation access routes cost \$1.75 per square foot more.						

7. Forest Service Camping Area Project						
Camping Area: Middle Fork Campground			Forest Service Region: 6			
Forest: Mt. Baker-Snoqualmie National Forest			State: Washington			
Website: www.fs.fed.us/r6/mbs/			Acres: 1.75 million			
New Construction			Urban Areas Served: Seattle, Vancouver			
Camping Units: 45			Annual Visits: 5.2 million			
Accessible Units: 5 RV, 45 Tent			Terrain: Urban, mountainous			
			Native Surface Firm & Stable: No			
Total Project Cost : \$850,000						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, parking spurs, living area pads, tent pads, outdoor recreation access route			Work Not Covered By Guidelines:			
Cost of Work Covered By Guidelines: \$247,750						
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Perma -Port	50	\$1000	3	0	\$800
Fire Rings	Playscapes	45	\$300	3	0	\$250
Pedestal Grills	Playscapes	45	\$500	3	0	\$400
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 5 16 Ft. Wide Spaces: 40 Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 45 Tent Pads (9 Raised) Non-Accessible: 0 Guidelines Require: 3 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials			Cost Per Square Ft.
Living Area Pads	45		Crushed Compacted Aggregate			\$.58
Tent Pads	45		Crushed Compacted Aggregate			\$.58
RV Spaces	45					
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot: \$3.81						
Additional Information Provided: Forest lists manufacturer and model for camping and picnic elements, and contractor may substitute other sources that match listed model. Imported 170,100 square feet of common fill at \$.50 per square foot to place for leveling site, and 104,004 square feet of crushed aggregate at \$.58 to place, spread, and compact for firm and stable surface. Accessible living area pads and parking spurs cost \$300 more per unit compared to crushed rock surface. Raised tent pads cost \$150 more.						

8. Forest Service Camping & Picnic Areas Project						
Camping Area: Camel Lake Recreation Area			Forest Service Region: 8			
Picnic Area: Silver Lake Recreation Area						
Forest: Apalachicola National Forest			State: Florida			
Website: www.fs.fed.us/r8/florida/			Acres: 564,000			
Alteration			Urban Areas Served:			
Camping Units: 10			Annual Visits: 500,000			
Picnic Units: 60						
Accessible Camping Units Before Project: 0			Terrain: Rural, lowland, swampy			
Accessible Camping Units After Project: 10						
Accessible Picnic Units Before Project: 0			Native Surface Firm & Stable: No			
Accessible Picnic Units After Project: 60						
Total Project Cost : \$122,187						
Work Covered By Guidelines: Picnic tables, fire rings, trash containers, benches, outdoor recreation access route			Work Not Covered By Guidelines: Day use area parking area			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	60	\$209	32	0	\$178
Fire Rings	R.J. Thomas	60	\$187	32	0	\$106
Trash Containers	McClintock	30	\$818	30	0	\$818
Benches	Ultra Play Systems	20	\$171	10	0	\$171
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area/Use Pads			Hardened Sand			
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Concrete						
Cost Per Square Foot: \$5						
Additional Information Provided: Native surface is sand. Added lime rock, asphalt, or concrete to increase stability so vehicles can drive and park on surface. Accessible outdoor rinsing shower provided.						

9. Forest Service Camping Area Project						
Camping Area: Cane Patch Campground			Forest Service Region: 8			
Forest: George Washington and Jefferson National Forests			State: Virginia			
Website: www.fs.fed.us/r8/gwj/			Acres: 1.8 million			
Alteration			Urban Areas Served: Washington DC			
Camping Units: 34			Annual Visits: 3 million			
Accessible Units Before Project: 0			Terrain: Rural, mountainous, rolling valleys			
Accessible Units After Project: 1 RV, 2 Tent			Native Surface Firm & Stable: No			
Total Project Cost : \$61,696						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, parking spurs, tent pads, living area pads			Work Not Covered By Guidelines:			
Cost of Work Covered By Guidelines: \$18,454						
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	11	\$177	3	0	\$149
Fire Rings	R.J. Thomas	20	\$127	3	0	
Pedestal Grills	R.J. Thomas	20	\$122	3	0	\$117
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 1 16 Ft. Wide Spaces: 9 Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 2 Tent Pads Non-Accessible: 7 Tent Pads Guidelines Require: 3 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	1					
Tent Pads	9					
RV Space	10	512	Concrete		\$4.25	
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Shipping costs were \$518 for the picnic tables, and \$1,024 for the other elements. Accessible parking spur (20 feet wide) costs \$535 more. Outdoor recreation access route will be provided next phase.						

10. Forest Service Camping Area Project						
Camping Area: Cagle Recreation Area			Forest Service Region: 8			
Forest: Sam Houston National Forest			State: Texas			
Website: www.fs.fed.us/r8/texas/			Acres: 163,000			
Alteration			Areas Served: Dallas – Ft. Worth			
Camping Units: 47			Annual Visits:			
Accessible Units Before Project: 11			Terrain: Rural, rolling plains and woodlands			
Accessible Units After Project: 5 RV, 8 Tent			Native Surface Firm & Stable: Varies			
Total Project Cost : \$526,661						
Work Covered By Guidelines: Picnic tables, fire rings, parking spurs, tent pads, living area pads			Work Not Covered By Guidelines:			
Cost of Work Covered By Guidelines: \$236,752						
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Gulf Coast Trade	46	\$393	3	0	\$366
Fire Rings	Fire Lite	46	\$400	3	0	\$400
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 5			Accessible: 8 Tent Pads			
16 Ft. Wide Spaces: 41			Non-Accessible: 12 Tent Pads			
Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Guidelines Require: 3 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	5		Decomposed Granite		\$1.38	
Tent Pads	20		Decomposed Granite		\$1.38	
RV Spaces	46					
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Enlarged 5 existing accessible camping units to accommodate RVs. Picnic tables placed on concrete pads. Used 3,450 square feet of decomposed granite. Larger tent pads used 700 additional square feet of decomposed granite. Accessible tent pads cost \$120 more. Accessible campsite pads cost \$950 more. RV spaces (20 feet wide) cost \$1,000 more. Pre-existing outdoor recreation access route.						

11. Forest Service Picnic Area Project						
Picnic Area: Pounds Hollow Picnic & Day Use Area			Forest Service Region: 9			
Forest: Shawnee National Forest			State: Illinois			
Website: www.fs.fed.us/r9/forests/shawnee/			Acres: 234,000			
Alteration			Urban Areas Served:			
Picnic Units: 5 Single & 1 Group			Annual Visits: 1.3 million			
Accessible Units Before Project: 0			Terrain: Rural, diverse terrain			
Accessible Units After Project: All			Native Surface Firm & Stable: No			
Total Project Cost : \$737,336						
Work Covered By Guidelines: Picnic tables, pedestal grills, trash containers, benches, use pads, outdoor recreation access route Cost of Work Covered By Guidelines: \$45,800			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 6 Ft.	Iron. Mt. Forge	12	\$1,654	7	0	1,024
Pedestal Grills	Iron. Mt. Forge	3 Single 1 Group	\$250 \$1,200	2 1	0 0	\$180
Trash Containers	Gov't. Furnished	5	\$100	5	0	
Benches	Iron. Mt. Forge	2	\$580	1	0	
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Use Pads		1,033	Concrete		\$4.86	
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Concrete						
Cost Per Square Foot: \$4.86						
Additional Information Provided: Element costs include excavation, concrete pads, installation, and grading. Outdoor recreation access route did not meet guidelines for running slope and resting intervals. Accessible outdoor rinsing shower provided.						

12. Forest Service Camping & Picnic Areas Project						
Camping Area: Quartz Creek Camping Area Picnic Area: Quartz Creek Picnic Area			Forest Service Region: 10			
Forest: Chugach National Forest			State: Alaska			
Website: www.fs.fed.us/r10/chugach/			Acres: 5.8 million			
Alteration			Urban Areas Served:			
Camping Units: 45 Picnic Units: 5			Annual Visits: 904,000			
Accessible Camping Units Before Project: 0 Accessible Camping Units After Project: 12 RV, 45 Tent			Terrain: Rural, temperate rainforest, river deltas			
Accessible Picnic Units Before Project: 0 Accessible Picnic Units After Project: 5			Native Surface Firm & Stable: No			
Total Project Cost : \$1,900,000						
Work Covered By Guidelines: Picnic tables, fire rings, trash containers, parking spurs, tent pads, living area pads Cost of Work Covered By Guidelines: \$255,670			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 11 Ft.	Custom	50	\$1,400	6	0	\$1,400
Fire Rings	R.J. Thomas	50	\$450	6	0	\$450
Trash Containers	Hid-a-Bag	9	\$1,200	9	0	\$1,200
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 12 16 Ft. Wide Spaces: 33 Guidelines Require: 3 RV (20 Ft.) or 2 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 45 Tent Pads Non-Accessible: 0 Guidelines Require: 3 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area & Tent Pads Combined	45	500	Compacted 3/8 Inch Minus Aggregate		\$7.00	
RV Space	45					
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot: On-grade \$20 per square foot. Boardwalk \$60 - \$65 per square foot.						
Additional Information Provided: Surface costs include clearing and grubbing native organics, filling with common burrow to grade and level, filter fabric, and timber edges around border of pads.						

13. National Park Service Camping Area Project						
Camping Area: Park Wide Campgrounds			National Park Service Region: Intermountain			
Park: Glacier National Park			State: Montana			
Website: www.nps.gov/glac/			Acres: 1 million			
Alteration			Urban Areas Served:			
Camping Units: Varies by campground			Annual Visits: 2 million			
Accessible Units Before Project: Varies			Terrain: Rural, mountainous			
Accessible Units After Project: Varies			Native Surface Firm & Stable: Yes			
Total Project Cost : \$107,000						
Work Covered By Guidelines: Picnic tables and fire rings Sufficient information not provided to determine number of accessible picnic tables and fire rings required by guidelines since number of accessible elements is based on total number of camping units in each campground.			Work Not Covered By Guidelines: Cyclical maintenance to restrooms and camp sites			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables Ft.		50	\$200		200	\$150
Fire Rings		25	\$150		400	\$100
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Used sites with firm and stable surfaces.						

14. National Park Service Camping Area Project						
Camping Area: Jenos Camping Area			National Park Service Region: Midwest			
Park: Voyageurs National Park			State: Minnesota			
Website: www.nps.gov/voya/			Acres: 218,200			
New Construction			Urban Areas Served:			
Camping Units: 8			Annual Visits: 253,661			
Accessible Units After Project: 1 Tent			Terrain: Rural, natural forest			
			Native Surface Firm & Stable: No			
Total Project Cost : \$55,150						
Work Covered By Guidelines: Constructed 8 tent camping spaces on island within park			Work Not Covered By Guidelines: Boat dock			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.		1		1*	3	
Fire Rings		1		1*	1	
Benches		0		5	10	
* Assumed 2 camping spaces share picnic table, and 4 camping spaces share fire ring.						
Camping Spaces Provided By Project						
Tent Camping Spaces						
Accessible: 1 Tent Pad						
Non-Accessible: 7 Tent Pads						
Guidelines Require: 2 Accessible Tent Pads						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads			Crusher Fines & Hardening Agent			
Tent Pads	8		Crusher Fines & Hardening Agent			
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width: 400 Ft. x 6 Ft.						
Surface Materials:						
Cost Per Square Foot: \$7						
Additional Information Provided: Non-accessible picnic tables 6 ft. Boat dock is accessible.						

15. National Park Service Camping Area Project						
Camping Area: Kulaniokaiki Campground			National Park Service Region: Pacific West			
Park: Hawaii Volcanoes National Park			State: Hawaii			
Website: www.nps.gov/havo/			Acres: 323,431			
New Construction			Urban Areas Served: Hilo			
Camping Units: 8			Annual Visits: 2.3 million			
Accessible Units After Project: 3 Tent			Terrain: Ranges from sea level to volcano summit			
			Native Surface Firm & Stable: No			
Total Project Cost : \$90,000						
Work Covered By Guidelines: Picnic tables, tent pads, living area pads, outdoor recreation access route			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 10 Ft.	Custom	3	\$1000	2	5	\$1000
Camping Spaces Provided By Project						
Tent Camping Spaces						
Accessible: 3 Tent Pads						
Non-Accessible: 5 Tent Pads						
Guidelines Require: 2 Accessible Tent Pads						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads			Asphalt & Gravel			
Tent Pads	8					
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width: 1000 Ft. x 4 Ft.						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided: Non-accessible picnic tables are 8 feet. Fires not allowed in campground.						

16. National Park Service Picnic Area Project						
Picnic Area: Picnic Area			National Park Service Region: Pacific West			
Park: Pinnacles National Monument			State: California			
Website: www.nps.gov/pinn/			Acres: 24,514			
New Construction			Urban Areas Served:			
Picnic Units: 8			Annual Visits: 156,389			
Accessible Units After Project: 8			Terrain: Wild lands, monoliths, canyons			
			Native Surface Firm & Stable:			
Total Project Cost : \$25,284						
Work Covered By Guidelines: Picnic tables, pedestal grills, trash containers, use pads, outdoor recreation access route			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	8	\$773	4	0	\$634
Pedestal Grills	R.J. Thomas	8	\$278	4	0	\$278
Trash Containers	Bear Saver	2	\$875	2	0	\$875
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Use Pads						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width: 330 Ft. x 4 Ft.						
Surface Materials:						
Cost Per Square Foot: \$6.87						
Additional Information Provided:						

17. National Park Service Camping Area Project						
Camping Area: Fort Pickens Campground			National Park Service Region: Southeast			
Park: Gulf Islands National Shore			State: Florida			
Website: www.nps.gov/guis/			Acres: 127,991			
Alteration			Urban Areas Served: Pensacola, Mobile, Biloxi			
Camping Units: 200			Annual Visits: 5.0 million			
Accessible Units Before Project:			Terrain: Beaches, marshes, maritime forests			
Accessible Units After Project:			Native Surface Firm & Stable:			
Total Project Cost : \$16,823						
Work Covered By Guidelines: Fire rings			Work Not Covered By Guidelines: Waterless urinals, grab bars, shower seats			
Cost of Work Covered By Guidelines: \$12,104						
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Fire Rings	R.J. Thomas	2	\$125	8	198	\$60
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided:						

18. National Park Service Camping & Picnic Areas Project						
Camping Area: Davis Bayou Campground Picnic Area: Picnic Area			National Park Service Region: Southeast			
Park: Gulf Islands National Seashore			State: Florida			
Website: www.nps.gov/guis/			Acres: 127,991			
Alteration			Urban Areas Served: Pensacola, Mobile, Biloxi			
Camping Units: 52 Picnic Units: 129			Annual Visits: 5.0 million			
Accessible Camping Units Before Project: 2 Accessible Camping Units After Project:			Terrain: Beaches, marshes, maritime forests			
Accessible Picnic Units Before Project: 2 Accessible Picnic Units After Project:			Native Surface Firm & Stable:			
Total Project Cost : \$2,296						
Work Covered By Guidelines: Picnic tables and fire rings Sufficient information not provided regarding number of picnic tables and fire rings altered in each area to determine number of accessible picnic tables and fire rings required by guidelines.			Work Not Covered By Guidelines: Cyclical maintenance to restrooms and camp sites			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables Ft.		0			11	
Fire Rings	Kay Park-Rec	3	\$232		50	\$129
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided:						

19. National Park Service Picnic Area Project						
Picnic Area: Brownsville Picnic Area			National Park Service Region: National Capitol			
Park: Manassas National Battlefield Park			State: Virginia			
Website: www.nps.gov/mana/			Acres: 5,073			
Alteration			Urban Areas Served: Washington DC			
Picnic Units: 13			Annual Visits: 716,963			
Accessible Units Before Project: 0			Terrain: Rolling countryside			
Accessible Units After Project: 3			Native Surface Firm & Stable: Yes			
Total Project Cost : \$12,720						
Work Covered By Guidelines: Picnic tables, use pads, outdoor recreation access route			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Plastic Recycling of Iowa Falls	3	\$395	7	10	\$334
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Use Pads	3					
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided: Non-accessible picnic tables are 6 feet. Use pads and outdoor recreation access route cost \$1,200. Purchased 20 additional picnic tables for other sites and future needs.						

20. National Park Service Picnic Area Project						
Picnic Area: Picnic Area			National Park Service Region: Northeast			
Park: Valley Forge National Park			State: Pennsylvania			
Website: www.nps.gov/vafo/			Acres: 3,446			
Alteration			Urban Areas Served: Philadelphia			
Picnic Units: 21			Annual Visits: 6.6 million			
Accessible Units Before Project: 0			Terrain:			
Accessible Units After Project: 2			Native Surface Firm & Stable: No			
Total Project Cost : \$42,089						
Work Covered By Guidelines: Picnic tables, outdoor recreation access route			Work Not Covered By Guidelines: Road repairs, restroom repairs, parking area restriped			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Great Lakes	2	\$715	11	19	\$715
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Concrete						
Cost Per Square Foot:						
Additional Information Provided:						

21. National Park Service Camping Area Project						
Camping Area: Blackwoods Campground			National Park Service Region: Northeast			
Park: Acadia National Park			State: Maine			
Website: www.nps.gov/acad/			Acres: 47,390			
Alteration			Urban Areas Served: Bar Harbor			
Camping Units: 315			Annual Visits: 2.2 million			
Accessible Units Before Project: 4			Terrain: Woodlands, mountains, lakes, ocean shore			
Accessible Units After Project: 16 Tent			Native Surface Firm & Stable: No			
Total Project Cost : \$4,000,000						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, trash containers, water hydrants, parking spurs, tent pads, living area pads			Work Not Covered By Guidelines: Entrance station, roads, drainage, utilities, restrooms			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	16		16		
Fire Rings	R.J. Thomas	16		16		
Pedestal Grills	R.J. Thomas	16		16		
Trash Containers	McClintock					
Water Hydrants		20				
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 0 16 Ft. Wide Spaces: 30 Guidelines Require: 12 RV (20 Ft.) or 6 RV (20 Ft.) and 6 Tent (16 Ft.)			Accessible: 16 Tent Pads Non-Accessible: 246 Tent Pads Guidelines Require: 12 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials			Cost Per Square Ft.
Living Area Pads			Compacted Crushed Stone Aggregate			
Tent Pads	262		Compacted Crushed Stone Aggregate			
Parking Spaces						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided: Sixteen camping units, including a group site, made fully accessible. Guidelines require 12 accessible camping units. Non-accessible picnic tables are 6 feet. Elements part of total contract price. Unit costs not available. Water faucets set at 24 inches above ground, instead of 28 inches to 36 inches required by guidelines. Used compacted crushed stone aggregate at all camping units.						

22. Fish & Wildlife Service Camping Area Project						
Camping Area: Long Island			Fish & Wildlife Service Region: 1			
Refuge: Willapa National Wildlife Refuge			State: Washington			
Website: www.fws.gov/willapa/			Acres: 1.5 million			
Alteration			Urban Areas Served: Portland, Takoma			
Camping Units: 21			Annual Visits: 12,975			
Accessible Units Before Project: 0			Terrain: Hilly			
Accessible Units After Project: 0			Native Surface Firm & Stable: Varies			
Total Project Cost : \$96,710						
Work Covered By Guidelines: Picnic tables, fire rings			Work Not Covered By Guidelines: Eliminated 4 campsites due to seasonal flooding and erosion, installed 3 new evaporative toilets, repaired and replaced portable toilets, repaired 6 existing picnic tables and 12 existing fire rings			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 6 Ft.	Engineered Plastic	0		2	15	\$524
Fire Rings	R.J. Thomas	9	\$119	2	0	
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Primitive campsites. Island accessed by personal watercraft. Tidal fluctuations, currents, and extensive mud flats make traveling to island difficult. Tidelands surrounding island are soft, silty mud that can act like quicksand and require special equipment to walk on.						

23. Fish & Wildlife Service Camping Area Project						
Camping Area: Rainbow Lake Campground				Fish & Wildlife Service Region: 7		
Refuge: Kenai National Wildlife Refuge				State: Alaska		
Website: http://kenai.fws.gov				Acres: 1.9 million		
Alteration				Urban Areas Served: Anchorage		
Camping Units: 3				Annual Visits: 575,000		
Accessible Units Before Project: 1				Terrain: Flat		
Accessible Units After Project: 3 RV, 3 Tent				Native Surface Firm & Stable: No		
Total Project Cost : \$64,275						
Work Covered By Guidelines: Picnic tables, fire rings, parking spurs, tent pads, living area pads				Work Not Covered By Guidelines: Boat ramps		
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 10 Ft.		3	\$2050	2	0	
Fire Rings		3	\$675	2	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs				Tent Camping Spaces		
20 Ft. Wide Spaces: 3 Guidelines Require: 2 RV (20 Ft.)				Accessible: 3 Tent Pads Non-Accessible: 0 Guidelines Require: 2 Accessible Tent Pads		
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	3		D-1 Gravel Packed		\$1.15	
Tent Pads	3		D-1 Gravel Packed		\$1.15	
Parking Spaces						
Project Involved Work On Circulation Paths: Not Answered						
Additional Information Provided: Used 11,550 square feet of D-I gravel.						

24. Bureau of Land Management Camping Area Project						
Camping Area: Juniper Campground						
Site: Sand Flats Recreation Area			State: Utah			
Website: www.discovermoab.com/campgrounds_blm.htm			Acres: 20			
New Construction			Urban Areas Served:			
Camping Units: 17			Annual Visits: 20,000			
Accessible Camping Units: 14 RV, 17 Tent			Terrain: Pinyon Juniper forest, modest slope			
			Native Surface Firm & Stable: No			
Total Project Cost : \$100,000						
Work Covered By Guidelines: Picnic tables, fire rings, parking spurs, tent pads, living area pads			Work Not Covered By Guidelines: Restrooms			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	17	\$450	2	0	
Fire Rings	R.J. Thomas	17	\$120	2	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 14 Guidelines Require: 2 RV (20 Ft.)			Accessible: 17 Tent Pads Non-Accessible: 0 Guidelines Require: 2 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads			Gravel & Reject Sands		\$1.61	
Tent Pads	17	256	Gravel & Reject Sands		\$1.61	
Parking Spaces			Gravel			
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot: \$4.00						
Additional Information Provided: Tent pads cost \$7,000. Imported sub base for ground surface. Used gravel and reject sands to level surfaces. Used landscape timbers as retaining structures for a few units. Living area pads cost \$40,000. Average cost \$9.00 ton. Tent pads cost \$7,000. Average cost \$9.25 ton.						

25. Bureau of Land Management Picnic Area Project						
Picnic Area: Picnic Area						
Site: Storm King Trailhead			State: Colorado			
Website: www.co.blm.gov/gsra/stormkingtr.htm			Acres:			
Alteration			Urban Areas Served:			
Picnic Units: 1			Annual Visits: 5,000			
Accessible Units Before Project: 0			Terrain:			
Accessible Units After Project: 1			Native Surface Firm & Stable:			
Total Project Cost : \$4,400						
Work Covered By Guidelines: Picnic table, use pad			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Arco Concrete	1	\$1000	1	0	
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Use Pads	1	225	Concrete		\$15	
Project Involved Work On Circulation Paths: Not Answered						
Additional Information Provided:						

26. Bureau of Land Management Camping Area Project						
Camping Area: Sourdough Creek Campground						
Site:				State: Alaska		
Website: www.blm.gov/ak/gdo/campgrounds.html				Acres: 188		
Alteration				Urban Areas Served: Fairbanks		
Camping Units: 42				Annual Visits: 19,334		
Accessible Units Before Project: 4				Terrain:		
Accessible Units After Project: 4				Native Surface Firm & Stable:		
Total Project Cost : \$1,129						
Work Covered By Guidelines: Picnic tables, fire rings				Work Not Covered By Guidelines:		
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 9 Ft.	Engineered Plastic	1	\$737	1	0	
Fire Rings	Belson	2	\$196	2	0	
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided:						

27. Bureau of Land Management Picnic Area Project						
Picnic Area: Bullfrog Day Use Area						
Site: Parker Strip Area				State: Arizona		
Website: www.blm.gov/az/lhfo/rec/strip.htm				Acres: 10		
Alteration				Urban Areas Served:		
Picnic Units: 8				Annual Visits: 1,950		
Accessible Units Before Project: 0				Terrain: Flat and sloping terrain		
Accessible Units After Project: 2				Native Surface Firm & Stable: No		
Total Project Cost : \$12,000						
Work Covered By Guidelines: Picnic tables, pedestal grills, use pads, outdoor recreation access route				Work Not Covered By Guidelines:		
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.		2	\$650	4	6	\$475
Pedestal Grills		2	\$125	4	5	\$85
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Use Area Pads	2	196	Concrete		\$13.04	
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width: 75 Ft. x 5 Ft.						
Surface Materials: Concrete						
Cost Per Square Foot: \$13.04						
Additional Information Provided:						

28. Bureau of Land Management Camping & Picnic Area Projects						
Camping Area: Campground						
Picnic Area: Day Use Area						
Site: Egin Lake Recreation Area			State: Idaho			
Website: www.id.blm.gov/recreation/sandunes/index.htm			Acres: 14			
New Construction			Urban Areas Served:			
Camping Units: 42			Annual Visits: 75,000			
Picnic Units: 3						
Accessible Camping Units: 4 RV			Terrain: Flat			
Accessible Picnic Units: 3			Native Surface Firm & Stable: No			
Total Project Cost : \$1,400,000						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, parking spurs, electric hook-ups, water hydrants, living area and use pads			Work Not Covered By Guidelines: Parking area, restrooms, RV dump station			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	62	\$690	6	0	
Fire Rings	R.J. Thomas	4	\$450	3	44	\$400
Pedestal Grills	R.J. Thomas	4	\$575	4	0	
Electric Hook-Ups		32	\$1500	3	0	
Water Hydrants		6	\$3000	6	2	\$3000
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
20 Ft. Wide Spaces: 35						
Guidelines Require: 3 RV (20 Ft.)						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area/Use Pads			Road Mix, Concrete			
Parking Spaces						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided: Element costs are contracted prices.						

29. Bureau of Land Management Camping & Picnic Areas Project						
Camping Area: Campground						
Picnic Area: Day Use Area						
Site: Pit River Recreation Area			State: California			
Website: www.blm.gov/ca/alturas/pit_river.html			Acres: 10			
Alteration			Urban Areas Served:			
Camping Units: 10			Annual Visits:			
Picnic Units: 5						
Accessible Camping Units Before Project: 0			Terrain:			
Accessible Camping Units After Project: 10						
Accessible Picnic Units Before Project: 0			Native Surface Firm & Stable: No			
Accessible Picnic Units After Project: 5						
Total Project Cost : \$271,186						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, trash containers, parking spurs, tent pads, living area pads			Work Not Covered By Guidelines: Toilets, raft launch, fishing area			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Outdoor Creations	15	\$576	5	0	
Fire Rings	Outdoor Creations	10	\$395	2	0	
Pedestal Grills	Outdoor Creations	5	\$505	3	0	
Trash Containers		9	\$700	9	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
20 Ft. Wide Spaces: 10 Guidelines Require: 2 RV (20 Ft.)			Accessible: 10 Tent Pads Non-Accessible: 0 Guidelines Require: 2 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area, Tent Pads & Parking Space Combined	10		Type II ¾ Minus Road Base		\$.54	
Use Pads	5		Type II ¾ Minus Road Base		\$.54	
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Type II ¾ Minus Road Base						
Cost Per Square Foot: \$.54						
Additional Information Provided:						

30. Bureau of Reclamation Picnic Area Project						
Picnic Area: Picnic Area			Bureau of Reclamation Region: Pacific Northwest			
Site: Emigrant Lake Recreation Area			State: Oregon			
Website: www.jacksoncountyparks.com/emigrant_lake.htm			Acres: 1,300			
New Construction			Urban Areas Served:			
Picnic Units: 2			Annual Visits: 172,000			
Accessible Picnic Units: 2			Terrain:			
			Native Surface Firm & Stable:			
Total Project Cost : \$10,200						
Work Covered By Guidelines: Picnic tables, fire rings, trash containers, use pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.		2	\$1100	2	0	
Fire Rings		2	\$205	2	0	
Trash Containers		1	\$1000	1	0	
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Use Pads	2	200	Asphalt		\$11.50	
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Pre-existing outdoor recreation access route.						

31. Bureau of Reclamation Picnic Area Project						
Picnic Area: Picnic Area			Bureau of Reclamation Region: Lower Colorado			
Site: Northshore Park			State: California			
Website:			Acres:			
Alteration			Urban Areas Served:			
Picnic Units: 4			Annual Visits:			
Accessible Picnic Units Before Project: 4			Terrain: Lakeshore, flat			
Accessible Picnic Units After Project: 4			Native Surface Firm & Stable:			
Total Project Cost : \$2,120						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Plastic Recycling	4	\$374	2	0	
Fire Rings	Kay Park-Rec	2	\$154	2	0	
Pedestal Grills	Kay Park-Rec	0		2	4	\$314
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided:						

32. Bureau of Reclamation Picnic Area Project						
Picnic Area: Picnic Area			Bureau of Reclamation Region: Lower Colorado			
Site: Salton Sea State Recreation Area			State: California			
Website: www.parks.ca.gov/default.asp?page_id=639			Acres:			
Alteration			Urban Areas Served:			
Picnic Units: 4			Annual Visits:			
Accessible Picnic Units Before Project: 4			Terrain: Lakeshore, flat			
Accessible Picnic Units After Project: 4			Native Surface Firm & Stable:			
Total Project Cost : \$4,968						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Plastic Recycling	6	\$422	3	0	
Fire Rings	Kay Park-Rec	4	\$154	2	0	
Pedestal Grills	Kay Park-Rec	0		2	8	\$78
Project Involved Work On Ground Surfaces: No						
Project Involved Work On Circulation Paths: No						
Additional Information Provided:						

33. Bureau of Reclamation Camping & Picnic Areas Project						
Camping Area: Cotton Wood Campground Picnic Area: Picnic Area				Bureau of Reclamation Region: Upper Colorado		
Site: Rifle Gap State Park				State: Colorado		
Website: www.parks.state.co.us/default.asp?parkID=64&action=park				Acres: 5		
New Construction				Urban Areas Served:		
Camping Units: 8 Picnic Units: 22				Annual Visits: 114,000		
Accessible Camping Units Before Project: 0 Accessible Camping Units After Project: 1 Tent				Terrain:		
Accessible Picnic Units Before Project: 0 Accessible Picnic Units After Project: 2				Native Surface Firm & Stable: No		
Total Project Cost : \$875,000						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, water hydrants, electric hook-ups, parking spurs, tent pads, living area and use pads				Work Not Covered By Guidelines: Eight new day use sites, group picnic shelter, shower building, toilet building		
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	Webcoat	3	\$700	13	27	\$650
Fire Rings	Iron Mt. Forge	2	\$300	2	9	\$300
Pedestal Grills	Iron Mt. Forge	5	\$250	5	0	
Water Hydrants		4	\$900	4	8	\$900
Electric Hook-Ups		2	\$1150	2	7	\$1150
Camping Spaces Provided By Project						
Camping Units With Parking Spurs				Tent Camping Spaces		
20 Ft. Wide Spaces: 0 16 Ft. Wide Spaces: 1 Guidelines Require: 2 RV (20 Ft.) or 1 RV (20 Ft.) and 1 Tent (16 Ft.)				Accessible: 1 Tent Platform Non-Accessible: 7 Guidelines Require: 2 Accessible Tent Pads/Platforms		
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area & Parking Space Combined	8		Concrete		\$5.00	
Tent Platforms	1	144	Gravel		\$1.50	
Clear Space	1	240	Concrete		\$5.00	
Use Pads			Concrete		\$5.00	
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Concrete						
Cost Per Square Foot: \$5.00						
Additional Information Provided: Non-accessible picnic tables are 6 feet. Used 4,624 square feet of concrete. Provided two campsite sewer taps.						

34. Bureau of Reclamation Picnic Area Project						
Picnic Area: Oak Shores Day Use Area			Bureau of Reclamation Region: Mid Pacific			
Site: Lake Berryessa			State: California			
Website: www.usbr.gov/mp/cao/field_offices/lake_berryessa/activities/day_use_areas.html			Acres: 2			
Alteration			Urban Areas Served: San Francisco			
Picnic Units: 60			Annual Visits: 6,000			
Accessible Picnic Units Before Project: 4			Terrain:			
Accessible Picnic Units After Project: 60			Native Surface Firm & Stable: Yes			
Total Project Cost : \$10,680						
Work Covered By Guidelines: Picnic tables, pedestal grills, use pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables Ft.	Jamestown	60	178	30	0	
Pedestal Grills	Jamestown	30	309	15	0	
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials			Cost Per Square Ft.
Use Pads						
Project Involved Work On Circulation Paths: Not Answered						
Additional Information Provided:						

35. Bureau of Reclamation Camping Area Project						
Camping Area: Arch Rock Area			Bureau of Reclamation Region: Great Plains			
Site: Keyhole State Park			State: Wyoming			
Website: http://wyoparks.state.wy.us/KEslide.htm			Acres: 2,228			
Alteration			Urban Areas Served:			
Camping Units: 13			Annual Visits: 115,000			
Accessible Camping Units Before Project: 0			Terrain: Reservoir site, prairie			
Accessible Camping Units After Project:			Native Surface Firm & Stable: Yes			
Total Project Cost : \$53,786						
Work Covered By Guidelines: Picnic tables, pedestal grills, trash containers, water hydrants, parking spurs, living area pads			Work Not Covered By Guidelines: Restroom			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	1	\$225	1	0	
Pedestal Grills	R.J. Thomas	1	\$92	1	0	
Trash Containers		1	\$10	1	0	
Water Hydrants						
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
Sufficient information not provided on width of parking spurs.						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads						
Parking Spaces						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Cement						
Cost Per Square Foot:						
Additional Information Provided: Outdoor recreation access route cost \$15,700.						

36. Bureau of Reclamation Camping Area Project						
Camping Area: Pronghorn Area			Bureau of Reclamation Region: Great Plains			
Site: Keyhole State Park			State: Wyoming			
Website: http://wyoparks.state.wy.us/KEslide.htm			Acres: 2,228			
Alteration			Urban Areas Served:			
Camping Units: 36			Annual Visits: 115,000			
Accessible Camping Units Before Project: 1			Terrain: Reservoir site, prairie			
Accessible Camping Units After Project:			Native Surface Firm & Stable: Yes			
Total Project Cost : \$104,860						
Work Covered By Guidelines: Picnic tables, pedestal grills, trash containers, water hydrants, parking spurs, living area pads			Work Not Covered By Guidelines: Restrooms			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	1	\$225	1	0	
Pedestal Grills	R.J. Thomas	1	\$92	1	0	
Trash Containers		1	\$10	1	0	
Water Hydrants						
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
Sufficient information not provided on width of parking spurs.						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads						
Parking Spaces						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Cement						
Cost Per Square Foot:						
Additional Information Provided:						

37. Bureau of Reclamation Camping Area Project						
Camping Area: Home Stead Area			Bureau of Reclamation Region: Great Plains			
Site: Keyhole State Park			State: Wyoming			
Website: http://wyoparks.state.wy.us/KEslide.htm			Acres: 2,228			
Alteration			Urban Areas Served:			
Camping Units: 14			Annual Visits: 115,000			
Accessible Camping Units Before Project: 0			Terrain: Reservoir site, prairie			
Accessible Camping Units After Project:			Native Surface Firm & Stable: Yes			
Total Project Cost : \$71,360						
Work Covered By Guidelines: Picnic tables, pedestal grills, trash containers, water hydrants, parking spurs, living area pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	3	\$225	2	0	
Pedestal Grills	R.J. Thomas	3	\$92	2	0	
Water Hydrants						
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
Sufficient information not provided on width of parking spurs.						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads						
Parking Spaces						
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials: Cement						
Cost Per Square Foot:						
Additional Information Provided:						

38. Army Corps of Engineers Camping Area Project						
Camping Area: Foscue Creek Park			Army Corps of Engineers Region: South Atlantic			
Site: Black Warrior and Tombigbee Lakes			State: Alabama			
Website: www.sam.usace.army.mil/op/rec/war-tom/dem/Default.htm#camp			Acres: 48			
New Construction			Urban Areas Served: Birmingham			
Camping Units: 20			Annual Visits: 92,975			
Accessible Camping Units: 0 RV, 0 Tent Parking Spurs 12 Ft. Wide			Terrain: Flat hardwood bottomland			
			Native Surface Firm & Stable: Yes			
Total Project Cost : \$603,276						
Work Covered By Guidelines: Picnic tables, fire rings, pedestal grills, electric, water and sewage hook-ups, parking spurs, tent pads, living area pads			Work Not Covered By Guidelines: Roads			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 6 Ft.	Jamestown	0		2	20	\$354
Fire Rings	Jamestown	0		2	20	\$50
Pedestal Grills	Jamestown	0		2	20	\$80
Electric Hook-Ups		20	\$99	2	0	
Water Hook-Ups		0		2	20	\$32
Camping Spaces Provided By Project						
Camping Units With Parking Spurs			Tent Camping Spaces			
12 Ft. Wide Spaces: 20 Guidelines Require: 2 RV (20 Ft.) or 1 RV (20 Ft.) and 1 Tent (16 Ft.)			Accessible: 9 Tent Pads Non-Accessible: 11 Tent Pads Guidelines Require: 2 Accessible Tent Pads			
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area & Tent Pads Combined	20	650	Crusher Stone		\$12.50	
Parking Spaces	20	540	Concrete			
Project Involved Work On Circulation Paths: Not Answered						
Additional Information Provided: Twenty camp tables provided.						

39. Army Corps of Engineers Camping Area Project						
Camping Area: Dam Site Park			Army Corps of Engineers Region: Southwestern			
Site: Greers Ferry Lake			State: Arkansas			
Website: www.swl.usace.army.mil/parks/greersferry/camping.htm			Acres: 312			
New Construction			Urban Areas Served:			
Camping Units: 40			Annual Visits: 400,000			
Accessible Camping Units: 0 RV			Terrain: Steep grade, extremely rocky soils			
			Native Surface Firm & Stable: No			
Total Project Cost : \$2,000,000						
Work Covered By Guidelines: Picnic tables, fire rings, electric and water hook-ups, parking spurs, living area pads			Work Not Covered By Guidelines: Day use areas, parking areas, restrooms, shower rooms, roads, gatehouse			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 8 Ft.	R.J. Thomas	40	\$320	3	0	
Fire Rings	R.J. Thomas	0		3	40	\$80
Electric Hook-Ups		40	\$260	3	0	
Water Hook-Ups		40	\$350	3	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
20 Ft. Wide Spaces: 0						
Guidelines Require: 3 RV (20 Ft.)						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	40	400	Quarry Fines		\$2.50	
Parking Spaces						
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Roads used for circulation.						

40. Army Corps of Engineers Camping Area Project						
Camping Area: Bucksaw Park			Army Corps of Engineers Region: Northwestern			
Site: Truman Lake			State: Missouri			
Website: www.nwk.usace.army.mil/harryst/camping.htm			Acres: 451			
Alteration			Urban Areas Served: Kansas City			
Camping Units: 134			Annual Visits: 60,295			
Accessible Camping Units Before Project: 0			Terrain: Flat			
Accessible Camping Units After Project: 7 RV			Native Surface Firm & Stable: No			
Total Project Cost : \$14,000						
Work Covered By Guidelines: Picnic tables, fire rings, parking spurs, living area pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables Ft.	Custom	7	\$100	7	0	
Fire Rings	Iron Mt. Forge	7	\$225	7	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
20 Ft. Wide Spaces: 7						
Guidelines Require: 7 RV (20 Ft.)						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads & Parking Spurs Combined	7	1200	Concrete		\$1.67	
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Labor provided by State agency work crew. Lantern posts provided.						

41. Army Corps of Engineers Picnic Area Project						
Picnic Area: Bucksaw Park Picnic Area			Army Corps of Engineers Region: Northwestern			
Site: Truman Lake			State: Missouri			
Website: www.nwk.usace.army.mil/harryst/camping.htm			Acres: 451			
New Construction			Urban Areas Served: Kansas City			
Picnic Units: 2			Annual Visits: 60,295			
Accessible Picnic Units: 2			Terrain: Gently sloping, rocky			
			Native Surface Firm & Stable: No			
Total Project Cost : \$2,600						
Work Covered By Guidelines: Picnic tables, pedestal grills, use area pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 10 Ft.	Custom	2	\$100	2	0	
Pedestal Grills	Iron Mt. Forge	2	\$250	2	0	
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials			Cost Per Square Ft.
Use Area Pads	2		Concrete			\$1.67
Project Involved Work On Circulation Paths: Yes						
Outdoor Recreation Access Route Provided: Yes						
Outdoor Recreation Access Route Length & Width:						
Surface Materials:						
Cost Per Square Foot:						
Additional Information Provided:						

42. Army Corps of Engineers Camping Area Project						
Camping Area: Valley Camp Loop			Army Corps of Engineers Region: North Atlantic			
Site: Raystown Lake, Seven Points Recreation Area			State: Pennsylvania			
Website: http://raystown.nab.usace.army.mil/Camping/valley_camp.htm			Acres: 100			
Alteration			Urban Areas Served: Pittsburgh			
Camping Units: 25			Annual Visits: 261,623			
Accessible Camping Units Before Project: 0			Terrain: Hilly			
Accessible Camping Units After Project: 2 RV			Native Surface Firm & Stable: No			
Total Project Cost : \$162,500						
Work Covered By Guidelines: Electric hook-ups, parking spurs, living area pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Electric Hook-Ups		25		2	0	
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
20 Ft. Wide Spaces: 2						
Guidelines Require: 2 RV (20 Ft.)						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads	25		Compacted Fines			
Parking Spaces	25					
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Cost for leveling site, adding fill, and adding layer of compacted fines was \$82.82 per square foot.						

43. Army Corps of Engineers Camping Area Project						
Camping Area: Maplewood Camping Area			Army Corps of Engineers Region: Great Lakes & Ohio River			
Site: Berlin Lake, Mill Creek Recreation Area			State: Ohio			
Website: www.lrp.usace.army.mil/rec/lakes/berlin.htm#rec			Acres: 11			
Alteration			Urban Areas Served: Youngstown			
Camping Units: 51			Annual Visits: 81,318			
Accessible Camping Units Before Project: 0			Terrain: Gently rolling			
Accessible Camping Units After Project: 4 RV			Native Surface Firm & Stable: Yes			
Total Project Cost : \$19,596						
Work Covered By Guidelines: Picnic tables, fire rings, electric hook-ups, parking spurs, living area pads			Work Not Covered By Guidelines:			
Camping & Picnic Elements Provided By Project						
Element	Manufacturer	Accessible			Non-Accessible	
		Number Provided	Unit Cost	Guidelines Require	Number Provided	Unit Cost
Picnic Tables 10 Ft.	Southern Picnik	4	\$279	4	0	
Fire Rings	Jamestown	4	\$145	4	0	
Electric Hook-Ups		0			4	\$172
Camping Spaces Provided By Project						
Camping Units With Parking Spurs						
20 Ft. Wide Spaces: 4						
Guidelines Require: 4 RV (20 Ft.)						
Project Involved Work On Ground Surfaces: Yes						
Surface	Number Worked On	Square Feet	Materials		Cost Per Square Ft.	
Living Area Pads			Crushed Limestone, Versalock Blocks			
Parking Spaces						
Project Involved Work On Circulation Paths: No						
Additional Information Provided: Picnic tables do not provide proper knee space. Lantern holders provided.						

APPENDIX C
TRAILS PROJECTS
DATA REQUEST

FY 2004 Trails Projects

The Access Board is collecting information on trails construction and alteration projects undertaken by Federal agencies in FY 2004 as part of a regulatory assessment of the costs and benefits of proposed accessibility guidelines for outdoor developed areas. There will be a conference call on **Tuesday, April 19 at 12:00 noon (EDT)** to go over the form. To participate in the conference call, call **888-456-0362** and enter this pass code: **31263**.

If you have questions as you complete the form, please call or e-mail the following individuals at the Access Board:

Bill Botten	202-272-0014	botten@access-board.gov
Peggy Greenwell	202-272-0017	greenwell@access-board.gov
Jim Raggio	202-272-0040	raggio@access-board.gov

April 13, 2005

Facility:
Location:
Name of Person Completing Form:
Telephone Number:
E-Mail Address:

1. What type of work did the project involve?
- Construction of a new trail
 - Alterations to change the original purpose, intent, or design of the trail
 - Maintenance and repair to return the trail to the standards or conditions to which it was originally designed and built

If the project involved maintenance and repair work, do not complete the form.

2. Does the newly constructed or altered trail connect to a designated trailhead or another accessible trail? Yes No

If the answer to the above question is no, do not complete the form.

3. Briefly describe the scope of work of the project (e.g., constructed 1.2 miles of trail).
4. Briefly describe the trail surface.
6. What was the total cost of the project?
7. If the Architectural Barriers Act or Section 504 of the Rehabilitation Act did not exist, check (✓) all of the following design criteria that would be followed when constructing or altering the trail:
- Firm and stable surface
 - Clear tread width 36 inches minimum
 - Running slope not exceed 1:20
8. If the technical provisions in the proposed accessibility guidelines summarized below were not met when constructing or altering the trail, check the technical provisions that were not met.

Check (✓) Technical Provisions Not Met	
<input type="checkbox"/>	Firm and stable surface
<input type="checkbox"/>	Clear tread width 36 in. min.
<input type="checkbox"/>	Clear width not reduced by protruding objects
<input type="checkbox"/>	Openings not permit passage of 1/2 in. diameter sphere Elongated openings perpendicular or diagonal to dominant direction of travel Elongated openings parallel to dominant direction of travel permitted if opening does not permit passage of 1/4 in. diameter sphere
<input type="checkbox"/>	Tread obstacles not exceed 2 in. max.

Check (√) Technical Provisions Not Met	
	Passing space provided at 1000 ft. intervals where clear tread width less than 60 in.
	Cross slope not exceed 1:20
	Running slope: 1:20 or less for any distance 1:12 max. for 200 ft. max. 1:10 max. for 30 ft. max. 1:8 max. for 10 ft. max. No more than 30 percent of trail exceeds 1:12 running slope.
	Resting intervals 60 in. long min. and as wide as segment leading to resting interval provided where running slope exceeds 1:20 at distances no greater than: 200 ft. apart where running slope is 1:12 max. 30 ft. apart where running slope is 1:10 max. 10 ft. apart where running slope is 1:8 max. Resting interval slope not exceed 1:33 in all directions
	Where edge protection provided, edge 3 in. high min.

9. Exceptions are permitted to specific technical provisions where compliance with the provision would:

- (1) Cause substantial harm to cultural, historic, religious, or significant natural features or characteristics;
- (2) Substantially alter the nature of setting or the purpose of the facility;
- (3) Require construction methods or materials prohibited by federal, state or local law; or
- (4) Not be feasible due to terrain or prevailing construction practices.

Do any of these conditions apply to the trail? Yes ____ (Condition #: ____)
No ____

10. Where exemptions are permitted to specific technical provisions and any of the conditions listed below apply, the trail is not required to comply with the proposed accessibility guidelines beyond first point where the condition applies, unless one of the scenarios discussed in questions 10 or 11 is present:

- (1) Combination of running slope and cross slope exceeds 40 percent for over 20 ft.;
- (2) Trail obstacle 30 in. high or more runs across full tread width;
- (3) Trail surface neither firm nor stable for 45 ft. or more;
- (4) Tread width less than 12 in. for 20 ft. or more; or
- (5) Trail not required to comply with technical provisions for more than 15 percent of trail length.

Do any of these conditions apply to the trail? Yes ____ (Condition #: ____)
No ____

11. Where the trail is 500 feet or less, the trail is required to comply with the proposed accessibility guidelines. Is the trail 500 feet or less? Yes ____ No ____

12. Where there is a prominent feature less than 500 ft. from the trailhead, the trail segment to the prominent feature is required to comply with the proposed accessibility guidelines. Is there a prominent feature less than 500 ft. from the trailhead? Yes ___ No ___

13. Fill-in the information requested below for other trail projects undertaken in the past five years.

Year	Trail Miles	Tread Width	Trail Surface	Cost

APPENDIX D
TRAIL PROJECTS
DATA SUMMARY

Department of Agriculture

Forest Service

1. Gallatin National Forest, Yankee Jim Interpretative Trail
2. Mt. Baker-Snoqualmie National Forest, Middle Fork Campground Nature Trail
3. Chucagh National Forest, Quartz Creek Viewing/Fishing Trail
4. Osceola National Forest, Nice Wander Trail

Department of Interior

National Park Service

5. Denali National Park and Preserve, Mc Kinley Station Trail
6. Yosemite National Park, Lower Yosemite Falls Trail
7. Hawaii Volcanoes National Park, Sulphur Bank Trail
8. Craters of the Moon National Monument and Preserve, Trail
9. Yellowstone National Park, Boiling River Trail
10. Indiana Dunes National Lakeshore, Trail
11. Isle Royal National Park, American Dock Trail
12. Cape Cod National Seashore, Red Maple Swamp Trail
13. Gulf Islands National Seashore, Perdido Key Discovery trail
14. Gulf Island National Seashore, Natures Way Extension Trail
15. Stones River National Battlefield, trail

Fish and Wildlife Service

16. Don Edwards San Francisco Bay National Wildlife Refuge, Trail
17. Wichita Mountains Wildlife Refuge, Quanah Parker Interpretive Trail
18. Kenai National Wildlife Refuge, Mosquito Lake Trail

Bureau of Land Management

19. Dinosaur Diamond National Scenic Byway, Mill Canyon Dinosaur Trail

Bureau of Reclamation

20. River Mountains Loop Trail
21. WestWorld of Scottsdale Trail
22. Trail

Department of Defense

Army Corps of Engineers

23. Table Rock Dam and Lake, Table Rock Lakeshore Trail
24. Milford Lake, Outlet Park, River Walk Trail Spur
25. Westville Lake, Grand Trunk Trail
26. Ball Mountain Lake, Winhall Brook Campground, Trail

1. Forest Service Trail Project	
Trail: Yankee Jim Interpretative Trail	Connects To: Designated Trailhead
Forest: Gallatin National Forest	
Forest Service Region: 1	State: Montana
New Construction	
Scope of Work: Constructed new trailhead and 1,800 feet of new trail to Yellowstone River overlook and interpretive site. Portion of trail has retainers. Improved portion of road, and provided accessible van parking, accessible toilet, and interpretive signs.	
Total Project Cost: \$46,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: 3 inches $\frac{3}{4}$ minus aggregate capped with 1 $\frac{1}{2}$ inches asphalt.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

2. Forest Service Trail Project	
Trail: Middle Fork Campground Nature Trail	Connects To: Campground/Trailhead
Forest: Mt. Baker-Snoqualmie National Forest	
Forest Service Region: 6	State: Washington
New Construction	
Scope of Work: Constructed 1,200 feet of new trail with two short bridges and some raised boardwalk.	
Total Project Cost: \$35,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Crushed limestone and wood.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

3. Forest Service Trail Project	
Trail: Quartz Creek Viewing/Fishing Trail	Connects To: Campground/Trailhead
Forest: Chucagh National Forest	
Forest Service Region: 10	State: Alaska
New Construction	
Scope of Work: Constructed 320 feet of boardwalk for viewing spawning salmon and limited fishing.	
Total Project Cost: \$204,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Wood.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

4. Forest Service Trail Project	
Trail: Nice Wander Trail	Connects To: Designated Trailhead
Forest: Osceola National Forest	
Forest Service Region: 8	State: Florida
Alteration & New Construction	
Scope of Work: Improved 1.3 miles of existing trail and added 0.7 mile of new trail to create 2 mile loop-trail. Constructed 1,000 feet of boardwalk through muddy area.	
Total Project Cost: \$12,177 and volunteer labor	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Native soil, crushed limerock, and wood.	
Additional Information Provided: Trail is part of Florida National Scenic Trail. The nonprofit Florida Trail Association has an agreement with the three National Forests in Florida to provide at least one accessible loop trail in each of the Forests.	

5. National Park Service Trail Project	
Trail: Mc Kinley Station Trail	Connects To: Designated Trailhead
Park: Denali National Park and Preserve	
National Park Service Region: Alaska	State: Alaska
New Construction	
Scope of Work: Constructed 2,100 feet of new trail.	
Total Project Cost: \$25,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Compacted gravel.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

6. National Park Service Trail Project	
Trail: Lower Yosemite Falls Trail	Connects To: Designated Trailhead
Park: Yosemite National Park	
National Park Service Region: Pacific West	State: California
Alteration	
Scope of Work: Reconstructed 1,100 feet of existing trail to newly constructed observation bridge below Lower Yosemite Falls.	
Total Project Cost: \$594,474	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Asphalt.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

7. National Park Service Trail Project	
Trail: Sulphur Bank Trail	Connects To: Designated Trailhead
Park: Hawaii Volcanoes National Park	
National Park Service Region: Pacific West	State: Alaska
Alteration & New Construction	
Scope of Work: Rehabilitated 4,000 feet of trail. Constructed 1,400 feet of new trail, including 800 feet of boardwalk and 100 feet of wood bridge.	
Total Project Cost: \$223,000	
Complied with Guidelines: Yes	
Exceptions Applicable: Yes. Compliance with technical provisions for running slope and resting intervals not feasible for 200 feet section due to terrain or prevailing construction practices.	
Trail Surface: Asphalt and wood.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

8. National Park Service Trail Project	
Trail: Trail	Connects To: Designated Trailhead
Park: Craters of the Moon National Monument and Preserve	
National Park Service Region: Pacific West	State: Idaho
Alteration	
Scope of Work: Improved 150 feet of existing trail to volcanic feature.	
Total Project Cost: \$129,044	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Concrete.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

9. National Park Service Trail Project	
Trail: Boiling River Trail	Connects To: Designated Trailhead
Park: Yellowstone National Park	
National Park Service Region: Intermountain	State: Idaho
Alteration	
Scope of Work: Improved 0.5 miles of existing trail to Boiling River, including bridges, turnpike, fencing, retaining walls, steps, and signage.	
Total Project Cost: \$116,400	
Complied with Guidelines: Yes	
Exceptions Applicable: Yes. Compliance with technical provisions for tread obstacles, passing space, running slope, resting intervals, and edge protection would cause substantial harm to cultural, historic, religious, or significant natural features or characteristics; and not feasible due to terrain or prevailing construction practices. Compliance with guidelines not required beyond first point where conditions apply because exceptions to technical provisions apply to more than 15 percent of trail length.	
Trail Surface: Hardened gravel and compressed soil.	
Additional Information Provided: Trail would have been constructed with firm and stable surface if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

10. National Park Service Trail Project	
Trail: Trail	Connects To: Accessible Trail
Park: Indiana Dunes National Lakeshore	
National Park Service Region: Midwest	State: Indiana
New Construction	
Scope of Work: Constructed 0.5 miles of new trail connecting existing Calumet Bike Trail and Duneland Prairie Trail.	
Total Project Cost: \$20,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Asphalt.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

11. National Park Service Trail Project	
Trail: American Dock Trail	Connects To: Designated Trailhead
Park: Isle Royale National Park	
National Park Service Region: Midwest	State: Minnesota
Alteration	
Scope of Work: Widened and paved existing trail and lowered running slope. Provided 8 turnouts with benches along trail. Installed handrail along 600 feet of lakeside of trail.	
Total Project Cost: \$40,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Polymerized cold patch.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

12. National Park Service Trail Project	
Trail: Red Maple Swamp Trail	Connects To: Designated Trailhead
Park: Cape Cod National Seashore	
National Park Service Region: Northeast	State: Massachusetts
Alteration	
Scope of Work: Reconstructed 0.5 miles of boardwalk. Provided edging, handrails, and wide deck areas for viewing wetland and wildlife.	
Total Project Cost: \$210,000 materials	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Trex decking and AQU treated wood.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

13. National Park Service Trail Project	
Trail: Perdido Key Discovery Trail	Connects To: Designated Trailhead
Park: Gulf Islands National Seashore	
National Park Service Region: Southeast	State: Florida
New Construction	
Scope of Work: Constructed 1,850 feet of boardwalk and observation deck.	
Total Project Cost: \$30,329	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Wood.	
Additional Information Provided:	

14. National Park Service Trail Project	
Trail: Natures Way Extension Trail	Connects To: Accessible Trail
Park: Gulf Islands National Seashore	
National Park Service Region: Southeast	State: Florida
New Construction	
Scope of Work: Constructed 2,185 feet of new trail, including 1,000 feet of boardwalk.	
Total Project Cost: \$133,265	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Crusher run, wood mulch, and wood.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

15. National Park Service Trail Project	
Trail: Trail	Connects To: Designated Trailhead
Park: Stones River National Battlefield	
National Park Service Region: Southeast	State: Tennessee
New Construction & Alteration	
Scope of Work: Constructed 1,900 feet of boardwalk and overlook platform. Resurfaced asphalt trail.	
Total Project Cost: \$139,610	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Trex decking, wood, and asphalt.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

16. Fish & Wildlife Service Trail Project	
Trail: Trail	Connects To: Accessible Trail
Park: Don Edwards San Francisco Bay National Wildlife Refuge	
Fish & Wildlife Service Region: 1	State: California
Alteration	
Scope of Work: Replaced boardwalk bridge.	
Total Project Cost: \$180,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Wood.	
Additional Information Provided:	

17. Fish & Wildlife Service Trail Project	
Trail: Quannah Parker Interpretive Trail	Connects To: Designated Trailhead
Park: Wichita Mountains Wildlife Refuge	
Fish & Wildlife Service Region: 2	State: Oklahoma
Alteration	
Scope of Work: Reconstructed 0.4 miles of existing trail.	
Total Project Cost: \$57,180	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Concrete.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

18. Fish & Wildlife Service Trail Project	
Trail: Mosquito Lake Trail	Connects To: Designated Trailhead
Park: Kenai National Wildlife Refuge	
Fish & Wildlife Service Region: 7	State: Alaska
Alteration	
Scope of Work: Rehabilitated existing trailhead and trail.	
Total Project Cost: \$56,900	
Complied with Guidelines: Yes	
Exceptions Applicable: Yes. Compliance with technical provisions for edge protection would substantially alter the nature of the setting or the purpose of the facility, and not feasible due to terrain or prevailing construction practices.	
Trail Surface: Packed 01 gravel.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

19. Bureau of Land Management Trail Project	
Trail: Mill Canyon Dinosaur Trail	Connects To: Designated Trailhead
Site: Dinosaur Diamond National Scenic Byway	
State: Utah	
Alteration	
Scope of Work: Altered 0.5 miles of existing trail.	
Total Project Cost: \$25,000	
Complied with Guidelines: Yes	
Exceptions Applicable: Yes. Compliance with technical provisions for running slope and edge protection would cause substantial harm to cultural, historic, religious, or significant natural features or characteristics.	
Trail Surface: Rock and sand.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

20. Bureau of Reclamation Trail Project	
Trail: River Mountains Loop Trail	Connects To: Designated Trailhead
Site:	
State: Nevada	
New Construction	
Scope of Work: Constructed 6 miles of new trail.	
Total Project Cost: \$330,000	
Complied with Guidelines: No. Technical provisions for running slope and resting intervals not met.	
Exceptions Applicable: No	
Trail Surface: Asphalt.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

21. Bureau of Reclamation Trail Project FY 2004	
Trail: WestWorld of Scottsdale Trail	Connects To: Designated Trailhead
Site:	
State: Arizona	
New Construction	
Scope of Work: Constructed new trailhead and 0.5 miles of new trail.	
Total Project Cost: \$800,000	
Complied with Guidelines: Yes.	
Exceptions Applicable: No	
Trail Surface: Decomposed granite and concrete.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

22. Bureau of Reclamation Trail Project	
Trail: Trail	Connects To: Designated Trailhead
Site:	
State: California	
New Construction	
Scope of Work: Constructed 550 feet of new trail.	
Total Project Cost: \$23,100	
Complied with Guidelines: Yes.	
Exceptions Applicable: No	
Trail Surface: Concrete.	
Additional Information Provided:	

23. Army Corps of Engineers Trail Project	
Trail: Table Rock Lakeshore Trail	Connects To: Designated Trailhead
Site: Table Rock Dam and Lake	
Army Corps of Engineers Region: Southwestern	State: Missouri
New Construction	
Scope of Work: Constructed 2.2 miles of new hiking/biking trail.	
Total Project Cost: \$512,000	
Complied with Guidelines: Yes	
Exceptions Applicable: Yes. Compliance with technical provisions for cross slope not feasible due to terrain at two locations where trail crossed existing boat ramps.	
Trail Surface: Asphalt.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

24. Army Corps of Engineers Trail Project	
Trail: River Walk Trail Spur	Connects To: Accessible Trail
Site: Outlet Park, Milford Lake	
Army Corps of Engineers Region: Northwestern	State: Kansas
New Construction	
Scope of Work: Constructed 1 mile of new trail. Provided two double vault toilets.	
Total Project Cost: \$90,000	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: ¾ inch compacted rock screenings.	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

25. Army Corps of Engineers Trail Project	
Trail: Grand Trunk Trail	Connects To: Designated Trailhead
Site: Westville Lake	
Army Corps of Engineers Region: North Atlantic State: Massachusetts	
New Construction	
Scope of Work: Constructed 1.7 miles of new trail. Part of trail reused old rail bed and town roads. Provided new parking lot and outdoor accessible route at trailhead.	
Total Project Cost: \$215,000	
Complied with Guidelines: Yes	
Exceptions Applicable: Yes. Compliance with technical provisions for cross slope, running slope, and resting intervals would substantially alter nature of the setting or purpose of the facility, and not feasible due to terrain or prevailing construction practices.	
Trail Surface: Compacted rock screenings.	
Additional Information Provided: Trail would have been constructed with firm and stable surface and 3 feet minimum clear tread width if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	

26. Army Corps of Engineers Trail Project	
Trail: Trail	Connects To: Campground/Trailhead
Site: Ball Mountain Lake, Winhall Brook Campground	
Army Corps of Engineers Region: North Atlantic State: Vermont	
Alteration	
Scope of Work: Altered 1.7 miles of rail tail to hiking trail.	
Total Project Cost: \$159,188	
Complied with Guidelines: Yes	
Exceptions Applicable: No	
Trail Surface: Shur-pak	
Additional Information Provided: Trail would have been constructed with firm and stable surface; 3 feet minimum clear tread width; and running slope not exceeding 1:20 if Architectural Barriers Act or Section 504 of the Rehabilitation Act did not apply.	