



Monocacy National Battlefield Visitor Use Study

Summer, 2016



ON THE COVER

Photograph of Worthington House

Photograph courtesy of the National Park Service

Monocacy National Battlefield Visitor Use Study

Summer, 2016

RSG
55 Railroad Row
White River Junction, VT 05001

May 2017

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Executive Summary

- This report describes the results of a visitor use study at Monocacy National Battlefield conducted from July 23 through July 31, 2016. During the sampling period, 310 visitor groups were contacted to participate in the survey. Of those groups, 281 agreed to participate in the study by accepting a mail-back survey packet. Questionnaires were completed and returned by 183 visitor groups, resulting in a completion rate of 65% among those visitor groups that agreed to participate in the study and an overall response rate of 59% for the study.
- This report profiles a systematic random sample of Monocacy National Battlefield visitors. Most of the results are presented in graphs and frequency tables. Summaries of visitor comments are included in the body of the report. Verbatim comments are included in the Visitor Comment Appendix (bound separately).
- Forty percent of visitor groups were groups of two, and 32% of visitor groups consisted of one member. Approximately half (49%) of visitor groups identified as groups of family.
- Seventeen percent of visitors were 65 years old or older, 25% of visitors were 55 to 64 years old, 30% of visitors were 35 to 54 years old, 10% of visitors were 18 to 34 years old, and 18% of visitors were under 18 years old.
- Hispanic or Latino visitors comprised 4% of visitation during the survey period. Most visitors (94%) were white. Few visitors were black or African American (3%), American Indian or Alaska Native (2%), Asian (2%), or Native Hawaiian or other Pacific Islander (1%).
- All visitor groups preferred to speak and read English when visiting an area such as Monocacy National Battlefield.
- Individuals from the United States comprised 99% of total visitation during the survey period. At the state level, 48% of visitors were from Maryland, 14% of visitors were from Pennsylvania, and smaller proportions of visitors were from 24 other states and territories. International visitors comprised <1% of total visitation with 67% of international visitors from the Netherlands and 33% from Costa Rica.
- Seventy-three percent of visitors indicated having visited the park only once during the last 12 months, while 14% had visited five or more times during the past year. Forty-seven percent of visitors indicated that they had visited another National Park Service (NPS) site within the past 12 months.
- Eighty-seven percent of visitor groups obtained information about Monocacy National Battlefield prior to this trip. The most commonly reported information sources used were the park website (45%), previous visits (30%), and the friends/relatives/word of mouth (17%). The vast majority (90%) of visitor groups had the information they needed about Monocacy National Battlefield for their trip.

- Ninety-one percent of visitor groups used a car, truck, or SUV to get from their home to the park. Fifty-nine percent of visitor groups spent up to one hour traveling from their home to the park. Fifty-seven percent of visitor groups traveled up to 50 miles from their home to get to the park.
- Forty-two percent of visitor groups indicated that visiting Monocacy National Battlefield was the primary or sole purpose of their trip away from home. Thirty-eight percent of visitor groups indicated that visiting Monocacy National Battlefield was one of several equally important destinations.
- The most important reasons for visitors to visit Monocacy National Battlefield included to learn more about American history and culture (47% of visitor groups), to spend time with friends/family (15% of visitor groups), and to visit a NPS site (17% of visitor groups). Twenty percent of visitor groups reported that visiting a cultural or historic site was their primary activity. Nineteen percent of visitor groups reported that visiting the museum was their primary activity. Nine percent of visitor groups reported having no primary activity.
- Twenty-seven percent of visitors stayed overnight in the park or in the nearby area. The majority (78%) of those visitors who stayed overnight stayed in lodging in nearby areas. Thirty-eight percent of visitor groups visited another NPS site on their trip away from home. The most commonly reported NPS sites visited other than Monocacy National Battlefield were Antietam National Battlefield and Harpers Ferry National Historical Park.
- The vast majority of visitor groups (95%) indicated that no one in their group had a physical condition that made it difficult to access or participate in activities or services during their visit. Of those visitor groups that did have a group member with a physical condition, the mostly commonly reported physical condition was a mobility-related condition (100%). Moreover, 57% of visitor groups disagreed that Monocacy National Battlefield is not accessible to persons with physical disabilities.
- Seventy-five percent of visitor groups reported going to the Visitor Center, 66% viewed indoor exhibits, 58% read the park brochure, and 52% talked informally with a ranger. Sixty-eight percent of visitor groups reported that they learned something from park staff, programs, and/or exhibits about American history, nature, and/or culture.
- Fifty-three percent of visitor groups visited Thomas Farm, 50% visited Gambrill Mill Farm, 50% visited Best Farm, and 50% visited Worthington Farm on their visit to Monocacy National Battlefield.
- Nearly all visitor groups reported that no one within their group purchased a package tour that included meals, lodging, and/or transportation while on their trip to Monocacy National Battlefield.

- Thirty-nine percent of visitor groups spent \$1 to \$50 on expenditures inside the park and nearby area, excluding package tour expenses, and 29% spent \$201 or more. The expenditure sectors where visitor groups spent the largest proportions of money (excluding package tour expenses) included restaurants/bars (36% of expenditures), hotels, motels, resorts (20% of expenditures), and souvenirs, clothing, supplies, and other retail (21% of expenditures).
- The vast majority of visitor groups (94%) reported that their visit to Monocacy National Battlefield met their expectations.
- The vast majority (98%) of visitor groups agreed that Monocacy National Battlefield is a safe place to visit. Eighty-two percent agreed that vandalism and crime are not a problem in Monocacy National Battlefield.
- Seventy-six percent of visitor groups agreed that natural resources in Monocacy National Battlefield are in pristine condition. Ninety-one percent of visitor groups agreed that historical and cultural features in Monocacy National Battlefield are well maintained/preserved. Forty-two percent of visitor groups disagreed that development of adjacent areas detracts from visitors' experiences at Monocacy National Battlefield. Ninety-six percent of visitor groups disagreed that Monocacy National Battlefield is too crowded.
- Overall, visitor groups rated the quality of facilities, services, and recreation opportunities in Monocacy National Battlefield highly. Ninety-three percent of visitor groups rated the overall quality as good or very good.

Acknowledgments

We thank the staff of Monocacy National Battlefield and the National Park Service's Social Science Program for their assistance and support with this visitor use study. Additionally, we thank Washington State University for their contributions to onsite distribution of surveys and Tab Service Company for their contributions to survey data entry.

List of Terms

NPS	National Park Service
RSG	Resource Systems Group, Inc.
SSP	Social Science Program
VUS	Visitor Use Study
OMB	Office of Management and Budget

Introduction

This report describes the results of a visitor use study (VUS) conducted at Monocacy National Battlefield from July 23 through July 31, 2016. The study was conducted by RSG on behalf of Monocacy National Battlefield and the National Park Service (NPS) Social Science Program (SSP).

Organization of Report

This report is organized into three sections

Section 1: **Methods** This section discusses the procedures, limitations, and special conditions that may affect the results of this study.

Section 2: **Results** This section provides summary information for each question in the questionnaire and includes a summary of visitor comments. The results are organized by topic areas, starting with visitor and visitor group characteristics, followed by results of questions related to pre-arrival, onsite, and post-trip stages of park visits.

Section 3: **Appendices**

Appendix 1. *The Questionnaire*. A copy of the questionnaire distributed to visitor groups.

Appendix 2. *The Thank You/Reminder Postcard*. A copy of the thank you/reminder postcard mailed to visitor groups.

Appendix 3. *The Replacement Mailing Cover Letter*. A copy of the replacement mailing cover letter mailed to visitor groups.

Appendix 4. *Detailed Sampling Procedures*. A detailed description of sampling locations and procedures.

Appendix 5. *Non-response Bias Analysis - Effects on Survey Responses due to Group Type and Visit Length*. Results of statistical tests of number of group type and visit length effects on key questions in the Monocacy National Battlefield VUS survey instrument.

Visitor Comments Appendix (separate document). Visitor responses to open-ended questions. Bound separately due to appendix length.

Presentation of the Results

Results are represented in the form of graphs (see example below), scatter plots, pie charts, tables, or text.

SAMPLE ONLY

1. The figure title describes the graph's information.
2. Listed above the graph, the "N" shows the number of individuals or visitor groups responding to or comments received for the question. When the number of individuals or visitor groups is less than 30 the word **"CAUTION!"** is shown on the graph to indicate the results may be 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 choice.

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 responded to each category.

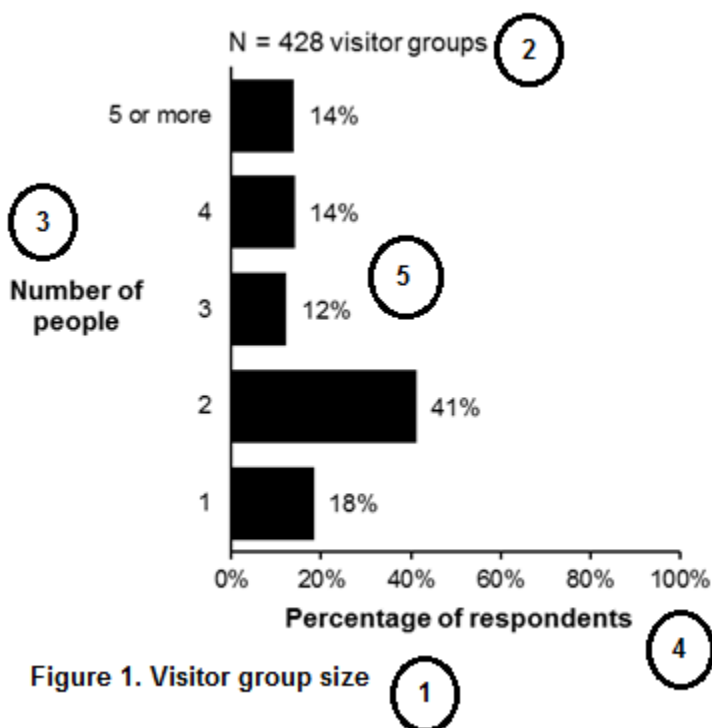


Figure 1. Example figure

Methods

Survey Method

The Monocacy National Battlefield VUS was administered at Monocacy National Battlefield as a personally delivered self-administered mail-back survey, following the principles outlined in Don A. Dillman's book *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method* (2014). The survey method included three phases: 1) onsite distribution of a booklet-sized questionnaire, 2) a color-picture reminder postcard mailing, and 3) one replacement mailing of a booklet-sized questionnaire for those participants that had not yet returned a completed questionnaire. The study population included visitor groups with at least one group member 18 years of age or older in Monocacy National Battlefield 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 questionnaires.

Sampling Effort

The visitor survey was administered at Monocacy National Battlefield from July 23 through July 31, 2016. The survey administration dates were selected to target peak use at the park. The peak use month was identified using the five-year average of monthly visitation data for Monocacy National Battlefield available from the NPS Public Use Statistics Office. Within the peak use month, the survey administration dates were selected to include both weekdays and weekend days.

The list of sampling locations was selected through an iterative, data-driven process. A list of potential sampling locations was compiled using three primary information sources. First, previously conducted visitor use studies and/or survey research were consulted for locations that had been sampled previously. Second, the sampling locations for collection of NPS Public Use Statistics Office visitation data were consulted for potential additional sampling locations. Third, the park's website and other popular trip planning resources for Monocacy National Battlefield were consulted to ensure that popular visitor locations were not inadvertently excluded from the list of potential sampling locations. The list of potential sampling locations was reduced through consideration of feasibility for survey administration and coverage of the range of user types at Monocacy National Battlefield. The refined list of sampling locations was finalized through consultation with the NPS SSP and Monocacy National Battlefield staff. The visitor survey was administered at four locations in the park: Gambrill Mill, Thomas Farm, Visitor Center, and Worthington Farm.

The visitor survey was administered for a select range of hours on each sampling day. The hours of survey administration at the Visitor Center coincided with the hours of operation. The hours of survey administration at all other sites were selected to capture a broad range of user types and maximize sampling efficiency. The final sampling effort is presented in Table 1.

Table 1. Sampling effort

Date	Gambrill Mill	Thomas Farm	Visitor Center	Worthington Farm
Saturday, July 23	9:00AM-6:00PM	-	9:00AM-6:00PM	9:00AM-6:00PM
Sunday, July 24	-	-	9:00AM-6:00PM	-
Monday, July 25	-	-	9:00AM-6:00PM	-
Tuesday, July 26	-	9:00AM-6:00PM	-	9:00AM-6:00PM
Wednesday, July 27	9:00AM-6:00PM	-	9:00AM-6:00PM	9:00AM-6:00PM
Thursday, July 28	9:00AM-6:00PM	-	9:00AM-6:00PM	-
Friday, July 29	-	9:00AM-6:00PM	9:00AM-6:00PM	-
Saturday, July 30	-	-	9:00AM-6:00PM	9:00AM-6:00PM
Sunday, July 31	-	9:00AM-6:00PM	9:00AM-6:00PM	-

Questionnaire Design

The Monocacy National Battlefield VUS questionnaire was developed through a collaborative process including Monocacy National Battlefield staff, NPS SSP staff, and RSG staff. The instrument was designed to gather information about visitor and trip characteristics, trip planning efforts, motivations for visiting, visitor perceptions of park experiences, and visitor satisfaction with park services and facilities. All of the questions included in the questionnaire were selected from the NPS Programmatic Information Collection Review Pool of Known Questions. The majority of the questions included in the survey instrument ask visitors to choose answers from a list of response options, providing an open-ended option, where appropriate, to ensure that question prompts allowed for inclusive answers. A few questions were completely open-ended to collect unprompted responses from visitors in their own words. The questionnaire was reviewed and approved by the Office of Management and Budget (OMB), and correspondingly conforms to OMB standards and guidelines for questionnaire design. The questionnaire was administered to visitors in English (Appendix 1).

Sampling Procedures

Mail-back survey packets were administered to visitor groups in Monocacy National Battlefield using onsite intercept methods (see Appendix 4 for detailed descriptions of how visitors were selected at each sampling location). Each contacted visitor group was greeted, introduced to the purpose of the study, and asked to participate. If a visitor group agreed to participate, they were asked which member of the group (at least 18 years old) had the next birthday; the individual with the next birthday was asked 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.

Individuals who agreed to complete the questionnaire were asked to provide their name and mailing address. This information was used to send follow-up mailings according to Dillman's (2014) mail-back survey methods. Participating visitors were then administered a mail-back survey packet, which included a booklet-sized questionnaire placed inside of a pre-addressed envelope affixed with a U.S. first class postage stamp. Visitors were asked to complete the questionnaire after completing 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 due to the U.S. first class postage affixed to the return envelope. Table 2 summarizes the survey effort by sampling location.

Table 2. Number of questionnaires distributed, by sampling location

Sampling site	Sampling date									Total questionnaires distributed	
	7/23	7/24	7/25	7/26	7/27	7/28	7/29	7/30	7/31	N	%
Gambrill Mill	35	-	9	-	-	12	-	-	-	56	20%
Thomas Farm	-	-	-	5	-	-	10	-	12	27	10%
Visitor Center	23	23	11	-	18	11	12	22	27	147	52%
Worthington Farm	-	13	-	13	12	-	-	13	-	51	18%
All sites	58	36	20	18	30	23	22	35	39	281	100%

Two weeks after field survey administration concluded, all survey participants were sent a color-picture postcard (Appendix 2) thanking them for participating in the study and/or reminding them to complete and return the questionnaire (Table 3). 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 (Appendix 3). 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 printed with international business reply mail postage.

Table 3. Follow-up mailing distribution

Mailing	Date	U.S.	International	Total
Postcards	8/15/2016	279	2	281
Replacement mailing	8/29/2016	157	1	158

Sampling Results¹

During the sampling period, 310 visitor groups were contacted to participate in the survey. Of these groups, 281 agreed to participate in the study by accepting a mail-back survey packet (91% cooperation rate) (Table 2). Questionnaires were completed and returned by 183 visitor groups

¹ Sampling results are reported using three metrics: cooperation rate, completion rate, and overall response rate. Cooperation rate is the proportion of onsite acceptances to total onsite contacts. Response rate is the proportion of completed survey questionnaires to total onsite contacts. Calculation of cooperation rate and response rate follow American Association for Public Opinion Research definitions. Completion rate is the proportion of completed survey questionnaires to onsite acceptances — completion rate is the metric in this study that is directly comparable to response rates reported in the Visitor Services Project (VSP) and is therefore included for reference. See Rookey et al. (2012) for a complete description of VSP response rate calculation.

(Table 4), resulting in a completion rate of 65% among those visitor groups that agreed to participate in the study and an overall response rate of 59% for the study.

Table 4. Number of completed questionnaires, by sampling location

Sampling site	N	Percent
Gambrill Mill	24	13%
Thomas Farm	19	10%
Visitor Center	104	57%
Worthington Farm	36	20%
Total	183	100%

Data Entry and Cleaning

Data from returned questionnaires were entered into an electronic data entry software by two separate data entry technicians. After independent double entry of the survey data was completed, the data entry software was used to identify any differences between the entries of the two data entry technicians. A data entry supervisor reviewed any differences detected by the software process, identified the correct values by referencing the original paper questionnaire, and entered the correct values into the database. The double-entered, reviewed, and corrected dataset was subjected to additional cleaning and proofing using Microsoft Excel and SPSS statistical software. Data cleaning and proofing included identification and correction of invalid values, and complete manual verification of data entry for a randomly selected subset (n=40) of the completed questionnaires for quality assurance. This process ensured an error rate at or below 1.5% for data entry. Errors in the subset were corrected with reference to hardcopies of questionnaires.

Non-Response Bias

Non-response bias is the bias that results when respondents differ in meaningful ways from non-respondents. Non-response bias affects the ability to generalize survey results, to some degree for some questions, from the sample to the study's target population (Salant and Dillamn, 1994; Dillman, 2014; Stoop, 2004; Filion, 1976; Dey, 1997). If non-respondents are found to differ from respondents in meaningful ways, care should be taken when interpreting survey responses, as they may over-represent some segments of the target population to some degree for some questions, and may under-represent other segments of the population to some degree for some questions.

To check for non-response bias and help inform the interpretation of results that may be affected by non-response bias, this study used answers to five, pre-selected non-response bias questions and one observable characteristic of the contacted visitor to compare respondents with non-respondents. After being contacted to participate in the survey, an interview, lasting approximately two minutes, was conducted with all contacted visitor groups regardless of whether or not they agreed to participate in the study. The interview included the following five questions used for evaluation of non-response bias:

1. How many adults, 18 years and older, are in your group?
2. How many children (under 18 years) are in your group?

3. What type of group are you with? Friends, family, friends and family, or some other type of group?
4. How long is this trip to Monocacy National Battlefield in total, from beginning to end?
5. What is your state of residence (if you live in the U.S.) or country of residence (if do not live in the U.S.)?

In addition to the five, pre-selected non-response bias questions, the gender of the person in the group who was first contacted by the survey administrator were observed and recorded.

An effort was made to obtain answers to the non-response bias questions from all visitor groups contacted, including those that declined to participate in the survey. Responses were obtained from most of the participating visitor groups and from many, but not all, of those that declined to participate in the study. When the survey administrator was unable to obtain responses to the non-response bias questions, it was often because the approached contact refused all further contact from the administrator after the initial refusal, usually with no reason provided. These instances were defined as “hard refusals”.

Ideally, responses or observed estimates for non-response bias variables should be collected from all respondents and non-respondents. The collection of information from all contacted individuals provides the best comparison of characteristics between the respondent and non-respondent populations. More practically, a majority of responses or observed estimates must be present to adequately characterize both the respondent and non-respondent populations. In this study, 70% was identified as the minimum percentage of valid values for non-response variables needed for both respondent and non-respondent populations in order to adequately characterize the populations on a given non-response variable.² All non-response variables met the minimum for 70% valid values among respondents and/or non-respondents (Table 5). Correspondingly, all variables were used for non-response bias analysis.

² The Office of Management and Budget Standards and Guidelines for Statistics Surveys (2006) suggest that any survey item with at least 70% non-missing data can be presumed to reflect the entire data set (i.e., for such items, any differences between the subjects with data and those without data are negligible).

Table 5. Number and percentage of respondents and non-respondents with valid values for non-response variables

Variable	Respondents (n=183)		Non-Respondents (n=460)	
	Valid N	Valid Percent	Valid N	Valid Percent
Initial contact gender	183	100%	127	100%
Number of adults	183	100%	119	93%
Number of children	183	100%	119	93%
Group type	183	100%	127	100%
Visit length	183	100%	119	93%
State or country of residence	183	100%	120	94%

Chi-square tests of independence were used to test for differences between respondents and non-respondents. 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. Values for the number of children in the visitor group were collapsed into three categories: no children, one child, and two or more children. Values for visit length were collapsed into four categories: one hour, two to three hours, and four hours or more. Responses for state or country of residence were collapsed into three categories: in state visitor, out of state visitor, and international visitor.

A Bonferroni correction was applied to account for the fact that six simultaneous statistical tests were conducted with the same data set. The Bonferroni correction minimizes the likelihood of concluding from the results of the statistical tests that there are differences between respondents and non-respondents, when there actually are no differences (i.e., minimizes the probability of making a Type I error). With the Bonferroni correction applied in this analysis, statistical test results with p-values of less than 0.008 are assumed to be statistically significant.

Results of the chi-square tests in Table 6 through Table 9 suggest that respondents and non-respondents do not differ significantly, with respect to initial contact gender ($p = 0.638$), number of adults in their group ($p = 0.099$), number of children in their group ($p = 0.287$), or state or country of residence ($p = 0.101$). These results provide no compelling evidence of non-response bias related to the initial contact gender, the number of adults in visitor groups, the number of children in visitor groups, or state or country of residence within the survey sample.

Table 6. Initial contact gender comparison between respondents and non-respondents

Response	Respondents (n=183)		Non-Respondents (n=122)	
	N	Percent	N	Percent
Male	100	55%	70	57%
Female	83	45%	52	43%
p-value (Chi-square) ¹	0.638			

¹ $\alpha = 0.05$, $p \leq 0.008$ indicates significant result following Bonferroni correction to account for multiple non-response bias statistical tests.

Table 7. Number of adult group members comparison between respondents and non-respondents

Response	Respondents (n=182)		Non-Respondents (n=119)	
	N	Percent	N	Percent
1 adult	65	36%	50	42%
2 adults	87	48%	45	38%
3 or 4 adults	27	15%	17	14%
5 or more adults	65	36%	50	42%
p-value (Chi-square) ¹	0.099			

¹ $\alpha = 0.05$, $p \leq 0.008$ indicates significant result following Bonferroni correction to account for multiple non-response bias statistical tests.

Table 8. Number of children in group comparison between respondents and non-respondents

Response	Respondents (n=183)		Non-Respondents (n=118)	
	N	Percent	N	Percent
No children	147	80%	87	74%
1 child	15	8%	16	14%
2 or more children	21	11%	15	13%
p-value (Chi-square) ¹	0.287			

¹ $\alpha = 0.05$, $p \leq 0.008$ indicates significant result following Bonferroni correction to account for multiple non-response bias statistical tests.

Table 9. State or country of residence comparison between respondents and non-respondents

Response	Respondents (n=184)		Non-Respondents (n=120)	
	N	%	N	%
In state visitor	91	49%	69	58%
Out of state visitor	92	50%	48	40%
International visitor	1	1%	3	3%
p-value (Chi-square) ¹	0.101			

¹ $\alpha = 0.05$, $p \leq 0.008$ indicates significant result following Bonferroni adjustment to account for multiple non-response bias statistical tests.

The results of the chi-square tests in Table 10 and Table 11 suggest respondents and non-respondents differed significantly, with respect to visitor group type ($p = 0.002$) and visit length ($p < 0.001$); thus, there is evidence of potential non-response bias related to group type and visit length within the survey's sample. Specifically, groups made up of family were more likely to respond to the survey than other group types, and visitor groups visiting the park for two hours or more were more likely to respond to the survey than those who visited for up to one hour.

The potential impact of non-response bias, with respect group type and visit length, on the results of the survey was further explored (Appendix 5). In particular, statistical tests of number of group type and visit length effects on key questions in the survey instrument were performed, with differences

found for only 3 of 71 questions for group type, and differences found for only 2 of 71 questions for visit length ($\alpha = 0.05$, $p \leq 0.0007$ indicates significant result following Bonferroni adjustment). Where statistical differences were found between respondent subgroups, results by subgroup are reported (Appendix 5).

Table 10. Group type comparison between respondents and non-respondents

Response	Respondents (n=183)		Non-Respondents (n=120)	
	N	Percent	N	Percent
Alone	52	28%	38	32%
Family	108	59%	51	43%
Friends	11	6%	7	6%
Family and friends	12	7%	24	20%
p-value (Chi-square) ¹	0.002			

¹ $\alpha = 0.05$, $p \leq 0.008$ indicates significant result following Bonferroni correction to account for multiple non-response bias statistical tests.

Table 11. Visit length comparison between respondents and non-respondents

Response	Respondents (n=184)		Non-Respondents (n=119)	
	N	Percent	N	Percent
1 hour	85	46%	86	72%
2 or 3 hours	83	45%	26	22%
4 or more hours	16	9%	7	6%
p-value (Chi-square) ¹	<0.001			

¹ $\alpha = 0.05$, $p \leq 0.008$ indicates significant result following Bonferroni correction to account for multiple non-response bias statistical tests.

In summary, no significant differences were found between respondents and non-respondents, with respect to initial contact gender, number of adults in group, number of children in group, and state or country of residence. Non-response bias analysis results suggest that, for a small number of questions in the survey, the survey results may over-represent opinions, evaluations, or behaviors from visitor groups who are families relative to groups of other types, and from visitor groups who visited the park for two hours or more relative to groups who visited for one hour. Effects of group type and visit length on results were analyzed further, and the results of this analysis are reported in Appendix 5.

Weighting of Survey Response Data

Visitor groups contacted during non-peak periods and/or at lower use sampling locations had a higher probability of selection for participation in the study than visitor groups contacted during peak periods and/or at higher use sampling locations. To account for these differences in selection probability, the survey data were weighted using counts of visitor volumes collected by survey administrators at each sampling location.

At the Visitor Center, visitor count data were collected for four 30-minute time periods during each sampling day. During each 30-minute visitor count period, the number of visitors who entered the Visitor Center was counted. At Gambrill Mill, Thomas Farm, and Worthington Farm, where an attempt was made to contact all arriving visitor groups, the number of contacts on the survey contact log forms was assumed to constitute a count of all visitor groups entering the sampling location. The count data were used to weight the survey response data, to account for variation in visitor volumes (and corresponding probability of selection for the study) across sampling locations and hours of the day. The report presents results of the analysis of the weighted survey response data.

Data Analysis

SPSS statistical software was used for data analysis. For all questions where pre-defined response options were provided, frequencies are reported. Descriptive statistics (mean, median, standard deviation) are presented in tables below figures for those variables for which measures of central tendency can be computed.

For open ended questions (i.e., without pre-defined response options), thematic codes were applied to the responses to categorize the data. The categorized data are reported in tabular format providing the percent of valid responses for each theme. For all open-ended questions and questions with open-ended response options, verbatim visitor comments are reported in the stand-alone *Visitor Comments Appendix*.

Limitations

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

1. The survey was self-administered. Respondents completed the questionnaire after an unknown amount of time after the 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 of July 23 through July 31, 2016. 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 word "CAUTION!" is included in the graph, figure, table, or text.
4. Sample size may vary for some questions, due to item non-response (i.e., one or more question left blank by a respondent). Therefore, refer to both the percentage and sample values when interpreting the results.
5. Results of statistical tests comparing respondents to non-respondents (i.e., non-response bias analysis) suggest that, for a small number of questions in the survey, the survey results may over-represent opinions, evaluations, or behaviors from visitor groups who are families relative to groups of other types, and from visitor groups who visited the park for two hours or more relative to groups who visited for up to one hour. Effects of group type and visit

length on results for a select set of key questions from the survey were analyzed, and the results of this analysis are reported in Appendix 5.

Special Conditions

The weather during the survey period was generally sunny, hot, and humid with high temperatures typically in the high and low 90s. Severe storms on July 30 disrupted survey administration for one to two hours while survey administrators waited for the weather to clear the area.

Results

Group and Visitor Characteristics

Visitor group size

Question 1

Including yourself, how many people were in your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey?

Results (Figure 2 and Table 12)

- 40% of visitor groups consisted of two members.
- 32% of visitor groups consisted of one member.

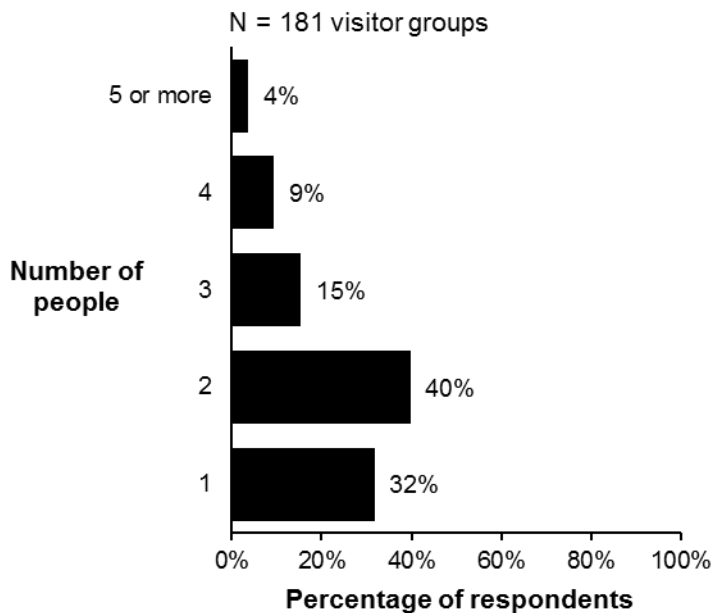


Figure 2. Visitor group size

Table 12. Descriptive statistics: Number of visitors in group

	Mean	Median	Std. Deviation
Number of visitors in group	2.15	2.00	1.19

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Number of adults within group

Question 1

Including yourself, how many people were in your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey?

Number of adults (18 years and older).

Results (Figure 3 and Table 13)

- 48% of visitor groups consisted of two adults.
- 42% of visitor groups consisted of one adult.

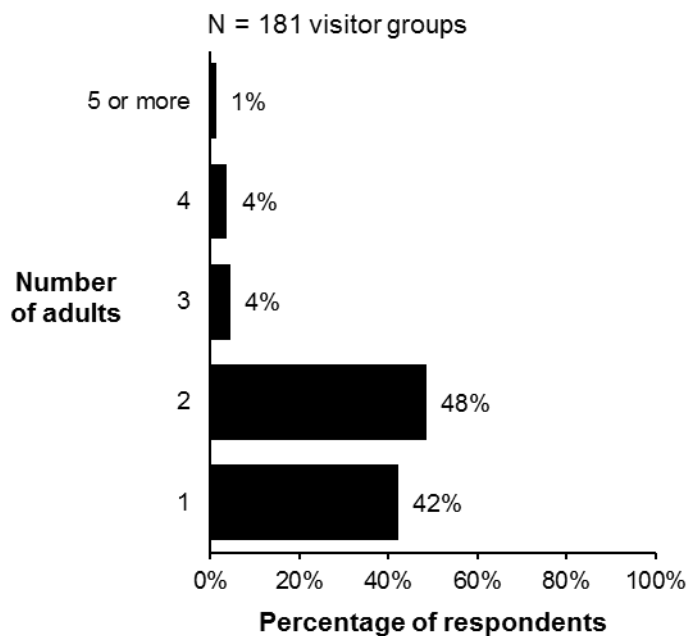


Figure 3. Number of adults within group

Table 13. Descriptive statistics: Number of adults in group

	Mean	Median	Std. Deviation
Number of adults in group	1.74	2.00	0.89

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Number of children within group

Question 1

Including yourself, how many people were in your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey?

Number of children (under 18 years).

Results (Figure 4 and Table 14)

- The majority of visitor groups (76%) did not have children.
- Of those visitor groups that had children (n=44), 48% of visitor groups consisted of one child.

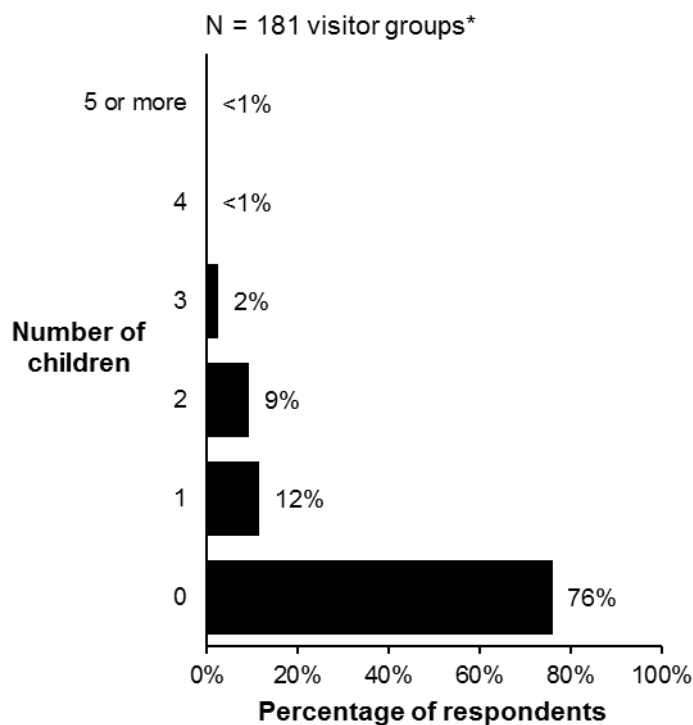


Figure 4. Number of children within group

Table 14. Descriptive statistics: Number of children in group (for groups with children)

	Mean	Median	Std. Deviation
Number of children in group	1.72	2	0.87

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor group type

Question 2

What type of group were you with during your visit to Monocacy National Battlefield on the day you were contacted for this survey?

Results (Figure 5)

- 49% of visitor groups were made up of family.
- 36% were alone.

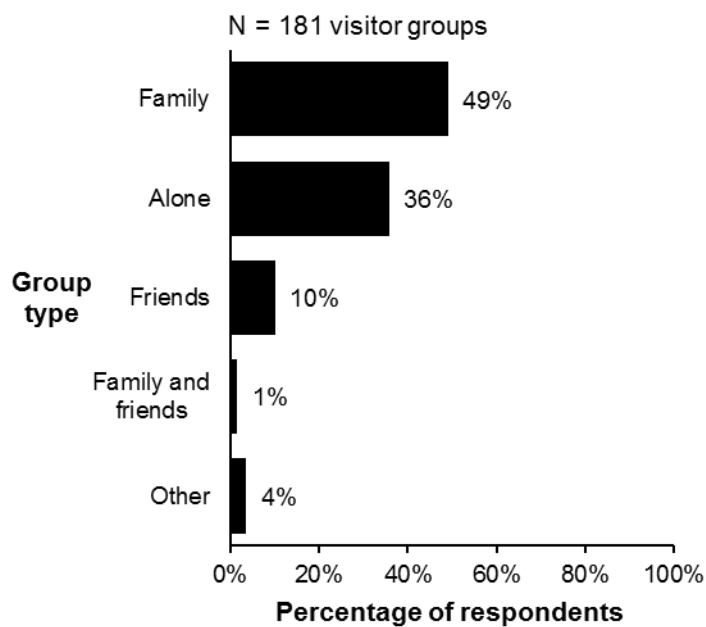


Figure 5. Visitor group type

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor age

Question 36

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide your current age.

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 6 and Table 15)

- Visitor ages ranged from less than one year old to 99 years old.
- 17% of visitors were 65 years old or older.
- 25% of visitors were 55 to 64 years old.
- 30% of visitors were 35 to 54 years old.
- 10% of visitors were 18 to 34 years old.
- 18% of visitors were under 18 years old.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

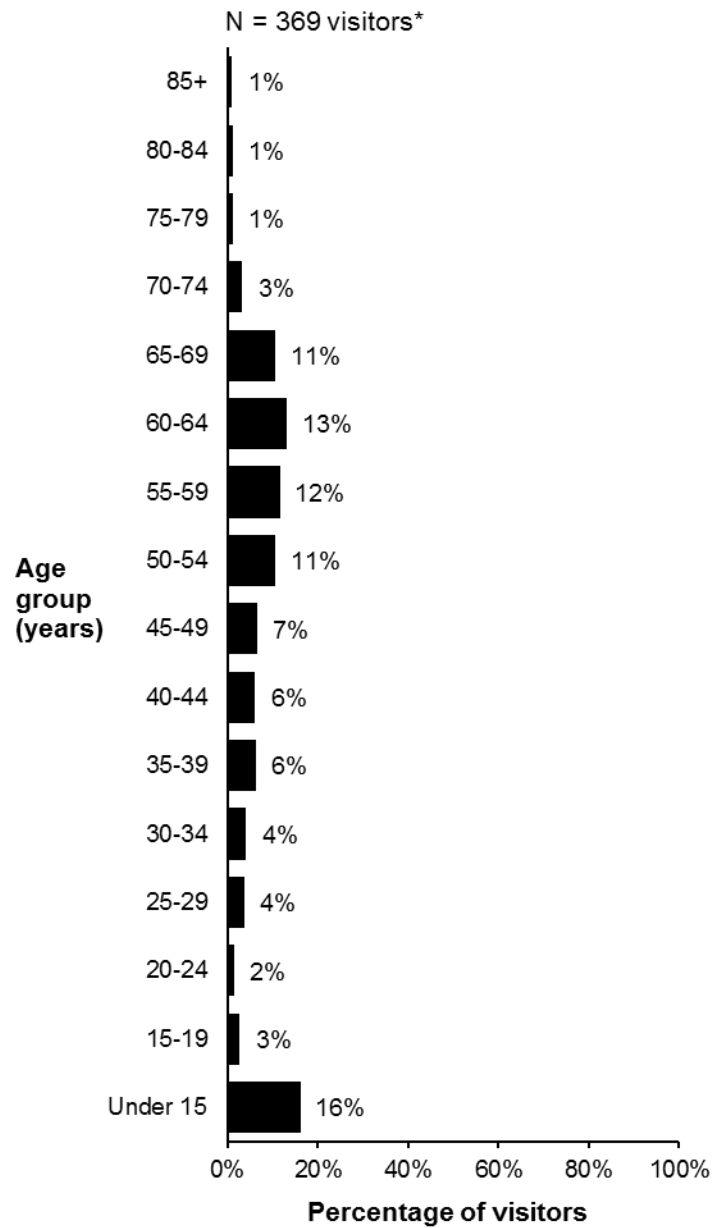


Figure 6. Visitor age

Table 15. Descriptive statistics: Visitor age

	Mean	Median	Std. Deviation
Visitor age	45.15	52.00	21.33

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor gender

Question 37

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide your gender.

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 7)

- 54% of visitors were male.
- 46% of visitors were female.

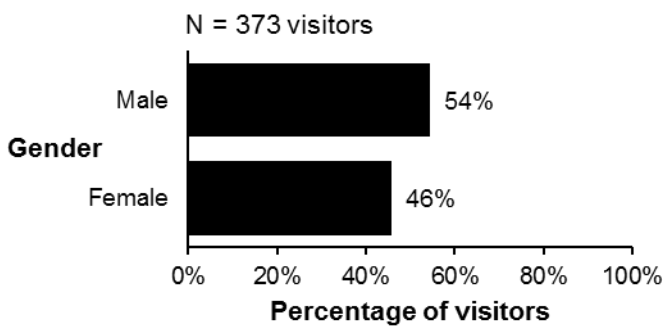


Figure 7. Visitor gender

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor ethnicity

Question 37

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide your ethnicity.

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 8)

- 4% of visitors were Hispanic or Latino.

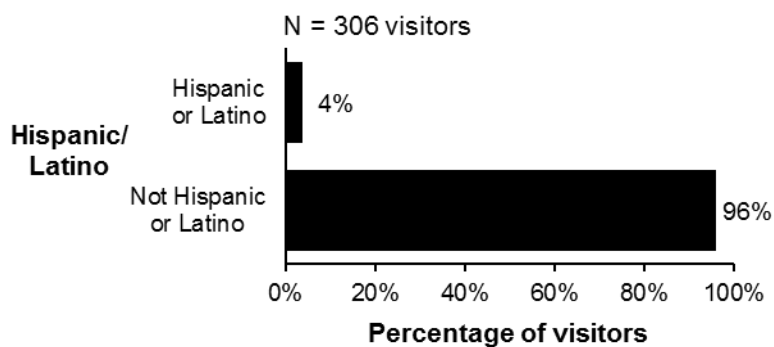


Figure 8. Visitor ethnicity

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor race

Question 38

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide your race.

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 9)

- 94% of visitors were white.
- Very few visitors were black or African American (3%), American Indian or Alaska Native (2%), Asian (2%), or native Hawaiian or other Pacific Islander (1%).

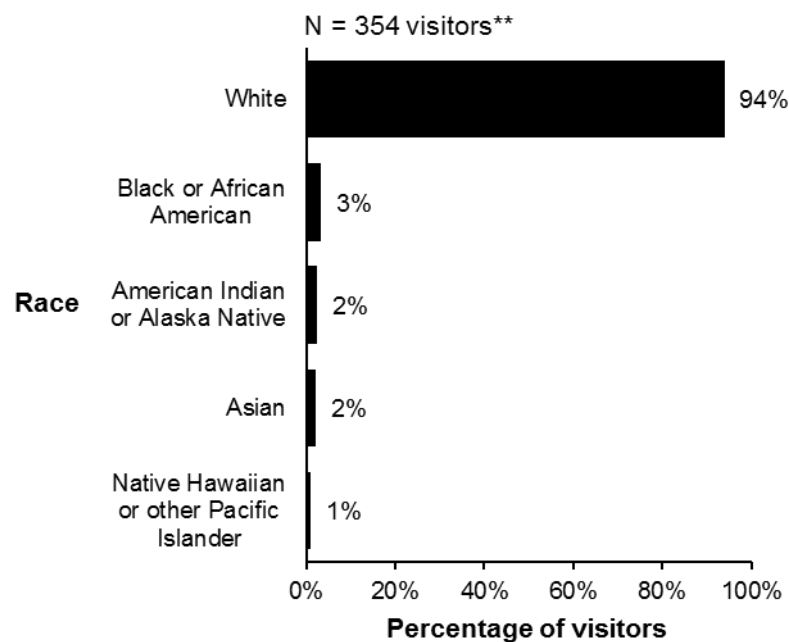


Figure 9. Visitor race

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor speaking language

Question 42

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

Results (Figure 10)

- 100% of visitor groups reported English as their preferred language for speaking.

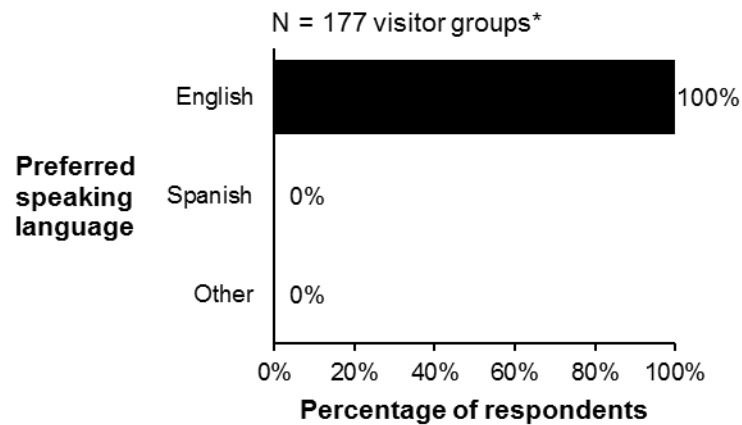


Figure 10. Preferred speaking language

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor reading language

Question 42

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

Results (Figure 11)

- 100% of visitor groups reported English as their preferred language for reading.

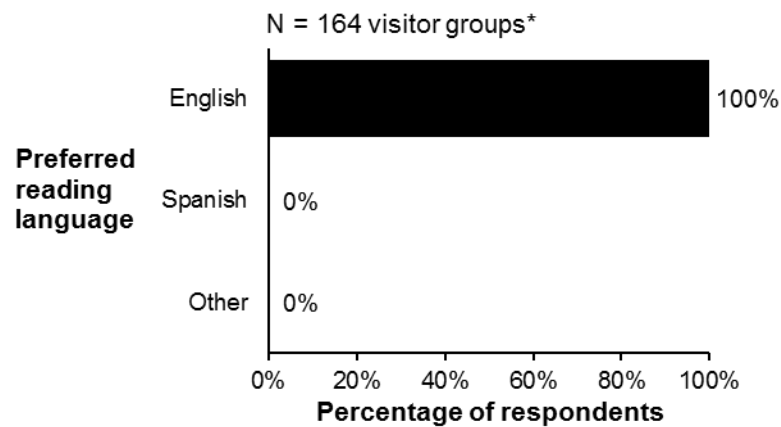


Figure 11. Preferred reading language

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

U.S. visitors' state of residence

Question 36

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide your U.S. ZIP code (if you are a U.S. resident).

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Table 16 and Figure 12)

- U.S. visitors came from 26 states and comprised 99% of total visitation to the park during the survey period.
- 48% of U.S. visitors came from Maryland.
- 14% of U.S. visitors came from Pennsylvania.
- Smaller proportions of visitors came from other U.S. states.

Table 16. United States visitors by state of residence

State	Percent of U.S. visitors N = 341 visitors*	Percent of all visitors N = 344 visitors
Maryland	48%	47%
Pennsylvania	14%	14%
Virginia	7%	6%
Texas	3%	3%
New York	3%	3%
New Jersey	3%	3%
Ohio	2%	2%
Illinois	2%	2%
Massachusetts	2%	2%
California	2%	2%
North Carolina	2%	2%
Delaware	2%	1%
South Carolina	1%	1%
Arizona	1%	1%
West Virginia	1%	1%
Kentucky	1%	1%
10 other states	6%	6%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

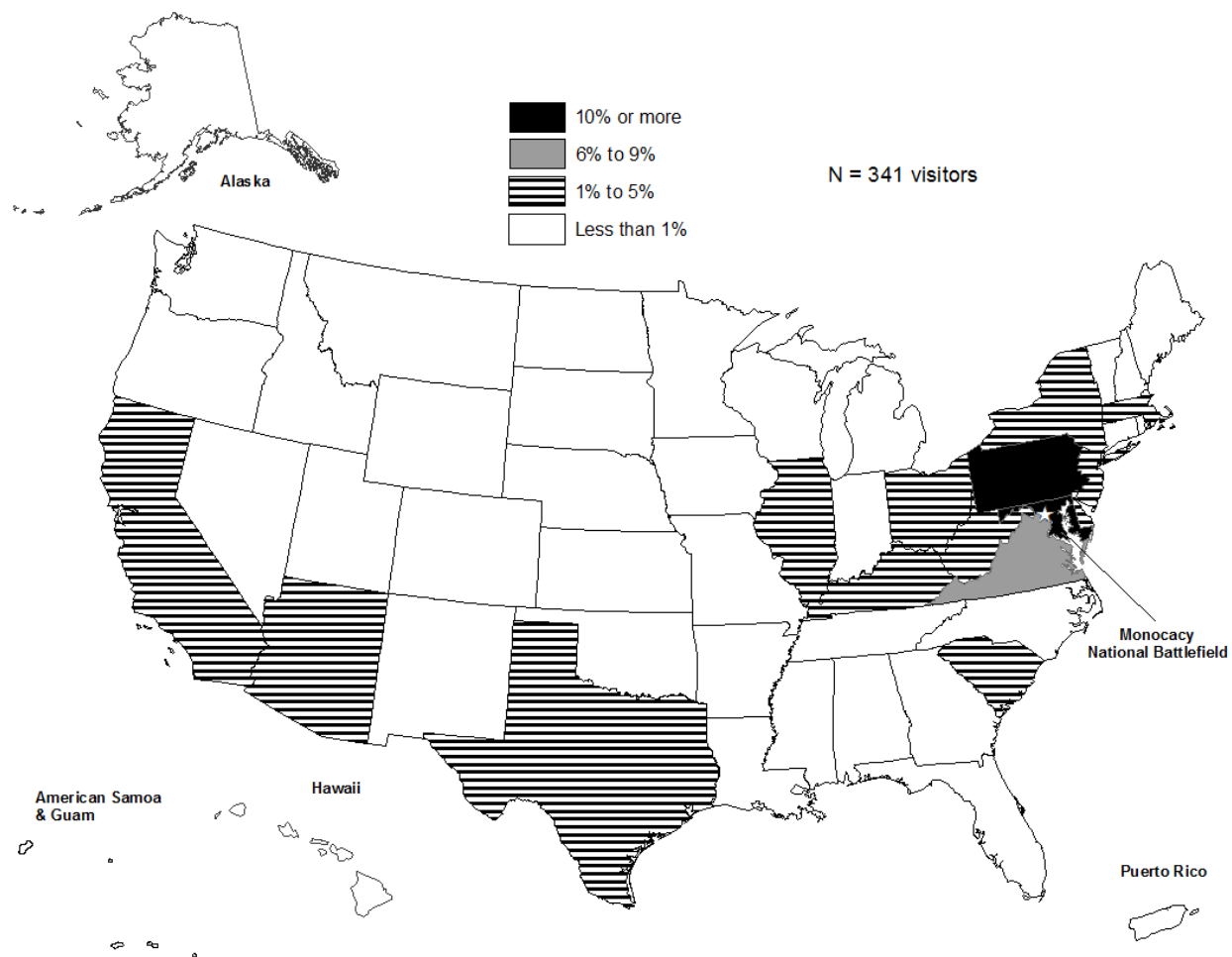


Figure 12. Proportion of U.S. visitors by state of residence

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

International visitors' country of residence

Question 36

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide your country of residence (if other than U.S.).

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Table 17)

- International visitors were from four countries and comprised <1% of total visitation to the park during the survey period.
- 67% of international visitors came from The Netherlands.
- 33% of international visitors came from Costa Rica.

Table 17. International visitors by country of residence

Country	Percent of international visitors N = 3 visitors	Percent of all visitors N = 344 visitors
The Netherlands	67%	<1%
Costa Rica	33%	<1%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Live in nearby area

Question 27

Do you live within the nearby area (within the shaded area shown on the map)?

See Figure 14 on the next page or Appendix 1 for map.

Results (Figure 13)

- 38% of visitor groups lived within the shaded area on the map (i.e., nearby area).

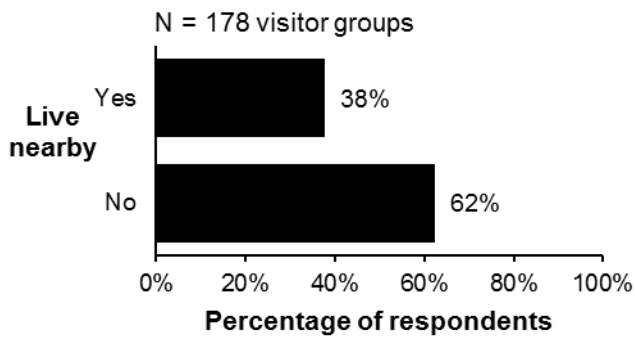


Figure 13. Visitors who live in nearby area

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

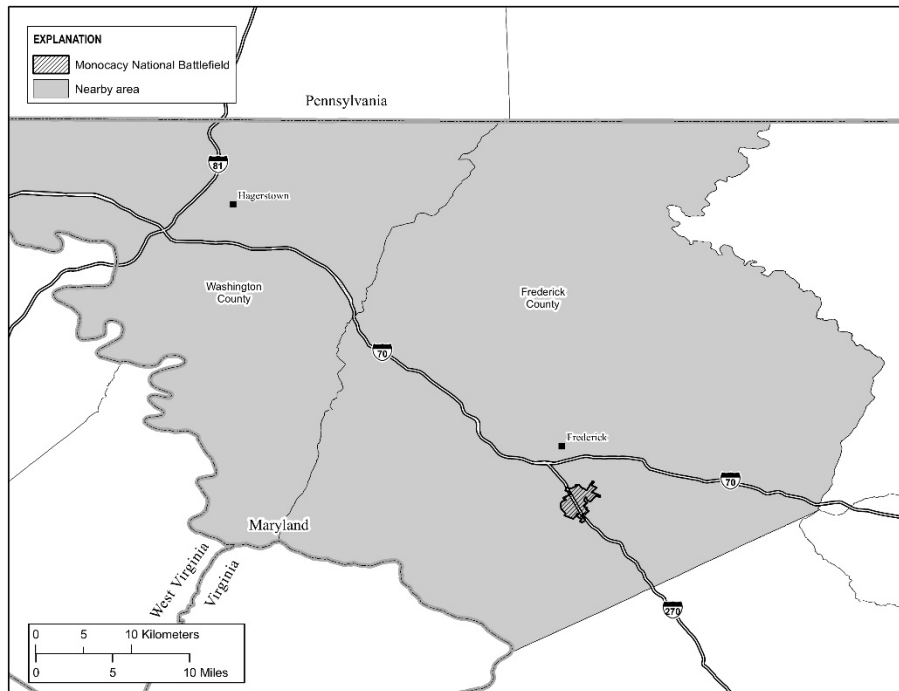


Figure 14. Map of Monocacy National Battlefield and nearby area

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor level of education

Question 39

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, what is the highest level of formal education completed by each member of your group?

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 15)

- 31% of visitors graduated from a college, business, or trade school.
- 30% of visitors completed a Master's, doctoral, or professional degree.
- 15% of visitors completed less than high school.

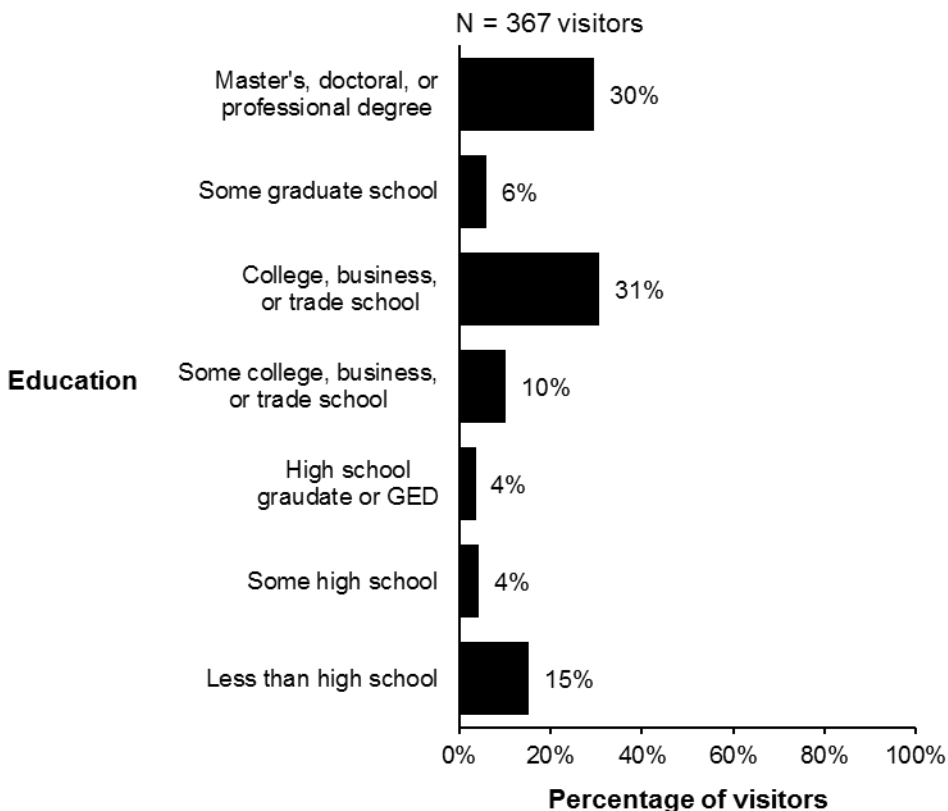


Figure 15. Visitor level of education

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Household income

Question 40

Which category best represents your annual household income?

Results (Figure 16)

- 26% of visitor groups had an annual household income between \$100,000 and \$149,999.
- 15% of visitor groups had an annual household income between \$50,000 and \$74,999.
- 13% of visitor groups had an annual household income of \$200,000 or more.

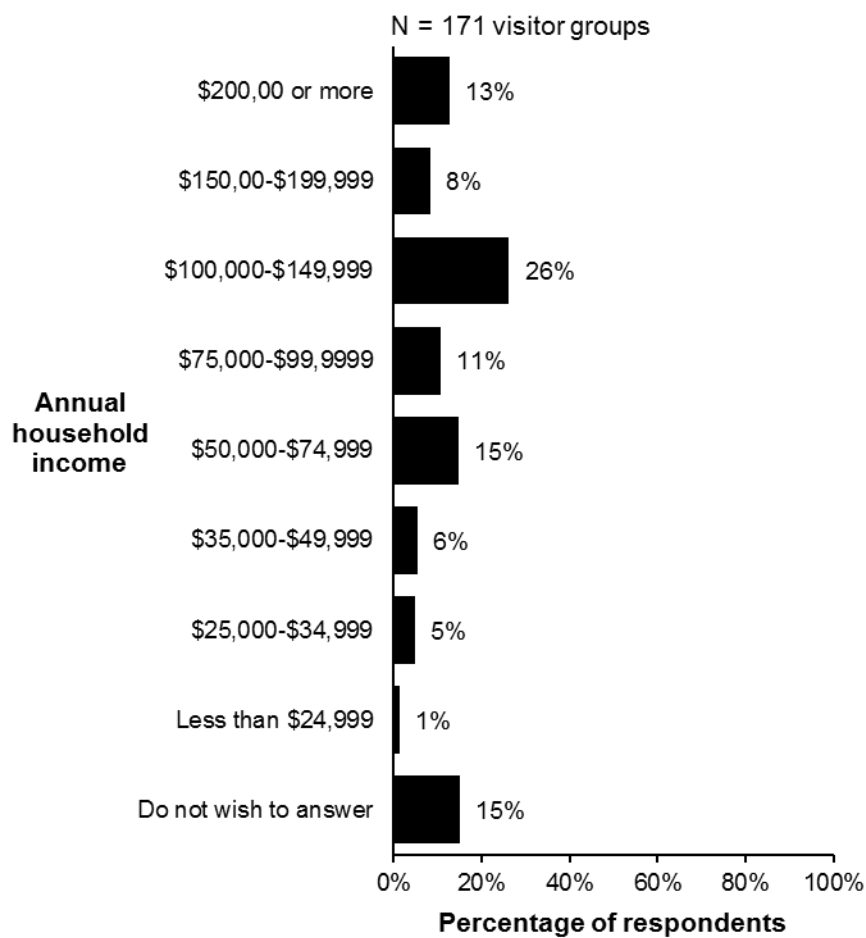


Figure 16. Annual household income

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Household size

Question 41

Including yourself, how many people are in your household?

Results (Figure 17 and Table 18)

- 41% of visitor groups reported living in a two-person household.
- 18% of visitor groups reported living in a three-person household.
- 18% of visitor groups reported living in a four-person household.

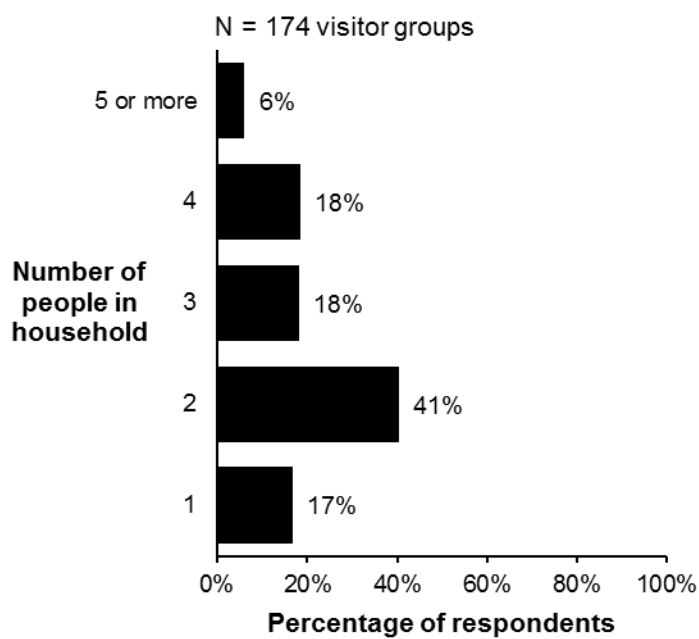


Figure 17. Size of household

Table 18. Descriptive statistics: Size of household

	Mean	Median	Std. Deviation
Size of household	2.58	2.00	1.22

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Frequency of visits to park

Question 36

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide the number of visits you have made to Monocacy National Battlefield in the last 12 months, including this trip.

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 18 and Table 19).

- 73% of visitors visited the park only once in the last 12 months.
- 14% of visitors visited the park five or more times in the last 12 months.

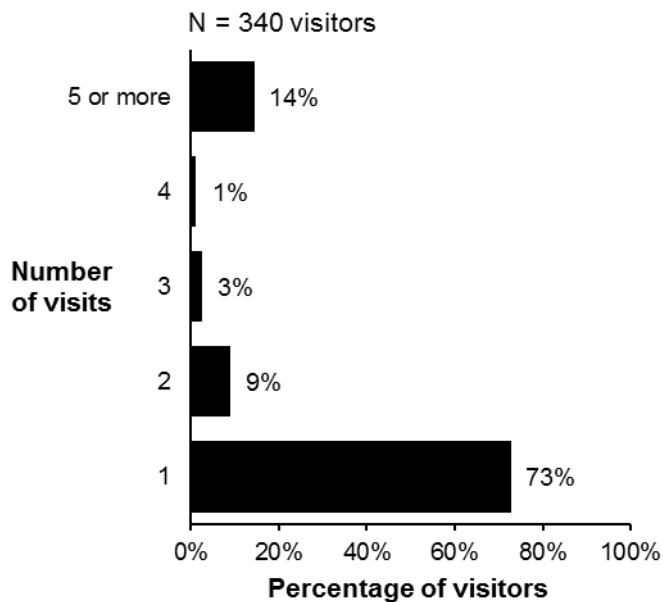


Figure 18. Park visits in last 12 months

Table 19. Descriptive statistics: Park visits in last 12 months

	Mean	Median	Std. Deviation
Park visits in last 12 months	6.15	1.00	33.16

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Frequency of visits to other National Park Service sites

Question 36

For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide the number of visits you have made to other NPS sites in the last 12 months.

Note: Respondent was asked to report this information for themselves and up to seven members from their visitor group.

Results (Figure 19 and Table 20)

- 47% of visitors visited five or more other NPS sites in the last 12 months.
- 13% of visitors did not visit any other NPS sites in the last 12 months.

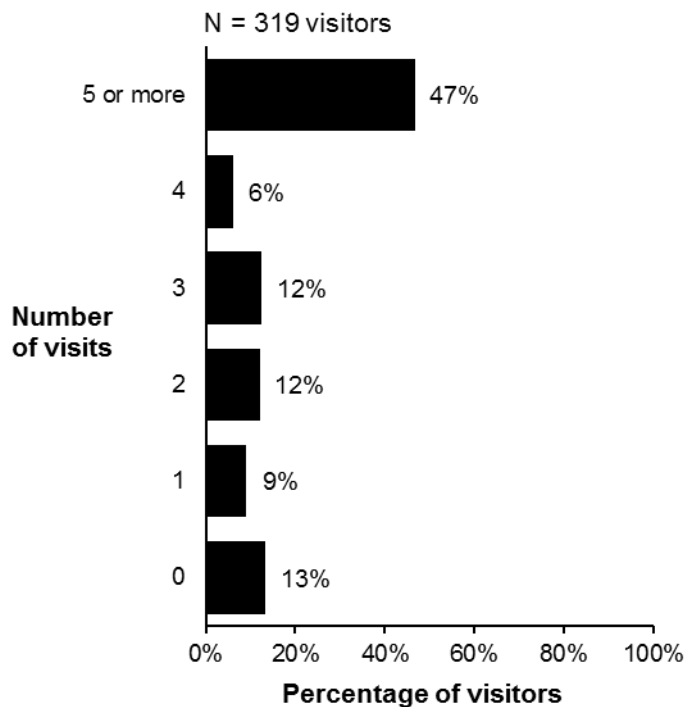


Figure 19. Other NPS site visits in last 12 months

Table 20. Descriptive statistics: NPS visits in last 12 months

	Mean	Median	Std. Deviation
NPS visits in last 12 months	8.68	4.00	12.53

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Pre-Trip Planning and Motivations

Information sources prior to visit

Question 8

Prior to this trip, how did you obtain information about Monocacy National Battlefield?

Results (Figure 20 and Figure 21)

- 87% of visitors obtained information about Monocacy National Battlefield prior to their visit.

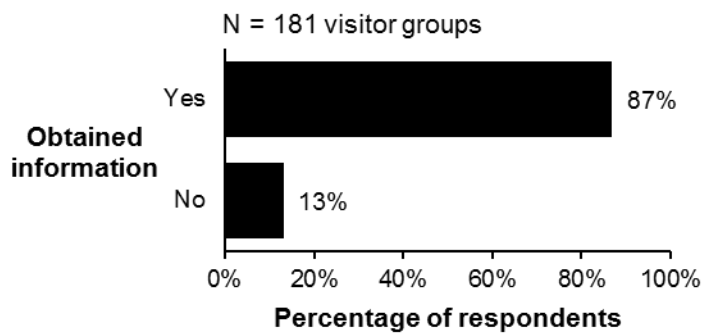


Figure 20. Visitor groups that obtained information about the park prior to visit

As shown in Figure 21, among those visitor groups who obtained information about Monocacy National Battlefield prior to their visit, the most common information sources were:

- o 45% Monocacy National Battlefield website (www.nps.gov/mono)
- o 30% Previous visits
- o 17% Friends/relatives/word of mouth

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

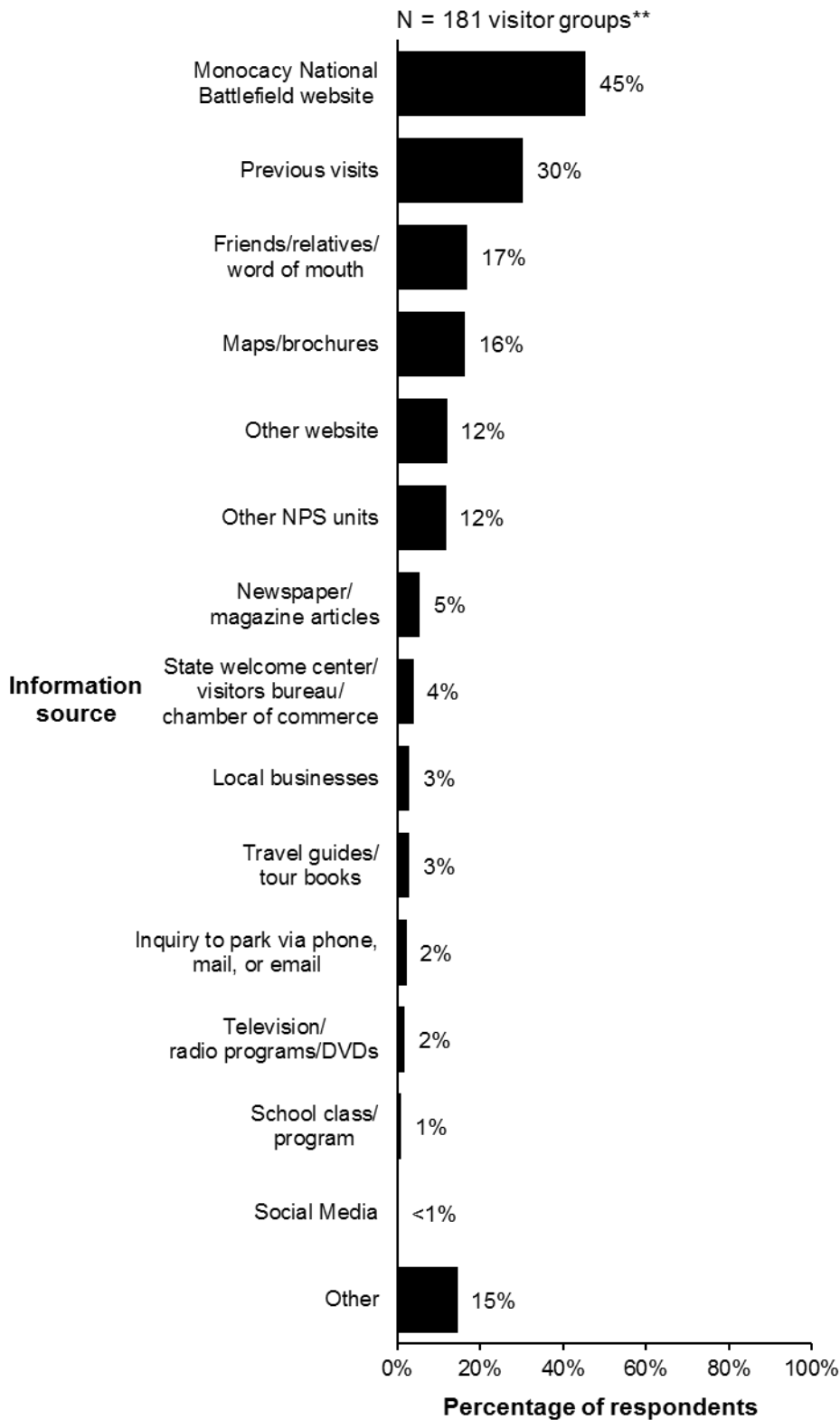


Figure 21. Information sources used prior to trip

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Information needed

Question 9

Did you have the information about Monocacy National Battlefield you needed on this trip?

Results (Figure 22)

- 90% of visitor groups had the information they needed on their visit.

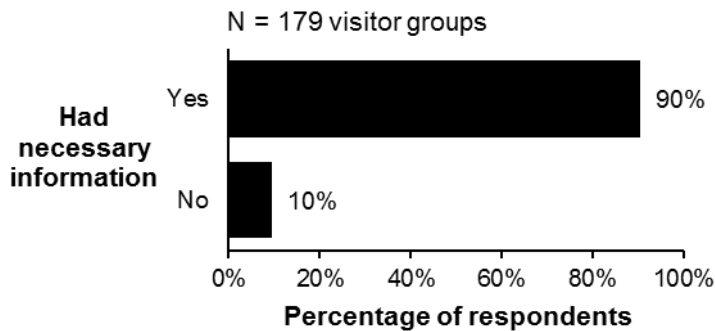


Figure 22. Had information needed on this trip

Question 9

If NO, please specify the information you needed but didn't have on this trip (open-ended).

Results (Table 21)

- Of those who did not have the information they needed, the most frequently mentioned information needed was:
 - o 39% "Battlefield information"
 - o 18% "Distance of hiking trails on brochure"
 - o 18% "Context of battle"

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Table 21. Information needed

N = 11 comments	
Some visitor groups may have made more than one comment.	
Information	Percent of valid responses
Battle information	27%
Distance of hiking trails on brochure	18%
Enslaved farm workers	18%
Context of battle	9%
Handicap accessibility	9%
More Trail signage	9%
Improved map	9%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Forms of transportation

Question 3

Please indicate all of the forms of transportation you personally used to travel from your home to Monocacy National Battlefield on this trip.

Results (Figure 23)

- 91% of visitor groups used a car, truck or SUV to travel to the park.

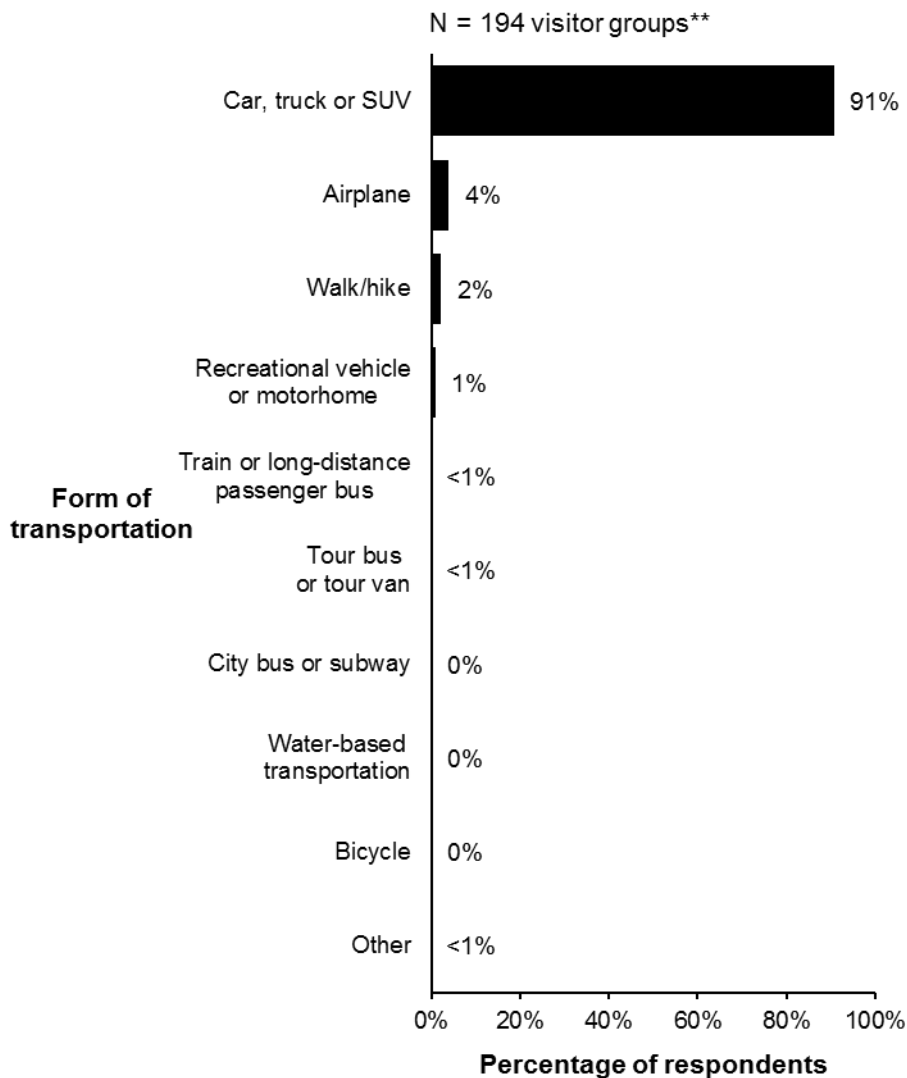


Figure 23. Transportation used to travel to park

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Number of people in vehicle

Question 3

Please indicate the number of people in the car, truck, or SUV, including you.

Results (Figure 24 and Table 22)

- 33% of visitor groups traveled in a vehicle by themselves.
- 30% of visitor groups traveled to the park in a vehicle with two people.

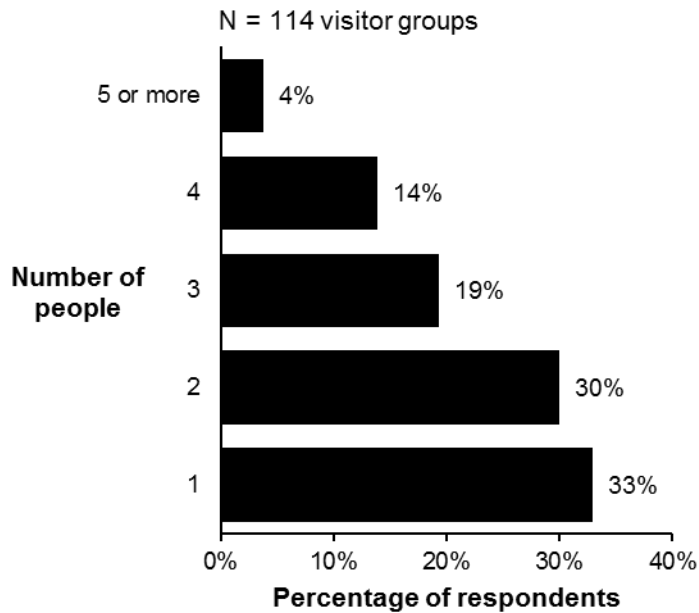


Figure 24. Number of passengers in car, truck or SUV

Table 22. Descriptive statistics: Number of passengers in car, truck, or SUV

	Mean	Median	Std. Deviation
Number of passengers	2.26	2.00	1.17

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Water-based transportation

Question 3

Please indicate all of the forms of water-based transportation you personally used to travel from your home to Monocacy National Battlefield on this trip.

Results

- No visitor groups used any form of water-based transportation to travel to the park on this trip.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Hours traveled to park

Question 5

Approximately how many hours from home did you travel one-way to get to Monocacy National Battlefield on this trip?

Results (Figure 25 and Table 23)

- 59% of visitor groups traveled up to one hour one-way to get to Monocacy National Battlefield.
- 20% of visitor groups traveled five hours or more one-way.

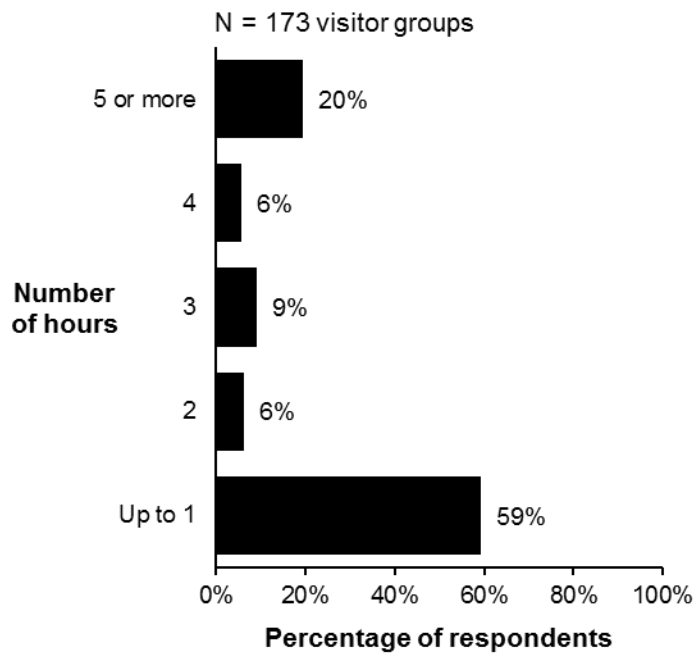


Figure 25. Hours traveled one-way to park

Table 23. Descriptive statistics: Hours traveled one-way to park

	Mean	Median	Std. Deviation
Hours traveled one-way	2.71	1.00	4.87

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Miles traveled to park

Question 5

Approximately how many miles from home did you travel one-way to get to Monocacy National Battlefield on this trip?

Results (Figure 26 and Table 24)

- 57% of visitor groups traveled up to 50 miles one-way to Monocacy National Battlefield.
- 17% of visitor groups traveled 251 miles or more one-way to Monocacy National Battlefield.

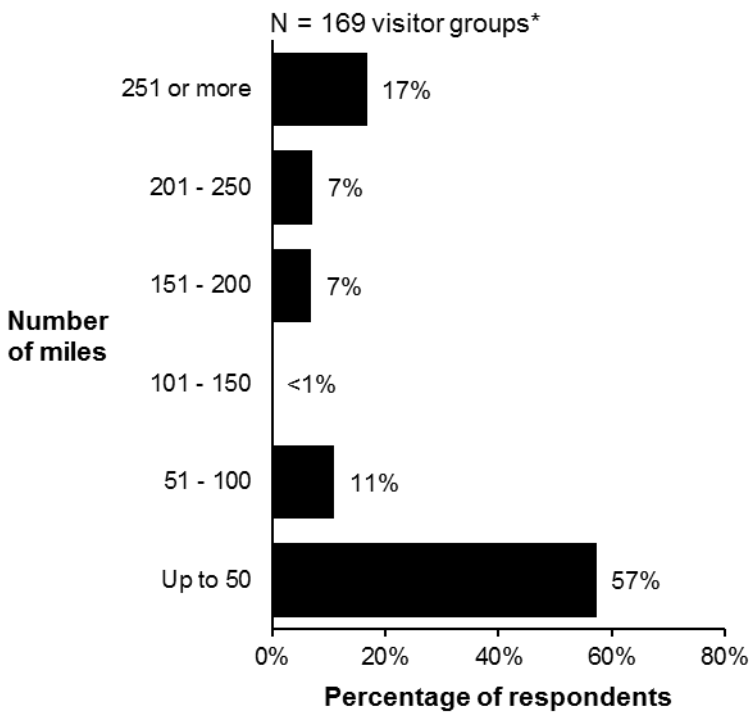


Figure 26. Miles traveled one-way to park

Table 24. Descriptive statistics: Miles traveled one-way to park

	Mean	Median	Std. Deviation
Miles traveled one-way	186.97	45.00	432.46

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Directional signage

Question 4

On this trip, were the signs directing your personal group to Monocacy National Battlefield adequate?

Interstate signs

Results (Figure 27)

- 54% of visitor groups indicated that interstate signs were adequate.
- 40% of visitor groups did not use interstate signs.

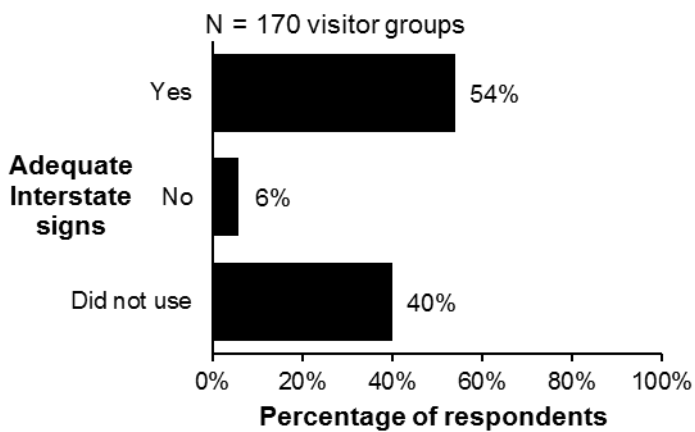


Figure 27. Adequacy of interstate signs

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

If you answered NO, please explain.

Results (Table 25)

- Of visitor groups who answered NO, the most frequently mentioned reasons were:
 - o 36% “Local”
 - o 27% “Did not see any”
 - o 24% “Did not use interstate”

Table 25. Reasons why interstate signs were not adequate

N = 33 comments	
Some visitor groups may have made more than one comment.	
Comments	Percent of valid responses
Local	36%
Did not see any	27%
Did not use interstate	24%
Not specific to Monocacy National Battlefield	3%
Other comments	9%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

State highway signs

Results (Figure 28)

- 66% of visitor groups indicated that state highway signs were adequate.
- 32% of visitor groups did not use state highway signs.

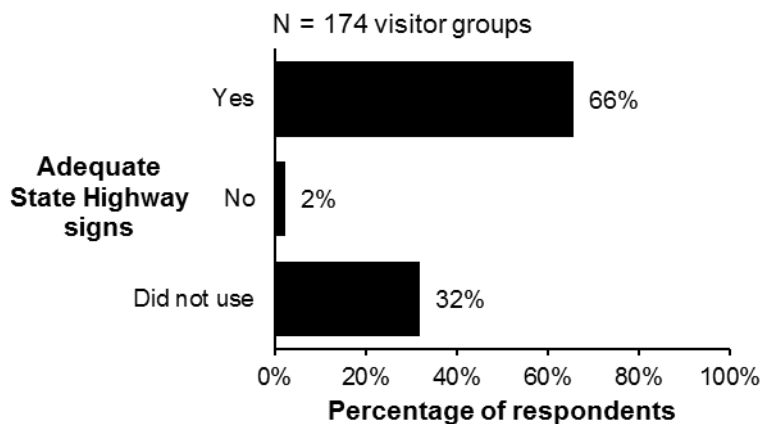


Figure 28. Adequacy of state highway signs

If you answered NO, please explain.

Results (Table 26)

- Of visitor groups who answered NO, the most frequently mentioned reasons were:
 - o 53% “Local”
 - o 27% “Did not see any”

Table 26. Reasons why state highway signs were not adequate

N = 15 comments	
Some visitor groups may have made more than one comment.	
Comments	Percent of valid responses
Local	53%
Did not see any	27%
Not well timed for turns	7%
Not specific to Monocacy National Battlefield	7%
Other comments	7%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Signs in local communities

Results (Figure 29)

- 74% of visitor groups indicated that signs in local communities were adequate.
- 22% of visitor groups did not use signs in local communities.

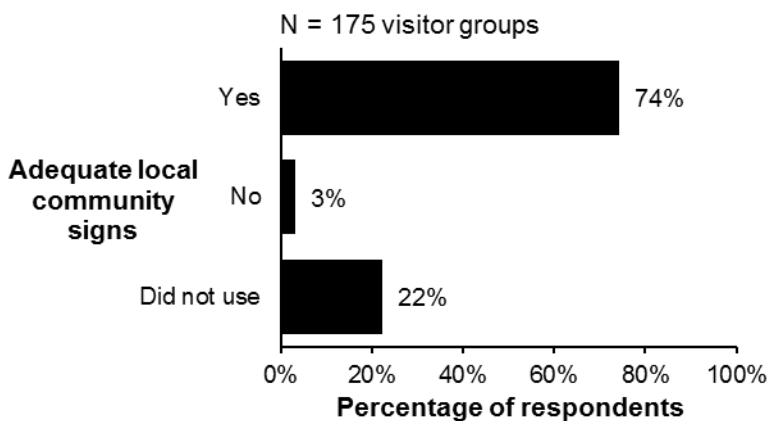


Figure 29. Adequacy of signs in local communities

If you answered NO, please explain.

Results (Table 27)

- Of visitor groups who answered NO, the most frequently mentioned reasons were:
 - o 56% “Local”
 - o 22% “Did not see any”

Table 27. Reasons why signs in local communities were not adequate

N = 9 comments	
Some visitor groups may have made more than one comment.	
Comments	Percent of valid responses
Local	56%
Did not see any	22%
Not well timed for turns	11%
Trouble finding battlefield	11%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Signs along Battlefield Tour Route

Results (Figure 30)

- 79% of visitor groups indicated that signs along the Battlefield Tour Route were adequate.
- 16% of visitor groups did not use signs along the Battlefield Tour Route.

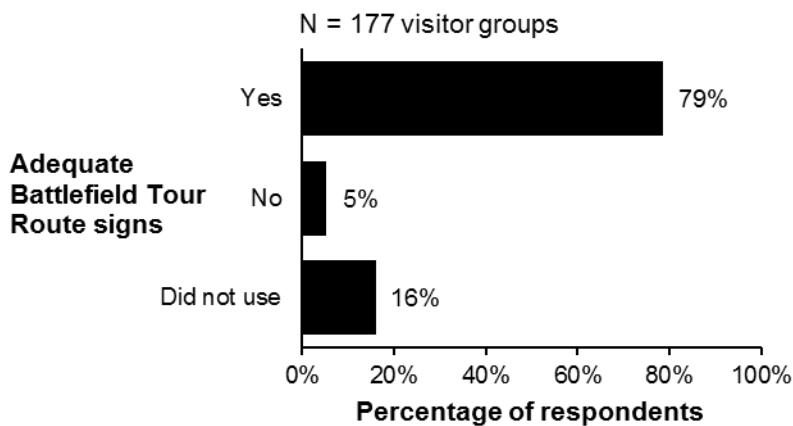


Figure 30. Adequacy of signs along Battlefield Tour Route

If you answered NO, please explain.

Results (Table 27)

- Of visitor groups who answered NO, the most frequently mentioned reasons were:
 - o 44% “Did not see any”
 - o 25% “Confusing”

Table 28. Reasons why signs along Battlefield Tour Route were not adequate

N = 11 comments	
Some visitor groups may have made more than one comment.	
Comments	Percent of valid responses
Did not see any	44%
Confusing	25%
Not well timed for turns	14%
Local	14%
Bigger signs	7%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Role of park visit in trip away from home

Question 29

Was this trip to Monocacy National Battlefield your primary or sole purpose for your trip away from home, one of several equally important destinations on your trip away from home, or just an incidental or spur of the moment stop on your trip away from home?

Results (Figure 31)

- 42% of visitor groups reported that their visit to the park was one of several equally important destinations on their trip.
- 38% of visitor groups reported that visiting the park was the primary or sole purpose of their trip.

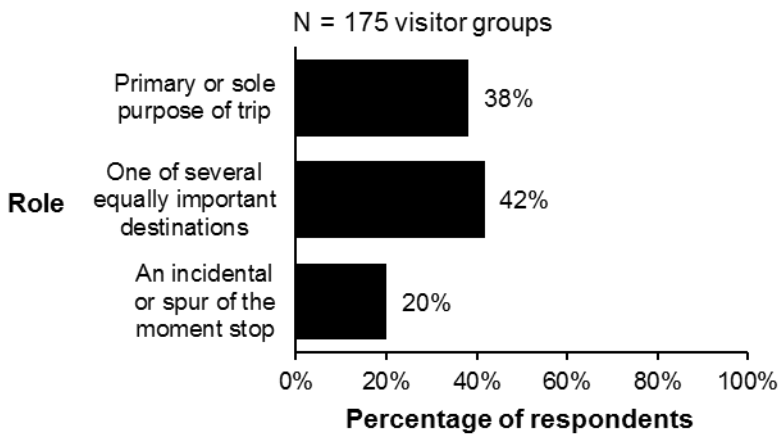


Figure 31. Role of park visit in trip away from home

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Role of park visit in trip away from home, if not primary or sole purpose for trip

Question 29

If this was one of several equally important destinations on your trip away from home, was one or more of the other equally important destinations located within the nearby area (within the shaded area of the map on p.12)?

See Figure 14 or Appendix 1 for map.

Results (Figure 32)

- For those visitor groups that reported visiting Monocacy National Battlefield as one of several equally important destinations, 77% reported that one or more equally important destinations were within the nearby area.

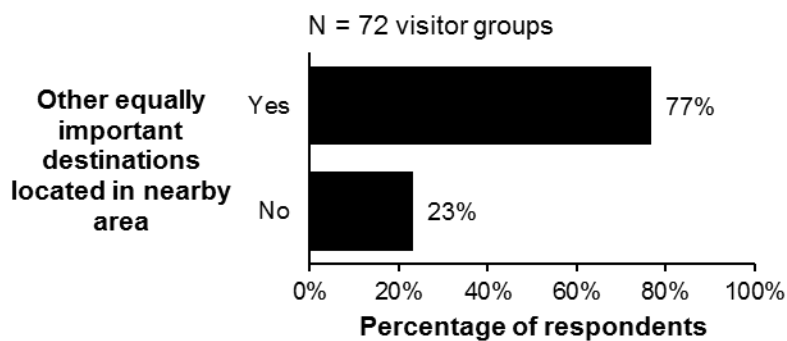


Figure 32. Location of other equally important destinations

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 29

If this was just an incidental or spur of the moment stop on your trip away from home, was your primary destination located within the nearby area (within the shaded area of the map on p.12)?

See Figure 14 or Appendix 1 for map.

Results (Figure 33)

- For those visitor groups that reported visiting Monocacy National Battlefield as just an incidental stop, 68% reported that their primary destination was within the shaded area of the map.

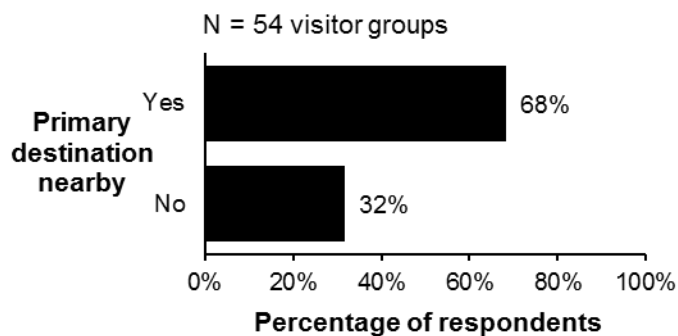


Figure 33. Location of primary destination if spur of the moment trip

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Importance of reasons for visiting the park

Question 10

Please indicate the importance of each of the following reasons for visiting Monocacy National Battlefield on this trip.

Rating choices:

- 1 = Extremely important
- 2 = Very important
- 3 = Moderately important
- 4 = Slightly important
- 5 = Not at all important

Results (Figure 34)

- Figure 34 shows the combined proportions of “extremely important” and “very important” ratings for reasons for visiting the park. Some visitor groups may not have selected a rating for each reason.
- The reasons that received the highest combined proportions of “extremely important” and “very important” ratings were:
 - o 74% Learn more about America history/culture
 - o 60% Spend time with friends/family
 - o 56% Be outdoors
 - o 53% Visit a NPS site
 - o 51% Relax
- The reasons that received the lowest combined proportions of “extremely important” and “very important” ratings were:
 - o 19% Learn more about nature
 - o 6% Attend a special event

Figure 35 through Figure 45 show ratings for each reason.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

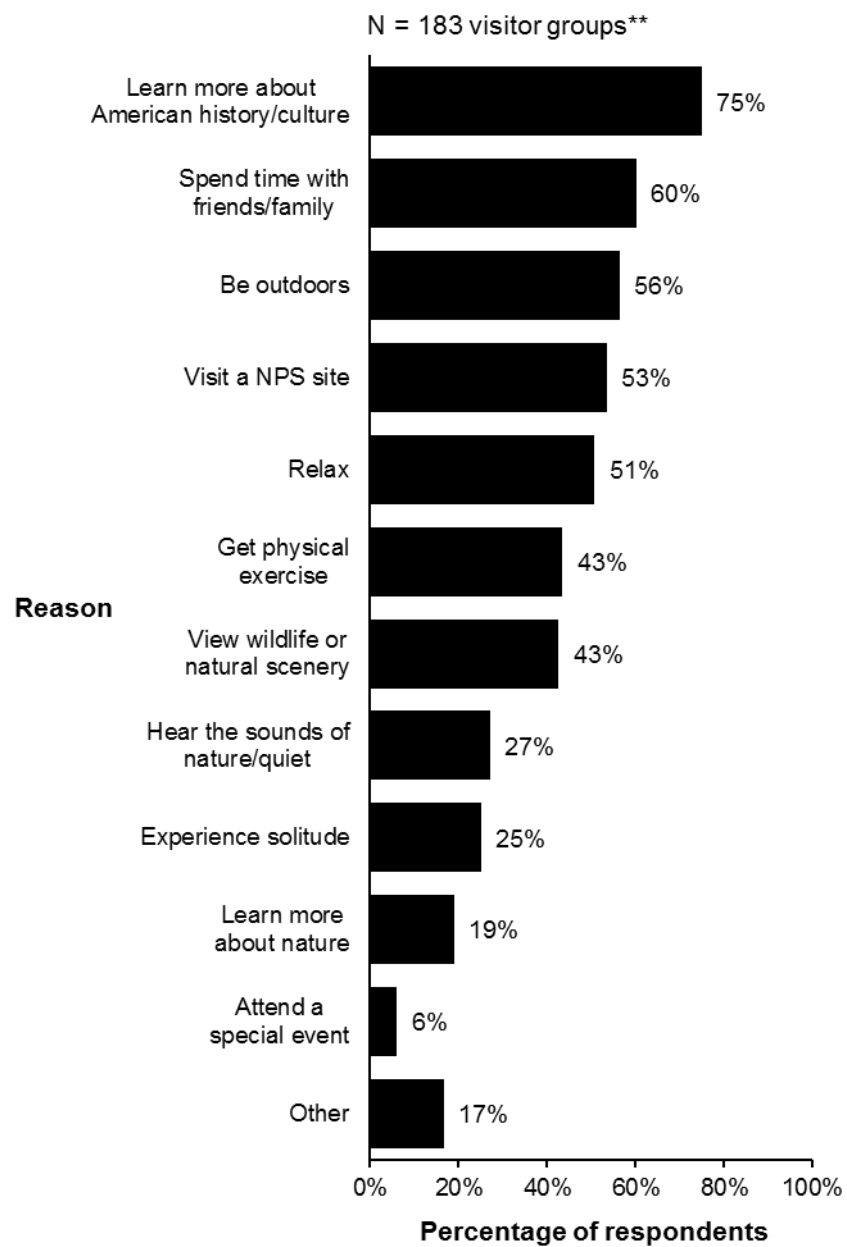


Figure 34. Importance of reasons for visiting the park

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

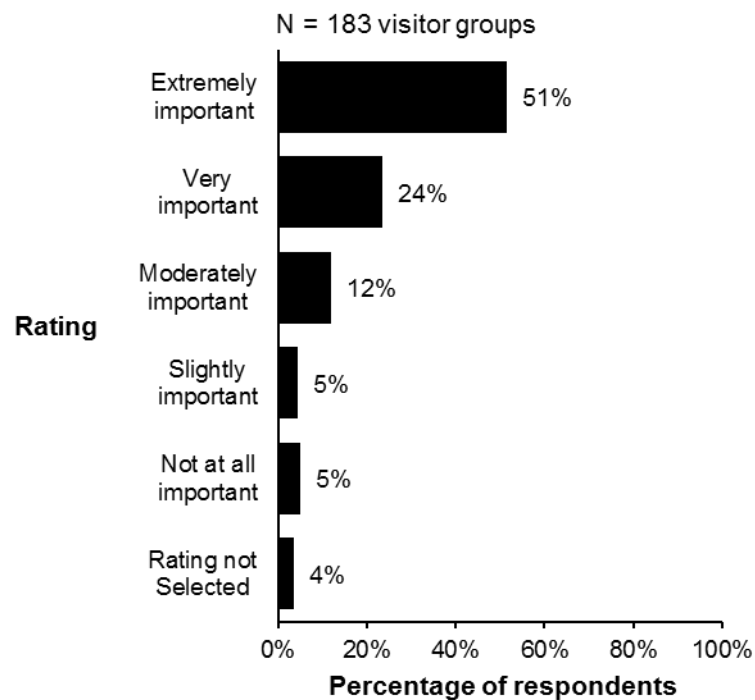


Figure 35. Importance of learning more about American history and culture

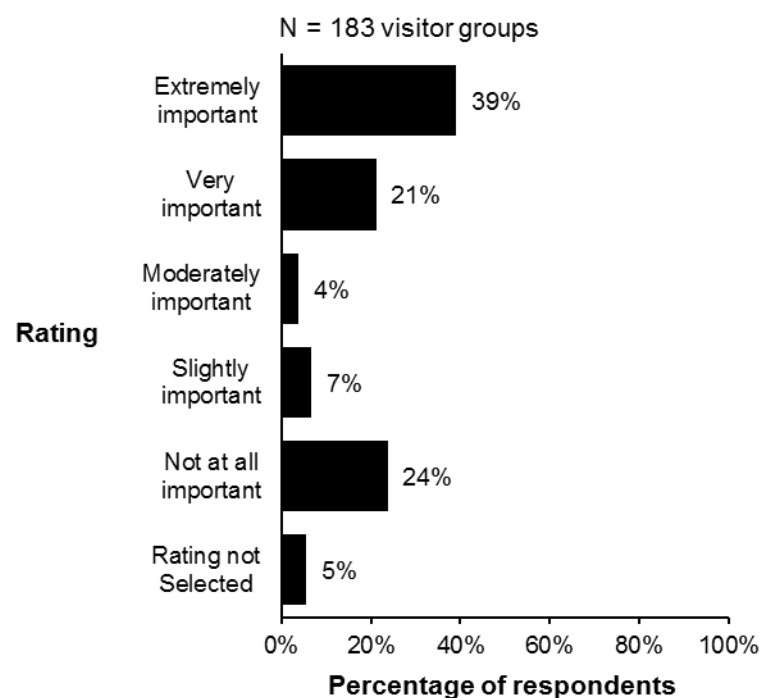


Figure 36. Importance of spending time with friends/family

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

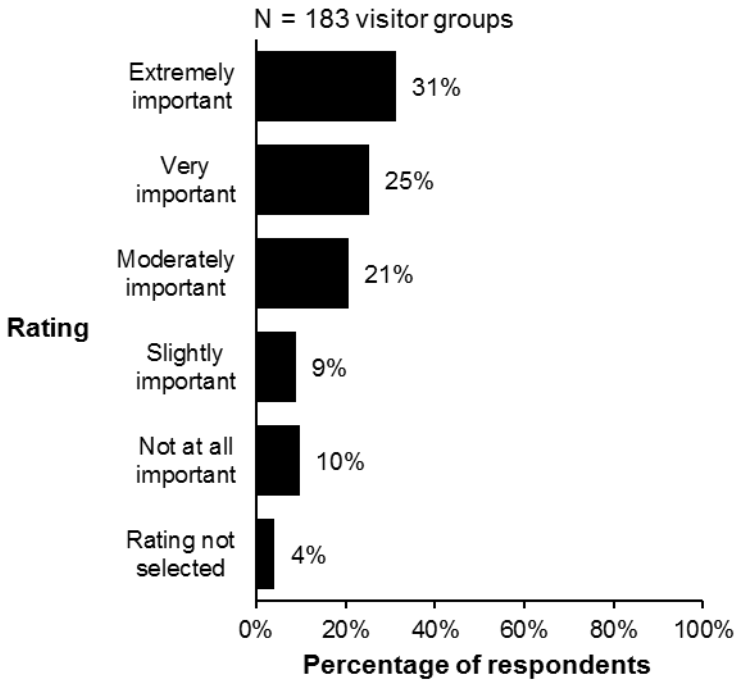


Figure 37. Importance of being outdoors

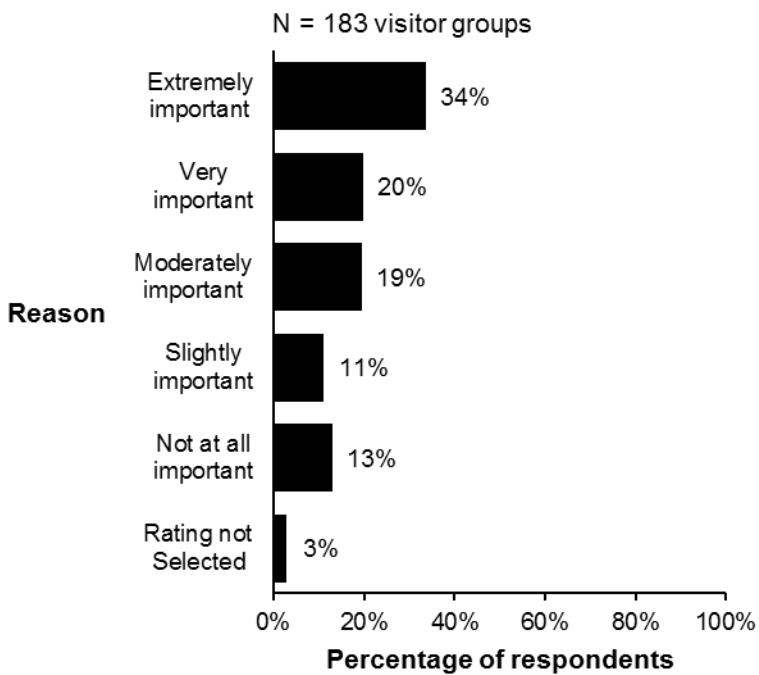


Figure 38. Importance of visiting a NPS site

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

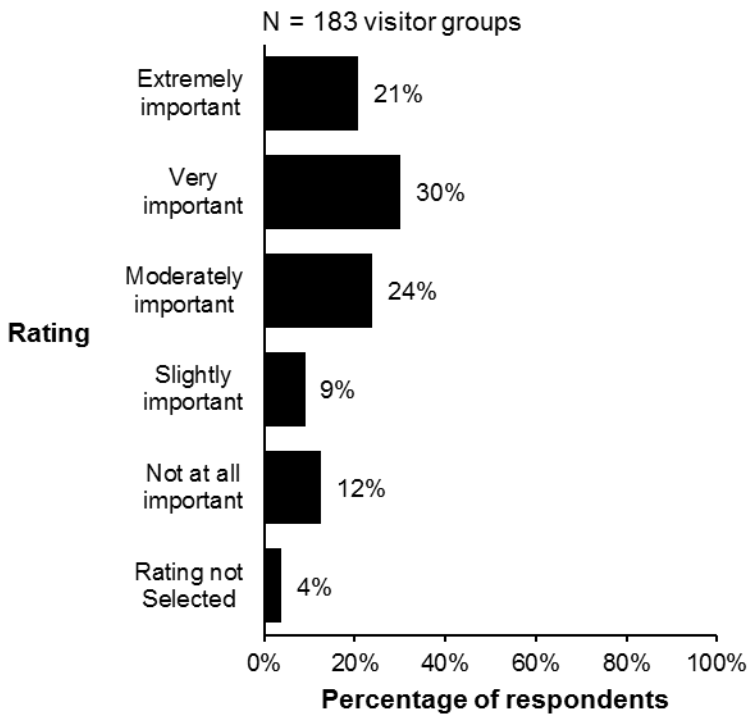


Figure 39. Importance of relaxing

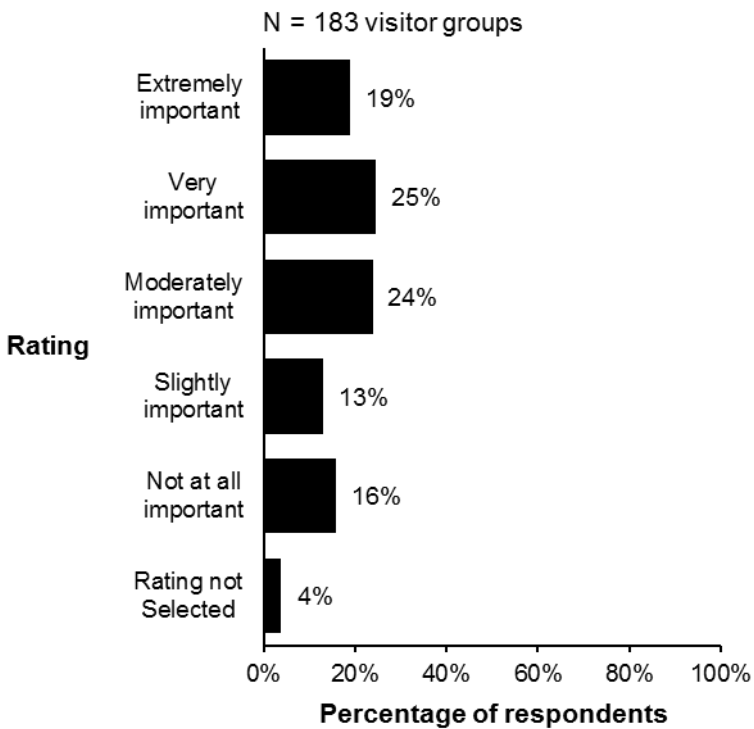


Figure 40. Importance of getting physical exercise

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

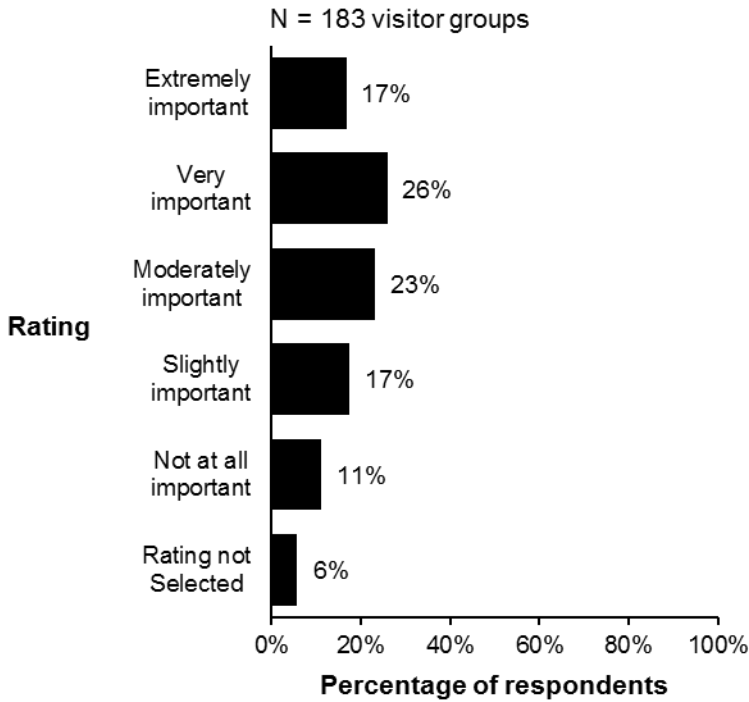


Figure 41. Importance of viewing wildlife or natural scenery

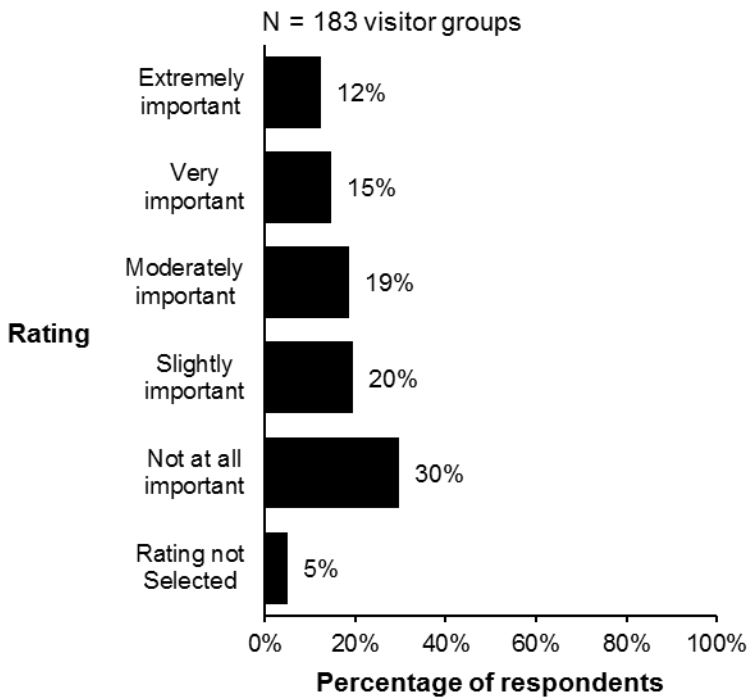


Figure 42. Importance of hearing the sounds of nature/quiet

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

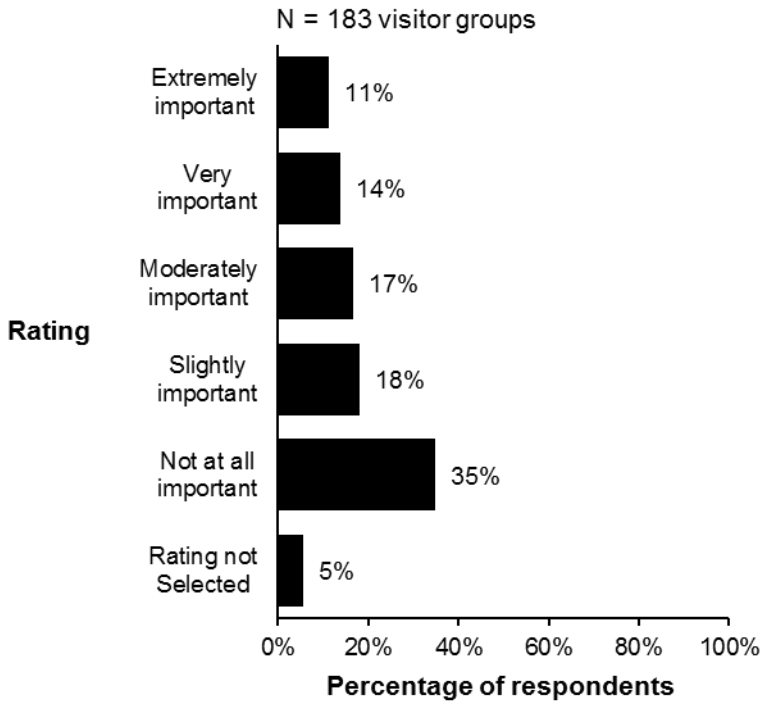


Figure 43. Importance of experiencing solitude

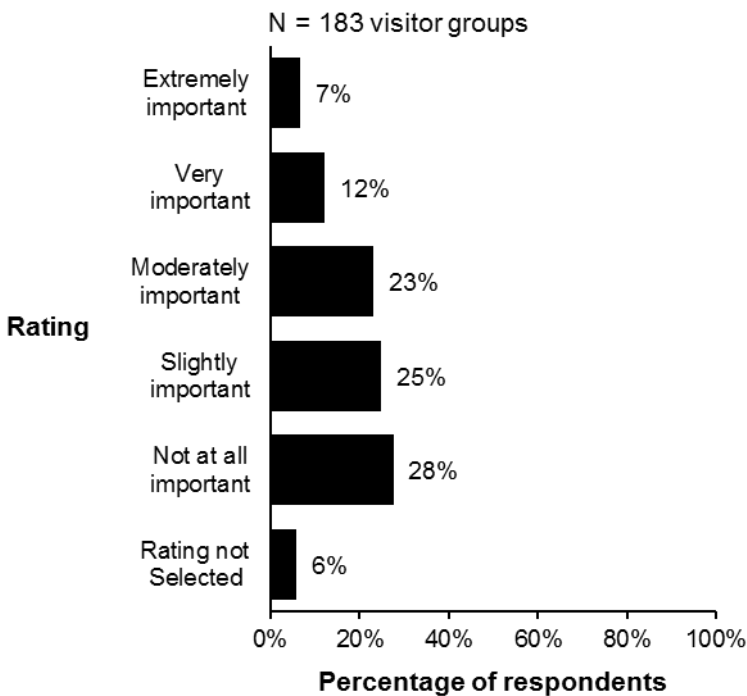


Figure 44. Importance of learning more about nature

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

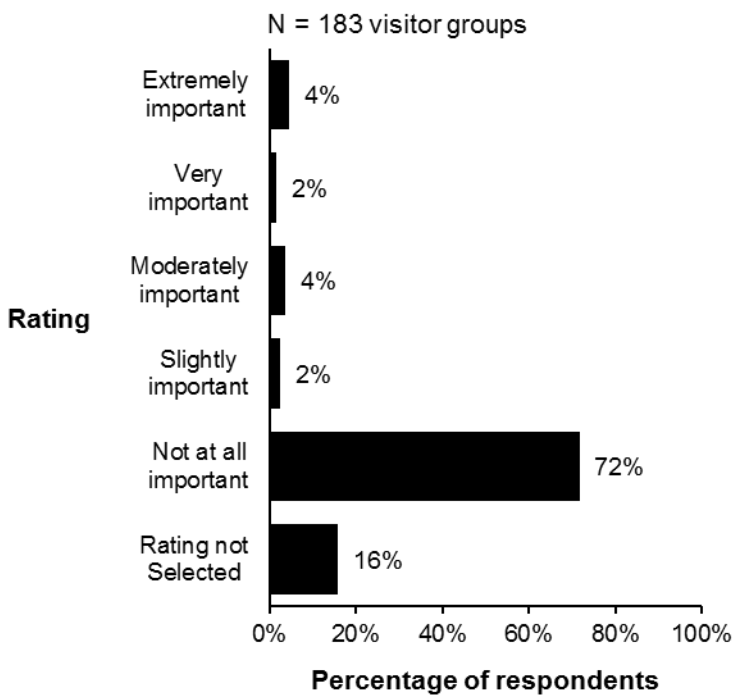


Figure 45. Importance of attending a special event

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Most important reasons for visiting the park

Question 11

Of the reasons for visiting Monocacy National Battlefield on this trip listed in Question 10, which was the most important to you?

Results (Figure 46)

- The most commonly selected most important reasons for visiting Monocacy National Battlefield were:
 - o 47% Learn more about American history and culture
 - o 15% Spend time with friends/family
 - o 14% Visit a NPS site

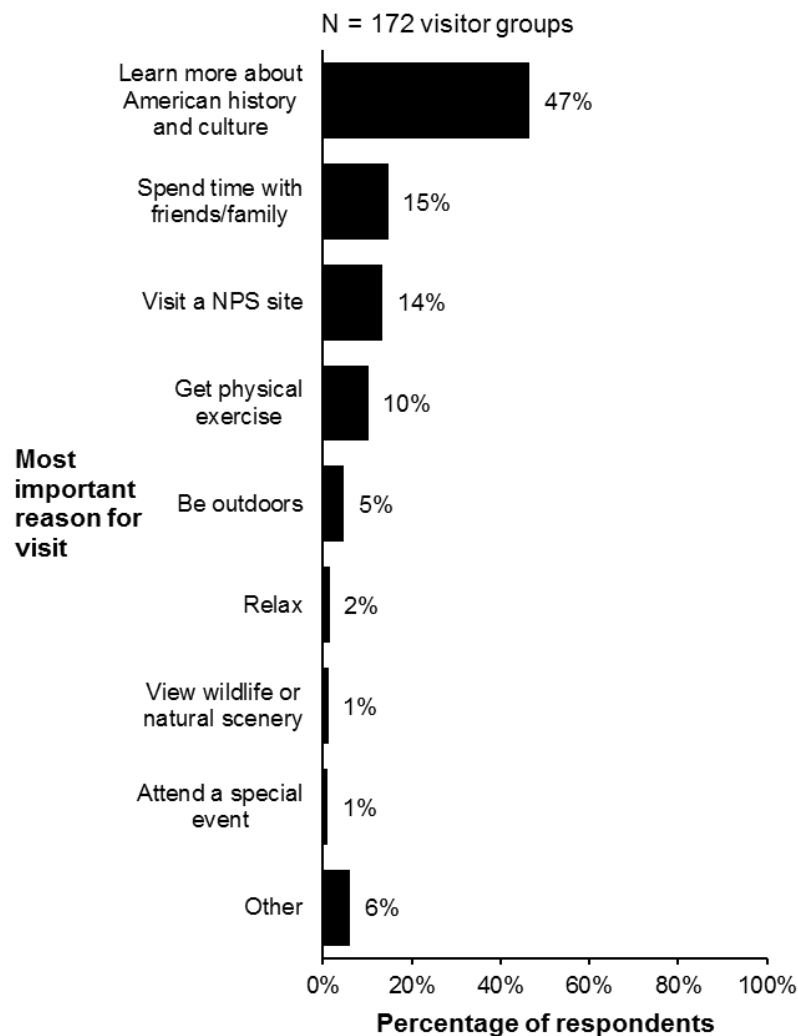


Figure 46. Most important reasons for visiting the park

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor Experience

Length of stay in Monocacy National Battlefield

Question 7

On this trip, how much total time did you spend within Monocacy National Battlefield?

Number of hours, if day trip

Results (Figure 47 and Table 29)

- 38% of visitor groups who spent less than 24 hours in the park visited for 2 hours.
- 28% of visitor groups who spent less than 24 hours in the park visited for 3 hours.

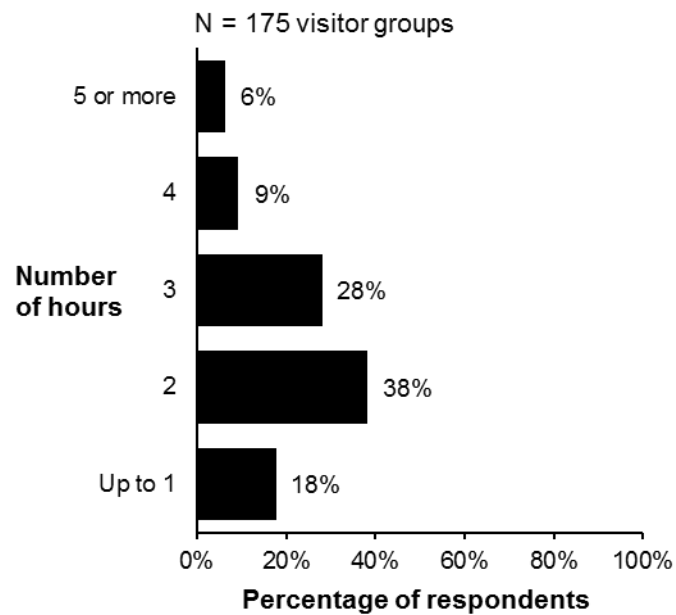


Figure 47. Number of hours visiting the park by groups who spent less than 24 hours in the park

Table 29. Descriptive statistics: Number of hours visiting park

	Mean	Median	Std. Deviation
Number of hours visiting	2.40	2.00	1.23

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Number of days, if greater than 1 day

Results (Figure 48 and Table 30)

- 90% of visitor groups who reported spending 24 hours or more in the park visited for two days.

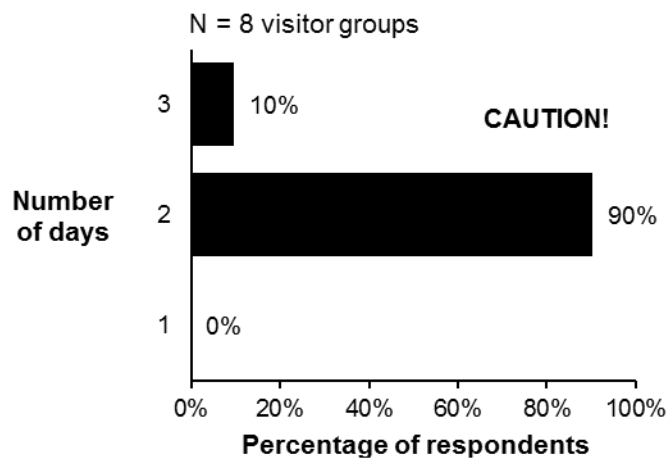


Figure 48. Number of days visiting the park by groups who spent 24 hours or more in the park

Table 30. Descriptive statistics: Number of days visiting park

	Mean	Median	Std. Deviation
Number of days visiting	2.12	2.00	0.35

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Days entered or re-entered park

Question 6

On how many days during this trip did you enter or re-enter Monocacy National Battlefield? If you were on a day trip or if you camped or lodged inside the park and did not leave the park boundaries for the entire length of your stay, then answer 1 day.

Results (Figure 49 and Table 31)

- 93% of visitor groups entered the park on only one day.

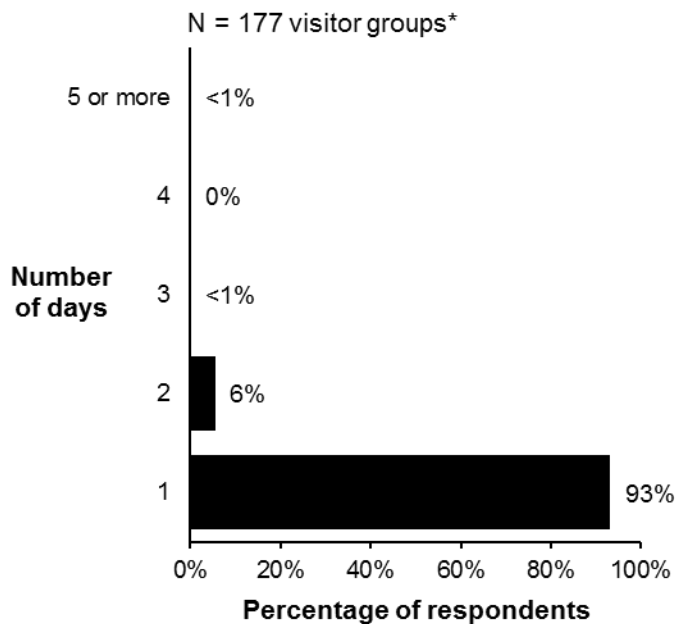


Figure 49. Number of days entered or re-entered park

Table 31. Descriptive statistics: Number of days entered or re-entered park

	Mean	Median	Std. Deviation
Number of days entered or re-entered park	1.11	1.00	0.62

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Overnight stay

Question 28a

On this trip, did you stay overnight away from your permanent residence either inside or nearby Monocacy National Battlefield?

Results (Figure 50)

- 27% of visitor groups stayed overnight nearby Monocacy National Battlefield on their trip.

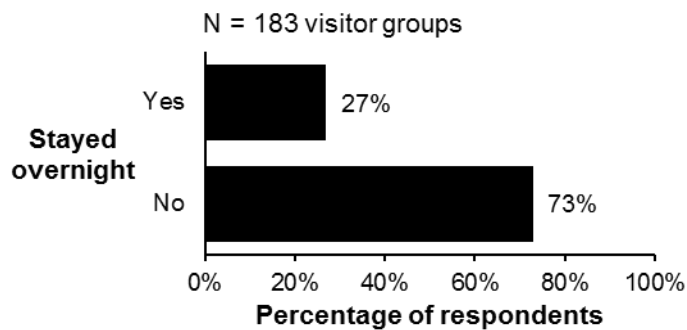


Figure 50. Visitors who stayed overnight in and/or near Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Nights spent in overnight accommodations

Question 28b

If YES, please list the number of nights you stayed in Monocacy National Battlefield and/or anywhere nearby Monocacy National Battlefield on this trip.

Results (Figure 51)

- Figure 51 shows the percentages of visitor groups that reported staying one or more nights in one of the listed overnight accommodations.
- 78% of visitor groups who stayed overnight one or more nights stayed in lodging in the nearby area.
- 19% of visitor groups who stayed overnight one or more nights stayed in other accommodations (e.g., friends, relatives).

Figure 52 through Figure 54 report nights spent in each type of overnight accommodation.

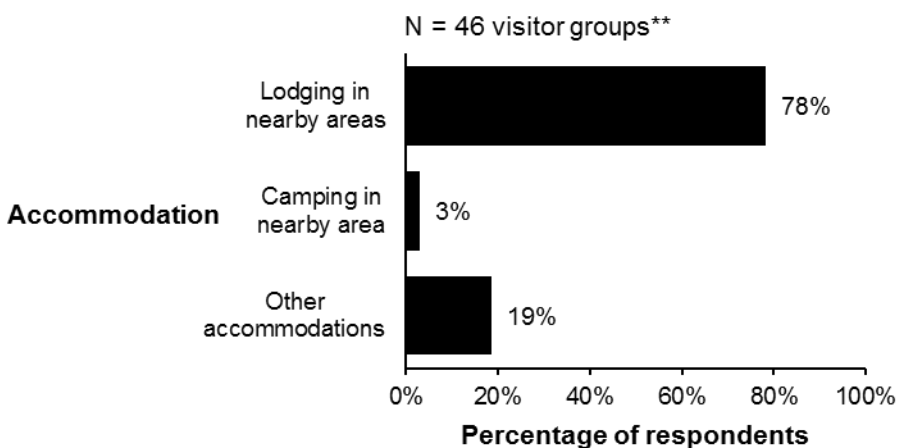


Figure 51. Accommodations for nights spent in the nearby area

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Lodging in the nearby area

Results (Figure 52 and Table 32)

- 46% of visitor groups who stayed at lodging in the nearby area stayed for one night.
- 39% of visitor groups who stayed at lodging in the nearby area stayed for two nights.

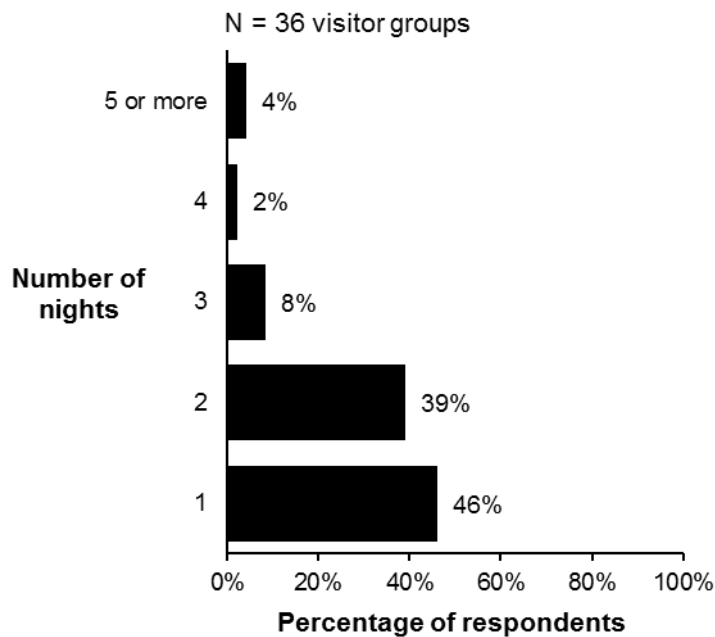


Figure 52. Nights spent in lodging in nearby area

Table 32. Descriptive statistics: Nights spent in lodging in nearby area

	Mean	Median	Std. Deviation
Number of nights	1.85	2.00	1.11

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Camping in the nearby area

Results (Figure 53)

- One visitor group camped in the nearby area and the group camped for five or more nights.

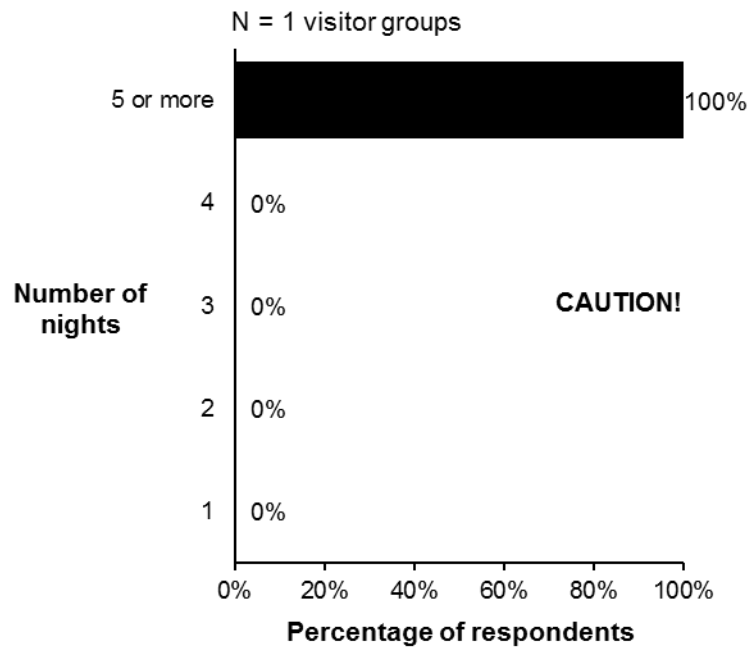


Figure 53. Nights spent camping in nearby area

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Other accommodations (e.g., staying with friends/relatives)

Results (Figure 54 and Table 33)

- 56% of visitor groups who stayed overnight in other accommodations stayed for two nights.
- 26% of visitor groups who stayed overnights in other accommodations stayed for five or more nights.

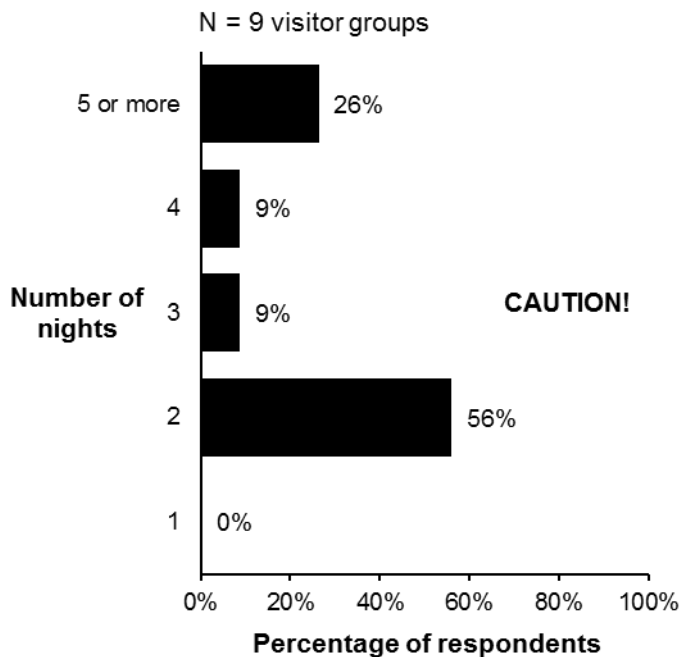


Figure 54. Nights spent in other accommodations (e.g., staying with friends/relatives)

Table 33. Descriptive statistics: Nights spent in other accommodations (e.g., staying with friends/relatives)

	Mean	Median	Std. Deviation
Number of nights	4.41	2.00	4.01

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visits to other National Park Service sites

Question 30

Did you visit any other National Park Service sites on your trip away from home?

Results (Figure 55)

- 38% of visitor groups visited other NPS units on their trip away from home.

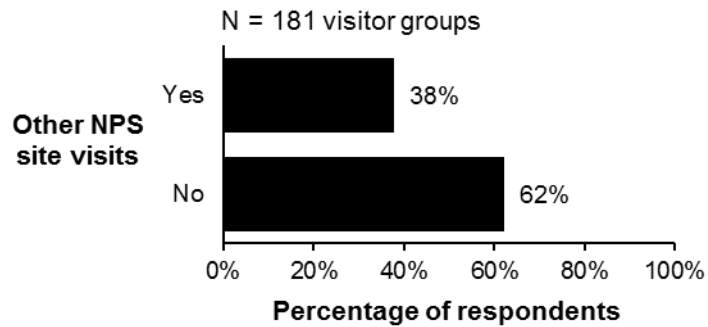


Figure 55. Visited other NPS sites on trip away from home

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Other National Park Service sites visited

Question 30

If YES, please specify other National Park Services sites you visited.

Results (Table 34)

- Of those visitor groups that did visit other NPS units on their trip, the most common other NPS units included:
 - o 21% Antietam National Battlefield
 - o 20% Harpers Ferry National Historical Park

Table 34. Other National Park Service sites visited

N = 164 comments	
Some visitor groups may have visited more than one other NPS site.	
Site	Percent of valid responses
Antietam National Battlefield	21%
Harpers Ferry National Historical Park	20%
Gettysburg National Military Park	11%
Chesapeake & Ohio National Historical Park	8%
Catoctin Mountain Park	8%
Eisenhower National Historic Site	5%
Manassas National Battlefield Park	3%
Fredericksburg & Spotsylvania National Military Park	2%
Johnstown Flood National Memorial	2%
Shenandoah National Park	2%
Flight 93 National Memorial	2%
National Mall and Memorial Parks	2%
Fort Washington	1%
Appomattox Court House National Historical Park	1%
Lincoln Boyhood Home National Memorial	1%
Appalachian National Scenic Trail	1%
Fort McHenry National Monument and Historic Shrine	1%
Washington Monument	1%
Jumonville Glen - Fort Necessity National Battlefield	1%
9 Other NPS sites	6%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visits to other sites of interest

Question 31

On this visit to Monocacy National Battlefield, what other places did you and your group visit?

Results (Figure 56)

- 33% of visitor groups also visited Downtown Frederick, Maryland on their visit to the park.
- 23% of visitor groups also visited Antietam National Battlefield, Maryland on their visit to the park.
- 21% of visitor groups also visited Harpers Ferry National Historical Park, West Virginia on their visit to the park.

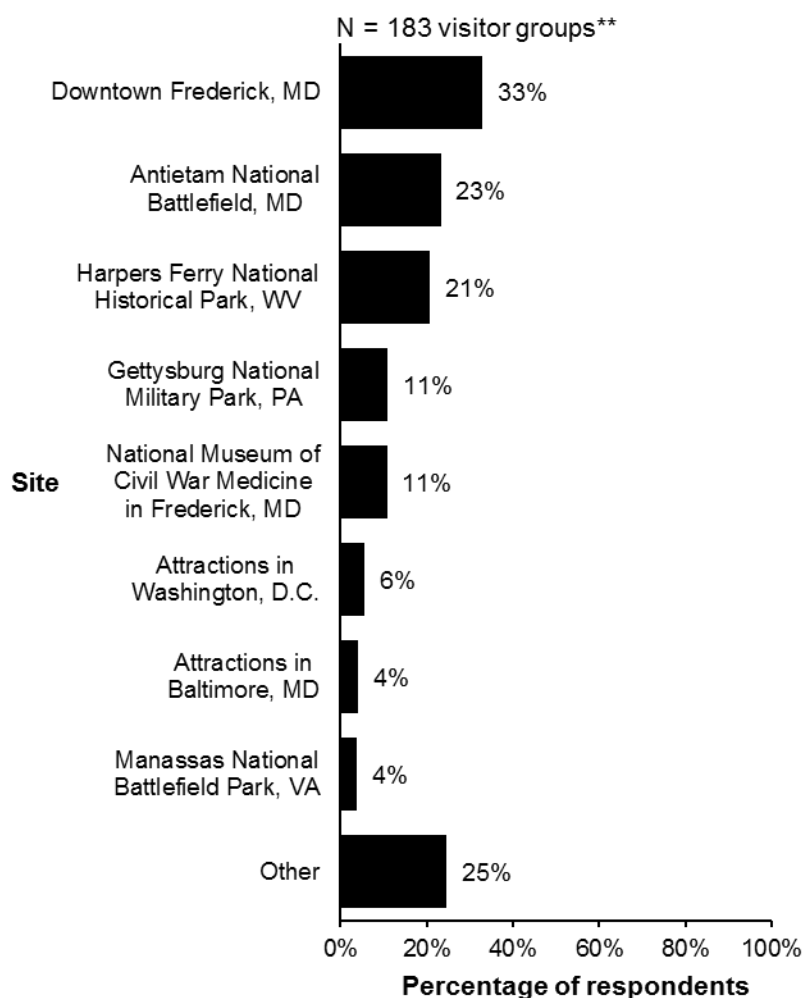


Figure 56. Other sites of interest visited

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Sites visited in Monocacy National Battlefield

Question 14

During this visit to Monocacy National Battlefield, which of the following sites did you and your group visit?

Results (Figure 57)

- 82% of visitor groups visited the Visitor Center.
- 53% of visitor groups visited Thomas Farm.
- 50% of visitor groups visited Gambrill Mill Farm.
- 50% of visitor groups visited Best Farm.
- 50% of visitor groups visited Worthington Farm.

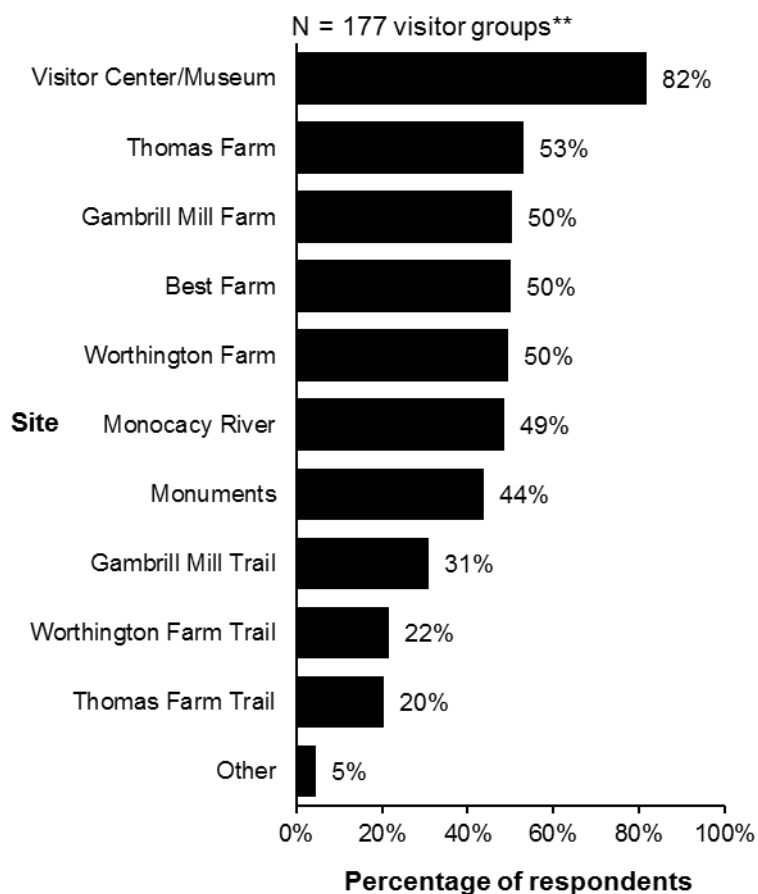


Figure 57. Sites visited in Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Activity participation

Question 12

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

Results (Figure 58)

- The most common activities in which visitor groups participated were:
 - o 73% Visiting a cultural or historic site
 - o 68% Visiting the museum
 - o 58% Viewing wildlife, natural features, scenery, wildflowers, etc.
 - o 48% Walking/short hike (<1 hour)

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

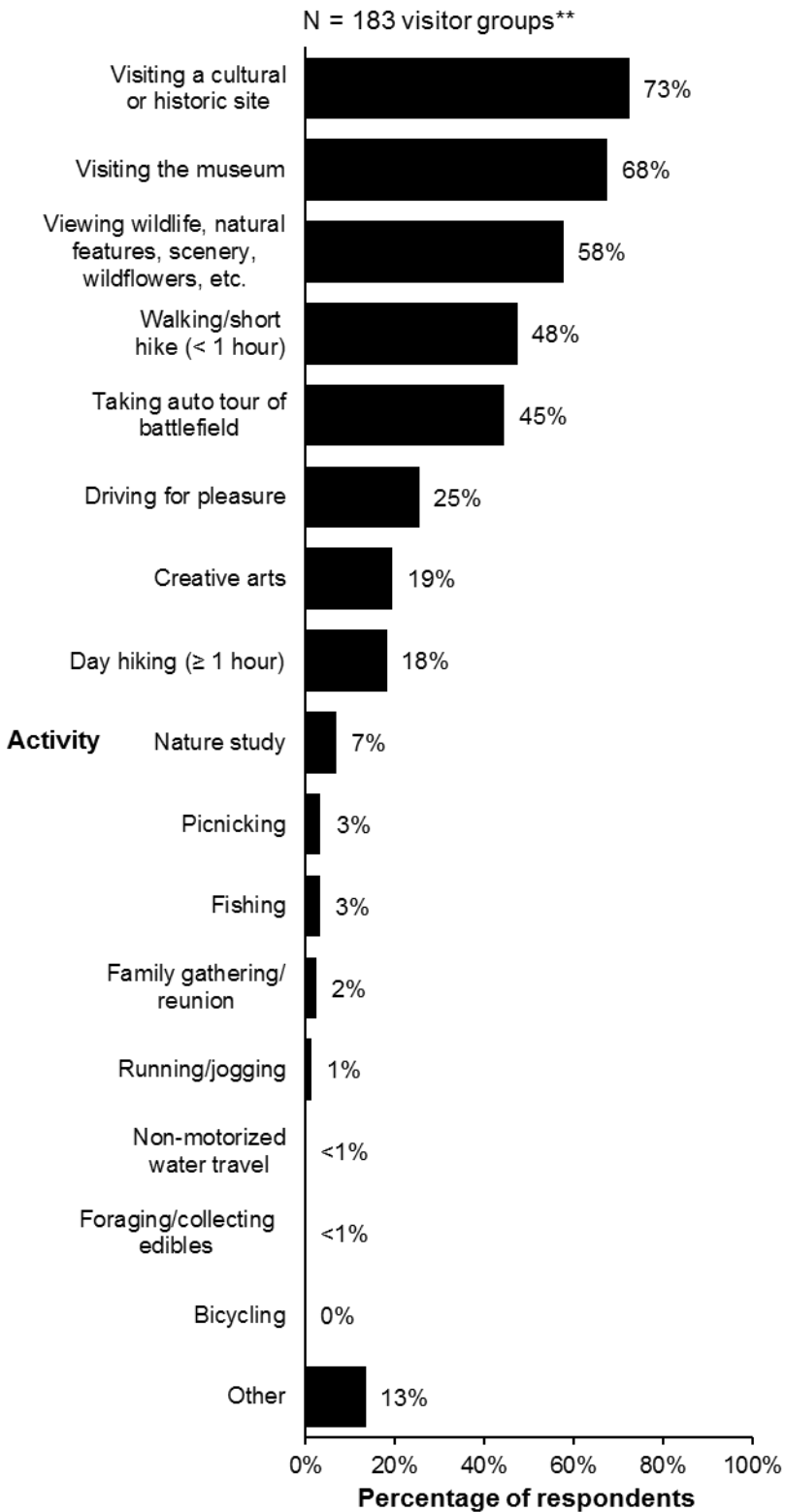


Figure 58. Participation in activities on this trip

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Primary activity on this trip

Question 13

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

Results (Figure 59)

- The most common primary activities listed by visitor groups were:
 - o 20% Visiting a cultural or historic site
 - o 19% Visiting the museum
 - o 13% Taking auto tour of battlefield
- 9% of visitor groups did not have a primary activity.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

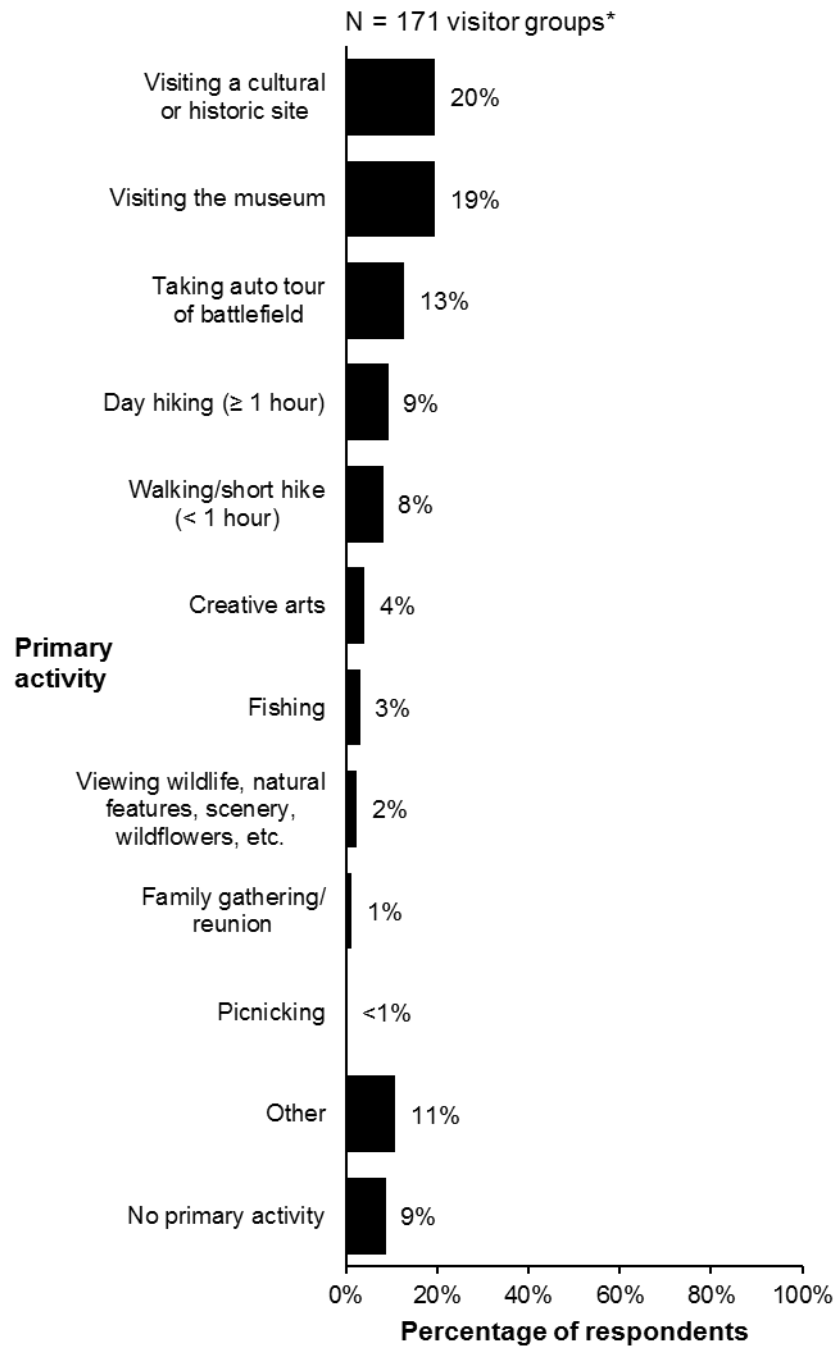


Figure 59. Primary activity on this trip to Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Programs and services participation

Question 15

On this trip, in which of the following programs and services did you personally participate within Monocacy National Battlefield?

Results (Figure 60)

- The most common programs and services in which visitor groups participated were:
 - o 75% Going to the Visitor Center
 - o 66% Viewing indoor exhibits
 - o 58% Reading the park brochure
 - o 52% Talking informally with a ranger

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

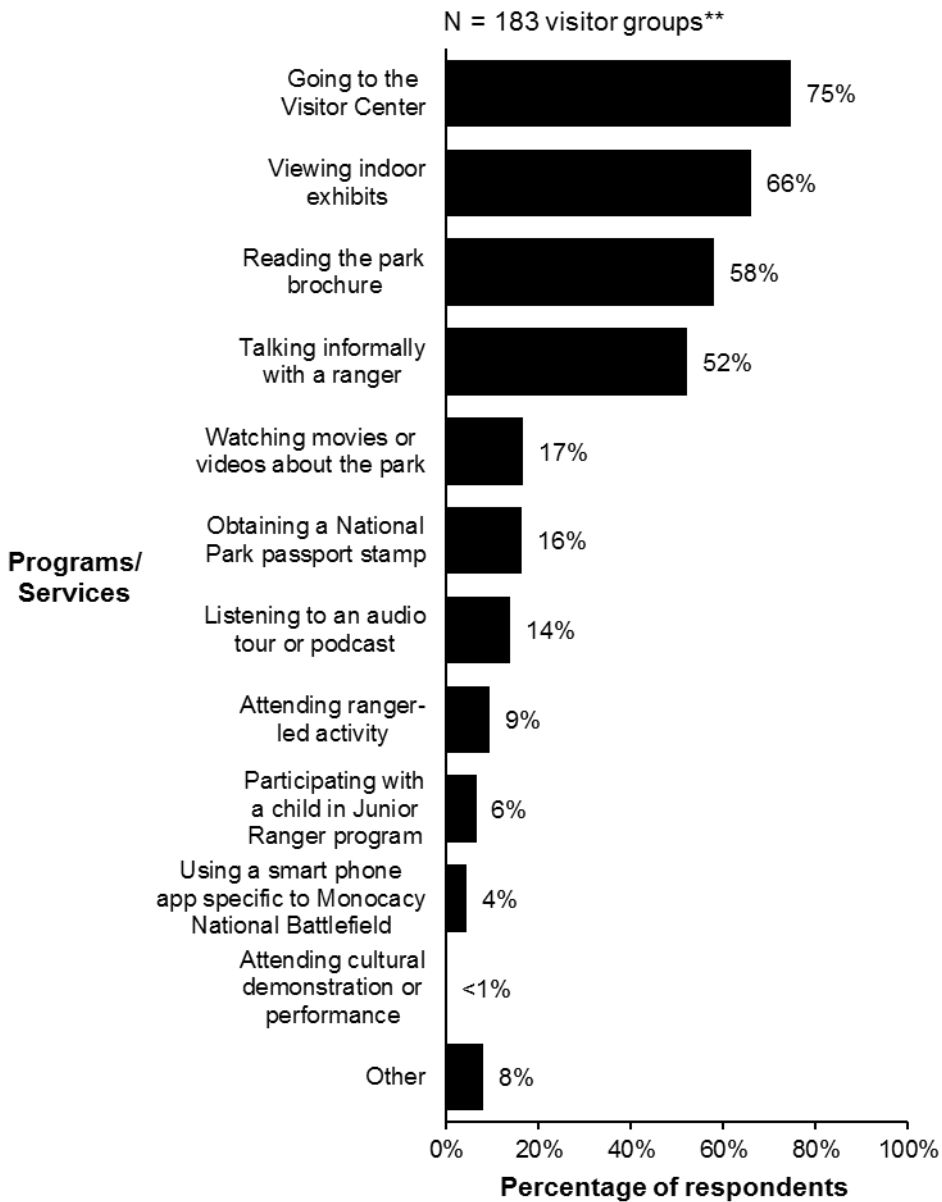


Figure 60. Participation in programs and services

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Learning from park staff, programs, and/or exhibits

Question 16

On this visit to Monocacy National Battlefield, did you learn anything from park staff, programs, exhibits, and/or the park itself about American history, nature, and/or culture?

Results (Figure 61)

- 68% of visitor groups learned something from park staff, programs, exhibits, and/or the park itself about American history, nature, and/or culture.

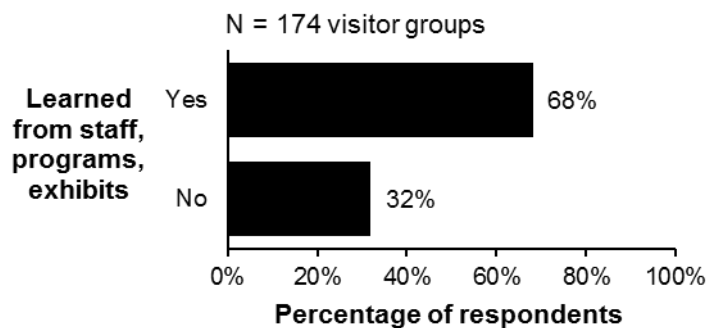


Figure 61. Visitors who learned something from park staff, programs, exhibits, and/or the park itself

Question 15

If YES, please specify subjects you learned about (open-ended).

Results (Table 35)

- Table 35 shows the subjects visitors learned about from park staff, programs, exhibits, and/or the park itself. The most frequently mentioned subjects were:
 - o 33% “Battle history”
 - o 20% “Monocacy significance”

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Table 35. Subjects learned

N = 164 comments	
Some visitor groups may have made more than one comment.	
Subject	Percent of valid responses
Battle history	33%
Monocacy significance	20%
Battle tactics	7%
Civil War history	7%
Exhibits	6%
General history	4%
American history	3%
Best Farm	3%
Directions	2%
Local history	2%
Trail system	2%
Other subjects	10%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Learning about subjects on future visits

Question 17

If you were to visit Monocacy National Battlefield in the future, are there specific subjects you would like to learn about?

Results (Figure 62)

- 39% of visitors had specific subjects they would like to learn about on a future visit to Monocacy National Battlefield.

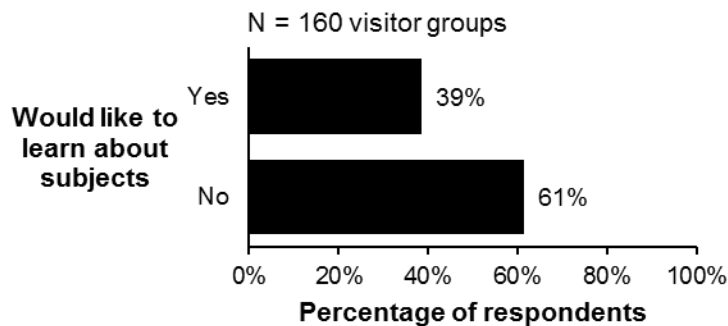


Figure 62. Visitors who would like to learn about specific subjects on future visits

Question 16

If YES, please specify subjects you would like to learn about (open-ended).

Results

- Table 36 shows the subjects visitors would like to learn about on future visits to Monocacy National Battlefield. The most frequently mentioned subjects were:
 - o 19% “Detailed battle history”
 - o 10% “Expanded tour scope”
 - o 10% “More Civil War history”

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Table 36. Subjects visitors would like to learn

N = 81 comments	
Some visitor groups may have made more than one comment.	
Subject	Percent of valid responses
Detailed battle history	19%
Expanded tour scope	11%
More Civil War history	11%
History of the Farms	9%
More American history	9%
Local impact	7%
Human interest stories	5%
Slavery	5%
Future plans for park	4%
Gambrill Mill	2%
Other subjects	18%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Aspects most liked about visit to Monocacy National Battlefield

Question 20

What did you like most about your visit to Monocacy National Battlefield (open-ended)?

Results

- Table 37 shows the aspects visitor groups liked most about their visit. The most frequently mentioned aspects were:
 - o 8% “Battle history”
 - o 8% “Trails”
 - o 7% “Rangers/staff”

Table 37. Aspects most liked about visit

N = 319 comments	
Some visitor groups may have made more than one comment.	
Aspect	Percent of valid responses
Battle history	8%
Trails	8%
Rangers/staff	7%
Visitors center	6%
Learning	6%
Fiber optic map	6%
Museum	5%
Accessibility	5%
Buildings	5%
Touring	4%
Well maintained	4%
Nature	3%
Area beauty	3%
Exhibits	3%
Updated/clear signage	3%
History	3%
River	3%
Peace and quiet	3%
Scenery	3%
Historic site	2%
Walking	2%
Being outdoors	1%
Being with family	1%
Gift shop	1%
Solitude	1%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Table 37 (continued). Aspects most liked about visit

N = 319 comments	
Some visitor groups may have made more than one comment.	
Aspect	Percent of valid responses
Other aspects	4%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Aspects least liked about visit to Monocacy National Battlefield

Question 21

What did you like least about your visit to Monocacy National Battlefield (open-ended)?

Results

- Table 38 shows the aspects visitor groups least liked about their visit. The most frequently mentioned aspects were:
 - o 25% “Weather”
 - o 10% “Nearby traffic/Navigating RT 355”
 - o 8% “Limited hours/sites closed”

Table 38. Aspects least liked about visit

N = 110 comments Some visitor groups may have made more than one comment.	
Aspect	Percent of valid responses
Weather	25%
Nearby traffic/Navigating RT 355	10%
Limited hours/sites closed	8%
Wanted more information	7%
Directional signage	5%
Improve amenities	5%
Need more interpretive signs	5%
Need more time	5%
Trail/road maintenance	5%
Confusion about auto tour	4%
Lack of trash cans/recycling	4%
Other aspects	17%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Expectations for visit to Monocacy National Battlefield

Question 22

Did your visit to Monocacy National Battlefield, on this trip, meet your expectations?

Results (Figure 63)

- 94% of visitor groups had their expectations met during their visit to Monocacy National Battlefield on this trip.

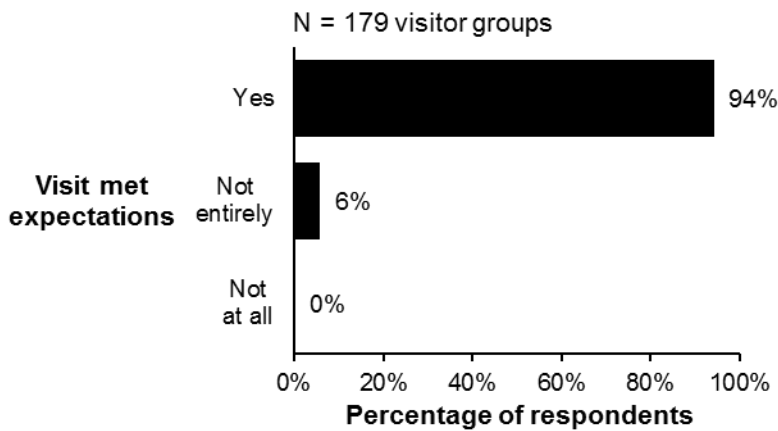


Figure 63. Meeting of expectations for visit on this trip

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 21

If NOT ENTIRELY, please explain (open-ended).

Results

- (Table 39) shows the reasons visitor groups' expectations were "not entirely" met. The most frequently mentioned reasons were:
 - o 16% "Missing information"
 - o 13% "Physical limitations to touring"
 - o 10% "Tours/signs hard to follow"

Table 39. Reasons expectations were "not entirely" met

N = 18 comments Some visitor groups may have made more than one comment.	
Reason	Percent of valid responses
Missing information	16%
Physical limitations to touring	13%
Tours/signs hard to follow	10%
Site closed	8%
Trees blocked view	7%
Trail upkeep	4%
Other comments	44%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Expenditures

Purchase of package tour(s)

Question 32a

Did you or anyone in your personal group purchase any package tours that included at least some meals, some lodging, and/or some transportation while on this trip?

Results (Figure 64)

- <1% of visitor groups had at least one member who purchased a package tour.

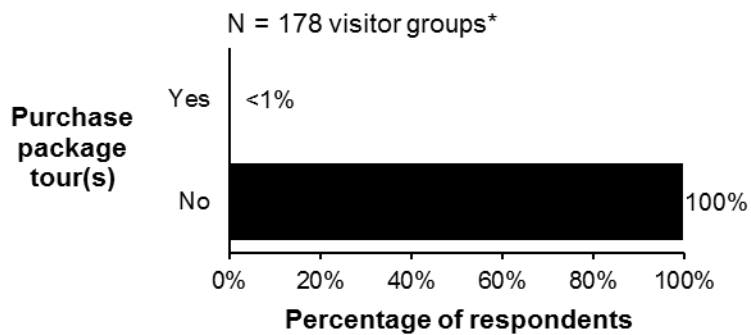


Figure 64. Visitor groups with member(s) who purchased packaged tour(s)

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 32b

If YES, what was the total length of your package tour(s)?

Results (Figure 65)

- One visitor group purchased a package tour with a total length of 2 or more days.

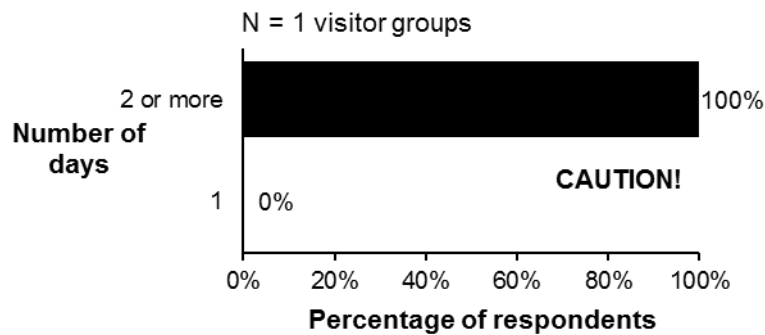


Figure 65. Total length of package tour(s) purchased by at least one group member

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 32c

If YES, what was the total cost per person for the package tour(s)?

Results

- The visitor group who purchased a package tour did not indicate the cost per person for the tour.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 32d

If YES, how many people in your personal group were on the package tour(s)?

Results (Figure 66)

- One visitor group purchased a package tour with two people on the tour.

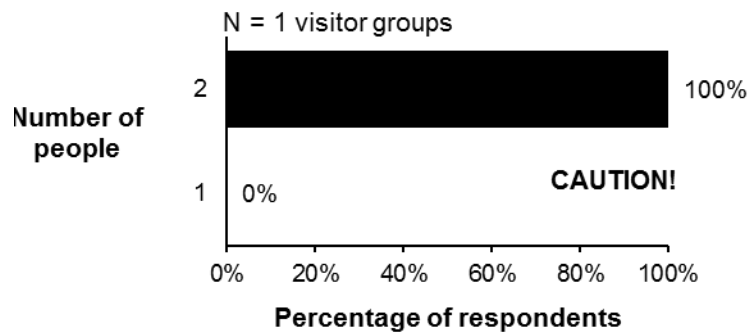


Figure 66. Number of group members on package tour(s) purchased by at least one group member

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Items included in package tour(s) as a part of visit

Question 32e

If YES, which of the following were included in the package tour(s) as part of your visit to Monocacy National Battlefield and the nearby area (within the shaded area of the map on p. 12)?

Results

- The visitor group who purchased a package tour did not indicate what was included in the tour.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Total expenditures inside Monocacy National Battlefield and nearby area

Question 33

Please estimate how much you and your personal group with whom you shared expenses (e.g., other family members, traveling companions) spent both inside Monocacy National Battlefield and within the nearby area (within the shaded area of the map on p. 12) during your time in the nearby area. If you reported expenditures for package tours, please only include individual expenses that were NOT part of your package tour(s).

Note: Residents living with the highlighted area of the map should only include expenditures that were directly related to this trip in Monocacy National Battlefield.

See Figure 14 or Appendix 1 for map.

Results – group expenditures excluding package tour expenses (Figure 67 and Table 40)

- 39% of visitor groups spent \$1 to \$50 in Monocacy National Battlefield and the nearby area.
- 29% of visitor groups spent \$201 or more in Monocacy National Battlefield and the nearby area.

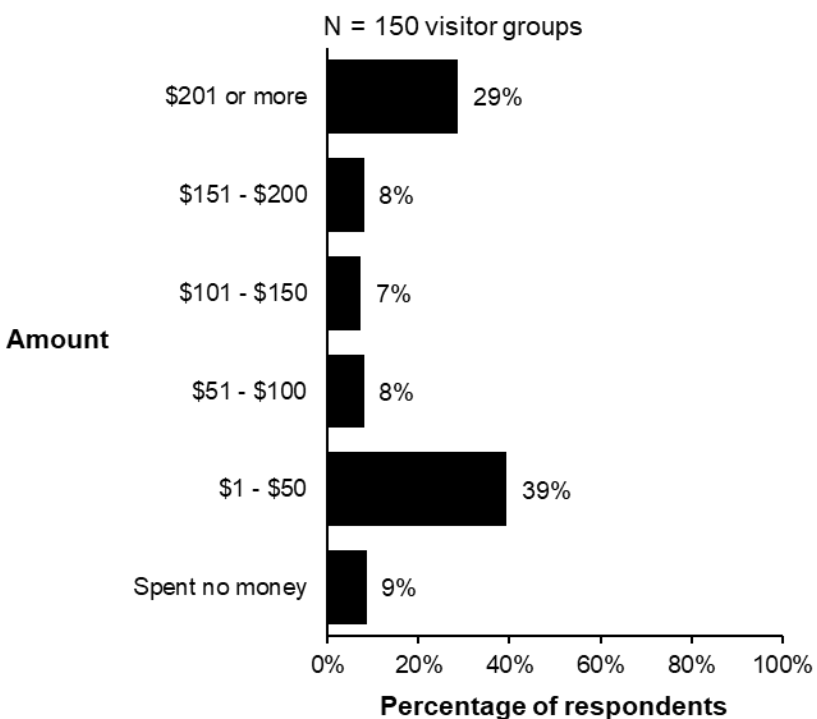


Figure 67. Total expenditures inside the park and in nearby area

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Table 40. Descriptive statistics: Total expenditures inside the park and nearby area

	Mean	Median	Std. Deviation
Total expenditures	221.86	75	358.44

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Percentages of total expenditures inside park and nearby area

Question 33

Please estimate how much you and your personal group with whom you shared expenses (e.g., other family members, traveling companions) spent both inside Monocacy National Battlefield and within the nearby area (within the shaded area of the map on p. 12) during your time in the nearby area.

See Figure 14 or Appendix 1 for map.

Results (Figure 68)

- Percentages of group expenditures (excluding package tour expenses):
 - o 36% Restaurants/bars
 - o 27% Hotels, motels, resorts
 - o 21% Souvenirs, clothing, supplies, other retail

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

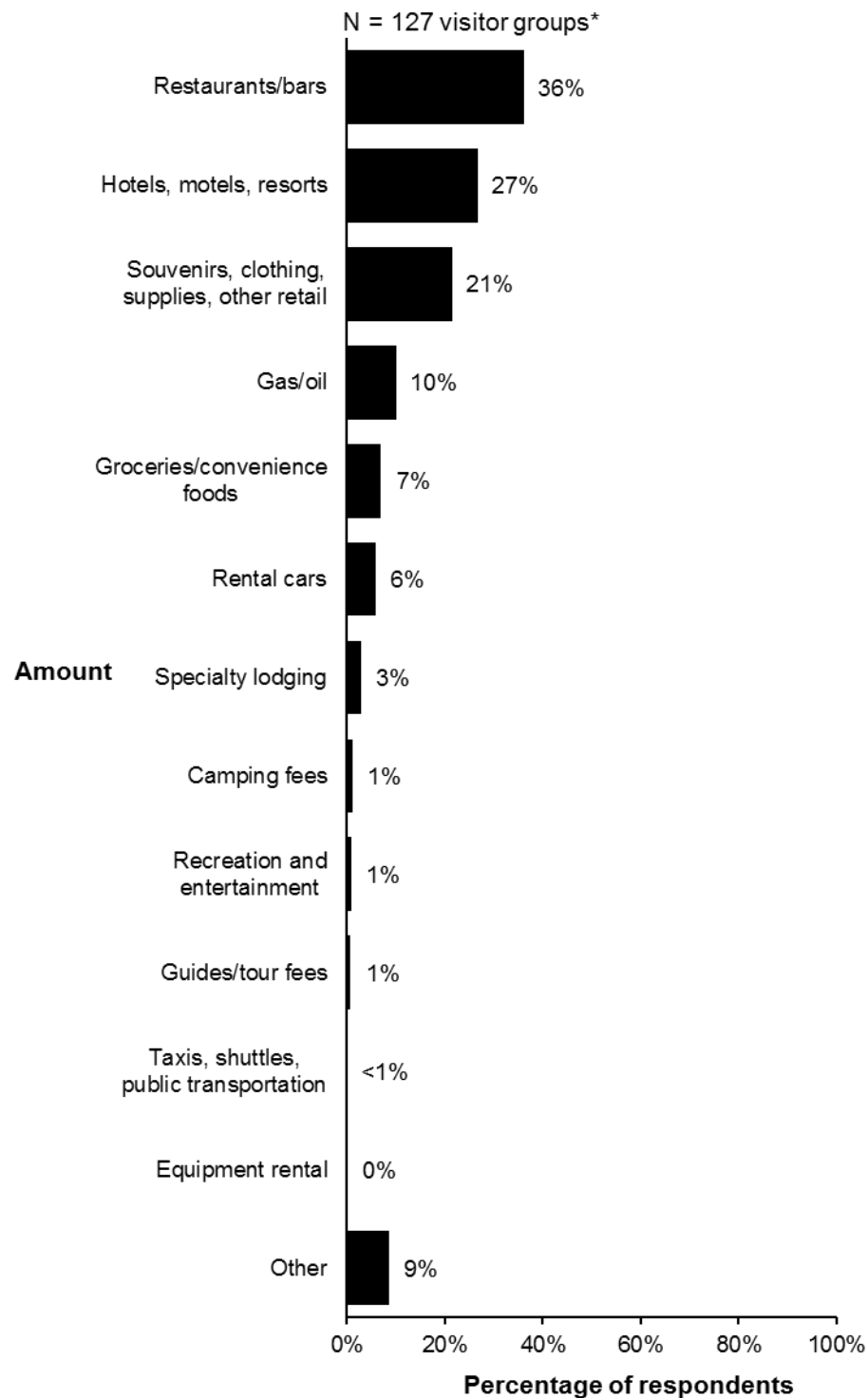


Figure 68. Percentages of total expenditures within the park and nearby area

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Number of people covered by expenses

Question 35a

Including yourself, how many people in your personal group were covered by the expenses for this trip away from home?

Results (Figure 69 and Table 41)

- 35% of visitor groups had two members covered by expenses.
- 32% of visitor groups had one member covered by expenses.

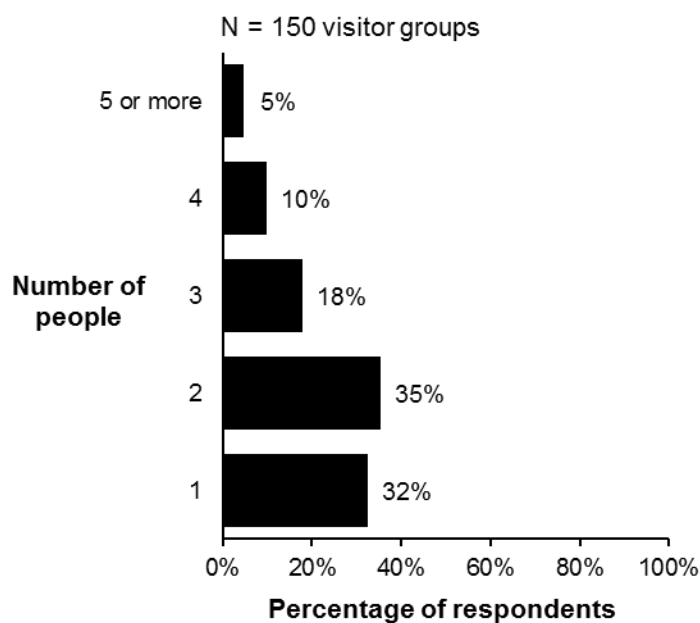


Figure 69. Visitors covered by expenses

Table 41. Descriptive statistics: Visitors covered by expenses

	Mean	Median	Std. Deviation
Number of visitors covered	2.19	2.00	1.20

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Adults covered by expenses

Question 35a

Including yourself, how many adults (18 years or over) in your personal group were covered by the expenses for this trip away from home?

Results (Figure 70 and Table 42)

- 49% of visitor groups had two adults covered by expenses.
- 42% of visitor groups had one adult covered by expenses.

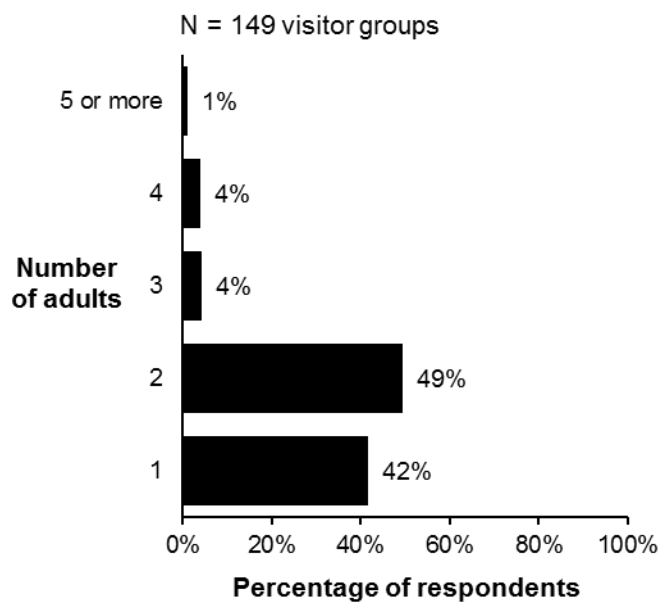


Figure 70. Adults covered by expenses

Table 42. Descriptive statistics: Adults covered by expenses

	Mean	Median	Std. Deviation
Number of adults covered	1.70	2.00	0.80

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Children covered by expenses

Question 35a

How many children (under 18 years) in your personal group were covered by the expenses for this trip away from home?

Results (Figure 71 and Table 43)

- 73% of visitor groups had no children covered by expenses.

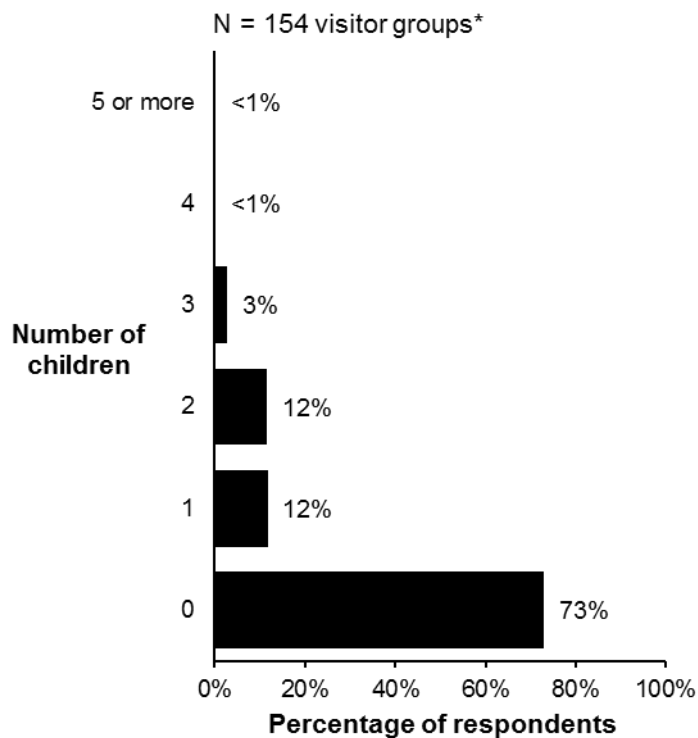


Figure 71. Children covered by expenses

Table 43. Descriptive statistics: Children covered by expenses (for groups with children)

	Mean	Median	Std. Deviation
Number of children covered	1.77	2.00	0.88

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Sharing of expenses

Question 35b

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

Results (Figure 72 and Table 44)

- 61% of visitor groups did not split the expenses on this trip.
- 35% of visitor groups had two people split trip expenses.

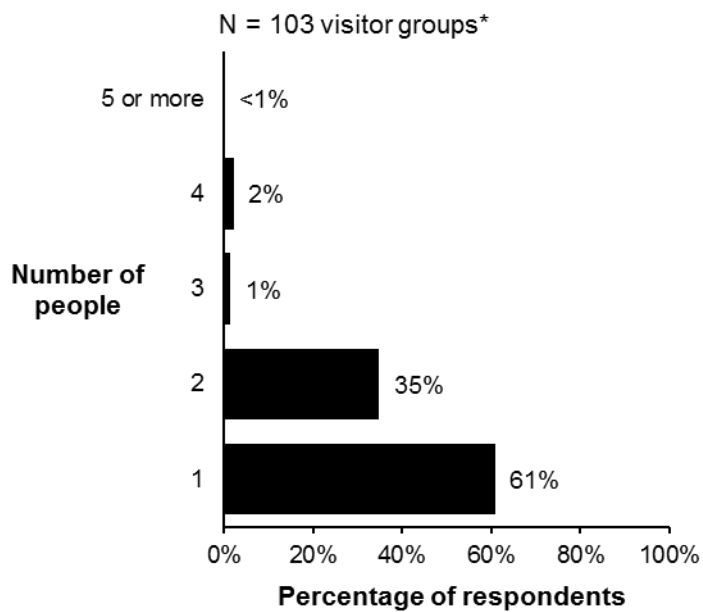


Figure 72. Sharing of expenses in visitor group

Table 44. Descriptive statistics: Sharing of expenses in visitor group

	Mean	Median	Std. Deviation
Number of people who shared expenses	1.48	1.00	0.77

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Total expenditures outside of park and nearby area

Question 34

For you and any members of your personal group with whom you shared expenses, please record any additional money spent outside of the map area during your trip away from home (for example, travel or food expenditures).

Results (Figure 73 and Table 45)

- 40% of visitor groups spent no additional money outside of Monocacy National Battlefield and the nearby area.
- 39% of visitor groups spent \$1 to \$500 on additional expenses outside of Monocacy National Battlefield and the nearby area.

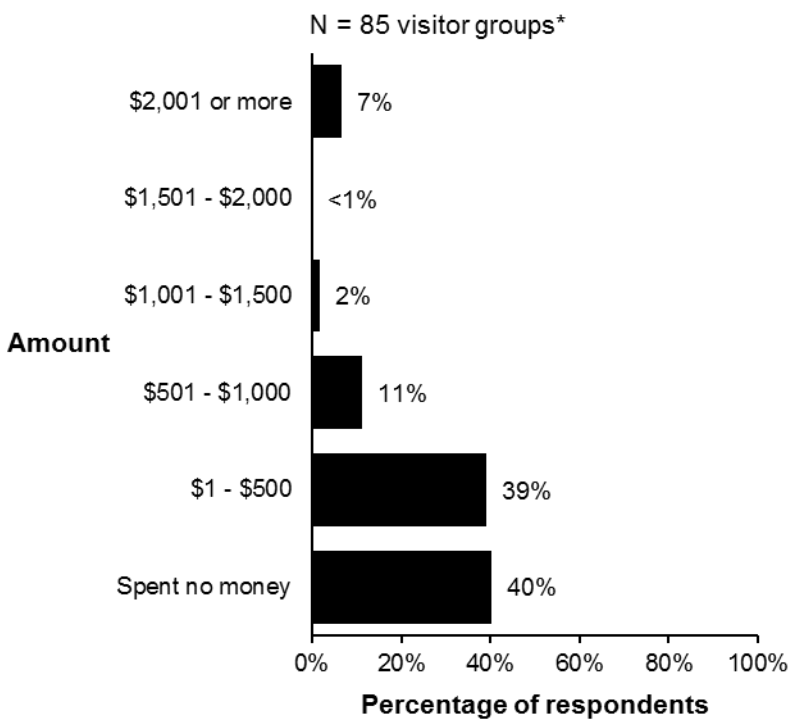


Figure 73. Total expenditures outside of park and nearby area

Table 45. Descriptive statistics: Total expenditures outside of park and nearby area

	Mean	Median	Std. Deviation
Total expenditures	879.31	175.00	1846.99

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Services and Facilities

Visitors with physical conditions

Question 19a

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 Monocacy National Battlefield?

Results (Figure 74)

- 5% of visitor groups had members with physical conditions that made it difficult to access or participate in park activities or services.

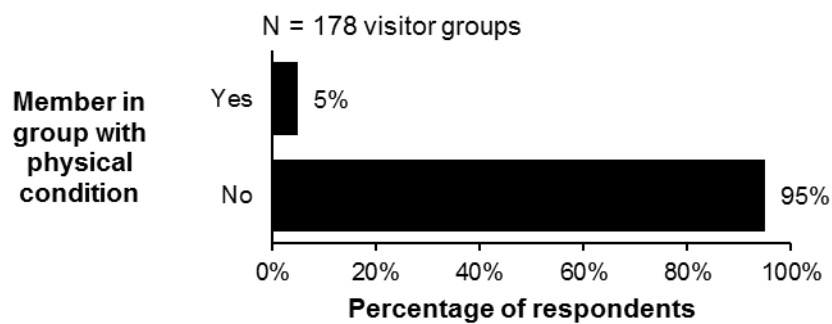


Figure 74. Visitors with physical conditions

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 19b

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

Results (Table 46)

- “Walking” was the type of activity most frequently mentioned (100%) activity in which members of visitor groups had difficulty participating.

Table 46. Activities/services/facilities difficult to participate in/access

N = 8 comments	
Some visitor groups may have made more than one comment.	
Activity, service, or facility	Percent of valid responses
Walking	100%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Question 19c

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

Results (Figure 75)

- Of visitor groups that had at least one member with a physical condition, the member(s) had specific difficulties with mobility.

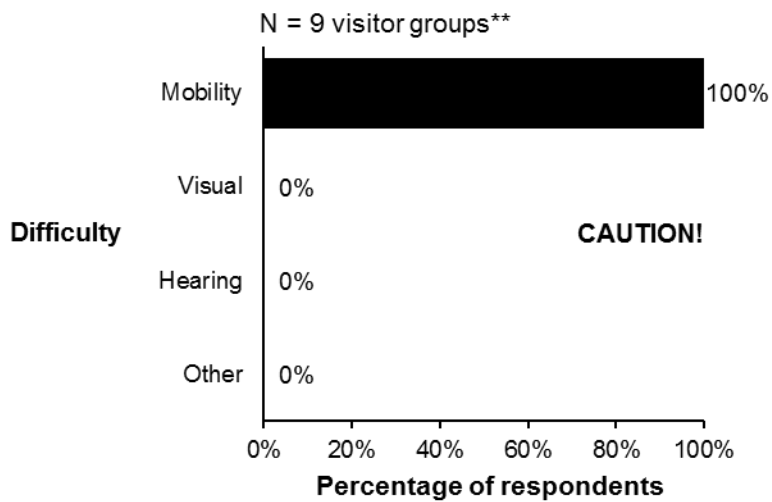


Figure 75. Specific difficulties had by visitor group member(s)

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Safety

Question 23

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

Monocacy National Battlefield is a safe place to visit.

Results (Figure 76)

- 76% of visitor groups strongly agreed that Monocacy National Battlefield is a safe place to visit.
- 22% of visitor groups agreed with this statement.

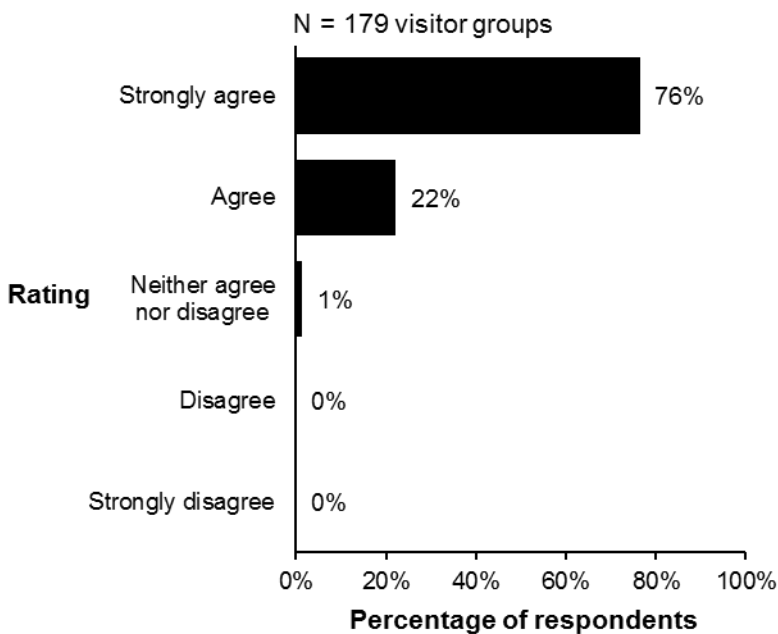


Figure 76. Extent of agreement/disagreement with statement on safety of Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Crowding

Question 23

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

Monocacy National Battlefield is too crowded.

Results (Figure 77)

- 65% of visitor groups strongly disagreed that Monocacy National Battlefield is too crowded.
- 31% of visitor groups disagreed with this statement.

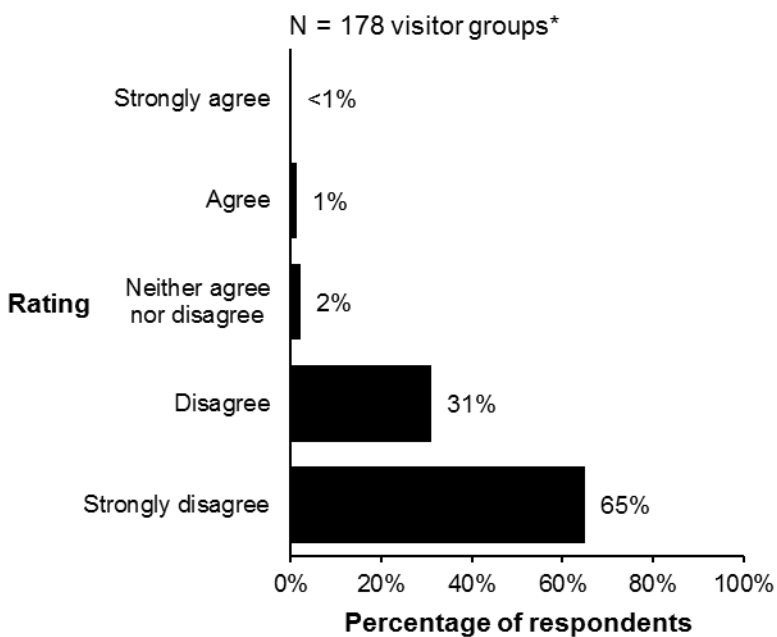


Figure 77. Extent of agreement/disagreement with statement on crowding in Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Condition of natural resources

Question 23

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

Natural resources in Monocacy National Battlefield are in pristine condition.

Results (Figure 78)

- 44% of visitor groups agreed that natural resources in Monocacy National Battlefield are in pristine condition.
- 32% of visitor groups strongly agreed with this statement.

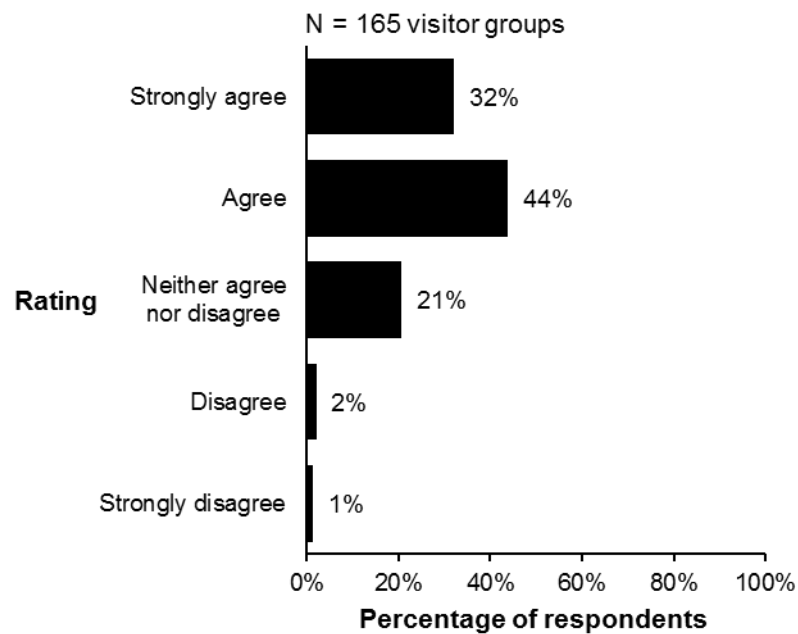


Figure 78. Extent of agreement/disagreement with statement on condition of natural resources in Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Vandalism and crime

Question 23

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

Vandalism and crime are not a problem in Monocacy National Battlefield.

Results (Figure 79)

- 45% of visitor groups strongly agreed that vandalism and crime are not a problem in Monocacy National Battlefield.
- 37% of visitor groups agreed with this statement.

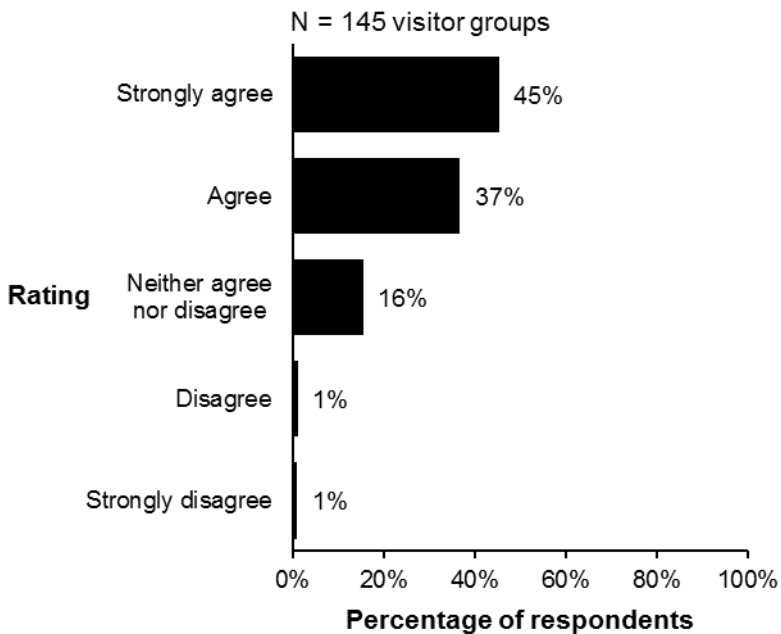


Figure 79. Extent of agreement/disagreement with statement on vandalism and crime in Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Accessibility

Question 23

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

Monocacy National Battlefield is not accessible to persons with physical disabilities.

Results (Figure 80)

- 43% of visitor groups disagreed that Monocacy National Battlefield is not accessible to persons with physical disabilities.
- 28% of visitor groups neither agreed nor disagreed with this statement.

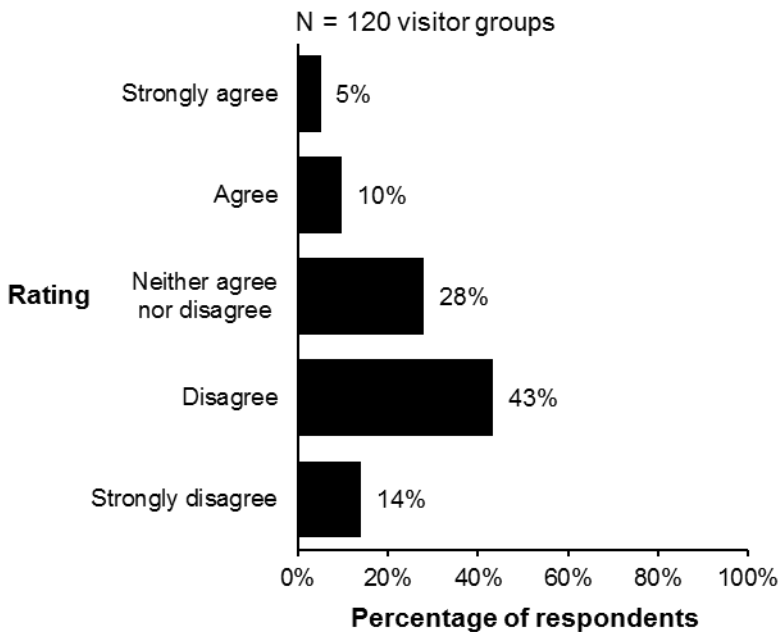


Figure 80. Extent of agreement/disagreement with statement on accessibility of Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Condition of historical and cultural features

Question 23

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

Historical and cultural features in Monocacy National Battlefield are well maintained/preserved.

Results (Figure 81)

- 46% of visitor groups strongly agreed that historical and cultural features in Monocacy National Battlefield are well maintained/preserved.
- 45% of visitor groups agreed with this statement.

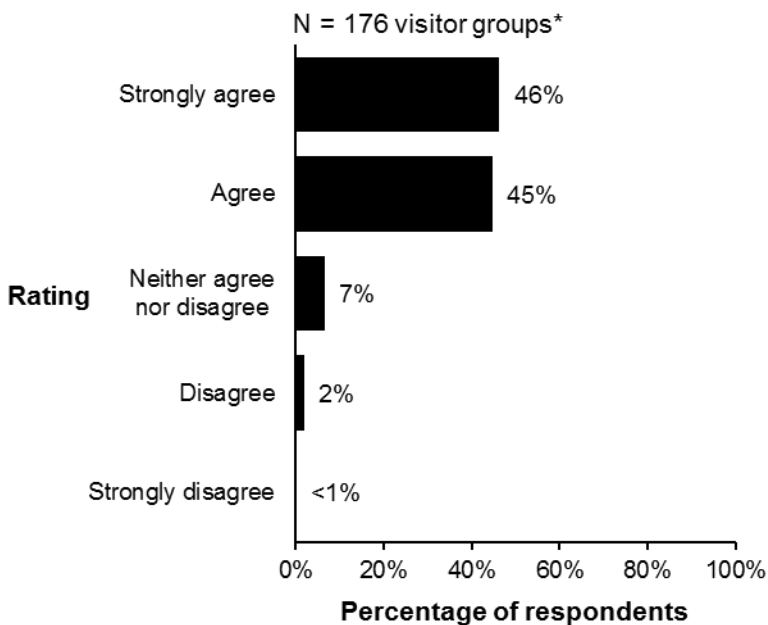


Figure 81. Extent of agreement/disagreement with statement on condition of historical and cultural features in Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Development of adjacent areas

Question 23

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

Development of adjacent areas detracts from visitors' experiences at Monocacy National Battlefield.

Results (Figure 82)

- 30% of visitor groups disagreed that development of adjacent areas detracts from visitors' experiences at Monocacy National Battlefield.
- 29% of visitor groups neither agreed nor disagreed with this statement.

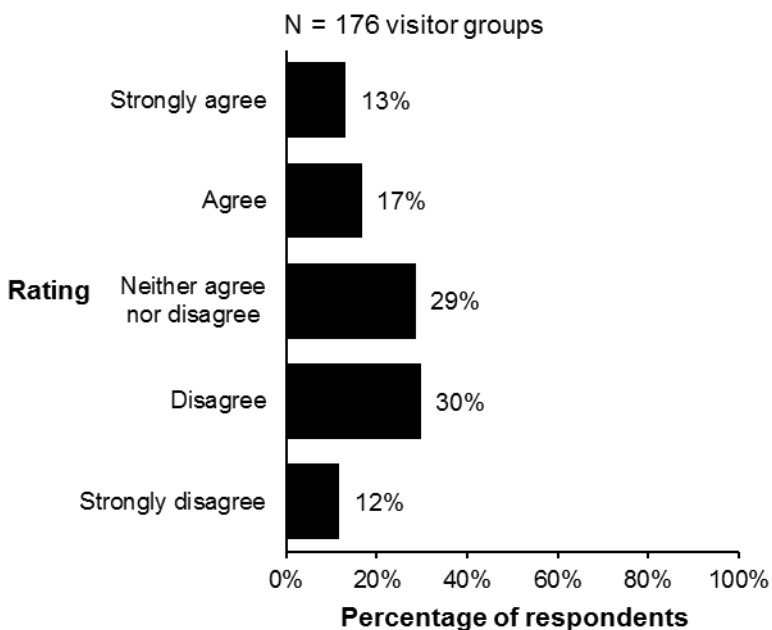


Figure 82. Extent of agreement/disagreement with statement on development of adjacent areas detracting from visitor experiences at Monocacy National Battlefield

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Quality of facilities, services, and recreational opportunities

Question 24

How would you rate the quality of the facilities, services, and recreational opportunities in Monocacy National Battlefield?

Rating choices:

- 1 = Very good
- 2 = Good
- 3 = Average
- 4 = Poor
- 5 = Very poor

Results

- Figure 83 shows the combined proportions of “very good” and “good” ratings for facilities, services, and recreational opportunities. Some visitor groups may not have selected a rating for each reason.
- The facilities, services, and recreational opportunities that received the highest combined proportions of “very good” and “good” ratings were:
 - o 84% Visitor Center
 - o 84% Exhibits (indoor and outdoor)
 - o 77% Park map or brochure
- The facilities, services, and recreational opportunities that received the lowest combined proportions of “very good” and “good” ratings were:
 - o 19% Campground and/or picnic areas (78% of visitor groups did not select a rating)
 - o 19% Ranger programs (78% of visitor groups did not select a rating)

Figure 84 through Figure 94 show ratings of quality for each facility, program, or recreational opportunity.

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

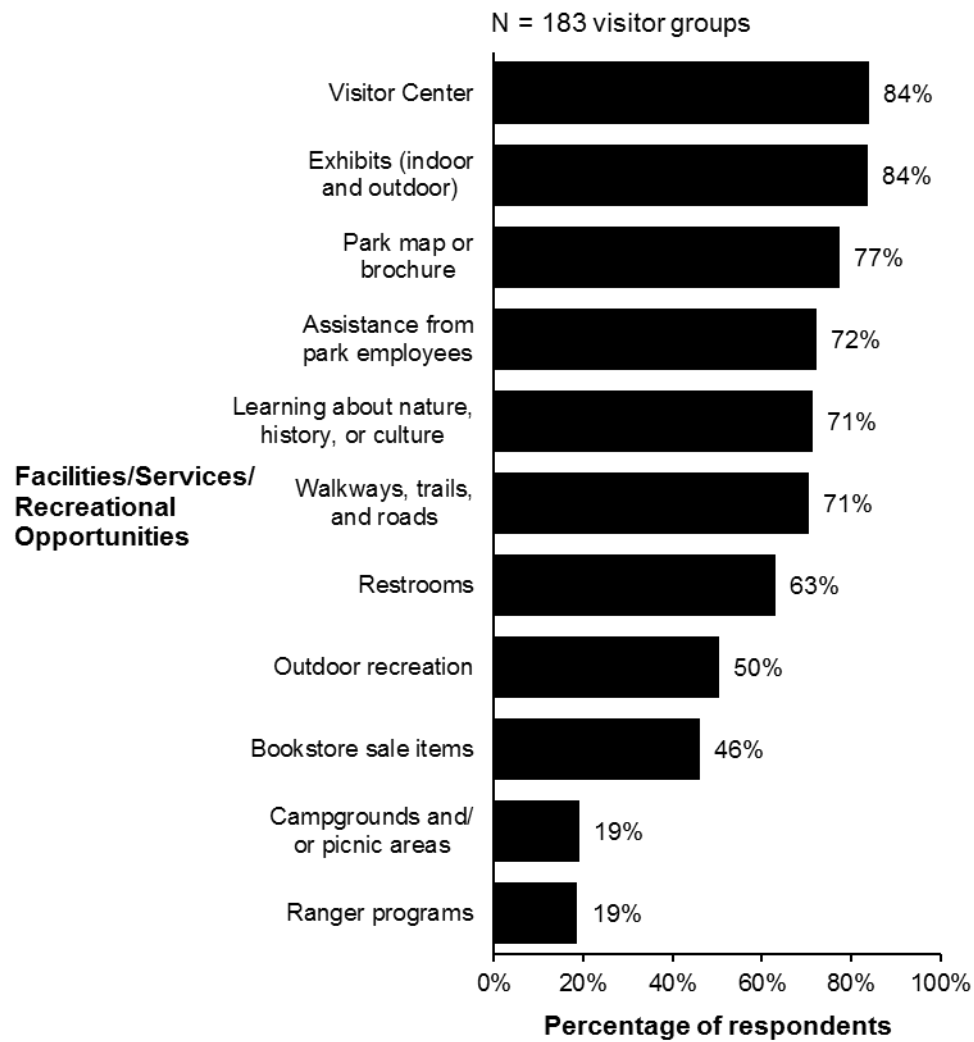


Figure 83. Quality of facilities, services, and recreational opportunities

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

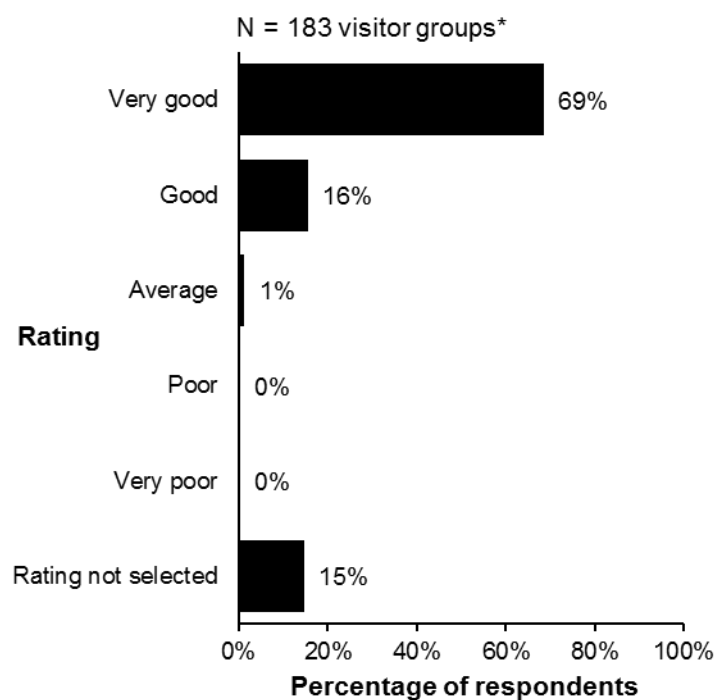


Figure 84. Quality of Visitor Center

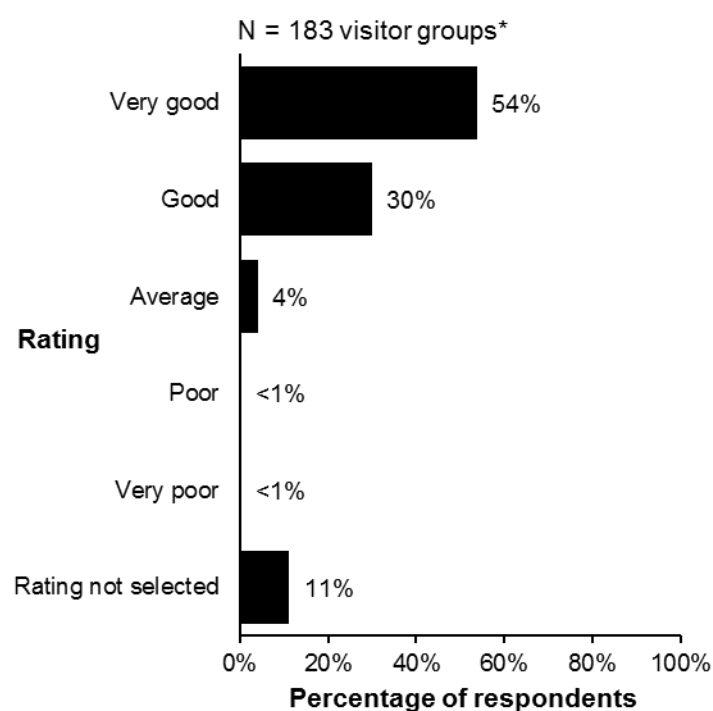


Figure 85. Quality of exhibits (indoor and outdoor)

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

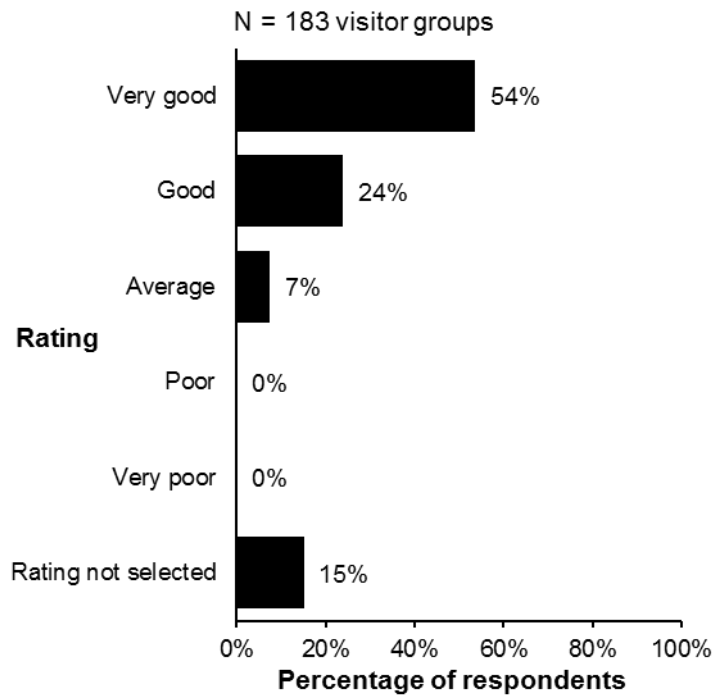


Figure 86. Quality of park map or brochure

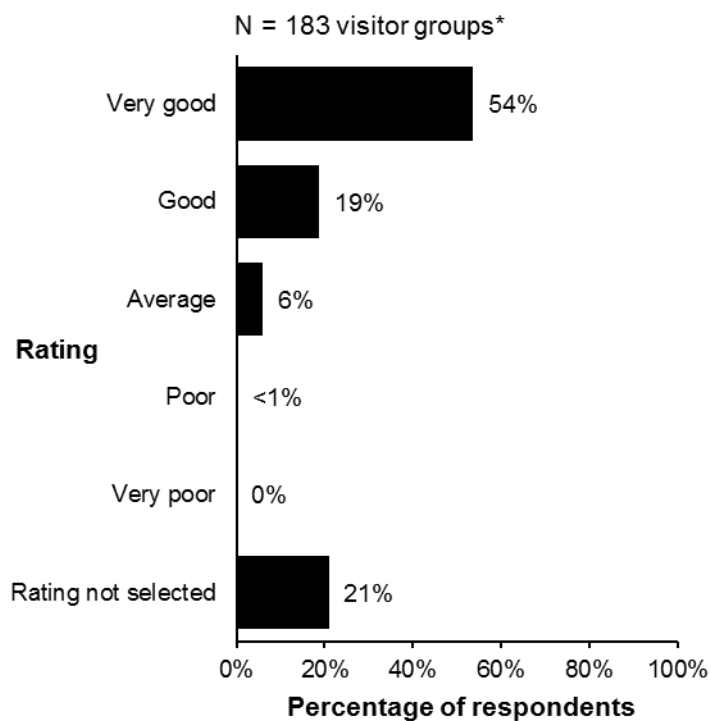


Figure 87. Quality of assistance from park employees

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

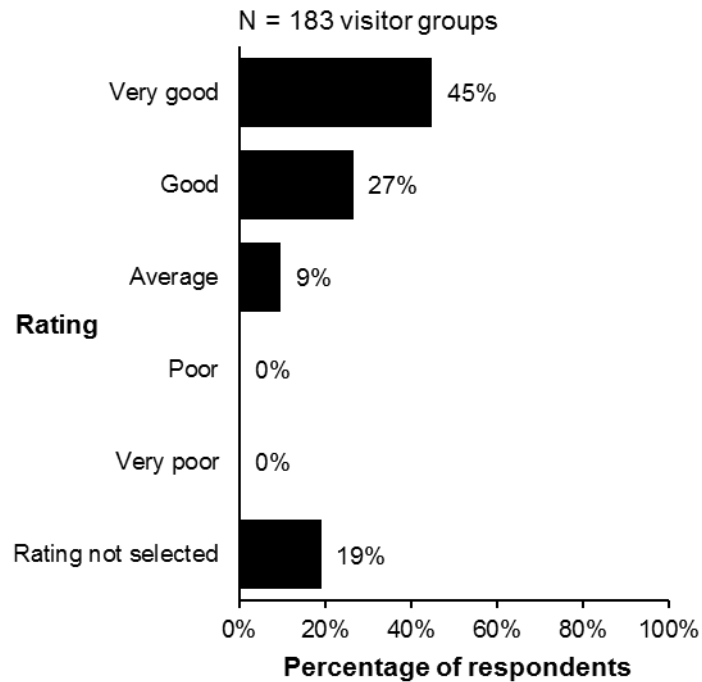


Figure 88. Quality of learning about nature, history, or culture

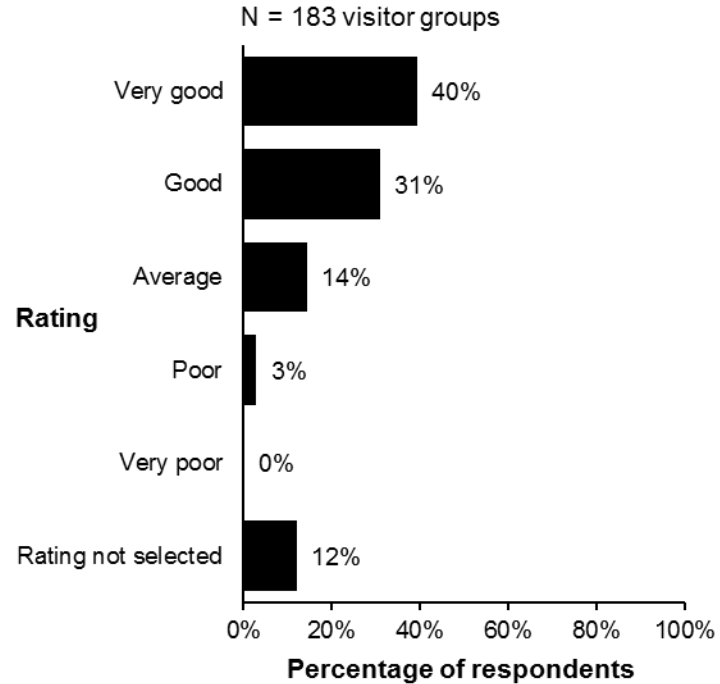


Figure 89. Quality of walkways, trails, and roads

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

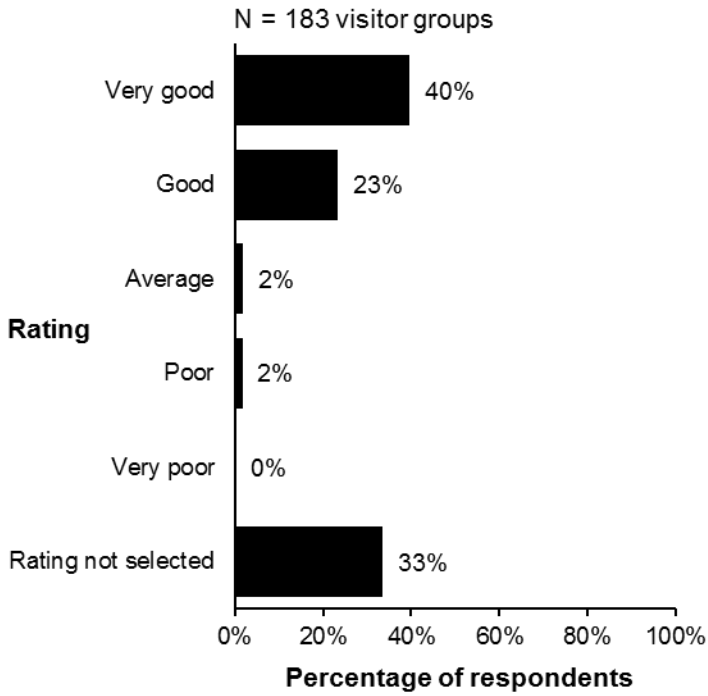


Figure 90. Quality of restrooms

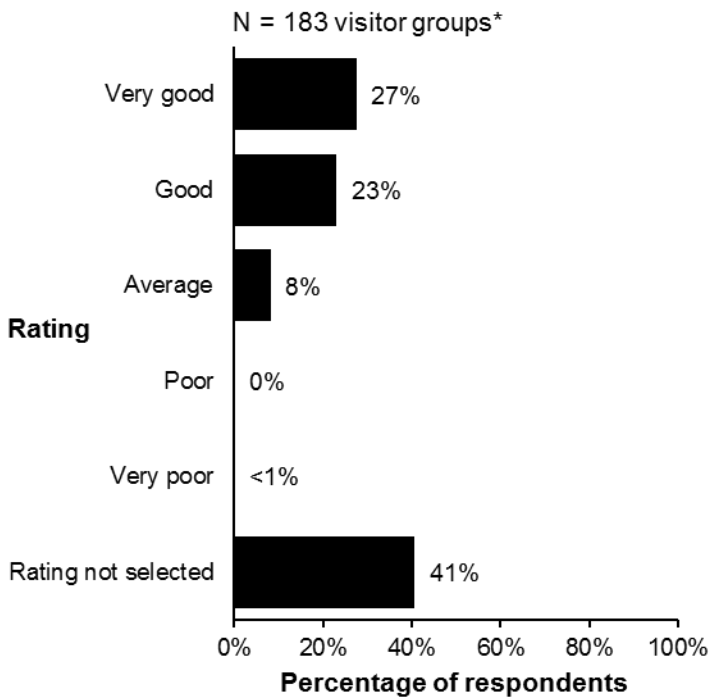


Figure 91. Quality of outdoor recreation (sightseeing, camping, bicycling, boating, hiking, etc.)

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

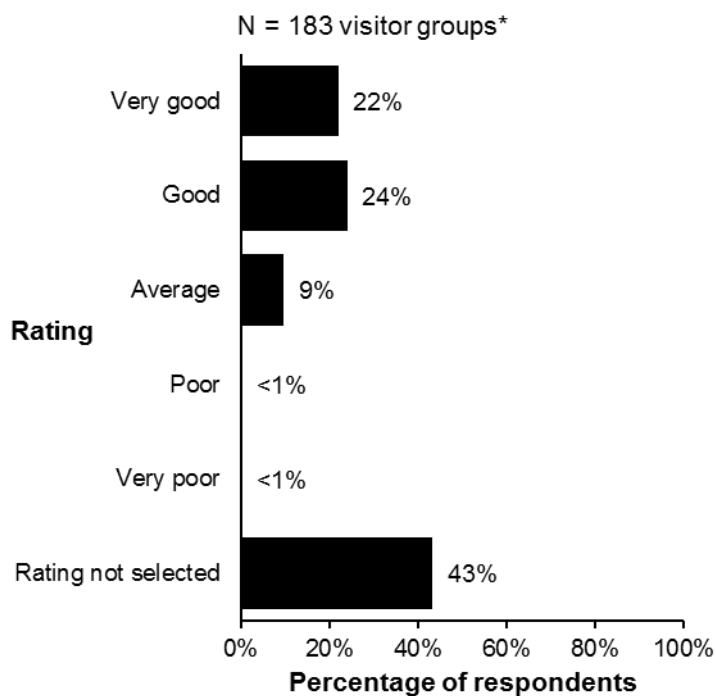


Figure 92. Quality of bookstore sale items

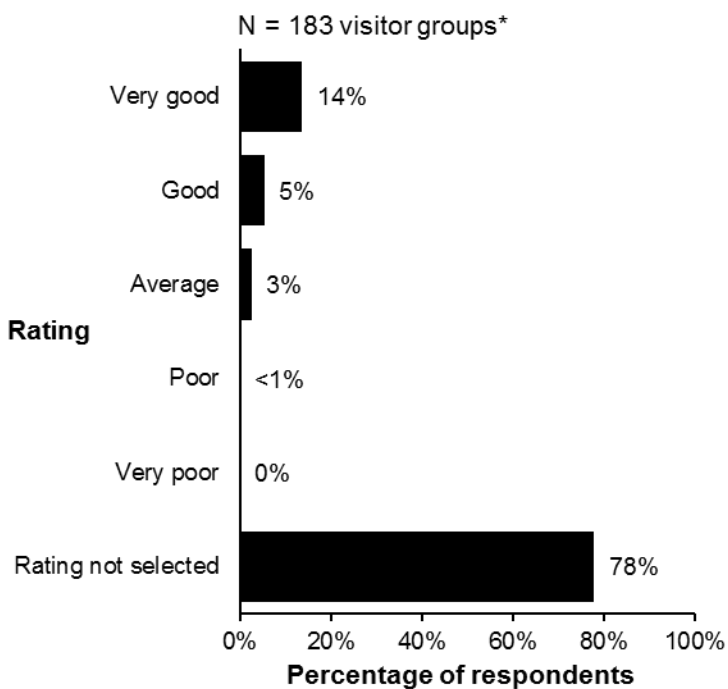


Figure 93. Quality of campgrounds and/or picnic areas

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

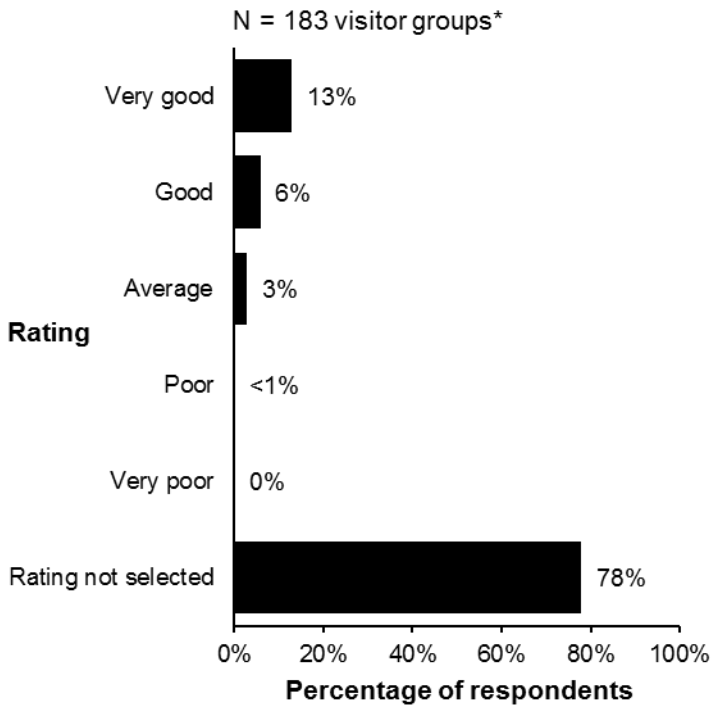


Figure 94. Quality of ranger programs

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Overall quality of facilities, services, and recreational opportunities

Question 25

Overall, how would you rate the quality of facilities, services, and recreational opportunities in Monocacy National Battlefield?

Results (Figure 95)

- 62% of visitor groups rated the quality of facilities, services, and recreational opportunities overall as “very good”.
- 31% of visitor groups gave an overall rating of “good”.

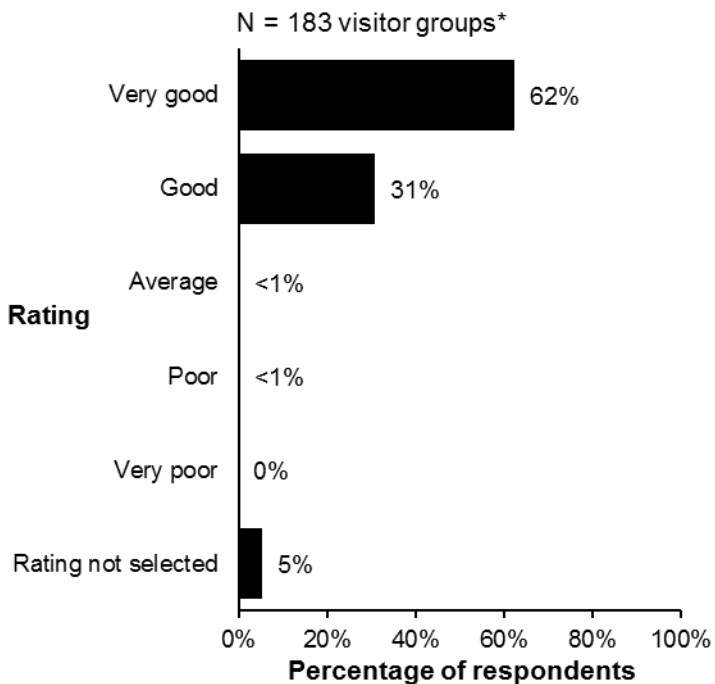


Figure 95. Overall rating of facilities, services, and recreational opportunities

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Opinion of national significance of park

Question 26

This park was established because of its significance to the nation. In your opinion, what is the national significance of this park?

Results

- Table 47 shows what visitor groups believed the national significance of Monocacy National Battlefield to be. The items most frequently mentioned were:
 - o 37% “Location of the battle that saved Washington”
 - o 22% “Civil War history”
 - o 10% “Battlefield preservation”

Table 47. Opinions of national significance of park

N = 195 comments Some visitor groups may have made more than one comment.	
Significance	Percent of valid responses
Location of the battle that saved Washington	37%
Civil War history	22%
Battlefield preservation	10%
American history	8%
Education	8%
Memorial/place of reflection	7%
Little known but important battle	5%
Other comments	3%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Importance of use of personal electronic devices

Question 18

How important to you was it during your visit to Monocacy National Battlefield to use personal electronic devices to do each of the following?

Rating choices:

- 1 = Extremely important
- 2 = Very important
- 3 = Moderately important
- 4 = Slightly important
- 5 = Not at all important

Results (Figure 96)

- Figure 96 shows the combined proportions of “extremely important” and “very important” ratings for use of a personal electronic device. Some visitor groups may not have selected a rating for each reason.
- The uses that received the highest combined proportions of “extremely important” and “very important” ratings were:
 - o 25% Make/receive cell phone call
 - o 22% Send/receive text message

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

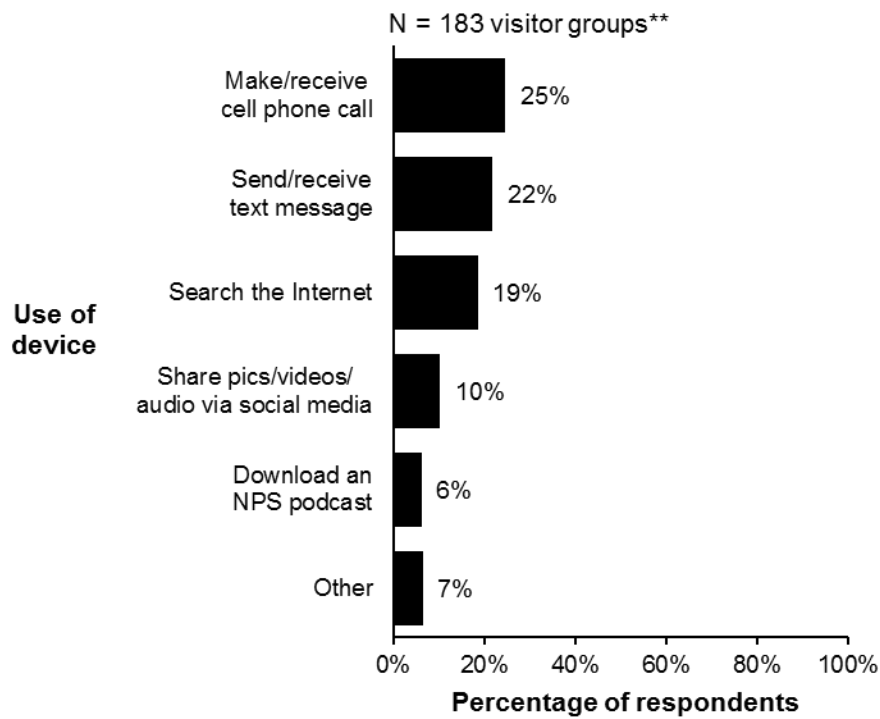


Figure 96. Importance of using personal electronic devices

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Quality of service required to use personal electronic devices

Question 18

How would you rate the quality of the personal electronic device service in the park required to do each activity?

Rating choices:

- 1 = Very good
- 2 = Good
- 3 = Average
- 4 = Poor
- 5 = No service at all
- 99 = Not applicable

Results (Figure 97)

- Figure 97 shows the combined proportions of “very good” and “good” ratings for quality of service required to use a personal electronic device. Some respondents may not have selected a rating for each reason.
- The uses that received the highest combined proportions of “very good” and “good” ratings for quality of service required were:
 - o 36% Make/receive phone call
 - o 34% Send/receive text message

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

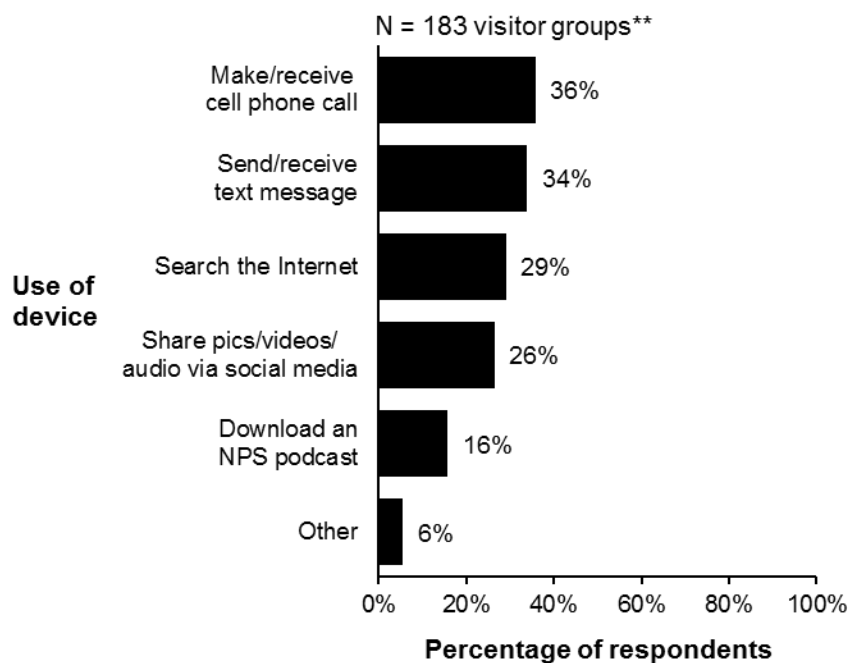


Figure 97. Quality of service required to use personal electronic devices

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Mean scores of importance and quality ratings for use of personal electronic devices

Question 18

- Figure 98 shows the mean scores of importance and quality ratings for all uses of personal electronic devices.
- All uses of personal electronic devices were rated as relatively unimportant.
- The quality of services required was rated above average for each use.

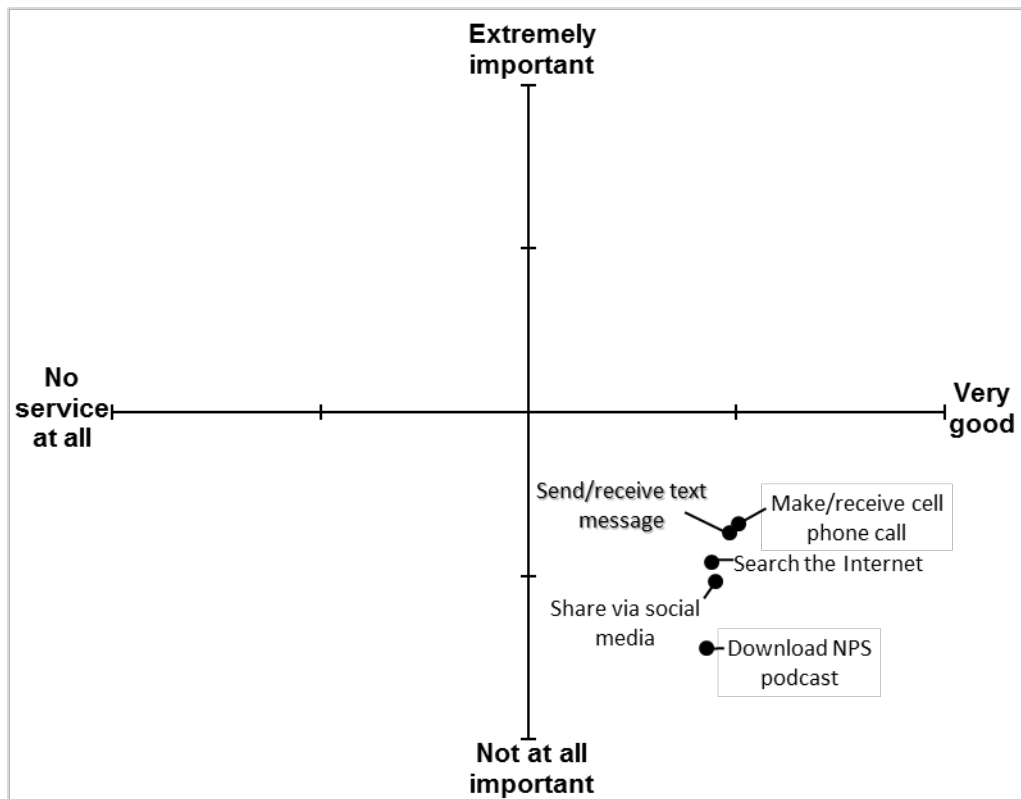


Figure 98. Mean scores for importance and quality ratings for use of personal electronic devices

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Visitor Comments

Additional comments

Question 43

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

Results (Table 48)

- Table 48 shows the percent of valid responses for categories of additional comments provided by visitor groups. Verbatim visitor comments can be found in the Visitor Comments Appendix, a separate volume from this report.
- For the most part, comments were mostly positive:
 - o 22% "Enjoyed visit"
 - o 11% "Rangers were great"
 - o 11% "Grateful for NPS"

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Table 48. Additional comments about facilities, services, or recreational opportunities

N = 94 comments	
Some visitor groups may have made more than one comment.	
Comment	Percent of valid responses
PERSONNEL	
Rangers are great	11%
POLICIES/MANAGEMENT	
Open historic buildings up to public	2%
Other	7%
FACILITIES AND MAINTENANCE	
More trash receptacles	3%
Trails need development	3%
Keep up the good work	2%
Other	2%
INTERPRETIVE SERVICES	
Like exhibits/visitor center	7%
More interpretive signage	7%
More tour/guide services	5%
Overview film/more information	5%
Want English only signs	4%
Other	1%
GENERAL	
Enjoyed visit	22%
Grateful to NPS	11%
Keep up the good work	5%

*total percentages do not equal 100 due to rounding

**total percentages do not equal 100 because visitors could select more than 1 answer

Literature Cited

- Dey, E. L. (1997). Working with low survey response rates: The efficacy of weighting adjustment. *Research in Higher Education*, 38(2): 215 – 227.
- Dillman, D. A., J. D. Smyth, & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design* (4th ed.). Hoboken, NJ: Wiley.
- Filion, F. L. (Winter 1975 – Winter 1976). Estimating bias due to non-response in mail surveys. *Public Opinion Quarterly*, 39(4): 482 – 492.
- Fowler, F. J. (1993). *Survey research methods* (2nd ed.). Newbury Park, CA: SAGE Publications.
- Office of Management and Budget (2006). *Standards and Guidelines for Statistical Surveys*. Retrieved from https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/statpolicy/standards_stat_surveys.pdf
- Rookey, B. D., Le, L., Littlejohn, M., & Dillman, D. A. (2012). Understanding the resilience of mail-back survey methods: An analysis of 20 years of change in response rates to national park surveys. *Social Science Research*, 41: 1404-1414.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. U.S.: John Wiley and Sons, Inc.
- Stoop, I. (2004). Surveying non-respondents. *Field methods*, 16 (1): 23.
- The American Association for Public Opinion Research. (2015). *Standard definitions: Final dispositions of case codes and outcome rates for surveys* (8th ed.). Retrieved from http://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions2015_8theditionwithchanges_April2015_logo.pdf

Appendix 1. The Questionnaire



Social Science Program
National Park Service
U.S. Department of the Interior

Monocacy National Battlefield

Visitor Study



2016

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United States Department of the Interior

NATIONAL PARK SERVICE
Monocacy National Battlefield
4632 Araby Church Road
Frederick, MD 21704



Summer, 2016

Dear National Park Visitor:

Thank you for participating in this study. Our goal is to learn about the expectations, opinions, and interests of visitors to the National Park System. This information will assist us in our efforts to better manage this park and to serve you.

This questionnaire is only being given to a select number of visitors, so your participation is very important. It should take about 20 minutes to complete after your visit.

When your visit is over, the adult in your group who will have the next birthday should complete this questionnaire. Seal it in the postage-paid envelope provided and drop it in any U.S. Postal Service mailbox.

If you have any questions, please contact the Social Science Program Chief, National Park Service, 1201 Oakridge Drive, Fort Collins, CO, 80525-5596; nps_nrss_social_science@nps.gov (email).

We appreciate your help.

Sincerely,

Andrew Banasik
Acting Superintendent

RETURN PROCEDURE

At the end of your visit:

1. Please have the adult in your group (at least 18 years old) who has the next birthday complete this questionnaire. That will help give us a statistically reliable sample.
2. For questions that use circles (O), please mark your answer by filling in the circle with **black or blue ink**. Please do not use pencil.

Like this: ●

Not like this:



3. Seal it in the postage-paid envelope provided.
4. Drop it in a U.S. Postal Service mailbox.

Paperwork Reduction and Privacy Act Statements: The Paperwork Reduction Act requires us to tell you why we are collecting this information, how we will use it, and whether or not you have to respond. This information will be used by the National Park Service as authorized by 16 USC 5931 §201. We will use this information to evaluate visitor services and facilities managed by the National Park Service. Your responses are voluntary and anonymous. Your name and address have been requested for follow-up purposes only. At the completion of this collection all names and personal information will be destroyed and in no way be connected with the results of this survey. A Federal agency may not conduct or sponsor and you are not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

Burden Estimate: We estimate that it will take an average of 20 minutes to complete this questionnaire. You may send comments concerning the burden estimates or any aspect of this information collection to the Social Science Program Chief, National Park Service, 1201 Oakridge Drive, Fort Collins, CO, 80525-5596; nps_nrss_social_science@nps.gov (email).

DIRECTIONS

Please have the adult in your group (at least 18 years old) having the next birthday complete this questionnaire.

In this questionnaire, your **personal group** is defined as you and anyone with whom you visited Monocacy National Battlefield on this trip, such as a spouse, family, friends, etc. This does not include the larger group that you might have traveled with, such as a school, church, scout, or tour group.

A **visit** is defined as the day in which you were contacted to complete this questionnaire. A **trip** is defined as the total extent of time away from your personal residence that could include multiple visits to Monocacy National Battlefield.

A. Trip Description

1. Including yourself, how many people were in your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey?

_____ Number of adults (18 years or older)

_____ Number of children (under 18 years)

2. What type of group were you with, during your visit to Monocacy National Battlefield on the day you were contacted for this survey? Please mark (●) **one.**

☐ Alone

☐ Friends

☐ Family

☐ Family and friends

☐ Other (Please specify) _____

3. Please indicate all of the forms of transportation you personally used to travel from your home to Monocacy National Battlefield, on this trip. Please mark (●) **all that apply**.

- ☐ Car, truck, or SUV (Number of people in vehicle, including you) _____
- ☐ Recreational vehicle or motorhome
- ☐ Airplane
- ☐ Tour bus or tour van
- ☐ City bus or subway
- ☐ Train or long-distance passenger bus
- ☐ Water-based transportation (Please mark (●) **all that apply**.)
 - ☐ Cruise ship
 - ☐ Ferry
 - ☐ Tour boat
 - ☐ Other water-based mode (Please specify) _____
- ☐ Bicycle
- ☐ Walk/hike
- ☐ Other (Please specify) _____

4. a) On this trip, were the signs directing your personal group to Monocacy National Battlefield adequate? Please mark (●) **one for each row**.

	Yes	No	Did not use
Interstate signs	☐	☐	☐
State highway signs	☐	☐	☐
Signs in local communities	☐	☐	☐
Battlefield Tour Route signs	☐	☐	☐

- b) If you answered **NO** for any of the above, please explain.

Interstate signs _____

State highway signs _____

Signs in local communities _____

Signs along Battlefield Tour Route _____

5. Approximately how many hours and miles from home did you travel one way to get to Monocacy National Battlefield on this trip?

_____ Number of hours

AND

_____ Number of miles

6. On how many days during this trip did you enter or re-enter Monocacy National Battlefield? If you were on a day trip and did not leave the park boundaries for the entire length of your stay, then answer 1 day.

_____ Number of days entering or re-entering Monocacy National Battlefield

OR

☐ Don't know/Not sure

7. On this trip, how much total time did you spend within Monocacy National Battlefield?

_____ Number of hours, if a day trip

_____ Number of days, if greater than 1 day

B. Trip Planning and Motivations

8. Prior to this trip, how did you obtain information about Monocacy National Battlefield? Please mark (●) **all that apply**.
- ☐ Did not obtain information prior to this visit
 - ☐ Previous visits
 - ☐ Friends/relatives/word of mouth
 - ☐ Inquiry to park via phone, mail, or email
 - ☐ Monocacy National Battlefield website (nps.gov/mono)
 - ☐ Other website (Please specify) _____
 - ☐ Local businesses (hotels, motels, restaurants, etc.)
 - ☐ Maps/brochures
 - ☐ Newspaper/magazine articles
 - ☐ Other units of the National Park System (NPS)
 - ☐ School class/program
 - ☐ Social media (such as Facebook, Twitter, etc.)
 - ☐ State welcome center/visitors bureau/chamber of commerce
 - ☐ Television/radio programs/DVDs
 - ☐ Travel guides/tour books (such as AAA, etc.)
 - ☐ Other (Please specify) _____
9. Did you have the information about Monocacy National Battlefield you needed on this trip? Please mark (●) **one**.
- ☐ Yes
 - ☐ No (Please specify information you needed but didn't have on this trip.)

10. How important to you was each of the following reasons for visiting Monocacy National Battlefield on this trip? Please mark (●) **one for each row**.

	Extremely Important	Very Important	Moderately Important	Slightly Important	Not at All Important
To visit a National Park Service site	☐	☐	☐	☐	☐
To spend time with friends/family	☐	☐	☐	☐	☐
To view wildlife or natural scenery	☐	☐	☐	☐	☐
To get physical exercise	☐	☐	☐	☐	☐
To relax	☐	☐	☐	☐	☐
To learn more about American history and culture	☐	☐	☐	☐	☐
To learn more about nature	☐	☐	☐	☐	☐
To attend a special event (Please specify)	☐	☐	☐	☐	☐

To hear the sounds of nature/quiet	☐	☐	☐	☐	☐
To experience solitude	☐	☐	☐	☐	☐
To be outdoors	☐	☐	☐	☐	☐
Other (Please specify)	☐	☐	☐	☐	☐

11. Of the reasons listed in Question 10, which was the most important reason for you to visit Monocacy National Battlefield on this trip?

C. Park Activities, Programs, and Services

12. On this trip, in which of the following activities did you personally participate within Monocacy National Battlefield? Please mark (●) **all that apply**.
- ☐ Viewing wildlife, natural features, scenery, wildflowers, etc.
 - ☐ Creative arts (photography/drawing/painting/writing)
 - ☐ Visiting a cultural or historic site
 - ☐ Nature study
 - ☐ Driving for pleasure
 - ☐ Walking/short hike (less than 1 hour)
 - ☐ Day hiking (1 hour or more)
 - ☐ Bicycling
 - ☐ Running/jogging
 - ☐ Fishing
 - ☐ Non-motorized water travel (rafting, kayaking, canoeing, tubing, etc.)
Please specify: _____
 - ☐ Visiting the museum
 - ☐ Family gathering/reunion
 - ☐ Picnicking
 - ☐ Foraging/collecting edibles (e.g., mushrooms, truffles)
 - ☐ Taking auto tour of battlefield
 - ☐ Other (Please specify) _____
13. Of the activities listed in Question 12, which was your primary activity during your visit to Monocacy National Battlefield on the day you were contacted for this survey?
- _____

OR

- ☐ I did not have a primary activity on this trip to Monocacy National Battlefield.

14. During this visit to Monocacy National Battlefield, which of the following sites did you and your group visit? Please mark (●) **all that apply**.
- ☐ Visitor Center/Museum
 - ☐ Thomas Farm
 - ☐ Thomas Farm Trail
 - ☐ Best Farm
 - ☐ Monuments
 - ☐ Gambrill Mill Farm
 - ☐ Gambrill Mill Trail
 - ☐ Monocacy River
 - ☐ Worthington Farm
 - ☐ Worthington Farm Trails
 - ☐ Other (Please specify) _____
15. On this trip, in which of the following programs and services did you personally participate within Monocacy National Battlefield? Please mark (●) **all that apply**.
- ☐ Attending a ranger-led activity, such as a tour or talk
 - ☐ Talking informally with a ranger
 - ☐ Viewing indoor exhibits
 - ☐ Attending a cultural demonstration or performance
 - ☐ Reading the park brochure or newspaper
 - ☐ Going to the Visitor Center
 - ☐ Watching movies or videos about the park
 - ☐ Participating with a child in your group in the Junior Ranger program
 - ☐ Obtaining National Park passport stamp
 - ☐ Listening to an audio tour or podcast
 - ☐ Using a smart phone app specific to Monocacy National Battlefield
 - ☐ Other (Please specify) _____

16. On this visit to Monocacy National Battlefield, did you learn anything from park staff, programs, and/or exhibits about American history, nature, and/or culture? Please mark (●) **one**.

☐ Yes (Please specify subjects you learned about.)

☐ No

17. If you were to visit Monocacy National Battlefield in the future, are there specific subjects you would like to learn about? Please mark (●) **one**.

☐ Yes (Please specify subjects you would like to learn about.)

☐ No

18. How important to you was it during your visit to Monocacy National Battlefield to use personal electronic devices to do each of the following, and how would you rate the quality of the service in Monocacy National Battlefield required to do each? For each item, please mark (●) **one for importance and one for quality of service needed.**

	IMPORTANCE					QUALITY OF SERVICE REQUIRED					
	Extremely Important	Very Important	Moderately Important	Slightly Important	Not at all Important	Very Good	Good	Average	Poor	No Service at All	Not Applicable
Make/receive cell phone call	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Send/receive text message	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Search the Internet	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Share pics/videos/audio via social media (Facebook, Twitter, etc.)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Download an NPS podcast	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other (Please specify)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

19. a) 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 Monocacy National Battlefield? Please mark (●) **one**.
- ☐ Yes
- ☐ No → **Go to Question 20**
- b) If **YES**, what activities, services, or facilities did the person(s) have difficulty participating in or accessing? Please be specific.

- c) Because of the physical condition, which specified difficulties did the person(s) have? Please mark (●) **all that apply**.
- ☐ Hearing (difficulty hearing ranger programs, bus drivers, audio-visual exhibits or programs, or information desk staff even with hearing aid)
 - ☐ Visual (difficulty in seeing exhibits, directional signs, visual aids that are part of programs even with prescribed glasses or due to blindness)
 - ☐ Mobility (difficulty in accessing facilities, services, or programs even with walking aid and/or wheelchairs)
 - ☐ Other (Please specify) _____

20. What did you like most about your visit to Monocacy National Battlefield?

21. What did you like least about your visit to Monocacy National Battlefield?

22. Did your visit to Monocacy National Battlefield, on this trip, meet your expectations? Please mark (●) **one**.

- ☐ Yes
- ☐ Not entirely (Please explain)

- ☐ Not at all (Please explain)

D. Park Management

23. To what extent do you agree or disagree with each of the following statements? Please mark (●) **one for each row**.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know / Not Sure
Monocacy National Battlefield is a safe place to visit	☐	☐	☐	☐	☐	☐
Monocacy National Battlefield is too crowded	☐	☐	☐	☐	☐	☐
Natural resources in Monocacy National Battlefield are in pristine condition	☐	☐	☐	☐	☐	☐
Vandalism and crime are not a problem in Monocacy National Battlefield	☐	☐	☐	☐	☐	☐
Monocacy National Battlefield is not accessible to persons with physical disabilities	☐	☐	☐	☐	☐	☐
Historical and cultural features in Monocacy National Battlefield are well maintained/preserved	☐	☐	☐	☐	☐	☐
Development of adjacent areas detracts from visitors' experiences at Monocacy National Battlefield	☐	☐	☐	☐	☐	☐

24. How would you rate the quality of the facilities, services, and recreational opportunities in Monocacy National Battlefield? Please mark (●) **one** for each row.

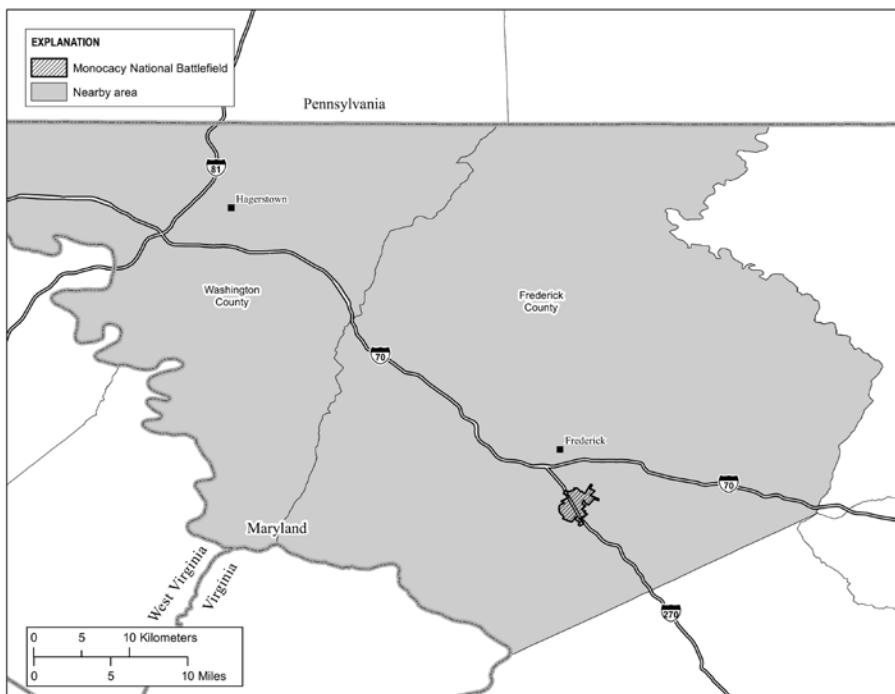
	Very Good	Good	Average	Poor	Very Poor	Not Used or Not Available
Park Facilities						
Visitor center	☐	☐	☐	☐	☐	☐
Exhibits (indoor and outdoor)	☐	☐	☐	☐	☐	☐
Restrooms	☐	☐	☐	☐	☐	☐
Walkways, trails, and roads	☐	☐	☐	☐	☐	☐
Campgrounds and/or picnic areas	☐	☐	☐	☐	☐	☐
Visitor Services						
Assistance from park employees	☐	☐	☐	☐	☐	☐
Park map or brochure	☐	☐	☐	☐	☐	☐
Ranger programs	☐	☐	☐	☐	☐	☐
Bookstore sales items (quality, variety and pricing)	☐	☐	☐	☐	☐	☐
Recreational Opportunities						
Learning about nature, history, or culture	☐	☐	☐	☐	☐	☐
Outdoor recreation (sightseeing, bicycling, boating, hiking, etc.)	☐	☐	☐	☐	☐	☐

25. Overall, how would you rate the quality of the facilities, services, and recreational opportunities in Monocacy National Battlefield? Please mark (●) **one**.
- ☐ Very good
 - ☐ Good
 - ☐ Average
 - ☐ Poor
 - ☐ Very poor

26. This park was established because of its significance to the nation. In your opinion, what is the national significance of this park?

E. Expenditures

Please refer to the map when answering the questions in this section.



27. Do you live within the nearby area (within the shaded area shown on the map)? Please mark (●) **one**.
- ☐ Yes
- ☐ No

28. a) On this trip to Monocacy National Battlefield and the nearby area, did you stay overnight away from your permanent residence within the nearby area (within the shaded area of the map on p.13)?

Please mark (●) **one**.

☐ Yes

☐ No → Go to Question 29

- b) If **YES**, please list the number of nights you stayed in Monocacy National Battlefield and/or in the nearby area (within the shaded area of the map on p.13) on this trip.

Accommodation	Number of Nights
Camping in the nearby area	_____
Lodging in the nearby area	_____
Other accommodations (e.g., friends/relatives)	_____

29. Was this trip to Monocacy National Battlefield? Please mark (●) **one**.
- ☐ Your primary or sole purpose of your trip away from home?
 - ☐ One of several equally important destinations on your trip away from home?
 - ➔ Was one or more of the other equally important destinations located within the nearby area (within the shaded area of the map on p.13)? Please mark (●) **one**.
 - ☐ Yes
 - ☐ No
 - ☐ Just an incidental or spur of the moment stop on your trip away from home?
 - ➔ Was your primary destination located within the nearby area (within the shaded area of the map on p.13)? Please mark (●) **one**.
 - ☐ Yes
 - ☐ No
30. Did you visit any other National Park Service sites on your trip away from home? Please mark (●) **one**.
- ☐ Yes (Please specify)

 - ☐ No
31. On this visit to Monocacy National Battlefield, what other places did you and your group visit? Please mark (●) **all that apply**.
- ☐ Gettysburg National Military Park, PA
 - ☐ Antietam National Battlefield, MD
 - ☐ Harpers Ferry National Historical Park, WV
 - ☐ Attractions in Washington, D.C.
 - ☐ Attractions in Baltimore, MD
 - ☐ National Museum of Civil War Medicine in Frederick, MD
 - ☐ Manassas National Battlefield Park, VA
 - ☐ Downtown Frederick, MD
 - ☐ Other (Please specify: _____)

32. a) Did you or anyone in your personal group purchase any package tours that included at least some meals, some lodging, and/or some transportation while on this trip?
- ☐ Yes
- ☐ No → **Go to Question 33**
- b) What was the total length of your package tour(s)? # _____ days
- c) What was the total cost per person for the package tour(s)?
- \$ _____ per person
- d) How many people in your personal group were on the package tour(s)?
- # _____ people
- e) Which of the following were included in the package tour(s) as part of your visit to Monocacy National Battlefield and the nearby area (within the shaded area of the map on p.13)? Please mark (●) **all that apply**.

	Items included in your package tour(s) as part of your visit to Monocacy National Battlefield and nearby area
Local air transportation	☐
Local ground transportation	☐
Local water transportation	☐
Local lodging	☐
Meals	☐
Guide services	☐
Fees (e.g., fishing licenses)	☐
Gear (e.g., camping equipment, bikes, kayaks)	☐
Admission to events or attractions	☐
Other (Please specify)	☐

33. Please estimate how much you and your personal group with whom you shared expenses (e.g., other family members, traveling companions) spent both inside Monocacy National Battlefield and within the nearby area (within the shaded area of the map on p.13) during your time in the nearby area. If you reported expenditures for package tours, please only include individual expenses that were NOT part of your package tour(s).

If you no longer have your receipts, estimate as closely as you can how much you and your group spent. Please enter 0 (zero) if you did not spend any money in a particular category.

Note: Residents living within the shaded area of the map should only include expenditures that were directly related to this trip to Monocacy National Battlefield.

Expenses	Amount spent in Monocacy National Battlefield and nearby area
Gas and oil (e.g., auto, RV, boat, etc.)	\$ _____
Rental cars	\$ _____
Taxis, shuttles, and public transportation	\$ _____
Restaurants and bars	\$ _____
Groceries and convenience foods	\$ _____
Hotels, motels, resorts	\$ _____
Specialty lodging (e.g., B&Bs, hostels, cabins, vacation rentals)	\$ _____
Camping fees (tent, RV)	\$ _____
Recreation and entertainment expenses (e.g., movies, bowling, miniature golf, etc.)	\$ _____
Souvenirs, clothing, supplies, other retail	\$ _____
Equipment rental	\$ _____
Guides and tour fees	\$ _____
Other (Please list) _____	\$ _____

OR

☐ Don't know/Not sure

34. For you and any members of your personal group with whom you shared expenses, please record any additional money spent outside of the map area during your trip away from home (for example, travel or food expenditures).

\$ _____

OR

☐ Don't know/Not sure

35. a) Including yourself, how many people in your personal group were covered by the expenses for this trip away from home?

_____ Number of adults (18 years or over)

_____ Number of children (under 18 years)

- b) Including yourself, how many people in your group split these trip expenses?

_____ Number of people

F. Background

36. For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide the following information. (If you don't know the answer, enter "DK.")

	Current Age	U.S. ZIP code or name of country other than U.S.	Number of visits to Monocacy National Battlefield in last 12 months, including this trip	Number of visits to other NPS sites in the last 12 months
Yourself				
Member #2				
Member #3				
Member #4				
Member #5				
Member #6				
Member #7				

37. For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide the following information. Please mark (●) **one for each group member, including yourself, for gender and Hispanic or Latino.** (If you don't know the answer, mark (●) "Don't know.")

Additional members of your personal group

	Yourself	#2	#3	#4	#5	#6	#7
Male	☐	☐	☐	☐	☐	☐	☐
Female	☐	☐	☐	☐	☐	☐	☐
Hispanic or Latino	☐	☐	☐	☐	☐	☐	☐
Not Hispanic or Latino	☐	☐	☐	☐	☐	☐	☐
Don't know	—	☐	☐	☐	☐	☐	☐

38. For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, please provide the following information. Please mark (●) **one or more for each group member, including yourself.** (If you don't know the answer, mark (●) "Don't know.")

	Yourself	#2	#3	#4	#5	#6	#7
American Indian or Alaska Native	☐	☐	☐	☐	☐	☐	☐
Asian	☐	☐	☐	☐	☐	☐	☐
Black or African American	☐	☐	☐	☐	☐	☐	☐
Native Hawaiian or other Pacific Islander	☐	☐	☐	☐	☐	☐	☐
White	☐	☐	☐	☐	☐	☐	☐
Don't know	—	☐	☐	☐	☐	☐	☐

39. For your personal group during your visit to Monocacy National Battlefield on the day you were contacted for this survey, what is the highest level of formal education completed by each member of your group? Please mark (●) **one for each group member, including yourself.** (If you don't know the answer, mark (●) "Don't know.")

	Yourself	#2	#3	#4	#5	#6	#7
Less than high school	☐	☐	☐	☐	☐	☐	☐
Some high school	☐	☐	☐	☐	☐	☐	☐
High school graduate or GED	☐	☐	☐	☐	☐	☐	☐
Some college, business, or trade school	☐	☐	☐	☐	☐	☐	☐
College, business, or trade school graduate	☐	☐	☐	☐	☐	☐	☐
Some graduate school	☐	☐	☐	☐	☐	☐	☐
Master's, doctoral, or professional degree	☐	☐	☐	☐	☐	☐	☐
Don't know	—	☐	☐	☐	☐	☐	☐

40. Which category best represents your annual household income? Please mark (●) **one**.

- ☐ Less than \$24,999
☐ \$25,000-\$34,999
☐ \$35,000-\$49,999
☐ \$50,000-\$74,999
☐ \$75,000-\$99,999
☐ \$100,000-\$149,999
☐ \$150,000-\$199,999
☐ \$200,000 or more
☐ Do not wish to answer

41. Including yourself, how many people are in your household?

_____ Number of people

42. When visiting an area such as Monocacy National Battlefield, what language do you personally prefer to use? Please mark (●) **one for speaking and one for reading**.

	Speaking	Reading
English	☐	☐
Spanish	☐	☐
Other (Please specify) _____	☐	☐

43. Is there anything else you would like to tell us about Monocacy National Battlefield's facilities, services, or recreational opportunities?

Thank you for your help!

**Please place the questionnaire in the
envelope provided and drop it in any U.S.
Postal Service mailbox.**

SURVEY ID NUMBER:

Appendix 2. The Thank You/Reminder Postcard

MONOCACY NATIONAL BATTLEFIELD



Dear Monocacy National Battlefield
Visitor,

About two weeks ago we contacted you to participate in a survey about your recent trip to Monocacy National Battlefield. If you are one of the many people who have already responded, thank you!

However, if you have not yet had the opportunity to complete the survey, please do so. A select number of people were contacted for this study, so your opinions are very important! Please complete and return the questionnaire booklet at your earliest convenience. If you have lost the survey, another one will be mailed to you in approximately two weeks.

A handwritten signature in cursive script, appearing to read "Andrew Banasik".

Andrew Banasik
Acting Superintendent
Monocacy National Battlefield



Appendix 3. The Replacement Mailing Cover Letter



UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
Monocacy National Battlefield
4632 Araby Church Road
Frederick, MD 21704



[Month] [Day], 2016

Dear [First Name] [Last Name],

The National Park Service would like to thank you for agreeing to participate in the Monocacy National Battlefield visitor study. As you are aware, we selected a small number of visitors to participate in this study; therefore, the return of each questionnaire is very important. The information you provide will help us better manage Monocacy National Battlefield, and better serve you, our visitor.

If you have already returned your questionnaire, we would like to thank you. However, if you have not, we are asking you to please return it by mail today. Since we have not received yours as of the date we mailed this letter, we have included a replacement questionnaire for your convenience.

If you have any questions regarding your questionnaire, please contact the Social Science Program Chief, National Park Service, 1201 Oakridge Drive, Fort Collins, CO, 80525-5596; nps_nrss_social_science@nps.gov (email).

Thank you for your help with this important study. Your opinions matter, and we appreciate you sharing them with us. They will help us improve the management of this park

Sincerely,

Andrew Banasik
Acting Superintendent
Monocacy National Battlefield

Appendix 4. Detailed Sampling Procedures

Site Schematics

As noted, the visitor survey was administered at four locations in Monocacy National Battlefield. A specific survey administration point was identified at each location, based on analysis of aerial site photos, onsite scoping, and recommendations from the Monocacy National Battlefield point of contact for this study. The survey administration point for each location was denoted with a yellow star in a site schematic provided to the survey administrator assigned to the site (Figure 99 through Figure 102). A red line was used in each site schematic to denote the boundary at which visitor groups traveling on foot or in vehicles were considered to have entered the survey area and were intercepted for the survey. A red arrow was used in each site schematic to denote the direction of travel in which visitor groups were intercepted.

Timed-Interval Sampling Procedures

At the Visitor Center, visitor groups were sampled using a timed-interval approach (i.e., attempt to sample one visitor group every N minutes of the sampling day, where N is the time interval); interval times were designed in advance of onsite administration to ensure that there was a sufficient number of questionnaires to administer to visitor groups during all hours of each sampling day and each day of the sampling period. The timed-interval approach involved having the survey administrator contact the first visitor group to enter the survey area at the start of the sampling period and asking them to participate in the survey. If the group agreed to participate, they were administered the survey; if the group refused to participate, they were asked to complete the non-response bias questions and then thanked for their time. After completing a contact with a refusal group, the survey administrator contacted the next visitor group to enter the survey area and asked them to participate in the survey. The survey administrator continued this process until a visitor group agreed to participate; once a participating group was administered the survey, the survey administrator waited until the start of the next time interval to contact a visitor group. At the start of the next time interval, the survey administrator contacted the first group to enter the survey area and asked them to participate in the survey. If the next time interval started before the survey administrator was able to recruit a visitor group to participate in the survey for the previous time interval, he/she advanced to the next time interval simply by contacting the next arriving visitor group; once a group agreed to participate, the survey administrator then waited until the start of the next time interval to continue. The survey administrator repeated this sequence of steps throughout the sampling period.

Other Sampling Procedures

At Gambrill Mill, Thomas Farm, and Worthington Farm, visitor use was too low for a timed-interval approach (i.e., visitor groups were not reliably present for contact at the start of each time interval). Thus, an attempt was made to contact all visitor groups who entered each of these survey locations; visitor groups at Gambrill Mill and Thomas Farm were contacted after they parked their vehicles in the parking lot, and visitor groups at Worthington Farm were contacted after they parked their vehicles in the parking lot or if they arrived to the sampling location on foot. The survey administrator contacted each visitor group to enter the survey area during the sampling period and

asked them to participate in the survey. Groups that agreed to participate were administered the survey and asked to complete the non-response bias questions; groups that refused to participate were asked to complete the non-response bias questions and then thanked for their time.



Figure 99. Visitor Center sampling location



Figure 100. Gambrill Mill sampling location



Figure 101. Thomas Farm sampling location

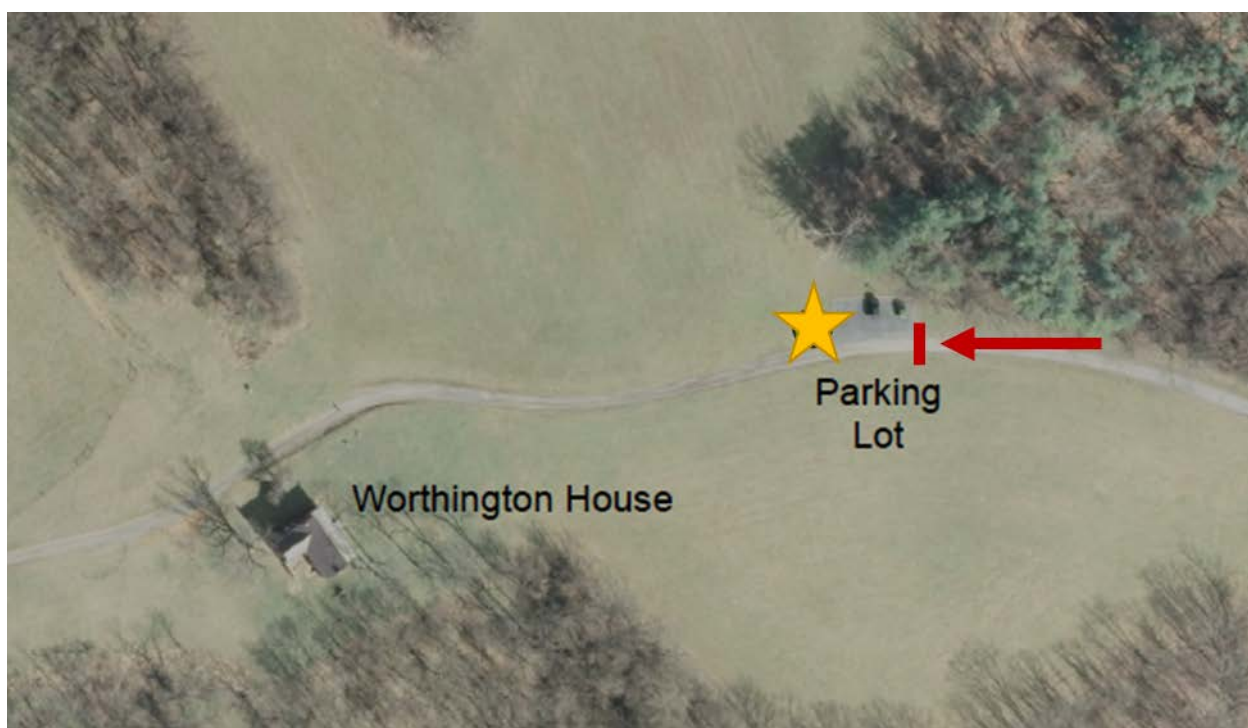


Figure 102. Worthington Farm sampling location

Appendix 5. Non-response Bias Analysis - Effects on Survey Responses due to Group Type and Visit Length

This study used answers to five, pre-selected non-response bias questions and one observable characteristic (initial contact gender) of contacted visitors to compare respondents with non-respondents and check for non-response bias. Results of a chi-square test for independence with $\alpha = 0.05$ and $p \leq 0.008$ (following Bonferroni correction) suggest that groups who responded to the survey do differ significantly from non-respondents, with respect to visitor group type ($\chi^2 = 15.052$; $p = 0.002$) and visit length ($\chi^2 = 20.326$; $p < 0.001$). In particular, groups who were families or visiting the park for two hours or more contacted for the survey were more likely than other group types or those visiting for one hour to respond to the survey.

The potential impact of this non-response bias on the results of the survey was further explored. Specifically, effects due to group type and visit length were examined for 71 key questions in the survey that were designed to assess use of information sources for trip planning, motivations for visiting Monocacy National Battlefield, participation in activities, programs, and services, attitudes toward park management, and satisfaction with park services and facilities (Table 49). A Bonferroni correction was applied to account for the fact that 71 simultaneous statistical tests were conducted with the same data set. The Bonferroni correction minimizes the likelihood of concluding from the results of the statistical tests that there are differences between respondents and non-respondents, when there actually are no differences (i.e., minimizes the probability of making a Type I error). With the Bonferroni correction applied in this analysis, statistical test results with p-values of less than 0.0007 are assumed to be statistically significant. Statistically significant effects of group type on survey responses were observed for only 3 of the 71 questions, and statistically significant effects of visit length on survey responses were observed for only 2 of the 71 questions that were assessed. Statistically significant effects are emphasized with bold text in Table 49 and Table 50.

Results of these statistical tests comparing respondents to non-respondents (i.e., non-response bias analysis) suggest that, for a small number of questions in the survey, the survey results may over-represent opinions, evaluations, or behaviors from visitor groups who are families or visiting the park for two hours or more. Where statistical differences were found between respondent subgroups, results by subgroup are reported in this appendix to document the effects of these differences (Figure 103 through Figure 107). The format of these figures is as follows:

1. The figure title describes the graph's information.
2. Listed below the graph, the "N" shows the number of individuals or visitor groups responding to the question for each group. The phrase **"CAUTION!"** is shown on the graph to indicate the results are unreliable due to low sample size ($N < 30$).

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

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

Table 49. Statistical tests of visitor group type effects on key questions in survey instrument administered

Question	Response scale	N	Chi-square; p-value
Prior to this trip, how did you obtain information about Monocacy National Battlefield? Please mark all that apply. (Q8)	0 = No 1 = Yes		
Did not obtain information prior to this visit		182	$\chi^2 = 3.781$; $p = 0.286$
Previous visits		182	$\chi^2 = 6.125$; $p = 0.106$
Friends/relatives/word of mouth		181	$\chi^2 = 13.116$; $p = 0.004$
Inquiry to park via phone, mail, or email		183	$\chi^2 = 2.111$; $p = 0.550$
Monocacy National Battlefield website		182	$\chi^2 = 0.422$; $p = 0.936$
Other website		183	$\chi^2 = 0.377$; $p = 0.945$
Local businesses (hotels, motels, restaurants, etc.)		183	$\chi^2 = 9.564$; $p = 0.023$
Maps/brochures		181	$\chi^2 = 5.808$; $p = 0.121$
Newspaper/magazine articles		181	$\chi^2 = 25.357$; $p < 0.0001$
Other units of the National Park System		183	$\chi^2 = 1.263$; $p = 0.738$
School class/program		183	$\chi^2 = 6.651$; $p = 0.084$
Social media (such as Facebook, Twitter, etc.)		182	$\chi^2 = 1.812$; $p = 0.612$
State welcome center/visitors bureau/chamber of commerce		183	$\chi^2 = 8.578$; $p = 0.035$
Television/radio programs/DVDs		182	$\chi^2 = 1.447$; $p = 0.694$
Travel guides/tour books (such as AAA, etc.)		182	$\chi^2 = 2.365$; $p = 0.500$
How important to you was each of the following reasons for visiting Monocacy National Battlefield on this trip? Please mark one for each row. (Q10)	1 = "Extremely important" to 5 = "Not at all important"		
To visit a National Park Service site		178	$\chi^2 = 22.948$; $p = 0.028$
To spend time with friends/family		171	$\chi^2 = 107.859$; $p < 0.0001$
To view wildlife or natural scenery		172	$\chi^2 = 18.830$; $p = 0.093$
To get physical exercise		175	$\chi^2 = 19.302$; $p = 0.081$

Question	Response scale	N	Chi-square; p-value
To relax		175	$\chi^2 = 16.137$; $p = 0.185$
To learn more about American history and culture		178	$\chi^2 = 10.887$; $p = 0.539$
To learn more about nature		175	$\chi^2 = 12.519$; $p = 0.405$
To attend a special event		155	$\chi^2 = 13.742$; $p = 0.317$
To hear the sounds of nature/quiet		177	$\chi^2 = 26.330$; $p = 0.010$
To experience solitude		174	$\chi^2 = 35.431$; $p < 0.0001$
To be outdoors		177	$\chi^2 = 21.831$; $p = 0.039$
On this trip, in which of the following activities did you personally participate within Monocacy National Battlefield? Please mark all that apply. (Q12)	0 = No 1 = Yes		
Viewing wildlife, natural features, scenery, wildflowers, etc.		178	$\chi^2 = 3.631$; $p = 0.304$
Creative arts (photography/drawing/painting/writing)		178	$\chi^2 = 4.511$; $p = 0.211$
Visiting a cultural or historic site		178	$\chi^2 = 4.113$; $p = 0.250$
Nature study		179	$\chi^2 = 1.639$; $p = 0.651$
Driving for pleasure		178	$\chi^2 = 2.820$; $p = 0.420$
Walking/short hike (less than 1 hour)		179	$\chi^2 = 3.620$; $p = 0.306$
Day hiking (1 hour or more)		179	$\chi^2 = 0.121$; $p = 0.989$
Bicycling		178	N/A
Running/jogging		178	$\chi^2 = 1.422$; $p = 0.700$
Fishing		179	$\chi^2 = 5.776$; $p = 0.123$
Non-motorized water travel (rafting, kayaking, canoeing, tubing, etc.)		178	$\chi^2 = 1.836$; $p = 0.607$
Visiting the museum		178	$\chi^2 = 11.549$; $p = 0.009$
Family gathering/reunion		178	$\chi^2 = 1.672$; $p = 0.643$
Picnicking		177	$\chi^2 = 0.957$; $p = 0.812$

Question	Response scale	N	Chi-square; p-value
Foraging/collecting edibles (e.g., mushrooms, truffles)		178	$\chi^2 = 1.836$; $p = 0.607$
Taking auto tour of battlefield		179	$\chi^2 = 10.830$; $p = 0.013$
During this visit to Monocacy National Battlefield, which of the following sites did you and your group visit? (Q14)	0 = No 1 = Yes		
Visitor Center/Museum		177	$\chi^2 = 12.252$; $p = 0.007$
Thomas Farm		178	$\chi^2 = 10.179$; $p = 0.017$
Thomas Farm Trail		176	$\chi^2 = 3.854$; $p = 0.278$
Best Farm		176	$\chi^2 = 10.872$; $p = 0.012$
Monuments		177	$\chi^2 = 3.328$; $p = 0.344$
Gambrill Mill Farm		176	$\chi^2 = 3.786$; $p = 0.285$
Gambrill Mill Trail		177	$\chi^2 = 2.606$; $p = 0.456$
Monacacy River		177	$\chi^2 = 2.046$; $p = 0.563$
Worthington Farm		176	$\chi^2 = 12.841$; $p = 0.005$
Worthington Farm Trails		177	$\chi^2 = 3.040$; $p = 0.386$
On this trip, in which of the following programs and services did you personally participate within Monocacy National Battlefield? (Q15)	0 = No 1 = Yes		
Attending a ranger-led activity, such as tour or talk		163	$\chi^2 = 7.812$; $p = 0.050$
Talking informally with a ranger		163	$\chi^2 = 9.117$; $p = 0.028$
Viewing indoor exhibits		163	$\chi^2 = 3.079$; $p = 0.380$
Attending a cultural demonstration or performance		163	$\chi^2 = 0.816$; $p = 0.846$
Reading the park brochure or newspaper		163	$\chi^2 = 1.484$; $p = 0.686$
Going to the Visitor Center		162	$\chi^2 = 7.184$; $p = 0.066$
Watching movies or videos about the park		163	$\chi^2 = 2.042$; $p = 0.564$

Question	Response scale	N	Chi-square; p-value
Participating with child in the Junior Ranger program		162	$\chi^2 = 8.100$; $p = 0.044$
Obtaining National Park passport stamp		162	$\chi^2 = 7.216$; $p = 0.065$
Listening to an audio tour or podcast		163	$\chi^2 = 6.129$; $p = 0.105$
Using a smart phone app specific to Monocacy National Battlefield		162	$\chi^2 = 4.523$; $p = 0.210$
To what extent do you agree or disagree with each of the following statements? Please mark one for each row. (Q23)	1 = "Strongly agree" to 5 = "Strongly disagree"		
Monocacy National Battlefield is a safe place to visit		183	$\chi^2 = 8.433$; $p = 0.491$
Monocacy National Battlefield is too crowded		184	$\chi^2 = 21.646$; $p = 0.494$
Natural resources in Monocacy National Battlefield are in pristine condition		183	$\chi^2 = 22.262$; $p = 0.101$
Vandalism and crime are not a problem in Monocacy National Battlefield		184	$\chi^2 = 15.624$; $p = 0.407$
Monocacy National Battlefield is not accessible to persons with physical disabilities		183	$\chi^2 = 32.023$; $p = 0.006$
Historical and cultural features in Monocacy National Battlefield are well maintained/preserved		185	$\chi^2 = 25.546$; $p = 0.043$
Development of adjacent areas detracts from visitors' experiences at Monocacy National Battlefield		183	$\chi^2 = 16.382$; $p = 0.357$
Overall, how would you rate the quality of the facilities, services, and recreational opportunities in Monocacy National Battlefield? (Q25)	1 = "Very good" to 5 = "Very poor"	174	$\chi^2 = 18.657$; $p = 0.028$

Table 50. Statistical tests of visitor visit length effects on key questions in survey instrument administered

Question	Response scale	N	Chi-square; p-value
Prior to this trip, how did you obtain information about Monocacy National Battlefield? Please mark all that apply. (Q8)	0 = No 1 = Yes		
Did not obtain information prior to this visit		182	$\chi^2 = 0.526$; $p = 0.769$
Previous visits		181	$\chi^2 = 2.377$; $p = 0.305$
Friends/relatives/word of mouth		181	$\chi^2 = 0.575$; $p = 0.750$
Inquiry to park via phone, mail, or email		182	$\chi^2 = 0.897$; $p = 0.639$
Monocacy National Battlefield website		182	$\chi^2 = 12.865$; $p = 0.002$
Other website		182	$\chi^2 = 1.774$; $p = 0.412$
Local businesses (hotels, motels, restaurants, etc.)		182	$\chi^2 = 0.599$; $p = 0.741$
Maps/brochures		182	$\chi^2 = 0.200$; $p = 0.905$
Newspaper/magazine articles		181	$\chi^2 = 0.681$; $p = 0.711$
Other units of the National Park System		182	$\chi^2 = 0.065$; $p = 0.968$
School class/program		182	$\chi^2 = 2.067$; $p = 0.356$
Social media (such as Facebook, Twitter, etc.)		182	$\chi^2 = 0.195$; $p = 0.907$
State welcome center/visitors bureau/chamber of commerce		182	$\chi^2 = 1.636$; $p = 0.441$
Television/radio programs/DVDs		181	$\chi^2 = 3.153$; $p = 0.207$
Travel guides/tour books (such as AAA, etc.)		182	$\chi^2 = 6.175$; $p = 0.046$
How important to you was each of the following reasons for visiting Monocacy National Battlefield on this trip? Please mark one for each row. (Q10)	1 = "Extremely important" to 5 = "Not at all important"		
To visit a National Park Service site		179	$\chi^2 = 8.283$; $p = 0.406$
To spend time with friends/family		174	$\chi^2 = 6.371$; $p = 0.606$
To view wildlife or natural scenery		172	$\chi^2 = 5.157$; $p = 0.741$
To get physical exercise		175	$\chi^2 = 12.187$; $p = 0.143$

Question	Response scale	N	Chi-square; p-value
To relax		176	$\chi^2 = 11.149$; $p = 0.193$
To learn more about American history and culture		177	$\chi^2 = 10.926$; $p = 0.206$
To learn more about nature		172	$\chi^2 = 5.691$; $p = 0.682$
To attend a special event		154	$\chi^2 = 7.102$; $p = 0.526$
To hear the sounds of nature/quiet		173	$\chi^2 = 18.477$; $p = 0.018$
To experience solitude		173	$\chi^2 = 11.435$; $p = 0.178$
To be outdoors		175	$\chi^2 = 19.647$; $p = 0.012$
On this trip, in which of the following activities did you personally participate within Monocacy National Battlefield? Please mark all that apply. (Q12)	0 = No 1 = Yes		
Viewing wildlife, natural features, scenery, wildflowers, etc.		178	$\chi^2 = 2.847$; $p = 0.241$
Creative arts (photography/drawing/painting/writing)		178	$\chi^2 = 2.794$; $p = 0.247$
Visiting a cultural or historic site		177	$\chi^2 = 1.881$; $p = 0.390$
Nature study		178	$\chi^2 = 1.344$; $p = 0.511$
Driving for pleasure		177	$\chi^2 = 2.482$; $p = 0.289$
Walking/short hike (less than 1 hour)		178	$\chi^2 = 0.923$; $p = 0.630$
Day hiking (1 hour or more)		178	$\chi^2 = 3.883$; $p = 0.144$
Bicycling		177	N/A
Running/jogging		178	$\chi^2 = 0.517$; $p = 0.772$
Fishing		178	$\chi^2 = 1.268$; $p = 0.531$
Non-motorized water travel (rafting, kayaking, canoeing, tubing, etc.)		178	$\chi^2 = 1.052$; $p = 0.591$
Visiting the museum		177	$\chi^2 = 3.977$; $p = 0.137$
Family gathering/reunion		178	$\chi^2 = 2.074$; $p = 0.355$
Picnicking		177	$\chi^2 = 1.638$; $p = 0.441$

Question	Response scale	N	Chi-square; p-value
Foraging/collecting edibles (e.g., mushrooms, truffles)		178	$\chi^2 = 1.052$; $p = 0.591$
Taking auto tour of battlefield		178	$\chi^2 = 14.529$; $p = 0.001$
During this visit to Monocacy National Battlefield, which of the following sites did you and your group visit? (Q14)	0 = No 1 = Yes		
Visitor Center/Museum		177	$\chi^2 = 6.063$; $p = 0.048$
Thomas Farm		178	$\chi^2 = 20.983$; $p < 0.001$
Thomas Farm Trail		176	$\chi^2 = 1.857$; $p = 0.395$
Best Farm		177	$\chi^2 = 8.634$; $p = 0.013$
Monuments		177	$\chi^2 = 13.565$; $p = 0.001$
Gambrill Mill Farm		178	$\chi^2 = 7.795$; $p = 0.020$
Gambrill Mill Trail		177	$\chi^2 = 9.802$; $p = 0.007$
Monacacy River		178	$\chi^2 = 13.713$; $p = 0.001$
Worthington Farm		178	$\chi^2 = 16.042$; $p < 0.001$
Worthington Farm Trails		175	$\chi^2 = 4.446$; $p = 0.108$
On this trip, in which of the following programs and services did you personally participate within Monocacy National Battlefield? (Q15)	0 = No 1 = Yes		
Attending a ranger-led activity, such as tour or talk		163	$\chi^2 = 2.264$; $p = 0.322$
Talking informally with a ranger		163	$\chi^2 = 3.620$; $p = 0.164$
Viewing indoor exhibits		163	$\chi^2 = 1.414$; $p = 0.493$
Attending a cultural demonstration or performance		163	$\chi^2 = 1.124$; $p = 0.570$
Reading the park brochure or newspaper		162	$\chi^2 = 13.063$; $p = 0.001$
Going to the Visitor Center		164	$\chi^2 = 3.557$; $p = 0.169$
Watching movies or videos about the park		162	$\chi^2 = 1.956$; $p = 0.376$

Question	Response scale	N	Chi-square; p-value
Participating with child in the Junior Ranger program		163	$\chi^2 = 11.878$; $p = 0.003$
Obtaining National Park passport stamp		163	$\chi^2 = 6.051$; $p = 0.049$
Listening to an audio tour or podcast		163	$\chi^2 = 4.479$; $p = 0.107$
Using a smart phone app specific to Monocacy National Battlefield		163	$\chi^2 = 3.190$; $p = 0.203$
To what extent do you agree or disagree with each of the following statements? Please mark one for each row. (Q23)	1 = "Strongly agree" to 5 = "Strongly disagree"		
Monocacy National Battlefield is a safe place to visit		182	$\chi^2 = 6.978$; $p = 0.323$
Monocacy National Battlefield is too crowded		184	$\chi^2 = 7.380$; $p = 0.689$
Natural resources in Monocacy National Battlefield are in pristine condition		184	$\chi^2 = 12.976$; $p = 0.225$
Vandalism and crime are not a problem in Monocacy National Battlefield		184	$\chi^2 = 3.527$; $p = 0.966$
Monocacy National Battlefield is not accessible to persons with physical disabilities		183	$\chi^2 = 10.960$; $p = 0.361$
Historical and cultural features in Monocacy National Battlefield are well maintained/preserved		185	$\chi^2 = 7.903$; $p = 0.638$
Development of adjacent areas detracts from visitors' experiences at Monocacy National Battlefield		182	$\chi^2 = 13.217$; $p = 0.212$
Overall, how would you rate the quality of the facilities, services, and recreational opportunities in Monocacy National Battlefield? (Q25)	1 = "Very good" to 5 = "Very poor"	172	$\chi^2 = 3.544$; $p = 0.738$

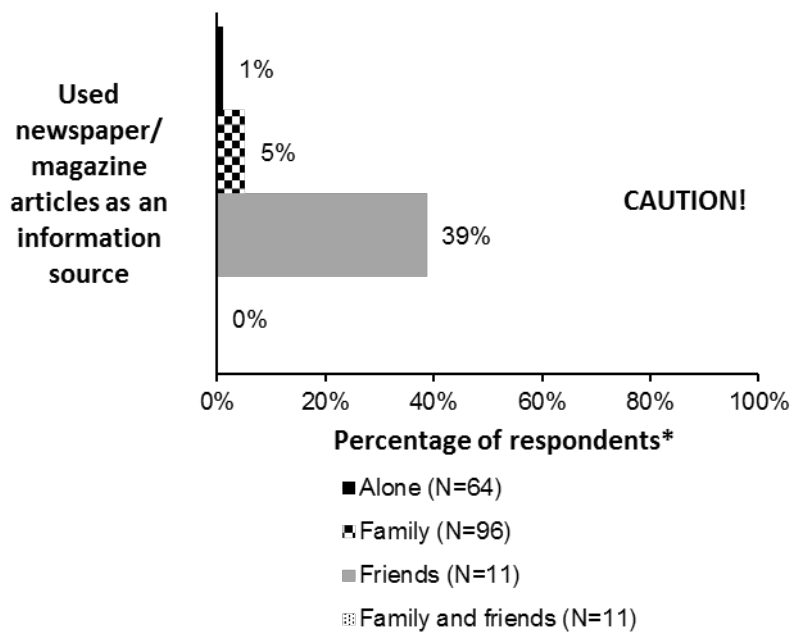


Figure 103. Visitor groups that obtained information about the park prior to visit using newspaper/magazine articles, by group type

*total percentages do not equal 100 due to rounding

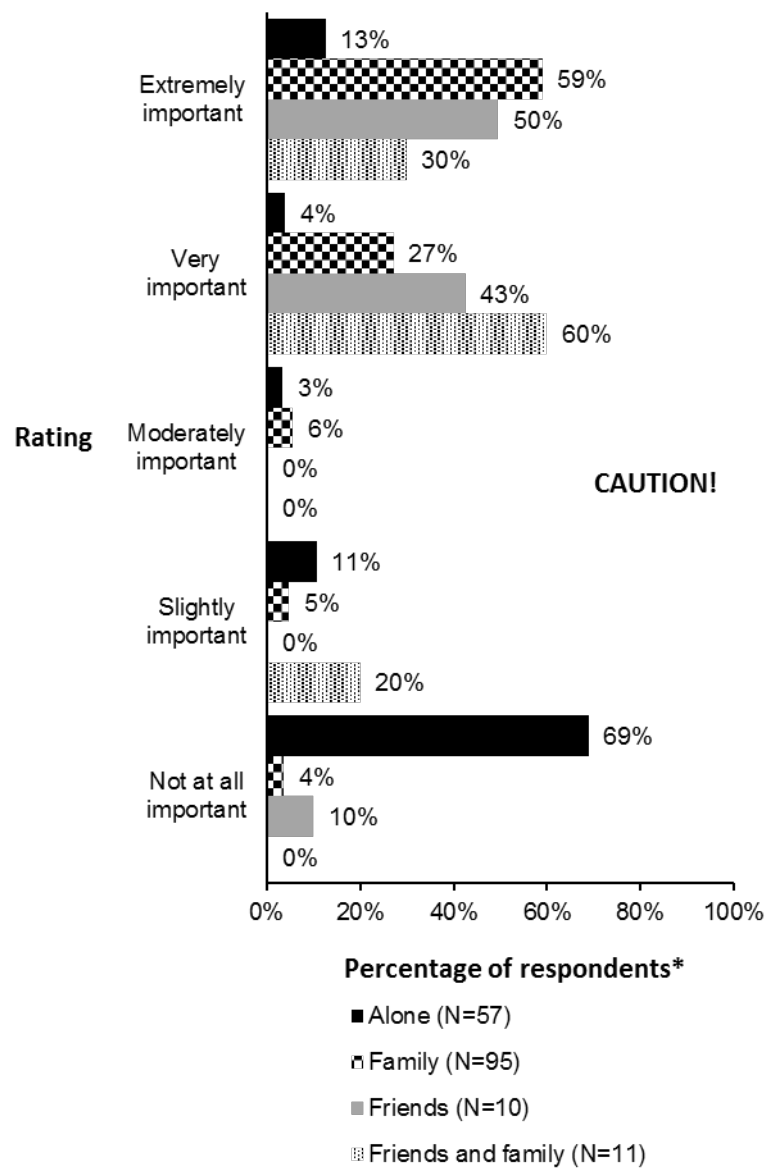


Figure 104. Importance of spending time with friends/family, by group type

*total percentages do not equal 100 due to rounding

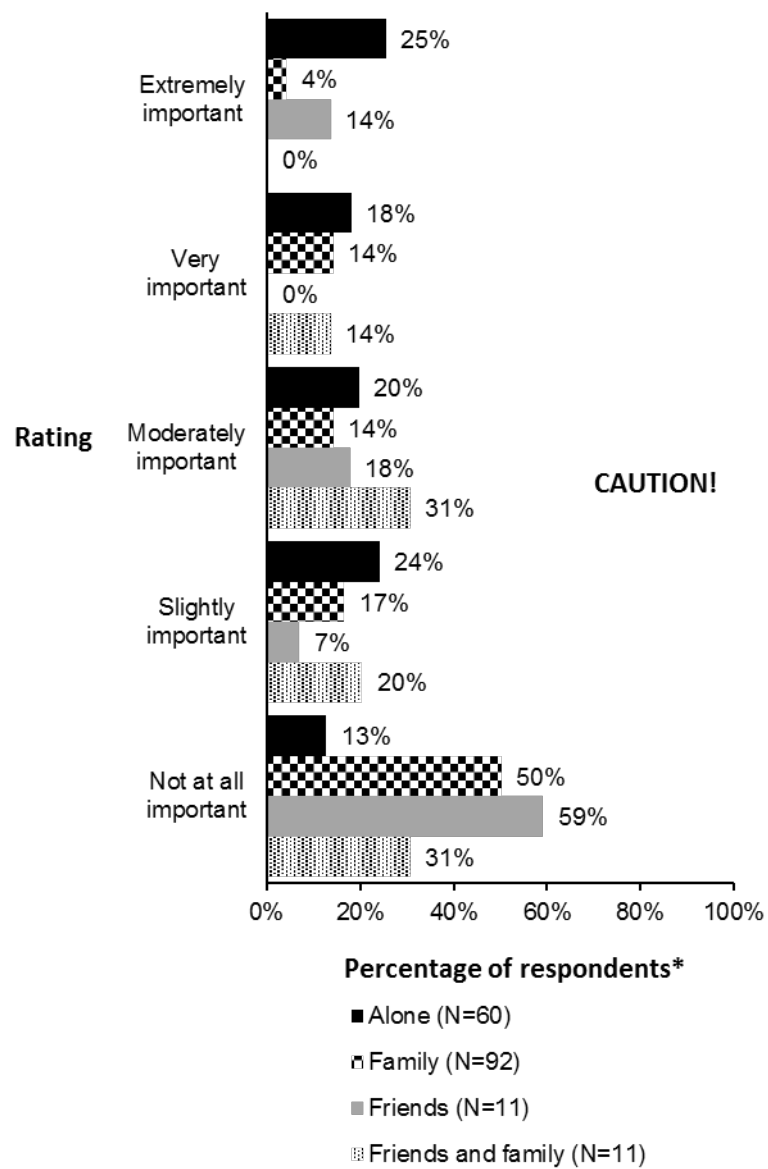


Figure 105. Importance of experiencing solitude, by group type

*total percentages do not equal 100 due to rounding

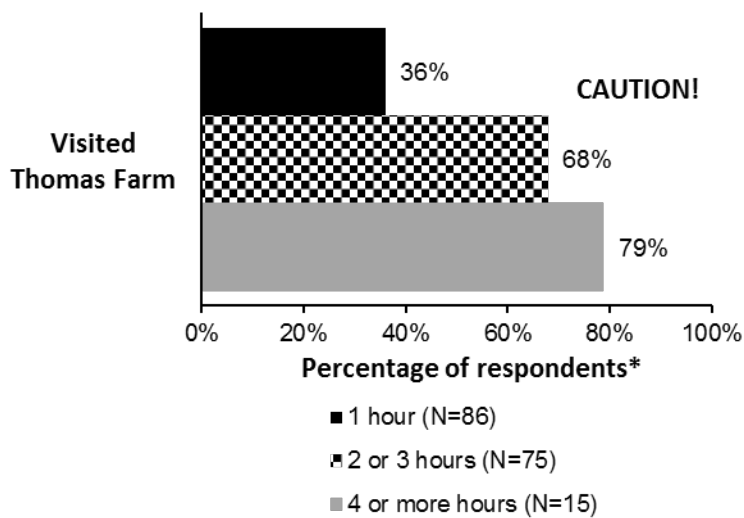


Figure 106. Visitor groups that visited Thomas Farm, by visit length

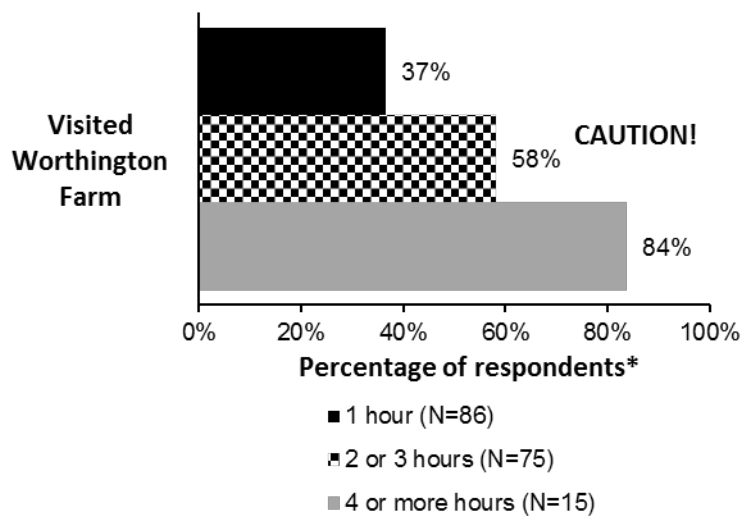


Figure 107. Visitor groups that visited Worthington Farm, by visit length

*total percentages do not equal 100 due to rounding

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