National Park Service Comprehensive Survey of the American Public

2018 – Racial and Ethnic Diversity of National Park System Visitors and Non-Visitors

Natural Resource Report NPS/NRSS/EQD/NRR—2019/2042

ON THE COVER
Youth programs at Muir Woods National Monument.
(NPS/JUMANA ZAHID)

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Abstract

In 2018, the National Park Service (NPS) conducted its third Comprehensive Survey of the American Public (CSAP3), a nationwide telephone survey consisting of interviews with more than 2,700 adult respondents across the United States. The survey obtained information on public attitudes and behaviors related to programs and services provided by the NPS, as well as on demographic characteristics of recent visitors and non-visitors to the National Park System. The present report examines differences across racial and ethnic groups within the CSAP3 data, including selected comparisons with CSAP1 and CSAP2.

As in the 2000 national survey and the 2008–2009 national survey, CSAP3 found that U.S. visitors to national parks, national monuments, and other units of the National Park System were disproportionately white and non-Hispanic. The most common barriers to national park visitation endorsed by non-visitors were related to travel distance, transportation, and expenses associated with travel and entrance to national parks. These barriers were disproportionately endorsed by Hispanic non-visitors and African American non-visitors as compared to white non-visitors. Other barriers highly endorsed by underserved populations related to a lack of interest or a lack of knowledge regarding national parks. Out of recent national park visitors, Hispanic visitors were less likely than white, non-Hispanic visitors or African Americans visitors to attend a ranger-led activity, such as a tour or a talk; and to watch movies about the park or listen to an audio tour or podcast. It is possible that this finding is a result of language barriers, particularly for those who do not speak English as their first language. These results indicate that NPS should continue to focus on improving access, raising awareness and interest, and welcoming diverse populations to national parks in order to remain relevant in the 21st century.

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RSG has a nationally and internationally recognized practice in the field of Public Lands Planning and Management (PLPM). The PLPM practice specializes in socioeconomic data collection, analysis, modeling, and peer-reviewed publication to help the NPS and other federal land management agency clients address nationally significant issues.

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WYSAC has a staff of 20 full-time employees and numerous part-time student workers, research aides, and interviewers. Together they conduct public opinion surveys, evaluation research, and software development for state and local governments and federal agencies.

Acknowledgments

Introduction

For many Americans, the national parks represent a sense of place, a marker of identity, and a reminder of the country's past (see Runte, 1987; Stokowski, 2002). However, the lands set aside as units of the National Park System do not have the same meaning for everyone. Some Americans visit the parks frequently; others, rarely or not at all. The National Park Service (NPS) uses data from a variety of social surveys to assess the public's relationship to national parks, national monuments, and the other natural, historical, and cultural sites managed by the NPS. Most of these surveys focus only on visitors to specific NPS units, but in the past two decades three surveys sponsored by the NPS have provided comprehensive national data. The distinguishing characteristic of the three national surveys is that non-visitors as well as visitors were interviewed about their behaviors and opinions concerning national parks.

Each of the three national surveys is referred to as a "Comprehensive Survey of the American Public," or CSAP. The first CSAP was conducted in 2000 by Northern Arizona University (hereafter, CSAP1). The second CSAP was conducted in 2008–2009 by the Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming (hereafter, CSAP2). The third and most recent CSAP was conducted in 2018 by Resources Systems Group (RSG) and WYSAC (hereafter, CSAP3). All three CSAPs were conducted via telephone interviews with a nationwide sample of adults and obtained information on visits to the National Park System, public attitudes and behaviors related to programs and services provided by the NPS, and demographic characteristics of recent visitors and non-visitors. In addition, CSAP3 covered current initiatives related to program awareness and youth engagement. Each of the three surveys has generated a national report as well as topical reports on specific issues. Taken together, the three sets of reports derived from these surveys help NPS policymakers understand how the American public relates to the National Park System.

This report uses data from CSAP1, CSAP2, and CSAP3 to compare major racial and ethnic groups on their visitation behavior and on related attitudes and opinions about the National Park System. The issue of underserved populations is a critical one for the NPS in an increasingly diverse twenty-first century America.

Diversity and the National Parks

When the NPS was created by the National Park Service Organic Act of 1916, the United States had completed its westward expansion and was securing those gains. Establishment of the first national parks and passage of the Organic Act were pieces of that consolidation. The Act sought to "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (NPS Organic Act, 1916, 39 Stat. 535).

For many Americans, the national parks represent both a sense of place (what America was before European settlement) and a marker of identity (a rugged and untamed character) (Runte, 1987; Stokowski, 2002). However, because different groups of people arrived on the North American continent at various times and under different conditions, the lands set aside as units of the National Park System may not have the same subjective meaning for all racial and ethnic groups in America.

Some parks are tied to historical events that have different resonance for different groups of Americans (Linenthal, 1993). Indeed, for some the national parks may represent loss and expropriation (Hough, 1991; Spence, 1999; Jacoby, 2001) rather than exploration and wilderness. In addition, some park units reflect natural landscapes and their grandeur, others are embedded in urban areas, and still others commemorate historic people and events (Lee, 1972; Floyd and Gramann, 1993; Floyd et al., 1993; Floyd, 1999). To the extent that racial and ethnic groups differ in their geographic locations, their economics, and their histories, they may also differ in the cultural expression they find relevant in the parks. As a result, they may have different patterns of park visitation and park activities.

In the U.S., most social science research relating recreational activities to race or ethnicity has focused on differences in rates of participation in outdoor recreation across social groups. Gramann and Allison (1999) summarize the history of this research and many of the issues it has raised. As they note, all modern societies are stratified, and one's position in a stratification system affects one's life chances. Along with differences in income, education, and gender, race and ethnicity have been primary dimensions of stratification in the U.S.

Historically, to be viewed as non-white in America has had large implications for access to society's important institutions, including government (and national parks). Research comparing non-Hispanic whites with African Americans, Asian Americans, or Mexican Americans and other Hispanic groups has shown that racial and ethnic differences exist in outdoor recreation behavior (Cordell et al., 2004; Outdoor Foundation, 2016; U.S. Fish and Wildlife Service & U.S. Census Bureau, 2016). In particular, many people of color, especially African Americans, tend to participate less frequently than whites in visiting national parks (Solop, Hagen, & Ostergren, 2003) and in a range of other outdoor recreational activities.

The NPS has supported research on the perspectives of different racial and ethnic groups concerning access constraints, preferred experiences, perceptions of being welcomed, and actual visitation to NPS units (for reviews, see Gramann, 1996; Floyd, 1999). Of particular importance in this regard are

the CSAP1 and CSAP2 topical reports on race/ethnicity differences (Solop et al., 2003; Taylor, Grandjean, & Gramann, 2011). In addition, as part of the development of CSAP2, the NPS commissioned WYSAC to conduct two focus groups in 2007, one with African Americans and the other with Hispanic Americans, to obtain culturally specific feedback on the content and wording of the CSAP2 questionnaire. Insights from these focus groups are carried forward in the design and conduct of this study (CSAP3). NPS staff and management have also engaged in reflective self-assessments to better understand America's growing diversity and its impact on the National Park System.

All of these approaches are viewed as necessary for the NPS to incorporate diversity in park planning, programming, and interpretive narratives (McCown & Laven, 2008; NPS, 1997; National Parks Second Century Commission, 2009a, 2009b, and 2016). The present report is part of an ongoing effort by the NPS to understand how different population groups relate to the National Park System.

Methods

Details regarding survey methodology are provided in the national reports associated with CSAP1, CSAP2, and CSAP3. Those reports also include the full text of the questionnaires and tables of responses for every survey question. Here we summarize only those aspects of the methodology relevant to comparisons across the three surveys and assessing racial and ethnic differences.

Sampling

While the sampling methods for all three CSAPs were designed to represent the U.S. adult population, three differences warrant consideration. First, the three surveys differed in the extent to which cell phone numbers were incorporated. Over the past two decades, there has been a rapid increase in the prevalence of cell phone-only and cell phone-reliant households in the U.S. (Brick et al., 2007; Keeter et al., 2007). The CSAP sampling methods have evolved to account for this shift. CSAP1 relied exclusively on landline phone numbers, with the sample disproportionately stratified by the seven NPS regions. CSAP2 sampled landline numbers using methods analogous to CSAP1, but supplemented the landline sample with a small, nationwide sample of cell phone numbers. Finally, CSAP3 used a fully integrated sample of landline and cell numbers, with the entire sample (landline and cell numbers) disproportionately stratified by NPS region, and with landline and cell numbers sampled in proportions that reflected their relative frequencies within each region.

Second, the timing of the three surveys differed. Interviews for CSAP1 were conducted during the late winter/spring, from February 21 to May 21, interviews for CSAP2 were conducted throughout an entire year, and interviews for CSAP3 were conducted during the summer and fall, from June 15 to November 30.

Third, the three surveys used different methods to select an adult within each contacted household to complete the survey. For CSAP1, interviewers asked to speak to the adult in the household who had had the most recent birthday. For CSAP2, each contacted household in the landline sample was randomly assigned one of three different selection methods: (1) the adult who had had the most recent birthday, (2) the adult who would have the next birthday, and (3) the adult selected using a random number generator. Statistical checks indicated that the three different methods yielded comparable results. For the cell phone sample of CSAP2, there was no within-household selection of an adult, as cell phone numbers typically are not shared within households. For CSAP3, no within-household sampling was implemented in either the landline sample or in the cell phone sample.

Language of Interviewing

The interviews for CSAP1 occurred exclusively in English. For CSAP2 and CSAP3, households that were identified in the initial calling as potentially requiring a Spanish-speaking interviewer were called back by bilingual interviewers. These interviewers then used either the English or Spanish version of the questionnaire, whichever was more comfortable for the respondent. The CSAP2 analysis found that Hispanic respondents who were interviewed in English were in general more favorably disposed toward national parks than those interviewed in Spanish (Taylor, Grandjean, and Gramann, 2011).

Defining Race and Ethnicity

As noted by Solop et al. (2003), race is a social classification based on perceived differences in physical characteristics. Ethnic status is based on national origin or a shared cultural characteristic. Thus "African American" and "white" are racial categories, but "Hispanic American" (or Latino) is an ethnic category reflecting ancestral ties to Spain. Hispanics can be of any race; for example, a person may self-identify as both Hispanic and African American or Hispanic and white.

Following a survey protocol required by the Office of Management and Budget (OMB), in all three surveys respondents were asked first to identify their ethnicity (Hispanic or not Hispanic) and then to select one or more racial categories (Table 7). In this report all respondents who self-identified on the first of those questions as "Hispanic or Latino/a," are combined in a single category ("Hispanic, any race"). This categorization is independent of their racial self-identification in the follow-up question, and of the language used for their interview. The term "white only, non-Hispanic" is used to describe respondents who self-identified as such. The remaining racial categories used in this report, also based on the second self-identification question, are "black or African American only, non-Hispanic," "Asian only, non-Hispanic," "American Indian or Alaska Native only, non-Hispanic," and "Other only, non-Hispanic."

Under the OMB protocol, respondents could place themselves in more than one racial category, e.g., black and white, or American Indian and white. Because of the small number of individuals who chose more than one race, and the wide variety of multi-racial combinations they chose, results for this group are not analyzed in the present report. In CSAP1 and CSAP2, there were also too few Hawaiian/Pacific Islanders to include that category in the analyses; however, in CSAP3, respondents who identified themselves as "Hawaiian/Pacific Islanders" are included in the "Other only, non-Hispanic" category. Furthermore, respondents in CSAP3 were given the option to identify themselves as "Other" race. Those respondents are also included in the "Other only, non-Hispanic" category. Respondents who declined to choose any race category are excluded from these analyses, unless they had identified themselves as Hispanic (in which case they are included in the "Hispanic, any race" category).

Identifying Recent Visitors

Recent visitors were defined as respondents who could name a valid unit of the National Park System they had visited in the previous two years. There were minor differences across the three surveys in the procedures used to identify these recent visitors. In all three surveys, the main body of the questionnaire began identically: "The National Park System consists of all the units managed by the National Park Service, including national parks, historic and cultural sites, and national monuments. How many times in the past two years have you visited a unit of the National Park System?" Respondents who reported at least one visit over that time span were considered part of the pool of potential "recent visitors," subject to validation. Those who said they had not visited in the past two years were then asked if they had ever visited. At this point, the CSAP2 and CSAP3 questionnaires diverged somewhat from the CSAP1 questionnaire. CSAP2 and CSAP3 added a timeline check by asking those who said they had ever visited how long ago that was. Those respondents who

volunteered that it was in fact within the past two years were put back into the pool of potential recent visitors.

All three questionnaires then asked respondents to name the last NPS unit they had visited in the past two years, and only respondents who identified a valid NPS unit on that question were defined as "recent visitors" for the analysis; all other respondents are defined as "non-visitors." For CSAP1, only the official list of NPS units was available for reference when this question was asked. In contrast, for CSAP2 and CSAP3, the list of NPS units included commonly used aliases to assist in park identification (e.g., "Gateway Arch" for Gateway Arch National Park [formerly Jefferson National Expansion Memorial] or "Mount McKinley" for Denali National Park and Preserve). In addition, CSAP2 introduced several optional probes to assist the interviewer in identifying the recently visited park. The probes were, "Do you know what state that's in? Is it in [state]? Is there any other name for it? Can you spell it for me?"

Weighting the Sample
The weighting methods used in CSAP surveys have evolved over time, with changes primarily reflecting evolving approaches to incorporating cell phone numbers and advancements in cell/landline weighting methods applied by survey practitioners. In CSAP1, only landline numbers were included in the sample. Regional weights were iteratively adjusted to match census demographic data (age, gender, ethnicity, and race) by region. Separate national weights were also developed that accounted for differences in sampling rates across the seven regions and that allowed the weighted survey data to match census demographics at the national level.

CSAP2 incorporated a supplemented sample of cell phone numbers, which necessitated adjustments to the weighting process. Within each region, weights were applied that calibrated the sample data to match estimates of the proportion of cell/landline phones (as estimated by the National Center for Health Statistics). For landline numbers, the weights were adjusted to reflect differences in the number of adults and the number of landlines within each household (both of which impact selection probabilities). These weights were then iteratively adjusted to match census demographics at the regional level. Finally, as with CSAP1, national weights were developed that accounted for differences in sampling rates across the seven regions and that allowed the weighted survey data to match national-level census demographics.

With CSAP3, cell phone numbers were fully integrated into the sampling process, with cell phone/landline sampling rates within each region reflecting the region's relative proportion of each type of phone number. As with CSAP1 and CSAP2, survey weights were iteratively adjusted to match regional- and national-level census demographics. However, with CSAP3, education and phone status (landline, cell phone-only, or dual user) were introduced as additional characteristics for calibration. In addition, CSAP3 did not adjust for the number of adults in the household. Finally, because CSAP3 calibrated simultaneously by region and demographics, a single set of weights was developed that could be used for both regional and national analyses.

In CSAP2, sample sizes were reported as "weighted N." These are "effective sample sizes" that incorporate a statistical adjustment to reflect variability in the data due to the survey weights. This

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variability increases the standard error of estimates derived from the data, making it less likely that any observed differences would be classified as statistically significant. In CSAP3 reports, the "weighted N" is typically not reported, but all statistical calculations continue to reflect the added variability due to the weights. In the present report, the weighted N is reported in two tables (Table 2 and Table 3) for consistency with the presentation of CSAP1 and CSAP2 results.

Response Rates

Response rates for phone surveys have been declining rapidly in recent decades (Keeter et al., 2006), and this trend is reflected in the response rates achieved in the two most recent CSAPs. While the overall response rate for CSAP2 was 12.5%, the overall response rate for CSAP1 was only 8.9% (8.3% for landlines and 9.3% for cell phone numbers).[1] The response rate for CSAP1 was not reported, but recent response rate trends suggest that CSAP1 likely achieved a response rate that was considerably higher than 12.5%.

To mitigate potential non-response bias due to low response rates, survey practitioners routinely develop weights for use in analysis (e.g., Brick et al., 2007), as was done in all three iterations of the CSAP. To the degree that demographic factors used in the weighting are correlated with other characteristics addressed in the survey, such as opinions and behaviors, weighting helps to reduce the adverse effects of non-response. However, some bias in the estimates is unavoidable when non-respondents have characteristics different from those of interviewed people in the same demographic group.

Margin of Error

For simplicity, the report does not present the margin of error associated with each estimate. Approximate margins of error for estimates of percentages derived from the full sample and from key subgroups are presented in Table 1 for CSAP3. The margins of error in Table 1 are based on the standard formula for a proportion, assuming a simple random sample from a large population with equal sampling weights. The margin of error for any specific estimate in the report will ultimately be a function of the sample size for that estimate, the underlying variance of the measure of interest, and the variance of the sampling weights.

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[1] All response rates reported in this section were calculated using the "RR3" formula defined by the American Association for Public Opinion Research (AAPOR, 2016).

Table 1. Margins of error for key CSAP3 subgroups, assuming simple random sample and no weighting.

Group	Number of respondents	Margin of error
All respondents	2445	±2%
Visitors	1519	±3%
Non-visitors	926	±3%
Hispanic, any race	212	±7%
White only, non-Hispanic	1837	±2%
Black or African American only, non-Hispanic	219	±7%
Asian only, non-Hispanic	68	±12%
American Indian or Alaska Native only, non-Hispanic	35	±17%
Other only, non-Hispanic	**74**	**±11%**

Statistical Testing

Significance tests comparing the three CSAP surveys are not reported here. Such tests would imply a degree of precision in the comparisons that is not warranted given the methodological differences summarized above. In fact, tables that compare results across the three CSAP surveys round all numbers to the nearest whole percent.

When analyzing only the CSAP3 data, Pearson chi-square tests are used to assess the statistical significance of differences across race/ethnic groups. The Pearson chi-squared statistic is corrected for the survey design using the second-order correction described by Rao and Scott (1984) and converted into an F statistic for the calculation of a p-value. Differences are classified as statistically significant if they have a small "p-value" (i.e., $p < 0.05$), indicating that the differences are unlikely to be caused by chance variation in the survey sample. Although the analyses highlight statistically significant effects, they are unable to reveal whether effects have important practical implications. Some effects that fall just short of the 0.05 significance level may have large practical implications while other effects with high statistical significance may have no practical implications. Thus, it is important to consider both the statistical significance and the practical implications of the results.

The chi-square test can be unreliable when some of the subgroups being examined are very small. As a result, the reported chi-square tests focus only on differences among the three largest race/ethnic groups sample (white, non-Hispanic; Hispanic, any race; and black or African American). For descriptive purposes only, percentage differences are also shown for Asian Americans, American Indians/Alaska Natives, and "Others." Even for this limited purpose, the results from these three small subsamples should be interpreted with caution.

Results

Who Visits?

Recent visitors were defined as people who had been to a unit of the National Park System within the past two years and who could identify that site with enough specificity for the interviewer to find it on a list of close to 400 named units managed by the NPS. This percentage increased over time, from 32% in CSAP1, to 47% in CSAP2, and 50% in CSAP3. The large increase from CSAP1 to CSAP2 is likely due in part to refinements in the method used to validate park units visited. In CSAP2, interviewers used an improved list of park units (including commonly used aliases) and non-directive probes. These refinements seem to have substantially reduced the number of false negatives in the interviewer-based validation process. Absent those design features, the 2000 survey probably underestimated the proportion of recent visitors.

It seems likely that the increases that occurred between 2008–2009 and 2018 are valid reflections of the increase in visitation percentage for each group in Table 2, due to large increases in visitation across the National Park System around the centennial. Entrance count totals compiled at the parks (which include international visits and repeat visits) stood at over 330 million visits in 2017, up from 285 million visits in 2009 (Street, 2010; Ziesler and Singh, 2018). However, it seems unlikely that visitation to park units increased so markedly between CSAP1 and CSAP2, where the total number of park visits did not change much between the CSAP1 survey in 2000–2009, when CSAP2 was completed (Street, 2010). Therefore, refinements in cross-referencing the list of unit names, along with other methodological factors, probably account for most or all of the apparent increase in visitation percentage for U.S. residents indicated between 2000 and 2008–2009 in Table 2.

Consistent with this overall increase from CSAP1 to CSAP3, the visitation percentages across each race/ethnic group were higher in CSAP3 than in CSAP2, just as visitation percentages were higher in CSAP2 than in CSAP1. Nevertheless, non-Hispanic whites tended to have the highest visitation, while African Americans and Hispanic Americans visited at comparatively lower rates in all survey years. Results for the American Indian/Alaska Native category and for Asian Americans are only approximate because of the small subsamples in these groups.

In Table 2, the percentages are calculated with the number of park visitors in each race/ethnic group as the numerator and the total number of respondents in each group as the denominator. This shows the percentage within each race/ethnic category who visited in the previous two years.

Table 2. Percent of each race/ethnic group who named a valid NPS unit visited in the past two years, by survey year.

Race/Ethnicity	2000		2008–2009		2018	
	%	Wtd. N	%	Wtd. N	%	Wtd. N
Hispanic, any race	27%	379	32%	348	41%	111
White only, non-Hispanic	36%	2452	53%	1807	56%	498
Black or African American only, non-Hispanic	13%	361	28%	307	30%	78
Asian only, non-Hispanic*	32%	77	53%	80	80%	15
American Indian or Alaska Native only, non-Hispanic*	37%	15	37%	39	40%	9
Total	**32%**	**3284**	**47%**	**2582**	**51%**	**712**

*Results should be interpreted with caution due to small sample size (N < 30).

To view the data from another perspective, Table 3 reports the percentages calculated in the opposite direction. Here, the weighted number of respondents in each race/ethnic group is the numerator, and the denominator is either the total in all groups (for the three "All" columns) or the total visitors (for the three "Visitor" columns). This approach helps to standardize for the methods-induced increase in apparent visitation as recorded between CSAP1 and CSAP2/CSAP3. It reveals which race/ethnic groups are over-represented or under-represented among recent visitors compared to their share of the total sample.

Table 3. Percent distribution across race/ethnicity, all respondents vs. visitors, by year.

Race/Ethnicity	2000			2008-2009			2018		
	All	Visitors	Diff.	All	Visitors	Diff.	All	Visitors	Diff.
Hispanic only, any race	12%	10%	-2	13%	9%	-4	16%	13%	-3
White only, non-Hispanic	74%	83%	+9	70%	78%	+8	70%	77%	+7
Black or African American only, non-Hispanic	11%	4%	-7	12%	7%	-5	11%	6%	-5
Asian only, non-Hispanic*	2%	2%	0	3%	3%	0	2%	3%	+1
American Indian/Alaska Native only, non-Hispanic*	<1%	<1%	0	2%	1%	-1	1%	1%	0
Weighted N	**3284**	**1058**	**–**	**2582**	**1205**	**–**	**712**	**362**	**–**

*Results should be interpreted with caution due to small sample size (N < 30).

Non-Hispanic whites were "over-represented" among visitors by about the same degree in all three survey years. That is, they constituted roughly seven, eight, or nine percentage points more of the visitors than their share of the sample as a whole. This is consistent with research reviewed above showing that non-Hispanic whites tend to participate more frequently than members of other race/ethnic groups in a range of outdoor activities, including visits to national parks. Hispanic Americans were under-represented among visitors by about the same degree in all survey years: by two percentage points in 2000, four points in 2008–2009, and three points in 2018.

African Americans were the most "under-represented" visitor group in all years, making up between 11% and 12% of the sample all three survey years, but only 4%,7%, and 6% of the visitors in CSAP1, CSAP2, and CSAP3, respectively. The degree of under-representation declined slightly from seven percentage points CSAP1 to five points in CSAP2, and remained the same between CSAP2 and CSAP3 (a five percentage point difference). While the change between CSAP1 and CSAP2/CSAP3 might reflect an increase in visitation by African Americans, it is a small enough change that chance variation between the two samples cannot be ruled out.

Finally, in both survey years, Asian Americans and American Indians/Alaska Natives are each represented among visitors in about the same proportion as their small fraction of the sample as a whole.

Why Not Visit More Often?
CSAP1, CSAP2, and CSAP3 all asked about reasons for not visiting national parks more often. Because of differences in question wording and response choices between the three surveys, the focus here is exclusively on race/ethnic comparisons at a single point in time, based solely on the CSAP3 data. (A separate topical report is available that compares the results over time.)

The interviewers asked non-visitors[2] how much they agreed or disagreed with a series of statements about perceived barriers to visitation (to reduce the overall length of the survey, respondents were randomly assigned to receive half of these questions about barriers to visitation).[3] The statements were introduced with generic phrasing about "why people don't visit national parks or don't visit more often." Five response choices were offered, ranging from strongly agree to strongly disagree, with "neither agree nor disagree" as the middle option. The statements were worded in the negative, as reasons for not visiting (e.g., hotel costs are "too high" or NPS units are "not safe"). Agreement with any of them therefore indicates some dissatisfaction or negative opinion about NPS units. The exact wording of this series of survey question is presented in Table 8 of Appendix A.

Table 4 presents the percentage of non-visitors who agreed (either strongly or somewhat) with each statement. Although the statements were presented in random order, they are listed in the table based

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[2] In CSAP2, all respondents were asked about how much they agreed or disagreed with a series of statements about perceived barriers to visitation. In CSAP3, only non-visitors were asked these questions due to a change in survey methods. As a result, this section only presents results from non-visitors.

[3] In CSAP2, an analysis was performed for this question comparing Hispanic respondents by language of interview. Due to small sample sizes and the split sample method, this analysis could not be performed for CSAP3.

on the fraction of non-visitors who agreed, from highest to lowest. The first column shows the results for the total responding non-visitors in all groups, while the remaining columns refer to non-visitors within each race/ethnic group.

Table 4. Percent of non-visitors agreeing with reasons for not visiting NPS units more often, by race/ethnicity (2018 survey).

Reason	All	Hisp.	White	Afr. Am.	Asian**	Am. Ind.**	Other**
Travel distance is too far from my home to get to any national parks I'm interested in visiting.	68%	70%	71%	56%	25%	87%	46%
It costs too much money to travel to a national park.	46%	62%	39%	53%	21%	54%	29%
There aren't good transportation options for me to get to a national park.*	37%	65%	24%	62%	69%	72%	69%
Personal health issues keep me from visiting the national parks.	33%	22%	34%	26%	21%	67%	60%
I don't know much about what there is to do in national parks.	32%	48%	24%	48%	6%	23%	28%
Entrance fees are too expensive or high at national parks.*	32%	43%	21%	47%	21%	53%	68%
I'm just not that interested in national parks.*	24%	38%	16%	51%	31%	2%	23%
National parks are not accessible to people with disabilities.	23%	38%	17%	31%	0%	12%	18%
National parks are too crowded.	23%	28%	20%	33%	0%	0%	26%
I don't share the same interests as people who visit national parks.*	17%	27%	11%	34%	7%	21%	29%
I'm just not that interested in travel/tourism.	15%	11%	15%	15%	0%	2%	44%
The risk of crime or vandalism in national parks makes me feel unsafe.	14%	25%	12%	12%	22%	1%	51%
National parks are unpleasant places for me to be.*	10%	21%	4%	15%	0%	23%	19%
I don't like being out of touch with family and friends due to a lack of connectivity in parks.	10%	13%	8%	11%	0%	1%	26%

 * Indicates that the three largest race/ethnicity categories (Hispanic, non-Hispanic white, and African American) are significantly different from one another (p < 0.05).

 ** Results should be interpreted with caution due to small sample sizes (N < 30). See Table 10 in Appendix B for sample sizes associated with questions summarized in this table.

Table 4 (continued). Percent of non-visitors agreeing with reasons for not visiting NPS units more often, by race/ethnicity (2018 survey).

Reason	All	Hisp.	White	Afr. Am.	Asian**	Am. Ind.**	Other**
The people who work in the national parks are of a very different racial/ethnic background than mine.*	5%	14%	5%	0%	0%	0%	12%

* Indicates that the three largest race/ethnicity categories (Hispanic, non-Hispanic white, and African American) are significantly different from one another (p < 0.05).

** Results should be interpreted with caution due to small sample sizes (N < 30). See Table 10 in Appendix B for sample sizes associated with questions summarized in this table.

For six of the statements in Table 4, differences across the three largest race/ethnic categories easily surpassed the conventional criterion for statistical significance (p < .05). Because of small subsample sizes, the results for Asian Americans, American Indians/Alaska Natives, and "Other" non-Hispanic individuals are not considered in these tests; the results for these groups are included for descriptive purposes only and should be interpreted with caution.

The most widely endorsed statement in every group except African Americans, Asian Americans, and "other" non-Hispanic respondents was that the "travel distance is too far from my home." For the non-visitors in Table 4, Hispanic respondents had more negative opinions than non-Hispanic whites on 12 out of 15 items. For African American non-visitors, the comparison is 10 of 15. The comparison for Asian Americans is three of 15, for American Indians/Alaska Natives it is seven of 15, and for "other" non-Hispanic respondents it is 13 of 15; however, results for these groups should be interpreted with caution due to small sample sizes.

Over half of Hispanic non-visitors agreed with statements related to access and expenses, including "the travel distance is too far from my home to get to any national parks I'm interested in visiting" (70%), "there aren't good transportation options for me to get to a national park" (65%), and "it costs too much money to travel to a national park" (62%). Similarly, over half of African American non-visitors agreed that "the travel distance is too far from my home to get to any national parks I'm interested in visiting" (56%) and "there aren't good transportation options for me to get to a national park" (62%). By comparison, while 71% of White, non-Hispanic non-visitors agreed that travel distances were far from their homes, fewer than half of White, non-Hispanic non-visitors agreed that travel expenses or access to transportation prevent them from visiting national parks or visiting more often.

Furthermore, over a third of Hispanic and African American non-visitors agreed that "entrance fees are too expensive or high at national parks," "I don't know much about what there is to do in national parks," and "I'm just not that interested in national parks," while under a quarter of White, non-Hispanic non-visitors agreed with those same statements. In particular, 51% of African American non-visitors stated that they are "just not that interested in national parks," while only 16% of White, non-Hispanic and 38% of Hispanic non-visitors agreed with that statement.

Other results support findings from the literature that national parks may do a better job of welcoming white, non-Hispanic visitors than other race/ethnic groups (see Byrne et al., 2009). For example, 34% of African American visitors also stated that they "don't share the same interests as people who visit national parks," as compared to 11% of White, non-Hispanic and 27% of Hispanic non-visitors. Only 4% of White, non-Hispanic non-visitors stated that "national parks are unpleasant places for me to be," as compared to 21% of Hispanic non-visitors and 15% of African American non-visitors.

Other interesting results that are not statistically significant include the larger percentage of White, non-Hispanic non-visitors agreeing that "personal health issues prevent me from visiting the national parks," (34%, as compared to 22% of Hispanic non-visitors and 26% of African American non-visitors), and the smaller percentage of White, non-Hispanic non-visitors agreeing that "National parks are too crowded" (20%, as compared to 28% of Hispanic non-visitors and 33% of African American non-visitors).

Does Use of Programs and Services Differ?

To complement the preceding analyses about reasons for not visiting, Table 5 provides data from visitors about the kinds of programs and services they used during their most recent visit. Visitors were asked about programs and services that "you or any member of your personal group" used. The exact wording of this series of survey questions is presented in Table 9 of Appendix A.

Table 5. Percent of visitors reporting use of programs/services during the most recent visit, by race/ethnicity (2018 survey).

Programs/Services	All	Hisp.	White	Afr. Am.	Asian**	Am. Ind.**	Other**
View outdoor exhibits.	80%	72%	80%	93%	81%	99%	83%
Go to the visitor center.	80%	75%	81%	69%	84%	81%	70%
Read the park brochure or newspaper.	80%	78%	79%	96%	71%	87%	80%
View indoor exhibits.	61%	49%	63%	58%	57%	86%	62%
Talk informally with a ranger.	54%	48%	55%	42%	49%	86%	80%
Watch movies or videos about the park, or listen to an audio tour or podcast.*	41%	26%	40%	78%	55%	26%	45%
Attend a ranger-led activity, such as a tour or talk.	28%	16%	28%	36%	30%	41%	48%
Use a smart phone app specific to the park unit.	16%	22%	14%	27%	34%	0%	9%

 * Indicates that the three largest race/ethnicity categories (Hispanic, non-Hispanic white, and African American) are significantly different from one another ($p < 0.05$).

 ** Results should be interpreted with caution due to small sample sizes (N < 30). See Table 11 in Appendix B for sample sizes associated with questions summarized in this table.

Table 5 (continued). Percent of visitors reporting use of programs/services during the most recent visit, by race/ethnicity (2018 survey).

Programs/Services	All	Hisp.	White	Afr. Am.	Asian**	Am. Ind.**	Other**
Attend a cultural demonstration or performance.	16%	20%	14%	15%	29%	20%	37%
Participate with a child in a youth program.*	7%	6%	6%	23%	15%	5%	4%

* Indicates that the three largest race/ethnicity categories (Hispanic, non-Hispanic white, and African American) are significantly different from one another ($p < 0.05$).

** Results should be interpreted with caution due to small sample sizes (N < 30). See Table 11 in Appendix B for sample sizes associated with questions summarized in this table.

Differences by race/ethnic group are generally less pronounced in Table 5 than in earlier tables. Only a few of the differences in participation rates are statistically significant, and the rank-order of activities is generally similar across groups. Hispanic visitors were less likely than White, non-Hispanic visitors or African Americans visitors to attend a ranger-led activity, such as a tour or a talk; view indoor exhibits; and to watch movies about the park or listen to an audio tour or podcast. Across all groups, African American visitors were the most likely to view outdoor exhibits; read the park brochure or newspaper; watch movies or videos about the park or listen to an audio tour or podcast; and to participate with a child in a youth program. In addition, it is interesting to note that only 14% of white, non-Hispanic visitors used "a smart phone app specific to the park unit," as compared to 22% of Hispanic visitors and 27% of African American visitors.

Conclusions

The issue of underserved populations is a critical one for the NPS in an increasingly diverse twenty-first century America. As others have pointed out (e.g., Gramann & Allison, 1999; National Parks Second Century Commission, 2009a), the day is fast approaching when the term "minority group" will lose much of its applicability as a social label in the U.S. By mid-century or sooner, non-Hispanic whites will no longer constitute a numerical majority in some areas, and in some states they may not even be the largest minority. One of the great challenges facing NPS will be its ability to accommodate these demographic changes in non-divisive and socially beneficial ways.

The purpose of the present report has been to inform this effort by investigating racial and ethnic differences in visitation and in perceptions of the National Park System. Of course, in the Internet age, physical visits are not the only measure of success in connecting with underserved populations. The role of virtual visits, including the volume and types of use received by NPS websites from different race/ethnic groups, needs to be studied further. Nevertheless, as pointed out by the National Parks Second Century Commission (2009a), demographic change will affect how parks are visited, and thus how the National Park System is valued, what kinds of development are appropriate, and who votes on behalf of parks. Therefore, the growth of population subgroups that have not traditionally included many park-goers requires the attention of the NPS.

As in the 2000 national survey and the 2008–2009 national survey, the NPS Comprehensive Survey of the American Public in 2018 found that U.S. visitors to national parks, national monuments, and other units of the National Park System were disproportionately white and non-Hispanic. Asian Americans and American Indians/Alaska Natives appeared to be represented among visitors in roughly the same proportion as in the population as a whole; however, Hispanic Americans and African Americans were under-represented among visitors to NPS units. Despite efforts by the NPS and its partners to engage underserved populations, these visitation differences by race/ethnic group seem not to have changed much over the past two decades.

Improving Access

While in CSAP2, the barriers to visitation expressed most widely by non-visitors was that they "just don't know that much about national park units," the barriers expressed most widely in this iteration of the study were related to expenses and access to park visitation. This is consistent with literature that has found that travel distance, a lack of transportation options, and the expenses associated with traveling to and visiting national parks can constrain park visitation by underrepresented communities (Burns, Covelli, & Graefe, 2008; Roberts, 2007; Roberts & Chitewere, 2011; Solop et al., 2003). While it is encouraging that a lack of knowledge about NPS units is no longer the most widely expressed barrier to visitation, these responses indicate that non-white respondents face barriers that prevent them from accessing parks, even if they are aware of parks and interested in visiting. Where access is a concern for some populations, many parks have partnered with environmental groups, school districts, community-based organizations, and local governments to provide transportation assistance for those who cannot reach parks on their own. The Every Kid in a Park program, created in 2015, also helps reduce some of these barriers by providing 4th grade

students nationwide with a free pass to federally managed lands and waters (NPS, 2016). Creating and sustaining these partnerships and programs will be critical to attracting underserved populations.

It is worth noting that CSAP2 found that concerns about the costs associated with visiting national parks are given more often by non-visitors than by visitors, which could indicate a lack of awareness or understanding of the actual costs of visitation on the part of non-visitors (Taylor et al., 2011). However, as Mott (2016) states, if this is the case, underserved populations' lack of knowledge of the costs of national park visitation must be addressed through targeted marketing and advertising campaigns by NPS.

Continuing to Raise Awareness

Based on some of the reasons reported for not visiting, non-visitors may be prompted to visit by further outreach. While the most prominent barriers were no longer related to a lack of knowledge about parks, nearly half of Hispanic and African American non-visitors still agreed that they "don't know much about what there is to do in national parks." These results support findings from other studies that have indicated that a lack of knowledge or awareness can present a barrier to national park visitation (Roberts, 2007; Roberts & Chitewere, 2011). This result suggests that the many efforts meant to raise awareness about national parks in preparation for the centennial in 2016, including the Find Your Park/*Encuentra Tu Parque* public awareness campaign, should be maintained. In general, public awareness campaigns should be assessed to ensure that they are reaching different ethnic and racial communities. Suggested methods for increasing awareness and exposure from the literature include using varied, bilingual media and partnerships with organizations that serve diverse communities, including schools (Roberts, 2007; Clarke, Rodriguez, & Alamillo, 2015; Mott, 2016; Burns et al., 2008).

Increasing Interest and Welcoming Diverse Audiences

Increasing access and awareness may not necessarily lead to increasing visits from underserved groups. Parks still must provide experiences that are relevant and desirable to those they are trying to attract. For example, over half of African American non-visitors (51%) agreed that "I'm just not that interested in national parks," while over a quarter of Hispanic non-visitors (27%) and over a third of African American non-visitors (34%) agreed that "I don't share the same interests as people who visit national parks." These findings indicate that parks should place a greater emphasis on welcoming diverse audiences who may not see themselves or their interests represented among other national park visitors.

Providing more information about the variety of activities available at national parks could help increase interest among underserved communities; furthermore, national parks could consider developing interpretive material or providing recreational activities that match the leisure preferences of underserved populations (Burns et al., 2008; Chavez, 2008). Other efforts to increase interest from underserved groups involve interpretive programming that relates NPS units to the cultural experiences and interests of specific race/ethnic populations. For example, although it is relevant to interpret the significance of slavery at Civil War battlefield sites, it is equally important to interpret stories of African American success, in addition to African American enslavement. NPS should also continue providing programs and services outside of NPS units to engage communities who may not

be interested in or able to access national park lands. In any case, providing underserved communities the opportunity to participate in the assessment of recreational opportunities, interpretive material, programs, and other NPS decision-making can be important for building long-term connections with those communities (Chavez, 2000; Clarke et al., 2015; Makopondo, 2006; Pease, 2015).

Cultivating perceptions of "belonging" and "welcomeness" are equally important for encouraging visitation by underserved groups, particularly if they have been historically excluded or removed from national park lands (Byrne et al., 2009; Hough, 1991; Spence, 1999; Jacoby, 2001). This may require conscious efforts on the behalf of NPS, including the provision of programmed special events that celebrate the achievements of underserved groups. Many examples of this already exist in the National Park System, but there is potential for more, especially in NPS units that have not previously emphasized their connections to people of color.

Hispanic visitors were less likely than White, non-Hispanic visitors or African Americans visitors to attend a ranger-led activity, such as a tour or a talk; view indoor exhibits; and to watch movies about the park or listen to an audio tour or podcast. This may be caused in part by language barriers, especially among those who have not adopted English as a first language. Some relatively simple measures could contribute to a more welcoming atmosphere, such as having both recorded responses and written materials available in Spanish as well as in English when potential visitors contact a park for information. The NPS should also intensify its ongoing efforts to ensure the cultural sensitivity and service orientation of all those who provide services. This means more than language literacy, as reflected in multi-lingual interpretation and signage. It also means promoting cultural literacy by understanding the preferences of different groups for various facilities and programs, as well as their preferred leisure activities and group structures when visiting (e.g., nuclear families *vs.* extended families).

A Final Word on Policy

In working to translate awareness into visits and to make parks more welcoming, the principle to keep in mind is that people not only seek out and visit parks; they also seek out and visit experiences. The experiences sought often reflect culturally based values and practices. In turn, the experiences gained can become lasting personal memories that are shared with others and influence future behaviors and opinions well beyond those of any particular visitor. Providing accessible, relevant, and desirable experiences to underserved populations is therefore a means of sustaining broad public support for national parks in an increasingly diverse America.

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Appendix A: Wording of Survey Questions

Table 6. Survey questions used to define recent park visitors, by CSAP year.

Study	Question	Response Options
CSAP1 2000	How many times in the past two years have you visited a unit of the National Park System?	• Number of visits
	Which National Park System unit did you last visit?	• Name of NPS unit
CSAP2 2008–2009	How many times in the past two years have you visited a unit of the National Park System?	• Number of visits
	[If zero] Have you ever, in your lifetime, visited a national park, historic or cultural site, monument, or other unit managed by the National Park Service?	• Yes • No
	[If yes] We want to ask about the last time you visited a unit of the National Park System. Was your most recent visit...	• Never visited • More than 5 years ago • From 2 to 5 years ago • Within 2 years
	Which National Park System unit did you LAST visit?	• Name of NPS unit
CSAP3 2018	How many times in the past two years have you visited a national park?	• Number of visits
	[If zero, don't know, or no answer] Have you ever, in your lifetime, visited a national park?	• Yes • No
	[If yes] We would like to know about the last time you visited a national park. Was your most recent visit…	• More than 5 years ago • From 2 to 5 years ago • Within the past two years • Never
	[If visited within last two years] Which national park did you LAST visit?	• Name of NPS unit

Table 7. Survey questions used to define race/ethnicity, by CSAP year.

Study	Question	Response Options
CSAP1 2000	Are you of Hispanic, Latino/a, or Spanish origin?	• Yes • No
	In what race would you place yourself? Select one or more of the following groups.	• American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White
CSAP2 2008–2009	Are you Hispanic or Latino [Latina]?	• Yes • No
	I'm going to read a list of racial categories. Please select one or more to describe your race. Are you…	• American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White
CSAP3 2018	Are you Hispanic or Latino?	• Yes • No
	I'm going to read a list of racial categories. Please select one or more to describe your race. Are you…	• American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian or other Pacific Islander • White • (Other)

Table 8. Survey questions asking non-visitors why they don't visit NPS units more often.

Study	Question	Response Options
CSAP3 2018	We're interested in why people don't visit national parks or don't visit more often. In the following series of questions I will be asking you about possible reasons for non-visitation. I'm going to read a series of statements. I'd like you to think of your own experiences, and tell me how much you agree or disagree with each statement: • I don't visit national parks or don't visit more often because: • Entrance fees are too expensive or high at national parks. • The travel distance is too far from my home to get to any national parks I'm interested in visiting. • National parks are too crowded. • National parks are not accessible to people with disabilities. • I don't know much about what there is to do in national parks. • National parks are unpleasant places for me to be. • It costs too much money to travel to a national park. • I don't share the same interests as people who visit national parks. • There aren't good transportation options for me to get to a national park. • The risk of crime or vandalism in national parks makes me feel unsafe. • I'm just not that interested in national parks. • The people who work in the national parks are of a very different racial/ethnic background than mine. • Personal health issues keep me from visiting the national parks. • I don't like being out of touch with family and friends due to a lack of connectivity in parks. • I'm just not that interested in travel/tourism.	• Strongly agree • Somewhat agree • Neither agree nor disagree • Somewhat disagree • Strongly disagree

Table 9. Survey questions asking visitors about programs/services used during their most recent visit.

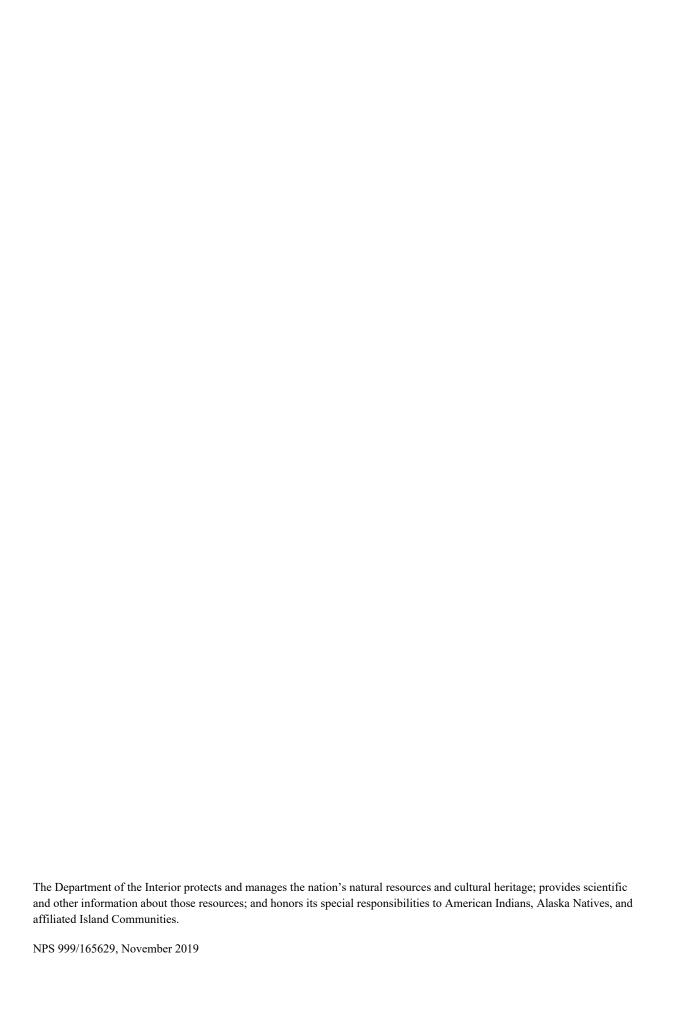| Study	Question	Response Options
CSAP3 2018	On your last visit to [Park Name] did you or any member of your personal group <u>use</u> any of the following programs or services? • Attend a ranger-led activity, such as a tour or talk. • Talk informally with a ranger. • View outdoor exhibits. • View indoor exhibits. • Attend a cultural demonstration or performance. • Read the park brochure or newspaper. • Go to the visitor center. • Watch movies or videos about the park, or listen to an audio tour or podcast. • Participate with a child in your group in a youth program. • Use a smart phone app specific to the park unit.	• Yes • No

Appendix B: Sample Sizes for Questions about Perceived Barriers to Visitation (Table 4) and Use of Programs/Services (Table 5).

Table 10. Sample sizes for questions about perceived barriers to visitation (Table 4).

Reason	All	Hisp.	White	Afr. Am.	Asian	Am. Ind.	Other
Travel distance is too far from my home to get to any national parks I'm interested in visiting.	532	68	358	71	6	10	19
It costs too much money to travel to a national park.	530	69	360	67	6	10	18
There aren't good transportation options for me to get to a national park.	385	22	286	45	8	9	15
Personal health issues keep me from visiting the national parks.	384	22	287	45	8	7	15
I don't know much about what there is to do in national parks.	529	69	356	70	6	10	18
Entrance fees are too expensive or high at national parks.	505	67	341	65	6	9	17
I'm just not that interested in national parks.	382	21	285	45	7	9	15
National parks are not accessible to people with disabilities.	495	66	330	64	6	10	19
National parks are too crowded.	516	68	349	66	6	10	17
I don't share the same interests as people who visit national parks.	377	20	282	45	8	9	13
I'm just not that interested in travel/tourism.	385	21	288	45	8	8	15
The risk of crime or vandalism in national parks makes me feel unsafe.	380	21	285	45	8	7	14
National parks are unpleasant places for me to be.	526	69	353	69	6	10	19
I don't like being out of touch with family and friends due to a lack of connectivity in parks.	384	22	287	45	7	8	15
The people who work in the national parks are of a very different racial/ethnic background than mine.	382	21	285	45	7	9	15

Table 11. Sample sizes for questions about use of programs/services (Table 5).

Programs/Services	All	Hisp.	White	Afr. Am.	Asian	Am. Ind.	Other
View outdoor exhibits.	1494	120	1168	100	52	15	39
Go to the visitor center.	1498	119	1168	102	53	16	40
Read the park brochure or newspaper.	1497	119	1166	103	53	16	40
View indoor exhibits.	1500	119	1171	103	52	15	40
Talk informally with a ranger.	1496	120	1168	102	51	16	39
Watch movies or videos about the park, or listen to an audio tour or podcast.	1493	116	1167	103	52	15	40
Attend a ranger-led activity, such as a tour or talk.	1502	120	1171	103	52	16	40
Use a smart phone app specific to the park unit.	1501	119	1170	103	53	16	40
Attend a cultural demonstration or performance.	1498	118	1171	102	51	16	40
Participate with a child in a youth program.	1504	118	1174	103	53	16	40

Natural Resource Stewardship and Science
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