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**OUTDOOR RECREATION IN THE UNITED STATES
WITH SPECIAL REFERENCE TO RECREATION AT
U.S. ARMY CORPS OF ENGINEERS SITES**

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FOREWORD

The 1994-95 National Survey on Recreation and the Environment (NSRE) is the latest in a series of national surveys that was started in 1960 by the Outdoor Recreation Resources Review Commission (ORRRC). Since that time, six additional surveys were conducted in 1965, 1970, 1972, 1977, 1982-83, and 1994-95. Through the years, the series has experienced changes in funding, sponsorship, methodology, and composition. In 1960, interviews were done in person over four seasons. In 1965, interviewing was done only in early fall. The 1970 survey instrument was a brief mailed supplement to the national fishing and hunting survey. The 1977 and 1994 surveys have been conducted by telephone, and the 1982 survey was conducted in person in cooperation with the National Crime Survey.

The agencies responsible for the survey have changed considerably over the years. The ORRRC, which did the first survey in 1960, recommended that subsequent surveys be completed at 5-year intervals, but consistent funding and responsibility were not created. From 1965 through 1977, the work was done by the Bureau of Outdoor Recreation and its successor, the Heritage Conservation and Recreation Service. Those Agencies were abolished in 1981, and responsibility for the survey fell to the National Park Service in the U. S. Department of the Interior (USDI). The National Park Service coordinated the development of a consortium that included itself, the Forest Service in the U.S. Department of Agriculture (USDA), the Department of Health and Human Services' Administration on Aging, and the USDI's Bureau of Land Management.

By the late 1980's, it was clear that the National Park Service would no longer assume the financial and organizational demands of a large national survey. Park Service officials asked the Forest Service to assume its coordinating role for the next National Recreation Survey. The Outdoor Recreation and Wilderness Assessment Group, a part of the research branch of the Forest Service, assumed this role jointly with the National Oceanic and Atmospheric Administration (NOAA). The final list of sponsoring agencies for the 1994-95 effort includes the USDA Forest Service, the USDI Bureau of Land Management, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and the USDA's Economic Research Service. NOAA discontinued its involvement shortly before data collection began. The Sporting Goods Manufacturers Association also joined as a sponsor. In addition, valuable assistance and resources were provided by the National Park Service, the University of Georgia, and Georgia Southern University. The University of Indiana cosponsored the section on people with disabilities.

The name "National Survey on Recreation and the Environment" was coined to reflect the growing interest by Americans in their natural environment. To address that interest, the scope of the survey was expanded from that of earlier surveys to include more issues related to natural resources and the environment.

I. INTRODUCTION TO THE NATIONAL SURVEY ON RECREATION AND THE ENVIRONMENT

History of the National Recreation Survey series

The National Survey on Recreation and the Environment (NSRE) represents the continuation of the National Recreation Survey series (NRS). Begun in 1960 by the Congressionally created Outdoor Recreation Resources Review Commission (ORRRC), the first NRS was a four-season, in-the-home survey of outdoor recreation participation in the United States. Since that time, five additional NRS studies have been conducted in 1965, 1970, 1972, 1977, and 1982-83. The sponsoring agencies from the federal government for the NSRE include the USDA Forest Service, the USDI Bureau of Land Management (BLM), the U.S. Army Corps of Engineers (COE), the U.S. Environmental Protection Agency (EPA), and the USDA Economic Research Service (ERS). The National Oceanic and Atmospheric Administration (NOAA) participated in designing and piloting the survey. The Sporting Goods Manufacturers Association, a private recreation industry-sponsored organization, also joined as a sponsor. In-kind resources were offered by the National Park Service, the University of Georgia, and Georgia Southern University. Indiana University co-sponsored the section on persons with disabilities. Data were collected by the Survey Research Center at the University of Georgia.

The current name for the 1994-95 NRS, the National Survey on Recreation and the Environment, was coined to reflect the growing interest and emphasis on how people of the United States view their natural environment. The scope of the NSRE has been expanded, in comparison with previous NRS studies, to include more issues related to outdoor recreation participation and natural resources. A brief history of the NSRE will explain this expanded purpose.

Objectives and Intended Uses

The NSRE describes and explores participation by people in the United States in outdoor recreation activities, wildlife and wilderness use and values, attitudes regarding recreation policy issues, and outdoor recreation patterns and needs of people with challenging and disabling conditions.

The NSRE is generating information for a wide variety of uses. The Forest Service will use NSRE data in their Congressionally mandated Resources Planning Act (RPA) Assessment of Outdoor Recreation and Wilderness. NSRE data will also be used to assist recreation planners and managers at the federal and state level, and will guide policy decisions in land and water management issues. Other uses of NSRE data include the assessment of the role of local, state, federal, and private providers of outdoor recreation, and methods of financing the management of outdoor recreation areas. NSRE data will also be used to generate information about future outdoor recreation markets. University researchers and graduate students will also use the NSRE to develop and test theoretically-grounded hypotheses, and specialized analyses will provide a range of information relating outdoor recreation participation to a host of theoretically related variables.

Format for Organizing Questions and Modules

The NSRE survey was comprised of two separate random-digit-dialing (RDD) telephone surveys. For survey one, a national sample of approximately 12,000 people in the United States was polled on four general areas: (1) participation in specified recreation activities measured in number of days and trips; (2) characteristics of recreation trips; (3) barriers and constraints to outdoor recreation; and (4) alternative recreation user fee strategies. The average length of this survey is 20 minutes.

For survey two, a national sample of approximately 5,000 people in the United States was asked about: (1) participation in outdoor recreation activities; (2) benefits of participation; (3) favorite activities and barriers and constraints to participation; (4) wilderness issues; (5) wildlife issues; (6) awareness of public land agencies; and (7) freshwater-based trips. All respondents were asked modules (1) and (2), and were randomly assigned three of the remaining five modules. For each of these randomly assigned modules, the sample size was approximately 2,500.

Within these two surveys, participation questions were asked about 67 outdoor recreation activities (Table 1). For 31 of these activities, the number of

participation days and the number of recreational trips where the activity was the primary purpose for the trip were collected. Additional information was collected about resource-related issues, such as wilderness and wildlife. Further analysis of barriers and constraints to participation will shed light on their distribution across the U.S. population. For NSRE surveys one and two, an additional set of questions was used to collect information about disabled user access to recreation areas. These questions were asked only of respondents who indicated they have a disability. If a respondent indicated that a disabled person lived in their home, that person also was interviewed, but at a later time when the disabled respondent was available.

For further explanation of the survey framework and methodology for the NSRE, refer to Appendix A to this report.

Corps of Engineers Objectives and Questions

As stated before, the NSRE provides data that can be used by recreation planners and resource managers at various levels of government. These data may help

guide agency policy decisions in land and water management issues. The U.S. Army Corps of Engineers (COE) is one such agency that may use NSRE data to make management decisions in the growing arena of outdoor recreation. As a sponsoring agency, the COE had specific input into the NSRE. This input came in the form of questions to be included in the survey. These questions relate to specific issues that the COE feels are important to current and future management decisions regarding outdoor recreation on COE managed lands. The questions include three main categories: what type of facilities are available at recreation areas, who manages the areas, and how would visitor satisfaction change with more private operation of recreation areas. The primary idea being explored by the COE is increased privatization of recreation management on COE lands. Answers to these questions will help the COE decide if and where such a change would be appropriate. The visitors' opinions were also asked regarding the most important improvement needed at the site they visited. A list of the specific questions regarding these issues is provided in Appendix B.

II. NATIONAL AND REGIONAL NSRE PARTICIPATION RESULTS

Outdoor Recreation Participation Estimates

This section examines the outdoor recreation participation patterns of individuals 16 years of age and older across 67 specific outdoor recreation activities. Encompassing these specific activities are 13 major activity headings. Numbers that describe participation in major heading activities may include participants in activities not specifically listed under that heading. For instance, a respondent who participated in ultimate frisbee would have indicated participation in an outdoor team sport, even though that sport is not specifically included under the major heading. Other major headings were defined based on the nature of a specific group of activities. "Viewing activities" is one such heading. National results are provided in Table 1, and regional results, by census region, are provided in Tables 2, 3, 4, and 5. Percentages in the tables were obtained using the results of the NSRE. Numbers of participants in the tables are estimates based on those percentages and U.S. census estimates of the number of persons in the country 16 years and older for the survey period (200,335,001), winter 1994 through spring 1995.

National

The NSRE results show that almost 95 percent of Americans 16 years and older participated in at least one outdoor recreation activity at least once in the 12 months prior to being interviewed. That is an estimated 189 million participants in 1994. Whether these activities were done for health reasons, as part of a vacation, as daily stress relief, or just for fun, it is apparent from the numbers that demand for outdoor recreation is high. Some activities, such as walking, do not necessarily require a specific setting for participation. This, perhaps, is one reason that walking was the single activity in which the most people participated. However, most activities either require or are enhanced by a particular environment or specific facilities. Wildlife viewing, tennis, and boating are examples of such activities. While private industry attempts to find a way to capitalize on the growing market of outdoor recreation, public agencies already have the basic resources necessary to provide for the public demand in this area. The most essential resource is, of course, land. Government agencies are

responsible for much of the land that is still available for outdoor recreation activities. While most agencies do have resource oriented responsibilities other than recreation, it is important for them to realize and respond to public demand for alternative use of public lands.

Results from the NSRE show that passive activities, including visiting a beach or waterside, walking, sightseeing, and gathering with family members outdoors, were the activities in which the most people participated in 1994-95 (Table 1). Participation estimates reveal that more than half of the Americans, 16 years and older, during that one year period participated in these activities. That's more than 100 million people. Visiting a beach or waterside, which had 124.4 million participants in 1994-95, is a very popular activity that is dependent upon a water related environmental setting. The enjoyment of activities such as sightseeing (113.4 million), gathering with family outdoors (123.8 million), and walking (133.7 million) could also be enhanced by such a setting. The high demand for such activities and the environments conducive to their enjoyment could certainly be met in part by agencies that manage water resources and the land surrounding those resources.

Among overall activity headings, viewing activities were shown to be the outdoor pursuits that people participated in the most. Over three-quarters of the population 16 years and older (152.6 million people) said they participated in this type of activity at least once in 1994-95. Swimming activities overall were also shown to be immensely popular, with over half of the population older than 16 (108.6 million) participating in some type of swimming. Again, some of the activities under these headings, such as water based nature study (55.4 million) and swimming in rivers, lakes, or oceans (78.1 million), are water resource dependent. Other activities under these headings might be enhanced by proximity to such a resource. In any case, public agencies who manage water resources can certainly play a major role in providing an environment for these immensely popular forms of outdoor recreation.

Table 1. **(National)**¹ Percent and number of persons 16 years and older participating in outdoor recreation by activity, 1994-95.

Activity	Percent Participation	Number (millions)
Fitness Activities	68.3	136.9
Running/Jogging	26.2	52.5
Biking	28.7	57.4
Walking	66.7	133.7
Individual Sport Activities	22.0	44.1
Golf	14.8	29.7
Tennis	10.6	21.2
Outdoor Team Sport Activities	26.4	53.0
Baseball	6.7	13.5
Softball	13.0	26.1
Football	6.8	13.6
Basketball	12.8	25.5
Soccer	4.7	9.5
Volleyball	14.3	28.7
Handball	5.6	11.3
Outdoor Spectator Activities	58.7	117.6
Concerts	34.2	68.4
Attending Sporting Events	47.5	95.2
Viewing Activities	76.2	152.6
Visiting a Nature Center	46.4	93.1
Visiting a Visitor Center	34.6	69.4
Visit a Prehistoric Site	17.4	34.9
Visit a Historic Site	44.1	88.4
Bird-Watching	27.0	54.1
Wildlife Viewing	31.2	62.6
Fish Viewing	13.7	27.4
Other Wildlife Viewing	13.7	27.5
Sightseeing	56.6	113.4
Visiting a Beach or Waterside	62.1	124.4
Water Based Nature Study	27.6	55.4
Snow and Ice Activities	18.1	36.3
Ice Skating	5.2	10.5
Snowboarding	2.3	4.5
Sledding	10.2	20.5
Downhill Skiing	8.4	16.8
Cross-Country Skiing	3.3	6.5
Snowmobiling	3.5	7.1
Camping (overall)	26.3	52.8
Developed Area	20.7	41.5
Primitive Area	14.0	28.0

(Activity)	(Percent)	(Number)
Hunting	9.3	18.6
Big game	7.1	14.2
Small game	6.5	13.0
Migratory bird	2.1	4.3
Fishing	28.9	57.8
Freshwater	24.4	48.8
Saltwater	9.5	19.0
Warmwater	20.4	40.8
Coldwater	10.4	20.8
Ice	2.0	4.0
Anadromous	4.5	9.1
Catch and Release	7.7	15.5
Boating	29.0	58.1
Sailing	4.8	9.6
Canoeing	7.0	14.1
Kayaking	1.3	2.6
Rowing	4.2	8.4
Floating, Rafting	7.6	15.2
Motor-boating	23.5	47.0
Water Skiing	8.9	17.9
Jet Skiing	4.7	9.5
Sailboarding/windsurfing	1.1	2.2
Swimming Activities	54.2	108.6
Surfing	1.3	2.6
Swimming/pool	44.2	88.5
Swimming/river, lake, ocean	39.0	78.1
Snorkeling/Scuba	7.2	14.5
Outdoor Adventure Activities	36.8	73.6
Hiking	23.8	47.8
Orienteering	2.4	4.8
Backpacking	7.6	15.2
Mountain Climbing	4.5	9.0
Rock Climbing	3.7	7.5
Caving	4.7	9.5
Off-Road Driving	13.9	27.9
Horseback Riding	7.1	14.3
Social Activities	67.8	135.9
Yard Games	36.7	73.6
Picnicking	49.1	98.3
Family Gathering	61.8	123.8

¹ Numbers between National and Regional sums may not total due to rounding.

Note: Est. National Population 16 and older on January 1, 1995--200,335,000.

Just behind the activities that the majority participated in were the activities in which more than 40 percent of the population participated. These activities include picnicking, pool swimming, attending a sports event, visiting a historic site, and visiting a nature center. Picnicking (98.3 million participants) is quite popular and is an activity that is often enjoyed near lakes. It is quite feasible for most land management agencies to provide facilities for picnicking, especially near lakes where the land resource might not be subject to other demands. Opportunities for nature centers near water are possible, and many dams and hydroelectric plants attract attention as historic sights. Even sporting events, which are mostly sponsored by private industry, might be attracted to public water resources in the case of boating or swimming competitions. Any of these quite popular activities could be provided for by a government land/water management agency. In the case of the more management intensive activities, a nominal fee could help offset costs and protect the resource. Given the popularity of these activities, a small fee would more than likely be tolerated by the public, especially considering the high cost of entertainment provided by the private sector.

More than 30 percent of the population participated in swimming outdoors in natural waters, outdoor adventure activities (overall), visiting a visitor center, viewing wildlife other than birds, attending an outdoor concert, and yard games. Traditional activities, such as fishing (overall), camping (overall), bicycling (overall), hiking, boating (overall), and bird-watching are included in a group of activities in which more than 20 percent of the population participated. Additional activities in this group include freshwater fishing, warmwater fishing, running/jogging, participating in an outdoor team sport, participating in an individual sport, camping in a developed area, motor-boating, and water based nature study. Twenty percent of the population is still about 40 million people. Fishing activities (57.8 million participants), especially freshwater fishing (48.8 million), are dependent upon lakes, reservoirs, and rivers. A great number of these water bodies are publicly managed. Likewise, boating (58.1 million) and swimming in lakes, rivers, and oceans (78.1 million) are also water resource dependent.

The remaining activities listed in the survey exhibited participation levels at less than 20 percent of the population over 16 years of age. Among these activities were tennis, golf, backpacking, mountain climbing, rock climbing, and camping in a primitive

area. Many activities in this group represent new activities since the last NRS, in 1982-83. Traditional activities are also represented and include hunting, horseback riding, and snow and ice activities. "Traditional activities" have been measured by the NRS series since 1960. Two of the least popular activities in the survey were sailboarding and ice fishing. However, these activities show participation estimates of 2.2 and 4.0 million people, respectively. The demand for areas to pursue these activities does exist. Many times the popularity of an activity may be localized due to environmental conditions. Many participants will find that public land or water resources may be conducive to and convenient for these recreational pursuits. Again, government agencies are responsible for recognizing and reacting to public demands. The NSRE shows that the public desire to recreate in the outdoors exists and is quite high.

Regional

(Northeast) The states included in the Northeast Region are Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont with an estimated population for the survey period of 41,970,183 persons 16 and older. In the Northeast Region, patterns of participation were quite similar to national patterns across most activities. The activities in which more than half of the population participated at least once in the past 12 months were the same nationally and in the Northeast (Table 2). Similarly, overall viewing activities showed the highest percent of participation in the Northeast with 76.4 percent of the region's population having participated in such an activity at least once in the past 12 months.

There were some notable differences between national and Northeast participation in a few activities. The percent of the population participating in overall snow and ice activities in the Northeast was noticeably higher than the national percentage for those activities. One quarter of the population in the Northeast is estimated to participate in snow and ice activities, while the national percentage for these same activities is less than 20 percent. Each of the specific snow and ice activities, such as ice skating and sledding, also showed a significantly higher participation percentage in the Northeast. The estimated number of ice skating participants in the region (4.1 million) is almost 40 percent of the national participation estimate (10.5 million). As with most deviations in regional

participation percentages, these can be attributed to regional climactic and geographic differences.

Participation percentages for camping and hunting activities in the Northeast were noticeably lower than national percentages for those same activities. Northeast participation estimates (millions of people), for each activity included in these two major headings, were significantly less than 20 percent of the national participation estimates. These percentages are worthy of note, because the Northeast makes up just over 20 percent of the total national population at least 16 years of age. Again, climactic and geographic differences may account for these deviations. Also worthy of consideration, to account for these lower numbers, would be the high population density of the Northeast in conjunction with the relatively low land base desirable for hunting and camping activities. Participation estimates for fishing, especially freshwater and warmwater fishing, were also well below 20 percent of the national participation estimates (Table 6).

(South) The states included in the South Region are Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia with an estimated population for the survey period of 68,734,939 persons 16 and older. In the South Region, participation percentages and estimates also coincided quite closely with national figures. In the South, and nationally, the same activities showed a greater than 50 percent participation rate (Table 3). Again, overall viewing activities showed the highest percent of participation, with 74.0 percent of the population participating in such activities. For most activities, national numbers and numbers from the South are similar, in part because the region makes up over one-third of the total national population. Therefore, the South would have a significant impact on national averages and estimates.

Participation percentages in the South were slightly higher than national percentages for fishing activities, except for coldwater, ice, and anadromous fishing. In particular, saltwater and warmwater fishing participation percentages were noticeably higher. Of the estimated total number of participants in saltwater fishing in the country (19.0 million), almost half live in the South (9.2 million). Of the estimated total number of participants in warmwater fishing in the nation (40.8

million), over 40 percent live in the South (16.7 million) (Table 6).

The greatest discrepancy between national and South Region participation percentages is for snow and ice activities. Participation percentages for the region are about half, and sometimes less than half, of the national participation percentages for these activities. Despite the South making up one-third of the national population, the participation estimate for overall snow and ice activities for the South (6.7 million) is less than one-fifth of the national participation estimate for that category (36.3 million). The climate of the region would most certainly explain this discrepancy. Other activities which show participation percentages lower than national percentages include each of the camping activities and all of the outdoor adventure activities, except for off-road driving and horseback riding.

(Midwest) The states included in the Midwest Region are Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin with an estimated population for the survey period of 47,719,797 persons 16 and older. In the Midwest Region, participation percentages were slightly higher than national percentages across most of the major activity headings. Again, viewing activities showed the highest participation percentage, with 77 percent of the population having participated in such an activity at least once within the past 12 months (Table 4). Also showing a participation percentage above 70 percent were overall social activities. In the Midwest and nationally, the same activities showed a greater than 50 percent participation rate. In addition to those activities, more than half of the Midwest population reported having visited a nature center within the past year.

Although the Midwest showed a slightly higher participation percentage across most major activities, the most notable differences in percent participation were for specific activities. Most snow and ice activities showed participation percentages higher than national percentages, with snowmobiling and sledding having significantly higher percentages for the region. Snowmobiling participation estimates for the region (2.9 million participants) make up 40 percent of the national participation estimate (7.1 million), despite the Midwest making up only about 25 percent of the national population over 16 years of age. Also notable were higher participation percentages in the Midwest for motor-boating and freshwater and warmwater

Table 2. **(Northeast)** Percent and number of persons 16 years and older participating in outdoor recreation by activity, 1994-95.

Activity	Percent Participation ¹	Number (millions)
Fitness Activities	69.0	29.0
Running/Jogging	25.5	10.7
Biking	28.2	11.8
Walking	68.1	28.6
Individual Sport Activities	21.7	9.1
Golf	13.9	5.8
Tennis	11.6	4.9
Outdoor Team Sport Activities	27.4	11.5
Baseball	7.2	3.0
Softball	12.6	5.3
Football	6.9	2.9
Basketball	13.2	5.5
Soccer	5.7	2.4
Volleyball	14.9	6.3
Handball	6.4	2.7
Outdoor Spectator Activities	59.5	25.0
Concerts	37.6	15.8
Attending Sporting Events	47.6	20.0
Viewing Activities	76.4	32.0
Visiting a Nature Center	44.3	18.6
Visiting a Visitor Center	32.7	13.7
Visiting a Prehistoric Site	15.2	6.4
Visiting a Historic Site	44.8	18.8
Bird-Watching	28.0	11.7
Wildlife Viewing	30.5	12.8
Fish Viewing	13.0	5.5
Other Wildlife Viewing	14.7	6.2
Sightseeing	56.4	23.7
Visiting a Beach or Waterside	64.3	27.0
Water Based Nature Study	28.3	11.9
Snow and Ice Activities	25.1	10.6
Ice Skating	9.9	4.1
Snowboarding	3.0	1.2
Sledding	15.3	6.4
Downhill Skiing	11.2	4.7
Cross-Country Skiing	5.1	2.1
Snowmobiling	4.8	2.0
Camping (overall)	21.8	9.2
Developed Area	17.6	7.4
Primitive Area	10.1	4.2
Hunting	6.7	2.8
Big game	5.7	2.4
Small game	4.4	1.8
Migratory bird	1.3	0.5

Fishing	23.8	10.0
Freshwater	18.4	7.7
Saltwater	11.2	4.7
Warmwater	14.7	6.2
Coldwater	11.1	4.7
Ice	1.6	0.7
Anadromous	4.7	2.0
Catch and Release	5.7	2.4
Boating	28.0	11.7
Sailing	6.4	2.7
Canoeing	8.4	3.5
Kayaking	1.2	0.5
Rowing	6.1	2.6
Floating, Rafting	6.5	2.7
Motor-boating	20.6	8.6
Water Skiing	6.8	2.8
Jet Skiing	3.3	1.4
Sailboarding/windsurfing	1.2	0.5
Swimming Activities	58.3	24.5
Surfing	1.1	0.4
Swimming/pool	47.6	20.0
Swimming/river, lake, ocean	44.9	18.8
Snorkeling/Scuba	7.2	3.0
Outdoor Adventure Activities	33.3	14.0
Hiking	21.8	9.1
Orienteering	2.8	1.2
Backpacking	7.6	3.2
Mountain Climbing	4.4	1.8
Rock Climbing	3.2	1.3
Caving	2.7	1.1
Off-Road Driving	11.1	4.7
Horseback Riding	5.4	2.3
Social Activities	68.2	28.6
Yard Games	40.3	16.9
Picnicking	49.4	20.7
Family Gathering	60.5	25.4

¹Participation percentages reflect participation within the region.

Note: Est. Northeast Population 16 and Older--41,970,183. The Northeast Census Region includes--Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

Table 3. **(South)** Percent and number of persons 16 years and older participating in outdoor recreation by activity, 1994-95.

Activity	Percent Participation ¹	Number (millions)
Fitness Activities	65.9	45.3
Running/Jogging	27.3	18.8
Biking	24.6	16.9
Walking	64.3	44.2

Individual Sport Activities	20.4	14.0
Golf	12.6	8.6
Tennis	10.7	7.4
Outdoor Team Sport Activities	26.4	18.2
Baseball	6.5	4.5
Softball	13.7	9.4
Football	7.1	4.9
Basketball	13.1	9.0
Soccer	4.4	3.0
Volleyball	14.5	10.0
Handball	5.4	3.7
Outdoor Spectator Activities	57.4	39.4
Concerts	31.3	21.5
Attending Sporting Events	47.9	32.9
Viewing Activities	74.0	50.8
Visiting a Nature Center	42.9	29.5
Visiting a Visitor Center	33.4	23.0
Visiting a Prehistoric Site	16.2	11.2
Visiting a Historic Site	43.6	30.0
Bird-Watching	26.2	18.0
Wildlife Viewing	28.9	19.9
Fish Viewing	13.7	9.4
Other Wildlife Viewing	11.9	8.2
Sightseeing	54.3	37.3
Visiting a Beach or Waterside	60.4	41.5
Water Based Nature Study	26.6	18.3
Snow and Ice Activities	9.8	6.7
Ice Skating	1.9	1.3
Snowboarding	1.4	1.0
Sledding	5.2	3.6
Downhill Skiing	5.5	3.8
Cross-Country Skiing	0.7	0.5
Snowmobiling	1.4	0.9
Camping (overall)	22.4	15.4
Developed Area	17.2	11.8
Primitive Area	12.5	8.6

(Activity)	(Percent)	(Number)
Hunting	10.6	7.3
Big game	8.0	5.5
Small game	7.9	5.4
Migratory bird	2.5	1.7
Fishing	32.0	22.0
Freshwater	26.2	18.0
Saltwater	13.4	9.2
Warmwater	24.3	16.7
Coldwater	8.0	5.5
Ice	0.3	0.2

Anadromous	4.0	2.8
Catch and Release	9.0	6.2
Boating	28.9	19.9
Sailing	3.8	2.6
Canoeing	6.6	4.5
Kayaking	1.1	0.7
Rowing	3.1	2.2
Floating, Rafting	7.9	5.4
Motor-boating	24.4	16.8
Water Skiing	9.4	6.5
Jet Skiing	5.5	3.8
Sailboarding/windsurfing	1.1	0.7
Swimming Activities	53.3	36.6
Surfing	1.4	0.9
Swimming/pool	44.8	30.8
Swimming/river, lake, ocean	37.3	25.6
Snorkeling/Scuba	7.7	5.3
Outdoor Adventure Activities	33.3	22.9
Hiking	18.6	12.8
Orienteering	2.1	1.4
Backpacking	5.9	4.1
Mountain Climbing	3.6	2.4
Rock Climbing	2.9	2.0
Caving	4.6	3.1
Off-Road Driving	14.7	10.1
Horseback Riding	7.4	5.1
Social Activities	65.1	44.8
Yard Games	34.7	23.8
Picnicking	44.8	30.8
Family Gathering	59.7	41.0

¹Participation percentages reflect participation within the region.

Note: Est. South Population 16 and Older --68,734,939. The South Census Region includes-Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

Table 4. **(Midwest)** Percent and number of persons 16 years and older participating in outdoor recreation by activity, 1994-95.

Activity	Percent Participation ¹	Number (millions)
Fitness Activities	69.5	33.2
Running/Jogging	23.3	11.1
Biking	32.3	15.4
Walking	68.2	32.5
Individual Sport Activities	24.6	11.7
Golf	18.5	8.8
Tennis	9.6	4.6
Outdoor Team Sport Activities	26.6	12.7
Baseball	6.8	3.2
Softball	14.1	6.7
Football	6.2	2.9
Basketball	12.6	6.0
Soccer	3.6	1.7
Volleyball	15.3	7.3
Handball	4.7	2.2
Outdoor Spectator Activities	59.9	28.6
Concerts	33.4	15.9
Attending Sporting Events	48.5	23.1
Viewing Activities	77.0	36.8
Visiting a Nature Center	50.4	24.1
Visiting a Visitor Center	36.0	17.2
Visiting a Prehistoric Site	16.8	8.0
Visiting a Historic Site	43.9	21.0
Bird-Watching	29.2	13.9
Wildlife Viewing	34.0	16.2
Fish Viewing	12.9	6.2
Other Wildlife Viewing	13.3	6.3
Sightseeing	57.5	27.4
Visiting a Beach or Waterside	61.3	29.3
Water Based Nature Study	26.2	12.5
Snow and Ice Activities	22.7	10.8
Ice Skating	7.9	3.8
Snowboarding	2.3	1.1
Sledding	14.2	6.8
Downhill Skiing	7.1	3.4
Cross-Country Skiing	4.8	2.3
Snowmobiling	6.1	2.9
Camping (overall)	27.2	13.0
Developed Area	21.7	10.4
Primitive Area	13.7	6.5

(Activity)	(Percent)	(Number)
Hunting	11.3	5.4
Big game	8.3	4.0
Small game	8.0	3.8
Migratory bird	2.3	1.1
Fishing	31.5	15.0
Freshwater	29.4	14.0
Saltwater	3.3	1.6
Warmwater	27.2	13.0
Coldwater	8.4	4.0
Ice	5.3	2.5
Anadromous	4.0	1.9
Catch and Release	8.0	3.8
Boating	31.8	15.2
Sailing	4.0	1.9
Canoeing	9.0	4.3
Kayaking	1.2	0.6
Rowing	5.1	2.4
Floating, Rafting	8.0	3.8
Motor-boating	27.1	12.9
Water Skiing	9.7	4.6
Jet Skiing	4.7	2.3
Sailboarding/windsurfing	0.9	0.4
Swimming Activities	53.4	25.5
Surfing	0.4	0.2
Swimming/pool	42.2	20.1
Swimming/river, lake, ocean	39.1	18.7
Snorkeling/Scuba	5.2	2.5
Outdoor Adventure Activities	35.6	17.0
Hiking	22.5	10.7
Orienteering	2.2	1.0
Backpacking	5.4	2.6
Mountain Climbing	2.7	1.3
Rock Climbing	3.3	1.6
Caving	5.5	2.6
Off-Road Driving	12.6	6.0
Horseback Riding	6.8	3.3
Social Activities	70.1	33.4
Yard Games	40.7	19.4
Picnicking	52.2	24.9
Family Gathering	65.5	31.2

¹Regional participation percentages reflect participation within the region.
Note: Est. Midwest Population 16 and Older -- 47,719,797. The Midwest Census Region includes-- Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

Table 5. **(West)** Percent and number of persons 16 years and older participating in outdoor recreation by activity, 1994-95.

Activity	Percent Participation ¹	Number (millions)
Fitness Activities	70.2	29.4
Running/Jogging	28.4	11.9
Biking	31.4	13.2
Walking	67.8	28.4
Individual Sport Activities	21.9	9.2
Golf	15.1	6.3
Tennis	10.5	4.4
Outdoor Team Sport Activities	25.3	10.6
Baseball	6.6	2.7
Softball	11.2	4.7
Football	6.7	2.8
Basketball	11.8	4.9
Soccer	5.7	2.4
Volleyball	12.3	5.2
Handball	6.4	2.7
Outdoor Spectator Activities	58.6	24.6
Concerts	36.6	15.3
Attending Sporting Events	45.8	19.2
Viewing Activities	78.7	33.0
Visiting a Nature Center	49.7	20.8
Visiting a Visitor Center	36.8	15.4
Visiting a Prehistoric Site	22.1	9.3
Visiting a Historic Site	44.7	18.7
Bird-Watching	24.8	10.4
Wildlife Viewing	32.4	13.6
Fish Viewing	15.3	6.4
Other Wildlife Viewing	16.5	6.9
Sightseeing	59.6	25.0
Visiting a Beach or Waterside	63.7	26.7
Water Based Nature Study	30.4	12.7
Snow and Ice Activities	19.7	8.3
Ice Skating	3.3	1.4
Snowboarding	3.1	1.3
Sledding	8.9	3.7
Downhill Skiing	12.2	5.1
Cross-Country Skiing	4.0	1.7
Snowmobiling	2.9	1.2
Camping (overall)	36.3	15.2
Developed Area	28.3	11.9
Primitive Area	20.6	8.6

(Activity)	(Percent)	(Number)
Hunting	7.3	3.1
Big game	5.6	2.3
Small game	4.3	1.8
Migratory bird	2.2	0.9
Fishing	25.6	10.7
Freshwater	21.1	8.8
Saltwater	8.8	3.7
Warmwater	11.0	4.6
Coldwater	15.9	6.7
Ice	1.2	0.5
Anadromous	5.8	2.4
Catch and Release	7.3	3.0
Boating	26.7	11.2
Sailing	5.9	2.5
Canoeing	4.1	1.7
Kayaking	2.0	0.8
Rowing	3.1	1.3
Floating, Rafting	7.7	3.2
Motor-boating	20.3	8.5
Water Skiing	9.3	3.9
Jet Skiing	4.9	2.1
Sailboarding/windsurfing	1.4	0.6
Swimming Activities	52.8	22.1
Surfing	2.5	1.0
Swimming/pool	42.2	17.7
Swimming/river, lake, ocean	35.9	15.1
Snorkeling/Scuba	9.0	3.8
Outdoor Adventure Activities	47.2	19.8
Hiking	36.1	15.1
Orienteering	2.9	1.2
Backpacking	12.8	5.4
Mountain Climbing	8.3	3.5
Rock Climbing	6.1	2.6
Caving	6.1	2.5
Off-Road Driving	16.9	7.1
Horseback Riding	8.7	3.6
Social Activities	69.3	29.0
Yard Games	31.9	13.3
Picnicking	52.1	21.8
Family Gathering	62.1	26.0

¹Regional participation percentages reflect participation within the region.
Note: Est. West Population 16 and Older -- 41,910,082. The West Census Region includes--Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

fishing. There is an abundance of lakes which provide opportunities for such activities.

Some of the participation percentages that were notably lower than national percentages were for surfing, saltwater fishing, and mountain climbing. These patterns are expected given the land-locked and relatively flat geography of most of the states in the Midwest Region.

(*West*) The states included in the West Region are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming with an estimated population for the survey period of 41,910,082 persons 16 and older. In the West Region, viewing activities overall showed the highest participation percentage, at 78.7 percent (Table 5). Also in the West, more than 70 percent of the population over 16 participated in a fitness activity at least once in 1994-95. Corresponding to national participation percentages, the same activities, walking, sightseeing, visiting a beach or waterside, and gathering with family, had a greater than 50 percent participation rate in the West. In addition to these activities, more than half the population in the region went picnicking at least once during the year. The West makes up about 20 percent of the national population over 16 years of age.

Activities that would be dependent upon or significantly enhanced by the wide open spaces and rugged terrain in the West showed regional participation percentages much higher than national percentages. While just over one-third of the nation participated in outdoor adventure activities (36.8%), almost half of the population in the West does so (47.2%). All of the specific outdoor adventure activities showed that a higher than average proportion of the population pursue this type of recreation in the West. Camping and downhill skiing percentages were also much higher than the national percentages. Perhaps residents of the region choose these recreational pursuits because the environments conducive to these activities are so close. Or perhaps, people who wish to pursue these activities move to the region, so that they may participate in them more conveniently.

Surprisingly, hunting and fishing participation percentages were noticeably lower in the West than nationally. Estimates of game hunters and fishermen were less than 20 percent of the national estimates for those activities. Most viewing activities were slightly more popular than average in the West. Perhaps the region's overall population, given the area's abundance

of protected lands, has a greater interest in or opportunity for non-consumptive recreational pursuits.

Participation in Water-based Activities

National participation estimates can sometimes be misleading. The range of participation estimates for some activities is quite large across regions. This is particularly true for activities that are dependent upon specific environmental settings or conditions. For instance, skiing will be popular where there are mountains and snow, and surfing will be popular on the coast. National estimates show a kind of average for each activity. That average may be close to, or quite different from more localized estimates. Resource managers, in different areas of the country, will get a clearer picture of the recreational desires and habits of the public they are serving if a more localized approach is taken. Agencies that manage lakes, reservoirs, rivers, seashores, and their surrounding lands will be most concerned with the public's interest in water-based or related activities. With these specific ideas in mind, Table 6 compares regional participation estimates for some water related activities.

Keeping in mind the percentage of the national population that each region represents, Table 6 can be useful in discerning if and where activity participation is localized. For instance, the percentage of ice-skaters from the South (12.3%) is significantly less than the South's percentage of the overall population (34%). In the table, some activities are marked with a "*". This asterisk indicates that at least one region's percentage of overall participation in that activity is significantly different than that region's percentage of the overall population. The percentage of the national population for each region is as follows: Northeast-21%, South-34%, Midwest-24%, and West-21%. Table 6 also provides the estimated millions of participants in each region for each listed activity, which can be a more useful number when dealing with visitor management and marketing.

Outdoor Recreation Participation Trends

This section provides a look at changes in national participation levels for outdoor recreation activities that were measured in previous National Recreation Surveys. Thirty-one activities, for which participation estimates were made in both 1982-83 and 1994-95, are compared in Table 7. The table shows the estimated number of participants for each survey period, as well as the percentage change in participation over the 12-year increment. The change is indicative of the relative

growth or decline in participation for a particular activity.

Since 1982-83, the fastest growing activities include bird-watching, hiking, backpacking, downhill skiing, and camping in a primitive area. Participants in bird-watching more than doubled in number between the 82-83 NRS and the 94-95 NSRE. Backpacking and hiking also showed a great increase in number of persons who participated, with almost twice as many people participating as there were 12 years before. Water resource related activities that have shown growth in number of participants include motor boating, water skiing, pool swimming, and swimming in a river, lake, or ocean (Table 7). Percent increases in each of these activities are greater than the overall population growth rate (13.4%). This growth in interest may indicate future growth potential. Motor boating and swimming in lakes, rivers, or oceans both had nearly a 40 percent increase in participation.

Overall, the trend for outdoor recreation participation indicates continued growth in the outdoor recreation market. Naturally, with an increase in total

population of 13.4 percent over the 13 year period would be expected. A percent change in participation above the rate of population growth indicates that a higher percentage of the public is participating in an activity. This is the case for most of the activities compared between the surveys. However, even participation growth less than the rate of overall population growth means more millions of participants. This growth will result in a greater demand for areas in which to recreate outdoors. Overall population growth, along with the increasing popularity of most outdoor recreation activities, will create problems and opportunities for land and water resource managers. A greater and changing demand is going to be placed on the public's natural resources through recreation. Managers need to anticipate and react to that demand.

Activities which have shown a decline in overall participation include tennis, horseback riding, sailing, fishing and hunting. In terms of natural resource oriented activities, the trend seems to be for a decline in participation in the consumptive activities such as

hunting, while overall non-consumptive activity participation seems to be on the rise.

Table 6. Number (millions) of persons, 16 years of age and older, who participated in various water related recreational activities at least once in the past 12 months, by Region, and the percentage of the national total of participants accounted for by Region.

Activity	Region				National ¹
	Northeast (21%)	South (34%)	Midwest (24%)	West (21%)	
Fish Viewing	5.5	9.4	6.2	6.4	27.4
	20.0%	34.2%	22.5%	23.3%	100.0%
Visiting a Beach/Waterside	27.0	41.5	29.3	26.7	124.4
	21.7%	33.4%	23.5%	21.4%	100.0%
Water Based Nature Study	11.9	18.3	12.5	12.7	55.4
	21.5%	33.0%	22.6%	22.9%	100.0%
*Ice Skating	4.1	1.3	3.8	1.4	10.5
	38.7%	12.3%	35.8%	13.2%	100.0%
*Freshwater Fishing	7.7	18.0	14.0	8.8	48.8
	15.9%	37.1%	28.9%	18.1%	100.0%
*Saltwater Fishing	4.7	9.2	1.6	3.7	19.0
	24.5%	47.9%	8.3%	19.3%	100.0%
*Warmwater Fishing	6.2	16.7	13.0	4.6	40.8
	15.3%	41.2%	32.1%	11.4%	100.0%
*Coldwater Fishing	4.7	5.5	4.0	6.7	20.8
	22.5%	26.3%	19.1%	32.1%	100.0%
*Ice Fishing	0.7	0.2	2.5	0.5	4.0
	17.9%	5.1%	64.1%	12.8%	100.0%
Anadromous Fishing	2.0	2.8	1.9	2.4	9.1
	22.0%	30.8%	20.9%	26.4%	100.0%
*Catch and Release	2.4	6.2	3.8	3.0	15.5
	15.6%	40.3%	24.7%	19.5%	100.0%
*Sailing	2.7	2.6	1.9	2.5	9.6
	27.8%	26.8%	19.6%	25.8%	100.0%
*Canoeing	3.5	4.5	4.3	1.7	14.1
	25.0%	32.1%	30.7%	12.1%	100.0%
*Rowing	2.6	2.2	2.4	1.3	8.4
	30.6%	25.9%	28.2%	15.3%	100.0%
Motor-Boating	8.6	16.8	12.9	8.5	47.0
	18.4%	35.9%	27.6%	18.2%	100.0%
Water Skiing	2.8	6.5	4.6	3.9	17.9
	15.7%	36.5%	25.8%	21.9%	100.0%
*Jet Skiing	1.4	3.8	2.3	2.1	9.5
	14.6%	39.6%	24.0%	21.9%	100.0%
Swimming/river, lake, ocean	18.8	25.6	18.7	15.1	78.1
	24.0%	32.7%	23.9%	19.3%	100.0%
Picnicking	20.7	30.8	24.9	21.8	98.3
	21.1%	31.4%	25.4%	22.2%	100.0%
*Developed Camping	7.4	11.8	10.4	11.9	41.5
	17.8%	28.4%	25.1%	28.7%	100.0%

¹Regional participation numbers may not sum to national numbers due to rounding.

*Activities marked with a * show a percentage of activity participation for at least one region that may be significantly different than that region's percentage of the overall population.

Table 7. Number and percent change¹ of persons 16 years and older participating in outdoor recreation by activity, comparing 1982-83 NRS and 1994-95 NSRE estimates.

Activity	Millions in 1982-83	Percent in 1994-95	Millions in 1994-95	Percent Change
Bicycling	56.5	28.7	57.4	+1.6
Horseback Riding	15.9	7.1	14.3	-10.1
* Golf	23.0	14.8	29.7	+29.1
Tennis	30.0	10.6	21.2	-29.3
* Outdoor Team Sports	42.4	26.4	53.0	+25.0
* Boating	49.5	29.0	58.1	+17.4
Sailing	10.6	4.8	9.6	-9.4
* Motor boating	33.6	23.5	47.0	+39.9
Water Skiing	15.9	8.9	17.9	+12.6
* Swimming/pool	76.0	44.2	88.5	+16.4
* Swimming/river, lake, or ocean	56.5	39.0	78.1	+38.2
Fishing	60.1	28.9	57.8	-3.8
Hunting	21.2	9.3	18.6	-12.3
* Hiking	24.7	23.8	47.8	+93.5
* Walking	93.6	66.7	133.7	+42.8
* Running/ Jogging	45.9	26.2	52.5	+14.4
* Bird Watching	21.2	27.0	54.1	+155.2
* Picnicking	84.8	49.1	98.3	+15.9
* Sightseeing	81.3	56.6	113.4	+39.5
* Off-Road Driving	19.4	13.9	27.9	+43.8
Ice Skating	10.6	5.2	10.5	-0.9
* Downhill Skiing	10.6	8.4	16.8	+58.5
* Cross-Country Skiing	5.3	3.3	6.5	+22.6
* Snow-mobiling	5.3	3.5	7.1	+34.0
* Sledding	17.7	10.2	20.5	+15.8
* Camping (overall)	42.4	26.3	52.8	+24.5
* Developed Area	30.0	20.7	41.5	+38.3
* Primitive Area	17.7	14.0	28.0	+58.2
* Backpacking	8.8	7.6	15.2	+72.7
* Attending a Sports Event	70.7	47.5	95.2	+34.7
* Attending an Outdoor Concert or Play	44.2	34.2	68.4	+54.7

¹Percent change is calculated by dividing the difference in number of participants, between the '82-83 and '94-95 surveys, by the number of participants in 1982-83.

*Activities marked by a * showed a percentage change (growth rate) greater than the 13.4% growth rate of the national population 16 years and older.

Note: Between the 1982-83 NRS and the 1994-95 NSRE, the national population 16 and older grew by 13.4% from an estimated 176,653,000 in 1982 to 200,335,000 in 1995

III. RESULTS OF THE ARMY CORPS OF ENGINEERS' QUESTIONS

This chapter includes data specifically related to the survey questions provided by the COE. A list of the COE questions is presented in Appendix B. Results of the survey and analysis of the data are presented in sections according to the specific category of issue addressed. The first major section provides national and regional results of the COE survey questions. The results are presented in sub-sections according to the three categories of COE questions: availability of services and facilities, area operators, and visitor satisfaction with more private operation. The second major section provides analysis of the results, mostly pertaining to government operated areas and visitor satisfaction. The third major section provides the results of the two free-response COE questions, regarding site improvement and specific agency operators. The regions used in the analysis of the COE questions are different than the census regions referred to in the previous chapters. The four regions represented in this chapter are the Northeast, Southeast, Northwest, and Southwest, and include the following states:

Northeast - Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana, Kentucky, Ohio, West Virginia, Virginia, Pennsylvania, Maryland, Delaware, New Jersey, New York, Connecticut, Rhode Island, Vermont, New Hampshire, Maine, Massachusetts, and the District of Columbia,

Southeast - Arkansas, Louisiana, Mississippi, Tennessee, Alabama, North Carolina, South Carolina, Georgia, and Florida,

Northwest - North Dakota, South Dakota, Nebraska, Kansas, Colorado, Wyoming, Montana, Idaho, Washington, Nevada, Utah, Oregon, and Alaska,

Southwest - California, Arizona, New Mexico, Oklahoma, Texas, and Hawaii.

SERVICE AVAILABILITY, AREA OPERATORS, AND VISITOR SATISFACTION

Availability of Services and Facilities

The data in this section were obtained by asking questions regarding the availability of specific services and facilities at the recreation site the respondent last visited. Each service or facility represented in the tables corresponds to a specific question (Appendix B, Q361-366). The possible responses to the questions were "yes," "no," "refused," or "don't know/ not ascertained." Percentage and number of respondents

are presented, first at the national level (Table 8) and then by region (Tables 9-12).

National

For the nation as a whole, the data shows that only developed campgrounds and restaurant/food service were available at over half of the sites visited by the respondents (Table 8). Almost half of the respondents reported having visited a site where either primitive camping was available or activity facilities were provided. Less than one-third of the respondents visited an area where activity instruction programs or dancing/entertainment were available. A very small percentage of the respondents refused to answer the question. A somewhat larger percentage of the respondents did not know if the specified service or facility was available.

Regional

Regional trends were toward more provision of camping facilities, both developed and primitive, in the western regions and more provision of highly developed facilities in the east. This trend could be a reflection of the relative availability of services at areas in each region. It could also be a reflection of the type of area that respondents in each region choose to visit, given areas available to them and their desired recreational experience.

(Northeast) The highest percentage of respondents in the Northeast (60.3%) reported that restaurant/food services were available at the site they last visited (Table 9). More than half of the respondents reported activity and developed campground facilities. Relative to national figures, a significantly higher percentage of Northeast respondents reported the availability of restaurant, activity facilities, activity instruction programs, and dancing or entertainment facilities. About the same percentage reported that developed campgrounds were available, and a noticeably smaller percentage reported the provision of primitive camping areas.

Table 8: **(National)** Percentage and number of respondents reporting that the listed service or facility was available at the area the respondent last visited.

Service or Facility	Response			
	Yes	No	Refused	Don't Know
Primitive Camping Areas ^a	47.5% 4642	47.6% 4651	0.2% 22	4.8% 465
Developed Campgrounds ^b	55.3% 5411	40.0% 3910	0.2% 23	4.5% 436
Resturant/Food Service	51.4% 5024	46.0% 4498	0.3% 26	2.4% 232
Activity Facilities ^c	45.8% 4482	50.9% 4976	0.3% 28	3.0% 294
Activity Instruction Programs	29.1% 2843	61.4% 6004	0.3% 30	9.2% 903
Dancing or Entertainment	26.7% 2615	66.9% 6541	0.3% 29	6.1% 595
Total respondents= 9780				

^a An area with no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities.

^b With modern toilet and hygienic facilities.

^c For example: swimming pool, golf course, equipment rentals, etc.

Table 9: **(Northeast)** Percentage and number of respondents reporting that the listed service or facility was available at the area the respondent last visited.

Service or Facility	Response			
	Yes	No	Refused	Don't Know
Primitive Camping Areas ^a	39.6% 1005	55.2% 1401	0.3% 7	4.9% 124
Developed Campground ^b	51.5% 1306	43.2% 1096	0.3% 7	5.0% 128
Resturant/Food Service	60.3% 1529	37.1% 940	0.3% 7	2.4% 61
Activity Facilities ^c	56.7% 1439	39.8% 1010	0.3% 8	3.2% 80
Activity Instruction Programs	36.2% 918	53.6% 1361	0.3% 8	9.8% 250
Dancing or Entertainment	34.6% 877	59.2% 1501	0.3% 8	6.0% 151

Total respondents for Northeast Region= 2537

^aAn area with no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities.

^bWith modern toilet and hygienic facilities.

^cFor example: swimming pool, golf course, equipment rentals, etc.

Table 10. (Southeast) Percentage and number of respondents reporting that the listed service or facility was available at the area the respondent last visited.

Service or Facility	Response			
	Yes	No	Refused	Don't Know
Primitive Camping Areas ^a	42.8% 488	51.8% 591	0.0% 0	5.4% 61
Developed Campground ^b	53.9% 614	40.9% 466	0.0% 0	5.3% 60
Restaurant/Food Service	59.3% 676	38.1% 434	0.0% 0	2.6% 30
Activity Facilities ^c	58.9% 671	37.8% 431	0.1% 1	3.2% 37
Activity Instruction Programs	32.8% 374	55.7% 635	0.0% 0	11.5% 131
Dancing or Entertainment	32.9% 375	60.1% 685	0.0% 0	7.0% 80
Total respondents for Southeast Region= 1140				

^a An area with no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities.

^b With modern toilet and hygienic facilities.

^c For example: swimming pool, golf course, equipment rentals, etc.

(Southeast) Restaurant/food service was also reported to have been the highest percentage (59.3%) of sites visited in the Southeast (Table 10). More than half of the respondents from the region also reported that developed campgrounds and activity facilities were available at the site they visited. About half of the visited sites in the region did not provide primitive camping. One-third of the respondents reported the provision of activity instruction programs and dancing/entertainment facilities at the site they visited. Relative to national figures, a higher percentage of respondents in the Southeast reported that restaurant/food service, activity facilities, activity instruction programs, and dancing/entertainment facilities were available at their site.

(Northwest) In the Northwest, only camping facilities, both primitive and developed, were reported by more than half of the respondents to be available at the site they last visited (Table 11). The Northwest was the only region where over half (54.7%) of the respondents reported that primitive camping areas were provided. This was also the only region where over half (54.5%) of the respondents said that

restaurant/food service was not available at the site they visited. About one-fifth reported the availability of dancing/entertainment or activity instruction programs. Relative to national figures, high percentages of respondents reported that their area did not provide food service, activity facilities, activity instruction programs, or dancing and entertainment facilities.

(Southwest) Southwest regional figures were very representative of national percentages. Percentages of respondents reporting provision of services fell between percents for the Northwest and percents for the eastern regions. Provision of developed campgrounds was reported by 54.4 percent of respondents in the region. Restaurant/ food service was also said to be available on site by over half of the respondents (Table 12). More than half reported that the area they visited did not provide activity facilities, instruction programs, or dancing/entertainment.

Table 11. **(North west)** Percentage and number of respondents reporting that the listed service or facility was available at the area the respondent last visited.

Service or Facility	Response			
	Yes	No	Refused	Don't Know
Primitive Camping Areas ^a	54.7% 2112	40.5% 1565	0.2% 8	4.6% 176
Developed Campground ^b	59.2% 2286	36.2% 1425	0.2% 7	3.7% 146
Restaurant/Food Service	43.1% 1664	54.5% 2099	0.2% 8	2.3% 90
Activity Facilities ^c	36.9% 1425	60.4% 2333	0.2% 8	2.5% 95
Activity Instruction Programs	23.0% 888	68.6% 2649	0.2% 9	8.2% 315
Dancing or Entertainment	20.1% 777	73.9% 2853	0.2% 9	5.7% 222

Total respondents for Northwest Region= 3861

^a An area with no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities.

^b With modern toilet and hygienic facilities.

^c For example: swimming pool, golf course, equipment rentals, etc.

Recreation Area Operators

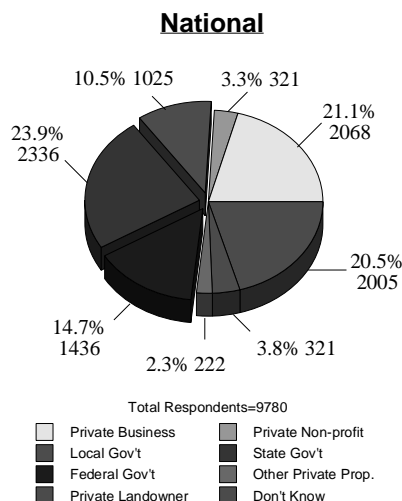


Figure 1.—Percent and number of national respondents reporting having visited a recreation area, by type of area operator

Area Operators

Recreation Area Operators

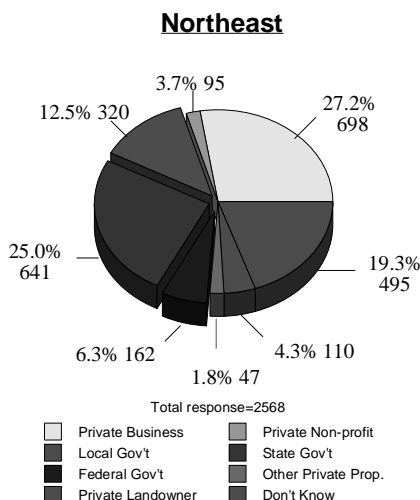


Figure 2.—Percent and number of Northeast respondents reporting having visited a recreation area, by type of area operator

The data in this section were obtained by asking who operated the area the respondent last visited. The

possible responses were as follows: private business, private non-profit group, local government, state government, federal government, other private property, private landowner, and don't know (Appendix B, Q367). Percent and number of national respondents are presented in Figure 1. Regional data are presented in Figures 2-5.

National

The national results indicate that state governments (23.9%) and private businesses (21.1%) operated more of the areas that the respondents visited (Figure 1). Over 20 percent of the respondents indicated that the area they visited was managed by one of these two operators. Government agencies overall managed almost half (49.1%) of the areas, with the federal government (14.7%) managing a slightly higher percentage of the areas than did local governments (10.5%). The number of persons responding that they did not know who managed the area they visited was quite significant. One fifth of the respondents could not or did not identify the operator of the area they visited. It is hard to speculate about the distribution of unknown operators. The type of area, prominence of signage, and nature of the visitor all may contribute to this unknown factor. If even a small percentage of the unknown operators proved to be government agencies, then it can safely be said that a majority of the areas visited were operated by some form of government.

Regional

In the Northeast and Southeast, the highest percentage of respondents visited areas operated by private business (Figures 2 and 3). State government areas had the next highest percentage visitors. Together, state and private business operated areas

were visited by about half of the respondents in each region. People who did not know the operator of their area made up the next highest percent of respondents. Local government areas, in the two eastern regions, had about twice as many visitors as federal areas. Less than 10 percent of the respondents from the Northeast and the Southeast visited a federally operated site. Likewise, the combined number of respondents who visited an area run by a private non-profit group, private landowner, or other private property, was less than 10 percent of the total respondents from each region.

Respondents in the Northwest and Southwest visited federal areas in much greater numbers than they did in the east. While respondents still visited state areas in

Recreation Area Operators

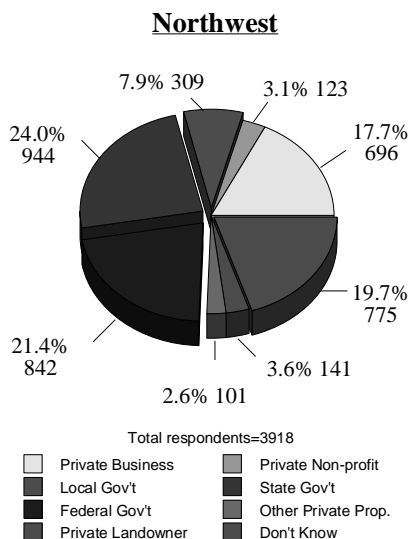


Figure 4.—Percent and number of Northwest respondents reporting having visited a recreation area, by type of area operator

the highest percentages, federal areas ran a close second in the Northwest, and third in the Southwest (Figures 4 and 5). This is excluding those respondents who did not know the operator of the area they visited. These respondents, as in the east, made up about one-fifth of the total respondents from each region. The highest regional percentage of visitors to federal sites was in the Northwest. There, about one-fifth of the respondents visited a federally operated area (Figure 4). Relative to the east, there was a higher percentage

Recreation Area Operators

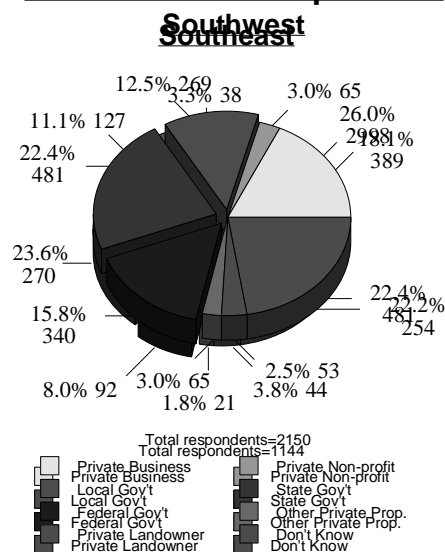


Figure 5.—Percent and number of Southwest respondents reporting having visited a recreation area, by type of area operator

of visitors to federal areas in the Southwest as well (Figure 5). The shift in number of respondents who visited various areas in the western regions seemed to be away from private business operated areas and toward federal sites. Private business areas still received just under 20 percent of the visits from respondents in each region. Because many of the nation's federal lands are in the west, the relative patterns of visitation are not surprising. The convenience and related lower expense of visiting a local site are obvious reasons why people would choose one type of area over another. Another reason may be related to the experiences people desire and the opportunities that different types of areas have to offer. This relationship is explored later in this report.

Table 12. **(Southwest)** Percentage and number of respondents reporting that the listed service or facility was available at the area the respondent last visited.

Service or Facility	Response			
	Yes	No	Refused	Don't Know
Primitive Camping Areas ^a	46.0% 970	49.0% 1033	0.3% 6	4.7% 98
Developed Campground ^b	54.4% 1146	40.7% 858	0.4% 8	4.5% 95
Restaurant/Food Service	51.8% 1092	45.7% 962	0.4% 9	2.1% 44
Activity Facilities ^c	42.2% 890	53.7% 1132	0.4% 9	3.6% 76
Activity Instruction Programs	29.3% 618	60.9% 1284	0.5% 11	9.2% 194
Dancing or Entertainment	26.4% 556	66.9% 1410	0.5% 10	6.2% 131
Total respondents for Southwest Region= 2107				

^a An area with no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities.

^b With modern toilet and hygienic facilities.

^c For example: swimming pool, golf course, equipment rentals, etc.

Table 13. (National) Percent and number of respondents reporting hypothetical change in satisfaction with area visited, given a change from public to private management, according to an increase in provision of various facilities and services by the private operator.

Increased Facilities and Services	Level of Satisfaction				
	Increase	Remain the Same	Decrease	Refused	Don't Know
No Increase or Change	17.1% 821	54.4% 2608	19.7% 944	0.5% 23	8.4% 401
Toilet/ Hygienic Facilities ^a	51.6% 2476	33.2% 1594	10.5% 502	0.5% 23	4.2% 202
Campground Development ^b	32.6% 1564	35.5% 1704	24.5% 1173	0.6% 27	6.9% 329
Activity Related Facilities and Services	36.8% 1764	33.6% 1614	24.6% 1178	0.5% 23	4.5% 218
Lodging Facilities ^c	27.7% 1328	31.3% 1502	35.1% 1684	0.5% 24	5.4% 259
Food Service	36.0% 1725	33.0% 1581	26.8% 1285	0.5% 25	3.8% 181
Total respondents reporting having visited a publicly operated (government) site= 4797					

^aMore modern facilities.

^bMore highly developed campgrounds.

^cHotel/motel or cabin facilities.

Satisfaction with more Private Operation of Facilities

The data in this section were obtained by asking questions regarding the visitors' level of satisfaction with the facilities and services available at the recreation area last visited (Appendix B, Q368-374). The questions were geared toward finding out how visitors felt their satisfaction levels would change if a private operator managed the public area the respondent last visited. Only respondents who reported having visited a site operated by the government were asked questions pertaining to this issue. Each question posed a hypothetical change from public to private management of the area. Along with this change, individual questions were asked regarding the increase in provision of specific services and facilities. One question proposed no change in provision of services and facilities, but with private instead of public management.

The specific services and facilities proposed for increase are listed in the following tables in the left column. Respondents were asked to consider the hypothetical changes and indicate how their level of satisfaction with the area might change, given each proposal. Response categories for these questions were "increase," "remain the same," "decrease," "refused," and "don't know." Percent and number of respondents for each question are presented, first on the national level (Table 13) and then for each region (Tables 14-17).

National

Figures for the national population show that a majority (51.6%) of the respondents who visited a government operated site would be more satisfied with the area if it were managed by a private operator who would provide more modern toilet and hygienic

Table 14. (Northeast) Percent and number of respondents reporting hypothetical change in satisfaction with area visited, given a change from public to private management, according to an increase in provision of various facilities and services by the private operator.

Increased Facilities and Services	Level of Satisfaction				
	Increase	Remain the Same	Decrease	Refused	Don't Know
No Increase or Change	17.3% 192	55.9% 620	17.0% 189	0.5% 5	9.3% 103
Toilet/ Hygienic Facilities ^a	53.8% 597	35.0% 388	6.1% 68	0.6% 7	4.4% 49
Campground Development ^b	32.8% 364	40.1% 445	17.5% 194	0.8% 9	8.7% 97
Activity Related Facilities and Services	45.0% 499	33.8% 375	15.0% 166	0.7% 8	5.5% 61
Lodging Facilities ^c	32.0% 355	35.7% 396	25.3% 281	0.7% 8	6.2% 69
Food Service	42.2% 468	34.4% 382	18.0% 200	0.8% 9	4.5% 50

Total respondents from Northeast reporting having visited a publicly operated (government) site= 1109

^aMore modern facilities.

^bMore highly developed campgrounds.

^cHotel/motel or cabin facilities.

facilities (Table 13). About one-third of the respondents said that provision of more developed campgrounds, activity related facilities, and food service by a private operator would increase their satisfaction with the public area they visited. Only 27.7 percent of the respondents indicated a desire for more lodging facilities, and 17.1 percent said that private operation would increase their satisfaction with the area even without any change in provision of services or facilities.

Over half (54.4%) of the respondents in the country indicated that private operation of the area they visited, with no change in provision of services, would not affect their level of satisfaction with the area. About one-third of the respondents in the nation indicated no change in their level of satisfaction, given increases in provision of each specific service by a private operator. In order to discover which proposed changes would go over well with a majority of the

visitors to these areas, the number of respondents who indicated an increase or no change in satisfaction could be combined. This is done in the analysis section of the report, broken down by the various levels of government (see Figures 10-15).

Regional

Regional trends show that, with the proposed changes, satisfaction levels would increase or remain the same for higher percentages of respondents from the eastern regions than from the west. Relative to the other regions, a higher percent of respondents from the Northwest indicated an actual decrease in satisfaction with the proposed changes. In the eastern regions, each proposed change resulted in more respondents reporting an increase rather than a decrease in satisfaction (Tables 14 and 15). This was not true for the Northwest and Southwest. In the Southwest, more respondents indicated an increase rather than decrease

Table 15. **(Southeast)** Percent and number of respondents reporting hypothetical change in satisfaction with area visited, given a change from public to private management, according to an increase in provision of various facilities and services by the private operator.

Increased Facilities and Services	Level of Satisfaction				
	Increase	Remain the Same	Decrease	Refused	Don't Know
No Increase or Change	20.1% 98	56.5% 275	14.2% 69	0.6% 3	8.6% 42
Toilet/ Hygienic Facilities ^a	55.9% 272	35.7% 174	4.1% 20	0.4% 2	3.9% 19
Campground Development ^b	33.5% 163	43.1% 210	15.8% 77	0.5% 2	7.2% 35
Activity Related Facilities and Services	41.3% 201	39.2% 191	15.0% 73	0.2% 1	4.3% 21
Lodging Facilities ^c	36.1% 176	34.7% 169	22.4% 109	0.4% 2	6.4% 31
Food Service	40.5% 197	40.9% 199	14.6% 71	0.2% 1	3.9% 19

Total respondents from Southeast reporting having visited a publicly operated (government) site= 487

^a*More modern facilities.*

^b*More highly developed campgrounds.*

^c*Hotel/motel or cabin facilities*

in satisfaction for all changes toward private operation, except where no change in service and where increased lodging facilities were proposed (Table 17). More Northwest respondents indicated a decrease rather than increase in satisfaction with almost all proposed changes toward private management. The exceptions were for increased campground development, where an equal number indicated increased and decreased satisfaction, and for toilet facilities, where almost a majority indicated increased satisfaction with proposed toilet facility improvement (Table 16).

Despite the relative deviations in the Northwest, there was a definite overall trend for all of the regions. A majority of respondents from each region indicated that private operation of the area would not affect their satisfaction, if no changes in provision of services were made. About half or more of the respondents in each region indicated that their satisfaction would increase if a private operator provided more modern

toilet/hygienic facilities. For every region, the highest percentage of respondents who indicated their satisfaction would decrease were responding to the proposed increase in lodging facilities. A majority of respondents in each region indicated that their satisfaction with the area they visited would either increase or not change, given any of the proposed changes to or by private management.

Table 16. **(Northwest)** Percent and number of respondents reporting hypothetical change in satisfaction with area visited, given a change from public to private management, according to an increase in provision of various facilities and services by the private operator.

Increased Facilities and Services	Level of Satisfaction				
	Increase	Remain the Same	Decrease	Refused	Don't Know
No Increase or Change	16.1% 331	54.0% 1113	22.7% 468	0.4% 8	6.9% 142
Toilet/ Hygienic Facilities ^a	48.5% 1001	32.4% 671	14.2% 293	0.4% 8	4.3% 89
Campground Development ^b	30.6% 632	32.4% 668	30.6% 631	0.5% 10	5.9% 121
Activity Related Facilities and Services	31.2% 643	31.8% 655	32.4% 668	0.3% 7	4.3% 89
Lodging Facilities ^c	23.4% 482	29.4% 606	42.5% 876	0.4% 8	4.4% 90
Food Service	31.2% 643	30.5% 629	34.4% 710	0.4% 8	3.5% 72
Total respondents from Northwest reporting having visited a publicly operated (government) site= 2062					

^aMore modern facilities.

^bMore highly developed campgrounds.

^cHotel/motel or cabin facilities.

GOVERNMENT AREAS, FACILITIES, AND VISITOR SATISFACTION

The following sections compare the results of the three sets of questions in various combinations. This analysis provides a look at relationships, such as type of facilities provided by each operating agency and type of facilities provided by various levels of government. These relationships are defined by the numbers and percentages of respondents indicating these facilities were provided at the area they last visited. The tables also provide a look at the hypothetical change in visitor satisfaction, with private versus public management and increased provision of services and facilities. These changes are compared by level of government and by type of facilities provided.

Demographic breakdowns of respondents answering questions 361-366 and 369-374 are provided in Tables C1-C3 in Appendix C. These tables compare the answers to the questions by demographic characteristics, such as age, race, gender, etc. There is no complete analysis according to these characteristics included in this report. These figures are available for interpretation, and some of the figures

may reflect demographic trends. However, most of the percentages merely reflect the overall demographic characteristics of the surveyed individuals.

Facilities Available by Operating Agency

This section provides a look at the type of facilities available at recreation areas managed by various area operators (Table 18). The data reflect the relative number and type of facilities provided by each operator, according to the number and percentage of visitors to those areas who indicated specific facilities were provided. This analysis will help in understanding which operators offer which recreation opportunities. A general description of areas run by specific operators will result, and will be useful when analyzing visitors' desired changes in these areas.

Primitive camping was reported to have been available by well over half (66.1%) of the respondents who visited a site operated by the federal government. State operated areas were reported to have provided the second highest percentage of primitive camping opportunities. Just over half of the respondents (56.9%) who visited state run areas reported the

Table 17. (Southwest) Percent and number of respondents reporting hypothetical change in satisfaction with area visited, given a change from public to private management, according to an increase in provision of various facilities and services by the private operator.

Increased Facilities and Services	Level of Satisfaction				
	Increase	Remain the Same	Decrease	Refused	Don't Know
No Increase or Change	17.7% 190	53.0% 568	18.9% 202	0.5% 5	9.9% 106
Toilet/ Hygienic Facilities ^a	54.0% 578	31.8% 341	9.9% 106	0.5% 5	3.8% 41
Campground Development ^b	35.6% 381	33.6% 360	23.4% 251	0.5% 5	6.9% 74
Activity Related Facilities and Services	37.4% 401	34.5% 369	23.3% 250	0.6% 6	4.2% 45
Lodging Facilities ^c	27.8% 298	29.1% 312	36.3% 389	0.5% 5	6.3% 67
Food Service	37.2% 398	32.8% 351	26.0% 278	0.6% 6	3.5% 38

Total respondents from Southwest reporting having visited a publicly operated (government) site= 1071

^aMore modern facilities.

^bMore highly developed campgrounds.

^cHotel/motel or cabin facilities

provision of primitive camping areas. This could be indicative of the relatively larger land base typically managed and made available for public access by these levels of government. Primitive camping opportunities would logically coincide with a large land base, where remote settings away from development are available.

Provision of developed campgrounds, with modern toilet and hygienic facilities, was reported by an equally high percentage of visitors to state and federally operated areas. Developed camping opportunities were reported to be available by about 65 percent of the respondents who visited an area operated by these levels of government (Table 18). Over half (56.2%) of the respondents who visited areas operated by private businesses reported provision of developed campgrounds. Less than half of the respondents who visited areas managed by the other operators reported the provision of any camping opportunities.

A very high percentage (74.9%) of respondents who visited an area operated by a private business reported that restaurant or food services were available. Almost half (49.5%) of the visitors to areas run by local governments reported the availability of these services. Only about one-third (37.5%) of the visitors to federally operated areas said that food services were provided. This was the lowest percentage for provision of this particular service.

Activity facilities, such as swimming pools, golf courses, or equipment rental, also were reported to be provided in the highest percentage by private businesses. Again, almost three-quarters (71.8%) of the respondents who visited private business operated areas indicated that such facilities were provided. The lowest percentage again was reported for the federally managed areas. Only 26.8 percent of surveyed visitors to federal areas reported the provision of activity facilities. Activity instruction programs, such as ropes courses, were not reported by a majority of visitors to any of the areas. Just under half of the respondents (45.9%) who visited private business operated areas reported the provision of these types of programs. Dancing/entertainment facilities were reported by even less of the respondents overall. However, half of those who visited a private business area (50.1%) did report the provision of dancing or entertainment facilities. Again, relatively few visitors to federally operated areas (14.6%) indicated that such facilities were provided.

In relation to the provision of specific services and

facilities, Table 18 provides a basic description of the type of area managed by each selected operator. This description is derived only from observations in areas that were visited by respondents. Therefore, it cannot be said from this data that an overall percentage of federally managed areas do or do not provide certain services. It can be said that a high percentage of reported visits to state or federally operated areas were to areas that provide either primitive or developed camping. This could mean that a high percentage of state and federal areas provide for these opportunities. It also could mean that respondents visited these specific government areas because camping opportunities were provided. Likewise, it could be surmised that a high percentage of all areas managed by a private business provide the “developed” services, such as restaurants and activity facilities. Or, perhaps respondents visited those particular private areas because of the services provided there. In either case, the numbers provide a general description of the operators who are likely to provide certain services.

The percentages for the respondents who could not identify the area operator fall somewhere near the mean of the percentages for the other operators. This is true for each of the service and facility categories. This may indicate that the distribution of these “don’t know” respondents is even across all of the possible area operators.

Table 18. Number and percent of respondents reporting service or facility was provided at the area they last visited, for each of the reported area operators.

Area Operator	Service or Facility ¹						Total Area Visitors
	Primitive Camping	Developed Campgrounds	Restaurant or Food Services	Activity Facilities	Activity Instruction Programs	Dancing/ Entertainment	
Private Business	39.2% 811	56.2% 1162	74.9% 1549	71.8% 1485	45.9% 949	50.1% 1036	2042
Private Non-Profit Group	39.6% 127	46.1% 148	43.3% 139	44.9% 144	29.9% 96	28.3% 91	321
Local Government	29.5% 302	39.4% 404	49.5% 507	46.5% 477	27.2% 279	22.0% 226	1025
State Government	56.9% 1329	65.6% 1532	42.6% 994	38.2% 893	23.6% 551	16.1% 375	2336
Federal Government	66.1% 949	64.4% 925	37.5% 539	26.8% 385	22.1% 318	14.6% 209	1436
Other Private Property	47.7% 106	46.8% 104	46.8% 104	41.9% 93	30.2% 67	29.7% 66	222
Private Landowner	44.7% 164	42.0% 154	45.8% 168	39.5% 145	21.8% 80	27.5% 101	367
Don't Know	42.6% 854	49.0% 982	51.1% 1024	42.9% 860	25.1% 503	25.5% 511	2005
Total respondents identifying area operator= 9780							

¹Services and facilities referred to are described as the following: Primitive camping- an area with no improved roads, water taps, flush toilets, showers, stores, or laundry facilities; Developed campgrounds- with modern toilet and hygienic facilities; Activity facilities- for example, swimming pool, golf course, equipment rentals, etc.; Activity instruction programs- for recreational activities; Dancing/entertainment- facilities or programs.

Government Operators

Northeast

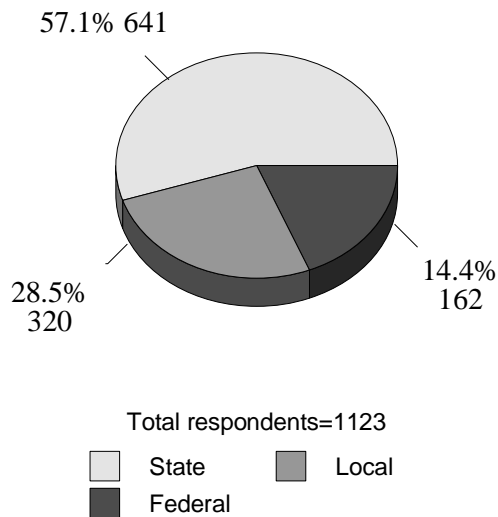


Figure 6.—Percent and number of Northeast respondents reporting having visited a recreation area operated by the government, by level of government agency

Government Operators by Region

Figures 6-9 provide regional numbers and percentages of respondents who visited an area managed by one of the three levels of government. These results reflect the relative number and type of government management of recreation areas in each region. The overall percentage of respondents who visited each of these areas were provided in Figures 2-5. Figures 6-9 show the percentages of respondents who visited these government areas only in relation to each other.

Figures 6 and 7 show the relative number of visits for the Northeast and Southeast respectively. More than half of all reported visits to government sites were to state operated areas. That proportion of visits is about twice as many as to local government areas, and about three times as many as to federal lands. These proportions are similar for both of the eastern regions. The relative number of respondents who visited these types of areas in the Northwest and Southwest (Figures 8 and 9) are quite different. There still were higher numbers of visits to state areas in these regions.

Government Operators

Southeast

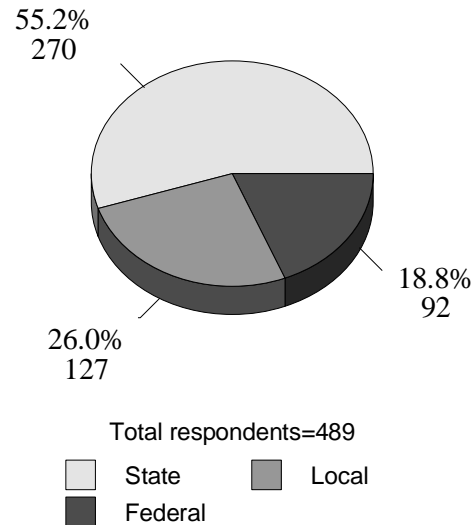


Figure 7.—Percent and number of Southeast respondents reporting having visited a recreation area operated by the government, by level of government agency

However, the percent of visits to these areas was less than half of the total visits to government sites. In the Northwest, about 40 percent of visits to government areas were to federally operated lands. Only about 15 percent of visits were reported to be to local government lands. Not quite as dramatic, but still showing the same trend towards federal areas, were the relative numbers for the Southwest region. Here, about one-third of the visits to government sites were to federal lands. About one-quarter were to local government areas.

Overall, state government lands provide a sizeable portion of the recreational opportunities and use. There are several reasons for this. First, there are numerous land management agencies on the state level, such as park systems, that have recreation as their primary goal. Second, several other state agencies, like the various state departments of natural resources, provide recreation along with other resource management. Finally, state areas tend to provide a relatively low cost recreational experience. Federal areas are found mostly in the western regions where most of the country's federally managed land is located. With this

Government Operators

Northwest

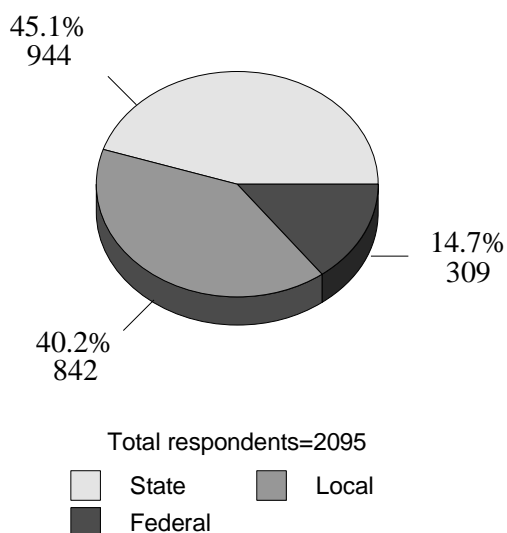


Figure 8.—Percent and number of Northwest respondents reporting having visited a recreation area operated by the government, by level of government agency

in mind, the proximity of state lands to eastern populations is a factor in their popularity. In the eastern regions, federal lands are less abundant and therefore visiting them is more expensive for most people. Local recreation areas are often convenient and inexpensive, but many times do not provide nature-based recreation opportunities and other services (see Table 18).

Change in Visitor Satisfaction With Private vs. Public Operation

This section includes tables that provide information on respondents' hypothetical change in satisfaction with the visited area, given a proposed change from public to private facility operation of the area. By type of government operator, Table 19 shows the numbers and percentages of respondents who indicated their satisfaction would increase with the proposed change, according to specific increases in services or facilities by the hypothetical private operator. These results reflect the relative number of visitors who would like to see these changes in each of the government operated areas. Table 20 shows the number and percentage of respondents who said their

Government Operators

Southwest

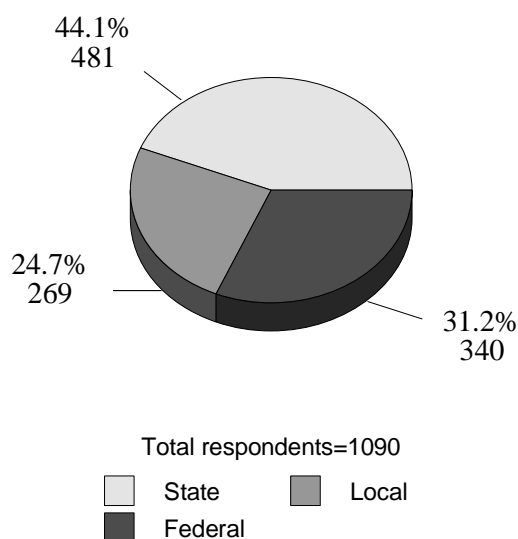


Figure 9.—Percent and number of Southwest respondents reporting having visited a recreation area operated by the government, by level of government agency.

satisfaction would remain the same if the public area they visited were privately operated, according to specific increases in services by the private operator. The proposed changes would neither add to nor detract from these respondents' experiences at the site they visited. Table 21 shows the number and percentage of respondents who said that the proposed changes, along with private operation of the site, would actually decrease their satisfaction with the area.

Between 14 and 20 percent of respondents reported that their satisfaction with an area would increase if a private operator took over operations even though they would not increase any services or facilities. Basically, an area would remain the same except that the government would no longer operate it. Only one-fifth of the visitors to local government areas, and less for state and federal areas, indicated that their satisfaction would actually increase such a change (Table 19). For each type of government

Table 19.—Percent¹ and number of respondents who indicated that their level of satisfaction with the government area last visited would **increase**, given a change from public to private management, according to increased provision of specific services and facilities by the private operator.

Service or Facility to be Increased	Level of Government		
	Local	State	Federal
No change in facilities & services	20.6% 211	17.3% 403	14.4% 207
Toilet/hygienic facilities ^a	60.9% 624	53.6% 1251	41.9% 601
Campground development ^b	37.4% 383	36.3% 847	23.3% 334
Activity related facilities & services	47.6% 488	40.2% 940	23.4% 336
Lodging facilities ^c	29.0% 297	31.6% 738	20.4% 293
Food services	43.5% 446	39.0% 911	25.6% 368
Total respondents who reported visiting an area operated by the local government = 1025			
Total respondents who reported visiting an area operated by the state government = 2336			
Total respondents who reported visiting an area operated by the federal government = 1436			

¹ Percentages are out of total respondents who visited an area operated by each specific level of government

^a More modern facilities

^b More highly developed campgrounds

^c Hotel/motel or cabin facilities

area, about half of the respondents said that private operation with no facility changes would not affect their level of satisfaction (Table 20). In general, it seems that most visitors are more concerned with the services available at an area than with who provides the services. Some respondents indicated that their satisfaction level would actually decrease if private operators managed the site, even if they did not change the services available at the area (Table 21). A comparison of these respondents with those who indicated an increase in satisfaction with the same change shows that at local government sites, a greater percentage would be more satisfied with the change. At state sites a slightly greater percentage would be less satisfied with the change, and at federal sites a noticeably larger portion of visitors indicated dissatisfaction with this particular change towards private operation.

Satisfaction changes were most dramatic for the proposed provision of more modern toilet/hygienic facilities by a private operator. For each type of government site, this was the change that the highest percentage of respondents indicated would increase their satisfaction with the area. Over half of the

respondents who visited local or state sites, and about 40 percent of those who visited a federal site indicated that such a change would be to their liking (Table 19). In addition, about one-third of the visitors to each of these public areas said that if a private operator provided more modern toilet facilities it would not affect their satisfaction with the area (Table 20). Only at federal sites did a significant portion of visitors (19.4%) report that this change would decrease their satisfaction with the area (Table 21).

Rather than go through each of the activities for each of the types of government area, it might be more clear to describe certain trends that seem to be apparent in these tables. For the remaining hypothetical changes by a proposed private operator (increased campground development, activity related facilities, lodging facilities, and food service) loose patterns appear for satisfaction changes and for type of operator. Between 30 percent and 40 percent of respondents visiting local and state areas reported that their satisfaction would increase with each of

Table 20.—Percent¹ and number of respondents who indicated that their level of satisfaction with the government area last visited would **remain the same**, given a change from public to private management, according to increased provision of specific services and facilities by the private operator.

Service or Facility to be Increased	Level of Government		
	Local	State	Federal
No change in facilities & services	56.3% 577	56.5% 1320	49.5% 711
Toilet/hygienic facilities ^a	28.5% 292	35.2% 822	33.4% 480
Campground development ^b	34.9% 358	38.2% 892	31.6% 454
Activity related facilities & services	32.2% 330	34.5% 807	33.2% 477
Lodging facilities ^c	37.5% 384	32.1% 750	25.6% 368
Food services	33.7% 345	34.9% 815	29.3% 421
Total respondents who reported visiting an area operated by the local government = 1025			
Total respondents who reported visiting an area operated by the state government = 2336			
Total respondents who reported visiting an area operated by the federal government = 1436			

¹ Percentages are out of total respondents who visited an area operated by each specific level of government

^a More modern facilities

^b More highly developed campgrounds

^c Hotel/motel or cabin facilities

these proposed changes (Table 19). Again, between 30 percent and 40 percent of visitors to local and state sites reported that these changes would not affect their satisfaction with the area (Table 20). There is one main exception to this general description. Almost half (47.5%) of the visitors to local government sites indicated that provision of more activity related facilities, by a private operator, would increase their satisfaction with the area. Another pattern appears evident at local and state sites. For each of these changes (campground development, etc.), there were more respondents who indicated that their satisfaction would increase than there were those who said it would decrease, with only one exception—slightly more respondents who visited a state site indicated that increased lodging facilities would decrease their satisfaction with the area.

Respondents who visited a federally operated area showed quite different trends related to satisfaction with the proposed changes. Compared to local and state areas, a lower percentage of the visitors to federal areas indicated satisfaction increases with each of the proposed changes (Table 19). The same can be said for visitors to these areas who indicated no change in

satisfaction (Table 20). With the exception of increased provision of toilet facilities, more visitors to federal sites indicated decreased rather than increased satisfaction with private operation and facility changes. Worthy of note is that almost half (48.9%) of the visitors to federal sites said that their satisfaction with the area would decrease if a private operator provided more lodging facilities (Table 21).

Visitor Support for Operation Changes in Government Areas

Figures 10-15 show the visitor responses to proposed changes at each type of government operated area. These figures give a good perspective on how the changes would affect the public that visits each type of area. In each figure, that is for each proposed change, the trend is apparent that higher percentages of respondents who visited local and state sites reported an “increase” or “no change” in satisfaction, than did visitors to federal sites.

Table 21.–Percent¹ and number of respondents who indicated that their level of satisfaction with the government area last visited would **decrease**, given a change from public to private management, according to increased provision of specific services and facilities by the private operator.

Service or Facility to be Increased	Level of Government		
	Local	State	Federal
No change in facilities & services	13.6% 139	18.0% 421	26.7% 384
Toilet/hygienic facilities ^a	5.1% 52	7.3% 171	19.4% 279
Campground development ^b	15.3% 157	19.9% 465	38.4% 551
Activity related facilities & services	13.1% 134	21.1% 493	38.4% 551
Lodging facilities ^c	22.7% 233	32.1% 749	48.9% 702
Food services	15.6% 160	23.1% 539	40.8% 586
Total respondents who reported visiting an area operated by the local government = 1025			
Total respondents who reported visiting an area operated by the state government = 2336			
Total respondents who reported visiting an area operated by the federal government = 1436			

¹ Percentages are out of total respondents who visited an area operated by each specific level of government

^a More modern facilities

^b More highly developed campgrounds

^c Hotel/motel or cabin facilities

These two satisfaction responses will be referred to as “non-negative.” For most proposed area operation changes, a large majority of visitors to each area consisted of respondents who indicated a non-negative reaction to those changes. Such a majority might support the implementation of the proposed changes. However, the strongest support comes for the changes where more respondents indicated increased satisfaction than indicated decreased satisfaction. This assumption seems to be true, because it is the visitors on either end of the spectrum who are most likely not to return to the area, depending on whether or not operation changes are made. Respondents in the middle of the spectrum, indicating no change in satisfaction, would probably be as likely to visit the site again in either case. Provision of more or better toilet facilities by a private operator garnered this type of “strong support” in all government areas (Figure 10). Likewise, strong support was shown by visitors to local and state areas for almost every proposed change. The one exception was for the proposed increase of lodging facilities, where there was not a

definitively higher percentage of positive or negative

reaction shown by respondents (Figure 11).

Visitors to federal areas showed strong support only for private operator provision of more or better toilet facilities (Figure 10). For all other changes, more visitors to federal areas reacted negatively than reacted positively. If the “neutral” visitors could be expected to return in any case, then it would seem that federal areas would stand to lose more visitors if these changes were made. Even if that percentage of negative respondents did come back to the area, their satisfaction level would have been lowered by the changes. There seems to be a particularly high percentage of federal area visitors who would be dissatisfied if a private operator provided more lodging facilities. There were actually more negative reactions from respondents to this proposed change than there were both positive and neutral reactions combined (Figure 11).

It seems that there might be a question as to whether visitor responses about their satisfaction levels were in reaction to the proposed change in facilities or

the proposed change in operator. Are visitor satisfaction levels affected only by what is at the site, or are they affected also by who provides what is there? The numbers represented in Figure 12 may help to understand this difference. They indicate that about 50 percent or more of the visitors to each government area responded that their satisfaction with the area would not be affected if a private operator took over operations, but did not change current provision of facilities and services. This percentage was much larger than the percentages of either positive or negative reaction. It would seem that many respondents' satisfaction with an area was based mostly on what the area had to offer, not on who operated the area. If the respondents visited an area based on the services provided, it does not matter to many of them who is in charge, as long those services are not affected. It might be found that if the current government operator, rather than a private operator, was to provide the same proposed facility changes, visitors would indicate satisfaction changes in similar ratios. The question then is whether government operators can afford to make the desired changes to appropriate areas. In a later section of this report, a look is taken at government sites based on the services currently available there, where visitors indicated increased satisfaction with the proposed changes.

A percentage of respondents did indicate that their satisfaction level would be affected based on whether the area was run by a private or public operator, even without any changes to the site. These respondents either indicated an increase or a decrease in satisfaction based solely on a change in operator. In local government areas more respondents said that even without facility changes, non-government operation would increase their satisfaction with the area. The opposite was true for federal sites, where a higher percentage of respondents indicated that a change to private operation would decrease their satisfaction (Figure 12).

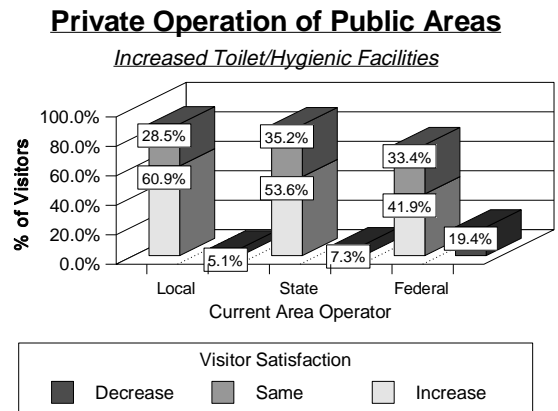


Figure 10.– Percent and number of respondents, by type of government area visited, reporting how their satisfaction would change with a proposed switch to private operation of the area, if the private operator provided more modern toilet/hygienic facilities.

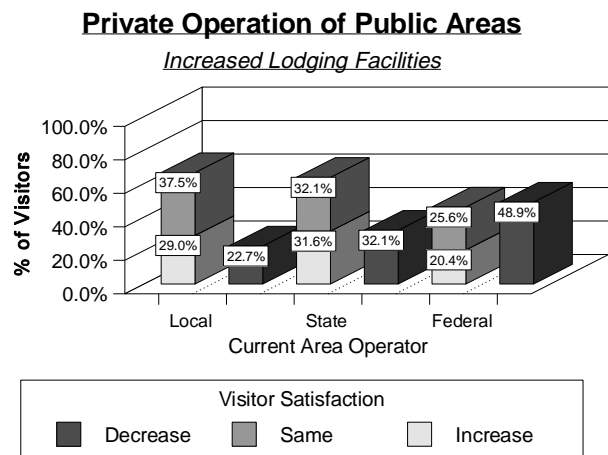


Figure 11.– Percent and number of respondents, by type of government area visited, reporting how their satisfaction would change with a proposed change to private operation of the area, if the private operator provided more lodging facilities.

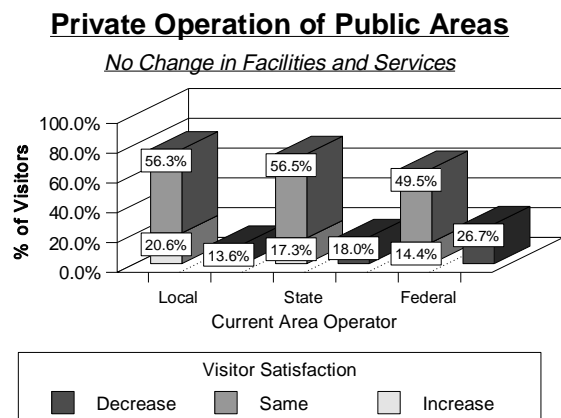


Figure 12.– Percent and number of respondents, by type of government area visited, reporting how their satisfaction would change with a proposed switch to private operation of the area, if the private operator did not change the site’s current facilities and services.

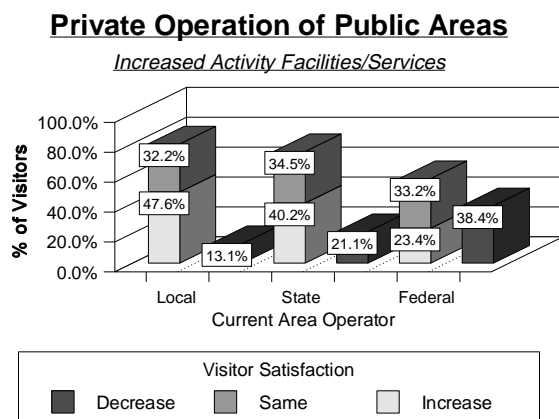


Figure 14.– Percent and number of respondents, by type of government area visited, reporting how their satisfaction would change with a proposed switch to private operation of the area, if the private operator provided more activity facilities and services.

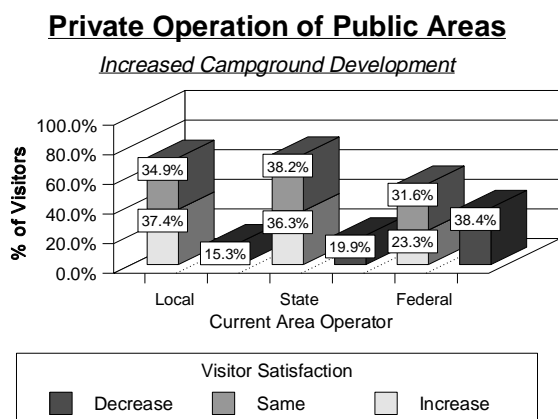


Figure 13.– Percent and number of respondents, by type of government area visited, reporting how their satisfaction would change with a proposed switch to private operation of the area, if the private operator provided more highly developed campgrounds.

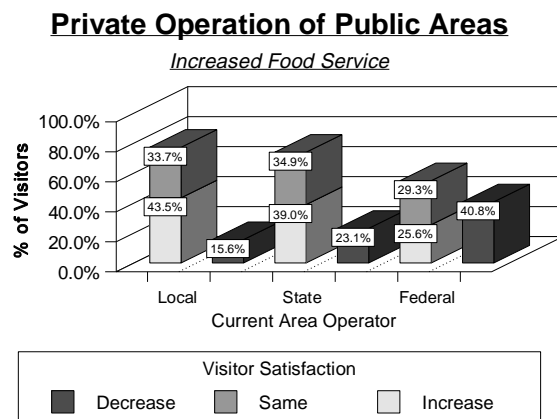


Figure 15.– Percent and number of respondents, by type of government area visited, reporting how their satisfaction would change with a proposed change to private operation of the area, if the private operator provided more food services.

Increased Visitor Satisfaction with Operation Changes

Local, State, and Federal Areas by Region

Tables 22-27 provide regional data for areas currently operated by the three levels of government. They show the number and percentage of respondents who indicated an increase in satisfaction according to each specific proposed increase in service. For each region, the results reflect the relative number of respondents who would like to see the proposed management and service change at the site currently operated by the government.

It is not surprising to see that the highest percentage of respondents reporting increased satisfaction with the proposed changes were visitors to local government sites in the Southeast. In contrast, the lowest percentages of these respondents were of visitors to federal government sites in the Northwest. Visitors to this type of area reported increased satisfaction with proposed operation changes in relatively fewer numbers than did visitors to all other federal areas and to all other Northwest sites (Tables 23-27). Relative to federal areas in other regions, there were a high number of visitors to Southeast federal sites (52.2%) who felt that private provision of more

Table 22. Number and percentage¹ of respondents, by region, and according to the type of government operator at the site last visited, who indicated that their level of satisfaction would increase if the public area they last visited were privately managed, but with **no increase in provision of services and facilities**.

Region	Level of Government			
	Local	State	Federal	Total
Northeast	61 19.1%	107 16.7%	25 15.4%	193 17.2%
Southeast	32 25.2%	49 18.1%	18 19.6%	99 20.2%
Northwest	56 18.1%	157 16.6%	122 14.5%	335 16.0%
Southwest	62 23.0%	90 18.7%	42 12.4%	194 17.8%

¹The percentages in the table are in relation to the total number of respondents, by region, who reported visiting a site operated by the level of government indicated in the table. Those totals, by level of government and region are presented in Figures 6-9.

Table 23. Number and percentage¹ of respondents, by region, and according to the type of government operator at the site last visited, who indicated that their level of satisfaction would increase if the public area they last visited were privately managed, and the private operator provided **more modern toilet/ hygienic facilities**.

Region	Level of Government			
	Local	State	Federal	Total
Northeast	199 62.2%	333 52.0%	72 44.4%	604 53.8%
Southeast	80 63.0%	145 53.7%	48 52.2%	273 55.8%
Northwest	189 61.2%	497 52.6%	326 38.7%	1012 48.3%
Southwest	156 58.0%	276 57.4%	155 45.6%	587 53.9%

¹The percentages in the table are in relation to the total number of respondents, by region, who reported visiting a site operated by the level of government indicated in the table. Those totals, by level of government and region are presented in Figures 6-9.

modern toilet facilities would increase their satisfaction with the area (Table 23). Across the board, for all proposed changes to federal areas, more visitors to Southeast federal sites wanted operation changes than in any other region. Whether they wanted change in facilities or in operator is hard to distinguish. About 20 percent of the visitors to these Southeast federal sites reacted positively to a proposed operator change even without facility alterations (Table 22). However, aside from increased toilet facility provision in the Southeast, there were no proposed changes to any federal site in any region that garnered a positive reaction from a majority of the visitors. As far as proposed service changes that did receive significant positive reaction

from federal area visitors, about one-third of the visitors to Northeast and Southeast federal sites said that more food service facilities would increase their satisfaction with the area (Table 27).

Government Areas According to Current Facilities

The trend seems apparent that relatively more of the visitors to local and state areas desire operation and facility changes than do visitors to federal areas. It seems that the current array of facilities at an area is part of the reason respondents visited that area, and influenced their choices of changes they felt would increase their enjoyment there. With this in mind,

Table 24. Number and percentage¹ of respondents, by region, and according to the type of government operator at the site last visited, who indicated that their level of satisfaction would increase if the public area they last visited were privately managed and the private operator provided **more highly developed campgrounds**.

Region	Level of Government			
	Local	State	Federal	Total
Northeast	111 34.7%	221 34.5%	38 23.5%	370 32.9%
Southeast	45 35.4%	94 34.8%	26 28.3%	165 33.7%
Northwest	121 39.2%	337 35.7%	182 21.6%	640 30.5%
Southwest	106 39.4%	195 40.5%	88 25.9%	389 35.7%

¹The percentages in the table are in relation to the total number of respondents, by region, who reported visiting a site operated by the level of government indicated in the table. Those totals, by level of government and region are presented in Figures 6-9.

Table 25. Number and percentage¹ of respondents, by region, and according to the type of government operator at the site, who indicated that their level of satisfaction would increase if the public area they last visited were privately managed and the private operator provided **more activity related facilities and services**.

Region	Level of Government			
	Local	State	Federal	Total
Northeast	158 49.4%	298 46.5%	48 29.6%	504 44.9%
Southeast	64 50.4%	109 40.4%	29 31.5%	202 41.3%
Northwest	142 46.0%	341 36.1%	169 20.1%	650 31.0%
Southwest	124 46.1%	192 39.9%	90 26.5%	406 37.2%

¹The percentages in the table are in relation to the total number of respondents, by region, who reported visiting a site operated by the level of government indicated in the table. Those totals, by level of government and region are presented in Figures 6-9.

Tables 28-33 provide data by type of facility currently provided at the government site the respondent last visited. The tables show the number and percentage of respondents whose satisfaction would increase with more specific services provided by a private operator. The specific services or facilities to be provided by a private operator are listed across the top of the tables. All respondents represented in the tables indicated an increase in satisfaction with the proposed changes. Respondents indicated either that the area operator did or did not currently provide the service in the title of each table. (For a breakdown, by government level, of respondents indicating whether or not a service was

provided at their site, see Appendix C, Table C4). The results reflect the relative number of respondents who would like to see specific increases in services by a private operator, based on the services that are or are not currently provided at the site.

Just over half of visitors (50.6%) to government sites where primitive camping was provided indicated that private provision of more modern toilet facilities would increase their satisfaction with the area (Table 28). About one-third of the visitors to these areas reacted positively to other changes in privately provided facilities. Areas that did not provide primitive

Table 26. Number and percentage¹ of respondents, by region, and according to the type of government operator at the site, who indicated that their level of satisfaction would increase if the public area they last visited were privately managed and the private operator provided **more hotel/motel or cabin facilities for lodging**.

Region	Level of Government			Total
	Local	State	Federal	
Northeast	88 27.5%	236 36.8%	36 22.2%	360 32.1%
Southeast	46 36.2%	108 40.0%	23 25.0%	177 36.2%
Northwest	88 28.5%	245 26.0%	158 18.8%	491 23.4%
Southwest	75 27.9%	149 31.0%	76 22.4%	300 27.5%

¹The percentages in the table are in relation to the total number of respondents, by region, who reported visiting a site operated by the level of government indicated in the table. Those totals, by level of government and region are presented in Figures 6-9.

Table 27. Number and percentage¹ of respondents, by region, and according to the type of government operator at the site, who indicated that their level of satisfaction would increase if the public area they last visited were privately managed and the private operator provided **more food service facilities**.

Region	Level of Government			Total
	Local	State	Federal	
Northeast	136 42.5%	280 43.7%	58 35.8%	474 42.2%
Southeast	58 45.7%	110 40.7%	30 32.6%	198 40.5%
Northwest	136 44.0%	332 35.2%	182 21.6%	650 31.0%
Southwest	116 43.1%	189 39.3%	98 28.8%	403 37.0%

¹The percentages in the table are in relation to the total number of respondents, by region, who reported visiting a site operated by the level of government indicated in the table. Those totals, by level of government and region are presented in Figures 6-9.

camping had about the same to higher percentages of visitors indicating satisfaction would increase with more privately provided facilities. This indicates that visitors to sites with primitive camping areas are not as likely to desire more facilities and services.

At government sites both where developed campgrounds were and were not available, visitors responded positively to proposed changes in percentages similar to those for visitors to government sites overall (see Table 13). At sites where developed campgrounds were available, visitors responded favorably to most proposed changes in slightly higher percentages than did visitors to areas where developed campgrounds were not available (Table 29). The most noticeable difference was for the proposal of more lodging facilities. A noticeably lower percentage of visitors responded favorably to increased lodging facilities at sites with no developed campgrounds (22.6% vs. 30.2%).

The percentages of visitors who said increased services and facilities would increase their satisfaction were much higher at areas where food services were already provided. At these areas, relative to areas with no food service, favorable reactions to each proposed change were reported by a much higher percentage of the visitors. All of these percentages were also much higher than for government areas overall (see Table

13). Increased provision of toilet/hygienic facilities by a private operator was viewed positively by 70.4 percent of the visitors to areas with food services (Table 30). Over half of the visitors to these areas also reacted favorably to proposed increases in activity facilities and food service by a private operator. Just under half of the respondents who visited areas with food service indicated a desire for increased campground development and lodging facilities. One-quarter of the visitors to these areas said that a change to private operation would increase their satisfaction, whether or not these were changes in services and facilities.

At areas where food service was not provided by the government operator, relatively low percentages of visitors indicated a desire for the proposed changes. Percentages of visitors to these areas were lower than the percentages for government areas overall. Only the proposed increase of toilet facilities garnered positive support from almost half of the visitors (44.7%). Because there is such a difference in the percentages for areas with and without food service, a couple of suppositions can be made. It seems that much of the support for particular changes comes from visitors to areas where food services are provided. This might indicate that visitors went to these areas expecting food and related services (i.e. toilet facilities) and were somewhat disappointed in the quality or quantity of the

Table 28.—Percent and number of respondents, according to current position of **primitive camping**¹, at the government site last visited who indicated an increase in satisfaction with the proposed change to private management, based on increased provision of specific services by the private operator.

Primitive Camping Provided at Site	Services or Facilities ² to be increased by a Private Operator					
	No change in Services Facilities	Toilet/ Hygienic Facilities	Campground Development	Activity Related Services Facilities	Lodging and Facilities	Food Service
Provided	15.3% 396	50.6% 1307	31.3% 807	34.2% 882	27.4% 707	33.7% 870
Not Provided	19.7% 410	53.9% 1120	34.8% 722	40.3% 837	27.1% 562	38.7% 803

Total respondents indicating primitive camping available at government site=2580

Total respondents indicating primitive camping not available at government site= 2077

¹An area with no improved roads, water taps, utility hookups, flush toilets, showers, stores or laundry facilities.

²For clarification, abbreviated facilities are described as the following: "Toilet/Hygienic Facilities" - more modern facilities, "Campground Development" - more highly developed campgrounds, and "Lodging Facilities" - hotel/motel or cabin facilities.

provision of these services. Even if these visitors were not necessarily disappointed, they were visiting the area at least partly based on facility and service availability. Certainly their satisfaction would increase with better or increased provision of these services. It also seems that the disparity in visitor percentages between areas with and without food service (Table 30) makes the current availability of these services a good indicator of areas where proposed changes are desired.

Visitors to government areas where activity facilities were available responded positively to proposed management changes in higher percentages than did visitors to areas where these facilities were not available. Activity facilities might include swimming pools, equipment rentals, or golf courses. The disparity between percentage of visitors reporting increased satisfaction with the changes was greatest for increased activity facilities, lodging facilities, and food service (Table 31). Almost half of the visitors to areas already providing activity facilities said that their satisfaction would increase if more activity facilities and more food service were provided by a private operator. This is compared to only about 30 percent of the visitors to areas without activity facilities (Table 31). About half of the visitors to both areas with and without activity facilities indicated a desire to have more modern toilet facilities at the area. Respondents who visited government areas without activity facilities reported positive responses to the changes in lower

percentages than for government areas overall (refer to Table 13).

Again it seems that visitors wanted more or better facilities at areas where those facilities were already available. Conversely, many visitors to areas where facilities are not available did not indicate a desire for more provision. These visitors probably went to areas knowing that certain facilities were not provided. If the experience they were pursuing did not involve such services, then it is likely that further provision of those services would not increase their satisfaction with the area and it is possible it would decrease their satisfaction. The availability of activity facilities and services at an area seems to be a good indicator of the type of area where specific increases in service are or are not desired.

Percentages of visitors reacting positively to proposed changes were about the same for sites with and without activity instruction programs as they were for government sites overall (refer to Table 13). Slightly higher percentages of visitors to areas with these programs indicated increased satisfaction with better toilet facilities and campground development (Table 32). A more pronounced difference is apparent in visitor reactions to increases in the other facilities at these two types of areas. Over 40 percent of visitors to areas with activity programs said their satisfaction would increase if more food services and more activity related services and facilities were provided. In contrast, only one-third of visitors to the sites without activity programs indicated a desire for increases in these services (Table 32). The current availability of

Table 29. Percent and number of respondents, according to current provision of **developed campgrounds**¹ at the government site last visited, who indicated an increase in satisfaction with the proposed change to private management, based on increased provision of specific services by the private operator.

Developed Campgrounds Provided at Site	Services or Facilities to be Increased by a Private Operator ²					
	No Change in Services or Facilities	Toilet/Hygienic Facilities	Campground Development	Activity Related Services and Facilities	Lodging Facilities	Food Service
Provided	17.3%	53.3%	35.8%	38.1%	30.2%	37.4%
	495	1525	1023	1090	863	1070
Not Provided	17.5%	50.2%	31.7%	34.8%	22.6%	33.9%
	315	906	571	628	407	612

Total respondents indicating developed campgrounds provided at a government site= 2861

Total respondents indicating developed campgrounds not provided at a government site= 1803

¹With modern toilet and hygienic facilities

²For clarification, abbreviated facilities are described as the following: "Toilet/Hygienic Facilities"- more modern facilities, "Campground Development"- more highly developed campgrounds, and "Lodging Facilities"- hotel/motel or cabin facilities.

activity instruction programs seems to be a good indicator of sites where some, but not all of the proposed changes might be desired by the visitors.

The percentages of respondents indicating increased satisfaction with the proposed changes were about the same for government areas overall as they were for areas that did not provide dancing or entertainment (see Table 13). However, at areas where dancing or entertainment was provided a higher percentage of visitors reported a positive reaction to each of the proposed management changes. In particular, half of the visitors to these sites said that

private provision of more activity services and facilities would increase their satisfaction with the area (Table 33). Also, relatively high percentages of these visitors indicated a favorable reaction to increased lodging and food service facilities. Areas that provide dancing or entertainment seem to be areas where visitors show a particular interest in the increased provision of certain services.

With respect to the proposal of no change in service, but with a change to private management, there were subtle trends apparent from the data. In areas where

Table 30: Percent and number of respondents, according to current provision of **restaurant/ food service** at the government site last visited, who indicated an increase in satisfaction with the proposed change to private management, based on increased provision of specific services by the private operator.

Restaurant/ Food Service Provided at Site	Services or Facilities to be Increased by a Private Operator ¹					
	No Change in Services or Facilities	Toilet/ Hygienic Facilities	Campground Development	Activity Related Services and Facilities	Lodging Facilities	Food Service
Provided	24.2%	70.4%	45.3%	56.0%	44.1%	53.1%
	386	1124	724	895	705	848
Not Provided	14.7%	44.7%	27.8%	28.8%	20.0%	29.1%
	428	1332	828	858	595	865
Total respondents indicating restaurant/ food service provided at a government site= 1597						
Total respondents indicating restaurant/ food service not provided at a government site= 2977						

¹For clarification, abbreviated facilities are described as the following: "Toilet/Hygiene Facilities"- more modern facilities, "Campground Development"- more highly developed campgrounds, and "Lodging Facilities"- hotel/motel or cabin facilities.

Table 31. Percent and number of respondents, according to current provision of **activity facilities**¹ at the government site last visited, who indicated an increase in satisfaction with the proposed change to private management, based on increased provision of specific services by the private operator.

Activity Facilities Provided at Site	Services or Facilities to be Increased by a Private Operator ²					
	No Change in Services or Facilities	Toilet/ Hygienic Facilities	Campground Development	Activity Related Services and Facilities	Lodging Facilities	Food Service
Provided	19.4%	57.8%	39.4%	48.1%	37.2%	45.7%
	340	1014	691	844	652	802
Not Provided	15.9%	48.4%	28.9%	30.4%	21.6%	30.4%
	470	1429	852	897	638	898
Total respondents indicating activity facilities provided at a government site= 1755						
Total respondents indicating activity facilities provided at a government site= 2951						

¹For example: swimming pool, golf course, equipment rentals, etc.

²For clarification, abbreviated facilities are described as the following: "Toilet/Hygienic Facilities"- more modern facilities, "Campground Development"- more highly developed campgrounds, and "Lodging Facilities"- hotel/motel or cabin facilities.

developed services (i.e. restaurants, activity facilities/programs, dancing/entertainment) were available, slightly higher percentages of visitors said a change in operator without service changes would increase their satisfaction, relative to percentages of visitors to areas where these “developed” facilities were not provided (Tables 30-33). It is likely that many areas that do provide the more developed facilities do not have primitive camping areas, and vice versa. It is not surprising then that a lower percentage of visitors to sites with primitive camping reported a positive reaction to management change, even without

general more people trust private business to provide quality services, but do not trust those businesses to leave land undeveloped for opportunities like primitive camping. Regardless, these percentages were relatively low, which seems to further indicate that visitors are in fact more concerned with the actual provision of service than they are with the provider of that service.

Table 32. Percent and number of respondents, according to current provision of **activity instruction programs** at the government site last visited, who indicated an increase in satisfaction with the proposed change to private management, **based on increased provision of specific services by the private operator.**

Activity Instruction Programs Provided at Site	Services or Facilities to be Increased by a Private Operator ¹					
	No Change in Services or Facilities	Toilet/ Hygienic Facilities	Campground Development	Activity Related Services and Facilities	Lodging Facilities	Food Service
Provided	18.4% 211	54.3% 623	34.6% 397	45.5% 522	33.2% 381	42.4% 487
Not Provided	16.9% 552	51.2% 1676	31.9% 1044	33.3% 1091	24.3% 795	33.2% 1088

Total respondents indicating act. instruction programs provided at a government site= 1148

Total respondents indicating act. instruction programs not provided at a government site= 3275

¹For clarification, abbreviated facilities are described as the following: “Toilet/Hygienic Facilities”- more modern facilities, “Campground Development”- more highly developed campgrounds, and “Lodging Facilities”- hotel/motel or cabin facilities.

facility changes (Table 28). If the slight disparity in

Table 33. Percent and number of respondents, according to current provision of **dancing or entertainment** at the government site last visited, who indicated an increase in satisfaction with the proposed change to private management, **based on increased provision of specific services by the private operator.**

Dancing or Entertainment Provided at Site	Services or Facilities to be Increased by a Private Operator ¹					
	No Change in Services or Facilities	Toilet/ Hygienic Facilities	Campground Development	Activity Related Services and Facilities	Lodging Facilities	Food Service
Provided	20.6% 167	54.1% 438	39.8% 322	50.0% 405	37.5% 304	44.8% 363
Not Provided	16.4% 619	51.7% 1947	31.3% 1177	34.2% 1288	25.0% 941	34.1% 1285

Total respondents indicating dancing or entertainment provided at a government site= 810

Total respondents indicating dancing or entertainment not provided at a government site= 3765

¹For clarification, abbreviated facilities are described as the following: “Toilet/Hygienic Facilities”- more modern facilities, “Campground Development”- more highly developed campgrounds, and “Lodging Facilities”- hotel/motel or cabin facilities.

RESULTS OF THE COE FREE-RESPONSE QUESTIONS

Along with the three sets of questions that provided multiple choice responses, there were two open-ended questions included in the COE section of the NSRE. One question asked respondents to identify the most important improvement needed at the area they last visited. The other question asked the respondents to identify the government agency that managed the area they last visited, if publicly managed. Neither question provided standard responses. (For the exact wording of the questions, refer to Appendix B, Q360 and Q368.)

Most Important Improvements Needed at Sites

This section contains the results of the open-ended question about the most important improvement needed at the site the respondent last visited. Table 34 shows the number and percentage of respondents for each region who provided an answer to this question. About 70 percent of the respondents in each region gave an answer.

The most common responses were categorized and listed by region (table 35). The lists are in no particular order, but it is evident that in all regions similar improvements are desired at recreation areas. Some similar responses included a desire for more and cleaner restrooms, more litter/pollution control, more crowd control, and improved road and parking conditions. Some responses were directly related to regional location given unique outdoor recreation opportunities in different environments. For example, in the Northwest there was a desire for skiing facility improvements and less logging activity, while in the Southwest some respondents desired more trees at the sites. A number of suggestions were somewhat conflicting, indicating that visitor desires differ across a spectrum of recreation opportunities. In the Southeast possible conflicts in preference occur between visitors who desire more camping sites and picnicking facilities, and visitors who would like to see more wildlife and wildlife habitat. In the Northwest there were suggestions for more dining facilities and better handicap accessibility along with suggestions for decreased development.

Suggestions that might interest the COE included better water quality, cleaner water areas (beaches, lakes, etc.), and improved water recreation and boating facilities. Some suggestions were rather abstract, such

as “improved water recreation,” while some, such as “more boat ramps,” were more specific. Visitor responses for all regions included water related as well as terrestrial improvements. Specific improvements were mentioned in regard to all realms of management, including visitor, facility, and resource management.

Table 34. Number and percentage of respondents, by region, who identified the most important improvement needed at the recreation area they last visited.

Region	Respondents	
	Provided an Answer	Total
Northeast	1819 70.8%	2568 100%
Southeast	800 69.9%	1144 100%
Northwest	2758 70.4%	3918 100%
Southwest	1551 72.1%	2150 100%

Government Agencies Operating Recreation Areas

This section provides the results of the open-ended question regarding the specific government agency operating the area the respondent last visited. Table 36 shows, by region, the number and percentage of respondents who identified the agency that operated the public recreation area they visited. Slightly more than 60 percent of the respondents from the Northeast and Southeast regions identified the specific government operator. In the Southwest about 70 percent could do so, and in the Northwest almost three-quarters of the respondents who visited a government site identified the operator of that site.

The agencies that respondents identified as area operators were listed and categorized. Many of the listed agencies were unique, as there were no standard responses to this particular question. Similar responses were categorized according to major federal agency or general state level agency. Certain government agencies were identified as area operators by a significant number of respondents in each region. Those agencies are listed in Table 37 along with the number and percentage of respondents who identified the agency. The number of respondents in the table and their corresponding percentages are rough estimates because many apparently don't know who the

Table 35. Respondents' suggestions for the most important improvement needed at the site they last visited, by region (responses are listed in no particular order).

Northeast

- 1) Cleaner and more restrooms
- 2) Better litter control
- 3) More erosion control
- 4) Road and parking improvements
- 5) Trail improvements (including increasing the number of trails)
- 6) More reasonable rates
- 7) More dining facilities with cheaper, healthier food
- 8) More crowd control and traffic control
- 9) Better water quality
- 10) Cleaner beaches
- 11) Better handicap accessibility
- 12) More activities and services
- 13) Need more supervision (i.e. life guards, etc.)
- 14) Recycling facilities
- 15) Decreased development

Southeast

- 1) Better litter and pollution control
- 2) More wildlife and wildlife habitat
- 3) More and cleaner bathrooms
- 4) More information services
- 5) More crowd control (limiting crowds)
- 6) Better boat access, more boat ramps
- 7) More and improved camping sites
- 8) Cleaner water areas (lakes, rivers, and beaches)
- 9) More road improvements
- 10) More picnicking facilities and benches

Northwest

- 1) More and cleaner restrooms
- 2) Clearer signs on roads and better road conditions
- 3) More parking facilities
- 4) Skiing facilities improvement (faster lifts, more trails, etc.)
- 5) Better litter control
- 6) More limited access (i.e. crowd control)
- 7) Better trail maintenance
- 8) Limited commercialization and development
- 9) More picnicking facilities
- 10) Improved boating facilities
- 11) Less logging activity
- 12) More camping facilities
- 13) Cleaner water

Southwest

- 1) More and cleaner restrooms
- 2) Pollution control on land and in water
- 3) Improved water recreation
- 4) Extended hours of operation
- 5) More trees
- 6) Improved access and more parking facilities
- 7) More crowd control
- 8) More camping hookups

area operators were. With respect to the estimates available it is apparent that in the western regions the U.S. Forest Service and the National Park Service received a relatively high percentage of visitors. In the Southeast more respondents identified the Army Corps of Engineers as the area operator. The results shown in table 37 should not be interpreted as percentages of visits among land management agencies. They simply indicate visitors' perceptions of whose area they visited.

Table 36. Number and percentage of respondents, by region, identifying the government agency that operated the recreation area they last visited.

Region	Respondents	
	Provided an Answer	Total
Northeast	704 62.7%	1123 100%
Southeast	317 64.8%	489 100%
Northwest	1568 74.8%	2095 100%
Southwest	759 69.6%	1090 100%

Table 37. Number and percentage of respondents in each region, able to identify the specific government agency operating the site last visited, by major agency.

Operating Agency	Northeast	Southeast	Northwest	Southwest
US Forest Service	28 4.0%	19 6.0%	388 24.7%	153 20.2%
National Park Service	48 6.8%	17 5.4%	159 10.1%	77 10.1%
Army Corps of Engineers	15 2.1%	16 5.0%	45 2.9%	16 2.1%
Bureau of Land Management	0 0.0%	1 0.3%	78 5.0%	14 1.8%
Department of Natural Resources (no specific state)	20 2.8%	0 0.0%	7 0.4%	1 0.1%
Department of Environmental Conservation	10 1.4%	0 0.0%	0 0.0%	0 0.0%
Parks and Recreation Department (no specific state)	27 3.8%	17 5.4%	62 4.0%	47 6.2%
State Parks and Recreation	19 2.7%	9 2.8%	24 1.5%	13 1.7%
Department of Fish and Game	5 0.7%	3 0.9%	41 2.6%	7 0.9%
US Fish and Wildlife Service	2 0.3%	1 0.3%	2 0.1%	0 0.0%
Department of Interior	4 0.6%	3 0.9%	8 0.5%	8 1.1%
Other agencies	526 74.7%	231 72.9%	754 48.1%	423 55.7%
Total respondents	704	317	1568	759
identifying a specific agency	100%	100%	100%	100%

IV. SUMMARY

The results and analyses of the Corps of Engineer's questions identify several key points that may be helpful when looking at privatization of recreation operations on public lands. If the survey sample is a reflection of the national population, then a number of conclusions can be drawn about the behavior and preferences of recreation area visitors in the United States.

Area Operators

- Nationally, a majority of recreation area users visit sites operated by a government agency.
- State operated areas are visited in the greatest numbers overall, and federal areas are visited significantly more in the west than they are in the east.
- Private business recreation areas are popular in all regions of the country, but particularly in the east.

Facilities Available by Operating Agency

- Nationally, a majority of state and federal recreation areas visited provided for primitive and developed camping opportunities. A majority of the private business operated areas also provided facilities for developed camping.
- Developed facilities (restaurants, activity facilities, programs, and entertainment) were provided at a high number of private business operated areas. A moderate percentage of local and state operated areas provided food service and activity facilities. A low percentage of federal sites offered these types of services.

Visitor Satisfaction with Proposed Operation Changes at Government Sites

- Trends in reported visitor satisfaction changes were apparent across regions and across levels of government operator. More visitors to government areas in the east reported that increased service provision by a private operator would increase their satisfaction with the area. This same trend was apparent for visitors to local and state operated areas around the country.
- Negative reactions to proposed operation changes were significant in the west and at federally operated areas.

- Increased visitor satisfaction was reported by almost a majority of visitors to all types of areas for the proposed provision of more modern toilet facilities by a private operator.
- Visitor satisfaction with proposed changes seem to be linked most directly to the type of services already available at the area they visited. Two distinct trends were apparent in this analysis. In areas where developed facilities (restaurant, activities, etc.) were already provided, high percentages of visitors reported that increased facilities by a private operator would increase their satisfaction with the area. In areas where developed facilities were not provided, low percentages of visitors reported increased satisfaction with the proposed increases in service.
- Visitor preference for recreation opportunities seem to be specifically related to the services available at the area they visited. Enhancement of the visitor's experience with increased provision of services and facilities would probably only occur if those services were consistent with the visitor's desired experience. Experiences pursued in areas without developed facilities would probably not be enhanced by provision of those facilities. Experiences sought in developed areas probably would be enhanced.

APPENDIX A

SURVEY METHODS

NSRE sampling methods and framework

Dates of data collection were January, 1994-April, 1995.

The NSRE serves many different purposes and thus had to include a sampling framework to address each of these purposes. Central was estimation of proportions and numbers of the population participating among outdoor recreation activities. Next was development of demand projection models. The demand models are from the perspective of the destination of recreational trips. Careful sample design was required to assure adequate numbers of observations in the major political and ecological regions of the country. Because of some of the states and regions of the U.S. are sparsely populated, disproportionately high rates were applied.

For NSRE survey one, the sample was stratified by region. Within each region, sampling was distributed within states proportionate to the distribution of population among area and local phone codes. Eight regions were identified as follows:

To ensure adequate numbers of observations

(minimum of 900 per region and 400 for Alaska) in the Rocky Mountains, the Great Plains and Alaska, a disproportionately high sampling rate with respect to population was needed. With respect to population proportion, the Northeast and Southern regions of the country (regions 1 and 2) are under represented using this sampling allocation.

Theoretical and Methodological Issues

There are many potential sources of bias in a large survey of human subjects. The principal ones of concern for the National Survey on Recreation and the Environment include recall and digit preference among the response biases and refusal, avidity, and incomplete listings among the non-response biases. As with any survey, regardless of scope or complexity, bias is a reality to be recognized and dealt with early on to the extent affordable through design of the sample and survey content. Brief descriptions of principal anticipated sources of bias in the NSRE are presented below.

Table A1. Regions identified for sampling framework

<u>Region 1</u>		<u>Region 2</u>		<u>Region 3</u>
Vermont	Pennsylvania	Virginia	Arkansas	Montana
Maine	New York	Kentucky	Oklahoma	North Dakota
New Hampshire	Ohio	North Carolina	Texas	South Dakota
Massachusetts	Indiana	Tennessee		Wyoming
Rhode Island	Michigan	South Carolina		Idaho
Connecticut	Illinois	Georgia		Nevada
New Jersey	Wisconsin	Alabama		
Delaware	Missouri	Florida		
Maryland/DC	Iowa	Mississippi		
West Virginia	Minnesota	Louisiana		
<u>Region 4</u>		<u>Region 6</u>	<u>Region 7</u>	<u>Region 8</u>
Utah	Colorado	Washington	California	Alaska
Nebraska	Kansas	Oregon	Hawaii	
New Mexico	Arizona			

Sources of Response Bias

Principal sources of response bias recognized for the NSRE include recall and digit preference. Recall bias is simply an inability of a respondent to recall accurately or to recall at all whether they participated in recreational activities or to recall the number of or places where these activities were undertaken. There is no conclusive evidence regarding optimum recall period (one week, one month, six months, etc.) or methods for correcting recall bias. Digit preference bias is related to recall bias, but more specifically is a participation rounding bias. For example, for activities of frequent participation, such as walking or running/jogging, respondents often round to the nearest five or ten, such as twenty-five, thirty or forty, rather than accurately reporting actual number of occasions, such as twenty-eight times during the last twelve months. For the NSRE, it is assumed that respondents randomly rounded up or down when reporting actual levels of participation.

Nonresponse Bias and Control

Principal sources of nonresponse bias include avidity and incomplete phone listings. Avidity bias is the tendency of persons who do not participate or who participate only infrequently in outdoor leisure activities to refuse participation in the survey. Left unaccounted for, avidity bias can result in seriously inflated estimates of population participation rates and biased estimates of participation differences by social group. Incomplete phone listings, like any other incomplete sampling frame, can occur for many reasons. More frequently encountered reasons include institutionalization, persons not having a phone, and persons having access only to pay phones or other non-individualistic arrangements. For the NSRE, an attempt to estimate avidity and listing bias was made by asking two key questions of persons who refuse the survey. Those questions are age and whether or not the respondent participated in outdoor recreation in the last twelve months. Additionally, gender of the respondent was recorded when recognizable. The estimated proportions of non-respondents, relative to respondents, was combined with weights derived from the 1990 Census of the U.S. population to weight each observation to correct for over or under representation by that respondent's social group in the sample.

Post-Stratification procedures

Data from the NSRE are post-stratified proportional to the 1990 Census results. The purpose for post-stratification is to compensate for disproportionate sampling rate with respect to social groupings and geographic regions. The post-stratification formula to be used is:

$$S_i = \frac{N_i * n}{N * n_i}$$

where ..

S_i = strata weight to be applied

N_i = population strata size

N = sum of N_i 's

n = sum of n_i 's

n_i = strata sample size

The strata are defined using combinations of the following variables: gender (two levels), age (six levels), race (five levels), and region of residence (8 levels). This creates $2*5*6*8=540$ strata. Calculation of S_i is illustrated through the following example:

First, assume we have two strata represented, males and females. Population strata size for males($N_{im}=20$) and the population strata size for females($N_{if}=25$). Sample strata size for males($n_{im}=8$) and for females($n_{if}=7$).

$$S_i \text{ (males)} = \frac{N_i (20) * n (15)}{N (45) * n_i (8)} = .83$$

$$S_i \text{ (females)} = \frac{N_i (25) * n (15)}{N (45) * n_i (7)} = 1.19$$

This results in each strata being weighted by the relative size of that strata to the population. This method is particularly useful in multi-purpose surveys where stratification factors selected prior to sampling may be poorly correlated with large numbers of secondary variables.

APPENDIX B

QUESTIONS USED IN THE ANALYSIS

Q360 What is the most important improvement that needs to be made at the area you last visited?

Next, I am going to read a list of services and facilities. Please tell me if the area you visited had any of these services or facilities.

Q361 Primitive Camping Areas (an area with no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities)

Q362 Developed Campgrounds (with modern toilet and hygienic facilities)

Q363 Restaurant/Food Service

Q364 Activity Facilities (for example: swimming pool, golf course, equipment rentals, etc.)

Q365 Recreation Activity Instruction Programs

Q366 Dancing or Entertainment Facilities or Programs

Responses for the questions 361-366 were yes, no, refused, or don't know/not ascertained.

Q367 Who operated the area you visited?

1. private business
2. private non-profit group
3. local government
4. state government
5. federal government
6. other private property
7. private landowner
8. don't know

Q368 What is the name of the government agency that operated the area?

Q369 If the same amount and type of facilities and services were provided as at the public area you visited on your last trip, but the facilities and services were privately managed would your level of satisfaction...

Q370 If the private manager provided more modern toilet/hygienic facilities than the public area, would your level of satisfaction...

Q371 If the private manager provided more highly developed campgrounds than the public area, would your level of satisfaction...

Q372 If the private manager provided more activity related facilities and services than the public area, would your level of satisfaction...

Q373 If the private manager provided more hotel/motel or cabin facilities for lodging than the public area, would your level of satisfaction...

Q374 If the private manager provided more food service facilities than the public area would your level of satisfaction...

Responses for Q369-Q374 are increase, remain the same, decrease, refused, or don't know/not ascertained.

APPENDIX C
DEMOGRAPHIC AND ACCOMPANYING TABLES

Table C1. Percent of respondents reporting having visited a site that provided the listed service or facility, by demographic characteristic.

Demographic Category	Service or Facility ¹					
	Primitive Camping	Developed Campgrounds	Restaurant or Food Services	Activity Facilities	Activity Instruction Programs	Dancing/ Entertainment
<u>Age</u>						
16-24	18.6	18.0	19.0	19.9	20.5	19.9
25-29	12.9	11.1	11.8	12.7	11.6	12.1
30-39	24.2	23.7	23.2	23.7	24.2	22.5
40-49	18.9	18.6	17.7	16.7	17.2	16.7
50-59	11.4	12.2	11.4	10.8	10.7	11.4
over 60	13.9	16.3	16.8	16.2	15.9	17.3
<u>Gender</u>						
Male	54.6	52.3	48.9	50.0	50.5	49.0
Female	45.4	47.7	51.1	50.0	49.5	51.0
<u>Race</u>						
African American	7.2	7.7	9.8	10.9	10.6	10.4
Caucasian	87.5	87.3	84.2	84.0	83.3	84.1
Other	5.3	5.0	6.0	5.1	6.1	5.5
<u>Education</u>						
Some High School Completed	10.8	9.4	9.2	9.6	9.9	9.9
High School Completed	29.6	29.6	26.5	27.2	25.8	27.3
Some College Completed	30.6	30.1	29.4	30.4	28.7	30.2
College Completed	29.0	30.9	34.9	32.8	35.6	32.7
<u>Income</u>						
Less than \$15,000	6.5	5.8	5.9	5.4	4.8	5.0
\$15,000-24,999	13.8	13.0	11.5	11.2	11.0	11.3
\$25,000-49,999	31.4	33.2	30.4	30.9	28.7	30.8
\$50,000-74,999	19.0	18.0	18.9	19.9	19.9	19.3
\$75,000-99,999	6.9	7.2	8.2	8.0	9.2	8.6
Over \$100,000	5.2	5.3	7.1	6.4	7.1	6.9
Refused or Did not Know	17.2	17.5	17.9	18.2	19.4	18.2
<u>Number of Persons Living in Household</u>						
One	14.6	14.6	16.0	14.5	14.7	16.1
Two	31.3	32.7	31.9	31.3	31.1	32.3
Three	20.3	19.3	18.8	19.2	20.1	19.5
Four	19.9	19.7	19.8	21.7	20.5	19.1
Five or more	13.9	13.7	13.5	13.3	13.6	13.0

¹Services and facilities referred to are described as the following: Primitive camping- an area with no improved roads, water taps, flush toilets, showers, stores, or laundry facilities; Developed campgrounds- with modern toilet and hygienic facilities; Activity facilities- for example, swimming pool, golf course, equipment rentals, etc.; Activity instruction programs- for recreational activities; Dancing/entertainment- facilities or programs.

Table C2. Percent of respondents, by demographic characteristic, indicating that their level of satisfaction with the visited area would **increase**, given a change from public to private management, according to increased provision of specific services and facilities by the private operator .

Demographic Characteristics	Service or Facility to be Increased					
	No Increase or Change	Toilet/ Hygienic Facilities ^a	Campground Development ^b	Activity-Related Facilities and Services	Lodging Facilities ^c	Food Service
<u>Age</u>						
16-24	23.9	19.7	21.0	22.1	18.9	19.2
25-29	16.7	14.3	14.7	14.8	15.3	14.8
30-39	24.5	27.5	26.5	27.2	25.6	26.1
40-49	16.3	18.9	17.7	17.2	17.6	17..7
50-59	8.0	9.3	9.0	8.7	9.7	10.8
over 60	10.6	10.3	11.0	9.9	12.9	11.5
<u>Gender</u>						
Male	56.2	50.4	52.9	50.5	52.0	53.5
Female	43.8	49.6	47.1	49.5	48.0	46.5
<u>Race</u>						
African American	15.0	10.4	12.6	12.4	12.7	12.8
Caucasian	75.5	82.2	79.6	79.7	80.0	79.1
Other	9.5	7.4	7.8	7.9	7.3	8.2
<u>Education</u>						
Some High School	11.5	8.7	10.5	9.7	9.0	9.1
Completed High School	30.3	27.2	33.8	30.2	29.2	30.1
Some College	29.2	32.6	31.1	31.2	31.4	31.1
Completed College	29.0	31.5	24.7	29.0	30.4	29.6
<u>Income</u>						
Less than \$15,000	6.6	7.6	9.1	8.2	7.8	7.4
\$15,000-24,999	12.9	13.8	13.9	13.2	13.4	13.8
\$25,000-49,999	34.0	32.1	33.6	34.2	32.7	32.3
\$50,000-74,999	17.2	18.5	17.6	16.7	19.4	17.2
\$75,000-99,999	5.6	6.9	6.2	7.0	6.9	7.2
Over \$100,000	4.4	5.8	3.9	5.0	4.7	5.3
Refused or Did not Know	19.3	15.2	15.7	15.6	15.2	16.7
<u>Number of Persons Living in Household</u>						
One	13.5	13.0	11.5	12.2	11.2	12.5
Two	24.8	27.4	27.2	27.5	29.2	28.7
Three	21.3	22.2	22.1	19.9	20.8	21.4
Four	23.8	23.6	23.6	25.2	24.3	23.2
Five or more	16.6	13.8	15.7	15.2	14.5	14.2

^aMore modern facilities.

^bMore highly developed campgrounds.

^cHotel/motel or cabin facilities.

Table C3. Percent of respondents, by demographic characteristic, indicating that their level of satisfaction with the

visited area would **decrease**, given a change from public to private management, according to increased provision of specific services and facilities by the private operator .

Demographic Characteristics	Service or Facility to be Increased					
	No Increase or Change	Toilet/ Hygienic Facilities ^a	Campground Development	Activity-Related Facilities and Services	Lodging Facilities ^c	Food Service
<u>Age</u>						
16-24	17.0	14.8	15.5	13.6	18.0	18.2
25-29	12.9	11.7	11.7	12.1	10.6	10.9
30-39	25.7	21.6	25.0	21.9	25.3	24.6
40-49	18.8	18.4	18.8	27.3	17.1	17.0
50-59	10.8	14.1	11.5	15.2	11.2	11.2
over 60	14.9	19.5	17.6	9.9	17.7	18.2
<u>Gender</u>						
Male	51.5	55.6	51.4	58.9	49.9	49.8
Female	48.5	44.4	48.6	41.1	50.1	50.2
<u>Race</u>						
African American	6.2	5.4	7.3	1.3	8.3	6.3
Caucasian	87.9	89.5	87.9	94.3	86.2	89.0
Other	5.9	5.0	4.8	4.4	5.6	4.6
<u>Education</u>						
Some High School Completed	34.0	8.3	7.6	4.8	9.7	10.0
High School Completed	29.2	28.9	26.0	19.6	29.5	28.5
Some College Completed	28.9	26.0	29.4	31.2	27.6	26.7
College Completed	7.9	36.8	37.1	44.4	33.1	34.8
<u>Income</u>						
Less than \$15,000	7.7	7.1	5.7	7.3	6.9	7.0
\$15,000-24,999	13.5	11.5	12.8	10.1	13.3	12.7
\$25,000-49,999	33.5	35.9	35.6	34.5	34.8	36.1
\$50,000-74,999	17.8	17.2	17.0	19.2	16.0	17.9
\$75,000-99,999	7.9	7.2	7.5	9.1	6.7	6.5
Over \$100,000	5.5	4.1	5.3	6.7	5.5	4.6
Refused or Did not Know	14.1	17.1	16.0	13.2	16.9	15.0
<u>Number of Persons Living in Household</u>						
One	13.7	14.7	15.5	16.9	16.4	15.0
Two	33.4	37.9	33.5	34.5	32.8	34.5
Three	19.4	16.3	18.4	19.8	18.5	17.6
Four	21.6	19.4	21.5	18.3	21.0	21.6
Five or more	12.0	11.7	11.0	10.5	11.2	11.2

^aMore modern facilities.

^bMore highly developed campgrounds.

^cHotel/motel or cabin facilities.

Table C4. Number of respondents, by level of government, indicating provision or lack of provision of services and

facilities at the public recreation area they last visited.

Service or Facility	Level of Government			Total ¹
	Local	State	Federal	
<u>Primitive Camping</u>				
Provided	302	1329	949	2580
Not provided	695	936	446	2077
<u>Developed Campgrounds</u>				
Provided	404	1532	925	2861
Not provided	590	738	475	1803
<u>Restaurant/Food Service</u>				
Provided	507	551	539	1597
Not provided	508	1588	881	2977
<u>Activity Facilities</u>				
Provided	477	893	385	1755
Not provided	530	1696	1025	2951
<u>Activity Instruction Programs</u>				
Provided	279	551	318	1148
Not provided	666	1588	1021	3275
<u>Dancing or Entertainment</u>				
Provided	226	375	209	810
Not provided	759	1846	1160	3765
Total respondents who indicated having visited a government operated site= 4797				

¹Totals do not include respondents who refused to answer or did not know if service was provided.