A Case Study of Millennials’ Attitudes Toward U.S. National Parks

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Abstract
Visitation to some of the most popular national parks in the United States has surged in recent years, but in many national park units, attendance has declined even as the U.S. population increases. Changing demographics, patterns of visitation, maintenance needs, and inconsistent federal support raise questions about national parks’ relevance to younger generations. In particular, the attitudes of the U.S. Millennial generation are a key concern for park managers and supporters. We evaluate the views of a sample of Millennials toward America’s national parks and find that many lack basic knowledge about national parks, yet still say they value and appreciate the national park system. Land managers should respond to knowledge gaps of Millennials and pursue outreach that strategically consolidates the support of this and younger generations for a national parks system that is expected to provide ecological and cultural benefits for current and future generations.

KEYWORDS: National Parks, Millennials, changing demographics, diverse populations

Introduction
Since 1916, the mission of the United States National Park Service (NPS) has been “to conserve the scenery and the natural and historic objects and the wildlife therein, and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations” (39 Stat. 535, 16 U.S.C. 1). The overall popularity of national parks has continued to grow in recent years, but this growth has centered on a handful of the most famous scenic parks; nationwide, many of the 423 units managed by the NPS have seen decreased visitation (National Park Service, n.d., Stevens et al., 2014;). Even as flagship parks such as Yellowstone, Yosemite, and Grand Canyon face challenges due to overcrowding, public interest in national parks may be dimming due to changing demographics, a turn to screens and technology, and shifting patterns of recreation (Stevens et al., 2014; Sultz, 2021; Xiao et al., 2022). These factors may undermine park visitation, which in recent decades has been relatively stagnant compared to the boom experienced from World War II to the late 1980s (National Park
Service, 2022a; Repanshek, 2007). In terms of per capita visitation, the popularity of national parks from 1993 to 2010 actually decreased (Stevens et al., 2014). Overall visitation rebounded to new highs with the 2016 centennial of the National Park Service, plateaued for several years, then plunged in 2020 during COVID-19-related closures. Visitations in 2021 bounced back, but only to levels approximating those from 2014 (National Park Service, 2022a; Ziesler & Spalding, 2022).

Concern about national park popularity may seem misplaced to those who have recently visited one of the United States’ iconic parks and waited in line at the entrance gate or struggled to find a campsite or parking place. Publicity surrounding the centennial of the national park system in 2016 spurred a significant surge in park visitors at the nation’s most popular parks (Bergstrom et al., 2020; Sultz, 2021), and the reopening of national parks following closures from the coronavirus pandemic of 2020 prompted a rush to recreate outdoors in many parts of the country. However, the attention and crowds typically concentrate on a relative handful of units; the NPS reported in 2022 that during the previous year, the eight busiest national parks received 25% of all visitors, and the 25 busiest park units attracted more than half of all annual visitation (National Park Service, 2022b). Park visitation projections modeled by Bergstrom et al. (2020) found that the most popular parks were likely to see increased crowding, but that if the cost of visiting parks increases, visitor numbers could actually drop by 2026 (p. 49).

The crowding in some national parks, along with the NPS’s limited financial resources to accommodate mass tourism, has caused frustration at a number of the most popular areas. Many of the nation’s most famous national parks are experiencing a record number of visitors and long lines while NPS personnel are understaffed and facing a maintenance backlog of nearly $13 billion (Maberry, 2016; Robbins, 2017). To try to alleviate crowding, unannounced park closures due to congestion, and allow NPS personnel to better manage crowds, some of the country’s most popular national parks now require timed-entry and advance reservations to visit during busy summer seasons (CBS News, 2022; NY Times, 2021).

Looking beyond the challenges of uneven park visitation and funding, it is worth examining who visits national parks and why (e.g., Xiao et al., 2022). Do the visitors reflect an increasingly diverse U.S. population? How broadly does interest in the national park system spread beyond the most famous scenic parks to the hundreds of other units managed by the NPS dedicated to the country’s natural, cultural, and historic features? How well do Americans know the national park system? In order to evaluate these questions, at least preliminarily, we assess the attitudes and values of a sample of Millennials toward America’s national parks. The Millennial generation, defined by the U.S. Census Bureau as individuals born between 1982 and 2000, is the generation of adults poised to impact the near future of national parks most dramatically, considering this cohort’s size, age, and mobility (Weiler et al., 2018). Second only to the younger Gen Z population, Millennials stand out for their abundance, technological integration, and ethnic diversity (Fry, 2016; Parker & Igielnik, 2020; Rainer & Rainer, 2011), but also their seeming...

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1 The national park system is the array of units (423 as of 2022) managed by the U.S. National Park Service. Both the agency and the system were established by the National Park Service Organic Act of 1916, 16 U.S.C. §1.

2 The Great American Outdoors Act, signed into law in 2020, pledges to dedicate $9.5 billion to begin addressing the maintenance backlog at U.S. national parks. The Act ensures permanent funding of the Land and Water Conservation Fund, though concerns have been raised about implementation (Karni 2020; Kutz 2020).

3 The diversity of U.S. national park visitors has also been impacted by growing numbers of international visitors. The U.S. Travel Association (2016) estimated that nearly 15 million international visitors would travel to a national park in 2017, and found that from 2012 to 2016 the share of overseas arrivals visiting parks represented more than one-third of all visitors.

4 Millennials are also commonly labeled as Generation Y.
disengagement from nature (Douglas et al., 2022). Our study does not provide a comprehensive analysis of a random selection of Millennials across the U.S., but rather offers insight into the attitudes and values of the Millennial population at a single university towards national parks.

The Popularity of National Parks

Research points to three key factors that may be undermining the popularity of national parks broadly: shifting demographics and a lack of diversity in visitors, cost associated with park visits, and the increased presence of new technologies and their impact on how people—especially in younger generations—interact with nature. We address each of these in turn, below.

Demographics

According to a 2008 NPS study, the agency acknowledged challenges in trying to engage with a more diverse American public (National Parks Second Century Commission, 2010). These findings were reaffirmed a decade later (Resource Systems Group, 2019). Characteristics of diversity go beyond race and ethnicity to include age, cultural traditions, geographic location, education, income, gender identity, sexual orientation, religion, and more (Carr, 1998; Johnson, 2018). As the composition of the U.S. population changes, understanding how to connect Millennials to national parks and other public lands will prove to be increasingly important if these lands are to maintain their position as valued spaces of conservation and national identity. Perhaps the greatest challenge for the NPS comes from the makeup of current and past American visitor demographics. Since the 1960s, studies have found that the NPS has done a poor job in attracting diverse visitors (Floyd, 1999; Santucci et al., 2014; Scott & Lee, 2018; Weber & Sultana, 2013b). Surveys and studies confirm these statistics: whites make up the overwhelming majority of visitor groups, as high as 95% in places such as Santa Monica Mountains Recreational Area (CA), Booker T. Washington National Monument (VA), and Bandelier National Monument (NM). The very limited visitation by people of color is particularly notable for sites such as Booker T. Washington monument, which commemorates African American history, and Bandelier, which is located in New Mexico, a state with the highest concentration of Hispanics anywhere in the U.S. (Stepler & Lopez, 2016). The NPS workforce is also disproportionately white compared to the population of the U.S. overall (Jacobs & Hotakainen, 2020).

In 2003, the NPS conducted a survey that found an obvious disconnect in attracting African American visitors compared to whites and Hispanics (Solop et al., 2003). The survey asked participants if they had visited a NPS site within two years; it found that only 13% of African Americans had done so, versus 36% of whites and 37% of Hispanics (Solop et al., 2003). The disparity found in the study resembled a lack of diversity in park visitors dating back 30 years (Meeker, 1973). While the 2003 NPS study indicated Hispanic visitation was greater than African American visitation, a National Park Service survey conducted in 2008-2009 found Hispanics represented only 9% of total NPS visitation, despite comprising roughly 16% of the U.S. population overall; the proportion of Hispanics in the U.S. population is expected to nearly double by the year 2050 (Taylor et al., 2011; see also Le, 2012; Passel & Cohn, 2008; Weber & Sultana, 2013b). The Park Service's 2018 update to this survey determined that non-Hispanic whites remained "overrepresented" among national park visitors at rates that roughly matched the surveys from 2003 and 2008-2009, and that Hispanic Americans and African Americans remained "underrepresented" at levels similar to those found in prior surveys (Resource Systems Group, 2019).
A variety of theories has been proposed to explain the underrepresentation of people of color in national parks (Erickson et al., 2009; Floyd, 1999, 2001; Krymkowski et al., 2014; Pease, 2015; Weber & Sultana, 2013b; Xiao et al., 2022). A study of African-Americans in Denver, Colorado, for example, found deep cultural disaffection toward national parks (Erickson et al., 2009). Krymkowski and colleagues (2014) found African-Americans had negative associations with national parks stemming from histories of discrimination and anxiety about their safety in areas of the U.S. dominated by rural whites.

An attempt to address the issue of low visitor diversity is being made, to some extent, by the NPS adding cultural and historic sites to its inventory to “commemorate individuals, places, or themes not currently represented within the system” (Weber & Sultana, 2013a, p. 455; National Parks Visitation, 2019). Compared to large scenic national parks, cultural and historic sites may be better positioned to attract diverse populations for reasons such as cultural relevance and geographic location, but these lesser-known units do not draw visitors in ways that create widespread support and federal appropriations. Additionally, while it is important to add more cultural and historic sites that appeal to broad constituencies, the NPS still faces a serious problem in connecting people of color with nature-based, flagship parks (Scott & Lee, 2018; Sultz, 2021). The NPS’s Jim Crow-era practices of segregation in the southern U.S. likely exacerbates this alienation of people of color from nature-based parks (Erickson et al., 2009; Johnson, 2017; Weber & Sultana, 2013b). Sultz (2021) found that motivations and constraints for visiting national parks (or not doing so) differed for young adults and for people of color, with young adults such as Millennials flagging a lack of time and knowledge as obstacles, non-white Hispanics highlighting time, access (i.e., proximity), and cost as constraints, and people of color more generally pointing to lack of interest, lack of sense of belonging, and NPS units being unpleasant places to be (see also Resource Systems Group, 2019). To make matters worse, the idea of “outdoor recreation”—such as hiking, camping, rock climbing, or rafting—as activities primarily enjoyed by white Americans has been reinforced by outdoor-themed media, which often fail to represent people of color; popular magazines rarely depict African-Americans or other people who do not fit traditional conceptions of fit, white outdoorsmen participating in outdoor recreation or outdoor activities, an omission that perpetuates stereotypes and behavioral norms (Finney, 2014; Martin, 2004; Stanley, 2020).

Cost

Entrance fees have been charged for admission into national parks since the establishment of the NPS in 1916, when the cost to enter Yellowstone National Park was $10 (Anderson & Freimund, 2004; Ostergren et al., 2005). By 2020, a 7-day pass to Yellowstone and Grand Teton National Parks cost $25 (adjusted for inflation, the 1916 price would be approximately $235 in 2020 dollars). Any fee charged may seem prohibitive to certain socioeconomic groups with lower incomes, and some scholars call for all public lands to be free for entry (Anderson & Freimund, 2004; Shwartz & Lin, 2006). There is some evidence that visitation numbers at particular NPS sites are negatively affected by fee increases (Resource Systems Group, 2019; Sultz, 2021): in the five years following fee increases at Zion National Park in 1995, the number of visitors still increased, but at lower than predicted levels (Schwartz & Lin, 2006).

Despite suggestions that park fees may be too expensive for some, results of one nationwide study in 2000 found that 80% of respondents in a random sample of 3,515 households thought the NPS entrance fees were fair (Ostergren et al., 2005). Respondents who considered entrance fees too expensive tended to consider the entire cost of a visit, including lodging and transportation. The same study found a weak association between those who believed park fees to be too expensive and those with low income and education levels. Hispanic and African Americans were more likely to consider entrance fees a barrier to visitation (p. 29). This response was also evident in the 2018 NPS survey (Resource Systems Group, 2019, p. 12).
Changes in technology and an increased devotion to screens are another factor that may impact park visitation. Pergams and Zaradic (2006) suggest the downward trend in U.S. national park visits is due to Americans, especially Millennials and younger people, spending more time with electronic media (see also Barton, 2012, but cf. Warnick et al., 2009). Complex relationships between new technologies and human behavior can be difficult to evaluate, but considering that by 2019, the average American spent more than 6.5 hours per day on the Internet (Hughes, 2019), and that for youths 13–18, average daily screen time by 2021 was approximately 8.5 hours (Jackson et al., 2021; Rideout et al., 2022), it seems reasonable to suggest that this might contribute to a diminished role for outdoor recreation, especially as these younger age cohorts pursue their own activities as young adults (Larson et al., 2019).

**Millennials**

The Millennial generation stands out in a number of important ways that relate to national parks and visitation: Millennials are the most racially and ethnically diverse adult generation in U.S. history, with 44% identifying as non-white; they are the largest in the U.S. at 83.1 million; computer technology has always been a part of their lives; and they are the most educated generation in U.S. history (Fry, 2016; Rainer & Rainer, 2011; United States Census Bureau, 2015). In addition to these characteristics, Millennials are about to wield a significant amount of power in the decades to come. In 2020, approximately one in three adult Americans is a Millennial, and by 2025 they will make up roughly 75% of the U.S. workforce (Pew Research Center, 2020; Winograd & Hais, 2014).

Family and friendships are considered important pieces of Millennials’ lives, but technology often serves as the glue to hold these pieces together (Rainer & Ranier, 2011). Compared to earlier generations, Millennials are more likely to have a social media profile of some type and post videos of themselves online (Pew Research Center, 2010). Technology use is so deeply engrained in Millennials’ lives that a 2010 study found it was their top self-identifier, ahead of music and pop culture (Pew Research Center, 2010). Considering the importance and prevalence of Millennials, if the NPS fails to connect with this population, it runs the risk of operating a system of lands that largely resonate with older and less populous generations.

In order to evaluate how Millennials view and understand U.S. national parks, we offer a case study where we surveyed students at a regional university in Colorado, located within a 4-hour drive of more than a dozen NPS units. From this survey, we highlight ideas and trends that may prove useful when considering how Millennials value national parks, what kinds of connection they have with these places, and what they know about the national park system.

**Methods**

We collected data using a preliminary focus group of six Millennials to test and refine survey questions, then administered a 24-question survey in paper or electronic form to participants drawn as a convenience sample from the student population at the University of Colorado Colorado Springs (UCCS), a regional research university located in Colorado Springs, Colorado. We recruited participants by approaching student organizations and academic departments on campus, contacting the heads of each student organization and administrators from each academic department, and asking for their assistance to recruit participants. We provided a brief description of the study, along with a link to the electronic survey to their members/students.

For the electronic version of the survey, we utilized SogoSurvey due to its ability to customize the available survey templates, generate a unique web address link to the survey, and block participants from responding more than once. The paper copy of the survey was made with Microsoft Word and consisted of three single-sided pages. To conduct the paper survey, we selected two popular locations on campus that provide access to a broad mix of students:

http://www.ejorel.com/
the student Recreation Center and the University Center, which is a central student gathering area near places such as the library, a student lounge/pub, and the UCCS bookstore. To recruit participants in both locations, a researcher sat at a table greeting passers-by and asked if they would be willing to complete a short survey on national parks. In-person data collection took place on three consecutive Fridays from approximately 8 a.m. to 1 p.m.

The study was reviewed and approved by the UCCS institutional review board, and participants read and signed a consent form before completing any questions. The survey gathered basic demographic information such as age, ethnicity, and residency. Questions asking about respondents’ knowledge, use of, and views about national parks utilized multiple question formats including list, Likert scale, and open (see Appendix A). To analyze the results of the survey, we applied descriptive statistics and evaluated participants’ responses. Survey participants were eligible if they were born between the years of 1982 and 1998, in order to include all Millennial-age students over the age of 18 at the time of the survey.

UCCS is located within easy driving distance (400 kilometers or less) of NPS units that range from among the country’s most popular scenic parks (Rocky Mountain National Park) to mid-sized parks that are regionally popular (Great Sand Dunes National Park and Preserve, Black Canyon of the Gunnison National Park) to national monuments or historic sites that primarily draw local visitors (Florissant Fossil Beds National Monument, Bent’s Old Fort National Historic Site).

As indicated earlier, this study was designed to provide insight into the attitudes and values of the Millennial population at a single university toward national parks. Further research will need to explore similar questions on both a broader geographic and demographic scale. Our research utilized a convenience sample, which limits our ability to make broad generalizations or universal claims, but for case-based research can be useful and appropriate (Hay, 2010). With our sampling, we tried to access as broad a representation of campus Millennials as possible. For the paper survey, we picked locations that were likely to attract students for different reasons and therefore yield a wider range of students. In total, we gathered 216 surveys: 96 electronic and 120 paper.

Survey questions were analyzed differently depending upon the kind of data collected. Likert scale questions were analyzed numerically and calculated into means (Kitchin & Tate, 2013). For the four open-format questions we relied upon manual coding for themes and content analysis (Hay, 2010; Vaughn & Turner, 2015). We began this process by first reading through each of the open question responses and noting frequently used terms and phrases to identify patterns. We conducted a second review to ensure a consistent foundation to begin assigning codes. Once we had established a list of codes, we created a codebook to translate qualitative data into an analyzable form, and help maintain the clarity of the information represented (Kitchin & Tate, 2013; Vaughn & Turner, 2015). We logged open and closed question responses and codes into a Microsoft Excel spreadsheet, including an extra category of code to the file so we could later compare the electronic survey responses to the paper survey responses to determine if there was any significant difference in responses across formats.

In order to analyze large amounts of information from the surveys, we applied descriptive statistics to summarize and interpret the data (Holcomb, 1998). We first calculated basic percentages in order to compare groups of unequal size (Holcomb, 1998). We also analyzed measures of central tendency, including mean, median, and mode (Herkenhoff & Fogli, 2013), and calculated standard deviation to determine the variability in data from the average. We then analyzed data across categories to evaluate if, for example, responses by one demographic classification expressed views distinct from others.
Results

As noted above, survey participants were limited to ages 18–34 to land within the range of the Millennial generation at the time of the survey. All but four respondents of the 216 surveyed identified as UCCS students. Despite the limitations of working with a convenience sample, the demographics of our survey population closely reflect the composition of UCCS as a whole. Students represented more than a dozen majors in all five colleges on campus, with the top five majors/colleges coming from criminal justice, engineering, sociology, business, and biology. Forty-seven percent of respondents identified as male, 52% as female, and 1% identified as other/non-binary, a gender composition that matched that of the student body at the time. Our survey sample included 32% non-white respondents, which also closely matched the UCCS enrollment at the time (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th># of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
<td>145</td>
<td>67.1%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>28</td>
<td>13.0%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>11</td>
<td>5.1%</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>17</td>
<td>7.9%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Multiethnic</td>
<td>13</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

The majority of UCCS students come from Colorado, and survey demographics reflected this, with 61% percent listing Colorado as the state where they had lived the majority of their lives. Approximately 15% of respondents were from other western states where federal public lands and scenic national parks are relatively common. Familiarity with national parks was evident in the survey sample, with more than 80% stating that they had visited a unit of the national park system, and more than 60% responding that they expected to visit a national park within the next 12 months.

A majority of respondents underestimated the size of the national park system, with nearly two-thirds selecting choices of 150 park units or less; only 17% chose the correct option identifying “over 400” units managed by the NPS. An open-ended question, which asked respondents to list, “all of the places you can name in Colorado that are a part of the greater national park system,” generated a list of 420 responses, of which 56% were units managed by the NPS in Colorado and 44% were either not national park units or were not located in Colorado. Scenic national parks in Colorado topped the list of places properly identified, with 40% of respondents naming Rocky Mountain National Park, 27% listing Great Sand Dunes National Park and Preserve, 19% mentioning Mesa Verde National Park, and nearly 9% naming Black Canyon of the Gunnison National Park.

Of the sites listed improperly, approximately 8% were national forests in Colorado, nearly 15% were prominent local or state-managed areas such as Mueller State Park or Colorado Springs’ Garden of the Gods city park. Six percent of improper responses named cities or mountain towns located in Colorado. Other locations mentioned inaccurately included NPS units such

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*Considering that many respondents later misidentified places as national parks, the responses to this question are likely somewhat inflated.
as Yellowstone and Yosemite, which are not located in Colorado, and a medley of Colorado counties, mountain ranges, rivers, and public and private scenic destinations.

A series of questions solicited responses relating to values surrounding and interest in national parks. Respondents indicated substantial desire “to visit a place in the national park system” within a year’s time: more than 79% rated this desire as “high” or “extremely high,” and only 7% rated their interest as “low” or “extremely low.” When asked, “how much are our National Parks tied to American identity?” fully 75% of respondents chose “strongly” or “very strongly,” and less than 1% selected the lowest choice, “not much.”

When asked, “How important is the national park system, as a whole, to you?” Millennial respondents expressed a high degree of personal support for national parks, with more than 80 percent selecting “Important” or “Very Important” (Table 2).

<table>
<thead>
<tr>
<th>Response Description</th>
<th># of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Not important</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>2 - Somewhat important</td>
<td>8</td>
<td>3.7%</td>
</tr>
<tr>
<td>3 - Neutral</td>
<td>27</td>
<td>12.5%</td>
</tr>
<tr>
<td>4 - Important</td>
<td>59</td>
<td>27.3%</td>
</tr>
<tr>
<td>5 - Very important</td>
<td>121</td>
<td>56.0%</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.5%</td>
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</table>

Even though large scenic national parks appear to be the most well-known by respondents, our survey found substantial support for all units of the national park system, regardless of their reputation or scenery (Table 3).

<table>
<thead>
<tr>
<th>Response Description</th>
<th>% of Respondents</th>
<th># of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Strongly disagree</td>
<td>0.9%</td>
<td>2</td>
</tr>
<tr>
<td>2 - Disagree</td>
<td>7.9%</td>
<td>17</td>
</tr>
<tr>
<td>3 - Neutral</td>
<td>7.9%</td>
<td>17</td>
</tr>
<tr>
<td>4 - Agree</td>
<td>24.1%</td>
<td>52</td>
</tr>
<tr>
<td>5 - Strongly agree</td>
<td>58.8%</td>
<td>127</td>
</tr>
<tr>
<td>No Response</td>
<td>0.5%</td>
<td>1</td>
</tr>
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A related question found that more than 80% of respondents agreed that they “would like to visit lesser-known places in national park system, even if they are not as famous as a place like Yellowstone.” Only 6% disagreed with this statement.

One of the characteristic features of Millennials is a commitment to family and friends (Weiler et al. 2018). We asked about the social component of visiting national parks and found that 53% of respondents agreed that, “Having a memorable experience in a national park with
family and/or friends is more important to me than anything I would see while visiting a national park." Seventeen percent disagreed with this statement, and nearly 30% were neutral.

Three of the survey questions asked about visitor fees and funding for national parks. Responses were mixed on whether admission fees should be charged at park entrances, with 35% agreeing that entry should be free if parks are supported by tax dollars, 37% disagreeing, and nearly 29% neutral. Thirty-five percent of respondents supported paying more in taxes if it increased park budgets, 23% did not support tax increases for parks, and 42% were neutral. When asked if visitor fees should be increased in order to reduce overcrowding and impacts on park resources, 24% agreed, 41% disagreed, and nearly 34% were neutral.

An open-response question asked how the NPS might encourage a more diverse demographic of visitors. For the top three responses, nearly 34% of respondents mentioned promotion, outreach, and education as key factors; 18% suggested a reduction in visitor fees; and 12% encouraged more events, attractions, and accommodations. Other responses pointed to utilizing mobile apps or other technologies as a way to connect Millennials to national parks.

A number of responses to this question brought pointed critiques of park visitors and the challenges facing the NPS to expand the reach of parks to all. As one respondent replied,

I honestly don’t think that the problem resides in our parks. In order to change the diversity of the people who [visit] our parks we would need to change the mindset of the community as a whole… People are different these days, they don’t care about nature or appreciate its beauty as our society has been brainwashed and dumbed down by technology and other material possessions.

Another respondent pointed to historical processes that have left their mark and would need to be overcome,

Many minorities have histories of exclusion from these places and/or have negative associations with places away from cities and structured environments… One main way would be to somehow get people of different ethnic backgrounds to work in these places to help open the door for visitors of different ethnicities to visit.

Other respondents viewed limits on visitation as benefiting parks; as one commented, “I believe that if the national parks tried to attract every type of demographic, it wouldn't be a national park anymore. It must be understood that places can't appeal to everyone.”

A willingness to integrate new technologies into their lives is one of the defining characteristics of Millennials (Pew Research Center, 2010), so our survey asked for recommendations on how the NPS could use technology in interpretive and educational efforts. Although the use of social media may attract the most attention from Millennials in terms of new technologies more broadly, in the context of national parks we found that social media ranked behind “park communication,” “mobile applications,” and “promotion of parks.” Respondents suggested using technology for park communication in a variety of ways, ranging from messaging park visitors to fulfilling operational needs.

Mobile applications can work in many different ways, and we received responses that targeted a range of outreach, education, and interpretation efforts. As one respondent offered, the NPS “should make an app where you can learn about all of the different parks, with like daily fun facts or ‘park of the week’ or something, since everyone uses their phones more than anything.” A few respondents broke from their Millennial peers altogether by discouraging the use of technology. As one respondent explained, “I would say avoiding technology would be the best way to go. People usually visit parks to enjoy the nature and get away from the hustle and bustle of the technological world.”
Discussion and Recommendations for Practitioners

The Millennial participants of our survey expressed strong interest in and support for the U.S. national park system, but a number of respondents were unable to correctly distinguish between state parks, national forests, national parks, or even mountain resort towns, which suggests that even those who think of themselves as park visitors may lack understanding of national parks. Future research should further examine this mixed understanding of national parks and explore whether Millennials and younger generations embrace a broader notion of “public lands” to include local and state lands, or if they simply misunderstand that national parks fall under a federal jurisdiction.

Of all the NPS sites survey respondents identified as existing in Colorado, nearly half of the places named were incorrectly identified. Millennials demonstrated some awareness of local and iconic parks in Colorado, but showed considerable confusion about what is and is not part of the national park system. This is important for a number of reasons, particularly in the understanding of how these places are funded and what the expectations should be when visiting. The inability to distinguish federal public lands from privately owned attractions seems especially problematic, with our respondents wrongly listing local Colorado Springs commercial attractions such as Seven Falls and Cave of the Winds as national parks.

Millennials express appreciation of national parks, but do not appear to know the national park system very well. While it may be relatively unimportant to know details such as the exact number of NPS units or where distant parks are located, there are real policy implications to knowing the difference between a national park, a state park, or private enterprises. Federal and state lands are largely funded by public sources, such as taxes and entry fees, and exist to serve a broadly conceived public good that includes environmental protection, recreation, and education, which is very different from the purpose or finances of private tourist attractions. Understanding the funding and purpose of a particular location can impact the expectations visitors bring to that place and how they relate to it.

The scope and array of units managed by the NPS also appear to be relatively poorly understood. Many of the small national park units and those protecting historical or cultural sites are located within easy driving distance (and even served by mass transit, in urban areas) and thereby relatively convenient to most Americans, including people of color and younger populations. The lack of awareness of these types of places likely contributes to their low visitation, but also points to opportunities to expand the demographic reach of the National Park Service (Shen et al., 2019).

Increasing access to a diverse population of visitors may not require a new influx to the United States’ large scenic parks, but could perhaps be addressed at least in part by recruiting visitors to their most proximate park units. If Millennials better recognized that there are more than 400 sites managed by the NPS, it might also create a keener understanding of the financial demands of operating this system. It is worth noting that our Millennial respondents said they appreciate all NPS sites regardless of how they compare to others. This was especially true for Hispanic/Latino and Black/African American respondents whose average responses were higher than most other subgroup categories. These differences ought to be more fully explored in future research as they may provide promising areas of opportunity for the NPS to pursue in the interest of increasing visitation by minority populations.

Our sample of Millennials expressed interest in visiting lesser-known park units, a desire that could lead to increased understanding of the entirety of the NPS’s purpose first-hand. For many units, particularly those that are not well-known, looking beyond aesthetics may be essential to understand the intangible importance tied to their cultural, historical, and natural significance. Visiting lesser-known places with greater frequency may bring better understanding of their importance, while also maintaining or increasing their relevance. Our disaggregated
data showed that Hispanic/Latinos in our survey have an even higher desire to visit lesser-known sites; on the other hand, Black/African Americans indicated relatively little desire to do so.

Our survey also found that the average respondent expressed a stronger desire to visit a national park than an expectation that they would actually do so. In further research, it would be helpful to understand the reasons behind this disparity and explore whether it is due to limited vacation time, cost, travel distance, alienation from outdoor spaces or historical processes, a combination of these reasons, or something else entirely. Our respondents strongly agreed that national parks contribute to their sense of American national identity, but it remains unclear how to translate this view into direct engagement with and support for the park system. Exactly what “national identity” signifies to younger generations is also a key factor worth exploring.

More than three-fourths of all respondents rated the NPS system as important or very important to them, but when these results were disaggregated by the ethnicity of the survey respondent we found that non-whites ranked the system as less important than white respondents (though enthusiasm for parks was still relatively strong across categories).

When we analyzed the responses across ethnic/racial categories, we found that non-white groups appear to place a higher value on their experience with family and/or friends compared to white respondents; with this in mind, it may be useful for the NPS to either provide a greater number of group camping and picnic areas, or to publicize existing facilities differently, in order to address this sentiment. The NPS could develop interpretive programs that specifically engage families in more culturally diverse or expansive ways. This is important as it could influence future planning and design of NPS sites.

We also found that Black/African American respondents lean towards not paying NPS admission fees if they are already funded by taxes. On the other hand, Hispanic/Latinos were relatively comfortable with entrance fees, in fact more so than any other subgroup. If this is true of Hispanic/Latinos on a national level, this would be highly encouraging for the NPS given the dire need for additional funding coupled with their need to attract more Hispanic/Latino visitors.

Adjusting entrance fees or offering admission on a sliding scale is also tempting, though the complexity of this could generate new problems. Web-based payment-in-advance systems might alleviate some of these concerns, such as documentation or entrance lines. It’s also worth noting that the NPS does offer a handful of fee-free days throughout the year; these could be expanded or targeted to draw underserved populations more readily into nearby park units. The NPS could also experiment with fee-free weeks or extended fee-free periods, either system wide or on a site by site basis, particularly when visitation is lower during off-peak seasons. Fee-free weeks might find particular success at NPS units that are close to urban areas where more diverse populations live.

One interesting takeaway from questions we asked about park funding is that despite support expressed for the national park system, Millennials indicated uneven attitudes towards increasing taxes in order to support NPS programs and park maintenance. Survey respondents slightly opposed paying higher entry fees and 18 percent suggested the reduction or elimination of entrance fees as a means of attracting more diverse constituencies to park. In 2015, many parks raised their entry fees, and as the multibillion-dollar maintenance backlog continues to hamper park services and operations, it is likely the NPS will face difficult funding choices. Reducing entrance fees would appear to be a simple solution, but entry fees to places like Yellowstone National Park have not even kept pace with inflation.

Compared to many forms of outdoor recreation such as skiing or golf, park entrance fees are quite low. Overcrowding at the country’s most popular national parks also would suggest that entrance fees are not discouraging use. If having cheaper or no fees is the answer to attracting new and diverse visitors, then a difficult funding dilemma arises: barring policy changes to fund parks adequately via federal appropriations, parks may face the prospect of limiting access or
reducing services—which as noted above, is already happening in the form of timed-entry and unscheduled park closures. One solution might be to raise entrance fees at the most popular (and crowded) national parks, while eliminating fees at small or little-visited sites. Examining how fee increases are likely to influence park visitation, especially for younger generations and a more diverse demographic mix, remains an important direction for new research (see Bergstrom et al., 2020).

According to a report by the Government Accountability Office, Congress reduced appropriations for the NPS by 8% between 2005 and 2014, causing parks such as Shenandoah National Park in Virginia to become more dependent on entrance and recreation fees (Taylor, 2016). Park funding via Congressional appropriations faces ever-increasing challenges as Congress seeks to limit non-defense discretionary spending and money for parks faces competition with other funding priorities, ranging from fire-fighting budgets for the U.S. Forest Service to support for the Centers for Disease Control and Prevention (Taylor, 2016).

One surprising finding in our study was that less than 2% of our respondents described park visitors as “not diverse,” despite the consistent concerns that parks are not attracting a representative cross-section of society. While it might seem obvious to promote park units more aggressively through advertising—the solution that more than one-third of our respondents pointed to in an effort to increase diversity of visitors—as a federal agency, the NPS is not allowed to pay for commercial advertising (Doyle, 2017). The National Park Foundation, a non-profit organization established to support the NPS, is able to fill this role on behalf of the agency, so a campaign targeting Millennials and constituencies underserved by national parks could be an important priority to raise awareness and recruit new kinds of park visitors and supporters. There are also many local and park-specific “friends” groups that could assist in this effort.

Although direct advertising is not an option available to the NPS due to its standing as a federal agency, the Park Service can still develop creative strategies and partnerships to increase public awareness and promote broader connections to diverse constituencies in society. New technologies can also prove useful in this effort. One example of this came during the 2016 Centennial celebration of the NPS with a national campaign called “Find Your Park,” which utilized a variety of digital channels and social media (Find Your Park, n/d). The Find Your Park campaign also leveraged support from a suite of corporate sponsors including Subaru, REI, American Express, Disney, and Budweiser. While the prospective corporatization of national parks raises concerns worth evaluating, the ability of well-known companies to reach and educate a cross-section of American society might bring helpful exposure to populations that otherwise wouldn’t notice or support national parks.

Outreach and education are well within the purview of the NPS and the agency has also committed to this in places like Tucson, AZ, which has a large Hispanic population but low Hispanic visitation at nearby Saguaro National Park (Larmer, 2013). Here, national park rangers connect with the Hispanic community by visiting schools and attending community events in hopes of engaging younger and more diverse audiences. The Park Service also is increasingly cognizant of a lack of diversity in its professional staff and ranger corps, and has developed programs to bring more people of color into the agency (Peterson, 2014).

Considering the emergent demographics of the U.S. population, and the likelihood that international visitation to U.S. parks will continue to grow, there may be no more important task for the NPS than attracting diverse visitors if the agency is to serve its mission of providing parks for “the enjoyment of future generations” (National Park Service, n.d., a). These “future generations” simply may not have the same characteristics, interests, or commitments to outdoor recreation that older cohorts of visitors have had. If the value of national parks ever diminishes amongst more diverse future generations due to a lack of connection with these parks, so too may their relevance and justification for continued funding and protection.
The responses we received about the appropriate role of technology in the parks point to a unique problem that the NPS will need to address: how to strike a balance between Millennials’ technological orientation while also continuing to leave national parks “unimpaired” and substantially characterized by human encounters with nature. The use of various technologies or mobile apps can surely be done in a way that does not impair the material elements of a park, but it could very well impair the intangible or affective aspects that contribute to many visitors’ distinctive experiences in national parks. As technology continues to advance and increases its role in our lives, the NPS may need to continually reevaluate where to draw a line in terms of how and where various technologies ought to be used.

Another way to attract new and diverse visitors could be to expand the range of park interpretive staff. Most NPS staff operate exclusively within their respective parks (or federal office complexes), but with just a modest reallocation or expansion of resources, park rangers could serve as community ambassadors for the NPS and engage with school groups, summer camps, or other venues where residents have access to, but little familiarity with, national parks. The duty of the ranger in this setting might be less focused on education of the NPS site they represent and more on outreach to connect new kinds of people to these places. By reaching into underserved communities, park personnel might also discover new opportunities to create interest in national parks. Building new kinds of relationships in this way could be seen as a long-term investment in parks and communities alike.

The NPS might also attract new and diverse visitors by hosting various events on a regular basis, especially when the theme is directly related to a particular park. The mission of protecting historical, cultural, and natural resources is paramount, but the agency could explore ways to connect something of interest with the demographics they wish to attract. Large or disruptive events would of course be incompatible with park priorities, but other kinds of events might be worth exploring. To cite just one example: Florissant Fossil Beds National Monument, 70 kilometers west of Colorado Springs, has hosted a plein air painting festival to attract artists to the site for a low-impact gathering, and also provides monthly “dark sky” astronomy sessions open to the public.

Of course, public awareness and knowledge about the national park system also needs to expand substantially. If Millennials are unable to distinguish between a resort town such as Estes Park and one of the United States’ most popular national parks adjacent to the town (Rocky Mountain National Park), the NPS will continue to struggle in attracting a diversifying American public. As technology continues to advance, so too will the technological expectations of visitors for experiencing national parks. There are appropriate and inappropriate ways for the NPS to satisfy technological expectations while also staying in line with its mission. As Sax (1980) emphasized when considering earlier technologies in national parks, those that promote “reflective” recreation and facilitate direct encounters with these distinctive places ought to be embraced, while those that commodify or distract visitors from the park experience might best be avoided. The NPS ought to concentrate on advancing its technological capabilities in education and interpretation on highly interactive mobile and web applications, so long as these do not detract from visitors’ ability to engage directly with parks while they are there. To some extent the NPS is already working on this.

The Harpers Ferry Center, at Harpers Ferry National Historic Park, is an interpretive and media service provider for the entire NPS system and produces films, mobile apps, and exhibits, among other media products (National Park Service, n.d., b). They also assist parks with social media and a distance learning program called WebRangers for schools (National Park Service, n.d., b). These are laudable initial efforts, but the NPS could utilize technology more ambitiously to create educational and interpretive opportunities to reach the public, especially Millennials.

To give one example: the NPS could develop a three-dimensional, interactive virtual park explorer for each NPS unit, where one could experience and learn about that place without being
there. This idea could be easily created by a web developer who is skilled in creating visually appealing user interfaces with nothing more than geographic information software (like Google Earth), a few basic programming languages, and an assortment of high quality pictures and videos from the park. These three-dimensional virtual park explorers would complement each of the NPS units’ websites and existing mobile applications, and potentially create new distance learning programs. Additionally, the information communicated to the end-user could be offered in various languages.

Conclusion

The NPS has much to be proud of in reflecting back on more than a century of history, yet it also faces real challenges in charting a successful path forward. The positive attitude toward national parks currently held by the American public, including Millennials, is a testament to the job the NPS has done since its establishment in 1916. But to continue to thrive, the NPS will need the support and understanding of an increasingly diverse American public. To meet this challenge, the NPS will not only need to secure financial and political support to maintain operations and protect park resources, but also reach out to new kinds of park supporters and visitors, including Millennials who appear to appreciate the abstract idea of a national park system, but may have little tangible connection or accurate understanding of the places actually included and protected.

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