



2022 Socioeconomic Research of Cumberland Gap National Historic Park

Report on 2022 Data Collection (Revised)



Hiker in Sand Cave in Cumberland Gap National Historic Park.
NPS / SCOTT TEODORSKI

2022 Socioeconomic Research of Cumberland Gap National Historic Park: Report on 2022 Data Collection (Revised)

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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.

Cumberland Gap National Historic Park (Cumberland Gap) 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 Cumberland Gap 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. Cumberland Gap National Historic Park (Cumberland Gap) 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 Cumberland Gap National Historic Park, what they do during their visit, and their spending profile. The results of the study are intended to assist Cumberland Gap National Historic Park 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.



Water cascades over boulders along Gap Creek in Cumberland Gap National Historic Park.
NPS / SCOTT TEODORSKI

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 Cumberland Gap local area map is shown in Figure 1. The local area around Cumberland Gap consists of counties from three states: Bell and Harlan counties in Kentucky; Lee County in Virginia; Claiborne and Campbell counties in Tennessee. Within Cumberland Gap, the study area was comprised of eight 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.

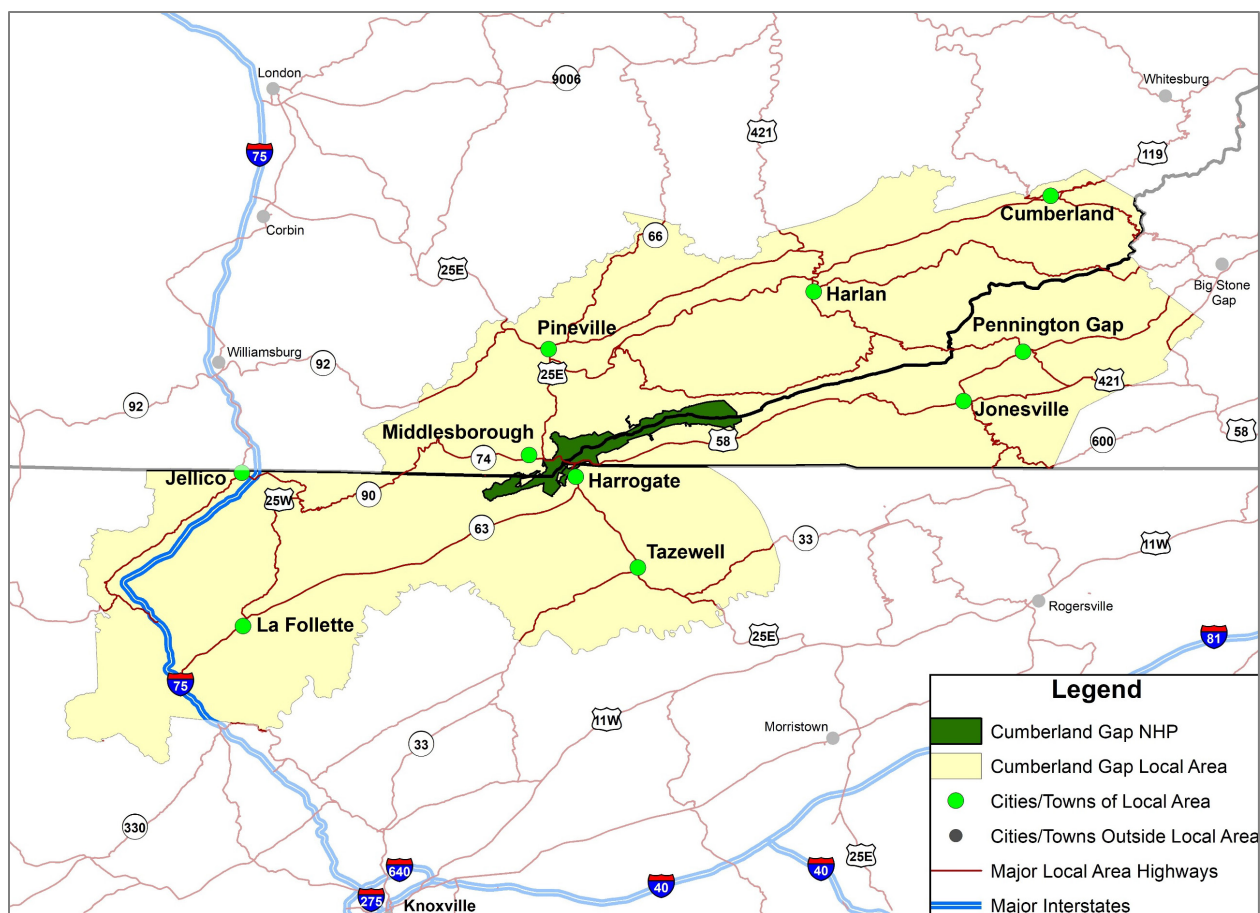


Figure 1. Cumberland Gap National Historic Park local area map.

NPS

Table 1. Information about sampling locations in Cumberland Gap.

Intercept Site	Completed Intercept Surveys		Nearby Attractions
	Number of Surveys	Percent of Surveys	
Pinnacle Overlook	283	23.1%	Scenic overlook
Main Visitor Center	545	44.4%	—
Iron Furnace	149	12.1%	Hiking trails, historic structure
Daniel Boone	117	9.5%	Visitor Center, exhibits, restrooms, walking trails, travel information
Bartlett Park	22	1.8%	Picnic area
Civic Park	34	2.8%	Hiking trails, picnic area, natural area

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 May 26th to June 5th, 2022. A sample of visitors were intercepted while visiting Cumberland Gap 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 Cumberland Gap (NPS 2022). If the visitor was eligible (at least 18 years of age, not a Cumberland Gap 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—Cumberland Gap intercept Survey.

Outcome	Total
Eligible visitors contacted	1,491
Complete refusals	81
Partial refusals (non-response questions completed)	183
Intercept surveys completed	1,227
Follow-up surveys distributed	1,070
Intercept response rate	82.3%
Follow-up acceptance rate	87.2%

During the sampling period, 8 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 Cumberland Gap. 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 11-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 Cumberland Gap. 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—Cumberland Gap follow-up mail-back/online survey.

Outcome	Total
Follow-up surveys distributed	1,070
Valid follow-up surveys completed	392
Response rate	36.6%

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 82.3%, 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 Cumberland Gap?” Note: p-value = 0.05.

Response	Full Survey Respondents		Intercept-Only Respondents	
	Frequency	Percent	Frequency	Percent
Yes	82	21.1%	220	26.3%
No	307	78.9%	618	73.7%

Table 5. Non-response bias question: “Do you currently live in the United States?” Note: p-value not computed due to low cell counts in “No” category.

Response	Full Survey Respondents		Intercept-Only Respondents	
	Frequency	Percent	Frequency	Percent
Yes	387	99.5%	831	99.2%
No	2	0.5%	7	0.8%

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 Cumberland Gap and/or within the local area?” Note: p-value = 0.25.

Response	Full Survey Respondents		Intercept-Only Respondents	
	Frequency	Percent	Frequency	Percent
Yes	124	32.0%	241	28.8%
No	264	68.0%	597	71.2%

Using a p-value of 0.05, the distribution of responses among full survey respondents and intercept-only respondents differed significantly for one question: permanent/seasonal residency. Therefore, permanent/seasonal resident visitors are not as well represented in the full responses as desired.

Results

Intercept Survey Results

The following section provides results of the 1,227 visitor intercept surveys conducted in Cumberland Gap National Historic Park from May 26th to June 5th, 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 Cumberland Gap. 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.

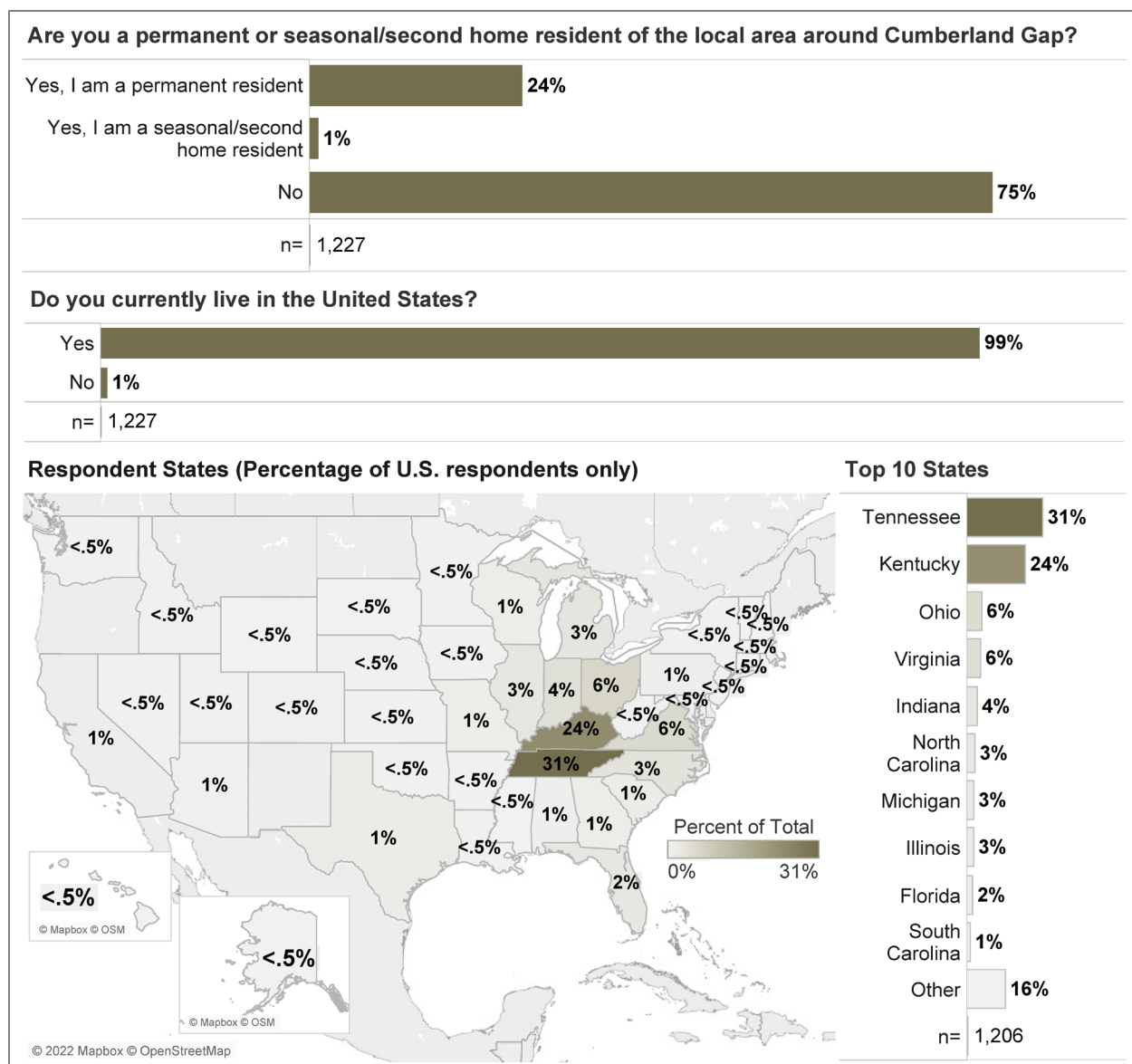


Figure 2. Visitor local residency status and geographic origin of domestic visitors to Cumberland Gap.
NPS

- A quarter of respondents (a combined 25%) stated that they were either permanent or seasonal residents of the local area around Cumberland Gap.
- There was a large geographic concentration of visitors from both Tennessee and Kentucky (where Cumberland Gap is located).
- Among the 99% of respondents currently residing in the U.S., 31% reside in Tennessee, followed by Kentucky (24%), Ohio (6%), and Virginia (6%).

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).

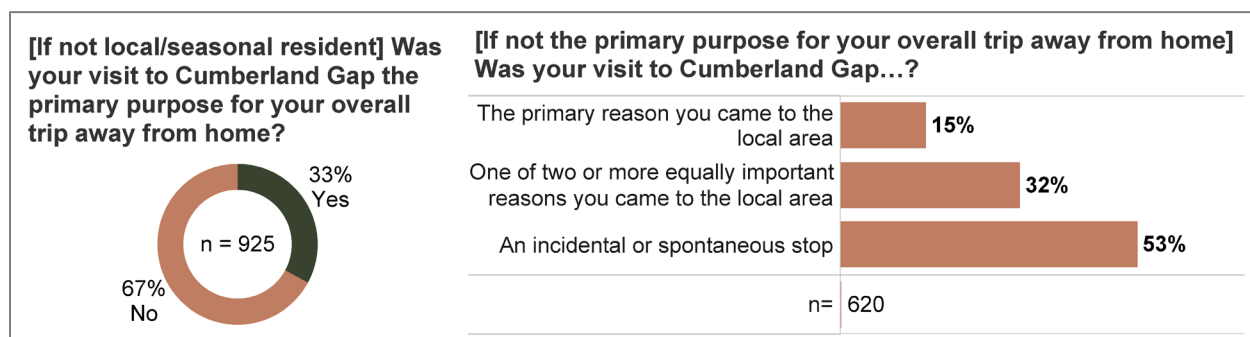


Figure 3. Role of Cumberland Gap in overall trip purpose.

NPS

- For roughly two-thirds of non-local respondents (67%), visiting Cumberland Gap was not the primary purpose for their overall trip away from home.
- Among those respondents for whom Cumberland Gap was not their primary trip purpose, 53% stated that their visit to Cumberland Gap was an incidental or spontaneous stop, while another 32% indicated that it was one of two or more equally important reasons you came to the local area.

Question 4: Length of Stay

If respondents indicated that they were not permanent or seasonal residents of the local area around Cumberland Gap, 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.

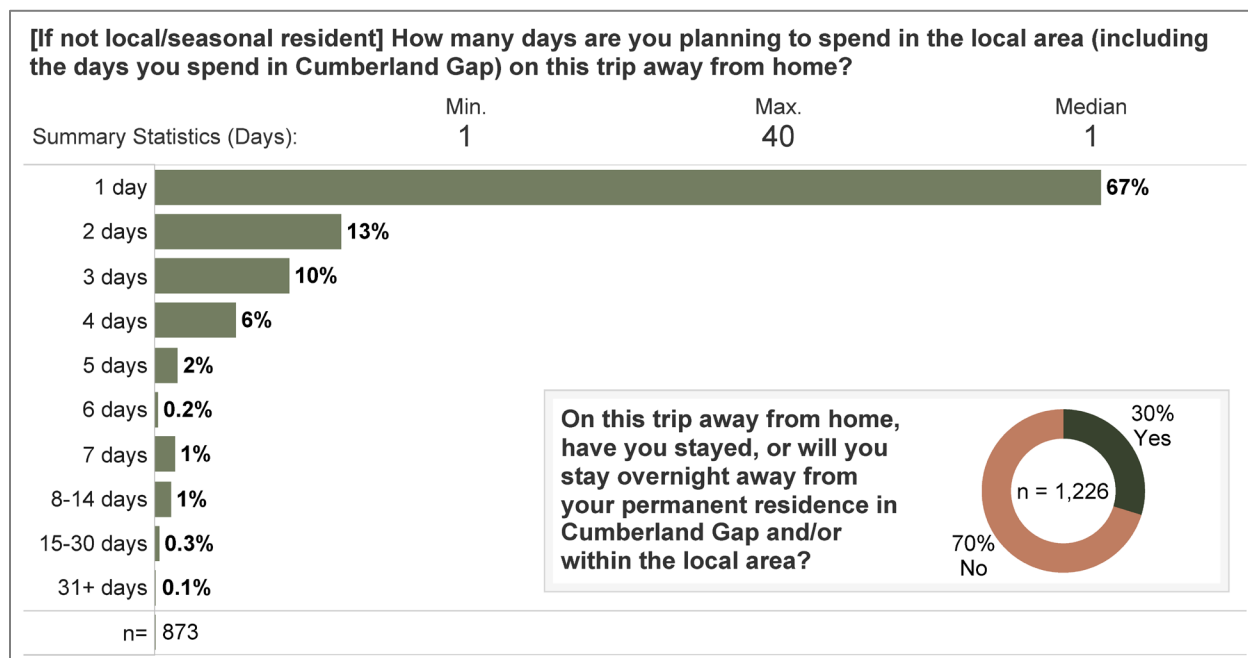


Figure 4. Time spent in the local area around Cumberland Gap.

NPS

- Two-thirds of non-local respondents (67%) spent one day in the local area, while 13% spent two days, and 10% spent three days. The median length of stay was one day.
- Additionally, just under one-third of all respondents (30%; 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).

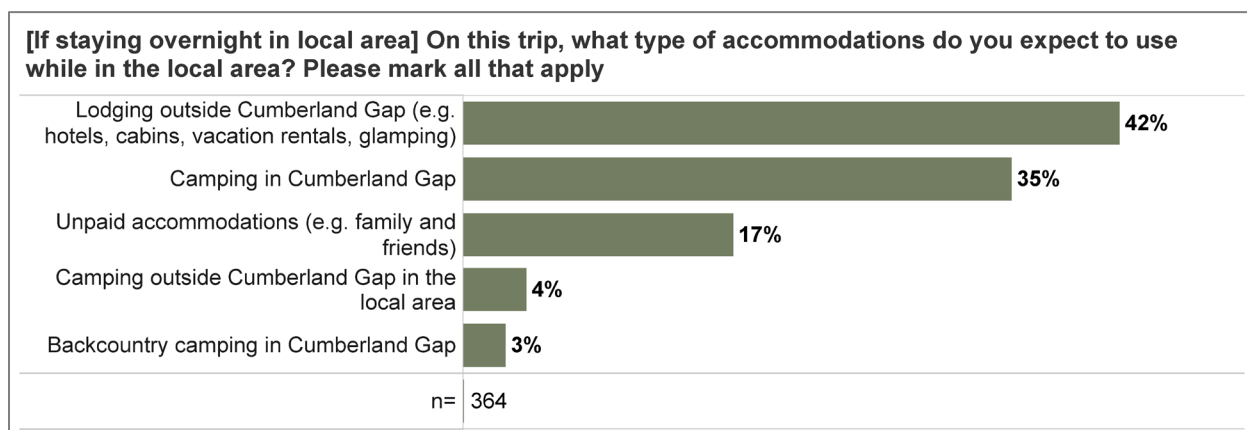


Figure 5. Accommodation types used in the local area around Cumberland Gap.

NPS

- Just over 40% of overnight respondents (42%) stayed in lodging outside Cumberland Gap (e.g., hotels, cabins, vacation rentals, glamping).
- This was followed in prevalence by respondents who camped in Cumberland Gap (35%), and those who stayed at unpaid accommodations (e.g, family and friends) (17%).

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

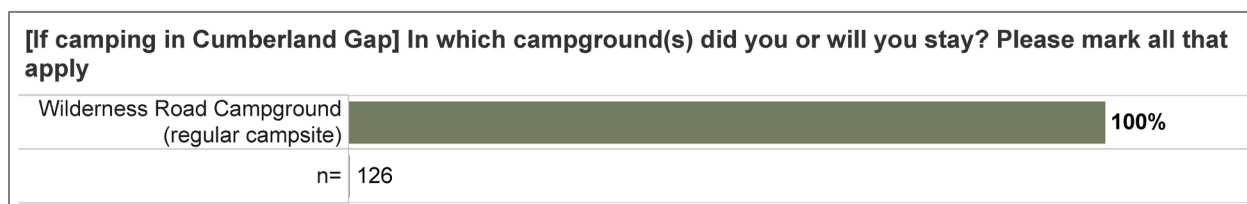


Figure 6. Campground use within Cumberland Gap.

NPS

- Of the respondents who reported which campground they stayed in while visiting Cumberland Gap, all (100%) reported staying at the Wilderness Road Campground.

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

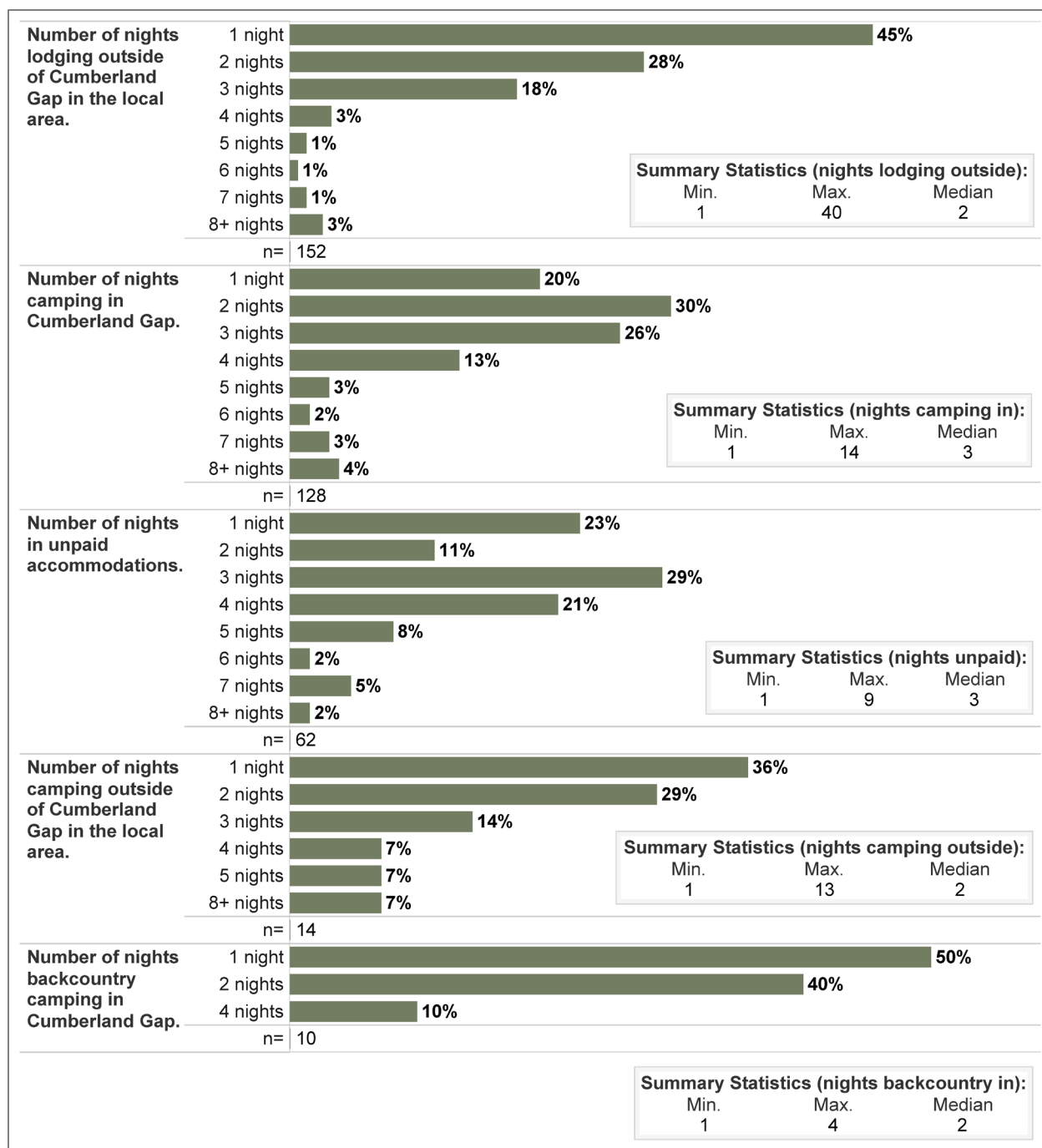


Figure 7. Number of nights spent in the local area around Cumberland Gap, by accommodation type. Tabular data shown in this figure are presented in [Appendix A, Table 8](#).

NPS

- Among the 42% of overnight respondents who lodged outside of Cumberland Gap in the local area (per Figure 5), median length of stay was two nights. Three-quarters (73%) lodged two nights or fewer in the local area this trip; 91% spent three nights or fewer.

- Among the 35% of overnight respondents who camped in Cumberland Gap (per Figure 5), median length of stay was three nights. Half (50%) of campers were spending two nights or fewer camping in the park this trip; 76% spent three nights or fewer.
- Among the 17% of overnight respondents who stayed in unpaid accommodations in the local area (per Figure 5), median length of stay was three nights. There was much broader spread in length of overnight stay among those staying in unpaid accommodations than those in paid options.
- Among the 4% of overnight respondents who camped outside of Cumberland Gap (per Figure 5), median length of stay was two nights, though the plurality (36%) stayed just one night. Results for this group should be interpreted with caution due to the small size of the sample (i.e., $n < 30$).
- Among the 3% of overnight respondents who participated in backcountry camping in Cumberland Gap (per Figure 5), median length of stay was two nights. Results for this group should be interpreted with caution due to the small size of the sample (i.e., $n < 30$).

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 Cumberland Gap (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.

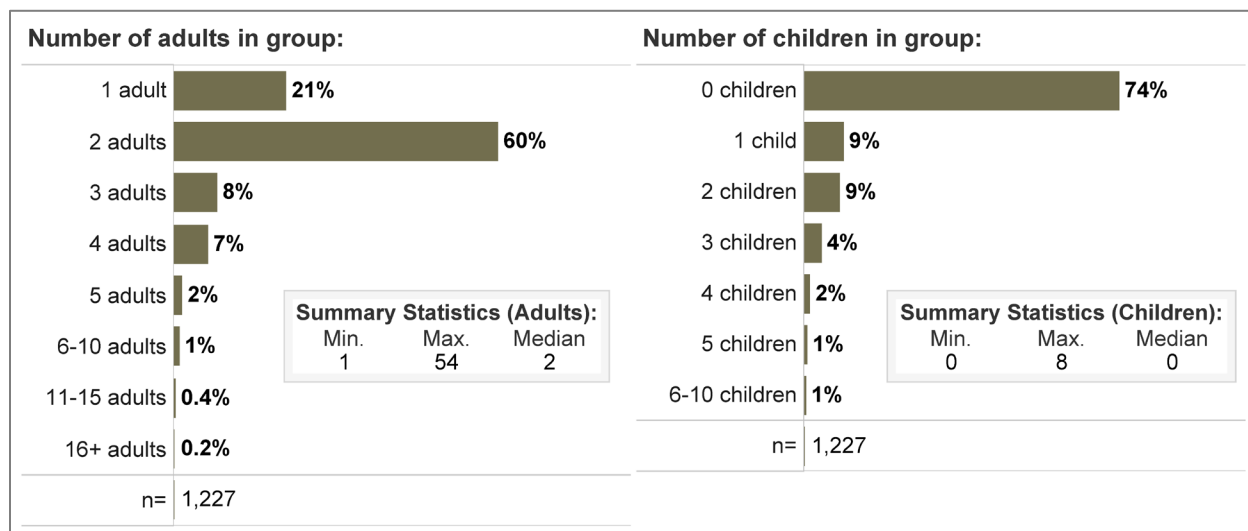


Figure 8. Number of adults and children in respondent's personal group while visiting Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 9](#).

NPS

- The median number of adults per group was two. Most groups (60%) included 2 adults.
- Most groups (74%) did not include any children.

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

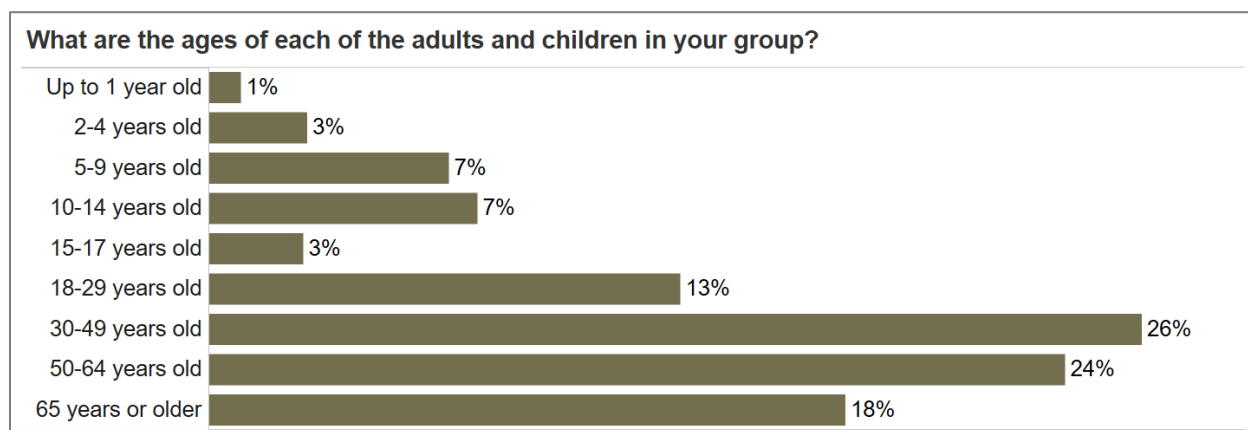


Figure 9. Age distribution of all members of respondent's personal group while visiting Cumberland Gap.

NPS

- The most common age of the adults and children in a personal group was 30–49 years old (26%), followed by 50–64 years old (24%), and respondents 65 years or older (18%).
- Children (i.e., visitors under 18 years old) accounted for a combined total of just 21% of group members.

Questions 13–16: Park Use Characteristics

First, respondents were asked to indicate if they planned to visit Cumberland Gap 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 10 and Table 7).

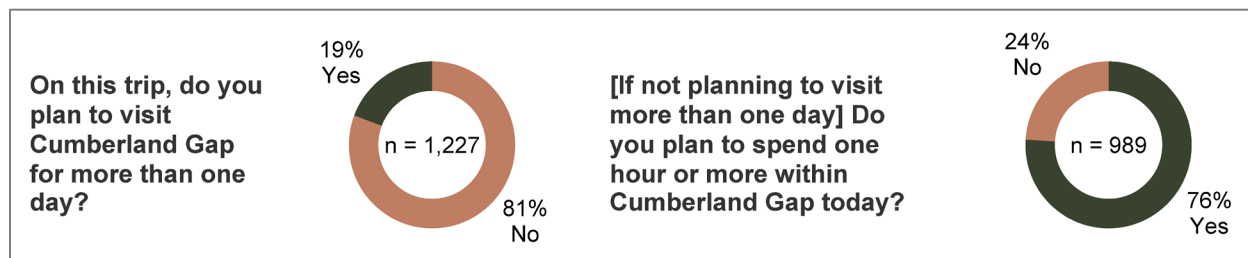


Figure 10. Duration of the respondent's trip to Cumberland Gap.

NPS

Table 7. Amount of time spent within Cumberland Gap.

Question	n	Min.	Max.	Median
[If not planning to spend one hour or more] How many minutes do you plan to spend within Cumberland Gap today?	235	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 Cumberland Gap today?	736	1	12	2
[If planning to visit at least one day] How many days do you plan to spend within Cumberland Gap on this trip?	239	1	365	2
[If planning to visit at least one day] On how many different days do you expect to enter the park?	236	1	365	2

- While visiting Cumberland Gap, most visitors (81%) did not plan to spend more than one day in the park.
- Among the 81% of visitors who did not spend more than a day in Cumberland Gap, the majority (76%) planned to spend one hour or more in the park. The median length of time spent in the park among this group was two hours.
- The remaining 19% of visitors planned to visit for more than one day; among those visitors, the median length of stay was two 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 two days.

Next, respondents were asked to indicate the most recent entrance they used to enter Cumberland Gap (Figure 11).

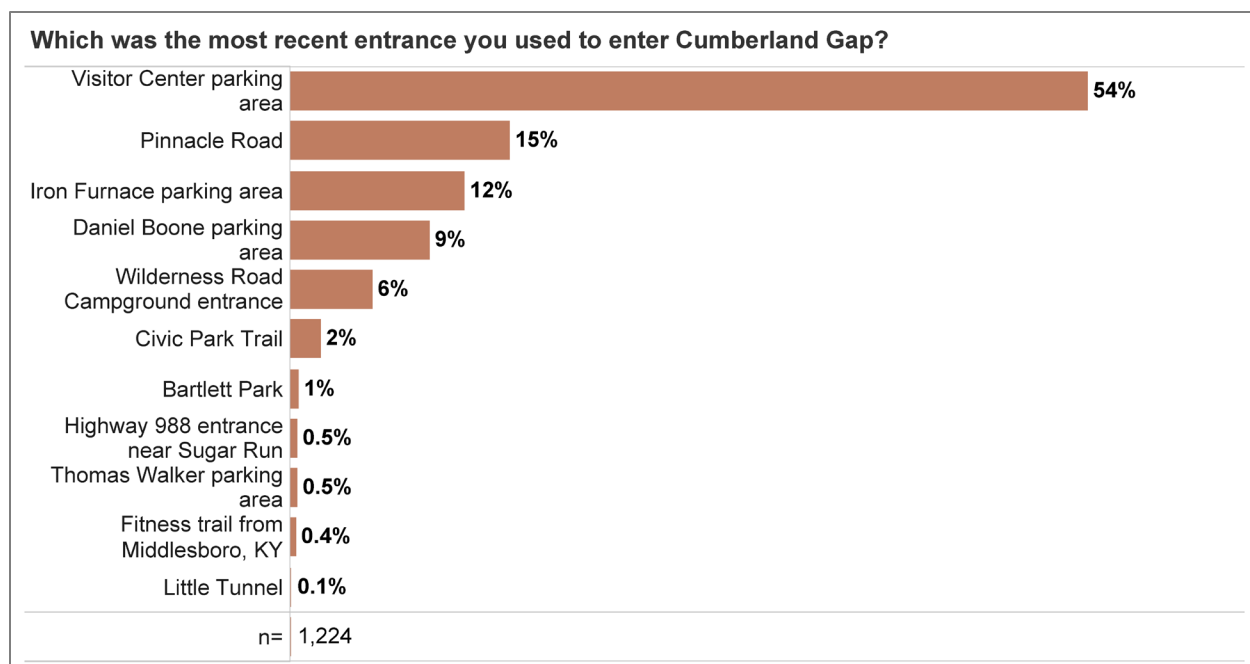


Figure 11. Most recent entrance used to enter Cumberland Gap.

NPS

- The Visitor Center parking area was the most commonly used entrance to Cumberland Gap (54%).
- Another 15% of respondents reported entering via Pinnacle Road, while 12% reported using the Iron Furnace parking area.
- Due to park geography and proximity of intercept sites to entrances, the results for most recent entrance used were impacted by the volume of visitors intercepted at various sites.

Respondents were also presented with a list of locations within Cumberland Gap and asked to indicate if they had been to, or planned to visit them, that day (Figure 12).

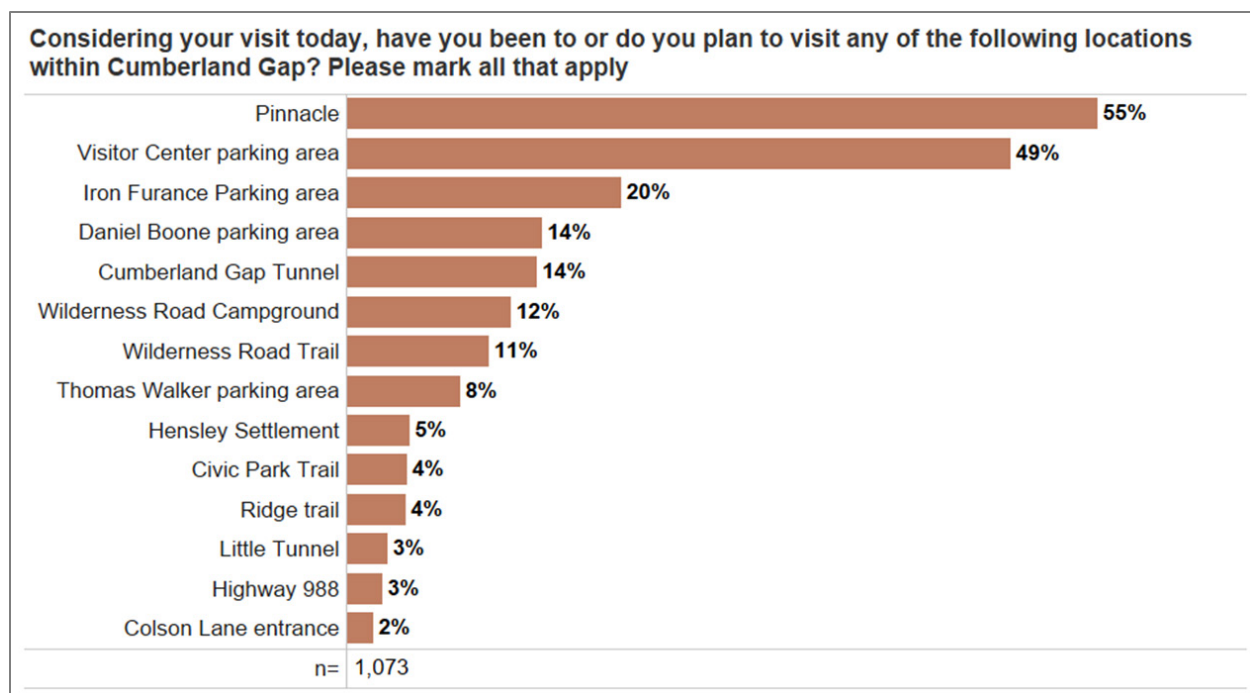


Figure 12. Park locations visited during the most recent trip to Cumberland Gap.

NPS

- The most commonly visited location in Cumberland Gap was the Pinnacle area (55% of respondents had either been there or planned to visit it on their trip), along with the Visitor Center parking area (49%), followed by the Iron Furnace parking area (20%), Daniel Boone parking area (14%) and Cumberland Gap Tunnel (14%).
- The Colson Lane entrance was the least-visited location from the list provided, with only 2% of respondents reporting having visited or planning to visit.

Question 17: Transportation

Visitors were asked about the form of transportation they used to enter Cumberland Gap on the day they were surveyed (Figure 13).

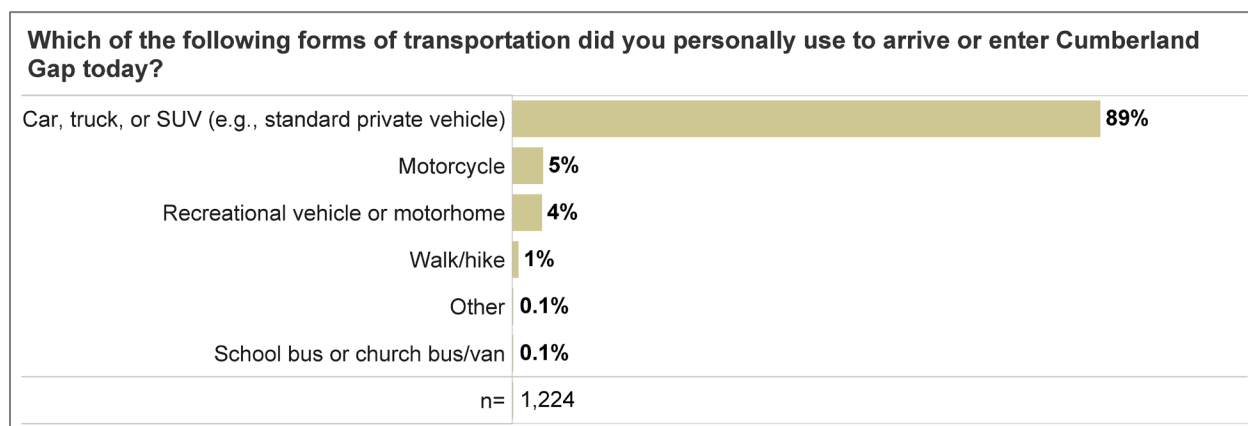


Figure 13. Form of transportation used to enter Cumberland Gap on the day of the survey.

NPS

- The majority of respondents (89%) reported that they used their car, truck, or SUV to enter Cumberland Gap on the day of the survey.
- This was followed distantly by the use of motorcycles (5%), and recreational vehicle or motorhome (4%).

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 14).

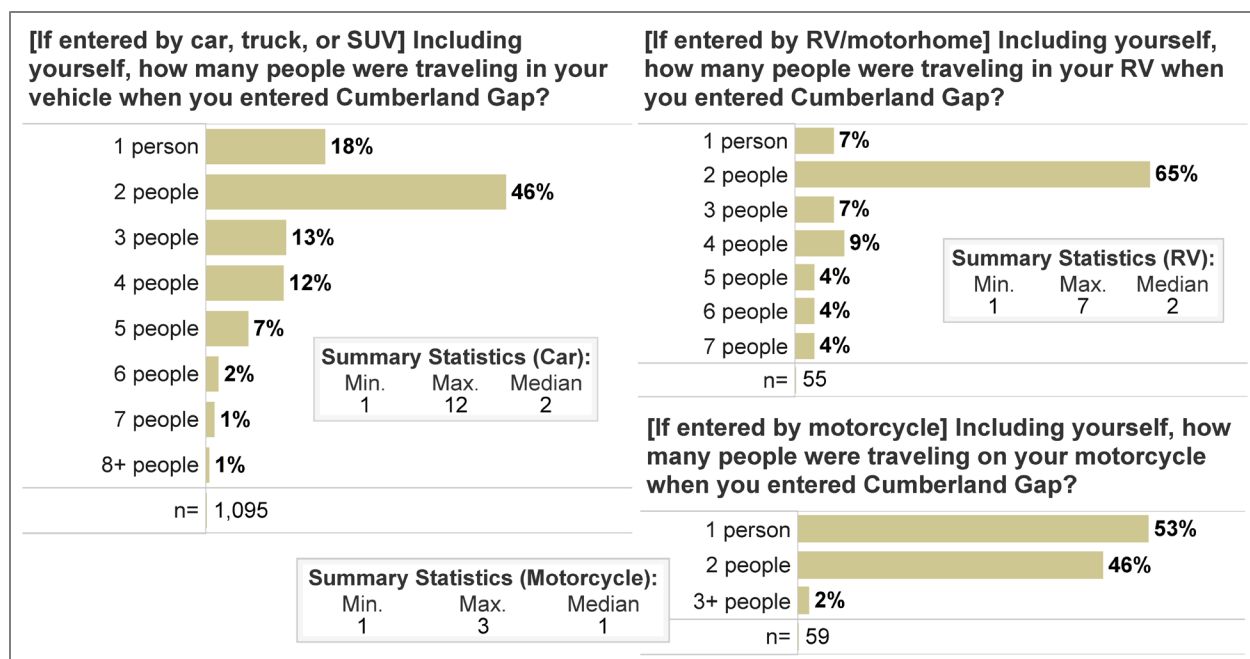


Figure 14. Number of people in or on respondent's vehicle when entering Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 10](#).

NPS

- The plurality (46%) of respondents traveling by car reported two people. The next common group size were solo travelers (18%), followed by three people (13%).
- Nearly two-thirds of respondents entering Cumberland Gap by RV/motorhome reported traveling in a group of two people (65%), followed by four people (9%), three people and solo travelers (7% each).
- Most motorcyclists (53%) were traveling on their own, though a large proportion reported riding with another passenger (46%).

Question 19: Previous Visits to Cumberland Gap

Respondents were asked if they were first time visitors to Cumberland Gap. Repeat visitors were then asked how many visits they have made to Cumberland Gap in the last 12 months and the last five years (Figure 15).

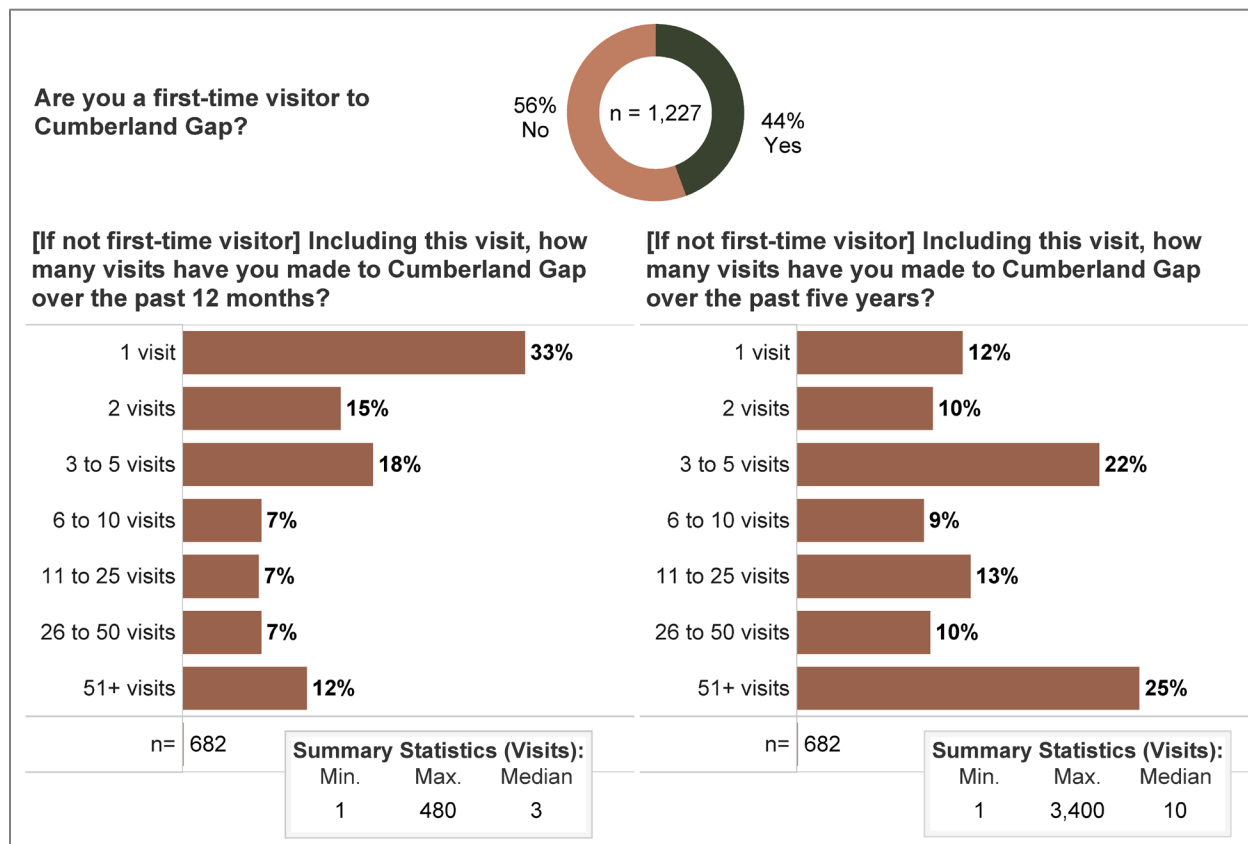


Figure 15. Previous visits to Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 11](#).

NPS

- Less than half of respondents (44%) were on their first ever trip to Cumberland Gap.
- Among the 56% of respondents who were repeat visitors, one-third (33%) were on their first visit in the past 12 months (i.e., had last visited more than a year ago).
- However, the majority of repeat visitors (88%) had visited more than one time in the past 5 years.
- The median number of visits made in the past 5 years was 10, including the current trip; 48% of repeat visitors had made more than 10 visits in the past 5 years.

Question 20: 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 16).

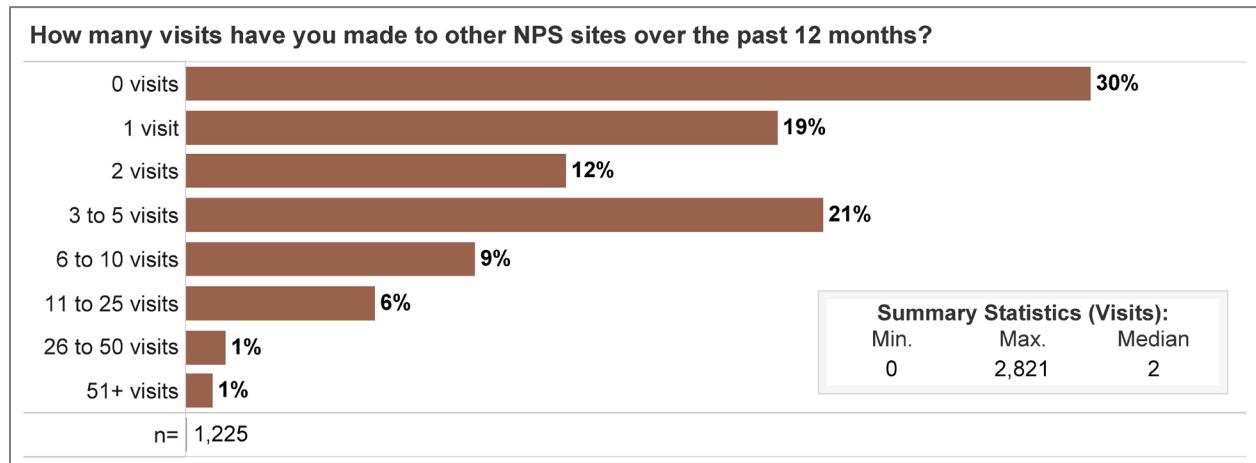


Figure 16. Visits made to other NPS sites within the past year. Tabular data shown in this figure are presented in [Appendix A, Table 12](#).

NPS

- The highest proportion of respondents (30%) had not made a single visit to another NPS site(s) in the past year.
- The median number of visits made to other NPS site(s) in the past 12 months was two, though a combined 38% had made 3 or more visits in the past year.

Follow-Up Survey Results

The following section provides results of the 392 follow-up visitor surveys received by mail-back or online following fieldwork conducted in Cumberland Gap National Historic Park in spring 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 Cumberland Gap

First, respondents were asked what sources they used to obtain information about Cumberland Gap prior to their trip, and whether they had the information they needed on their trip (Figure 17).

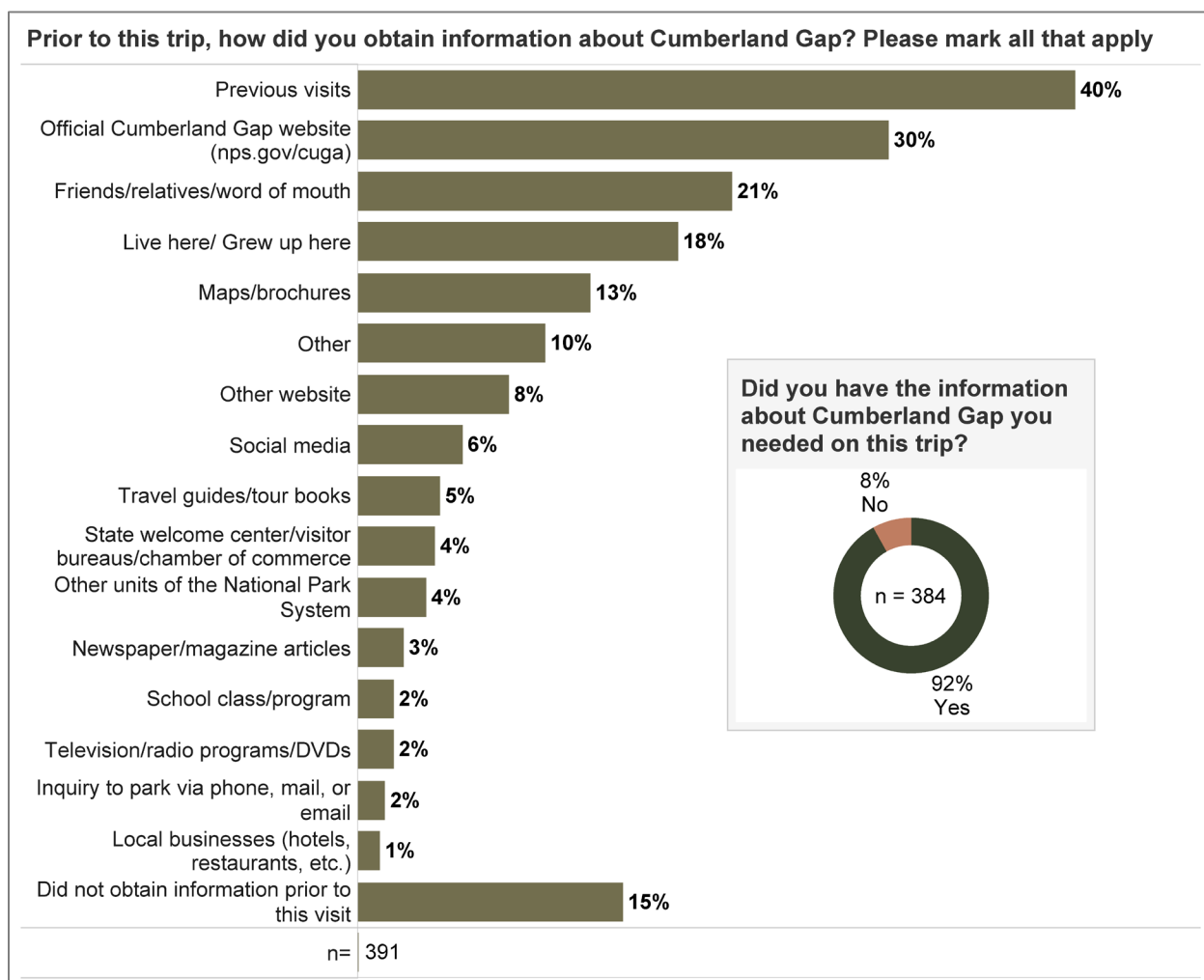


Figure 17. Sources used to obtain information about Cumberland Gap prior to the trip.

NPS

- The most used resource was previous visits, with 40% of respondents reportedly using it. The second most common source was the official Cumberland Gap website (nps.gov/cuga) (30%), followed by friends/relatives/word of mouth (21%), live there/grew up there (18%), and maps/brochures (13%).
- In a follow-up question, 92% of respondents said that they had the information about Cumberland Gap 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 Cumberland Gap on their trip (Figure 18).

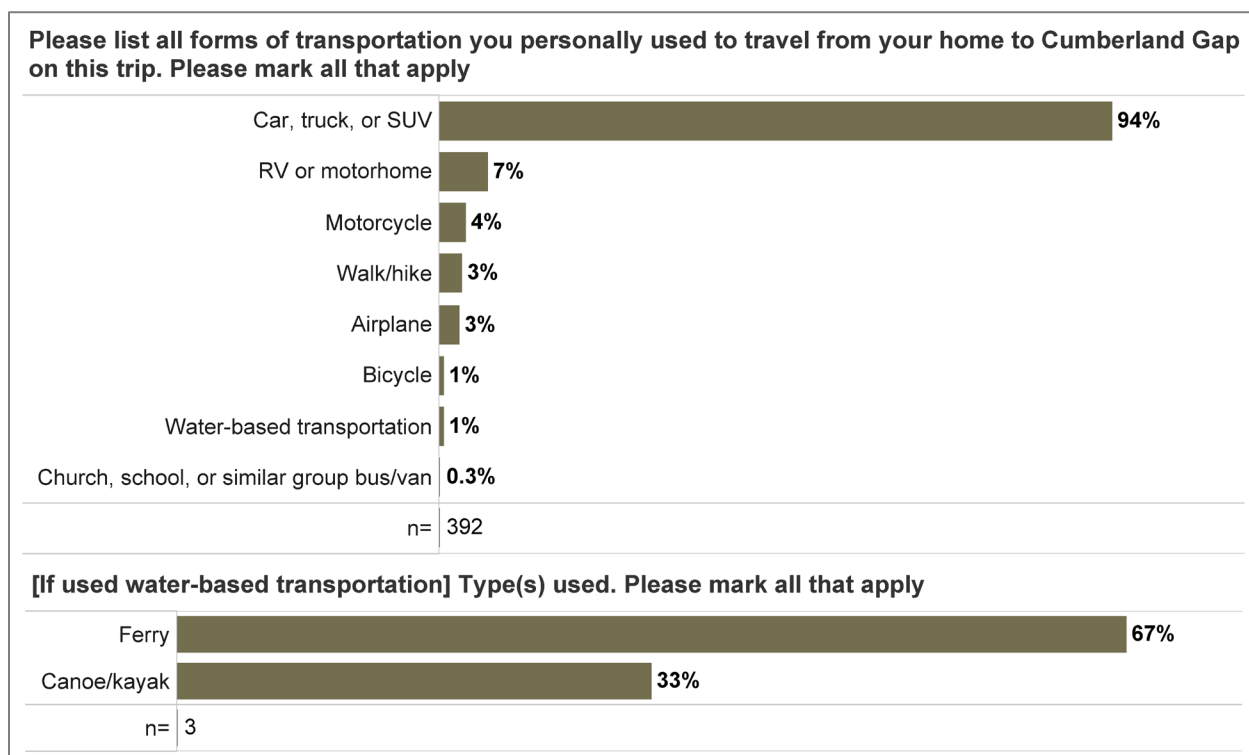


Figure 18. Forms of transportation used to travel from home to Cumberland Gap on the recent trip.

NPS

- Nearly all respondents (94%) used a personal vehicle, such as a car, truck, or SUV, at some point during their trip from home to Cumberland Gap.
- The second most common mode of travel was an RV or motorhome (7%), followed by a motorcycle (4%).

Question 4: Travel Party Composition

Respondents were asked what type of group they were with during their visit to Cumberland Gap on the day of the survey (Figure 19).

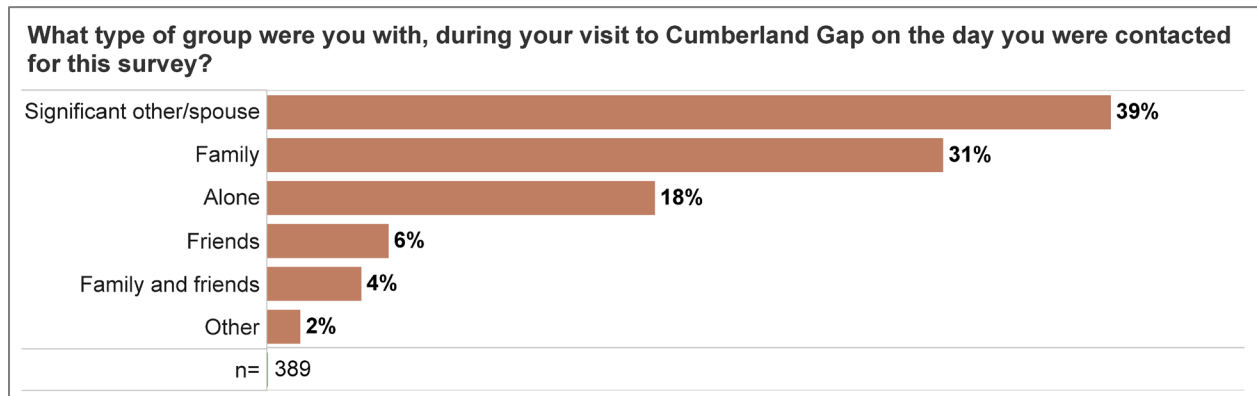


Figure 19. Travel party composition during Cumberland Gap visit.

NPS

- The highest proportion of respondents (39%) visited Cumberland Gap with their significant other or spouse on the day of the survey.
- Just under one-third of respondents (31%) explored Cumberland Gap with their family, and another 18% visited the park alone.

Question 10: Entrance Fees

Respondents were asked to indicate which type of entrance fees applied to them personally on their most recent trip to Cumberland Gap² (Figure 20).

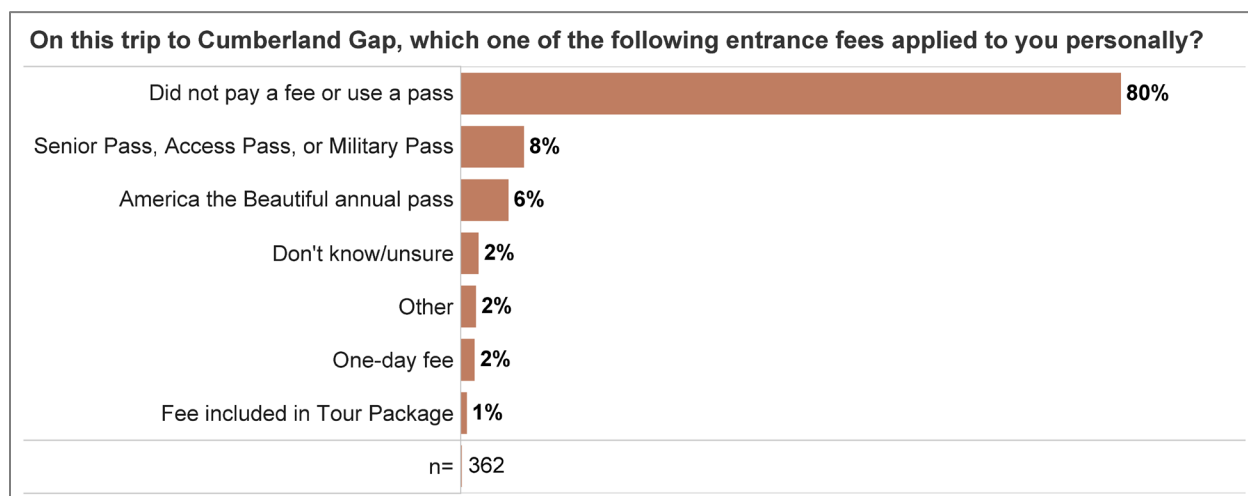


Figure 20. Entrance fees to enter Cumberland Gap on the most recent trip.

NPS

- The majority of respondents (80%) reported they did not pay a fee or use a pass while visiting Cumberland Gap, and another 8% entered using a Senior Pass, Access Pass, or Military Pass.

² Cumberland Gap 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 21).

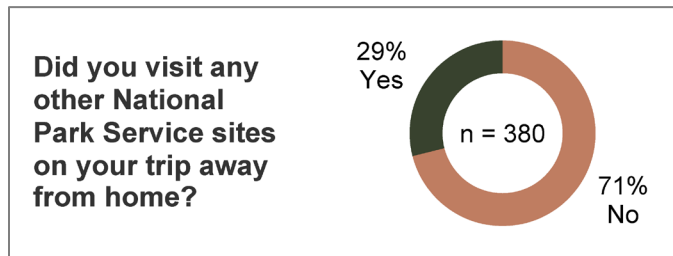


Figure 21. NPS sites visited on trip away from home.

NPS

- Under one-third (29%) of all respondents visited other NPS sites on their trip, while 71% identified Cumberland Gap 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 Cumberland Gap, and which of those was their primary activity (Figure 22).

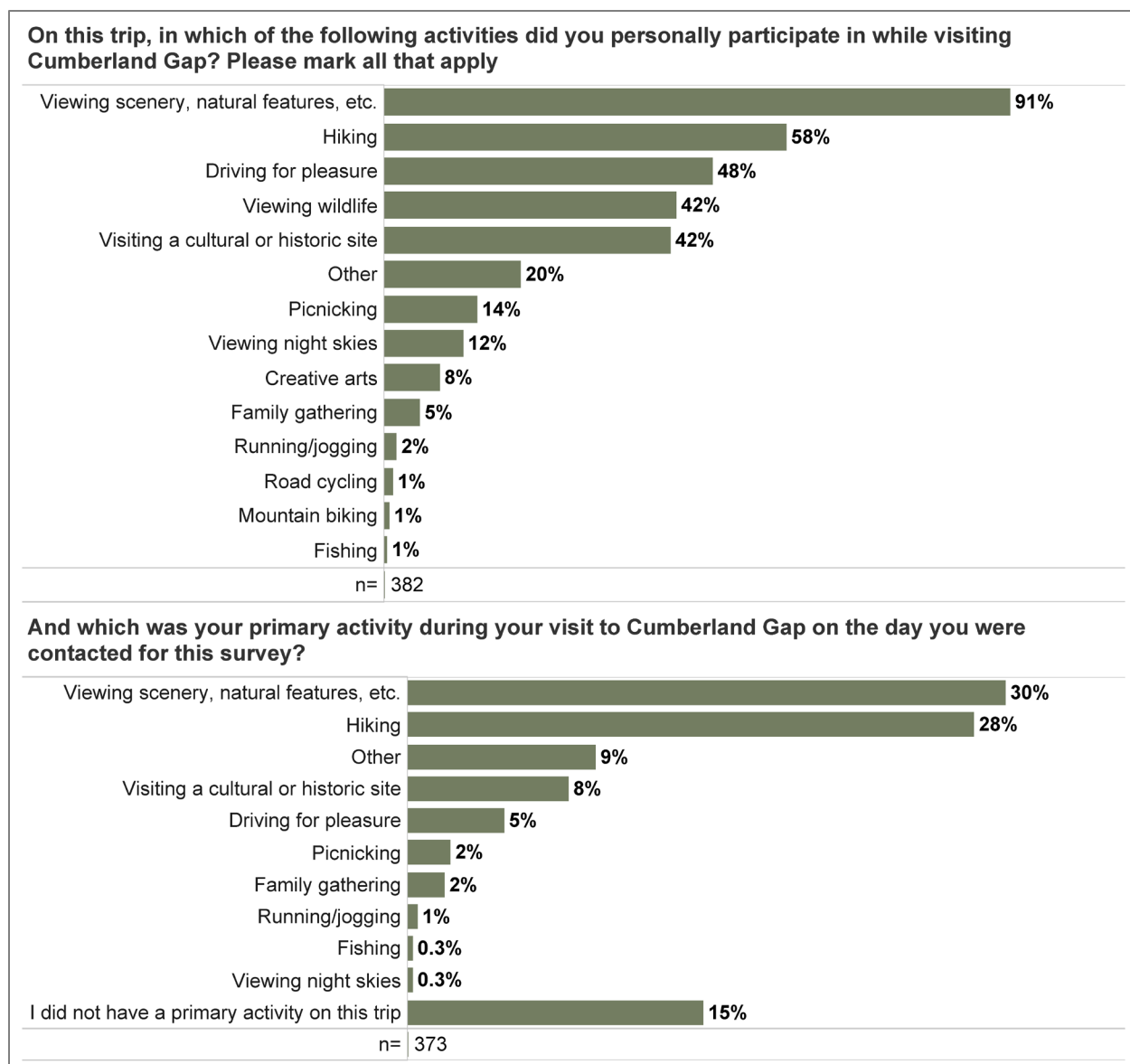


Figure 22. Participation in activities at Cumberland Gap.

NPS

- Almost all visitors reported viewing scenery, natural features, etc., (91%), while 58% reported hiking, and 48% reported driving for pleasure.
- Running/jogging, road cycling, mountain biking, and fishing were all uncommon activities (reported by 2% or fewer of respondents).
- The largest proportion of respondents (30%) reported viewing scenery, natural features, etc., as their primary activity, followed by hiking (28%).

Questions 15–16: Reasons to Visit

Survey respondents were asked to rate the importance of various reasons to visit Cumberland Gap on their trip, then asked which of those was the most important reason for them to visit Cumberland Gap (Figure 23).

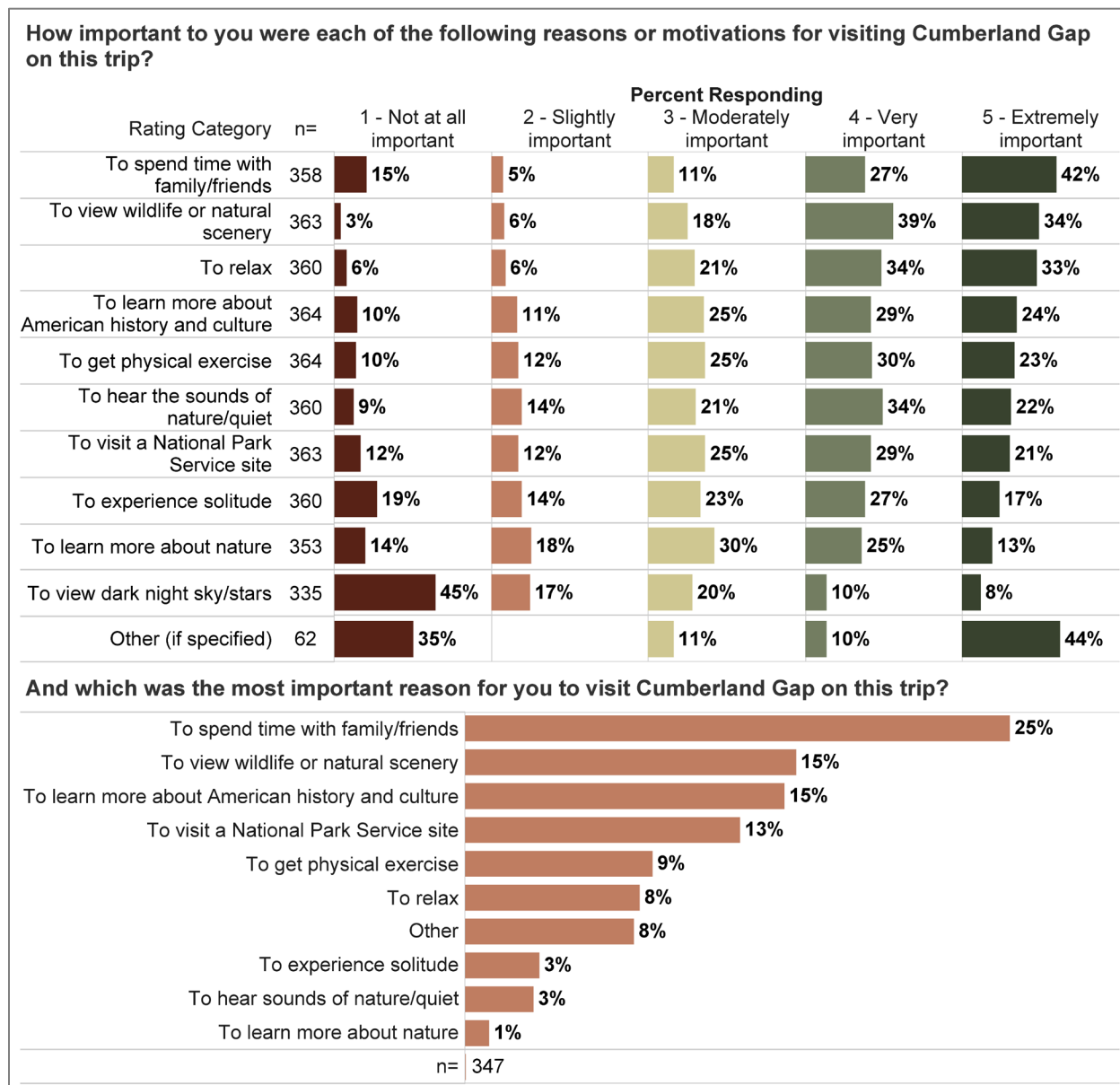


Figure 23. Reasons or motivations to visit Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 13](#).

NPS

- Visitors chose spending time with family/friends (42%) and to view wildlife or natural scenery (34%) as extremely important reasons for their trip to Cumberland Gap.

- Other important reasons were to relax and to learn more about American history and culture (33% and 24% of respondents, respectively, rated them as extremely important).
- The least important reasons were to learn more about nature and to view dark night sky/stars (only 13% and 8% of respondents, respectively, reported them as extremely important, and 14% and 45% 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 (25%), followed by viewing wildlife or natural scenery (15%), and to learn more about American history and culture (15%).

Questions 17–19: Programs, Services, and Learning

Respondents were asked to identify all programs and services that they personally participated in in Cumberland Gap during their trip (Figure 24).

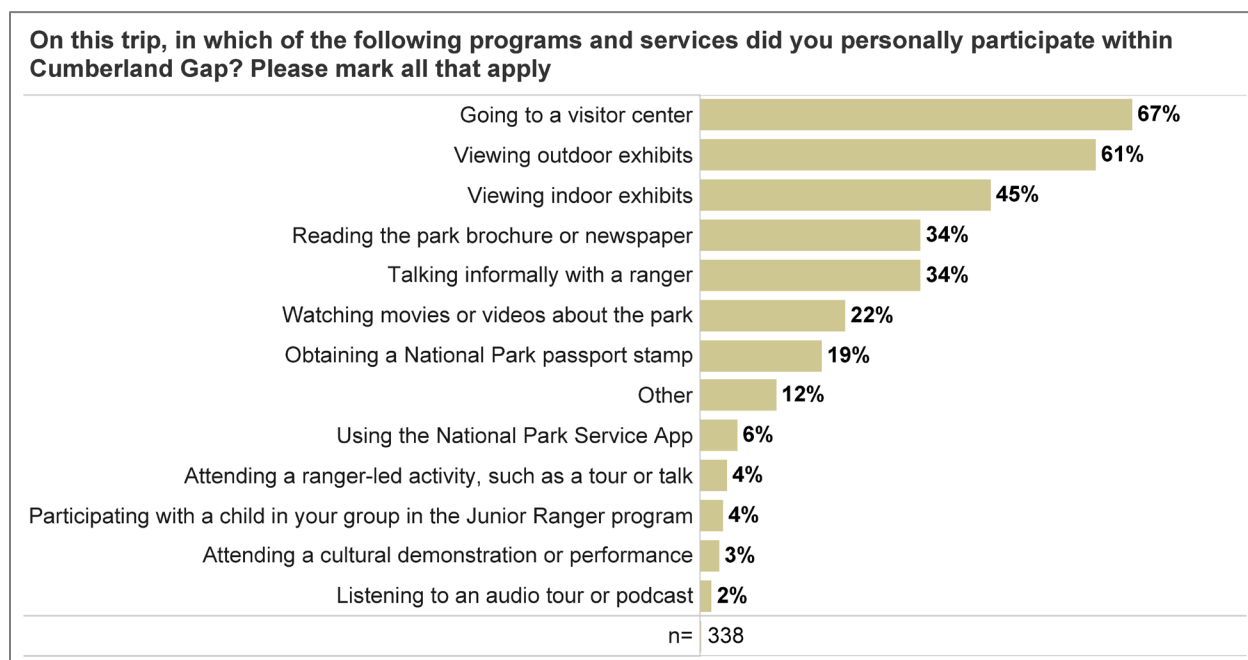


Figure 24. Programs participated while visiting Cumberland Gap.

NPS

- The two most-used programs and/or services were going to a visitor center and viewing outdoor exhibits, with a majority of respondents (at least 61%) reporting participating in each of them.
- No other programs were engaged in by over half of respondents; however, 45% reported viewing indoor exhibits.

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 25).

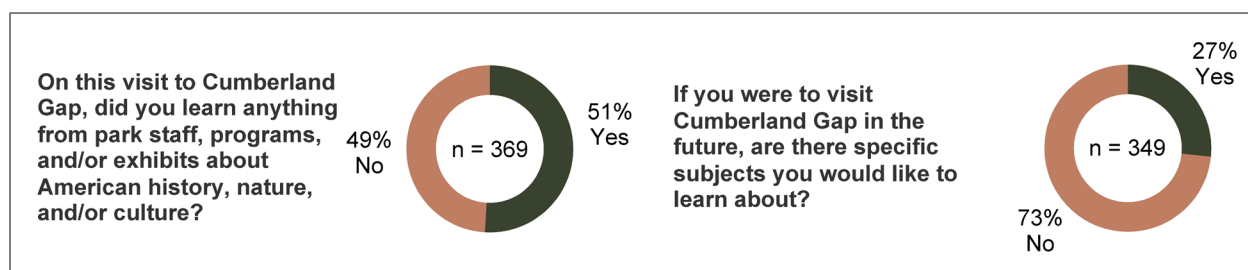


Figure 25. Learning.

NPS

- Just over half of respondents (51%) reported that they learned something from park staff, programs, and/or exhibits about American history, nature, and/or culture.
- Roughly one-quarter of respondents (27%) reported that if they were to visit Cumberland Gap 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 Cumberland Gap (Figure 26).

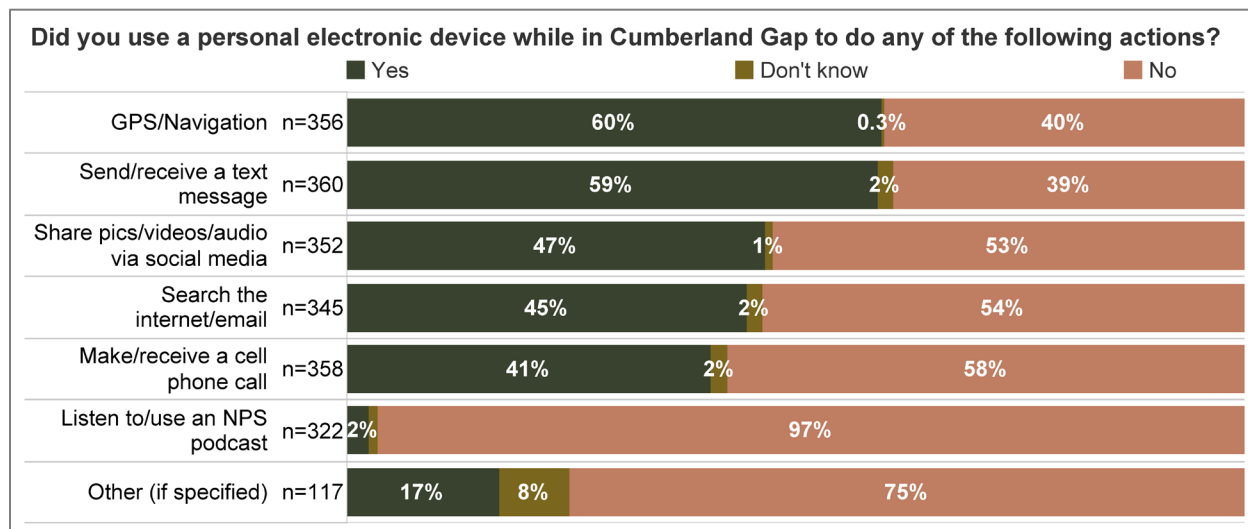


Figure 26. Use of personal electronic devices while visiting Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 14](#).

NPS

- The majority of respondents (60%) reported using GPS/navigation, as well as sending/receiving a text message (59%).
- Conversely, only 2% 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 27), and the quality of their service (Figure 28).

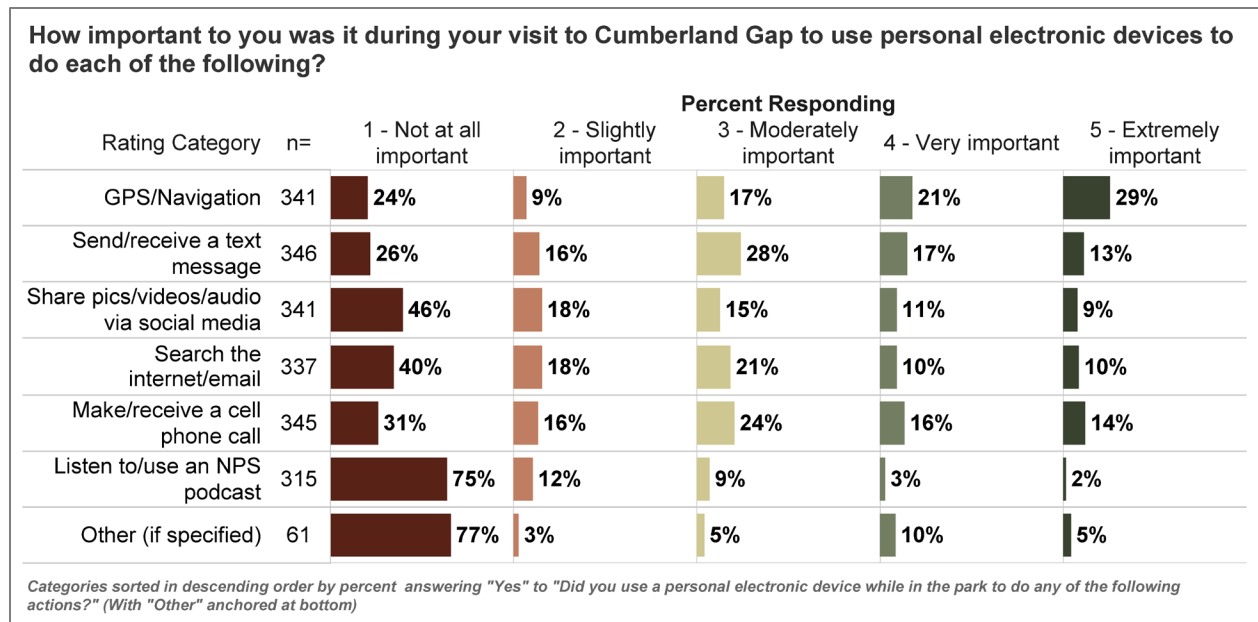


Figure 27. The importance of use of personal electronic devices while visiting Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 15](#).

NPS

- The most important device uses were GPS/navigation and sending/receiving a text message (29% and 13% of respondents, respectively, rated them as extremely important).
- Listening to and using an NPS podcast was rated as extremely important only by 2% of respondents, and not at all important by 75% of respondents.

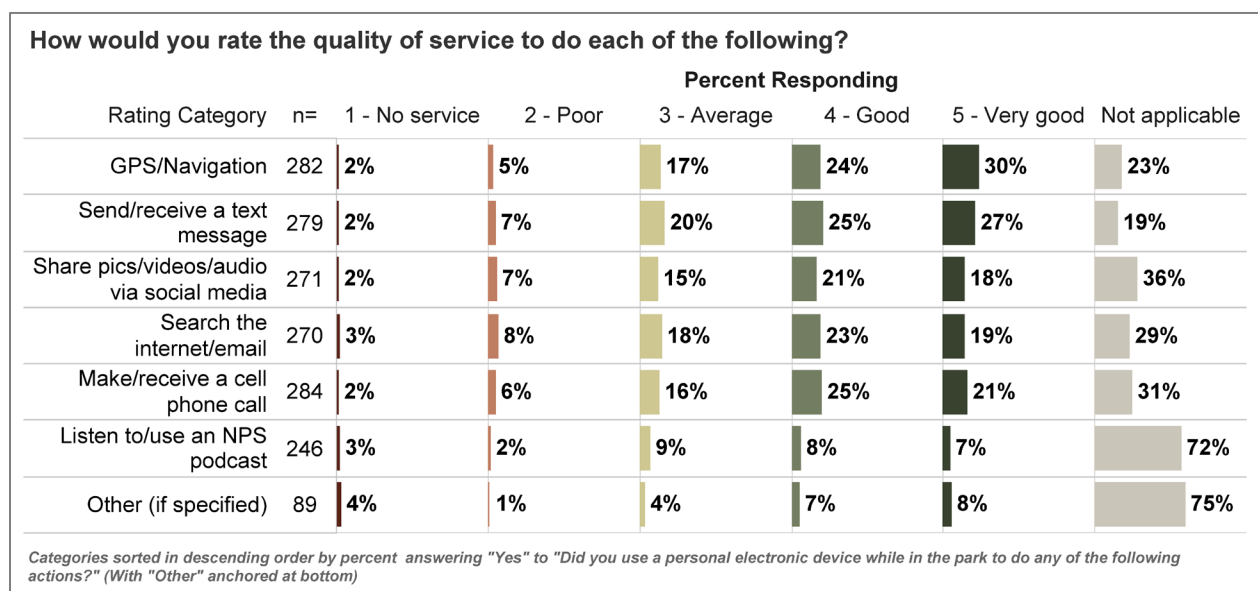


Figure 28. Quality of service of personal electronic devices while visiting Cumberland Gap. Tabular data shown in this figure are presented in [Appendix A, Table 16](#).

NPS

- GPS/navigation was rated as very good or good by 30% and 24% of respondents, respectively. Only 2% of respondents reported that they had no service for this.
- A small percentage of respondents (3% or less for all services) reported that they had no service when attempting to use one of the services from the list provided. For all the options listed, respondents were more likely to report the service as very good or not applicable as opposed to reporting no service at their desired time of use.

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 Cumberland Gap. If such condition was identified, respondents were asked to specify the type of difficulty (Figure 29).

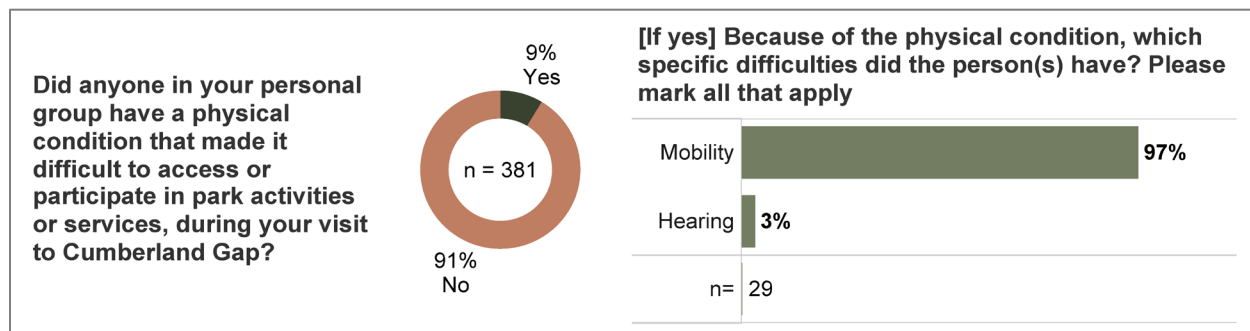


Figure 29. Physical difficulties while visiting Cumberland Gap.

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 Cumberland Gap.
- Among the 9% of visitors who identified at least one difficulty, 97% reported mobility issues in their group, with small portions also reporting hearing and/or visual difficulties.

Questions 25–28: Visitor Experience

Respondents were asked if their visit to Cumberland Gap met their expectations (Figure 30).

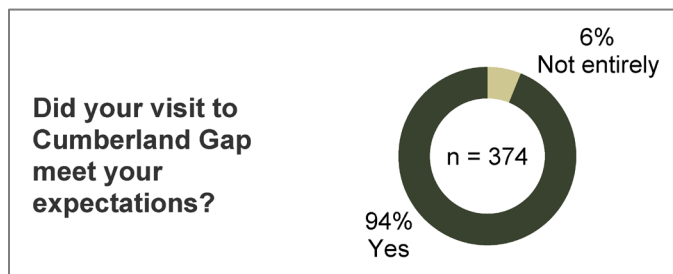


Figure 30. Meeting Cumberland Gap expectations.

NPS

- The majority of respondents (94%) reported that their visit to Cumberland Gap met their expectations, while 6% 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 Cumberland Gap 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 Cumberland Gap and asked to indicate their level of agreement or disagreement with each given statement (Figure 31).

To what extent do you agree or disagree with each of the following statements?							
Rating Category	n=	Percent Responding					Don't know / not sure
		1 - Strongly Disagree	2 - Somewhat Disagree	3 - Neither Agree nor Disagree	4 - Somewhat Agree	5 - Strongly Agree	
Cumberland Gap is a safe place to visit	375	1%	1%	3%	10%	81%	4%
Historical and cultural features in Cumberland Gap are well maintained/preserved	376	1%	2%	6%	23%	59%	10%
Natural resources in Cumberland Gap are in pristine condition	371	1%	4%	10%	29%	51%	5%
Vandalism and crime are not a problem at Cumberland Gap	374	4%	5%	14%	13%	38%	26%
Development of adjacent areas detracts from visitors' experience at Cumberland Gap	375	30%	22%	21%	9%	4%	15%
Cumberland Gap is not accessible to a person with physical disabilities	376	17%	14%	19%	10%	4%	36%
Cumberland Gap is too crowded	375	54%	24%	15%	2%	3%	2%
The entrance fee for Cumberland Gap is too high	363	53%	5%	14%	1%	1%	26%

Figure 31. Rating Cumberland Gap experience. Tabular data shown in this figure are presented in [Appendix A, Table 17](#).

NPS

- From all the statements listed, “Cumberland Gap is a safe place to visit” received the most consensus with a combined 91% of respondents saying they either strongly or somewhat agree with it. That was followed by “Historical and cultural features in Cumberland Gap are well maintained/preserved” and “Natural resources in Cumberland Gap are in pristine condition” (82% and 80% of respondents, respectively, strongly or somewhat agreed with these statements).
- Conversely, “Cumberland Gap is too crowded” and “The entrance fee for Cumberland Gap is too high” received the least support, with less than 5% of respondents either somewhat or strongly agreeing with these statements, and at least 50% of respondents strongly disagreeing with each of them.

Next, respondents were asked to rate the quality of park facilities, visitor services, and recreational opportunities in Cumberland Gap (Figure 32).

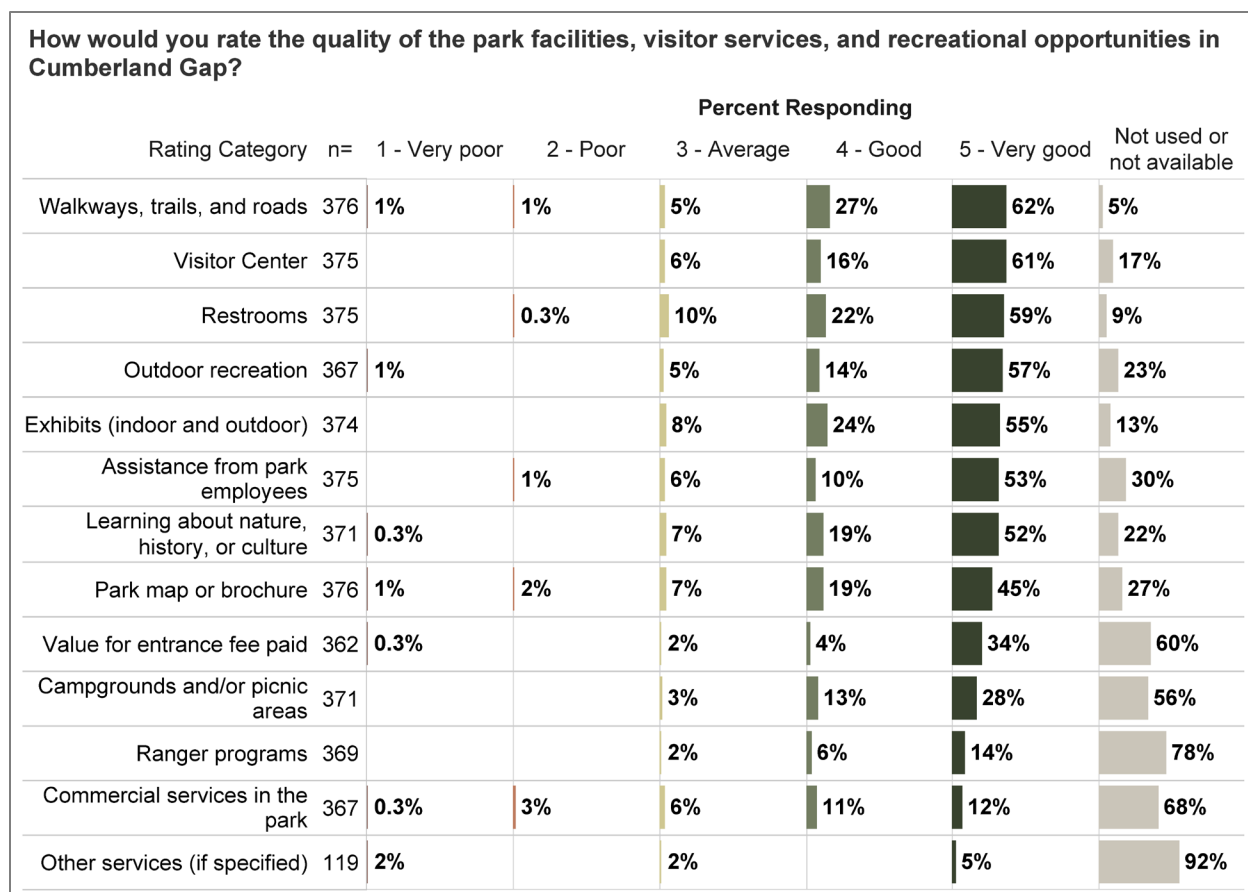


Figure 32. Rating the quality of Cumberland Gap facilities, visitor services, and recreational opportunities. Tabular data shown in this figure are presented in [Appendix A, Table 18](#).

NPS

- Over half of visitors (ranging from 52% to 62%) rated walkways, trails and roads, the visitor center, restrooms, outdoor recreation, exhibits (indoor and outdoor), assistance from park employees, and learning about nature, history, or culture as very good.
- Conversely, fewer than half of visitors rated the park map or brochure, value for entrance fee paid, campgrounds and/or picnic areas, ranger programs, and commercial services in the park as very good. For 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 33).

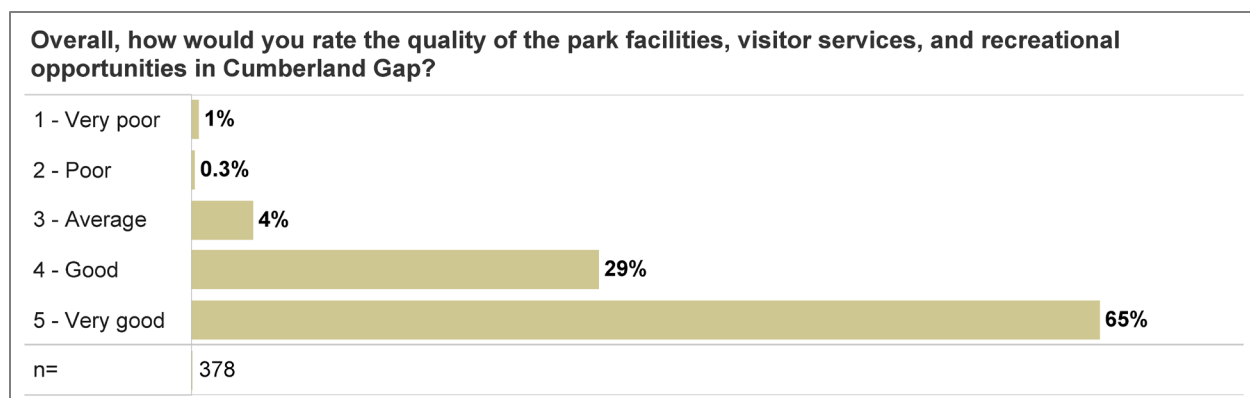


Figure 33. Rating overall quality of Cumberland Gap facilities, visitor services, and recreational opportunities.

NPS

- In general, roughly two-thirds of respondents (65%) rated the quality of the park facilities, visitor services, and recreational opportunities in Cumberland Gap as very good, and another 29% rated them as good.
- Just over 5% of respondents rated the quality of park facilities, visitor services, and recreational opportunities 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 34 depicts descriptive statistics for respondent gender, age, and education.

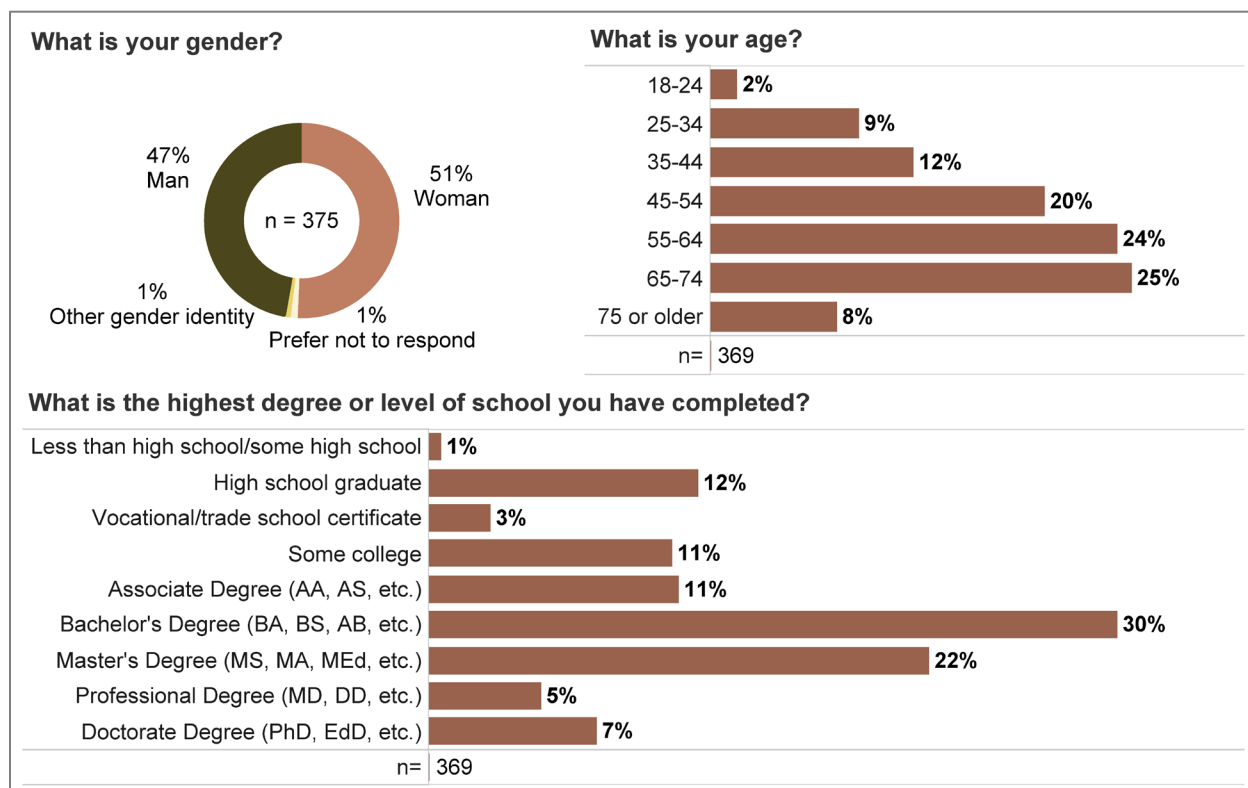


Figure 34. Respondent demographics: gender, age, and level of education.

NPS

- Follow-up survey respondents were slightly more likely to be women than men, though the sample was relatively balanced (51% vs. 47%). Another 1% had another gender identity, while 1% preferred not to disclose their gender identity.
- The most common age categories were 64–74 years old (25%), 55–64 years old (24%), and 45–54 years old (20%). The least represented age group were 18–24 years old (only 2% of the participants surveyed).
- Most survey respondents were highly educated, with a combined 75% having some college degree, and roughly one-third (34%) holding a master's degree or advanced degree.

Respondents were also asked to identify their race(s) and if they were of Hispanic, Latino or Spanish origin (Figure 35).

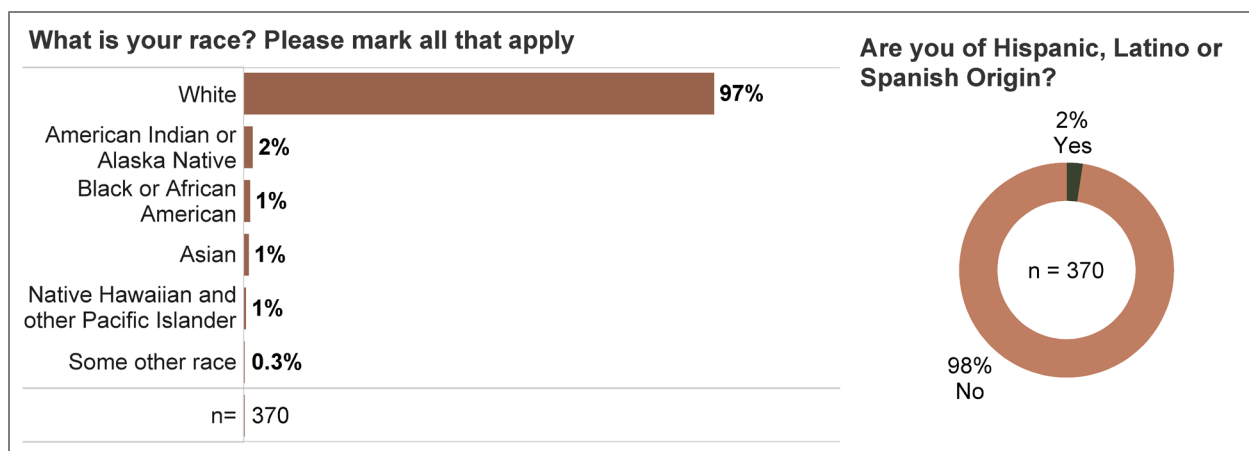


Figure 35. Respondent demographics: race and ethnicity.

NPS

- The majority of respondents (97%) were White, while 2% were American Indian or Alaska Native.
- Most respondents (98%) 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 36).

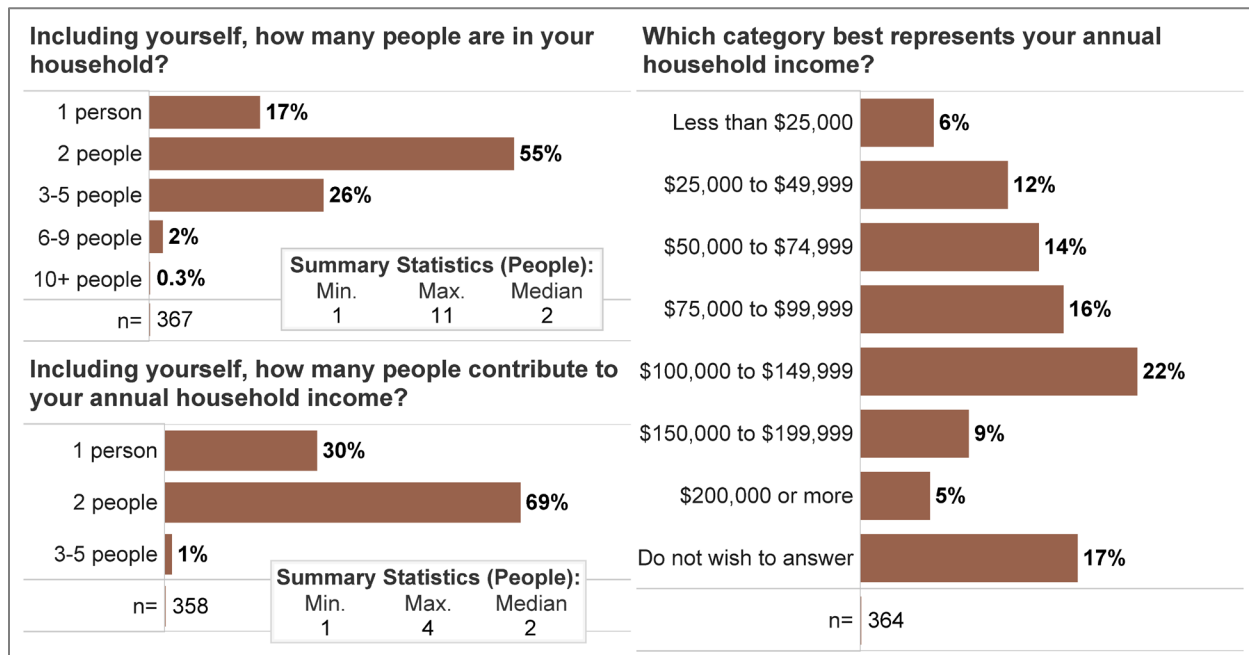


Figure 36. Household demographics: annual household income and household size. Tabular data shown in this figure are presented in [Appendix A, Table 19](#).

NPS

- The majority of respondents (55%) had two people in their household, followed by 3–5 people (another 26%).
- Roughly one-fifth of respondents (22%) reported that their annual household income was between \$100,000 and \$149,999, and another 16% earned between \$75,000 and \$99,999.
- Most respondents (69%) came from a dual-income household.

Finally, respondents were asked about their language preference (Figure 37).

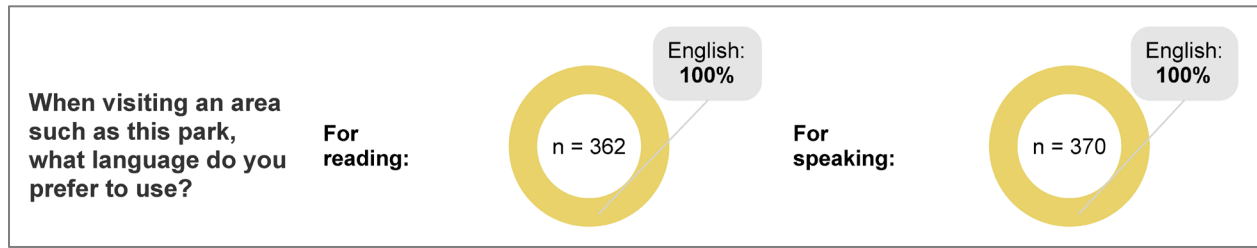


Figure 37. Respondent's language preference.

NPS

- All respondents who answered the question (100%) preferred to use English both for reading and speaking when visiting an area such as Cumberland Gap.

Literature Cited

National Park Service (NPS). 2022. 2022 Socioeconomic Monitoring of Cumberland Gap National Historic Park: Visitor Intercept and Post-Trip Surveys.
<https://irma.nps.gov/DataStore/Reference/Profile/2318660>

Appendix A: Accessible Tables

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

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

Accommodation Type	n	Min.	Max.	Median
Backcountry Camping in Cumberland Gap	10	1	4	2
Camping in Cumberland Gap	128	1	14	3
Camping outside Cumberland Gap	14	1	13	2
Lodging outside Cumberland Gap	152	1	40	2
Unpaid accommodations	62	1	9	3

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

Group Composition	n	Min.	Max.	Median
Adults	1227	1	54	2
Children	1227	0	8	0

Table 10. Data from [Figure 14](#). Number of people in respondent's vehicle when entering Cumberland Gap.

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 Cumberland Gap?	1095	1	12	2
[If entered by RV/motorhome] Including yourself, how many people were traveling in your RV when you entered Cumberland Gap?	55	1	7	2
[If entered by motorcycle] Including yourself, how many people were traveling on your motorcycle when you entered Cumberland Gap?	59	1	3	1

Table 11. Data from [Figure 15](#). Previous visits to Cumberland Gap.

Question	n	Min.	Max.	Median
[If not first-time visitor] Including this visit, how many visits have you made to Cumberland Gap over the past 12 months?	682	1	480	3
[If not first-time visitor] Including this visit, how many visits have you made to Cumberland Gap over the past five years?	682	1	3400	10

Table 12. Data from [Figure 16](#). 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?	1225	0	2821	2

Table 13. Data from [Figure 23](#). Reasons or motivations to visit Cumberland Gap.

Rating Category	n
To visit a National Park Service site	363
To experience solitude	360
To hear the sounds of nature/quiet	360
To learn more about nature	353
To learn more about American history and culture	364
To spend time with family/friends	358
To get physical exercise	364
To view wildlife or natural scenery	363
To relax	360
To view dark night sky/stars	335
Other (if specified)	62

Table 14. Data from [Figure 26](#). Use of personal electronic devices while visiting Cumberland Gap.

Device Use	n
Make/receive a cell phone call	358
Send/receive a text message	360
Search the internet/email	345
GPS/Navigation	356
Share pics/videos/audio via social media	352
Listen to/use an NPS podcast	322
Other (if specified)	117

Table 15. Data from [Figure 27](#). The importance of use of personal electronic devices while visiting Cumberland Gap.

Device Use	n
Make/receive a cell phone call	345
Send/receive a text message	346
Search the internet/email	337
GPS/Navigation	341
Share pics/videos/audio via social media	341
Listen to/use an NPS podcast	315
Other (if specified)	61

Table 16. Data from [Figure 28](#). Quality of service of personal electronic devices while visiting Cumberland Gap.

Device Use	n
Make/receive a cell phone call	284
Send/receive a text message	279
Search the internet/email	270
GPS/Navigation	282
Share pics/videos/audio via social media	271
Listen to/use an NPS podcast	246
Other (if specified)	89

Table 17. Data from [Figure 31](#). Rating Cumberland Gap experience.

Rating Category	n
Cumberland Gap is a safe place to visit	375
Cumberland Gap is too crowded	375
Natural resources in Cumberland Gap are in pristine condition	371
The entrance fee for Cumberland Gap is too high	363
Vandalism and crime are not a problem at Cumberland Gap	374
Cumberland Gap is not accessible to a person with physical disabilities	376
Historical and cultural features in Cumberland Gap are well maintained/preserved	376
Development of adjacent areas detracts from visitors' experience at Cumberland Gap	375

Table 18. Data from [Figure 32](#). Rating the quality of Cumberland Gap facilities, visitor services, and recreational opportunities.

Rating Category	n
Visitor Center	375
Exhibits (indoor and outdoor)	374
Restrooms	375
Walkways, trails, and roads	376
Campgrounds and/or picnic areas	371
Assistance from park employees	375
Park map or brochure	376
Ranger programs	369
Value for entrance fee paid	362
Commercial services in the park (food, lodging, gifts, rental, etc.)	367
Other services (if specified)	119
Learning about nature, history, or culture	371
Outdoor recreation (sightseeing, camping, bicycling, boating, hiking, etc.)	367

Table 19. Data from [Figure 36](#). Household demographics: annual household income and household size.

Question	n	Min.	Max.	Median
Including yourself, how many people are in your household?	367	1	11	2
Including yourself, how many people contribute to your annual household income?	358	1	4	2

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Natural Resource Stewardship and Science

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