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Spending Patterns of Outdoor Recreation Visitors to National Forests

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Abstract

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The economic linkages between national forests and surrounding areas are one of the important ways public lands contribute to the well-being of private individuals and communities. One way national forests contribute to the economies of surrounding communities is by attracting recreation visitors who, as part of their trip, spend money in communities on the peripheries of national forests. We use survey data collected from visitors to all forest and grasslands in the National Forest System to estimate the average spending per trip of national forest recreation visitors engaged in various types of recreation trips and activities. Average spending of national forest visitors ranges from about $36 per party per trip for local residents on day trips to more than $740 per party per trip for visitors downhill skiing or snowboarding on national forest lands and staying overnight off forest in local areas. We report key parameters to complete economic contribution analysis for individual national forests and for the entire National Forest System.

Keywords: Recreation spending, economic impact, National Visitor Use Monitoring.

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Introduction

Recreation is the most common way that people personally interact with land managed by the U.S. Forest Service. The national forests and grasslands of the United States receive about 148 million visits annually (USDA FS 2016). Expenditures on recreation trips in gateway communities by visitors to the National Forest System (NFS) is an important contributor to the economies of many local communities (White et al. 2016). This report updates previous figures on the average spending of national forest recreation visitors (Stynes and White 2005a, 2005b; White et al. 2013). The data used in this update come from the 120 administrative NFS units sampled in federal fiscal years 2010 through 2015 under the U.S. Department of Agriculture, Forest Service's National Visitor Use Monitoring (NVUM) program (Zarnoch et al. 2011). In this report, we provide updated estimates of average recreation visitor spending, the share of recreation visits by trip type, average people per party, and other visit characteristics to assist in economic analyses of outdoor recreation use.

Recreation visitor spending is an important contribution to many local economies.

We discuss the analytical considerations in developing the spending profiles; present the national-level segment shares; and report the average, high, and low spending averages for seven trip-type segments (referred to as the "Basic 7" in round 1 of NVUM). In addition, we present spending averages for downhill skiers/snowboarders and for a more discrete set of lodging-based segments.

In appendix 1, we provide guidance on how to apply the spending profiles for economic impact or contribution analysis with an example application for the Mount Hood National Forest. Appendix 2 contains additional tables that can serve as inputs for economic analyses at the forest level. In appendix 3, we report on the recreation behavior and spending patterns of wildlife-related visitors for use in analyses focused on that user group. Appendix 4 contains spending profiles and parameters necessary for activity-specific analyses.

Background on NVUM Surveys

The objective of the NVUM program is to estimate the number of recreation visits to the NFS (Zarnoch et al. 2011). To achieve this objective, a subset of national forests in each Forest Service region is sampled yearly with each administrative unit (typically an administrative national forest) in the NFS sampled once every 5 years. The NVUM program gathers information on visitor and trip characteristics in addition to data necessary to estimate visitation. A separate economics survey administered to roughly a third of those sampled gathered spending information that provides the basis for development of the spending profiles reported here. The NVUM survey approach involves a sample of recreation visits to national forests.

A national forest visit is defined as one person recreating on national forest land for an indeterminate period of time that ends when the individual leaves the national forest to spend the night off national forest lands.

Pertinent Survey Questions

The results reported here are drawn from a subset of the questions on the NVUM survey instrument. To classify visitors into groups for economic analysis, we rely on questions related to the distance traveled to the site; if nights away from home were spent in the local area; the different types, if any, of lodging used; and the primary purpose for the trip away from home. Wording of survey questions and directions to surveyors for administration of the survey are available in the 2007 National Visitor Use Monitoring Handbook (USDA FS 2007: 37).

For visitor spending, NVUM respondents are asked to report the spending of their travel party (generally those traveling in the same vehicle) within 50 mi of the interview site. Spending is collected for 10 expenditure categories (e.g., money spent in restaurants/bars, for gas and oil, for souvenirs, and for motels/hotels). Respondents are asked to only report spending in the local area of the recreation site that is related to the current trip—both expenses already made and those anticipated. Visitors are allowed to opt out of reporting expenses altogether if they cannot recall their spending or prefer to not report it. Respondents opting out of reporting their spending were excluded when calculating average trip spending. Some respondents report spending in some categories but leave other categories blank. Field interviewers are instructed to not leave spending categories blank and confirm spending is zero. However, in cases where spending in some categories is reported and other categories are left blank, the blanks were filled with zeros and the respondent's spending was included in the analysis.

NVUM Sample

National forest visitors were sampled at both designated recreation sites (e.g., picnic areas, campgrounds, and visitor centers on national forest lands) and in the general forest area of individual national forests. A stratified sampling scheme was employed based upon the expected visitation (very high, high, medium, or low last-exiting recreation traffic) for a given location on a given day (termed a "site day"). Individual dates and locations selected for recreation sampling were termed "sample days." Site days are the total collection of all potential days and locations in the population; sample days are a subset of these site days. On sample days, individuals leaving the recreation site that was selected for sampling who voluntarily stopped at the interview point and who stated they were recreating on

the national forest and leaving the site (or leaving the national forest at general forest area sites) that day completed an NVUM survey. About 24 forests were surveyed each year in the 5 years of sampling included in this study (table 1). More than 96,000 individuals sampled on national forests agreed to participate in the survey; about 30,000 completed the economic supplemental survey requested from about every third person.

More than 96,000 individuals sampled on national forests agreed to participate in the survey.

Table 1—National forests sampled and number of respondents in the 5 years of Round 3 of National Visitor Use Monitoring

	2010	2011	2012	2013	2014	Total
National forests sampled	23	25	22	25	25	120
Basic survey respondents	22,096	18,236	21,714	16,915	17,691	96,652
Economic survey respondents	6,953	5,747	6,786	5,125	5,298	29,909

Spending Pro ile Estimation

Analysis Considerations

The spending analysis involved several decisions related to (1) identifying local visitors, (2) identifying outlier and contaminant observations, (3) identifying visitors whose primary trip purpose was something other than recreating on a national forest, (4) determining the appropriate weights to place on individual observations, and (5) identifying recreation visits where the primary purpose was downhill skiing/snowboarding or wildlife-related recreation.

Local visitors—
Locals were defined as those claiming to have traveled 60 mi or less from home to the recreation interview location. Previous analysis (Stynes and White 2005a) found that a travel distance of between 50 and 60 mi approximated a ZIP code proximity to a national forest boundary of 30 straight-line miles.

Outliers and contaminants—
The criteria adopted here to identify outliers are meant to reduce the likelihood of including both contaminant observations and true outliers when estimating spending averages. Contaminants are observations that do not belong to the population or are erroneous observations. Recreation visitors were asked to report only expenses that occurred within 50 mi of the interview site and that were related to the current recreation trip. An example of a contaminant would be a survey observation that included spending that actually occurred outside the 50-mi radius around the recreation site or on another recreation trip.

An outlier is an observation that does belong to the population under study but has undue influence on the estimation of the sample mean given the size of the

sample. For example, some day visitors may spend $800 during a recreation trip to a national forest, but such spending is uncommon, and the vast majority of visitors spend substantially less or nothing at all (Stynes and White 2006). When sample sizes are small, outlier observations can significantly influence the estimate of the sample mean. See Stynes and White (2006) for additional discussion of outliers and contaminants in the context of measuring recreation visitor spending.

Three rules—related to length of stay, party size, and total spending—were developed to remove likely outliers and contaminants. Collectively, these rules excluded 1,515 cases from this analysis (table 2). Respondents stating that they stayed overnight away from home in local forest areas for more than 30 nights were excluded. Rylander et al. (1995) found that individuals on long trips have greater difficulty in accurately recalling trip spending. Respondents recreating in parties of eight or more individuals were excluded (about 1 percent of all respondents) owing to likely problems in estimating expenses for everyone in the party. Finally, respondents that reported spending $500 or more per night or a total of $500 or more in sporting goods expenditures in local forest areas were also excluded. Some of these respondents are likely contaminants and others are true outliers that would influence the estimates of sample means. Omitting cases with high reported expenditures on sporting goods was designed to omit purchases of durable goods. See appendix D of White and Stynes 2010a for additional analysis on the criteria used in defining all outliers.

Table 2—Cases excluded and used in developing spending averages, by aggregate recreation activity group

	Downhill skiing	Wildlife related	General recreation	Total
Economic survey respondents	2,024	3,819	24,066	29,909
Respondents excluded as outliers and contaminants:				
• Nights in the local area >30	11	31	140	182
• People per vehicle >8	35	23	362	420
• Spending per night >$500 or sporting goods expenditures >$500	141	100	672	913
Total	187	154	1,174	1,515
Missing distance traveled[a]	2	9	54	65
Refused to report expenses	67	267	1,356	1,690
Could not recall expenses	81	266	1,741	2,088
Total for economic analysis	1,687	3,123	19,741	24,551

[a] In total, 86 cases had missing travel distances. Of these, nine were removed as outliers and appear in those totals. Of the remaining 77 cases, 12 were classified into the nonprimary segment and included in analyses. The final 65 cases missing a travel distance were excluded from analyses involving the trip segments.

Travel distance is used in the classification of visitors and 65 cases that did not include a reported travel distance and were not foreign visitors or "nonprimary" visitors (see below) were removed. Nearly 1,700 respondents (6 percent of economic respondents not otherwise removed) stated that they did not wish to report their expenses. These cases were excluded from calculating spending averages. Similarly, about 2,100 respondents (7 percent of economic respondents not otherwise removed) stated they could not recall their expenses; these cases were also removed from calculation of the spending averages.

Trip purpose—
Those claiming to be traveling away from home primarily for the purpose of recreating on a national forest are classified as "primary purpose" visitors. Visitors stating that their primary reason for being away from home was to recreate somewhere other than a national forest, visit family/friends, for business, or for some other reason are classified as "nonprimary" visitors. The spending of individuals in this "nonprimary" group is typically excluded from economic contribution and impact analyses (Crompton et al. 2001, Watson et al. 2007).

Weighting scheme—
Survey data collected from a random sample of people are often weighted to improve the representativeness of the sample to the population of people covered by the sample. There are two weighting schemes used in NVUM. The first, exposure weighting, is used to correct the collected sample for overrepresentation of those who recreate at multiple sites during the visit. The NVUM sample days (days and locations for sampling) are randomly selected in advance of the sample year. To have the opportunity to participate in sampling, a recreationist must "correctly choose" to recreate at the specific site undergoing NVUM sampling. Most national forest visitors recreate at just one site on their visit—meaning those visitors have only one chance to "correctly choose" a site undergoing NVUM sampling. Visitors who recreate at more than one site have more than one chance at selecting an NVUM sampling site to recreate. Consequently, those who visit more recreation sites during their visit are overrepresented in an unweighted sample. Exposure weighting is important because those who recreate at multiple sites may have different recreation behavior than visitors who recreate at just one site. The weight is calculated as the inverse of the total number of sites visited on a national forest visit. An undeveloped area and a wilderness area on a national forest are each counted as one site.

The second weighting scheme used in NVUM is national visit expansion weighting (referred to here simply as case weights). Under NVUM, sites and areas

of national forests are classified into strata for sampling. For the most part, each NVUM stratum receives roughly the same number of sample days. However, the strata differ in the amount of recreation use they experience. That differing recreation use means that the ratio of individuals sampled to the amount of recreation use differs across the strata. In a simplified example, stratum A may have yielded five visitor interviews and have the recreation use of 1,000 visits. Stratum B may have yielded 10 visitor interviews and have the recreation use of 5,000 visits. Stratum B has five times the recreation use of stratum A, but only twice the number of recreation interviews. The simple numbers of visitors sampled in strata A and B do not reflect the pattern of use for those strata. The case weights applied to respondents in each stratum adjusts the sample to be representative of the amount of use in each stratum. In this simplified example, the case weight applied to each respondent in stratum A would be 200 (1,000 visits/five interviews). The case weight assigned to each respondent sampled in stratum B would be 500 (5,000 visits/10 interviews). Although not shown in this simplified example, the actual case weights also incorporate the expansion weights described above.

National Visitor Use Monitoring relies on a complex stratified, clustered, sampling design to estimate recreation use and characterize visitors. For estimating visitor spending, we treat the sample as if it is a simple random sample and adjust the sample for overrepresentation of those visiting multiple sites using the exposure weights. We estimate the variance of the spending averages assuming a simple random sample rather than stratified cluster design. For the remaining parameters estimated in this report, we treated the sample as coming from the full stratified cluster design and used the case weights in developing estimates. We show only the point estimates for these parameters and do not report the variance or confidence interval.

Downhill skiers/snowboarders spend more during recreation trips than individuals engaged in other recreation activities.

Downhill skiing/snowboarding and wildlife-related recreation—Recreation visits by individuals whose primary recreation activity is downhill skiing or snowboarding account for about 16 percent of all national forest visits (USDA FS 20165). On average, downhill skiers/snowboarders spend more during recreation trips than individuals engaged in other recreation activities. If left in the general recreation sample, downhill skiers/snowboarders inflate the general trip spending averages. In particular, spending in the “entry fees” and “recreation and entertainment” categories is very sensitive to the inclusion of downhill skiers/snowboarders. Given how their spending can influence general recreation spending averages, we have excluded downhill skiers/snowboarders when estimating the general spending averages and developed separate spending profiles for downhill skiers /snowboarders. The skier/snowboarder profiles can be used when conducting

economic analyses related to downhill skiing/snowboarding recreation. The basic profiles, omitting downhill skiers/snowboarders, apply to recreation that is not downhill skiing/snowboarding.

The Forest Service has a variety of policies and management efforts aimed at conserving wildlife habitat and wildlife populations. The agency is regularly asked to report outcomes related to these investments. The spending patterns and characteristics for recreation that are wildlife related (hunting, fishing, viewing wildlife) are reported separately for some analyses in the main body of this report and in appendix 3.

Visitor Segments

A primary objective of the spending analysis is to estimate spending profiles for a set of meaningful segments of recreation visitors to national forests. To be useful, the segments must (1) be identifiable from the NVUM survey variables, (2) help to explain differences in spending across different applications, (3) be large enough to obtain adequate sample sizes in the survey, and (4) be meaningful to anticipated recreation management and policy applications.

Recreation visits are classified into one of seven trip-type segments (also referred to as the "Basic 7"):

- Nonlocal day trips: nonlocal residents on day trips to national forests
- Nonlocal OVN-NF: nonlocal residents staying overnight on national forests
- Nonlocal OVN: nonlocal residents staying overnight off national forests in local areas
- Local day trips: local residents on day trips to national forests
- Local OVN-NF: local residents staying overnight on national forests
- Local-OVN: local residents staying overnight off national forests in local areas
- Nonprimary: visits where recreating on national forests is not the primary trip purpose

Local visitors are those who have traveled 60 mi or less from home to reach a recreation site. Day visitors are those who did not report a night spent in a local (within 50 mi) forest area. Visitors in the day segment include those who did not spend a night away from home as well as those passing through a forest area and spending a night away from home outside the local forest area.

Overnight national forest visitors are those who spent a night away from home and reported lodging in a cabin, developed campground, or primitive area on a national forest (or some combination of those three). Visitors in the overnight off-forest OVN category are those who spent a night away from home in a local forest

area and reported using any lodging off the national forest or some combination of lodging on and off the national forest. The OVN segment also includes a few respondents who would otherwise be classified as on day trips, but who reported lodging expenses.

Based on ANOVA tests using round 1 NVUM data, these seven trip-type visitor segments explain about 27 percent of the variation in trip spending by travel parties (White and Stynes 2008). For comparison, primary recreation activities explain 1 percent of variation in visitor spending. This segmentation yields total spending averages for general recreation that are statistically and practically different for each trip segment. The ability to find statistically significant difference may have been bolstered by the relatively large sample sizes within each trip type. These trip segments have proven useful in Forest Service economic analyses and appear to now be intuitive to agency economists and analysts.

National-Level Segment Shares

The national-level visitor segment shares are estimated from all cases and represent general patterns in trip type across all NFS units (table 3). Segment shares for individual NFS units are reported in appendix 2. Day trips by individuals who live in a local forest area are the most common type of national forest visit (45 percent of all forest visits). Local visits collectively account for more than half of all visits to national forests. Visits by nonlocals are most frequently overnight trips away from home with nights off national forests. Finally, approximately 15 percent of national forest visits result from a nonprimary trip where recreation on a national forest is secondary to some other reason for the visitor being away from home. The vast majority of nonprimary visits come from nonlocal individuals.

Table 3—Segment shares for national forest visits[a]

	Nonlocal			Local				
Visit types	**Day**	**OVN-NF**	**OVN**	**Day**	**OVN-NF**	**OVN**	**Nonprimary**	**Total**
				Percent				
All visits (including skiers)	11	8	16	45	4	1	15	100
Downhill skiing/ snowboarding visits	16	[b]	46	33	[b]	1	4	100
Wildlife-related visits	11	11	9	54	4	2	9	100
General recreation[c]	9	8	12	48	4	1	18	100
All visits except downhill skiing/snowboarding	10	9	11	48	4	1	17	100

[a] Estimated from the full sample using case weights. OVN = overnight, NF = national forest.
[b] For skiers/snowboarders, the OVN-NF visits are included in the OVN segments.
[c] General recreation visits are those not downhill skiing/snowboarding and not wildlife related.

Relative to visits for other activities, ski/snowboarding visits are more likely to be nonlocal visits and are most likely to be overnight trips (table 3). Well more than half of ski/snowboarding visits come from nonlocals, and more than half of those visits involve an overnight stay. Local visits for skiing/snowboarding are almost entirely day trips; about one-third of all ski/snowboard visits nationally are generated by locals on day trips. Nonprimary visits comprise a much smaller share of ski/snowboard visits compared to other activities on national forests. Wildlife-related visits are more likely to be from local residents compared to other types of visits. When wildlife-related visitors are on nonlocal trips, they are less likely than other users to use overnight lodging off national forests (e.g., hotels/motels). Wildlife-related visits are also less likely to be nonprimary trips compared to other types of visits.

Nights Away From Home

Understanding patterns in length of stay is important because travel parties spend more money in a greater number of economic sectors when they stay more nights in or near local communities. Additionally, understanding patterns in length of stay can inform recreation management and policy actions and help to characterize recreation visitors. The average lengths of stay for those who are and are not downhill skiing/snowboarding are similar (table 4). Across all activities, visitors on overnight trips to national forests spend between three and five nights if they live outside the local areas and two to four nights if they live in the local areas. In both cases, those staying overnight off national forests have longer stays. Those on nonprimary trips have

Table 4—Average number of nights away from home[a] and in local forest areas for national forest (NF) visitors on overnight (OVN) trips[b]

	Nonlocal		Local		
	OVN-NF	OVN	OVN-NF	OVN	Nonprimary
All visits:					
Nights away from home	4.3	6.4	2.2	4.2	8.6
Nights in the local area	3.3	5.0	2.1	3.7	3.5
Nondownhill skiing/snowboarding visits:					
Nights away from home	4.1	6.3	2.2	4.2	8.7
Nights in the local area	3.1	4.6	2.1	3.7	3.5
Only downhill skiing/snowboarding visits:					
Nights away from home	[c]	6.4	[c]	3.6	6.0
Nights in the local area	[c]	5.4	[c]	3.6	3.9

[a] "Nights away from home" includes both "nights in the local area" and nights outside the local area.
[b] Estimated from the full sample using case weights.
[c] For skiers/snowboarders, the OVN-NF visits, which are minimal, are included in the OVN segments.

the greatest disparity between total nights away from home and the nights spent in local forest areas—reflecting the lesser importance of national forests in these trips.

Spending Profiles

Spending profiles describe the average spending within a set of spending categories for a particular trip type. The unit of analysis for the spending profiles presented here is the party, and it includes all expenses by the travel party within 50 mi of the interview site during the trip. The reported spending was price adjusted to 2014 using a distinct U.S. Bureau of Labor Statistics price index for each spending category.

Basic 7 Trip Spending

The average expenditures per party per trip for national forest visitors ranges from $36 for local visitors on day trips to $580 for nonlocal visitors on OVN trips (table 5). The 95 percent confidence intervals around our estimates of total spending, for all but the local overnight segment, are less than 6 percent of the total spending figure. For the local overnight segment (the least common segment and the one with the smallest sample size) the 95 percent confidence interval is 15 percent of

Table 5—National forest visitor spending profiles by trip-type segment and spending category, dollars per party per trip[a]

	Nonlocal			Local				
Spending categories	Day	OVN-NF	OVN	Day	OVN-NF	OVN	Nonprimary	All visits[b]
				Dollars				
Motel	0	44.77	203.85	0	6.39	51.62	139.67	53.96
Camping	0	27.79	13.68	0	28.25	23.01	12.23	7.43
Restaurant	14.77	27.47	116.41	5.66	7.65	32.43	93.23	37.63
Groceries	10.67	55.09	72.52	6.62	71.54	59.62	49.85	29.68
Gas and oil	30.20	62.27	82.47	15.43	46.59	58.05	62.71	38.74
Other transportation	0.58	1.34	4.98	0.16	0.04	1.19	3.35	1.45
Entry fees	4.12	7.13	12.85	2.70	4.51	5.12	7.58	5.38
Recreation and entertainment	2.96	7.36	33.31	1.01	2.01	3.61	21.84	9.38
Sporting goods	3.15	10.77	13.75	3.83	11.78	9.48	7.91	6.62
Souvenirs and other expenses	1.93	7.73	25.87	0.60	1.10	11.48	23.74	8.62
Total	68.39	251.74	579.70	36.00	179.86	255.60	422.12	198.87
Sample size (unweighted)	2,112	3,600	2,289	9,225	1,388	295	3,955	22,864
Standard deviation of total	72	399	714	53	199	325	653	n/a

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was downhill skiing/snowboarding. When completing analyses involving skiers/snowboarders, refer to subsequent tables. OVN = overnight, NF = national forest, n/a = not applicable.

[b] The all-visit averages are computed as a weighted average of the columns using the national trip segment shares for nondownhill skiing/nonsnowboarding as weights.

total spending. For day trips, spending on gas and oil is the greatest single expense followed by spending on food in either restaurants or grocery stores depending on whether the visitor is a local. Lodging expenses (camping and motel/hotel expenses combined) are the greatest single expense for nonlocal visitors on overnight trips (on or off the national forest), followed by spending for food and for gas and oil. Spending in grocery stores and for gas and oil are the greatest expenditures for local visitors staying overnight on national forests. Lodging, groceries, and gas and oil account for almost all the expenses of the few local visitors who stay overnight off national forests. The total spending of this group is about half that of their nonlocal counterparts. The spending of nonprimary visitors is generally similar to that of nonlocal OVN visitors.

Average motel and camping expenses for OVN and OVN-NF visitors may appear low. However, visitors in both of those segments use a variety of lodging types that have a range of costs. Some lodging (e.g., homes of friends/relatives, owned seasonal homes, and national forest roadsides) will be used free and will not require expenditure specifically on the trip. The shown averages reflect this mix of costs, including many cases where the overnight lodging was free. In a later section, we report spending profiles for visitors engaged in a variety of lodging types. In those profiles, average expenditure for motels and camping are more consistent with average room rates and camping fees that one typically experiences.

Dividing the spending averages for trips involving overnight stays shown in table 5 by the average number of nights in the local area for each segment (table 4) gives average party spending on a per-night basis (not shown). For nonlocal OVN visitors, average spending is a little less than $126 per night. Local OVN visitor spending is about $69 per night, on average. On a per-night basis, the total spending of nonlocal and local OVN-NF visitors is similar—about $80 per night—although there are differences in patterns within specific expenditure categories. On a per-night basis, the total spending of nonprimary visitors is about $114 per night.

High and Low Spending Averages

For most NFS units, between 100 and 300 respondents were asked to complete the economic survey. After breaking those respondents into trip type and excluding outliers and contaminants, sample sizes at the forest level are generally too small to reliably estimate spending averages for all seven visitor segments for individual national forests. For many forests, the national-level basic spending profile presented in the previous section is applicable and can be combined with segment share estimates for the specific forest under consideration (see app. 2, table 19) to estimate total visitor spending for the forest (see app. 1 for a detailed example of

the steps to estimating total spending). However, visitor spending can differ from place to place owing to the extent of local spending opportunities and local prices; to accommodate these differences, we developed spending profiles for areas with above- and below-average spending.

Following the same approach used in prior analyses (e.g., White et al. 2013), we grouped observations from forests with above- or below-average spending (see app. 2, table 18) to develop "high" and "low" spending profiles. Forests with above- or below-average spending were identified by comparing spending averages for each forest with the national averages. Day and overnight visitor spending averages (excluding nonprimary visitors and downhill skiers/snowboarders) were estimated based on the sample of visitors on each forest. To control for differences in the visitor mix across forests, a standardized overall average was computed for each forest, assuming a fixed mix of 60 percent day trips and 40 percent overnight trips. The standardized spending average for each forest was compared to the national standardized spending average (see Stynes et al. 2002 for additional discussion of this analysis). Of the 120 units sampled between fiscal years 2010 and 2015, 58 have spending that was not found to be statistically different from the national average. Of those national forests where spending did differ from the national average, 18 forests were classified as "above-average spending" and 44 forests as "below-average spending."

On average, the high and low spending profiles are approximately 33 percent higher/lower than the average spending profile (tables 6 and 7). The spending of local day visitors does not follow this pattern and is lower at "high" spending forests than "low" spending forests. It is possible that local residents on day trips to high spending forest areas avoid many higher expense services that are aimed at tourists. A forest identified as a high spending area (see app. 2, table 18) may elect to use the profiles in table 6 instead of the national averages in table 5. Similarly, forests identified as low spending areas (see app. 2, table 18) may elect to use the averages in table 7 for analyses. In addition, the high and low spending profiles also can be used for economic analysis aimed at specific geographic areas around a national forest with higher or lower than average spending opportunities or prices. Areas near major tourist destinations or in proximity or easy access to commercial areas and spending opportunities can generally expect above-average visitor spending, while sites in more remote, rural areas will likely experience below-average spending (and often lower costs because of less demand for services). On many national forests, there will be both "high" and "low" spending areas. An assessment of nearby spending opportunities and prices can help in deciding between the average, high, or low spending profiles for a particular application.

Areas near major tourist destinations can generally expect above-average visitor spending.

Table 6—High spending profiles by trip-type segment and spending category, dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[b]
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
				Dollars				
Motel	0	81.33	293.91	0	5.09	135.07	214.72	81.98
Camping	0	38.35	14.10	0	32.13	10.49	15.80	8.99
Restaurant	23.57	60.73	176.20	5.24	6.53	101.32	139.68	57.05
Groceries	7.86	67.71	83.26	4.48	80.21	46.32	65.85	33.79
Gas and oil	30.05	83.68	98.65	11.27	40.89	53.17	80.72	43.34
Other transportation	0.64	1.44	7.80	0.15	0	2.17	5.26	2.15
Entry fees	5.40	8.70	18.99	1.52	2.08	8.16	8.71	5.93
Recreation and entertainment	3.13	16.63	52.47	1.32	1.20	12.50	29.19	13.97
Sporting goods	2.42	13.57	17.96	1.67	12.56	1.16	10.23	6.62
Souvenirs and other expenses	3.54	16.10	44.75	0.72	0.70	14.41	39.95	14.68
Total	76.59	388.26	808.09	26.38	181.38	384.77	610.10	268.51
Sample size (unweighted)	278	517	745	1,628	157	32	1,050	4,407
Standard deviation of total	80	496	814	47	186	565	796	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was downhill skiing/snowboarding. When completing analyses involving skiers/snowboarders, refer to subsequent tables.

[b] The all-visit averages are computed as a weighted average of the columns using the national trip segment shares for nondownhill skiing/non-snowboarding as weights.

Table 7—Low spending profiles by trip-type segment and spending category, dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[b]
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
				Dollars				
Motel	0	20.00	110.55	0	4.53	35.53	79.58	29.73
Camping	0	20.75	16.13	0	24.63	17.95	9.34	6.44
Restaurant	11.63	18.98	70.20	5.70	7.17	26.40	65.23	26.02
Groceries	9.38	45.20	44.39	6.98	64.93	52.49	36.22	22.78
Gas and oil	27.52	49.10	60.94	15.87	41.57	47.32	49.40	32.36
Other transportation	0.10	0.75	1.63	0.06	0.06	1.05	2.06	0.68
Entry fees	3.72	8.09	5.60	3.11	5.79	3.42	6.61	4.60
Recreation and entertainment	2.80	4.50	9.93	0.73	2.17	0.45	15.76	5.08
Sporting goods	2.54	7.82	9.02	3.75	10.98	10.23	5.75	5.31
Souvenirs and other expenses	0.91	4.04	9.77	0.39	0.90	10.69	13.27	4.30
Total	58.61	179.24	338.18	36.59	162.73	205.53	283.22	137.30
Sample size (unweighted)	966	1,291	538	4,309	654	112	1,077	8,947
Standard deviation of total	63	262	359	50	168	206	412	n/a

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was downhill skiing/snowboarding. When completing analyses involving skiers/snowboarders, refer to subsequent tables. OVN = overnight, NF = national forest, n/a = not applicable.

[b] The all-visit averages are computed as a weighted average of the columns using the national trip segment shares for nondownhill skiing/nonsnowboarding as weights.

Downhill Skier/Snowboarder Visitor Spending

The trip spending of downhill skiers/snowboarders on day trips is about 65 percent greater than day visitors on other national forest recreation trips (table 8). Similarly, nonlocal overnight visitors who are downhill skiing or snowboarding spend about 28 percent more than nonlocal overnight visitors doing other activities on national forest trips. The additional spending by downhill skiers/snowboarders primarily can be traced to greater spending on entry fees, recreation and entertainment, and restaurants. Within trip types, downhill skiers/snowboarders spend less than other visitors on gas and oil; for all trip types except nonlocal overnight and nonprimary, downhill skiers/snowboarders spend less than other visitors on groceries. Note that expenses for season passes likely are not represented in these trip-specific spending averages. Similarly, lift tickets sold as part of a package deal that includes lodging may not have been reported by respondents separately as entry fees or recreation and entertainment expenses. Economic analyses that incorporate analyses of downhill skier/snowboarder spending should use table 8, or reliable visitor spending figures available from other sources applicable to the study area.

Table 8—Spending profiles of downhill skiers and snowboarders, dollars per party per trip[a]

	Nonlocal segments		Local segments			
Spending category	**Day**	**OVN**	**Day**	**OVN[b]**	**Nonprimary**	**All visits[c]**
				Dollars		
Motel	0	193.53	0	88.83	146.10	95.76
Camping	0	0.43	0	0.20	4.23	0.37
Restaurant	20.53	158.80	9.83	72.89	129.36	85.48
Groceries	4.57	76.78	3.21	35.24	68.60	40.21
Gas and oil	24.43	64.96	13.44	29.82	55.28	40.73
Other transportation	0.28	1.89	0.24	0.87	9.78	1.39
Entry fees	37.68	90.73	17.93	41.65	107.20	58.39
Recreation and entertainment	18.62	107.74	11.13	49.45	52.21	58.79
Sporting goods	5.02	26.08	2.81	11.97	22.14	14.73
Souvenirs and other expenses	2.01	22.88	0.68	10.50	12.84	11.69
Total	113.15	743.81	59.26	341.41	607.74	407.54
Sample size (unweighted)	371	431	784	N/A	71	N/A
Standard deviation of total	96	825	81		772	N/A

N/A = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages are based on visitors who claimed their primary activity was downhill skiing or snowboarding and analyses involving nonskier/nonsnowboarder visits should refer to previous tables on national forest visitor average spending. For downhill skiers and snowboarders, we have combined the overnight (OVN) national forest and OVN segments into a single OVN segment.

[b] The sample size for local overnight visitors sampled at ski areas was insufficient and here we calculate average spending as 46 percent of the nonlocal overnight average. See appendix 4 for further information on this calculation.

[c] The all-visit averages are computed as a weighted average of the columns using the national skier/snowboarder segment shares as weights.

Those national forests that are classified as either high or low spending may elect to use high or low spending skier/snowboarder profiles (tables 9 and 10). Within trip segments, spending figures at high spending areas are not always greater than the corresponding spending figures at average areas for that trip segment. Likewise, spending figures at low spending areas are not always less than the corresponding average spending figures. This inconsistency likely results from the mix of spending opportunities at these places and differing average visitor lengths of stay in high and low spending areas.

Table 9—High spending profiles of downhill skiers and snowboarders, dollars per party per trip[a]

	Nonlocal segments		Local segments			
Spending category	Day[b]	OVN	Day	OVN[c]	Nonprimary	All visits
				Dollars		
Motel	0	248.41	0	97.85	292.71	126.96
Camping	0	0.31	0	0.22	0	0.14
Restaurant	22.96	234.15	10.36	80.29	219.19	124.37
Groceries	5.11	88.62	1.97	38.82	17.08	43.30
Gas and oil	27.32	71.95	10.74	32.84	28.40	42.48
Other transportation	0.31	1.93	0.01	0.96	0	0.95
Entry fees	42.14	181.05	19.66	45.87	415.92	113.61
Recreation and entertainment	20.83	120.23	7.25	54.47	68.78	64.33
Sporting goods	5.61	32.33	1.23	13.19	11.21	16.76
Souvenirs and other expenses	2.25	23.38	0.26	11.57	42.85	13.03
Total	126.54	1,002.36	51.48	376.07	1,096.14	545.93
Sample size (unweighted)	n/a	122	168	n/a	337	n/a
Standard deviation of total		971	77		785	

n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages are based on visitors who claimed their primary activity was downhill skiing or snowboarding and analyses involving nonskier/nonsnowboarder visits should refer to previous tables on national forest visitor average spending. For downhill skiers and snowboarders, we have combined the overnight (OVN) national forest and OVN segments into a single OVN segment.

[b] The sample size for nonlocal day visitors sampled at high spending ski areas was insufficient and here we calculate average spending at high spending areas as 112 percent of nonlocal day skier spending at average spending areas. See appendix 4 for further information on this calculation.

[c] The sample size for local overnight visitors sampled at high spending ski areas was insufficient and here we calculate average spending at high spending areas as 110 percent of the nonlocal overnight skier/snowboarder spending at average spending areas. See appendix 4 for further information on this calculation.

[d] The all-visit averages are computed as a weighted average of the columns using the national skier/snowboarder segment shares as weights.

Table 10—Low spending profiles of downhill skiers and snowboarders, dollars per party per trip[a]

Spending category	Nonlocal segments		Local segments		Nonprimary	All visits[c]
	Day	OVN	Day	OVN[b]		
			Dollars			
Motel	0	234.51	0	77.11	196.87	116.52
Camping	0	0.18	0	0.17	0	0.08
Restaurant	14.43	184.09	8.29	63.27	172.49	97.26
Groceries	4.61	92.10	2.59	30.59	76.27	47.32
Gas and oil	24.09	68.93	14.33	25.88	80.90	43.79
Other transportation	0	0.53	0	0.75	29.75	1.44
Entry fees	33.13	84.76	17.00	36.15	73.84	53.22
Recreation and entertainment	9.95	134.34	9.58	42.93	41.67	68.65
Sporting goods	2.95	35.43	3.21	10.39	36.84	19.41
Souvenirs and other expenses	1.84	20.34	0.33	9.12	9.10	10.21
Total	90.99	855.21	55.33	296.35	717.73	457.89
Sample size (unweighted)	133	81	294	Rule 2	21	n/a
Standard deviation of total	87	1,002	78		744	

n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages are based on visitors who claimed their primary activity was downhill skiing or snowboarding and analyses involving nonskier visits should refer to previous tables on national forest visitor average spending. For downhill skiers and snowboarders, we have combined the overnight (OVN) national forest and OVN segments into a single OVN segment.

[b] The sample size for local overnight visitors sampled at low spending ski areas was insufficient and here we calculate average spending as 87 percent of the nonlocal overnight spending at average ski areas. See appendix 4 for further information on this calculation.

[c] The all-visit averages are computed as a weighted average of the columns using the national skier/snowboarder segment shares as weights.

Lodging-Based Segmentation

The OVN and, to a lesser extent, the OVN-NF segments of the Basic 7 trip segments contain a mix of visitors using a variety of overnight lodging. Overnight visitors were asked to report what type(s) of lodging they used during their stay. Responses to that question allow us to further classify and better estimate spending for overnight visitors. However, local visitors on overnight trips are not separated from nonlocal visitors because sample sizes were not large enough to estimate lodging-based spending profiles separately for locals and nonlocals. When respondents reported using multiple lodging types, they were placed in the most expensive lodging segment. For example, a number of respondents reported using both a campground and hotel/motel on their trip. Those respondents were classified in the "motel" segment. The lodging-based segments provide an alternative to the Basic 7 trip segments and will prove most useful when the economic analysis has a strong focus on overnight trips. Using the responses to the lodging question, and extending from the Basic 7 trip segments, yields 10 lodging-based segments:

1. Nonlocal day trips: nonlocal residents on day trips to national forests
2. Local day trips: local residents on day trips to national forests
3. National forest undeveloped: visitors lodging in undeveloped areas on national forests
4. National forest developed: visitors lodging in developed campgrounds on national forests
5. National forest cabin: visitors lodging in cabins on national forests
6. Motel: visitors staying in rented hotels, cabins, condos, homes, etc. off national forests
7. Off-forest camp: visitors lodging in campgrounds off national forests
8. Private home: visitors staying at private homes of friends or relatives or their second homes
9. Other/multiple: visits with undesignated, missing, or multiple lodging types
10. Nonprimary: visits where recreating on national forests is not the primary trip purpose

The day trip and nonprimary segment shares for the lodging-based segments are unchanged from those found for the Basic 7 segments (table 11). Of the overnight visits, motel stays (including B&Bs, rented condos, etc.) are the most frequent lodging choice (10 percent of all visits) followed by developed campgrounds on national forests (6 percent of all visits) and private homes (6 percent of all visits). The least common overnight lodging types for national forest visits are private campgrounds located off national forests, national forest cabins, and other/multiple lodging. Excluding downhill skiers/snowboarders from the segment share estimation reduces the percentage of visits staying in motels and private homes and increases the percentage of visits staying in developed campgrounds on national forests. Considering only downhill skiers/snowboarders, 27 percent of visits involve stays in motels, and 14 percent involve stays in private homes.

Lodging-Based Segment Spending Profiles

The day and nonprimary trip spending averages (table 12) are unchanged from those shown in table 5. Trip spending in the overnight segments ranges from $156 for those camping in the undeveloped portions of forests to more than $800 for those staying overnight off forests in motels. Those staying in private homes and camping off forests spend about half that of individuals staying in motels off forests.

Spending in the overnight segments ranges from $156 for those camping in the undeveloped portions of forests to more than $800 for those staying in motels.

Placing overnight segment spending on a per-night basis and using the lodging-based segments provides the best opportunity to gauge the face validity of the spending averages. On a per-night basis, the spending of the overnight visitors ranges from $57 for those camping in undeveloped portions of the forest to $181 for those staying

Table 11—Segment shares for lodging-based segments[a]

Segment	All visits	Nondownhill skiing/ nonsnowboarding visits	Downhill skiing/ snowboarding visits
		Percent	
Nonlocal day	11	10	16
Local day	45	48	34
National forest undeveloped camping	3	3	b
National forest developed camping	6	8	b
National forest cabin	2	2	4
Motel	10	6	27
Private campground	1	1	b
Private home	6	4	14
Other/multiple	1	1	1
Nonprimary	15	17	4
Total	100	100	100

[a] Estimated using case weights and the full sample.
[b] Lodging types on the national forest are combined into a single segment: national forest cabin. No visits occurred in the private campground segment.

Table 12—National forest visitor spending profiles by lodging type segment and spending category, dollars per party per trip[a]

			National forest								
Spending category	Nonlocal day	Local day	Undeveloped	Developed	Cabin	Motel	Private campground	Private home	Other/multiple	Nonprimary	All visits[b]
						Dollars					
Motel	0	0	9.08	5.20	226.11	396.15	43.53	32.48	102.81	139.67	55.49
Camping	0	0	8.34	41.20	4.29	0.73	84.11	0.77	26.18	12.23	6.89
Restaurant	14.77	5.66	15.22	15.05	64.73	158.65	63.11	91.98	65.36	93.23	37.48
Groceries	10.67	6.62	43.94	65.59	65.23	60.48	70.63	91.64	67.19	49.85	29.26
Gas and oil	30.20	15.43	51.25	56.65	68.54	79.71	86.01	73.92	89.58	62.71	38.02
Other transportation	0.58	0.16	1.82	0.12	1.19	3.78	0.72	4.56	12.75	3.35	1.33
Entry fees	4.12	2.70	5.96	6.09	6.86	16.21	11.96	10.47	8.53	7.58	5.40
Recreation and entertainment	2.96	1.01	3.74	4.37	14.63	39.17	12.59	31.63	27.65	21.84	9.27
Sporting goods	3.15	3.83	13.44	9.86	10.14	14.04	11.25	13.77	17.01	7.91	6.57
Souvenirs and other expenses	1.93	0.60	2.93	4.56	17.44	32.72	19.98	22.24	16.57	23.74	8.54
Total	68.39	36.00	155.73	208.69	479.17	801.63	403.90	373.47	433.62	422.12	198.24
Sample size (unweighted)	2,112	9,225	1,128	2,977	660	990	261	710	523	3,955	22,541
Standard deviation of total	72	53	304	249	564	801	453	472	710	653	n/a

n/a = not applicable.
[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was downhill skiing or snowboarding. When completing analyses involving skiers and snowboarders, refer to subsequent tables on average skier/snowboarder spending.
[b] The all-visit averages are computed as a weighted average of the columns using the lodging-based segment shares for nondownhill skiing nonsnowboarding visits as weights.

off forests in motels (table 13). Those staying in motels spend, on average, $89 for lodging expenses, $36 for restaurant meals and drinks, and $18 for gas and oil, per night. Those staying in developed national forest campgrounds pay approximately $18 for lodging/campground fees, $25 for groceries, and $21 for gas and oil, per night.

Table 13—Per-day/night national forest visitor spending profiles by lodging type segment and spending category, dollars per party[a]

			National forest								
Spending category	**Nonlocal day**	**Local day**	**Undeveloped**	**Developed**	**Cabin**	**Motel**	**Private campground**	**Private home**	**Other/multiple**	**Nonprimary**	**All visits[b]**
						Dollars					
Motel	0	0	3.32	1.97	75.12	89.22	8.78	6.87	22.11	39.79	26.65
Camping	0	0	3.05	15.61	1.43	0.16	16.96	0.16	5.63	3.49	3.31
Restaurant	14.77	5.66	5.55	5.70	21.51	35.73	12.72	19.45	14.05	26.56	18.00
Groceries	10.67	6.62	16.04	24.85	21.67	13.62	14.24	19.37	14.45	14.20	14.05
Gas and oil	30.20	15.43	18.70	21.46	22.77	17.95	17.34	15.63	19.26	17.87	18.26
Other transportation	0.58	0.16	0.66	0.04	0.39	0.85	0.15	0.96	2.74	0.95	0.64
Entry fees	4.12	2.70	2.17	2.31	2.28	3.65	2.41	2.21	1.84	2.16	2.59
Recreation and entertainment	2.96	1.01	1.37	1.66	4.86	8.82	2.54	6.69	5.95	6.22	4.45
Sporting goods	3.15	3.83	4.91	3.73	3.37	3.16	2.27	2.91	3.66	2.25	3.15
Souvenirs and other expenses	1.93	0.60	1.07	1.73	5.80	7.37	4.03	4.70	3.56	6.76	4.10
Total	68.39	36.00	56.83	79.05	159.19	180.55	81.43	78.96	93.25	120.26	95.22
Sample size (unweighted)	2,112	9,225	1,128	2,977	660	990	261	710	523	3,955	22,541
Average days/nights in the local area	1.0	1.0	2.7	2.6	3.0	4.4	5.0	4.7	4.7	3.5	2.1

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was downhill skiing or snowboarding. When completing analyses involving skiers and snowboarders refer to subsequent tables on average skier/snowboarding spending.

[b] The all-visit averages are computed as a weighted average of the columns using the lodging-based segment shares computed without downhill skiers and snowboarders as weights and divided by the average number of nights in the local area.

The trip spending of those engaged in downhill skiing/snowboarding in the lodging-based segments ranges from $59 for those on local day trips to $886 for those staying in motels, hotels, or bed and breakfasts (B&Bs) in local forest areas (table 14). Those staying in motels, hotels, or B&Bs average approximately $341 per trip on lodging expenditures, while those staying in private homes average $53 in lodging expenses. The private home category is likely capturing a mix of visitors staying for free with friends and relatives and those renting private homes.

Table 14—National forest visitor spending profiles of downhill skiers and snowboarders by lodging-type segment and spending category, dollars per party per trip[a]

Spending category	Nonlocal day	Local day	National forest[b]	Motel	Private home	Other/ multiple[c]	Non-primary	All visits[d]
				Dollars				
Motel	0	0	185.79	341.29	52.90	102.81	146.10	113.86
Camping	0	0	0	0	0.02	26.18	4.23	0.43
Restaurant	20.53	9.83	102.43	155.70	169.78	65.36	129.36	82.36
Groceries	4.57	3.21	63.22	59.64	93.85	67.19	68.60	37.01
Gas and oil	24.43	13.44	60.15	66.72	56.65	89.58	55.28	39.94
Other transportation	0.28	0.24	2.40	0.42	3.16	12.75	9.78	1.30
Entry fees	37.68	17.93	39.93	105.65	87.95	8.53	107.20	58.93
Recreation and entertainment	18.62	11.13	134.61	105.67	100.18	27.65	52.21	57.07
Sporting goods	5.02	2.81	33.53	22.76	26.27	17.01	22.14	13.98
Souvenirs and other expenses	2.01	0.68	13.27	28.04	20.69	16.57	12.84	12.23
Total	113.15	59.26	635.33	885.90	611.44	433.62	607.74	417.11
Sample size (unweighted)	371	784	60	170	193	523	71	1,670
Standard deviation of total	96	81	603	838	855	710	772	n/a

n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages are for visitors engaged in downhill skiing and snowboarding.

[b] All lodging types on the national forest are combined here in a single segment. The analyst should be cautious in using this segment as it is not clear if visitors are able to differentiate between lodging on or off the national forest.

[c] There was an insufficient number of downhill skiing/snowboarding respondents in the other/multiple segment, and we substitute the spending averages shown for the general lodging-based segments here.

[d] The all-visit averages are computed as a weighted average of the columns using the lodging-based segment shares computed for downhill skiers and snowboarders as weights.

Those engaged in downhill skiing/snowboarding and staying overnight in motels/hotels/B&Bs average 3.9 nights in the local areas and spend about $229 per night, on average (table 15). Lodging constitutes the greatest single expense for these visitors. Groups using private homes for lodging spend about $128 per night and the greatest expense for these groups is food. Increased spending on entry fees and recreation and entertainment are the distinguishing features of the downhill skier/snowboarder spending averages compared to the spending of visitors not engaging in these activities. Downhill skiers/snowboarders tend to spend slightly less than other visitors on gas and oil purchased in the local area. With the exception of those categories, the spending of downhill skiers/snowboarders is fairly similar to that of visitors not engaged in these activities when trip length is accounted for by placing spending on a per-night basis.

Table 15—Per-day/night national forest visitor spending profiles of downhill skiers and snowboarders by lodging-type segment and spending category, dollars per party[a]

Spending category	Nonlocal day	Local day	National forest[b]	Motel	Private home	Other/ multiple[c]	Non-primary	All visits[d]
				Dollars				
Motel	0	0	61.72	76.87	11.18	22.11	41.62	42.67
Camping	0	0	0	0	0	5.63	1.20	0.16
Restaurant	20.53	9.83	34.03	35.07	35.89	14.05	36.86	30.87
Groceries	4.57	3.21	21.00	13.43	19.84	14.45	19.55	13.87
Gas and oil	24.43	13.44	19.98	15.03	11.98	19.26	15.75	14.97
Other transportation	0.28	0.24	0.80	0.09	0.67	2.74	2.79	0.49
Entry fees	37.68	17.93	13.27	23.80	18.59	1.84	30.54	22.09
Recreation and entertainment	18.62	11.13	44.72	23.80	21.18	5.95	14.87	21.39
Sporting goods	5.02	2.81	11.14	5.13	5.55	3.66	6.31	5.24
Souvenirs and other expenses	2.01	0.68	4.41	6.32	4.37	3.56	3.66	4.58
Total	113.15	59.26	211.07	199.53	129.27	93.25	173.14	156.32
Sample size (unweighted)	371	784	60	170	193	523	71	1,670
Average days/nights in the local area	1.0	1.0	3.0	4.4	4.7	4.7	3.5	2.7

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages are for visitors engaged in downhill skiing and snowboarding.

[b] All lodging types on the national forest are combined here in a single segment. The analyst should be cautious in using this segment as it is not clear if visitors are able to differentiate between lodging on or off the national forest.

[c] There was an insufficient number of downhill skiing/snowboarding respondents in the other/multiple segment and we substitute the spending averages shown for the general lodging-based segments here.

[d] The all-visit averages are computed as a weighted average of the columns using the lodging-based segment shares computed for downhill skiers and snowboarders as weights and divided by the average number of nights in the local area.

Conclusions

The spending averages and visit and trip characteristics in this report can be used to better understand the behavior of outdoor recreationists and to estimate the economic contribution and impact on local communities from outdoor recreation visitor spending. The data collected in this analysis come from visitors to NFS lands, but the results presented here are likely applicable to outdoor recreation resources managed by other land agencies. The spending figures and trip characteristics reported here are consistent with those found in analysis of data collected from outdoor recreationists visiting lands managed by other agencies (e.g., USDI NPS 2016, White and Goodding 2015).

The data in this report come from visitor interviews conducted on NFS lands between 2010 and 2015. This report updates results from the previous analysis (White et al. 2013) that used data collected under the NVUM program between

Spending patterns have been relatively stable since the beginning of the NVUM program.

2005 and 2009. The visitor spending patterns and trip characteristics changed very little between the two periods. The similarity between these two reports reinforces the relatively stable patterns we have found in visitor spending and trip characteristics since the beginning of the NVUM program (White et al. 2013). Any significant changes in spending averages or visitor spending parameters in the early years of NVUM have come about primarily from changes in the NVUM survey instrument and analytical changes. The stability in visitor spending between the two most recent data series likely traces to steadily declining unemployment, improving consumer confidence, and very low inflation over the past 8 years. Between the data periods, consumer prices have remained largely steady, meaning that per-night costs to recreate remained largely unchanged during the period of economic improvement.

For many applications, the Basic 7 trip segments and the associated spending averages will be appropriate. In situations where downhill skiing/snowboarding visits are an important component of the analysis, the downhill skiing/snowboarding profiles and estimated characteristics should be incorporated in the analysis for that portion of use. In instances where overnight trips are particularly important to the analysis, the lodging-based segments should prove useful. The wildlife-related spending figures reported in appendix 3 can be applied for wildlife-related analyses. Finally, the activity-specific spending profiles in appendix 4 can be used for analyses aimed at specific activities.

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Metric Equivalents

When you know:	Multiply by:	To get:
Miles (mi)	1.609	Kilometers

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Appendix 1: Applying the National Spending Profiles

This section provides guidance on applying the spending profiles for economic analysis and has been adapted from Stynes et al. (2002). A number of distinct spending profiles have been generated from the National Visitor Use Monitoring (NVUM) survey data. These include:

- National average spending profiles by trip segments (table 5)
- High and low spending profiles by trip segments (tables 6 and 7)
- Downhill skier/snowboarder spending profiles (tables 8 through 10)
- Spending profiles by lodging-based segment (tables 12 through 15)
- Spending profiles for select segment/activity combinations (app. 4).

These spending profiles can be used in national-, regional-, forest-, and subforest-level planning. For economic impact or contribution analyses, the spending profiles must be combined with (1) estimates of total visits, (2) estimates of the percentage of visits within trip or activity segments, (3) estimates of average party sizes within trip segments, and (4) an economic model of the local economy (usually an input-output [I-O] model).

For national-, regional-, and forest-level analyses of visits to National Forest System lands, the number of visits and trip segment shares may be derived from NVUM results or other sources. The NVUM results will be most reliable at the national level, with increasing variability at regional and forest levels. Other local sources may be more reliable in estimating the number of visits within particular activity subgroups or for subforest-level analysis.

The NVUM spending categories were developed to easily bridge to sectors in I-O models estimated with IMPLAN so the application of the spending data to I-O models is reasonably straightforward. For most applications, acquiring the estimates of visits and segment shares will be a greater problem than bridging to the I-O model.

The general steps for making spending and economic impact/contribution estimates with the NVUM spending profiles are:

1. **Choose a set of visitor segments**—When analyzing spending by all visitors, we recommend using the Basic 7 trip segments. When conducting more targeted analyses, one or more of the wildlife-related spending profiles (app. 3) or activity-based profiles (app. 4) may be used. We suggest using the Basic 7 trip segments as defaults and developing more specific segments only for groups whose spending will differ from these and for which reliable visit estimates can be made. For most analyses, a set of mutually exclusive visitor segments should be chosen for which both visit estimates and spending profiles can be generated.

2. **Choose a spending profile for each segment**—If using the NVUM trip segments, begin by selecting from the high, national-average, or low profiles based on the characteristics of a particular application. Note that even though a forest may be classified (app. 2, table 18) as an above-average spending area, if the application relates to more remote areas of the forest, the low spending profiles may be more appropriate, as spending within trip segments is largely a function of the number and kinds of nearby spending opportunities. The NVUM spending profiles may be adjusted to suit the local situation/application, as needed. See text later in this appendix for guidance on adjusting spending averages for local applications and for how to use an engineering approach to estimate spending profiles when survey data are not available or of limited applicability. When the analysis involves downhill skier or snowboarder visits, the downhill skier/snowboarder spending profiles should be incorporated in the analysis and both the downhill skier/snowboarder spending profiles (e.g., table 8 or 14) and the basic spending profiles (e.g., table 5 or 12) may need to be used in the analysis. The wildlife-related spending profiles in appendix 3 may also be used for analyses that need to account for wildlife-related visitor spending.

3. **Estimate the number of visits by each segment**—At the national or forest level, one may multiply the NVUM estimated number of nondownhill skiing/snowboarding visits by the estimates of general trip segment shares (app. 2, table 19) to distribute total visits across the trip segments.[1] Downhill skiing/snowboarding visits (if any) can be distributed across segments using the forest- or national-level information in appendix 2, table 20. A similar procedure could be used for wildlife-related visits using information in appendix 3.

4. **Convert the estimate of visits to party visits**—Be careful to put visits and spending into common units. Recreation visits are on a per-person basis, while the spending averages reported here are on a per-party basis. Either divide the spending averages by the average party size to put spending on a per-person basis or convert visits to parties by dividing visits by an average party size. The NVUM estimates of average party sizes by segment for each forest are reported in appendix 2, table 21; the national-level average size of skier/snowboarder parties is reported in appendix 2, table 22. If you elect to use the spending profiles estimated on a per-night basis, then it is also necessary to

[1] Another complication for some applications is potential double counting of spending by visitors staying overnight off forests and making multiple national forest visits during their stay in the area. Spending averages are on a trip basis (to the area). If the incidence of multiple national forest visits per trip is known, national forest visits should be converted to distinct trips to the area by dividing by an estimate of visits per trip.

place the party visits on a night basis by multiplying party visits by the average numbers of nights in the local area (treating day trips as involving 1 day/night). The NVUM estimates of the average numbers of nights in the local area for each forest are in appendix 2, table 23. For downhill skiers/snowboarders, analysts will need to use the national-level average number of nights shown in table 4.

5. **Estimate total spending**—The estimate of total spending is calculated by multiplying the number of visits (i.e., party visits or party night visits) of each trip type (segment) by the appropriate per-trip or per-day/night spending averages for that segment and summing across segments.

6. **Apply total spending within spending categories as final demand changes to an I-O model for local regions**—The total spending estimated within each spending category can be applied to an I-O model for local regions using appropriate bridge tables to match the NVUM spending categories. The spending profiles represent spending within a 50-mi radius of forests. For Forest Service applications, Ecosystem Management Coordination (EMC—Washington office) has developed a custom set of I-O bridges for recreation visitor spending. Other federal recreation agencies (e.g., the National Park Service, Bureau of Land Management, and U.S. Army Corps of Engineers) have also developed customized I-O bridging for recreation visitor spending for their applications.

7. **Attribution issues**—When making spending and contribution/economic impact estimates, some decisions must be made regarding which visits or spending should be counted. There are several alternatives. At one extreme is to count all spending within 50 mi of forests by anyone who visits the national forests during a trip to the area. Adopting this extreme, all of the spending of anyone (including locals and nonprimary visitors) who visits the forests would be counted. This approach would include spending from incidental visits and quite a bit of spending not directly related to recreation on national forests. At the other extreme is to make a "with vs. without" impact estimate and count only trips and spending that would not have been made in the absence of the forest recreation opportunities. Most situations, however, call for something in between.

   Whether to include spending by local residents is a common question. Some argue that local residents would spend the money locally regardless of the recreation opportunities on national forests and that such spending does not represent "new" money to the region. Others are interested in capturing all spending associated with forest recreation trips, which includes local resident

spending. Taking a "with vs. without" approach, the question is whether this spending would remain in the region or go outside in the absence of forest recreation opportunities. If locals would go outside the region for recreation in the absence of national forest opportunities, their trip spending would represent a loss to the region's economy. That is, a loss of $100 in spending by a local resident is equivalent to the loss from not attracting a nonresident trip. It therefore should be included in a "with vs. without" economic impact assessment. In most cases, some local residents would find somewhere else to go locally if national forests were not present and some others would go outside the region for recreation. Ultimately, there is not a perfect answer to the question of whether spending by local residents should be included. We recommend including spending by local residents when estimating the economic contribution of forest recreation opportunities to the region, but excluding all of the local spending when estimating economic impacts of forest recreation to the region.

More problematic are trips to regions that are not generated by national forests, but are made for some other purpose. The "nonprimary" purpose trip segment is included in this report so that these trips and associated spending may be treated separately. We recommend using the local day trip spending profile for nonprimary purpose trips when estimating the contribution of forests to local economies. The rationale is that the local day trip profile covers the additional spending of a recreation visit to national forests for visitors who are already in the area for some other reason. It possibly excludes several nights of lodging and other expenses that are evident in the nonprimary trip spending profile, on the basis that this spending was not associated with national forest visits. Only the additional spending for national forest visits is assumed to be lost to the local economy in the absence of national forest recreation opportunities. This procedure will omit some lodging and related expenses associated with extending a stay in the area to visit national forests, but is a reasonable, conservative, approach.

Some visitors would likely substitute other nearby recreation opportunities in the absence of those provided on national forests. The extent of substitutions will depend on the local supply of recreation opportunities. In a pure "with vs. without" analysis, trips and associated spending that would not be lost to regions (i.e., the visitor would recreate elsewhere in the 50-mi area) would also be excluded. Further study of substitution patterns would be required to fully address the substitution issue. More generally, many trips involving visits to national forests will involve multiple purposes and activities, making it difficult in some cases to isolate which "caused" the trips to be made.

8. **High spending recreation parties**—Nationally, a majority of those on recreation visits to the National Forest System spend less than $50 during the trip. However, a limited number of visits involve greater spending and, because of the fairly conservative spending outlier rule we adopt in estimating spending profiles, our standard spending profiles may not fully represent spending by these high spending groups. One such group, downhill skiers/snowboarders, do have high spending patterns, and we have identified a spending profile applicable to economic analyses involving that group. Another group with potentially high spending that is not represented in our standard spending profiles are visitors using guides and outfitters. In the current NVUM survey instrument, no question clearly identifies respondents using guides and outfitters. Even if such a question existed, it is possible that the resulting sample size of respondents using guides and outfitters would be inadequate to reliably estimate the spending patterns of that group. That would likely result because these visits are thought to be a small component of total recreation use, and these visitors may be hard to intercept as they use nontraditional entry and exit points, not identified in NVUM sampling, between private lands and the national forest. One of the spending categories (recreation and entertainment) does include reference to recreation guide fees, but the generality of the spending category makes it impossible to definitively identify those reporting guide expenses.

   In cases where the spending by visitors using guides and outfitters, or other analyses involving high spenders, is an important component of the economic analysis and that spending is not adequately represented by the existing spending profiles, the forest could opt to (1) use one of the high spending profiles (or the downhill skier/snowboarder profile) we have reported here for the component of recreation use associated with guides and outfitters, (2) use the results of other studies that have reported reliable estimates of average or total spending of visits associated with guides and outfitters, or (3) use an engineering approach to construct a guide and outfitter spending profile applicable to the specific application. For the last option, the analyst can use an existing profile (e.g., the national-level average spending profile) and modify the average spending values in the appropriate categories (e.g., recreation and entertainment and lodging) to reflect the average costs in the local area associated with guide and outfitter use. See White et al. (2013) for an example of how to use an engineering approach for guide and outfitter expenses.

Example: Estimating Total Spending for the Mount Hood National Forest

The above steps for applying the spending profiles are illustrated for the Mount Hood National Forest east of Portland, Oregon, and south of Hood River, Oregon. The Mount Hood National Forest is a very popular destination for downhill skiing/snowboarding and our example depicts how to handle that spending separate from general recreation visitor spending. The number of recreation visits annually to the Mount Hood National Forest is 1.95 million (USDA FS 2015).

Computation of total visitor spending is shown in table 16. We depict the calculation of total visitor spending using the per-trip (rather than per-night) approach because the Forest Service and other agencies are using this approach. See White et al. (2013) for an example that uses the per-night approach. We draw on several

Table 16—Calculation of annual visitor spending on the Mount Hood National Forest[a]

	Nonlocal			Local			Non-primary	Total[b]	Units
	Day	OVN-NF	OVN	Day	OVN-NF	OVN			
Total recreation	—	—	—	—	—	—	—	1,946,800	Number
Downhill skiers/snowboarders:									
Visits								1,275,154	Number
Segment shares	24	0	11	52	0	1	12	100	Percent
Visits by segment	306,037	0	140,267	663,080	0	12,752	153,018	1,275,154	Number
Party size	2.7		3.0	2.1		2.4	2.9		Number
Party visits	113,347		46,756	315,752		5,313	52,765	533,933	Number
Spending ($/party/trip)	113.15		743.81	59.26		341.41	59.26[c]		Dollars
Spending total	12,825	0	34,777	18,711	0	1,814	3,127	71,255	Dollars (thousands)
Nondownhill skiers/snowboarders:									
Visits								671,646	Number
Segment shares	18	10	3	52	5	2	10	100	Percent
Visits by segment	120,896	67,165	20,149	349,256	33,582	13,433	67,165	671,646	Number
Party size	3	2.6	3.0	2.4	2.4	2.3	2.7		Number
Party visits	40,299	25,833	6,716	145,523	13,993	5,840	24,876	263,080	Number
Spending ($/party/trip)	68.39	251.74	579.70	36.00	179.86	255.60	36.00		Dollars
Spending total	2,756	6,503	3,894	5,239	2,517	1,493	896	23,297	Dollars (thousands)
Spending (all visits)	15,581	6,503	38,671	23,950	2,517	3,307	4,022	94,551	Dollars (thousands)

OVN = overnight, NF = national forest.

[a] Recreation visit estimate from the Mount Hood National Forest National Visitor Use Monitoring report, segments shares from tables 19 and 20, party sizes from tables 21 and 22, and spending averages from tables 5 and 8. All dollar values expressed in 2014 dollars.

[b] Calculated rows: visits by segment = total recreation visits × segment share, party visits = visits by segment / party size, spending total = spending ($/party/trip) × party visits, and spending (all visits) = spending total (downhill skiers/snowboarders) + spending total (nondownhill skiers/nonsnowboarders).

[c] The spending average for local day trips is used for nonprimary purpose trips to capture only the marginal increase in spending tracing to the national forest visit.

forest-specific figures from tables in appendix 2. At some points in the calculation, because of small sample sizes, forest-specific parameters are not available, and we substitute national-level parameters.

Recreation visits are first split into those with and without downhill skiing/snowboarding as the primary recreation activity using NVUM results for the Mount Hood National Forest (USDA FS 2015). Visits are then allocated to trip segments using the forest-level segment shares for skiers/snowboarders (see app. 2, table 20) and nonskiers/nonsnowboarders (see app. 2, table 19) for the Mount Hood National Forest. Next visits are converted to party visits by dividing by the national-level party sizes from table 22 in appendix 2 for downhill skiers/snowboarders and the Mount Hood National Forest party sizes from table 21 in appendix 2 for nondownhill skiers/nonsnowboarders. Party visits are then multiplied by the party trip spending averages to obtain total spending. The national average spending profiles for downhill skiers/snowboarders (table 8) and nondownhill skiers/nonsnowboarders (table 5) are used in this example because the Mount Hood National Forest is classified as an "average" spending forest (see app. 2, table 18). The spending of local visitors is included in this example calculation of total visitor spending. For nonprimary visits, we assumed that average spending on local day trip visits represents the spending attributable to the Mount Hood National Forest during nonprimary visits.

Based on these calculations, recreation visits to the Mount Hood National Forest generate approximately $95 million (in 2014 dollars) in visitor spending each year in the local area around the national forest (table 16). Nearly 75 percent of that spending is associated with downhill skiers/snowboarders. Collectively, local day trips accounted for 52 percent of visits and 25 percent of spending. Nonlocals on overnight (OVN) trips staying off the forest account for 41 percent of the spending and 8 percent of visits.

To obtain spending in detailed expenditure categories simply multiply party visits for each segment by the complete spending profile for that segment (e.g., table 5 or 8). This itemizes spending within specific categories/sectors. The greatest spending by Mount Hood National Forest visitors (table 17) is for gas and oil ($17.9 million), restaurant food and alcohol ($17.1 million), entry fees ($16.3 million), and lodging ($12.4 million). Nonlocal OVN visitors account for the majority of spending for restaurant food and alcohol and for lodging; local day visitors account for most of the spending for gas and oil and for entry fees.

Table 17—Annual visitor spending by expense category on the Mount Hood National Forest[a]

	Nonlocal			Local			Non-primary	Total
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
	Dollars (thousands)							
Motel	0	1,157	10,418	0	89	773	0	12,437
Camping	0	718	112	0	395	135	0	1,361
Restaurant	2,922	710	8,207	3,928	107	577	659	17,109
Groceries	948	1,423	4,077	1,977	1,001	535	334	10,296
Gas and oil	3,986	1,609	3,591	6,489	652	497	1,093	17,917
Other transportation	55	35	122	99	1	12	17	339
Entry fees	4,437	184	4,328	6,054	63	251	1,013	16,331
Recreation and entertainment	2,230	190	5,261	3,661	28	284	612	12,267
Sporting goods	696	278	1,312	1,445	165	119	244	4,258
Souvenirs and other expenses	306	200	1,244	302	15	123	51	2,240
Total	15,580	6,503	38,671	23,955	2,517	3,307	4,023	94,555

[a] Values are in 2014 dollars. Totals do not match values in table 16 because of rounding. OVN = overnight. NF = national forest.

As new recreation visit estimates become available, spending estimates may be updated by simply replacing the total visit estimate and redoing the calculation. Segment shares, party sizes, and spending averages based on the NVUM survey may also be modified by other local information sources or to simulate and evaluate future scenarios. In any event, the estimate of total spending for a given application should be based on the best estimates of each of the different inputs in the spending calculation.

Appendix 2: Supplemental Tables for Completing Economic Analyses

A variety of intermediate parameters and inputs are needed to estimate total spending. Most of the figures elsewhere in this report are at the national level. In this appendix, we provide the parameters at the forest level. The classification of each unit in the National Forest System as "above average," "average," or "below average" is shown in table 18. The total number of visits to national forests is reported by the National Visitor Use Monitoring (NVUM) program (https://apps.fs.fed.us/nfs/nrm/nvum/results/), and we report the share of those visits occurring within each visitor spending segment (tables 19 and 20).

Table 18—Classification of National Forest System administrative units as above, below, or average spending

Above-average spending	Average spending		Below-average spending
Black Hills	Allegheny	Manti-La Sal	Angeles
Bridger-Teton	Apache-Sitgreaves	Medicine Bow	Arapahoe-Roosevelt
Cibola	Bighorn	Modoc	Ashley
Coconino	Caribou-Targhee	Mount Hood	Beaverhead-Deerlodge
Gallatin	Carson	National forests in Alabama	Bitterroot
Grand Mesa-Uncompahgre-Gunnison	Chattahoochee-Oconee	National forests in Florida	Boise
Hiawatha	Chequamegon-Nicolet	Nebraska	Cherokee
Inyo	Chippewa	Nez Perce	Cleveland
Lake Tahoe Management Unit	Chugach	Okanogan	Columbia River Gorge
National forests in North Carolina	Clearwater	Ouachita	Colville
Ottawa	Coronado	Payette	Dakota Prairie
Rio Grande	Custer	Pike-San Isabel	Daniel Boone
San Juan	Deschutes	Plumas	Dixie
Siuslaw	El-Yunque	Routt	Eldorado
Tongass—Juneau, Admiralty	Fishlake	Salmon-Challis	Finger Lakes
Tongass—Sitka, Hoonah	Flathead	San Bernardino	Fremont-Winema
White Mountain	Francis Marion-Sumter	Sawtooth	Gifford Pinchot
White River	George Washington	Sequoia	Gila
	Humboldt-Toiyabe	Shasta-Trinity	Green Mountains
	Humboldt-Toiyabe—Spring Mountains	Shoshone	Helena
	Huron-Manistee	Sierra	Hoosier
	Idaho Panhandle	Six Rivers	Kisatchie
	Jefferson	Stanislaus	Klamath
	Kaibab	Superior	Los Padres
	Kootenai	Tahoe	Malheur
	Land Between the Lakes	Tongass—Ketchikan, Misty, Thorne Bay	Mark Twain
	Lassen	Tongass—Yakutat, Petersberg, Wrangell	Mendocino
	Lewis and Clark	Umpqua	Midewin Tallgrass Prairie
	Lincoln	Wayne	Mount Baker-Snoqualmie
	Lolo		Monongahela
			National forests in Mississippi
			National forests in Texas
			Ochoco
			Olympic
			Ozark-St. Francis
			Prescott
			Rogue River-Siskiyou
			Santa Fe
			Shawnee
			Tonto
			Uinta-Wasatch-Cache
			Umatilla
			Wallowa-Whitman
			Wenatchee
			Willamette

Table 19—General recreation segment shares by administrative unit[a]

Administrative unit	Nonlocal			Local			Nonprimary	Total
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
					Percent			
Allegheny	13	14	11	39	10	3	10	100
Angeles	7	3	1	76	8	0	5	100
Apache-Sitgreaves	11	49	4	22	1	1	12	100
Arapaho-Roosevelt	10	4	16	56	4	1	9	100
Ashley	13	23	4	34	8	1	17	100
Beaverhead-Deerlodge	6	5	3	72	3	0	11	100
Bighorn	15	16	2	23	8	1	35	100
Bitterroot	4	1	1	81	5	2	6	100
Black Hills	6	5	23	41	6	2	17	100
Boise	10	17	8	42	7	3	13	100
Bridger-Teton	8	9	15	55	2	1	10	100
Caribbean	4	0	26	7	0	0	63	100
Caribou-Targhee	5	9	8	54	5	1	18	100
Carson	10	8	17	42	1	1	21	100
Chattahoochee-Oconee	9	8	7	44	3	3	26	100
Chequamegon-Nicolet	4	10	19	14	7	4	42	100
Cherokee	10	6	10	63	4	0	7	100
Chippewa	8	18	8	34	11	0	21	100
Chugach	9	7	10	35	4	2	33	100
Cibola	3	2	2	69	1	1	22	100
Clearwater	9	12	4	50	6	0	19	100
Cleveland	5	5	0	76	7	1	6	100
Coconino	15	6	16	27	2	0	34	100
Columbia River Gorge	8	1	5	55	1	0	30	100
Colville	9	32	1	40	9	1	8	100
Coronado	5	4	9	59	10	2	11	100
Custer	25	11	9	26	5	1	23	100
Dakota Prairie	10	7	11	37	6	0	29	100
Daniel Boone	14	12	12	38	9	1	14	100
Deschutes	2	8	10	53	4	1	22	100
Dixie	13	16	7	29	4	2	29	100
Eldorado	15	30	4	28	10	1	12	100
Fishlake	5	13	25	39	3	0	15	100
Flathead	6	6	4	54	6	1	23	100
Francis Marion-Sumter	6	2	0	78	1	0	13	100
Fremont-Winema	10	5	5	59	12	2	7	100
Gallatin	3	3	20	68	2	0	4	100
George Washington-Jefferson	10	6	6	57	4	1	16	100
Gifford Pinchot	27	13	6	20	1	1	32	100
Gila	10	6	4	63	3	0	14	100
Grand Mesa-Uncompahgre-Gunnison	7	4	10	56	1	1	21	100
Green Mountain and Finger Lakes	7	2	7	52	1	3	28	100
Helena	2	2	6	74	4	1	11	100
Hiawatha	5	5	17	32	8	2	31	100
Hoosier	6	13	3	52	12	2	12	100
Humboldt-Toiyabe	1	23	68	4	2	0	2	100
Humboldt-Toiyabe—Spring Mountains	4	1	1	75	6	1	12	100
Huron Manistee	28	8	12	33	2	4	13	100
Idaho Panhandle	14	7	7	56	3	2	11	100
Inyo	7	35	17	9	3	0	29	100
Kaibab	8	14	7	6	1	0	64	100
Kisatchie	21	7	2	60	4	0	6	100
Klamath	5	12	6	54	2	0	21	100
Kootenai	10	4	7	47	8	1	23	100
Lake Tahoe Management Unit	8	9	31	21	1	0	30	100
Land Between the Lakes	6	33	3	17	32	1	8	100
Lassen	12	17	6	42	5	3	15	100
Lewis and Clark	21	9	7	18	2	4	39	100
Lincoln	18	6	9	18	3	0	46	100
Lolo	3	3	5	80	1	1	7	100
Los Padres	9	7	4	58	3	0	19	100
Malheur	3	29	6	33	7	0	22	100

Table 19—General recreation segment shares by administrative unit[a] (continued)

Administrative unit	Nonlocal			Local			Nonprimary	Total
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
					Percent			
Manti-La Sal	16	12	2	35	8	1	26	100
Mark Twain	6	7	9	61	3	0	14	100
Medicine Bow	9	17	6	55	5	1	7	100
Mendocino	6	18	1	59	3	0	13	100
Midewin Tallgrass Prairie	11	0	0	82	0	0	7	100
Modoc	9	1	3	67	1	0	19	100
Monongahela	10	16	16	28	3	0	27	100
Mount Baker-Snoqualmie	22	9	3	44	11	2	9	100
Mount Hood	18	10	3	52	5	2	10	100
National Forests in Alabama	13	1	1	81	1	2	1	100
National Forests in Florida	9	15	3	47	20	0	6	100
National Forests in Mississippi	7	2	0	74	4	0	13	100
National Forests in North Carolina	10	5	13	50	3	0	19	100
National Forests in Texas	18	9	1	47	12	1	12	100
Nebraska	12	4	4	41	1	5	33	100
Nez Perce	6	21	5	52	3	1	12	100
Ochoco	4	8	3	46	14	0	25	100
Okanogan	9	16	23	23	2	1	26	100
Olympic	9	7	12	39	7	1	25	100
Ottawa	4	10	28	17	1	2	38	100
Ouachita	20	14	13	46	4	0	3	100
Ozark-St Francis	7	21	5	39	9	6	13	100
Payette	12	12	35	30	1	2	8	100
Pike-San Isabel	12	7	8	54	3	1	15	100
Plumas	7	25	5	47	9	1	6	100
Prescott	13	10	4	61	4	1	7	100
Rio Grande	13	20	21	31	0	1	14	100
Rogue River-Siskiyou	9	5	3	56	4	0	23	100
Routt	2	5	16	29	3	1	44	100
Salmon-Challis	17	23	12	32	5	0	11	100
San Bernardino	16	10	22	36	4	3	9	100
San Juan	4	15	12	26	16	1	26	100
Santa Fe	7	9	3	67	2	0	12	100
Sawtooth	8	16	13	41	5	0	17	100
Sequoia	7	33	7	36	3	0	14	100
Shasta Trinity	8	13	7	46	5	1	20	100
Shawnee	11	7	18	41	3	4	16	100
Shoshone	10	9	9	46	4	1	21	100
Sierra	10	18	8	41	6	1	16	100
Siuslaw	13	15	10	34	3	0	25	100
Six Rivers	11	6	5	44	2	1	31	100
Stanislaus	15	25	15	30	3	1	11	100
Superior	2	22	14	46	1	0	15	100
Tahoe	8	6	11	57	6	1	11	100
Tongass (total)	4	0	5	73	2	1	15	100
Tongass—Juneau, Admiralty	2	0	5	72	4	0	17	100
Tongass—Ketchikan, Misty, Thorne Bay	2	0	8	69	1	2	18	100
Tongass—Sitka, Hoonah	2	1	6	75	0	1	15	100
Tongass—Yakutat, Petersberg, Wrangell	11	1	1	76	3	1	7	100
Tonto	17	5	0	68	3	0	7	100
Uinta-Wasatch-Cache	4	5	3	69	8	0	11	100
Umatilla	21	18	2	37	15	0	7	100
Umpqua	26	16	4	21	2	0	31	100
Wallowa-Whitman	10	18	8	44	1	0	19	100
Wayne	7	16	2	60	10	1	4	100
Wenatchee	17	18	6	36	13	0	10	100
White Mountain	13	8	30	16	1	1	31	100
White River	6	3	23	35	1	0	32	100
Willamette	19	18	3	27	8	2	23	100
National average	9	8	12	48	4	1	18	100

[a] Estimated using the full sample and case weights. Cases where the primary activity was downhill skiing/snowboarding or wildlife-related recreation were excluded. OVN = overnight, NF = national forest.

Table 20—Segment shares by administrative unit for downhill skiing visits[a]

Administrative unit	Nonlocal		Local		Nonprimary	Total
	Day	OVN	Day	OVN		
			Percent			
Angeles	38	1	46	3	12	100
Arapaho-Roosevelt	26	33	37	1	3	100
Beaverhead-Deerlodge	19	12	61	4	4	100
Bighorn	37	1	62	0	0	100
Bitterroot	21	3	73	0	3	100
Boise	5	0	93	0	2	100
Bridger-Teton	4	30	62	2	2	100
Caribou-Targhee	13	18	60	3	6	100
Carson	11	62	27	0	0	100
Chequamegon-Nicolet	16	46	33	1	4	100
Chippewa	16	46	33	1	4	100
Chugach	16	46	33	1	4	100
Cibola	1	2	88	0	9	100
Clearwater	16	46	33	1	4	100
Coconino	19	21	55	1	4	100
Colville	22	6	67	3	2	100
Coronado	16	46	33	1	4	100
Custer	15	40	32	6	7	100
Deschutes	5	37	50	1	7	100
Dixie	25	25	50	0	0	100
Eldorado	38	29	21	3	9	100
Flathead	6	26	62	1	5	100
Gallatin	2	6	89	1	2	100
Gifford Pinchot	16	46	33	1	4	100
Grand Mesa-Uncompahgre-Gunnison	14	16	68	1	1	100
Green Mountain and Finger Lakes	8	61	25	3	3	100
Helena	16	46	33	1	4	100
Hiawatha	16	46	33	1	4	100
Humboldt-Toiyabe—Spring Mountains	8	8	67	4	13	100
Idaho Panhandle	43	6	23	1	27	100
Inyo	4	80	14	0	2	100
Kaibab	25	18	41	2	14	100
Klamath	0	0	80	0	20	100
Kootenai	10	3	74	0	13	100
Lake Tahoe Management Unit	4	61	30	2	3	100
Lassen	16	46	33	1	4	100
Lewis and Clark	67	18	8	3	4	100
Lincoln	17	25	46	1	11	100
Lolo	1	3	95	1	0	100
Los Padres	16	46	33	1	4	100
Manti-La Sal	0	14	57	0	29	100
Medicine Bow	28	18	51	0	3	100
Mount Baker-Snoqualmie	51	13	30	2	4	100
Mount Hood	24	11	52	1	12	100
Nez Perce	16	46	33	1	4	100
Okanogan	2	9	85	0	4	100
Ozark-St Francis	16	46	33	1	4	100
Payette	14	46	30	6	4	100
Pike-San Isabel	24	32	36	1	7	100
Plumas	16	46	33	1	4	100

Table 20—Segment shares by administrative unit for downhill skiing visits[a] (continued)

Administrative unit	Nonlocal		Local		Nonprimary	Total
	Day	OVN	Day	OVN		
				Percent		
Rio Grande	21	51	27	0	1	100
Rogue River-Siskiyou	7	1	90	1	1	100
Routt	1	61	30	0	8	100
Salmon-Challis	16	46	33	1	4	100
San Bernardino	39	26	20	2	13	100
San Juan	11	16	71	0	2	100
Santa Fe	20	9	61	1	9	100
Sawtooth	28	27	43	1	1	100
Sequoia	37	3	59	1	0	100
Shasta-Trinity	0	17	83	0	0	100
Shoshone	19	12	53	9	7	100
Sierra	33	20	33	6	8	100
Stanislaus	29	52	15	1	3	100
Superior	16	46	33	1	4	100
Tahoe	29	33	32	0	6	100
Tonto	16	46	33	1	4	100
Uinta-Wasatch-Cache	8	30	55	1	6	100
Umatilla	53	6	39	0	2	100
Wallowa-Whitman	18	14	58	3	7	100
Wenatchee	29	9	57	2	3	100
White Mountain	25	62	9	1	3	100
White River	19	67	11	1	2	100
Willamette	39	23	37	1	0	100
National average	16	46	33	1	4	100

[a] Estimated using the full sample and case weights. Only forests with downhill skiing visits are shown. OVN = overnight.

The spending averages presented in this report relate to the entire travel party for the entire trip. To estimate total spending, divide the estimate of recreation visits by the average party size (table 21 or 22) to place NVUM visits and spending in the same units. Users may complete spending analysis either on a per-trip or per-night basis. To convert per-trip spending to per-night spending, we provide an estimate of the average number of nights in the local area for visitors to each national forest (table 23).

Table 21—Downhill skier party size by trip segment[a]

Nonlocal		Local		Nonprimary
Day	OVN	Day	OVN	
2.7	3.0	2.1	2.4	2.9

OVN = overnight.

[a] Estimated using the full sample and case weights. There are insufficient cases to estimate skier party sizes for individual national forests. The national average party sizes can be used for forest-level analyses.

Table 22—General recreation average party size by trip segment and administrative unit[a]

Administrative unit	Nonlocal			Local			Nonprimary
	Day	OVN-NF	OVN	Day	OVN-NF	OVN	
				Number			
Allegheny	2.6	2.8	1.9	2.5	3.5	2.3	3.4
Angeles	3.2	3.0	2.8	2.3	2.7	2.3	2.3
Apache-Sitgreaves	2.6	2.9	2.5	2.4	2.8	2.3	2.5
Arapaho-Roosevelt	2.5	2.8	2.3	2.2	2.8	2.3	3.2
Ashley	2.6	3.0	2.8	2.9	3.2	2.3	2.9
Beaverhead-Deerlodge	2.2	2.6	2.5	2.5	2.3	2.3	2.9
Bighorn	3.0	2.6	3.3	2.7	3.0	2.3	2.9
Bitterroot	2.1	2.8	2.8	2.2	2.7	2.3	2.6
Black Hills	2.6	2.9	2.7	2.3	3.2	2.3	2.8
Boise	3.0	3.3	2.7	2.4	3.0	2.3	2.2
Bridger-Teton	3.1	3.3	3.3	2.1	3.5	2.3	3.4
Caribbean	2.6	2.8	2.8	3.2	2.8	2.3	2.8
Caribou-Targhee	2.3	3.6	3.5	2.2	2.3	2.3	2.7
Carson	2.4	2.9	2.5	1.7	2.8	2.3	2.2
Chattahoochee-Oconee	2.6	2.7	2.4	2.5	1.9	2.3	2.5
Chequamegon-Nicolet	2.0	2.4	2.2	1.8	2.6	2.3	2.5
Cherokee	3.7	2.3	2.9	2.5	3.3	2.3	2.6
Chippewa	2.6	3.2	2.8	2.4	2.3	2.3	2.1
Chugach	3.2	2.3	2.5	2.0	2.3	2.3	2.8
Cibola	2.3	1.7	2.2	2.3	2.8	2.3	2.5
Clearwater	2.8	2.4	2.8	2.4	3.0	2.3	2.4
Cleveland	1.9	2.5	2.8	2.2	2.7	2.3	2.3
Coconino	2.8	3.0	2.7	2.1	2.0	2.3	2.8
Columbia River Gorge	2.4	2.3	2.5	2.2	2.1	2.3	2.6
Colville	2.6	2.9	2.8	2.4	2.7	2.3	2.1
Coronado	2.7	2.5	2.6	1.9	3.1	2.3	2.5
Custer	2.6	2.5	2.3	2.2	2.9	2.3	2.6
Dakota Prairie	2.6	2.8	2.8	1.9	2.8	2.3	1.7
Daniel Boone	2.8	2.8	2.8	2.2	2.5	2.3	2.2
Deschutes	2.2	2.9	3.0	2.1	2.6	2.3	2.7
Dixie	2.7	2.3	4.1	2.5	2.7	2.3	2.5
Eldorado	3.0	3.0	2.6	2.3	2.8	2.3	2.3
Fishlake	2.6	3.1	3.2	2.2	2.8	2.3	2.6
Flathead	2.9	2.8	2.6	2.3	2.5	2.3	2.7
Francis Marion-Sumter	2.2	2.0	2.0	2.3	2.2	2.3	3.7
Fremont-Winema	2.8	2.0	2.8	2.4	3.1	2.3	1.8
Gallatin	2.2	3.4	2.9	1.8	2.5	2.3	2.7
George Washington-Jefferson	3.2	2.7	2.3	2.0	2.4	2.3	2.8
Gifford Pinchot	2.5	2.6	2.7	2.0	2.8	2.3	2.5
Gila	3.4	2.6	2.7	2.0	2.8	2.3	2.8
Grand Mesa-Uncompahgre-Gunnison	2.4	2.2	2.5	2.3	2.5	2.3	2.2
Green Mountain and Finger Lakes	2.2	2.1	2.1	2.5	3.1	2.3	2.0
Helena	2.6	2.8	2.8	1.9	2.4	2.3	2.1
Hiawatha	2.0	3.3	2.7	1.7	3.1	2.3	2.8
Hoosier	3.2	2.4	2.8	2.2	2.3	2.3	2.3
Humboldt-Toiyabe	1.9	5.3	2.1	2.7	2.8	2.3	2.0
Humboldt-Toiyabe—Spring Mountains	3.3	2.8	2.5	2.7	2.8	2.3	2.5
Huron-Manistee	2.7	2.3	2.9	2.5	2.4	2.3	2.3
Idaho Panhandle	2.5	2.8	2.9	2.0	2.9	1.9	2.3
Inyo	2.0	2.5	2.8	1.5	2.8	2.3	2.7
Kaibab	2.6	2.4	2.3	2.5	2.8	2.3	2.7
Kisatchie	2.0	3.6	3.9	2.5	4.1	2.3	2.1
Klamath	2.6	2.2	2.8	2.5	3.1	2.3	2.4
Kootenai	2.3	2.7	2.9	2.1	2.1	2.3	2.5
Lake Tahoe Management Unit	1.8	2.6	3.0	1.9	2.8	2.3	2.8
Land Between the Lakes	2.6	2.9	2.9	2.7	3.4	2.3	2.8
Lassen	2.4	2.8	2.8	2.6	2.9	2.3	2.2
Lewis and Clark	2.5	3.4	3.8	1.7	2.7	2.3	2.3
Lincoln	2.9	2.6	2.8	1.6	2.8	2.3	2.9
Lolo	2.8	2.4	2.6	1.8	2.4	2.3	1.9
Los Padres	2.8	2.9	2.7	1.9	2.6	2.3	2.4
Malheur	2.6	3.8	2.8	2.4	2.9	2.3	2.2

Table 22—General recreation average party size by trip segment and administrative unit[a] (continued)

Administrative unit	Nonlocal			Local			Nonprimary
	Day	OVN-NF	OVN	Day	OVN-NF	OVN	
				Number			
Manti-La Sal	3.2	3.2	2.8	2.8	2.6	2.3	3.2
Mark Twain	2.5	3.6	3.6	2.7	2.1	2.3	3.2
Medicine Bow	2.9	3.1	3.0	1.9	2.9	2.3	2.3
Mendocino	2.5	2.2	2.8	1.6	2.8	2.3	1.8
Midewin Tallgrass Prairie	2.6	2.8	2.8	1.7	2.8	2.3	2.7
Modoc	2.6	2.8	2.8	2.2	2.8	2.3	2.7
Monongahela	2.5	2.2	2.5	1.9	1.9	2.3	2.6
Mount Baker-Snoqualmie	2.3	3.1	3.0	2.5	2.8	2.3	2.2
Mount Hood	3.0	2.6	3.0	2.4	2.4	2.3	2.7
National forests in Alabama	2.1	2.8	2.8	2.4	2.8	2.3	2.7
National forests in Florida	2.8	2.2	2.4	2.4	2.8	2.3	2.3
National forests in Mississippi	2.0	2.8	2.8	2.7	1.7	2.3	2.2
National forests in North Carolina	2.4	2.1	2.3	1.9	2.0	2.3	2.5
National forests in Texas	2.0	2.5	2.8	2.1	2.9	2.3	2.2
Nebraska	2.6	2.8	2.8	2.5	2.8	2.3	2.7
Nez Perce	2.2	2.9	3.1	2.1	2.6	2.3	2.4
Ochoco	2.6	2.6	2.8	2.5	2.8	2.3	1.7
Okanogan	2.0	2.2	2.9	2.2	5.5	2.3	2.2
Olympic	2.0	2.6	2.8	2.1	2.6	2.5	2.7
Ottawa	3.5	2.6	3.0	1.9	2.8	2.3	2.7
Ouachita	2.2	2.4	1.5	2.5	3.2	2.3	2.7
Ozark-St. Francis	2.7	2.3	2.8	2.9	3.1	2.3	2.8
Payette	2.5	2.6	3.1	2.1	2.8	2.3	2.1
Pike-San Isabel	2.5	2.5	2.5	2.2	2.1	2.3	2.4
Plumas	3.9	2.3	2.6	2.3	2.7	2.3	2.1
Prescott	2.7	2.7	2.7	1.7	3.1	2.3	2.3
Rio Grande	2.3	2.3	3.0	2.2	2.8	2.3	2.3
Rogue River-Siskiyou	2.1	2.7	2.6	2.0	2.4	2.3	2.5
Routt	2.6	2.4	3.2	2.0	1.9	2.3	2.8
Salmon-Challis	2.1	2.9	2.7	2.3	2.4	2.3	2.7
San Bernardino	2.7	2.8	2.9	2.3	3.2	2.4	3.0
San Juan	2.1	2.7	3.0	2.0	2.5	2.3	2.7
Santa Fe	2.6	2.6	2.6	1.9	3.2	2.3	2.5
Sawtooth	2.8	2.8	2.7	2.0	2.4	2.3	2.4
Sequoia	3.1	2.9	3.9	2.3	2.8	2.3	2.4
Shasta-Trinity	2.8	2.7	2.8	2.2	2.7	2.3	2.4
Shawnee	2.9	2.2	2.3	2.1	2.0	2.2	2.6
Shoshone	2.6	2.8	2.5	2.1	2.1	2.3	2.5
Sierra	3.5	3.0	3.7	2.5	3.2	3.7	2.7
Siuslaw	2.2	2.7	2.9	2.0	2.8	2.3	2.6
Six Rivers	2.6	2.3	2.3	2.0	3.2	2.3	2.3
Stanislaus	2.9	2.9	3.0	2.2	2.3	2.3	2.9
Superior	2.6	3.1	2.4	2.1	2.8	2.3	2.3
Tahoe	2.2	2.8	2.5	1.9	3.5	2.3	2.5
Tongass (total)	2.6	2.8	2.5	1.9	2.8	2.8	2.4
Tongass—Juneau, Admiralty	2.6	2.8	2.4	1.7	2.8	2.3	2.4
Tongass—Ketchikan, Misty, Thorne Bay	2.6	2.8	2.4	2.3	2.8	3.5	2.4
Tongass—Sitka, Hoonah	2.6	2.8	2.8	2.1	2.8	2.3	2.2
Tongass—Yakutat, Petersberg, Wrangell	2.6	2.8	2.8	1.4	2.8	2.3	2.7
Tonto	3.2	2.8	2.8	2.8	2.8	2.3	2.1
Uinta-Wasatch-Cache	2.5	3.1	3.0	2.4	3.3	2.3	2.6
Umatilla	2.1	2.6	2.8	2.8	4.6	2.3	2.7
Umpqua	2.4	2.4	2.4	1.8	2.8	2.3	2.5
Wallowa-Whitman	2.2	2.6	2.8	2.5	3.3	2.3	2.5
Wayne	2.9	2.8	2.5	2.5	2.4	2.3	2.7
Wenatchee	2.1	2.5	2.1	2.0	2.6	2.3	2.2
White Mountain	2.4	2.5	2.8	2.3	2.8	2.2	2.8
White River	3.0	2.7	3.1	1.9	2.9	2.3	3.3
Willamette	2.8	2.6	3.4	2.4	2.5	2.3	2.6
National average	2.6	2.8	2.8	2.2	2.8	2.3	2.7

[a] When there were fewer than 15 cases in a trip segment/forest combination, we have inserted the national average party size for that trip segment. OVN = overnight, NF = national forest.

Table 23—Average number of nights spent in the local area by segment and administrative unit[a]

Administrative unit	Nonlocal		Local		Nonprimary
	OVN-NF	OVN	OVN-NF	OVN	
			Number of nights		
Allegheny	2.5	3.9	1.9	3.7	2.2
Angeles	1.9	4.6	1.4	3.7	4.6
Apache-Sitgreaves	3.4	4.7	2.1	3.7	3.3
Arapaho-Roosevelt	2.2	3.7	2.3	2.8	3.5
Ashley	4.4	4.7	2.1	3.7	1.9
Beaverhead-Deerlodge	5.8	9.1	3.1	3.7	1.6
Bighorn	3.0	2.1	2.7	3.7	0.8
Bitterroot	3.1	4.6	2.6	3.7	2.5
Black Hills	4.4	4.2	2.1	3.7	3.3
Boise	2.4	2.2	1.9	3.7	3.4
Bridger-Teton	3.7	4.9	3.8	3.7	3.6
Caribbean	3.1	6.2	2.1	3.7	5.7
Caribou-Targhee	2.8	3.9	1.4	3.7	2.7
Carson	3.1	3.9	2.1	3.7	3.0
Chattahoochee-Oconee	2.8	3.1	1.6	3.7	2.5
Chequamegon-Nicolet	3.4	4.0	3.3	3.7	2.8
Cherokee	2.3	3.2	2.7	3.7	2.5
Chippewa	3.7	4.4	2.8	3.7	1.6
Chugach	2.3	6.4	2.2	3.7	5.0
Cibola	2.7	5.3	2.1	3.7	4.7
Clearwater	2.8	3.4	2.1	3.7	1.7
Cleveland	1.9	4.6	1.5	3.7	1.1
Coconino	2.4	3.9	1.5	3.7	3.4
Columbia River Gorge	2.0	4.9	1.1	3.7	2.8
Colville	2.8	4.6	3.3	3.7	3.5
Coronado	2.2	7.7	1.5	3.7	5.5
Custer	2.7	5.7	1.8	3.7	1.6
Dakota Prairie	3.1	4.6	2.1	3.7	2.6
Daniel Boone	2.5	2.5	3.5	3.7	2.6
Deschutes	3.4	4.7	2.4	3.7	4.0
Dixie	3.0	3.0	2.3	3.7	2.0
Eldorado	2.4	4.1	2.0	3.7	4.1
Fishlake	2.6	3.8	2.4	3.7	1.2
Flathead	4.3	7.6	2.1	3.7	5.5
Francis Marion-Sumter	1.7	1.8	3.2	3.7	1.5
Fremont-Winema	3.7	6.6	2.5	3.7	1.8
Gallatin	3.1	6.0	2.0	3.7	4.3
George Washington-Jefferson	4.3	3.3	1.6	3.7	1.3
Gifford Pinchot	2.2	3.0	2.1	3.7	1.1
Gila	6.2	3.5	2.1	3.7	1.6
Grand Mesa-Uncompahgre-Gunnison	2.3	5.2	1.5	3.7	5.6
Green Mountain and Finger Lakes	7.1	4.5	5.2	3.7	1.6
Helena	2.3	5.0	1.4	3.7	0.9
Hiawatha	3.6	4.3	3.9	3.7	2.4
Hoosier	2.3	4.6	2.4	3.7	0.3
Humboldt-Toiyabe	3.0	5.4	2.1	3.7	2.0
Humboldt-Toiyabe—Spring Mountains	3.1	3.9	1.4	3.7	7.4
Huron Manistee	2.4	5.0	2.3	3.7	2.1
Idaho Panhandle	3.0	5.5	2.4	3.0	3.2
Inyo	3.6	4.2	2.1	3.7	2.3
Kaibab	2.5	2.4	2.1	3.7	2.3
Kisatchie	4.6	2.8	2.4	3.7	0.6
Klamath	2.9	7.8	2.2	3.7	3.7
Kootenai	3.4	2.7	1.3	3.7	1.9
Lake Tahoe Management Unit	4.3	5.0	2.6	3.7	4.1
Land Between the Lakes	2.9	2.6	2.3	3.7	4.4
Lassen	3.9	4.6	2.8	3.7	1.4
Lewis and Clark	3.6	3.5	2.6	3.7	3.1
Lincoln	2.8	2.7	2.1	3.7	2.8
Lolo	3.4	4.4	2.2	3.7	1.3
Los Padres	2.1	3.6	1.6	3.7	2.6
Malheur	5.8	7.1	2.4	3.7	2.9
Manti-La Sal	2.8	4.1	3.0	3.7	2.5
Mark Twain	1.6	1.5	3.4	3.7	1.3

Table 23—Average number of nights spent in the local area by segment and administrative unit[a] (continued)

Administrative unit	Nonlocal		Local		Nonprimary
	OVN-NF	OVN	OVN-NF	OVN	
			Number of nights		
Medicine Bow	2.8	3.5	2.7	3.7	1.7
Mendocino	2.5	4.6	2.0	3.7	1.2
Midewin Tallgrass Prairie	3.1	4.6	2.1	3.7	0.6
Modoc	3.1	4.6	2.1	3.7	3.5
Monongahela	2.9	4.0	3.0	3.7	2.2
Mount Baker-Snoqualmie	2.0	3.4	2.1	3.7	2.7
Mount Hood	2.2	3.8	1.4	3.7	1.5
National forests in Alabama	3.1	4.6	2.1	3.7	3.5
National forests in Florida	3.6	6.6	2.2	3.7	2.5
National forests in Mississippi	3.1	4.6	2.9	3.7	0.9
National forests in North Carolina	3.2	4.2	1.5	3.7	4.1
National forests in Texas	3.7	3.3	2.7	3.7	1.2
Nebraska	3.1	2.4	2.1	3.7	1.9
Nez Perce	5.0	3.1	6.7	3.7	2.4
Ochoco	3.2	4.6	1.7	3.7	4.1
Okanogan	3.2	5.0	1.1	3.7	1.8
Olympic	1.8	3.8	1.7	1.6	3.6
Ottawa	3.6	4.0	2.1	3.7	3.2
Ouachita	2.9	2.7	3.5	3.7	1.0
Ozark-St. Francis	1.8	5.9	2.5	3.7	1.4
Payette	2.7	3.0	2.1	3.7	2.3
Pike-San Isabel	3.5	3.5	1.4	3.7	4.0
Plumas	3.0	4.0	2.5	3.7	3.7
Prescott	2.2	1.8	1.5	3.7	3.3
Rio Grande	4.1	7.4	2.1	3.7	9.1
Rogue River-Siskiyou	2.9	3.4	1.7	3.7	2.5
Routt	4.2	4.9	2.1	3.7	3.4
Salmon-Challis	2.7	3.3	3.1	3.7	3.2
San Bernardino	2.2	3.0	2.0	2.9	2.9
San Juan	4.0	8.2	2.0	3.7	4.6
Santa Fe	1.9	6.3	2.0	3.7	4.7
Sawtooth	3.0	6.3	1.7	3.7	4.9
Sequoia	2.4	3.0	1.5	3.7	1.6
Shasta-Trinity	3.6	2.9	2.0	3.7	1.8
Shawnee	2.2	3.5	2.6	5.2	1.6
Shoshone	3.4	5.7	3.6	3.7	2.4
Sierra	3.6	4.0	3.0	3.7	2.0
Siuslaw	3.0	4.6	2.1	3.7	2.0
Six Rivers	2.7	4.1	3.2	3.7	1.6
Stanislaus	2.8	3.8	2.2	3.7	3.0
Superior	4.2	3.9	2.1	3.7	2.9
Tahoe	3.3	3.9	2.2	3.7	3.0
Tongass (total)	3.1	7.1	2.1	3.4	3.4
Tongass—Juneau, Admiralty	3.1	4.2	2.1	3.7	2.9
Tongass—Ketchikan, Misty, Thorne Bay	3.1	8.3	2.1	3.0	2.8
Tongass—Sitka, Hoonah	3.1	7.3	2.1	3.7	5.9
Tongass—Yakutat, Petersberg, Wrangell	3.1	8.5	2.1	3.7	4.0
Tonto	3.1	4.6	2.1	3.7	1.1
Uinta-Wasatch-Cache	2.7	4.6	1.7	3.7	4.4
Umatilla	4.5	4.6	2.2	3.7	2.6
Umpqua	2.9	3.3	2.1	3.7	1.5
Wallowa-Whitman	3.4	1.7	2.4	3.7	1.5
Wayne	2.2	3.0	1.9	3.7	3.5
Wenatchee	2.1	2.3	3.4	3.7	1.1
White Mountain	2.8	3.3	2.1	3.7	2.7
White River	2.8	6.2	2.7	3.7	6.5
Willamette	2.4	5.1	2.4	2.8	1.8
National average	3.1	4.6	2.1	3.7	3.5

[a] Estimated using the full dataset and the case weights. If a forest has fewer than 15 cases in a segment, the value is the national average for that segment. OVN = overnight, NF = national forest.

Appendix 3: Wildlife-Related Visit Characteristics and Spending Averages

This appendix presents two sets of spending profiles for national forest visitors. One set is for visitors whose primary activity on the forest was wildlife related; the other is for visitors whose primary activity was not wildlife related nor downhill skiing/snowboarding (i.e., general recreation). The wildlife-related activity spending profiles can be used to estimate the economic activity generated from wildlife-related recreation on national forests.

Wildlife-related respondents were identified by their answers to two questions on the National Visitor Use Monitoring survey: "What activities have you participated in while on this visit?" and "of these, which was your primary recreation activity?" Respondents who selected "viewing wildlife," "hunting," or "fishing" as their primary recreation activity were considered wildlife-related visitors.

Spending Profiles by Trip Segment

Wildlife-related visitors spend more per trip than nonwildlife visitors on all trip types except for overnight trips off forests (table 24). Wildlife-related visitors in all trip types except local overnight spend more on gas and oil, groceries, and sporting goods than their general recreation counterparts.

To avoid double counting of visitor spending, we developed a "general recreation" spending profile to use when handling wildlife-related visits separately. The general recreation spending profile is for all visits except those for downhill skiing/snowboarding and wildlife-related activities. The spending profile for general recreation visitors (table 25) is very similar to the national nondownhill skier/nonsnowboarder spending profile (table 5), because the majority of visitors fall into this group. The general recreation spending profile excludes wildlife-related visitors, so the primary difference in this spending profile compared to the basic, nondownhill skier/nonsnowboarder profile is lower spending for gas and oil, groceries, and sporting goods. The general recreation spending averages can be used in analyses that either (1) don't involve wildlife-related or downhill skiing/snowboarding recreation or (2) develop a separate computation of total spending specifically for wildlife-related recreation and there is a need for a spending profile to represent other visitors.

Table 24—Wildlife-related national forest visitor spending profiles by trip-type segment and spending category, dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[b]
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
				Dollars				
Motel	0	48.45	197.92	0	4.85	24.27	135.32	36.00
Camping	0	29.86	13.48	0	29.24	13.87	11.56	6.99
Restaurant	9.49	25.73	95.62	3.08	8.16	13.86	86.33	22.52
Groceries	11.80	66.81	84.40	6.76	76.43	58.82	51.63	28.77
Gas and oil	40.84	84.83	88.90	22.28	69.09	63.24	69.39	44.13
Other transportation	0.13	0.70	1.53	0.03	0.02	1.17	6.51	0.86
Entry fees	2.17	10.20	10.01	1.89	3.12	1.86	8.08	4.17
Recreation and entertainment	1.21	5.98	30.56	0.87	1.36	0.49	16.19	5.53
Sporting goods	9.06	20.84	23.61	9.89	25.14	23.28	17.90	13.83
Souvenirs and other expenses	2.02	7.53	20.15	0.54	2.87	7.83	23.81	5.57
Total	76.73	300.93	566.17	45.34	220.28	208.70	426.72	168.37
Sample size (unweighted)	379	584	307	1,301	158	52	342	3,123
Standard deviation of total	76	390	686	58	208	203	623	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages estimated from visitors who claimed their primary activity was wildlife related. OVN = overnight, NF = national forest, n/a = not applicable.

[b] The all-visit averages are computed as a weighted average of the columns using the national trip segment shares for wildlife-related recreation as weights.

Table 25—General recreation (not downhill skiing/snowboarding or wildlife-related recreation) national forest visitor spending profiles by trip-type segment and spending category, dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[d]
	Day[b]	OVN-NF	OVN	Day[c]	OVN-NF	OVN		
				Dollars				
Motel	0	44.00	204.80	0	6.58	58.06	140.07	54.15
Camping	0	27.36	13.71	0	28.12	25.17	12.30	7.42
Restaurant	15.94	27.84	119.73	6.09	7.58	36.81	93.87	38.52
Groceries	10.41	52.63	70.63	6.59	70.91	59.81	49.68	29.17
Gas and oil	27.82	57.53	81.44	14.30	43.72	56.82	62.09	37.24
Other transportation	0.68	1.48	5.53	0.18	0.04	1.20	3.06	1.49
Entry fees	4.56	6.48	13.30	2.83	4.69	5.88	7.54	5.49
Recreation and entertainment	3.35	7.65	33.75	1.03	2.10	4.35	22.36	9.61
Sporting goods	1.83	8.66	12.17	2.83	10.07	6.22	6.99	5.40
Souvenirs and other expenses	1.92	7.78	26.79	0.61	0.88	12.34	23.73	8.73
Total	66.53	241.41	581.86	34.46	174.70	266.66	421.69	197.22
Sample size (unweighted)	1,733	3,016	1,982	7,924	1,230	243	3,613	19,741
Standard deviation of total	70	400	719	52	198	345	656	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.

[b] The all-visit averages are computed as a weighted average of the columns using the national general recreation segment shares as weights.

High and Low Spending Averages

Table 26 provides a high spending profile similar to table 6, but for visitors who specified their primary activity was wildlife related. In many cases, when completing analyses for wildlife-related recreation, a forest identified as a high spending area (app. 2, table 18) should use the profile in table 26. Similarly, forests identified as low spending areas (app. 2, table 18) should use the averages in table 27 for many wildlife-related analyses. The high and low spending profiles also can be used for wildlife-related visitor economic analysis aimed at specific geographical areas with higher or lower than average spending opportunities or prices.

Table 26—High spending profiles by trip-type segment and spending category for wildlife-related visits, dollars per party per trip[a]

	Nonlocal			Local				
Spending categories	Day	OVN-NF	OVN	Day	OVN-NF	OVN	Nonprimary	All visits[b]
				Dollars				
Motel	0	40.76	381.80	0	0	26.74	266.49	63.36
Camping	0	43.47	16.43	0	33.51	15.28	17.02	9.44
Restaurant	10.62	55.94	146.19	3.62	9.85	15.27	157.25	37.28
Groceries	13.20	71.34	100.94	5.02	88.49	64.79	76.52	32.81
Gas and oil	45.67	88.52	110.33	22.54	49.25	69.66	88.43	48.15
Other transportation	0.15	0.17	0	0	0	1.29	5.30	0.54
Entry fees	2.43	4.71	10.83	1.05	0	2.05	11.14	3.37
Recreation and entertainment	1.36	8.08	40.05	0.49	0	0.54	26.92	7.34
Sporting goods	10.13	21.37	23.28	6.77	8.31	25.64	26.77	12.46
Souvenirs and other expenses	2.26	9.26	48.07	0.14	0	8.63	37.83	9.25
Total	85.81	343.63	877.94	39.63	189.41	229.88	713.67	223.99
Sample size (unweighted)	n/a	68	64	155	16	n/a	65	386
Standard deviation of total		426	800	60	182		725	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages estimated from visitors who claimed their primary activity was wildlife-related.

[b] The sample size for wildlife-related nonlocal day visitors sampled at high spending areas was insufficient and here we calculate average spending at high spending areas as 112 percent of wildlife-related nonlocal day spending at average spending areas. See appendix 4 for further information on this calculation.

[c] The sample size for wildlife-related local overnight visitors sampled at high spending areas was insufficient and here we calculate average spending at high spending areas as 110 percent of the wildlife-related nonlocal overnight spending at average spending areas. See appendix 4 for further information on this calculation.

[d] The all-visit averages are computed as a weighted average of the columns using the national trip segment shares for wildlife-related recreation as weights.

Table 27—Low spending profiles for wildlife-related recreation by trip-type segment and spending category, dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[c]
	Day	OVN-NF	OVN	Day	OVN-NF	OVN[b]		
				Dollars				
Motel	0	16.10	102.31	0	2.82	21.07	33.39	10.75
Camping	0	18.10	8.77	0	21.67	12.04	8.97	4.13
Restaurant	6.10	19.52	76.75	2.46	3.47	12.03	58.59	13.37
Groceries	10.89	52.05	49.71	5.84	57.55	51.06	37.46	19.32
Gas and oil	39.45	70.65	73.96	20.42	52.53	54.89	58.77	36.77
Other transportation	0	0.84	0	0	0	1.02	0	0.09
Entry fees	2.69	20.24	9.43	2.72	4.88	1.62	6.41	5.32
Recreation and entertainment	1.43	5.22	14.26	1.32	0.66	0.42	4.38	2.71
Sporting goods	6.11	14.29	24.47	10.10	21.38	20.21	4.89	11.15
Souvenirs and other expenses	0.35	4.51	15.92	0.32	1.30	6.80	12.53	2.63
Total	67.03	221.52	375.57	43.18	166.27	181.15	225.38	106.24
Sample size (unweighted)	196	194	92	659	60	n/a	91	1,317
Standard deviation of total	60	281	381	48	169		324	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages estimated from visitors who claimed their primary activity was wildlife-related.

[b] The sample size for wildlife-related local overnight visitors sampled at low spending areas was insufficient and here we calculate average spending as 87 percent of the wildlife-related nonlocal overnight spending at average areas. See appendix 4 for further information on this calculation.

[c] The all-visit averages are computed as a weighted average of the columns using the national trip segment shares for wildlife-related recreation as weights.

Tables 28 and 29 also provide high and low spending profiles for the general recreation group that excludes visitors who stated their primary activity was wildlife related or downhill skiing/snowboarding. These tables can be used for economic analysis aimed at specific areas around a national forest with higher or lower than average spending opportunities or prices when it is desirable to exclude wildlife-related and downhill skiing/snowboarding visitation from the analysis.

Table 28—High spending profiles by trip-type segment and spending category for general recreation visits (not downhill skiing/snowboarding or wildlife-related recreation), dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[c]
	Day	OVN-NF	OVN	Day	OVN-NF	OVN[b]		
				Dollars				
Motel	0	88.78	285.24	0	5.64	63.96	211.56	80.28
Camping	0	37.41	13.87	0	31.98	27.72	15.73	9.05
Restaurant	24.21	61.61	179.16	5.41	6.17	40.54	138.61	56.80
Groceries	8.16	67.04	81.51	4.43	79.31	65.88	65.20	33.57
Gas and oil	29.31	82.80	97.50	10.08	39.99	62.59	80.25	42.47
Other transportation	0.68	1.67	8.57	0.17	0	1.32	5.26	2.26
Entry fees	5.63	9.43	19.79	1.57	2.31	6.48	8.56	6.09
Recreation and entertainment	3.05	18.20	53.70	1.41	1.33	4.79	29.33	14.23
Sporting goods	1.39	12.14	17.43	1.14	13.02	6.85	9.22	5.98
Souvenirs and other expenses	3.77	17.36	44.42	0.78	0.78	13.60	40.07	14.81
Total	76.19	396.45	801.20	24.98	180.52	293.73	603.79	265.55
Sample size (unweighted)	262	449	681	1473	141	n/a	985	4,021
Standard deviation of total	81	506	816	46	187		801	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was not downhill skiing or wildlife-related recreation.

[b] The sample size for local overnight visitors sampled at high spending areas was insufficient and here we calculate average spending as 110 percent of the nonlocal overnight spending at average areas. See appendix 4 for further information on this calculation.

[c] The all-visit averages are computed as a weighted average of the columns using the national general recreation segment shares as weights.

Table 29—Low spending profiles for general recreation visits (not downhill skiing/snowboarding or wildlife-related recreation) by trip-type segment and spending category, dollars per party per trip[a]

Spending categories	Nonlocal			Local			Nonprimary	All visits[b]
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
				Dollars				
Motel	0	20.70	112.28	0	4.70	37.99	84.17	30.85
Camping	0	21.22	17.67	0	24.91	19.98	9.38	6.70
Restaurant	13.11	18.89	68.83	6.29	7.53	30.05	65.89	26.43
Groceries	8.98	43.98	43.28	7.19	65.64	50.74	36.10	22.60
Gas and oil	24.32	45.26	58.22	15.05	40.52	39.89	48.47	30.76
Other transportation	0.13	0.73	1.98	0.07	0.07	1.39	2.26	0.77
Entry fees	4.00	5.93	4.80	3.19	5.88	4.19	6.63	4.41
Recreation and entertainment	3.17	4.37	9.02	0.62	2.31	0.26	16.89	5.15
Sporting goods	1.59	6.67	5.79	2.59	9.98	5.54	5.83	4.12
Souvenirs and other expenses	1.06	3.96	8.49	0.40	0.87	12.99	13.34	4.19
Total	56.36	171.70	330.35	35.40	162.39	203.02	288.96	135.98
Sample size (unweighted)	770	1,097	446	3,650	594	87	986	7,630
Standard deviation of total	64	258	354	50	168	208	419	n/a

OVN = overnight, NF = national forest, n/a = not applicable.

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars. These averages exclude visitors who claimed their primary activity was not downhill skiing/snowboarding or wildlife-related recreation.

[b] The all-visit averages are computed as a weighted average of the columns using the national general recreation segment shares as weights.

Wildlife-Related Visitor Trip and Party Characteristics

Visitors whose primary activities were wildlife related typically recreate in smaller travel parties (table 30). For wildlife-related visitors, local overnight trips with stays on the national forest involved the largest travel parties. In general and at the national level, wildlife-related visitors staying overnight on their trip spent a slightly greater number of nights in the local area (table 31) than general recreation visitors.

Table 30—Wildlife-related recreation average party size by trip segment and administrative unit[a]

	Nonlocal			Local			
Administrative unit	**Day**	**OVN-NF**	**OVN**	**Day**	**OVN-NF**	**OVN**	**Nonprimary**
Allegheny	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Angeles	2.3	2.3	2.5	2.0	2.7	2.0	2.3
Apache-Sitgreaves	2.1	1.9	2.5	2.7	2.7	2.0	2.3
Arapaho-Roosevelt	2.1	2.0	2.3	2.2	2.7	2.0	2.2
Ashley	2.7	2.5	2.5	2.6	3.3	2.0	2.3
Beaverhead-Deerlodge	1.7	2.1	2.5	2.4	2.7	2.0	2.3
Bighorn	2.1	2.3	2.5	2.6	2.7	2.0	2.9
Bitterroot	2.1	2.3	2.5	1.8	2.7	2.0	2.3
Black Hills	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Boise	2.4	2.4	2.5	1.8	2.7	2.0	2.3
Bridger-Teton	2.1	2.4	2.5	2.5	2.7	2.0	2.3
Caribbean	2.1	2.3	2.5	1.9	2.7	2.0	2.7
Caribou-Targhee	2.1	2.7	2.5	1.9	2.7	2.0	3.2
Carson	2.1	2.0	2.5	1.9	2.7	2.0	2.3
Chattahoochee-Oconee	2.1	2.3	2.5	2.2	2.7	2.0	2.3
Chequamegon-Nicolet	2.1	2.3	1.6	1.5	2.7	2.0	2.3
Cherokee	2.1	2.1	2.5	1.8	1.9	2.0	2.3
Chippewa	2.9	2.0	2.5	2.1	2.7	2.0	2.3
Chugach	2.3	2.9	3.5	2.2	2.7	2.0	2.6
Cibola	2.1	2.3	2.5	2.3	2.7	2.0	2.3
Clearwater	2.1	2.5	2.5	1.9	2.7	2.0	2.3
Cleveland	2.1	2.3	2.5	1.6	2.7	2.0	2.3
Coconino	2.1	2.5	2.5	2.0	2.7	2.0	2.3
Columbia River Gorge	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Colville	2.1	2.3	2.5	2.1	2.7	2.0	2.3
Coronado	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Custer	3.0	2.4	2.5	2.9	2.7	2.0	2.7
Dakota Prairie	2.1	2.3	2.5	2.1	2.7	2.0	2.3
Daniel Boone	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Deschutes	2.1	2.2	2.5	2.0	2.7	2.0	2.1
Dixie	2.5	2.3	2.5	2.2	2.7	2.0	2.3
Eldorado	1.9	2.0	2.5	1.6	2.7	2.0	2.3
Fishlake	2.1	2.9	2.5	3.0	2.7	2.0	2.3
Flathead	1.9	2.4	2.5	1.7	2.6	2.0	2.1
Francis Marion-Sumter	2.1	2.3	2.5	1.6	2.7	2.0	2.3
Fremont-Winema	2.1	2.3	2.5	2.0	2.7	2.0	2.0
Gallatin	2.1	1.9	2.8	1.7	2.7	2.0	2.3
George Washington-Jefferson	2.1	2.3	2.5	2.0	2.7	2.0	2.3
Gifford Pinchot	2.3	1.9	2.5	1.7	2.7	2.0	2.3
Gila	2.1	2.4	2.5	1.8	2.7	2.0	2.3
Grand Mesa-Uncompahgre-Gunnison	2.1	2.3	2.5	2.5	2.7	2.0	2.3

Table 30—Wildlife-related recreation average party size by trip segment and administrative unit[a] (continued)

	Nonlocal			Local			
Administrative unit	Day	OVN-NF	OVN	Day	OVN-NF	OVN	Nonprimary
Green Mountain and Finger Lakes	2.1	2.3	2.5	1.3	2.7	2.0	2.3
Helena	1.3	2.3	2.5	1.8	2.7	2.0	2.3
Hiawatha	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Hoosier	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Humboldt-Toiyabe	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Humboldt-Toiyabe—Spring Mountains	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Huron-Manistee	2.4	2.1	2.3	2.1	2.7	2.0	1.9
Idaho Panhandle	2.1	2.3	2.5	1.8	2.7	2.0	2.3
Inyo	2.1	2.3	2.3	1.9	2.7	2.0	2.7
Kaibab	2.1	2.3	2.5	2.3	2.7	2.0	2.3
Kisatchie	2.1	2.8	2.5	1.7	2.7	2.0	1.7
Klamath	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Kootenai	2.1	2.3	2.5	1.5	2.7	2.0	2.3
Lake Tahoe Management Unit	2.1	2.3	2.5	1.9	2.7	2.0	2.9
Land Between the Lakes	2.1	2.3	1.6	1.8	2.7	2.0	2.6
Lassen	1.8	2.2	2.5	1.7	2.7	2.0	2.3
Lewis and Clark	2.7	2.4	2.5	2.1	2.7	2.0	2.1
Lincoln	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Lolo	2.1	2.3	2.5	1.6	2.7	2.0	2.3
Los Padres	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Malheur	2.1	2.4	2.5	2.1	2.7	2.0	2.3
Manti-La Sal	2.5	2.5	2.5	2.0	2.4	2.0	3.0
Mark Twain	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Medicine Bow	2.1	2.3	2.5	2.1	2.7	2.0	2.3
Mendocino	2.1	2.3	2.5	1.8	2.7	2.0	2.3
Midewin Tallgrass Prairie	2.1	2.3	2.5	1.4	2.7	2.0	2.3
Modoc	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Monongahela	2.0	2.0	1.7	2.1	2.7	2.0	2.4
Mount Baker-Snoqualmie	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Mount Hood	2.1	2.3	2.5	1.9	2.7	2.0	2.3
National forests in Alabama	2.1	2.3	2.5	1.9	2.7	2.0	2.3
National forests in Florida	2.1	2.3	2.5	2.5	2.7	2.0	2.3
National forests in Mississippi	1.6	2.3	2.5	1.4	2.7	2.0	2.3
National forests in North Carolina	2.1	3.1	2.2	1.6	2.7	2.0	2.3
National forests in Texas	1.8	2.3	2.1	1.7	2.0	2.0	2.3
Nebraska	2.1	2.3	3.8	1.9	2.7	2.0	2.3
Nez Perce	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Ochoco	2.1	2.3	2.5	2.1	2.7	2.0	2.3
Okanogan	2.1	2.2	2.5	1.5	2.7	2.0	2.3
Olympic	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Ottawa	2.1	2.0	1.9	2.0	2.7	2.0	2.3
Ouachita	2.1	2.3	2.5	1.6	2.7	2.0	2.3
Ozark-St Francis	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Payette	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Pike-San Isabel	2.1	1.7	2.5	1.6	2.7	2.0	2.3
Plumas	2.2	1.6	2.2	2.0	2.7	2.0	2.3
Prescott	2.1	2.3	2.5	1.6	2.7	2.0	2.3
Rio Grande	2.1	2.3	2.9	1.9	2.7	2.0	2.3
Rogue River-Siskiyou	2.1	2.3	2.5	1.7	2.7	2.0	2.0

Table 30—Wildlife-related recreation average party size by trip segment and administrative unit[a] (continued)

Administrative unit	Nonlocal			Local			Nonprimary
	Day	OVN-NF	OVN	Day	OVN-NF	OVN	
Routt	2.1	2.9	2.5	1.9	2.7	2.0	2.3
Salmon-Challis	2.6	2.7	2.2	1.7	2.7	2.0	2.3
San Bernardino	2.1	2.3	2.5	2.4	2.7	2.0	2.3
San Juan	2.1	2.3	2.4	1.8	2.7	2.0	2.3
Santa Fe	1.5	2.3	2.5	1.6	2.7	2.0	2.3
Sawtooth	1.9	2.1	2.9	2.3	2.7	2.0	3.1
Sequoia	2.1	2.8	2.5	1.7	2.7	2.0	2.3
Shasta-Trinity	2.1	2.3	2.5	2.3	2.7	2.0	2.3
Shawnee	2.6	2.2	2.0	1.6	2.7	2.0	2.3
Shoshone	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Sierra	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Siuslaw	2.1	2.3	2.5	1.8	2.7	2.0	2.3
Six Rivers	2.1	2.3	2.5	2.4	2.7	2.0	2.3
Stanislaus	2.1	2.4	2.7	1.9	2.7	2.0	2.3
Superior	2.1	2.5	2.8	1.9	2.7	2.0	2.3
Tahoe	1.8	3.2	2.5	2.0	2.7	2.0	4.0
Tongass (total)	2.1	2.3	2.6	1.6	2.7	2.0	2.3
Tongass—Juneau, Admiralty	2.1	2.3	2.5	1.5	2.7	2.0	2.3
Tongass—Ketchikan, Misty, Thorne Bay	2.1	2.3	2.5	1.7	2.7	2.0	2.3
Tongass—Sitka, Hoonah	2.1	2.3	2.5	1.9	2.7	2.0	2.3
Tongass—Yakutat, Petersberg, Wrangell	2.1	2.3	3.2	1.6	2.7	2.0	2.3
Tonto	2.1	2.3	2.2	2.4	2.7	2.0	2.3
Uinta-Wasatch-Cache	2.3	2.3	2.5	1.9	3.6	2.0	2.3
Umatilla	2.5	2.1	2.5	2.6	2.7	2.0	2.3
Umpqua	2.4	1.9	2.5	2.1	2.7	2.0	2.3
Wallowa-Whitman	2.1	3.1	3.0	1.4	2.7	2.0	2.3
Wayne	2.1	2.3	2.5	2.3	2.7	2.0	2.3
Wenatchee	2.1	2.3	2.5	2.5	2.7	2.0	2.3
White Mountain	2.1	2.3	2.5	1.9	2.7	2.0	2.3
White River	2.1	2.3	3.1	2.8	2.7	2.0	2.9
Willamette	2.9	2.3	2.5	2.0	2.7	2.0	2.0
National average	2.1	2.3	2.5	1.9	2.7	2.0	2.3

OVN = overnight, NF = national forest.

[a] When there were fewer than 15 cases in a trip segment/forest combination, we have inserted the national average party size for that trip segment.

Table 31—Average number of nights away from home[a] and in local forest areas for wildlife-related visitors[b]

	Nonlocal		Local		Nonprimary
	OVN-NF	OVN	OVN-NF	OVN	
All visits:					
Nights away from home	4.5	6.7	2.7	5.1	7.0
Nights in the local area	4.0	5.1	2.7	4.7	2.9

OVN = overnight, NF = national forest.

[a] "Nights away from home" includes both "nights in the local area" and nights outside the local area.

[b] Estimated from the full sample using case weights.

Wildlife-Related Visits

The percentage of visits where the primary activities were wildlife related differs widely across forests (table 32). On the Malheur National Forest, more than 75 percent of recreation visits are wildlife related; it is 65 percent of visits to the Midewin Tallgrass Prairie. About half of recreation visits to the national forests in Texas and national forests in Mississippi are for wildlife-related recreation. In contrast, the shares of visits that are wildlife related are less than 5 percent on many forests. The percentage of visits on each forest that are for general recreation and downhill skiing/snowboarding are also shown in table 32.

Table 32—Percentage of wildlife-related visits by administrative unit[a]

Administrative unit	Downhill skiing/snowboarding	Wildlife related	General recreation
		Percent	
Allegheny	0	29	71
Angeles	9	7	84
Apache-Sitgreaves	0	25	75
Arapaho-Roosevelt	22	13	65
Ashley	0	41	59
Beaverhead-Deerlodge	9	49	42
Bighorn	2	19	79
Bitterroot	12	12	76
Black Hills	0	19	81
Boise	35	10	55
Bridger-Teton	32	10	58
Caribbean	0	12	88
Caribou-Targhee	12	17	71
Carson	27	9	64
Chattahoochee-Oconee	0	18	82
Chequamegon-Nicolet	0	31	69
Cherokee	0	9	91
Chippewa	0	54	46
Chugach	1	38	61
Cibola	3	10	87
Clearwater	2	13	85
Cleveland	0	7	93
Coconino	5	6	89
Columbia River Gorge	0	1	99
Colville	36	9	55
Coronado	0	8	92
Custer	21	28	51
Dakota Prairie	0	24	76
Daniel Boone	0	25	75
Deschutes	25	11	64
Dixie	13	16	71
Eldorado	42	7	51

Table 32—Percentage of wildlife-related visits by administrative unit[a] (continued)

Administrative unit	Downhill skiing/snowboarding	Wildlife related	General recreation
		Percent	
Fishlake	0	33	67
Flathead	29	22	49
Francis Marion-Sumter	0	36	64
Fremont-Winema	0	24	76
Gallatin	9	9	82
George Washington-Jefferson	0	28	72
Gifford Pinchot	1	17	82
Gila	0	31	69
Grand Mesa-Uncompahgre-Gunnison	38	5	57
Green Mountain and Finger Lakes	24	10	66
Helena	1	26	73
Hiawatha	0	17	83
Hoosier	0	13	87
Humboldt-Toiyabe	1	2	97
Humboldt-Toiyabe—Spring Mountains	3	2	95
Huron-Manistee	0	20	80
Idaho Panhandle	7	17	76
Inyo	38	8	54
Kaibab	1	14	85
Kisatchie	0	46	54
Klamath	2	21	77
Kootenai	1	26	73
Lake Tahoe Managment Unit	56	2	42
Land Between the Lakes	0	41	59
Lassen	3	29	68
Lewis and Clark	14	36	50
Lincoln	11	6	83
Lolo	6	21	73
Los Padres	0	2	98
Malheur	0	76	24
Manti-La Sal	0	23	77
Mark Twain	0	26	74
Medicine Bow	10	11	79
Mendocino	0	10	90
Midewin Tallgrass Prairie	0	65	35
Modoc	0	22	78
Monongahela	0	29	71
Mount Baker-Snoqualmie	22	4	74
Mount Hood	66	1	33
National forests in Alabama	0	10	90
National forests in Florida	0	28	72
National forests in Mississippi	0	49	51
National forests in North Carolina	0	10	90
National forests in Texas	0	52	48
Nebraska	0	30	70
Nez Perce	0	15	85

Table 32—Percentage of wildlife-related visits by administrative unit[a] (continued)

Administrative unit	Downhill skiing/snowboarding	Wildlife related	General recreation
		Percent	
Ochoco	0	19	81
Okanogan	5	18	77
Olympic	0	16	84
Ottawa	0	22	78
Ouachita	0	19	81
Ozark-St. Francis	1	20	79
Payette	28	12	60
Pike-San Isabel	4	13	83
Plumas	0	28	72
Prescott	0	10	90
Rio Grande	27	21	52
Rogue River-Siskiyou	9	19	72
Routt	48	8	44
Salmon-Challis	2	30	68
San Bernardino	26	3	71
San Juan	12	8	80
Santa Fe	17	5	78
Sawtooth	34	7	59
Sequoia	1	42	57
Shasta-Trinity	1	19	80
Shawnee	0	15	85
Shoshone	2	18	80
Sierra	9	7	84
Siuslaw	0	8	92
Six Rivers	0	10	90
Stanislaus	8	15	77
Superior	0	14	86
Tahoe	18	10	72
Tongass (total)	0	16	84
Tongass—Juneau, Admiralty	0	11	89
Tongass—Ketchikan, Misty, Thorne Bay	0	15	85
Tongass—Sitka, Hoonah	0	12	88
Tongass—Yakutat, Petersberg, Wrangell	0	29	71
Tonto	0	23	77
Uinta-Wasatch-Cache	19	9	72
Umatilla	10	31	59
Umpqua	0	24	76
Wallowa-Whitman	7	19	74
Wayne	0	25	75
Wenatchee	17	9	74
White Mountain	14	3	83
White River	48	1	51
Willamette	6	17	77
National average	16	13	71

[a] Wildlife-related visits are those where the primary activity is hunting, fishing, or viewing wildlife.

At the national level, wildlife-related visits are more likely to be from local residents, have a greater share of visits in the local overnight national forest and local overnight segments, and less likely to be nonprimary visits. However, this pattern is highly variable at the forest level (table 33). In nearly all cases, local day trips remain the most common type of wildlife-related visit. However, the share of visits that is local day trips ranges from a vast majority (e.g., more than 75 percent) to a few forests where local day trips are a fairly small component of visits. These segment shares can be used when distributing wildlife-related visits across the Basic 7 trip types.

Table 33—Wildlife-related recreation segment shares by administrative unit[a]

	Nonlocal			Local				
Administrative unit	Day	OVN-NF	OVN	Day	OVN-NF	OVN	Nonprimary	Total
					Percent			
Allegheny	2	4	18	72	0	3	1	100
Angeles	22	0	1	69	4	1	3	100
Apache-Sitgreaves	9	32	19	22	0	0	18	100
Arapaho-Roosevelt	16	10	7	40	11	3	13	100
Ashley	8	27	8	41	9	2	5	100
Beaverhead-Deerlodge	19	6	7	56	1	0	11	100
Bighorn	9	17	1	36	7	0	30	100
Bitterroot	1	1	2	80	0	1	15	100
Black Hills	0	2	5	69	10	0	14	100
Boise	38	24	6	16	10	5	1	100
Bridger-Teton	12	17	4	57	2	0	8	100
Caribbean	0	0	45	6	0	0	49	100
Caribou-Targhee	15	6	13	47	7	4	8	100
Carson	13	31	9	12	14	0	21	100
Chattahoochee-Oconee	20	7	1	49	4	4	15	100
Chequamegon-Nicolet	5	4	30	49	0	2	10	100
Cherokee	8	3	2	83	3	0	1	100
Chippewa	10	20	20	43	3	1	3	100
Chugach	13	3	31	18	1	0	34	100
Cibola	17	15	10	43	0	0	15	100
Clearwater	14	25	1	18	4	2	36	100
Cleveland	11	11	9	54	4	2	9	100
Coconino	12	31	6	23	6	0	22	100
Columbia River Gorge	11	11	9	54	4	2	9	100
Colville	6	15	15	45	11	7	1	100
Coronado	14	12	5	50	2	6	11	100
Custer	26	33	5	22	1	1	12	100
Dakota Prairie	11	11	9	54	4	2	9	100
Daniel Boone	7	4	5	76	5	0	3	100
Deschutes	6	20	5	45	9	0	15	100
Dixie	27	11	5	41	14	0	2	100
Eldorado	25	34	2	26	4	0	9	100
Fishlake	6	31	13	29	11	0	10	100

Table 33—Wildlife-related recreation segment shares by administrative unit[a] (continued)

Administrative unit	Nonlocal			Local			Nonprimary	Total
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
					Percent			
Francis Marion-Sumter	21	1	1	74	0	0	3	100
Fremont-Winema	5	13	0	68	10	0	4	100
Gallatin	6	8	12	71	2	0	1	100
George Washington-Jefferson	5	3	0	83	3	5	1	100
Gifford Pinchot	19	23	8	38	6	0	6	100
Gila	3	51	6	33	6	0	1	100
Grand Mesa-Uncompahgre-Gunnison	1	5	9	67	6	0	12	100
Green Mountain and Finger Lakes	11	0	1	57	0	10	21	100
Helena	8	13	7	58	0	0	14	100
Hiawatha	0	11	36	26	8	0	19	100
Hoosier	3	4	1	83	3	0	6	100
Humboldt-Toiyabe	37	11	3	12	21	0	16	100
Humboldt-Toiyabe—Spring Mountains	11	11	9	54	4	2	9	100
Huron Manistee	22	3	10	50	0	1	14	100
Idaho Panhandle	12	5	4	70	4	2	3	100
Inyo	2	51	29	3	1	2	12	100
Kaibab	18	17	5	36	2	0	22	100
Kisatchie	2	7	2	67	5	8	9	100
Klamath	9	17	7	44	6	5	12	100
Kootenai	16	10	6	62	3	0	3	100
Lake Tahoe Management Unit	0	9	21	32	0	3	35	100
Land Between the Lakes	9	6	13	54	1	0	17	100
Lassen	16	41	1	26	5	2	9	100
Lewis and Clark	12	37	14	22	0	3	12	100
Lincoln	11	11	9	54	4	2	9	100
Lolo	12	2	5	75	0	0	6	100
Los Padres	20	13	0	40	5	0	22	100
Malheur	0	58	3	35	2	0	2	100
Manti-La Sal	11	17	7	34	13	2	16	100
Mark Twain	8	0	0	82	0	0	10	100
Medicine Bow	18	7	7	60	1	0	7	100
Mendocino	6	21	0	45	12	0	16	100
Midewin Tallgrass Prairie	8	0	0	89	0	0	3	100
Modoc	11	11	9	54	4	2	9	100
Monongahela	13	12	14	47	4	1	9	100
Mount Baker-Snoqualmie	11	11	9	54	4	2	9	100
Mount Hood	11	11	9	54	4	2	9	100
National forests in Alabama	11	11	9	54	4	2	9	100
National forests in Florida	1	6	12	65	4	11	1	100
National forests in Mississippi	11	0	0	89	0	0	0	100
National forests in North Carolina	5	2	10	73	4	1	5	100
National forests in Texas	10	5	3	74	2	2	4	100
Nebraska	6	11	3	55	0	1	24	100
Nez Perce	4	34	11	27	10	0	14	100
Ochoco	1	4	1	81	4	0	9	100
Okanogan	1	23	38	28	2	0	8	100
Olympic	6	0	9	81	1	1	2	100

Table 33—Wildlife-related recreation segment shares by administrative unit[a] (continued)

Administrative unit	Nonlocal			Local			Nonprimary	Total
	Day	OVN-NF	OVN	Day	OVN-NF	OVN		
					Percent			
Ouachita	14	0	1	55	25	2	3	100
Ozark-St. Francis	6	1	0	60	27	0	6	100
Payette	22	22	15	24	7	5	5	100
Pike-San Isabel	3	13	15	61	0	1	7	100
Plumas	12	10	12	54	4	2	6	100
Prescott	9	2	6	68	1	0	14	100
Rio Grande	26	18	25	4	7	1	19	100
Rogue River-Siskiyou	11	3	9	56	1	2	18	100
Routt	17	21	15	25	5	0	17	100
Salmon-Challis	25	12	4	39	0	4	16	100
San Bernardino	6	7	7	52	13	0	15	100
San Juan	4	12	25	37	10	0	12	100
Santa Fe	19	7	1	53	13	0	7	100
Sawtooth	24	13	12	28	6	6	11	100
Sequoia	8	12	5	55	7	2	11	100
Shasta Trinity	12	11	2	65	2	0	8	100
Shawnee	3	11	11	70	0	0	5	100
Shoshone	32	6	18	30	10	0	4	100
Sierra	27	12	2	44	1	0	14	100
Siuslaw	9	9	5	61	3	0	13	100
Six Rivers	11	1	23	57	0	0	8	100
Stanislaus	15	31	19	31	1	0	3	100
Superior	6	31	29	28	1	0	5	100
Tahoe	6	14	2	65	6	0	7	100
Tongass (total)	2	2	13	63	2	1	17	100
Tongass—Juneau, Admiralty	1	1	4	72	1	0	21	100
Tongass—Ketchikan, Misty, Thorne Bay	1	1	16	64	0	3	15	100
Tongass—Sitka, Hoonah	11	11	9	54	4	2	9	100
Tongass—Yakutat, Petersberg, Wrangell	2	1	25	46	4	0	22	100
Tonto	19	4	0	63	2	2	10	100
Uinta-Wasatch-Cache	11	13	9	55	3	3	6	100
Umatilla	11	46	9	20	4	1	9	100
Umpqua	25	38	5	21	2	0	9	100
Wallowa-Whitman	14	25	10	39	2	0	10	100
Wayne	0	5	0	87	1	7	0	100
Wenatchee	7	3	19	38	20	1	12	100
White Mountain	7	14	15	31	0	1	32	100
White River	12	18	31	12	16	0	11	100
Willamette	10	8	10	63	0	1	8	100
National average	11	11	9	54	4	2	9	100

[a] Estimated using the full sample and case weights. Estimates developed using only those cases where the recreation was wildlife related.
OVN = overnight, NF = national forest.

Appendix 4: Activity-Specific Spending Averages

The information in this appendix updates a previous report (White and Stynes 2010b) on the average spending of National Forest System (NFS) recreation visitors engaged in a variety of recreation activities. The spending averages presented here complement the spending averages for visitors engaged in differing types of recreation trips reported elsewhere in this report. The spending averages presented in this appendix should be applied **only** to analyses focused on specific recreation activities; the spending averages reported elsewhere in this report should be used for most recreation analyses. The spending averages in this appendix should **not** be used in place of the others in this report to do an analysis of all recreation at the national, regional, or forest level.

Activity Groupings

When completing a National Visitor Use Monitoring (NVUM) survey, respondents are presented a list of 26 recreation activities and asked to select those they participated in during the national forest visit. Respondents are also asked to identify their single primary recreation activity on the visit to the national forest. The activity-specific spending averages[1] presented here relate to the primary activity. Small sample sizes do not allow us to construct spending averages for each NVUM activity. If an activity is not depicted here, it is not because that activity is less important. Rather, it is because either too few visitors doing that activity volunteered to do a NVUM survey, or the spending patterns of visitors engaged in that recreation activity are not statistically unique from that of visitors in other activities (e.g., hiking vs. biking). Because of those factors, we develop spending profiles for 12 activity groups (table 34). Because the spending profiles for downhill skiers/snowboarders are presented elsewhere in this report, we do not repeat spending averages for that group in this appendix.

Small Sample Size Conditions

Despite a sample of nearly 30,000 national forest visits, sample sizes become very small once visitors are split into activities, trip-type segments, and high and low spending levels. Although sample sizes for some popular activities were quite large (e.g., hiking), the sample sizes for other specialized activities (e.g., off-road/motorized trail) are not. In a number of instances, there were fewer than 50 observations for some combinations of activity, trip type, and spending level. For those instances

[1] The NVUM averages for people per vehicle are used to estimate party sizes. It is assumed that the group traveling in the same vehicle is the spending unit.

Table 34—Recreation activity groupings for activity-specific spending averages

Activity	Description
Downhill skiing/snowboarding[a]	Downhill skiing or snowboarding
Cross-country skiing	Cross-country skiing or snowshoeing
Snowmobiling	Snowmobile travel
Hunting	Hunting—all types
Fishing	Fishing—all types
Nature related	Viewing nature, viewing wildlife, visiting a nature center, or completing nature study
Off-road/motorized trail	Motorized recreation in off-road vehicle areas or on motorized vehicle trails
Driving for pleasure	Driving for pleasure on roads
Developed camping	Camping in developed campsites
Primitive camping/backpacking	Primitive camping, backpacking, or camping in dispersed areas
Hiking/biking	Hiking or walking, bicycling (including mountain biking)
Other	Any remaining activity, those visitors engaged in multiple primary activities, or those without a primary activity

[a] We do not present the downhill skiing/snowboarding spending averages in this appendix because they are presented elsewhere in this report.

with small sample sizes where we could not estimate spending directly from the data, we construct spending averages based on the following rules.

Rule 1—For one activity (snowmobiling) the NVUM economic sample did not include 50 nonlocal day trips. Therefore, the nonlocal day trip spending profile for snowmobiling was based on the local day trip spending profile for that activity ($99). The nonlocal day trip spending average for all activities ($76) is two times the local day trip average for all activities ($38). That relationship is used to estimate the nonlocal day trip spending average for snowmobiling. Ultimately, average spending of nonlocal day trip snowmobile visitors was estimated as $99 × 2.0 = $198.

Rule 2—For many activities there were too few cases to independently estimate a low or high spending average directly from the NVUM sample. In those situations, the low and/or high spending averages were estimated using the ratios of low to average and high to average spending across all activities for the respective trip type. It was assumed that the deviations from the activity average for low and high spending areas could be represented by the same deviations for the all visitor averages. For example, the low spending average for nonlocal cross country skiers on overnight trips is $365 = 0.625 × $584 and the high average is $963 = 1.649 × $584. This same procedure is used to fill low and high spending cells for other segments and activities, using the ratios at the bottom of the corresponding columns in table 35. This approach preserves the unique distribution of spending across categories for a given activity in the detailed tables that follow, as it adjusts spending in all categories proportionally up or down by a fixed percentage.

Rule 4[2]—Five activities (cross-country skiing, snowmobiling, nature-related recreation, off-road/motorized trail, and driving for pleasure) did not have enough local overnight trip observations to reliably estimate spending averages for that trip type. For those activities, the local overnight trip average was estimated at 46 percent of the nonlocal overnight trip average based on the overall ratio of spending averages of local and nonlocal overnight trips across all activities.

Spending Profiles

For all activities combined, visitor spending ranges from $29 per party per trip for local day trips in high spending areas to $704 per party per trip for nonlocal overnight trips in high spending areas (table 35, total row). Within activities and trip types, the greatest observed spending (i.e., not filled using rules 1 through 4) was for nonlocal nature-related visitors on overnight trips in high spending areas ($879).

[2] We have used the same set of analytical rules for this activity-spending analysis as in prior reports. "Rule 3" was not required in this analysis; however, we have maintained the numbering scheme for consistency with past, and potential future, analyses.

Table 35—Total visitor spending for high, average, and low spending areas by activity, dollars per party per trip in 2014 dollars[a]

	Nonlocal day trips			Nonlocal overnight trips[b]			Local day trips			Local overnight trips[b]		
Activity	Low	Average	High	Low	Average	High	Low	Average	High	Low	Average	High
						Dollars						
Cross-country skiing	58	70	79	365	584	963	34	36	21	233	268	295
Snowmobiling	164	198	222	526	842	1,388	99	99	76	335	386	426
Hunting	85	103	115	326	371	611	48	53	41	202	233	257
Fishing	66	72	81	225	368	481	43	44	40	146	203	224
Nature-related	50	57	64	313	640	879	36	35	27	255	294	323
Off-road/ motorized trail	74	89	100	208	333	548	63	56	43	133	153	168
Driving	39	46	52	305	488	716	31	32	27	195	224	247
Developed camping	N/A	N/A	N/A	185	212	297	N/A	N/A	N/A	174	190	200
Primitive camping/ backpacking	N/A	N/A	N/A	82	142	315	N/A	N/A	N/A	114	112	124
Hiking/biking	47	57	70	256	489	718	26	24	20	173	183	201
Other	63	74	93	250	355	552	44	44	31	183	213	235
Total	63	76	85	267	427	704	38	38	29	171	197	217
Ratio to average	0.829		1.118	0.625		1.649	1.000		0.763	0.868		1.102

N/A = not applicable.

[a] Shaded cells were filled using rules 1, 2, or 4 as described in the text. Other figures are estimated directly from the National Visitor Use Monitoring sample.

[b] Includes visitors on overnight trips staying on or off the forest.

The lowest observed spending was for locals hiking or biking on day trips to high spending areas ($20). Average spending for visitors on overnight trips engaged in some activities in high spending areas is quite high. However, it is useful to keep in mind that, in many cases, the number of visits in that activity and trip type is quite small. For example, average trip spending for nonlocal visitors "driving for pleasure" and staying overnight away from home in high spending areas is estimated to be more than $716 per party per trip. But, nationally, just 5 percent of visits have the primary activity of driving for pleasure, and less than one-fourth of driving-for-pleasure visits fall into the nonlocal overnight trip segment (see table 46). Further, about 15 percent of administrative units in the NFS are classified as high spending areas.

Detailed spending averages for each of the activity groups included in this analysis are presented in tables 36a through 45b. In most cases, the spending averages were computed directly from NVUM survey data. We identify the rule we used (see above) to construct the spending average when sample sizes were less than 50 cases. National-level segment shares and party sizes necessary to do activity-specific analyses are reported in tables 46 and 47.

Table 36a—Nonlocal visitor spending averages for cross-country skiers, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	141.74	226.68	373.73
Camping	0	0	0	0.72	1.15	1.90
Restaurant	13.81	16.66	18.63	66.24	105.93	174.65
Groceries	4.61	5.56	6.22	34.45	55.09	90.83
Gas and oil	16.77	20.23	22.63	36.08	57.70	95.13
Other transportation	0	0	0	0	0	0
Entry fees	8.80	10.62	11.88	37.29	59.63	98.31
Recreation and entertainment	11.13	13.43	15.02	21.37	34.18	56.35
Sporting goods	2.43	2.93	3.28	22.20	35.50	58.53
Souvenirs and other expenses	0.77	0.93	1.04	5.19	8.30	13.68
Total	58.32	70.35	78.69	365.27	584.16	963.11
Sample size (unweighted)[c]	Rule 2	60	Rule 2	Rule 2	104	Rule 2
Standard deviation of total		89			654	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 36b—Local visitor spending averages for cross-country skiers, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	90.31	104.05	114.61
Camping	0	0	0	0.46	0.53	0.58
Restaurant	6.51	4.17	3.82	42.20	48.62	53.56
Groceries	2.68	1.68	3.44	21.95	25.29	27.85
Gas and oil	14.30	7.62	5.78	22.99	26.48	29.17
Other transportation	0	0	0	0	0	0
Entry fees	6.59	14.95	3.44	23.76	27.37	30.15
Recreation and entertainment	1.86	1.64	2.13	13.62	15.69	17.28
Sporting goods	2.23	5.80	1.92	14.14	16.29	17.95
Souvenirs and other expenses	0	0.31	0	3.31	3.81	4.20
Total	34.17	36.17	20.52	232.74	268.13	295.35
Sample size (unweighted)[c]	127	174	66	Rule 2	Rule 4	Rule 2
Standard deviation of total	47	79	31			

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 37a—Nonlocal visitor spending averages for snowmobiling, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	162.03	259.12	427.21
Camping	0	0	0	0.36	0.57	0.94
Restaurant	28.52	34.41	38.48	104.62	167.31	275.85
Groceries	12.49	15.07	16.86	34.27	54.81	90.37
Gas and oil	101.52	122.47	136.98	119.53	191.16	315.17
Other transportation	0	0	0	2.29	3.66	6.03
Entry fees	13.62	16.43	18.38	10.64	17.01	28.04
Recreation and entertainment	0	0	0	61.10	97.72	161.11
Sporting goods	8.16	9.85	11.02	14.78	23.64	38.98
Souvenirs and other expenses	0	0	0	16.66	26.64	43.92
Total	164.32	198.23	221.71	526.27	841.64	1,387.62
Sample size (unweighted)[c]	Rule 2	Rule 1	Rule 2	Rule 2	102	Rule 2
Standard deviation of total					713	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 37b—Local visitor spending averages for snowmobiling, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	103.24	118.94	131.01
Camping	0	0	0	0.23	0.26	0.29
Restaurant	17.20	17.20	13.13	66.66	76.80	84.59
Groceries	7.54	7.54	5.75	21.84	25.16	27.71
Gas and oil	61.24	61.24	46.73	76.16	87.74	96.65
Other transportation	0	0	0	1.46	1.68	1.85
Entry fees	8.22	8.22	6.27	6.78	7.81	8.60
Recreation and entertainment	0	0	0	38.93	44.85	49.41
Sporting goods	4.92	4.92	3.76	9.42	10.85	11.95
Souvenirs and other expenses	0	0	0	10.61	12.23	13.47
Total	99.12	99.12	75.64	335.33	386.31	425.53
Sample size (unweighted)[c]	Rule 2	101	Rule 2	Rule 2	Rule 4	Rule 2
Standard deviation of total		87				

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 38a—Nonlocal visitor spending averages for hunting, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	35.72	49.05	80.87
Camping	0	0	0	11.98	14.07	23.20
Restaurant	6.53	7.88	8.81	34.76	44.78	73.83
Groceries	10.81	13.04	14.58	64.50	80.83	133.27
Gas and oil	48.45	58.45	65.37	103.71	117.38	193.53
Other transportation	0	0	0	0	0	0
Entry fees	0.46	0.56	0.63	34.64	14.69	24.22
Recreation and entertainment	0	0	0	4.91	5.67	9.35
Sporting goods	18.11	21.85	24.44	30.02	35.99	59.34
Souvenirs and other expenses	0.77	0.93	1.04	5.59	8.06	13.29
Total	85.14	102.71	114.87	325.83	370.52	610.88
Sample size (unweighted)[c]	Rule 2	71	Rule 2	86	204	Rule 2
Standard deviation of total		89		365	451	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 38b—Local visitor spending averages for hunting, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	0	0	0
Camping	0	0	0	0	0	0
Restaurant	2.67	3.13	2.39	9.80	11.29	12.44
Groceries	4.75	5.37	4.10	63.28	72.90	80.30
Gas and oil	23.78	26.55	20.26	71.89	82.82	91.23
Other transportation	0	0.06	0.05	0	0	0
Entry fees	0.89	0.54	0.41	2.16	2.49	2.75
Recreation and entertainment	0	0.48	0.37	0.73	0.84	0.92
Sporting goods	15.12	16.18	12.35	23.67	27.27	30.04
Souvenirs and other expenses	0.65	1.04	0.79	4.93	5.68	6.26
Total	47.86	53.36	40.72	202.23	232.98	256.63
Sample size (unweighted)[c]	171	365	Rule 2	Rule 2	69	Rule 2
Standard deviation of total	53	69			187	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 39a—Nonlocal visitor spending averages for fishing, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	41.60	96.47	135.10
Camping	0	0	0	17.92	27.82	37.66
Restaurant	5.87	9.06	10.13	31.45	45.40	66.99
Groceries	12.86	12.74	14.25	43.75	69.92	71.53
Gas and oil	36.97	37.34	41.76	53.48	73.80	93.36
Other transportation	0	0.19	0.21	0	0.78	0.14
Entry fees	3.27	2.62	2.93	8.29	8.31	6.85
Recreation and entertainment	1.99	1.47	1.64	6.12	16.96	28.34
Sporting goods	4.89	6.84	7.65	13.64	19.16	23.21
Souvenirs and other expenses	0.30	2.07	2.32	8.83	9.88	17.34
Total	66.15	72.33	80.90	225.08	368.49	480.50
Sample size (unweighted)[c]	140	265	Rule 2	162	589	82
Standard deviation of total	62	74		277	510	576

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 39b—Local visitor spending averages for fishing, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	17.09	9.92	10.93
Camping	0	0	0	12.81	27.92	30.75
Restaurant	2.06	2.70	2.39	5.74	9.04	9.96
Groceries	6.49	7.90	7.20	43.16	68.23	75.16
Gas and oil	19.70	21.43	23.89	44.97	58.28	64.20
Other transportation	0	0.03	0	0	0.57	0.62
Entry fees	3.59	2.62	1.65	4.22	2.63	2.89
Recreation and entertainment	1.51	0.87	0.38	0.55	1.39	1.53
Sporting goods	9.26	8.49	4.76	15.62	21.76	23.97
Souvenirs and other expenses	0.23	0.22	0	1.76	3.76	4.14
Total	42.85	44.27	40.26	145.93	203.48	224.14
Sample size (unweighted)[c]	427	793	90	55	130	Rule 2
Standard deviation of total	44	52	58	153	213	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 40a—Nonlocal visitor spending averages for nature-related activities, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	101.69	267.22	400.74
Camping	0	0	0	7.18	14.31	11.12
Restaurant	12.55	17.07	19.09	86.16	128.10	179.13
Groceries	5.02	4.54	5.08	37.27	57.10	68.58
Gas and oil	25.20	25.84	28.90	50.60	77.88	78.62
Other transportation	0.40	0.18	0.20	1.59	10.26	20.13
Entry fees	1.80	2.30	2.57	3.29	12.16	17.71
Recreation and entertainment	2.99	2.81	3.14	10.42	27.66	29.89
Sporting goods	0.73	0.46	0.51	3.61	6.51	8.55
Souvenirs and other expenses	1.65	4.22	4.72	11.00	38.48	64.13
Total	50.34	57.42	64.22	312.80	639.67	878.60
Sample size (unweighted)[c]	112	239	Rule 2	119	417	154
Standard deviation of total	53	57		370	677	827

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 40b—Local visitor spending averages for nature-related activities, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	106.47	122.65	135.11
Camping	0	0	0	5.70	6.57	7.24
Restaurant	9.52	8.43	8.37	51.04	58.80	64.77
Groceries	5.86	4.06	1.68	22.75	26.21	28.87
Gas and oil	16.97	15.03	10.08	31.03	35.75	39.38
Other transportation	0.08	0.54	0.10	4.09	4.71	5.19
Entry fees	1.23	1.60	1.02	4.84	5.58	6.15
Recreation and entertainment	1.10	2.66	3.04	11.02	12.70	13.98
Sporting goods	0.58	0.97	1.53	2.59	2.99	3.29
Souvenirs and other expenses	0.72	1.45	0.97	15.33	17.66	19.46
Total	36.05	34.75	26.80	254.86	293.61	323.42
Sample size (unweighted)[c]	222	566	149	Rule 2	Rule 4	Rule 2
Standard deviation of total	45	51	53			

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 41a—Nonlocal visitor spending averages for off-road/motorized trail use, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	38.77	62.01	102.24
Camping	0	0	0	25.19	40.28	66.41
Restaurant	10.50	12.67	14.17	29.38	46.99	77.47
Groceries	12.13	14.63	16.36	37.79	60.44	99.65
Gas and oil	40.34	48.67	54.43	55.94	89.47	147.51
Other transportation	0	0	0	0	0	0
Entry fees	7.59	9.16	10.24	3.96	6.33	10.44
Recreation and entertainment	0	0	0	4.09	6.54	10.78
Sporting goods	1.99	2.40	2.68	7.12	11.39	18.78
Souvenirs and other expenses	1.47	1.77	1.98	5.73	9.16	15.10
Total	74.03	89.30	99.88	207.98	332.62	548.38
Sample size (unweighted)[c]	Rule 2	62	Rule 2	Rule 2	153	Rule 2
Standard deviation of total		72			454	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 41b—Local visitor spending averages for off-road/motorized trail use, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	24.71	28.46	31.35
Camping	0	0	0	16.05	18.49	20.37
Restaurant	10.22	6.65	5.07	18.72	21.57	23.76
Groceries	9.11	9.37	7.15	24.08	27.74	30.56
Gas and oil	30.27	30.25	23.08	35.65	41.07	45.24
Other transportation	0	0.46	0.35	0	0	0
Entry fees	4.40	3.31	2.53	2.52	2.91	3.20
Recreation and entertainment	5.12	3.01	2.30	2.61	3.00	3.31
Sporting goods	2.99	2.69	2.05	4.54	5.23	5.76
Souvenirs and other expenses	0.44	0.38	0.29	3.65	4.20	4.63
Total	62.56	56.12	42.83	132.52	152.67	168.17
Sample size (unweighted)[c]	99	247	Rule 2	Rule 2	Rule 4	Rule 2
Standard deviation of total	63	58				

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 42a—Nonlocal visitor spending averages for driving for pleasure, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
	Dollars					
Motel	0	0	0	97.50	155.93	243.41
Camping	0	0	0	9.54	15.25	25.63
Restaurant	14.22	15.94	17.83	68.56	109.64	182.25
Groceries	2.73	4.25	4.75	28.95	46.30	62.82
Gas and oil	19.01	22.58	25.25	64.24	102.73	122.49
Other transportation	0	0.11	0.12	0.31	0.49	0.06
Entry fees	1.26	1.04	1.16	5.20	8.32	9.53
Recreation and entertainment	0	0	0	11.71	18.72	25.70
Sporting goods	0	0	0	3.77	6.03	5.95
Souvenirs and other expenses	1.86	2.26	2.53	15.58	24.91	38.35
Total	39.08	46.19	51.65	305.34	488.32	716.20
Sample size (unweighted)[c]	66	128	Rule 2	Rule 2	137	52
Standard deviation of total	38	52			563	709

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 42b—Local visitor spending averages for driving for pleasure, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
	Dollars					
Motel	0	0	0	62.13	71.57	78.84
Camping	0	0	0	6.08	7.00	7.71
Restaurant	8.42	7.15	7.05	43.68	50.32	55.43
Groceries	2.88	3.69	5.57	18.45	21.25	23.41
Gas and oil	18.06	19.47	12.91	40.93	47.15	51.94
Other transportation	0	0	0	0.20	0.22	0.25
Entry fees	1.33	0.67	0.27	3.31	3.82	4.21
Recreation and entertainment	0.18	0.08	0	7.46	8.59	9.46
Sporting goods	0.32	0.37	0.12	2.40	2.77	3.05
Souvenirs and other expenses	0	0.38	1.38	9.92	11.43	12.59
Total	31.18	31.82	27.30	194.56	224.14	246.89
Sample size (unweighted)[c]	183	384	59	Rule 2	Rule 4	Rule 2
Standard deviation of total	43	45	42			

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 43a—Nonlocal visitor spending averages for camping, dollars per party per trip[a]

Spending category	Primitive camping/backpacking			Developed camping		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	2.20	17.49	90.26	1.99	4.69	10.14
Camping	3.47	7.45	12.20	38.61	44.25	58.14
Restaurant	14.32	23.50	57.77	14.45	16.78	37.14
Groceries	21.53	31.41	41.58	58.45	62.63	71.75
Gas and oil	26.71	40.39	56.79	50.28	57.63	78.10
Other transportation	2.23	1.57	2.19	0.05	0.28	2.20
Entry fees	3.33	4.23	8.10	7.62	7.28	7.95
Recreation and entertainment	1.05	2.37	8.06	2.08	3.77	8.77
Sporting goods	6.75	10.88	27.06	8.42	9.12	11.01
Souvenirs and other expenses	0.65	2.88	10.61	3.21	5.75	12.17
Total	82.23	142.16	314.64	185.16	212.18	297.36
Sample size (unweighted)	180	364	54	299	740	84
Standard deviation of total	160	284	448	175	225	321

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.

Table 43b—Local visitor spending averages for camping, dollars per party per trip[a]

Spending category	Primitive camping/backpacking			Developed camping		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	1.61	1.24	1.36	0.81	0.63	0.24
Camping	6.51	6.06	6.68	36.57	41.89	50.02
Restaurant	8.91	6.26	6.90	7.01	7.55	9.02
Groceries	45.99	49.09	54.07	69.78	75.86	79.45
Gas and oil	36.83	33.98	37.43	39.55	45.44	42.76
Other transportation	0.17	0.10	0.11	0.09	0.05	0
Entry fees	3.73	3.73	4.11	6.82	5.44	3.30
Recreation and entertainment	0.66	0.61	0.67	2.45	1.83	0.47
Sporting goods	8.96	10.71	11.80	10.56	10.11	14.15
Souvenirs and other expenses	0.61	0.38	0.42	0.64	0.82	0.49
Total	113.98	112.16	123.54	174.30	189.62	199.90
Sample size (unweighted)[b]	247	479	Rule 2	247	479	55
Standard deviation of total	190	197		190	197	179

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 44a—Nonlocal visitor spending averages for hiking/biking, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	88.52	178.79	256.59
Camping	0	0	0	11.81	12.34	14.29
Restaurant	14.15	16.76	24.77	55.30	102.68	159.54
Groceries	6.38	7.46	9.00	34.85	62.29	84.28
Gas and oil	19.74	23.58	28.65	43.40	63.79	83.64
Other transportation	0.11	1.43	1.27	1.09	4.04	8.61
Entry fees	3.94	3.56	1.88	5.90	7.54	12.14
Recreation and entertainment	0.23	1.23	1.87	3.70	23.84	45.98
Sporting goods	1.23	1.02	0.11	5.42	9.23	13.70
Souvenirs and other expenses	0.90	1.66	2.15	6.27	24.20	39.00
Total	46.68	56.69	69.71	256.24	488.73	717.77
Sample size (unweighted)[c]	339	682	112	350	1,346	441
Standard deviation of total	53	63	89	318	669	817

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 44b—Local visitor spending averages for hiking/biking, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	37.15	42.90	47.26
Camping	0	0	0	14.90	14.94	16.45
Restaurant	6.53	6.08	5.22	19.40	21.49	23.67
Groceries	4.35	4.06	3.65	48.52	52.02	57.30
Gas and oil	11.04	9.87	7.49	22.42	29.77	32.79
Other transportation	0.09	0.21	0.25	0.90	1.23	1.36
Entry fees	1.94	1.46	0.77	7.58	4.41	4.86
Recreation and entertainment	0.28	0.48	1.24	3.84	2.05	2.26
Sporting goods	1.30	1.64	1.11	7.74	8.06	8.87
Souvenirs and other expenses	0.50	0.55	0.66	10.56	5.80	6.39
Total	26.01	24.35	20.39	173.01	182.68	201.22
Sample size (unweighted)[c]	1,778	3,748	874	93	218	Rule 2
Standard deviation of total	40	42	43	227	252	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 45a—Nonlocal visitor spending averages for other activities, dollars per party per trip[a]

Spending category	Nonlocal day trips			Nonlocal overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	54.91	91.15	145.89
Camping	0	0	0	25.28	25.38	29.96
Restaurant	10.66	14.53	27.24	31.06	50.73	108.82
Groceries	14.58	13.87	12.29	53.77	69.05	86.00
Gas and oil	28.87	29.38	31.23	56.38	66.71	93.21
Other transportation	0.11	0.27	0.80	1.73	3.63	0.31
Entry fees	4.65	5.74	9.68	5.39	8.38	12.14
Recreation and entertainment	6.39	5.79	4.28	10.04	18.03	34.11
Sporting goods	2.47	3.04	2.96	5.52	8.89	9.75
Souvenirs and other expenses	0.61	1.59	4.14	6.17	13.33	32.25
Total	68.35	74.21	92.61	250.25	355.27	552.44
Sample size (unweighted)	219	549	50	531	1,733	255
Standard deviation of total	70	72	74	324	560	627

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.

Table 45b—Local visitor spending averages for other activities, dollars per party per trip[a]

Spending category	Local day trips			Local overnight[b] trips		
	Low	Average	High	Low	Average	High
			Dollars			
Motel	0	0	0	10.39	19.93	21.96
Camping	0	0	0	23.82	27.80	30.63
Restaurant	4.37	5.14	3.68	11.21	14.92	16.44
Groceries	11.97	11.11	7.71	69.48	75.62	83.29
Gas and oil	17.11	16.96	13.22	48.06	54.79	60.35
Other transportation	0.06	0.07	0.04	0	0.03	0.04
Entry fees	4.71	3.89	3.50	5.02	4.93	5.43
Recreation and entertainment	0.76	1.39	0.76	1.73	3.21	3.53
Sporting goods	4.78	4.92	1.29	9.97	9.72	10.71
Souvenirs and other expenses	0.30	0.70	1.20	2.91	2.45	2.70
Total	44.06	44.18	31.40	182.59	213.41	235.08
Sample size (unweighted)[c]	1,263	2,638	295	212	513	Rule 2
Standard deviation of total	58	57	47	153	262	

[a] Outliers are excluded and exposure weights are applied in estimating spending averages. All figures expressed in 2014 dollars.
[b] Includes visitors on overnight trips staying on or off forests.
[c] See text for descriptions of rules used for filling spending averages when sample sizes were fewer than 50 cases.

Table 46—Percentage of trip-type segment shares by activity

Primary activity	Nonlocal day	Nonlocal overnight[a]	Local day	Local overnight[a]	Nonprimary	Total
			Percent			
Cross-country skiing	10	19	63	2	6	100
Snowmobiling	20	38	31	2	9	100
Hunting	9	21	60	7	3	100
Fishing	12	20	52	7	9	100
Nature related	12	16	30	1	41	100
OHV use	16	18	54	5	7	100
Driving for pleasure	9	21	44	1	25	100
Developed camping	0	48	0	41	11	100
Primitive camping/backpacking	0	48	0	40	12	100
Hiking/biking	8	15	57	2	18	100
Other	10	20	48	6	16	100

[a] Includes visitors on overnight trips staying on or off forests. OHV = off-highway vehicle.

Table 47—Average party size by activity and trip type

Primary activity	Nonlocal day	Nonlocal overnight[a]	Local day	Local overnight[a]	Nonprimary
Cross-country skiing	2.7	2.8	1.9	2.6	2.1
Snowmobiling	2.8	2.8	2.4	1.8	2.5
Hunting	2.0	2.1	1.7	2.1	1.8
Fishing	2.2	2.6	2.1	2.9	2.4
Nature related	2.6	2.5	2.3	2.5	2.7
OHV use	2.1	2.6	2.0	2.1	2.8
Driving for pleasure	2.2	2.2	2.2	2.7	2.4
Developed camping	3.3	2.9	2.4	2.9	2.6
Primitive camping/backpacking	2.2	2.6	2.9	2.7	2.4
Hiking/biking	2.4	2.6	2.0	2.4	2.6
Other	3.0	3.0	2.6	2.7	2.8

[a] Includes visitors on overnight trips staying on or off forests. OHV = off-highway vehicle.

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