



# 2022 Arches National Park Visitor Spending and Experience Study

*Final Report on 2022 Data Collection*



**ON THE COVER**

Visitors at Delicate Arch  
NPS/Veronica Verdin

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# 2022 Arches National Park Visitor Spending and Experience Study

*Final Report on 2022 Data Collection*

Prepared by:  
The Otak Team



Prepared for:  
Arches National Park



March 2023

U.S. Department of the Interior  
National Park Service

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# Contents

	Page
Figures.....	v
Tables.....	viii
Introduction.....	1
Organization of the Report .....	2
Presentation of the Visitor Use Survey Results.....	3
Methods.....	5
Survey Method .....	5
Sampling Effort .....	6
Survey Instrument Design .....	6
Sampling Procedures.....	7
Sampling Results .....	8
Non-Response Bias .....	9
Vehicle type (commercial versus private).....	10
Number of adults in group.....	10
Number of children in group .....	11
First-time visitor to Arches National Park.....	11
Visit to Arches National Park was primary purpose of trip .....	12
Multi-day visit to Arches National Park.....	13
Hours expected to spend in Arches National Park .....	14
Limitations.....	14
Special Conditions.....	15
Results.....	17
Parkwide Visitor Survey – On-Site Intercept Survey.....	18
Visitor residency.....	18
Trip characteristics and travel planning .....	24
Visitation history .....	59

# Contents (continued)

	Page
Parkwide Visitor Survey – Mail-Back Survey .....	62
Trip description .....	62
Arches National Park visit.....	71
Arches National Park management .....	75
Visitor background information .....	89
Visitor comments.....	102
Literature Cited .....	103

# Figures

	Page
<b>Figure 1.</b> Example figure .....	3
<b>Figure 2.</b> Roadway intercept location for survey administration.....	7
<b>Figure 3.</b> Local or non-local residence.....	18
<b>Figure 4.</b> Map of Arches National Park and local area .....	19
<b>Figure 5.</b> Proportion of U.S. visitors by state of residence .....	21
<b>Figure 6.</b> Purpose of overall trip away from home .....	24
<b>Figure 7.</b> Role of park visit in trip away from home.....	25
<b>Figure 8.</b> Primary reason for visiting the local area .....	26
<b>Figure 9.</b> Expected number of days spent in the park or in the local area .....	27
<b>Figure 10.</b> Visitors who stayed overnight in the local area.....	28
<b>Figure 11.</b> Accommodations for nights spent in Arches National Park or the local area .....	29
<b>Figure 12.</b> Nights spent camping in the backcountry.....	30
<b>Figure 13.</b> Nights spent camping in a campground in Arches National Park.....	31
<b>Figure 14.</b> Nights spent camping outside of Arches National Park in the local area.....	32
<b>Figure 15.</b> Nights spent lodging outside of Arches National Park in the local area .....	33
<b>Figure 16.</b> Nights spent in unpaid accommodations. ....	34
<b>Figure 17.</b> Arrival time on first day of visit .....	35
<b>Figure 18.</b> Anticipated departure time on last day of visit.....	36
<b>Figure 19.</b> Closest communities to visitors' accommodations .....	37
<b>Figure 20.</b> Number of adults in group.....	38
<b>Figure 21.</b> Number of children in group .....	39
<b>Figure 22.</b> Visitor group size.....	40
<b>Figure 23.</b> Number of people splitting trip expenses .....	41
<b>Figure 24.</b> Transportation used to enter park .....	42
<b>Figure 25.</b> Number of passengers in vehicle.....	43
<b>Figure 26.</b> Timing of decision to visit Arches National Park .....	44

## Figures (continued)

	Page
<b>Figure 27.</b> Pilot timed-entry system awareness.....	45
<b>Figure 28.</b> Timed-entry reservation holders.....	46
<b>Figure 29.</b> Secured reservation for preferred day and time.....	47
<b>Figure 30.</b> Actions taken by visitors to secure a timed-entry reservation.....	48
<b>Figure 31.</b> Tried to secure a timed-entry reservation .....	49
<b>Figure 32.</b> Reason for not being able to secure a timed-entry reservation.....	50
<b>Figure 33.</b> Reason for not trying to secure a timed-entry reservation.....	51
<b>Figure 34.</b> Plan to visit Arches National Park on multiple days .....	52
<b>Figure 35.</b> Number of hours visiting the park by groups who planned to spend less than 24 hours in the park.....	53
<b>Figure 36.</b> Number of days visiting the park by groups who spent 24 hours or more in the park.....	54
<b>Figure 37.</b> Number of different days visiting the park.....	55
<b>Figure 38.</b> Plans for park re-entry on the day contacted .....	56
<b>Figure 39.</b> Effect of possible crowding on trip plans .....	58
<b>Figure 40.</b> First-time visitors.....	59
<b>Figure 41.</b> Number of previous visits in the last 12 months .....	60
<b>Figure 42.</b> Number of previous visits in the past five years.....	61
<b>Figure 43.</b> Transportation used to travel to park.....	62
<b>Figure 44.</b> Visitor group type.....	63
<b>Figure 45.</b> Visitors reporting no alternative recreation site.....	64
<b>Figure 46.</b> Distance of alternative recreation site from respondents' homes.....	66
<b>Figure 47.</b> Other nearby parks visited while on this trip away from home.....	67
<b>Figure 48.</b> Communities visited while in the local area.....	68
<b>Figure 49.</b> Number of days spent in the park or in the local area .....	69
<b>Figure 50.</b> Number of different days entering Arches National Park .....	70

**Figures (continued)**

	Page
<b>Figure 51.</b> Participation in activities on this trip.....	74
<b>Figure 52.</b> Visitors with physical conditions.....	77
<b>Figure 53.</b> Specific difficulties encountered by visitor group member(s).....	79
<b>Figure 54.</b> Mail-back survey proportion of U.S. visitors by state of residence .....	90
<b>Figure 55.</b> Respondent age.....	92
<b>Figure 56.</b> Respondent gender.....	93
<b>Figure 57.</b> Respondent ethnicity .....	94
<b>Figure 58.</b> Respondent race.....	95
<b>Figure 59.</b> Respondent level of education.....	96
<b>Figure 60.</b> Respondent household income .....	97
<b>Figure 61.</b> Contributors to household income.....	98
<b>Figure 62.</b> Respondent household size.....	99
<b>Figure 63.</b> Preferred speaking language.....	100
<b>Figure 64.</b> Preferred reading language .....	101

# Tables

	Page
<b>Table 1.</b> Sampling effort.....	6
<b>Table 2.</b> Initial contact group vehicle type comparison between mail-back respondents and non-respondents .....	10
<b>Table 3.</b> Number of adult group members comparison between mail-back respondents and non-respondents .....	10
<b>Table 4.</b> Number of child group members comparison between mail-back respondents and non-respondents .....	11
<b>Table 5.</b> First-time visitor comparison between mail-back respondents and non-respondents .....	11
<b>Table 6.</b> Primary trip purpose comparison between mail-back respondents and non-respondents .....	12
<b>Table 7.</b> Overnight stay comparison between mail-back respondents and non-respondents.....	12
<b>Table 8.</b> Muti-day park visit comparison between mail-back respondents and non-respondents .....	13
<b>Table 9.</b> Number of days in Arches National Park comparison between mail-back respondents and non-respondents .....	13
<b>Table 10.</b> Muti-day park visit comparison between mail-back respondents and non-respondents .....	14
<b>Table 11.</b> United States visitors by state of residence.....	20
<b>Table 12.</b> International visitors by country of residence.....	22
<b>Table 13.</b> Importance of visiting park destinations .....	72
<b>Table 14.</b> Perceived condition of park resources .....	76
<b>Table 15.</b> Facilities availability .....	80
<b>Table 16.</b> Use of coping strategies for crowding.....	81
<b>Table 17.</b> Frequency of coping strategy use.....	83
<b>Table 18.</b> Hiking experience .....	85
<b>Table 19.</b> Actions to secure an advance reservation .....	86

## Tables (continued)

	Page
<b>Table 20.</b> Support or opposition to management practices .....	88
<b>Table 21.</b> U.S. state of residence: Mail-back survey .....	89
<b>Table 22.</b> Country of residence: Mail-back survey .....	91

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## Introduction

Arches National Park (ARCH) is a part of the National Park Service's (NPS) Southeast Utah Group (SEUG). Visitation to ARCH has recently experienced an unprecedented increase. While historical trends have demonstrated a steady increase in annual visitation, the past decade has generated an 80 percent increase in annual recreation visits. This change in visitation also highlights expansions in the peak season to begin earlier in the spring and extend further into the fall. ARCH is currently considering various visitor use management strategies, and during the primary visitation season of 2022, managed visitor entries under a pilot timed-entry system.

The park would like to learn more about park visitors and their visitation behavior in relation to increasing visitor use and potentially changing visitation patterns, and under different visitor use management conditions to inform visitor management decisions and strategies. The park has commissioned this visitor survey to collect information from visitors about these topics while visitation is being managed under the pilot timed-entry system.

In particular, ARCH managers require this information collection to determine current utilization and perception of park resources, operations, and issues that may exist due to increased visitation, and under the pilot timed-entry managed access system. A visitor survey was developed to gather the following information:

- Collect visitor spending profiles to enable a better understanding of how and where visitors spend their money while travelling, thus providing the park and local officials with useful information about spending and the potential impacts of management decisions that may alter visitor spending. Results of spending profiles are not included in this report. They are included in Visitor Spending Effects reports generated by the Social Science Program of the NPS;
- Collect trip characteristics to enable understanding of travel demand for the park and its relationship to the region;
- Collect visitor characteristics to enable understanding of visitors and how management decisions may impact sub-populations of visitors;
- Collect information about visitors' experiences with the pilot timed-entry system; and
- Collect visitor perceptions of the park to identify visitor perceived conditions on the ground, allowing the park to consider potential implications of management decisions on visitor perceptions.

The research conducted to achieve these study purposes and presented in this report includes a visitor survey of park visitors to ARCH in the summer season of 2022.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Organization of the Report

The report is organized into four sections.

**Introduction:** This section discusses the purpose and intent of the study, the organization of this report, and general information about how to interpret study results.

**Methods:** This section discusses the procedures, and special conditions that may affect the results of the study.

**Results:** This section provides summary information for questions in the study questionnaire organized by topic area in two subsections. The first subsection presents results from the on-site intercept survey including information about visitor residency, trip purpose and travel planning, lodging, group characteristics, and transportation modes. The second subsection presents results from a mail-back survey and includes information about trip characteristics, trip motivations, visit experience, and visitor background characteristics and demographics.

**Appendices:** Delivered in a separate companion document.

- Appendix 1. *On-site Questionnaire.* An example of the on-site questionnaire using Qualtrics software to digitally record visitor responses.
- Appendix 2. *Mail-back Questionnaire.* An example of the printed mail-back questionnaire given to visitors on site for return in the mail.
- Appendix 3. *Visitor Survey: Verbatim Responses to On-site Survey Open-ended Questions.* Visitor responses to open-ended questions.
- Appendix 4. *Visitor Survey: Verbatim Responses to Mail-back Survey Open-ended Questions.* Visitor responses to open-ended questions.
- Appendix 5. *Visitor Survey: Descriptive Statistics.* Descriptive statistics for those variables for which measures of central tendency can be computed.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Presentation of the Visitor Use Survey Results

Visitor use survey results are represented in the form of figures (see Figure 1 below), tables, and/or text.

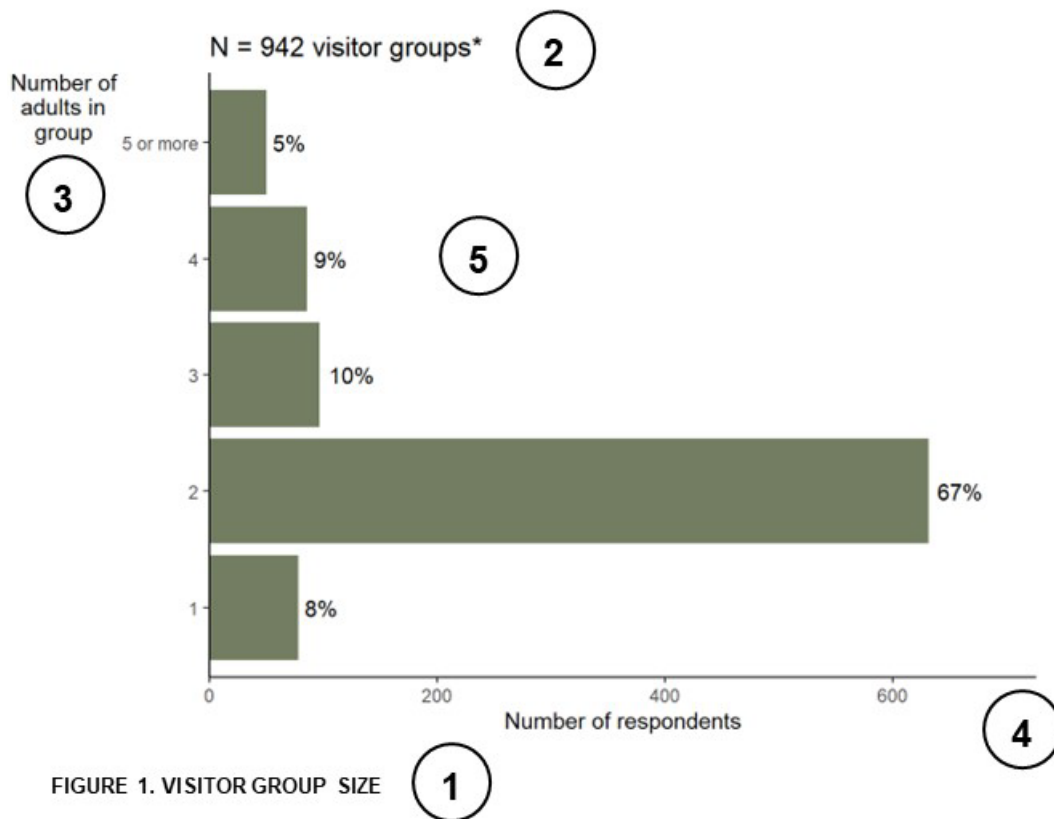
### *SAMPLE ONLY*

1. The figure caption describes the figure's information.
2. Listed above the figure, the "N" shows the number of individuals or visitor groups responding to the question. When the number of individuals or visitor groups is less than 30 the word "CAUTION" is shown on the figure or table to indicate the results are statistically unreliable due to low sample size.

*\* appears when total percentages do not equal 100 due to rounding.*

*\*\* appears when total percentages do not equal 100 because visitors could select more than one answer.*

3. Vertical information (y-axis) describes the response categories.
4. Horizontal information (x-axis) shows the percentage of responses in each category.
5. The proportion of visitor groups/visitors who selected each category.



**Figure 1.** Example figure

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

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\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Methods

The study was designed to collect visitor spending profiles, visitor and trip characteristics, and understand visitor perceptions of the park and park management. This section of the report describes the methods used to accomplish each of these objectives.

### Survey Method

The visitor survey was administered in ARCH. The survey used a two-phase survey methodology to elicit responses from a representative sample of visitors to ARCH. The survey included an on-site intercept survey administered on tablet computers, and a mail-back survey to obtain information about respondents' full trip. Visitors who completed the on-site intercept survey were asked to take a printed mail-back follow-up survey. Individuals who agreed to complete the mail-back questionnaire were asked to provide their name and mailing address following the principles outlined in Don A. Dillman's book *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method* (2014). The mail-back survey method included three phases: 1) on-site distribution of a booklet-sized questionnaire, 2) a color-picture reminder postcard mailing, and 3) up to two replacement mailings of the booklet-sized questionnaire for those participants that had not yet returned a completed questionnaire. Visitors were asked to complete the questionnaire after their trip to the park and to return the questionnaire by mail using the self-addressed postage-paid envelope provided. International visitors were asked to mail their completed questionnaires before leaving the country.

Approximately one week after field survey administration concluded, all mail-back survey participants were sent a color picture-postcard thanking them for participating in the study and reminding them to complete and return the questionnaire. Approximately two weeks after mailing the postcards, a replacement mail-back survey packet was sent to each individual who agreed to participate in the study but had not yet returned his or her questionnaire. Two distinct replacement mail-back survey packets were sent, depending on whether the provided address was a U.S. address or an international address. U.S. addresses were sent a packet that included a pre-addressed return envelope affixed with a U.S. first class postage stamp. International addresses were sent a packet that included a pre-addressed return envelope affixed with international postage. This mailing process was repeated approximately two weeks after the first replacement mail-back survey packet for individuals who agreed to participate in the study, but who had still not returned his or her questionnaire. The mail-back survey response window closed on Monday, August 15, 2022.

The study population included visitor groups with at least one group member 18 years of age or older in ARCH during the study period. The target margin of error for summary statistics of no greater than  $\pm 5\%$  (Fowler 1993) was used to establish the target sample size at 400 completed mail-back questionnaires.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Sampling Effort

The visitor survey was administered at ARCH from May 27 through June 6, 2022.<sup>1</sup> The survey administration dates were selected to include both weekdays and weekend days. The sampling periods and sampling location were selected in consultation with park staff to capture a broad range of user types and maximize sampling efficiency.

The visitor survey was administered for a select range of hours on each sampling day. The hours of survey administration coincided with the hours of highest visitation to maximize sampling efficiency. The survey administration period was also selected to capture hours both during and outside of the reservation window to capture responses from visitors with and without timed-entry reservations. The full sampling effort is presented in Table 1.

**Table 1.** Sampling effort

Date	Daily sampling period
Friday, May 27	7:00 a.m. – 3:00 p.m.
Saturday, May 28	7:00 a.m. – 3:00 p.m.
Sunday, May 29	7:00 a.m. – 3:00 p.m.
Monday, May 30	7:00 a.m. – 3:00 p.m.
Tuesday, May 31	7:00 a.m. – 3:00 p.m.
Wednesday, June 1	N/A
Thursday, June 2	11:00 a.m. – 7:00 p.m.
Friday, June 3	11:00 a.m. – 7:00 p.m.
Saturday, June 4	11:00 a.m. – 7:00 p.m.
Sunday, June 5	11:00 a.m. – 7:00 p.m.
Monday, June 6	11:00 a.m. – 7:00 p.m.

## Survey Instrument Design

The on-site portion of the survey was administered to ARCH visitors after they entered the park. The purpose of the on-site intercept survey was to collect key information regarding visitor segments and visitation in the local area from a larger sample of visitors. It also collected information about visitors' experiences with the pilot timed-entry system which was concurrent with the sampling period. The mail-back survey was intended to gather key in-depth information on visitor spending profiles, trip characteristics, and attitudes about park management, programs, and facilities.

The survey instruments were designed by the project team in coordination with NPS staff both in the park and in the NPS Social Science Program. Questions included in the questionnaires were selected from the NPS Programmatic Information Collection Review Pool of Known Questions. The majority of the questions included in the survey instruments ask visitors to choose answers from a list of response options, providing an open-ended option, where appropriate, to ensure that question

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<sup>1</sup> Wednesday, June 1, was a scheduled day off for the field staff during sampling period. No surveys were administered on this day.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

prompts allowed for inclusive answers. A few questions were completely open-ended to collect unprompted responses from visitors in their own words. The survey instruments and sampling protocol were reviewed and approved by the Office of Management and Budget (OMB) and correspondingly conform to OMB standards and guidelines for questionnaire design. Appendix 1 contains a copy of the on-site intercept survey instrument, and Appendix 2 contains a copy of the mail-back survey instrument.

### **Sampling Procedures**

The on-site component of the survey was administered on 10 days between May 27 and June 6, 2022. For the first five days, the daily sampling period started at 7:00 a.m. and ended at 3:00 p.m. For the last five days, the daily sampling period started at 11:00 a.m. and ended at 7:00 p.m. As previously stated, these sampling hours were selected to intercept visitors with and without timed-entry reservations and at peak visitation times.

Survey sampling was conducted by the survey administration team via roadway intercept sampling which occurred at a pullover location on the inbound side of the park entrance road beyond the turn off to the Fiery Furnace (Figure 2). The sampling location was selected to match the sampling location used in a similar survey conducted in 2021, and was a place where vehicles could safely be pulled over without causing traffic to become congested or interfering with park operations.



**Figure 2.** Roadway intercept location for survey administration

Survey administration used a first-after-last approach to sample inbound vehicles. Specifically, the survey administration team pulled over the first vehicle to approach the sampling location in an inbound direction and asked the occupants of the vehicle to participate in the study.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

More specifically, each contacted visitor group was greeted, briefly introduced to the purpose of the study, asked to participate, and screened for eligibility. Visitor groups were considered eligible for the study if they had not previously participated in the study, were not a park employee, were able to communicate with the English-speaking survey administrator (i.e., did not have a language barrier), and had at least one group member 18 years of age or older. Information from all contacts, whether they participated in the survey or not, was recorded on a digital contact log by the survey administrator as part of the on-site questionnaire (Appendix 1). The survey administrator noted the gender of the first individual contacted, group size, and whether or not the visitor group arrived in a commercial vehicle. If visitors were eligible for the study and agreed to participate, they were asked which member (at least 18 years old) had the next birthday. The individual with the next birthday was selected to complete the questionnaire for the group. This was done in order to randomize selection of the individual within the group to complete the questionnaire. The survey administrator then conducted an interview, lasting approximately five minutes, to complete the on-site questionnaire with the visitor.

A shorter interview, lasting approximately two minutes, was conducted with eligible visitors who refused to participate in the survey. These visitors were asked how many adults and children were in their group, whether they were a first-time visitor to ARCH, whether visiting ARCH was the primary purpose for their overall trip away from home, whether they planned to stay overnight in ARCH or the local area, and whether they planned to visit ARCH on more than one day. For all “hard refusals” (groups who refused to participate in the study and in the brief interview), only the observational data (gender of first-contacted group member, group size, whether the group arrived in a commercial vehicle, and time of contact) and refusal reason were recorded on the contact log.

Once the visitor completed the on-site intercept survey, the shorter three-question interview survey, or were determined to be ineligible or a “hard-refusal,” the survey administration team dismissed the vehicle from the pullout sampling location. The next vehicle to approach in an inbound direction was pulled over and asked to participate in the survey. The team continued this process throughout the sampling period.

## **Sampling Results**

During the sampling period, 1,121 visitor groups were eligible for and invited to participate in the survey. Of these groups, 942 agreed to participate in the on-site intercept survey (84 percent on-site response rate<sup>2</sup>) and 840 agreed to participate in the mail-back survey by accepting a mail-back survey packet (75 percent cooperation rate). Questionnaires were completed and returned by 465 visitor groups, resulting in a completion rate of 55 percent among those visitor groups that accepted a mail-back questionnaire, and an overall mail-back response rate of 42 percent for the study.

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<sup>2</sup> OMB Standards and Guidelines for Statistical Surveys (2006) specifies that a non-response bias analysis is required when unit response rate is below 80 percent. As such, non-response bias analysis was not conducted for the on-site intercept survey.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Non-Response Bias

As noted, the response rate for the on-site intercept survey exceeds the OMB threshold for non-response bias analysis of an 80 percent response rate or higher. The response rate for the mail-back survey was 42 percent; therefore, a non-response bias analysis was conducted to compare mail-back survey respondents and non-respondents.

To check for non-response bias in the mail-back survey data, this study used responses to eight non-response bias questions. The non-response bias questions were administered via a short interview with all eligible contacted visitor groups who refused to participate in the study. The non-response bias questions exactly matched questions in the mail-back survey to provide a reliable basis to compare respondents and non-respondents with respect to several key characteristics. The non-response bias questions included:

1. How many adults (18 years and older) are in your group?
2. How many children (under 18 years) are in your group?
3. Are you a first-time visitor to Arches National Park?
4. Was your visit to Arches National Park the primary purpose for your overall trip away from home?
5. On this trip away from home, have you stayed, or will you stay overnight in Arches National Park or within the local area?
6. On this trip, do you plan to visit Arches National Park for more than one day?
7. If you plan to visit Arches National Park for more than one day on this trip, how many days do you plan to visit?
8. If you do not plan to visit Arches National Park for more than one day on this trip, how many hours do you plan to spend in Arches National Park?

In addition to the eight pre-selected non-response bias questions, one observation-based variable recorded for each contacted visitor group was used for the non-response bias analysis (whether the contacted group arrived at the intercept location in a commercial vehicle or private vehicle).

Chi-square tests of independence were used to test for differences between mail-back respondents and mail-back non-respondents. Statistical test results with p-values of less than or equal to 0.05 are assumed to be statistically significant. The results are presented in the following subsections. Note that percentages that do not sum to 100 due to rounding are denoted with an asterisk (\*) in the column header.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

### **Vehicle type (commercial versus private)**

The results of the chi-square test in Table 2 suggest mail-back survey respondents and non-respondents do not differ significantly with respect to whether the visitor group arrived to the park via a commercial vehicle or private vehicle ( $p = 1.000$ ).

**Table 2.** Initial contact group vehicle type comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 465)		Mail-back non-respondents (N = 513)	
	N	%*	N	%*
Commercial vehicle	464	100%	511	100%
Non-commercial vehicle	1	< 1%	2	< 1%
Chi-square test results	Test statistic < 0.001; p-value = 1.000			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

### **Number of adults in group**

Values for the number of adults in the visitor group were collapsed into the following four categories: groups with one adult, groups with two adults, groups with three or four adults, and groups with five or more adults (Table 3). Results of the chi-square test in Table 3 suggest that there is a statistically significant difference between respondents and non-respondents, with respect to group size ( $p = 0.044$ ). The results suggest that visitors who visit the park alone may not be as well represented in the mail-back survey responses as desired.

**Table 3.** Number of adult group members comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 465)		Mail-back non-respondents (N = 524)	
	N	%	N	%
1 adult	26	6%	54	10%
2 adults	317	68%	346	66%
3–4 adults	97	21%	94	18%
5 or more adults	25	5%	30	6%
Chi-square test results	Test statistic = 8.079; p-value = 0.044			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

### **Number of children in group**

Values for the number of children in the visitor group were collapsed into the following five categories: groups with no children, groups with one child, groups with two children, groups with three or four children, and groups with five or more children (Table 4). Results of the chi-square test in Table 4 suggest that mail-back survey respondents and non-respondents do not differ significantly, with respect to the number of children in their groups ( $p = 0.606$ ).

**Table 4.** Number of child group members comparison between mail-back respondents and non-respondents

<b>Response</b>	<b>Mail-back respondents (N = 465)</b>		<b>Mail-back non-respondents (N = 524)</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
0 children	359	77%	382	73%
1 child	37	8%	49	9%
2 children	44	10%	61	12%
3–4 children	19	4%	26	5%
5 or more children	6	1%	6	1%
Chi-square test results	Test statistic = 2.720; p-value = 0.606			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

### **First-time visitor to Arches National Park**

The results of the chi-square test in Table 5 suggest mail-back survey respondents and non-respondents do not differ significantly with respect to being first-time visitors to the park ( $p = 0.383$ ).

**Table 5.** First-time visitor comparison between mail-back respondents and non-respondents

<b>Response</b>	<b>Mail-back respondents (N = 465)</b>		<b>Mail-back non-respondents (N = 524)</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
First-time visitor	341	73%	398	76%
Not a first-time visitor	124	27%	126	24%
Chi-square test results	Test statistic = 0.763; p-value = 0.383			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Visit to Arches National Park was primary purpose of trip**

The results of the chi-square test in Table 6 suggest that, using a p-value of 0.05, that there is a statistically significant difference between respondents and non-respondents, with respect to their ARCH visit being their primary trip purpose ( $p = 0.038$ ). Therefore, respondents for whom visiting ARCH was the primary trip purpose are not as well represented in the mail-back survey responses as desired.

**Table 6.** Primary trip purpose comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 462)		Mail-back non-respondents (N = 523)	
	N	%	N	%
ARCH was the primary trip purpose	95	21%	138	26%
ARCH was not the primary trip purpose	367	79%	385	74%
Chi-square test results		Test statistic = 4.290; p-value = 0.038		

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

**Overnight stay in Arches National Park or local area**

The results of the chi-square test in Table 7 suggest mail-back survey respondents and non-respondents do not differ significantly with respect to an overnight stay in the park or local area ( $p = 0.678$ ).

**Table 7.** Overnight stay comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 465)		Mail-back non-respondents (N = 524)	
	N	%	N	%
Overnight stay	416	89%	474	90%
No overnight stay	49	11%	50	10%
Chi-square test results		Test statistic = 0.172; p-value = 0.678		

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

### **Multi-day visit to Arches National Park**

The results of the chi-square test in Table 8 suggest mail-back survey respondents and non-respondents do not differ significantly with respect to multi-day visits to the park ( $p = 0.585$ ).

**Table 8.** Multi-day park visit comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 465)		Mail-back non-respondents (N = 522)	
	N	%	N	%
Multi-day visit	132	28%	139	27%
One day visit	333	72%	383	73%
Chi-square test results	Test statistic = 0.299; p-value = 0.585			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

### **Days expected to spend in Arches National Park**

This question was asked of respondents who indicated they would spend more than one day in Arches National Park during their trip. Values for the number of days spent in ARCH were collapsed into the following three categories: groups spending two days in the park, groups spending three days in the park, and groups spending four or more days in the park (Table 9). Results of the chi-square test in Table 9 suggest that mail-back survey respondents and non-respondents do not differ significantly with respect to the number of days they expected to spend in the park ( $p = 0.444$ ).

**Table 9.** Number of days in Arches National Park comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 132)		Mail-back non-respondents (N = 139)	
	N	%	N	%*
2 days	101	77%	102	73%
3 days	24	18%	24	17%
4 or more days	7	5%	13	9%
Chi-square test results	Test statistic = 1.625; p-value = 0.444			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

### **Hours expected to spend in Arches National Park**

This question was asked of respondents who indicated they would spend only one day in Arches National Park during their trip. Values for the number of hours spent in ARCH were collapsed into the following two categories: groups spending five or fewer hours in the park, and groups spending more than five hours in the park (Table 10). Results of the chi-square test in Table 10 suggest that mail-back survey respondents and non-respondents do not differ significantly with respect to the number of hours they planned to spend in the park ( $p = 0.823$ ).

**Table 10.** Multi-day park visit comparison between mail-back respondents and non-respondents

Response	Mail-back respondents (N = 333)		Mail-back non-respondents (N = 383)	
	N	%	N	%
5 or less hours	178	53%	209	55%
More than 5 hours	155	47%	174	45%
Chi-square test results	Test statistic = 0.050; p-value = 0.823			

<sup>1</sup> p-value  $\leq 0.05$  indicates a significant result

The results of the mail-back survey non-response bias analysis suggest that there are statistically significant differences between respondents and non-respondents, with respect to the number of adults in their groups and with respect to the primary purpose for their overall trip away from home. Non-respondents were slightly more likely than respondents to visit the park alone and non-respondents were slightly more likely than respondents to report that visiting ARCH was the primary purpose of their trip to the local area. The study results should be interpreted with these points in mind.

### **Limitations**

This study has limitations that should be considered when interpreting the results.

1. The mail-back survey was self-administered. Respondents completed the questionnaire after an unknown amount of time after their visit, which may have affected recall to some degree. To the extent respondents' recall was affected, it is possible some of their responses may not fully reflect actual behavior.
2. The data reflect visitor use patterns as collected during the study period May 27 through June 6, 2022. The results present a 'snapshot-in-time' and do not necessarily apply to visitor groups during other times of the year.
3. Caution is advised when interpreting any data with a sample size of less than 30, as the results may be unreliable. Whenever the sample size is less than 30, the phrase "CAUTION: Number of respondents less than 30 visitor groups" is included in the graph, figure, table, or text. No statistical tests were performed on variables with samples smaller than 30 individuals or visitor groups.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

4. Sample size may vary for some questions, due to item non-response (i.e., one or more questions left blank by a respondent). Therefore, refer to both the percentage and sample values when interpreting the results.

### **Special Conditions**

There were special conditions during the sampling period to consider when interpreting the results.

1. The weather during the survey period was generally hot, dry, and sunny. Temperatures during the survey period were consistently in the mid-90s.
2. The sampling period occurred while a timed-entry system was being pilot-tested in the park.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

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\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Results

This section of the report presents the results of the visitor surveys administered on site and via a mail-back survey. The results are generally presented in questionnaire order and include the question number, the question text, select bulleted information, and data figures and tables. For all open-ended questions and questions with open-ended response options in the on-site and mail-back surveys, verbatim responses are reported in Appendices 3 and 4 (companion document). Descriptive statistics (mean, median, standard deviation) are presented in Appendix 5 (companion document) for those variables for which measures of central tendency can be computed.

It should be noted, due to rounding, the percentages summarized in the bulleted information may not exactly match manual summation of the percentages presented in the tables. The percentages in the tables may not sum to 100 percent due to rounding, or in cases where survey respondents were instructed to select all response options that apply.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Parkwide Visitor Survey – On-Site Intercept Survey

### Visitor residency

#### Residency in the local area

##### Question 1

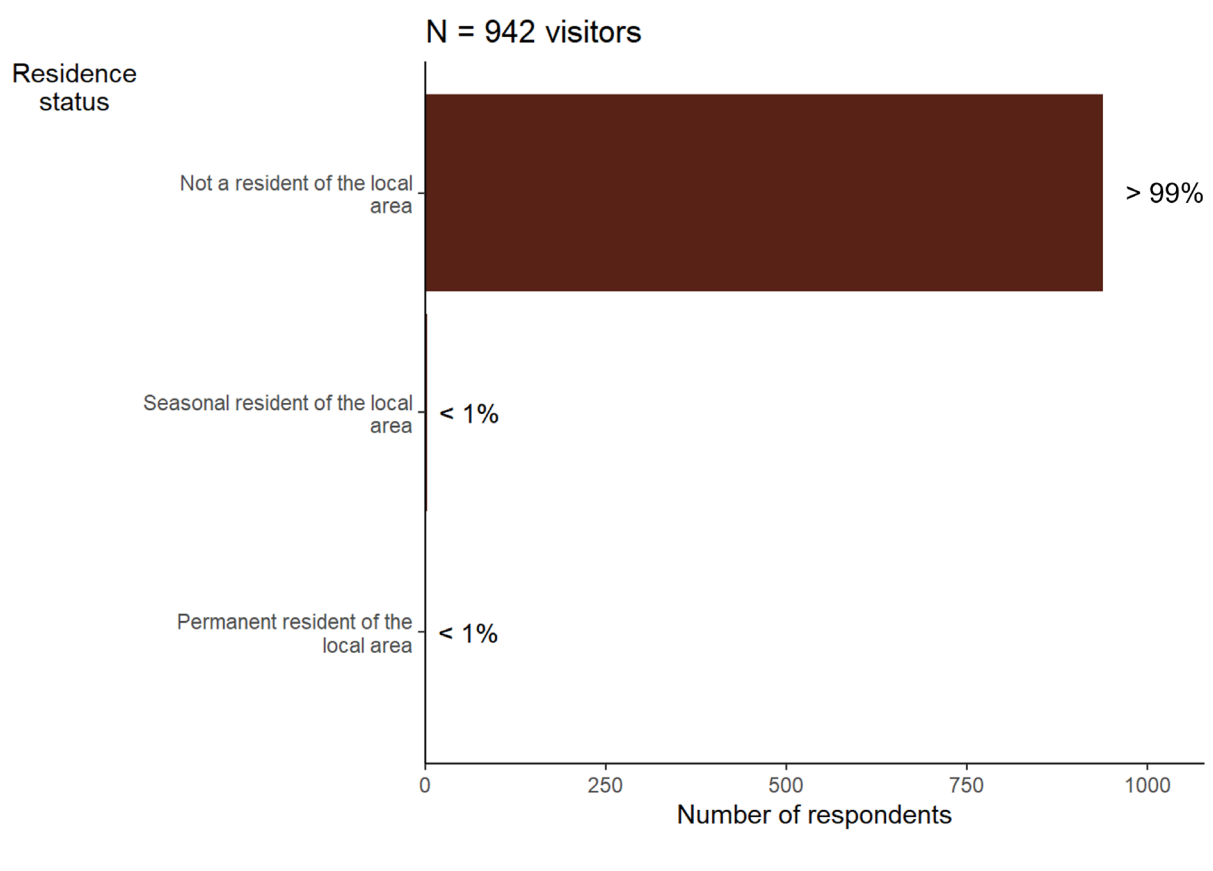
*Question 1 was asked of all respondents.*

Are you a permanent or seasonal resident of the local area around Arches National Park?

See Figure 4 for the local area map.

Results (Figure 3)

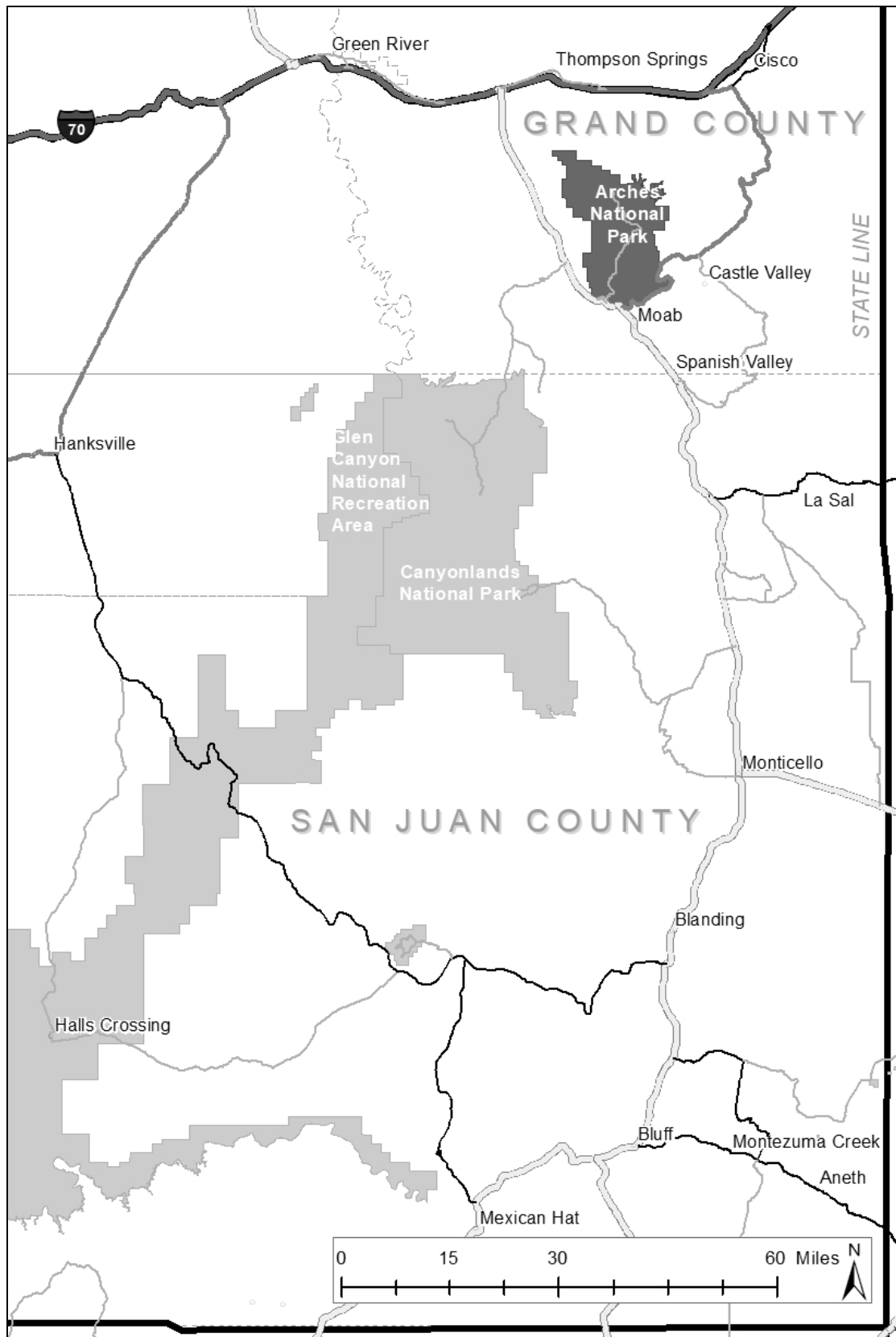
- Less than one percent of visitors lived permanently or seasonally within the local area.



**Figure 3.** Local or non-local residence

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer



**Figure 4.** Map of Arches National Park and local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

U.S. visitors' state of residence

Question 2 and Question 3B

*Question 2 was asked of respondents who indicated in Question 1 that they are a permanent or seasonal resident in the local area.*

What is your ZIP code in the local area?

*Question 3B was asked of respondents who indicated in Question 1 that they are not a permanent or seasonal resident in the local area, and who indicated that the U.S. is their country of origin.*

What is your home ZIP code?

The results summarized in Table 11 and Figure 5 compile Question 2 and Question 3B responses.

Results (Table 11, Figure 5)

- Visitors from 48 states were part of the survey sample.
- The most popular states of residence of all visitors (i.e., of local, national, and international visitors) were Colorado (11%), Utah (7%), and California (6%).

**Table 11.** United States visitors by state of residence

<b>State</b>	<b>Number of visitors</b>	<b>Percent of U.S. visitors* (N = 771)</b>	<b>Percent of all visitors (N = 934)</b>
Colorado	105	14	11
Utah	70	9	7
California	52	7	6
Florida	43	6	5
Texas	40	5	4
Arizona	33	4	4
Georgia	24	3	3
North Carolina	23	3	2
Ohio	23	3	2
Washington	22	3	2
Pennsylvania	21	3	2
Missouri	19	2	2
New York	19	2	2
Michigan	18	2	2
Illinois	17	2	2
Massachusetts	16	2	2
Indiana	15	2	2

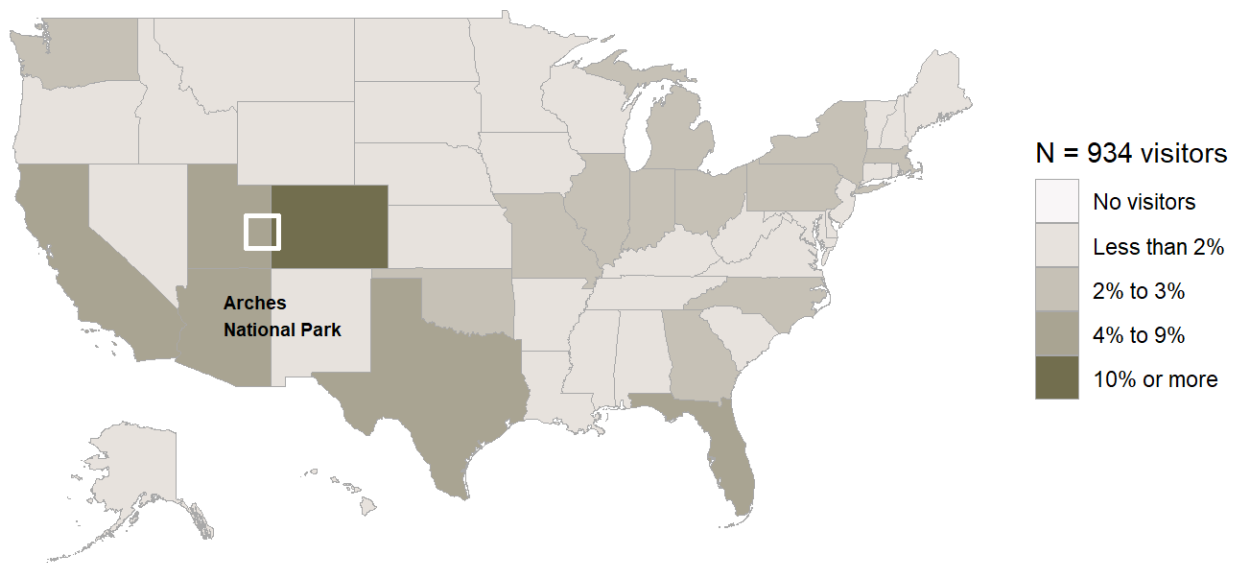
\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

State	Number of visitors	Percent of U.S. visitors* (N = 771)	Percent of all visitors (N = 934)
Oklahoma	15	2	2
Tennessee	14	2	1
Iowa	12	2	1
Virginia	12	2	1
27 other states	158	20	17
Total	771	100	82

Other states each had less than two percent visitors

Geographic origin of U.S. residents – On-site survey



**Figure 5.** Proportion of U.S. visitors by state of residence<sup>3</sup>

<sup>3</sup> Percentages are calculated out of all visitors (including international).

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

International visitors' country of residence

Question 3C

*Question 3C was asked of respondents who indicated that the U.S. is not their country of origin.*

What is your home country if not U.S.?

Results (Table 12)

- Visitors from 37 countries were included in the survey sample.
- Eighteen percent of international visitors were from Germany, 12 percent were from Canada, and nine percent were from the Netherlands.

**Table 12.** International visitors by country of residence

Country	Number of visitors	Percent of int'l visitors* (N = 163)	Percent of all visitors (N = 934)
Germany	30	18	3
Canada	19	12	2
Netherlands	15	9	2
France	12	7	1
China	11	7	1
India	10	6	1
Australia	8	5	1
United Kingdom of Great Britain and Northern Ireland	8	5	1
Switzerland	7	4	1
Belgium	4	2	< 1
Mexico	3	2	< 1
South Korea	3	2	< 1
Argentina	2	1	< 1
Austria	2	1	< 1
Denmark	2	1	< 1
Italy	2	1	< 1
Philippines	2	1	< 1
Singapore	2	1	< 1
Thailand	2	1	< 1
Zimbabwe	2	1	< 1
Bolivia	1	1	< 1
Brazil	1	1	< 1
Cuba	1	1	< 1
Estonia	1	1	< 1
Indonesia	1	1	< 1

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Country	Number of visitors	Percent of int'l visitors* (N = 163)	Percent of all visitors (N = 934)
Israel	1	1	< 1
Japan	1	1	< 1
Peru	1	1	< 1
Portugal	1	1	< 1
Romania	1	1	< 1
Slovakia	1	1	< 1
Somalia	1	1	< 1
South Africa	1	1	< 1
Sri Lanka	1	1	< 1
Sweden	1	1	< 1
Trinidad and Tobago	1	1	< 1
Yemen	1	1	< 1
Total	163	104	17

All countries are included

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## **Trip characteristics and travel planning**

### Trip purpose

#### Question 4

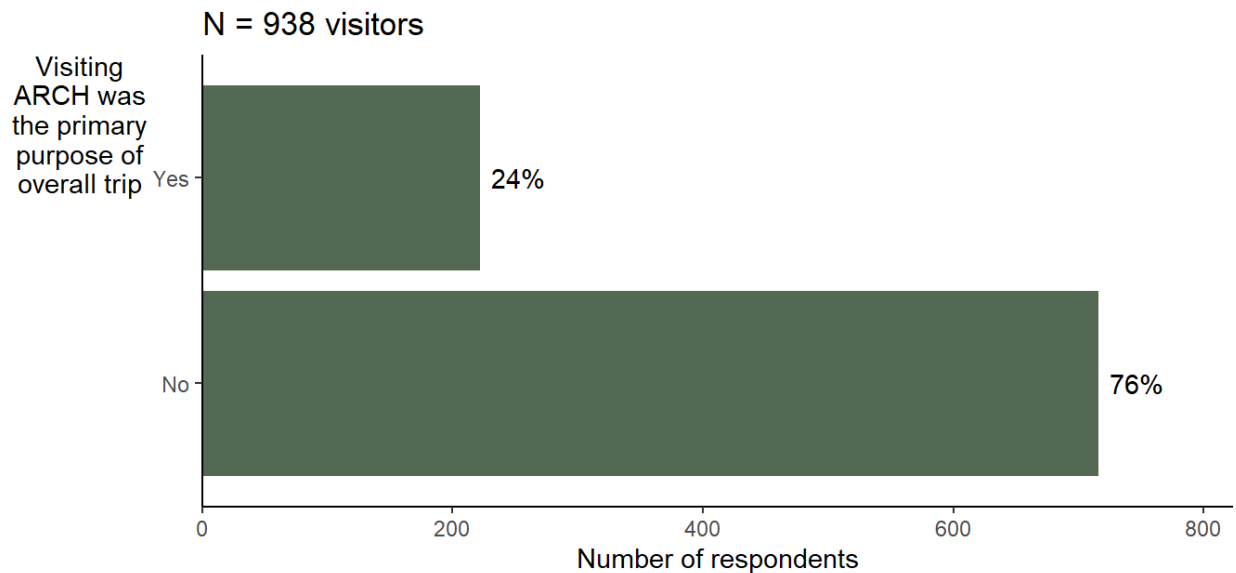
*Question 4 was asked of respondents who indicated in Question 1 that they are not a permanent or seasonal resident of the local area.*

Is your visit to Arches National Park the primary purpose of your overall trip away from home?

Results (Figure 6)

Of visitors who reported that they are not permanent or seasonal residents of the local area...

- A majority of visitors (76%) reported that visiting ARCH was not the primary purpose of their overall trip away from home.



**Figure 6.** Purpose of overall trip away from home

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Role of park visit in trip away from home

### Question 5

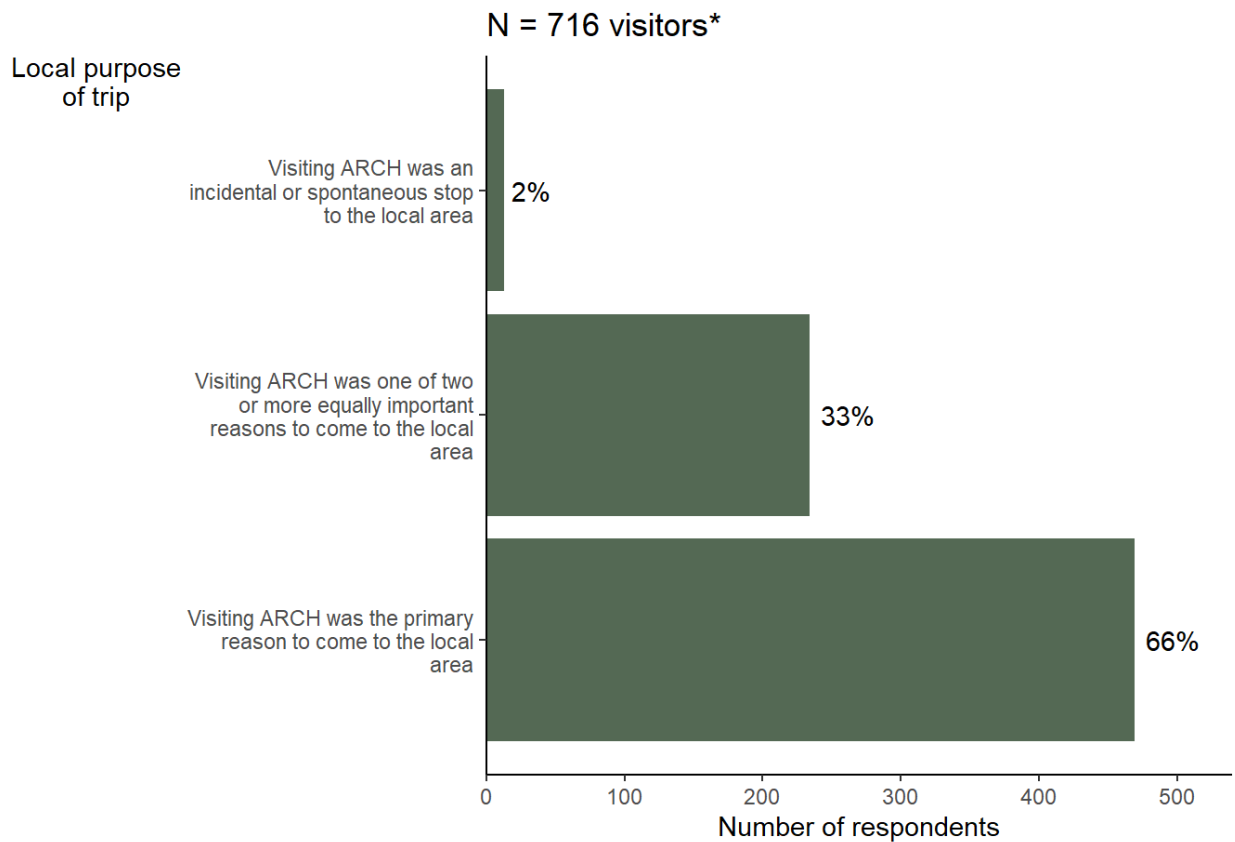
*Question 5 was asked of respondents who indicated in Question 4 that their visit to Arches National Park was not the primary purpose of their overall trip away from home.*

Is your visit to Arches National Park the primary purpose you came to the local area?

### Results (Figure 7)

Of visitors who reported that visiting Arches National Park was not the primary purpose of their overall trip away from home...

- About two thirds (66%) of visitors indicated that visiting ARCH was the primary reason they came to the local area, while about one third (33%) of visitors indicated that visiting ARCH was one of the two or more equally important reasons for coming to the local area.
- Only two percent of visitors indicated that visiting ARCH was an incidental or spontaneous stop in the local area.



**Figure 7.** Role of park visit in trip away from home

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Primary reason for visiting the local area

Question 6

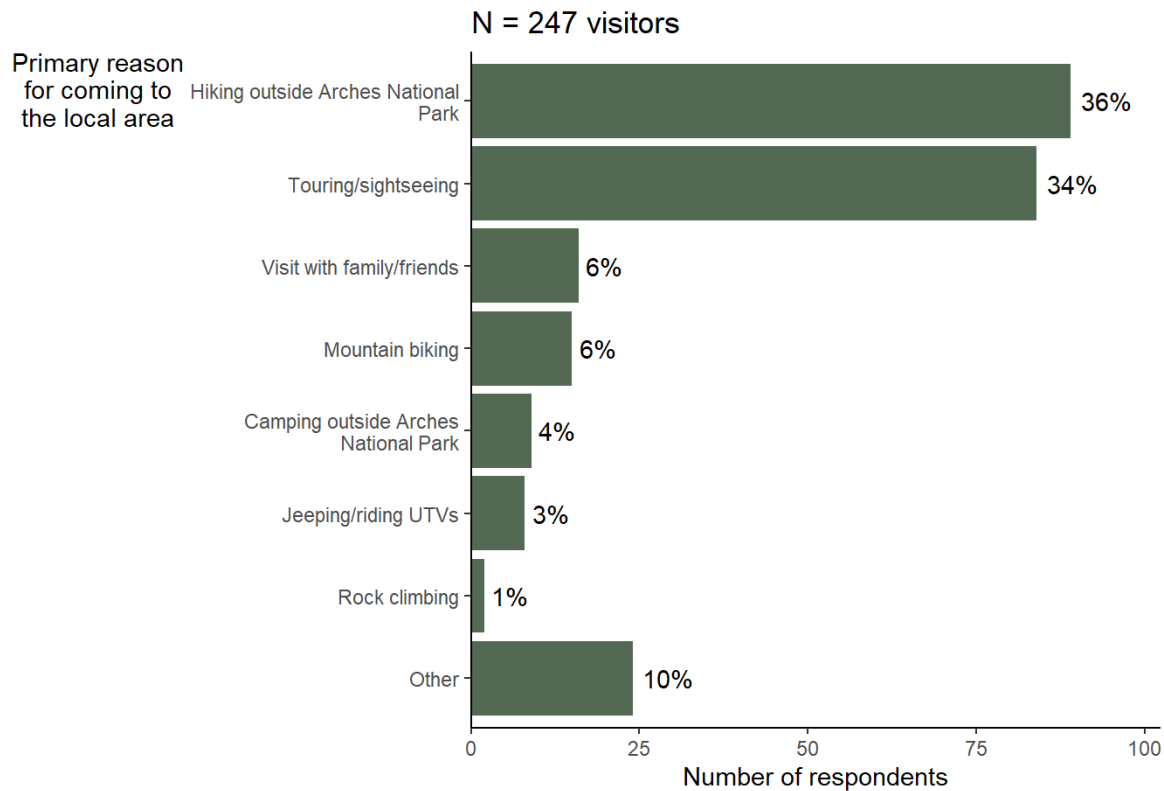
*Question 6 was asked of respondents who indicated in Question 5 that their visit to Arches National Park was not their primary reason for coming to the local area.*

What was the primary reason you came to the local area?

Results (Figure 8)

Of visitors who reported that visiting Arches National Park was not their primary reason for coming to the local area...

- Visitors indicated that the most popular reasons for coming to the local area were to hike outside of ARCH (36%) and for touring/sightseeing (34%).
- Less popular primary reasons for coming to the local area included visiting with family/friends (6%), mountain biking (6%), camping outside ARCH (4%), jeeping/riding UTVs (3%), and rock climbing (1%).
- See Appendix 3 (Appendices companion document) for other primary reasons for coming to the local area.



**Figure 8.** Primary reason for visiting the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of days spent in the local area

Question 7

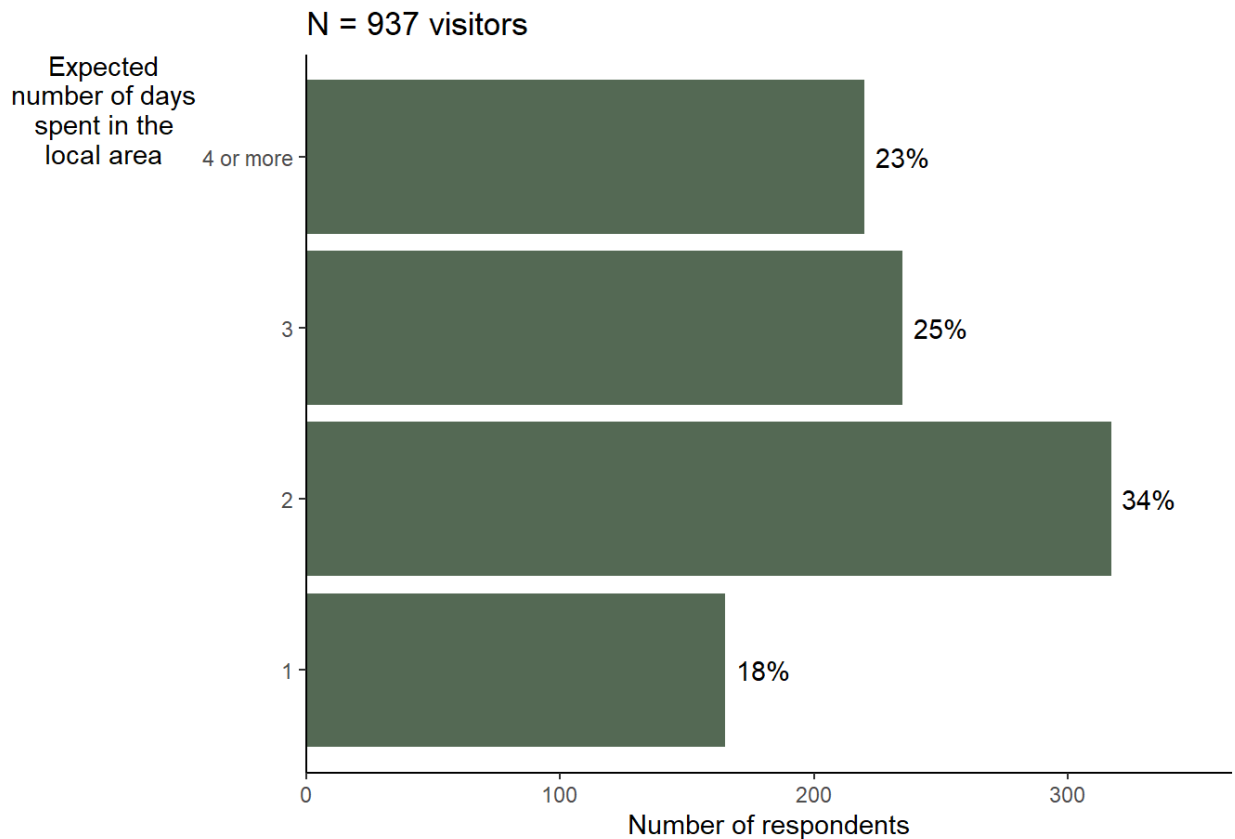
*Question 7 was asked of respondents who indicated in Question 1 that they are not permanent or seasonal residents of the local area.*

How many days are you planning to spend in the local area (including the days you spend in Arches National Park) on this trip away from home?

Results (Figure 9)

Of visitors who reported that they are not permanent or seasonal residents of the local area...

- More than half of visitors (52%) indicated that they expected to stay in the local area for one or two days, and one-quarter of visitors (25%) indicated they would spend three days in the local area. Nearly a quarter of visitors (23%) indicated they would spend four or more days in the local area.



**Figure 9.** Expected number of days spent in the park or in the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Overnight stay in the local area

Question 8

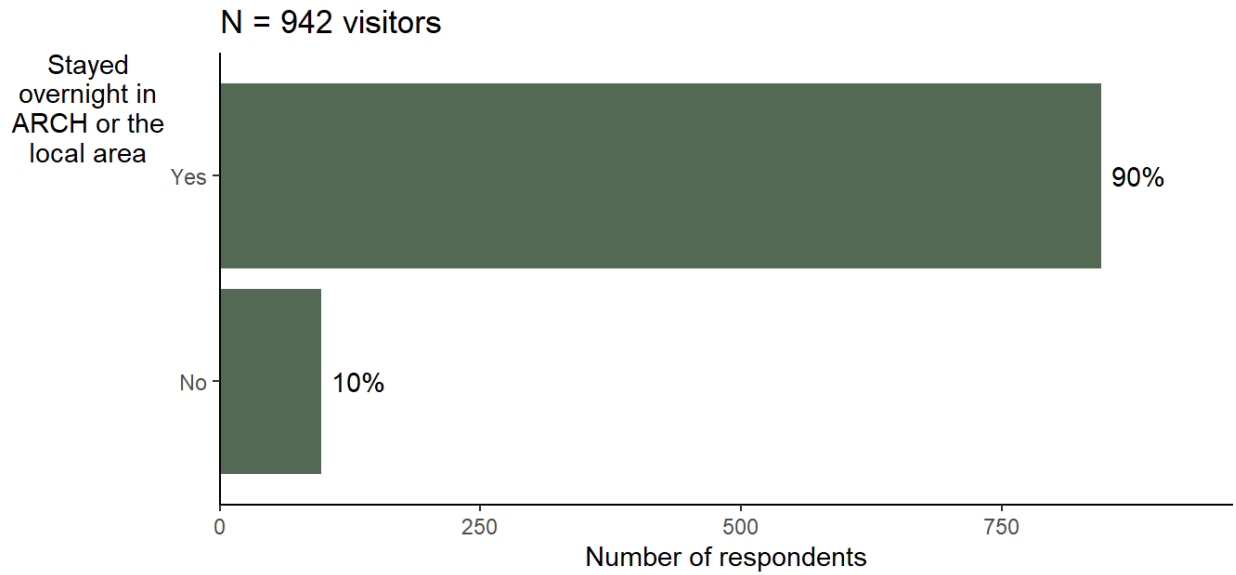
*Question 8 was asked of all respondents.*

On this trip away from home, have you stayed, or will you stay overnight away from your permanent residence in Arches National Park and/or within the local area?

See Figure 4 for map.

Results (Figure 10)

- Most (90%) visitors indicated that they stayed or would stay overnight in ARCH or in the local area.



**Figure 10.** Visitors who stayed overnight in the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Type of overnight accommodation

Question 9

Question 9 was asked of respondents who indicated in Question 8 that they have stayed or will stay overnight in Arches National Park or in the local area.

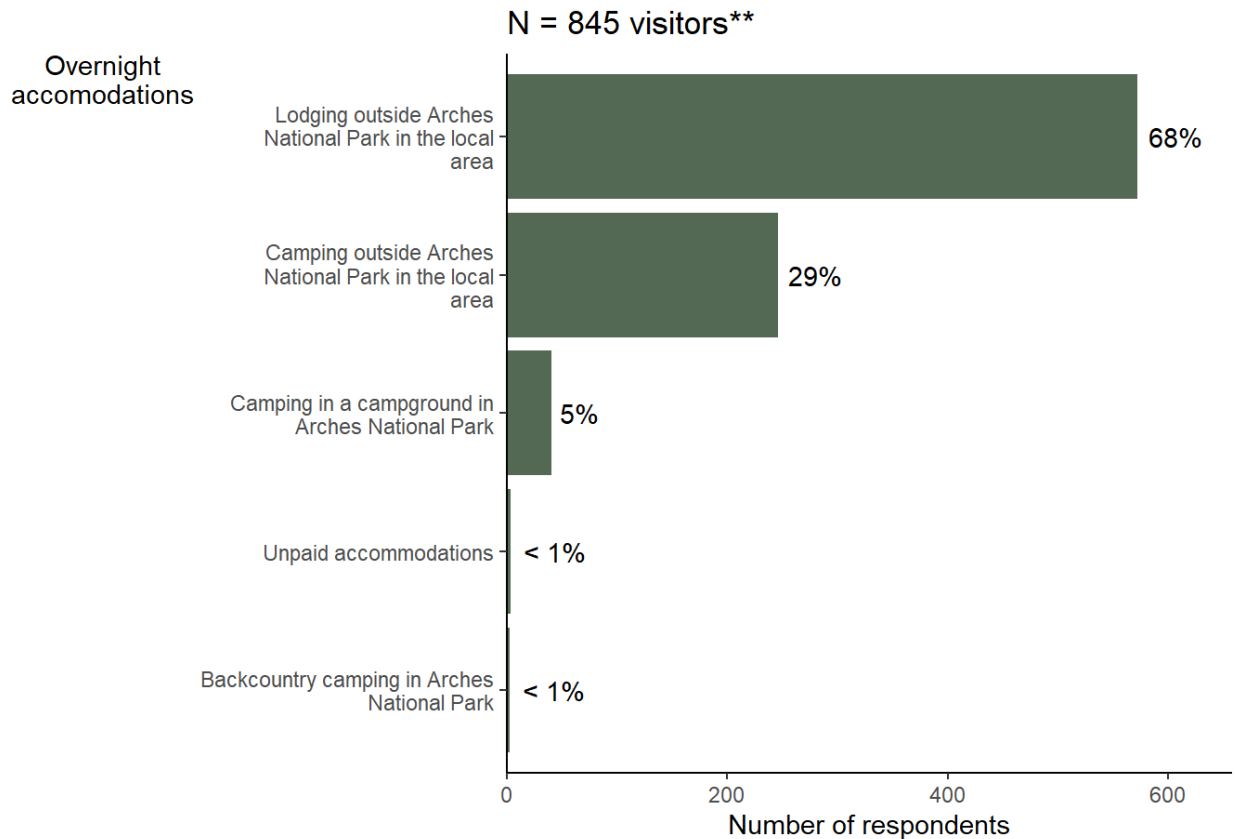
On this trip, what type of accommodations do you expect to use while in Arches National Park and/or the local area?

See Figure 4 for map.

Results (Figure 11)

Of visitors who reported that they have stayed or will stay overnight in Arches National Park or in the local area...

- Over two-thirds (68%) of visitors indicated that they were lodging outside of ARCH in the local area, and 34 percent of visitors indicated they were camping, whether that was outside the park in the local area (29%) or at a campground in ARCH (5%). Few visitors (< 1%) stayed in unpaid accommodations or camped in the backcountry in ARCH.



**Figure 11.** Accommodations for nights spent in Arches National Park or the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Nights backcountry camping in Arches National Park

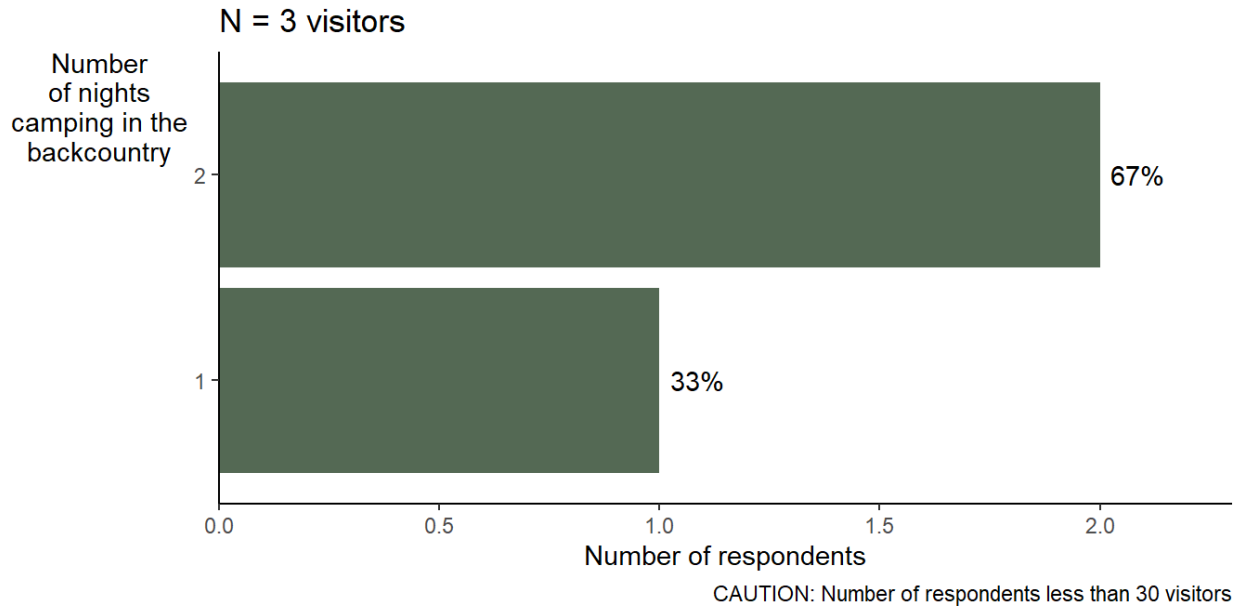
Question 10A

*Question 10A was asked of respondents who indicated in Question 9 that they had backcountry camped or planned to backcountry camp in Arches National Park.*

How many nights have you or do you plan to camp in the backcountry?

Results (Figure 12)

- Of the three visitors who camped in the backcountry, one visitor (33%) spent one night, and two visitors (67%) spent two nights.
- On average, visitors spent 1.7 nights camping in the backcountry (see Appendix 5 in the Appendices companion document).



**Figure 12.** Nights spent camping in the backcountry

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Nights camping in Arches National Park campground

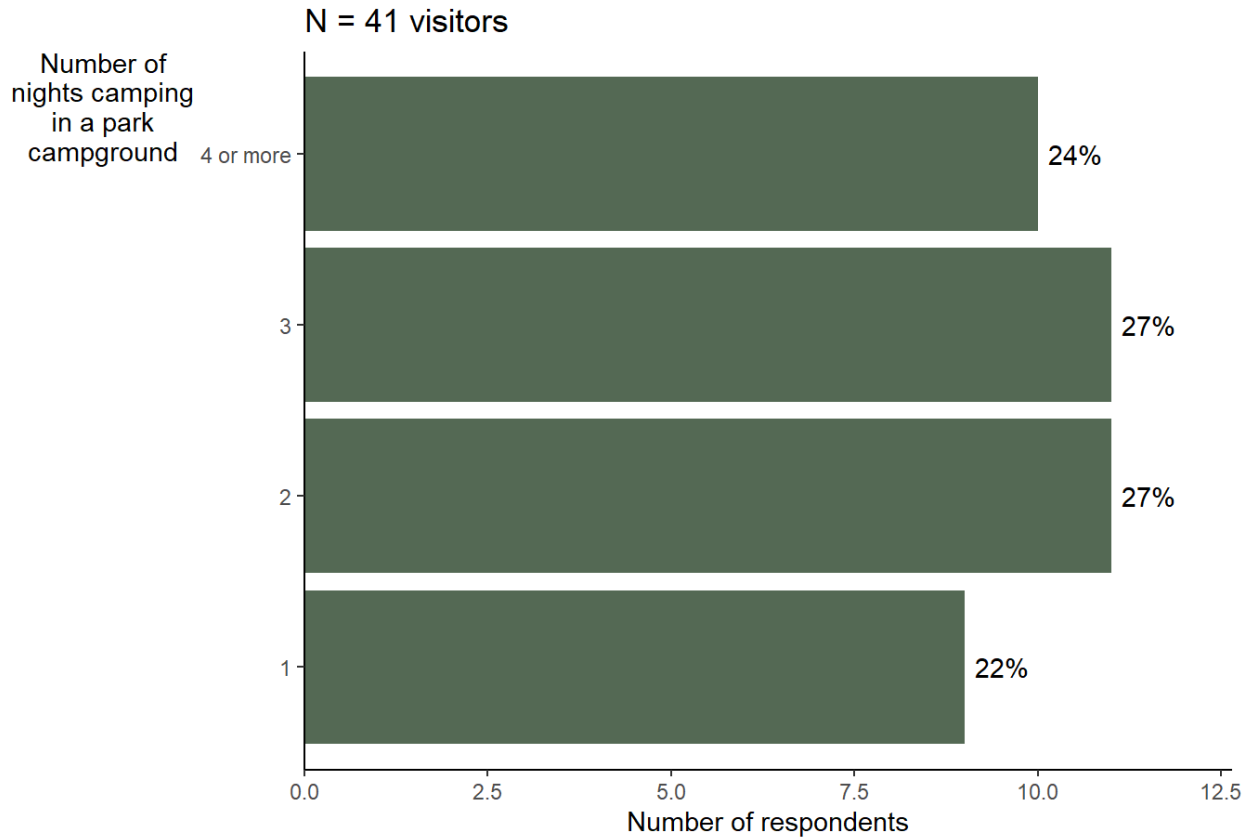
Question 10B

*Question 10B was asked of respondents who indicated in Question 9 that they had camped or planned to camp in Arches National Park.*

How many nights have you or do you plan to camp in Arches National Park?

Results (Figure 13)

- Nearly half of visitors (49%) who camped in ARCH spent one or two nights, and nearly one quarter spent three nights or four or more nights (27% and 24% respectively).
- On average, visitors spent 2.7 nights camping in the park (see Appendix 5 in the Appendices companion document).



**Figure 13.** Nights spent camping in a campground in Arches National Park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Nights camping outside Arches National Park in the local area

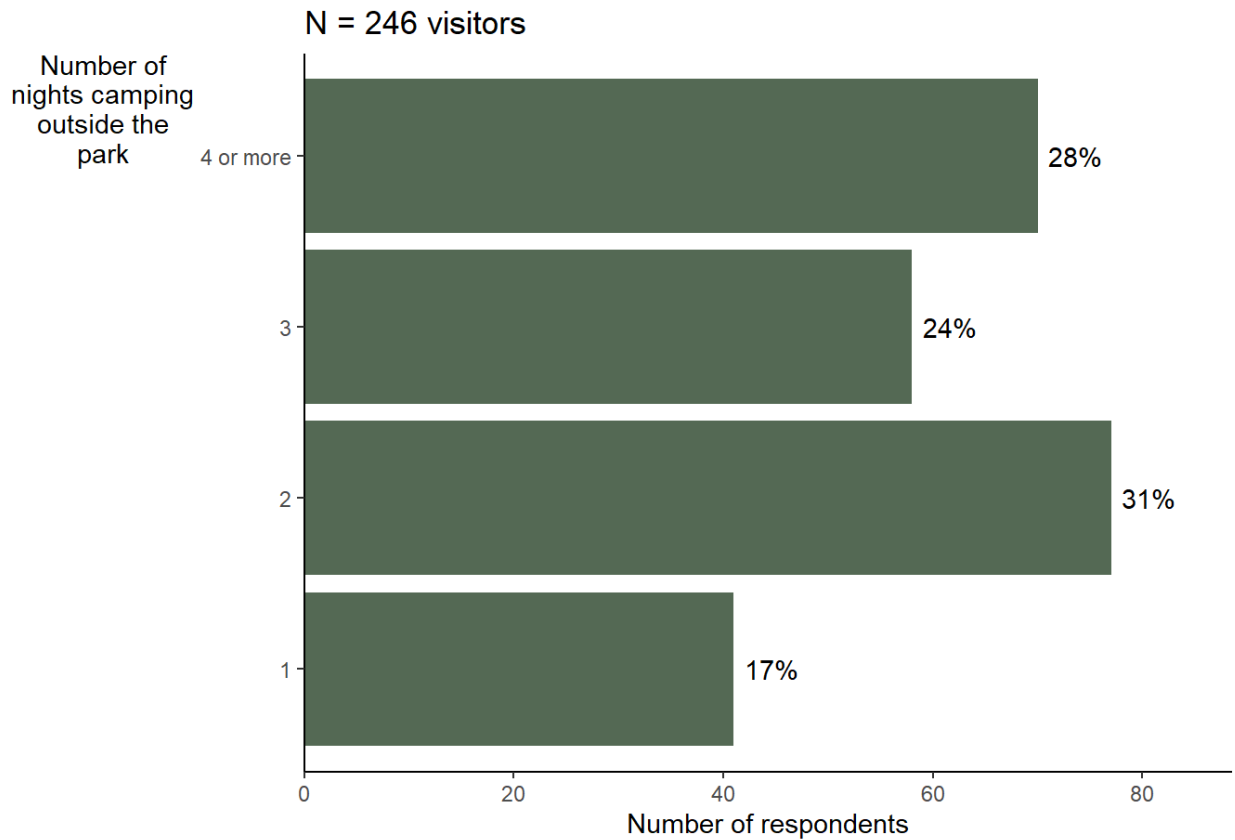
Question 10C

*Question 10C was asked of respondents who indicated in Question 9 that they had camped or planned to camp outside of Arches National Park in the local area.*

How many nights have you or do you plan to camp outside of Arches National Park in the local area?

Results (Figure 14)

- Nearly one-third of visitors (31%) who camped outside of ARCH in the local area spent two nights, while over half (52%) spent three or more nights, and 17 percent spent one night.
- On average, visitors spent about three nights camping in the local area (see Appendix 5 in the Appendices companion document).



**Figure 14.** Nights spent camping outside of Arches National Park in the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Nights spent in lodging outside of ARCH in the local area

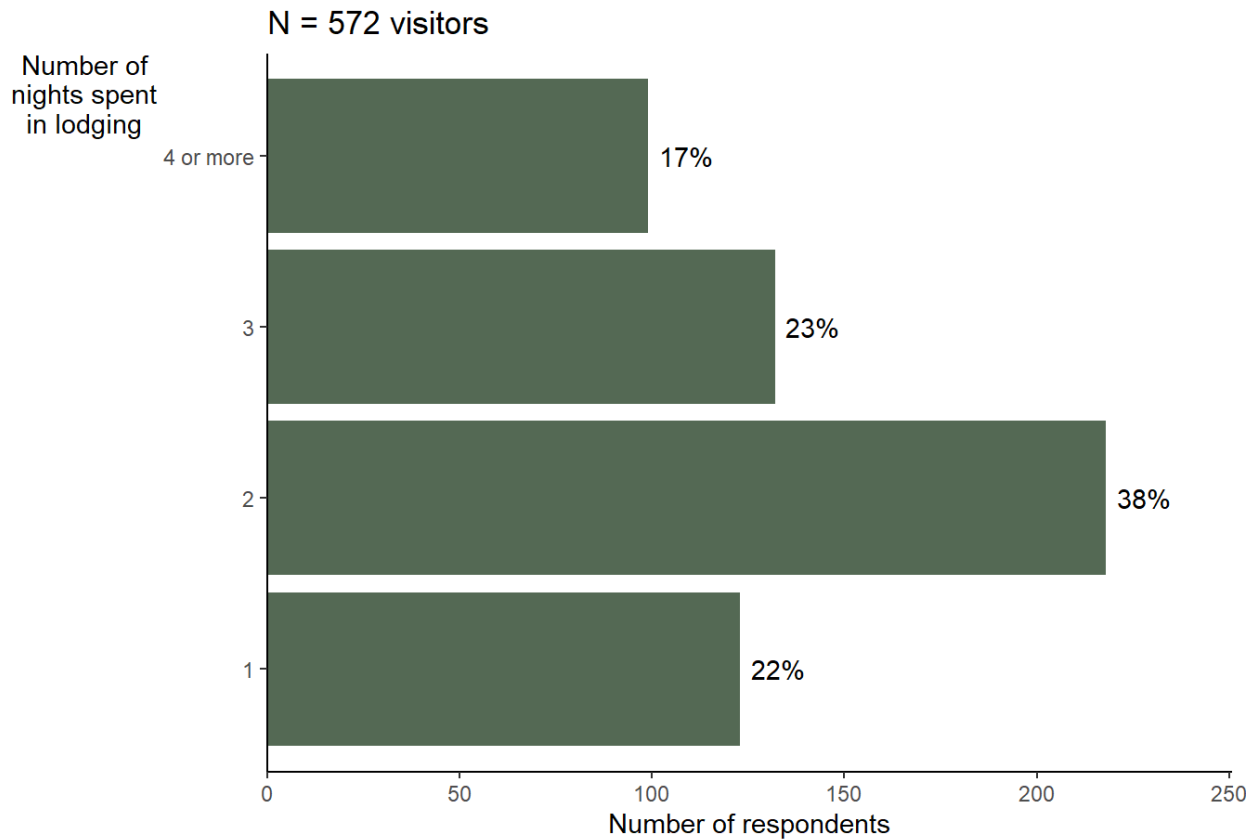
Question 10D

*Question 10D was asked of respondents who indicated in Question 9 that they had lodged or planned to lodge outside of Arches National Park in the local area.*

How many nights have you or do you plan to spend lodging outside of ARCH in the local area?

Results (Figure 15)

- Nearly one quarter of visitors (22%) who stayed in lodging in the local area spent one night, 38 percent spent two nights, and 40 percent spent three or more nights.
- On average, visitors spent 2.5 nights in lodging in the local area (see Appendix 5 in the Appendices companion document).



**Figure 15.** Nights spent lodging outside of Arches National Park in the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Nights spent in unpaid accommodations

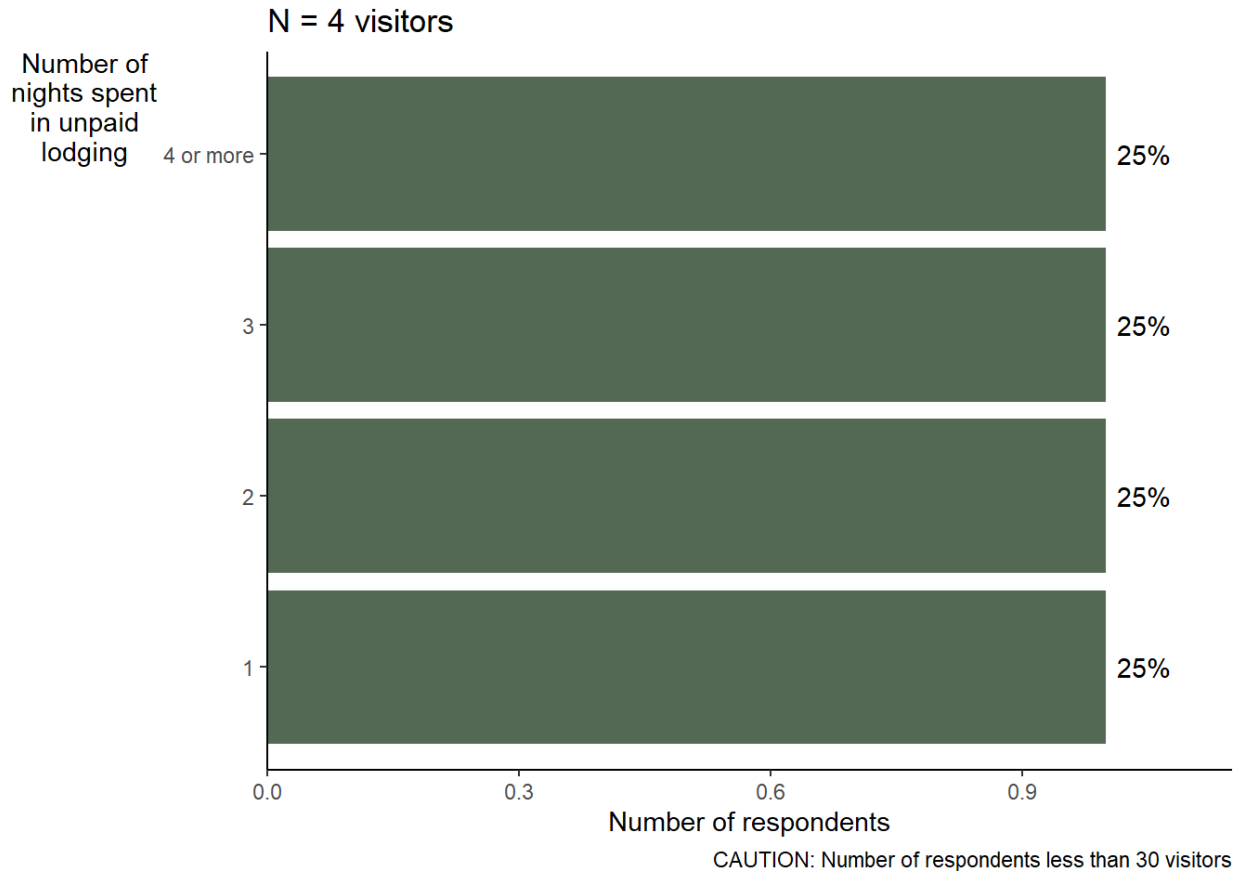
Question 10E

*Question 10E was asked of respondents who indicated in Question 9 that they had stayed or planned to stay in unpaid accommodations.*

How many nights have you or do you plan to spend in unpaid accommodations?

Results (Figure 16)

- Of the four visitors who stayed in unpaid accommodations, one visitor spent one night, one spent two nights, one spent three nights, and one spent four or more nights.
- On average, visitors spent 2.5 nights in unpaid accommodations (see Appendix 5 in the Appendices companion document).



**Figure 16.** Nights spent in unpaid accommodations.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Arriving at Arches National Park

### Question 11

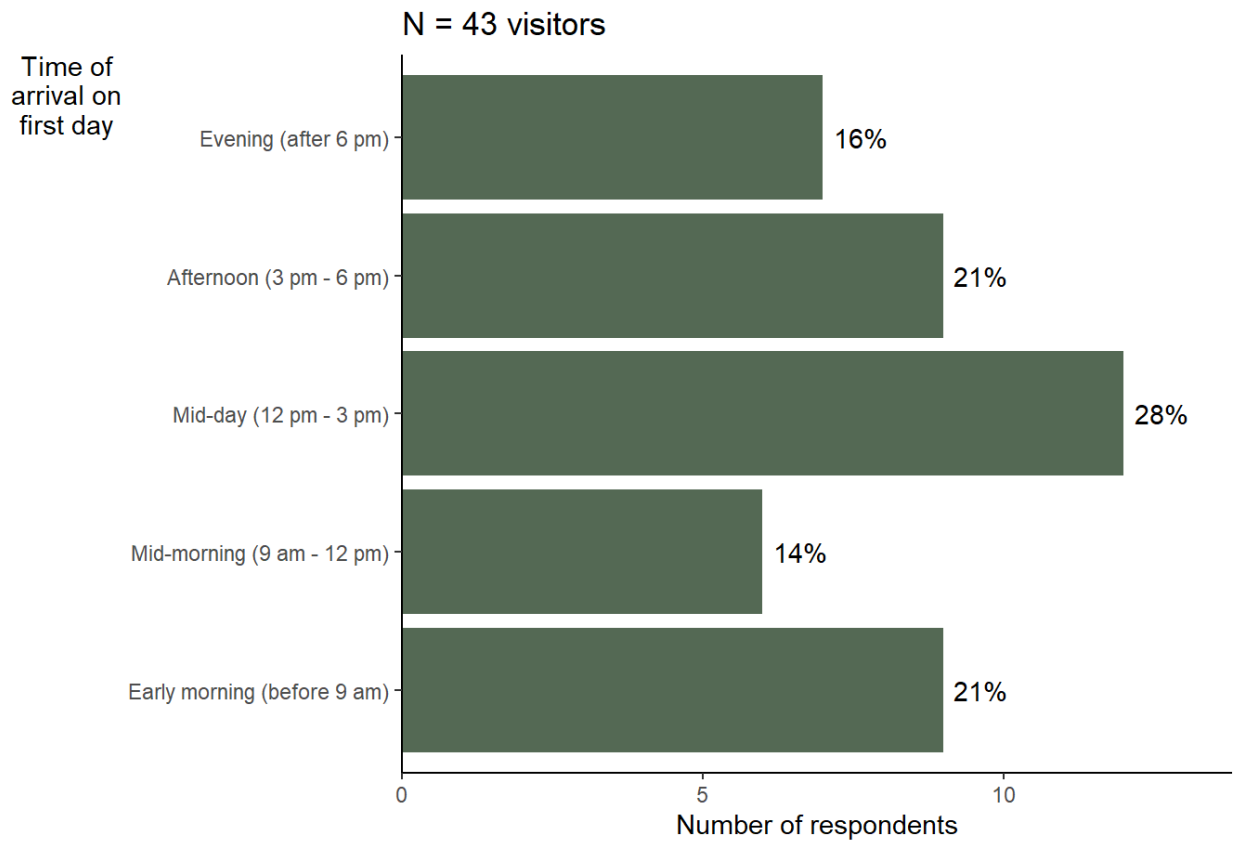
*Question 11 was asked of respondents who indicated in Question 9 that they had camped or backcountry camped, or planned to camp or backcountry camp in Arches National Park.*

What time of day did you arrive on your first day in Arches National Park?

Results (Figure 17)

Of visitors who camped, or backcountry camped in Arches National Park...

- Over one-third of visitors (35%) arrived before noon, and nearly half of visitors (49%) arrived after 12:00 p.m., but before 6:00 p.m. on their first day in ARCH.



**Figure 17.** Arrival time on first day of visit

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Departing from Arches National Park

Question 12

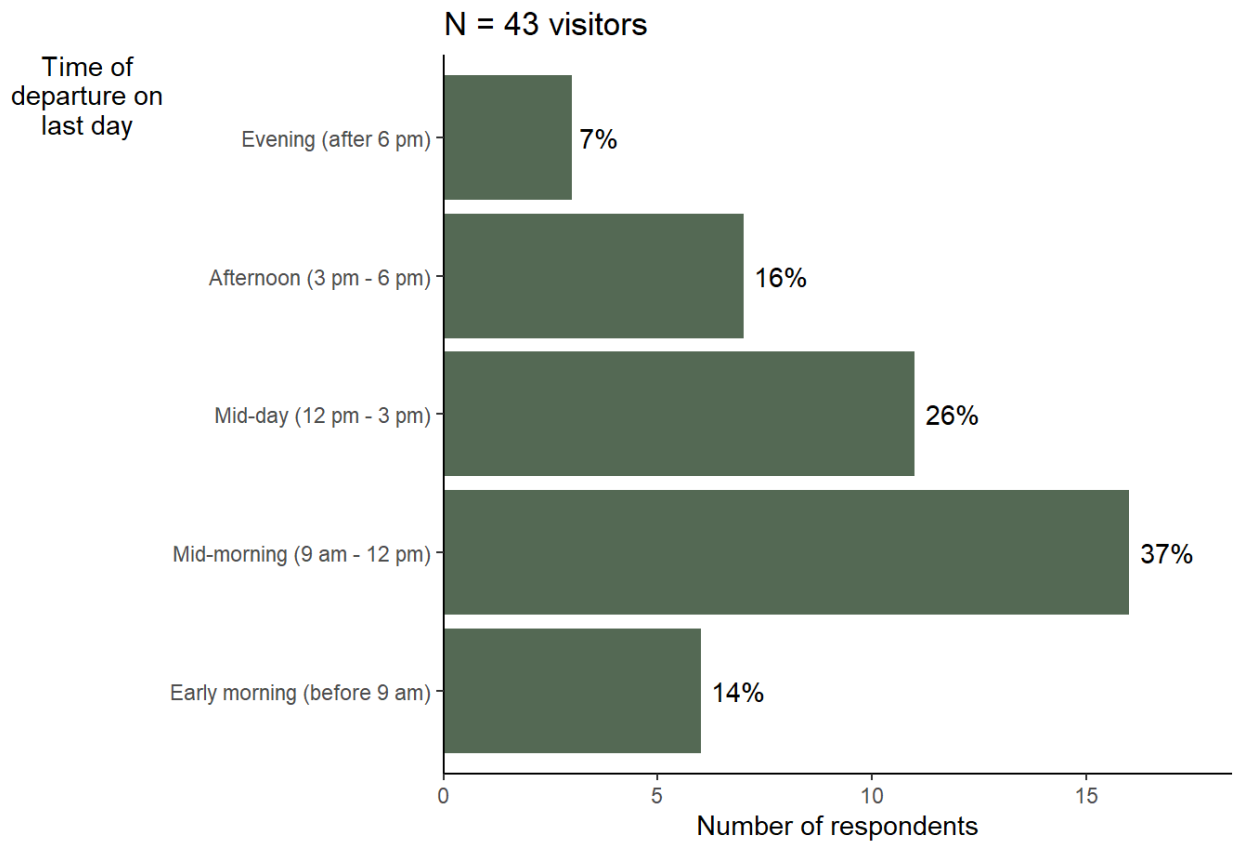
*Question 12 was asked of respondents who indicated in Question 9 that they had camped or backcountry camped, or planned to camp or backcountry camp in Arches National Park.*

What time of day do you plan to leave Arches National Park on your last day in the park?

Results (Figure 18)

Of visitors who camped, or backcountry camped in Arches National Park...

- Over one-third of visitors (37%) anticipated that they would leave the park between 9:00 a.m. and 12:00 p.m.
- Just over one-fourth of visitors (26%) anticipated that they would leave the park between 12:00 p.m. and 3:00 p.m.
- Nearly one-fourth (23%) of visitors anticipated that they would leave the park after 3:00 p.m.



**Figure 18.** Anticipated departure time on last day of visit

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Nearby communities

Question 13

*Question 13 was asked of respondents who indicated in Question 9 that they expected to camp outside of Arches National Park in the local area, lodge outside of Arches National Park in the local area, or stay in unpaid accommodations.*

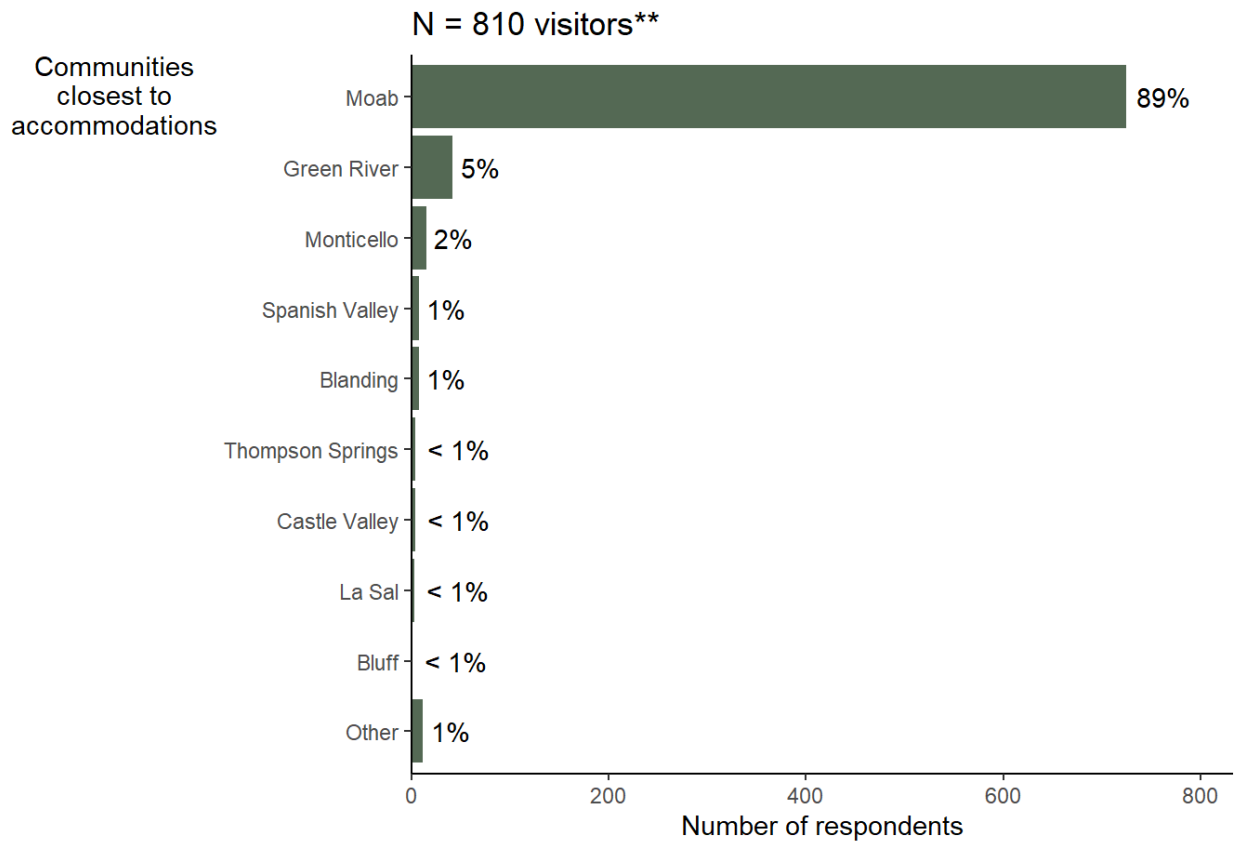
What communities are closest to where you stayed or are staying at your accommodation(s) outside Arches National Park in the local area?

See Figure 4 for map.

Results (Figure 19)

Of visitors who expected to camp outside of Arches National Park in the local area, lodge outside of Arches National Park in the local area, or stay in unpaid accommodations...

- Most visitors (89%) stayed in overnight accommodations in Moab.



**Figure 19.** Closest communities to visitors' accommodations

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of adults within group

Question 14A

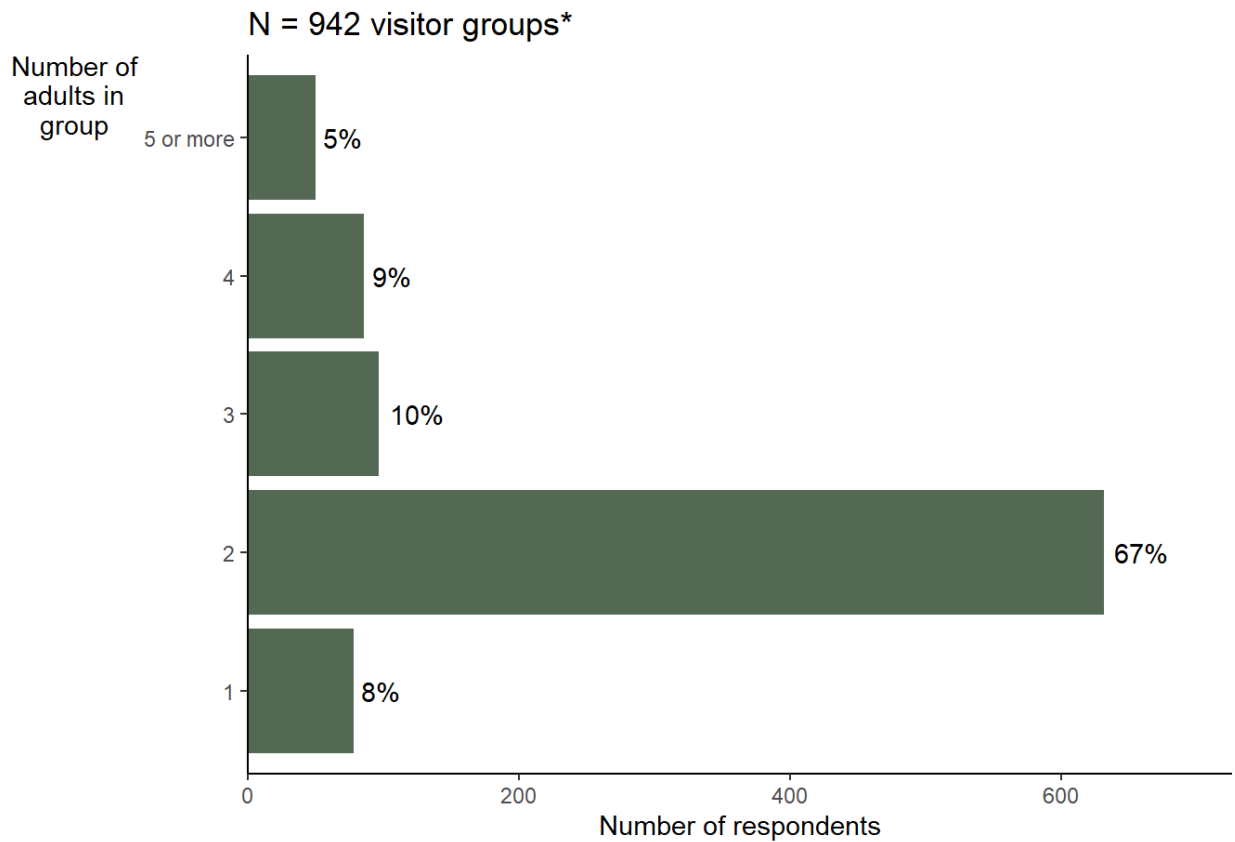
*Question 14A was asked of all respondents.*

Including yourself, how many people are in your personal group as you visit Arches National Park?

Number of adults (18 years and older)

Results (Figure 20)

- Two-thirds of visitor groups (67%) contained two adults.
- On average, there were 2.5 adults in visitor groups (see Appendix 5 in the Appendices companion document).



**Figure 20.** Number of adults in group

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of children in group

Question 14B

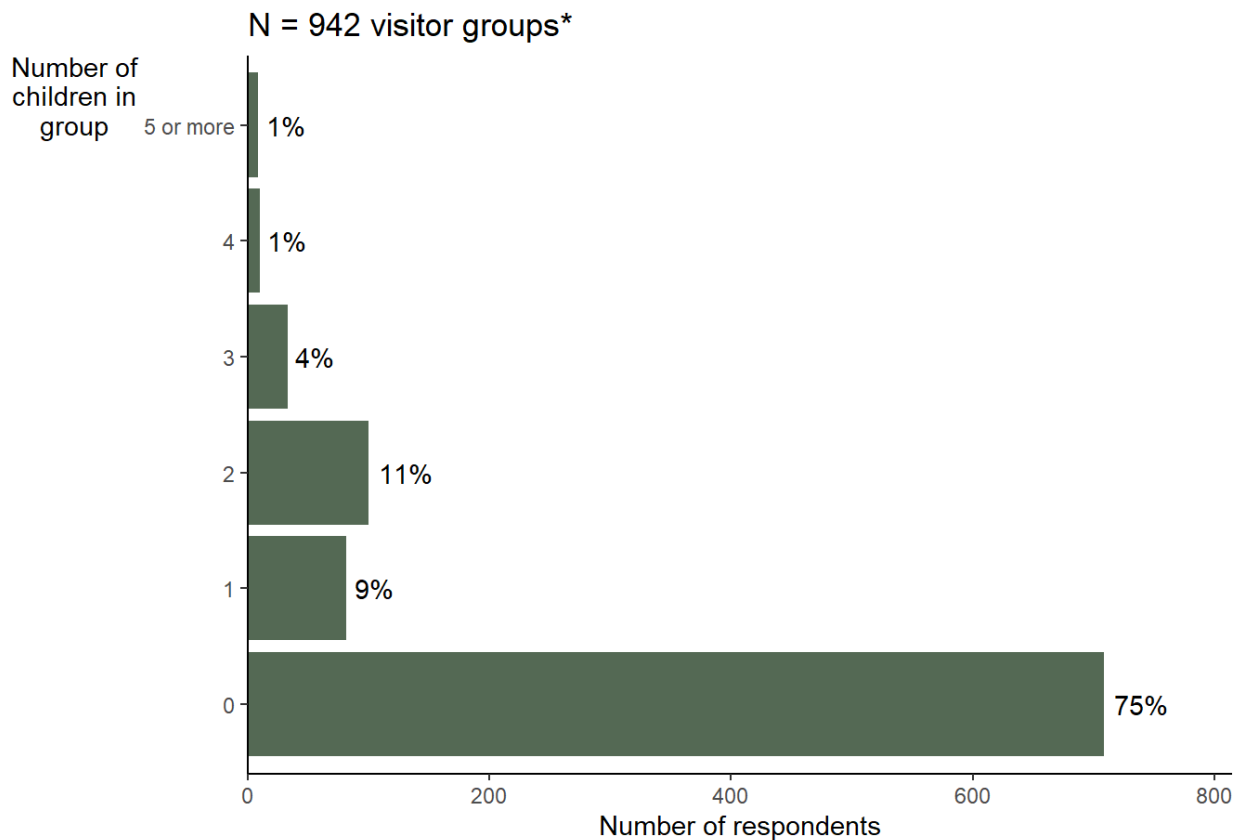
*Question 14B was asked of all respondents.*

Including yourself, how many people are in your personal group as you visit Arches National Park?

Number of children (under 18 years)

Results (Figure 21)

- Three-quarters of visitor groups (75%) traveled without children, while 20 percent of visitor groups traveled with one or two children.
- On average, there were 0.5 children in visitor groups (see Appendix 5 in the Appendices companion document).



**Figure 21.** Number of children in group

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Group size

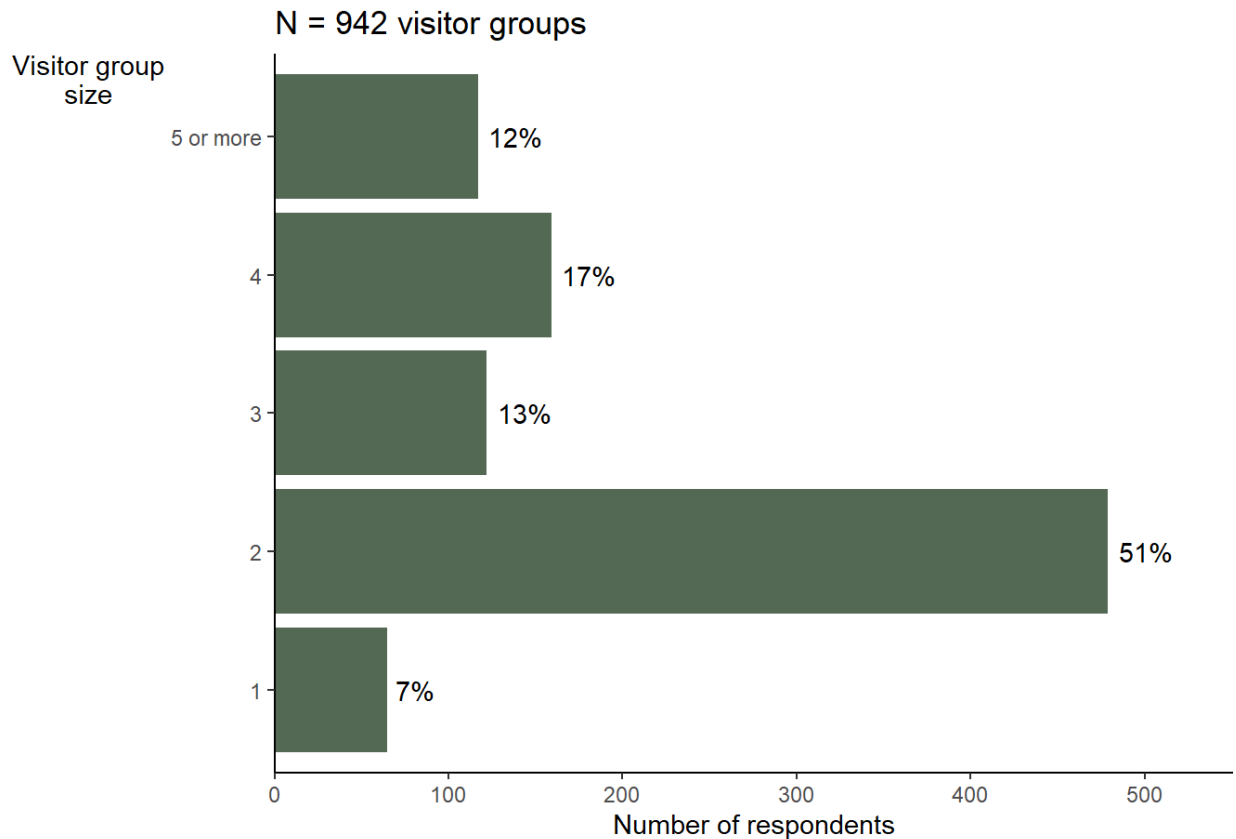
Question 14C

*Question 14C was asked of all respondents.*

Including yourself, how many people are in your personal group as you visit Arches National Park?

Results (Figure 22)

- More than half of visitor groups (51%) visited the park in groups of two people, while 42 percent visited in groups of three or more. A small percentage (7%) of visitor groups visited ARCH alone.
- The average visitor group size was 3.0 people (see Appendix 5 in the Appendices companion document).



**Figure 22.** Visitor group size

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of people splitting expenses

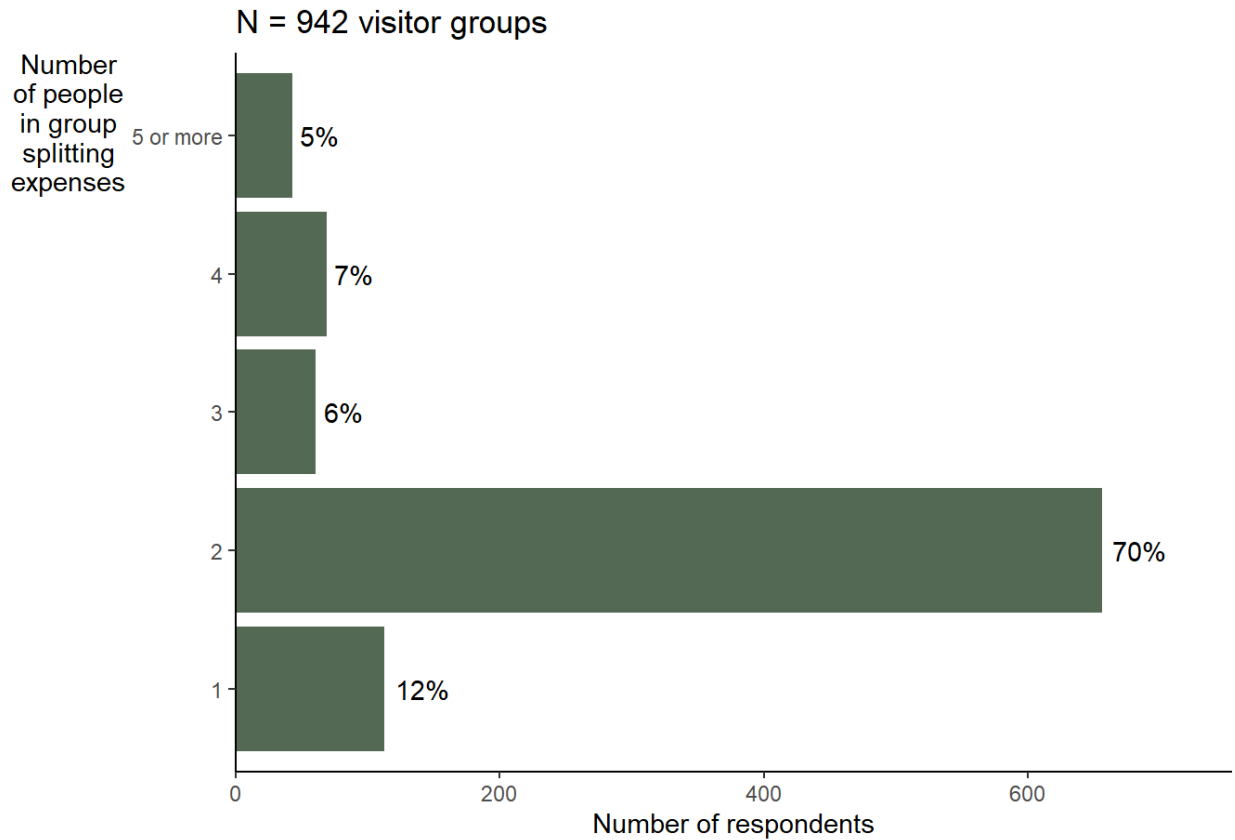
Question 15

*Question 15 was asked of all respondents.*

Including yourself, how many people in your personal group split trip expenses?

Results (Figure 23)

- Over two-thirds of visitor groups (70%) split trip expenses between two group members, while one person paid trip expenses for 12 percent of visitor groups.
- On average, 2.3 group members were splitting expenses (see Appendix 5 in the Appendices companion document).



**Figure 23.** Number of people splitting trip expenses

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Forms of transportation

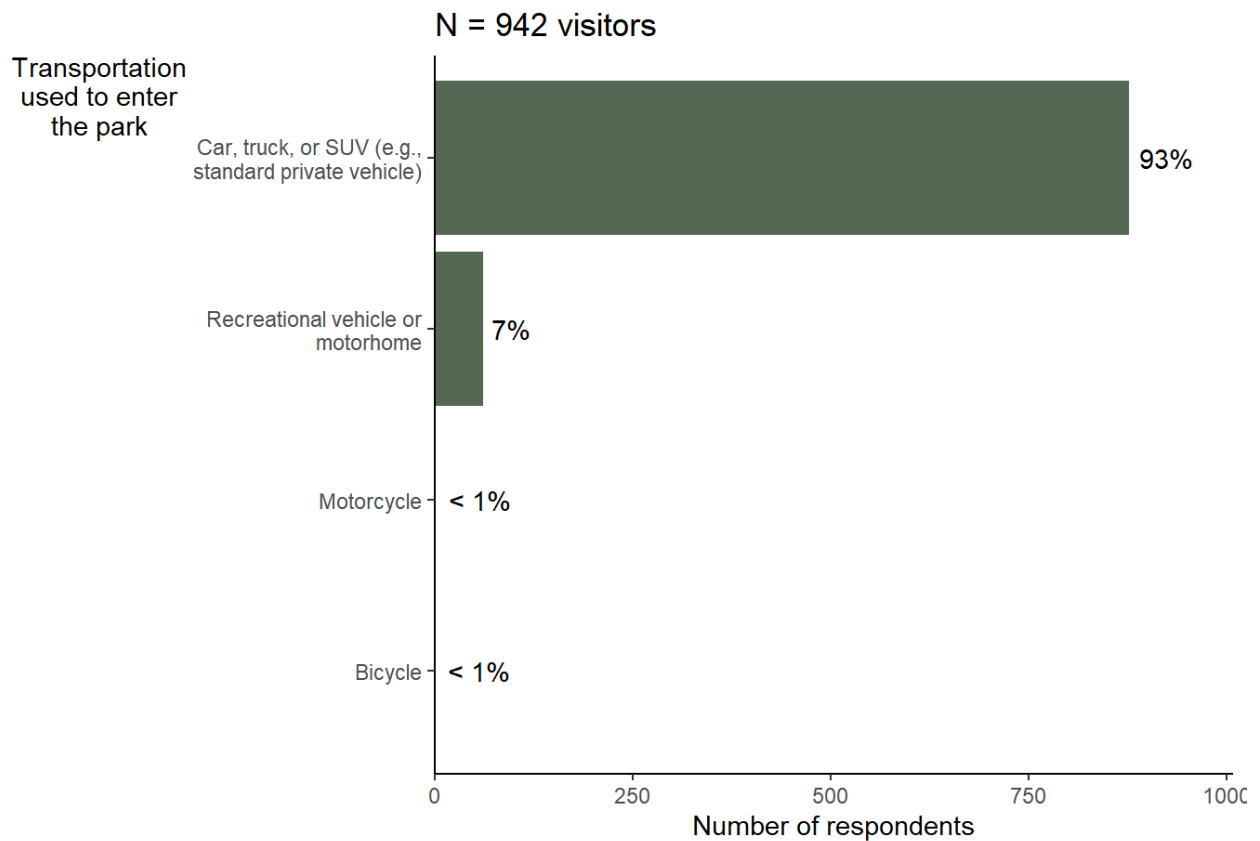
Question 16

*Question 16 was asked of all respondents.*

Which of the following forms of transportation did you personally use to enter Arches National Park today?

Results (Figure 24)

- The vast majority of visitors (93%) entered ARCH in a private vehicle such as a car, truck, or SUV.



**Figure 24.** Transportation used to enter park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of people in vehicle

Question 17

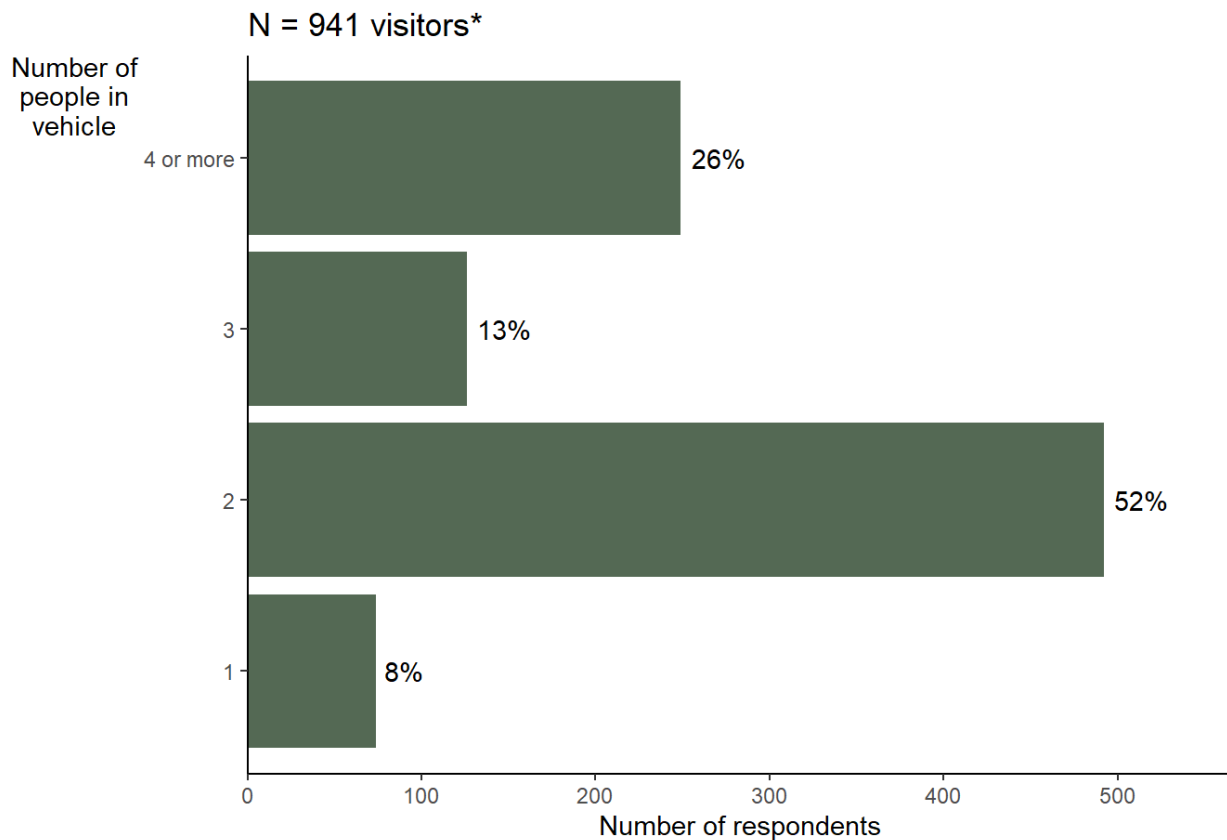
*Question 17 was asked of respondents who indicated in Question 16 that they used a car, truck, or SUV to enter Arches National Park.*

How many people are traveling in your vehicle with you, including yourself?

Results (Figure 25)

Of visitors who reported using a car, truck, or SUV to enter Arches National Park...

- Over half of visitors (52%) entered the park in a vehicle with two people, while about a quarter of visitors (26%) entered the park in a vehicle with four or more people.
- On average, visitors entered the park in vehicles with 2.7 people (see Appendix 5 in the Appendices companion document).



**Figure 25.** Number of passengers in vehicle

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Travel planning

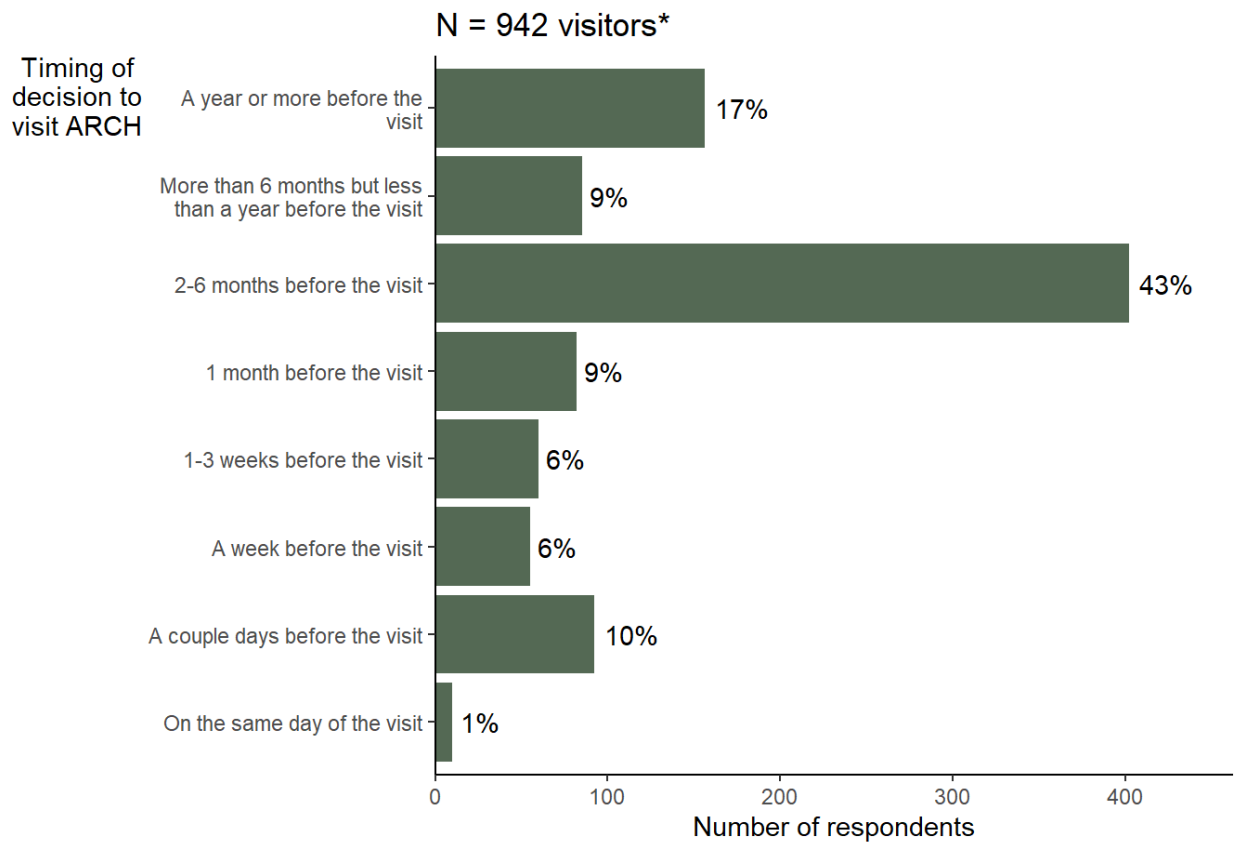
Question 24

*Question 24 was asked of all respondents.*

When did you make the decision to visit Arches National Park?

Results (Figure 26)

- Visitors most frequently reported that they decided to travel to ARCH two to six months prior to traveling (43%), while 32 percent of visitors reported deciding to travel to ARCH one month or less before their travel.



**Figure 26.** Timing of decision to visit Arches National Park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Awareness of pilot timed-entry system

Question 25

Question 25 was asked of all respondents.

How did you become aware that a timed-entry reservation is currently required to enter the park between the hours of 6 a.m. and 5 p.m.?

Results (Figure 27)

- More than half (58%) of visitors became aware of the pilot timed-entry system via the Arches National Park website, while 14 percent of visitors learned from a friend.

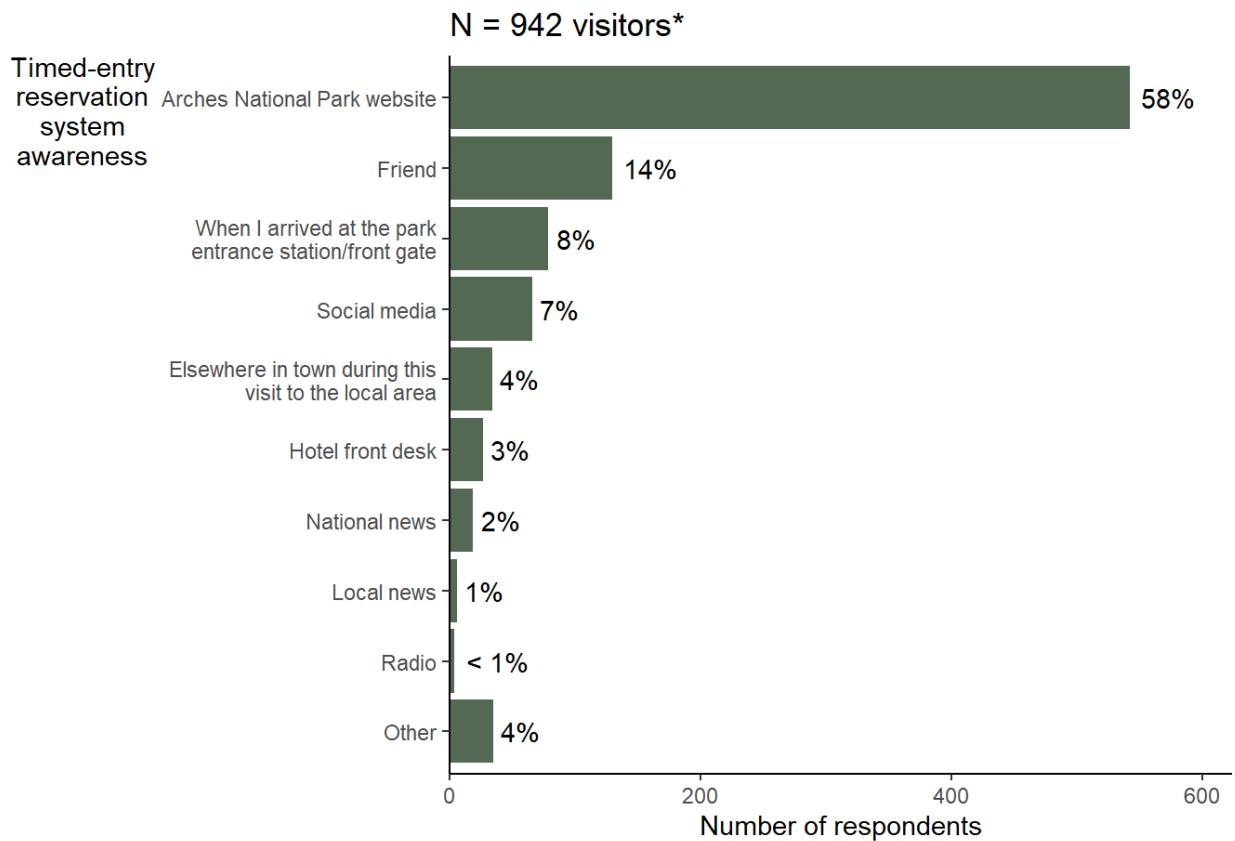


Figure 27. Pilot timed-entry system awareness

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Timed-entry reservation holders

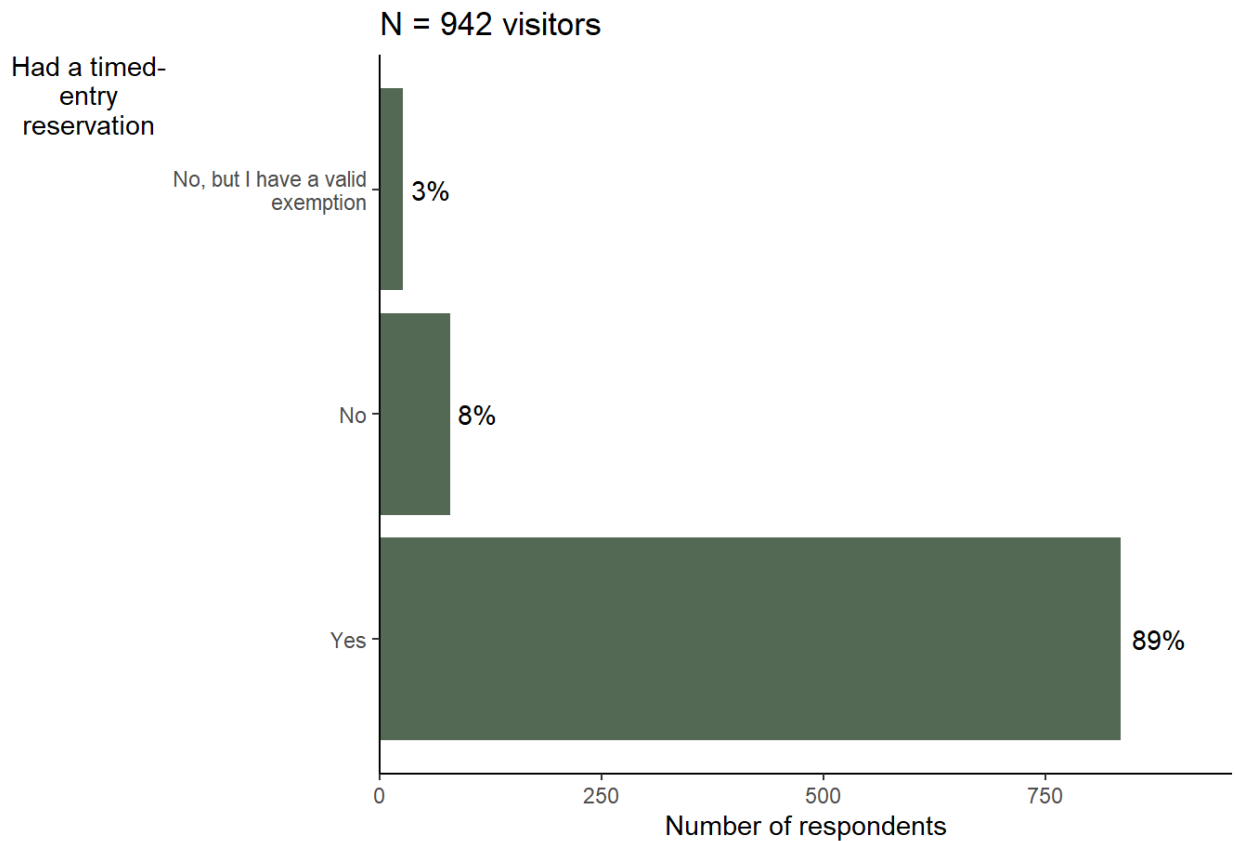
Question 26

*Question 26 was asked of all respondents.*

Did you have a timed-entry reservation to enter the park today?

Results (Figure 28)

- Most (89%) visitors had a timed-entry reservation to enter the park. Only three percent of visitors reported having a valid exemption for not having a timed-entry reservation.



**Figure 28.** Timed-entry reservation holders

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Preferred day and time of timed-entry reservation

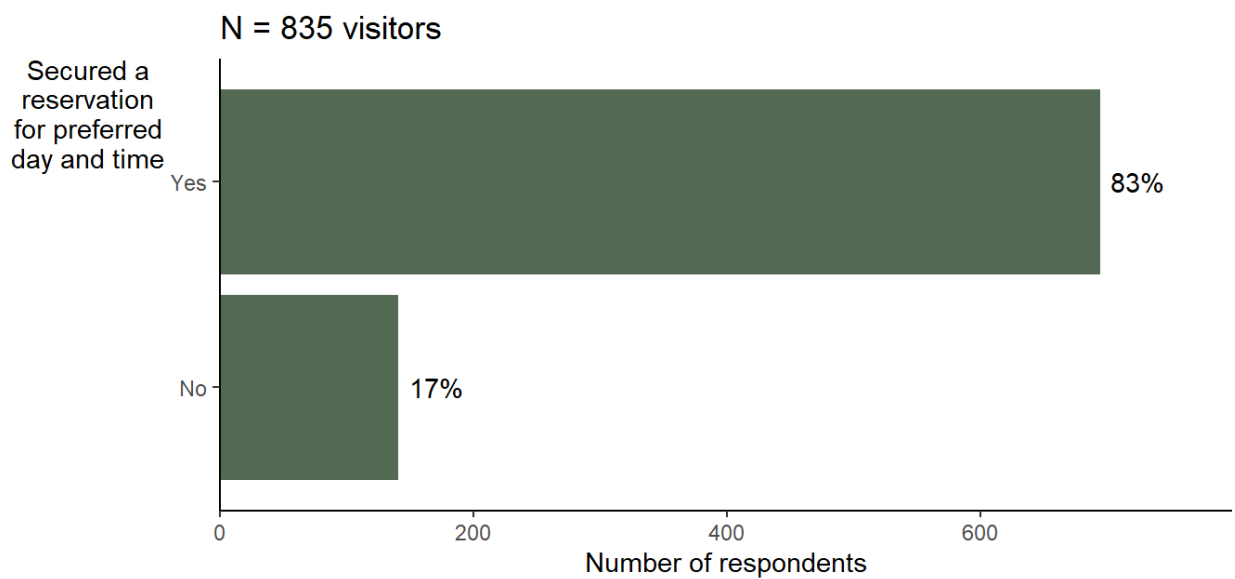
Question 27

*Question 27 was asked of respondents who indicated in Question 26 that they had a timed-entry reservation to enter the park on the day they were contacted.*

Were you able to secure a reservation for your preferred day and time?

Results (Figure 29)

- Most (83%) visitors who had a timed-entry reservation were able to secure a timed-entry reservation for their preferred day and time.



**Figure 29.** Secured reservation for preferred day and time

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Actions taken by visitors to secure a timed-entry reservation

Question 28

Question 28 was asked of respondents who indicated in Question 27 that they were able to secure a timed-entry reservation for the day they were contacted, but that it was not for their preferred day and time.

Which of the following actions did you take in order to secure a timed-entry reservation for today?

Results (Figure 30)

- Most (85%) of visitors who secured a reservation but not for their preferred day and time visited during a different time of day in order to secure a timed-entry reservation, and 12 percent visited on a different day in the same week to secure a timed-entry reservation.

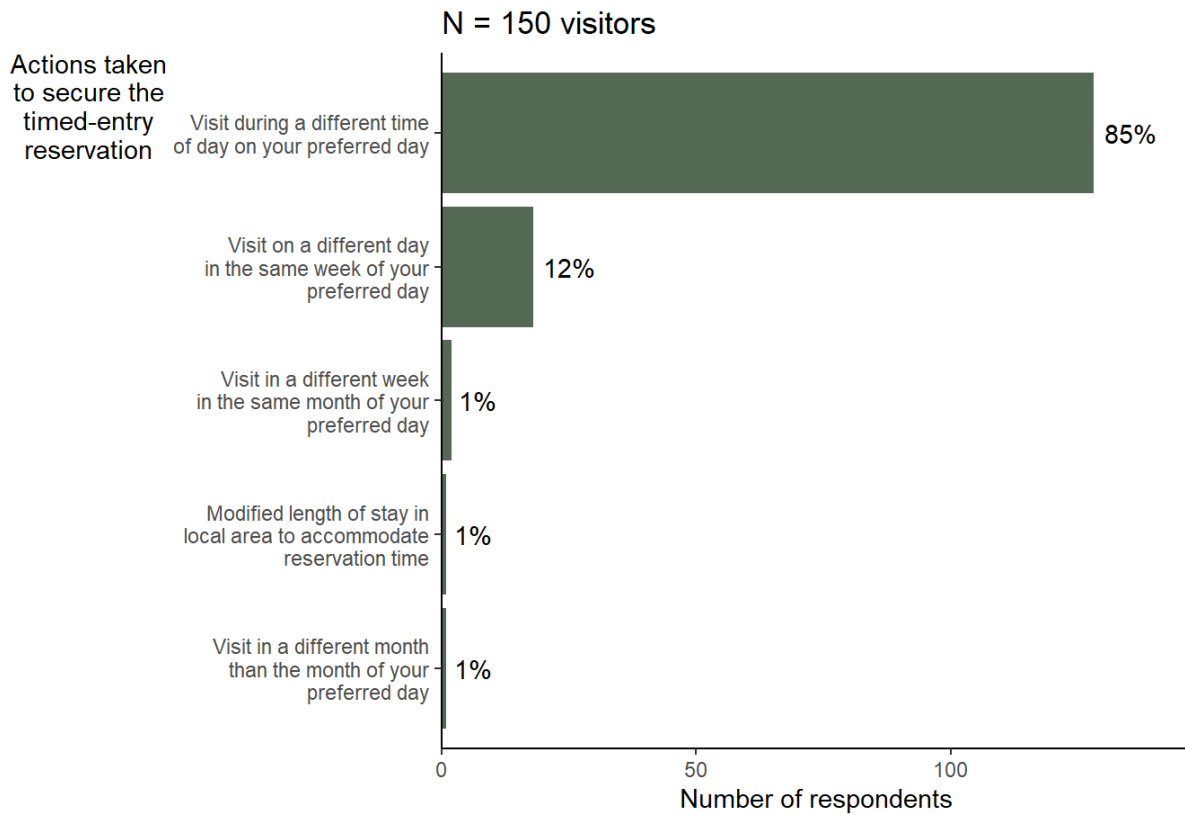


Figure 30. Actions taken by visitors to secure a timed-entry reservation

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Tried to secure a timed-entry reservation

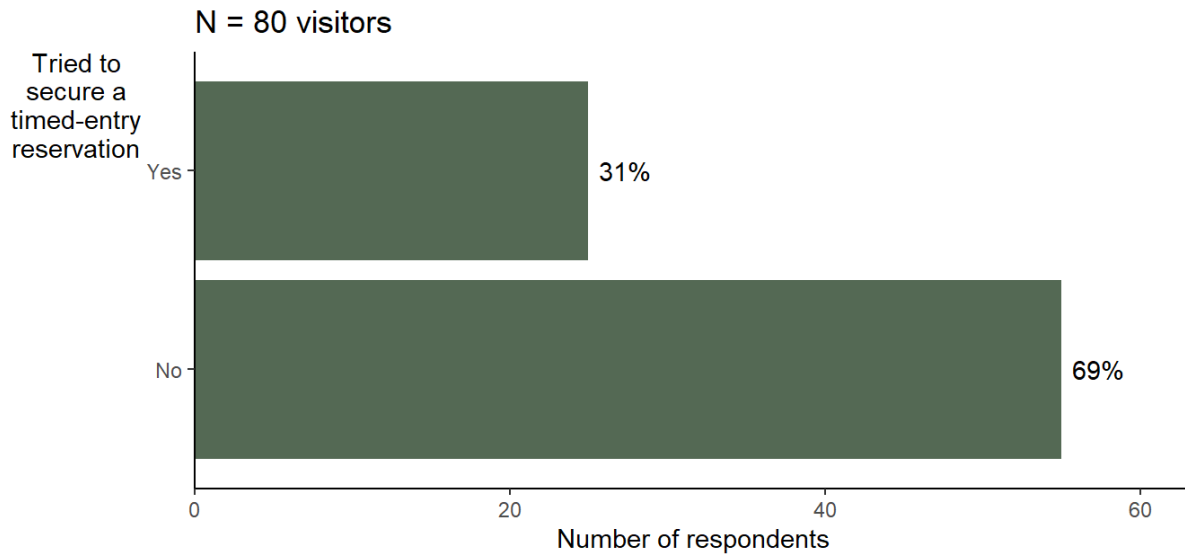
Question 29A

*Question 29A was asked of respondents who indicated in Question 26 that they did not have a timed-entry reservation to enter the park for the day they were contacted.*

Did you try to secure a timed-entry reservation to enter the park today?

Results (Figure 31)

- Over two-thirds (69%) of visitors who did not have a timed-entry reservation to visit ARCH did not try to secure one.



**Figure 31.** Tried to secure a timed-entry reservation

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Reason for not being able to secure a timed-entry reservation

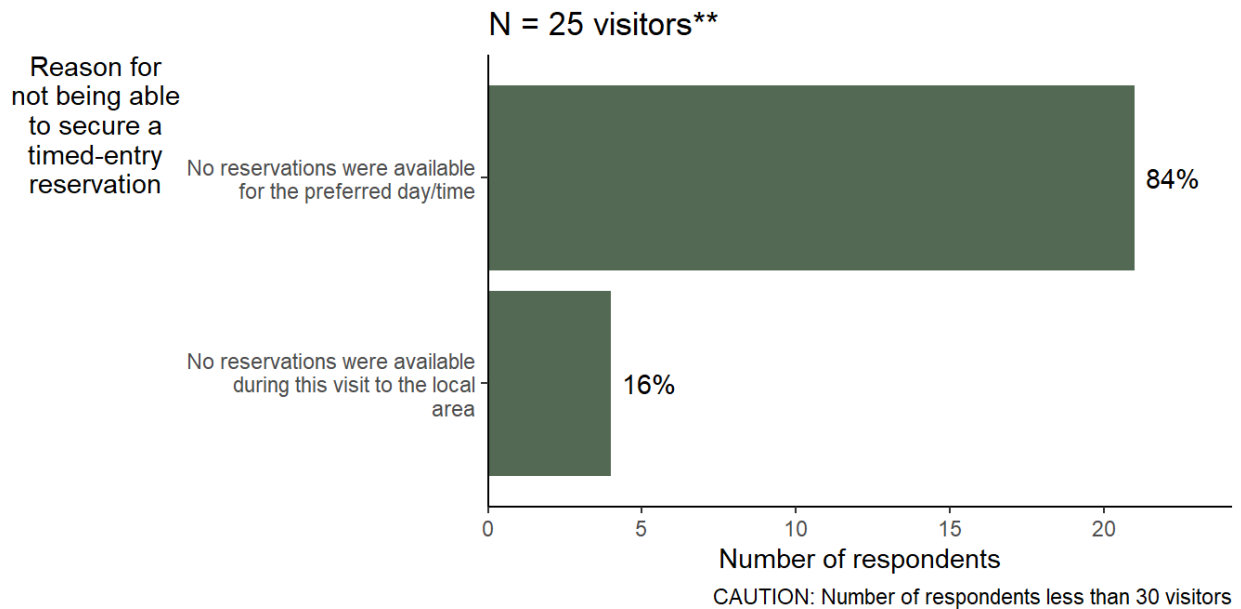
Question 29B

*Question 29B was asked of respondents who indicated in Question 29A that they tried to secure a timed-entry reservation for the day they were contacted but did not get one.*

Why weren't you able to secure a timed-entry reservation to enter Arches National Park for today?

Results (Figure 32)

- Most (84%) visitors who tried to secure a timed-entry reservation but did not get one, indicated that there were no reservations available during their preferred day and/or time. A smaller percentage of visitors (16%) indicated that they did not secure a timed-entry reservation because there was none available during their visit to the local area.



**Figure 32.** Reason for not being able to secure a timed-entry reservation

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Reason for not trying to secure a timed-entry reservation

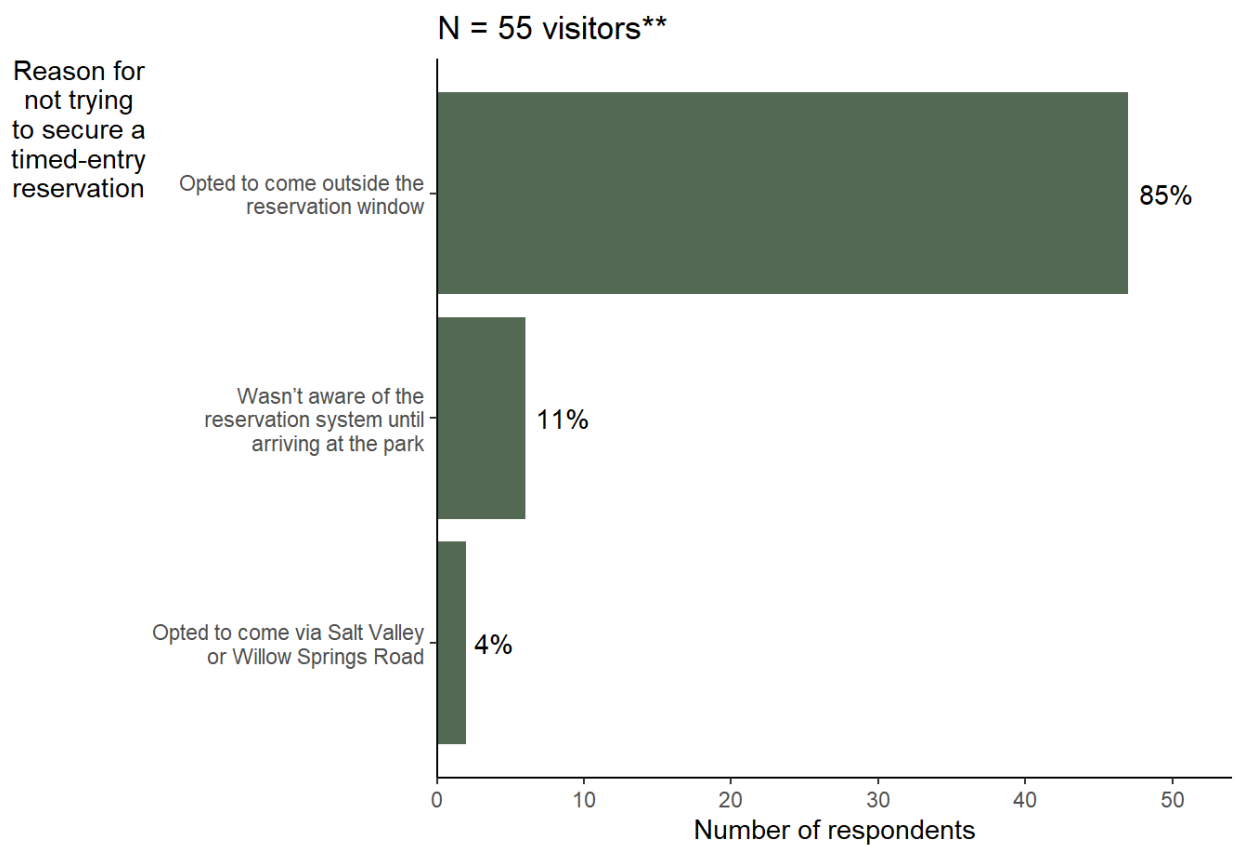
Question 29C

Question 29C was asked of respondents who indicated in Question 29A that they did not try to secure a timed-entry reservation for the day they were contacted.

Why didn't you try to secure a timed-entry reservation to enter the park today?

Results (Figure 33)

- Most (85%) visitors who did not try to secure a timed-entry reservation opted to come outside the reservation window.



**Figure 33.** Reason for not trying to secure a timed-entry reservation

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Multiday trip

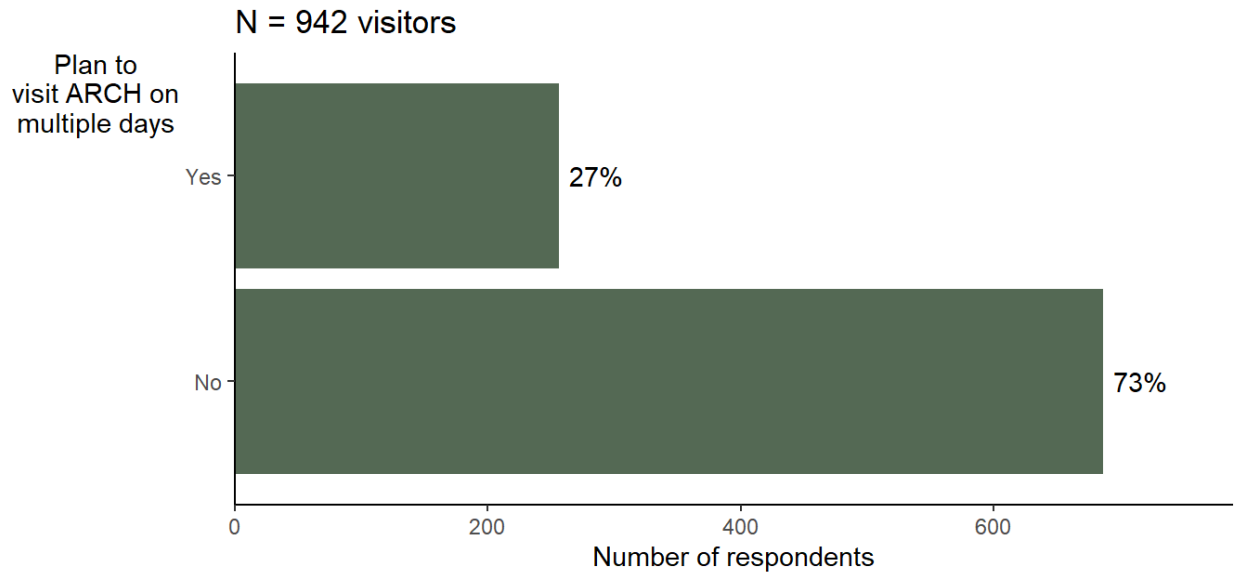
Question 30

*Question 30 was asked of all respondents.*

On this trip, do you plan to visit Arches National Park for more than one day?

Results (Figure 34)

- Nearly three-quarters (73%) of visitors did not plan to visit ARCH on multiple days.



**Figure 34.** Plan to visit Arches National Park on multiple days

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of hours spent in the park

Question 31

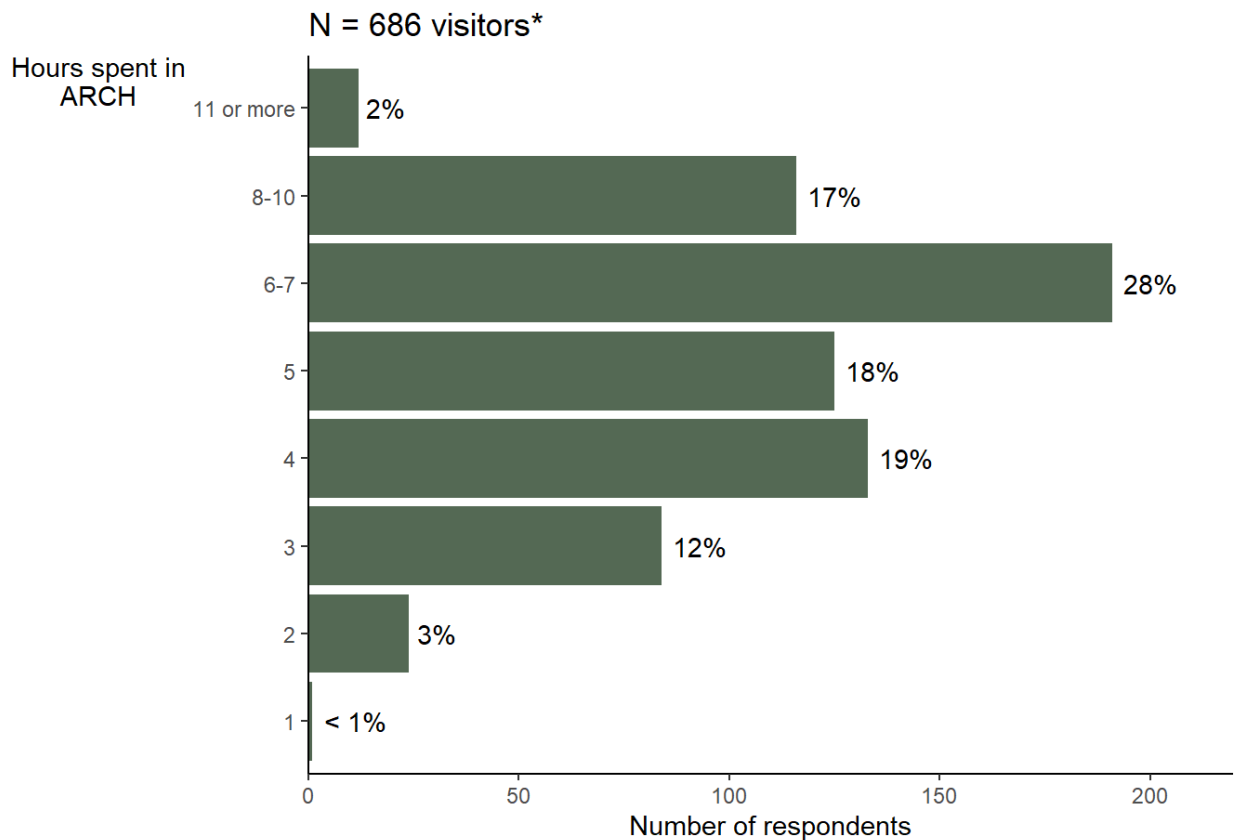
*Question 31 was asked of respondents who indicated in Question 30 that they did not plan to visit Arches National Park for more than one day.*

How many hours do you plan to spend within Arches National Park on this trip?

Results (Figure 35)

Of visitors who planned to spend only one day in the park...

- More than half of visitors (52%) planned to visit for five hours or less, and 81 percent of visitors planned to visit for seven hours or less.
- On average, visitors spent 5.5 hours in the park (see Appendix 5 in the Appendices companion document).



**Figure 35.** Number of hours visiting the park by groups who planned to spend less than 24 hours in the park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Days spent in the park

Question 32

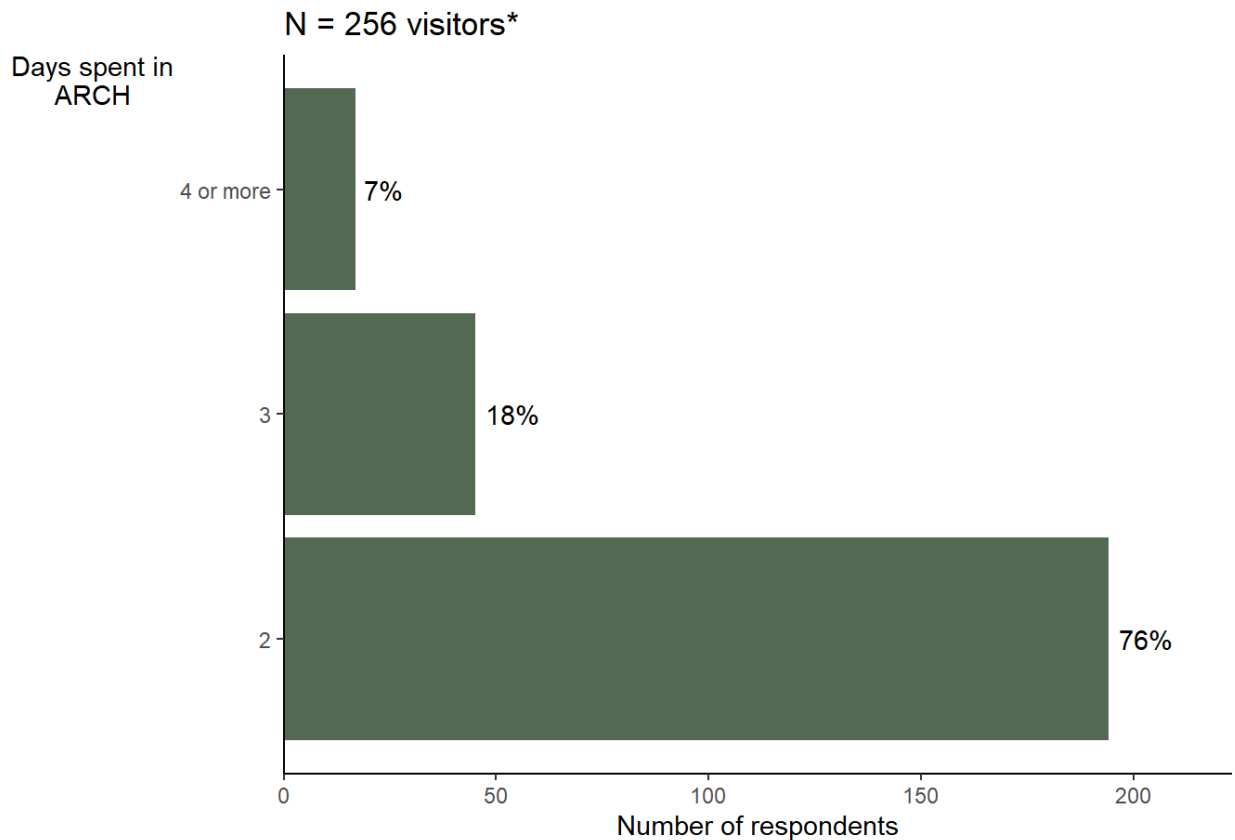
Question 32 was asked of respondents who indicated in Question 30 that they planned to visit Arches National Park for more than one day.

How many days do you plan to spend within Arches National Park on this trip?

Results (Figure 36)

Of visitors who planned to spend more than one day in the park...

- More than three-quarters (76%) of visitors planned to visit for two days.
- The average number of days spent in the park was 2.4 days (see Appendix 5 in the Appendices companion document).



**Figure 36.** Number of days visiting the park by groups who spent 24 hours or more in the park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of different days visiting the park

Question 33

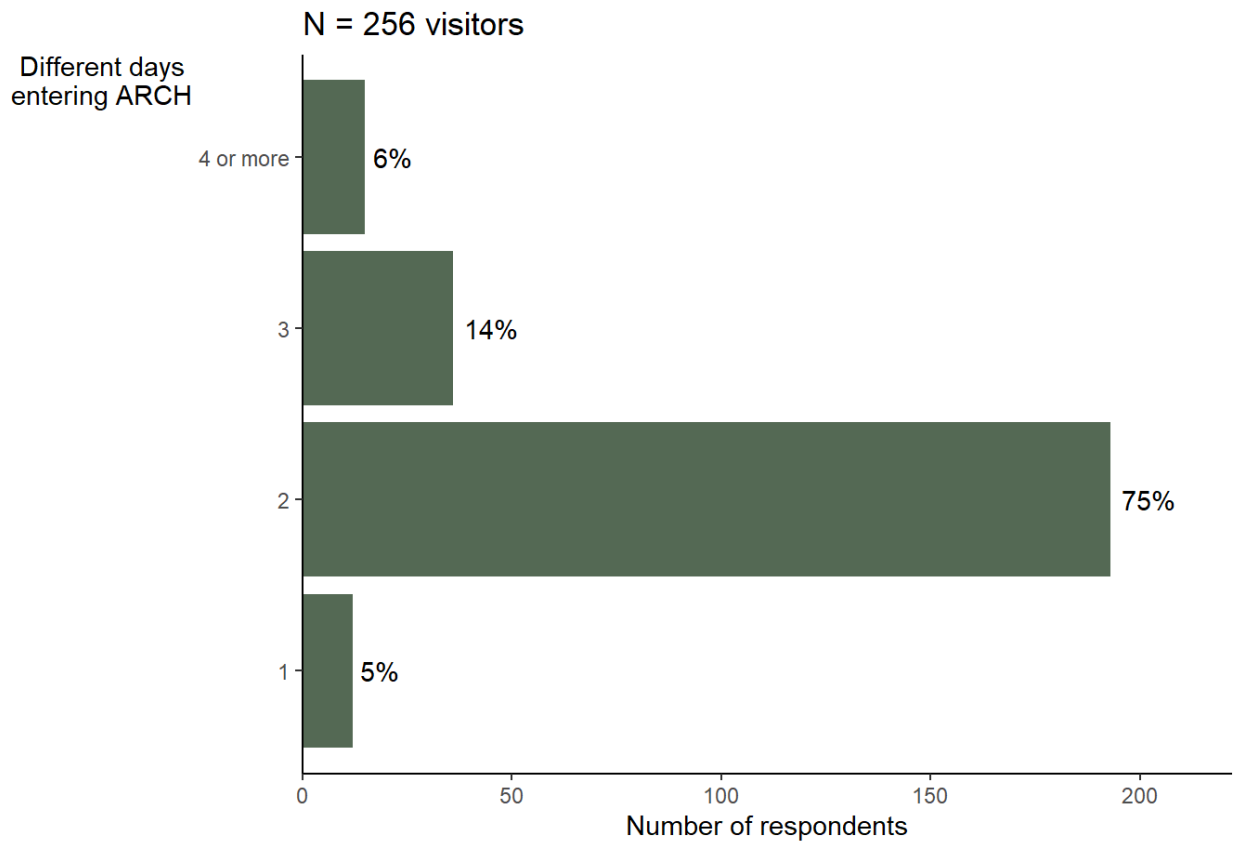
*Question 33 was asked of respondents who indicated in Question 30 that they planned to visit Arches National Park for more than one day.*

On how many different days do you expect to enter the park?

Results (Figure 37)

Of visitors who planned to spend more than one day in the park...

- Three-quarters (75%) of visitors planned to enter the park on two different days.
- The average number of different days visiting the park was 2.2 days (see Appendix 5 in the Appendices companion document).



**Figure 37.** Number of different days visiting the park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Multiple entrances on the day contacted

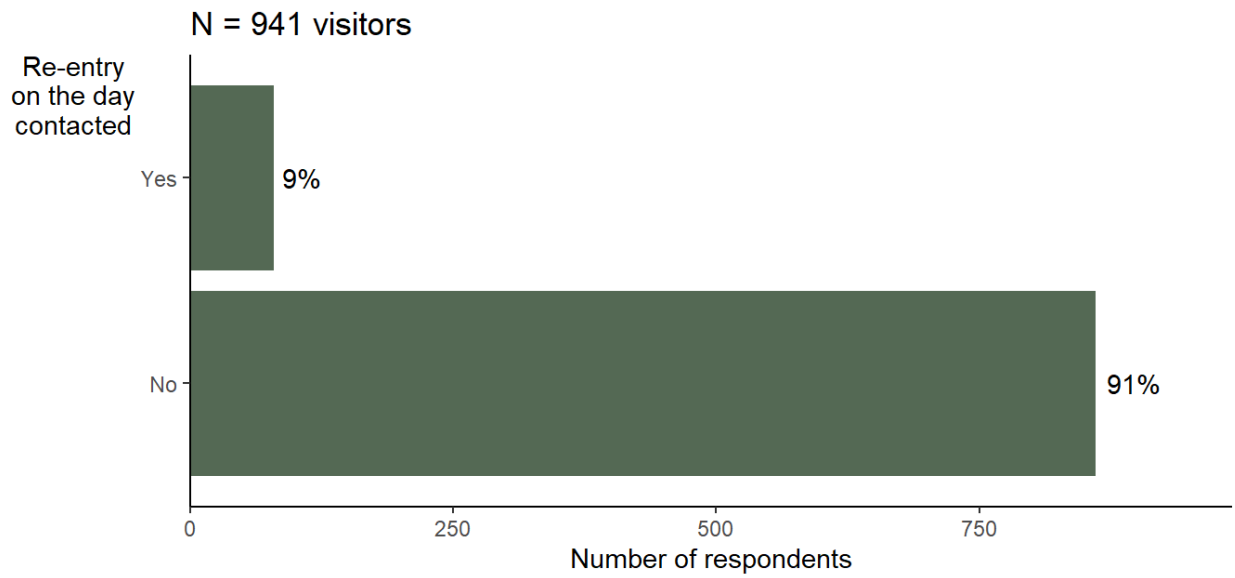
Question 34A

*Question 34A was asked of all respondents.*

Did you, or do you plan to leave and re-enter the park today?

Results (Figure 38)

- Most visitors (91%) did not plan to exit and re-enter the park on the day they were contacted.



**Figure 38.** Plans for park re-entry on the day contacted

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of times re-entering the park on the day contacted

Question 34B

*Question 34B was asked of respondents who indicated in Question 34A that they planned to leave and re-enter the park.*

How many times do you plan to re-enter the park today?

- All visitors (100%) who exited or planned to exit and re-enter the park on the day they were contacted did so only one time.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Effect of potential crowding on trip planning

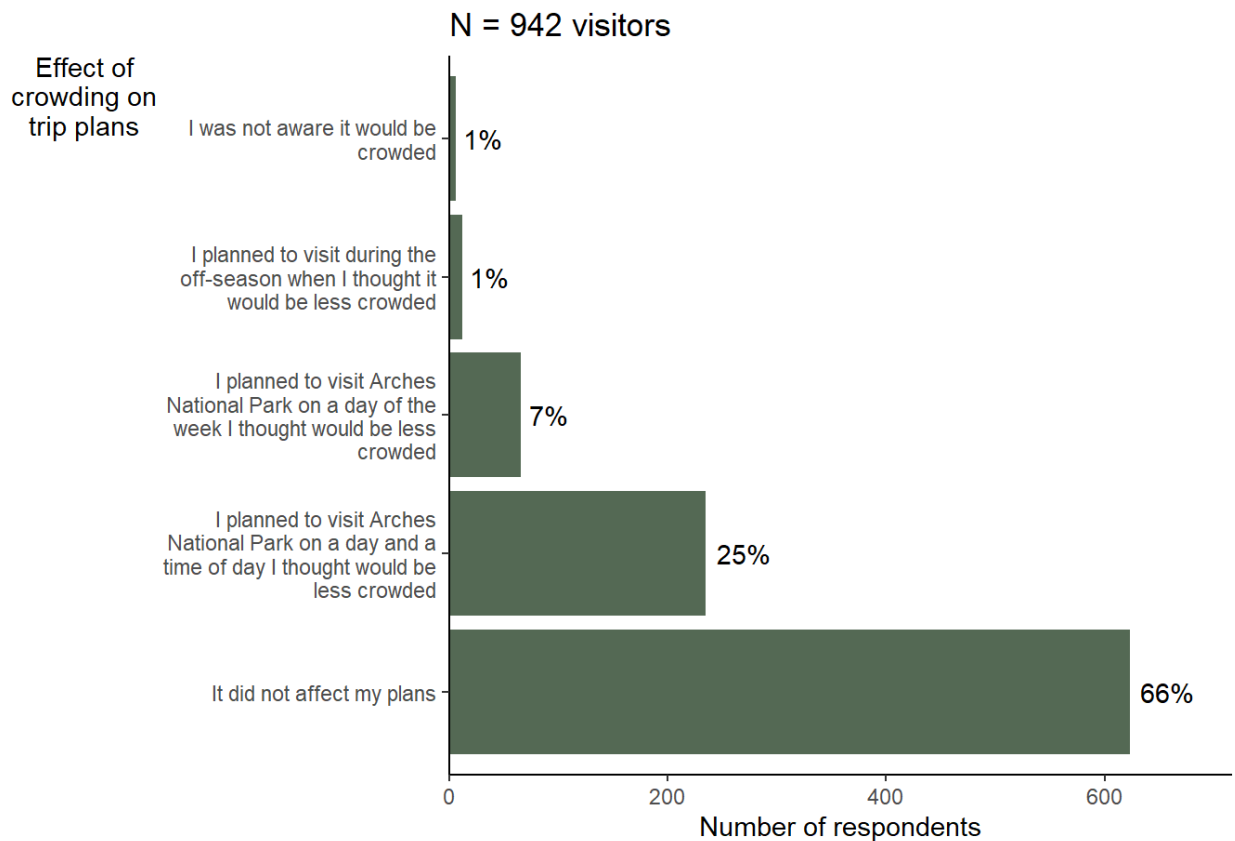
Question 35

*Question 35 was asked of all respondents.*

During the planning process for your visit to Arches National Park, how did the possibility of crowding affect your trip plans?

Results (Figure 39)

- Nearly two-thirds (66%) of visitors reported that the possibility of crowding did not affect their trip plans, and a quarter (25%) of visitors reported that they planned to visit ARCH on a day and time they thought would be less crowded.



**Figure 39.** Effect of possible crowding on trip plans

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Visitation history**

First time visitor

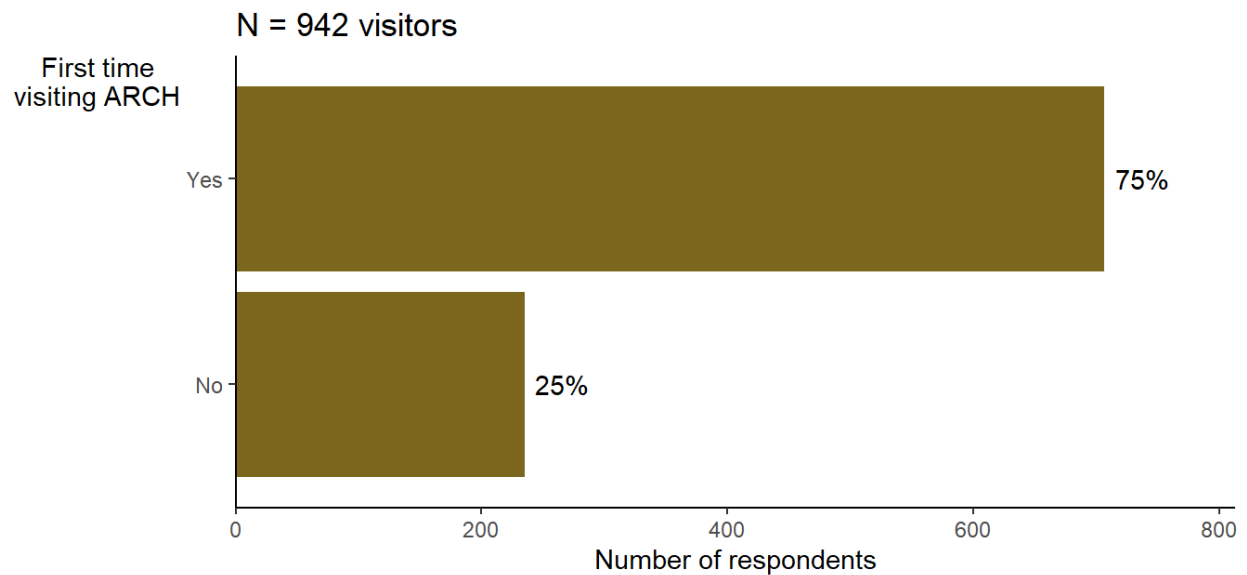
Question 36

*Question 36 was asked of all respondents.*

Are you a first-time visitor to Arches National Park?

Results (Figure 40)

- Three-quarters (75%) of visitors reported being a first-time visitor to ARCH.



**Figure 40.** First-time visitors

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of visits to Arches National Park in the past 12 months

Question 37

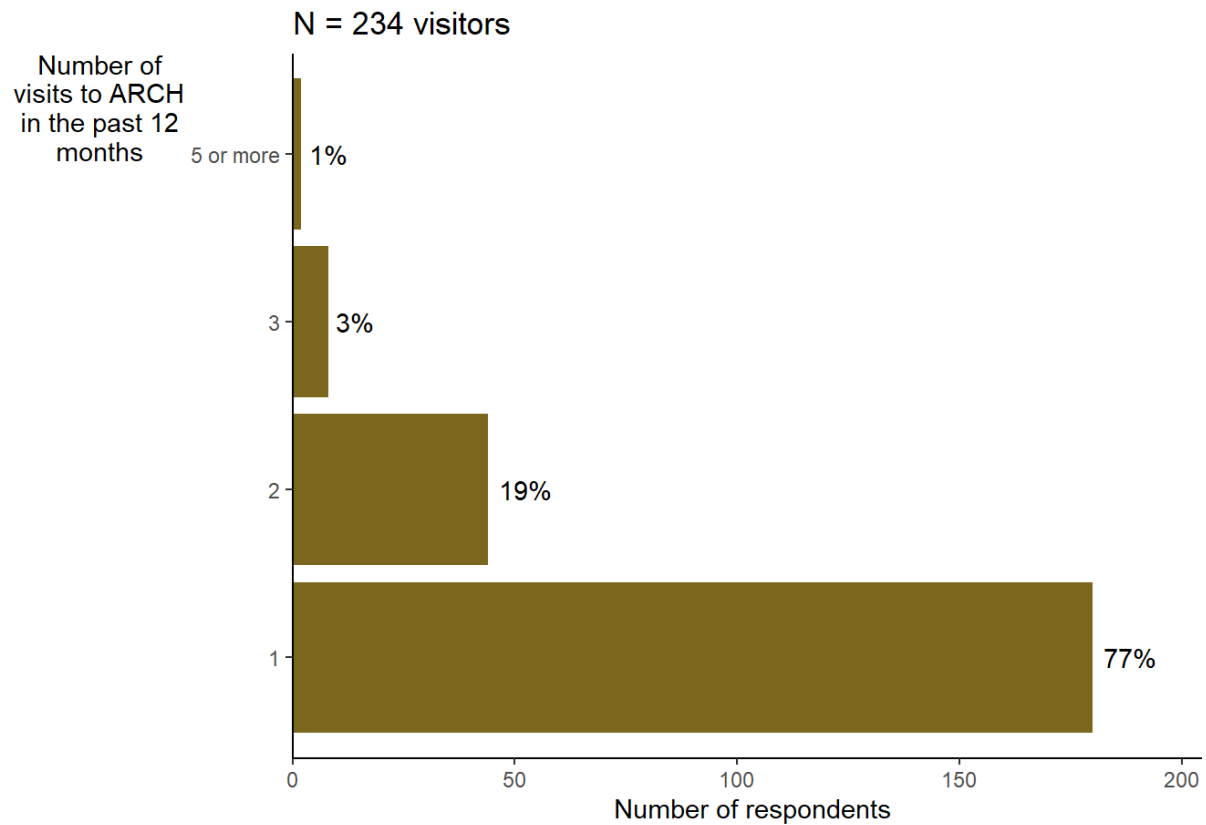
*Question 37 was asked of respondents who indicated in Question 36 that they are not a first-time visitor to Arches National Park.*

Including the current trip, how many visits have you made to Arches National Park over the past 12 months?

Results (Figure 41)

Of visitors who had visited Arches National Park before...

- A majority of visitors (77%) reported one trip to the park in the past 12 months (i.e., the current trip).
- A relatively small percentage of visitors (19%) reported two trips to the park in the past 12 months, including the current trip.
- On average, visitors reported visiting ARCH 1.3 times over the past 12 months (see Appendix 5 in the Appendices companion document).



**Figure 41.** Number of previous visits in the last 12 months

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of visits to Arches National Park in the past five years

Question 38

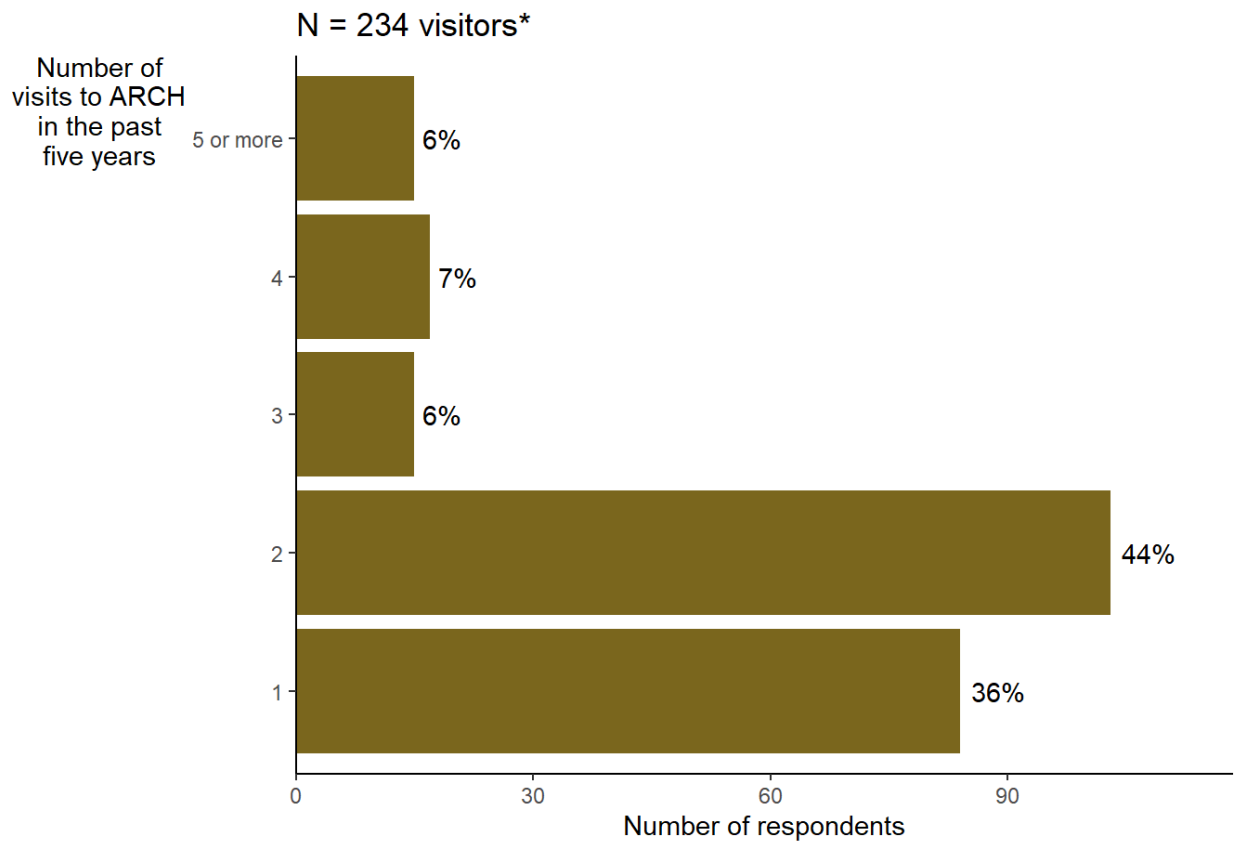
*Question 38 was asked of respondents who indicated in Question 36 that they are not a first-time visitor to Arches National Park.*

Including the current trip, how many visits have you made to Arches National Park over the past five years?

Results (Figure 42)

Of visitors who had visited Arches National Park before...

- A majority of visitors (80%) reported one or two trips to the park in the past five years, including the current trip.
- The average number of visits to ARCH in the past five years was 2.3 (see Appendix 5 in the Appendices companion document).



**Figure 42.** Number of previous visits in the past five years

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Parkwide Visitor Survey – Mail-Back Survey

### Trip description

#### Transportation used to get to Arches National Park

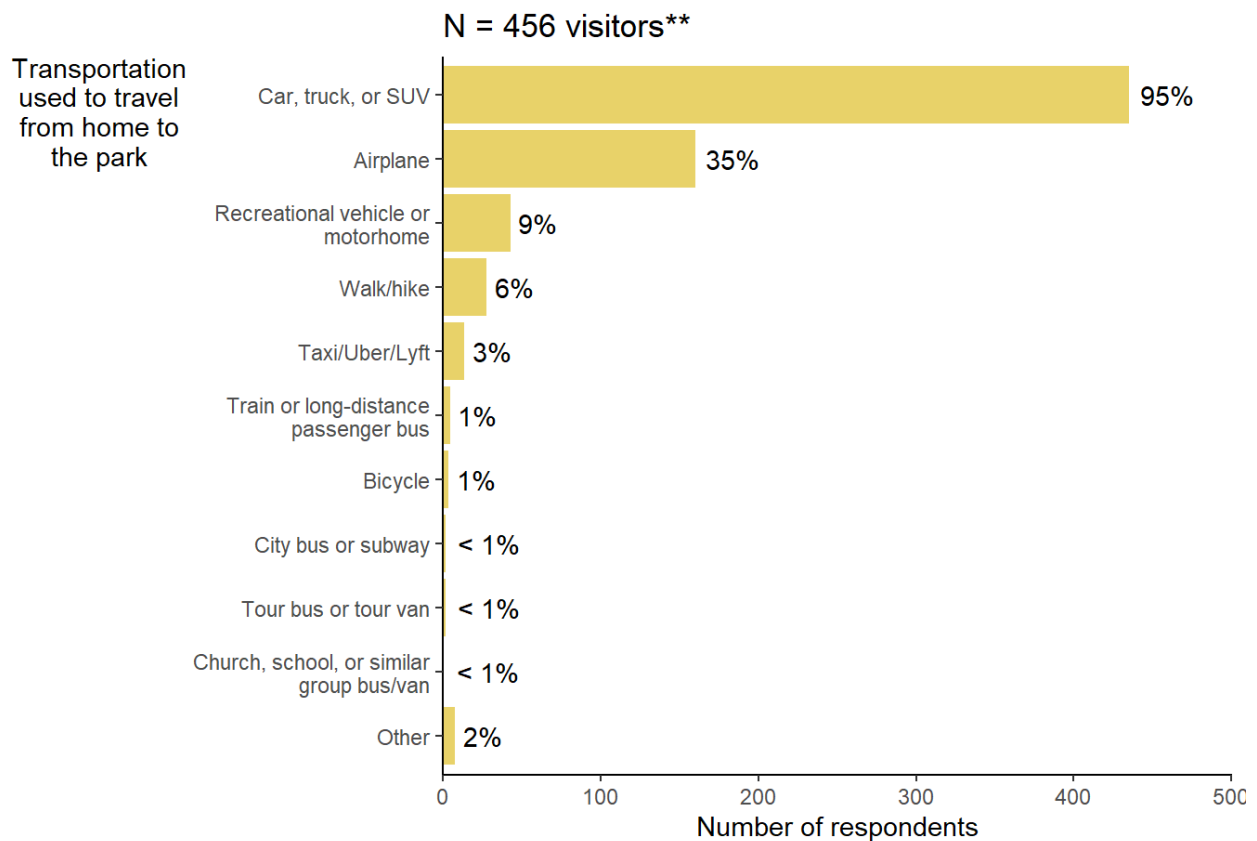
##### Question 1

*Question 1 was asked of all respondents.*

Please indicate all forms of transportation you personally used to travel from your home to Arches National Park on this trip.

Results (Figure 43)

- Most visitors (95%) reported using a car, truck, or SUV to travel to the park.
- Over one-third of visitors (35%) reported using an airplane as part of their travel to the park.
- See Appendix 4 (Appendices companion document) for other forms of transportation specified by visitors.



**Figure 43.** Transportation used to travel to park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Group type

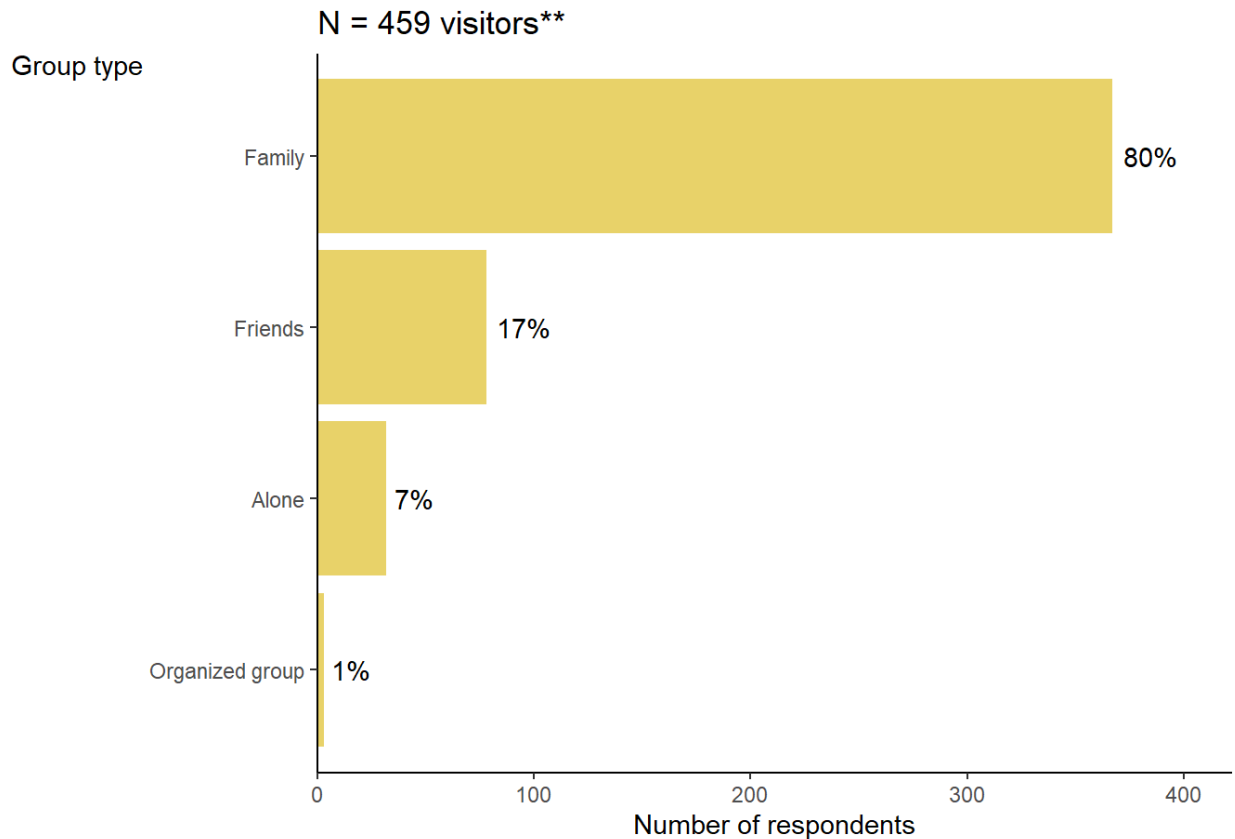
Question 2

*Question 2 was asked of all respondents.*

What type of group were you with during your trip to Arches National Park on the day you were contacted for this survey?

Results (Figure 44)

- A majority of visitors (80%) reported visiting ARCH with family, 17 percent of visitors reported visiting with friends, and seven percent reported traveling alone. Only one percent of visitors reported traveling with an organized group.
- See Appendix 4 (Appendices companion document) for organized groups specified by visitors.



**Figure 44.** Visitor group type

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Would have visited an alternative recreation site

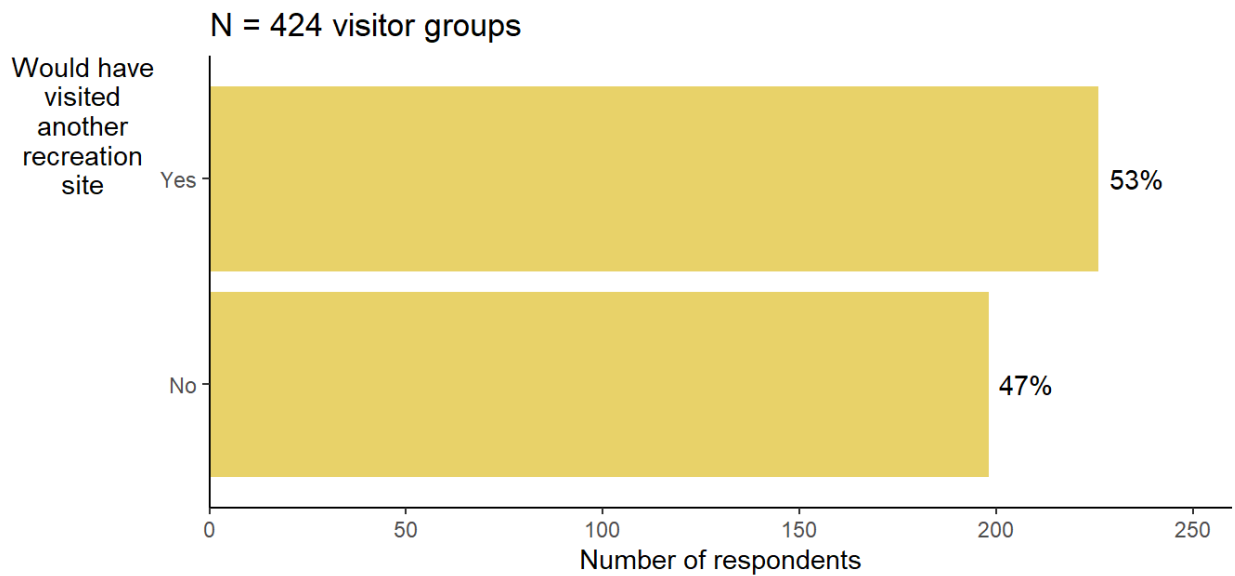
Question 3A

*Question 3A was asked of all respondents.*

If you (and your personal group) had not chosen to visit Arches National Park, would you have visited another recreation site instead?

Results (Figure 45)

- Over half of visitor groups (53%) reported that if they had not visited ARCH, they would have visited another recreation site.



**Figure 45.** Visitors reporting no alternative recreation site

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Alternative recreation site if Arches National Park was not visited

Question 3B

*Question 3B was asked of respondents who indicated in Question 3A that they would have visited another recreation site if they had not chosen to visit Arches National Park.*

What other recreation site would you have visited instead?

Results

- See Appendix 4 (Appendices companion document) for the other recreation sites specified by visitor groups who indicated that they would have visited another recreation site if they had not chosen to visit Arches National Park.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Alternative recreation site distance from home

Question 3C

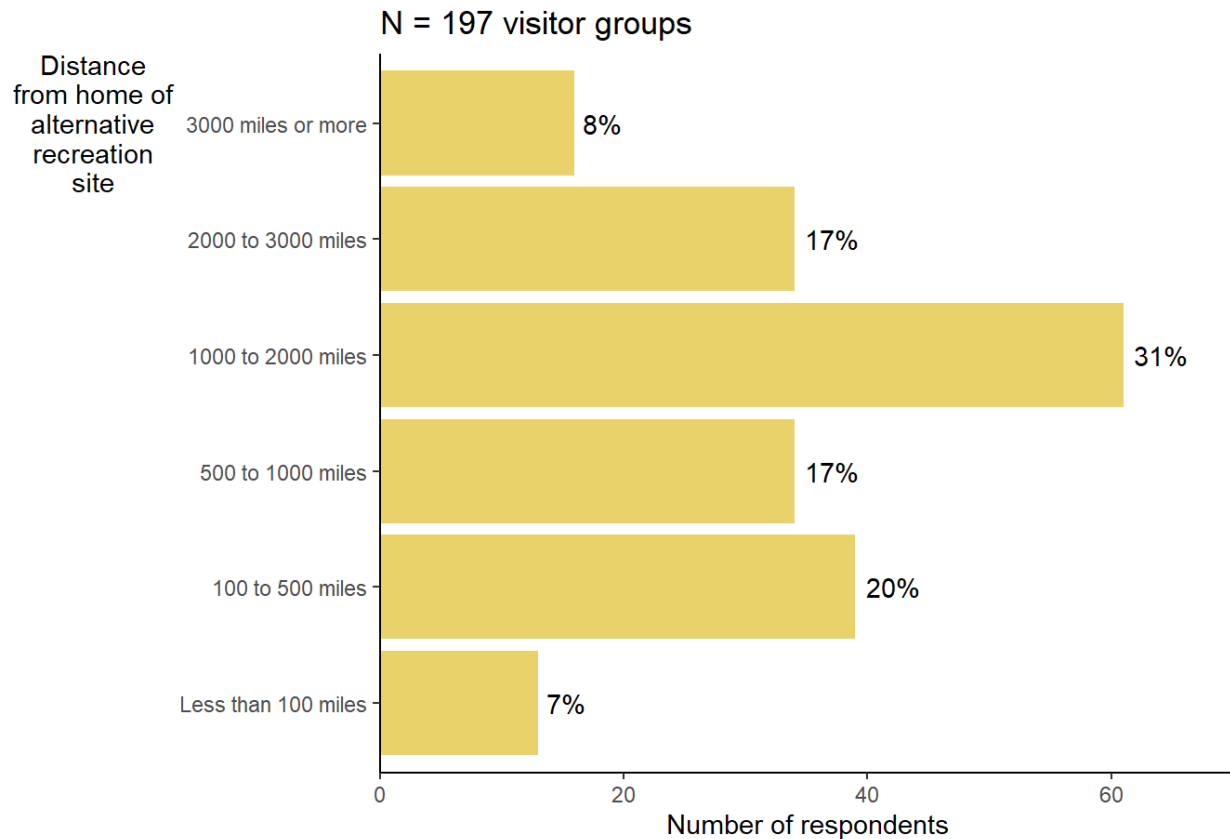
*Question 3C was asked of respondents who indicated in Question 3A that they would have visited another recreation site if they had not chosen to visit Arches National Park.*

How far is this alternative recreation site from your home?

Results (Figure 46)

Of visitor groups who reported that they would have visited another recreation site if they had not chosen to visit Arches National Park...

- Nearly half of visitor groups (44%) reported the site being 1,000 miles or less from their home, and 75 percent reported the alternative recreation site being 2,000 miles or less from their home.



**Figure 46.** Distance of alternative recreation site from respondents' homes

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Other Utah parks visited on this trip

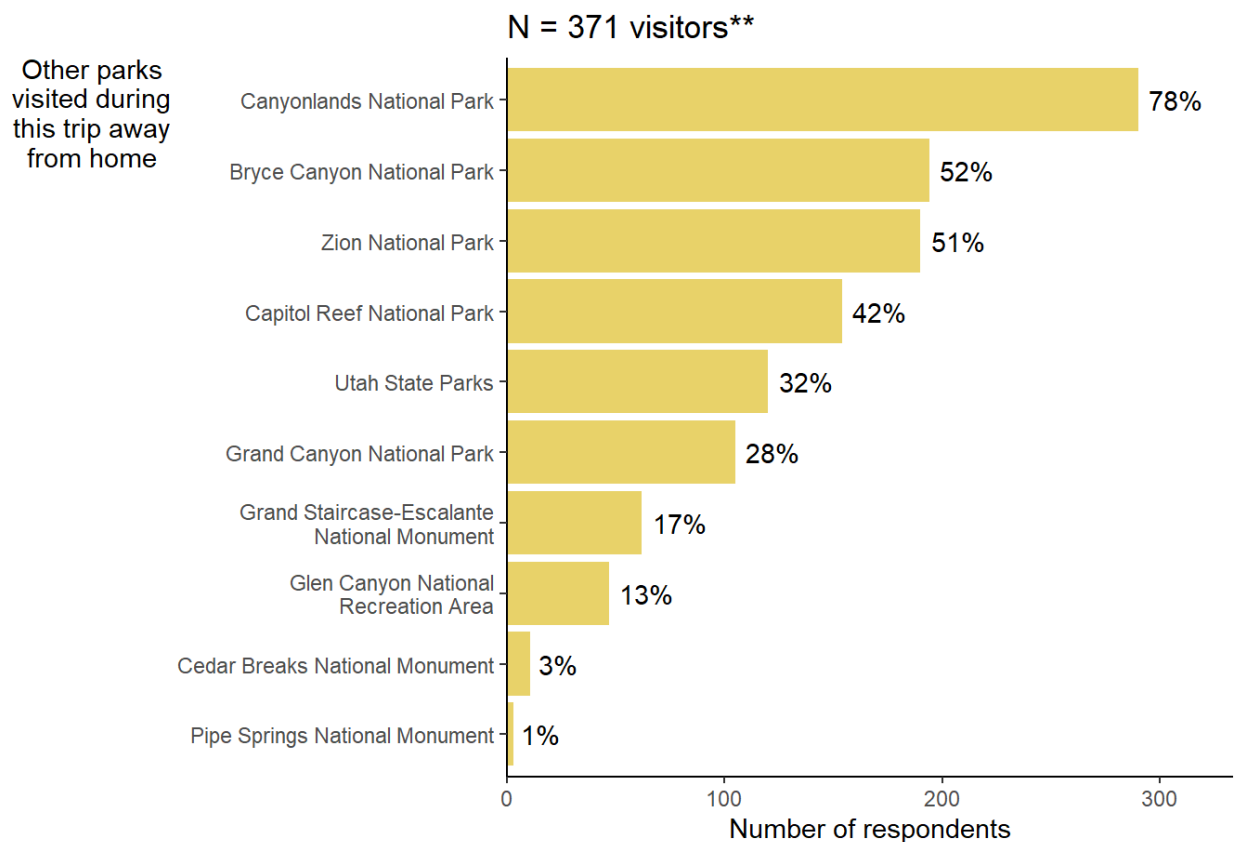
Question 4

*Question 4 was asked of all respondents.*

Did you visit any of the following parks on this trip away from home?

Results (Figure 47)

- A majority of visitors (78%) also visited Canyonlands National Park during their trip away from home.
- More than half of visitors also visited Bryce Canyon National Park (52%) and Zion National Park (51%), while nearly half (42%) visited Capitol Reef National Park on their trip away from home.
- Nearly one-third of visitors (32%) also visited Utah State Parks while on their trip.



**Figure 47.** Other nearby parks visited while on this trip away from home

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Communities visited in the local area

Question 5

Question 5 was asked of all respondents.

Which communities did you visit while in the local area?

See Figure 4 for the local area map.

Results (Figure 48)

- Most visitors (97%) visited Moab, and 17 percent of visitors visited Green River while in the local area.
- See Appendix 4 (Appendices companion document) for other communities specified by visitors.

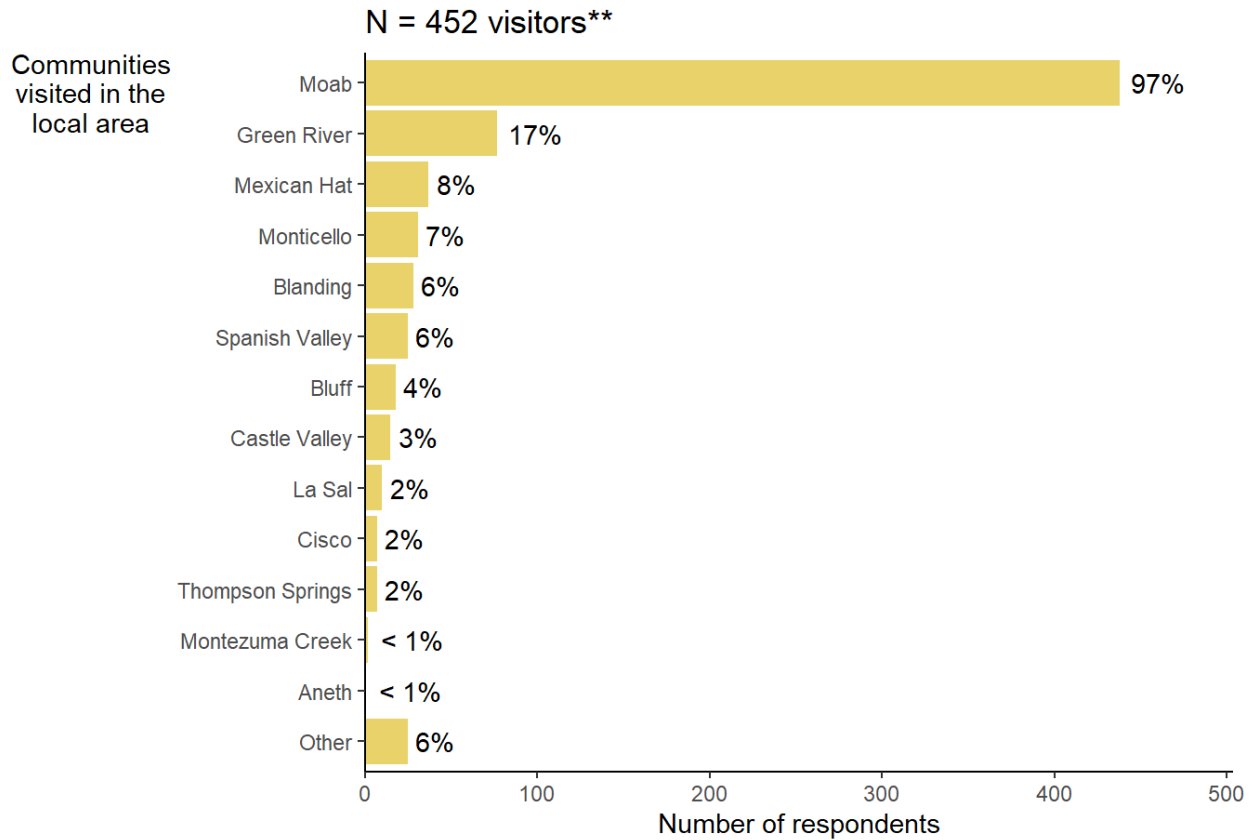


Figure 48. Communities visited while in the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of days spent in the park or in the local area

Question 6

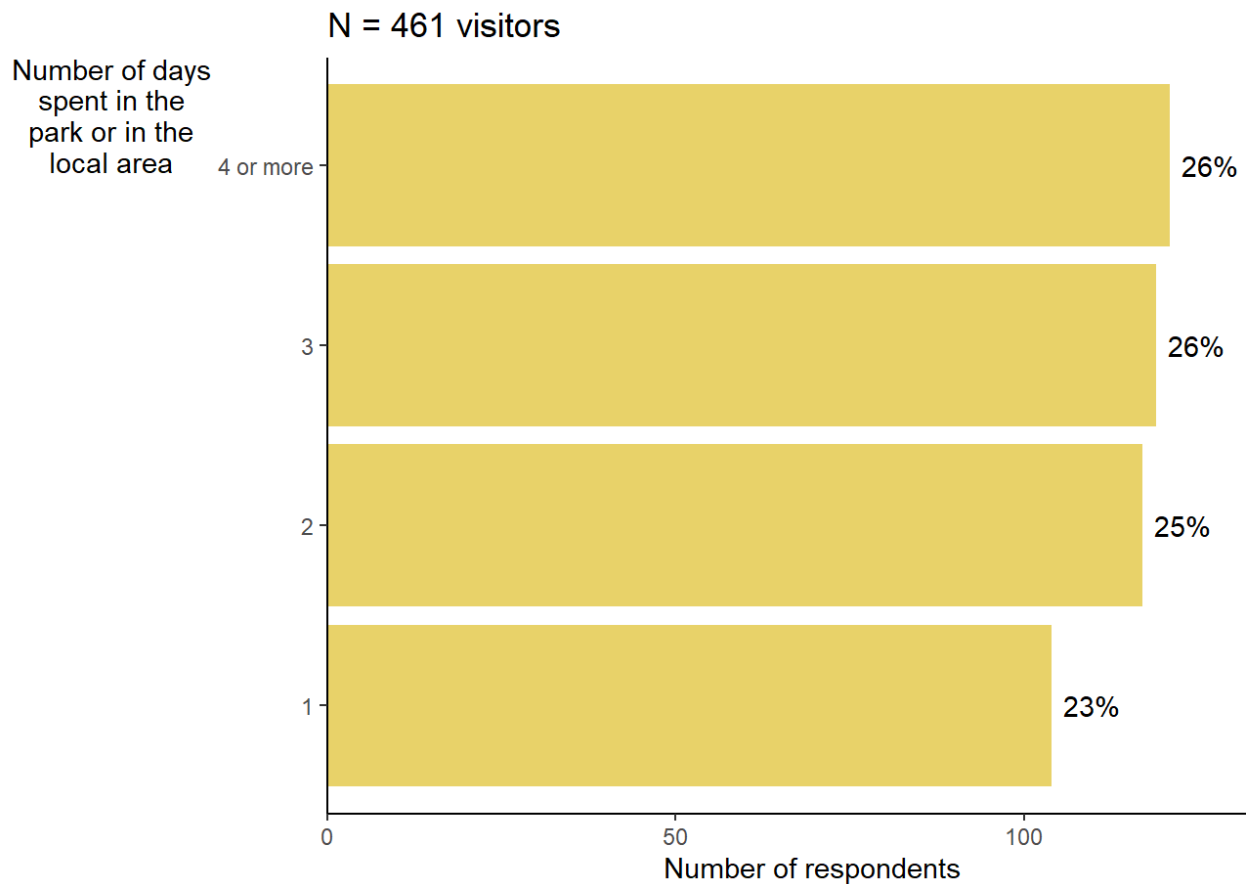
*Question 6 was asked of all respondents.*

How many days did you spend in Arches National Park and/or the local area?

See Figure 4 for the local area map.

Results (Figure 49)

- More than half of visitors (52%) spent three or more days in the park or in the local area.
- On average, visitors spent between 2.9 days in the park or in the local area (see Appendix 5 in the Appendices companion document).



**Figure 49.** Number of days spent in the park or in the local area

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of different days entering Arches National Park

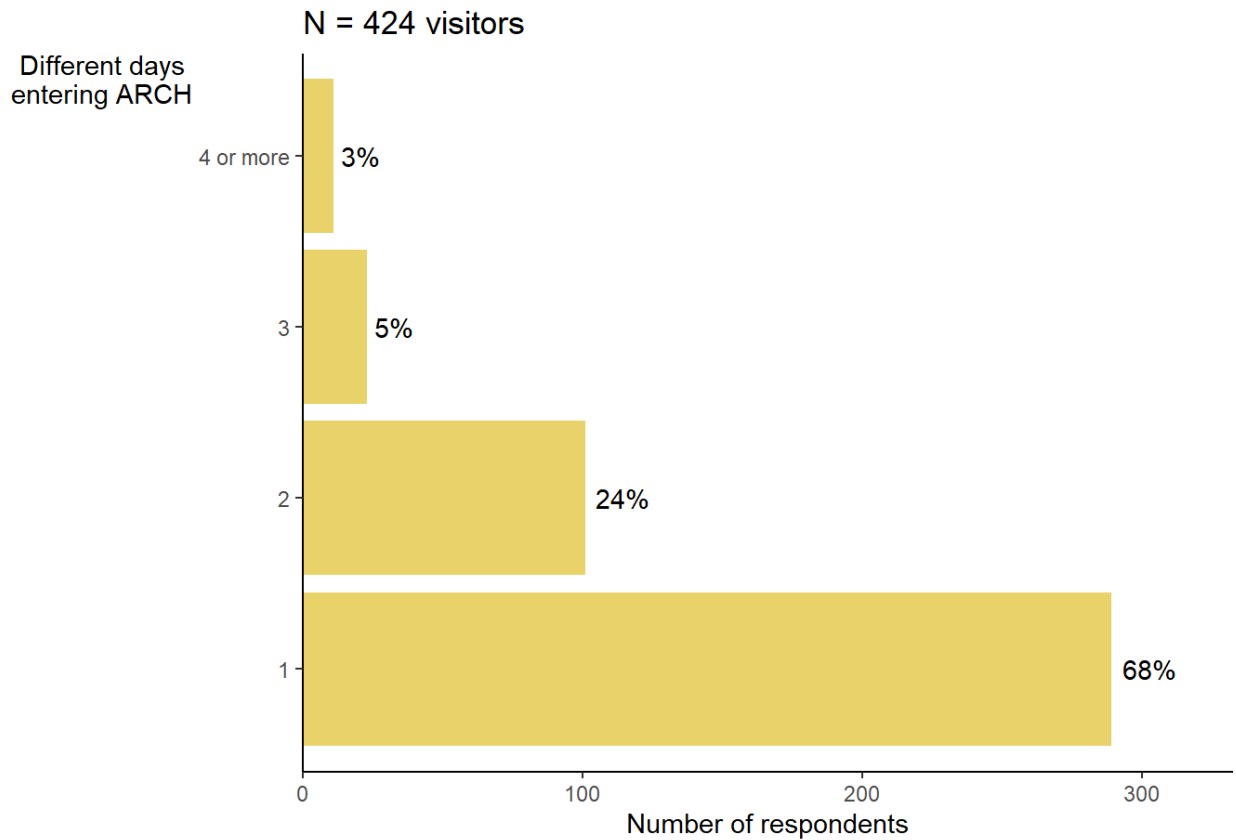
Question 10

*Question 10 was asked of all respondents.*

On how many different days did you enter Arches National Park on this trip? (Enter 1 if you only were in the site for one day).

Results (Figure 50)

- About two-thirds of visitors (68%) entered the park on only one day, while 24 percent of visitors entered the park on two different days.
- On average, visitors entered Arches National Park on 1.4 different days (see Appendix 5 in the Appendices companion document).



**Figure 50.** Number of different days entering Arches National Park

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## **Arches National Park visit**

### Importance of visiting park destinations

#### Question 11

*Question 11 was asked of all respondents.*

How important to you was it to visit each of the following destinations during this trip to Arches National Park?

Results (Table 13<sup>4</sup>)

- A majority of visitors reported that visiting the following destinations in ARCH was either “extremely important” or “very important”:
  - Delicate Arch (71%)
  - Windows (61%)
  - Landscape Arch (57%)
  - Balanced Rock (51%)
- There were no destinations for which over one-fourth of visitors reported that visiting the site was either “slightly important” or “not important at all.”
- “Other” park destinations are listed in Appendix 4 (Appendices companion document).

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<sup>4</sup> Twenty-nine open-ended responses indicating that Devils Garden, Double O Arch, Landscape Arch, or Dark Angel were “other” extremely important, very important, moderately important, or slightly important park destinations to visit were applied to the “Landscape Arch” results in Table 13. Twenty-three open-ended responses indicating that Double Arch was an “other” either extremely important, very important, or moderately important park destination to visit were compiled into the “Windows” results row in Table 13. One open-ended response indicating that the Fiery Furnace was an “other” extremely important park destination to visit was compiled into the “Fiery Furnace” results row in Table 13. These open-ended responses are also accounted for in the “Other” results row of Table 13 and are listed in Appendix 4.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Table 13.** Importance of visiting park destinations

<b>Destination</b>	<b>N</b>	<b>Extremely Important</b>	<b>Very Important</b>	<b>Moderately Important</b>	<b>Slightly Important</b>	<b>Not at all Important</b>	<b>Did not visit</b>	<b>Total</b>
Delicate Arch	426	44%	27%	18%	3%	1%	6%	100%
Landscape Arch	440	26%	31%	21%	7%	2%	12%	100%
Park Avenue	405	9%	20%	23%	12%	6%	29%	100%
Fiery Furnace	404	9%	15%	23%	13%	9%	30%	100%
Sand Dune Arch	412	13%	23%	25%	15%	5%	20%	100%
Balanced Rock	420	24%	27%	28%	10%	5%	5%	100%
Visitor Center	416	27%	21%	18%	10%	8%	16%	100%
Windows	432	32%	29%	22%	6%	1%	10%	100%
Other	113 <sup>5</sup>	44%	16%	12%	4%	1%	24%	100%

<sup>5</sup> The sample size for “Other” includes all open-ended responses provided by respondents and reported in Appendix 4, including responses applied to the list of choices in Question 11.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Activities

### Question 12

*Question 12 was asked of all respondents.*

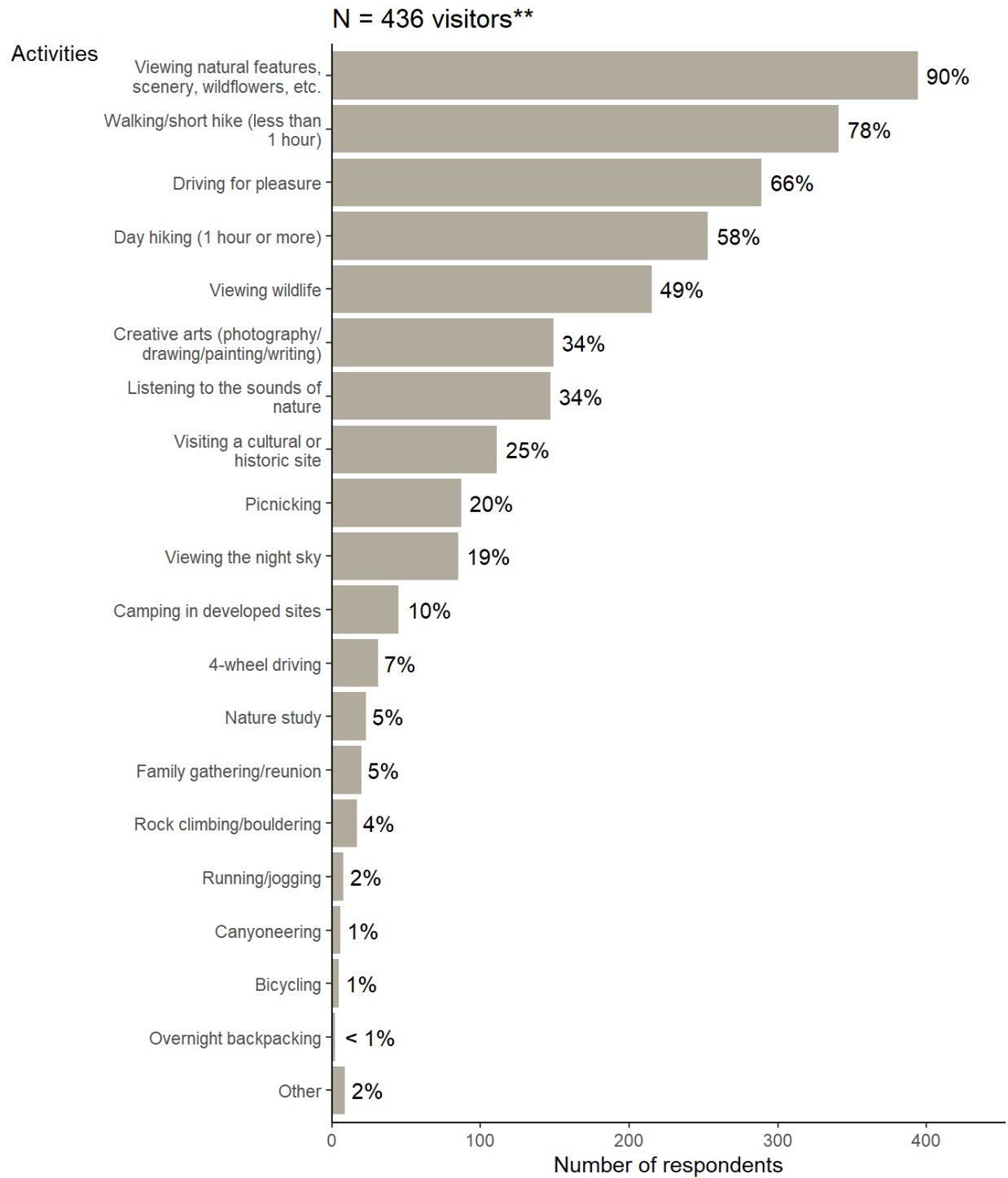
On this trip, in which of the following activities did you personally participate within Arches National Park?

#### Results (Figure 51)

- A majority of visitors participated in viewing natural features, scenery, wildflowers, etc., (90%), walking/short hikes (less than one hour) (78%), driving for pleasure (66%), and day hikes (one hour or more) (58%).
- See Appendix 4 (Appendices companion document) for other activities specified by visitors.

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer



**Figure 51.** Participation in activities on this trip

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Primary activity

### Question 13

*Question 13 was asked of all respondents.*

Of the activities listed in Question 12, which was your primary activity during your visit to Arches National Park on the day you were contacted for this survey?

#### Results

- A small number of visitors (10%) specified that they did not have a primary activity.
- Primary activities specified are listed in Appendix 4 (Appendices companion document).

## ***Arches National Park management***

### Perceived condition of park resources

#### Question 14

*Question 14 was asked of all respondents.*

To what extent do you agree or disagree with each of the following statements?

#### Results (Table 14)

- A majority of visitors agreed or strongly agreed with the following statements: ARCH is a safe place to visit, natural resources in ARCH are in pristine condition, graffiti and litter are not a problem in ARCH, and historical and cultural features in ARCH are well maintained/preserved.
- A majority of visitors disagreed or strongly disagreed with the following statements: Development of facilities INSIDE the park detracts from visitors' experiences at ARCH, and development of adjacent areas OUTSIDE the park detracts from visitors' experiences at ARCH.
- Nearly half (48%) of visitors disagreed or strongly disagreed with the statement "ARCH is too crowded."

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Table 14.** Perceived condition of park resources

<b>Variable</b>	<b>N</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Do not Know/ Not Sure</b>	<b>Total</b>
Arches National Park is a safe place to visit	464	73%	25%	< 1%	1%	< 1%	1%	100%
Arches National Park is too crowded	458	4%	17%	30%	41%	7%	1%	100%
Natural resources in Arches National Park are in pristine condition	459	34%	54%	9%	2%	0%	1%	100%
Graffiti and litter are not a problem in Arches National Park	460	42%	42%	7%	6%	2%	1%	100%
Arches National Park is not accessible to persons with physical disabilities	455	4%	14%	29%	20%	5%	27%	100%
Historical and cultural features in Arches National Park are well maintained/preserved	461	36%	47%	8%	< 1%	0%	9%	100%
Development of facilities INSIDE the park detracts from visitors' experiences at Arches National Park	457	4%	7%	17%	41%	24%	7%	100%
Development of adjacent areas OUTSIDE the park detracts from visitors' experiences at Arches National Park	462	2%	7%	21%	38%	24%	8%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Group member physical condition

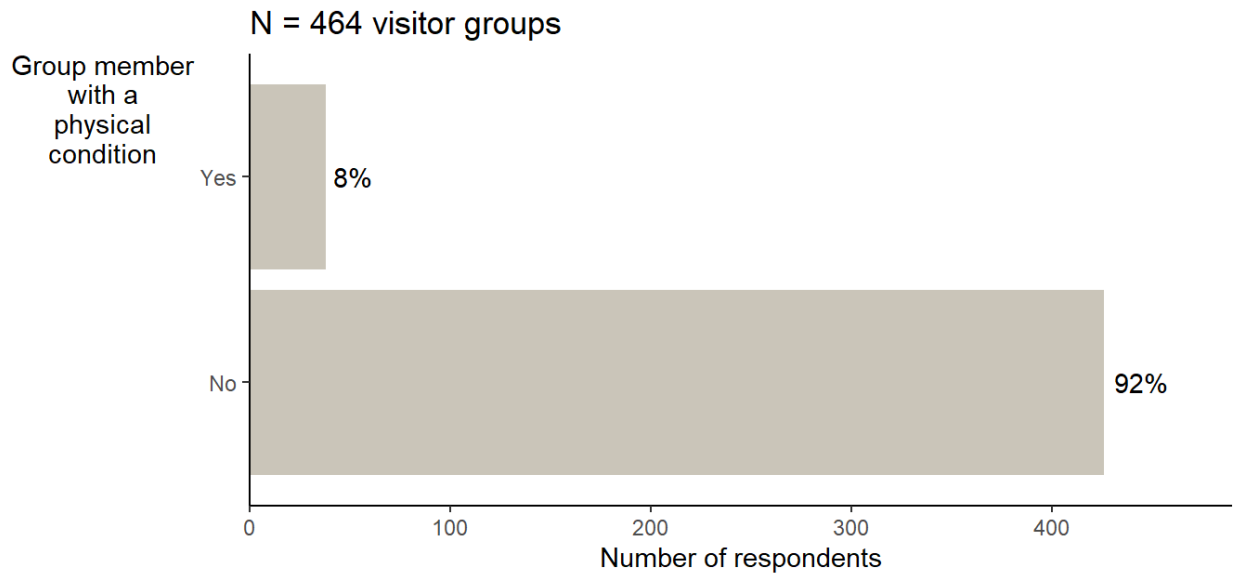
Question 15A

*Question 15A was asked of all respondents.*

Did anyone in your personal group have a physical condition that made it difficult to access or participate in park activities or services, during your visit to Arches National Park?

Results (Figure 52)

- Most visitor groups (92%) had no members of their group with a physical condition that made it difficult to access or participate in park activities for services during their visit.



**Figure 52.** Visitors with physical conditions

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Types of activities, services, facilities in which group member(s) could not participate or access  
Question 15B

*Question 15B was asked of respondents who indicated in Question 15A that they had at least one member in their personal group with a physical condition that made it difficult to access or participate in park activities or services.*

What activities, services, or facilities did the person(s) have difficulty participating in or accessing? (open-ended)

Results

- The types of activities, services, or facilities that visitors had difficulty participating in or accessing are listed in Appendix 4 (Appendices companion document).

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Type of physical condition

### Question 15C

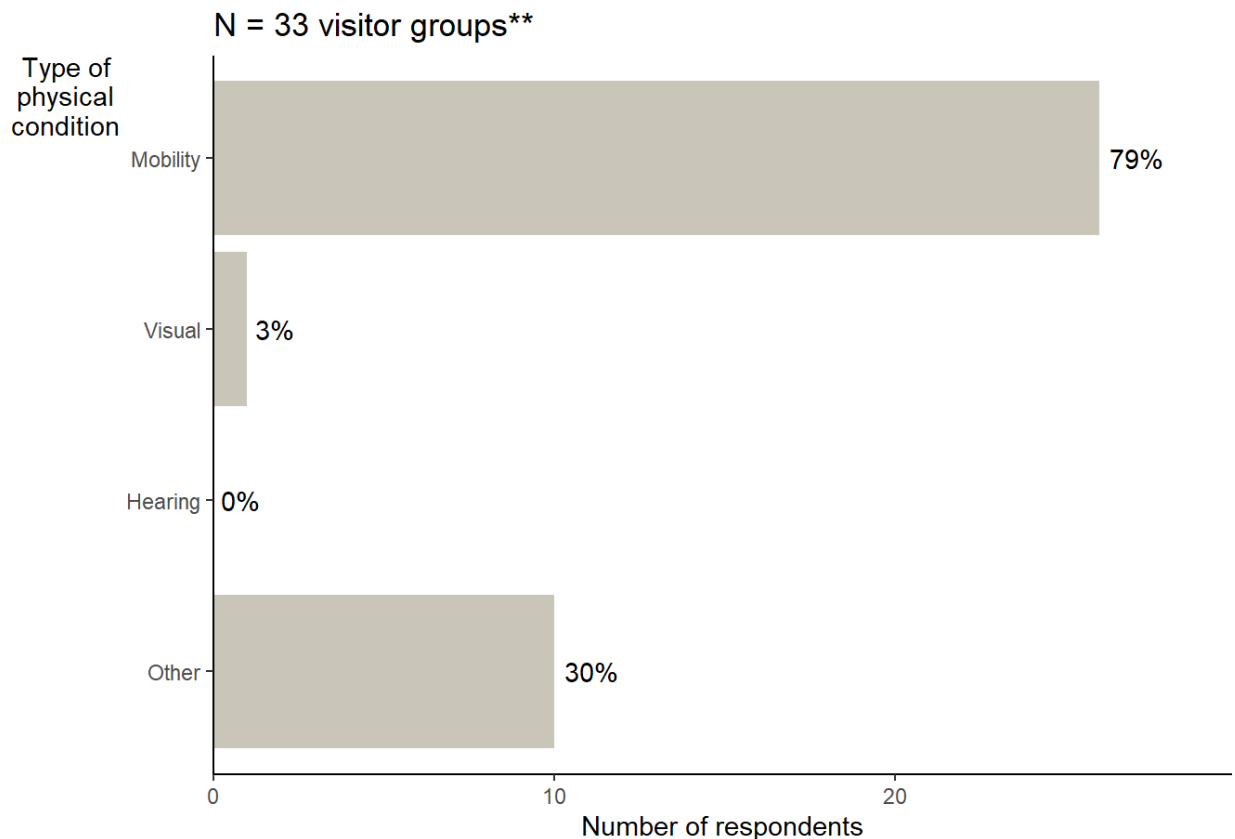
*Question 15C was asked of respondents who indicated in Question 15A that they had at least one member in their personal group with a physical condition that made it difficult to access or participate in park activities or services.*

Because of the physical condition, which specified difficulties did the person(s) have?

Results (Figure 53)

Of the visitor groups that had at least one member of their group with a physical condition that made it difficult to access or participate in park activities or services...

- Over three-fourths of visitor groups (79%) reported a group member with difficulties related to mobility.
- Nearly one-third of visitor groups reported an “other” type of difficulty (30%). The “other” types of specific difficulties are reported in Appendix 4 (Appendices companion document).



**Figure 53.** Specific difficulties encountered by visitor group member(s)

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Quantity of park facilities

### Question 16

*Question 16 was asked of all respondents.*

Thinking about your visit to Arches National Park, would you have liked to have seen more of, the same, or less of each of the following facilities?

#### Results (Table 15)

- A majority of visitors (53%) would have liked to see more water stations available for use.
- More than one-third of visitors would have liked to see improved access to arches (35%) or to canyons (35%).
- There were no cases for which more than five percent of visitors reported wanting to have seen less of a facility type in the park.
- Other trails at specified sites and other types of facilities visitors would have liked to have seen more of, the same, or less are specified in Appendix 4 (Appendices companion documents).

**Table 15.** Facilities availability

Facility	N	More	Same	Less	Total
Primitive roads for scenic driving	421	30%	65%	4%	100%
Access to arches	435	35%	64%	1%	100%
Access to panoramic viewpoints	436	30%	70%	0%	100%
Access to canyons	429	35%	64%	1%	100%
Trails at the Windows	422	17%	82%	1%	100%
Trails at Delicate Arch	430	26%	72%	2%	100%
Trails at Delicate Arch Viewpoint	422	20%	80%	1%	100%
Trails at Devils Garden	416	19%	81%	1%	100%
Trails at other sites	189	10%	88%	2%	100%
Transportation options between Moab and Arches National Park (trails, shuttles, etc.)	364	23%	73%	4%	100%
Restrooms	429	23%	76%	< 1%	100%
Water stations	433	53%	47%	0%	100%
Campgrounds	397	19%	77%	5%	100%
Other	64	27%	72%	2%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Strategies used to cope with crowding

Question 17A

*Question 17A was asked of all respondents.*

Please indicate whether you have ever done each of the following in Arches National Park.

Results (Table 16)

- There were no cases for which more than half of visitors reported using one of the coping strategies to avoid crowds in the park.
- Nearly half (48%) of visitors have avoided visiting crowded attractions as a strategy to avoid crowds in the park.
- Visitors were also likely to have visited on weekdays to avoid weekend crowds (45%), to have gone to other areas where they were less likely to see other people (41%), and to have gone on trails that are less crowded (41%).

**Table 16.** Use of coping strategies for crowding.

<b>Strategy</b>	<b>N</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
Visit earlier or later in the season to avoid seeing other people	442	32%	68%	100%
Visit on weekdays to avoid weekend crowds	441	45%	55%	100%
Go to trails that are less crowded	437	41%	59%	100%
Avoid places that have limits on the amount of use	419	16%	84%	100%
Go to other areas where you are less likely to see other people	430	41%	59%	100%
Avoid attractions that are crowded	433	48%	52%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Frequency of coping strategy used

Question 17B

*Question 17B was asked for each of the coping strategies the respondent indicated they had used to avoid crowding in Arches National Park in Question 17A.*

Please indicate how often you do each of the following in Arches National Park.

Results (Table 17)

Of visitors who used each of the unique coping strategies to avoid crowding in Arches National Park...

- None of the strategies utilized was “always” or “usually” used by a majority of visitors.
- Each of the strategies utilized was “always,” “usually” or “often” used by a majority of visitors.
- Over forty percent of visitors “always” or “usually” visited earlier or later in the season to avoid seeing other people (43%), and visited on weekdays to avoid weekend crowds (41%).

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Table 17.** Frequency of coping strategy use

<b>Strategy</b>	<b>N</b>	<b>Rarely</b>	<b>Occasionally</b>	<b>Often</b>	<b>Usually</b>	<b>Always</b>	<b>Total</b>
Visit earlier or later in the season to avoid seeing other people	134	13%	27%	18%	25%	18%	100%
Visit on weekdays to avoid weekend crowds	177	16%	22%	20%	21%	20%	100%
Go to trails that are less crowded	165	5%	27%	33%	25%	10%	100%
Avoid places that have limits on the amount of use	62	3%	37%	19%	27%	13%	100%
Go to other areas where you are less likely to see other people	153	6%	25%	35%	24%	10%	100%
Avoid attractions that are crowded	179	8%	27%	35%	20%	11%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Hiking experience

### Question 18

*Question 18 was asked of all respondents.*

To what extent do you agree or disagree with each of the following statements about your experiences while hiking on trails in Arches National Park?

#### Results (Table 18)

- A majority (67%) of visitors agreed or strongly agreed that the number of people on the trail was acceptable to protect the quality of visitors' experiences (i.e., prevent crowding).
- A majority (52%) of visitors disagreed or strongly disagreed that there were fewer people on the trail than they would prefer to see when hiking in ARCH (26%).

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Table 18.** Hiking experience

<b>Condition</b>	<b>N</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Do not Know/No Opinion</b>	<b>Total</b>
There were fewer people on the trail than I would prefer to see when hiking in Arches National Park	440	1%	4%	33%	36%	17%	9%	100%
There were more people on the trail than I think is acceptable to reduce environmental impacts	440	3%	16%	34%	32%	7%	8%	100%
The number of people on the trail was acceptable to protect the quality of visitors' experiences (i.e., prevent crowding)	438	10%	57%	16%	10%	1%	6%	100%
There were more people on the trail than I think is acceptable to provide opportunities for solitude	440	10%	25%	25%	30%	5%	7%	100%
The number of people I encountered while hiking on trails in Arches National Park positively impacted my experience	441	4%	26%	40%	17%	4%	8%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Responses to advance reservation system

Question 19

*Question 19 was asked of all respondents.*

If a reservation were required in advance to visit Arches National Park, which of the following actions would you be willing or able to take in order to secure a visit to Arches National Park?

Results (Table 19)

- A majority of visitors reported that they would be willing or able to visit during a different time of day (80%), visit on a different day in the same week (69%), visit on weekdays instead of weekend days (78%), visit in a different month (51%), visit earlier or later in the season (63%), and visit in a different season (55%) in order to obtain a reservation to visit ARCH.
- A strong majority (i.e., more than three-fourths) of visitors reported that they would visit during a different time of day (80%) or would visit on weekdays instead of weekend days (78%) in order to obtain a reservation to visit ARCH.
- A majority of visitors reported that in order to obtain a reservation to visit ARCH, they would not visit in a different week in the same month (56%), nor would they sacrifice visiting the most popular areas of the park (65%).

**Table 19.** Actions to secure an advance reservation

<b>Response</b>	<b>N</b>	<b>Yes</b>	<b>No</b>	<b>Total</b>
Visit during a different time of day	439	80%	20%	100%
Visit on a different day in the same week	436	69%	31%	100%
Visit on weekdays instead of weekend days	433	78%	22%	100%
Visit in a different week in the same month	430	44%	56%	100%
Visit in a different month	433	51%	49%	100%
Visit earlier or later in the season	438	63%	37%	100%
Visit in a different season	435	55%	45%	100%
Visit Arches National Park even if you were unable to visit the most popular areas of the park	436	35%	65%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Support for management practices

### Question 20

*Question 20 was asked of all respondents.*

Please indicate the extent to which you would support or oppose each of the following potential management practices at Arches National Park.

#### Results (Table 20)

- A majority of visitors reported that they would “support” or “strongly support” continuing advance timed-entry reservations to the park to reduce crowding during the peak season (85%), expanding the trail network in the park to provide additional recreation opportunities (68%), and implementing a voluntary shuttle system to increase modes of access (69%).
- A majority of visitors would not necessarily “oppose” or “strongly oppose” any of the management practices except for implementing a mandatory shuttle system to reduce traffic congestion.
- Nearly half of visitors reported that they would “oppose” or “strongly oppose” implementing advance timed-entry reservations to visit specific areas of the park (i.e., site-specific permits) (48%), and over half of visitors would “oppose” or “strongly oppose” implementing a mandatory shuttle system to reduce traffic congestion (57%).

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Table 20.** Support or opposition to management practices

<b>Management practice</b>	<b>N</b>	<b>Strongly Support</b>	<b>Support</b>	<b>Neither Support nor Oppose</b>	<b>Oppose</b>	<b>Strongly Oppose</b>	<b>Do not Know/No Opinion</b>	<b>Total</b>
Expand parking areas at key attraction sites, allowing for more visitors on the related trails	440	12%	26%	18%	32%	10%	2%	100%
Continue advance timed-entry reservations to the park to reduce crowding during the peak season	444	48%	37%	5%	5%	3%	2%	100%
Expand trail network in the park to provide additional recreation opportunities	441	21%	47%	20%	7%	2%	3%	100%
Implement advance timed-entry reservations to visit specific areas of the park (i.e., site-specific permits)	441	8%	21%	21%	32%	17%	2%	100%
Implement mandatory shuttle system to reduce traffic congestion	438	7%	18%	17%	38%	19%	2%	100%
Implement voluntary shuttle system to increase modes of access	441	17%	52%	18%	7%	4%	2%	100%
Temporarily close congested parking areas	440	4%	20%	25%	32%	12%	5%	100%

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

## Visitor background information

### U.S. visitors' state of residence

#### Question 21A

*Question 21A was asked of all U.S. resident respondents.*

What is your home ZIP code (if you are a U.S. resident)?

Results (Table 21, Figure 54)

- The most popular states of residence for U.S. visitors were California (10%), Colorado (9%), and Utah (8%).

**Table 21.** U.S. state of residence: Mail-back survey

State	Number of visitors	Percent of U.S. visitors* (N = 416)	Percent of all visitors* (N = 445)
California	40	10	9
Colorado	37	9	8
Utah	33	8	7
Florida	24	6	5
Texas	21	5	5
Arizona	15	4	3
Georgia	15	4	3
Washington	15	4	3
Michigan	14	3	3
Pennsylvania	14	3	3
Ohio	13	3	3
Illinois	11	3	2
North Carolina	11	3	2
Indiana	10	2	2
New York	10	2	2
Massachusetts	9	2	2
Missouri	9	2	2
Tennessee	9	2	2
Oklahoma	8	2	2
Iowa	7	2	2
Oregon	7	2	2
Virginia	7	2	2
Nebraska	6	1	1
New Mexico	6	1	1
26 other states	65	16	15
Total	416	101	91

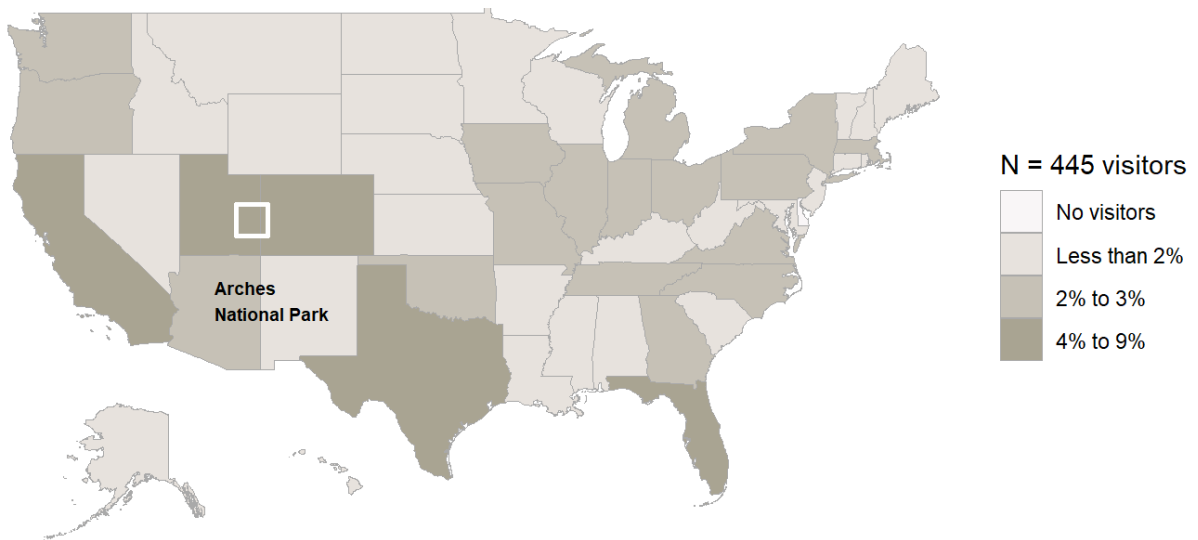
Other states each had less than two percent visitors

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Geographic origin of U.S. residents

Question 21



**Figure 54.** Mail-back survey proportion of U.S. visitors by state of residence<sup>6</sup>

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<sup>6</sup> Percentages are calculated out of all visitors (including international).

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

International visitors' country of residence

Question 21B

*Question 21B was asked of non-U.S. resident respondents.*

What is your home country (if you are not a U.S. resident)?

Results (Table 22)

- Of the 29 international visitors who were surveyed, over one-fourth of international visitors were from Germany (28%), 17 percent were from the Netherlands, and 10 percent were from Canada.

**Table 22.** Country of residence: Mail-back survey

<b>Country</b>	<b>Number of visitors</b>	<b>Percent of int'l visitors (N = 29)</b>	<b>Percent of all visitors (N = 445)</b>
Germany	8	28	2
Netherlands	5	17	1
Canada	3	10	1
Belgium	2	7	< 1
France	2	7	< 1
Singapore	2	7	< 1
United Kingdom of Great Britain and Northern Ireland	2	7	< 1
Estonia	1	3	< 1
Ireland	1	3	< 1
South Africa	1	3	< 1
Sweden	1	3	< 1
Switzerland	1	3	< 1
Total	29	98	7

All countries are included

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Age

Question 22

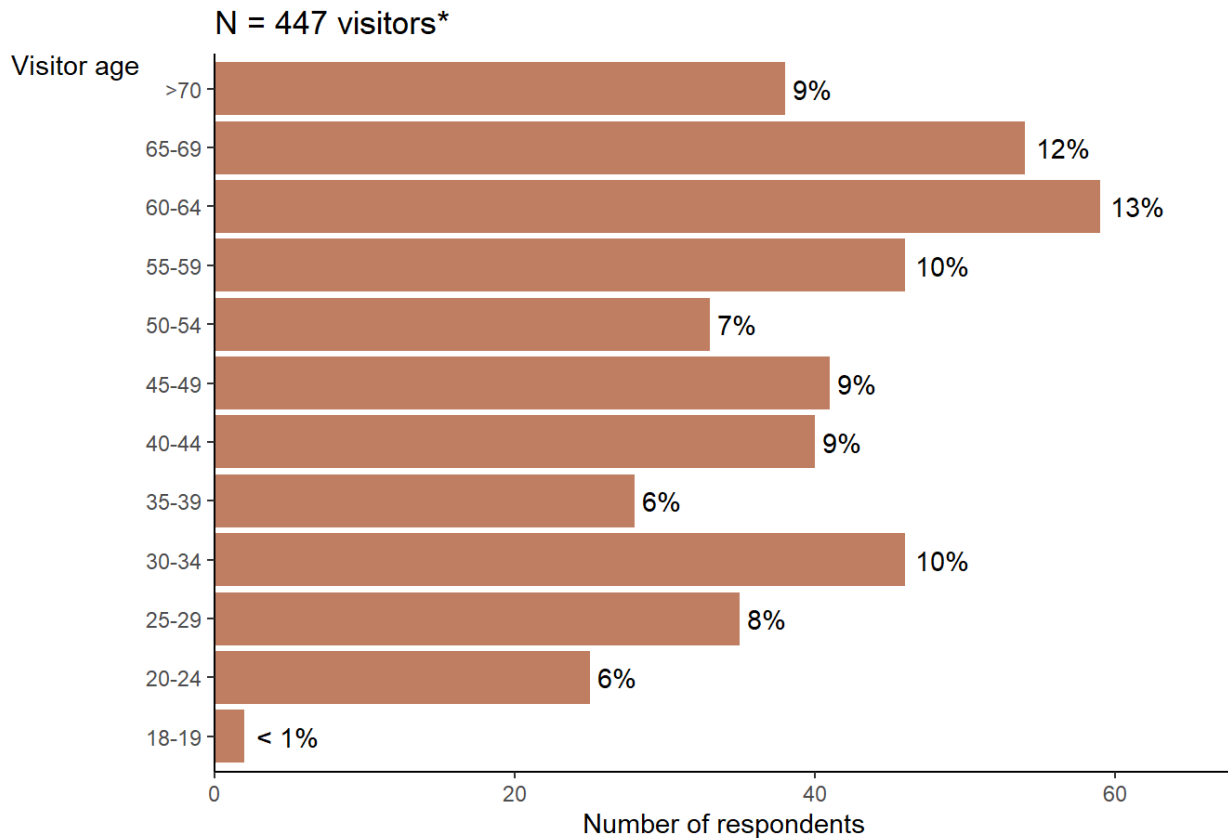
*Question 22 was asked of all respondents.*

What is your age?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 55)

- Over one-third of visitors (34%) were 60 years or older.
- Over one-third of visitors (35%) were 40 to 59 years old.
- Nearly one-third of visitors (30%) were 18 to 39 years old.
- On average, visitors were about 49 years old (see Appendix 5 in the Appendices companion document).



**Figure 55.** Respondent age

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Gender

Question 23

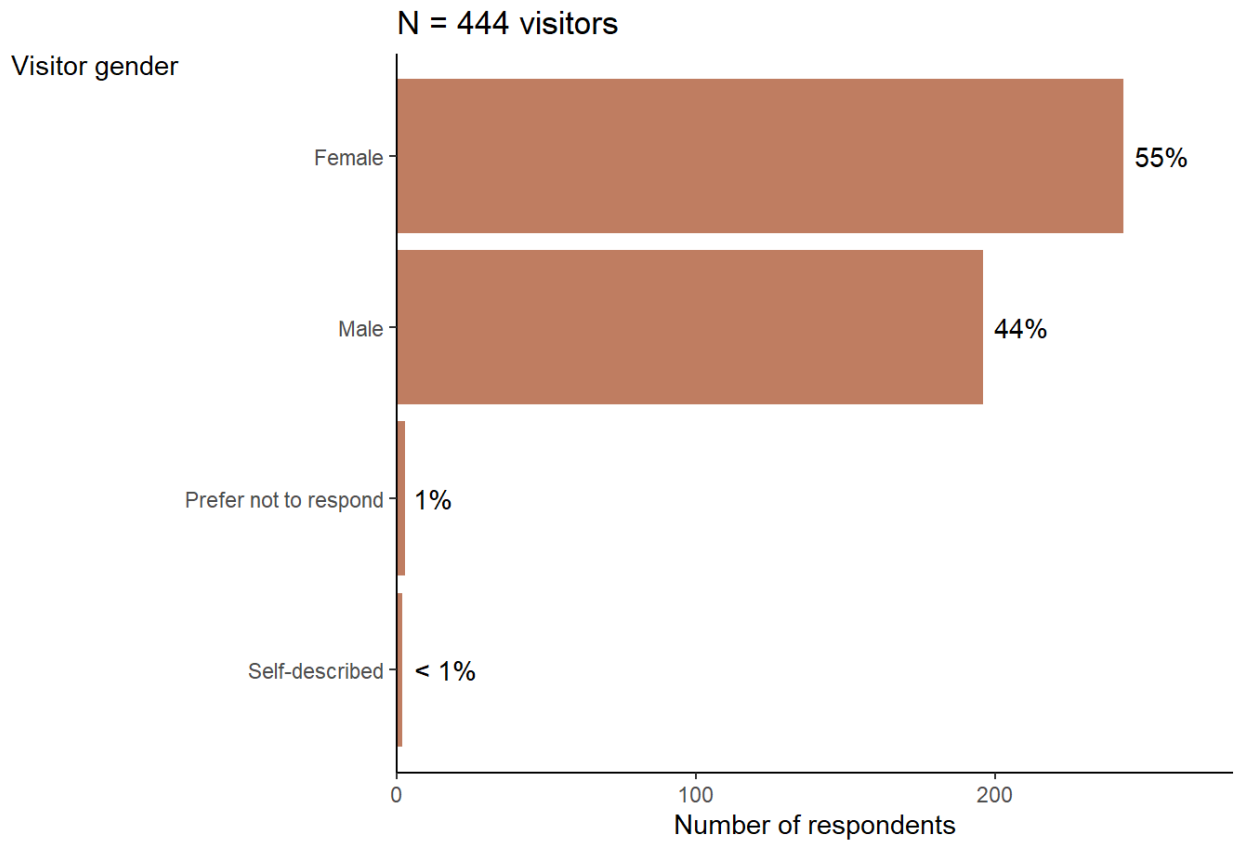
*Question 23 was asked of all respondents.*

What is your gender?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 56)

- A majority of visitors (55%) were female, and 44 percent of visitors were male.
- Visitor self-described genders are listed in Appendix 4 (Appendices companion document).



**Figure 56.** Respondent gender

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Ethnicity

Question 24

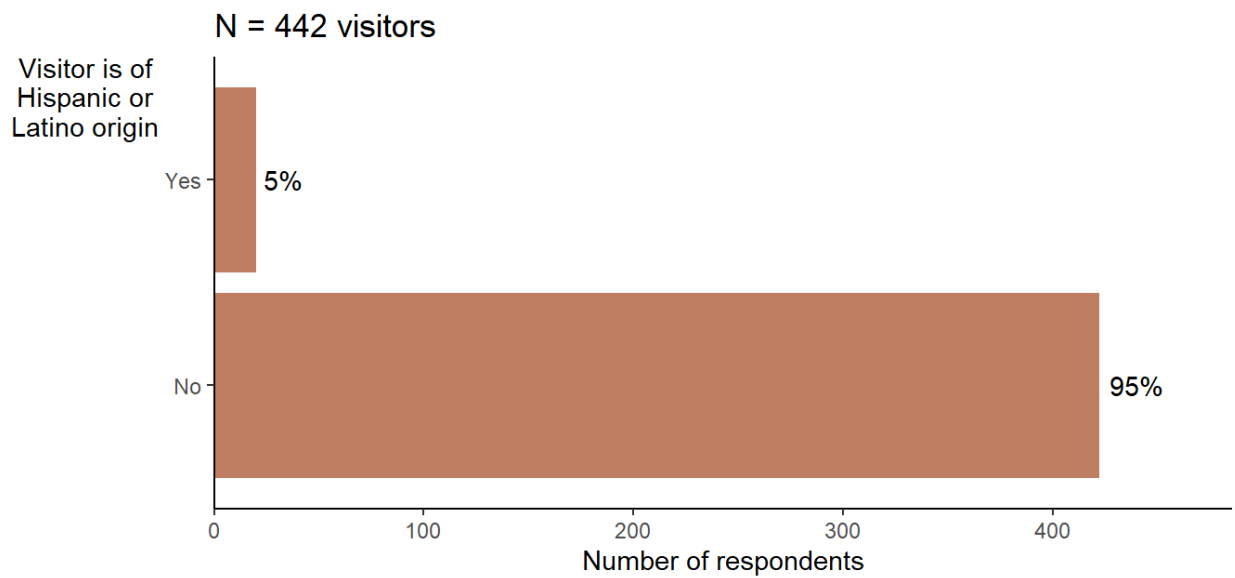
*Question 24 was asked of all respondents.*

Are you of Hispanic or Latino origin?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 57)

- A small percentage of visitors (5%) were of Hispanic or Latino origin.



**Figure 57.** Respondent ethnicity

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Race

Question 25

Question 25 was asked of all respondents.

What is your race?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 58)

- Most visitors (89%) were white.
- A small percentage of visitors (9%) were Asian.
- Very few visitors were Black or African American (1%), American Indian or Alaska Native (1%), or Native Hawaiian or other Pacific Islander (< 1%).
- A small percentage of visitors (2%) were of an “other” race, and the “other” races are listed in Appendix 4 (Appendices companion document).

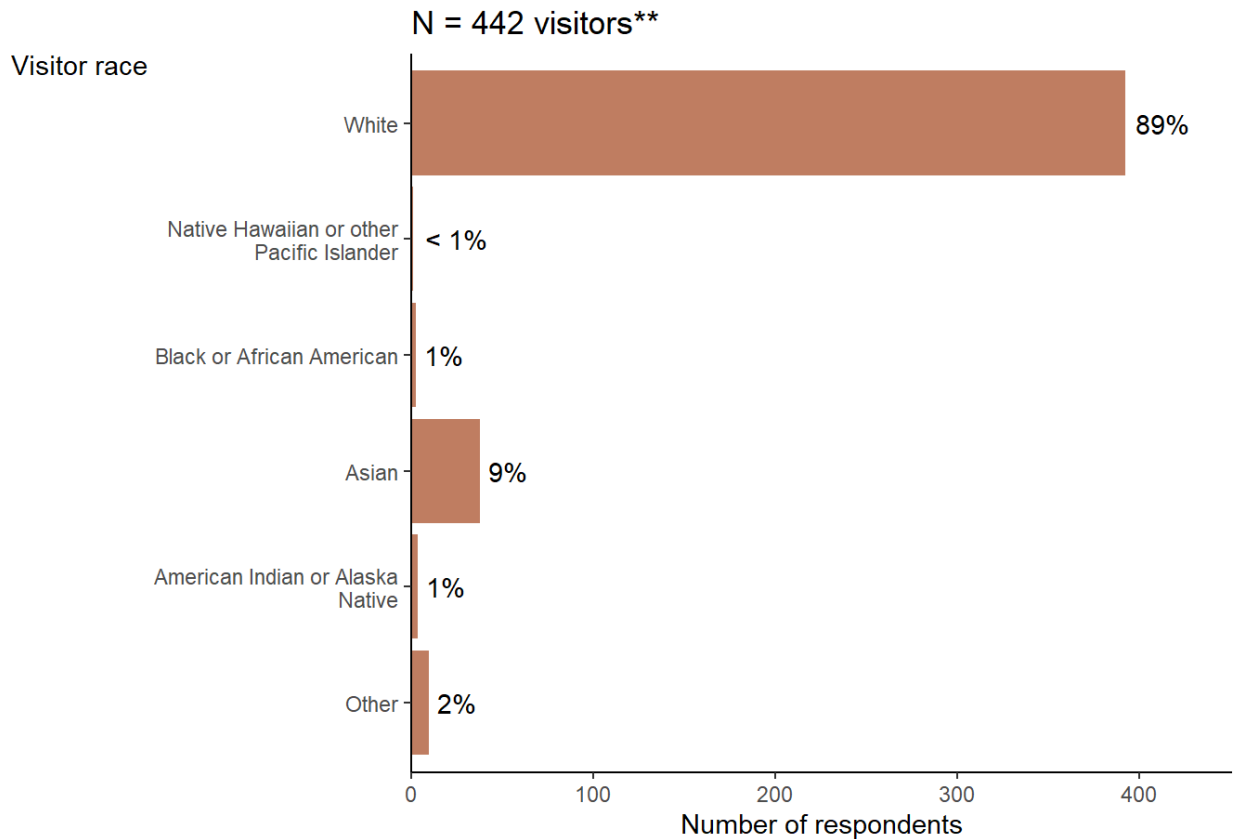


Figure 58. Respondent race

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Education

Question 26

Question 26 was asked of all respondents.

What is the highest degree or level of school you have completed?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 59)

- Over one-third of visitors (39%) were college, business, or trade school graduates.
- Over one-third of visitors (36%) completed a master's, doctoral, or professional degree.

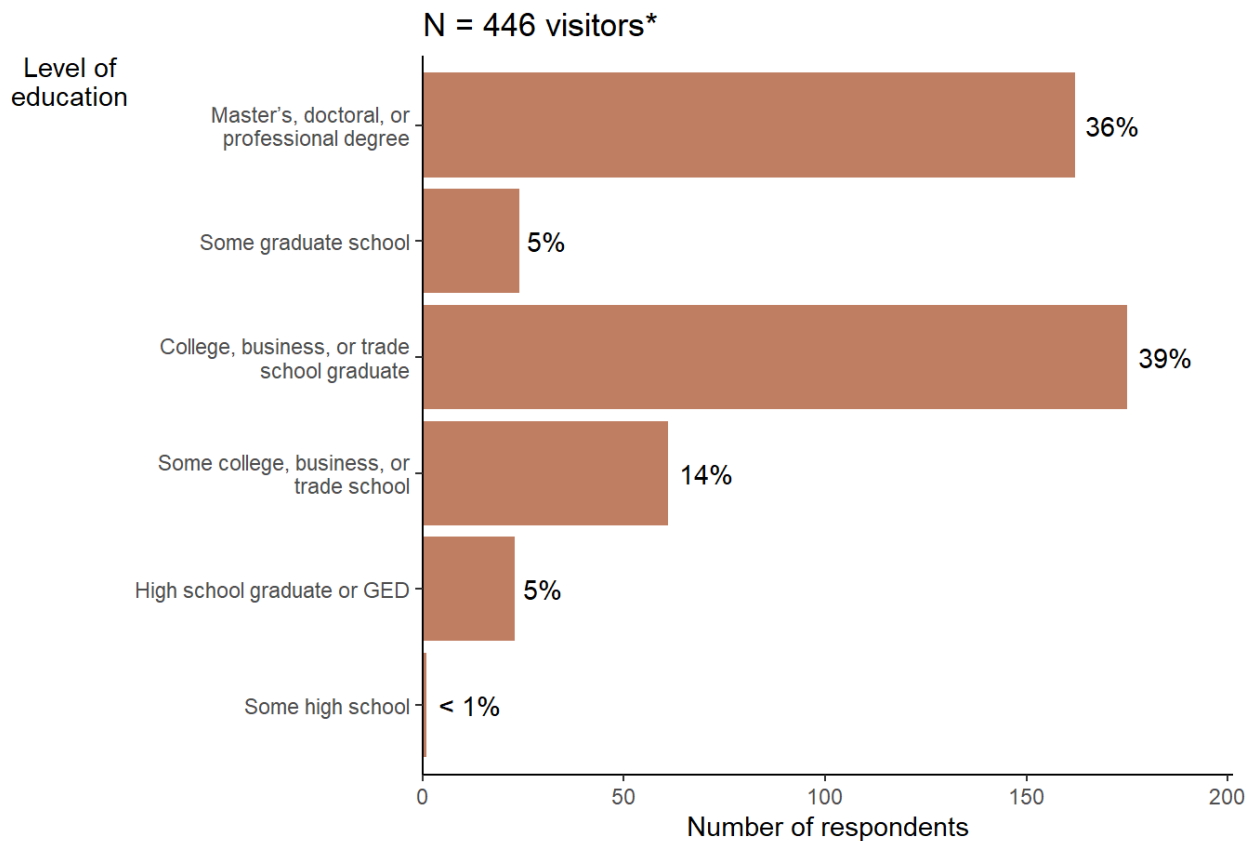


Figure 59. Respondent level of education

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Household income

Question 27

Question 27 was asked of all respondents.

Which category best describes your household income last year before taxes?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 60)

- One quarter (25%) of visitors had an annual household income between \$100,000 and \$149,000.
- Nearly one-quarter (24%) of visitors had an annual household income of \$200,000 or more.
- Nearly two-thirds (64%) of visitors had an annual household income of \$100,000 or more.

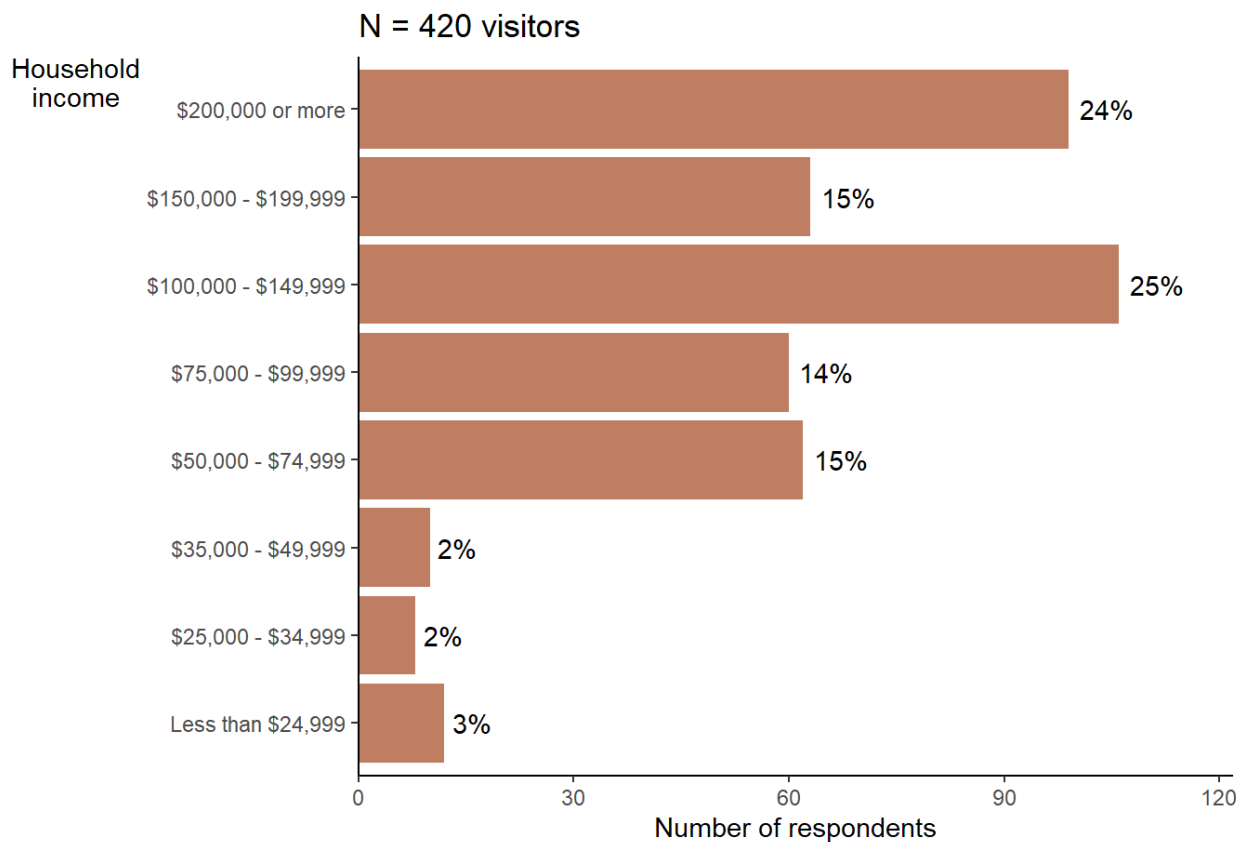


Figure 60. Respondent household income

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Number of contributors to household income

Question 28

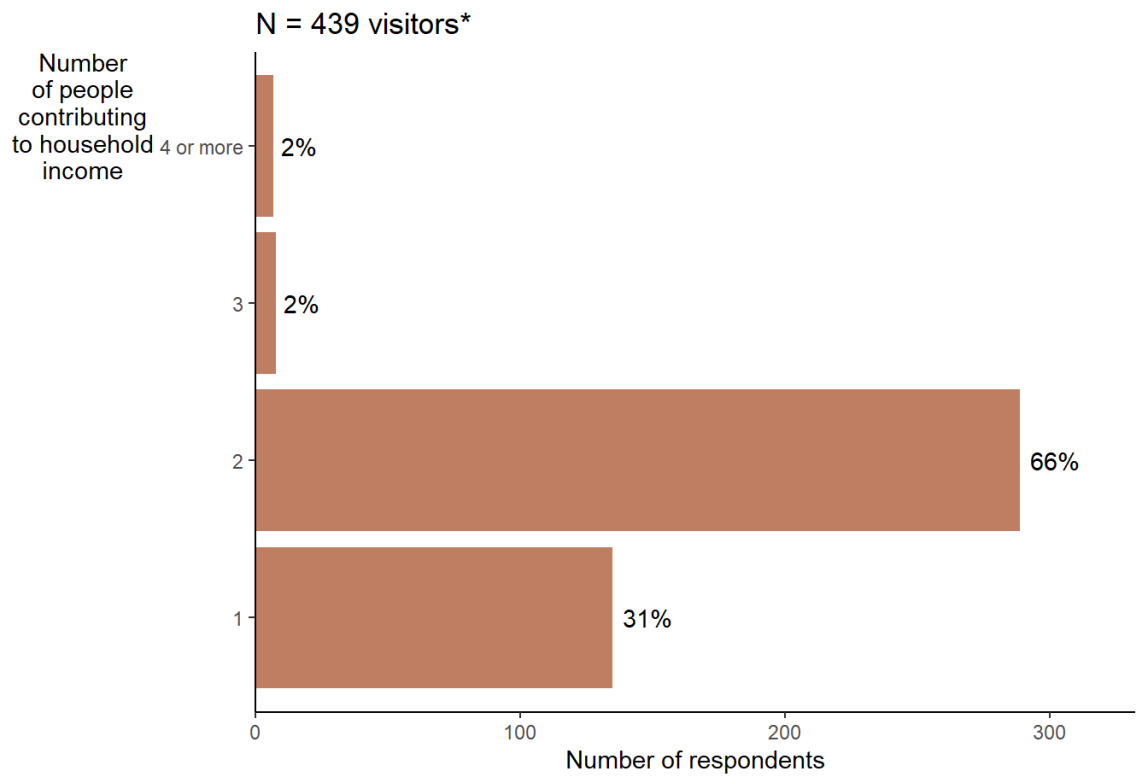
*Question 28 was asked of all respondents.*

Including yourself, how many people contribute to your annual household income?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 61)

- A majority of visitors (66%) had two contributors to their household income.
- Nearly one-third of visitors (31%) were the sole contributor to their household income.
- On average, 1.8 people contributed to the annual household income (see Appendix 5 in the Appendices companion document).



**Figure 61.** Contributors to household income

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Household size

Question 29

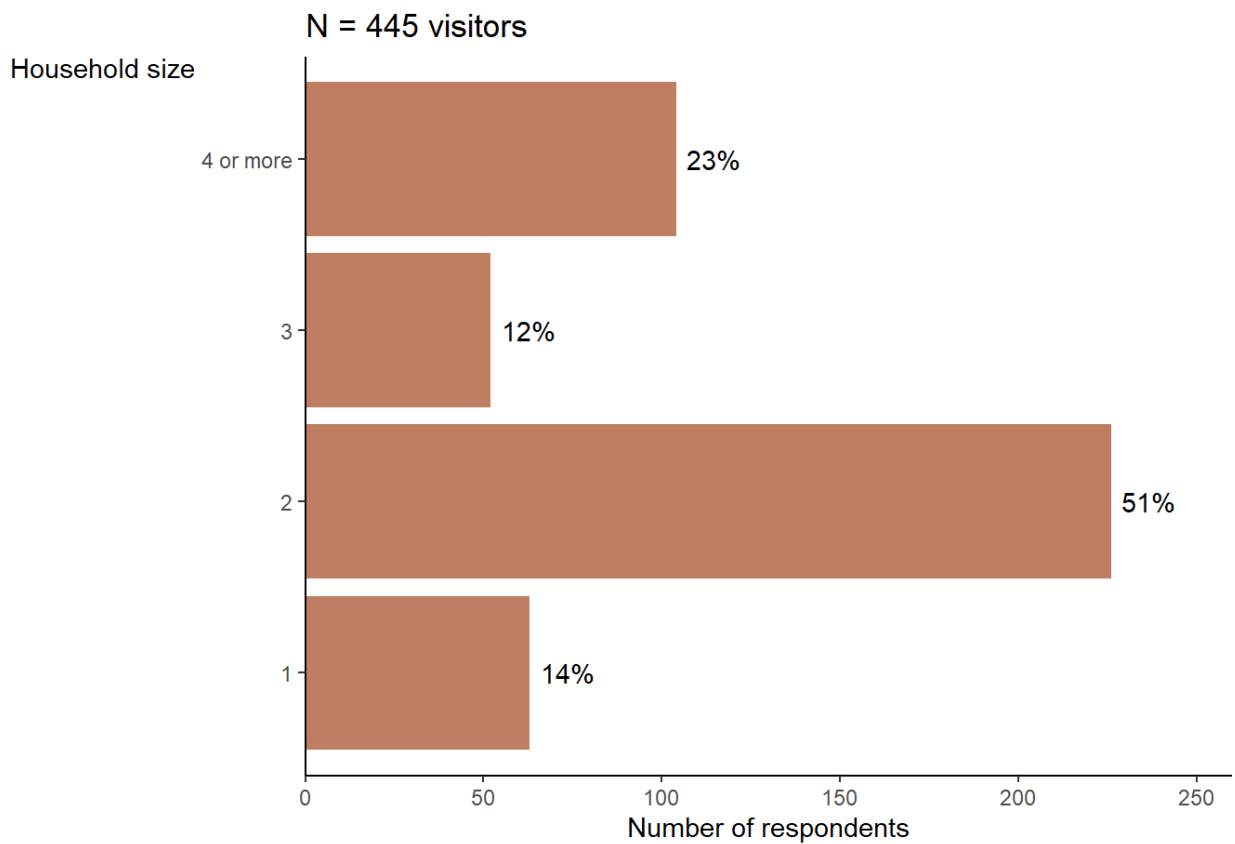
*Question 29 was asked of all respondents.*

Including yourself, how many people are in your household?

Note: Response was limited to just the group member completing the mail-back survey.

Results (Figure 62)

- About half of visitors (51%) had a household of two people.
- Over one-third of visitors (35%) had a household of three or more people.
- The average household size was 2.6 people (see Appendix 5 in the Appendices companion document).



**Figure 62.** Respondent household size

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Preferred speaking language

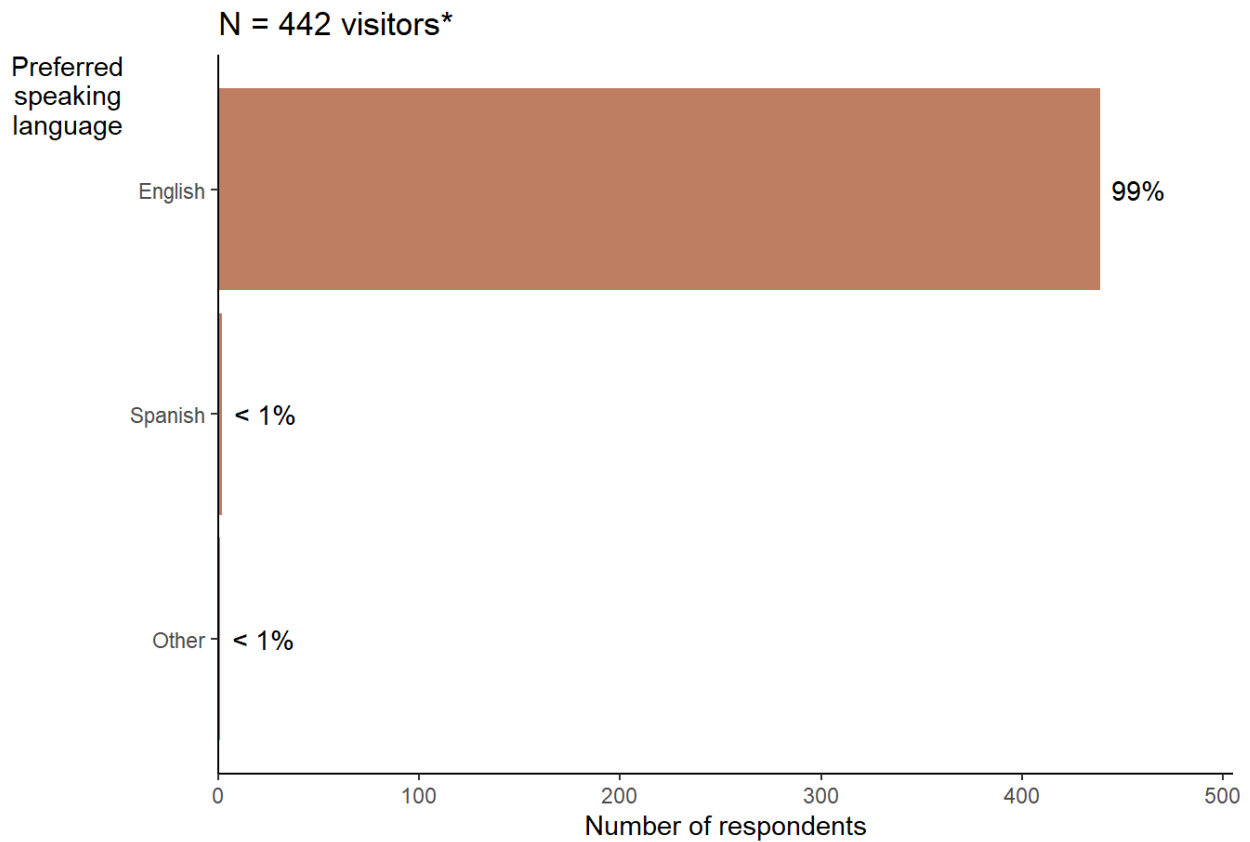
Question 30A

*Question 30A was asked of all respondents.*

When visiting an area such as Arches National Park, what language do you personally prefer to use for speaking?

Results (Figure 63)

- Nearly all visitors (99%) reported English as their preferred language for speaking.
- Other languages preferred by visitors are listed in Appendix 4 in the Appendices companion document.



**Figure 63.** Preferred speaking language

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

Preferred reading language

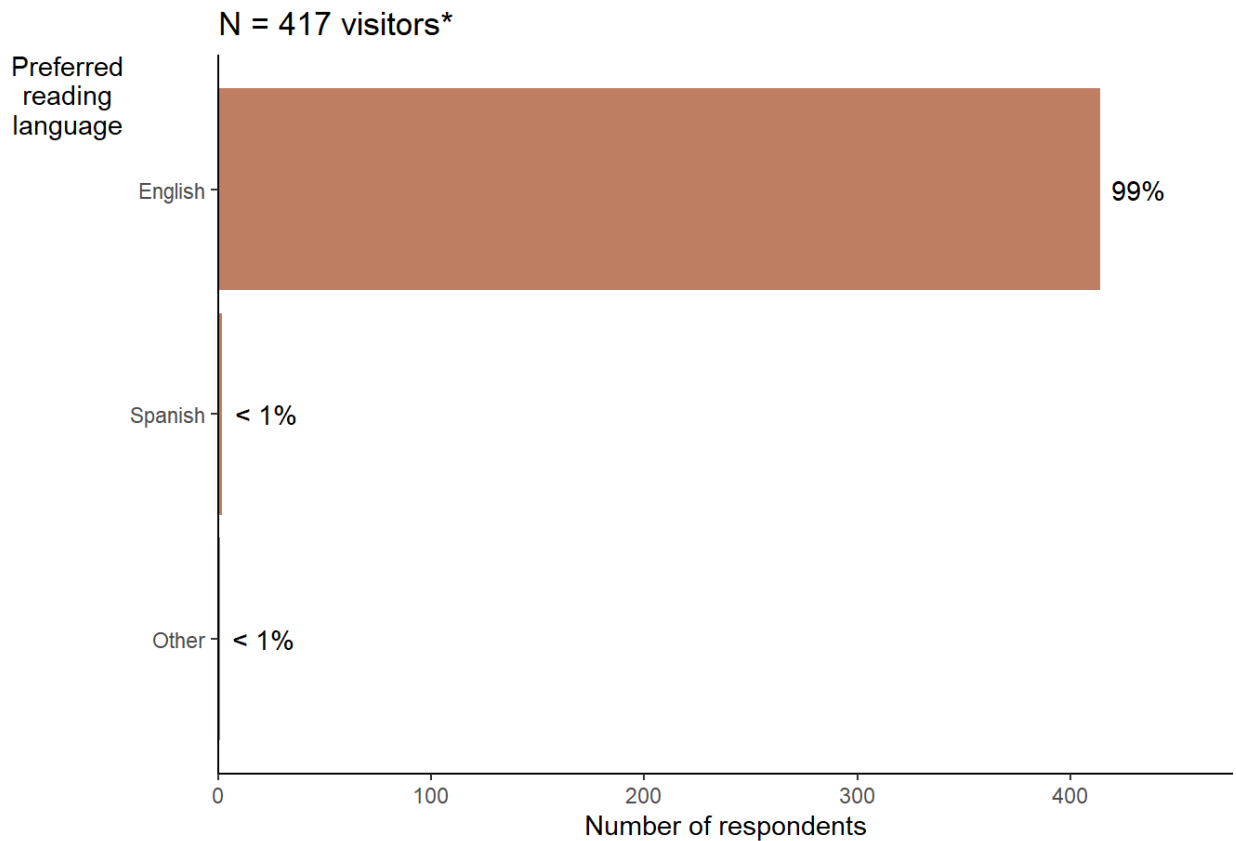
Question 30B

*Question 30B was asked of all respondents.*

When visiting an area such as Arches National Park, what language do you personally prefer to use for reading?

Results (Figure 64)

- Nearly all visitors (99%) reported English as their preferred language for reading.



**Figure 64.** Preferred reading language

\* total percentages do not equal 100 due to rounding

\*\* total percentages do not equal 100 because visitors could select more than one answer

**Visitor comments**

Question 31

*Question 31 was asked of all respondents.*

Is there anything else you would like to tell us about Arches National Park's facilities, services, or recreational opportunities?

Results

- Results are transcribed verbatim in Appendix 4 (Appendices companion document).

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