United States Department of Agriculture

Forest Service

Natural Resource Manager

National Visitor Use Monitoring Program

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Visitor Use Report

Cherokee NF

USDA Forest Service
Region 8

National Visitor Use Monitoring
Data collected FY 2017

CONTENTS

1. INTRODUCTION

1.1. Scope and purpose of the National Visitor Use Monitoring program

The National Visitor Use Monitoring (NVUM) program provides reliable information about recreation visitors to national forest system managed lands at the national, regional, and forest level. Information about the quantity and quality of recreation visits is required for national forest plans, Executive Order 12862 (Setting Customer Service Standards), and implementation of the National Recreation Agenda. To improve public service, the agency's Strategic and Annual Performance Plans require measuring trends in user satisfaction and use levels. NVUM information assists Congress, Forest Service leaders, and program managers in making sound decisions that best serve the public and protect valuable natural resources by providing science based, reliable information about the type, quantity, quality and location of recreation use on public lands. The information collected is also important to external customers including state agencies and private industry. NVUM methodology and analysis is explained in detail in the research paper entitled: Forest Service National Visitor Use Monitoring Process: Research Method Documentation; English, Kocis, Zarnoch, and Arnold; Southern Research Station; May 2002 (http://www.fs.fed.us/recreation/programs/nvum).

In 1998 a team of research scientists and forest staff developed a recreation sampling system (NVUM) that provides statistical recreation use information at the forest, regional, and national level. Several Forest Service staff areas including Recreation, Wilderness, Ecosystem Management, Research and Strategic Planning and Resource Assessment were involved in developing the program. From January 2000 through September 2003 every national forest implemented this methodology and collected visitor use information. This application served to test the method over the full range of forest conditions, and to provide a rough national estimate of visitation. Implementation of the improved method began in October 2004. Once every five years, each National Forest and Grassland has a year of field data collection.

This NVUM data is useful for forest planning and decision making. The description of visitor characteristics (age, race, zip code, activity participation) can help forest staff identify their recreation niche. Satisfaction information can help management decide where best to place limited resources that would result in improved visitor satisfaction. Economic expenditure information can help forests show local communities the employment and income effects of tourism from forest visitors. In addition, the visitation estimates can be helpful in considering visitor capacity issues.

1.2. Methods

To define the sampling frame, staff on each forest classify all recreation sites and areas into five basic categories called "site types": Day Use Developed Sites (DUDS), Overnight Use Developed Sites (OUDS), Designated Wilderness Areas (Wilderness), General Forest Areas (GFA), and View Corridors (VC). Only the first four categories are counted as national forest recreation visits and are included in the visit estimates. The last category is used to track the volume of people who view national forests from nearby roads; since they do not get onto agency lands, they cannot be counted as visits. For the entire sampling year, each day on each site was given a rating of very high, high, medium, low, or no use according to the expected level of recreational visitors who would be

observed leaving that location for the last time (last exiting recreation use) on that day. The combination of a calendar day and a site or area is called a site day. Site days are the basic sampling unit for the NVUM protocol. Results of this forest categorization are shown in Table 1.

In essence, visitation is estimated through a combination of traffic counts and surveys of exiting visitors. Both are obtained on a random sample of locations and days distributed over an entire forest for a year. All of the surveyed recreation visitors are asked about their visit duration, activities, demographics, travel distance, and annual usage. About one-third were also asked a series of questions about satisfaction. Another one-third were asked to provide information about their income, spending while on their trip, and the next best substitute for the visit.

1.3. Definition of Terms

NVUM has standardized measures of visitor use to ensure that all national forest visitor measures are comparable. These definitions are basically the same as established by the Forest Service in the 1970's. Visitors must pursue a recreation activity physically located "on" Forest Service managed land in order to be counted. They cannot be passing through; viewing from non-Forest Service managed roads, or just using restroom facilities. The visitation metrics are **national forest visits** and **site visits.**   NVUM provides estimates of both and confidence interval statistics measuring the precision of the estimates. The NVUM methodology categorizes recreation facilities and areas into specific site types and use levels in order to develop the sampling frame. Understanding the definitions of the variables used in the sample design and statistical analysis is important in order to interpret the results.

National forest visit is the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A national forest visit can be composed of multiple site visits. The visit ends when the person leaves the national forest to spend the night somewhere else.

Site visit is the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time.   The site visit ends when the person leaves the site or area for the last time on that day.

A **confidence interval** is a range of values that is likely to include an unknown population value, where the range is calculated from a given set of sample data. Confidence intervals are always accompanied by a **confidence level**, which tells the degree of certainty that the value lies in the interval. Used together these two terms define the reliability of the estimate, by defining the range of values that are needed to reach the given confidence level. For example, the 2008 national visitation estimate is 175.6 million visits, with a 90% confidence interval of 3.2%. In other words, given the NVUM data, our best estimate is 175.6 million visits, and given the underlying data, we are 90% certain that the true number is between 170.0 million and 181.2 million.

Recreation trip is the duration of time beginning when the visitor left their home and ending when they return to their home.

Site day - a day that a recreation site or area is open to the public for recreation purposes.

Proxy - information collected at a recreation site or area that is directly related to the amount of

recreation visitation received. The proxy information must pertain to all users of the site and it must be one of the proxy types allowed in the NVUM pre-work directions (fee receipts, fee envelopes, mandatory permits, permanent traffic counters, group reservations, ticket sales, and daily use records).

Nonproxy - a recreation site or area that does not have proxy information. At these sites a 24-hour traffic count is taken to measure total use for one site day at the sample site .

Use level - for each day of the year for each recreation site or area, the site day was categorized as very high, high, medium or low last exiting recreation traffic, or no exiting use. No Use could means either that the location was administratively closed, or it was open but was expected to have zero last exiting visitors. For example a picnic area may listed as having no use during winter months (120 days), high last exiting recreation volume on all other weekends (70 days) and medium last exiting recreation use on the remaining midweek days (175 days). This accounts for all 365 days of the year. This process was repeated for every site and area on the forest.

1.4. Limitations of the Results

The information presented here is valid and applicable at the forest, regional, and national level. It is not designed to be accurate at the district or site level. The quality of the visitation estimate is dependent on the sample design development, sampling unit selection, sample size and variability, and survey implementation. First, preliminary work conducted by forests to identify and consistently classify sites and access points according to the type and amount of expected exiting visitation is the key determinant of the validity and magnitude of the visitation estimate. Second, the success of the forest staff in accomplishing its assigned set of sample days , correctly filling out the interview forms, and following the field protocols influence the reliability of the results, variability of the visitation estimate, and validity of the visitation descriptions. Third, the variability of traffic counts within a sampling stratum affects the reliability of the visitation estimates . Fourth, the range of visitors sampled must be representative of the population of all visitors. Finally, the number of visitors sampled must be large enough to adequately control variability.   The results and confidence intervals will reflect all these factors.

Confidence intervals indicate the reliability of the visitation estimate, given the underlying data. Large confidence intervals indicate high variability in the national forest visit (NFV), site visit (SV) and Wilderness visit estimates. Variance is caused primarily by a small sample size in number of days or having a few sampled days where the observed exiting visitation volume was very different from the normal range. For example, on a particular National Forest in the General Forest Area low stratum, there were 14 sample days. Of these 14 sample days, 13 days had visitation estimates between zero and twenty. The remaining day had a visitation estimate of 440. So the stratum mean was about 37 per day, standard error was about 116, and the 90% confidence interval width is 400% of the mean. Causes for such outlier observations are not known, but could include a misclassification of the day (a high use day incorrectly categorized as a low use day), unusual weather, malfunctioning traffic counter, or reporting errors. Eliminating the unusual observation from data analysis would reduce the variability.   However, unless the NVUM team had reason to suspect the observation was incorrect they did not eliminate these unusual cases.

The descriptive information about national forest visitors is based upon only those visitors that were interviewed. Every effort was made to incorporate distinct seasonal use patterns and activities that

vary greatly by season into the sampling frame. The sampling plan took into account both the spatial and seasonal spread of visitation patterns across the forest. Even so, because of the small sample size of site-days, or because some user groups decline to participate in the survey, it is possible to under-represent certain user groups, particularly for activities that are quite limited in where or when they occur.

Note that the results of the NVUM activity analysis DO NOT identify the types of activities visitors would like to have offered on the national forests. It also does not tell us about displaced forest visitors, those who no longer visit the forest because the activities they desire are not offered.

Some forest visitors were counted and included in the total forest use estimate but were not surveyed. This included visitors to recreation special events and organization camps. Their characteristics are not included in the visit descriptions.

Caution should be used in interpreting any comparisons of these results with those obtained during the 2000 - 2003 period. Differences cannot be interpreted as a trend. Several method changes account for the differences, for both visitation estimates and visit characteristics. One key factor is that the first application of the NVUM process was largely a national beta-test of the method, and significant improvements occurred following it. The NVUM process entailed a completely new method and approach to measuring visitation on National Forest lands. Simply going through the NVUM process for the first time enabled forest staff to do a much better job thereafter in identifying sites, accurately classifying days into use level strata, and ensuring consistency across all locations on the forest. These improvements enhanced the validity of all aspects of the NVUM results. Sampling plans and quality control procedures were also improved.

2. VISITATION ESTIMATES

2.1. Forest Definition of Site Days

The population of site days for sampling was constructed from information provided by forest staff. For each site, each day of the year was given a rating of very high, high, medium, low, or none according to the expected volume of recreation visitors who would be leaving the site or area for the last time (last exiting recreation use). The stratum, a combination of site type and use level, was then used to construct the sampling frame. The results of the recreation site/area stratification and days sampled are displayed in Table 1.

Table 1. Site Days and Percentage of Days Sampled by Stratum

Stratum*		Days Sampled	Site Days# in Use Level/Proxy Population	Sampling Rate (%)&
Site Type†	Use Level‡ or Proxy Code§			
DUDS	VERY HIGH	10	57	17.5
DUDS	HIGH	20	519	3.9
DUDS	MEDIUM	10	970	1.0
DUDS	LOW	13	4,438	0.3
DUDS	DUR5	5	852	0.6
OUDS	VERY HIGH	5	16	31.3
OUDS	HIGH	6	19	31.6
OUDS	MEDIUM	13	96	13.5
OUDS	LOW	6	348	1.7
OUDS	DUR4	6	162	3.7
OUDS	FE4	11	1,467	0.7
GFA	HIGH	18	1,559	1.2
GFA	MEDIUM	21	5,406	0.4
GFA	LOW	58	34,503	0.2
GFA	FR1	6	370	1.6
GFA	PTC1	13	861	1.5
WILDERNESS	HIGH	13	268	4.9
WILDERNESS	MEDIUM	9	538	1.7
WILDERNESS	LOW	8	1,428	0.6
Total		**251**	**53,877**	**0.5**

* Stratum is the combination of the site type and use level or proxy code. Sample days were independently drawn within each stratum.

† DUDS = Day Use Developed Site, OUDS = Overnight Use Developed Site, GFA = General Forest Area ("Undeveloped Areas"), WILDERNESS = Designated Wilderness

‡ Use level was defined independently by each forest by defining the expected number of recreation visitors that would be last-exiting a site or area on a given day. The forest developed the range for very high, high, medium, and low and then assigned each day of the year to one of the use levels.

§ Proxy Code - If the site or area already had counts of use (such as fee envelopes or ski lift tickets) the site was called a proxy site and sampled independent of nonproxy sites.

Site Days are days that a recreation site or area is open to the public for recreation purposes.

& 0.0 - This value is less than five one-hundredths.

2.2. Visitation Estimates

Visitation estimates are available at the national, regional, and forest level. This document provides only National Forest level data. Other documents may be obtained through the National Visitor Use Monitoring web page: www.fs.fed.us/recreation/programs/nvum.

When reviewing the results, users should discuss with forest staff if this forest experienced any unusual circumstances such as forest fires, floods, or atypical weather that may have created an unusual recreation use pattern for the year sampled. Table 2 displays the number of national forest visits and site visits by site type for this National Forest.

Table 2. Annual Visitation Estimate

Visit Type	Visits (1,000s)	90% Confidence Level (%)#
Total Estimated Site Visits*	2,875	±16.2
→ Day Use Developed Site Visits	464	±22.6
→ Overnight Use Developed Site Visits	76	±18.0
→ General Forest Area Visits	2,217	±20.4
→ Designated Wilderness Visits†	119	±32.3
Total Estimated National Forest Visits§	2,073	±17.4
→ Special Events and Organized Camp Use‡	5	±0.0

* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

† Designated Wilderness visits are included in the Site Visits estimate.

‡ Special events and organizational camp use are not included in the Site Visit estimate, only in the National Forest Visits estimate. Forests reported the total number of participants and observers so this number is not estimated; it is treated as 100% accurate.

§ A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

This value defines the upper and lower bounds of the visitation estimate at the 90% confidence level, for example if the visitation estimate is 100 +/-5%, one would say "at the 90% confidence level visitation is between 95 and 105 visits."

The quality of the use estimate is based in part on how many individuals were contacted during the sample day and how many complete interviews were obtained from which to estimate NVUM numbers and visitor descriptions. Table 3 and Table 4 display the number of visitor contacts, number of completed interviews by site type and survey form type. This information may be useful to managers when assessing how representative of all visitors the information in this report may be.

Table 3. Number of Individuals Contacted by Site Type

Site Type	Total Individuals Contacted	Individuals Who Agreed to be Interviewed	Recreating Individuals Who Are Leaving for the Last Time That Day
Day Use Developed Sites	1,010	802	453
Overnight Use Developed Sites	864	736	307
Undeveloped Areas (GFAs)	1,019	901	690
Designated Wilderness	302	266	174
Total	**3,195**	**2,705**	**1,624**

Table 4. Number of Complete Interviews* by Site Type and Form Type

Form Type†	Developed Day Use Site	Developed Overnight	Undeveloped Areas (GFAs)	Wilderness	Total
Basic	148	110	231	61	550
Economic	155	104	229	55	543
Satisfaction	150	93	230	58	531
Total	**453**	**307**	**690**	**174**	**1,624**

* Complete interviews are those in which the individual contacted agreed to be interviewed, was recreating on the national forest and was exiting the site or area for the last time that day.

† Form Type is the type of interview form administered to the visitor. The Basic form did not ask either economic or satisfaction questions. The Satisfaction form did not ask economic questions and the Economic form did not ask satisfaction questions.

Visitors were interviewed regardless of whether they were recreating at the site or not, however the interview was discontinued after determining that the reason for visiting the site was <u>not</u> recreation. Figure 1 displays the various reasons visitors gave as their purpose for stopping at the sample site.

Figure 1. Purpose of Visit by Visitors Who Agreed to be Interviewed

■ Recreation	67.4%	
■ Use Bathroom	3.3%	
■ Work or Commute	3.1%	
■ Passing Through	16.9%	
■ Some Other Reason	9.4%	
Total:	100.0%	
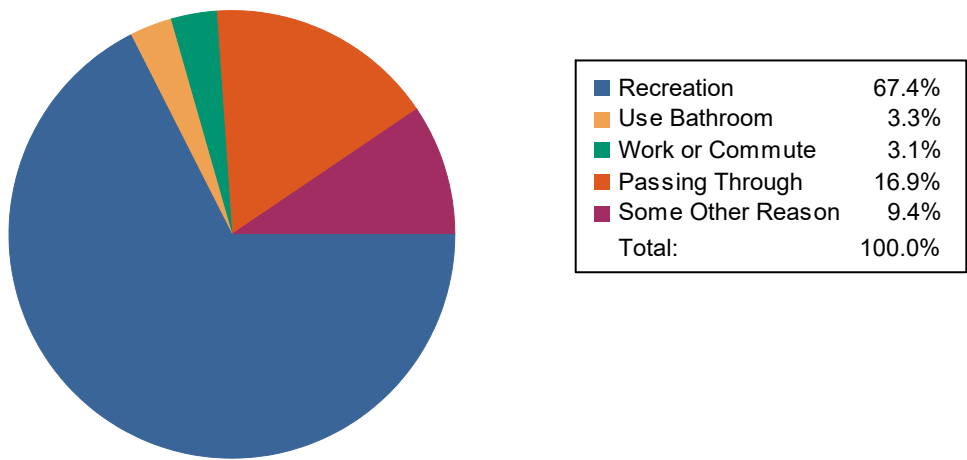
3. DESCRIPTION OF THE RECREATION VISIT

3.1. Demographics

Descriptions of forest recreational visits were developed based upon the characteristics of interviewed visitors (respondents) and expanded to the national forest visitor population. Basic demographic information helps forest managers identify the profile of the visitors they serve. Management concerns such as providing recreation opportunities for underserved populations may be monitored with this information. Table 5, Table 6 and Table 7 provide basic demographic information about visitors interviewed regarding Gender, Race/Ethnicity, and Age, respectively. Table 8 shows the 15 most common reported origins for recreation visitors. A complete list of reported zip codes for respondents is found in Appendix A. Table 9 provides information about self reported travel distance from home to the interview site.

Demographic results show that about 40% of visits to the Cherokee NF are made by females. Among the racial and ethnic minorities, the most frequently encountered are Hispanics/Latinos (3.5%). The age distribution shows that about 20% of visits are children under age 16. People over the age of 60 account for almost 15% of visits. About 40% of visits are from those people living within 25 miles of the forest. About 25% live between 25 and 50 miles away.

Table 5. Percent of National Forest Visits* by Gender

Gender	Survey Respondents†	National Forest Visits (%)‡
Female	1,589	39.6
Male	1,936	60.4
Total	**3,525**	**100.0**
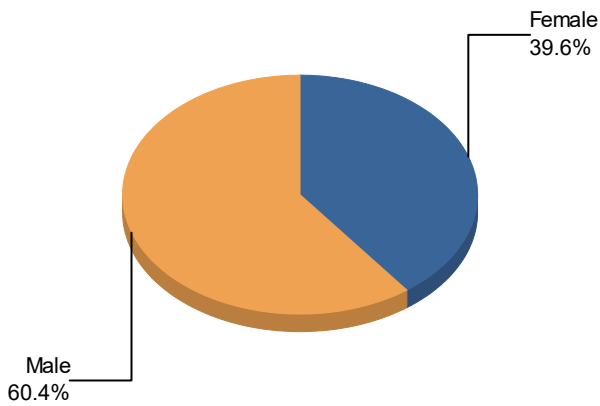
Female
39.6%

Male
60.4%

* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Non-respondents to gender questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of National Forest Visits.

Table 6. Percent of National Forest Visits* by Race/Ethnicity

Race †	Survey Respondents‡	National Forest Visits (%)§#
American Indian / Alaska Native	27	1.7
Asian	9	0.7
Black / African American	22	1.5
Hawaiian / Pacific Islander	1	0.3
White	1,369	96.3
Total	1,428	100.5

Ethnicity†	Survey Respondents‡	National Forest Visits (%)§
Hispanic / Latino	61	3.5
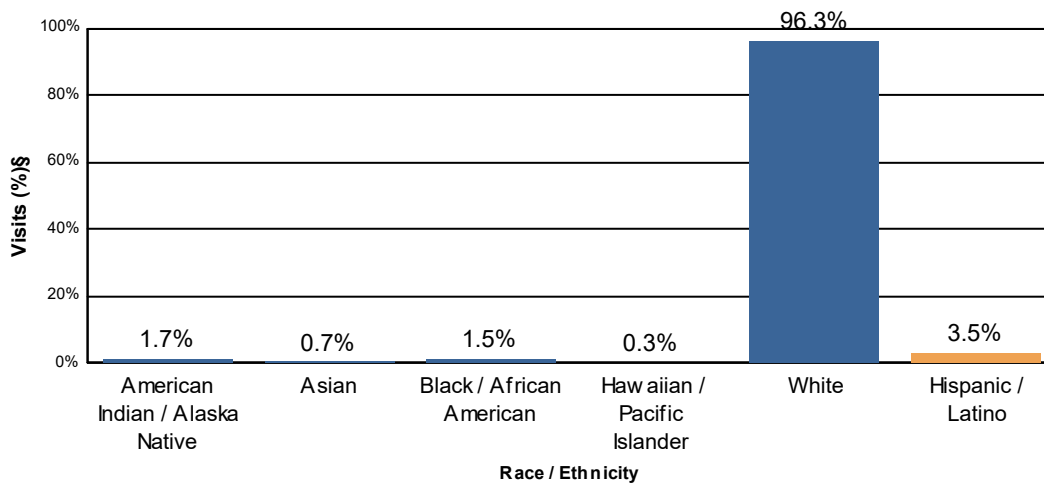
* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

Respondents could choose more than one racial group, so the total may be more than 100%.

† Race and Ethnicity were asked as two separate questions.

‡ Non-respondents to race/ethnicity questions were excluded from analysis.

§ Calculations are computed using weights that expand the sample of individuals to the population of National Forest Visits.

Table 7. Percent of National Forest Visits* by Age

Age Class	National Forest Visits (%)‡
Under 16	20.3
16-19	6.8
20-29	16.0
30-39	14.3
40-49	14.5
50-59	13.2
60-69	10.5
70+	4.4
Total	**100.0**
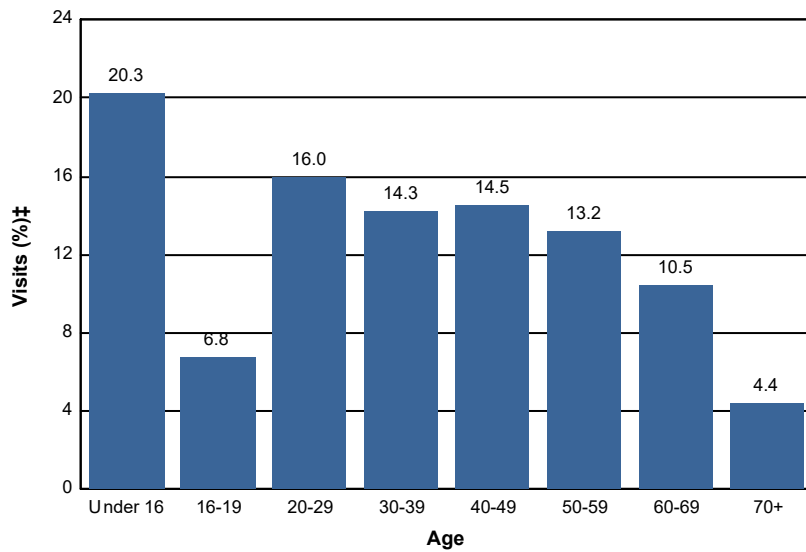
* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Non-respondents to age questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of National Forest Visits.

Table 8. Top 15 Most Commonly Reported ZIP Codes, States and Counties of National Forest Survey Respondents

ZIP Code	State	County	Percent of Respondents	Survey Respondents (n)
37323	Tennessee	Bradley County	11.4	57
37312	Tennessee	Bradley County	11.2	56
37643	Tennessee	Carter County	10.4	52
37385	Tennessee	Monroe County	9.6	48
37311	Tennessee	Bradley County	8.2	41
37354	Tennessee	Monroe County	6.2	31
37604	Tennessee	Washington County	6.0	30
Unknown Origin*			5.8	29
37601	Tennessee	Washington County	5.2	26
37303	Tennessee	McMinn County	5.0	25
37650	Tennessee	Unicoi County	4.6	23
37874	Tennessee	Monroe County	4.4	22
37363	Tennessee	Hamilton County	4.4	22
37307	Tennessee	Polk County	4.2	21
37774	Tennessee	Loudon County	3.6	18

* Includes respondents reporting no ZIP code or an invalid ZIP code.

Table 9. Percent of National Forest Visits* by Distance Traveled

Miles from Survey Respondent's Home to Interview Location†	National Forest Visits (%)
0 - 25 miles	40.5
26 - 50 miles	24.7
51 - 75 miles	7.0
76 - 100 miles	4.7
101 - 200 miles	7.2
201 - 500 miles	7.8
Over 500 miles	8.0
Total	99.9

Note: Blank cells indicate that insufficient data were collected to make inferences.

* National Forest Visits are defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Travel distance is self-reported.

3.2. Visit Descriptions

Characteristics of the recreation visit such as length of visit, types of sites visited, activity participation and visitor satisfaction with forest facilities and services help managers understand recreation use patterns and use of facilities. This allows them to plan workforce and facility needs. The average national forest visit length of stay and average site visit length of stay by site type on this forest is displayed in Table 10. Since the average values displayed in Table 10 may be influenced by a few people staying a very long time, the median value is also shown.

Almost half of visits to this forest last less than 3 hours, although the average duration is about 9 hours. The median length of visits to overnight sites is about 39 hours, indicating a one or two night stay is common. Over half of visits come from people who visit at most 5 times per year. Very frequent visitors are rare: roughly 11% of visits are made by people who visit more than 50 times per year.

Table 10. Visit Duration

Visit Type	Average Duration (hours)‡	Median Duration (hours)‡
Site Visit	5.6	3.0
Day Use Developed		
Overnight Use Developed		
Undeveloped Areas	5.6	3.0
Designated Wilderness		
National Forest Visit		

* A Site Visit is the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time. Sites and areas were divided into four site types as listed here.

† A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

‡ If this variable is blank not enough surveys were collected to make inferences.

Many of the respondents on this National Forest went only to the site at which they were interviewed (Table 11). Some visitors went to more than one recreation site or area during their national forest visit and the average site visits per national forest visit is shown below. Also displayed are the average people per vehicle and average axles per vehicle. This information in conjunction with traffic counts was used to expand observations from individual interviews to the full forest population of recreation visitors. This information may be useful to forest engineers and others who use vehicle counters to conduct traffic studies.

During the interview, visitors were asked how often they visit this national forest for all recreational activities, and how often for their primary activity. Table 12 summarizes the percent of visits that are made by those in each frequency category for this National Forest.

Table 11. Group Characteristics

Characteristic	Average
Percent of visits that were to just one national forest site during the National Forest Visit*	96.5
Number of national forest sites visited on National Forest Visit*	1.1
Group size	2.7
Axles per vehicle	2.0

Table 12. Percent of National Forest Visits* by Annual Visit Frequency

Number of Annual Visits	Visits (%)†	Cumulative Visits (%)
1 - 5	50.2	50.2
6 - 10	11.7	62.0
11 - 15	6.0	68.0
16 - 20	6.1	74.0
21 - 25	3.6	77.6
26 - 30	4.2	81.8
31 - 35	0.8	82.6
36 - 40	1.8	84.4
41 - 50	4.5	88.9
51 - 100	5.7	94.6
101 - 200	3.3	97.8
201 - 300	1.3	99.1
Over 300	0.9	100.0
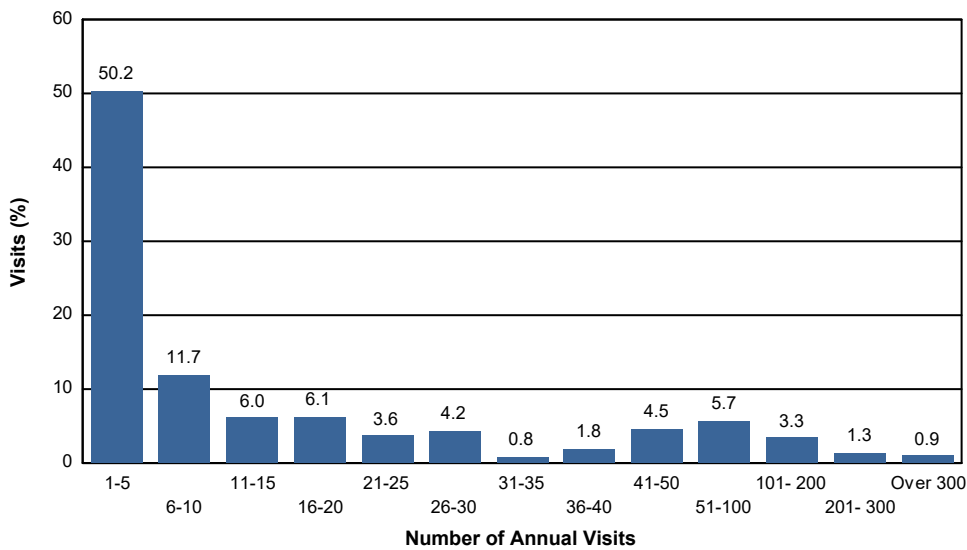
* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† The first row indicates the percent of National Forest Visits made by persons who visit 1 to 5 times per year. The last row indicates the percent of National Forest Visits made by persons who visit more than 300 times per year.

3.3. Activities

After identifying their main recreational activity, visitors were asked how many hours they spent participating in that main activity during this national forest visit. Some caution is needed when using this information. Because most national forest visitors participate in several recreation activities during each visit, it is more than likely that other visitors also participated in this activity, but did not identify it as their <u>main</u> activity. For example, on one national forest 63 % of visitors identified viewing wildlife as a recreational activity that they participated in during this visit, however only 3% identified that activity as their <u>main</u> recreational activity. The information on average hours viewing wildlife is only for the 3% who reported it as a main activity.

The most frequently reported primary activities are viewing natural features (23%), hiking/walking (22%), and nonmotorized water travel (16%).

Use of Constructed Facilities and Designated Areas

About one-third of recreation visitors interviewed were asked about whether they made use of a targeted set of facilities and special designated areas during their visit. These results are displayed in Table 14.

Table 13. Activity Participation

Activity	% Participation*	% Main Activity‡	Avg Hours Doing Main Activity
Viewing Natural Features	39.7	23.4	2.4
Hiking / Walking	38.0	22.6	4.1
Relaxing	27.5	4.8	14.5
Non-motorized Water	18.1	16.4	3.9
Viewing Wildlife	14.1	1.6	3.9
Other Non-motorized	13.4	7.0	3.1
Driving for Pleasure	13.0	4.2	3.8
Picnicking	11.5	3.0	3.3
Fishing	7.2	5.4	3.6
Developed Camping	4.2	2.5	51.9
Some Other Activity	4.0	2.1	2.3
Bicycling	3.8	2.7	4.7
Hunting	3.6	3.3	6.2
Nature Center Activities	3.3	0.1	2.5
Nature Study	3.2	0.1	0.0
Motorized Water Activities	1.8	0.2	1.6
Backpacking	1.2	0.2	27.8
Visiting Historic Sites	1.2	0.0	0.0
Gathering Forest Products	1.1	0.1	3.0
Primitive Camping	0.9	0.1	54.7
Motorized Trail Activity	0.4	0.2	1.1
Horseback Riding	0.2	0.2	4.0
No Activity Reported	0.2	0.4	
Resort Use	0.2	0.0	60.0
Other Motorized Activity	0.1	0.1	2.0
OHV Use	0.1	0.0	3.0
Downhill Skiing	0.0	0.0	2.0
Snowmobiling	0.0	0.0	0.0
Cross-country Skiing	0.0	0.0	0.0

% Main Activity
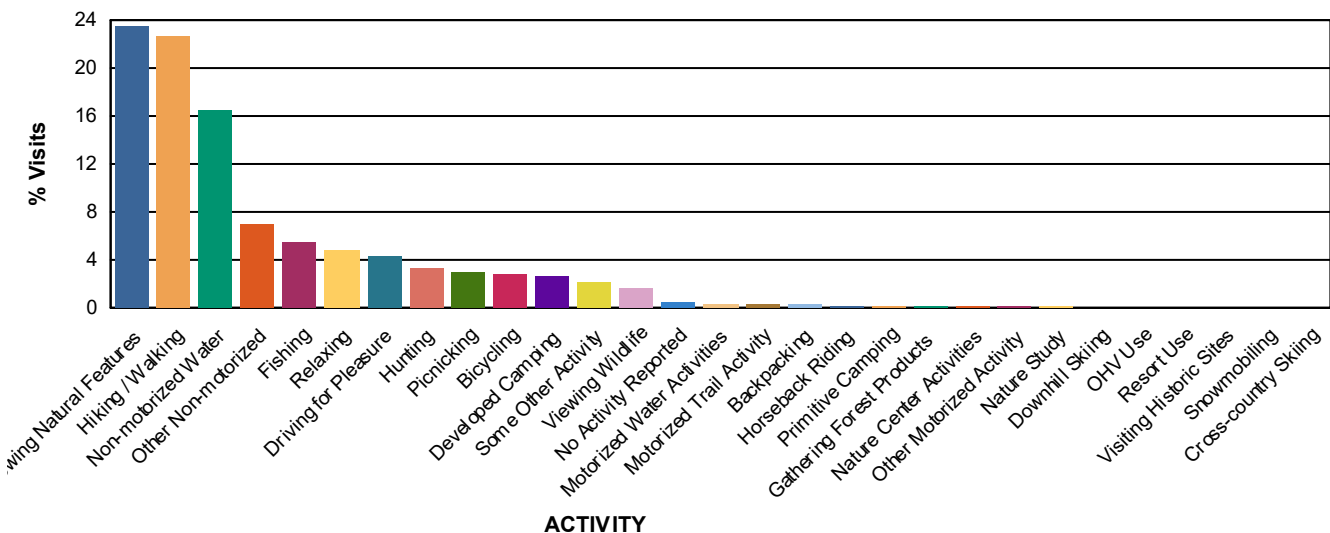
* Survey respondents could select multiple activities so this column may total more than 100%.

‡ Survey respondents were asked to select just one of their activities as their main reason for the forest visit. Some respondents selected more than one, so this column may total more than 100%.

Special Facility Use

Table 14. Percent of National Forest Visits* Indicating Use of Special Facilities or Areas

Special Facility or Area	% of National Forest Visits†
Developed Swimming Site	15.3
Scenic Byway	24.2
Visitor Center or Museum	6.6
Designated ORV Area	2.6
Forest Roads	2.2
Interpretive Displays	0.9
Information Sites	0.6
Developed Fishing Site	8.6
Motorized Single Track Trails	0.9
Motorized Dual Track Trails	0.8
None of these Facilities	61.3

* A National Forest Visit is defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

† Survey respondents could select as many or as few special facilities or areas as appropriate.

4. ECONOMIC INFORMATION

Forest managers are usually very interested in the impact of National Forest recreation visits on the local economy. As commodity production of timber and other resources has declined, local communities look increasingly to tourism to support their communities. When considering recreation-related visitor spending managers are often interested both in identifying the average spending of individual visitors (or types of visitors) and the total spending associated with all recreation use. Spending averages for visitors or visitor parties can be estimated using data collected from a statistically valid visitor sampling program such as NVUM. To estimate the total spending associated with recreation use, three pieces of information are needed: an overall visitation estimate, the proportion of visits in the visitor types, and the average spending profiles for each of the visitor types. Multiplying the three gives a total amount of spending by a particular type of visitor. Summing over all visitor types gives total spending.

About one-third of the NVUM surveys included questions about trip-related spending within 50 miles of the site visited. Analysis of spending data included identification of the primary visitor segments that have distinct spending profiles as well as estimation of the average spending per party per visit. Results from the FY2005 through FY2009 period are available in a report: https://www.treesearch.fs.fed.us/pubs/43869. Results from the FY2010 through FY2014 period are in the publication process.

4.1. Spending Segments

The spending that occurs on a recreation trip is greatly influenced by the type of recreation trip taken. For example, visitors on overnight trips away from home typically have to pay for some form of lodging (e.g., hotel/motel rooms, fees in a developed campground, etc.) while those on day trips do not. In addition, visitors on overnight trips will generally have to purchase more food during their trip (in restaurants or grocery stores) than visitors on day trips. Visitors who have not traveled far from home to the recreation location usually spend less than visitors traveling longer distances, especially on items such as fuel and food. Analysis of spending patterns has shown that a good way to construct segments of the visitor market with consistent spending patterns is the following seven groupings:

1. local visitors on day trips,
2. local visitors on overnight trips staying in lodging on the national forest,
3. local visitors on overnight trips staying in lodging off the national forest, and
4. non-local visitors on day trips,
5. non-local visitors on overnight trips staying in lodging on the national forest,
6. non-local visitors on overnight trips staying in lodging off the forest,
7. non-primary visitors.

Local visitors are those who travel less than 50 road miles from home to the recreation site visited and non-local visitors are those who travel greater than 50 road miles to the recreation site visited. Non-primary visitors are those for whom the primary purpose of their trip is something other than recreating on that national forest. The distribution of visits by spending segment is not displayed in this report. See the appendix tables in the spending analysis report cited above for spending segment distributions.

Almost 75% of visits to this forest are made as a day trip from home rather than a trip that includes an overnight stay. Another 13% are side trips made while the person was on a trip to some other destination. The income distribution results show a concerntation toward lower incomes. About 44% of visits are from households making less than $50,000 per year.

Table 15 is no longer displayed here

4.2. Spending Profiles

Spending profiles for each segment are contained in the spending analysis report, as are tables that identify whether visitors to a particular forest are in a higher or lower than average range. It is essential to note that the spending profiles are in dollars per party per visit. Obtaining per visit spending is accomplished by dividing the spending for each segment bythe average people per party for the forest and spending segment. These data are in the appendix of the report.

4.3. Total Direct Spending

Total direct spending made within 50 miles of the forest and associated with national forest recreation is calculated by combining estimates of per party spending averages with the number of party trips in the segment. The number of party-trips in the segment equals the number of National Forest visits reported in table 2, times the percentage of visits in each spending segment, and divided by the average people per party.

4.4. Other Visit Information

There are several other important aspects of the trips on which the recreation visits to the forest are made. These are summarized in Table 16. The first aspect relates to total amount spent by the recreating party on the trip. This includes spending not just within 50 miles of the forest, but anywhere. The table shows both the average and the median. Another set describes the overall length of the trips on which the visits are made. The table shows the percent of the visits that were made on trips where the person stayed away from home overnight (even though the forest visit may be just a day visit), and the average total nights away from home and nights spent within 50 miles of the forest. For those spending one or more nights in or near the forest, the table shows the percentage that selected each of a series of lodging options. Together, these results help show the context of overall trip length and lodging patterns for visitors to the forest.

Table 16. Trip Spending and Lodging Usage

Trip Spending	Value
Average Total Trip Spending per Party	$280
Median Total Trip Spending per Party	$35
% NF Visits made on trip with overnight stay away from home	20.3%
% NF Visits with overnight stay within 50 miles of NF	17.9%
Mean nights/visit within 50 miles of NF	4.3
Area Lodging Use	% Visits with Nights Near Forest
NFS Campground on this NF	24.9%
Undeveloped Camping in this NF	7.9%
NFS Cabin	4.9%
Other Public Campground	4.9%
Private Campground	9.4%
Rented Private Home	39.2%
Home of Friends/Family	6.7%
Own Home	4.6%
Other Lodging	0.7%

Area Lodging Use
% Visits with Nights Near Forest
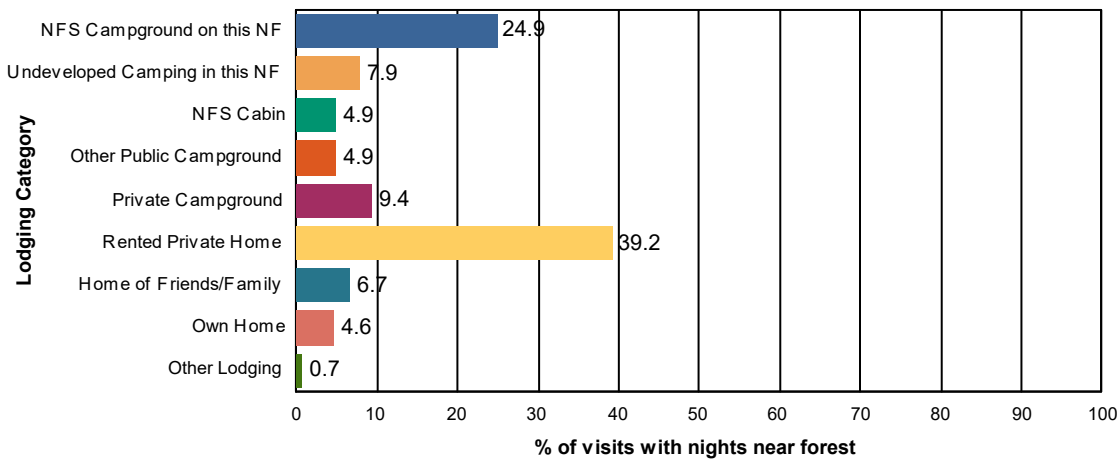
4.5. Household Income

Visitors were asked to report a general category for their total household income. Only very general categories were used, to minimize the intrusive nature of the question. Results help indicate the overall socio-economic status of visitors to the forest, and are found in Table 17.

Table 17. Percent of National Forest Visits* by Annual Household Income

Annual Household Income Category	National Forest Visits (%)
Under $25,000	16.5
$25,000 to $49,999	27.9
$50,000 to $74,999	22.6
$75,000 to $99,999	16.0
$100,000 to $149,999	9.3
$150,000 and up	7.8
Total	100.1

* National Forest Visits are defined as the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A National Forest Visit can be composed of multiple Site Visits.

4.6. Substitute Behavior

Visitors were asked to select one of several substitute choices, if for some reason they were unable to visit this national forest (Figure 3). Choices included going somewhere else for the same activity they did on the current trip, coming back to this forest for the same activity at some later time, going someplace else for a different activity, staying at home and not making a recreation trip, going to work instead of recreating, and a residual 'other' category. On most forests, the majority of visitors indicate that their substitute behavior choice is activity driven (going elsewhere for same activity) and a smaller percentage indicate they would come back later to this national forest for the same activity. For those visitors who said they would have gone somewhere else for recreation they were asked how far from their home this alternate destination was. These results are shown in Figure 4.

Figure 3. Substitute Behavior Choices

■ Come Back Another Time	13.4%
■ Gone Elsewhere for a Different Activity	16.8%
■ Gone Elsewhere for the Same Activity	53.3%
■ Gone to Work	0.2%
■ Had Some Other Substitute	2.0%
■ Stayed at Home	14.3%
Total:	100.0%
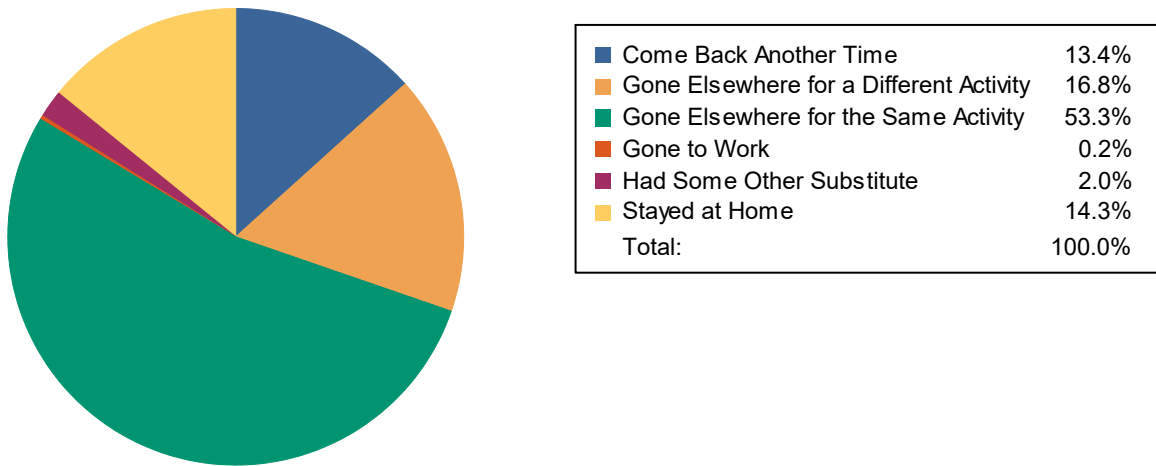
Figure 4. Reported Distance Visitors Would Travel to Alternate Location

Distance	Percent of Visits
0 - 25 miles	42.6
26 - 50 miles	28.0
51 - 75 miles	7.6
76 - 100 miles	7.5
101 - 200 miles	6.5
201 - 300 miles	1.8
Over 300 miles	6.1
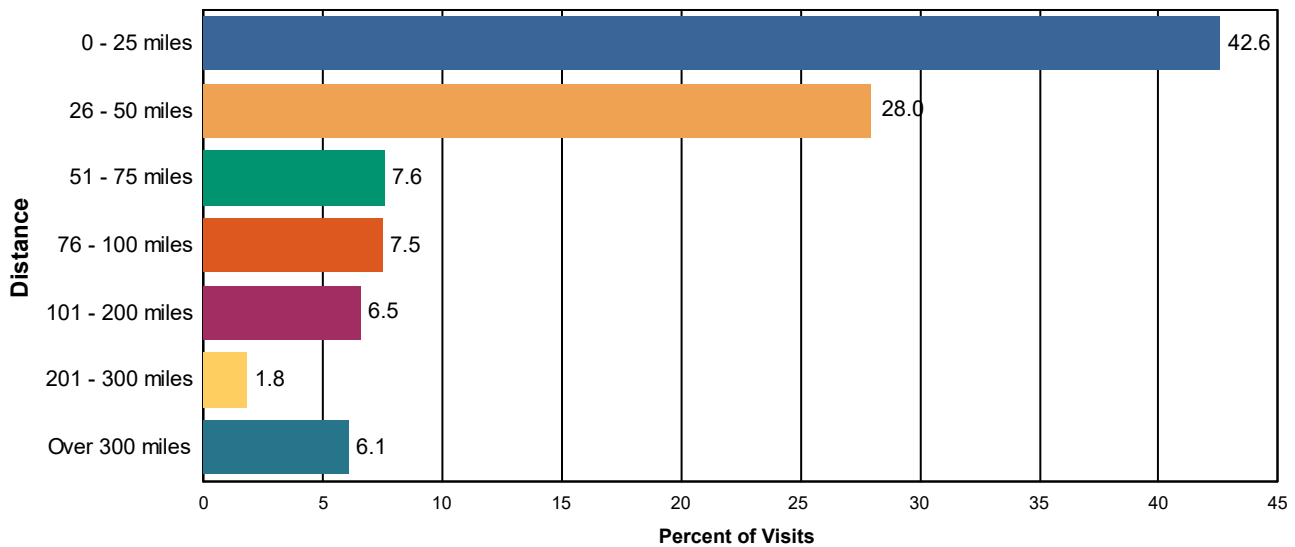
5. SATISFACTION INFORMATION

An important element of outdoor recreation program delivery is evaluating customer satisfaction with the recreation setting, facilities, and services provided. Satisfaction information helps managers decide where to invest in resources and to allocate resources more efficiently toward improving customer satisfaction. Satisfaction is a core piece of data for national- and forest-level performance measures. To describe customer satisfaction, several different measures are used. Recreation visitors were asked to provide an overall rating of their visit to the national forest, on a 5-point Likert scale. About one-third of visitors interviewed on the forest rated their satisfaction with fourteen elements related to recreation facilities and services, and the importance of those elements to their recreation experience. Visitors were asked to rate the specific site or area at which they were interviewed. Visitors rated both the importance and performance (satisfaction with) of these elements using a 5-point scale. The Likert scale for importance ranged from not important to very important. The Likert scale for performance ranged from very dissatisfied to very satisfied. Although the satisfaction ratings specifically referenced the area where the visitor was interviewed, the survey design does not usually have enough responses for any individual site or area on the forest to present information at a site level. Rather, the information is generalized to overall satisfaction within the three site types: Day Use Developed (DUDS), Overnight Use Developed (OUDS), General Forest Areas, and on the forest as a whole.

The satisfaction responses are analyzed in several ways. First, a graph of overall satisfaction is presented in Figure 5. Next, two aggregate measures were calculated from the set of individual elements. The satisfaction elements most readily controlled by managers were aggregated into four categories: developed facilities, access, services, and visitor safety. The site types sampled were aggregated into three groups: developed sites (includes both day use and overnight developed sites), dispersed areas, and designated Wilderness. The first aggregate measure is called "Percent Satisfied Index (PSI)", which is the proportion of all ratings for the elements in the category where the satisfaction ratings had a numerical rating of 4 or 5. Conceptually, the PSI indicator shows the percent of all recreation customers who are satisfied with agency performance. The agency's national target for this measure is 85%. It is usually difficult to consistently have a higher satisfaction score than 85% since given tradeoffs among user groups and other factors. Table 18 displays the aggregate PSI scores for this forest.

Another aggregate measure of satisfaction is called "Percent Meet Expectations (PME)". This is the proportion of satisfaction ratings in which the numerical satisfaction rating for a particular element is equal to or greater than the importance rating for that element. This indicator tracks the congruence between the agency's performance and customer evaluations of importance. The idea behind this measure is that those elements with higher importance levels must have higher performance levels. Figure 6 displays the PME scores by type of site. Lower scores indicate a gap between desires and performance.

An Importance-Performance Analysis (IPA) (Hudson, et al, Feb 2004) was calculated for the importance and satisfaction scores. A target level of importance and performance divides the possible set of score pairs into four quadrants. For this work, the target level of both was a numerical score of 4.0. Each quadrant has a title that helps in interpreting responses that fall into it, and that provides some general guidance for management. These can be described as:

1. Importance at or above 4.0, Satisfaction at or above 4.0: **Keep up the good work**. These are items that are important to visitors and ones that the forest is performing quite well;
2. Importance at or above 4.0, Satisfaction under 4.0: **Concentrate here**. These are important items to the public, but performance is not where it needs to be. Increasing effort here is likely to have the greatest payoff in overall customer satisfaction;
3. Importance below 4.0, Satisfaction above 4.0: **Possible overkill**. These are items that are not highly important to visitors, but the forest's performance is quite good. It may be possible to reduce effort here without greatly harming overall satisfaction;
4. Importance below 4.0; Satisfaction below 4.0: **Low Priority**. These are items where performance is not very good, but neither are they important to visitors. Focusing effort here is unlikely to have a great impact.

We present tables that show the I-P rating title for each satisfaction element. Each sitetype is presented in a separate table. Results are presented in Tables 19 - 22.

The numerical scores for visitor satisfaction and importance for each element by site type, and the sample sizes for each are presented in Appendix B (Tables B1 - B4). Most managers find it difficult to discern meaning from these raw tables; however they may wish to examine specific elements once they have reviewed the other satisfaction information presented in this section. Note that if an element had fewer than 10 responses no analyses are performed, as there are too few responses to provide reliable information. Finally, visitors were asked about their overall satisfaction with and the importance of road condition and the adequacy of signage. Figure 7a and Figure 7b show the results.

The overall satisfaction results are very good. About 88% of people visiting indicated they were very satisfied with their overall recreation experience. Another 10% were somewhat satisfied. The results for the composite indices were also good. Satisfaction ratings for perception of safety were at least 95% for all types of sites. Ratings for the facilities and access composites were higher than 80% over all settings.

Figure 5. Percent of National Forest Visits by Overall Satisfaction Rating

■ Very Satisfied	88.1%
■ Somewhat Satisfied	9.5%
■ Neither Satisfied nor Dissatisfied	1.3%
■ Somewhat Dissatisfied	0.6%
■ Very Dissatisfied	0.6%
Total:	100.0%
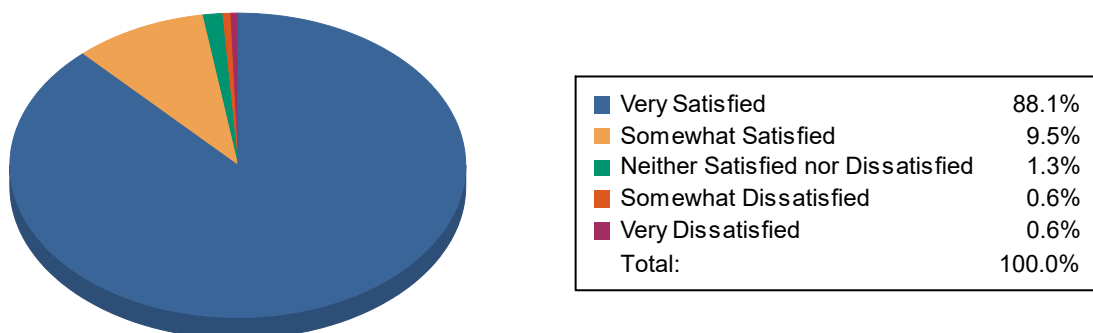
Table 18. Percent Satisfied Index† Scores for Aggregate Categories

Satisfaction Element	Satisfied Survey Respondents (%)		
	Developed Sites‡	Undeveloped Areas (GFAs)	Designated Wilderness
Developed Facilities	87.0	84.0	87.2
Access	93.9	90.3	82.4
Services	85.3	86.9	67.2
Feeling of Safety	95.9	99.7	97.1

† This is a composite rating. It is the proportion of satisfaction ratings scored by visitors as good (4) or very good (5). Computed as the percentage of all ratings for the elements within the sub grouping that are at or above the target level, and indicates the percent of all visitors that are reasonably well satisfied with agency performance.

‡ This category includes both Day Use and Overnight Use Developed Sites.

Figure 6. Percent Meets Expectations Scores*
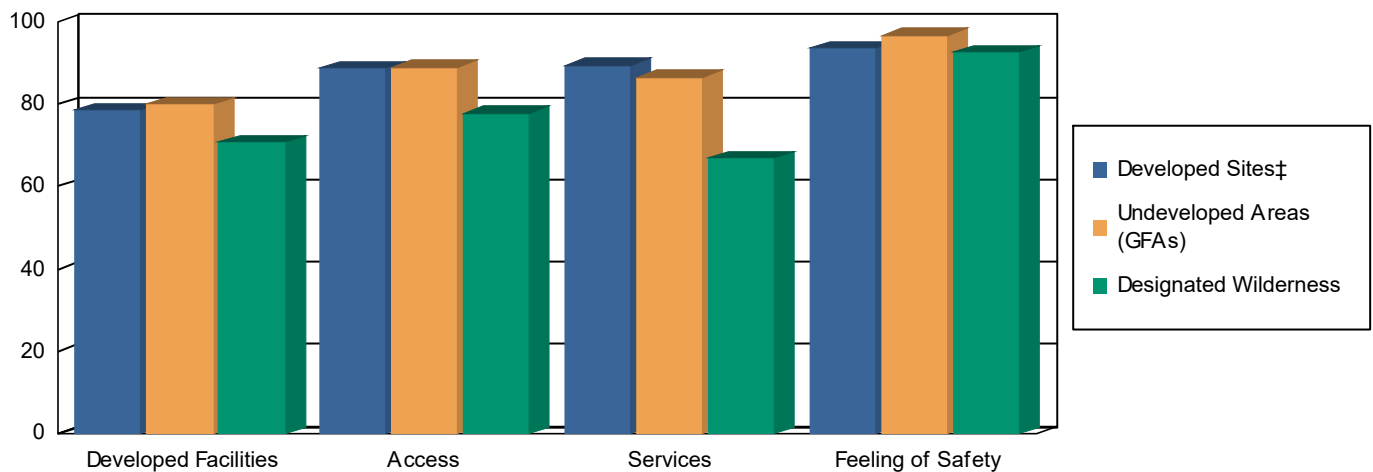
* "Percent Meet Expectations (PME)" is the proportion of satisfaction ratings in which the numerical satisfaction rating for a particular element is equal to or greater than the importance rating for that element. This indicator tracks the congruence between the agency's performance and customer evaluations of importance. The idea behind this measure is that those elements with higher importance levels must have higher performance levels. Lower scores indicate a gap between desires and performance.

‡ This category includes both Day Use and Overnight Use Developed Sites.

Table 19. Importance-Performance Ratings for Day Use Developed Sites

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Keep up the Good Work
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Possible Overkill
Interpretive Displays	Possible Overkill
Parking Availability	Keep up the Good Work
Parking Lot Condition	Keep up the Good Work
Rec. Info. Availability	Keep up the Good Work
Road Condition	Keep up the Good Work
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	Keep up the Good Work

Table 20. Importance-Performance Ratings for Overnight Developed Sites

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Keep up the Good Work
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Keep up the Good Work
Interpretive Displays	Keep up the Good Work
Parking Availability	Keep up the Good Work
Parking Lot Condition	Keep up the Good Work
Rec. Info. Availability	Keep up the Good Work
Road Condition	Keep up the Good Work
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	Keep up the Good Work

Table 21. Importance-Performance Ratings for Undeveloped Areas (GFAs)

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	Concentrate Here
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	Keep up the Good Work
Interpretive Displays	Possible Overkill
Parking Availability	Keep up the Good Work
Parking Lot Condition	Keep up the Good Work
Rec. Info. Availability	Keep up the Good Work
Road Condition	Keep up the Good Work
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	Keep up the Good Work

Table 22. Importance-Performance Ratings for Designated Wilderness

Satisfaction Element	Importance-Performance Rating
Restroom Cleanliness	*
Developed Facilities	Keep up the Good Work
Condition of Environment	Keep up the Good Work
Employee Helpfulness	*
Interpretive Displays	Low Priority
Parking Availability	Keep up the Good Work
Parking Lot Condition	Keep up the Good Work
Rec. Info. Availability	Keep up the Good Work
Road Condition	Keep up the Good Work
Feeling of Satefy	Keep up the Good Work
Scenery	Keep up the Good Work
Signage Adequacy	Keep up the Good Work
Trail Condition	Keep up the Good Work
Value for Fee Paid	*

* The data was not reported for items with fewer than 10 responses.

Road Conditions & Signage

Figure 7a. Satisfaction with Forest-wide Road Conditions & Signage Adequacy
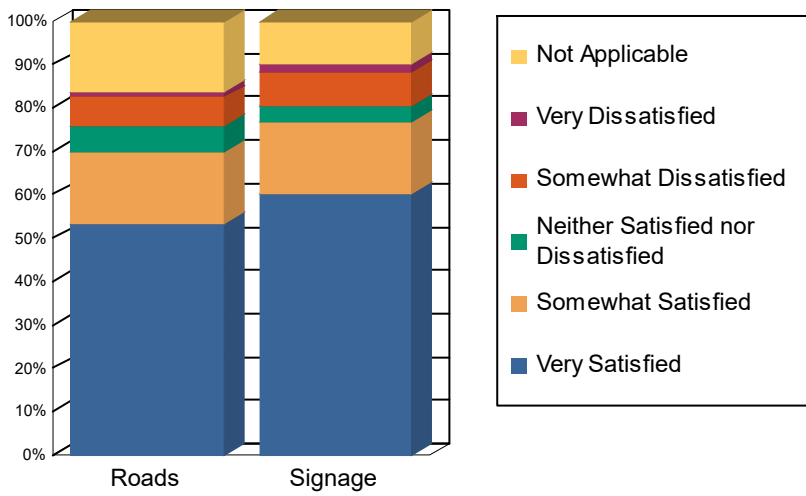
Figure 7b. Importance of Forest-wide Road Conditions & Signage Adequacy
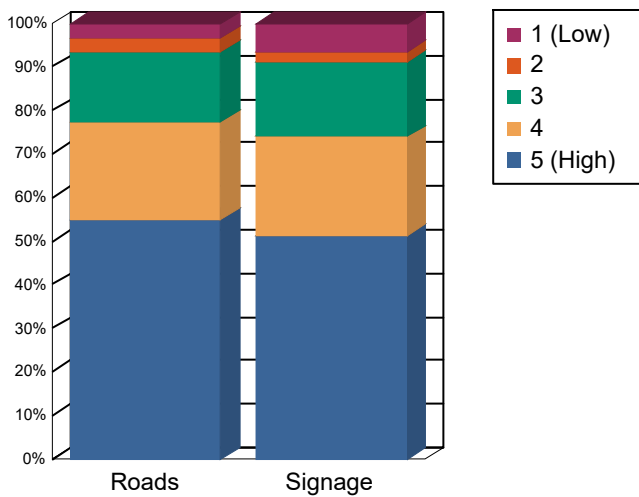
5.1. Crowding

Visitors rated their perception of how crowded the recreation site or area felt to them. This information is useful when looking at the type of site the visitor was using since someone visiting a designated Wilderness may think 5 people is too many while someone visiting a developed campground may think 200 people is about right. Table 23 shows the distribution of responses for each site type. Crowding was reported on a scale of 1 to 10 where 1 denotes hardly anyone was there, and a 10 indicates the area was perceived as overcrowded.

Table 23. Percent of Site Visits* by Crowding Rating and Site Type

Crowding Rating†	Site Types (% of Site Visits)			
	Day Use Developed Sites	Overnight Use Developed Sites	Undeveloped Areas (GFAs)	Designated Wilderness
10 - Overcrowded	4.4	0.0	2.1	2.1
9	7.8	5.8	2.5	0.0
8	6.3	13.2	2.4	6.4
7	6.3	14.7	8.4	5.3
6	13.1	19.1	13.1	28.3
5	13.2	12.1	9.6	19.2
4	15.9	11.3	14.8	12.2
3	17.6	7.6	16.5	13.2
2	13.1	8.9	18.3	9.4
1 - Hardly anyone there	2.5	7.3	12.2	3.8
Average Rating	**5.0**	**5.3**	**4.1**	**4.9**
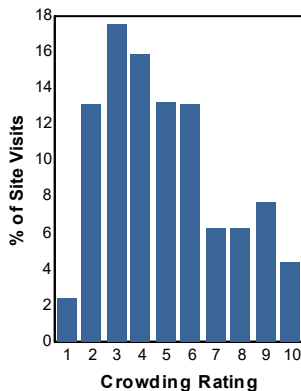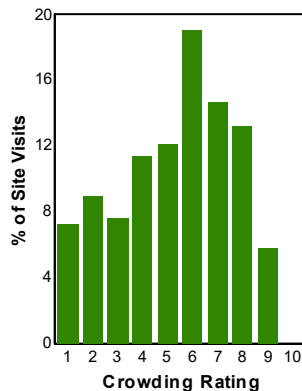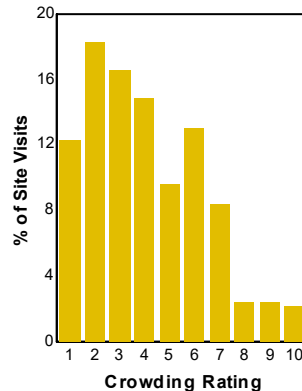
Day Use Developed Sites — **Overnight Use Developed Sites** — **Undeveloped Areas (GFAs)** — **Designated Wilderness**
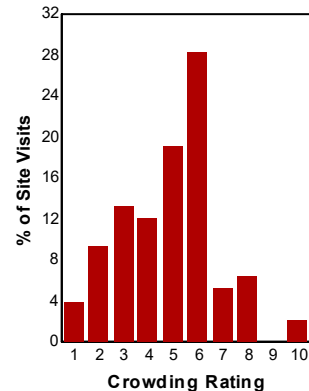
* A Site Visit is the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time.

† Survey respondents rated how crowded the site or area they were interviewed at was using a scale of 1 to 10 where 1 meant hardly anyone was there and 10 meant the site or area was overcrowded.

5.2. Disabilities

Providing barrier-free facilities for recreation visitors is an important part of facility and service planning and development. One question asked if anyone in their group had a disability. If so, the visitor was then asked if the facilities at the sites they visited were accessible for this person (Table 24).

Table 24. Accessibility of National Forest Facilities by Persons with Disabilities

Item	Percent
% of visits that include a group member with a disability	7.9
Of this group, percent who said facilities at site visited were accessible	57.7

6. WILDERNESS VISIT DEMOGRAPHICS

Visits to Wilderness are sometimes made by a particular subset of the overall visitor population . In this chapter, tables are presented that describe the demographic characteristics of those who visit designated wilderness on this forest. Table 25 shows the gender breakdown, Table 26 the racial and ethnicity distribution, and the Table 27 age composition. In Table 28, a frequency analysis of Zip Codes obtained from respondents is presented, to give a rough idea of the common origins of Wilderness visitors.

Table 25. Percent of Wilderness Site Visits* by Gender

Gender	Survey Respondents†	Wilderness Site Visits (%)‡
Female	216	47.5
Male	216	52.5
Total	**432**	**100.0**
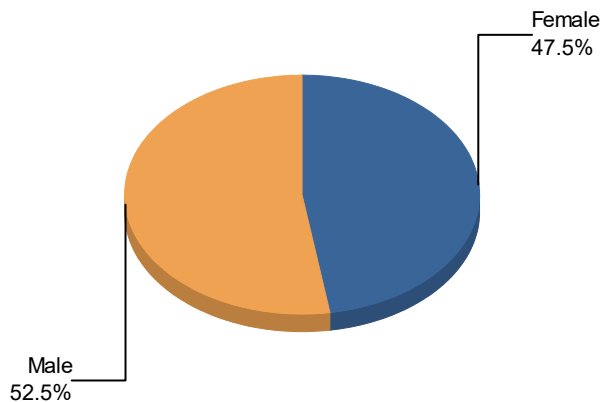
Female
47.5%

Male
52.5%

* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

† Non-respondents to gender questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of Wilderness Site Visits.

Table 26. Percent of Wilderness Site Visits* by Race/Ethnicity

Race †	Survey Respondents‡	Wilderness Site Visits (%)§#
American Indian / Alaska Native	0	0.0
Asian	0	0.0
Black / African American	7	3.2
Hawaiian / Pacific Islander	0	0.0
White	161	96.8
Total	168	100.0

Ethnicity†	Survey Respondents‡	Wilderness Site Visits (%)§
Hispanic / Latino	8	5.3
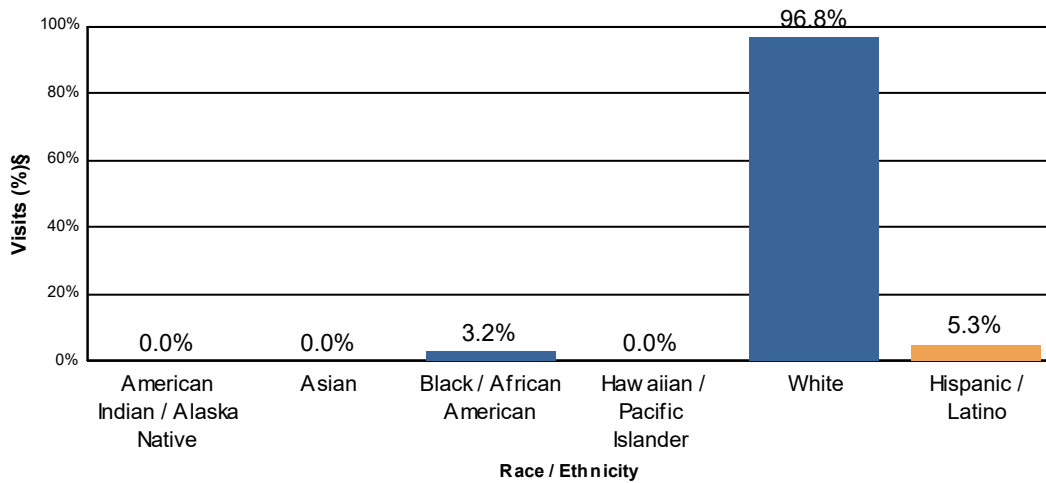
* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

Respondents could choose more than one racial group, so the total may be more than 100%.

† Race and Ethnicity were asked as two separate questions.

‡ Non-respondents to race/ethnicity questions were excluded from analysis.

§ Calculations are computed using weights that expand the sample of individuals to the population of Wilderness Site Visits.

Table 27. Percent of Wilderness Site Visits* by Age

Age Class	Wilderness Site Visits (%)‡
Under 16	21.6
16-19	7.9
20-29	23.7
30-39	16.2
40-49	11.0
50-59	8.3
60-69	9.1
70+	2.2
Total	**100.0**
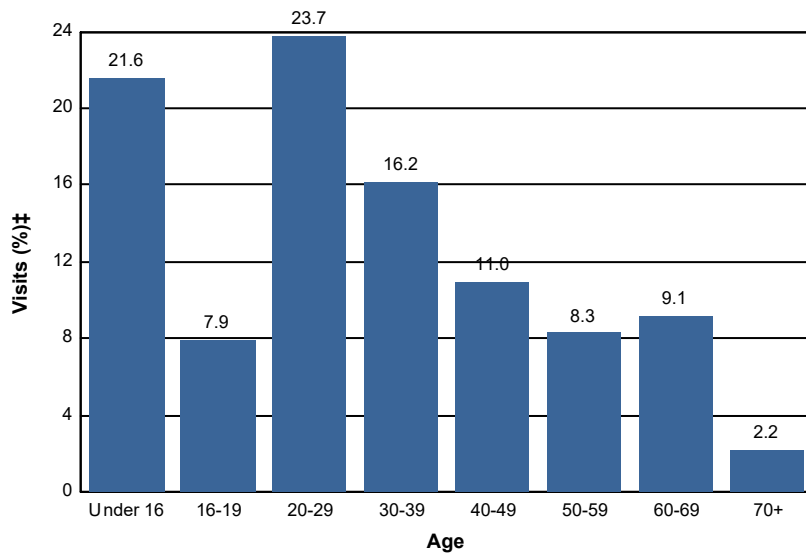
* A Site Visit is the entry of one person onto a National Forest site or area to participate in recreation activities for an unspecified period of time.

† Non-respondents to age questions were excluded from analysis.

‡ Calculations are computed using weights that expand the sample of individuals to the population of Wilderness Site Visits.

Table 28. Top 15 Most Commonly Reported ZIP Codes, States and Counties of Wilderness Survey Respondents

ZIP Code	State	County	Percent of Respondents	Survey Respondents (n)
37604	Tennessee	Washington County	16.5	15
37643	Tennessee	Carter County	15.4	14
37601	Tennessee	Washington County	13.2	12
37615	Tennessee	Washington County	11.0	10
37659	Tennessee	Washington County	6.6	6
37658	Tennessee	Carter County	5.5	5
37620	Tennessee	Sullivan County	4.4	4
37660	Tennessee	Sullivan County	4.4	4
37692	Tennessee	Unicoi County	4.4	4
37745	Tennessee	Greene County	4.4	4
37664	Tennessee	Sullivan County	3.3	3
37303	Tennessee	McMinn County	3.3	3
37774	Tennessee	Loudon County	3.3	3
37686	Tennessee	Sullivan County	2.2	2
37919	Tennessee	Knox County	2.2	2

* Includes respondents reporting no ZIP code or an invalid ZIP code.

7. APPENDIX TABLES

APPENDIX A - Complete List of ZIP Codes

Table A-1. ZIP Codes, States and Counties of National Forest Survey Respondents

ZIP Code	State	County	Percent of Respondents	Survey Respondents (n)
37323	Tennessee	Bradley County	3.5	57
37312	Tennessee	Bradley County	3.4	56
37643	Tennessee	Carter County	3.2	52
37385	Tennessee	Monroe County	3.0	48
37311	Tennessee	Bradley County	2.5	41
37354	Tennessee	Monroe County	1.9	31
37604	Tennessee	Washington County	1.8	30
Unknown Origin*			1.8	29
37601	Tennessee	Washington County	1.6	26
37303	Tennessee	McMinn County	1.5	25
37650	Tennessee	Unicoi County	1.4	23
37874	Tennessee	Monroe County	1.4	22
37363	Tennessee	Hamilton County	1.4	22
37307	Tennessee	Polk County	1.3	21
37774	Tennessee	Loudon County	1.1	18
37317	Tennessee	Polk County	0.9	15
37803	Tennessee	Blount County	0.9	15
28906	North Carolina	Cherokee County	0.9	15
37620	Tennessee	Sullivan County	0.9	15
37615	Tennessee	Washington County	0.9	15
37659	Tennessee	Washington County	0.9	14
37310	Tennessee	Bradley County	0.8	13
37369	Tennessee	Polk County	0.8	13
37658	Tennessee	Carter County	0.8	13
37322	Tennessee	Meigs County	0.7	12
30736	Georgia	Catoosa County	0.7	11
37353	Tennessee	Bradley County	0.7	11
37421	Tennessee	Hamilton County	0.7	11
37331	Tennessee	McMinn County	0.7	11
Foreign Country			0.6	10
37329	Tennessee	McMinn County	0.6	10
37343	Tennessee	Hamilton County	0.6	10
37885	Tennessee	Monroe County	0.6	9
37362	Tennessee	Polk County	0.6	9
37745	Tennessee	Greene County	0.6	9
37361	Tennessee	Polk County	0.6	9
37618	Tennessee	Sullivan County	0.6	9
37692	Tennessee	Unicoi County	0.6	9
30513	Georgia	Fannin County	0.5	8
37934	Tennessee	Knox County	0.5	8

37876	Tennessee	Sevier County	0.5	8
37743	Tennessee	Greene County	0.5	8
37772	Tennessee	Loudon County	0.5	8
37415	Tennessee	Hamilton County	0.4	7
37336	Tennessee	Meigs County	0.4	7
37617	Tennessee	Sullivan County	0.4	7
37687	Tennessee	Carter County	0.4	7
37309	Tennessee	McMinn County	0.4	7
30555	Georgia	Fannin County	0.4	7
30560	Georgia	Fannin County	0.4	6
37801	Tennessee	Blount County	0.4	6
30559	Georgia	Fannin County	0.4	6
37920	Tennessee	Knox County	0.4	6
37660	Tennessee	Sullivan County	0.4	6
37664	Tennessee	Sullivan County	0.4	6
37326	Tennessee	Polk County	0.4	6
30705	Georgia	Murray County	0.3	5
37412	Tennessee	Hamilton County	0.3	5
30721	Georgia	Whitfield County	0.3	5
28607	North Carolina	Watauga County	0.3	5
37826	Tennessee	McMinn County	0.3	5
37919	Tennessee	Knox County	0.3	5
37777	Tennessee	Blount County	0.3	5
37688	Tennessee	Johnson County	0.3	5
37405	Tennessee	Hamilton County	0.3	5
37379	Tennessee	Hamilton County	0.3	5
28713	North Carolina	Swain County	0.2	4
30711	Georgia	Murray County	0.2	4
37683	Tennessee	Johnson County	0.2	4
37302	Tennessee	Hamilton County	0.2	4
37391	Tennessee	Polk County	0.2	4
37325	Tennessee	Polk County	0.2	4
37814	Tennessee	Hamblen County	0.2	4
37804	Tennessee	Blount County	0.2	4
37849	Tennessee	Knox County	0.2	4
37027	Tennessee	Williamson County	0.2	4
37716	Tennessee	Anderson County	0.2	4
37909	Tennessee	Knox County	0.2	4
37686	Tennessee	Sullivan County	0.2	4
37409	Tennessee	Hamilton County	0.2	4
37922	Tennessee	Knox County	0.2	3
37923	Tennessee	Knox County	0.2	3
37846	Tennessee	Loudon County	0.2	3
37690	Tennessee	Washington County	0.2	3
30144	Georgia	Cobb County	0.2	3
37640	Tennessee	Johnson County	0.2	3
30541	Georgia	Fannin County	0.2	3
30741	Georgia	Walker County	0.2	3
24201	Virginia	Bristol city	0.2	3
37308	Tennessee	Hamilton County	0.2	3
37742	Tennessee	Loudon County	0.2	3

28604	North Carolina	Avery County	0.2	3
37370	Tennessee	McMinn County	0.2	3
37932	Tennessee	Knox County	0.2	3
24210	Virginia	Washington County	0.2	3
37918	Tennessee	Knox County	0.2	3
37763	Tennessee	Roane County	0.2	3
35758	Alabama	Madison County	0.2	3
28801	North Carolina	Buncombe County	0.2	3
30102	Georgia	Cherokee County	0.2	3
30127	Georgia	Cobb County	0.2	3
37912	Tennessee	Knox County	0.2	3
28904	North Carolina	Clay County	0.2	3
30738	Georgia	Dade County	0.2	3
30720	Georgia	Whitfield County	0.1	2
37160	Tennessee	Bedford County	0.1	2
30120	Georgia	Bartow County	0.1	2
37818	Tennessee	Greene County	0.1	2
28622	North Carolina	Avery County	0.1	2
35622	Alabama	Morgan County	0.1	2
29464	South Carolina	Charleston County	0.1	2
32962	Florida	Indian River County	0.1	2
28684	North Carolina	Ashe County	0.1	2
30189	Georgia	Cherokee County	0.1	2
30740	Georgia	Whitfield County	0.1	2
27403	North Carolina	Guilford County	0.1	2
47331	Indiana	Fayette County	0.1	2
37066	Tennessee	Sumner County	0.1	2
28031	North Carolina	Mecklenburg County	0.1	2
30064	Georgia	Cobb County	0.1	2
46220	Indiana	Marion County	0.1	2
37374	Tennessee	Marion County	0.1	2
37644	Tennessee	Carter County	0.1	2
48602	Michigan	Saginaw County	0.1	2
35173	Alabama	Jefferson County	0.1	2
38053	Tennessee	Shelby County	0.1	2
30135	Georgia	Douglas County	0.1	2
37179	Tennessee	Williamson County	0.1	2
28740	North Carolina	Yancey County	0.1	2
24251	Virginia	Scott County	0.1	2
37377	Tennessee	Hamilton County	0.1	2
29642	South Carolina	Pickens County	0.1	2
37722	Tennessee	Cocke County	0.1	2
37342	Tennessee	Coffee County	0.1	2
30710	Georgia	Whitfield County	0.1	2
37321	Tennessee	Rhea County	0.1	2
30103	Georgia	Bartow County	0.1	2
35051	Alabama	Shelby County	0.1	2
30707	Georgia	Walker County	0.1	2
30536	Georgia	Gilmer County	0.1	2
30062	Georgia	Cobb County	0.1	2
40514	Kentucky	Fayette County	0.1	2

37771	Tennessee	Loudon County	0.1	2
30265	Georgia	Coweta County	0.1	2
37327	Tennessee	Sequatchie County	0.1	2
30224	Georgia	Spalding County	0.1	2
37398	Tennessee	Franklin County	0.1	2
37921	Tennessee	Knox County	0.1	2
37347	Tennessee	Marion County	0.1	2
30066	Georgia	Cobb County	0.1	2
37419	Tennessee	Hamilton County	0.1	2
37865	Tennessee	Sevier County	0.1	2
37931	Tennessee	Knox County	0.1	2
37174	Tennessee	Maury County	0.1	2
37380	Tennessee	Marion County	0.1	2
37821	Tennessee	Cocke County	0.1	2
37663	Tennessee	Sullivan County	0.1	2
28173	North Carolina	Union County	0.1	2
37641	Tennessee	Greene County	0.1	2
43231	Ohio	Franklin County	0.1	2
37341	Tennessee	Hamilton County	0.1	2
36575	Alabama	Mobile County	0.1	1
45830	Ohio	Putnam County	0.1	1
37681	Tennessee	Washington County	0.1	1
28777	North Carolina	Mitchell County	0.1	1
28269	North Carolina	Mecklenburg County	0.1	1
30533	Georgia	Lumpkin County	0.1	1
28601	North Carolina	Catawba County	0.1	1
36703	Alabama	Dallas County	0.1	1
65203	Missouri	Boone County	0.1	1
29456	South Carolina	Berkeley County	0.1	1
35077	Alabama	Cullman County	0.1	1
46118	Indiana	Hendricks County	0.1	1
30022	Georgia	Fulton County	0.1	1
60115	Illinois	DeKalb County	0.1	1
20211	District of Columbia	District of Columbia	0.1	1
59422	Montana	Teton County	0.1	1
37185	Tennessee	Humphreys County	0.1	1
24631	Virginia	Buchanan County	0.1	1
38801	Mississippi	Lee County	0.1	1
37873	Tennessee	Hawkins County	0.1	1
29206	South Carolina	Richland County	0.1	1
37828	Tennessee	Anderson County	0.1	1
36830	Alabama	Lee County	0.1	1
21236	Maryland	Baltimore County	0.1	1
28641	North Carolina	Burke County	0.1	1
30747	Georgia	Chattooga County	0.1	1
37175	Tennessee	Houston County	0.1	1
37917	Tennessee	Knox County	0.1	1
37721	Tennessee	Knox County	0.1	1
31901	Georgia	Muscogee County	0.1	1
28774	North Carolina	Jackson County	0.1	1
45373	Ohio	Miami County	0.1	1

35611	Alabama	Limestone County	0.1	1
37737	Tennessee	Blount County	0.1	1
30165	Georgia	Floyd County	0.1	1
46236	Indiana	Marion County	0.1	1
30028	Georgia	Forsyth County	0.1	1
48138	Michigan	Wayne County	0.1	1
34952	Florida	St. Lucie County	0.1	1
33609	Florida	Hillsborough County	0.1	1
46714	Indiana	Wells County	0.1	1
32754	Florida	Brevard County	0.1	1
38571	Tennessee	Cumberland County	0.1	1
37210	Tennessee	Davidson County	0.1	1
53563	Wisconsin	Rock County	0.1	1
18013	Pennsylvania	Northampton County	0.1	1
48446	Michigan	Lapeer County	0.1	1
30540	Georgia	Gilmer County	0.1	1
37333	Tennessee	Polk County	0.1	1
30276	Georgia	Coweta County	0.1	1
30043	Georgia	Gwinnett County	0.1	1
36068	Alabama	Autauga County	0.1	1
46140	Indiana	Hancock County	0.1	1
29620	South Carolina	Abbeville County	0.1	1
32796	Florida	Brevard County	0.1	1
30522	Georgia	Gilmer County	0.1	1
28659	North Carolina	Wilkes County	0.1	1
37090	Tennessee	Wilson County	0.1	1
30512	Georgia	Union County	0.1	1
28698	North Carolina	Watauga County	0.1	1
33461	Florida	Palm Beach County	0.1	1
36066	Alabama	Autauga County	0.1	1
80235	Colorado	Jefferson County	0.1	1
34231	Florida	Sarasota County	0.1	1
28734	North Carolina	Macon County	0.1	1
27043	North Carolina	Stokes County	0.1	1
32763	Florida	Volusia County	0.1	1
23602	Virginia	Newport News city	0.1	1
35126	Alabama	Jefferson County	0.1	1
30125	Georgia	Polk County	0.1	1
24202	Virginia	Washington County	0.1	1
46259	Indiana	Marion County	0.1	1
33594	Florida	Hillsborough County	0.1	1
55374	Minnesota	Hennepin County	0.1	1
35763	Alabama	Madison County	0.1	1
30306	Georgia	Fulton County	0.1	1
32534	Florida	Escambia County	0.1	1
61370	Illinois	La Salle County	0.1	1
23027	Virginia	Cumberland County	0.1	1
28612	North Carolina	Burke County	0.1	1
14880	New York	Allegany County	0.1	1
49829	Michigan	Delta County	0.1	1
30173	Georgia	Floyd County	0.1	1

24211	Virginia	Washington County	0.1	1
30041	Georgia	Forsyth County	0.1	1
30114	Georgia	Cherokee County	0.1	1
27893	North Carolina	Wilson County	0.1	1
49097	Michigan	Kalamazoo County	0.1	1
30161	Georgia	Floyd County	0.1	1
30314	Georgia	Fulton County	0.1	1
40502	Kentucky	Fayette County	0.1	1
29710	South Carolina	York County	0.1	1
37086	Tennessee	Rutherford County	0.1	1
37402	Tennessee	Hamilton County	0.1	1
14424	New York	Ontario County	0.1	1
15825	Pennsylvania	Jefferson County	0.1	1
28806	North Carolina	Buncombe County	0.1	1
37760	Tennessee	Jefferson County	0.1	1
30628	Georgia	Madison County	0.1	1
38133	Tennessee	Shelby County	0.1	1
42141	Kentucky	Barren County	0.1	1
33527	Florida	Hillsborough County	0.1	1
74352	Oklahoma	Mayes County	0.1	1
37642	Tennessee	Hawkins County	0.1	1
38024	Tennessee	Dyer County	0.1	1
30134	Georgia	Douglas County	0.1	1
48161	Michigan	Monroe County	0.1	1
35444	Alabama	Tuscaloosa County	0.1	1
42025	Kentucky	Marshall County	0.1	1
28214	North Carolina	Mecklenburg County	0.1	1
30506	Georgia	Hall County	0.1	1
70420	Louisiana	St. Tammany Parish	0.1	1
75068	Texas	Denton County	0.1	1
52302	Iowa	Linn County	0.1	1
32505	Florida	Escambia County	0.1	1
30666	Georgia	Barrow County	0.1	1
28763	North Carolina	Macon County	0.1	1
42653	Kentucky	McCreary County	0.1	1
46628	Indiana	St. Joseph County	0.1	1
72611	Arkansas	Boone County	0.1	1
75647	Texas	Gregg County	0.1	1
37301	Tennessee	Grundy County	0.1	1
30024	Georgia	Gwinnett County	0.1	1
37657	Tennessee	Unicoi County	0.1	1
42701	Kentucky	Hardin County	0.1	1
30650	Georgia	Morgan County	0.1	1
35802	Alabama	Madison County	0.1	1
28902	North Carolina	Clay County	0.1	1
28694	North Carolina	Ashe County	0.1	1
33050	Florida	Monroe County	0.1	1
37314	Tennessee	Monroe County	0.1	1
33444	Florida	Palm Beach County	0.1	1
30755	Georgia	Whitfield County	0.1	1
28320	North Carolina	Bladen County	0.1	1

28018	North Carolina	Rutherford County	0.1	1
35010	Alabama	Tallapoosa County	0.1	1
74437	Oklahoma	Okmulgee County	0.1	1
19312	Pennsylvania	Chester County	0.1	1
77084	Texas	Harris County	0.1	1
37665	Tennessee	Sullivan County	0.1	1
37680	Tennessee	Johnson County	0.1	1
37705	Tennessee	Anderson County	0.1	1
32966	Florida	Indian River County	0.1	1
37128	Tennessee	Rutherford County	0.1	1
37330	Tennessee	Franklin County	0.1	1
16141	Pennsylvania	Beaver County	0.1	1
41018	Kentucky	Kenton County	0.1	1
39051	Mississippi	Leake County	0.1	1
85641	Arizona	Pima County	0.1	1
32817	Florida	Orange County	0.1	1
37830	Tennessee	Anderson County	0.1	1
37355	Tennessee	Coffee County	0.1	1
46835	Indiana	Allen County	0.1	1
30582	Georgia	Towns County	0.1	1
30501	Georgia	Hall County	0.1	1
28624	North Carolina	Wilkes County	0.1	1
28760	North Carolina	Henderson County	0.1	1
21791	Maryland	Carroll County	0.1	1
35634	Alabama	Lauderdale County	0.1	1
28901	North Carolina	Cherokee County	0.1	1
45459	Ohio	Montgomery County	0.1	1
28778	North Carolina	Buncombe County	0.1	1
29696	South Carolina	Oconee County	0.1	1
31033	Georgia	Jones County	0.1	1
35458	Alabama	Tuscaloosa County	0.1	1
30044	Georgia	Gwinnett County	0.1	1
33541	Florida	Pasco County	0.1	1
28205	North Carolina	Mecklenburg County	0.1	1
19530	Pennsylvania	Berks County	0.1	1
37662	Tennessee	Sullivan County	0.1	1
34450	Florida	Citrus County	0.1	1
37214	Tennessee	Davidson County	0.1	1
60185	Illinois	DuPage County	0.1	1
72034	Arkansas	Faulkner County	0.1	1
27028	North Carolina	Davie County	0.1	1
45439	Ohio	Montgomery County	0.1	1
28640	North Carolina	Ashe County	0.1	1
37810	Tennessee	Greene County	0.1	1
35016	Alabama	Marshall County	0.1	1
60542	Illinois	Kane County	0.1	1
30542	Georgia	Hall County	0.1	1
35443	Alabama	Greene County	0.1	1
38138	Tennessee	Shelby County	0.1	1
71251	Louisiana	Jackson Parish	0.1	1
23188	Virginia	James City County	0.1	1

37216	Tennessee	Davidson County	0.1	1
21901	Maryland	Cecil County	0.1	1
72022	Arkansas	Saline County	0.1	1
27377	North Carolina	Guilford County	0.1	1
43605	Ohio	Lucas County	0.1	1
20874	Maryland	Montgomery County	0.1	1
75219	Texas	Dallas County	0.1	1
37221	Tennessee	Davidson County	0.1	1
47714	Indiana	Vanderburgh County	0.1	1
35769	Alabama	Jackson County	0.1	1
27537	North Carolina	Vance County	0.1	1
38565	Tennessee	Fentress County	0.1	1
37087	Tennessee	Wilson County	0.1	1
46036	Indiana	Madison County	0.1	1
27009	North Carolina	Forsyth County	0.1	1
50266	Iowa	Polk County	0.1	1
27106	North Carolina	Forsyth County	0.1	1
23881	Virginia	Surry County	0.1	1
32303	Florida	Leon County	0.1	1
37338	Tennessee	Rhea County	0.1	1
39218	Mississippi	Rankin County	0.1	1
74017	Oklahoma	Rogers County	0.1	1
24503	Virginia	Lynchburg city	0.1	1
30329	Georgia	DeKalb County	0.1	1
38055	Tennessee	Shelby County	0.1	1
60093	Illinois	Cook County	0.1	1
14127	New York	Erie County	0.1	1
37064	Tennessee	Williamson County	0.1	1
27591	North Carolina	Wake County	0.1	1
52175	Iowa	Fayette County	0.1	1
24209	Virginia	Bristol city	0.1	1
37841	Tennessee	Scott County	0.1	1
41030	Kentucky	Grant County	0.1	1
03470	New Hampshire	Cheshire County	0.1	1
27311	North Carolina	Caswell County	0.1	1
32958	Florida	Indian River County	0.1	1
30750	Georgia	Walker County	0.1	1
28615	North Carolina	Ashe County	0.1	1
33578	Florida	Hillsborough County	0.1	1
36301	Alabama	Houston County	0.1	1
30564	Georgia	Hall County	0.1	1
35951	Alabama	Marshall County	0.1	1
20009	District of Columbia	District of Columbia	0.1	1
33066	Florida	Broward County	0.1	1
53027	Wisconsin	Washington County	0.1	1
37082	Tennessee	Cheatham County	0.1	1
67601	Kansas	Ellis County	0.1	1
28715	North Carolina	Buncombe County	0.1	1
41051	Kentucky	Kenton County	0.1	1
30107	Georgia	Cherokee County	0.1	1
35045	Alabama	Chilton County	0.1	1

33710	Florida	Pinellas County	0.1	1
20690	Maryland	St. Marys County	0.1	1
28376	North Carolina	Hoke County	0.1	1
28729	North Carolina	Henderson County	0.1	1
30642	Georgia	Greene County	0.1	1
40272	Kentucky	Jefferson County	0.1	1
37381	Tennessee	Rhea County	0.1	1
37880	Tennessee	Meigs County	0.1	1
37779	Tennessee	Union County	0.1	1
29845	South Carolina	McCormick County	0.1	1
34695	Florida	Pinellas County	0.1	1
37129	Tennessee	Rutherford County	0.1	1
34293	Florida	Sarasota County	0.1	1
28043	North Carolina	Rutherford County	0.1	1
32113	Florida	Marion County	0.1	1
34957	Florida	Martin County	0.1	1
28905	North Carolina	Cherokee County	0.1	1
48848	Michigan	Shiawassee County	0.1	1
28262	North Carolina	Mecklenburg County	0.1	1
01760	Massachusetts	Middlesex County	0.1	1
27313	North Carolina	Guilford County	0.1	1
37748	Tennessee	Roane County	0.1	1
37854	Tennessee	Roane County	0.1	1
35960	Alabama	Cherokee County	0.1	1
37862	Tennessee	Sevier County	0.1	1
63005	Missouri	St. Louis County	0.1	1
24382	Virginia	Wythe County	0.1	1
24920	West Virginia	Pocahontas County	0.1	1
40207	Kentucky	Jefferson County	0.1	1
35950	Alabama	Marshall County	0.1	1
75098	Texas	Collin County	0.1	1
28732	North Carolina	Henderson County	0.1	1
80440	Colorado	Park County	0.1	1
37416	Tennessee	Hamilton County	0.1	1
08012	New Jersey	Camden County	0.1	1
48146	Michigan	Wayne County	0.1	1
30067	Georgia	Cobb County	0.1	1
32750	Florida	Seminole County	0.1	1
38501	Tennessee	Putnam County	0.1	1
32963	Florida	Indian River County	0.1	1
41042	Kentucky	Boone County	0.1	1
21128	Maryland	Baltimore County	0.1	1
24270	Virginia	Washington County	0.1	1
23601	Virginia	Newport News city	0.1	1
43065	Ohio	Delaware County	0.1	1
37031	Tennessee	Sumner County	0.1	1
74030	Oklahoma	Creek County	0.1	1
29715	South Carolina	York County	0.1	1
37840	Tennessee	Roane County	0.1	1
33408	Florida	Palm Beach County	0.1	1
35071	Alabama	Jefferson County	0.1	1

30507	Georgia	Hall County	0.1	1
35209	Alabama	Jefferson County	0.1	1
35661	Alabama	Colbert County	0.1	1
71270	Louisiana	Lincoln Parish	0.1	1
33510	Florida	Hillsborough County	0.1	1
32164	Florida	Flagler County	0.1	1
37335	Tennessee	Lincoln County	0.1	1
33860	Florida	Polk County	0.1	1
24368	Virginia	Wythe County	0.1	1
30547	Georgia	Banks County	0.1	1
37938	Tennessee	Knox County	0.1	1
76065	Texas	Ellis County	0.1	1
37825	Tennessee	Claiborne County	0.1	1
30009	Georgia	Fulton County	0.1	1
28754	North Carolina	Madison County	0.1	1
28657	North Carolina	Avery County	0.1	1
70433	Louisiana	St. Tammany Parish	0.1	1
08052	New Jersey	Burlington County	0.1	1
32778	Florida	Lake County	0.1	1
37315	Tennessee	Hamilton County	0.1	1
48105	Michigan	Washtenaw County	0.1	1
20533	District of Columbia	District of Columbia	0.1	1
83704	Idaho	Ada County	0.1	1
32159	Florida	Lake County	0.1	1
37738	Tennessee	Sevier County	0.1	1
37122	Tennessee	Wilson County	0.1	1
37766	Tennessee	Campbell County	0.1	1
35980	Alabama	Marshall County	0.1	1
62010	Illinois	Madison County	0.1	1
35175	Alabama	Marshall County	0.1	1
33931	Florida	Lee County	0.1	1
49424	Michigan	Ottawa County	0.1	1
28804	North Carolina	Buncombe County	0.1	1
34117	Florida	Collier County	0.1	1
70555	Louisiana	Vermilion Parish	0.1	1
33830	Florida	Polk County	0.1	1
35242	Alabama	Shelby County	0.1	1
01907	Massachusetts	Essex County	0.1	1
37694	Tennessee	Carter County	0.1	1
37069	Tennessee	Williamson County	0.1	1
40324	Kentucky	Scott County	0.1	1
80917	Colorado	El Paso County	0.1	1
30182	Georgia	Haralson County	0.1	1
10036	New York	New York County	0.1	1
28617	North Carolina	Ashe County	0.1	1
72601	Arkansas	Boone County	0.1	1
38587	Tennessee	White County	0.1	1
28167	North Carolina	Rutherford County	0.1	1
72401	Arkansas	Craighead County	0.1	1
28516	North Carolina	Carteret County	0.1	1
39556	Mississippi	Hancock County	0.1	1

61704	Illinois	McLean County	0.1	1
37055	Tennessee	Dickson County	0.1	1
30084	Georgia	DeKalb County	0.1	1
30030	Georgia	DeKalb County	0.1	1
27607	North Carolina	Wake County	0.1	1
20165	Virginia	Loudoun County	0.1	1
27615	North Carolina	Wake County	0.1	1
70726	Louisiana	Livingston Parish	0.1	1
48312	Michigan	Macomb County	0.1	1
37411	Tennessee	Hamilton County	0.1	1
37110	Tennessee	Warren County	0.1	1
30143	Georgia	Pickens County	0.1	1
30677	Georgia	Oconee County	0.1	1
49507	Michigan	Kent County	0.1	1
37924	Tennessee	Knox County	0.1	1
35613	Alabama	Limestone County	0.1	1
33604	Florida	Hillsborough County	0.1	1
37313	Tennessee	Grundy County	0.1	1
28642	North Carolina	Yadkin County	0.1	1
28655	North Carolina	Burke County	0.1	1
73170	Oklahoma	Cleveland County	0.1	1
37842	Tennessee	Cumberland County	0.1	1
28705	North Carolina	Mitchell County	0.1	1
24628	Virginia	Buchanan County	0.1	1
30605	Georgia	Clarke County	0.1	1
37205	Tennessee	Davidson County	0.1	1
22151	Virginia	Fairfax County	0.1	1
31794	Georgia	Tift County	0.1	1
38658	Mississippi	Panola County	0.1	1
30078	Georgia	Gwinnett County	0.1	1
28709	North Carolina	Buncombe County	0.1	1
33486	Florida	Palm Beach County	0.1	1
33615	Florida	Hillsborough County	0.1	1
15360	Pennsylvania	Washington County	0.1	1
75208	Texas	Dallas County	0.1	1
39455	Mississippi	Lamar County	0.1	1
35616	Alabama	Colbert County	0.1	1
32531	Florida	Okaloosa County	0.1	1
48042	Michigan	Macomb County	0.1	1
29662	South Carolina	Greenville County	0.1	1
70737	Louisiana	Ascension Parish	0.1	1
37372	Tennessee	Franklin County	0.1	1
28124	North Carolina	Cabarrus County	0.1	1
40214	Kentucky	Jefferson County	0.1	1
34119	Florida	Collier County	0.1	1
45714	Ohio	Washington County	0.1	1
28721	North Carolina	Haywood County	0.1	1
85306	Arizona	Maricopa County	0.1	1
30021	Georgia	DeKalb County	0.1	1
52601	Iowa	Des Moines County	0.1	1
37616	Tennessee	Greene County	0.1	1

34607	Florida	Hernando County	0.1	1
30033	Georgia	DeKalb County	0.1	1
35811	Alabama	Madison County	0.1	1
32773	Florida	Seminole County	0.1	1
30725	Georgia	Walker County	0.1	1
46510	Indiana	Kosciusko County	0.1	1
37882	Tennessee	Blount County	0.1	1
24361	Virginia	Washington County	0.1	1
37075	Tennessee	Sumner County	0.1	1
37404	Tennessee	Hamilton County	0.1	1
37843	Tennessee	Cocke County	0.1	1
29630	South Carolina	Pickens County	0.1	1
32601	Florida	Alachua County	0.1	1
34787	Florida	Orange County	0.1	1
32550	Florida	Walton County	0.1	1
89103	Nevada	Clark County	0.1	1
32807	Florida	Orange County	0.1	1
37820	Tennessee	Jefferson County	0.1	1
29412	South Carolina	Charleston County	0.1	1
30521	Georgia	Franklin County	0.1	1
70810	Louisiana	East Baton Rouge Parish	0.1	1
30075	Georgia	Fulton County	0.1	1
58104	North Dakota	Cass County	0.1	1
77469	Texas	Fort Bend County	0.1	1
08872	New Jersey	Middlesex County	0.1	1
30327	Georgia	Fulton County	0.1	1
30633	Georgia	Madison County	0.1	1
46052	Indiana	Boone County	0.1	1
36742	Alabama	Marengo County	0.1	1
28704	North Carolina	Buncombe County	0.1	1
21211	Maryland	Baltimore city	0.1	1
30223	Georgia	Spalding County	0.1	1
05677	Vermont	Washington County	0.1	1
24602	Virginia	Tazewell County	0.1	1
30116	Georgia	Carroll County	0.1	1
38583	Tennessee	White County	0.1	1
38504	Tennessee	Fentress County	0.1	1
37013	Tennessee	Davidson County	0.1	1
08620	New Jersey	Mercer County	0.1	1
28753	North Carolina	Madison County	0.1	1
32955	Florida	Brevard County	0.1	1
30076	Georgia	Fulton County	0.1	1
45103	Ohio	Clermont County	0.1	1
01821	Massachusetts	Middlesex County	0.1	1
30739	Georgia	Walker County	0.1	1
35750	Alabama	Madison County	0.1	1
28787	North Carolina	Buncombe County	0.1	1
24228	Virginia	Dickenson County	0.1	1
42086	Kentucky	McCracken County	0.1	1
28105	North Carolina	Mecklenburg County	0.1	1

* Includes respondents reporting no ZIP code or an invalid ZIP code .

APPENDIX B - Detailed Satisfaction Results

Table B-1. Satisfaction for Visits to Day Use Developed Sites

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	1.5	7.7	10.7	24.9	55.2	4.2	4.5	99
Developed Facilities	0.0	0.0	7.2	14.5	78.3	4.7	4.4	117
Condition of Environment	0.0	0.0	0.3	12.8	87.0	4.9	4.7	147
Employee Helpfulness	2.3	13.5	11.3	2.8	70.2	4.3	3.6	45
Interpretive Displays	3.1	0.3	14.1	18.5	64.0	4.4	3.3	79
Parking Availability	0.0	1.1	4.5	21.4	73.0	4.7	4.4	146
Parking Lot Condition	0.0	2.0	3.0	16.5	78.5	4.7	4.3	148
Rec. Info. Availability	2.6	3.3	10.0	20.2	63.9	4.4	4.1	119
Road Condition	0.4	4.2	5.3	27.0	63.0	4.5	4.3	95
Feeling of Satefy	0.0	1.5	2.7	6.8	88.9	4.8	4.7	148
Scenery	0.0	0.0	0.5	4.8	94.7	4.9	4.6	147
Signage Adequacy	1.6	2.8	9.0	14.1	72.5	4.5	4.0	142
Trail Condition	0.0	2.9	2.0	29.7	65.3	4.6	4.1	84
Value for Fee Paid	0.0	2.3	4.3	6.0	87.4	4.8	4.4	120

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

Table B-2. Satisfaction for Visits to Overnight Developed Sites

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	4.9	1.1	13.1	23.1	57.7	4.3	4.8	72
Developed Facilities	0.8	0.0	6.0	14.0	79.3	4.7	4.5	77
Condition of Environment	0.0	0.9	6.7	5.3	87.0	4.8	4.9	92
Employee Helpfulness	0.0	0.0	1.2	3.9	94.9	4.9	4.7	45
Interpretive Displays	0.0	0.0	12.2	20.0	67.8	4.6	4.1	57
Parking Availability	0.0	0.0	8.6	17.8	73.6	4.7	4.4	83
Parking Lot Condition	0.0	0.0	3.7	16.3	80.1	4.8	4.3	75
Rec. Info. Availability	0.0	0.0	12.3	18.2	69.6	4.6	4.5	72
Road Condition	0.0	1.3	1.0	15.8	81.9	4.8	4.5	61
Feeling of Satefy	0.0	0.0	3.2	5.9	91.0	4.9	4.9	92
Scenery	0.0	0.0	2.1	4.6	93.3	4.9	4.9	92
Signage Adequacy	0.0	0.0	2.4	15.3	82.3	4.8	4.6	86
Trail Condition	0.0	0.0	3.9	13.9	82.1	4.8	4.2	39
Value for Fee Paid	0.0	0.0	3.6	6.4	90.0	4.9	4.8	69

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

Table B-3. Satisfaction for Visits to Undeveloped Areas (GFAs)

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness	8.5	9.7	11.4	19.8	50.7	3.9	4.4	70
Developed Facilities	0.0	2.3	2.4	14.4	80.9	4.7	4.3	80
Condition of Environment	0.0	1.1	1.6	8.9	88.4	4.8	4.8	154
Employee Helpfulness	0.0	5.0	1.2	2.4	91.3	4.8	4.3	37
Interpretive Displays	2.4	2.4	9.0	17.8	68.3	4.5	3.8	73
Parking Availability	1.3	6.9	3.3	18.0	70.5	4.5	4.3	125
Parking Lot Condition	1.7	0.3	2.3	20.5	75.2	4.7	4.1	125
Rec. Info. Availability	2.8	1.5	7.6	16.8	71.4	4.5	4.2	123
Road Condition	1.7	3.3	7.4	24.0	63.5	4.4	4.3	94
Feeling of Satefy	0.0	0.0	0.3	9.9	89.8	4.9	4.7	149
Scenery	0.0	0.0	1.7	3.3	95.1	4.9	4.7	156
Signage Adequacy	2.8	5.2	7.4	16.6	68.0	4.4	4.2	139
Trail Condition	2.0	2.0	7.7	15.4	72.9	4.6	4.4	80
Value for Fee Paid	0.0	0.0	8.4	13.1	78.5	4.7	4.4	47

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

Table B-4. Satisfaction for Visits to Designated Wilderness*

Satisfaction Element	Percent Rating Satisfaction as:					Mean Rating§	Mean Importance†	No. Obs‡
	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied			
Restroom Cleanliness								5
Developed Facilities	0.0	0.0	5.9	48.9	45.2	4.4	4.3	12
Condition of Environment	0.0	1.1	0.0	6.1	92.8	4.9	4.9	56
Employee Helpfulness								7
Interpretive Displays	24.5	16.1	12.9	20.1	26.5	3.1	3.6	23
Parking Availability	4.7	15.7	10.2	16.4	53.0	4.0	4.5	52
Parking Lot Condition	4.8	5.6	4.4	22.8	62.4	4.3	4.4	52
Rec. Info. Availability	1.4	6.5	20.8	38.2	33.2	4.0	4.1	44
Road Condition	0.0	3.3	14.5	23.3	58.9	4.4	4.3	40
Feeling of Satefy	0.0	0.0	2.9	8.1	88.9	4.9	4.6	55
Scenery	0.0	0.0	0.0	1.1	98.9	5.0	4.8	56
Signage Adequacy	1.2	16.0	13.6	16.7	52.5	4.0	4.3	52
Trail Condition	0.0	2.3	5.3	12.4	80.1	4.7	4.7	52
Value for Fee Paid								6

NOTE: The data was not reported for items with fewer than 10 responses. Satisfaction and Importance were asked as two separate questions so one of these may have 10 responses even though the other does not.

§ Scale: Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Neither Satisfied nor Dissatisfied = 3, Somewhat Satisfied = 4, Very Satisfied = 5

† Scale: Not Important = 1, Somewhat Important = 2, Moderately Important = 3, Important = 4, Very Important = 5

‡ No. Obs is the number of survey respondents who responded to this item.

* Data supplied is for all Designated Wilderness on the forest combined. Data was not collected for satisfaction for each individual Wilderness on the forest.