



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

Visitor Services Project



# **Minuteman Missile National Historic Site Visitor Study**

**Summer 2009**

**University of Idaho**  
A LEGACY OF LEADING

Park Studies Unit  
Visitor Services Project  
Report 211



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Report 211**

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**Visitor Services Project  
Minuteman Missile National Historic Site  
Report Summary**

- This report describes the results of a visitor study at Minuteman Missile National Historic Site (NHS) during June 15-23, 2009. A total of 340 questionnaires were distributed to visitor groups. Of those, 249 questionnaires were returned, resulting in a 73.2% response rate.
  - This report profiles a systematic random sample of Minuteman Missile NHS visitors. Most results are presented in graphs and frequency tables. Summaries of visitor comments are included in the report and complete comments are included in the Visitor Comments Appendix.
  - Forty-two percent of visitor groups were in groups of two and 39% were in groups of four or more. Eighty-five percent of visitor groups were in family groups.
  - United States visitors comprised 97% of total visitors during the survey period, with 13% from Minnesota, 11% from Wisconsin, and smaller proportions from 39 other states and Washington, D.C. International visitors were from six countries and comprised 3% of total visitors, with 45% from Canada and 20% from Sweden. Smaller proportions came from four other countries.
  - Fifty-four percent of visitors were ages 36-65 years, 9% were over 65 years, and 25% were ages 15 years or younger. Sixty percent of respondents were male. Two percent of visitors were Hispanic or Latino. Ninety-seven percent of visitors were White. Thirty-six percent had a bachelor's degree and 35% had a graduate degree. Two percent of visitor groups reported physical conditions that made it difficult to access or participate in park activities or services.
  - Twenty-two percent of visitors had an annual income of \$75,000 to \$99,999, 20% had an income between \$50,000 and \$74,999, and 19% had an income of \$100,000 to \$145,000. Forty-one percent of visitors had two members in their household, while 26% had four members.
  - The most commonly used language for communication within visitor groups was English (98%).
  - Ninety-eight percent of visitors were visiting the park for the first time since 2004. Sixty-three percent entered the park once during this visit. Ninety-seven percent of visitors used one vehicle to arrive at the park.
  - Three percent of visitor groups were residents of South Dakota. For 56% of visitor groups, Minuteman Missile NHS was one of several destinations in South Dakota. For 74%, visiting other attractions in the area was the primary reason for visiting the Minuteman Missile NHS area. For 47%, an interest in Cold War history was the primary reason for visiting the park.
  - Of those visitor groups (55%) who stayed overnight in the area, within 30 miles of the visitor center, 49% spent one night and 26% spent three or more nights. Fifty-nine percent stayed in lodges, hotels, motels, cabins, B&B, etc. and 27% were RV/trailer camping.
  - Thirty-one percent of visitor groups spent one hour visiting the park and 30% spent two or more hours. Four percent of visitor groups visited the park on more than one day.
  - Most visitor groups (82%) obtained information about the park prior to their visit and 77% received the information they needed. Prior to this visit, visitor groups most often obtained information about Minuteman Missile NHS through the park website (46%) and travel guides/tour books (35%). Sixty-seven percent indicated they would prefer to obtain information for a future visit from the park website, while 35% would use travel guides/tour books.
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- The most common site that visitors visited at Minuteman Missile NHS was the visitor center (94%). Ninety-eight percent of visitor groups visited other national park sites in the area. The most common destinations were Badlands National Park (93%) and Mount Rushmore National Memorial (89%).
- The most common visitor activities were viewing visitor center exhibits (77%) and watching the park video/film (42%). The primary activities were ranger-led tours (35%) and viewing visitor center exhibits (20%).
- Forty-one percent of visitor groups attended a ranger-led tour, and 87% thought the length of the tour was about right. Sixty-two percent were interested in taking a tour between 9-11 am.
- Regarding what they learned during their park visit, 87% of visitor groups learned about missile history and 61% learned about nuclear weapons and the arms race. On a future visit, visitor groups indicated they would be interested in learning about personal stories related to missile field personnel (59%) and system technology and engineering (59%).
- The visitor services and facilities most commonly used by visitor groups were parking (83%) and indoor exhibits (82%). The service receiving the highest importance rating was ranger-led tours (96%, N=89). The service receiving the highest quality rating was ranger-led tours (100%, N=86).
- The average group expenditure in the park and the surrounding area (within 30 miles of the park) was \$316, with a median (50% spent more and 50% spent less) of \$133. The average total expenditure per person was \$119. Seventy-three percent had two adults covered by expenditures and 24% had two children covered by expenditures while 52% had no children covered by expenditures.
- Fifty-three percent of visitor groups would be likely to visit the park in the future. Ninety-five percent were interested in learning about cultural and natural history features of the park on a future visit. The most common preferred methods of learning about park features were ranger-led tours/programs (78%) and indoor exhibits (62%). Fifty-five percent of visitor groups werewilling to pay a fee to use the shuttle to visit park sites.
- Most visitor groups (68%) rated the overall quality of services, facilities, and recreational opportunities at Minuteman Missile NHS as “very good” or “good.” Nine percent of visitor groups rated the overall quality as “very poor” or “poor.”

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## INTRODUCTION

This report describes the results of a visitor study at Minuteman Missile National Historic Site (NHS), conducted June 15-23, 2009 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Park Studies Unit (PSU) at the University of Idaho.

“Dispersed across the rolling high plains of Western South Dakota during the Cold War were one hundred and fifty Minuteman Missiles. These missiles held warheads which could have been used in a devastating counter strike against the Soviet Union in the event of a nuclear war. Minuteman missiles held the power to destroy civilization. Yet the same destructive force acted as a nuclear deterrent, which kept the peace for three decades. At Minuteman Missile it is possible to learn how nuclear war came to haunt the world.” (Minuteman Missile National Historic Park, National Park Service, Department of the Interior website <http://www.nps.gov/mimi>, October, 2009)

### **Organization of the report**

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The report is organized into three sections.

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

Section 2: **Results**. This section provides summary information for each question in the questionnaire and includes a summary of visitor comments. The presentation of the results of this study does not follow the order of questions in the questionnaire.

Section 3: **Appendices**

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

Appendix 2: *Additional Analysis*. A list of options for cross-references and cross comparisons. These comparisons can be analyzed within park or between parks. Results of additional analyses are not included in this report as they may only be requested after the results of this study have been published.

Appendix 3: *Decision rules for checking non-response bias*. An explanation of how the non-response bias was determined.

Appendix 4: *Visitor Services Project Publications*. A complete list of publications by the PSU. Copies of these reports can be obtained by contacting the PSU office at (208) 885-7863 or by visiting the website: <http://www.psu.uidaho.edu/vsp/reports.htm>.

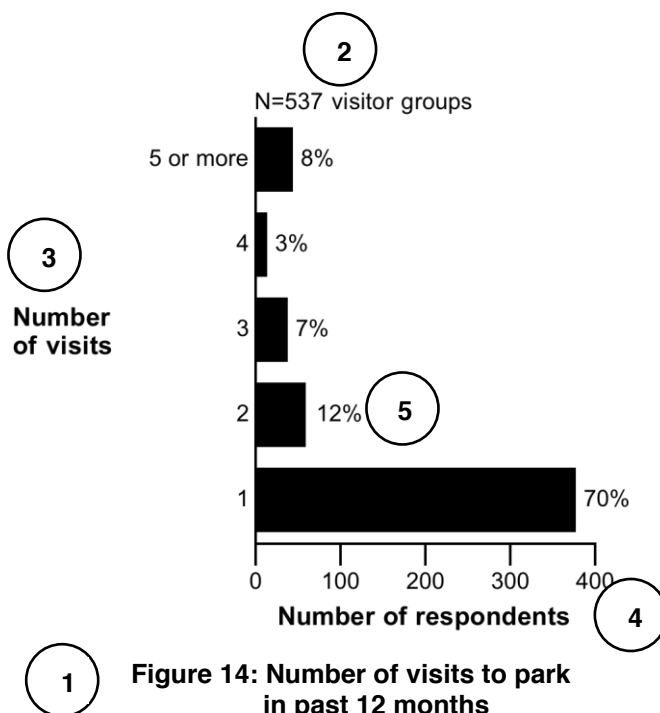
Visitor Comments Appendix: A separate appendix provides visitor responses to open-ended questions. It is bound separately from this report due to its size.

## 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 the question. If “N” is less than 30, “**CAUTION!**” is shown on the graph to indicate the results may be unreliable.
  - \* 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 describes the response categories.
- 4: Horizontal information shows the number or proportions of responses in each category.
- 5: In most graphs, percentages provide additional information.





## METHODS

### Survey Design

#### Sample size and sampling plan

All VSP questionnaires follow design principles outlined in Don A. Dillman's book *Mail and Internet Surveys: The Tailored Design Method* (2007). Using this methodology, the sample size was calculated based on the park visitation statistics of previous years.

Brief interviews were conducted with a systematic, random sample of visitor groups that arrived at selected locations in Minuteman Missile NHS during June 15-23, 2009. Questionnaires were distributed at the visitor center. On June 18, questionnaires were also distributed at Delta-01, where there was an Open House. Table 1 shows the two locations, the number of questionnaires distributed at each location, and the response rate for each location. Visitors were surveyed between the hours of 8 a.m. and 5 p.m. During this survey, 372 visitor groups were contacted and 340 of these groups (91.4%) accepted questionnaires (average acceptance rate for 205 VSP visitor studies is 90.9%). Questionnaires were completed and returned by 249 visitor groups resulting in a 73.2% response rate for this study. The average response rate for the 205 VSP visitor studies conducted from 1988 through 2008 was 74.2%.

**Table 1: Questionnaire distribution**  
 $N_1$ =number of questionnaires distributed  
 $N_2$ =number of questionnaires returned

Sampling site	Distributed		Returned	
	$N_1$	%	$N_2$	%
Visitor center	298	12	213	14
Delta-01 (Open House)	42	88	36	86
Total	340	100	249	100

#### Questionnaire design

The Minuteman Missile NHS questionnaire was developed at a workshop held with park staff to design and prioritize the questions. Some of the questions were comparable with VSP studies conducted at other parks, while others were customized for Minuteman Missile NHS. Many questions asked visitors to choose answers from a list of responses, often with an open-ended option, while others were completely open-ended.

No pilot study was conducted to test the Minuteman Missile NHS questionnaire. However, all questions followed Office of Management and Budget (OMB) guidelines and/or were used in previous surveys. Thus, the clarity and consistency of the survey instrument have been tested and supported.

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## Survey procedure

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Visitor groups were greeted, briefly introduced to the purpose of the study, and asked to participate. If visitors agreed, they were asked which member (at least 16 years old) had the next birthday. The individual with the next birthday was selected to complete the questionnaire for the group. An interview, lasting approximately two minutes, was conducted with that person to determine group size, group type, and the age of the member completing the questionnaire. These individuals were asked for their names, addresses, and telephone numbers or email addresses in order to mail them a reminder/thank-you postcard and follow-ups. Visitors were asked to complete the survey after their visit, and return the questionnaire by mail. The questionnaires were pre-addressed and affixed with a U.S. first class postage stamp.

Two weeks following the survey, a reminder/thank you postcard was mailed to all participants who provided a valid mailing address (see Table 2). Replacement questionnaires were mailed to participants who had not returned their questionnaires four weeks after the survey. Seven weeks after the survey, a second round of replacement questionnaires was mailed to visitors who had not returned their questionnaires.

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**Table 2: Follow-up mailing distribution**

Mailing waive	Date	U.S.	International	Total
Postcards	9 July 2009	319	10	329
1 <sup>st</sup> Replacement	23 July 2009	154	4	158
2 <sup>nd</sup> Replacement	12 August 2009	109	0	109

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<h2>Data Analysis</h2>
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Returned questionnaires were coded and the visitor responses were processed using custom and standard statistical software applications—Statistical Analysis Software (SAS)®, and a custom designed FileMaker Pro® application. Descriptive statistics and cross-tabulations were calculated for the coded data and responses to open-ended questions were categorized and summarized. Double-key data entry validation was performed on numeric and text entry variables and the remaining checkbox (bubble) variables were read by optical mark recognition (OMR) software.

### **Limitations**

Like all surveys, this study has limitations that should be considered when interpreting the results.

1. This was a self-administered survey. Respondents completed the questionnaire after the visit, which may have resulted in poor recall. Thus, it is not possible to know whether visitor responses reflected actual behavior.
2. The data reflect visitor use patterns to the selected sites during the study period of June 15-23, 2009. The results present a 'snapshot-in-time' and do not necessarily apply to visitors 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. Occasionally, there may be inconsistencies in the results. Inconsistencies arise from missing data or incorrect answers (due to misunderstood directions, carelessness, or poor recall of information). Therefore, refer to both the percentage and N (number of individuals or visitor groups) when interpreting the results.

### **Special Conditions**

The weather during the survey period ranged from warm and overcast to sunny and hot. Temperatures varied from 60's to 90's. On some days there were light breezes with winds up to 11 mph.

### Checking Non-response Bias

Four variables were used to check non-response bias: respondents' age, travel distance from home to the park, overall quality rating score, and level of education. There were no significant differences between early and late responders in any of these variables (see Tables 3 and 4). Non-response bias is thus judged to be insignificant. See Appendix 3 for more details of the non-response bias checking procedures.

**Table 3: Comparison of respondents at different mailing waves**

Variable	Before 1 <sup>st</sup> replacement	Between 1 <sup>st</sup> and 2 <sup>nd</sup> replacement	After 2 <sup>nd</sup> replacement	p-value (ANOVA)
Age (years)	50.17	49.02	50.13	0.839
Travel distance to park (miles)	875	835	695	0.117
Overall quality rating (from 1 to 5 scale)	3.86	3.88	3.57	0.407

**Table 4: Comparison of respondents at different mailing waves**  
(number of respondents)

Education level	Before 1 <sup>st</sup> replacement	Between 1 <sup>st</sup> and 2 <sup>nd</sup> replacement	After 2 <sup>nd</sup> replacement	
Some high school	1	0	0	
High school diploma/GED	8	5	3	
Some college	33	14	5	
Bachelor's degree	67	16	6	
Graduate degree	63	16	6	
p-value (chi-square)				0.447

## RESULTS

### Group and Visitor Characteristics

#### Visitor group size

##### Question 18b

On this visit, how many people were in your personal group, including yourself?

##### Results

- 42% of visitors were in groups of two (see Figure 1).
- 39% were in groups of four or more.
- 13% were in groups of three.
- 6% were in groups of one.

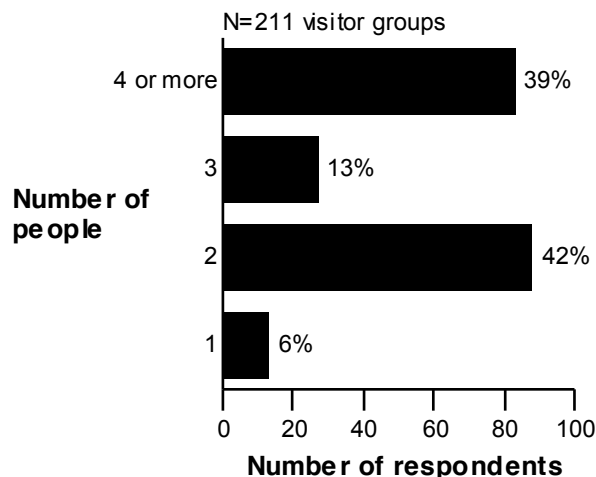


Figure 1: Visitor group size

#### Visitor group type

##### Question 18a

On this visit, which type of personal group (not commercial guided tour/school/other organized group) were you with?

##### Results

- 85% of visitor groups were made up of family members (see Figure 2).
- 6% were alone.
- There were no visitors with “other” groups.

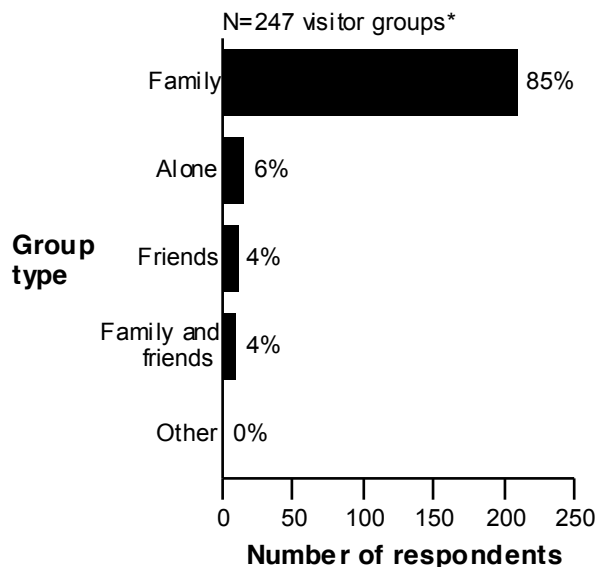


Figure 2: Visitor group type

\*total percentages do not equal 100 due to rounding

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

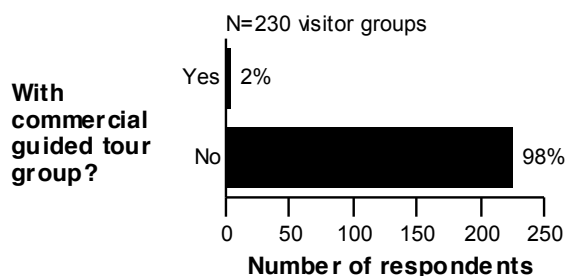
## Visitors with organized groups

### Question 17a

On this visit, were you and your personal group part of a commercial guided tour group?

#### Results

- 2% of visitor groups were part of a commercial guided tour group (see Figure 3).



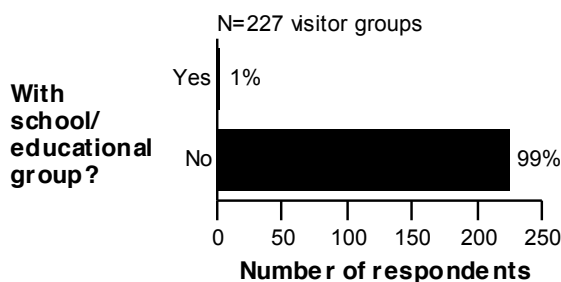
**Figure 3: Visitors with a commercial guided tour group**

### Question 17b

On this visit, were you and your personal group part of a school/educational group?

#### Results

- 1% of visitor groups were part of a school/educational group (see Figure 4).



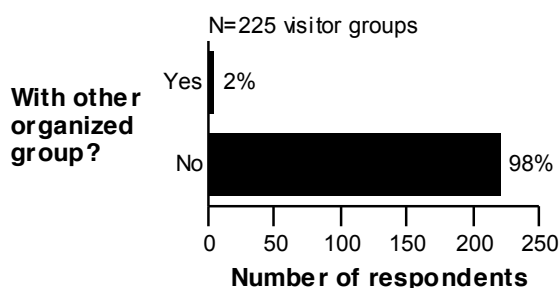
**Figure 4: Visitors with a school/educational group**

### Question 17c

On this visit, were you and your personal group part of an "other" organized group (scouts, work, church)?

#### Results

- 2% of visitor groups were traveling with an "other" organized group (see Figure 5).



**Figure 5: Visitors with an "other" organized group**

\*total percentages do not equal 100 due to rounding

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

## Question 17d

If you were with one of these organized groups, how many people, including yourself, were in this group?

Results – Interpret results with **CAUTION!**

- Not enough visitor groups responded to this question to provide reliable data (see Figure 6).

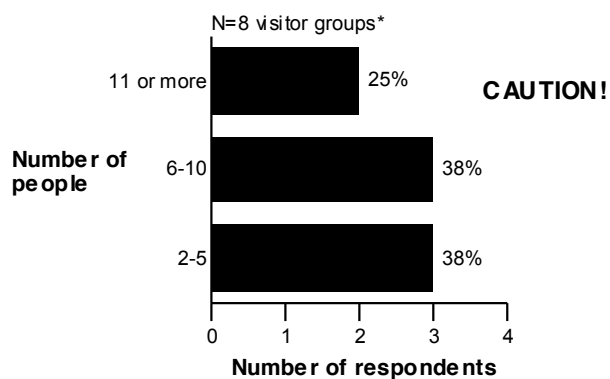


Figure 6: Organized group size

\*total percentages do not equal 100 due to rounding

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

## United States visitors by state of residence

Question 24b

For you and your personal group on this visit, what is your state of residence?

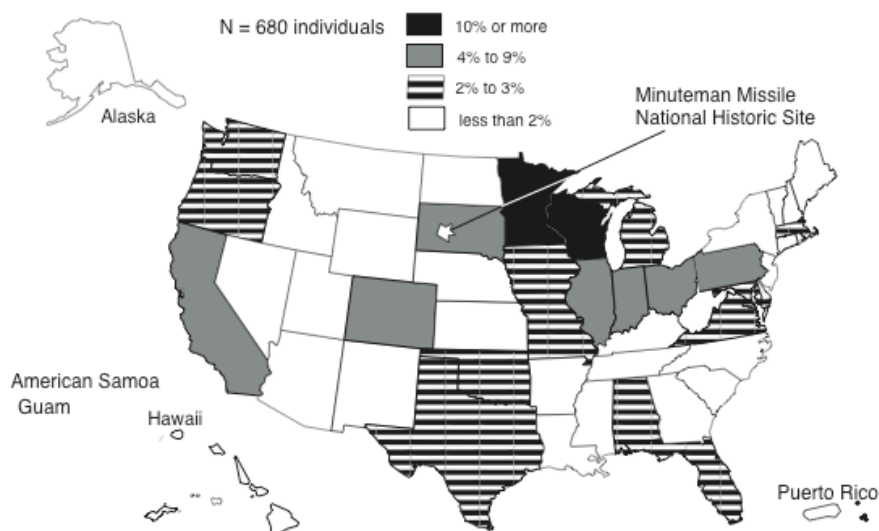
Note: Response was limited to seven members from each visitor group.

### Results

- U.S. visitors were from 41 states and Washington, D.C. and comprised 97% of total visitors to the park during the survey period.
- 13% of U.S. visitors came from Minnesota (see Table 5 and Map 1).
- Smaller proportions of U.S. visitors came from 40 other states and Washington, D.C.

**Table 5: United States visitors by state of residence\***

State	Number of visitors	Percent of U.S. visitors N=680 individuals	Percent of total visitors N=700 individuals
Minnesota	91	13	13
Wisconsin	73	11	10
California	39	6	6
Ohio	33	5	5
Indiana	32	5	5
Colorado	30	4	4
Illinois	28	4	4
Pennsylvania	24	4	3
South Dakota	24	4	3
Michigan	23	3	3
Florida	22	3	3
Oklahoma	21	3	3
Washington	21	3	3
Missouri	20	3	3
Texas	20	3	3
Iowa	18	3	3
Oregon	16	2	2
Alabama	15	2	2
Maryland	14	2	2
Virginia	13	2	2
Massachusetts	11	2	2
20 other states and Washington, D.C.	92	14	13



**Map 1: Proportions of United States 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 one answer



## International visitors by country of residence

Question 24b

For you and your personal group on this visit, what is your country of residence?

Note: Response was limited to seven members from each visitor group.

Results – **CAUTION!**

- International visitors were from 6 countries and comprised 3% of total visitation to the park during the survey period (see Table 6).

**Table 6: International visitors by country of residence \***  
**CAUTION!**

Country	Number of visitors	Percent of international visitors N=20 individuals	Percent of total visitors N=700 individuals
Canada	9	45	1
Sweden	4	20	1
Norway	3	15	<1
Switzerland	2	10	<1
Lithuania	1	5	<1
United Kingdom	1	5	<1

\*total percentages do not equal 100 due to rounding

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

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## Number of visits to the park

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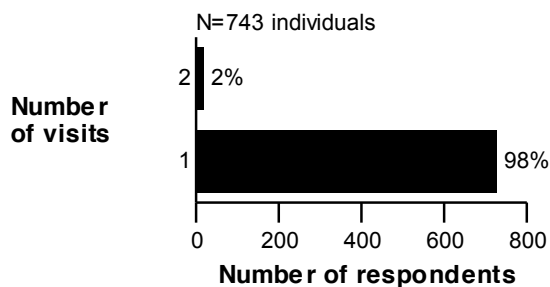
### Question 24c

For you and your personal group on this visit, how many times have you visited Minuteman Missile NHS since 2004 (including this visit)?

Note: Response was limited to seven members from each visitor group.

### Results

- 98% of visitors were visiting the park for the first time since 2004 (see Figure 7).
- 2% had visited two times.



**Figure 7: Number of visits to park since 2004**

\*total percentages do not equal 100 due to rounding

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

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## Visitor age

### Question 24a

For you and your personal group on this visit, what is your current age?

Note: Response was limited to seven members from each visitor group.

### Results

- Visitor ages ranged from 1 to 84 years.
- 54% of visitors were in the 36-65 years age group (see Figure 8).
- 25% were 15 years or younger.
- 9% were 66 or older.

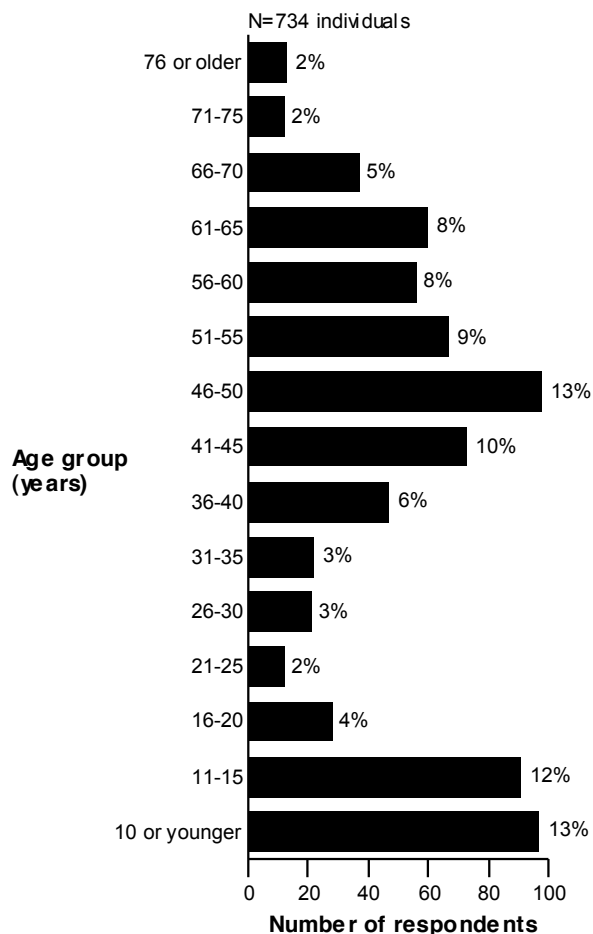


Figure 8: Visitor age

## Respondent's gender

### Question 19

For you only, what is your gender?

### Results

- 60% of respondents were male (see Figure 9).
- 40% were female.

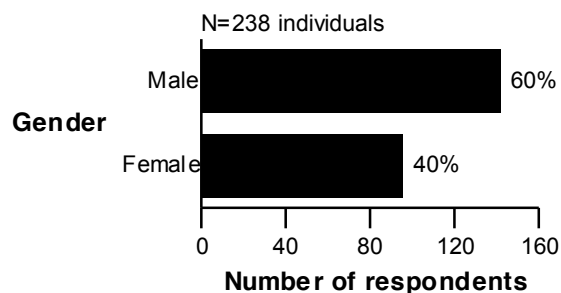


Figure 9: Respondent gender

\*total percentages do not equal 100 due to rounding

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

## Visitor ethnicity

### Question 23a

Are you or members of your group  
Hispanic or Latino?

Note: Response was limited to seven  
members from each visitor group.

### Results

- 2% of visitors were Hispanic or Latino (see Figure 10).

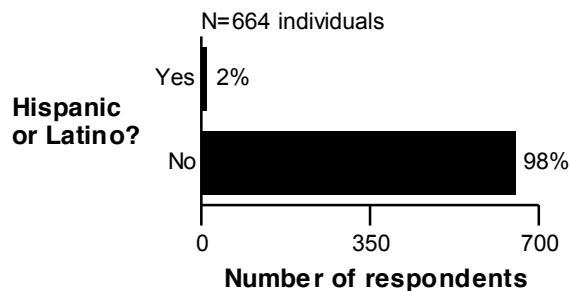


Figure 10: Visitor ethnicity

## Visitor race

### Question 23b

What is your race? What is the race of  
each member of your personal group?

Note: Response was limited to seven  
members from each visitor group.

### Results

- 97% of visitors were White (see Figure 11).
- 3% were Asian.

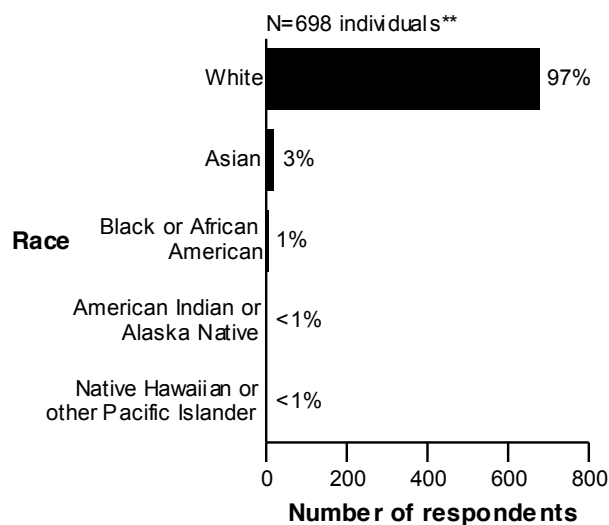


Figure 11: Visitor race

\*total percentages do not equal 100 due to rounding

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

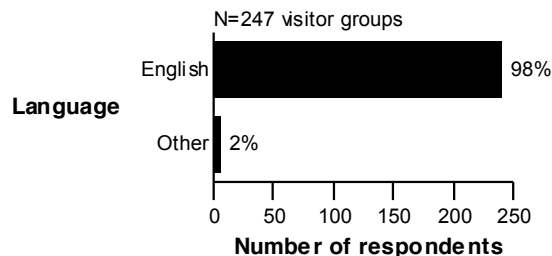
## Language used for communicating

### Question 25a

Which one language do you and members of your personal group primarily use to communicate with each other?

### Results

- 98% of visitor groups reported English as their preferred language to communicate with each other (see Figure 12).
- Table 7 shows the other languages (2%) used for communication within the group. Interpret results with **CAUTION!**



**Figure 12: Language used for communication**

**Table 7: Languages used to communicate within group\***  
N=6 visitor groups – **CAUTION!**

Language	N	Percentage
Chinese	1	17
German	1	17
Lithuanian	1	17
Norwegian	1	17
Spanish	1	17
Swedish	1	17

\*total percentages do not equal 100 due to rounding

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

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## Language used for speaking and reading

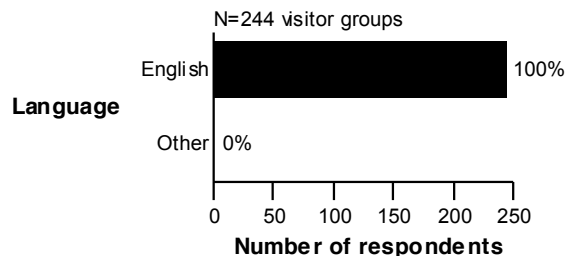
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### Question 25b

When visiting an area such as Minuteman Missile NHS, which one language do you and most members of your personal group prefer to use for speaking?

#### Results

- All visitor groups reported English as their preferred language for speaking (see Figure 13).



**Figure 13: Language preferred for speaking**

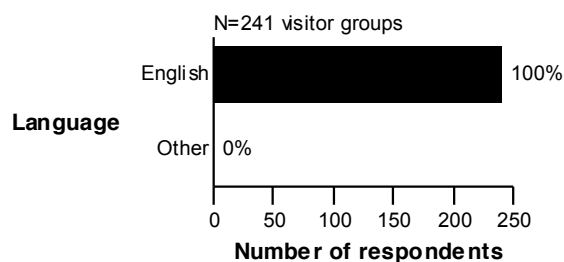
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### Question 25c

When visiting an area such as Minuteman Missile NHS, which one language do you and most members of your personal group prefer to use for reading?

#### Results

- All visitor groups preferred English for reading (see Figure 14).



**Figure 14: Language preferred for reading**

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\*total percentages do not equal 100 due to rounding

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

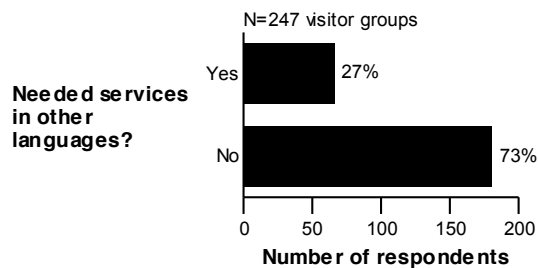
## Services preferred in languages other than English

### Question 25d

In your opinion, which services in the park need to be provided in languages other than English?

### Results

- 27% of visitor groups suggested services that need to be provided in other languages (see Figure 15).
- Table 8 shows the services needed in other languages. Interpret results with **CAUTION!**



**Figure 15: Need for services in other languages**

**Table 8: Services needed in other languages**

N=24 comments;  
some visitor groups made more than one comment.  
**CAUTION!**

Service	Number of times mentioned
Signage	4
Brochures	3
Information for restrooms	3
All services	2
Close caption	2
Maps	2
Self-guided tour brochures	2
Warning/safety information	2
General information	1
Labels	1
Movies	1
Recordings	1

\*total percentages do not equal 100 due to rounding

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

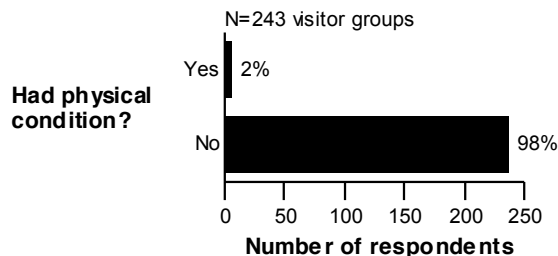
## Visitors with physical conditions/impairments

### Question 21a

Does anyone in your personal group have a physical condition that made it difficult to access or participate in park activities or services?

### Results

- 2% of visitor groups had members with physical conditions that made it difficult to access or participate in park activities or services (see Figure 16).



**Figure 16: Visitors with physical conditions**

### Question 21b

If YES, which services or activities were difficult to access/participate in?

### Results – Interpret with **CAUTION!**

- Five visitor groups commented on the services and activities that were difficult to access or participate in (see Table 9).

**Table 9: Services/activities that were difficult to access/participate in**

N=6 comments;

some visitor groups made more than one comment.

**CAUTION!**

Service	Number of times mentioned
Walking	3
Exercise induced asthma	1
Going to the launch control facility	1
Standing	1

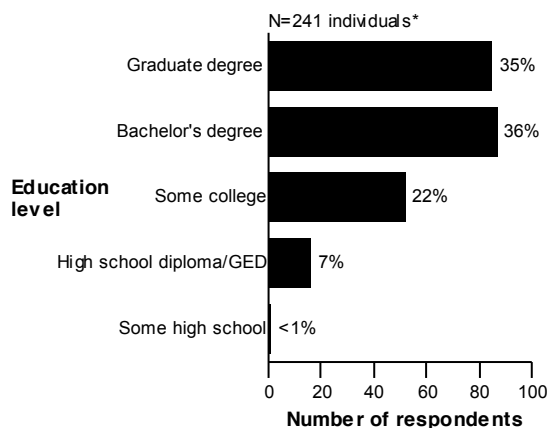
## Respondent's level of education

### Question 20

For you only, what is the highest level of education you have completed?

### Results

- 36% of respondents had a bachelor's degree (see Figure 17).
- 35% had a graduate degree.



**Figure 17: Level of education**

\*total percentages do not equal 100 due to rounding

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



## Household income

### Question 33a

Which category best represents your annual household income?

### Results

- 22% of respondents had an annual income of \$75,000 to \$99,999 (see Figure 18).
- 20% had income between \$50,000 and \$74,999.
- 19% had income between \$100,000 and \$149,999.



Figure 18: Annual household income

## Household size

### Question 33b

How many people are in your household?

### Results

- 41% of respondents had two members in their household (see Figure 19).
- 26% had four members

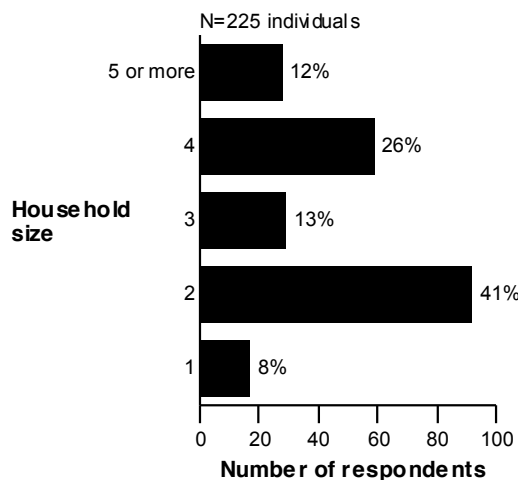


Figure 19: Household size

\*total percentages do not equal 100 due to rounding

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

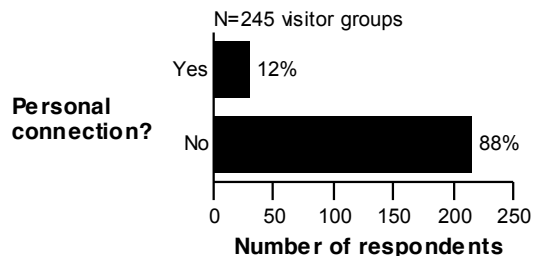
## Personal connection to Minuteman Missile Field

### Question 14a

Do you, or does any person in your family or personal group, have a personal connection to Minuteman Missile field?

### Results

- 12% of visitor groups had members or family members with a personal connection to Minuteman Missile Field (see Figure 20).



**Figure 20: Visitor groups that had a personal connection to the Minuteman Missile Field**

### Question 14b

If YES what is the personal connection to the missile field? (open-ended)

### Results – Interpret results with **CAUTION!**

- Nineteen visitor groups responded to this question.
- Table 10 shows visitor groups' connection to the missile field.

**Table 10: Personal connection to missile field**

N=19 comments – **CAUTION!**

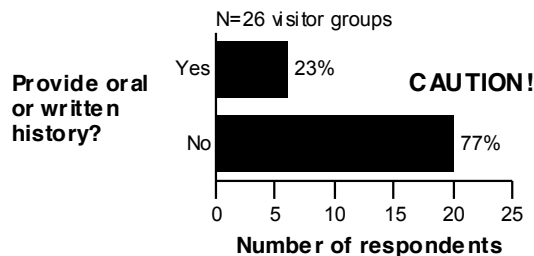
Connection	Number of times mentioned
Friend/family stationed at missile field	5
Personally served in military	4
Friend/family served in military	3
Personally worked at a missile field	2
Longtime nonviolent protester	1
Personally worked at this facility	1
Publish a magazine for military and civilian engineers/system designers on GNSS	1
Son worked at Minuteman NHS	1
Supplied parts for Minuteman	1

### Question 14c

If YES, would this person be interested in providing the park with an oral or written history of this personal connection?

### Results – Interpret results with **CAUTION!**

- Not enough visitor groups responded to this question to provide reliable data (see Figure 21).



**Figure 21: Visitor groups with members willing to provide a history of personal connection**

\*total percentages do not equal 100 due to rounding

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

## Trip/Visit Characteristics and Preferences

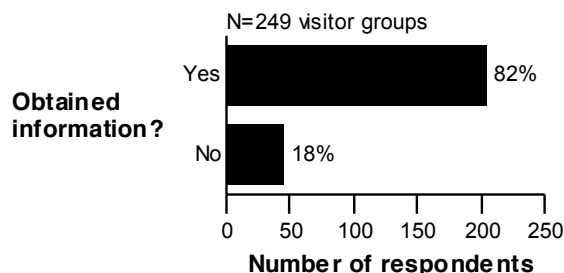
### Information sources prior to visit

#### Question 1a

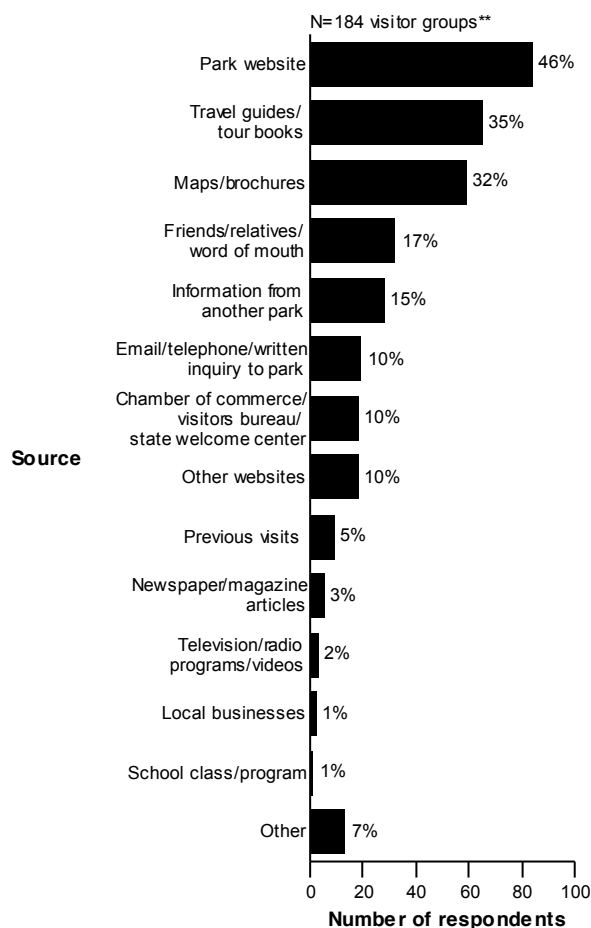
Prior to your visit, how did you and your personal group obtain information about Minuteman Missile NHS?

#### Results

- 82% of visitor groups obtained information about Minuteman Missile NHS prior to their visit (see Figure 22).
- As shown in Figure 23, among those visitor groups that obtained information about Minuteman Missile NHS prior to their visit, the most common sources were:
  - 46% Minuteman Missile NHS website
  - 35% Travel guides/tour books
  - 32% Map/brochures
- “Other” sources (7%) were:
  - Geo caching information
  - National Park passport
  - Road sign



**Figure 22: Visitor groups who obtained information about Minuteman Missile NHS prior to visit**



**Figure 23: Sources of information used by visitor groups prior to visit**

\*total percentages do not equal 100 due to rounding

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

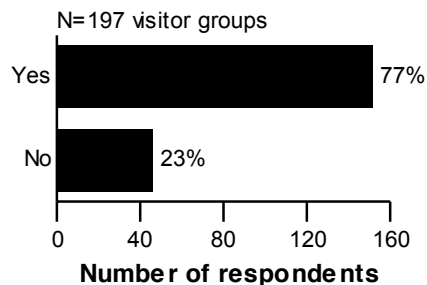
## Question 1c

From the sources you used prior to this visit, did you and your personal group receive the type of information about the park that you needed?

## Results

- 77% of visitor groups received needed information prior to their visit (see Figure 24).

**Received  
needed  
information?**



**Figure 24: Visitor groups who received needed information prior to their visit**

## Question 1d

If NO, what type of park information did you and your personal group need that was not available? (open-ended)

## Results

- Forty-seven visitor groups listed information they needed, but was not available (see Table 11).

**Table 11: Needed information**

N=55 comments;  
some visitor groups made more than one comment.

Type of information	Number of times mentioned
Need reservations for tours	8
Tour information (hours)	8
Unaware of park existence	7
Location of different sites	6
Information about Thursday Open House	3
Better directions	2
Details of missile tours	2
Historical background	2
Hours of service	2
Open House days	2
That tours fill up quickly so call ahead	2
Brochures/posters	1
Cell phone tours	1
GPS coordinates	1
Listings of sites	1
Misleading: Open House but exhibit not open	1
Mistook the ticket center for information center	1
One-fourth mile signs should have an arrow	1
Signage on I-90 and at meeting site	1
Site 01 and visitor center were not apparent that they were at different sites	1
Technical information	1
Too vague, too secretive, not specific	1

\*total percentages do not equal 100 due to rounding

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

## Information sources for future visit

### Question 1b

If you were to visit Minuteman Missile NHS in the future, how would you and your personal group prefer to obtain information about the park?

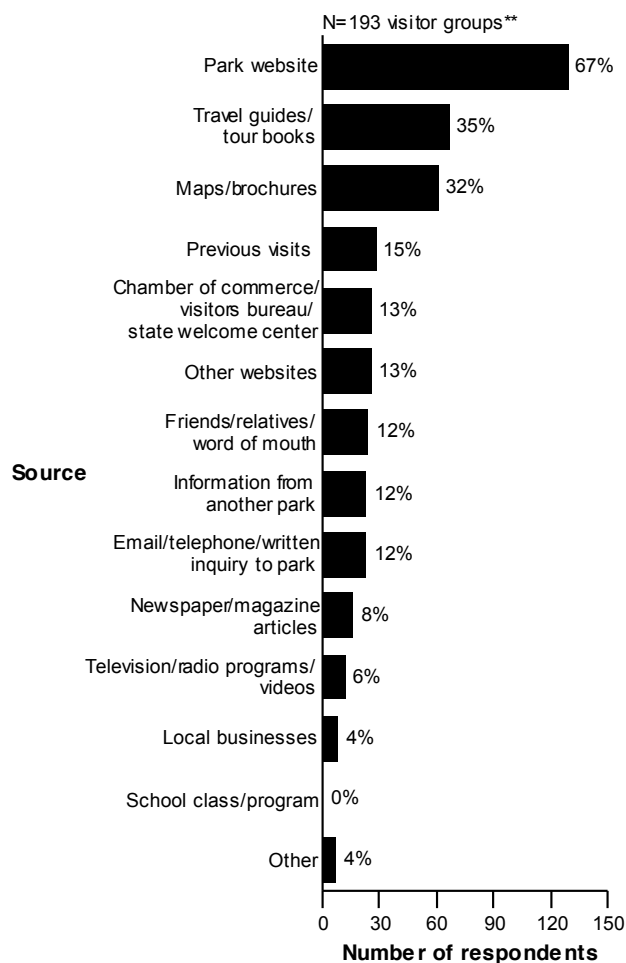
### Results

- As shown in Figure 25, the most common sources of information to use for a future visit were:

67% Minuteman Missile NHS website  
35% Travel guides/tour books  
32% Maps/brochures

- “Other” sources of information (4%) were:

GPS search  
Road signs



**Figure 25: Sources of information to use for a future visit**

\*total percentages do not equal 100 due to rounding

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

## Reason for visiting South Dakota

### Question 2a

What role did this visit to Minuteman Missile NHS play in your and your personal group's decision to visit South Dakota?

### Results

- 3% of visitor groups were residents of South Dakota (see Figure 26).
- 56% of visitor groups indicated Minuteman Missile NHS was one of several destinations in South Dakota (see Figure 27).
- 43% indicated the park was not a planned destination in South Dakota.
- 43% indicated the park was not a planned destination in South Dakota.

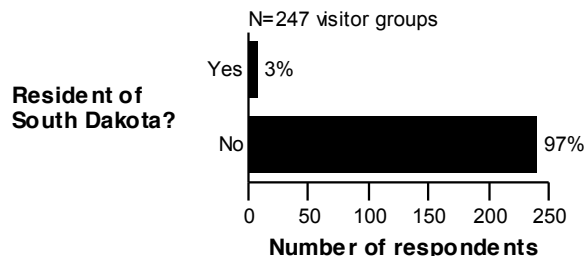


Figure 26: Residents of South Dakota

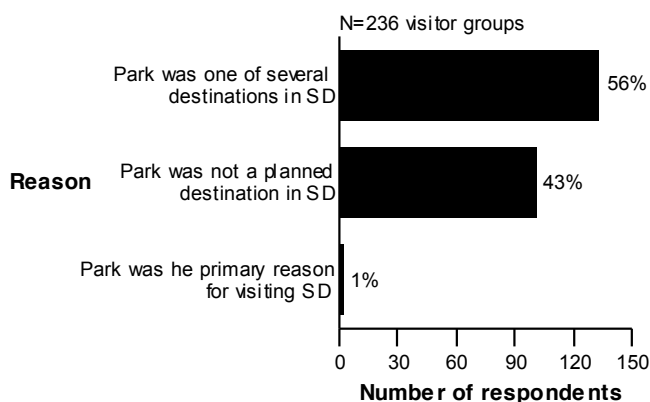


Figure 27: Role of Minuteman Missile NHS in deciding to visit South Dakota

### Question 2b

Did your visit to Minuteman Missile NHS influence you and your personal group's decision to spend time in the area (within 30 miles of visitor center) in addition to spending time at the park?

### Results

- 1% of visitor groups decided to spend time in the Minuteman Missile NHS area in addition to visiting the park (see Figure 28).

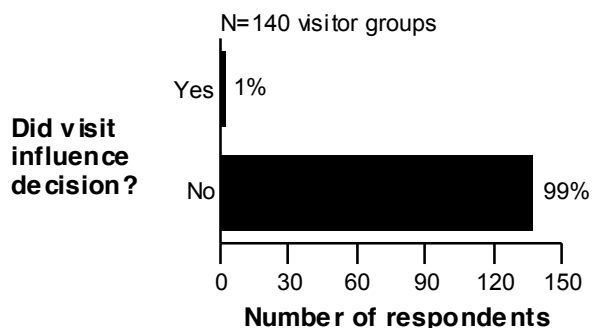


Figure 28: Visitor groups that decided to spend time in the Minuteman Missile NHS area in addition to visiting the park

\*total percentages do not equal 100 due to rounding

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

## Reason for visiting the area

### Question 3

On this trip, what was the primary reason that you and your personal group came to the Minuteman Missile NHS area (within 30 miles of the visitor center)?

### Results

- No visitors were residents of the Minuteman Missile NHS area (see Figure 29).

- As shown in Figure 30, among visitor groups who were not area residents, the primary reason for visiting the Minuteman Missile NHS area included:

74% Visit other attractions in the area

18% Visit Minuteman Missile NHS

- “Other” reasons (6%) included:

Camping at Circle 10 across road

Educational conference in Rapid City

Friend suggested it

Obtain passport stamp

On a sightseeing tour

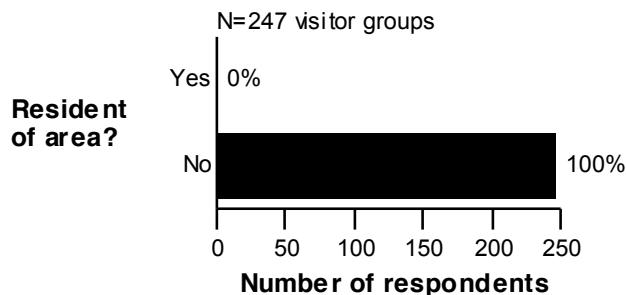
On the way to other destinations

Part of vacation itinerary

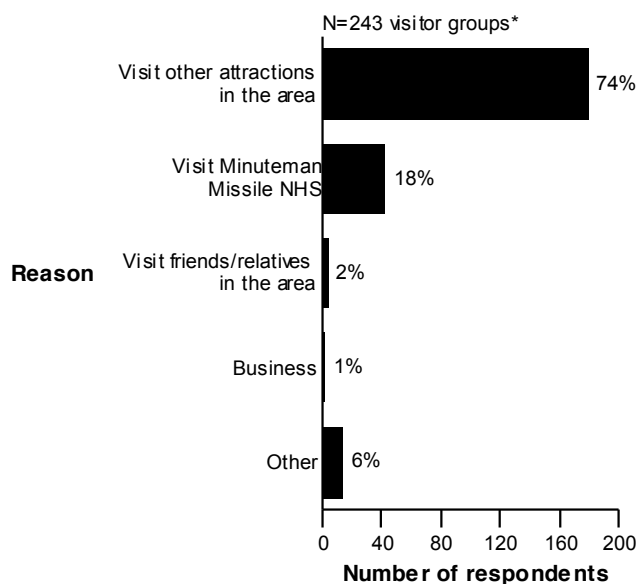
Stopped for gas

Checking National Historic sites across country

Traveling through South Dakota by car



**Figure 29: Residents of the Minuteman Missile NHS area (within 30 miles of visitor center)**



**Figure 30: Primary reason for visiting the Minuteman Missile NHS area (within 30 miles of visitor center)**

\*total percentages do not equal 100 due to rounding

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

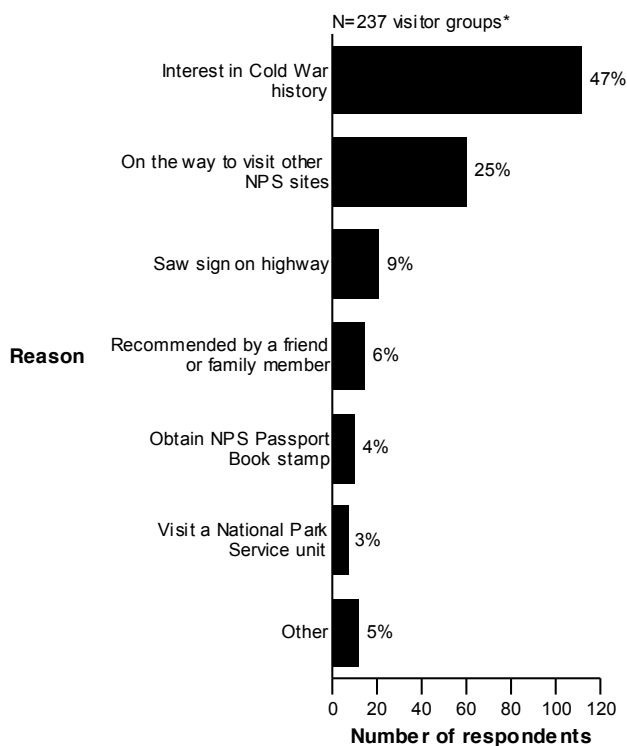
## Reason for visiting the park

### Question 4

On this visit, what was the primary reason that you and your personal group visited Minuteman Missile NHS?

### Results

- As shown in Figure 31, visitor groups' primary reasons for visiting Minuteman Missile NHS included:
  - 47% Interest in Cold War history
  - 25% On the way to visit other NPS sites
- "Other" reasons (5%) included:
  - Former employment in missile field
  - Interested in Minuteman program
  - Junior Ranger program
  - Obtain information on NPS services
  - Peace activist – wanted to see inside
  - Personal interest
  - This site is a virtual cache on geocaching.com
  - Visit family
  - Visit information center



**Figure 31: Primary reason for visiting the Minuteman Missile NHS**

\*total percentages do not equal 100 due to rounding

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



## Places stayed on night prior to visit

### Question 6a

In what city/town did you and your personal group stay on the night before your arrival at Minuteman Missile NHS? If you stayed at home please write the name of the city/town and state where you live. (open-ended)

### Results

- Table 12 shows the locations where visitor groups stayed on the night prior to visiting Minuteman Missile NHS.

**Table 12: City/town in which visitor groups stayed on the night prior to visit**

N=49 locations

City/town	Number of times mentioned
Rapid City, SD	52
Wall, SD	26
Interior, SD	19
Badlands National Park, SD	18
Custer, SD	15
Mitchell, SD	14
Sioux Falls, SD	13
Hill City, SD	12
Keystone, SD	7
Chamberlain, SD	5
Deadwood, SD	4
Murdo, SD	4
Pierre, SD	4
Custer State Park, SD	3
Kadoka, SD	3
Cedar Pass, SD	2
Hot Springs, SD	2
Owatonna, MN	2
Spearfish, SD	2
Sturgis, SD	2
Wind Cave, SD	2
Belvidere, SD	1
Brandon, SD	1
Brookings, SD	1
Buffalo Gap, SD	1
Canistota, SD	1
Cheyenne, WY	1
Chicago, IL	1
Des Moines, IA	1
Devils Tower, WY	1
Fairmont, MN	1

\*total percentages do not equal 100 due to rounding

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

**Table 12: City/town in which visitor groups stayed  
on the night prior to visit**  
(continued)

City/town	Number of times mentioned
Huron, SD	1
Kennebec, SD	1
Lead, SD	1
Maple Grove, MN	1
Mason City, IA	1
Miles City, MT	1
Minneapolis, MN	1
Omaha, NE	1
Philip, SD	1
Paynesville, MN	1
Rockport, MO	1
Smithville, MO	1
Storm Lake, IA	1
Valentine, NE	1
Waldorf, MD	1
Winner, SD	1
Wisconsin Dells, WI	1
Worthington, MN	1

\*total percentages do not equal 100 due to rounding

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

## Places stayed on night after visit

### Question 6b

In what city/town did you and your personal group stay on the night after your departure from Minuteman Missile NHS? If you stayed at home please write the name of the city/town and state where you live. (open ended)

### Results

- Table 13 shows the locations where visitor groups stayed on the night after leaving Minuteman Missile NHS.

**Table 13: City/town in which visitor groups stayed on the night after visit**

N=67 locations

City/town	Number of times mentioned
Rapid City, SD	61
Custer, SD	21
Hill City, SD	13
Keystone, SD	11
Wall, SD	10
Interior, SD	9
Spearfish, SD	9
Deadwood, SD	8
Sioux Falls, SD	8
Custer State Park, SD	7
Mitchell, SD	6
Badlands National Park, SD	4
Billings, MT	4
Hot Springs, SD	4
Albert Lea, MN	3
Devils Tower, WY	3
Minneapolis, MN	3
Austin, MN	2
Lead, SD	2
Missoula, MT	2
Bell Fourde, SD	1
Black Hills, SD	1
Bladehills, SD	1
Brandon, SD	1
Buffalo Gap, SD	1
Buffalo, SD	1
Chamberlain, SD	1
Cheyenne, WY	1
Cody, WY	1
Columbia, MD	1

\*total percentages do not equal 100 due to rounding

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

**Table 13: City/town in which visitor groups stayed  
on the night after visit**  
(continued)

City/town	Number of times mentioned
Draper, UT	1
Elk Grove Village, IL	1
Emery, SD	1
Flandreau, SD	1
Frankfort, SD	1
Hardin, MT	1
Hazelton, ND	1
Highmore, SD	1
Hutchinson, MN	1
Iowa City, IA	1
Kadoka, SD	1
Laverne, MN	1
Mauston, WI	1
Millersburg, IA	1
Neenah, WI	1
New Ulm, MN	1
North Platte, NE	1
Oacoma, SD	1
Omaha, NE	1
Onawa, IA	1
Osage Beach, MO	1
Philip, SD	1
Piedmont, SD	1
Pierre, SD	1
Rochester, MN	1
Rockledge, FL	1
Sage Creek Campground, SD	1
Sheridan, WY	1
Sioux City, IA	1
Sterling, CO	1
Sturgis, SD	1
Sundance, WY	1
Thedford, NE	1
Urbandale, IA	1
Valentine, NE	1
Wayzata, MN	1
Wessington, SD	1

\*total percentages do not equal 100 due to rounding

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

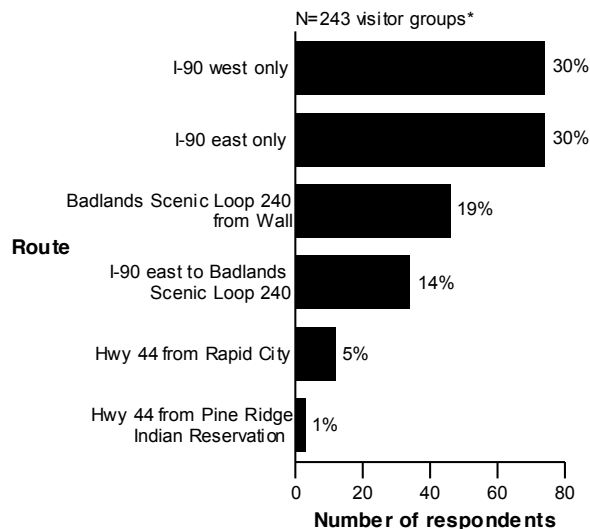
## Routes used to travel to/from park

### Question 7a

On this visit to Minuteman Missile NHS, which routes did you use to first arrive at the park?

### Results

- 30% of visitor groups used I-90 west to arrive at the park (see Figure 32).
- 30% used I-90 east route.



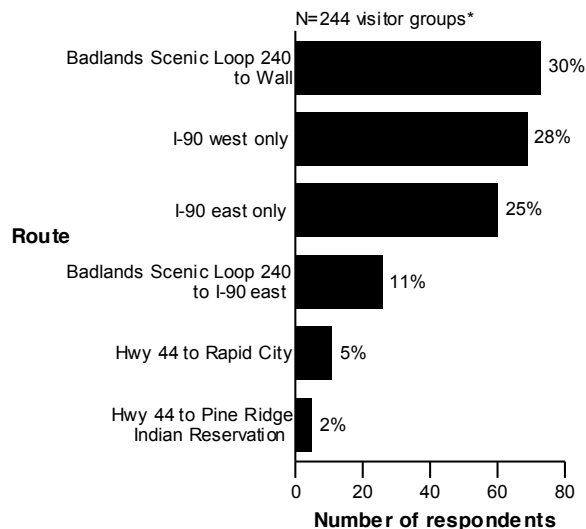
**Figure 32: Routes used to arrive at the park**

### Question 7b

On this visit to Minuteman Missile NHS, which routes did you use after leaving the park?

### Results

- 30% of visitor groups used Badlands Scenic Loop 240 to Wall (see Figure 33).
- 28% used I-90 west.
- 25% used I-90 east.



**Figure 33: Routes used after leaving the park**

\*total percentages do not equal 100 due to rounding

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

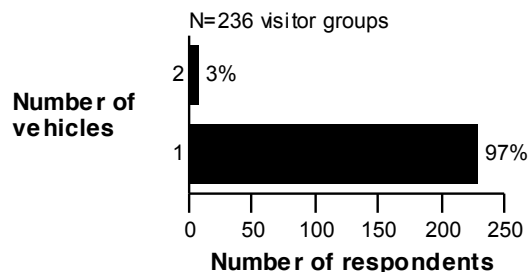
## Number of vehicles

### Question 7c

On this visit, how many vehicles did you and your personal group use to arrive at the park?

### Results

- 97% of visitor groups used one vehicle to arrive at the park (see Figure 34).
- 3% used two vehicles.



**Figure 34: Number of vehicles used to arrive at the park**

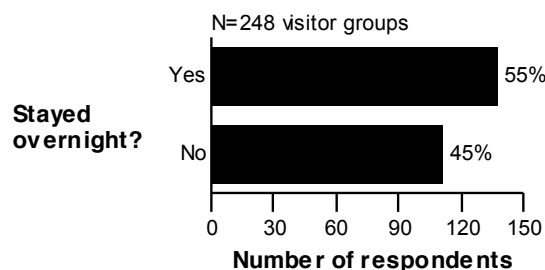
## Overnight stay and accommodations

### Question 8a

On this trip, did you and your personal group stay overnight away from your permanent residence in the Minuteman Missile NHS area (within 30 miles of the visitor center)?

### Results

- 55% of visitor groups stayed overnight away from home in the Minuteman Missile NHS area (see Figure 35).



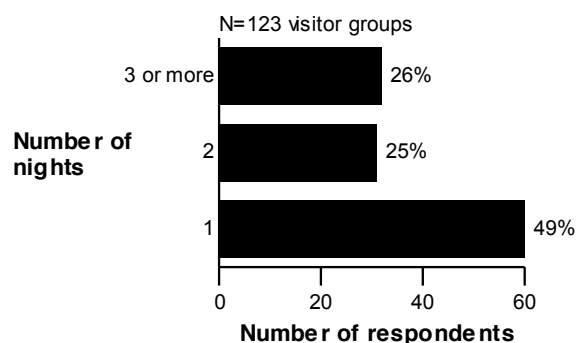
**Figure 35: Visitor groups that stayed overnight in the Minuteman Missile NHS area**

### Question 8b

If YES, please list the number of nights you and your personal group stayed in the Minuteman Missile NHS area.

### Results

- 49% of visitor groups stayed one night in the Minuteman Missile NHS area (see Figure 36).
- 26% stayed three or more nights.



**Figure 36: Number of nights in the Minuteman Missile NHS area**

\*total percentages do not equal 100 due to rounding

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

## Type of lodging

### Question 8c

If YES, in which types of lodging did you and your personal group spend the night(s) in the area outside the park (within 30 miles of the visitor center)?

### Results

- 59% of visitor groups stayed in lodges, hotels, motels, cabins, B&B, etc. (see Figure 37).
- 27% stayed in RV/trailer campsites.
- No visitor group specified an “other” (1%) type of lodging.

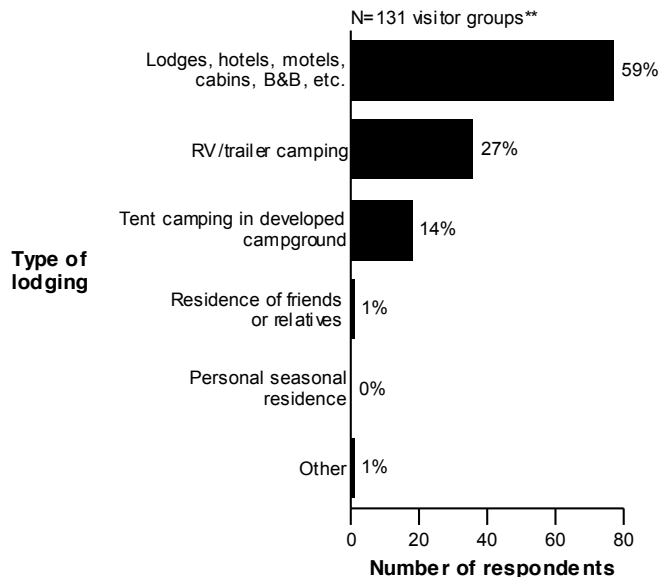


Figure 37: Type of lodging outside the park

\*total percentages do not equal 100 due to rounding

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

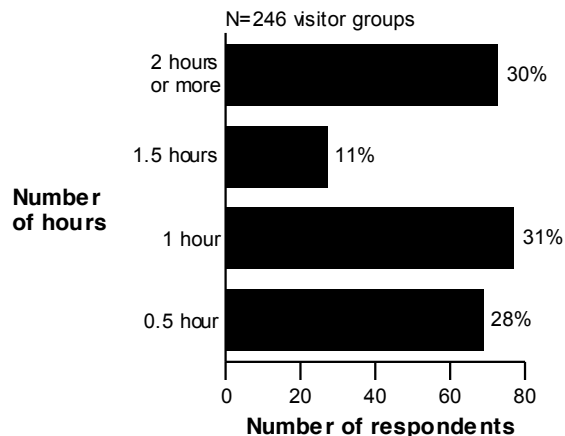
## Length of stay

### Question 9a

How many hours in total did you and your personal group spend visiting Minuteman Missile NHS on this visit?

### Results

- 31% of visitor groups spent one hour visiting the park (see Figure 38).
- 30% spent two or more hours.
- 28% spent half an hour.
- The average length of stay 1.3 hours.



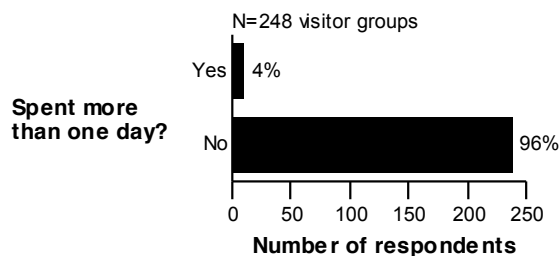
**Figure 38: Number of hours spent visiting the park**

### Question 9b

On this visit, did you and your personal group visit Minuteman Missile NHS on more than one day?

### Results

- 4% of visitor groups visited Minuteman Missile NHS on more than one day (see Figure 49).



**Figure 39: Visitor groups that spent more than one day visiting the park**

### Question 9c

If YES, on how many days did you visit the park

### Results – Interpret results with **CAUTION!**

- Nine visitor groups visited the park on two days.

\*total percentages do not equal 100 due to rounding

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



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## Number of park entries

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### Question 9d

On this trip, how many times did you and your personal group enter the park?

### Results

- 63% of visitor groups entered the park once (see Figure 40).
- 37% entered the park twice.

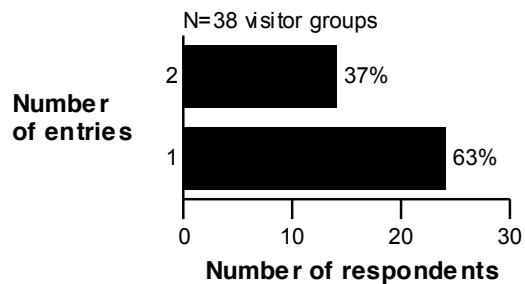


Figure 40: Number of park entries

\*total percentages do not equal 100 due to rounding

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

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## Sites visited

### Question 10

On this visit to Minuteman Missile NHS, which park sites did you and your personal group visit?

### Results

- As shown in Figure 41, the most commonly visited sites by visitor groups at Minuteman Missile NHS were:

94% Visitor center  
50% Launch Facility (Missile Silo) Delta-09

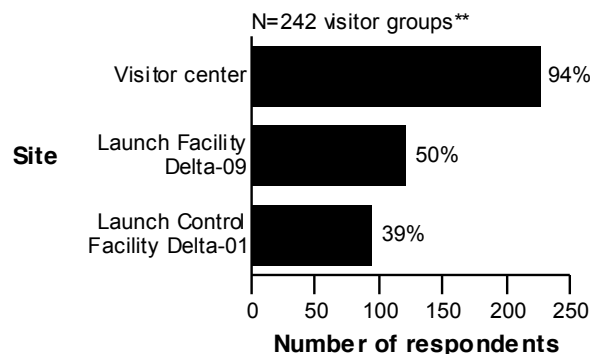


Figure 41: Sites visited

## National park sites visited in the area

### Question 5

On this trip, which of the following national park sites in the Minuteman Missile NHS area (within 100 miles of the park) did you and your personal group visit?

### Results

- 98% of visitor groups visited other national park sites in the area (see Figure 42).
- As shown in Figure 43, the most commonly visited national park sites in the Minuteman Missile NHS area were:

93% Badlands National Park  
89% Mount Rushmore National Memorial

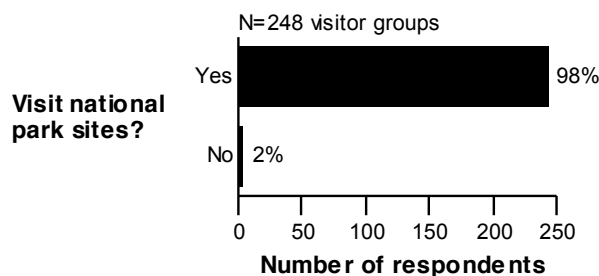


Figure 42: Visitor groups that visited national park sites in the area

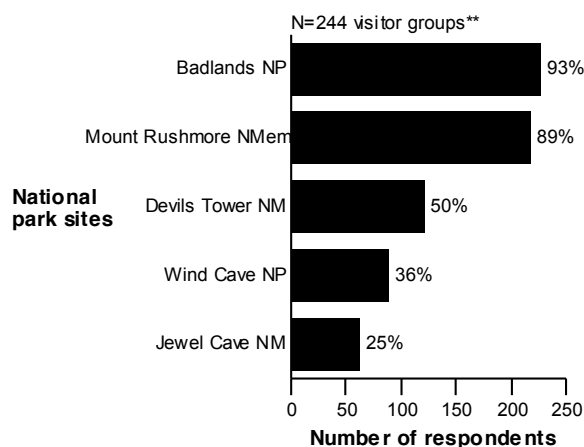


Figure 43: National park sites visited in the area

\*total percentages do not equal 100 due to rounding

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

## Expected activities

### Question 12a

Prior to this visit, in which activities did you and your personal group expect to participate at Minuteman Missile NHS?

### Results

- As shown in Figure 44, the most common activities in which visitor groups expected to participate were:

75% View visitor center exhibits  
51% Attend ranger-led tours (other than Open House)  
48% Watch park video/film

- “Other” activities (4%) were:

Buy souvenirs  
Geo caching  
Visit different sites

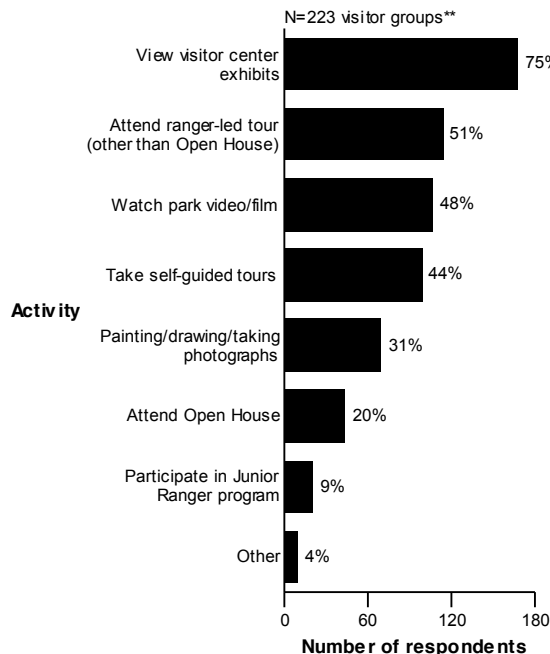


Figure 44: Expected activities

## Activities on this visit

### Question 12b

In which activities did you and your personal group actually participate on this visit?

### Results

- As shown in Figure 45, the most common activities in which visitor groups participated were:

77% View visitor center exhibits  
42% Watch park video/film  
31% Painting/drawing/taking photographs  
31% Attend ranger-led tours (other than Open House)

- “Other” activities (5%) were:

Conversation with ranger outside  
Geo caching  
Visit missile silo  
Visit visitor center

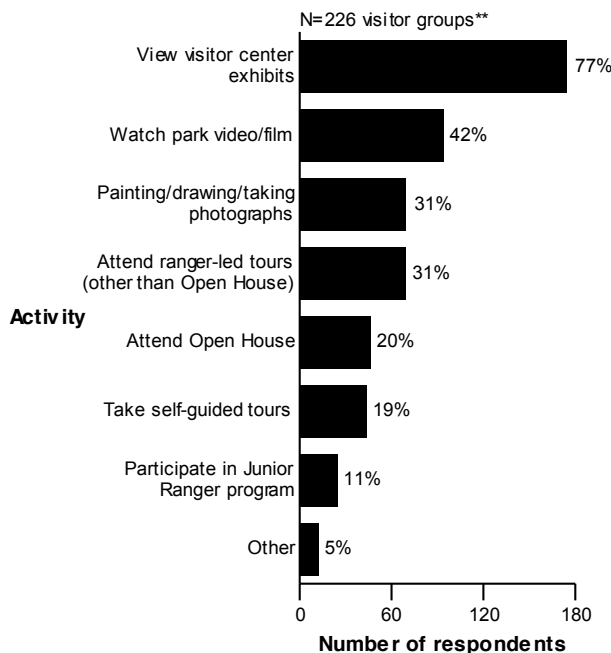


Figure 45: Activities on this visit

\*total percentages do not equal 100 due to rounding

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

## Primary activity on this visit

### Question 12c

Which one of the above activities was the primary activity in which you and your personal group participated at Minuteman Missile NHS on this visit?

### Results

- As shown in Figure 46, the most common primary activities listed by visitor groups were:
  - 35% Attend ranger-led tours (other than Open House)
  - 20% View visitor center exhibits
  - 16% Watch park video/film
- “Other” activities (3%) included:
  - Conversation with ranger outside
  - Geo caching
  - Visit missile silo
  - Visit visitor center

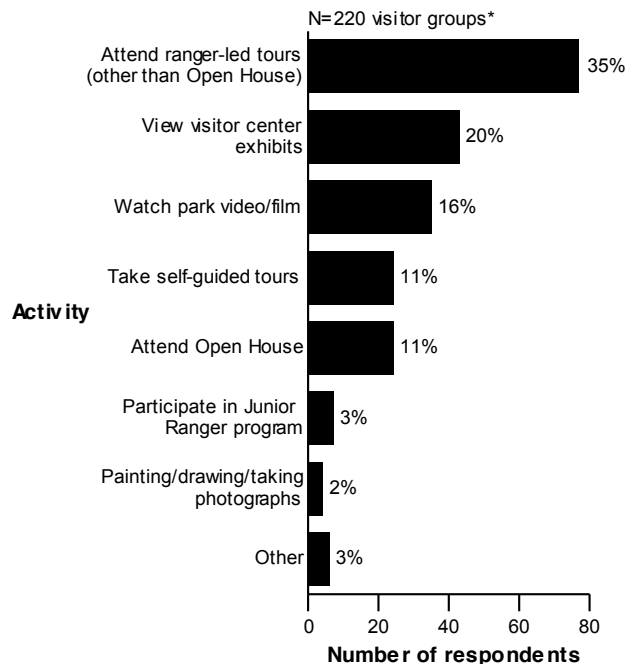


Figure 46: Primary activity

## Ranger-led tours

### Question 11a

On this visit to Minuteman Missile NHS, did anyone in your personal group participate in a ranger-led tour?

### Results

- 41% of visitor groups attended a ranger-led tour (see Figure 47).

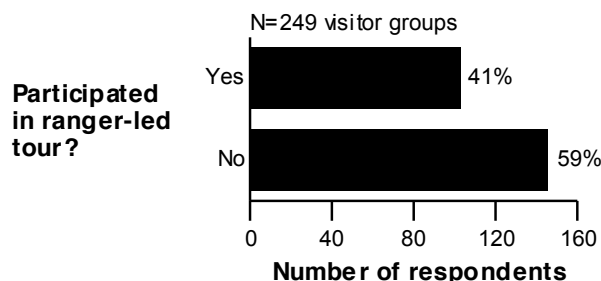


Figure 47: Visitor groups that attended ranger-led tour

### Question 11b

If YES, what was the most enjoyable aspect of the tour? (open-ended)

### Results

- Ninety-three visitor groups responded to this question.
- Table 14 shows visitor opinions on the most enjoyable aspect of the tour.

\*total percentages do not equal 100 due to rounding

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

**Table 14: Most enjoyable aspect of the tour**

N=113 comments;  
some visitor groups made more than one comments.

Tour aspect	Number of times mentioned
Launch control facility	26
Personal experiences of guides	21
All was enjoyable	7
Guides were former missile employees	7
Informative visit	6
Rangers were knowledgeable	6
Delta 9 Missile Silo	4
Friendly rangers	4
Information provided by ranger	4
History of launch sites	3
Narratives were educational and interesting	3
Tour of launch control facility	3
History of sites	2
Personal attention	2
Rangers were enthusiastic about site	2
Close viewing of site	1
Explanation of cold war and deactivation steps	1
Guide with humor	1
Having served in the military remembering my experience	1
Historical significance	1
Information about launch control facility	1
Listening to ranger's presentation at the silo	1
Meeting officer that fired a missile	1
Ranger	1
Seeing the capsule launch site	1
Silo tour at Delta 9	1
Size of the entire 7-state missile field	1
The information signs	1

\*total percentages do not equal 100 due to rounding

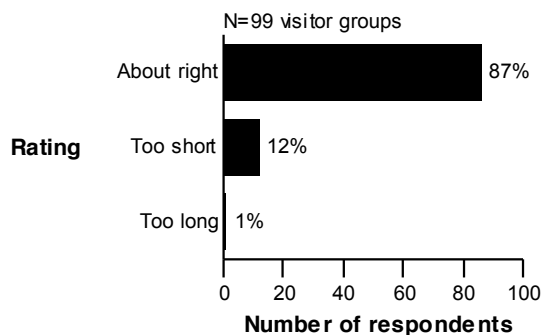
\*\*total percentages do not equal 100 because visitors could select more than one answer

## Question 11c

If YES, please rate the length of the tour.

## Results

- 87% of visitor groups felt the length of the tour was about right (see Figure 48).
- 12% felt the tour was too short.



**Figure 48: Length of tour ratings**

## Question 11d

During which times of day would you and your personal group prefer to take the tour?

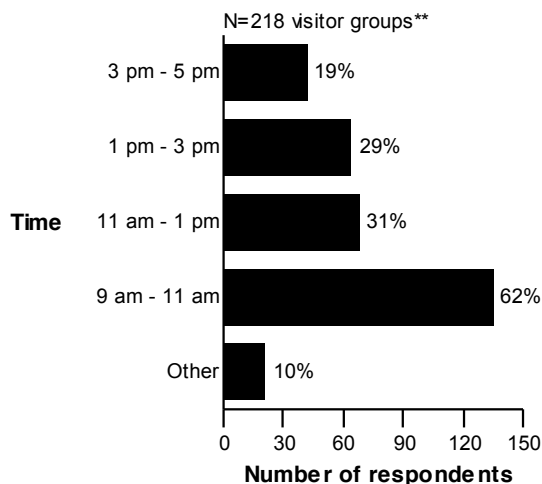
## Results

- As shown in Figure 49, the times visitor groups preferred to take a ranger-led tour included:

62% 9:00 am – 11:00 am  
 31% 11:00 am – 1:00 pm  
 29% 1:00 pm – 3:00 pm

- “Other” times (10%) were:

5:00 pm – 7:00 pm  
 Any time would be good  
 It depends on the travel schedule



**Figure 49: Times visitor groups would prefer to take ranger-led tours**

\*total percentages do not equal 100 due to rounding

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

## Topics learned on this visit

### Question 13a

During this visit to Minuteman Missile NHS, did you and your personal group learn about the following topics?

### Results

- As shown in Figure 50, the most common topics visitor groups learned about on this visit were:
  - 87% Missile history – both U.S. and Soviet Union
  - 61% Nuclear weapons and the arms race
- “Other” topics (4%) were:
  - Active vs. inactive systems (e.g. F.E. Warren Air Force Base)
  - Environmental impact
  - Everyday life in the headquarters
  - Memories of 50's and 60's arms race
  - START Treaty
  - Television
  - Truth and myth about launch security

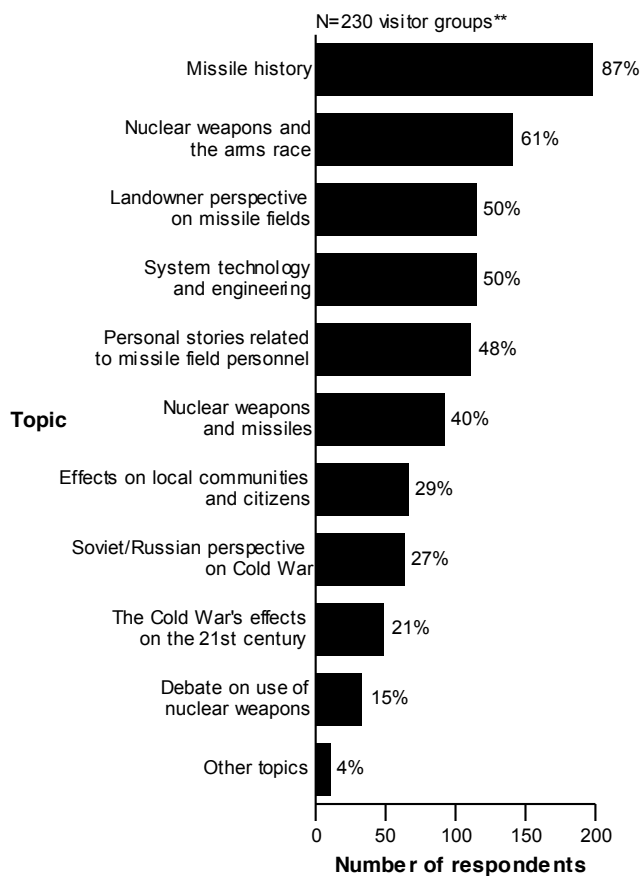


Figure 50: Topics learned on this visit

\*total percentages do not equal 100 due to rounding

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

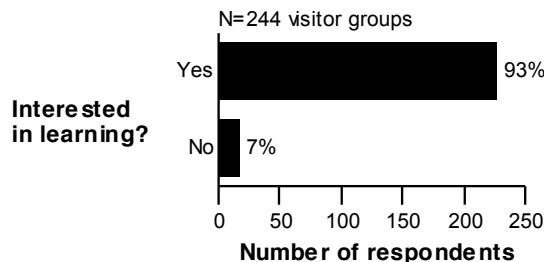
## Preferred topics on future visit

### Question 13b

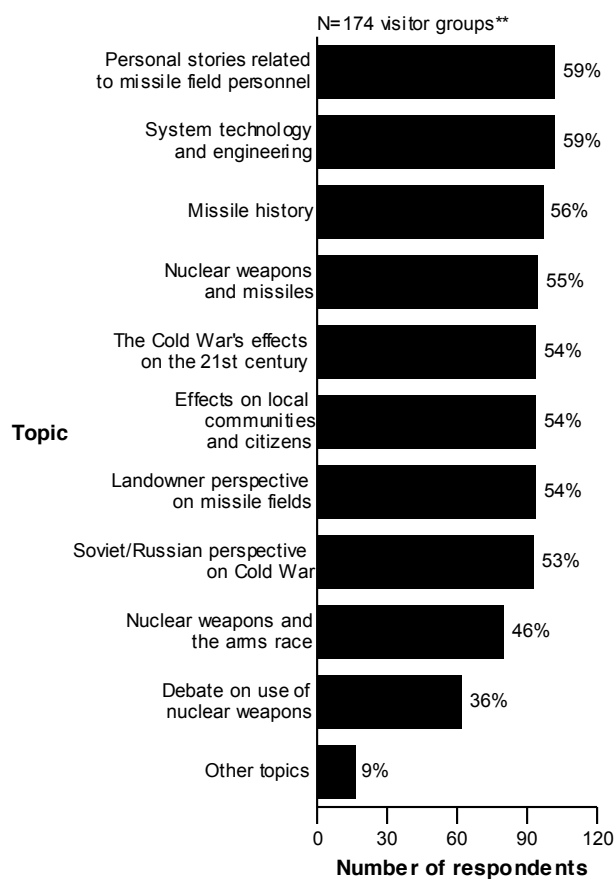
If you were to visit in the future, which topics would you and your personal group be interested in learning (or learning more) about?

### Results

- 93% of visitor groups were interested in learning on a future visit (see Figure 51).
- As shown in Figure 52, the most common topics visitor groups would be interested in learning or learning more about were:
  - 59% Personal and human stories related to missile field (Air Force) personnel
  - 59% Technology and engineering that developed and built the system
  - 56% Missile history – both U.S. and Soviet Union
- “Other” topics (9%) were:
  - Effects of peace movement on ending Cold War
  - Environmental impact
  - Get into the facilities
  - How the site was developed
  - Memories of 50's and 60's arms race
  - Missiles
  - More information on “Command and Control”
  - See a silo/missile
  - Stories about misileers and their survival
  - The Native American view
  - Truth and myth from film, TV about launch, security
  - Visit actual NHS site



**Figure 51: Interested in learning on a future visit**



**Figure 52: Topics interested in learning about on future visit**

\*total percentages do not equal 100 due to rounding

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



## Ratings of Visitor Services, Facilities, Attributes and Resources

### Visitor services and facilities used

#### Question 15a

Please indicate all the visitor services and facilities that you or your personal group used at Minuteman Missile NHS during this visit.

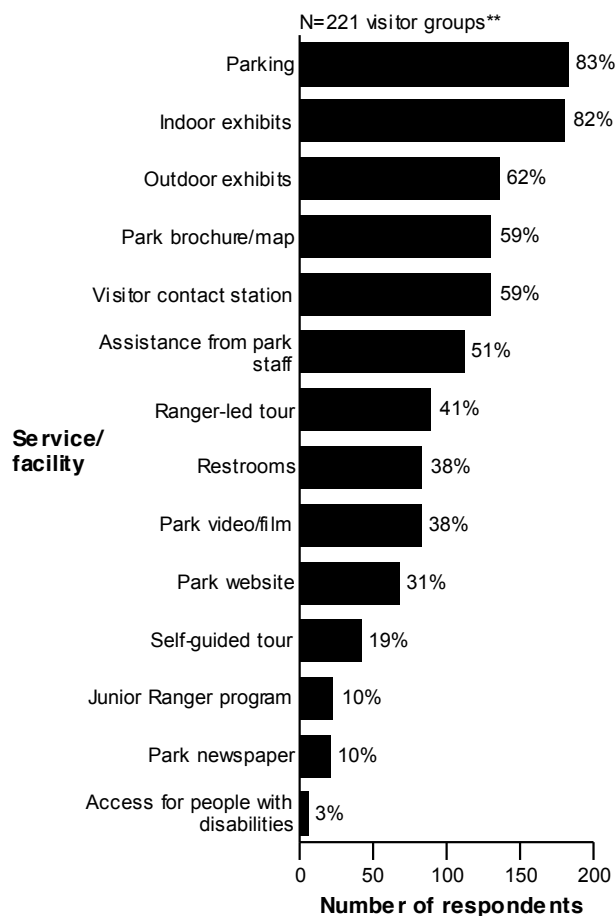
#### Results

- As shown in Figure 53, the most commonly used visitor services and facilities were:

83% Parking  
82% Indoor exhibits  
62% Outdoor exhibits

- The least used service/facility was:

3% Access for people with disabilities



**Figure 53: Visitor services and facilities used**

\*total percentages do not equal 100 due to rounding

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

## Importance ratings of visitor services and facilities

### Question 15b

Next, for only those services and facilities that you or your personal group used, please rate their importance to your visit from 1-5.

- 1=Not important
- 2=Somewhat important
- 3=Moderately important
- 4=Very important
- 5=Extremely important

### Results

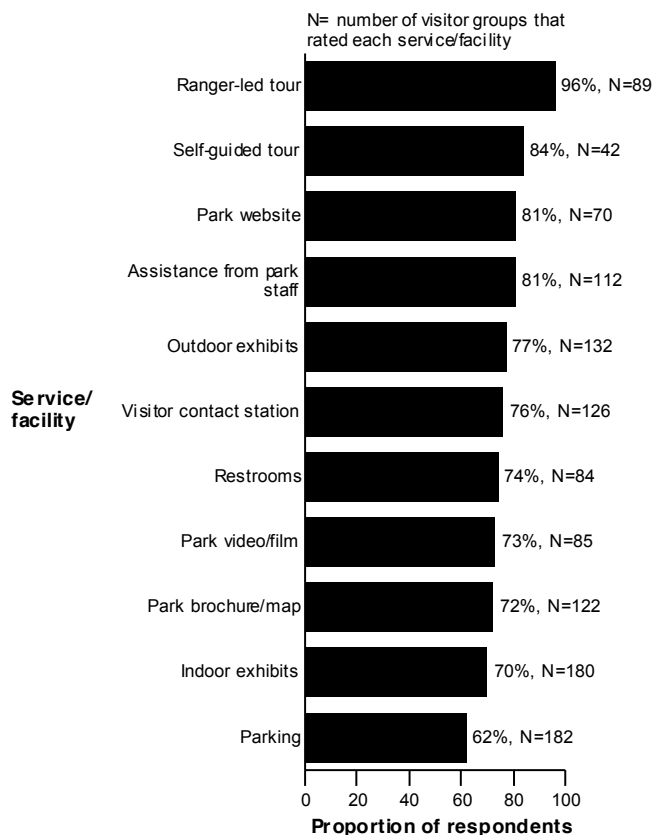
- Figure 54 shows the combined proportions of “extremely important” and “very important” ratings for visitor services and facilities that were rated by 30 or more visitor groups.

- The visitor services and facilities receiving the highest combined proportions of “extremely important” and “very important” ratings were:

96% Ranger-led tour  
84% Self-guided tour  
81% Park website  
81% Assistance from park staff

- Figures 55 to 68 show the importance ratings for each visitor service and facility.
- The visitor service/facility receiving the highest “not important” rating that was rated by 30 or more visitor groups was:

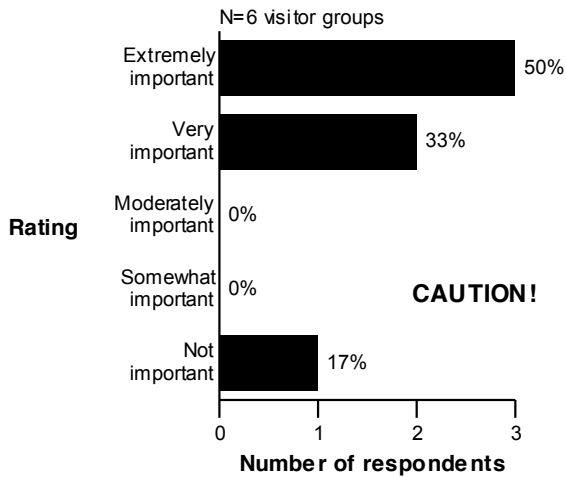
7% Parking



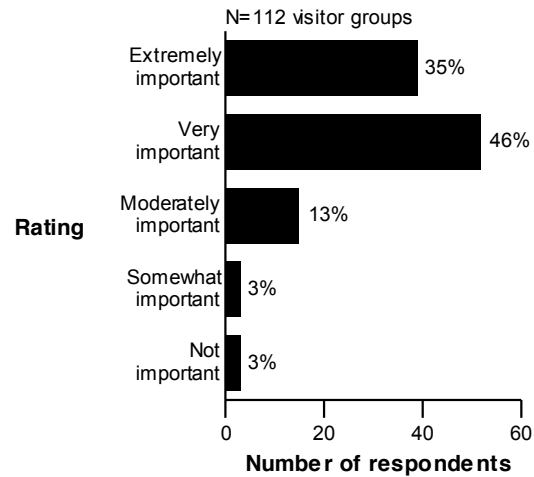
**Figure 54: Combined proportions of “extremely important” and “very important” ratings of visitor services and facilities**

\*total percentages do not equal 100 due to rounding

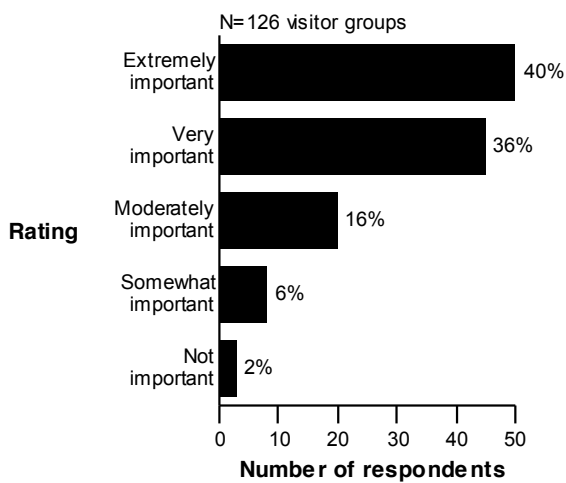
\*\*total percentages do not equal 100 because visitors could select more than one answer



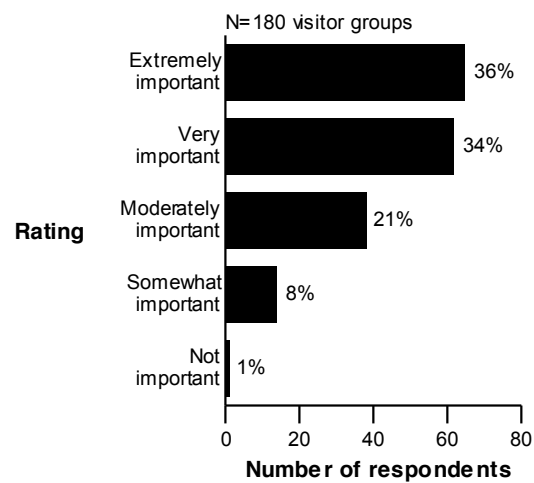
**Figure 55: Importance of access for people with disabilities**



**Figure 56: Importance of assistance from park staff**



**Figure 57: Importance of visitor contact station**



**Figure 58: Importance of indoor exhibits**

\*total percentages do not equal 100 due to rounding

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

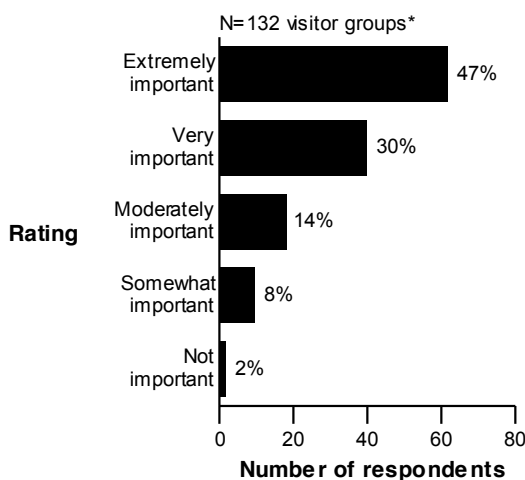


Figure 59: Importance outdoor exhibits

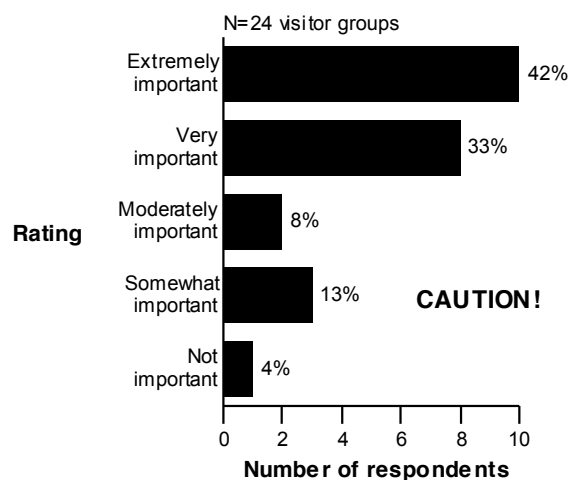


Figure 60: Importance of Junior Ranger program

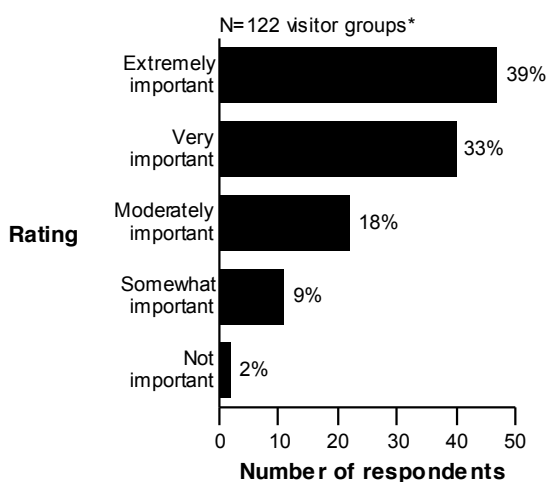


Figure 61: Importance of park brochure/ map

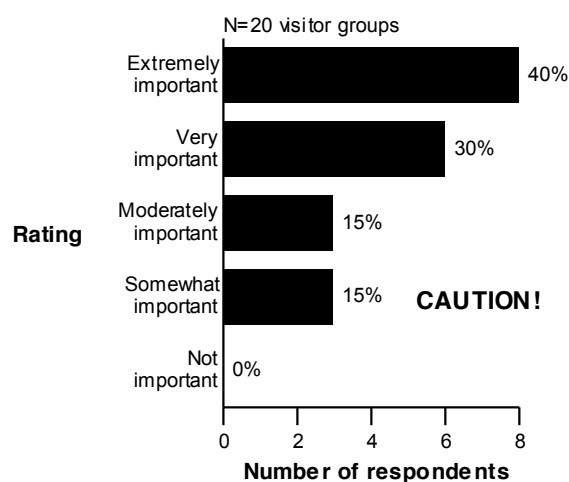


Figure 62: Importance of park newspaper

\*total percentages do not equal 100 due to rounding

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

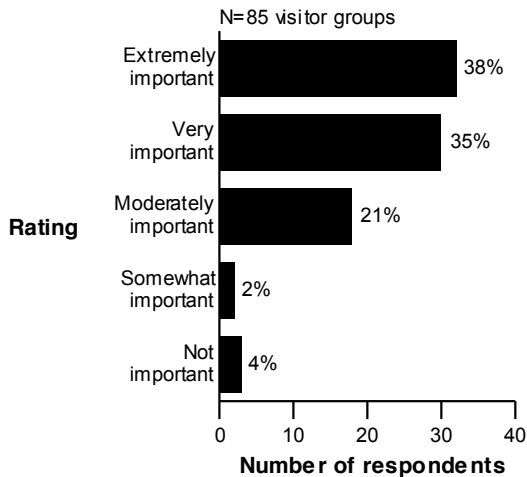


Figure 63: Importance of park video/film

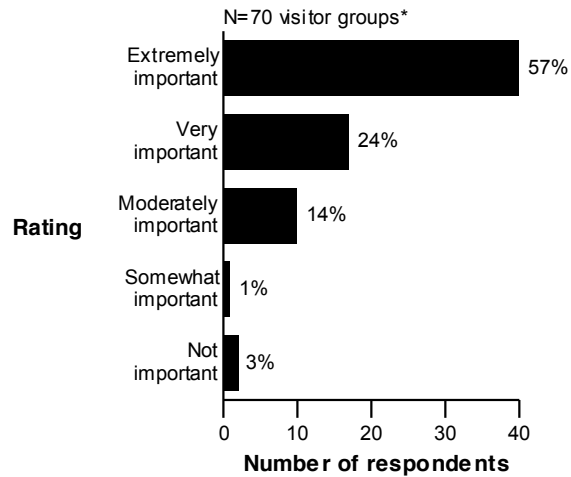
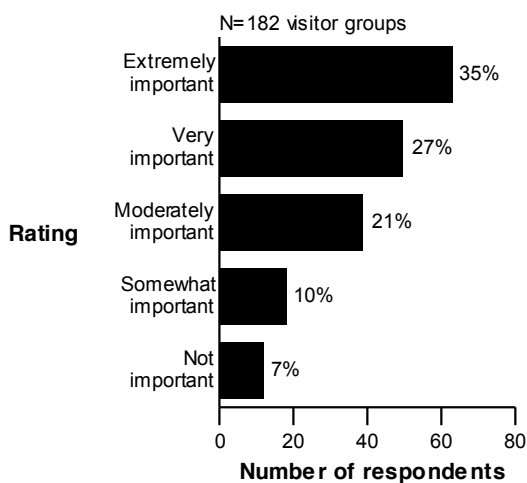
Figure 64: Importance of park website:  
[www.nps.gov/mimi](http://www.nps.gov/mimi) used  
before or during visit

Figure 65: Importance of parking

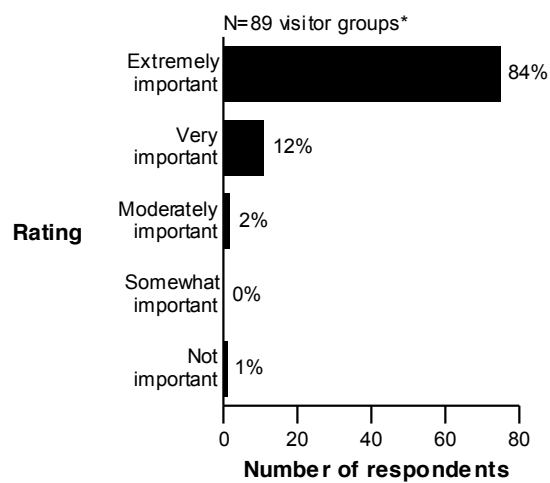
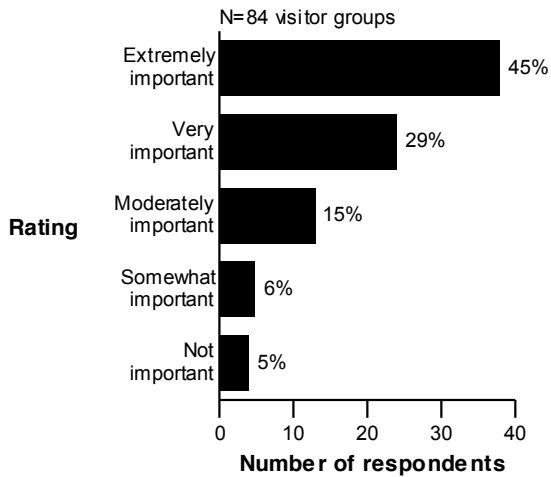
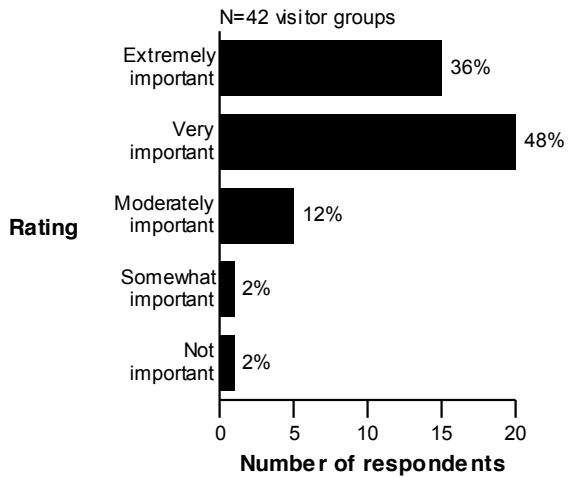


Figure 66: Importance of ranger-led tours

\*total percentages do not equal 100 due to rounding

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

**Figure 67: Importance of restrooms****Figure 68: Importance of self-guided tour**

\*total percentages do not equal 100 due to rounding

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

## Quality ratings of visitor services and facilities

### Question 15c

Finally, for only those services and facilities that you or your personal group used, please rate their quality from 1-5.

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

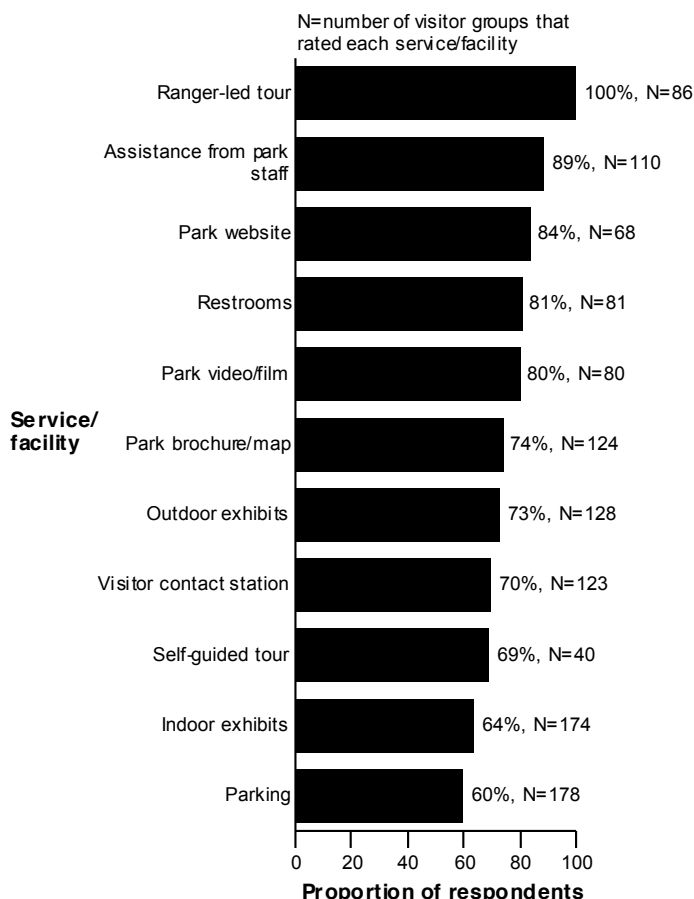
### Results

- Figure 69 shows the combined proportions of “very good” and “good” quality ratings for visitor services and facilities that were rated by 30 or more visitor groups.
- The visitor services and facilities that received the highest combined proportions of “very good” and “good” quality ratings were:

100% Ranger-led tours  
89% Assistance from park staff  
84% Park website

- Figures 70 to 83 show the quality ratings for each service/facility.
- The services/facilities receiving the highest “very poor” quality rating that was rated by 30 or more visitor groups were:

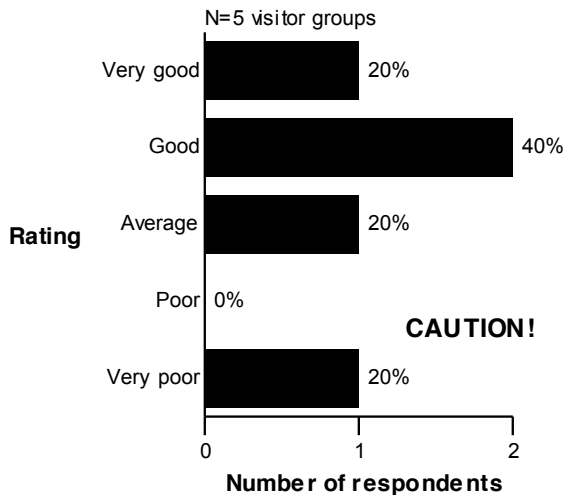
3% Parking  
3% Self-guided tour



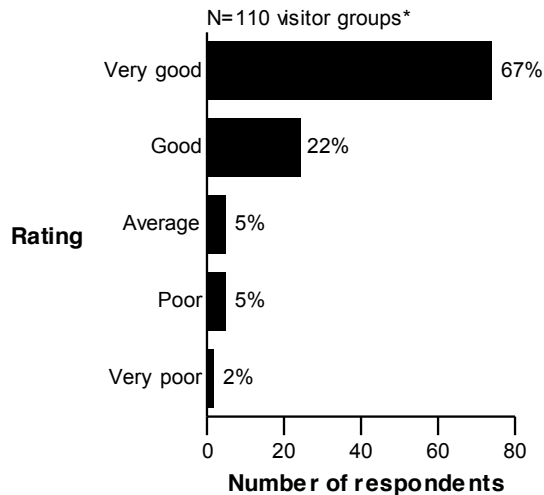
**Figure 69: Combined proportions of “very good” and “good” quality ratings of visitor services/facilities**

\*total percentages do not equal 100 due to rounding

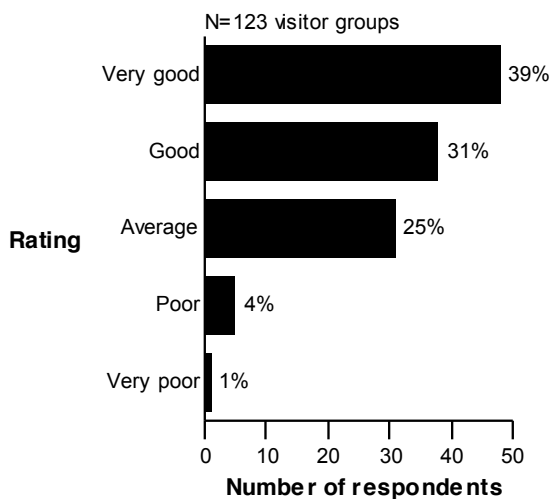
\*\*total percentages do not equal 100 because visitors could select more than one answer



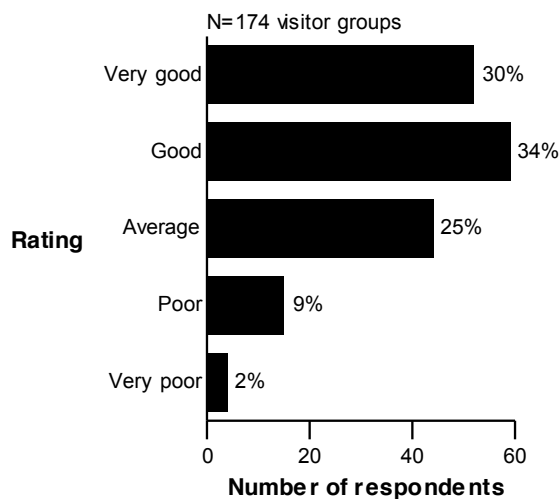
**Figure 70: Quality of access for people with disabilities**



**Figure 71: Quality of assistance from park staff**



**Figure 72: Quality of visitor contact station**



**Figure 73: Quality of indoor exhibits**

\*total percentages do not equal 100 due to rounding

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



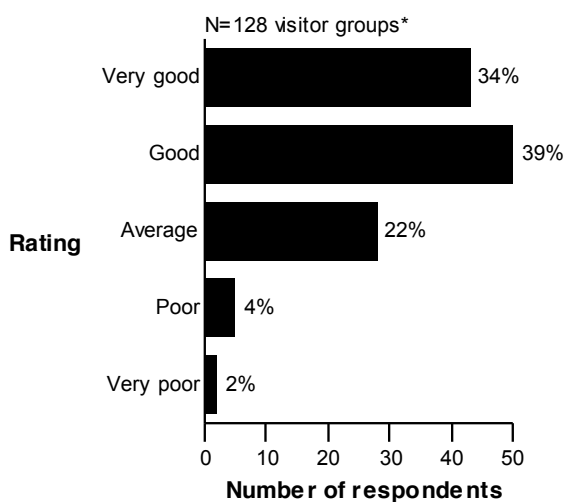


Figure 74: Quality of outdoor exhibits

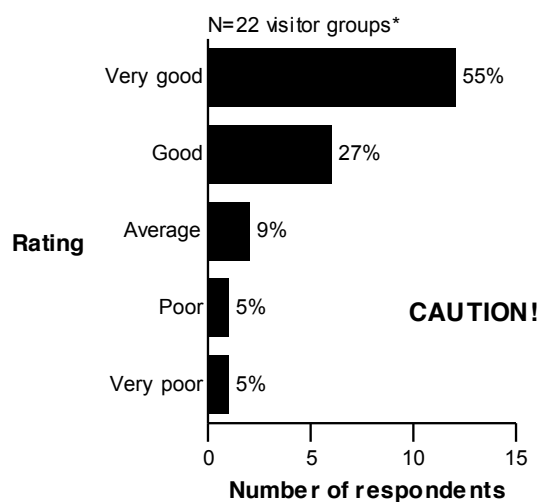


Figure 75: Quality of Junior Ranger program

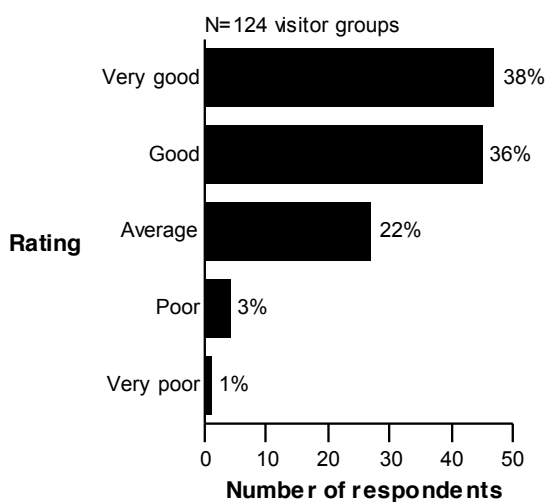
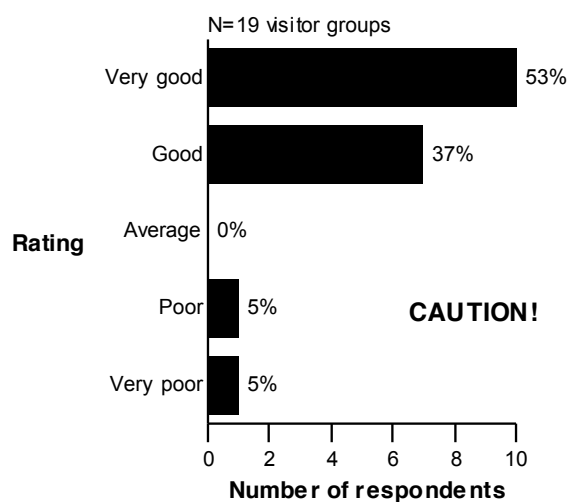
Figure 76: Quality of park brochure/  
map

Figure 77: Quality of park newspaper

\*total percentages do not equal 100 due to rounding

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

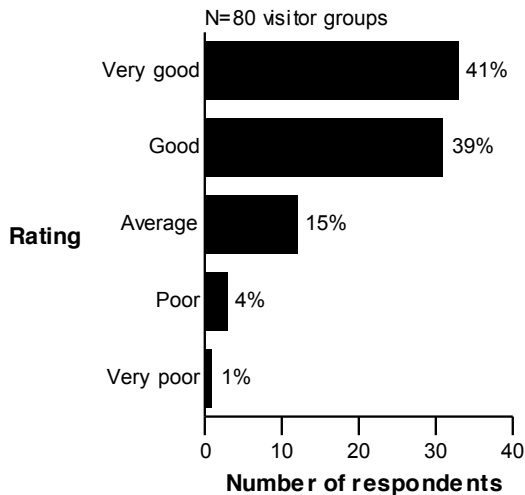


Figure 78: Quality of park video/film

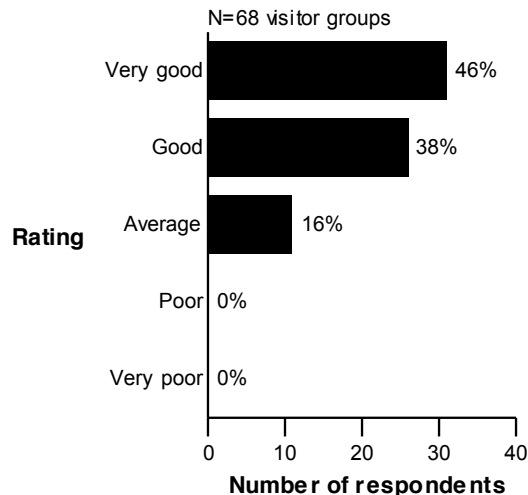
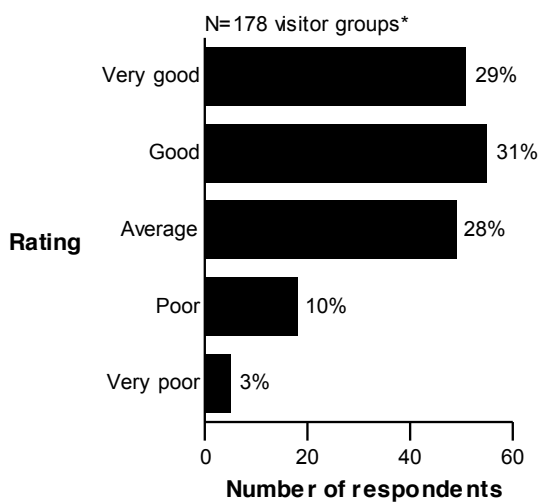
Figure 79: Quality of park website:  
[www.nps.gov/mimi](http://www.nps.gov/mimi) used before  
or during visit

Figure 80: Quality of parking

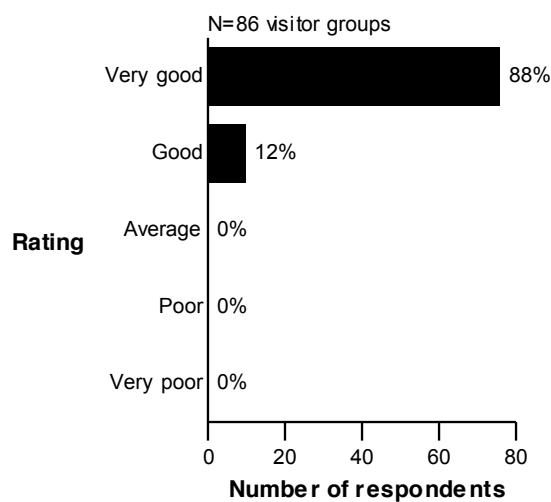
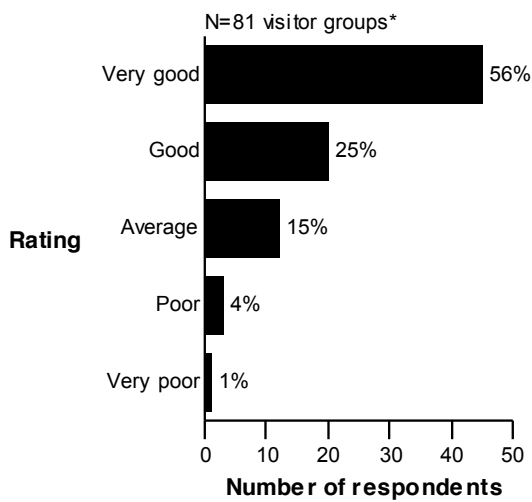
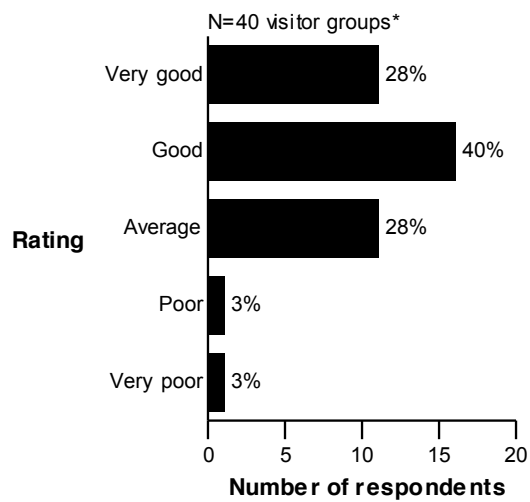


Figure 81: Quality of ranger-led tour

\*total percentages do not equal 100 due to rounding

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

**Figure 82: Quality of restrooms****Figure 83: Quality of self-guided tour**

\*total percentages do not equal 100 due to rounding

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

### Mean scores of importance and quality ratings for visitor services and facilities

- Figures 84 and 85 show the mean scores of importance and quality ratings for all visitor services and facilities that were rated by 30 or more visitor groups.
- All visitor information services and facilities were rated above average.

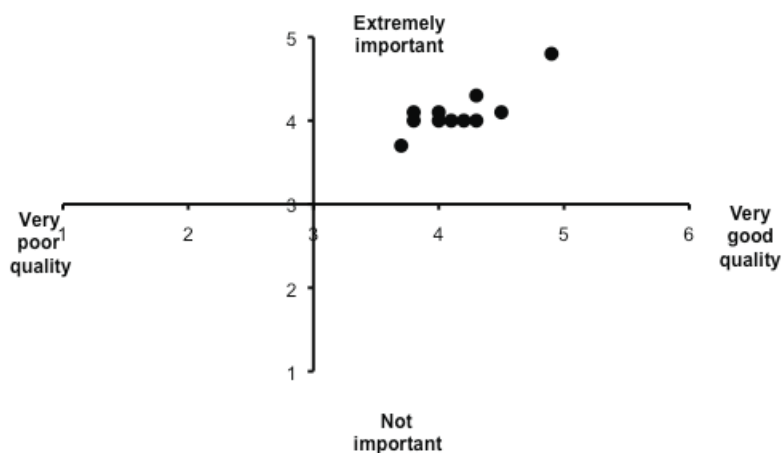


Figure 84: Mean scores of importance and quality ratings for visitor services/facilities

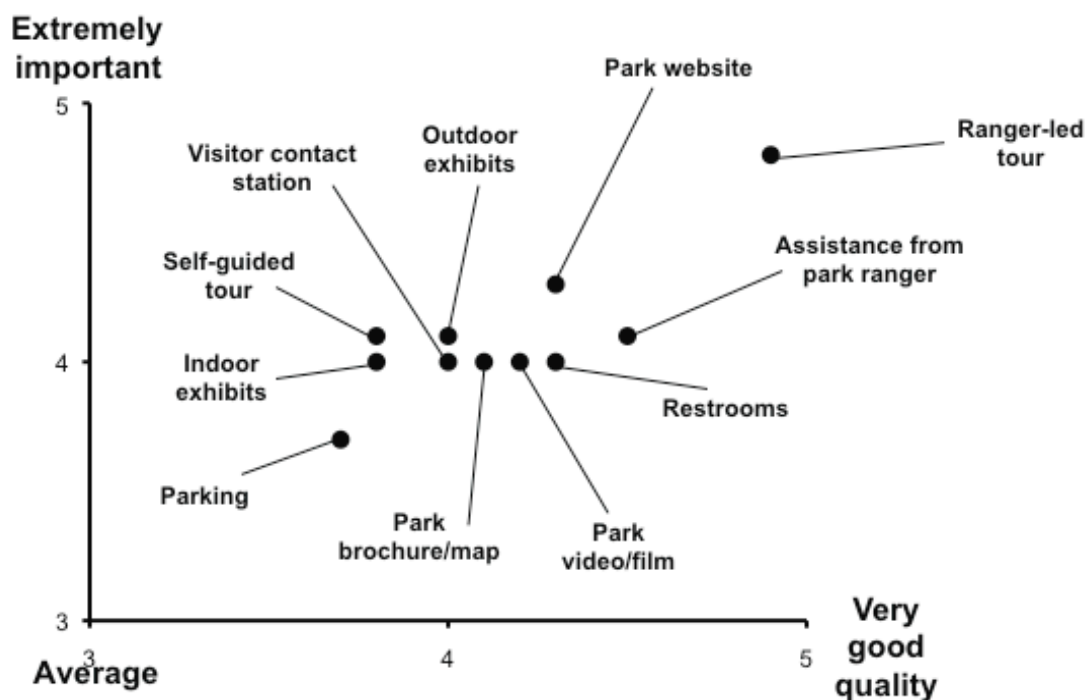


Figure 85: Detail of Figure 84

\*total percentages do not equal 100 due to rounding

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

## Expenditures

### Total expenditures inside and outside Minuteman Missile NHS

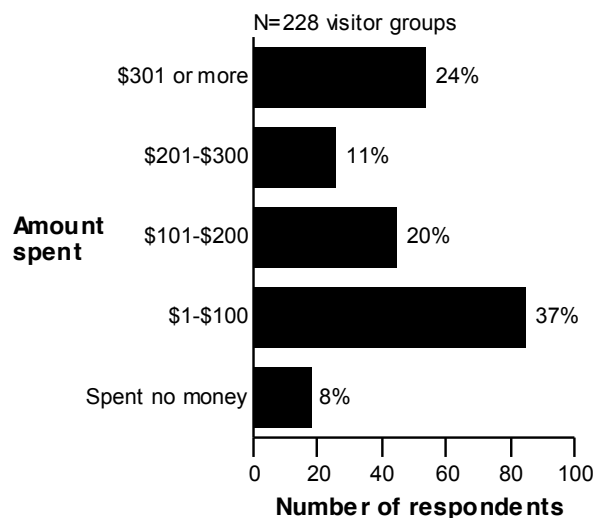
#### Question 16

For you and your personal group, please estimate all expenditures for the items listed below for this visit to Minuteman Missile NHS area (within 30 miles of the park).

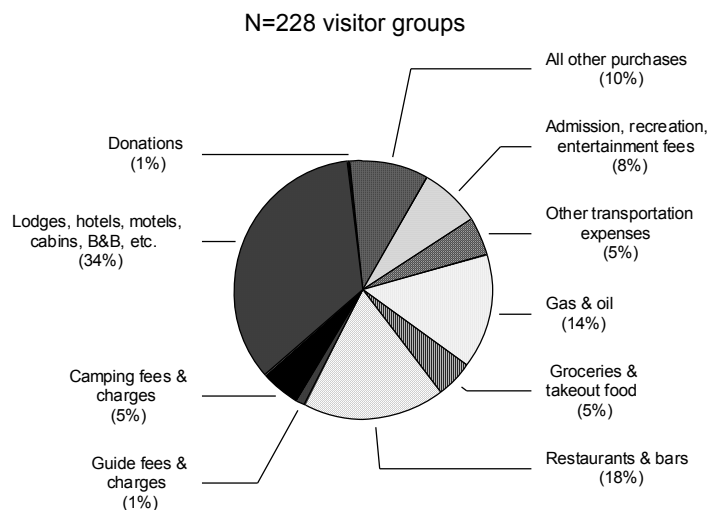
#### Results

- 37% of visitor groups spent \$1-\$100 (see Figure 86).
- 24% spent \$301 or more.
- The average visitor group expenditure was \$316.
- The median group expenditure (50% of groups spent more and 50% of groups spent less) was \$133.
- Average total expenditure per person (per capita) was \$119.
- As shown in Figure 87, the largest proportions of total expenditures inside and outside the park were:

34% Lodges, hotels, motels, cabins, B&B, etc.  
18% Restaurants and bars  
14% Gas and oil



**Figure 86: Total expenditures inside and outside the park**



**Figure 87: Proportions of total expenditures inside and outside the park**

\*total percentages do not equal 100 due to rounding

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

## Number of adults covered by expenditures

Question 16c

How many adults (18 years or older) do the above expenses cover?

Results

- 73% of visitor groups had two adults covered by expenditures (see Figure 88).
- 17% had three or more adults.

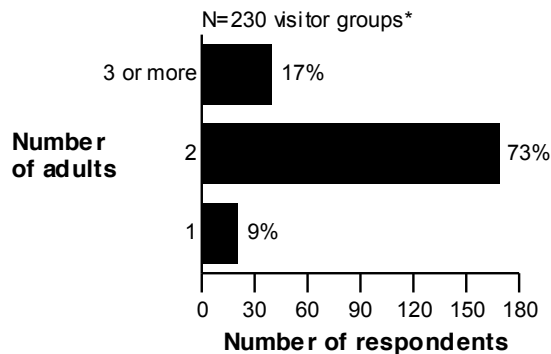


Figure 88: Number of adults covered by expenditures

## Number of children covered by expenditures

Question 16c

How many children (under 18 years) do the above expenses cover?

Results

- 52% of visitor groups did not have any children covered by expenditures (see Figure 89).
- 24% had two children.

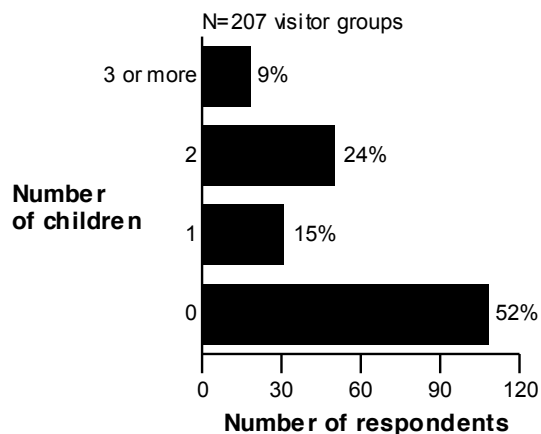


Figure 89: Number of children covered by expenditures

\*total percentages do not equal 100 due to rounding

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

## Expenditures inside the park

### Question 16a

Please list your personal group's total expenditures inside Minuteman Missile NHS.

### Results

- 76% of visitor groups spent no money inside the park (see Figure 90).
- 21% spent \$1-\$20.
- The average visitor group expenditure inside the park was \$5.
- The median expenditure (50% of groups spent more and 50% of groups spent less) was \$0.
- Average total expenditure per person (per capita) was \$6.
- As shown in Figure 91, the largest proportions of total expenditures inside the park were:

75% All other purchases  
25% Donations

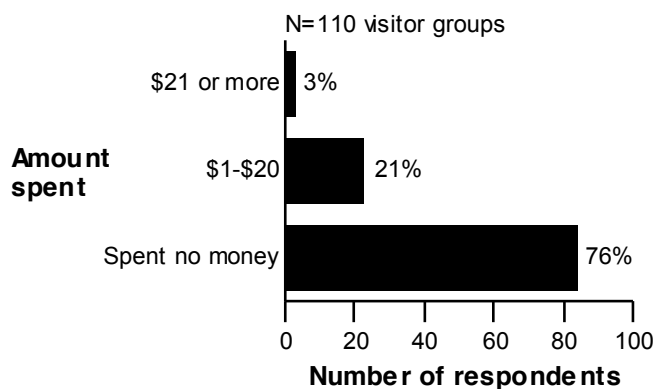


Figure 90: Total expenditures inside the park

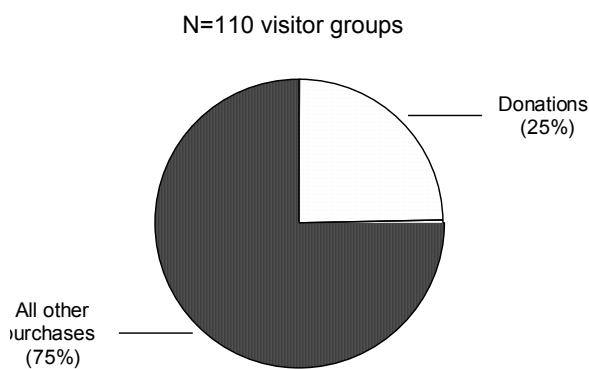


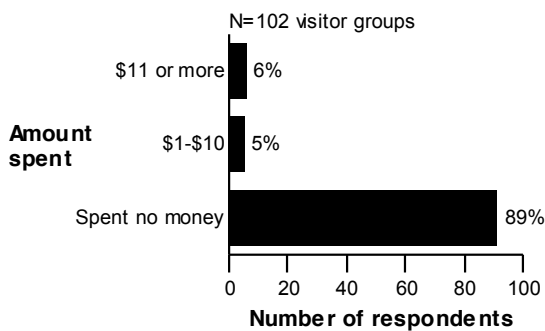
Figure 91: Proportions of total expenditures inside the park

\*total percentages do not equal 100 due to rounding

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

All other purchases

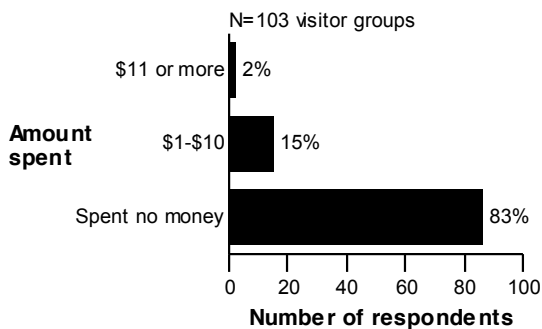
- 89% of visitor groups did not spend any money on other purchases inside the park (see Figure 92).
- 6% spent \$11 or more.



**Figure 92: Expenditures for all other purchases inside the park**

Donations

- 83% of visitor groups did not spend any money on donations inside the park (see Figure 93).
- 15% spent \$1-\$10.



**Figure 93: Expenditures for donations inside the park**

\*total percentages do not equal 100 due to rounding

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



## Expenditures outside the park

### Question 16b

Please list your personal group's total expenditures in the area outside the park (within 30 miles of the park).

### Results

- 35% of visitor groups spent \$1 - \$100 (see Figure 94).
- 24% spent \$301 or more.
- 20% spent between \$101 and \$200.
- The average visitor group expenditure outside the park was \$317.
- The median expenditure (50% of groups spent more and 50% of groups spent less) was \$133.
- Average total expenditure per person (per capita) was \$132.
- As shown in Figure 95, the largest proportions of total expenditures outside the park were:
  - 35% Lodges, hotels, motels, cabins, B&B, etc.
  - 18% Restaurants and bars
  - 14% Gas and oil

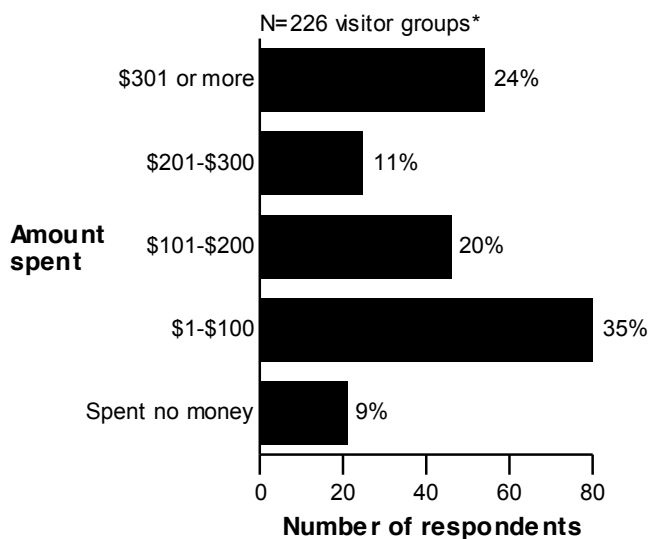


Figure 94: Total expenditures outside the park

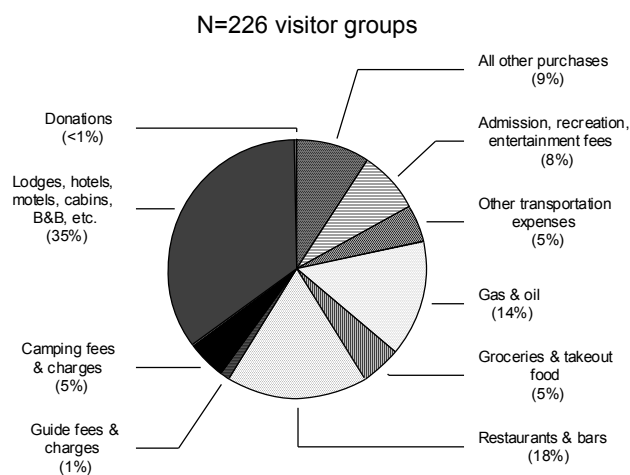


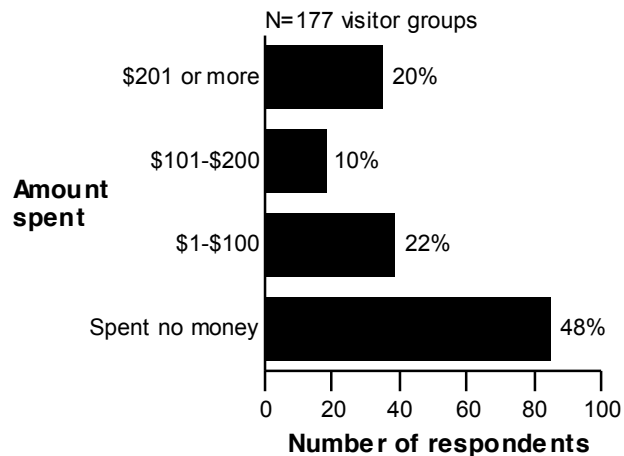
Figure 95: Proportions of total expenditures outside the park

\*total percentages do not equal 100 due to rounding

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

Lodges, hotels, motels, cabins, B&B, etc.

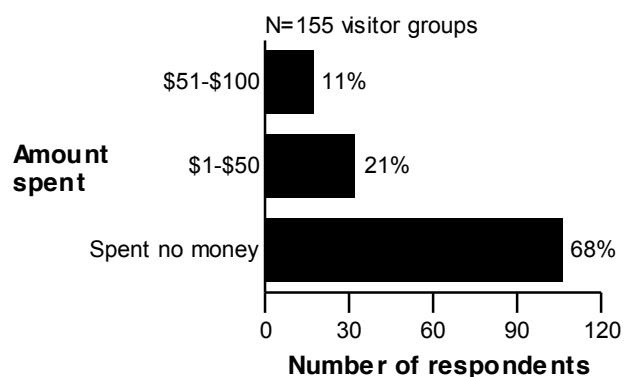
- 48% of visitor groups did not spend any money on lodging outside the park (see Figure 96).
- 22% spent \$1-\$100.



**Figure 96: Expenditures for lodging outside the park**

Camping fees and charges

- 68% of visitor groups did not spend any money on camping fees and charges outside the park (see Figure 97).
- 21% spent \$1-\$50.



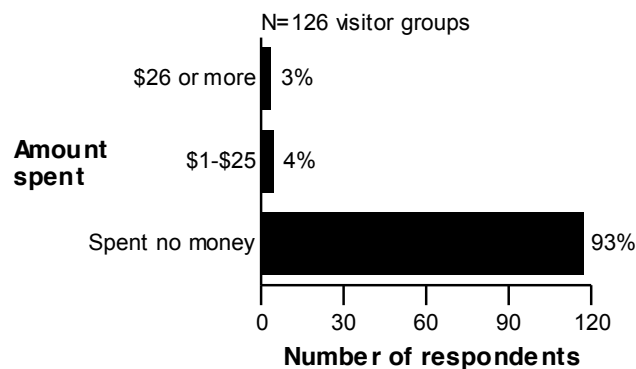
**Figure 97: Expenditures for camping fees and charges outside the park**

\*total percentages do not equal 100 due to rounding

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

Guide fees and charges

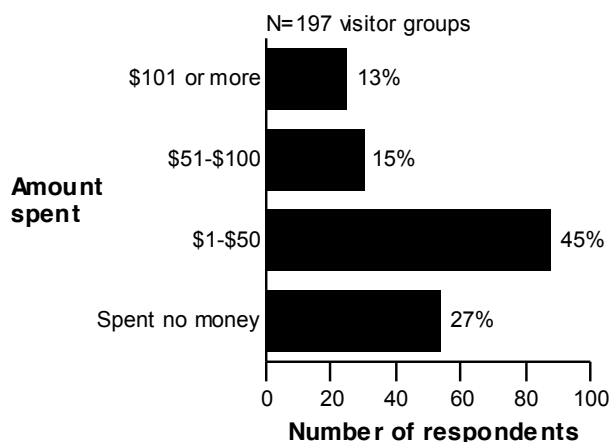
- 93% of visitor groups did not spend any money on guide fees and charges outside the park (see Figure 98).



**Figure 98: Expenditures for guide fees and charges outside the park**

Restaurants and bars

- 45% of visitor groups spent \$1-\$50 on restaurants and bars outside the park (see Figure 99).
- 27% did not spend any money.



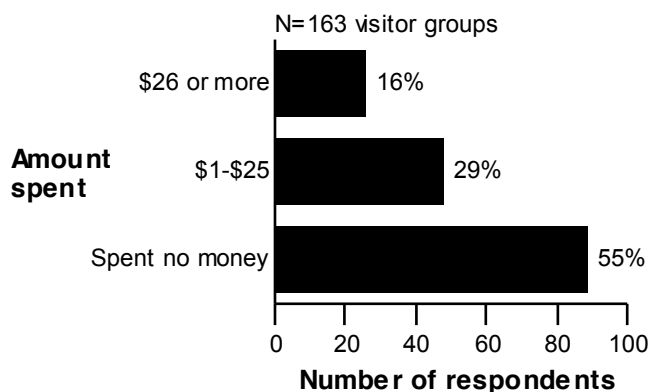
**Figure 99: Expenditures for restaurants and bars outside the park**

\*total percentages do not equal 100 due to rounding

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

Groceries and takeout food

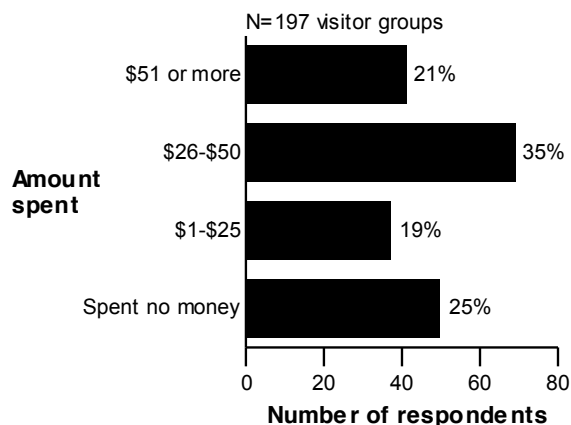
- 55% of visitor groups did not spend any money on groceries and takeout food outside the park (see Figure 100).
- 29% spent \$1-\$25.



**Figure 100: Expenditures for groceries and takeout food outside the park**

Gas and oil (auto, RV, boat, etc.)

- 35% of visitor groups spent \$26 - \$50 on gas and oil outside the park (see Figure 101).
- 25% did not spend any money.



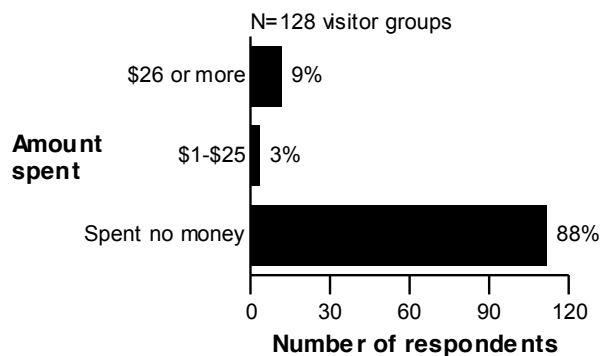
**Figure 101: Expenditures for gas and oil outside the park**

\*total percentages do not equal 100 due to rounding

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

Other transportation expenses (rental cars, taxis, auto repairs, but NOT airfare)

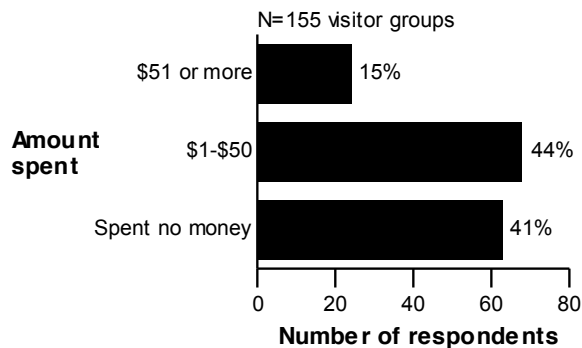
- 88% of visitor groups spent no money on other transportation expenses outside the park (see Figure 102).
- 9% spent \$26 or more.



**Figure 102: Expenditures for other transportation expenses outside the park**

Admission, recreation, entertainment fees

- 44% of visitor groups spent \$1-\$50 on admission, recreation, entertainment fees outside the park (see Figure 103).
- 41% did not spend any money.



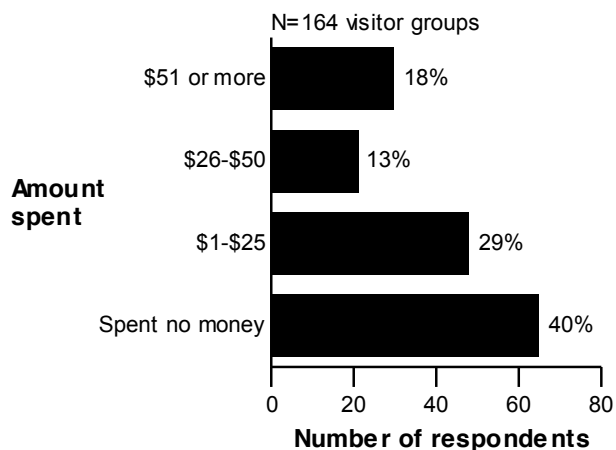
**Figure 103: Expenditures for admission, recreation, entertainment fees outside the park**

\*total percentages do not equal 100 due to rounding

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

All other purchases (souvenirs, books, sporting goods, clothing, etc.)

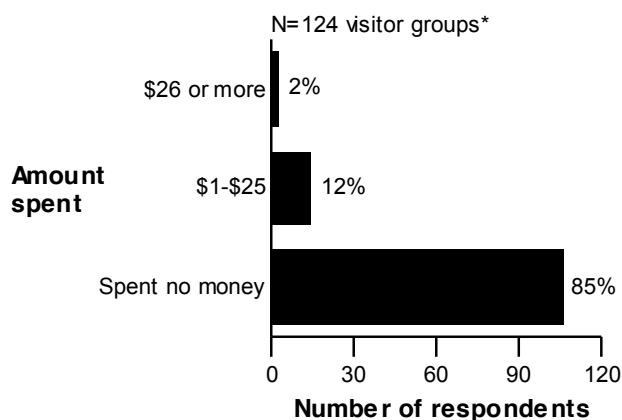
- 40% of visitor groups did not spend any money on other purchases outside the park (see Figure 104).
- 29% spent \$1-\$25.



**Figure 104: Expenditures for all other purchases outside the park**

Donations

- 85% of visitor groups did not spend any money on donations outside the park (see Figure 105).
- 12% spent \$1-\$25.



**Figure 105: Expenditures for donations outside the park**

\*total percentages do not equal 100 due to rounding

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

## Preferences for Future Visit

### Likelihood of future visit

#### Question 22

Would you or your personal group be likely to visit Minuteman Missile NHS in the future?

#### Results

- 53% of visitor groups would be likely to visit the park in the future (see Figure 106).
- 26% were not sure.

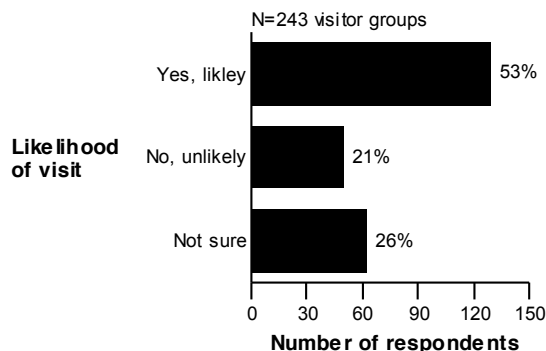


Figure 106: Likelihood of future visit

### Willingness to pay shuttle bus fee

#### Question 27

If you were to visit Minuteman Missile NHS in the future, would you and your personal group be willing to pay \$6.00/person (ages 16 and over) to ride a shuttle bus round trip from visitor center to the park sites?

#### Results

- 55% of visitor groups would be willing to pay a \$6.00/person fee for a shuttle bus between visitor center and park sites (see Figure 107).
- 28% would not be willing to pay a fee.

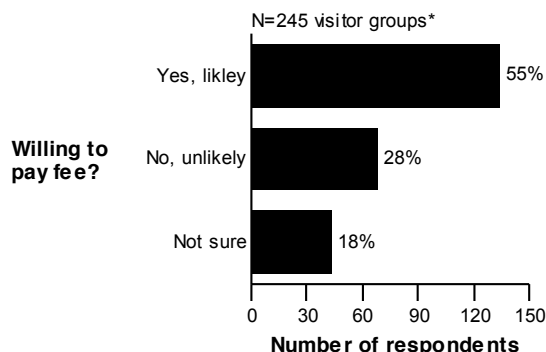


Figure 107: Willingness to pay a fee for shuttle bus between visitor center and park sites

\*total percentages do not equal 100 due to rounding

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

## Preferred methods to learn about park

### Question 31

If you were to visit Minuteman Missile NHS in the future, how would you and your personal group prefer to learn about cultural and natural history features of the park?

### Results

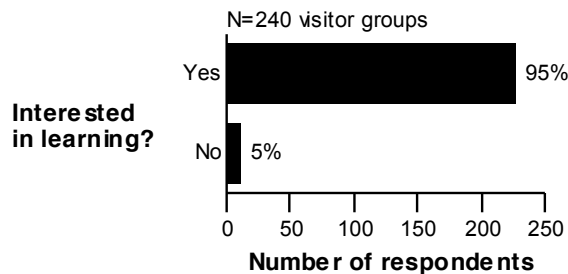
- 95% of visitor groups were interested in learning about cultural and natural history features of the park (see Figure 108).

- As shown in Figure 109, the most common preferred methods of learning about park features by visitor groups were:

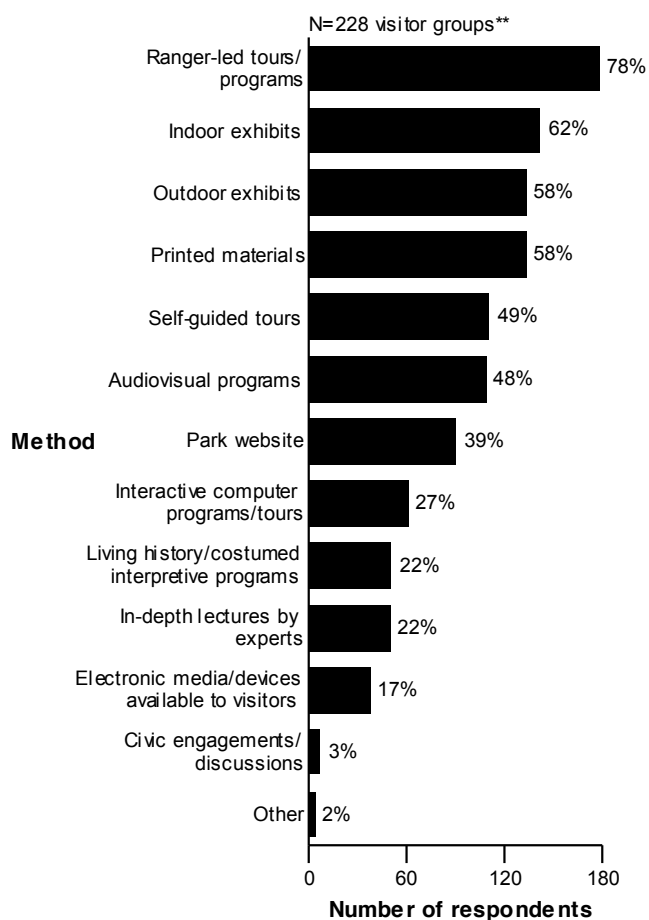
78% Ranger-led tours/  
programs  
62% Indoor exhibits  
58% Outdoor exhibits  
58% Printed material

- “Other” methods (2%) were:

All of the above, as budget  
permits  
Map of Cold War



**Figure 108: Visitor groups that were interested in learning about the park**



**Figure 109: Preferred methods for learning**

\*total percentages do not equal 100 due to rounding

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



## Sales items available to purchase on a future visit

### Question 26

If you were to visit Minuteman Missile NHS in the future, which types of sales items would you and your personal group like to have available for purchase in a bookstore/sales area?

### Results

- 63% of visitor groups were interested in having sales items available for purchase on a future visit (see Figure 110).

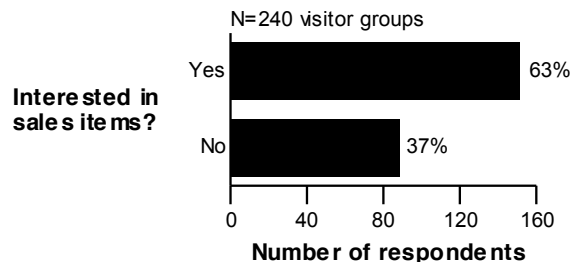
- As shown in Figure 111, the most common sales items visitor groups would like to have available were:

61% Gifts/souvenir items

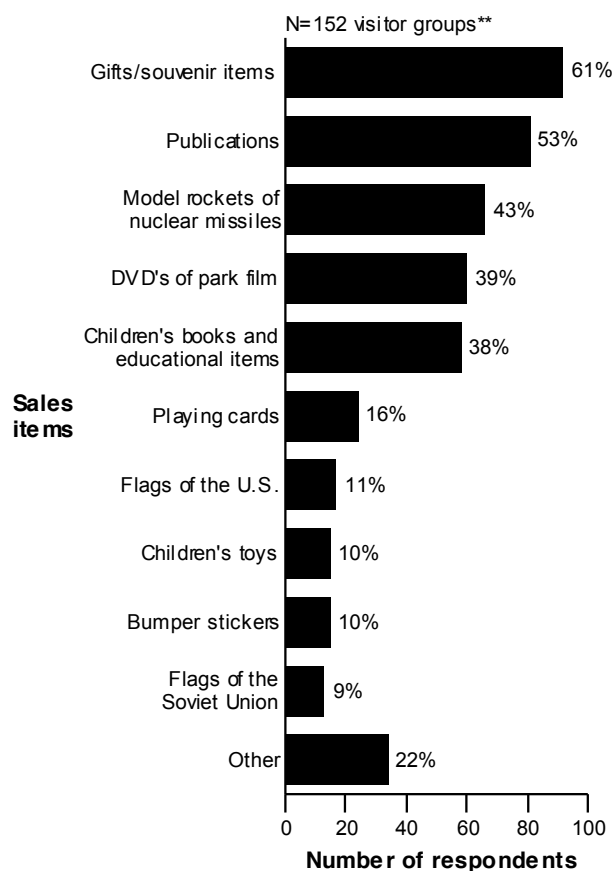
53% Publications

- “Other” items (22%) were:

Christmas ornament  
Cups  
Documentaries of nuclear/Cold War  
Hats  
Hike Shield 1  
Information about Cold War  
Keychains  
Lanyards  
Launch key  
Magnets  
Model of the site  
More detailed information  
Old Cold War propaganda - duck and cover, etc.  
Patches/pins  
Penny squasher  
Pens (e.g. Floaty pens)  
Photographs  
Pictures/posters of Mikhail Gorbachev  
Postcards  
Posters  
Puzzles  
Reproduction unit shirts (squadron)  
Snacks  
T-shirts



**Figure 110: Visitor groups that were interested in having sales items available for purchase on a future visit**



**Figure 111: Sales items visitor groups would like to have available for purchase on a future visit**

\*total percentages do not equal 100 due to rounding

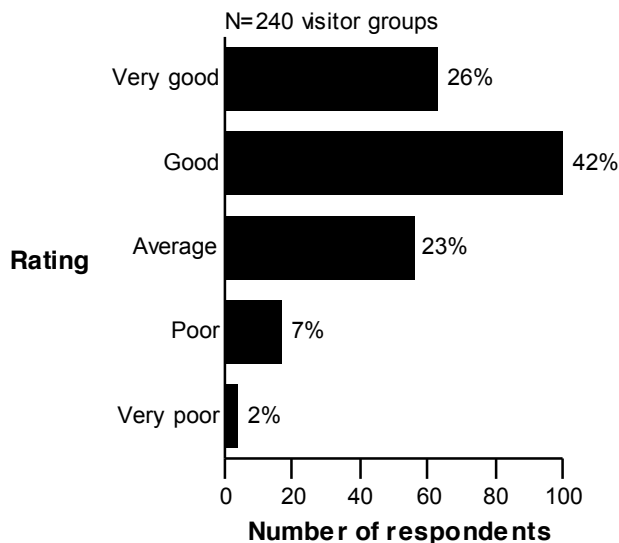
\*\*total percentages do not equal 100 because visitors could select more than one answer

**Overall Quality****Question 29**

Overall, how would you rate the quality of the visitor facilities, services, and recreational opportunities provided to you and your personal group at Minuteman Missile NHS during this visit?

**Results**

- 68% of visitor groups rated the overall quality of facilities, services, and recreational opportunities as “very good” or “good” (see Figure 112).
- 9% rated the quality as “very poor” or “poor.”



**Figure 112: Overall quality 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 one answer

<b>Visitor Comments</b>
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**National significance of the park**


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**Question 28**

Minuteman Missile NHS was established because of its significance to the nation. In your opinion, what is the national significance of the park? (open-ended)

**Results**

- 82% of visitor groups (N=205) responded to this question.
- Table 15 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

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**Table 15: National significance of the park**

N=269 comments;  
some visitor groups made more than one comment.

Comment	Number of times mentioned
Historical value/significance	52
Reminder/history of Cold War	52
Avoidance/deterrent of war	12
Educational value	12
National security during Cold War era	10
National security/defense	10
Education of youth/future generations	8
Cold War victory	7
Reality/threat of nuclear war	7
Educate the public	6
Historic preservation	5
History of nuclear weapons	5
Insight into life during the Cold War	5
U.S. action/readiness during Cold War	4
Consequences of nuclear war	3
Lessons for the future	3
Symbol/reminder of nuclear arms race	3
Technological achievement/history	3
A war memorial	2
Effect of Cold War on the world	2
Effect of Cold War on U.S. policy	2
Effect of missile sites on mid-western states	2
It is important	2
Of minimal significance	2
Protection of freedom	2
Recognize service of USAF/military personnel	2
Reminder of the costs of freedom	2
Soviet/U.S. relations	2
Testament to fear	2
Access to history	1
Awareness of the site	1
Caused of slowdown of Soviet expansion	1

---

**Table 15: National significance of the park**  
(continued)

Comment	Number of times mentioned
Clarifies misconceptions of nuclear war	1
Communicate the importance of a strong country	1
Control centers have changed little	1
Defeat of communism	1
Demonstrates national strength	1
Educate the public of how things have changed	1
Effect on present day life	1
Explains the daily fight for peace	1
Growing awareness of the past	1
History of foreign relations	1
History of national defense	1
History of satellite technology	1
Importance of military role in US security	1
Increases global awareness	1
Influence of Cold War on military history/policy	1
Major national investment	1
National pride	1
National security system	1
Nuclear war past/future	1
On-going fight for liberty	1
Opportunity to view the site	1
Political secrecy and war	1
Precariousness of global situations	1
Recent historic perspective for NPS	1
Reminder of a time of fear and prejudice	1
Reminder of US strength	1
Service to country	1
Should be visited by all Americans	1
Show effects of war	1
Showed how US stopped USSR	1
Site was in heartland of America	1
Stupidity of man/war	1
Symbol of American military	1
Thought-provoking	1
Threat of genocide	1
Un-used Triad 1000 sites	1
Willingness to pay for freedom	1

## Planning for the future

### Question 30

What would you and your personal group recommend to improve current visitor services provided at the park? (open-ended)

### Results

- 62% of visitor groups (N=155) responded to this question.
- Table 16 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

**Table 16: Planning for the future**

N=222 comments;  
some visitor groups made more than one comments.

Comment	Number of times mentioned
<b>INTERPRETIVE SERVICES</b>	
Offer more guided tours	31
Add more exhibits	20
Provide better information about the sites (e.g., location)	8
Have more educational material	4
Offer more self-guided tour opportunities	4
Give more information on the website about tours (e.g., Open House, reservations)	3
Have longer tours	3
Improve exhibits	3
More informative exhibits	3
Add more informational signs	2
Have a video in different room to avoid interruptions	2
More hands-on exhibits	2
More information about Cold War	2
Need more information about tours/reservations	2
Run Open House more often	2
Update tour information	2
Other comments	28
<b>FACILITIES/MAINTENANCE</b>	
Increase visitor center size	22
Have a permanent visitor center	10
Better parking	8
Add more directional signs to sites	6
Better road signs	6
Improve visitor center	5
Access roads to sites need improvement	4
A visitor center located at silo site	3
Add more parking	2
Have a shelter for people waiting for tours	2
Need more RV parking	2
Other comments	6

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**Table 16: Planning for the future**  
(continued)

Comment	Number of times mentioned
<b>POLICIES/MANAGEMENT</b>	
Provide a shuttle from visitor center to sites	8
Advertise the site more	7
Add souvenirs	4
Extended hours of operation	2
Other comments	4

---

## Additional comments

### Question 32

Is there anything else you and your personal group would like to tell us about your visit to Minuteman Missile NHS? (open-ended)

### Results

- 39% of visitor groups (N=97) responded to this question.
- Table 17 shows a summary of visitor comments. A complete copy of hand-written comments is included in the Visitor Comments Appendix.

**Table 17: Additional comments**

N=165 comments;  
some visitor groups made more than one comment.

Comment	Number of times mentioned
<b>PERSONNEL</b>	
Rangers and guides were knowledgeable	13
Park staff was friendly	10
Other comments	5
<b>INTERPRETIVE SERVICES</b>	
Add more tours	4
Enjoyed the ranger-led tours	4
Liked the personal stories from former employees	4
Enjoyed the tour	3
Improve reservation system	3
Add more exhibits	2
Junior Ranger program was great	2
Tour information should be on website	2
Unable to take tour	2
Other comments	25
<b>FACILITIES/MAINTENANCE</b>	
Sign difficult to see	2
Other comments	4
<b>POLICIES/MANAGEMENT</b>	
Advertise more	2
Develop the site more	2
Other comments	2

---

**Table 17: Additional comments**  
(continued)

Comment	Number of times mentioned
<b>GENERAL COMMENTS</b>	
Enjoyed the visit	22
It was interesting	8
Nice site	7
Will return	5
The visit was informative	4
Discovered the site by chance	3
Thank you	3
Were not able to visit some sites	2
Learned a lot from the visit	2
Wish we had more time to visit	2
Other comments	16

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<b>Appendix 1: The Questionnaire</b>
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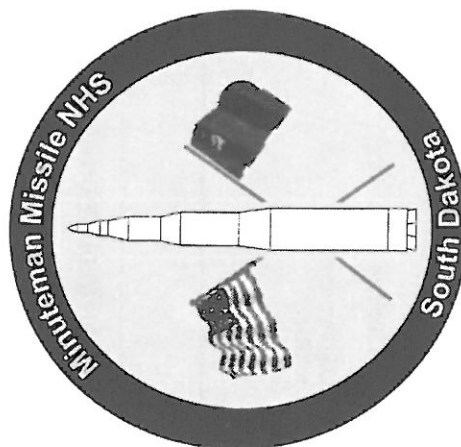
Social Science Program  
National Park Service  
U.S. Department of the Interior  
Visitor Services Project

# Minuteman Missile National Historic Site

## Visitor Study

Visitor Services Project  
Park Studies Unit  
College of Natural Resources  
University of Idaho  
P.O. Box 441139  
Moscow, Idaho 83844-1139

OFFICIAL BUSINESS





# United States Department of the Interior

NATIONAL PARK SERVICE  
Minuteman Missile NHS  
21280 SD Hwy 240  
Philip, SD 57567-7102

IN REPLY REFER TO:

May - June 2009

Dear Visitor:

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

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

When your visit is over, please complete this questionnaire. Seal it with the stickers provided on the last page and drop it in any U.S. mailbox.

If you have any questions, please contact Margaret Littlejohn, NPS VSP Coordinator, Park Studies Unit, College of Natural Resources, P.O. Box 441139, University of Idaho, Moscow, Idaho 83844-1139, phone: 208-885-7863, email: [littlej@uidaho.edu](mailto:littlej@uidaho.edu).

We appreciate your help.

Sincerely,

Mark E. Herberger  
Superintendent

## DIRECTIONS

At the end of your visit:

- 1) Please have the selected individual complete this questionnaire.
- 2) Answer the questions carefully since each question is different.
- 3) For questions that use circles (O), please mark your answer by filling in the circle with black or blue ink, or a pencil with dark (e.g. #2) lead.

Like this: Not like this:

- 4) Seal it with the stickers provided.
- 5) Drop it in a U.S. mailbox.

Thank you!

## PRIVACY ACT and PAPERWORK REDUCTION ACT statement:

16 U.S.C. 1a-7 authorizes collection of this information. This information will be used by park managers to better serve the public. Response to this request is voluntary. No action may be taken against you for refusing to supply the information requested. Your name is requested for follow-up mailing purposes only. When analysis of the questionnaire is completed, all name and address files will be destroyed. Thus the permanent data will be anonymous. Please do not put your name or that of any member of your personal group on the questionnaire. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

**Burden estimate statement:** Public reporting burden for this form is estimated to average 20 minutes per response. Direct comments regarding the burden estimate or any other aspect of this form to Margaret Littlejohn, NPS Visitor Services Project, College of Natural Resources, University of Idaho, P.O. Box 441139, Moscow, ID, 83844-1139; email: [littlej@uidaho.edu](mailto:littlej@uidaho.edu).

## Your Visit To Minuteman Missile NHS

NOTE: In this questionnaire, your **personal group** is defined as anyone that you are visiting the park with, such as spouse, family, friends, etc. This does not include the larger group that you might be traveling with, such as school, church, scouts, or tour group.

1. a) Prior to your visit, how did you and your personal group obtain information about Minuteman Missile NHS? Please mark (●) all that apply in column (a).  
 b) If you were to visit Minuteman Missile NHS in the future, how would you and your personal group prefer to obtain information about the park? Please mark (●) all that apply in column (b).

## a) Prior to this visit

- ☐ Did not obtain information prior to visit → Go to part b of this question  
☐ Previous visits  
☐ Friends/relatives/word of mouth  
☐ Travel guides/tour books (such as AAA, etc.)  
☐ Maps/brochures  
☐ Newspaper/magazine articles  
☐ Email/telephone/written inquiry to park  
☐ Television/radio programs/videos  
☐ Minuteman Missile NHS website: [www.nps.gov/mimi](http://www.nps.gov/mimi)  
☐ Other websites  
☐ School class/program  
☐ Local businesses (hotels/motels/restaurants, etc.)  
☐ Chamber of commerce/visitors bureau/state welcome center  
☐ Information from another park  
☐ Other (Please specify below)

This visit \_\_\_\_\_ Future visit \_\_\_\_\_

- c) From the sources you used prior to this visit, did you and your personal group receive the type of information about the park that you needed?

☐ No ☐ Yes → Go to Question 2

- d) If NO, what type of park information did you and your personal group need that was not available? Please be specific.

2. a) What role did this visit to Minuteman Missile NHS play in your and your personal group's decision to visit South Dakota? Please mark (●) only one.

- ☐ Resident of S. Dakota → Go to Question 3  
☐ Minuteman Missile NHS was the primary reason for visiting S. Dakota  
☐ Minuteman Missile NHS was one of several destinations in S. Dakota  
☐ Minuteman Missile NHS was not a planned destination in S. Dakota

- b) Did your visit to Minuteman Missile NHS influence you and your personal group's decision to spend time in the area (within 30 miles of visitor center) in addition to spending time at the park?

☐ Yes ☐ No

3. On this trip, what was the **primary** reason that you and your personal group came to the Minuteman Missile NHS area (within 30 miles of the visitor center)? Please mark (●) only one.

- ☐ Resident of area (within 30 miles of visitor center) → Go to Question 4  
☐ Visit Minuteman Missile NHS  
☐ Visit other attractions in the area  
☐ Visit friends/relatives in the area  
☐ Business  
☐ Other (Please specify) \_\_\_\_\_

4. On this visit, what was the **primary** reason that you and your personal group visited Minuteman Missile NHS? Please mark (●) only one.

- ☐ Obtain NPS Passport Book stamp ☐ Saw sign on highway  
☐ Visit a National Park Service unit ☐ Interest in Cold War history  
☐ Recommended by a friend or family member  
☐ Something to do on the way to visit other NPS sites in western South Dakota, such as Badlands and Mt. Rushmore  
☐ Other (Please specify) \_\_\_\_\_

5. On this trip, which of the following national park sites in the Minuteman Missile NHS area (within 100 miles of the park) did you and your personal group visit? Please mark (●) all that apply.

- ☐ None → **Go to Question 6**
- ☐ Badlands National Park
- ☐ Devils Tower National Monument
- ☐ Jewel Cave National Monument
- ☐ Mount Rushmore National Memorial
- ☐ Wind Cave National Park

6. a) In what city/town did you and your personal group stay on the **night before your arrival** at Minuteman Missile NHS? If you stayed at home, please write the name of the city/town and state where you live.

Nearest city/town \_\_\_\_\_ State \_\_\_\_\_

- b) In what city/town did you and your personal group stay on the **night after your departure** from Minuteman Missile NHS? If you stayed at home, please write the name of the city/town and state where you live.

Nearest city/town \_\_\_\_\_ State \_\_\_\_\_

7. a) On this visit to Minuteman Missile NHS, which routes did you use to first **arrive** at the park? Please mark (●) **only one**.

- ☐ I-90 east only ☐ I-90 east to Badlands Scenic Loop 240
- ☐ I-90 west only ☐ Badlands Scenic Loop 240 from Wall
- ☐ Hwy 44 from Rapid City ☐ Hwy 44 from Pine Ridge Indian Reservation

- b) On this visit to Minuteman Missile NHS, which routes did you use **after leaving** the park? Please mark (●) **only one**.

- ☐ I-90 east only ☐ Badlands Scenic Loop 240 to I-90 east
- ☐ I-90 west only ☐ Badlands Scenic Loop 240 to Wall
- ☐ Hwy 44 to Rapid City ☐ Hwy 44 to Pine Ridge Indian Reservation

- c) On this visit, how many vehicles did you and your personal group use to arrive at the park?

\_\_\_\_\_ Number of vehicles

8. a) On this trip, did you and your personal group stay overnight **away from your permanent residence** in the Minuteman Missile NHS area (within 30 miles of the visitor center)?

☐ Yes ☐ No → **Go to Question 9**

- b) If YES, please list the number of nights you and your personal group stayed in the Minuteman Missile NHS area.

\_\_\_\_\_ Number of nights within 30 miles of the visitor center

- c) If YES, in which types of lodging did you and your personal group spend the night(s) in the area outside the park (within 30 miles of the visitor center)? Please mark (●) **all** that apply.

- ☐ Lodges, hotels, motels, cabins, B&B, etc.
- ☐ RV/trailer camping
- ☐ Tent camping in developed campground
- ☐ Personal seasonal residence
- ☐ Residence of friends or relatives
- ☐ Other (Please specify) \_\_\_\_\_

9. a) How many hours in **total** did you and your personal group spend visiting Minuteman Missile NHS on this visit?

\_\_\_\_\_ Total number of hours (Please list partial hours as 1/4, 1/2, or 3/4.)

- b) On this visit, did you and your personal group visit Minuteman Missile NHS on more than one day?

☐ Yes ☐ No → **Go to Question 10**

- c) If YES, on how many days did you visit the park?

\_\_\_\_\_ Number of days

- d) On this trip, how many times did you and your personal group enter the park?

\_\_\_\_\_ Number of times entered

10. On this visit to Minuteman Missile NHS, which park sites did you and your personal group visit? Please mark (●) **all** that apply.

- ☐ Visitor center
- ☐ Launch Facility (Missile Silo) Delta-09
- ☐ Launch Control Facility Delta-01

11. a) On this visit to Minuteman Missile NHS, did anyone in your personal group participate in a ranger-led tour?

☐ Yes ☐ No → Go to part d of this question

- b) If YES, what was the most enjoyable aspect of the tour?

- c) If YES, please rate the length of the tour. Please mark (●) only one.

☐ Too short ☐ About right ☐ Too long

- d) During which times of day would you and your personal group prefer to take the tour? Please mark (●) all that apply.

☐ 9:00 am – 11:00 am ☐ 1:00 pm – 3:00 pm

☐ 11:00 am – 1:00 pm ☐ 3:00 pm – 5:00 pm

☐ Other (Please specify) \_\_\_\_\_

12. a) Prior to this visit, in which activities did you and your personal group expect to participate at Minuteman Missile NHS? Please mark (●) all that apply in column (a).

- b) In which activities did you and your personal group actually participate on this visit? Please mark (●) all that apply in column (b).

**a) Expected activity**

- ☐ Attend Open House ☐
- ☐ Attend ranger-led tours (other than Open House) ☐
- ☐ Painting/drawing/taking photographs ☐
- ☐ Participate in Junior Ranger program ☐
- ☐ Take self-guided tours ☐
- ☐ View visitor center exhibits ☐
- ☐ Watch park video/film ☐
- ☐ Other (Please specify below) ☐

Expected \_\_\_\_\_ This visit \_\_\_\_\_

- c) Which one of the above activities was the primary activity in which you and your personal group participated at Minuteman Missile NHS on this visit? Please list only one.

13. a) During this visit to Minuteman Missile NHS, did you and your personal group learn about the following topics? Please mark (●) all that apply in column (a).

- b) If you were to visit in the future, which topics would you and your personal group be interested in learning (or learning more) about? Please mark (●) all that apply in column (b).

**a) Learned this visit**

☐ Not interested in learning on a future visit ☐

☐ Missile history – both U.S. and Soviet Union ☐

☐ Technology and engineering that developed and built the system ☐

☐ Nuclear weapons and the arms race ☐

☐ Soviet/Russian perspective on Cold War ☐

☐ Landowner perspective on missile fields ☐

☐ Personal and human stories related to missile field (Air Force) personnel ☐

☐ Nuclear weapons and missiles – at present and in the future ☐

☐ Effects on local communities and citizens ☐

☐ Peace protests – Debate on use of nuclear weapons ☐

☐ The Cold War's effects on the 21<sup>st</sup> century ☐

☐ Other topics (Please specify below) ☐

This visit \_\_\_\_\_ Future visit \_\_\_\_\_

14. a) Do you, or does any person in your family or personal group, have a personal connection to the Minuteman Missile field?

☐ Yes ☐ No → Go to part c of this question

- b) If YES what is the personal connection to the missile field?

- c) If YES, would this person be interested in providing the park with an oral or written history of this personal connection?

☐ Yes ☐ No

15. a) Please mark (●) all the visitor services and facilities that you or your personal group **used** at Minuteman Missile NHS during this visit.
- b) Next, for only those services and facilities that you or your personal group **used**, please rate their importance to your visit from 1-5.
- c) Finally, for only those services and facilities that you or your personal group **used**, please rate their quality from 1-5.

a) Visitor services/facilities used Mark (●)	b) If used, how important? 1=Not important 2=Somewhat important 3=Moderately important 4=Very important 5=Extremely important	c) If used, what quality? 1=Very poor 2=Poor 3=Average 4=Good 5=Very good

- |                       |   |       |       |
|-----------------------|---|-------|-------|
| <input type="radio"/> | Access for people with disabilities   | _____ | _____ |
| <input type="radio"/> | Assistance from park staff  | _____ | _____ |
| <input type="radio"/> | Visitor contact station   | _____ | _____ |
| <input type="radio"/> | Indoor exhibits   | _____ | _____ |
| <input type="radio"/> | Outdoor exhibits  | _____ | _____ |
| <input type="radio"/> | Junior Ranger program   | _____ | _____ |
| <input type="radio"/> | Park brochure/map   | _____ | _____ |
| <input type="radio"/> | Park newspaper  | _____ | _____ |
| <input type="radio"/> | Park video/film   | _____ | _____ |
| <input type="radio"/> | Park website: <a href="http://www.nps.gov/mimi">www.nps.gov/mimi</a><br>used before or during visit | _____ | _____ |
| <input type="radio"/> | Parking   | _____ | _____ |
| <input type="radio"/> | Ranger-led tour   | _____ | _____ |
| <input type="radio"/> | Restrooms   | _____ | _____ |
| <input type="radio"/> | Self-guided tour  | _____ | _____ |

16. For you and your personal group, please estimate all expenditures for the items listed below for this visit to Minuteman Missile NHS area (within 30 miles of the park). **Please write "0" if no money was spent in a particular category.**

- a) Please list your group's total expenditures inside Minuteman Missile NHS.
- b) Please list your group's total expenditures in the area outside the park (within 30 miles of the park).

NOTE: Surrounding area residents should only include expenditures that were **just for this trip** to Minuteman Missile NHS.

	EXPENDITURES	
	a) Inside park	b) Outside park
Lodges, hotels, motels, cabins, B&B, etc.	n/a	\$ _____
Camping fees and charges	n/a	\$ _____
Guide fees and charges	n/a	\$ _____
Restaurants and bars	n/a	\$ _____
Groceries and takeout food	n/a	\$ _____
Gas and oil (auto, RV, boat, etc.)	n/a	\$ _____
Other transportation expenses (rental cars, taxis, auto repairs, but NOT airfare)	n/a	\$ _____
Admission, recreation, entertainment fees	n/a	\$ _____
All other purchases (souvenirs, film, books, sporting goods, clothing, etc.)	\$ _____	\$ _____
Donations	\$ _____	\$ _____

- c) How many people do the above expenses cover?

\_\_\_\_\_ Adults (18 years or over) \_\_\_\_\_ Children (under 18 years)  
Please write "0" if no children were covered by the expenditures.

17. On this visit, were you and your personal group part of the following types of organized groups?

- |   |                           |                          |
|---|---------------------------|--------------------------|
| a) Commercial guided tour group   | <input type="radio"/> Yes | <input type="radio"/> No |
| b) School/educational group   | <input type="radio"/> Yes | <input type="radio"/> No |
| c) Other (scouts, work, church)   | <input type="radio"/> Yes | <input type="radio"/> No |
| d) If you were with one of these organized groups, how many people, including yourself, were in this group? |                           |                          |

\_\_\_\_\_ Number of people in organized group

18. a) On this visit, which type of personal group (not commercial guided tour/school/other organized group) were you with? Please mark (●) **only one**.

☐ Alone      ☐ Friends  
☐ Family      ☐ Family and friends  
☐ Other (Please specify) \_\_\_\_\_

- b) On this visit, how many people were in your personal group, including yourself?  
 \_\_\_\_\_ Number of people

19. For you only, what is your gender?

☐ Male      ☐ Female

20. For you only, what is the highest level of education you have completed? Please mark (●) **only one**.

☐ Some high school      ☐ Bachelor's degree  
☐ High school diploma/GED      ☐ Graduate degree  
☐ Some college

21. a) Does anyone in your personal group have a physical condition that made it difficult to access or participate in park activities or services?

☐ Yes      ☐ No → **Go to Question 22**

- b) If YES, which services or activities were difficult to access/participate in?  
 \_\_\_\_\_

22. Would you or your personal group be likely to visit Minuteman Missile NHS in the future?

☐ Yes, likely      ☐ No, unlikely      ☐ Not sure

23. a) Are you or members of your group Hispanic or Latino? Please mark (●) **one** for each group member.

	Yourself	Member #2	Member #3	Member #4	Member #5	Member #6	Member #7
Yes, Hispanic or Latino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No, not Hispanic or Latino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- b) What is your race? What is the race of each member of your personal group? Please mark (●) **one or more** for you and each group member.

	Yourself	Member #2	Member #3	Member #4	Member #5	Member #6	Member #7
American Indian or Alaska Native	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Black or African American	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Native Hawaiian or other Pacific Islander	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. For you and your personal group on this visit, please provide the following. (If you do not know the answer, leave blank).

	a) Current age	b) U.S. ZIP code or name of country other than U.S.	c) Number of visits to Minuteman Missile NHS since 2004 (including this visit)
Yourself	_____	_____	_____
Member #2	_____	_____	_____
Member #3	_____	_____	_____
Member #4	_____	_____	_____
Member #5	_____	_____	_____
Member #6	_____	_____	_____
Member #7	_____	_____	_____

25. a) Which one language do you and members of your personal group primarily use to communicate with each other?

☐ English      ☐ Other (Specify) \_\_\_\_\_

- b & c) When visiting an area such as Minuteman Missile NHS, which **one** language do you and most members of your personal group prefer to use for the following?

b) **Speaking:** ☐ English      ☐ Other (Specify) \_\_\_\_\_  
 c) **Reading:** ☐ English      ☐ Other (Specify) \_\_\_\_\_



- d) In your opinion, which **services** in the park need to be provided in languages other than English? Please specify a service or mark (●) "None."

Service \_\_\_\_\_ ☐ None

26. If you were to visit Minuteman Missile NHS in the future, which types of sales items would you and your personal group like to have available for purchase in a bookstore/sales area? Please mark (●) **all** that apply.

- ☐ Not interested in sales items → **Go to Question 27**
- ☐ Bumper stickers (w/park name and/or logo) ☐ Children's toys
- ☐ Children's books and educational items ☐ DVD's of park film
- ☐ Flags of the Soviet Union ☐ Flags of the U.S.
- ☐ Model rockets of nuclear missiles ☐ Gifts/souvenir items
- ☐ Playing cards (w/park and missile field logos) ☐ Publications
- ☐ Other (Please specify) \_\_\_\_\_

27. If you were to visit Minuteman Missile NHS in the future, would you and your personal group be willing to pay \$6.00/person (ages 16 and over) to take a shuttle bus round trip from the visitor center to the park sites?

☐ Yes, likely ☐ No, unlikely ☐ Not sure

28. Minuteman Missile NHS was established because of its significance to the nation. In your opinion, what is the national significance of the park?
- \_\_\_\_\_
- \_\_\_\_\_

29. Overall, how would you rate the quality of the visitor facilities, services, and recreational opportunities provided to you and your personal group at Minuteman Missile NHS during this visit? Please mark (●) **one**.

Very poor	Poor	Average	Good	Very good
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. What would you and your personal group recommend to improve current visitor services provided at the park? Please be specific.
- \_\_\_\_\_
- \_\_\_\_\_

31. If you were to visit Minuteman Missile NHS in the future, how would you and your personal group prefer to learn about cultural and natural history features of the park? Please mark (●) **all** that apply.

- ☐ Not interested in learning about the park → **Go on to Question 32**
- ☐ Civic engagements and discussions ☐ In-depth lectures by experts
- ☐ Interactive computer programs/tours ☐ Indoor exhibits
- ☐ Park website: [www.nps.gov/mimi](http://www.nps.gov/mimi) ☐ Outdoor exhibits
- ☐ Ranger-led tours/programs ☐ Self-guided tours
- ☐ Audiovisual programs (DVD, video, or movie)
- ☐ Electronic media/devices available to visitors (downloadable podcasts, MP3, Windows Media™, etc.)
- ☐ Living history demonstrations/costumed interpretive programs
- ☐ Printed materials (brochures, books, maps, etc.)
- ☐ Other (Please specify) \_\_\_\_\_

32. Is there anything else you and your personal group would like to tell us about your visit to Minuteman Missile NHS?
- \_\_\_\_\_
- \_\_\_\_\_

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

<input type="radio"/> Less than \$24,999	<input type="radio"/> \$50,000-\$74,999	<input type="radio"/> \$150,000-\$199,999
<input type="radio"/> \$25,000-\$34,999	<input type="radio"/> \$75,000-\$99,999	<input type="radio"/> \$200,000 or more
<input type="radio"/> \$35,000-\$49,999	<input type="radio"/> \$100,000-\$149,999	<input type="radio"/> Do not wish to answer

b) How many people are in your household? \_\_\_\_\_ Number of people

Thank you for your help! Please seal the questionnaire with the stickers provided and drop it in any U.S. mailbox.



## Appendix 2: Additional Analysis

The Visitor Services Project (VSP) offers the opportunity to learn more from VSP visitor study data through additional analysis. Two-way and three-way cross tabulations can be made with any questions.

Below are some examples of the types of cross tabulations that can be requested. To make a request, please use the contact information below, and include your name, address and phone number in the request.

1. What proportion of family groups with children attend interpretive programs?
2. Is there a correlation between visitors' ages and their preferred sources of information about the park?
3. Are highly satisfied visitors more likely to return for a future visit?
4. How many international visitors participate in hiking?
5. What ages of visitors would use the park website as a source of information on a future visit?
6. Is there a correlation between visitor groups' rating of the overall quality of their park experience, and their ratings of individual services and facilities?
7. Do larger visitor groups (e.g., four or more) participate in different activities than smaller groups?
8. Do frequent visitors rate the overall quality of their park experiences differently than less frequent visitors?

For more information please contact:

Visitor Services Project, PSU  
College of Natural Resources  
P.O. Box 441139  
University of Idaho  
Moscow, ID 83844-1139

Phone: 208-885-7863  
Fax: 208-885-4261  
Email: [littlej@uidaho.edu](mailto:littlej@uidaho.edu)  
Website: <http://www.psu.uidaho.edu>

### **Appendix 3: Decision Rules for Checking Non-response Bias**

Non-response bias is one of the major threats to the quality of a survey project. It affects the ability to generalize from a sample to general population (Salant and Dillman 1994; Dillman, 2007; Stoop 2004; Fillion 1976; Dey 1997). Since non-response bias is usually caused by participants failing to return their questionnaires, a higher response rate is more desirable. However, higher response rates do not guarantee low non-response bias. Researchers have suggested different methods to detect non-response bias. The most common variables used to detect non-response bias are demographic variables. Some researchers such as Van Kenhove (2002), Groves (2000) also suggest that saliency of topic has an effect on response rate. In our visitor study, visitors' satisfaction (overall quality rating) could be considered as one of the salient factors as we aim to collect opinions from both unsatisfied and satisfied visitors. There are also several methods for checking non-response bias suggested in the literature. We decided to follow the method suggested by Groves (2006), De Rada (2005), and Rogelberg and Luong (1998) to compare the demographic characteristics as well as satisfaction scores of respondents in three different mailing waves. This seems to be the most suitable method because the visitor population is generally unknown.

Respondents were categorized based on the date their questionnaire was received. The first wave is defined as surveys received before the 1<sup>st</sup> replacement, the second wave is between 1<sup>st</sup> and 2<sup>nd</sup> replacement and the third wave contains surveys received after the 2<sup>nd</sup> replacement. Analysis of variance was used to detect differences in age, distance of travel to the park, and overall quality rating scores among different mailing waves.

A Chi-square test was used to detect the difference in education levels at different mailing waves. The hypothesis was that group types are equally represented. If the p-value is greater than 0.05, the difference in group type is judged to be insignificant.

Therefore, the hypotheses for checking non-response bias are:

1. Respondents of different mailing waves have the same average age.
2. On average respondents of different mailing waves traveled the same distance to the park.
3. Respondents of different mailing waves have the same average satisfaction scores.
4. Respondents of different education levels are equally represented at different mailing waves.

Tables 3 and 4 show no significant difference in age, travel distance, overall quality rating, and level of education. The non-response bias is thus judged to be insignificant.

*References*

- Filion F. L. (Winter 1975-Winter 1976). Estimating Bias due to Non-response in Mail Surveys. *Public Opinion Quarterly*, Vol 39 (4): 482-492.
- De Rada, D. V. (2005). The Effect of Follow-up Mailings on the Response Rate and Response Quality in Mail Survey. *Quality & Quantity*, Vol 38: 1-18.
- 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. (2007). *Mail and Internet Surveys: The Tailored Design Method, Updated version with New Internet, Visual, and Mixed-Mode Guide*, 2<sup>nd</sup> Edition, New York: John Wiley and Sons, Inc.
- Goudy, W. J. (1976) Non-response Effect on Relationships Between Variables. *Public Opinion Quarterly*, Vol 40 (3): 360-369.
- Groves, R. M. (2006). Nonresponse Rates and Nonresponse Bias in Household Surveys. *Public Opinion Quarterly*, Vol 70 (5): 646-675.
- Groves, R. M., Singer, E., and Corning, A. (2000). Leverage-Saliency Theory of Survey Participation Description and Illustration. *Public Opinion Quarterly*, Vol 64: 299-308.
- Rogelberg, S. G. and Luong, A. (1998). Nonresponse to Mailed Surveys: A Review and Guide. *Current Directions in Psychological Science*, Vol 7 (2): 60-65.
- Salant, P. and Dillman, D. A. (1994). *How to Conduct Your Own Survey*. U.S.: John Wiley and Sons, Inc.
- Stoop, I. A. L. (2004). Surveying Non-respondents. *Field Methods*, 16 (1): 23.
- Van Kenhove, P., Wijnen, K., and De Wulf K. (2002). The Influence of Topic Involvement on Mail-Survey Response Behavior. *Psychology and Marketing*, Vol 19 (3): 293-301.

**Appendix 4: Visitor Services Project Publications**

All VSP reports are available on the Park Studies Unit website at [www.psu.uidaho.edu.vsp.reports.htm](http://www.psu.uidaho.edu.vsp.reports.htm). All studies were conducted in summer unless otherwise noted.

**1982**

1. Mapping interpretive services: A pilot study at Grand Teton National Park.

**1983**

2. Mapping interpretive services: Identifying barriers to adoption and diffusion of the method.
3. Mapping interpretive services: A follow-up study at Yellowstone National Park and Mt Rushmore National Memorial.
4. Mapping visitor populations: A pilot study at Yellowstone National Park.

**1985**

5. North Cascades National Park Service Complex
6. Crater Lake National Park

**1986**

7. Gettysburg National Military Park
8. Independence National Historical Park
9. Valley Forge National Historical Park

**1987**

10. Colonial National Historical Park (summer & fall)
11. Grand Teton National Park
12. Harpers Ferry National Historical Park
13. Mesa Verde National Park
14. Shenandoah National Park (summer & fall)
15. Yellowstone National Park
16. Independence National Historical Park: Four Seasons Study

**1988**

17. Glen Canyon National Recreational Area
18. Denali National Park and Preserve
19. Bryce Canyon National Park
20. Craters of the Moon National Monument

**1989**

21. Everglades National Park (winter)
22. Statue of Liberty National Monument
23. The White House Tours, President's Park

**1989 (continued)**

24. Lincoln Home National Historic Site
25. Yellowstone National Park
26. Delaware Water Gap National Recreation Area
27. Muir Woods National Monument

**1990**

28. Canyonlands National Park (spring)
29. White Sands National Monument
30. National Monuments & Memorials, Washington, D.C.
31. Kenai Fjords National Park
32. Gateway National Recreation Area
33. Petersburg National Battlefield
34. Death Valley National Monument
35. Glacier National Park
36. Scott's Bluff National Monument
37. John Day Fossil Beds National Monument

**1991**

38. Jean Lafitte National Historical Park (spring)
39. Joshua Tree National Monument (spring)
40. The White House Tours, President's Park (spring)
41. Natchez Trace Parkway (spring)
42. Stehekin-North Cascades NP/Lake Chelan NRA
43. City of Rocks National Reserve
44. The White House Tours, President's Park (fall)

**1992**

45. Big Bend National Park (spring)
46. Frederick Douglass National Historic Site (spring)
47. Glen Echo Park (spring)
48. Bent's Old Fort National Historic Site
49. Jefferson National Expansion Memorial
50. Zion National Park
51. New River Gorge National River
52. Klondike Gold Rush National Historical Park, AK
53. Arlington House-The Robert E. Lee Memorial

**Visitor Services Project Publications (continued)****1993**

- 54. Belle Haven Park/Dyke Marsh Wildlife Park (spring)
- 55. Santa Monica Mountains National Recreation Area (spring)
- 56. Whitman Mission National Historic Site
- 57. Sitka National Historical Park
- 58. Indiana Dunes National Lakeshore
- 59. Redwood National Park
- 60. Channel Islands National Park
- 61. Pecos National Historical Park
- 62. Canyon de Chelly National Monument
- 63. Bryce Canyon National Park (fall)

**1994**

- 64. Death Valley National Monument Backcountry (winter)
- 65. San Antonio Missions National Historical Park (spring)
- 66. Anchorage Alaska Public Lands Information Center
- 67. Wolf Trap Farm Park for the Performing Arts
- 68. Nez Perce National Historical Park
- 69. Edison National Historic Site
- 70. San Juan Island National Historical Park
- 71. Canaveral National Seashore
- 72. Indiana Dunes National Lakeshore (fall)
- 73. Gettysburg National Military Park (fall)

**1995**

- 74. Grand Teton National Park (winter)
- 75. Yellowstone National Park (winter)
- 76. Bandelier National Monument
- 77. Wrangell-St. Elias National Park & Preserve
- 78. Adams National Historic Site
- 79. Devils Tower National Monument
- 80. Manassas National Battlefield Park
- 81. Booker T. Washington National Monument
- 82. San Francisco Maritime National Historical Park
- 83. Dry Tortugas National Park

**1996**

- 84. Everglades National Park (spring)
- 85. Chiricahua National Monument (spring)

**1996 (continued)**

- 86. Fort Bowie National Historic Site (spring)
- 87. Great Falls Park, Virginia (spring)
- 88. Great Smoky Mountains National Park
- 89. Chamizal National Memorial
- 90. Death Valley National Park (fall)
- 91. Prince William Forest Park (fall)
- 92. Great Smoky Mountains National Park (fall)

**1997**

- 93. Virgin Islands National Park (winter)
- 94. Mojave National Preserve (spring)
- 95. Martin Luther King, Jr., National Historic Site (spring)
- 96. Lincoln Boyhood National Memorial
- 97. Grand Teton National Park
- 98. Bryce Canyon National Park
- 99. Voyageurs National Park
- 100. Lowell National Historical Park

**1998**

- 101. Jean Lafitte National Historical Park & Park (spring)
- 102. Chattahoochee River National Recreation Area (spring)
- 103. Cumberland Island National Seashore (spring)
- 104. Iwo Jima/Netherlands Carillon Memorials
- 105. National Monuments & Memorials, Washington, D.C.
- 106. Klondike Gold Rush National Historical Park, AK
- 107. Whiskeytown National Recreation Area
- 108. Acadia National Park

**1999**

- 109. Big Cypress National Preserve (winter)
- 110. San Juan National Historic Site, Puerto Rico (winter)
- 111. St. Croix National Scenic Riverway
- 112. Rock Creek Park
- 113. New Bedford Whaling National Historical Park
- 114. Glacier Bay National Park & Preserve
- 115. Kenai Fjords National Park
- 116. Lassen Volcanic National Park
- 117. Cumberland Gap National Historical Park (fall)

**Visitor Services Project Publications (continued)****2000**

- 118. Haleakala National Park (spring)
- 119. White House Tour and White House Visitor Center (spring)
- 120. USS Arizona Memorial
- 121. Olympic National Park
- 122. Eisenhower National Historic Site
- 123. Badlands National Park
- 124. Mount Rainier National Park

**2001**

- 125. Biscayne National Park (spring)
- 126. Colonial National Historical Park (Jamestown)
- 127. Shenandoah National Park
- 128. Pictured Rocks National Lakeshore
- 129. Crater Lake National Park
- 130. Valley Forge National Historical Park

**2002**

- 131. Everglades National Park (spring)
- 132. Dry Tortugas National Park (spring)
- 133. Pinnacles National Monument (spring)
- 134. Great Sand Dunes National Park & Preserve
- 135. Pipestone National Monument
- 136. Outer Banks Group (Cape Hatteras National Seashore, Ft. Raleigh National Historic Site, and Wright Brothers National Memorial)
- 137. Sequoia & Kings Canyon National Parks and Sequoia National Forest
- 138. Catoctin Mountain Park
- 139. Hopewell Furnace National Historic Site
- 140. Stones River National Battlefield (fall)

**2003**

- 141. Gateway National Recreation Area: Floyd Bennett Field (spring)
- 142. Cowpens National Battlefield (spring)
- 143. Grand Canyon National Park – North Rim
- 144. Grand Canyon National Park – South Rim
- 145. C&O Canal National Historical Park
- 146. Capulin Volcano National Monument
- 147. Oregon Caves National Monument
- 148. Knife River Indian Villages National Historic Site
- 149. Fort Stanwix National Monument
- 150. Arches National Park

**2003 continued**

- 151. Mojave National Preserve (fall)

**2004**

- 152. Joshua Tree National Park (spring)
- 153. New River Gorge National River
- 154. George Washington Birthplace National Monument
- 155. Craters of the Moon National Monument & Preserve
- 156. Dayton Aviation Heritage National Historical Park
- 157. Apostle Islands National Lakeshore
- 158. Keweenaw National Historical Park
- 159. Effigy Mounds National Monument
- 160. Saint-Gaudens National Historic Site
- 161. Manzanar National Historic Site
- 162. John Day Fossil Beds National Monument

**2005**

- 163. Congaree National Park (spring)
- 164. San Francisco Maritime National Historical Park (spring)
- 165. Lincoln Home National Historic Site
- 166. Chickasaw National Recreation Area
- 167. Timpanogos Cave National Monument
- 168. Yosemite National Park
- 169. Fort Sumter National Monument
- 170. Harpers Ferry National Historical Park
- 171. Cuyahoga Valley National Park
- 172. Johnstown Flood National Memorial
- 173. Nicodemus National Historic Site

**2006**

- 174. Kings Mountain National Military Park (spring)
- 175. John Fitzgerald Kennedy National Historic Site
- 176. Devils Postpile National Monument
- 177. Mammoth Cave National Park
- 178. Yellowstone National Park
- 179. Monocacy National Battlefield
- 180. Denali National Park & Preserve
- 181. Golden Spike National Historic Site
- 182. Katmai National Park and Preserve
- 183. Zion National Park (spring and fall)



**Visitor Services Project Publications (continued)****2007**

- 184.1. Big Cypress National Preserve (spring)
- 184.2. Big Cypress National Preserve (ORV  
Permit Holder/Camp Owner)
- 185. Hawaii Volcanoes National Park (spring)
- 186. Glen Canyon National Recreation Area  
(spring and summer)
- 187. Lava Beds National Monument
- 188. John Muir National Historic Site
- 189. Fort Union Trading Post NHS
- 190. Fort Donelson National Battlefield
- 191. Agate Fossil Beds National Monument
- 192. Mount Rushmore National Memorial
- 193. Ebey's Landing National Historical  
Reserve
- 194. Rainbow Bridge National Monument
- 195. Independence National Historical Park
- 196. Minute Man National Historical Park

**2008**

- 197. Blue Ridge Parkway (fall and summer)
- 198. Yosemite National Park
- 199. Everglades National Park (winter and  
spring)
- 200. Horseshoe Bend National Military Park  
(spring)
- 201. Carl Sandburg Home National Historic  
Site (spring)
- 202. Fire Island National Seashore resident  
(spring)
- 203. Fire Island National Seashore visitor
- 204. Capitol Reef National Park
- 205.1 Great Smoky Mountains National Park  
(summer)
- 205.2 Great Smoky Mountains National Park  
(fall)
- 206. Grand Teton National Park
- 207. Herbert Hoover National Historic Site
- 208. City of Rocks National Reserve

**2009**

- 209. Fort Larned National Historic Site
- 210. Homestead National Monument of  
America
- 211. Minuteman Missile National Historic Site

For more information about the Visitor Services Project, please contact the University of Idaho Park Studies Unit, website: <a href="http://www.psu.uidaho.edu">www.psu.uidaho.edu</a> or phone (208) 885-7863.
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<b>Visitor Comments Appendix</b>
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This section contains complete visitor comments of all open-ended questions and is bound separately from this report due to its size.

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