The Outdoor Recreation Economy

October 22, 2019
The Outdoor Recreation Economy

Congress plays an overarching role in shaping outdoor recreation throughout the nation through legislation and oversight. As Congress continues to debate outdoor recreation issues—including provision of federal resources, planning efforts, and funding—data on the size, distribution, and relative importance of the outdoor recreation economy may inform these debates. Both historical and recent legislative and executive efforts centered on outdoor recreation have identified the economic importance of outdoor recreation. In 2016, Congress passed the Outdoor Recreation Jobs and Economic Impact Act (P.L. 114-249), which directed the Bureau of Economic Analysis (BEA) in the Department of Commerce to create an account that would measure the outdoor recreation economy. BEA released the first official Outdoor Recreation Satellite Account (ORSA) statistics in September 2018 and updated them in September 2019.

According to the ORSA statistics, in 2017, the current-dollar value added of the outdoor recreation economy was $427 billion, or 2.2% of gross domestic product (GDP). ORSA statistics show that supporting activities, such as construction and travel and tourism expenses, accounted for approximately half of value added. Conventional outdoor recreation activities, as defined by BEA, accounted for another 30.7% of real outdoor recreation gross output; other recreation accounted for 19.3%. The outdoor recreation economy grew by 3.9% in 2017, faster than the 2.4% growth for the overall U.S. economy, and has grown approximately 9.9% since 2012. Real gross output, real compensation, and real employment all grew faster in the outdoor recreation economy than in the overall economy in 2016. BEA reports that the “arts, entertainment, recreation, accommodation, and food services industry” was the largest contributor to the outdoor recreation economy in 2017, accounting for $112.9 billion of current-dollar outdoor recreation value added, followed by retail trade. These two sectors were also the largest industries included in the ORSA statistics for both compensation ($67.3 billion) and employment (2.1 million) in 2017. BEA released prototype statistics for states, which found that Hawaii, Montana, Maine, Vermont, and Wyoming had the five highest proportions of state GDP generated from outdoor recreation in 2017.

In addition to the ORSA statistics, which are measured for the nation as a whole or for individual states, federal agencies sometimes measure the specific economic impact of federal lands. According to some studies, visitors to federal lands generated $55 billion in value added in FY2012 and $53.9 billion in value added in FY2016 (FY2017 dollars). Differences in methods, data, and assumptions mean any comparison between these figures and the ORSA statistics can be highly general at best.

It is difficult to precisely measure the total amount of outdoor recreation that Americans engage in, due to differences in data collection, measurement, definitions, and other factors between sources. One source, the National Survey on Recreation and the Environment (NSRE), measures the number of people who engage in 17 different outdoor activities and how often they do so. According to the NSRE, over 194 million respondents (approximately 82% of respondents) engage in the most popular form of outdoor recreation (visiting developed sites) in a given year. Americans report engaging in the most popular surveyed activity, viewing nature, over 32.4 billion times in a given year, although this activity is a major outlier. Rates of participation in surveyed activities vary substantially and can depend on geographic location, proximity to recreation resources, demographic factors, and other influences.

In FY2017, lands managed by the four federal land management agencies (the Bureau of Land Management, Fish and Wildlife Service, Forest Service, and National Park Service) had approximately 596 million visits. Lands managed by other federal agencies (the Bureau of Reclamation, National Oceanic and Atmospheric Administration, and United States Army Corps of Engineers) also had significant visitation. Visits to the lands of these other agencies sometimes exceeded visits to lands managed by the four federal land management agencies. Although publicly owned lands (including federal lands) generally have the greatest amount of recreation visits, private lands can dominate certain types of recreation, particularly in the eastern United States.
Contents

Introduction .......................................................... 1
Outdoor Recreation Jobs and Economic Impact Act ...................... 1
The National Outdoor Recreation Economy ................................ 3
   About the Outdoor Recreation Satellite Account ....................... 3
   Outdoor Recreation Satellite Account Estimates ...................... 4
   National Outdoor Recreation Participation ............................ 10
Outdoor Recreation on Federal Lands ................................... 13
   Federal Lands’ Recreation Resources and Uses ...................... 15
   Recreation Visits to Federal Lands .................................... 16

Figures

Figure 1. Outdoor Recreation Value Added by Activity Type .......... 5
Figure 2. Industry Composition of Outdoor Recreation Value Added, 2017 .......... 6
Figure 3. Value Added by Outdoor Recreation Activity, 2017 ............. 7
Figure 4. Outdoor Recreation as a Percentage of State GDP ............ 8

Tables

Table 1. Outdoor Recreation Participants and Days, 2008 ............... 11
Table 2. Economic Activity from Outdoor Recreation on Federal Lands ........ 14
Table 3. Federal Land Recreation Visits .................................. 16

Contacts

Author Information ...................................................... 17
Introduction

Congress plays an overarching role in shaping outdoor recreation throughout the nation through legislation and oversight. Congress’s role in outdoor recreation resources, policies, and programs often involves the agencies that manage recreation resources on federal lands and waters. However, Congress also has supported crosscutting legislative, analytic, and planning efforts dedicated to outdoor recreation broadly, and it has established programs that facilitate recreation on nonfederal lands. Legislation, hearings, and congressional reports have indicated the significance of outdoor recreation economic activity as a decisionmaking consideration in many contexts, not just those involving federal lands. As Congress continues to debate outdoor recreation issues—including provision of federal resources, planning efforts, and funding—data on the size, distribution, and relative importance of the outdoor recreation economy may inform these debates.

Outdoor Recreation Jobs and Economic Impact Act

In April 2016, the Secretary of the Interior announced that the Department of the Interior would sign a memorandum of understanding with the Department of Commerce to undertake a feasibility study to analyze outdoor recreation’s impact on the U.S. economy. The Secretary noted that “credible data on the tangible economic benefits of public lands” would be a valuable resource for stakeholders, including Congress, and that the study would count the contributions of the outdoor recreation economy in a “comprehensive and impartial” way. Later that year, Congress explicitly authorized these efforts through passage of the Outdoor Recreation Jobs and Economic Impact Act. In addition to ensuring the availability of economic data on outdoor

---

1 Currently, no one federal agency oversees outdoor recreation. Instead, various federal agencies managing land and water resources administer outdoor recreation on those resources. Four of these agencies are conventionally considered to be the four federal land management agencies: the Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NPS) in the Department of the Interior (DOI) and the Forest Service (FS) in the Department of Agriculture (USDA). The Bureau of Reclamation (BOR) in DOI, the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce (DOC), and the U.S. Army Corps of Engineers (USACE) in the Department of Defense (DOD) also manage resources used for recreation. In addition, Congress established several crosscutting land designations, such as wilderness, wild and scenic rivers, and national trails, all of which have some recreational focus.

2 For example, H.Rept. 116-5 is the Coastal and Marine Economies Act, which would place a moratorium on offshore oil and gas leasing, specifies that the moratorium is sought because “existing industries, including tourism, fishing, and outdoor recreation, which have led to prosperous economies up and down the Atlantic and Pacific, are not compatible with offshore oil and gas drilling.” The legislation related to enhanced recreational hunting and sport fishing and certain environmental regulations, states that “recreational activities associated with the great outdoors generate hundreds of billions of dollars annually for the nation’s economy while simultaneously creating millions of jobs.” As part of S. Hrg. 115-27, congressional testimony centered on many aspects of the outdoor recreation economy, including significance to states, industries, and interest groups, relation to existing laws and policies, and other matters. U.S. Congress, House Committee on Energy and Commerce, Subcommittee on Digital Commerce and Consumer Protection, Outdoor Recreation: Vast Impact of the Great Outdoors, 115th Cong., 1st sess., 2017, S. Hrg. 115-27.


4 DOI, “Secretary Jewell.” See also S.Rept. 114-371.

5 P.L. 114-249.
recreation, the act ensured methodological uniformity with other statistical activities of the Bureau of Economic Analysis (BEA) that analyze the economic impact of private industries. The act directed the Secretary of Commerce, acting through BEA, to assess and analyze the outdoor recreation economy of the United States and its contributions to the economy generally. The act required the Secretary to consider employment, sales, and contributions to travel and tourism, in addition to any other items the Secretary considered appropriate. Consequently, BEA developed the Outdoor Recreation Satellite Account (ORSA), an account using the same data and methods as BEA’s gross domestic product (GDP) statistics. BEA released the first ORSA prototype statistics for comment in February 2018, and it released the first official ORSA statistics in September 2018. BEA released the most recent ORSA statistics on September 20, 2019. Congress has indicated general approval of the ORSA and directed BEA to develop regional statistics in future years; BEA included state-level prototype statistics in the 2019 release. The House Appropriations Committee also directed the Department of Commerce, in coordination with the agencies of the Federal Recreation Council, to continue to refine the account and to report on the feasibility of identifying amounts allocated by the federal government to outdoor recreation efforts.

---

7 P.L. 114-249 §2(a).  
8 P.L. 114-249 §2(b).  
9 The Bureau of Economic Analysis (BEA) often refers to collections of statistics as accounts. Accounts measure sectors or activities in a given geographic area (such as national, international, or regional) and may relate to individual industries, flows of goods and services, or multiple industries, called satellite accounts. For more information, see BEA, “What We Do,” at https://www.bea.gov/sites/default/files/2018-04/BEA-What-We-Do-Fact-Sheet.pdf.  
12 H.Rept. 116-101. The Federal Recreation Council members are the BLM, BOR, FWS, and NPS in DOI; FS in USDA; NOAA in DOC; and USACE in DOD. See https://www.bea.gov/data/special-topics/outdoor-recreation.
Terminology

Value added is the value of final goods and services produced by a given sector (i.e., those purchased by end users), minus the value of the intermediate goods and services (i.e., those used up in production). When measured at the national level, value added is one way to measure gross domestic product (GDP), although other ways of calculating GDP exist.

Gross output is the value of all the goods and services produced by the nation’s economy, including both final and intermediate goods and services.

Employment includes full-time, part-time, and temporary (i.e., seasonal or short-term) employees, as well as employees on paid leave.

Compensation is the total remuneration to employees, including wage and salaries and supplements (e.g., employer contributions to employee health insurance or Social Security).

Real data is economic data that has been adjusted for inflation. For the purposes of this report, unless otherwise noted, real data is measured in 2017 dollars.

Current-dollar data is economic data that has not been adjusted for inflation, (i.e., is the dollar value at the time it was reported).

The National Outdoor Recreation Economy

About the Outdoor Recreation Satellite Account

BEA prepares the ORSA statistics as required by the Outdoor Recreation Jobs and Impact Act. The most recent ORSA statistics, released in September 2019, measured the period from 2012 to 2017.

The ORSA “measures the size of the outdoor recreation economy and the link between outdoor recreation and the broader U.S. economy.”13 BEA constructed the ORSA by isolating outdoor recreation spending and production from the broader industries and categories that BEA already tracked.14 BEA compiles data into industry accounts (e.g., retail trade, manufacturing, construction, and others) and uses all this data to calculate gross domestic product (GDP). The ORSA is a satellite account in that it isolates and combines the parts of many individual industries that are related to outdoor recreation. For example, as described by BEA, existing industry accounts show “the production of all apparel, whereas the ORSA shows the production of apparel used specifically for outdoor recreation activities, such as wetsuits and hiking boots.”15

The ORSA divides outdoor recreation activity into core activities and supporting activities. Core activities include the production and purchase of goods and services used directly for outdoor recreation, such as equipment, fuel, concessions, and fees.16 Supporting activities are defined as goods and services that facilitate access to outdoor recreation activities, such as travel and tourism expenses, local trips, construction, and government expenditures that support outdoor recreation (including local, state, and federal spending).17 BEA also organizes its statistics using

---

17 Highfill and Smith-Nelson, Outdoor Recreation Satellite Account, p. 11. Both travel and tourism and local trips include food, beverages, lodging, transportation, souvenirs, and shopping that occur as part of an outdoor recreation
conventional and broad views of outdoor recreation. The *conventional* activities include “all recreational activities undertaken for pleasure that generally involve some level of intentional physical exertion and occur in nature-based environments outdoors,” such as camping, fishing, hiking, and hunting. Other activities include additional activities undertaken for pleasure that occur outdoors that may not meet the conventional definition (i.e., do not require intentional physical exertion or occur in a nature-based setting), such as outdoor concerts and festivals and games and sports fields. The two categories of activities can be combined to generate a broad view of the outdoor recreation economy.

BEA calculates the ORSA from the same data used to calculate GDP broadly. As such, the ORSA is directly comparable to other BEA products, including other satellite accounts, like those for arts and cultural production. In addition, the estimates used to create the ORSA follow internationally recognized standards for national accounting, including creating GDP, value added, and other measures. Thus, in theory, the ORSA results can be compared to other measures of GDP, gross output, and value added, although differing assumptions, data, and methods may influence to what degree other measures are equivalent to ORSA statistics. As described above, the ORSA combines data from many different BEA industries; thus, although very general comparisons can be made, direct comparisons risk double-counting. For example, comparing the size of the ORSA to the size of the apparel industry would be inaccurate, because some value added from the apparel industry is included in the ORSA.

**Outdoor Recreation Satellite Account Estimates**

According to the ORSA statistics, in 2017, the current-dollar value added of the outdoor recreation economy was $427 billion. The outdoor recreation economy accounted for 2.2% of GDP. As shown in Figure 1, supporting activities, such as construction and travel and tourism expenses, accounted for approximately half of outdoor recreation value added in 2017, approximately $213.9 million current dollars. Conventional outdoor recreation accounted for 30.7% of value added. Other recreation accounted for 19.3%.

---

23 Highfill and Smith-Nelson, *Outdoor Recreation Satellite Account*. According to this source, there are three ways to calculate GDP, including value added, which generate equivalent results.
24 The 2017 ORSA data releases are reported in both millions of real (2012) dollars and current (2017) dollars. Unless otherwise noted, all ORSA economic statistics reported herein are calculated by CRS to real 2017 dollars.

---

*Trip*. *Travel and tourism* measures spending that occurs more than 50 miles from home. *Local trips* measures spending that occurs within 50 miles of home.
The Outdoor Recreation Economy

Figure 1. Outdoor Recreation Value Added by Activity Type
(in billions of 2017 dollars)


Notes: Conventional outdoor recreation includes activities such as bicycling, boating, hiking, and hunting. Other outdoor recreation includes activities such as gardening, outdoor concerts, and games and sports fields. The supporting category includes activities such as construction, travel and tourism, local trips, and government expenditures. Current dollars have been converted to 2017 dollars using Bureau of Economic Analysis GDP Price Index, annual, not seasonally adjusted.

BEA organizes its accounts by industry. BEA reports that the arts, entertainment, recreation, accommodation, and food services industry was the largest contributor to the outdoor recreation economy in 2017, accounting for $112.9 billion of current-dollar outdoor recreation value added. The second-largest industry in 2017 was retail trade, accounting for $95.7 billion of current-dollar value added. Figure 2 provides a full breakdown of contribution to value added by industry.

BEA reported that the outdoor recreation economy generated approximately 5.1 million jobs in 2017. The arts, entertainment, recreation, accommodation, and food services industry was the largest industry included in the ORSA for both compensation ($67.3 billion current dollars) and employment (2.1 million) in 2017. Retail trade was the second-largest industry for both compensation ($49.8 billion current dollars) and employment (1.6 million) in 2017.

30 Awuku-Budu and Franks, ORSA, U.S. and Prototype for States. BEA uses the National American Industry Classification System (NAICS) to define industries; the NAICS definition of retail trade involves retailers “organized to sell merchandise in small quantities to the general public,” generally without manufacturing or creating the merchandise. It includes categories such as vehicle and vehicle part dealers, health and personal care stores, food and beverage stores (such as grocery stores), clothing stores, and gas stations. Within the ORSA, BEA has combined the arts, entertainment, and recreation categories with the accommodation and food service categories. The final category in the ORSA includes establishments “providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption,” and “establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons.” For more information, see Office of Management and Budget, North American Industry Classification System, 2017, at https://www.census.gov/eos/www/naics/2017NAICS/2017_NAICS_Manual.pdf.
The largest amount of value added in 2017 from an individual conventional outdoor recreation activity (as defined by BEA) came from boating/fishing, accounting for approximately $21 billion in current-value dollars, or approximately 5% of value added from outdoor recreation (see Figure 3).31 The activities that generated the most value added are not necessarily the most popular, according to an FS participation survey. For example, although equestrian activities were among the six largest activities in terms of value added, an FS survey found that equestrian activities were among the three smallest activities for number of participants (see “National Outdoor Recreation Participation” for more information).

Although much of the economic activity tracked by BEA to calculate value added can be linked to a specific activity (see “About the Outdoor Recreation Satellite Account”), some economic activity cannot. For example, multiuse apparel and accessories (such as backpacks, bug spray, and other items) that can be used for many activities accounted for approximately $48.6 billion in current dollars, or over 11% of value added.32

---

31 Awuku-Budu and Franks, ORSA, U.S. and Prototype for States.
In real terms, the outdoor recreation economy grew 3.9% between 2016 and 2017, faster than the 2.4% growth for the overall U.S. economy.\(^{33}\) Real gross output, compensation, and employment all grew faster in the outdoor recreation economy than in the overall economy in 2017.\(^{34}\) Between 2012 and 2017, the outdoor recreation economy grew by approximately 9.9%.\(^{35}\)

In 2017, BEA released prototype statistics on the percentage of each state’s GDP from outdoor recreation (see Figure 4). BEA’s preliminary results found that Hawaii, Montana, Maine, Vermont, and Wyoming had the five highest proportions of state GDP from outdoor recreation. However, other measures of economic importance vary considerably by state. For example, California, Florida, and Texas had the highest total outdoor recreation value added. Wyoming, Hawaii, and Alaska and Maine (tied) had the highest percentage of state employment from outdoor recreation.\(^{36}\) The relative importance of recreation in individual states depends on the size of the outdoor recreation economy, the state’s economy generally, and the state’s employment and compensation patterns. It is unclear to what extent these estimates may change if BEA adjusts its methods for calculating state statistics. Official state statistics are scheduled for release in fall 2020.

\(^{33}\) Awuku-Budu and Franks, ORSA, U.S. and Prototype for States.

\(^{34}\) Awuku-Budu and Franks, ORSA, U.S. and Prototype for States.


Figure 4. Outdoor Recreation as a Percentage of State GDP
(2017, prototype)


Other Estimates of Economic Activity

In addition to the estimates created by BEA, researchers, advocacy groups, and industry associations create estimates of the outdoor recreation economy. Many groups estimate impacts of individual activities, sectors, geographic areas, or outdoor recreation areas (e.g., angling, winter snow sports, a given watershed, or a given state).37 The broadest of these is the Outdoor Industry Association’s (OIA’s) Outdoor Recreation Economy report, which has been produced annually since 2006.38 Prior to publication of the ORSA, OIA estimates were sometimes cited to gauge the size of the outdoor recreation economy as a whole.39

According to OIA’s 2017 report, the outdoor recreation economy generated $887 billion in consumer spending, the majority of which ($702 billion) was trip and travel spending, including airfare, lodging, fuel, groceries, tickets, lessons, guides, and other unspecified expenses spent

37 For examples of some types of reports, see American Sportfishing Association, Sportfishing in America, 2013; Protect Our Winters, 2018 Economic Report, which discusses the economic value of the winter sports sector; Huron River Watershed Council, The Economic Impact of the Huron River, 2017, which discusses economic impacts of recreation on a given watershed; and Colorado Parks and Wildlife, The 2017 Economic Contributions of Outdoor Recreation in Colorado, 2018, which discusses economic contributions of outdoor recreation in a given state.

38 Outdoor Industry Association (OIA), The Outdoor Recreation Economy, 2017. (Hereinafter, OIA, Outdoor Recreation Economy.) This is the most recent report, although it is unclear what year is represented by the data.

anywhere away from home.\textsuperscript{40} OIA estimates that the outdoor recreation economy directly supports 7.6 million jobs.\textsuperscript{41} OIA also estimates that the outdoor recreation economy generates $65.3 billion in federal tax revenue and $59.2 billion in state and local tax revenue.\textsuperscript{42}

OIA’s estimates of the size of the outdoor recreation economy, and other estimation efforts, cannot be directly compared to the ORSA.\textsuperscript{43} This may be due to differences in method, assumptions, measurement, or statistics reported. Specifically, the OIA reports measure consumer spending and tax revenue, which are not part of the ORSA and are not directly comparable to any statistic reported in the ORSA.\textsuperscript{44} OIA’s estimate of jobs (7.6 million) is higher than BEA’s estimate of jobs (5.2 million), but it is unclear to what extent the data reported are similar in measurement or whether they represent the same year.

\begin{center}
\begin{tabular}{|l|}
\hline
\textbf{GDP, Value Added, and Economic Value} \\
\textbf{GDP, or value added, is an important bottom line in measuring how much the market economy produces and what it is worth. However, GDP may provide an incomplete measure, because it omits activities that do not involve buying and selling in markets (or nonmarket activities). Economic theory does not define economic value in terms of market prices but in terms of the trade-offs that individuals are willing to make with scarce resources, such as money, other resources (i.e., barter), or time. For example, a person may hike in a nearby park every weekend without spending any money, but that person demonstrates that the walk has value to him or her by choosing to do it over other possible activities and by spending time and resources to travel to the park. GDP does not capture the value of activities outside of markets and therefore may miscount the total value of the economy. Thus, although the Outdoor Recreation Satellite Account provides a new and comprehensive source of information and enables comparison to other Bureau of Economic Analysis measures of the economy, it may not represent the full value of all outdoor recreation resources and uses.} \\
\hline
\end{tabular}
\end{center}

BEA excluded exports and imports in its calculation, and these figures may be captured in OIA’s statistics. BEA states that external reports on the outdoor recreation economy that include “activities with a high share of spending on imported goods and services (such as apparel) will likely have higher estimates than the ORSA.”\textsuperscript{45} BEA also states that other reports may include spending on items not used for outdoor recreation (for example, bicycles used for commuting).\textsuperscript{46}

\textsuperscript{40} OIA, \textit{Outdoor Recreation Economy}.  
\textsuperscript{41} OIA, \textit{Outdoor Recreation Economy}.  
\textsuperscript{42} OIA, \textit{Outdoor Recreation Economy}.  
\textsuperscript{43} Highfill and Smith-Nelson, \textit{Outdoor Recreation Satellite Account}.  
\textsuperscript{44} Highfill and Smith-Nelson, \textit{Outdoor Recreation Satellite Account}. According to this source, measures of consumer spending are more closely related to BEA’s personal consumption expenditures statistics, which are not part of the ORSA.  
\textsuperscript{45} Highfill and Smith-Nelson, \textit{Outdoor Recreation Satellite Account}.  
\textsuperscript{46} Highfill and Smith-Nelson, \textit{Outdoor Recreation Satellite Account}. Some sources (see, for example, https://www.outsideonline.com/2281581/government-puts-outdoor-industry-size-673-billion) have claimed that BEA did not include economic activity from trips of less than 50 miles and have stated that this may result in undercounting in BEA statistics, given that many outdoor recreation trips occur in this radius. However, BEA methods include definitions and calculations for local trips of less than 50 miles. Thus, it is uncertain whether this criticism is well-founded. Highfill and Smith-Nelson, \textit{Outdoor Recreation Satellite Account}. According to the OIA results, two-thirds of outdoor recreation trips are within this 50-mile radius and those trips represent 67% of the consumer spending.
In general, because other reports do not give the same statistics as the ORSA, and due to methodological differences, it is unclear whether (and to what degree) the ORSA and other reports may or may not be in disagreement, despite apparent large differences in results.

The results of the ORSA and OIA reports have certain broad commonalities. For example, both reports find that large amounts of economic activity are driven by activities requiring relatively expensive purchases, such as vehicles (for example, boating or off-highway vehicle activities). Both reports also find that expenses related to travel, such as lodging, airfare, and food away from home, constitute large shares of the economic activity generated by outdoor recreation.

National Outdoor Recreation Participation

According to one source, measures of national trends in outdoor recreation participation are based primarily on the National Survey on Recreation and the Environment (NSRE), a population-based survey conducted by the U.S. Forest Service (FS), sampling all areas of the country and participation in 17 outdoor activities. The NSRE measures both participation (the number of respondents who report engaging in the activity at least once over the course of a year) and consumption (the number of times the respondent indicates engaging in the activity). The survey does not estimate the total number of participants in outdoor recreation generally, only participation rates in the 17 activities studied. The most recent NSRE was completed for the period 1999-2009, and an update is ongoing.

The NSRE estimated that, for the activities considered, a maximum of 194 million people (visiting developed sites) and a minimum of 8 million people (primitive skiing) participated every year (see Table 1 for additional details). FS estimated that approximately 82% of NSRE respondents participated in visiting developed sites, the activity with the highest participation rate. In terms of the frequency with which participants engaged in each activity (shown as “Activity Days” in Table 1), FS estimated that participants engaged in the most popular activity (viewing nature) over 32.4 billion times; this activity, however, is a major outlier, and participants engaged in the next several most popular activities between 8.3 billion and 1.8 billion times.

---


49 The 17 activities surveyed may be viewed as encompassing more than one activity in some categories. The activities are using developed sites (e.g., developed site camping, picnicking, family gatherings), visiting interpretive sites (e.g., historic sites, nature centers), birding, viewing (e.g., photographing, viewing, studying nature or natural settings), challenge activities (e.g., rock climbing, mountain biking), equestrian, day hiking, visiting primitive sites (e.g., backpacking, primitive camping), motorized off-road use, motorized snow use, motorized water use, hunting, fishing, downhill skiing (e.g., skiing, snowboarding), primitive skiing (e.g., cross-country skiing, snowshoeing), swimming (e.g., swimming, diving, visiting watersides), and floating (e.g., canoeing, rafting). Bowker et al., Outdoor Recreation Participation.

50 FS uses the term visitor days, which is defined to mean any amount of time a visitor spends engaging in a given activity, rather than a calendar day. Thus, participants could report multiple visitor days of activities for a given calendar day (i.e., visiting a developed site to picnic, swimming at an adjacent lake, birdwatching, and taking a hike around the lake), and the number of visitor days do not add to 365. Bowker et al., Outdoor Recreation Participation.
### Table 1. Outdoor Recreation Participants and Days, 2008

<table>
<thead>
<tr>
<th>Activity or Activity Group</th>
<th>Participants (millions)</th>
<th>Activity Days (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Developed Sites b</td>
<td>194</td>
<td>2,246</td>
</tr>
<tr>
<td>Viewing c</td>
<td>190</td>
<td>32,461</td>
</tr>
<tr>
<td>Visiting Interpretive Sites d</td>
<td>158</td>
<td>1,249</td>
</tr>
<tr>
<td>Swimming e</td>
<td>144</td>
<td>3,476</td>
</tr>
<tr>
<td>Visiting Primitive Sites f</td>
<td>91</td>
<td>1,239</td>
</tr>
<tr>
<td>Birding g</td>
<td>82</td>
<td>8,255</td>
</tr>
<tr>
<td>Day Hiking</td>
<td>79</td>
<td>1,835</td>
</tr>
<tr>
<td>Fishing</td>
<td>73</td>
<td>1,369</td>
</tr>
<tr>
<td>Motorized Water Use</td>
<td>62</td>
<td>958</td>
</tr>
<tr>
<td>Motorized Off-Road Use</td>
<td>48</td>
<td>1,053</td>
</tr>
<tr>
<td>Floating i</td>
<td>40</td>
<td>262</td>
</tr>
<tr>
<td>Hunting</td>
<td>28</td>
<td>538</td>
</tr>
<tr>
<td>Challenge Activities h</td>
<td>25</td>
<td>121</td>
</tr>
<tr>
<td>Downhill Skiing i</td>
<td>24</td>
<td>178</td>
</tr>
<tr>
<td>Equestrian</td>
<td>17</td>
<td>263</td>
</tr>
<tr>
<td>Motorized Snow Use</td>
<td>10</td>
<td>69</td>
</tr>
<tr>
<td>Primitive Skiing j</td>
<td>8</td>
<td>52</td>
</tr>
</tbody>
</table>


**Notes:** Table entries are presented in descending order of number of participants. The NSRE defines a *day* as any amount of time spent on an activity on a given day, whether or not that activity was the primary reason for recreating outdoors; thus, a person could engage in more than one activity during a calendar day. According to the Forest Service, participant statistics were calculated as the product of the average weighted frequency of participation by activity for NSRE data from 2005 to 2009 and the population of the United States aged 16 or older in 2008. Thus, although the survey period was 2005-2009, participants are reported for the year 2008.

- a. Some activity groups include more than one activity (see notes b-j, below).
- b. Using developed sites includes, for example, developed site camping, picnicking, and family gatherings.
- c. Viewing includes, for example, photographing, viewing, and studying nature or natural settings.
- d. Visiting interpretive sites includes, for example, visiting historic sites and nature centers.
- e. Swimming includes, for example, swimming, diving, and visiting watersides.
- f. Visiting primitive sites includes, for example, backpacking and primitive camping.
- g. Floating includes, for example, canoeing and rafting.
- h. Challenge activities include, for example, rock climbing and mountain biking.
- i. Downhill skiing includes, for example, skiing and snowboarding.
- j. Primitive skiing includes, for example, cross-country skiing and snowshoeing.

Between 1999 and 2009, FS estimated that participation in nature-based outdoor recreation generally increased. The number of U.S. participants in the surveyed activities increased by 7.1% over this period.51 Certain activities, such as those oriented toward viewing and photographing

---

51 Bowker et al., *Outdoor Recreation Participation.*
nature, off-highway vehicle activities, and several physically challenging activities (e.g., kayaking, snowboarding, surfing) had relatively large increases in participation compared to the average over this period.\textsuperscript{52}

More people overall participate in outdoor recreation in the eastern United States than in the western United States, in large part because most of the U.S. population resides in the East.\textsuperscript{53} However, participation rates (measured as the number of participants per hundred people) are higher in the West for all activities except hunting and fishing.\textsuperscript{54} In addition to this broad trend, demographic factors, such as population size, age, gender, race, ethnicity, education, and income, are correlated with the rate of outdoor recreation. For example, relative to the general population, people engaging in hunting and fishing are more likely to be rural residents, and people engaging in skiing and snowboarding are more likely to be urban residents.\textsuperscript{55} Availability of and proximity to recreation settings also are highly correlated with the rate of outdoor recreation participation.\textsuperscript{56}

The amount of recreation that occurs on lands of differing ownership—for example, federal, state, local, and private—likely varies widely by activity and location (see section on “Recreation Visits to Federal Lands” for further discussion of recreation on federal lands).

<table>
<thead>
<tr>
<th>Outdoor Recreation Policy Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A potential benefit of measuring the economic activity from outdoor recreation is to support choosing, planning, and analyzing federal outdoor recreation policies. Congress and the executive branch have used various policies in the past, some of which may support various aspects of outdoor recreation.</td>
</tr>
<tr>
<td>- A federal outdoor recreation agency has managed various crosscutting federal outdoor recreation activities and initiatives.</td>
</tr>
<tr>
<td>- Congress and the executive branch have convened commissions, councils, and other bodies to study or promote outdoor recreation, coordinate activities, or recommend policies or programs. In the past, some recommendations of such bodies have been adopted in law.</td>
</tr>
<tr>
<td>- Congress has designated lands or created land systems with recreation as a primary purpose.</td>
</tr>
<tr>
<td>- Congress has provided funding for nonfederal recreation resources.</td>
</tr>
<tr>
<td>- The federal government may undertake research and analysis of recreation activities and trends, either under specific congressional authorization or through general agency authorities.</td>
</tr>
<tr>
<td>Sources and examples of these activities are available on request from the author.</td>
</tr>
</tbody>
</table>

---


\textsuperscript{53} Cordell, \textit{Outdoor Recreation Trends}. For the purposes of this section, unless otherwise noted, the East consists of Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin. The West consists of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

\textsuperscript{54} Cordell, \textit{Outdoor Recreation Trends}.

\textsuperscript{55} Cordell, \textit{Outdoor Recreation Trends}.

\textsuperscript{56} Cordell, \textit{Outdoor Recreation Trends}, and White et al., \textit{Federal Outdoor Recreation Trends}. 
 Approximately 60% of lands in the United States are privately owned, and approximately 28% of the total land area is federally owned; the remainder is in a mix of state, local, tribal, and other ownerships. Over 92% of federal land is located in 11 western states and Alaska. The uneven distribution of federal land between the eastern and western United States influences what lands provide outdoor recreation opportunities in different regions of the United States, particularly given that, for some federal land management agencies, at least half of visits to the properties they administer come from people who live within 50 miles.

FS found that private lands were a more important recreation setting in the East, with the total number of recreation visits on private lands in the East nearly four times the number in the West. In the West, respondents reported that they spent the majority of activity days in all surveyed activities on publicly owned lands of any kind. In contrast, respondents in the East spent the majority of activity days in some surveyed activities on private lands and some on publicly owned lands.

**Outdoor Recreation on Federal Lands**

The ORSA statistics measures the state of the outdoor recreation economy generally. From the standpoint of public lands management, there is often congressional interest in how the government’s provision of recreational opportunities translates into economic activity in communities around federal recreation resources. Legislation, hearings, and congressional reports have indicated the significance of this economic activity as a policy consideration in contexts involving federal lands. In the past decade, federal agencies and interagency groups have conducted studies measuring economic contributions specific to federal lands. Because these studies examine multiple agencies under a single framework, and because they report value added, the results are comparable to one another. In the sense that value added is a consistent


58 The 11 western states, for the purposes of this report, are Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. For further information, see CRS Report R42346, Federal Land Ownership: Overview and Data, by Carol Hardy Vincent, Laura A. Hanson, and Carla N. Argueta.

59 These agencies include BLM, FS, FWS, and USACE. White et al., Federal Outdoor Recreation Trends.

60 As part of the National Survey on Recreation and the Environment (NSRE), FS determined where respondents spent their activity days for six activity groups: visiting recreation and historic sites, viewing/photographing nature, backcountry activities, motorized activities, hunting, and snow skiing. FS did not distinguish between types of publicly owned lands (for example, federal, state, or local). Cordell, Outdoor Recreation Trends.

61 Respondents spent between 57% (hunting) and 78% (backcountry activities) of activity days on publicly owned lands.

62 Cordell, Outdoor Recreation Trends. The definition of East and West used in this data source is not available. Respondents spent between 55% (viewing/photographing nature) and 72% (backcountry activities) of their activity days on publicly owned lands. Respondents spent between 54% (motorized activities) and 57% (hunting) on private lands.

63 White et al., Federal Outdoor Recreation Trends.

64 For example, the Recreation Not Red Tape Act, H.R. 3400, which would have addressed recreation permitting, access, and volunteerism, among other matters, specified that “the economic benefits of outdoor recreation on federal lands create significant economic and employment benefits to rural economies.” One hearing witness in U.S. Congress, House Committee on Natural Resources, Subcommittee on Public Lands and Environmental Regulation, Impediments to Public Recreation on Federal Lands, Oversight Hearing, 113th Cong., 1st sess., 2013, H. Hrg 113-14, stated that “economic opportunity is always central to any conversation about recreation on Federal lands.”

65 Single federal agencies also may conduct studies of visitor spending on the resources they manage, at various time scales and geographic scales and using various methods. Due to differing methods and assumptions, these studies may
concept, they also may be generally comparable to other measures of value added, such as the ORSA results, although differences in methods, data, and assumptions mean any comparison can be, at best, highly general.

According to these studies, in FY2017 dollars, visitors spent approximately $54 billion in the local economies of federal recreation areas in FY2012 and $49.8 billion in FY2016, generating $55 billion in value added in FY2012 and $53.9 billion in value added in FY2016 (see Table 2). The studies indicate that outdoor recreation on federal lands directly supported 880,000 jobs in FY2012 and 826,000 jobs in FY2016.

The authors of the studies in Table 2 limited their studies of visitor spending to areas within 50 miles of the federal recreation site. The authors state that this limitation provides a conservative estimate. Although research suggests that many visits to federal recreation sites do indeed originate from nearby, the nationwide estimates discussed above (see “The National Outdoor Recreation Economy”) indicate that a large proportion of economic activity derives from travel-related expenses. If the travel-related portion of economic activity related to federal sites is not being captured in these results because that activity occurs more than 50 miles from the federal recreation site, these studies may undercount the true value. Similarly, results of national studies indicate that activities requiring major purchases (e.g., vehicles) account for a large proportion of the outdoor recreation economy. If visitors do not report such expenditures, it also may result in undercounting. The agencies used different methods to measure visitation and economic activity; thus, estimates may be only generally comparable.

| Table 2. Economic Activity from Outdoor Recreation on Federal Lands (in FY2017 dollars) |
|---|---|---|---|---|---|---|
| Agency | Visitor Spending (billion $) | Jobs (thousands) | Value Added (billion $) |
| NPS (CY) | 15.9 | 18.3 | 243.0 | 318.0 | 17.2 | 20.4 |
| BLM | 3.2 | 3.1 | 58.0 | 48.0 | 4.3 | 4.1 |
| FWS | 2.1 | 2.0 | 37.0 | 37.0 | 2.2 | 3.1 |
| BOR | 1.1 | 1.0 | 26.0 | 23.0 | 2.2 | 2.0 |
| FS | 11.7 | 9.2 | 194.0 | 148.0 | 14.0 | 11.2 |
| NOAA | 5.3 | 5.1 | 135.0 | 63.0 | NA | NA |
| USACE | 13.8 | 11.2 | 187.0 | 189.0 | 15.1 | 13.2 |
| Total | 54.0 | 49.8 | 880.0 | 826.0 | 55.0 | 53.9 |


66 Don English et al., Outdoor Recreation: Jobs and Income, Federal Interagency Council on Outdoor Recreation, 2014 (hereinafter, English et al., Outdoor Recreation), and S. Cline and C. Crowley, Economic Contributions of Outdoor Recreation on Federal Lands, DOI, Office of Policy Analysis, 2016. Visitor spending may or may not have a direct relationship with value added, depending on methods used, and the relationship cannot be determined without detailed methodological information.

67 English et al., Outdoor Recreation.
been converted to FY2017 dollars using Bureau of Economic Analysis Personal Consumption Expenditures Price Index, quarterly.

**Notes:** Data reflect visitor spending on federal lands and within 50 miles of federal lands. “NA” means data were not available at the time of publication of this report. NPS = National Park Service; CY = calendar year; BLM = Bureau of Land Management; FWS = Fish and Wildlife Service; BOR = Bureau of Reclamation; FS = Forest Service; NOAA = National Oceanic and Atmospheric Administration; USACE = U.S. Army Corps of Engineers.

- a. NPS values are based on visitation from calendar year 2016.
- b. NOAA does not regularly collect visitation data; thus, it is unclear what period was used to estimate visitation for calculation of other statistics.
- c. Totals may differ from calculated column total due to rounding.

**Federal Lands’ Recreation Resources and Uses**

Federal lands comprise approximately 640 million acres in the United States, about 28% of the total land area. Approximately 92% (573 million acres) of federal lands are located in 11 western states and Alaska, with over one-third (224 million acres) of all federal land in Alaska alone. The Forest Service (FS) and the Bureau of Land Management (BLM) manage the majority of federal land. Nearly all federal land is open and available to the public for recreation.

Although there is considerable overlap in the recreation opportunities across agencies, some agencies could be considered to have dominant niches. FS and BLM offer a range of opportunities, from camping, picnicking, and birdwatching in developed settings to activities in undeveloped backcountry, motorized recreation, and others. Opportunities on Fish and Wildlife Service land emphasize wildlife, fish, and birds. The National Park Service (NPS) is associated with “iconic natural and cultural resources.” Opportunities on land owned by the Bureau of Reclamation, National Oceanic and Atmospheric Administration, and U.S. Army Corps of Engineers (USACE) tend to center on water and underwater resources. Although some agencies’ resources are used mostly by locals, all agencies have resources with regional, national, or international markets.

---

68 This figure includes DOD lands. For more information, see CRS Report R42346, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent, Laura A. Hanson, and Carla N. Argueta.

69 The 11 Western states, for the purposes of this report, are Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. For further information, see CRS Report R42346, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent, Laura A. Hanson, and Carla N. Argueta.

70 CRS Report R42346, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent, Laura A. Hanson, and Carla N. Argueta.

71 White et al., *Federal Outdoor Recreation Trends*.

72 White et al., *Federal Outdoor Recreation Trends*.

73 White et al., *Federal Outdoor Recreation Trends*.

74 White et al., *Federal Outdoor Recreation Trends*.


76 White et al., *Federal Outdoor Recreation Trends*. 

---
Recreation Visits to Federal Lands

Table 3 presents information from various sources on recreation visits to federal lands from FY2012 to FY2017. In general, these statistics are not comparable to the NSRE estimates given above due to differences in measurement. The statistics indicate that, in general over this period for agencies with complete data, FS and NPS had the most visits. These statistics underscore that size and location are imperfect predictors of recreation resource use; USACE, for example, has higher visitation than several agencies that manage more federal land area. These differences may be due to proximity to population centers, the types of resources available on different lands, and other factors.

Table 3. Federal Land Recreation Visits

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior</td>
<td>417</td>
<td>407</td>
<td>423</td>
<td>443</td>
<td>473</td>
<td>483</td>
</tr>
<tr>
<td>NPS (CY)*</td>
<td>283</td>
<td>274</td>
<td>293</td>
<td>307</td>
<td>331</td>
<td>331</td>
</tr>
<tr>
<td>BLM</td>
<td>59</td>
<td>62</td>
<td>61</td>
<td>62</td>
<td>65</td>
<td>63</td>
</tr>
<tr>
<td>FWS</td>
<td>47</td>
<td>47</td>
<td>47</td>
<td>48</td>
<td>50</td>
<td>53</td>
</tr>
<tr>
<td>BOR</td>
<td>28</td>
<td>25</td>
<td>25</td>
<td>27</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>FS*</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>149</td>
<td>148</td>
<td>149</td>
</tr>
<tr>
<td>NOAA</td>
<td>NR*</td>
<td>NR*</td>
<td>NR*</td>
<td>NR*</td>
<td>NR*</td>
<td>NR*</td>
</tr>
<tr>
<td>USACE</td>
<td>360</td>
<td>NR*</td>
<td>264</td>
<td>259</td>
<td>273c</td>
<td>283</td>
</tr>
</tbody>
</table>


Notes: FY2017 is the most recent year for which visitation data are available for all agencies. Data marked NR* are unavailable at the time of publication of this report.

a. NPS reports visits in calendar years.
b. FS estimates visitation by surveying 20% of national forests every year for five years; thus, for example, data for “FY2016” reflects estimates based on annual visits from the period FY2012-FY2016.

For example, as discussed, the NSRE survey measures a visit, or a given amount of time using the agency’s lands or waters, regardless of its length. Therefore, visits can represent more than one activity (i.e., a weekend-long trip during which participants camped, hiked, swam, watched wildlife, and visited interpretive sites would count as five separate items under the NSRE survey framework).
Author Information

Anne A. Riddle
Analyst in Natural Resources Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS’s institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.