



2022 Socioeconomic Research of Cape Hatteras National Seashore

Report on 2022 Data Collection (Revised)



Bodie Island Light Station following Hurricane Arthur. The Bodie Island Lighthouse and keeper's quarters are reflected in standing floodwater on the grounds after Hurricane Arthur at Cape Hatteras National Seashore. The image, titled "Twice as Nice," highlights the mirror-like reflection of the lighthouse in the flooded landscape.

NPS

2022 Socioeconomic Research of Cape Hatteras National Seashore: Report on 2022 Data Collection (Revised)

Science Report NPS/SR—2026/462

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Abstract

A strong mandate and need for socioeconomic monitoring are expressed in the NPS strategic goals for science, in statements by the NPS leadership, and the report of the Second Century Commission. This mandate resulted in a pilot socioeconomic monitoring study in 2015/2016 at a sample of park units across the U.S; the current study uses outcomes from the first stage of the pilot program and progresses into a second stage of the pilot process at 24 NPS units across the United States. Cape Hatteras National Seashore (Cape Hatteras) was selected as one of these units. This report informs core issues of visitor use management and develops a deeper, contemporary understanding of who visits Cape Hatteras and what they do during their visit. It uses a two-phased survey methodology to capture a representative sample of visitor information, characteristics, and behavior: (1) an on-site intercept survey conducted via tablet, and (2) a follow up (mail-back and/or online survey) for full trip details. The results are organized by these two phases and are intended to assist park managers in understanding current utilization and perception of park resources, operations and potential issues, as well as to facilitate communication and decision-making processes within the park and between the park and its local partners and stakeholders.

The revised version of this report corrects a previous error identified in Figure 9 and includes minor editorial, formatting, and accessibility updates. No substantive changes have been made to the findings or conclusions presented in the original 2022 report.

Introduction

The National Park Service (NPS) has both a strong mandate and need for socioeconomic research. This is expressed in the NPS strategic goals for science, in statements by the NPS leadership, in the report of the Second Century Commission, and through the Department of the Interior priorities for 2018–2022. Additionally, a recent U.S. Government Accountability Office (GAO) report identified the needs to better understand and monitor customer experience dimensions where results more directly link to investments made. The need for socioeconomic research and monitoring also was identified in an external review of the NPS Social Science Program and supported in the 2008 Interior Appropriations Bill Joint Explanatory Statement.

This mandate resulted in a pilot socioeconomic monitoring study in 2015/2016 at a sample of park units across the U.S., previously described as “Phase One.” The current study uses outcomes from the 2015/16 pilot program and progresses into “Phase Two” of the pilot process at 24 NPS units across the United States. Cape Hatteras National Seashore (Cape Hatteras) was selected as one of these units. Phase Two seeks to further explore visitor demographics and characteristics, applying recommendations from the 2015/16 Phase One pilot program and validating instrument and method refinements. It is part of the program designed to collect data from in-park visitors at a broad agency level in order to best represent information needs regarding visitors across the National Park System. Data collected during the 2022 Phase Two sampling period¹ are intended to inform individual park managers of key information about their visitors and allow for analysis of data at the agency level for future implementation.

The purpose of this study is to inform core issues of visitor use management, management solutions, and to develop a current and deeper understanding of who visits Cape Hatteras National Seashore, what they do during their visit, and their spending profile. The results of the study are intended to assist Cape Hatteras National Seashore managers in understanding current utilization and perception of park resources, operations, and issues that may exist due to increasing visitation, and facilitating communication and decision processes within the park and between the park and its local partners and stakeholders.

The study was conducted by a large-scale research team from Otak, Inc., RRC Associates, Inc., and the Institute for Tourism and Recreation Research at the University of Montana.

¹ It is important to note that during the 2022 Phase Two sampling period, some aspects of the visitor profiles (e.g., perceptions and behavior) may have been impacted, to varying degrees, by the COVID-19 pandemic.



Semipalmated plover (*Charadrius semipalmatus*) on a tidal flat.
NPS

Methods

The study used a two-phased survey methodology to capture a representative sample of visitor information, characteristics, and behavior:

1. An on-site intercept survey conducted via tablet, and
2. A follow-up (mail-back and/or online) survey for full trip details.

This comprehensive two-phase approach provides the necessary information to make on-the-ground decisions using immediate feedback from the intercept survey while also capturing key in-depth information on visitor spending profiles and trip characteristics for long-term planning. Additionally, the tablet survey was kept brief to ensure the visitor's experience was not altered. The methods also permit a larger sample to be collected on key questions of interest.

Study Area

The Cape Hatteras local area map is shown in Figure 1. The local area around Cape Hatteras consists of Dare, Hyde, Carteret, Currituck, and Tyrrell counties in North Carolina. Within Cape Hatteras, the study area was comprised of 11 locations. Table 1 shows more details about sampling locations. The locations and volumes of surveyor effort were determined based on historic visitor volumes and distribution across the park's main areas.

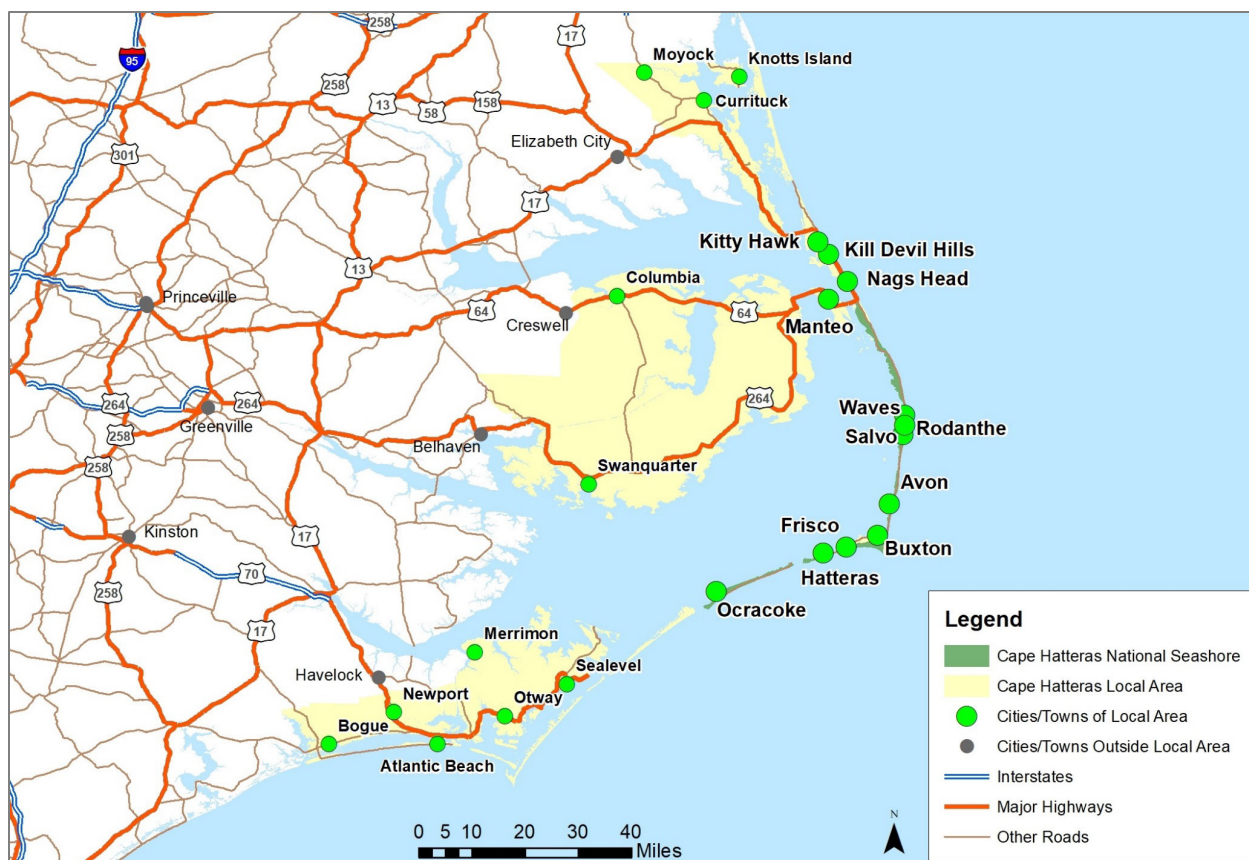


Figure 1. Cape Hatteras National Seashore local area map.

NPS

Table 1. Information about sampling locations in Cape Hatteras.

Intercept Site	Completed Intercept Surveys	
	Number of Surveys	Percent of Surveys
Whalebone Junction Information Center	51	3.2%
Coquina Beach	265	16.4%
Bodie Island Lighthouse	258	16.0%
Oregon Marina	150	9.3%
Hatteras Island Visitor Center	212	13.1%
Hatteras Island Lighthouse	7	0.4%
Salvo Day Use Area	255	15.8%
Frisco Day Use Area	153	9.5%
Haulover Day Use Area	96	5.9%
Cape Point	8	0.5%
Ferry from Hatteras Island to Ocracoke Island	162	10.0%

Sampling Period and Procedure

Intercept Survey

The on-site intercept survey was developed to collect rapid visitor information via tablet-based responses, which were then analyzed and provided for park managers within several weeks of conclusion of data collection. This effort allowed for immediate management action if needed.

The intercept sampling was conducted during the period of July 23–August 1, 2022. A sample of visitors were intercepted while visiting Cape Hatteras across the designated locations listed in Table 1, above. The majority of respondents were visitors on foot at these locations.

Surveyors approached potential respondents at the site to introduce the purpose of the study and ask them to participate in a short 5–7-minute survey about their experience in Cape Hatteras (NPS 2022). If the visitor was eligible (at least 18 years of age, not a Cape Hatteras employee, and had not previously taken the survey) and agreed to participate in the study, the surveyor verbally administered the survey questions and recorded the responses on a handheld tablet device. If the visitor did not agree, surveyors asked if they would be willing to answer three non-response bias questions (see Non-Response Bias Analysis section). Upon complete or partial refusal, the surveyor would thank the visitor for their time, log the non-response, and approach the next visitor group.

At the end of the intercept survey, visitors were invited to participate in a follow-up survey by mail-back or online response. Those who agreed to participate were given an envelope containing a printed copy of the follow-up survey and hyperlink and instructions for accessing it online. As part of the intercept protocol, surveyors logged a unique identifier (four-digit code) from the envelope into the tablet for future connection to the follow-up survey.

Therefore, four potential outcomes were possible when intercepting visitors (see Table 2):

1. Complete refusal, refusing to answer any questions, including non-response bias questions;
2. Partial refusal, answering non-response questions but nothing further;
3. Complete intercept, but refuse to take follow-up;
4. Complete intercept and take follow-up.

Table 2. Response outcomes—Cape Hatteras Intercept Survey.

Outcome	Total
Eligible visitors contacted	2,015
Complete refusals	214
Partial refusals (non-response questions completed)	183
Intercept surveys completed	1,618
Follow-up surveys distributed	1,557
Intercept response rate	80.3%
Follow-up acceptance rate	96.2%

During the sampling period, 7 surveyors were stationed simultaneously at different sampling sites. Start times varied day-to-day and by location to capture a diverse sample of visitors across Cape Hatteras. Each surveyor worked nine 7-hour days (six hours data collection and one-hour lunch break) and rotated between several sites. Each surveyor had one day off during the 10-day sampling window.

Mail-Back/Online Survey

The follow-up mail-back/online survey was distributed to participating respondents who completed the intercept survey and then agreed to take a follow-up survey after completing their trip to Cape Hatteras. This method extended data collection and asked participants to complete the survey after their visit either through a postage-paid envelope provided to them, or online via a provided survey link. The follow-up survey covers visitor trip spending details, travel patterns, and perceptions of their recent visit (NPS 2022). Both the intercept survey and the follow-up survey were tagged with a unique identifier (four-digit code) for each respondent so their on-site tablet responses could be paired with their follow-up responses. Joining the two datasets provides a more complete picture of connecting in-park experiences and post-visit perceptions.

At the end of the intercept survey, respondents were asked for their physical mailing address or email address. This allowed for a reminder postcard or email to be sent to all contacts about a week following the end of each data collection period. This postcard or email thanked them for their original participation and encouraged them to complete the follow-up if they had not already done so.

Three weeks after postcard mailing, a second contact (with the same unique IDs) was delivered to all outstanding addresses/emails, noting that the individual's completed questionnaire had yet to be received. The mailed survey packets included replacement surveys and postage-paid, self-addressed return envelopes. A final contact was mailed/emailed to all remaining non-respondents four weeks after sending the second contact (i.e., first full replacement survey). Table 3 shows response rate for the follow-up mail-back/online survey.

Table 3. Response rate—Cape Hatteras follow-up mail-back/online survey.

Outcome	Total
Follow-up surveys distributed	1,557
Valid follow-up surveys completed	361
Response rate	23.2%

Non-Response Bias Analysis

To account for potential biases between respondents and non-respondents, three questions were asked of eligible visitors contacted who did not wish to participate in the on-site intercept survey. These three questions can then be compared to both those who completed the intercept survey only, and those who completed both the intercept and follow-up surveys. With an intercept survey

response rate of 80.3%, concern over *intercept* non-response is muted. Tables 4 through 6 below show results of bias testing between intercept-only and full survey respondents.

Table 4. Non-response bias question: “Are you a permanent or seasonal/second home resident of the local area around Cape Hatteras?” Note: p-value = 0.68.

Response	Full Survey Respondents		Intercept-Only Respondents	
	Frequency	Percent	Frequency	Percent
Yes	46	12.9%	173	13.7%
No	311	87.1%	1088	86.3%

Table 5. Non-response bias question: “Do you currently live in the United States?” Note: p-value = 0.01.

Response	Full Survey Respondents		Intercept-Only Respondents	
	Frequency	Percent	Frequency	Percent
Yes	354	99.2%	1213	96.2%
No	3	0.8%	48	3.8%

Table 6. Non-response bias question: “On this trip away from home, have you [and your personal group] stayed, or will you stay overnight away from your permanent residence either in Cape Hatteras and/or within the local area?” Note: p-value = 0.65.

Response	Full Survey Respondents		Intercept-Only Respondents	
	Frequency	Percent	Frequency	Percent
Yes	305	85.4%	1064	84.4%
No	52	14.6%	196	15.6%

Using a p-value of 0.05, the distribution of responses among full survey respondents and intercept-only respondents differed significantly for one question: 1) United States residency. Therefore, international residents are not as well represented in the full responses as desired.

Results

Intercept Survey Results

The following section provides results of the 1,618 visitor intercept surveys conducted in Cape Hatteras National Seashore from July 23 to August 1, 2022. All results are presented in this report, regardless of sample size, which varies by question. Caution is recommended in the interpretation of figures with sample size lower than $n = 30$. Categories on some questions may not sum to 100% due to rounding differences and/or the opportunity to select more than one response option. To preserve the data for additional analyses, outliers for open-ended numeric questions (e.g., nights spent, days in local area, etc.) have not been removed. Given these outliers, medians are shown instead of means throughout the report, in order to better represent the central tendency.

Questions 1–2: Visitor Residency

First, respondents were asked to indicate if they were permanent or seasonal residents of the local area around Cape Hatteras. If they did not reside permanently or seasonally in the local area, they were asked if they currently live in the U.S., and if so, for their ZIP code. Figure 2 depicts responses to this group of questions.

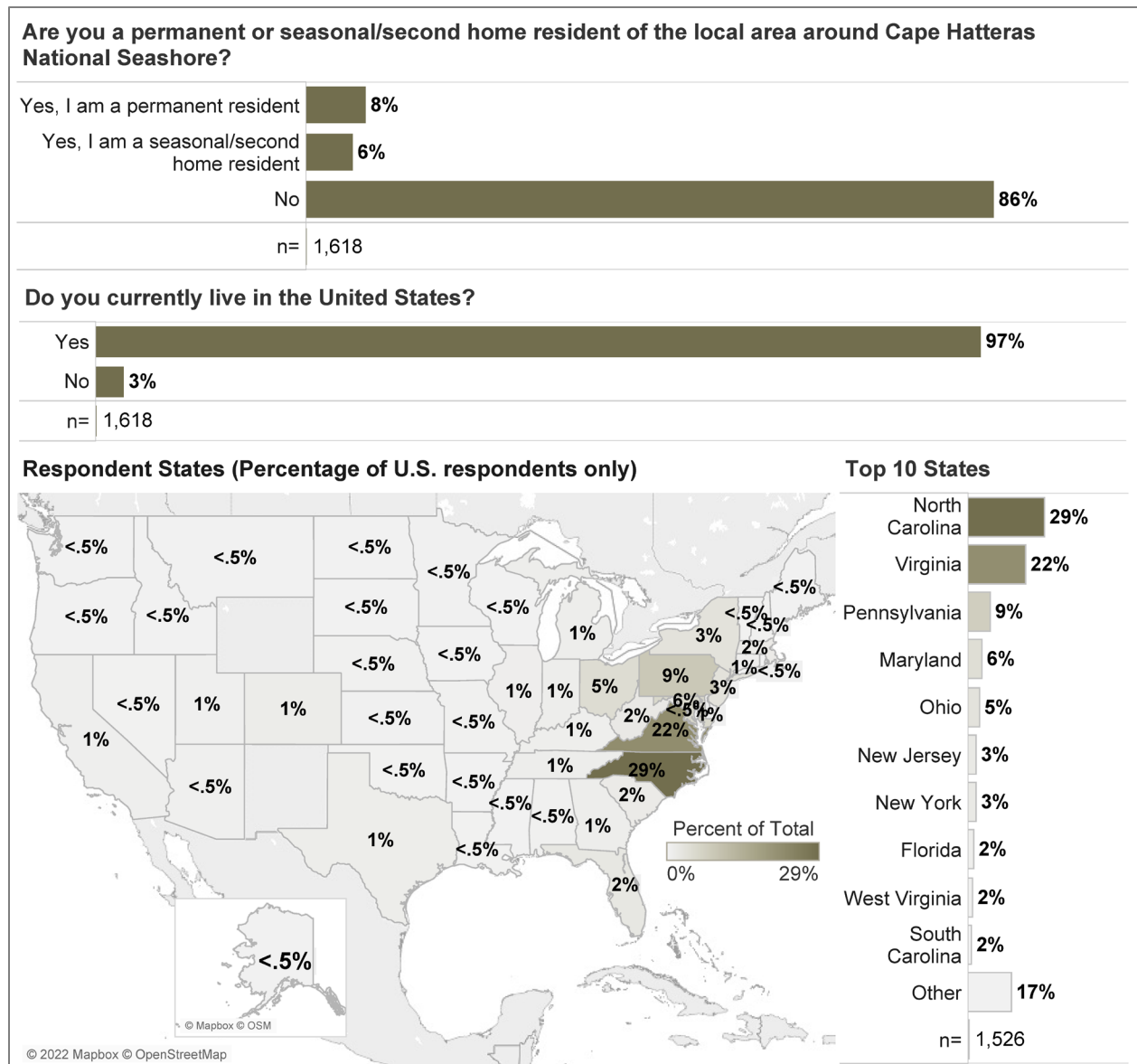


Figure 2. Visitor local residency status and geographic origin of domestic visitors to Cape Hatteras.
NPS

- A small percentage of respondents (a combined 14%) stated that they were either permanent or seasonal residents of the local area around Cape Hatteras.
- There was a large geographic concentration of visitors from North Carolina (where Cape Hatteras is located).
- Among the 97% of respondents currently residing in the U.S., 29% reside in North Carolina, followed by 22% in Virginia.

Question 3: Trip Purpose

If respondents indicated that they were not permanent or seasonal residents of the local area, they were asked about the overall purpose for their trip away from home (Figure 3).

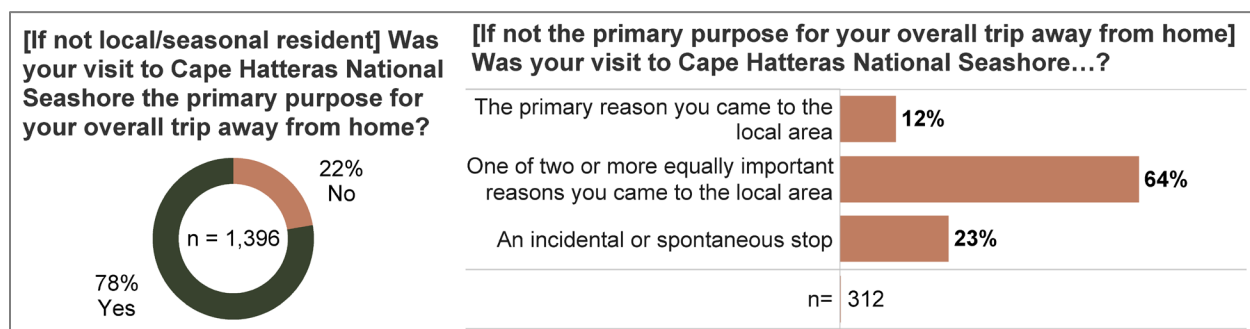


Figure 3. Role of Cape Hatteras in overall trip purpose.

NPS

- For over three quarters of non-local respondents (78%), visiting Cape Hatteras was the primary purpose for their overall trip away from home.
- Among those respondents for whom Cape Hatteras was not their primary trip purpose, 64% stated that their visit to Cape Hatteras was one of two or more equally important reasons they came to the local area, while another 23% indicated that it was an incidental or spontaneous stop.

Question 4: Length of Stay

If respondents indicated that they were not permanent or seasonal residents of the local area around Cape Hatteras, they were asked how many days they planned to spend within that local area, including days spent in the park. All respondents, regardless of residency, were asked whether they would be staying overnight away from their permanent residence within the local area. Responses to both of these questions are depicted in Figure 4.

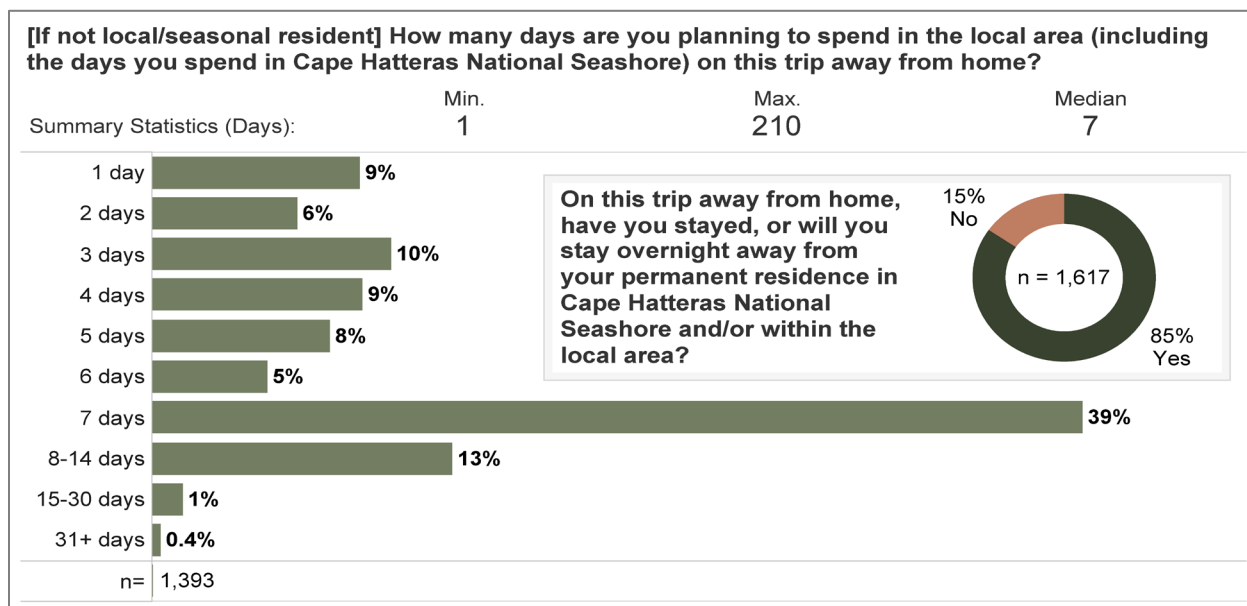


Figure 4. Time spent in the local area around Cape Hatteras.

NPS

- More than one-third of non-local respondents (39%) spent seven days in the local area, while 13% spent 8–14 days. The median length of stay was 7 days.
- Additionally, a majority of all respondents (85%; including permanent/seasonal residents) had stayed or planned to stay overnight away from their permanent residence in the park and/or in the local area.

Questions 5–6: Overnight Visitors

If respondents indicated that they stayed overnight in the local area, they were asked about the type(s) of accommodation they used or planned to use while there (Figure 5).

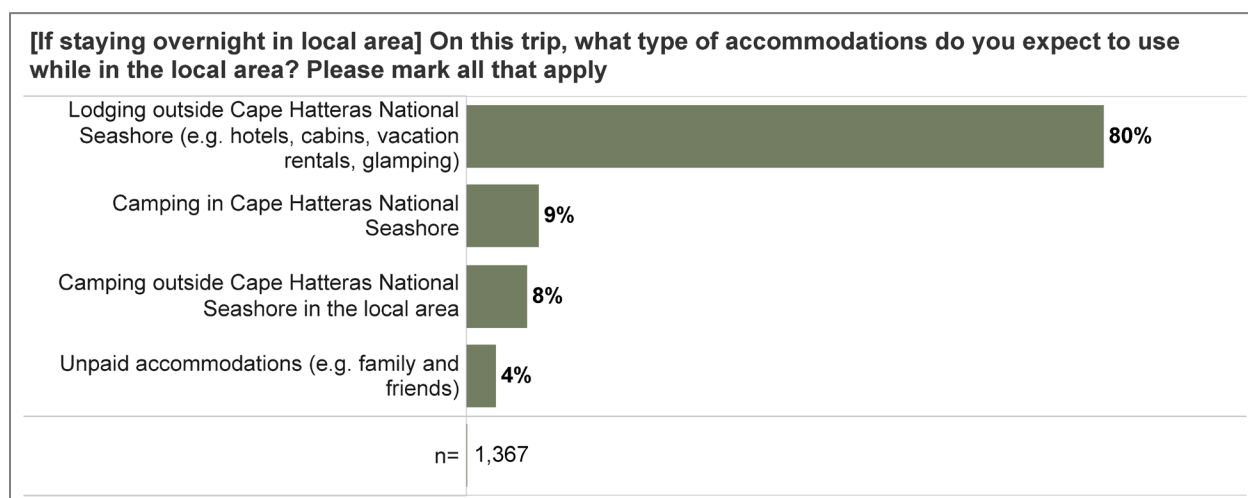


Figure 5. Accommodation types used in the local area around Cape Hatteras.

NPS

- Most overnight respondents (80%) stayed in lodging outside Cape Hatteras National Seashore.
- This was followed in prevalence by camping in Cape Hatteras National Seashore (9%), and camping outside Cape Hatteras National Seashore (8%).

Respondents who camped in Cape Hatteras were asked in which campground(s) they had stayed or planned to stay (Figure 6).

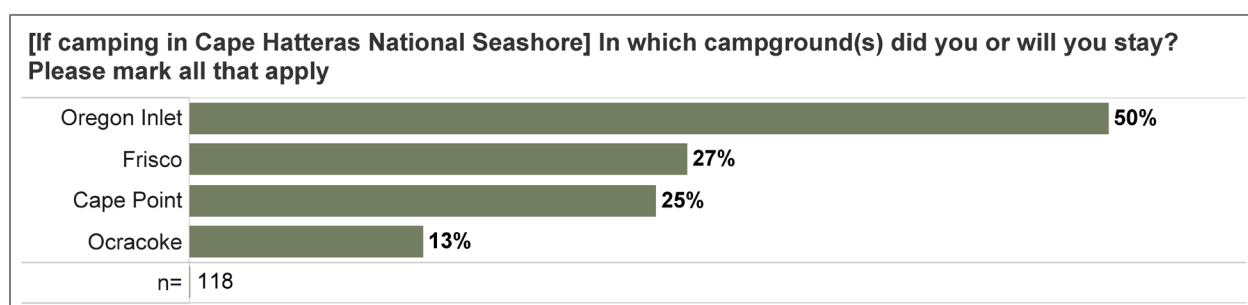


Figure 6. Campground use within Cape Hatteras.

NPS

- Half of the respondents who camped in Cape Hatteras National Seashore indicated they camped or would camp at Oregon Inlet.

- Over a quarter of respondents who camped in Cape Hatteras National Seashore (27%) indicated they stayed or would stay at Frisco campground, while 25% indicated they had camped or would camp at Cape Point campground.

Respondents were then asked to indicate the number of nights they spent or would spend in each accommodation type (Figure 7).

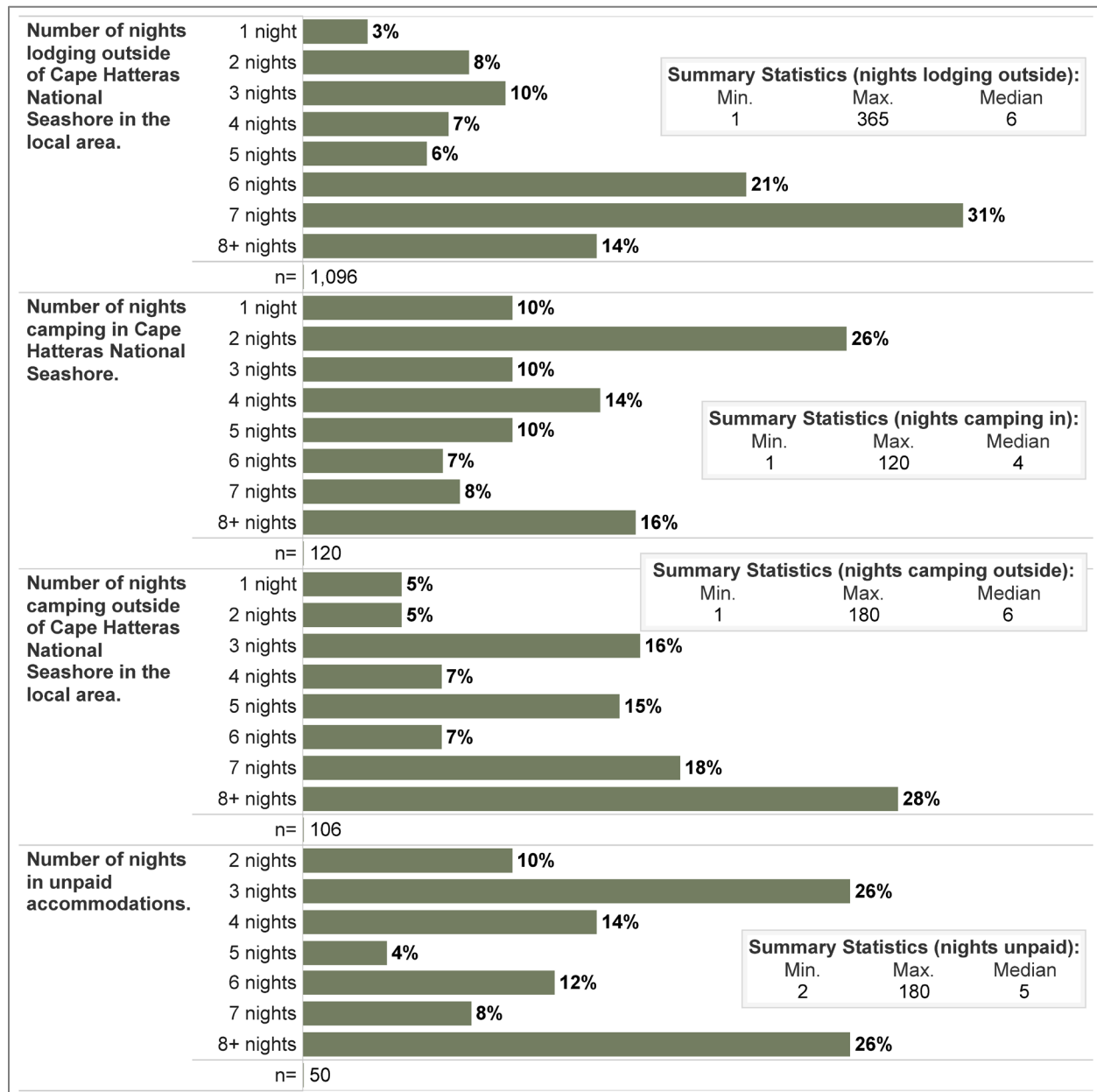


Figure 7. Number of nights spent in the local area around Cape Hatteras, by accommodation type. Tabular data shown in this figure are presented in [Appendix A, Table 8](#).

NPS

- Among the 80% of overnight respondents who lodged outside of Cape Hatteras in the local area (per Figure 5), the median length of stay was 6 nights. Nearly half (45%) lodged 7 nights or more in the local area this trip.
- Among the 9% of overnight respondents who camped in Cape Hatteras (per Figure 5), the median length of stay was 4 nights. More than one-third (36%) of campers were spending 2 nights or fewer camping in the park this trip; 46% spent 3 nights or fewer.
- Among the 8% of overnight respondents who camped outside of Cape Hatteras (per Figure 5), the median length of stay was 6 nights. Nearly half (46%) stayed 7 nights or more.
- Among the 4% of overnight respondents who stayed in unpaid accommodations in the local area (per Figure 5), the median length of stay was 5 nights. There was much broader spread in length of overnight stay among those staying in unpaid accommodations than those in paid options, however over one third (36%) stayed 3 nights or less, while about a quarter (26%) stayed 8 or more nights.

Questions 9–11: Party Characteristics

Respondents were asked to indicate how many adults (18 or older) and children (under 18) were in their personal group during their visit to Cape Hatteras (Figure 8). A personal group was defined as the visitor and companions with whom they visited the park, such as a spouse, family, and/or friends, but visitors were informed not to account for the larger group with whom they may have traveled, such as a school, church, scout, or tour group.

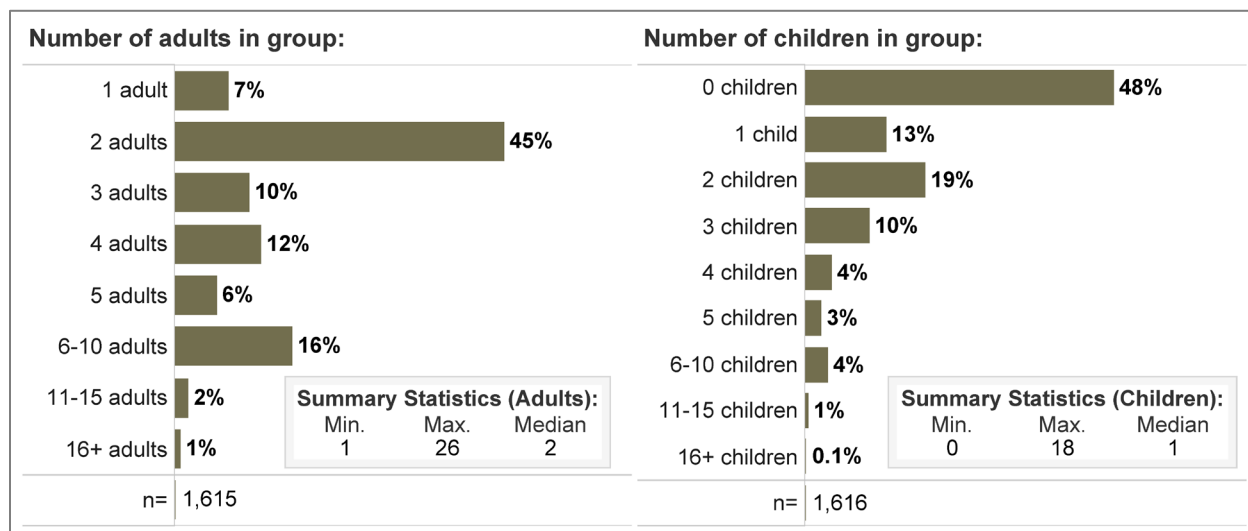


Figure 8. Number of adults and children in respondent's personal group while visiting Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 9](#).

NPS

- The median number of adults per group was 2. A plurality of groups (45%) included 2 adults.
- Nearly half of groups (48%) did not include any children.

Respondents were then asked to provide the age of each member of their group (Figure 9).

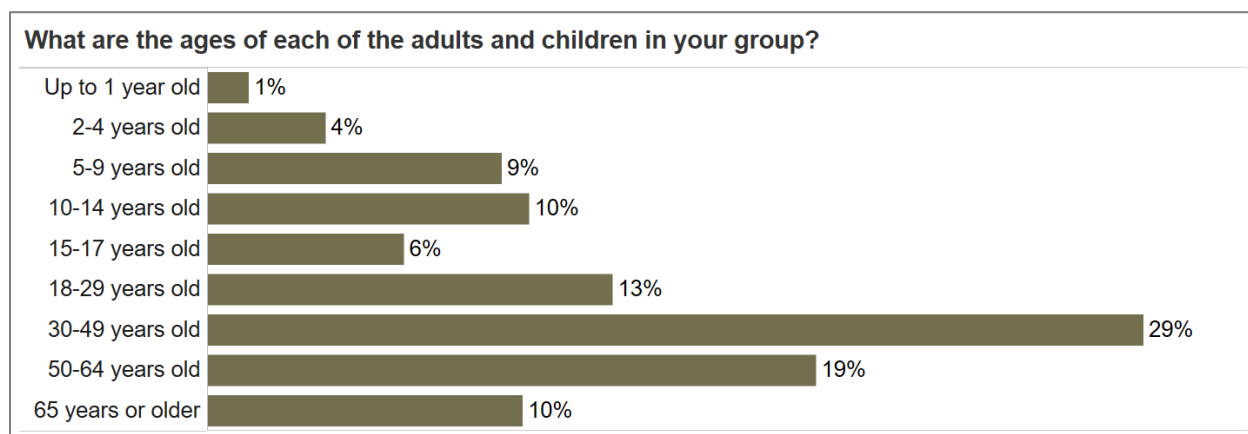


Figure 9. Age distribution of all members of respondent's personal group while visiting Cape Hatteras.

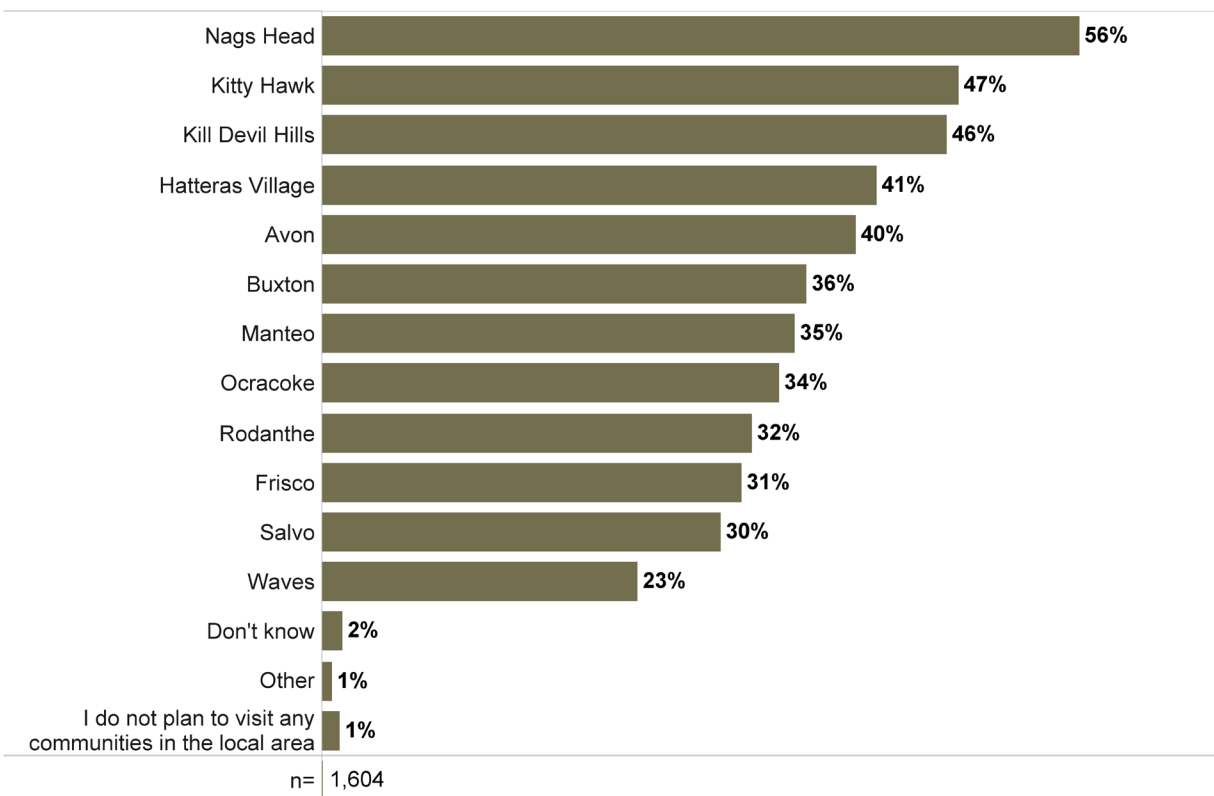
NPS

- The most common age of the adults and children in a personal group was 30–49 years old (29%), followed by 50–64 years old (19%), and 18–29 years old (13%).
- Children (i.e., visitors under 18 years old) accounted for a combined total of 30% of group members.

Questions 13–14: Local Communities

To build a more detailed understanding of the impact of Cape Hatteras on the surrounding local area, respondents were given a list of nearby communities and asked which one(s), if any, they had already visited or planned to visit during their trip. Visiting a community was defined as stopping to do or buy anything, such as purchasing gas or groceries or dining. Those respondents who had previously indicated that they were staying overnight in the local area outside Cape Hatteras (i.e., paid lodging outside the park, camping outside the park, or staying in unpaid accommodation outside the park) were then asked which local community (or communities) from that list was (or were) closest to their accommodations. Responses to both of these questions are shown in Figure 10, below.

Which communities have you already visited or do you plan to visit outside Cape Hatteras National Seashore while in the local area? Please mark all that apply



What communities are closest to where you stayed or are staying at your accommodation(s) outside Cape Hatteras National Seashore in the local area? Please mark all that apply

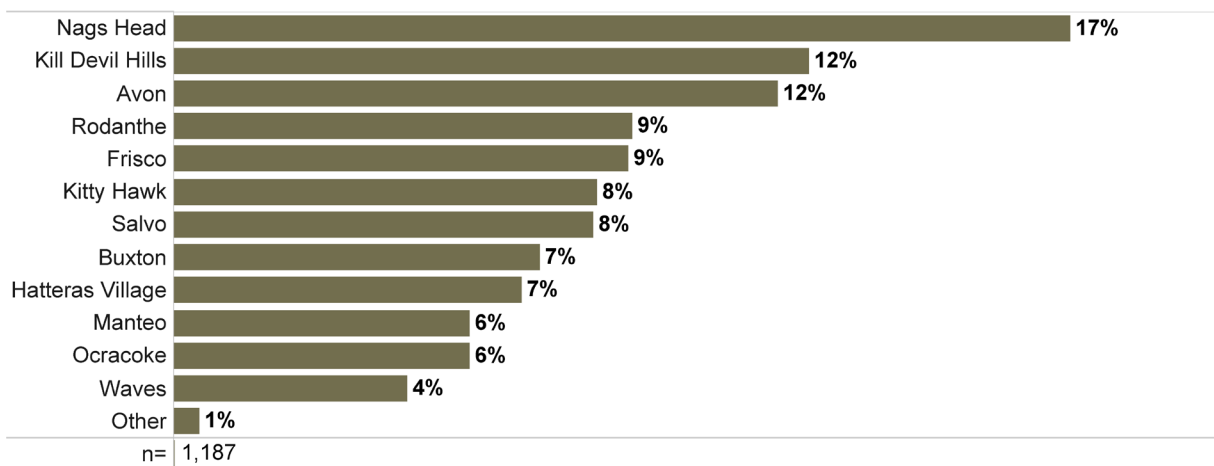


Figure 10. Communities visited outside Cape Hatteras while in the local area.

NPS

- A majority of respondents (56%) visited the community of Nags Head. More than one-third of respondents indicated they visited Kitty Hawk (47%), Kill Devil Hills (46%), Hatteras Village (41%), Avon (40%), Buxton (36%), Manteo (35%), and Ocracoke (34%).

- Visitors who stayed in accommodations outside Cape Hatteras were most likely to stay in Nags Head (17%), Kill Devil Hills (12%), and Avon (12%).

Questions 15–18: Park Use Characteristics

First, respondents were asked to indicate if they planned to visit Cape Hatteras for more than one day, and then a series of follow-up questions about the length of time they might spend in the park (Figure 11 and Table 7).

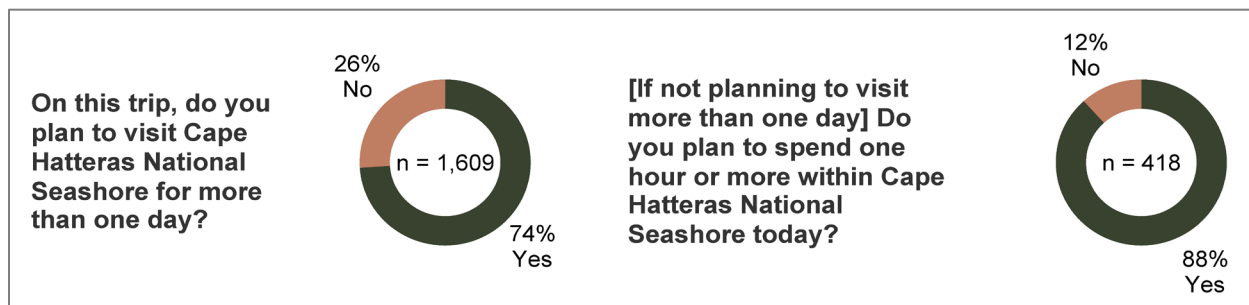


Figure 11. Duration of the respondent's trip to Cape Hatteras.

NPS

Table 7. Amount of time spent within Cape Hatteras.

Question	n	Min.	Max.	Median
[If not planning to spend one hour or more] How many minutes do you plan to spend within Cape Hatteras today?	44	1	59	30
[If planning to spend less than a day, but one hour or more] How many hours do you plan to spend within Cape Hatteras today?	367	1	18	3
[If planning to visit at least one day] How many days do you plan to spend within Cape Hatteras on this trip?	1192	1	1000	6
[If planning to visit at least one day] On how many different days do you expect to enter the park?	1191	1	1000	2

- While visiting Cape Hatteras, most visitors (74%) planned to spend more than one day in the park.
- Among the 26% of visitors who did not spend more than a day in Cape Hatteras, most (88%) planned to spend one hour or more in the park. The median length of time spent in the park among this group was 3 hours.
- The remaining 74% of visitors planned to visit for more than one day; among those visitors, the median length of stay was 6 days.
- Those respondents who spent at least one day in the park were also asked on how many different days they expected to enter the park; the median answer was 2 days.

Next, respondents were asked to indicate the most recent entrance they used to enter Cape Hatteras (Figure 12).

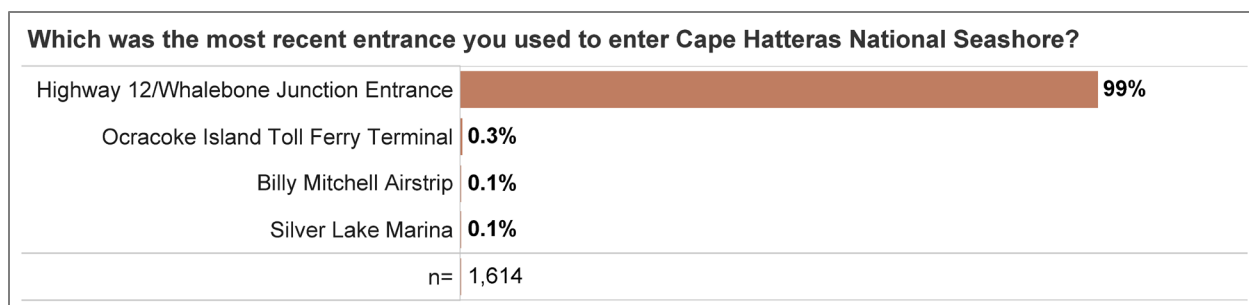


Figure 12. Most recent entrance used to enter Cape Hatteras.

NPS

- Highway 12/Whalebone Junction was the most commonly used entrance to Cape Hatteras (99%).
- Only very small percentages of visitors (<1%) used other entrances to Cape Hatteras.

Respondents were also presented with a list of locations within Cape Hatteras and asked to indicate if they had been to, or planned to visit them, that day (Figure 13).

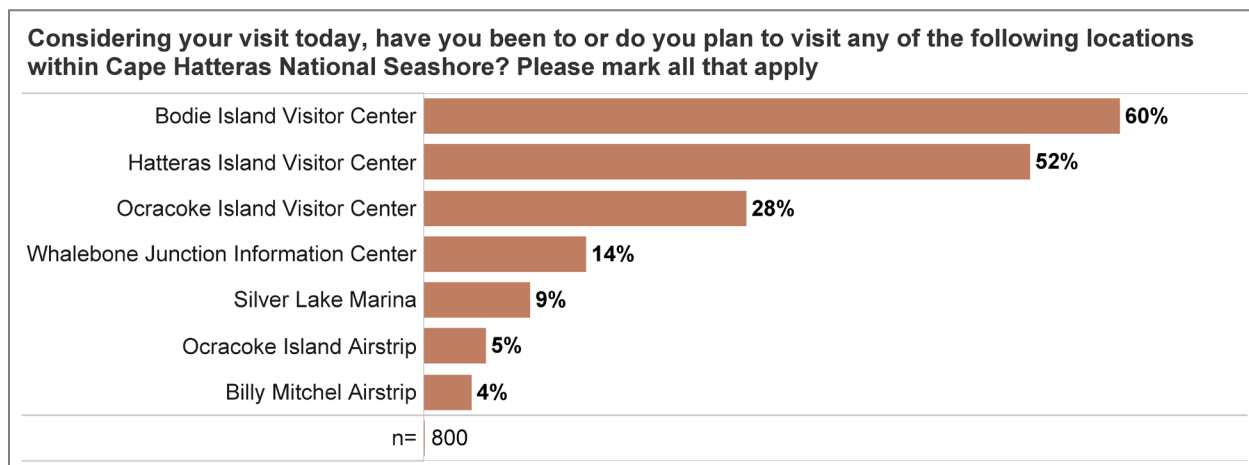


Figure 13. Park locations visited during the most recent trip to Cape Hatteras.

NPS

- The most commonly visited location in Cape Hatteras was Bodie Island Visitor Center (60% of respondents had either been there or planned to visit it on their trip), followed by Hatteras Island Visitor Center (52%) and Ocracoke Island Visitor Center (28%).
- Billy Mitchell Airstrip was the least-visited location from the list provided, with only 4% of respondents reporting having visited or planning to visit.

Question 19: Transportation

Visitors were asked about the form of transportation they used to enter Cape Hatteras on the day they were surveyed (Figure 14).

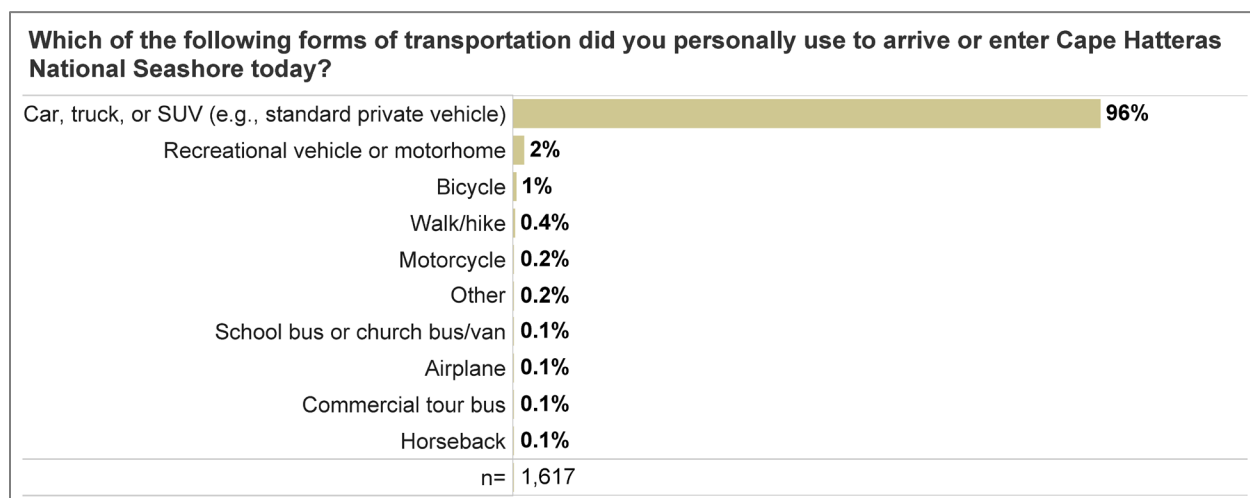


Figure 14. Form of transportation used to enter Cape Hatteras on the day of the survey.

NPS

- The vast majority of respondents (96%) reported that they used their car, truck, or SUV to enter Cape Hatteras on the day of the survey.
- This was followed distantly by use of a recreational vehicle or motorhome (2%), and bicycles (1%).

If respondents entered the park using a multi-passenger private vehicle (i.e., car, truck or SUV; recreational vehicle or motorhome; or motorcycle), they were asked to indicate how many people were traveling in or on that vehicle (Figure 15).

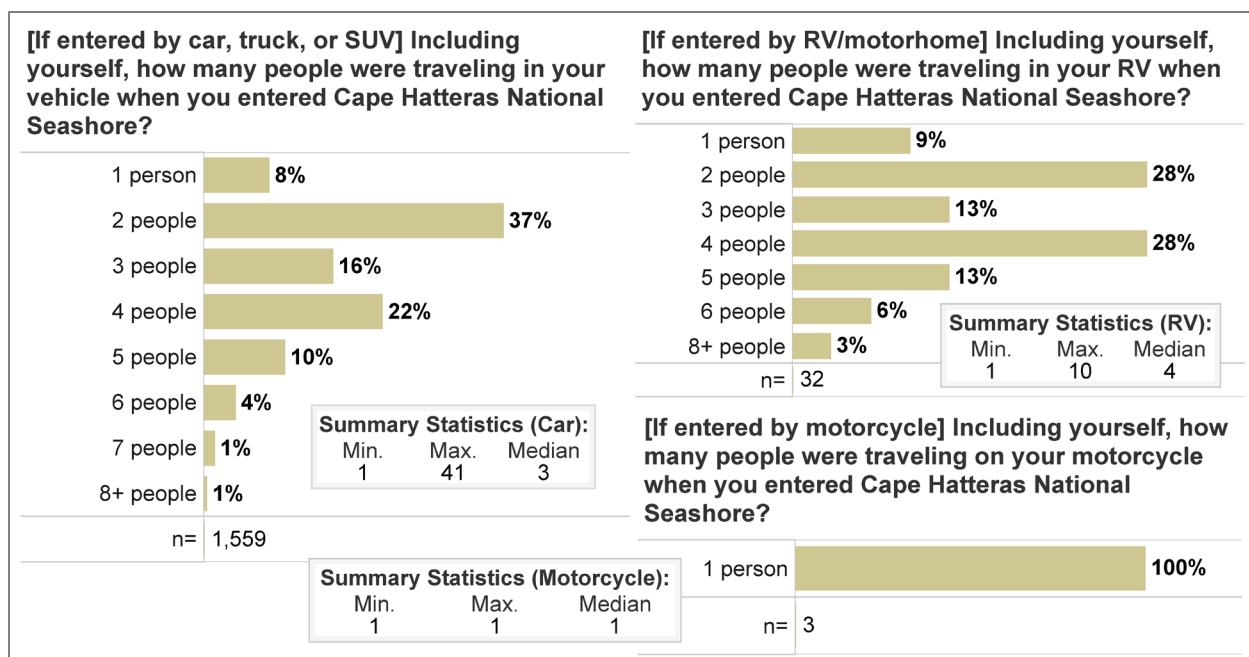


Figure 15. Number of people in or on respondent's vehicle when entering Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 10](#).

NPS

- More than one-third of respondents (37%) traveling by car reported 2 people. The next common group size was 4 people (22%), followed by 3 people (16%).
- Just over a quarter of respondents entering Cape Hatteras by RV/motorhome reported traveling in a group of 2 or 4 people (28% each), followed by 3 or 5 people (13% each) or 1 person (9%).
- All motorcyclists (100%) were traveling on their own.

Question 21: Previous Visits to Cape Hatteras

Respondents were asked if they were first time visitors to Cape Hatteras. Repeat visitors were then asked how many visits they have made to Cape Hatteras in the last 12 months and the last five years (Figure 16).

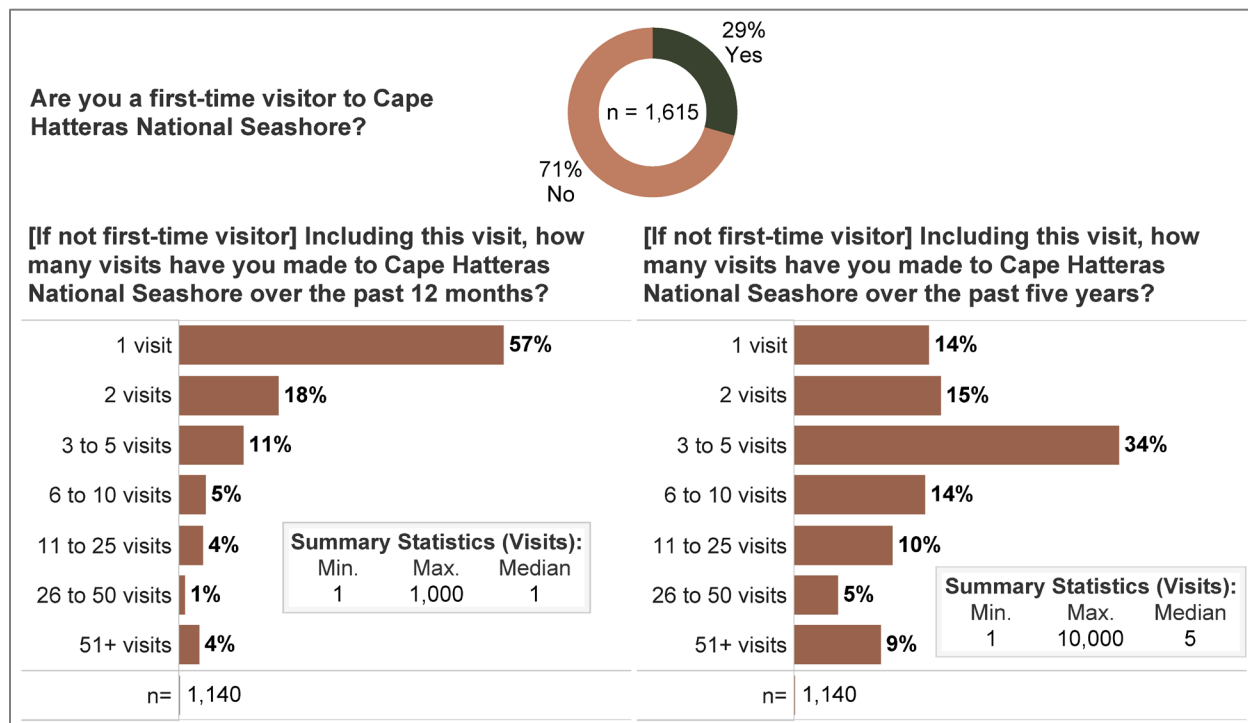


Figure 16. Previous visits to Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 11](#).

NPS

- About a quarter of respondents (29%) were on their first ever trip to Cape Hatteras.
- Among the 71% of respondents who were repeat visitors, the majority (57%) were on their first visit in the past 12 months (i.e., had last visited more than a year ago).
- However, most repeat visitors (86%) had visited at least one prior time in the past 5 years.
- The median number of visits made in the past 5 years was 5, including the current trip; 24% of repeat visitors had made more than 10 visits in the past 5 years.

Question 22: Previous Visits to Other NPS Units

Finally, respondents were asked how many visits they made to other NPS sites over the past 12 months (Figure 17).

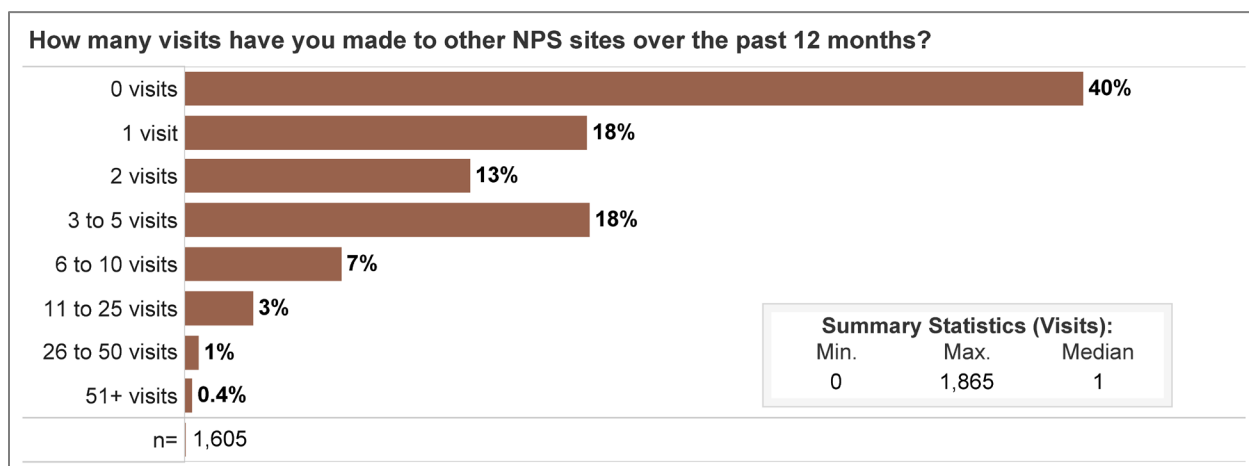


Figure 17. Visits made to other NPS sites within the past year. Tabular data shown in this figure are presented in [Appendix A, Table 12](#).

NPS

- A majority (60%) had made at least one visit to other NPS site(s) in the past year.
- The median number of visits made to other NPS site(s) in the past 12 months was 1, though a combined 29.4% had made 3 or more visits in the past year.

Follow-Up Survey Results

The following section provides results of the 361 follow-up visitor surveys received by mail-back or online following fieldwork conducted in Cape Hatteras National Seashore in summer of 2022. Again, caution is recommended in the interpretation of figures with sample size lower than $n = 30$, and categories on some questions may not sum to 100% due to rounding differences and/or the opportunity to select more than one response option.

Questions 1–2: Information About Cape Hatteras

First, respondents were asked what sources they used to obtain information about Cape Hatteras prior to their trip, and whether they had the information they needed on their trip (Figure 18).

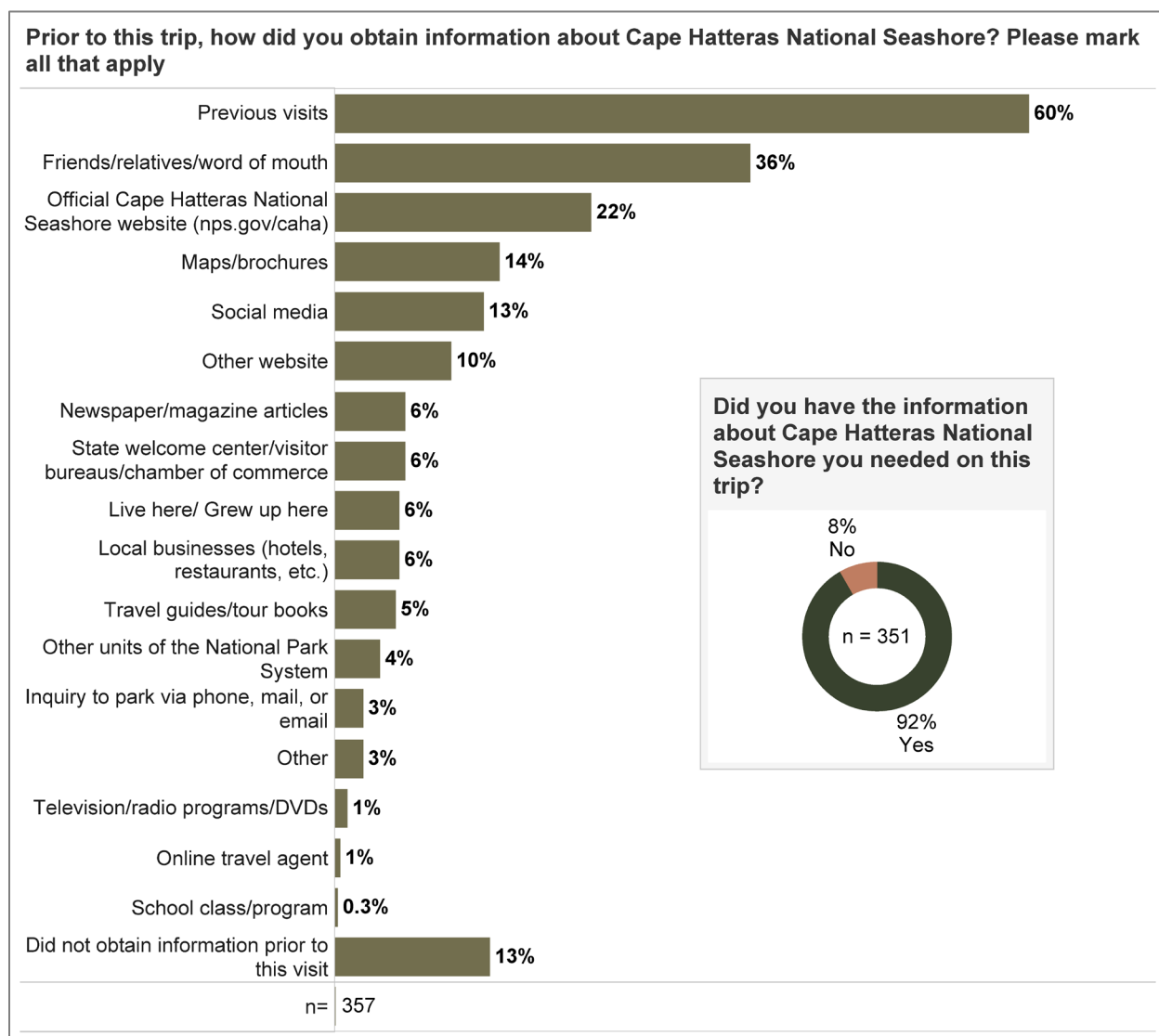


Figure 18. Sources used to obtain information about Cape Hatteras prior to the trip.

NPS

- The most used resource was previous visits, with 60% of respondents reportedly using it. The second most common source was friends/relatives/word of mouth (36%), followed by the official Cape Hatteras National Seashore website (22%), maps/brochures (14%), and social media (13%).
- In a follow-up question, 92% of respondents said that they had the information about Cape Hatteras that they needed on their trip, while 8% indicated that there was information that they needed but did not have.
- In an open-ended follow-up question, those who did not have the information they needed on this trip were asked to elaborate. These comments are provided as an accompanying document for review.

Question 3: Transportation

While in the intercept survey, respondents indicated a mode of transportation they used to enter the park on the day of the intercept, the follow-up survey asked respondents to select all forms of transportation they personally used to travel from their home to Cape Hatteras on their trip (Figure 19).

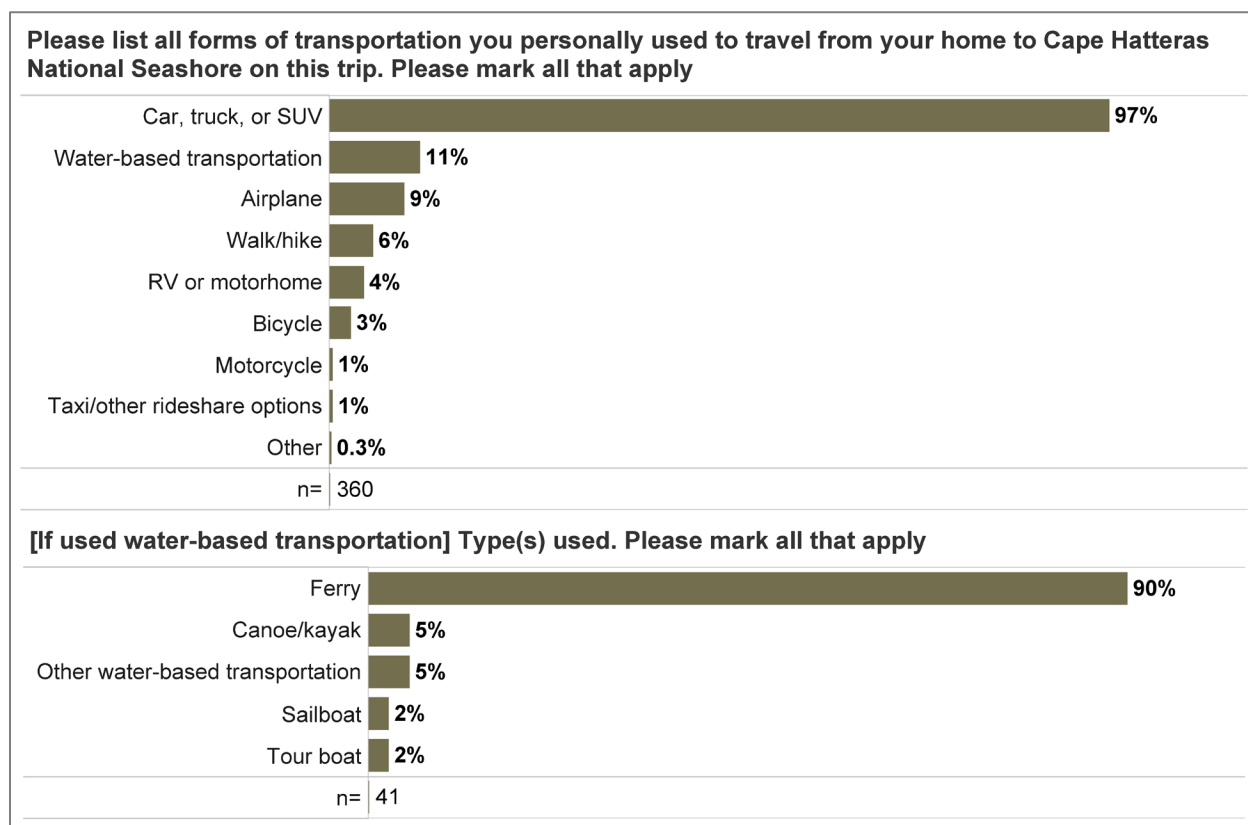


Figure 19. Forms of transportation used to travel from home to Cape Hatteras on the recent trip.
NPS

- Nearly all respondents (97%) used a personal vehicle, such as a car, truck, or SUV, at some point during their trip from home to Cape Hatteras.
- The second most common mode of travel was water-based transportation (11%), followed by airplane (9%).
- Of those visitors who used water-based transportation at some point during their trip from home to Cape Hatteras, 90% used a ferry.

Question 4: Travel Party Composition

Respondents were asked what type of group they were with during their visit to Cape Hatteras on the day of the survey (Figure 20).

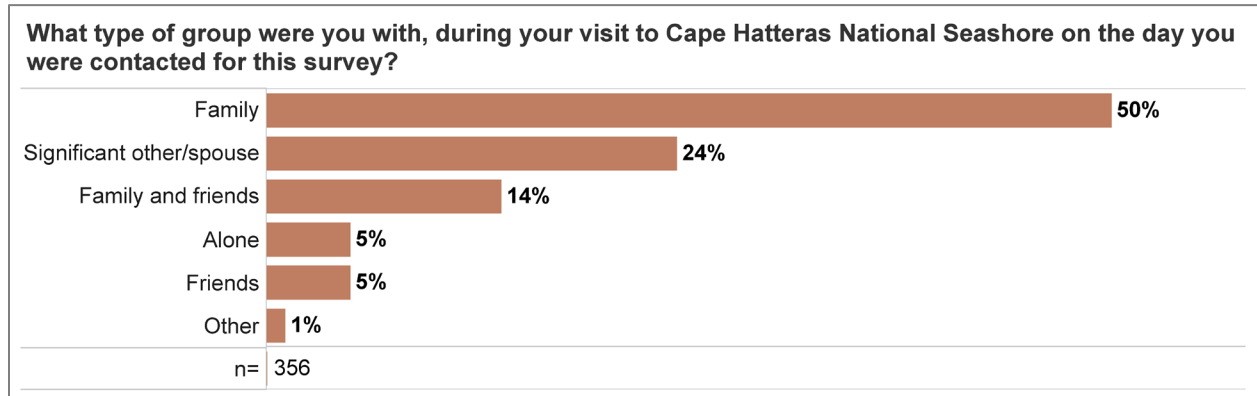


Figure 20. Travel party composition during Cape Hatteras visit.

NPS

- Half of respondents (50%) visited Cape Hatteras with their family on the day of the survey.
- Nearly a quarter of respondents (24%) explored Cape Hatteras with their significant other or spouse, and another 14% visited the park with their family and friends.

Question 10: Entrance Fees

Respondents were asked to indicate which type of entrance fees applied to them personally on their most recent trip to Cape Hatteras² (Figure 21).

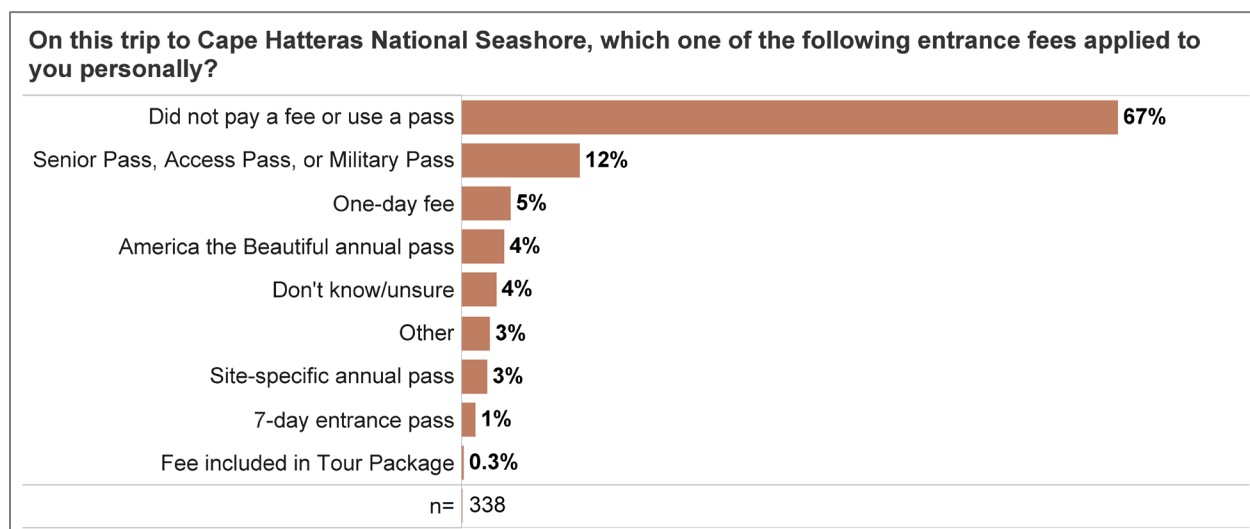


Figure 21. Entrance fees to enter Cape Hatteras on the most recent trip.

NPS

- Two-thirds of respondents (67%) reported not paying a fee or using a pass, while 12% entered using a Senior Pass, Access Pass, or Military Pass.
- In contrast, 9% of respondents entered using a Cape Hatteras-specific pass or fee (i.e., annual pass, 7-day, or single-day entrance fee).

² Cape Hatteras does not charge an entrance fee. However, this question was asked as part of the standard survey fielded at units across the NPS system.

Questions 12–14: Trip Characteristics

Respondents were asked if they visited other National Park Service sites on their trip away from home (Figure 22).

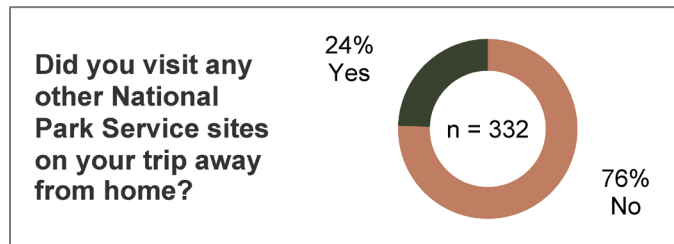


Figure 22. NPS sites visited on trip away from home.

NPS

- Nearly a quarter (24%) of all respondents had visited other NPS sites on their trip, while 76% identified Cape Hatteras as the only NPS site they visited while away from home.
- In an open-ended follow-up question, those who had visited other NPS sites on their trip were asked to list which one(s). These comments are provided in an accompanying document.

Survey respondents were then asked to identify all activities that they participated in while visiting Cape Hatteras, and which of those was their primary activity (Figure 23).

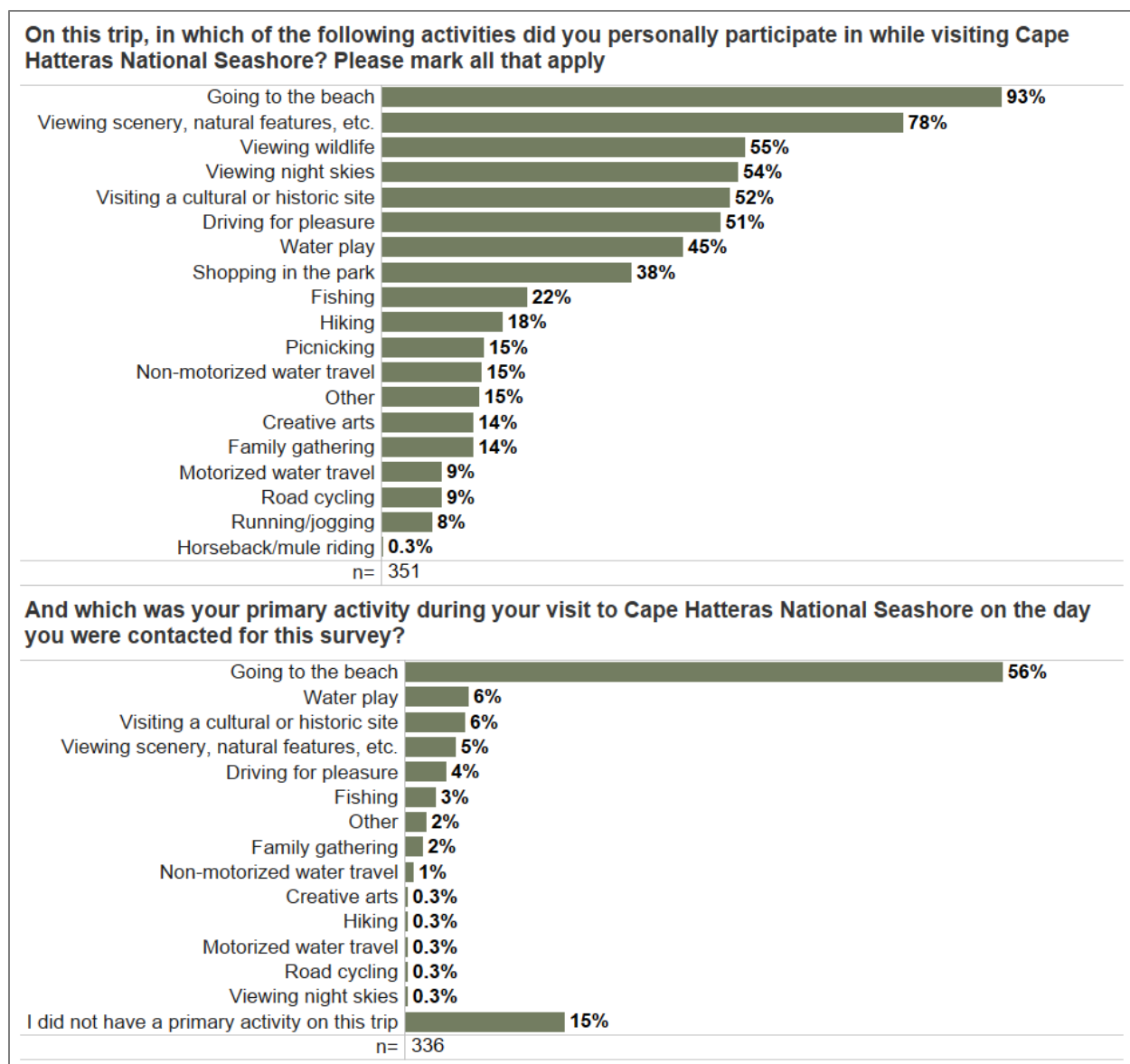


Figure 23. Participation in activities at Cape Hatteras.

NPS

- Almost all visitors reported going to the beach (93%), while a majority reported viewing scenery, natural features, etc. (78%), viewing wildlife (55%), viewing night skies (54%), visiting a cultural or historic site (52%) and driving for pleasure (51%).
- Motorized water travel, road cycling, running/jogging, and horseback/mule riding were all uncommon activities (reported by fewer than 10% of respondents).
- The majority of respondents (56%) reported going to the beach as their primary activity, followed by water play and visiting a cultural or historic site (6% each).

Questions 15–16: Reasons to Visit

Survey respondents were asked to rate the importance of various reasons to visit Cape Hatteras on their trip, then asked which of those was the most important reason for them to visit Cape Hatteras (Figure 24).

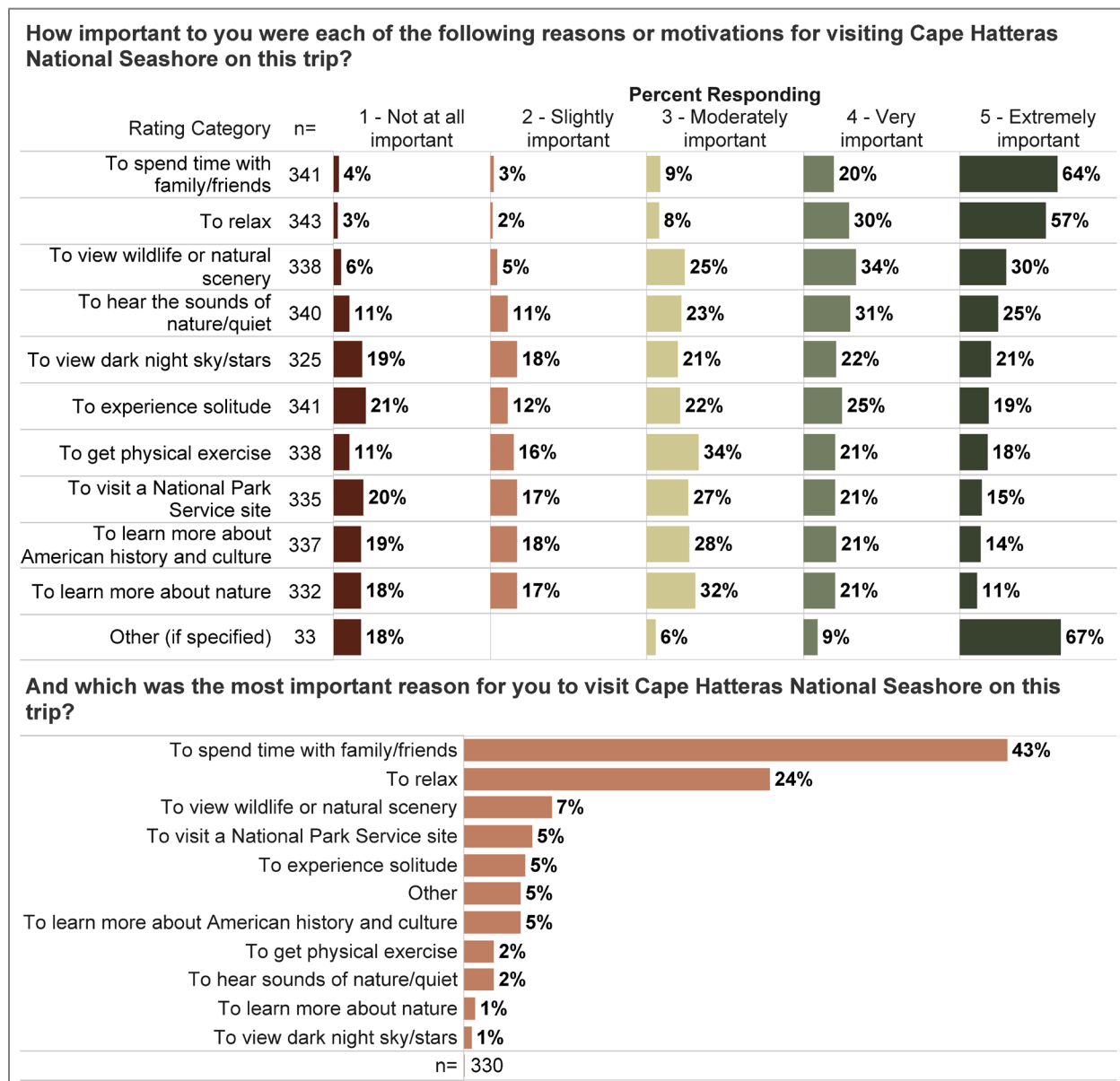


Figure 24. Reasons or motivations to visit Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 13](#).

NPS

- Most visitors chose to spend time with family/friends (64%) and to relax (57%) as extremely important reasons for their trip to Cape Hatteras.

- Other important reasons were to view wildlife and natural scenery and to hear the sounds of nature/quiet (30% and 25% of respondents, respectively, rated them as extremely important).
- The least important reasons were to learn more about American history and culture and to learn more about nature (only 14% and 11% of respondents, respectively, reported them as extremely important, and 19% and 18% of respondents, respectively, rated them as not at all important).
- The most common response about the most important reason was to spend time with family/friends (43%), followed by to relax (24%).

Questions 17–19: Programs, Services, and Learning

Respondents were asked to identify all programs and services that they personally participated in in Cape Hatteras during their trip (Figure 25).

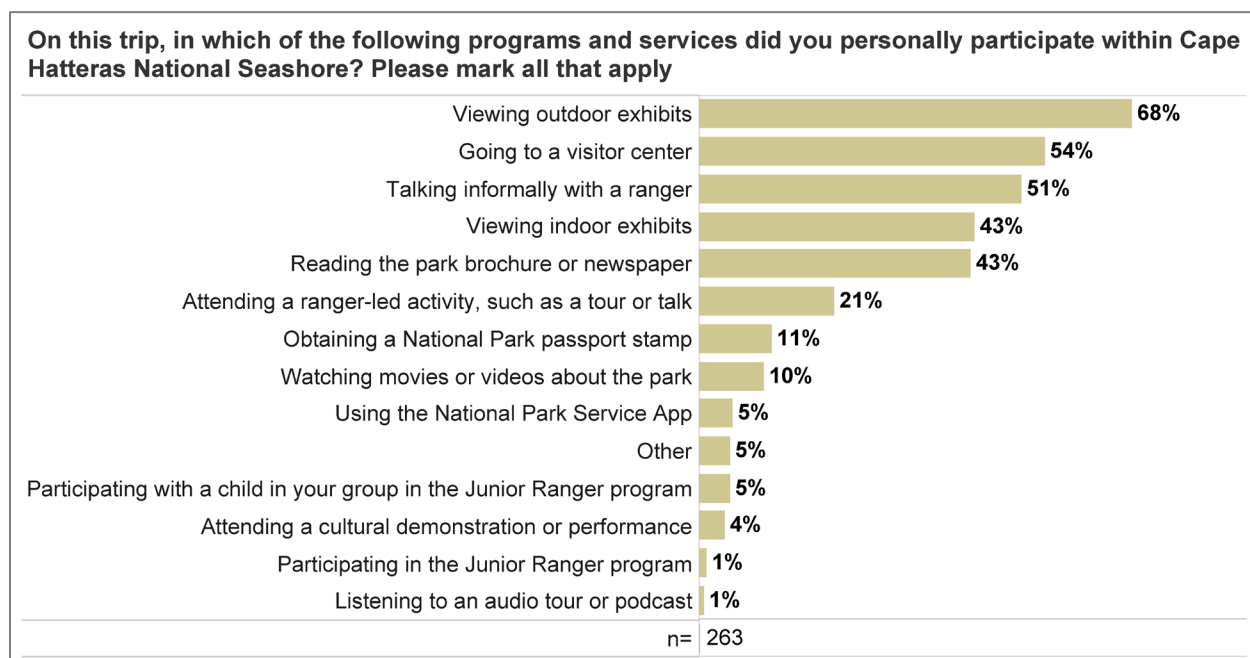


Figure 25. Programs participated while visiting Cape Hatteras.

NPS

- The most-used program was viewing outdoor exhibits with 68% of visitors reporting participating in this program.
- Two other programs were engaged in by over half of respondents: going to a visitors center (54%) and talking informally with a ranger (51%).

Two follow-up questions asked if respondents learned anything from park staff, programs, and/or exhibits about American history, nature, and/or culture, and what specific subjects they would like to learn about in the future (Figure 26).

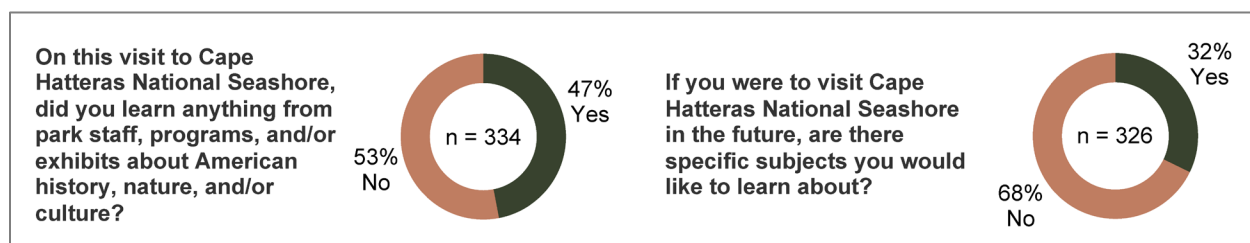


Figure 26. Learning.

NPS

- Nearly half of respondents (47%) reported that they learned something from park staff, programs, and/or exhibits about American history, nature, and/or culture.
- About one-third of respondents (32%) reported that if they were to visit Cape Hatteras in the future, there are specific subjects they would like to learn about.
- Respondents who said yes to either of these two questions were asked to elaborate. These comments are provided as an accompanying document for review.

Questions 20–21: Use of Devices

Two survey questions were focused on the use of electronic devices, their importance, and the quality of service provided. First, respondents were asked which personal electronic devices they used while in Cape Hatteras (Figure 27).

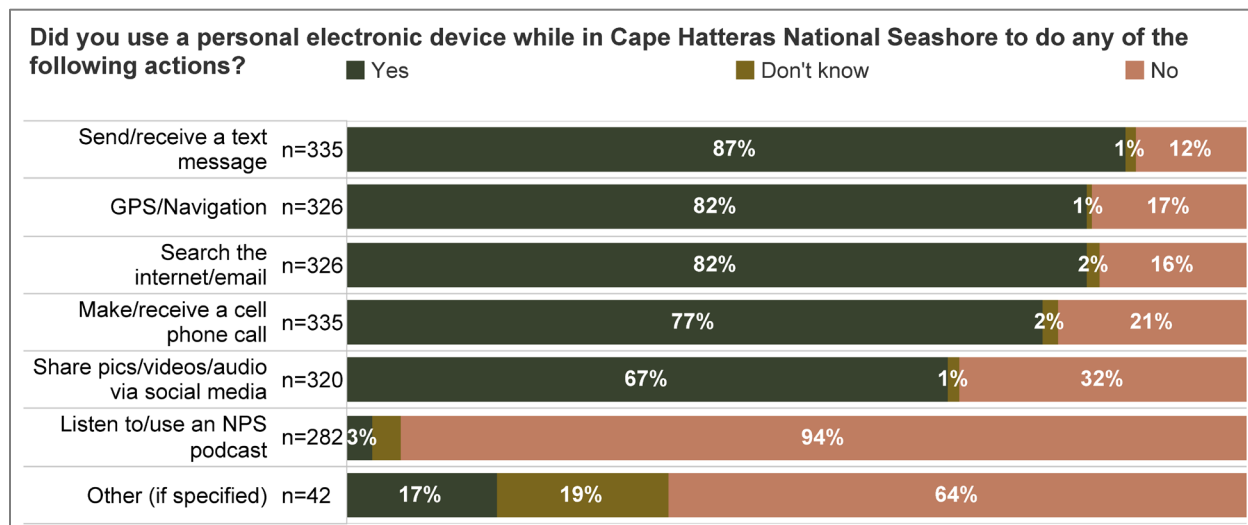


Figure 27. Use of personal electronic devices while visiting Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 14](#).

NPS

- Most respondents (87%) reported sending or receiving a text message, while 82% of respondents reported using GPS/navigation and searching the internet.
- More than two-thirds of respondents also reported making/receiving a cell phone call (77%) and sharing pictures/videos/audio via social media (67%).
- Conversely, only 3% of respondents listened to or used an NPS podcast.

Then, respondents were asked to rate both the importance of each of these electronic device uses (Figure 28), and the quality of their service (Figure 29).

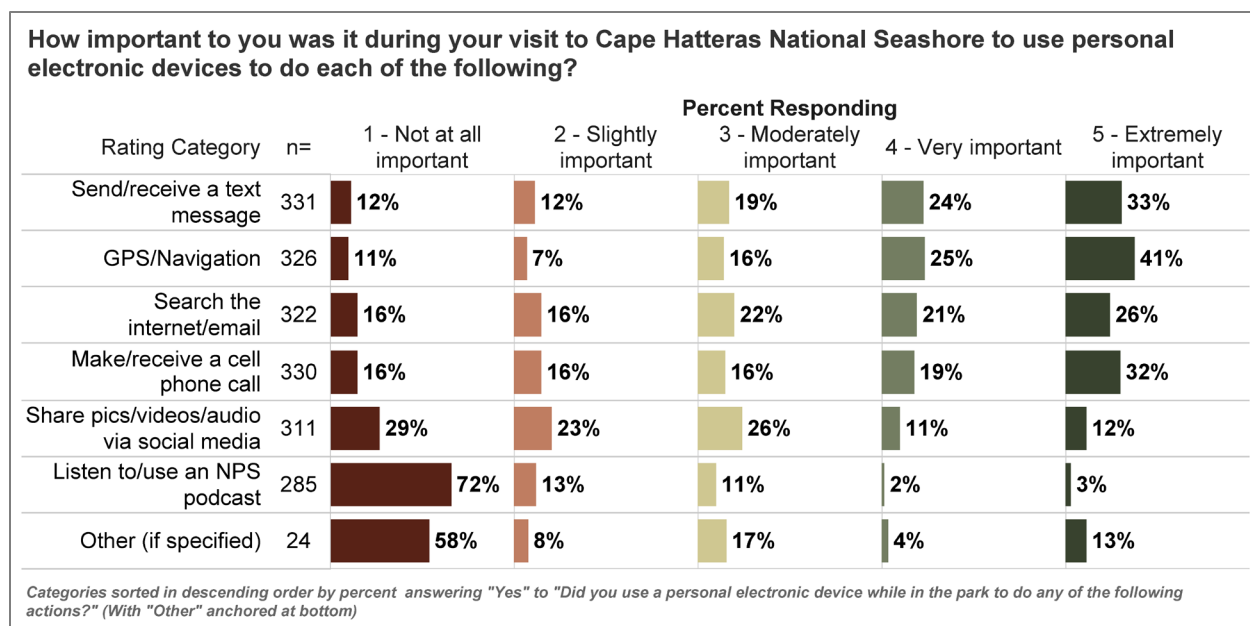


Figure 28. The importance of use of personal electronic devices while visiting Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 15](#).

NPS

- The most important device uses were GPS/navigation and sending/receiving a text message (41% and 33% of respondents, respectively, rated them as extremely important).
- Listening to and using an NPS podcast was rated as extremely important only by 3% of respondents, and not at all important by 72% of respondents.

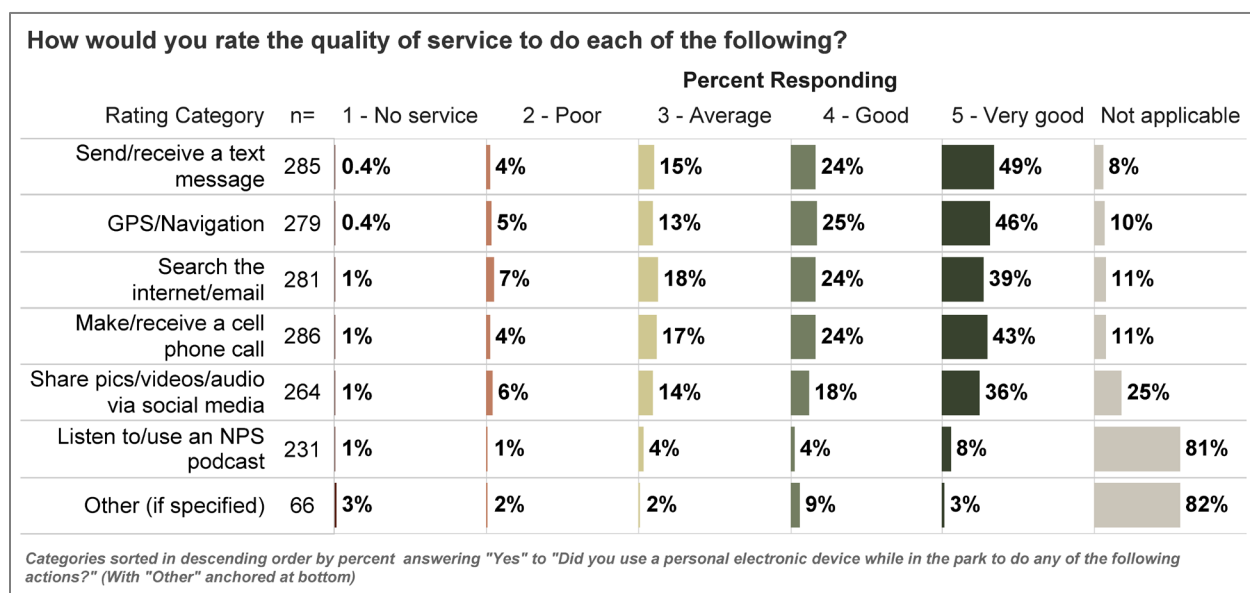


Figure 29. Quality of service of personal electronic devices while visiting Cape Hatteras. Tabular data shown in this figure are presented in [Appendix A, Table 16](#).

NPS

- Send/receive a text message was rated as very good or good by 49% and 24% of respondents, respectively. Only 0.4% of respondents reported that they had no service for this.
- Sizeable percentages of visitors (ranging from 36% to 46%, depending on the service) rated most services listed as very good.

Question 22: Physical Difficulties

Respondents were asked if anyone in their personal group had a physical condition that made it difficult to access or participate in park activities or services during their visit to Cape Hatteras. If such a condition was identified, respondents were asked to specify the type of difficulty (Figure 30).

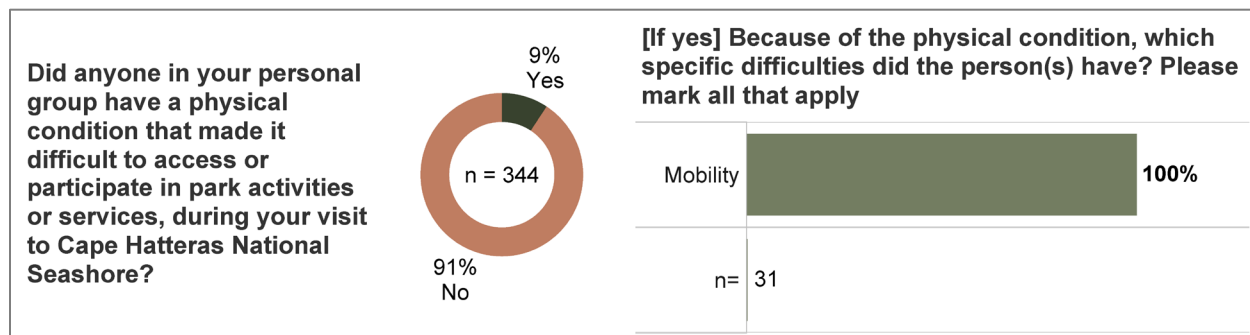


Figure 30. Physical difficulties while visiting Cape Hatteras.

NPS

- The majority of respondents (91%) reported that nobody in their personal group had a physical condition that made it difficult to access or participate in park activities or services during their visit to Cape Hatteras.
- Among the 9% of visitors who identified at least one difficulty, 100% reported mobility issues in their group.

Questions 25–28: Visitor Experience

Respondents were asked if their visit to Cape Hatteras met their expectations (Figure 31).

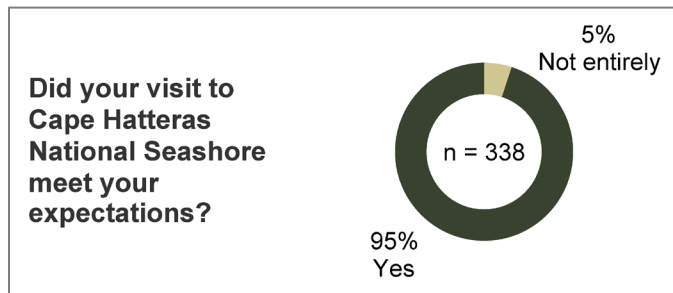


Figure 31. Meeting Cape Hatteras expectations.

NPS

- The vast majority of respondents (95%) reported that their visit to Cape Hatteras met their expectations, while 5% of respondents said it did not meet their expectations entirely, and no respondents indicated that it did not meet their expectations at all.
- In an open-ended follow-up question, respondents who indicated that Cape Hatteras did not meet their expectations were asked to elaborate. These comments are provided as an accompanying document for review.

Respondents were then given several statements about Cape Hatteras and asked to indicate their level of agreement or disagreement with each given statement (Figure 32).

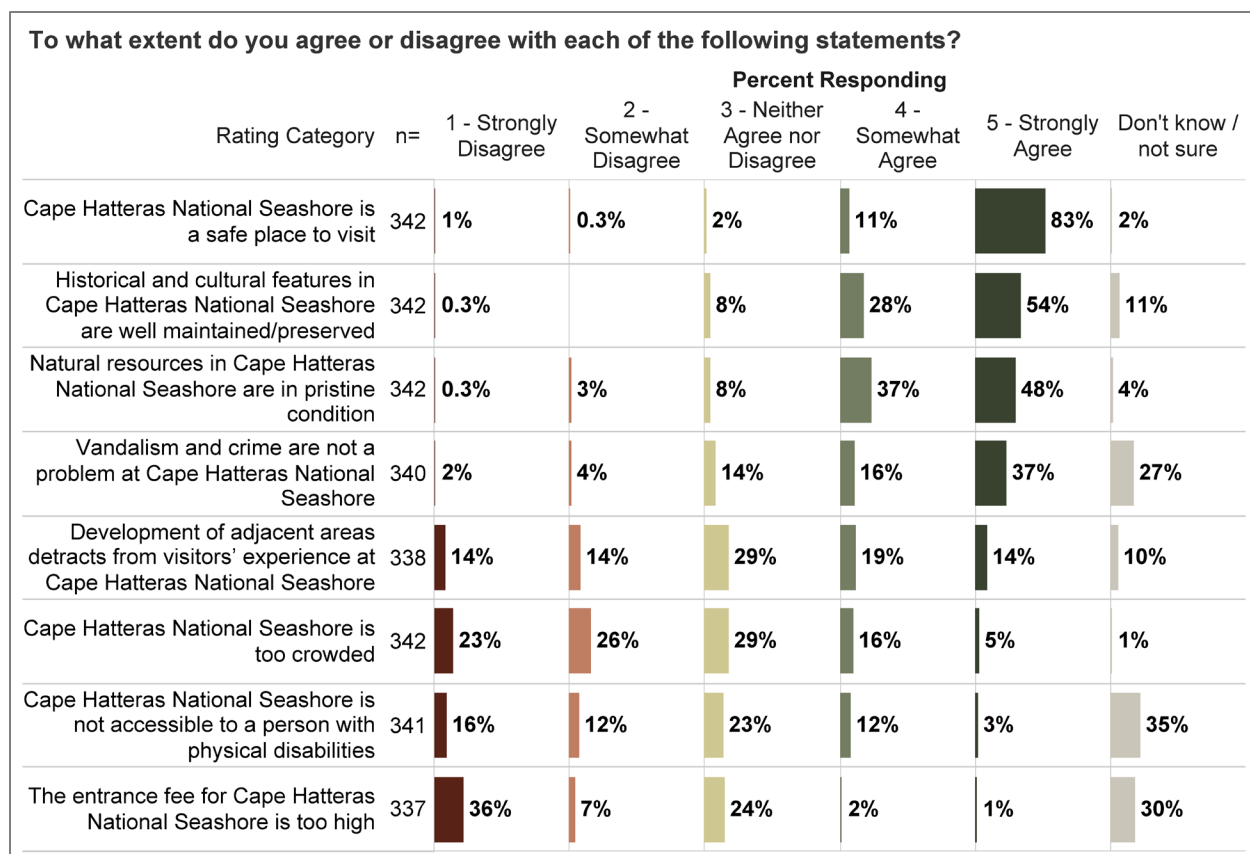


Figure 32. Rating Cape Hatteras experience. Tabular data shown in this figure are presented in [Appendix A, Table 17](#).

NPS

- From all the statements listed, “Cape Hatteras National Seashore is a safe place to visit” received the most consensus with a combined 94% of respondents saying they either strongly or somewhat agree with it. That was followed by “historical and cultural features in Cape Hatteras National Seashore are well maintained/preserved” and “natural resources in Cape Hatteras National Seashore are in pristine condition” (92% and 85% of respondents, respectively, strongly or somewhat agreed with these statements).
- Conversely, “the entrance fee for Cape Hatteras National Seashore is too high” received the least support, with only 3% of respondents either somewhat or strongly agreeing with this statement, and over one-third of respondents (36%) strongly disagreeing with it.

Next, respondents were asked to rate the quality of park facilities, visitor services, and recreational opportunities in Cape Hatteras (Figure 33).

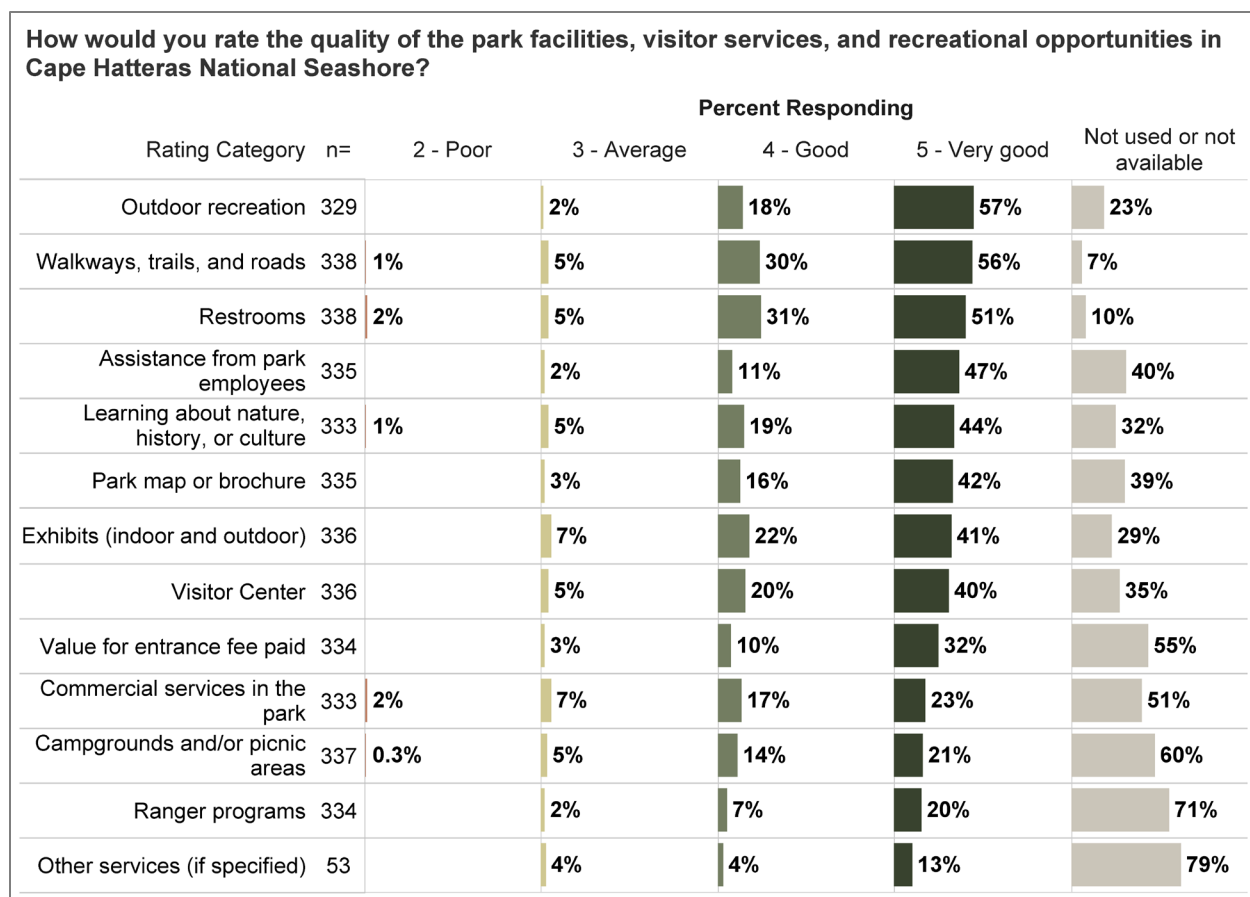


Figure 33. Rating the quality of Cape Hatteras facilities, visitor services, and recreational opportunities. Tabular data shown in this figure are presented in [Appendix A, Table 18](#).

NPS

- Over half of visitors (ranging from 51% to 57%) rated outdoor recreation, walkways, trails, and roads, and restrooms as very good.
- Conversely, fewer than half of visitors rated assistance from park employees, learning about nature, history, or culture, park map or brochure, exhibits (indoor and outdoor), visitor centers, value for entrance fee paid, commercial services in the park, campgrounds and/or picnic areas, and ranger programs as very good. For many of these ratings categories, visitors were most likely to say that they were either not available, or they did not use them.

Finally, respondents were asked to rate overall quality of the park facilities, visitor services, and recreation opportunities (Figure 34).

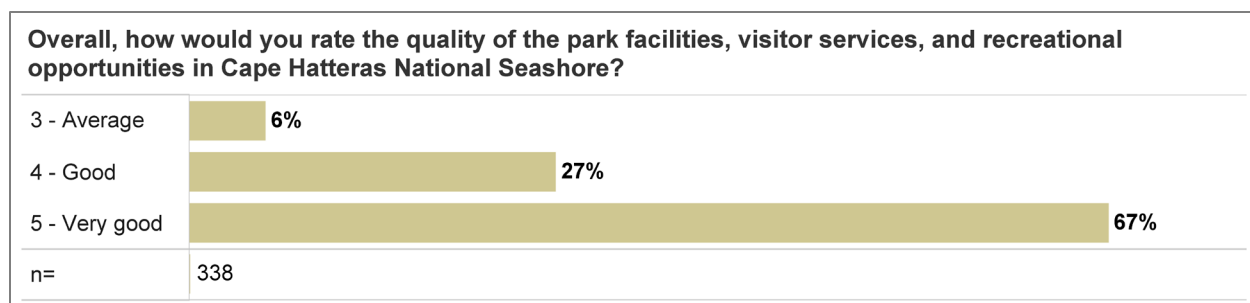


Figure 34. Rating overall quality of Cape Hatteras facilities, visitor services, and recreational opportunities.

NPS

- In general, about two-thirds of respondents (67%) rated the quality of the park facilities, visitor services, and recreational opportunities in Cape Hatteras as very good, and another 27% rated them as good.
- Just about 1 in 8 visitors rated the overall quality as average or below.

Questions 31–39: Background/Demographics

In the final section of the follow-up survey, respondents were asked various questions about their personal and household demographics. Figure 35 depicts descriptive statistics for respondent gender, age, and education.

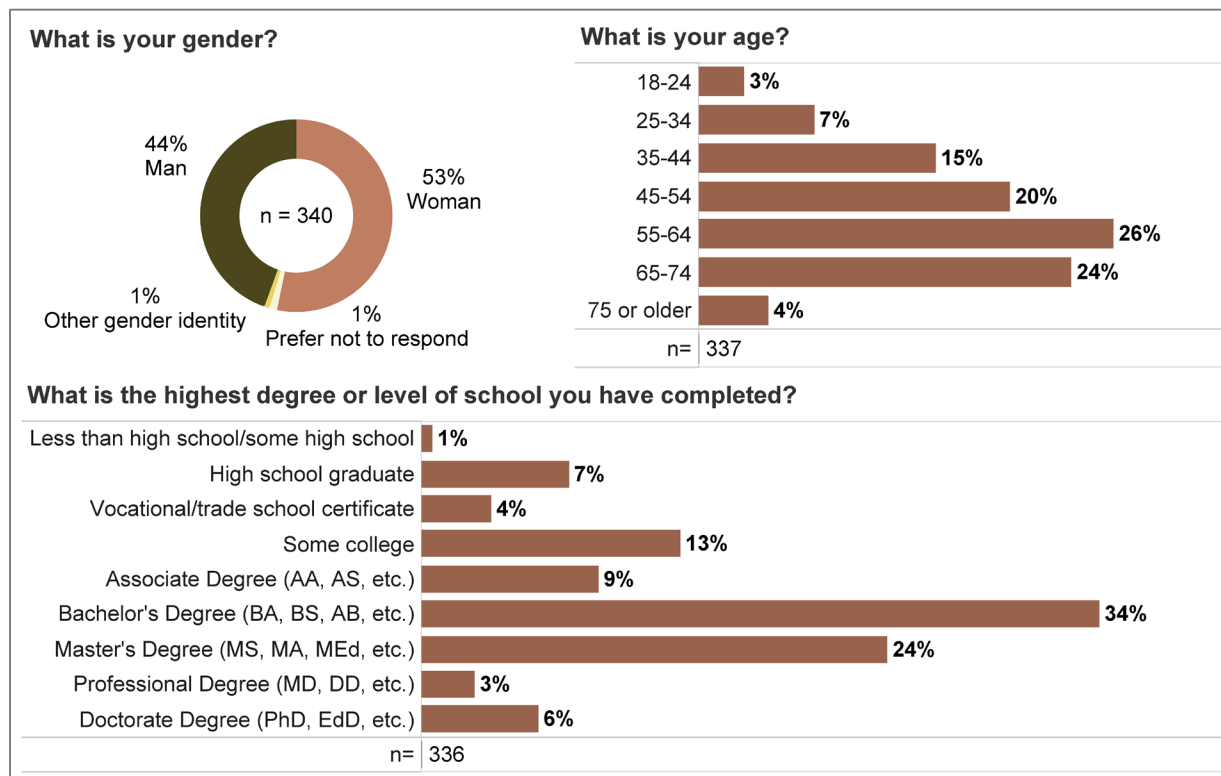


Figure 35. Respondent demographics: gender, age, and level of education.

NPS

- Follow-up survey respondents were slightly more likely to be women than men, though the sample was relatively balanced (53% vs. 44%). Another 1% had another gender identity, while 1% preferred not to disclose their gender identity.
- The most common age categories were 55 to 64 (26%), 65 to 74 (24%), and 45 to 54 (20%). The least represented age group was 18 to 24 (only 3% of the participants surveyed).
- Most survey respondents were highly educated, with a combined 75% having some college degree, and about one-third (33%) holding a master's degree or higher.

Respondents were also asked to identify their race(s) and if they were of Hispanic, Latino or Spanish origin (Figure 36).

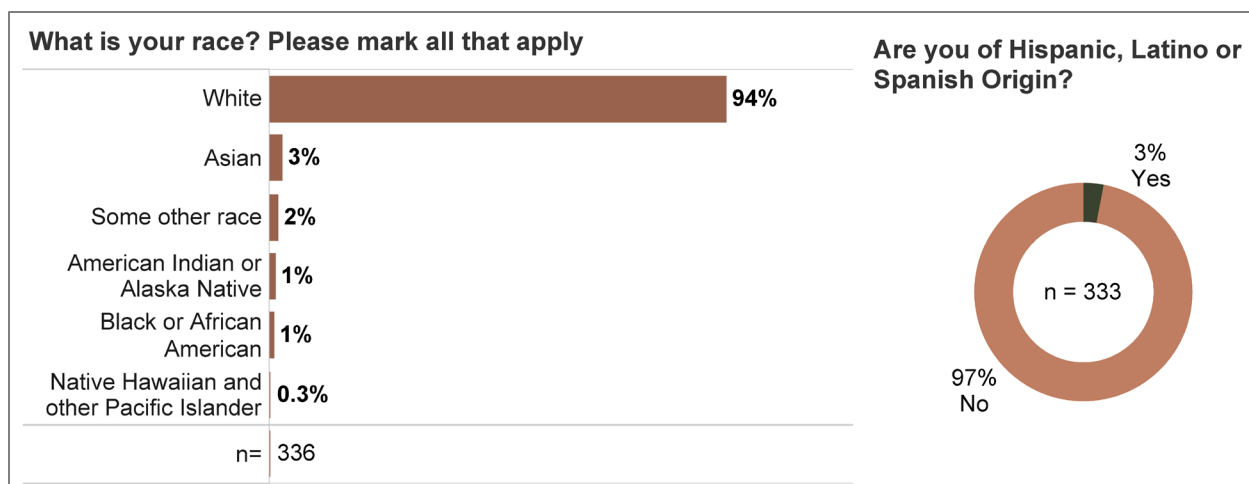


Figure 36. Respondent demographics: race and ethnicity.

NPS

- The majority of respondents (94%) were White, while 3% were Asian.
- Most respondents (97%) were not of Hispanic, Latino or Spanish origin.

At a household level, respondents were asked to report annual income and number of contributors, as well as how many people (adults and children) live in their household (Figure 37).

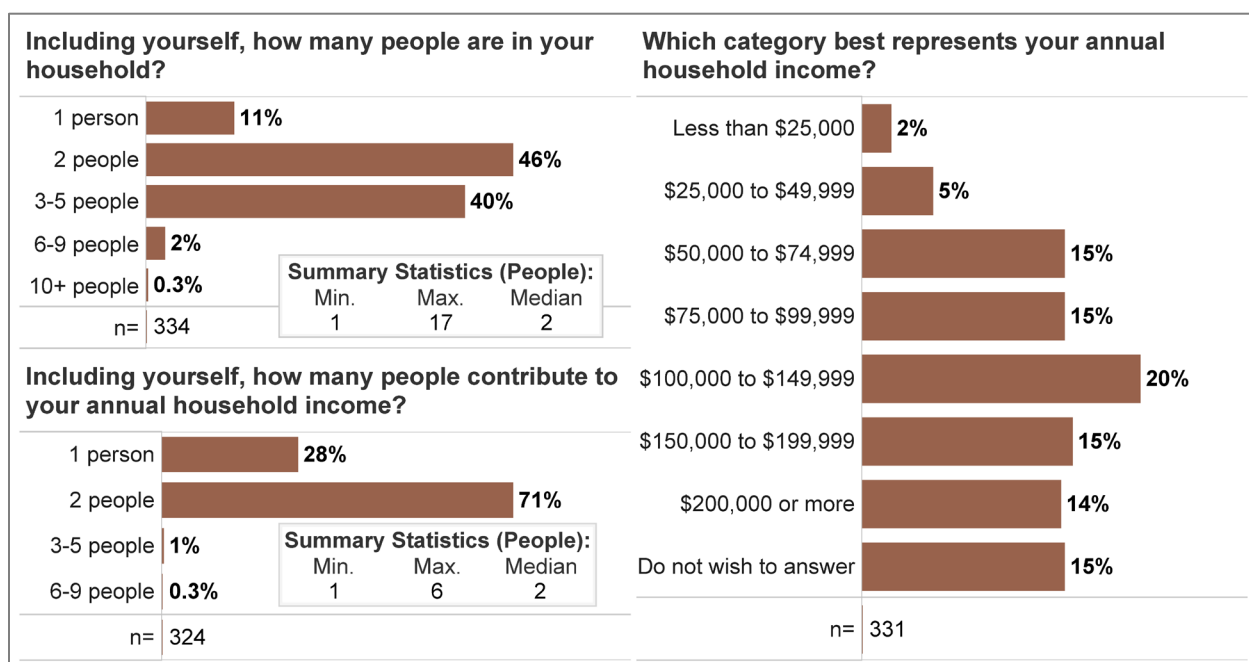


Figure 37. Household demographics: annual household income and household size. Tabular data shown in this figure are presented in [Appendix A, Table 19](#).

NPS

- Nearly half of respondents (46%) had 2 people in their household, followed by 3–5 people (another 40%).
- In addition to being highly educated, Cape Hatteras visitors are also relatively affluent, with nearly half of respondents (49%) reporting an annual household income of \$100,000 or higher, while 14% earned \$200,000 or more.
- Most respondents (71%) came from a dual-income household.

Finally, respondents were asked about their language preference (Figure 38).

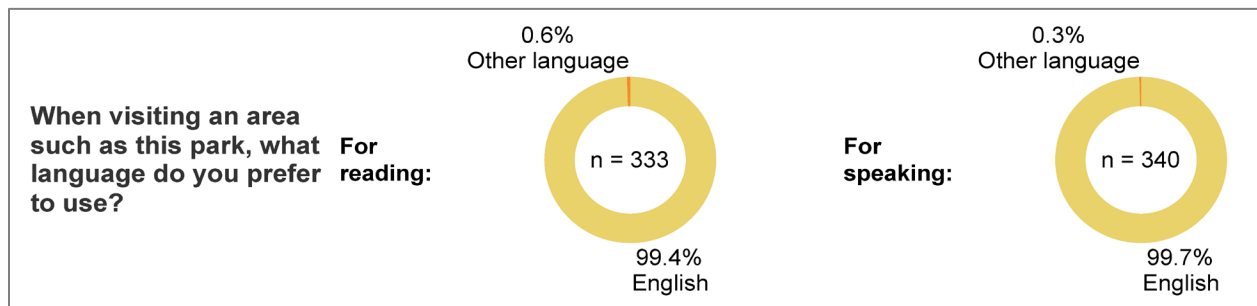


Figure 38. Respondent's language preference.

NPS

- While 3% of respondents were of Hispanic, Latino or Spanish origin, the overwhelming majority of respondents (99%) preferred to use English both for reading and speaking when visiting an area such as Cape Hatteras.
- Less than 1% of respondents preferred Spanish for either reading and/or speaking.

Literature Cited

National Park Service (NPS). 2022. 2022 Socioeconomic Monitoring of Cape Hatteras National Seashore: Visitor Intercept and Post-Trip Surveys.
<https://irma.nps.gov/DataStore/Reference/Profile/2318657>

Appendix A: Accessible Tables

This appendix contains accessible tables (Tables 8–19) with data from figures found in the body of the report. Table captions include hyperlinks to the corresponding figures.

Table 8. Data from [Figure 7](#). Number of nights spent in the local area around Cape Hatteras, by accommodation type.

Accommodation Type	n	Min.	Max.	Median
Camping in Cape Hatteras	120	1	120	4
Camping outside Cape Hatteras	106	1	180	6
Lodging outside Cape Hatteras	1096	1	365	6
Unpaid accommodations	50	2	180	5

Table 9. Data from [Figure 8](#). Number of adults and children in respondent's personal group while visiting Cape Hatteras.

Group Composition	n	Min.	Max.	Median
Adults	1615	1	26	2
Children	1616	0	18	1

Table 10. Data from [Figure 15](#). Number of people in respondent's vehicle when entering Cape Hatteras.

Question	n	Min.	Max.	Median
[If entered by car, truck, or SUV] Including yourself, how many people were traveling in your vehicle when you entered Cape Hatteras?	1559	1	41	3
[If entered by RV/motorhome] Including yourself, how many people were traveling in your RV when you entered Cape Hatteras?	32	1	10	4
[If entered by motorcycle] Including yourself, how many people were traveling on your motorcycle when you entered Cape Hatteras?	3	1	1	1

Table 11. Data from [Figure 16](#). Previous visits to Cape Hatteras.

Question	n	Min.	Max.	Median
[If not first-time visitor] Including this visit, how many visits have you made to Cape Hatteras over the past 12 months?	1140	1	1000	1
[If not first-time visitor] Including this visit, how many visits have you made to Cape Hatteras over the past five years?	1140	1	10000	5

Table 12. Data from [Figure 17](#). Visits made to other NPS sites within the past year.

Question	n	Min.	Max.	Median
How many visits have you made to other NPS sites over the past 12 months?	1605	0	1865	1

Table 13. Data from [Figure 24](#). Reasons or motivations to visit Cape Hatteras.

Rating Category	n
To visit a National Park Service site	335
To experience solitude	341
To hear the sounds of nature/quiet	340
To learn more about nature	332
To learn more about American history and culture	337
To spend time with family/friends	341
To get physical exercise	338
To view wildlife or natural scenery	338
To relax	343
To view dark night sky/stars	325
Other (if specified)	33

Table 14. Data from [Figure 27](#). Use of personal electronic devices while visiting Cape Hatteras.

Device Use	n
Make/receive a cell phone call	335
Send/receive a text message	335
Search the internet/email	326
GPS/Navigation	326
Share pics/videos/audio via social media	320
Listen to/use an NPS podcast	282
Other (if specified)	42

Table 15. Data from [Figure 28](#). The importance of use of personal electronic devices while visiting Cape Hatteras.

Device Use	n
Make/receive a cell phone call	330
Send/receive a text message	331
Search the internet/email	322
GPS/Navigation	326
Share pics/videos/audio via social media	311
Listen to/use an NPS podcast	285
Other (if specified)	24

Table 16. Data from [Figure 29](#). Quality of service of personal electronic devices while visiting Cape Hatteras.

Device Use	n
Make/receive a cell phone call	286
Send/receive a text message	285
Search the internet/email	281
GPS/Navigation	279
Share pics/videos/audio via social media	264
Listen to/use an NPS podcast	231
Other (if specified)	66

Table 17. Data from [Figure 32](#). Rating Cape Hatteras experience.

Rating Category	n
Cape Hatteras is a safe place to visit	342
Cape Hatteras is too crowded	342
Natural resources in Cape Hatteras are in pristine condition	342
The entrance fee for Cape Hatteras is too high	337
Vandalism and crime are not a problem at Cape Hatteras	340
Cape Hatteras is not accessible to a person with physical disabilities	341
Historical and cultural features in Cape Hatteras are well maintained/preserved	342
Development of adjacent areas detracts from visitors' experience at Cape Hatteras	338

Table 18. Data from [Figure 33](#). Rating the quality of Cape Hatteras facilities, visitor services, and recreational opportunities.

Rating Category	n
Visitor Center	336
Exhibits (indoor and outdoor)	336
Restrooms	338
Walkways, trails, and roads	338
Campgrounds and/or picnic areas	337
Assistance from park employees	335
Park map or brochure	335
Ranger programs	334
Value for entrance fee paid	334
Commercial services in the park (food, lodging, gifts, rental, etc.)	333
Other services (if specified)	53
Learning about nature, history, or culture	333
Outdoor recreation (sightseeing, camping, bicycling, boating, hiking, etc.)	329

Table 19. Data from [Figure 37](#). Household demographics: annual household income and household size.

Question	n	Min.	Max.	Median
Including yourself, how many people are in your household?	334	1	17	2
Including yourself, how many people contribute to your annual household income?	324	1	6	2

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