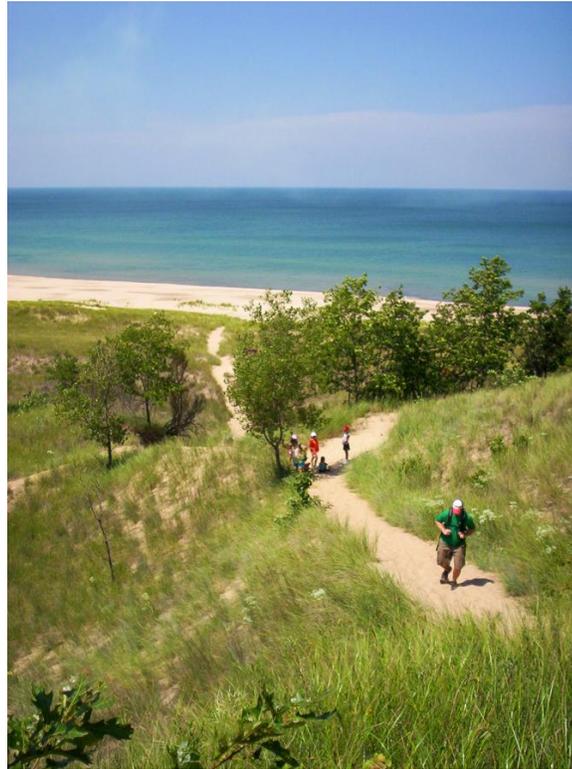




Social Science Program
National Park Service
U.S. Department of the Interior

Visitor Services Project



Indiana Dunes National Lakeshore Visitor Study

Summer 2009

University of Idaho
A LEGACY OF LEADING

Park Studies Unit
Visitor Services Project
Report 220



**Social Science Program
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May 2010

Nancy C. Holmes
Ariel Blotkamp
Yen Le
Gail Vander Stoep
Steven J. Hollenhorst

Nancy Holmes and Ariel Blotkamp are Research Assistants, and Dr. Yen Le is the Assistant Director of the Visitor Services Project at the University of Idaho. Dr. Steven Hollenhorst is the Director of the Park Studies Unit, Department of Conservation Social Sciences, University of Idaho. We thank Dr. Gail Vander Stoep, Assistant Professor at Michigan State University, for overseeing the survey fieldwork, Elise Nussbaum and the staff of Indiana Dunes National Lakeshore for assisting with the survey, and David Vollmer and Yanyin Xu for data processing.

**Visitor Services Project
Indiana Dunes National Lakeshore
Report Summary**

- This report describes the results of a visitor study at Indiana Dunes National Lakeshore during August 1-14, 2009. A total of 908 questionnaires were distributed to visitor groups. Of those, 499 questionnaires were returned resulting in an overall 55% response rate.
- This report profiles a systematic random sample of Indiana Dunes National Lakeshore 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.
- Thirty-four percent of visitor groups were in groups of five or more and 27% were in groups of two. Sixty-five percent of visitor groups were in family groups.
- United States visitors comprised 98% of total visitation during the survey period, with 40% from Indiana, 40% from Illinois, and smaller proportions from 27 other states. International visitors were from seven countries and comprised 2% of total visitation.
- Forty-seven percent of visitors were visiting the park for the first time, while 34% had visited four or more times. In the past twelve months, 66% of visitors visited the park one time and 16% visited two to three times.
- Thirty-eight percent of visitors were ages 31-51 years, 5% were 66 years or older, and 28% were ages 15 years or younger. Six percent of visitors were Hispanic or Latino and 95% were White.
- Most visitor groups (88%) obtained information about the park prior to their visit. Prior to this visit, visitor groups most often obtained information about the park through previous visits (54%) and friends/relatives/word of mouth (49%). Most visitor groups (85%) received the information they needed. On a future visit, 67% of visitors would use the Indiana Dunes National Lakeshore website to obtain information.
- Of those visitor groups that spent more than 24 hours, the average length of stay was 2.8 days. Of those that spent less than 24 hours, the average length of stay was 3.5 hours. The average length of stay for all visitors was 15.9 hours.
- Among visitors that visited other places in the surrounding area (from Gary, IN to Michigan City, IN), 42% of visitor groups visited Indiana Dunes State Park.
- The most common sites visited within the park were Mt. Baldy (38%) followed by the beach in the central part of the park (37%). “Beach activities” was the most common visitor activity (79%) followed by walking/hiking (51%).
- The information service and facility most commonly used by visitor groups was directional signs (68%). The most commonly used visitor service and facility was restrooms (87%).
- Most visitor groups (87%) rated the overall quality of facilities, services, and recreational opportunities at Indiana Dunes National Lakeshore as “very good” or “good.” Less than two percent of visitor groups rated the overall quality as “very poor” or “poor.”

For more information about the Visitor Services Project, please contact the Park Studies Unit at the University of Idaho at (208) 885-7863 or the following website <http://www.psu.uidaho.edu>.

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INTRODUCTION

This report describes the results of a visitor study at Indiana Dunes National Lakeshore (NL), conducted August 1-14, 2009 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Park Studies Unit (PSU) at the University of Idaho.

The National Park Service website for Indiana Dunes NL describes the park: “Indiana Dunes National Lakeshore is a treasure of diverse natural resources located within an urban setting. The national lakeshore features communities that have both scientific and historic significance to the field of ecology. In addition, four National Natural Landmarks and one National Historical Landmark are located within its boundaries” (www.nps.gov/indu February, 2010).

Organization of the report

The report is organized into three sections.

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

Section 2: Results. This section provides summary information for each question in the questionnaire and also 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 visitor groups.

Appendix 2: *Additional Analysis.* Results of additional analyses are included in this report. A list of sample questions for cross-references and cross comparisons is provided. Comparisons can be analyzed within park or between parks.

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 VSP. Copies of these reports can be obtained by visiting the website: www.psu.uidaho.edu/vsp/reports.htm or by contacting the VSP office at (208) 885-7863.

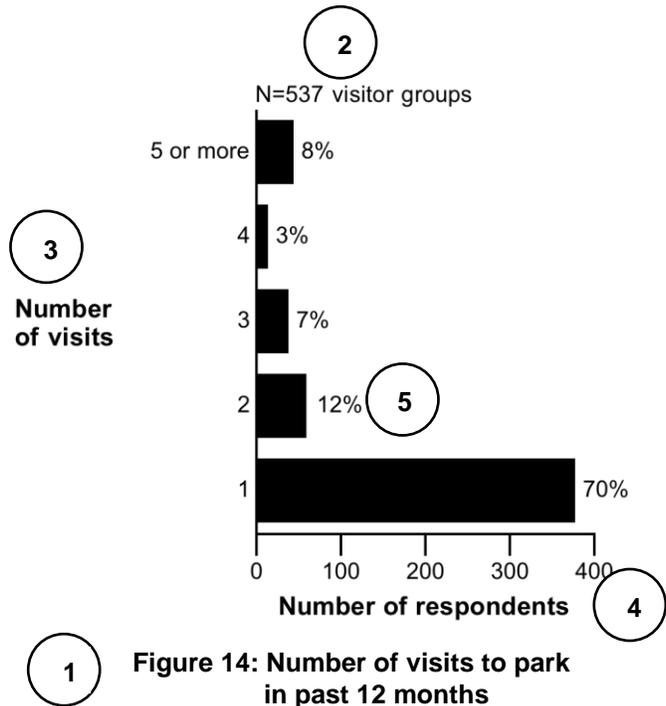
Visitor Comments Appendix: A separate appendix provides visitor responses to open-ended questions. It is bound separately from this report due to its size.

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 Indiana Dunes NL during August 1-14, 2009. Table 1 shows the ten locations, number of questionnaires distributed at each location, and the response rate for each location. Visitors were surveyed between the hours of 7 a.m. and 7 p.m. During this survey, 969 visitor groups were contacted and 908 of these groups (93.6%) accepted questionnaires (average acceptance rate for 205 VSP visitor studies conducted from 1988 through 2008 is 90.9%). Questionnaires were completed and returned by 499 visitor groups resulting in a 55.0% response rate for this study. The average response rate for the 205 VSP visitor studies is 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	%
West Beach Bath House	189	21	102	20
Mt. Baldy	184	20	107	21
Kemil Beach	140	15	60	12
Central Beach	100	11	51	10
Dorothy Buell Memorial Visitor Center	90	10	46	9
Portage Lakefront Pavilion	79	9	50	10
Chellberg Farm	60	7	41	8
Dunewood Campground	50	6	33	7
Horse Trail	8	1	4	1
Paul H. Douglas Center	7	1	5	1
Total	907	101*	499	99*

*total percentages do not equal 100 due to rounding

Questionnaire design

The Indiana Dunes National Lakeshore 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 Indiana Dunes National Lakeshore. 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 Indiana Dunes National Lakeshore 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.

Survey procedure

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. In order to distribute all 499 questionnaires, the survey period was extended. This resulted in a second round of follow-up mailings.

Table 2: Follow-up mailing distribution

Round 1 mailing	Date	U.S.	International	Total
Postcards	August 24, 2009	792	11	803
1 st Replacement	September 8, 2009	496	6	502
2 nd Replacement	September 28, 2009	428	0	428
Round 2 mailing	Date	U.S.	International	Total
Postcards	August 31, 2009	63	1	64
1 st Replacement	September 15, 2009	43	1	44
2 nd Replacement	October 5, 2009	30	0	30

Data Analysis

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 August 1-14, 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 was generally warm and sunny in the morning followed by afternoon clouds and some rain in the afternoons. Temperatures varied from the mid 60s to high 70s. No special events occurred in the area that would have affected the type and the amount of visitation to the park.

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 postcard	Between postcard 2 nd replacement	After 2 nd replacement	p-value (ANOVA)
Age (years)	45.22	45.03	42.56	0.203
Travel distance to park (miles)	113.88	127.84	143.27	0.584
Overall quality rating (from 1 to 5 scale)	4.26	4.15	4.23	0.405

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

Education level	Before postcard	Between postcard 2 nd replacement	After 2 nd replacement	p-value (chi-square)
Some high school	1	2	0	
High school diploma/GED	40	19	15	
Some college	74	30	31	
Bachelor's degree	90	32	31	
Graduate degree	63	32	27	
p-value (chi-square)				0.723

RESULTS

Group and Visitor Characteristics

Visitor group size

Question 27b

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

Results

- 34% of visitors were in groups of five or more (see Figure 1).
- 27% were in groups of two.
- The mean group size was 4.5

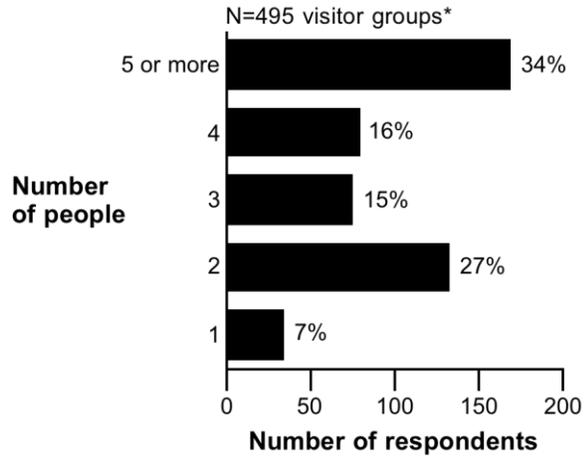


Figure 1: Visitor group size

Visitor group type

Question 27a

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

Results

- 65% of visitor groups were made up of family members (see Figure 2).
- 17% were with family and friends.

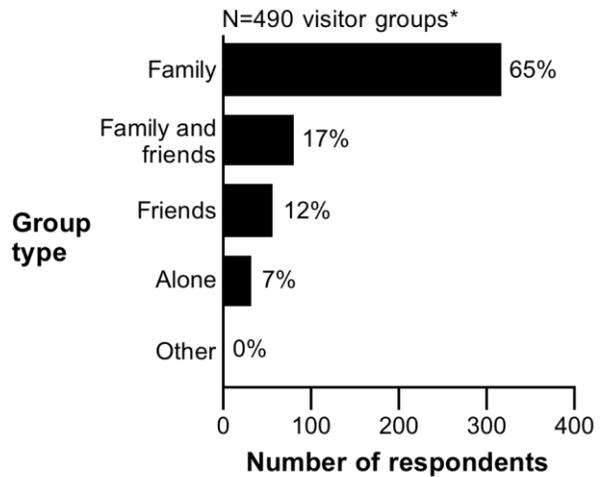


Figure 2: Visitor group type

*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 26a

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

Results

- 1% of visitor groups were part of a commercial guided tour group (see Figure 3).

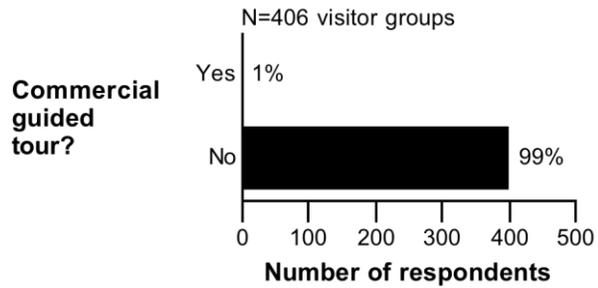


Figure 3: Visitors with a commercial guided tour group

Question 26b

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

Results

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

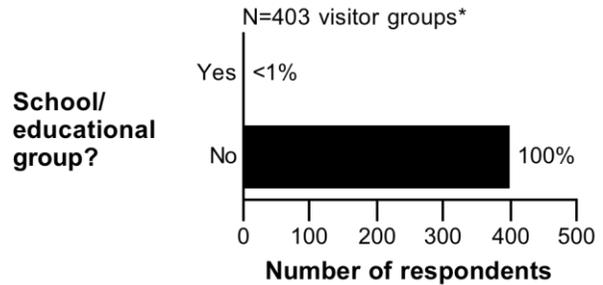


Figure 4: Visitors with a school/educational group

Question 26c

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

Results

- 3% of visitor groups were part of an "other" organized group (see Figure 5).

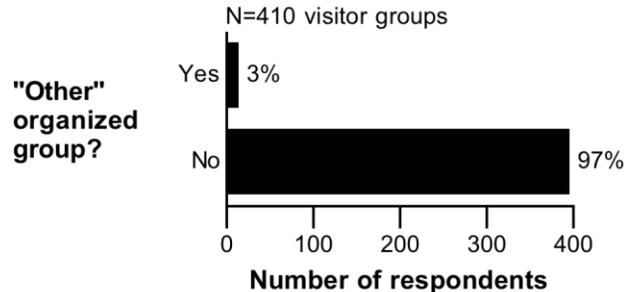


Figure 5: Visitors with an "other" organized group

*total percentages do not equal 100 due to rounding

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

Question 26d

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

Results – Interpret with **CAUTION!**

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

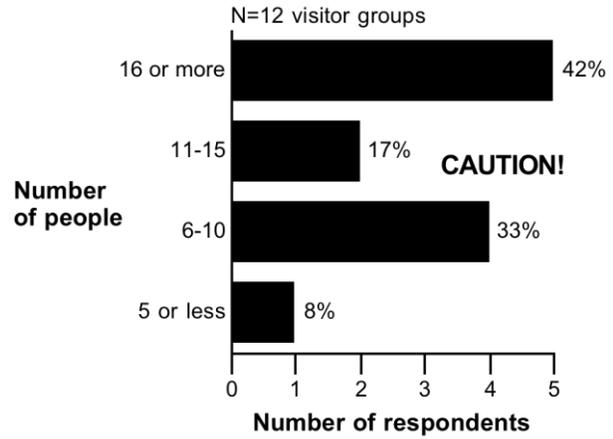


Figure 6: Organized group size

*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 28b

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

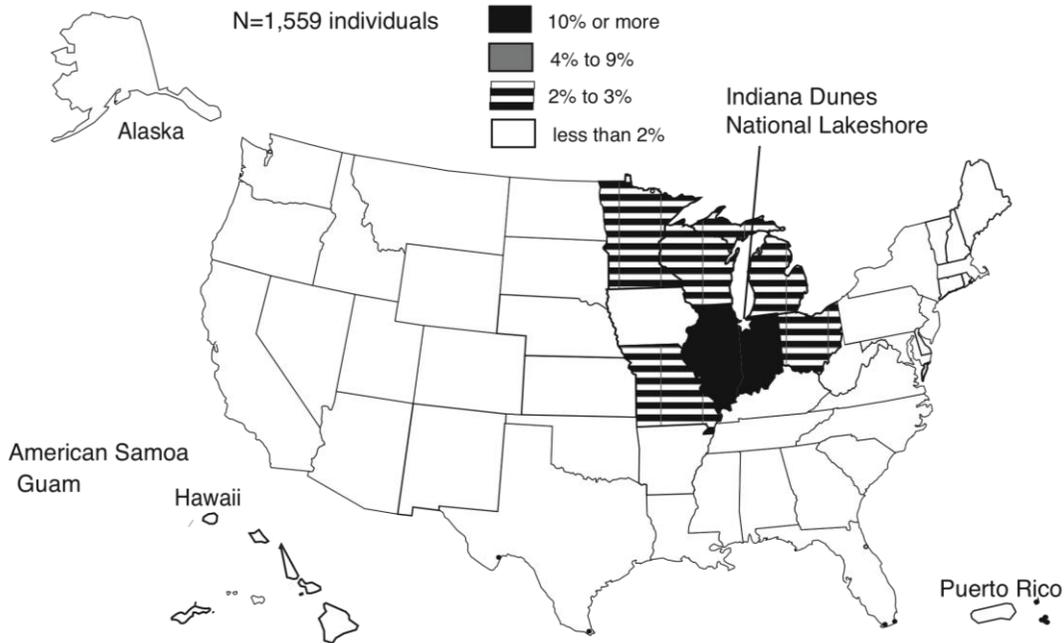
Table 5: United States visitors by state of residence*

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

Results

- U.S. visitors were from 29 states and comprised 98% of total visitation to the park during the survey period.
- 40% of U.S. visitors came from Illinois and 40% from Indiana (see Table 5 and Map 1).
- Smaller proportions of U.S. visitors came from 27 other states.

State	Number of visitors	Percent of U.S. visitors N=1,559 individuals	Percent of total visitors N=1,584 individuals
Illinois	625	40	39
Indiana	625	40	39
Ohio	52	3	3
Michigan	40	3	3
Wisconsin	40	3	3
Minnesota	33	2	2
Missouri	27	2	2
California	16	1	1
Iowa	14	1	1
Pennsylvania	12	1	1
Kentucky	9	1	1
18 other states	66	4	4



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 28b

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

Table 6: International visitors by country of residence *

	Country	Number of visitors	Percent of international visitors N=25 individuals	Percent of total visitors N=1,584 individuals
Note: Response was limited to seven members from each visitor group.	Canada	13	52	1
	Poland	4	16	.2
	United Kingdom	3	12	.2
	Germany	2	8	.1
	Australia	1	4	.1
	Japan	1	4	.1
	Netherlands	1	4	.1

Results – **CAUTION!**

- There were too few responses from international visitors to provide reliable results (see Table 6).

*total percentages do not equal 100 due to rounding

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

Number of visits, past 12 months

Question 28c

For you and your personal group on this visit, how many times have you visited Indiana Dunes NL in the past 12 months (including this visit)?

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

Results

- 66% of visitors were visiting the park for the first time in the past 12 months (see Figure 7).
- 17% visited four or more times.

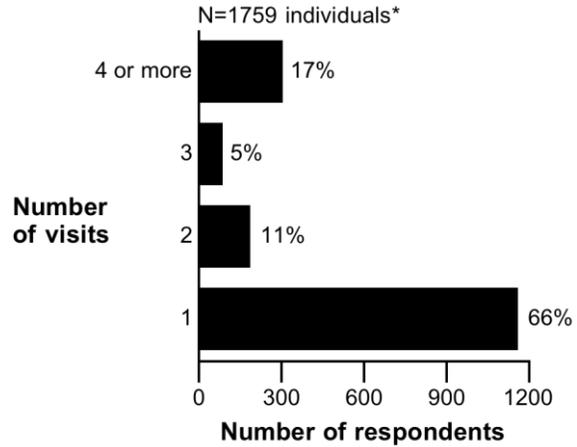


Figure 7: Number of visits to park in past 12 months

Number of visits, lifetime

Question 28d

For you and your personal group on this visit, how many times have you visited Indiana Dunes NL in your lifetime (including this visit)?

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

Results

- 47% of visitors were visiting the park for the first time (see Figure 8).
- 34% visited the park four or more times in their lifetime.

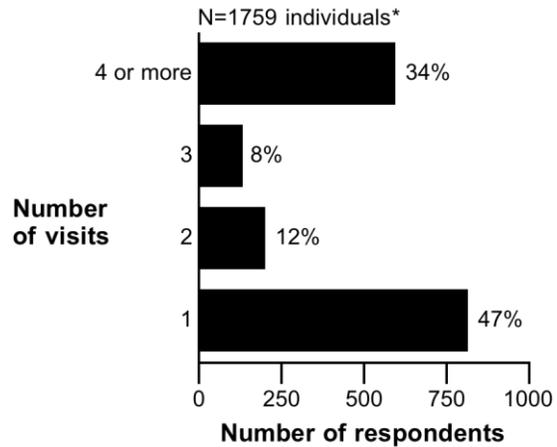


Figure 8: Number of visits to park in lifetime

*total percentages do not equal 100 due to rounding

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

Visitor age

Question 28a

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 93 years.
- 38% of visitors were in the 31-55 years age group (see Figure 9).
- 29% were 15 years or younger.
- 5% were 66 or older.

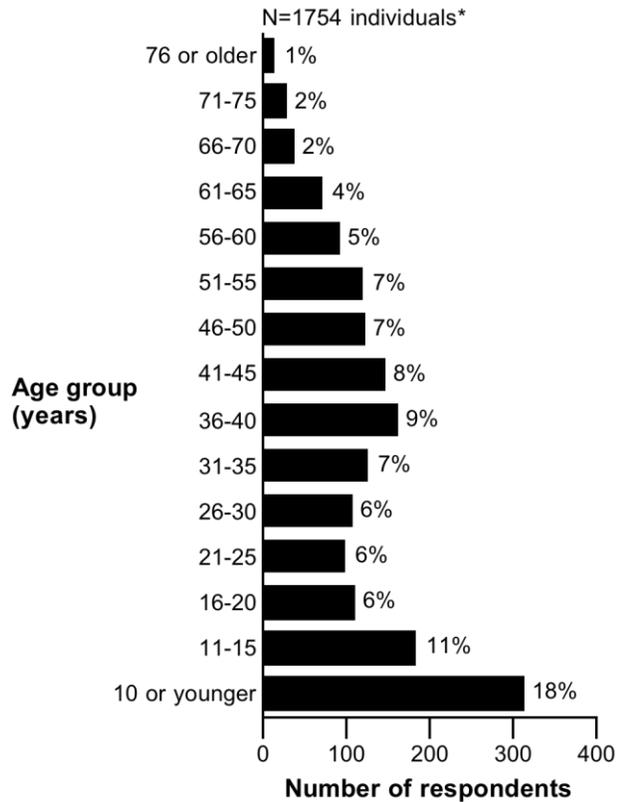


Figure 9: Visitor age

*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 30a

Are you or members of your personal group Hispanic or Latino?

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

Results

- 6% of visitors were Hispanic or Latino (see Figure 10).

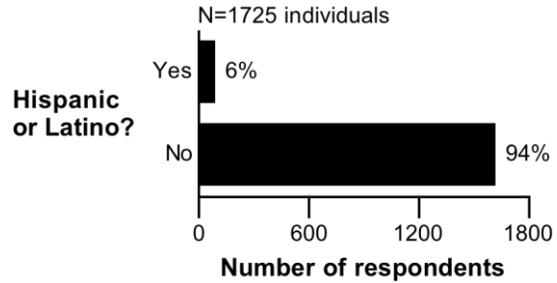


Figure 10: Visitors who were Hispanic or Latino

Visitor race

Question 30b

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

- 95% of visitors were White (see Figure 11).
- 3% were Asian.

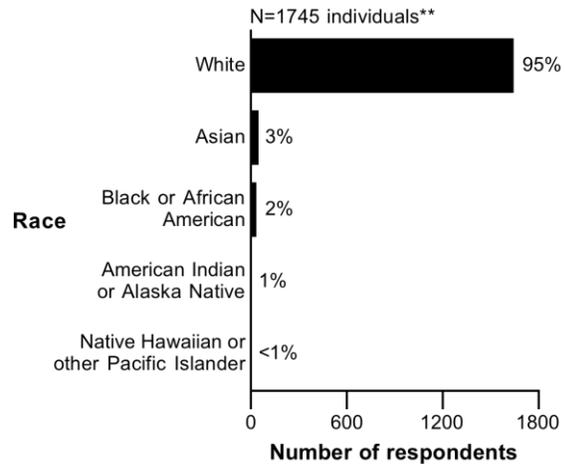


Figure 11: Visitor race

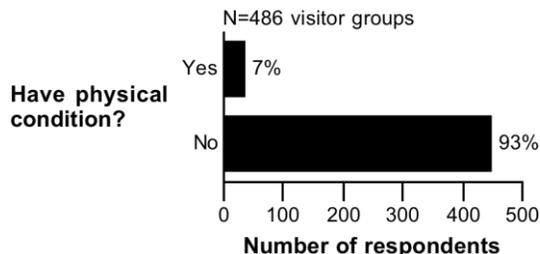
*total percentages do not equal 100 due to rounding

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

Visitors with physical conditions

Question 31a

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



Results

- 7% of visitor groups had members with physical conditions that made it difficult to access or participate in park activities or services (see Figure 12).

Figure 12: Visitor groups that had members with physical conditions

Question 31b

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

Results

- 32 visitor groups commented on the services and activities that were difficult to access or participate in (see Table 7).

Table 7: Services/activities difficult to access/participate in
N=32 comments

Service	Number of times mentioned
Walking/hiking	13
Getting to beach	10
Walking on sand	4
Restrooms	2
Bike trails	1
Climbing stairs	1
Swimming	1

*total percentages do not equal 100 due to rounding

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

Respondents' level of education

Question 29

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

Results

- 31% of respondents had a bachelor's degree (see Figure 13).
- 28% had attended some college.

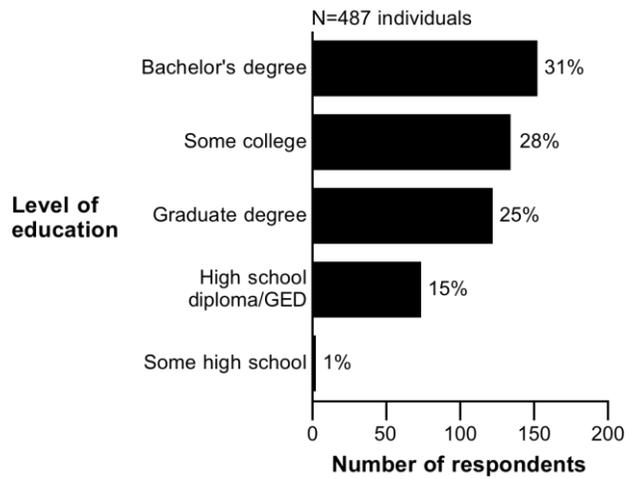


Figure 13: Respondents' level of education

*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 36a

Which category best represents your annual household income?

Results

- 24% of respondents had an annual household income of \$50,000 to \$74,999 (see Figure 14).
- 35% had an income of \$75,000 to \$149,999.

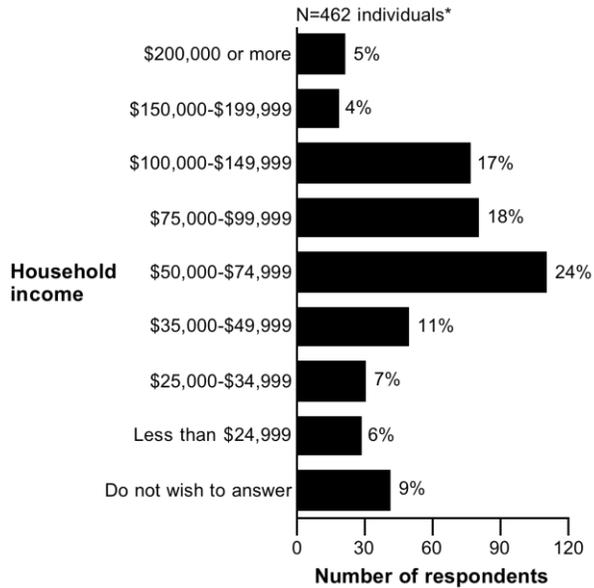


Figure 14: Annual household income

Household size

Question 36b

How many people are in your household?

Results

- 33% of respondents had two people in their household (see Figure 15).
- 39% had four or more people in their household.

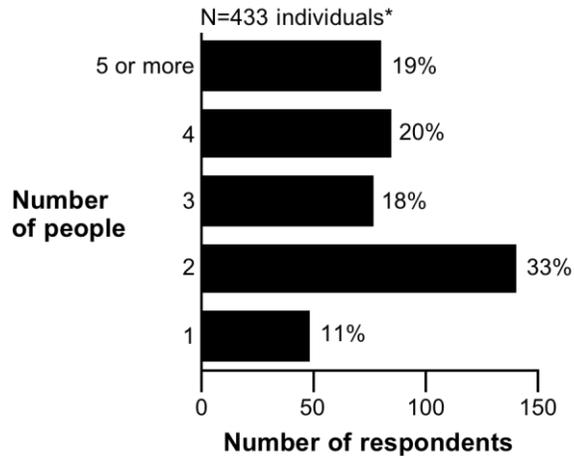


Figure 15: Number of people in household

*total percentages do not equal 100 due to rounding

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

Awareness of park

Question 2

Prior to this visit, were you and your personal group aware that Indiana Dunes National Lakeshore is a national park?

Results

- 79% of visitor groups were aware, prior to their visit, that Indiana Dunes National Lakeshore is a national park (see Figure 16).

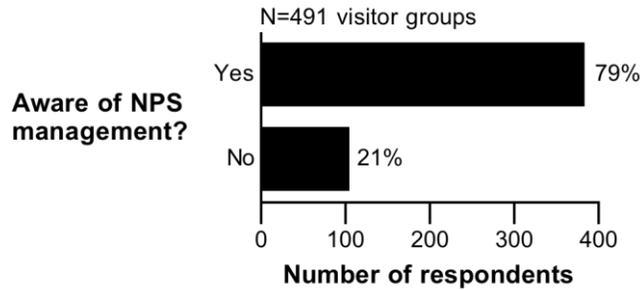


Figure 16: Visitor groups that were aware that Indiana Dunes NL is a national park

Awareness of adjacent parks

Question 3

Prior to this visit, were you and your personal group aware that there are two adjacent parks along Lake Michigan named Indiana Dunes? One is Indiana Dunes National Lakeshore, managed by the U.S. National Park Service, and the other is Indiana Dunes State Park, managed by Indiana’s Department of Natural Resources.

Results

- 43% of visitor groups were not aware of the two adjacent parks named Indiana Dunes along Lake Michigan (see Figure 17).
- 28% knew that each park was managed by a different organization.

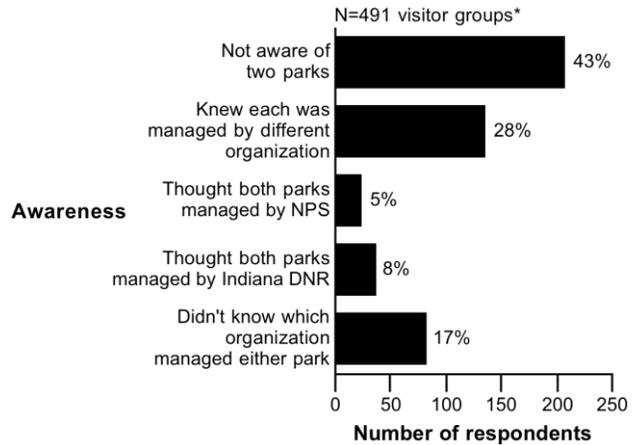


Figure 17: Visitor groups’ awareness that there are two adjacent parks along Lake Michigan

*total percentages do not equal 100 due to rounding

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

Awareness of safety risks

Question 4

Prior to this visit, were you and your personal group aware of the safety risks of swimming in Lake Michigan?

Results

- 84% of visitor groups were aware, prior to their visit, of the safety risks of swimming in Lake Michigan (see Figure 18).

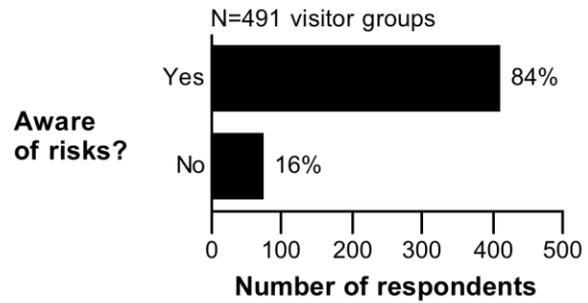


Figure 18: Visitor groups that saw signs leading to the park

*total percentages do not equal 100 due to rounding

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

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 Indiana Dunes National Lakeshore?

Results

- 88% of visitor groups obtained information about Indiana Dunes National Lakeshore prior to their visit (see Figure 19).
- As shown in Figure 20, among those visitor groups who obtained information about Indiana Dunes National Lakeshore prior to their visit, the most common sources were:
 - 54% Previous visits
 - 49% Friends/relatives/word of mouth
 - 37% Indiana Dunes National Lakeshore website
- “Other” sources (3%) were:
 - Book at library
 - Exploring the park
 - Natives of area
 - NPS Passport
 - Portage Parks Department
 - Portage Parks Kids Program
 - Sign on the interstate
 - Signs on highway

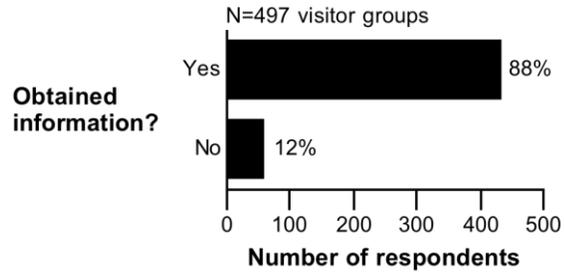


Figure 19: Visitor groups that obtained information about Indiana Dunes NL prior to their visit

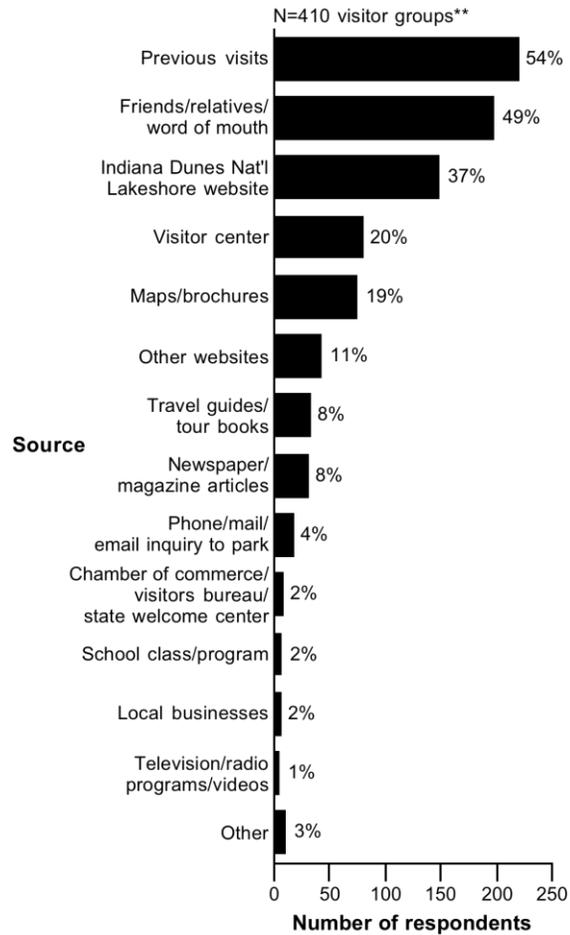


Figure 20: Sources of information used by visitor groups prior to visit

*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

- 85% of visitor groups received needed information prior to their visit (see Figure 21).

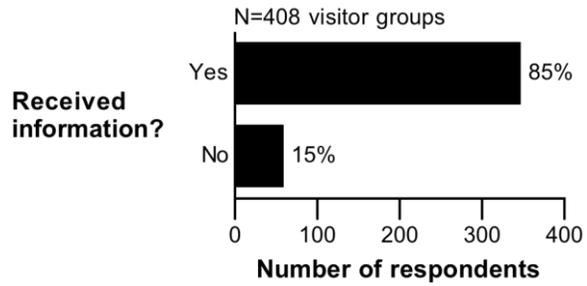


Figure 21: Visitor groups that received needed information prior to their visit

Question 1d

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

Results

- 41 visitor groups listed information they needed, but that was not available (see Table 8).

Table 8: Needed information

N=49 comments;
some visitor groups made more than one comment.

Type of information	Number of times mentioned
Parking information	7
Difference between state parks and national parks	3
Hiking trail information	3
Pet policy	3
Beach facilities	2
Beach maps	2
Campground information	2
Directions to individual entrances	2
Directions/map to campgrounds	2
Directions/address for visitor center	2
Maps	2
Park map	2
Restrooms	2
Road signs	2
Camping with an RV	1
Concessions	1
Description of different beaches	1
Directions	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 8: Needed information
(continued)

Type of information	Number of times mentioned
Dunes information	1
Exact directions from interstate	1
Information about Chellberg Farm	1
Picnic area information	1
Pictures of dunes and beaches	1
Specific, detailed information	1
Street addresses of entrances	1
Time zone information	1
Which parks to visit	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 Indiana Dunes National Lakeshore in the future, how would you and your personal group prefer to obtain information about the park?

Results

- As shown in Figure 22, the most common sources of information to use for a future visit were:

67% Indiana Dunes National Lakeshore website
 32% Previous visits
 30% Visitor center

- “Other” sources of information (1%) were:

Library
 Lions Club activities

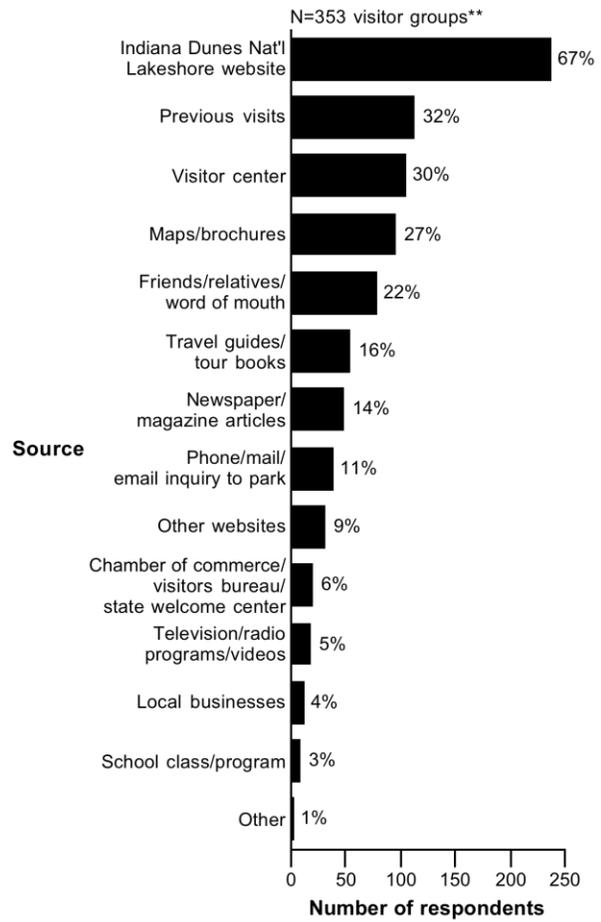


Figure 22: Sources of information to use for a future visit

*total percentages do not equal 100 due to rounding

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

Primary reason for visiting park area

Question 5

On this visit, what was the primary reason that you and your personal group came to the Indiana Dunes National Lakeshore area (from Gary, IN to Michigan City, IN)?

Results

- 20% of visitor groups were residents of the area (see Figure 23).
- As shown in Figure 24, among visitor groups who were not residents, the primary reasons for visiting the Indiana Dunes National Lakeshore area were:

73% Visit Indiana Dunes National Lakeshore

“Other” reasons (14%) included:

- Birding
- Family outing
- Family reunion
- Field trip
- Fishing
- Fitness challenge
- Indiana Dunes State Park was full
- Karate program
- Lunch break
- Only beach with a sand wheelchair
- Passing through
- Photography
- Shopping
- Stay at timeshare
- Swimming
- To go to a beach
- To see the scenery
- Visit a dog friendly beach
- Walking
- Weekend vacation
- Wind surfing

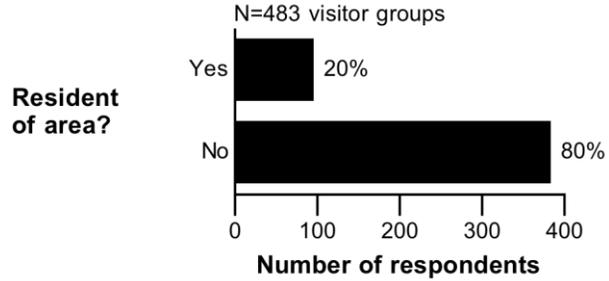


Figure 23: Residents of the area (from Gary IN to Michigan City, IN)

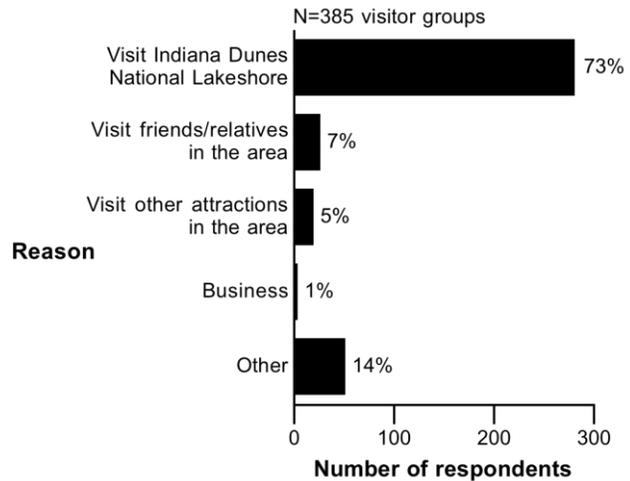


Figure 24: Primary reason for visiting the area

*total percentages do not equal 100 due to rounding

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

Primary reason for visiting the park

Question 20

On this visit, what was your primary reason/motivation for visiting Indiana Dunes National Lakeshore?

Results

- As shown in Figure 25, visitor groups' primary reasons for visiting Indiana Dunes National Lakeshore included:

67% Visit the beach/
swim/sunbathe

- “Other” reasons (13%) were:

- Birding
- Camping
- Dune climbing/see the dunes
- Enjoy beauty/sightsee
- Family activities
- Family reunion
- Fishing
- Nature study
- Photography/arts
- Picnicking
- See Mt. Baldy
- See sunset
- Solitude/peacefulness
- Visit for future reference
- Visit pet-friendly beach
- Visit Riverwalk/Portage

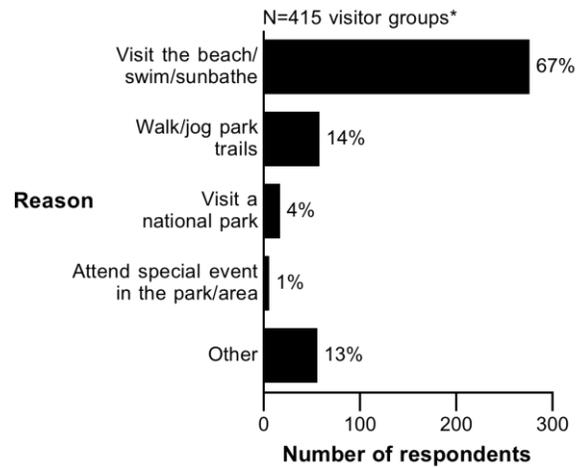


Figure 25: Primary reason for visiting Indiana Dunes NL

*total percentages do not equal 100 due to rounding

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

Directional signs

Question 9a

During your travel to Indiana Dunes National Lakeshore, did you see signs leading you to the park?

Results

- 76% of visitor groups saw signs leading them to the park (see Figure 26).

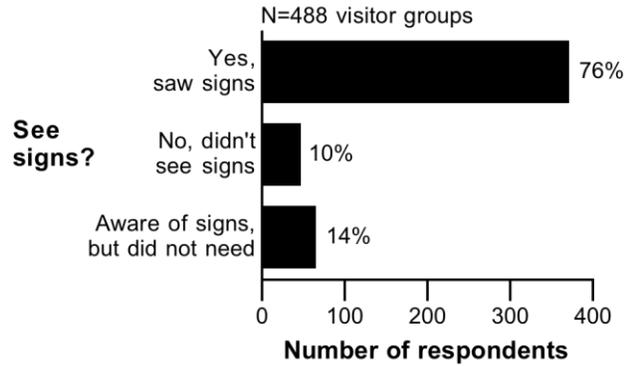


Figure 26: Visitor groups that saw signs leading to the park

Question 9b

If YES, were the signs helpful?

Results

- 93% of visitor groups felt that the signs leading them to the park were helpful (see Figure 27).

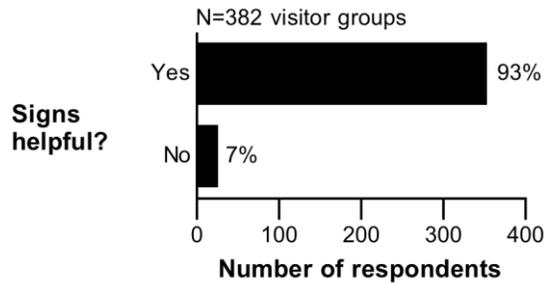


Figure 27: Visitor groups' opinions on helpfulness of signs

Number of vehicles

Question 27c

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

Results

- 78% of visitor groups used one vehicle to arrive at the park (see Figure 28).

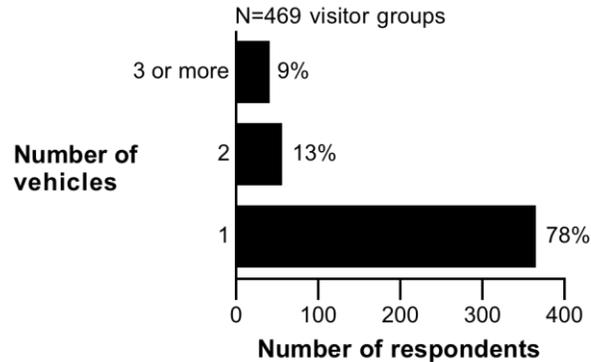


Figure 28: Number of vehicles used to arrive at the park

*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 in the park

Question 10

On this visit, how long did you and your personal group stay at Indiana Dunes National Lakeshore?

Results

Number of hours if less than 24 hours (80%)

- 37% of visitor groups spent two to three hours at Indiana Dunes NL (see Figure 29).
- 25% spent between four and five hours.
- The average length of stay for visitor groups who spent less than 24 hours was 3.5 hours.

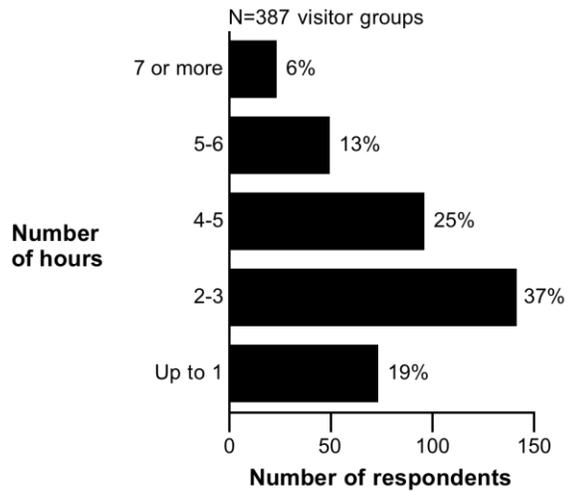


Figure 29: Number of hours visiting the park

Number of days if 24 hours or more (20%)

- 48% of visitor groups spent three or more days at Indiana Dunes NL (see Figure 30).
- 41% spent two days.
- The average length of stay for visitor groups who spent more than 24 hours was 2.8 days.

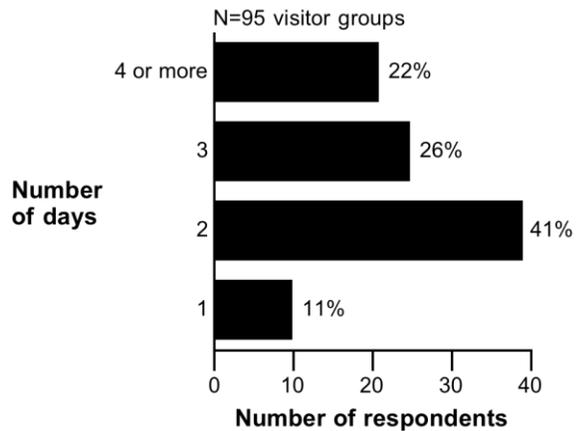


Figure 30: Number of days visiting the park

Average length of stay

- The average length of stay for all visitor groups was 15.9 hours.

*total percentages do not equal 100 due to rounding

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

Sites visited in the area

Question 6

On this trip to Indiana Dunes National Lakeshore, did you and your personal group visit other places in the area (from Gary, IN to Michigan City, IN)?

Results

- 40% of visitor groups visited Indiana Dunes State Park on this trip (see Figure 31).
- 30% visited the Outlet Mall
- Table 9 shows “other” sites in the area (28%) that visitor groups visited.

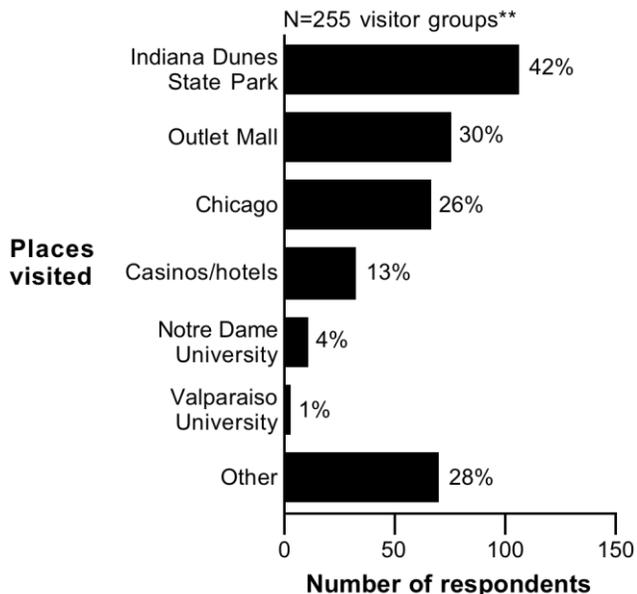


Figure 31: Sites visited in the area

Table 9: Sites visited in the area

N=70 comments

Site	Number of times mentioned
Michigan City	6
Restaurants (unspecified locations)	5
Bass Pro, Portage, IN	4
City park in Michigan City	3
Michigan City Zoo	3
Chesterton, IN	3
Chesterton Art Fair	3
Antique shops	2
Auburn Cord Dusenbergl	2
Benton Harbor, MI	2
Crown Point, IN	2
Porter County Fair	2
New Buffalo, MI	2
Warren Dunes State Park	2
Chesterton European Market	2
Benton Harbor Ironman Race	1
Berrion County, MI	1
Beverly Shores	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 9: Sites visited in the area
(continued)

Sites	Number of times mentioned
Blue Sky Blueberry Farm, Wanatah, IN	1
Boat rentals/local bait shop	1
Charleston, IL	1
Coffee Creek Nature Preserve	1
Columbus' Replica Ships	1
Drum Corp International Competition	1
Evanston, IL	1
Holland, MI	1
Leprechaun Hunt	1
Lighthouse museum	1
Michigan City campground	1
Michigan City Lighthouse	1
Military Museum in Michigan City	1
New Buffalo, MI	1
Port of Indiana	1
Purdue University	1
Sharing Meadows in Rolling Prairie	1
Shoreline Brewery	1
Smokey's BBQ	1
South Bend	1
Spring House Inn	1
St. Joseph	1
Studebaker Museums	1
Tryon Farm	1

*total percentages do not equal 100 due to rounding

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

Sites visited in the park

Question 12a

On this visit, which of the following sites at Indiana Dunes National Lakeshore did you and your personal group visit/use?

Results

- As shown in Figure 32, the sites most commonly visited by visitor groups at Indiana Dunes National Lakeshore were:
 - 38% Mt. Baldy
 - 37% Beach in central part of the park
 - 33% Beach at west end of the park
- The least visited site was:
 - 3% Paul Douglas Center for Environmental Education
- “Other” sites visited (6%) were:
 - Bike trail
 - Century of Progress Homes
 - Dune Ridge trail
 - Heron Rookery
 - Li-co-ki-we trail
 - Mt. Tom
 - Picnic area

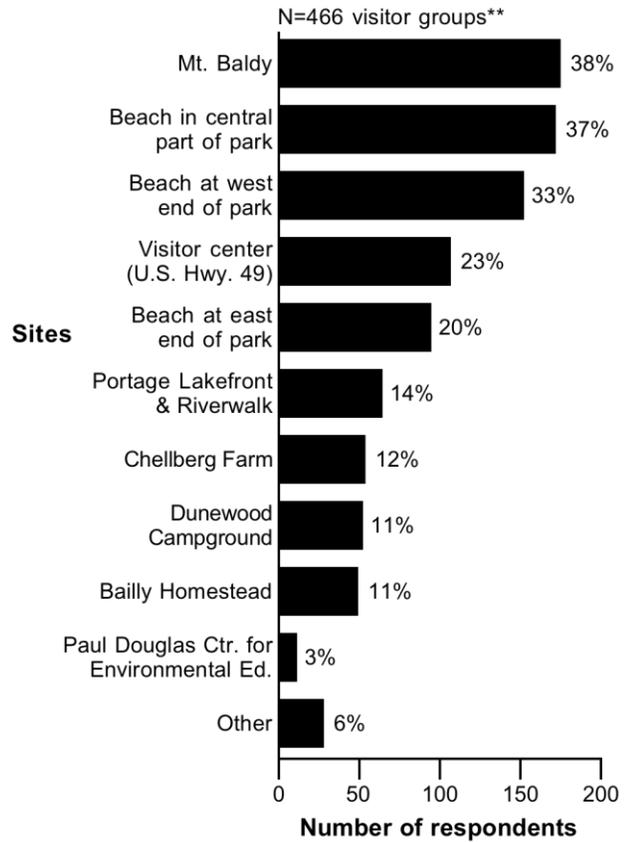


Figure 32: Sites visited

*total percentages do not equal 100 due to rounding

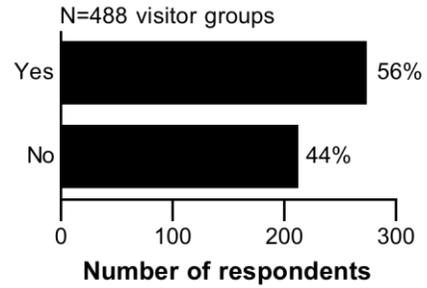
**total percentages do not equal 100 because visitors could select more than one answer

Visit to one specific site

Question 7a

On this visit to Indiana Dunes National Lakeshore, did you and your personal group have only one specific site within the park that you planned to visit?

Planned to visit one site?



Results

- 56% of visitor groups planned to visit only one site at Indiana Dunes National Lakeshore (see Figure 33).

Figure 33: Visitor groups that planned to visit only one site

Question 7b

If YES, which site was it? (open-ended)

Results

- 255 visitor groups listed one specific site they visited (see Table 10).

Table 10: Specific site visited
N= 205 comments

Site	Number of times mentioned
Mt. Baldy	43
Beach (unspecified)	36
West Beach	24
Central Beach	18
Kemil Beach	18
Portage	16
Chellberg Farm	8
Dunes	7
Bailly Homestead	5
Beverly Shores	5
Campground (unspecified)	5
Dunbar Beach	4
Dunewood Campground	4
Trails (unspecified)	3
Lake view	2
Beach with food stand	1
Burns Ditch	1
Cowles Bog	1
Douglas Center	1
Long Lake Trail	1
Michigan City beach	1
Miller Woods	1

*total percentages do not equal 100 due to rounding

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

Finding a specific site

Question 7c

On this visit, were you able to find that site?

Results

- 99% of visitor groups were able to find the site they had planned to visit (see Figure 34).

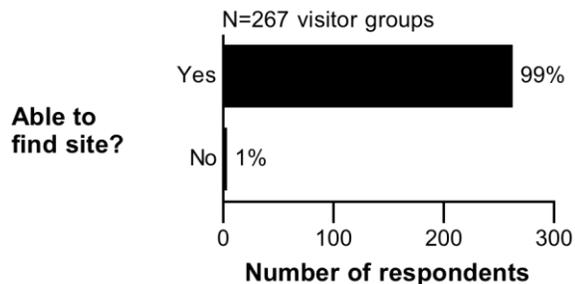


Figure 34: Visitor groups that were able to find a specific site

Finding parking at specific site

Question 7d

On this visit, were you able to find parking at that site?

Results

- 89% of visitor groups were able to find parking at the site they had planned to visit (see Figure 35).

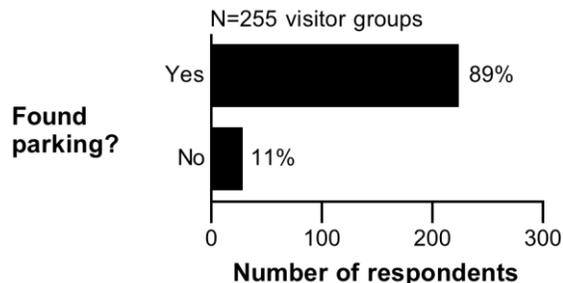


Figure 35: Visitor groups that were able to find parking at specific site

*total percentages do not equal 100 due to rounding

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

Reasons for choosing a specific site

Question 12b

If you and your personal group only visited one site on this visit, why did you choose that site?

Results

- 244 visitor groups gave reasons for choosing a specific site (see Table 11).

Table 11: Reasons for choosing site

N= 294 comments;
some visitors made more than one comment.

Reason	Number of times mentioned
Beach	21
Closest to home	20
Familiarity/previous visit	16
Swimming	16
Dog-friendly	13
Recommended	11
Good place for children	9
Hiking	9
Less crowded	9
Less crowded beach	9
Parking close to beach	9
Available parking	8
Closest site	7
Family tradition	7
Free	7
Most convenient	7
Clean area	6
Lack of parking elsewhere	6
Swimming with lifeguard	6
By chance	5
Free/cheap parking	5
Restroom facilities	5
See a new place	5
Great views	4
Quiet/peaceful	4
See the dunes	4
Accessibility for disabled	3
Camping	3
Largest dune	3
Motorcycle ride	3
Nicest beach	3
Photography/arts	3
Pre-planned event	3
Relaxing	3
Riverwalk	3
Walk	3
Beach with dunes nearby	2

*total percentages do not equal 100 due to rounding

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

Table 11: Reasons for choosing site
(continued)

Reason	Number of times mentioned
Beauty	2
Dune climbing	2
Favorite place	2
First one found	2
Fishing	2
Good weather	2
Only knew of one site	2
Always wanted to visit	1
Availability of rental houses	1
Bathhouse	1
Beach house	1
Closest to work	1
Educational	1
Get a passport stamp	1
GPS sent us there	1
Inclement weather	1
Junior Ranger badge	1
Looking for butterflies	1
Most interesting	1
Mt. Baldy was closed	1
New facility	1
Nicest facilities	1
Only beach we could find	1
Pavillon area	1
See animals at Douglas Center	1
Time restrictions	1
Wedding accommodations	1

*total percentages do not equal 100 due to rounding

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

Activities on this visit

Question 15a

On this visit, in which activities did you and your personal group participate within Indiana Dunes National Lakeshore?

Results

- As shown in Figure 36, the most common activities in which visitor groups participated were:
 - 79% Beach activities
 - 51% Walking/hiking
 - 41% Enjoying solitude/quiet
- “Other” activities (7%) were:
 - Collecting small stones
 - Telling childhood stories
 - Dog walking
 - Dog swimming
 - Fitness challenge
 - Geocaching
 - Helping pick up trash
 - Karate
 - Kite flying
 - Playing catch
 - Running
 - Visiting Century of Progress homes
 - Watching sunset

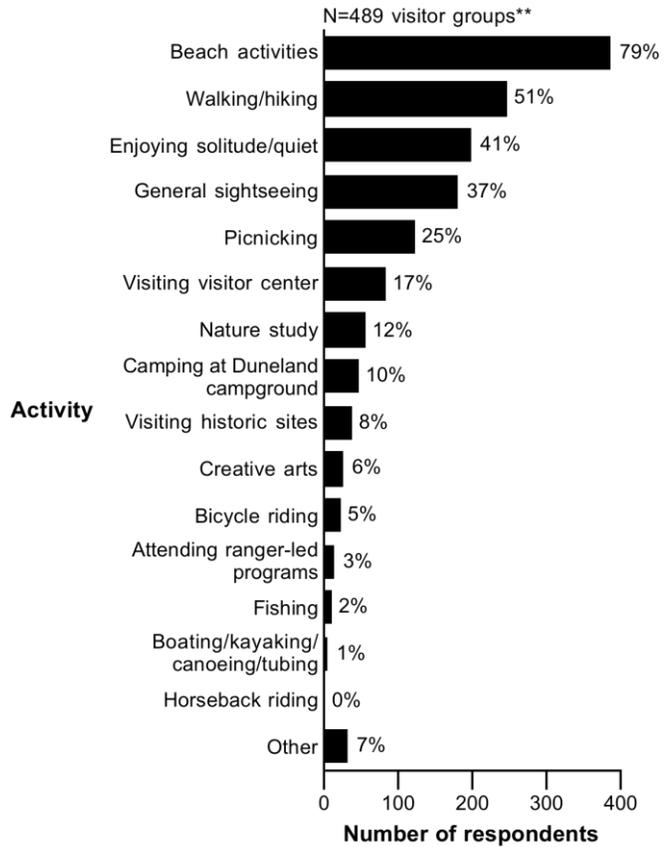


Figure 36: Activities on this visit

*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 15b

Which one of the above activities was the primary reason you and your personal group visited Indiana Dunes National Lakeshore on this visit?

Results

- As shown in Figure 37, the most common primary activity listed by visitor groups was:

57% Beach activities

- “Other” activities (2%) included:

- Dog walking
- Dune climbing
- Fitness challenge
- Karate
- Rock collecting
- Running
- Swimming with dogs

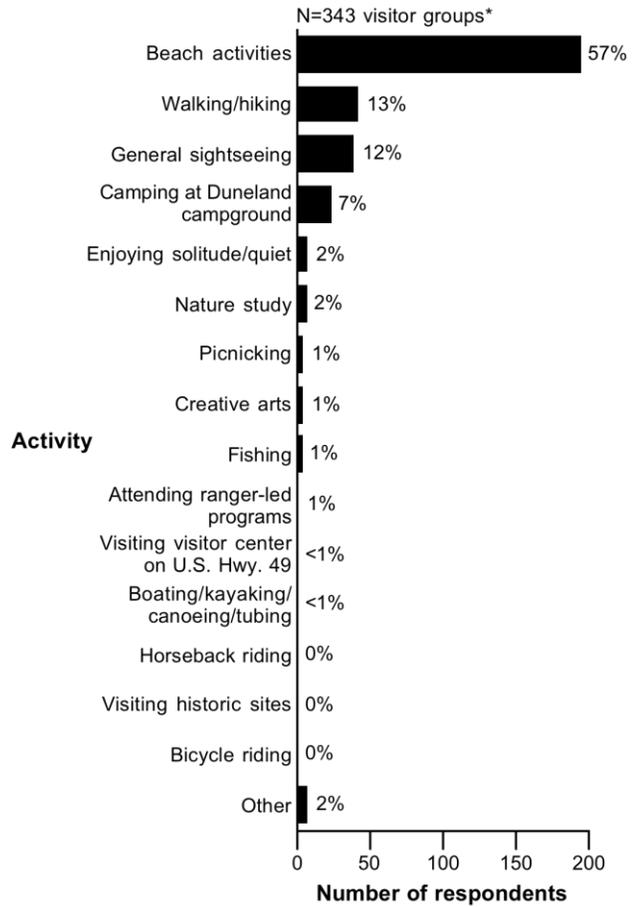


Figure 37: Primary activity

*total percentages do not equal 100 due to rounding

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

Participation in school programs at park

Question 17

Did you or any member of your group participate in a school program at Indiana Dunes National Lakeshore when you were a child?

Results

- 14% of visitor groups had members who participated in a school program at Indiana Dunes National Lakeshore as a child (see Figure 38).

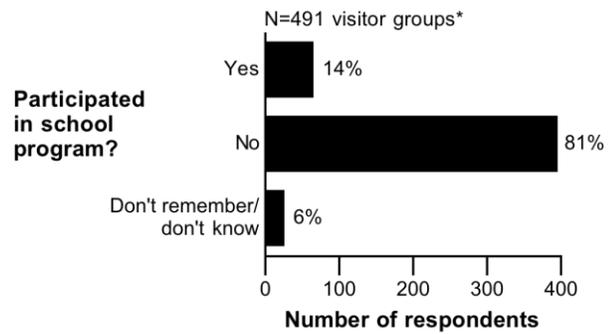


Figure 38: Visitor groups that participated in a school program at Indiana Dunes National Lakeshore as a child

*total percentages do not equal 100 due to rounding

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

Attending ranger-led talks/programs

Question 23a

On this visit to Indiana Dunes National Lakeshore, did you and your personal group attend any ranger-led talks/programs?

Results

- 4% of visitor groups attended ranger-led talks/programs (see Figure 39).

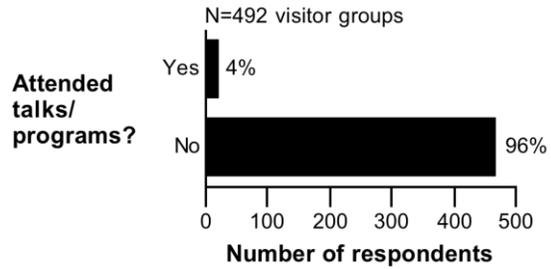


Figure 39: Visitor groups that attended ranger-led talks/programs

Question 23b

If NO, what prevented you and your personal group from participating in ranger-led talks/programs?

Results

- As shown in Figure 40, the most common reasons for not attending ranger-led talks/programs were:

- 44% Did not have time
- 40% Not aware of any programs offered
- 31% Not interested

- “Other” reasons (7%) were:

- Not offered at the right time
- No programs were available
- Already familiar with the area
- Had children in group
- No parking available
- Had pets
- Inclement weather
- Not enough rangers

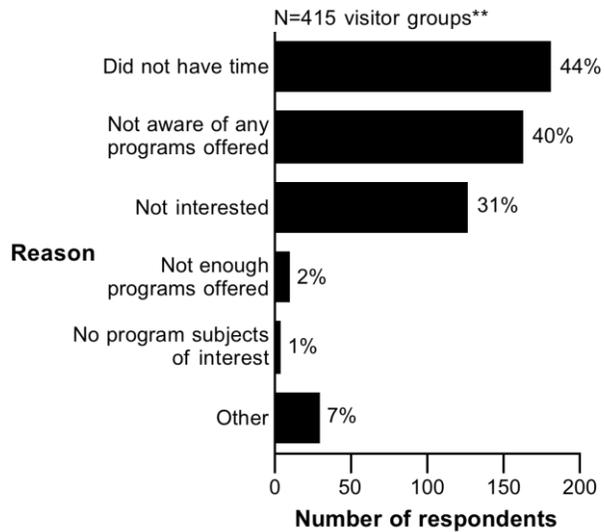


Figure 40: Reasons for not attending ranger-led talks/programs

*total percentages do not equal 100 due to rounding

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

Presence of lifeguards

Question 16

Does the presence of lifeguards influence your decision on where to swim?

Results

- 62% of visitor groups felt that the presence of lifeguard services did not influence their decision on where to swim (see Figure 41).

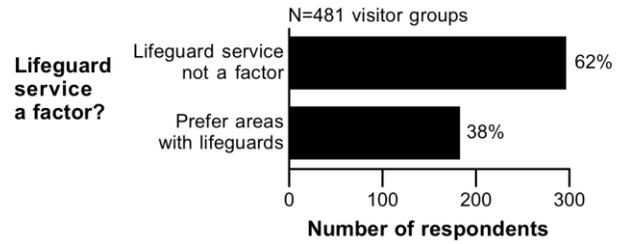


Figure 41: Visitor groups’ swimming decisions influenced by the presence of lifeguards

Use of trails

Question 13

On this visit, which of the following trails at Indiana Dunes National Lakeshore did you and your personal group use?

Results

- As shown in Figure 42, the most common trail used by visitor groups was:

55% Mt. Baldy

- “Other” trails (17%) were:

- Asphalt path
- Bailey/Chellburg Trail
- Dunewood Trace
- Not sure
- Observation pier
- Pinhook Bog
- Portage Lakefront/Riverwalk
- Trails along the West Beach Dunes
- Unspecified beach trail

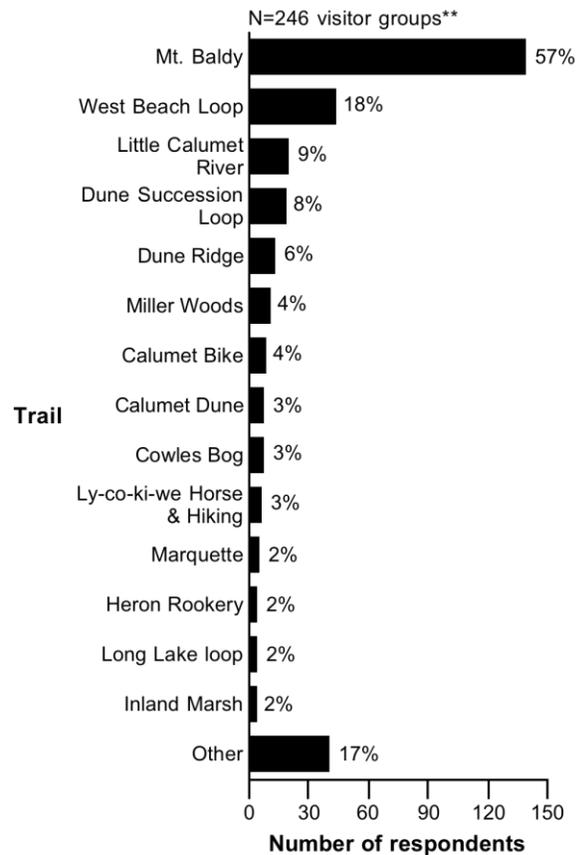


Figure 42: Trails used

*total percentages do not equal 100 due to rounding

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

Opinions about safety

Question 19a

For the safety issues below, please indicate how safe you and your personal group felt from crime and accidents during this visit to Indiana Dunes National Lakeshore.

Results

Personal safety from crime

- 68% of visitor groups felt “very safe” from crime (see Figure 43).

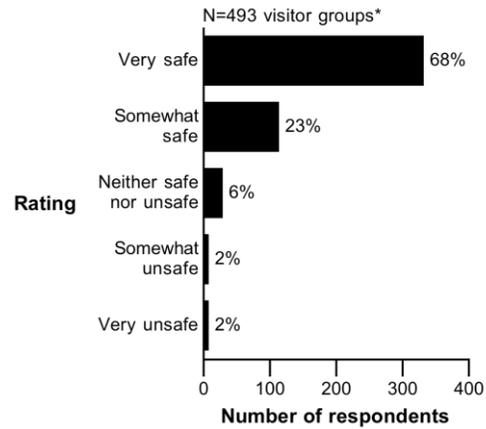


Figure 43: Personal safety from crime

Personal safety from accidents

- 61% of visitor groups felt they were “very safe” from accidents (see Figure 44).

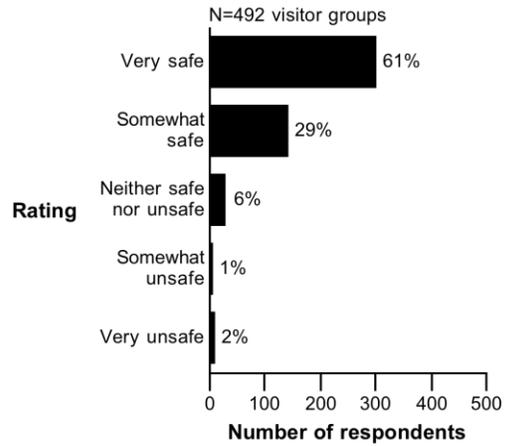


Figure 44: Personal safety from accidents

Safety of personal property from crime

- 49% of visitor groups felt their personal property was “very safe” from crime (see Figure 45).

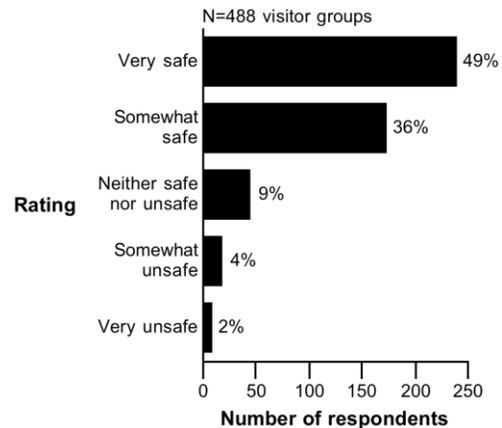


Figure 45: Safety of personal property from crime

*total percentages do not equal 100 due to rounding

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

Question 19b

If you marked “very unsafe” or “somewhat unsafe” for any of the above items, please explain why (open-ended).

Results

- 42 visitor groups gave reasons for feeling “very unsafe” or “somewhat unsafe” (see Table 12).

Table 12: Reasons for feeling unsafe
N=45 comments;
some visitor groups made more than one comment.

Reason	Number of times mentioned
Lack of police/ranger presence	8
High crime area (Chicago/Gary area)	4
Lack of people (secluded areas)	4
Not a good area	4
Construction areas	2
Lack of lifeguards	2
Not familiar with area/many strangers	2
Property left in cars at risk	2
Swimming/drowning	2
You never know when something could happen	2
Buckets were stolen	1
Children rolling trash container down Mt. Baldy	1
Dogs running unleashed	1
Don't trust the people	1
Heard about a lot of vehicle break-ins	1
No signs about E. coli/rip tides	1
No way to ensure belongings are safe when swimming	1
Saw some shady people	1
Theft is everywhere	1
Time of day (after dark)	1
Too many people	1
Urban gang activity	1
Vehicle was damaged in parking lot	1

*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 safety messages

Question 18

Indiana Dunes National Lakeshore contains over 12 miles of beaches. The park encourages visitors to stay out of the water during periods of rip currents or a high level of E. coli activity. When these unsafe/unhealthy conditions exist, how do you prefer to learn this information?

Results

- As shown in Figure 46, visitor groups' preferred methods for learning safety information were:
 - 93% Signs on beaches
 - 37% Rangers on beaches
- Table 13 shows "other" methods (18%) preferred by visitor groups for learning safety information.

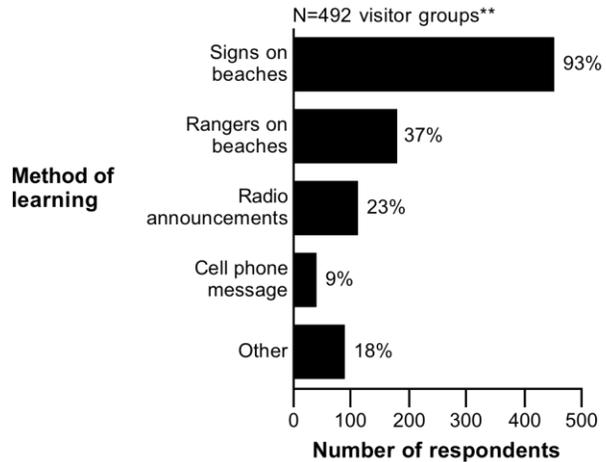


Figure 46: Preferred method for learning safety messages

Table 13: Other methods for learning safety information

N=101 comments

Site	Number of times mentioned
Internet/website	54
Television	12
Beach flags	7
Newspaper	7
Signs at visitor center	6
Signs at entrance	5
Email	4
Signs in parking areas	3
Signs at campground	2
Call the ranger station	1

*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

Information services and facilities used

Question 21a

Please indicate all information services and facilities that you or your personal group used at Indiana Dunes National Lakeshore during this visit.

Results

- As shown in Figure 47, the most commonly used information services and facilities were:
 - 68% Directional signs
 - 59% Park brochure/map
 - 47% Information signs
- The least used service/facility was:
 - 3% Ranger-led programs

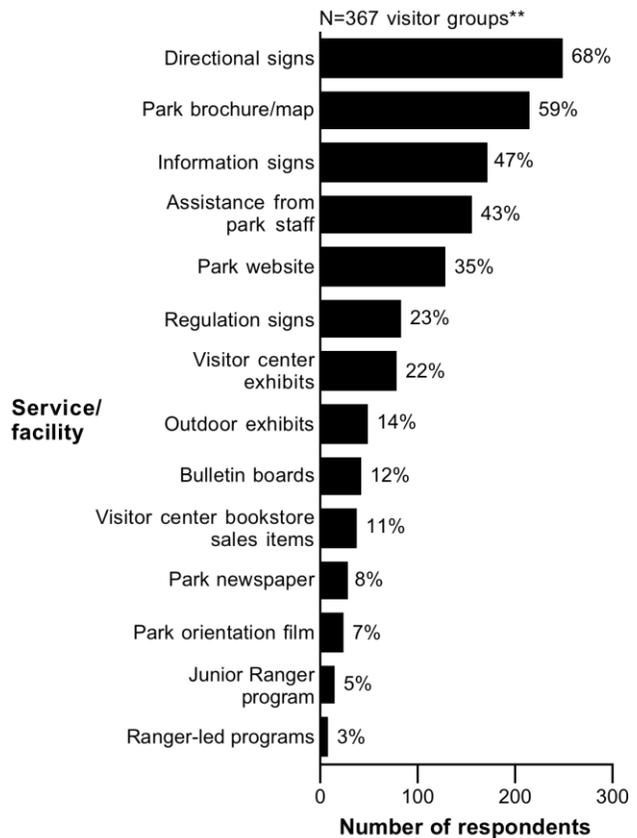


Figure 47: Information services and facilities used

*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 information services and facilities

Question 21b

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

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

Results

- Figure 48 shows the combined proportions of “extremely important” and “very important” ratings for information services and facilities that were rated by 30 or more visitor groups.
- The information services and facilities receiving the highest combined proportions of “extremely important” and “very important” ratings were:

- 79% Park website
- 79% Regulation signs
- 77% Directional signs

- Figures 49 to 62 show the importance ratings for each information service and facility.
- The information service/facility receiving the highest “not important” rating that was rated by 30 or more visitor groups was:

- 6% Visitor center bookstore sales items

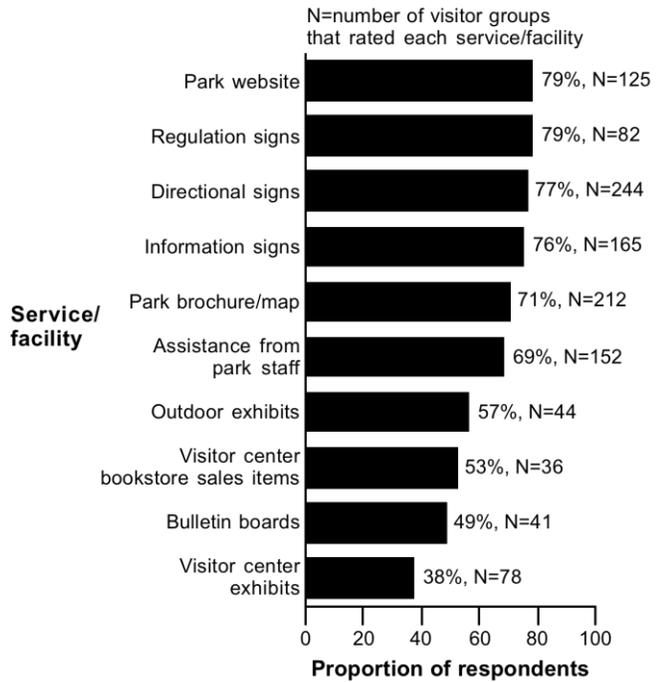


Figure 48: Combined proportions of “extremely important” and “very important” ratings of information services and facilities

*total percentages do not equal 100 due to rounding

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

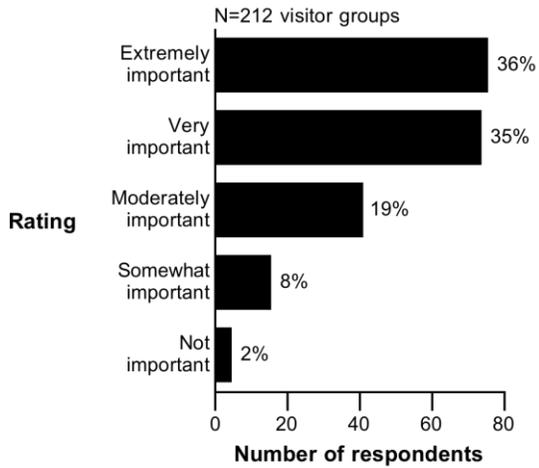


Figure 49: Importance of park brochure/map

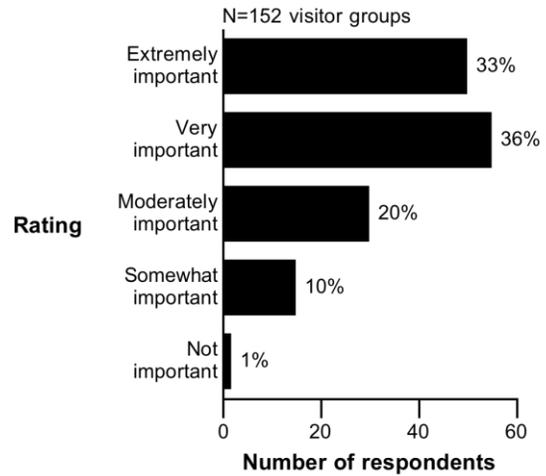


Figure 50: Importance of assistance from park staff

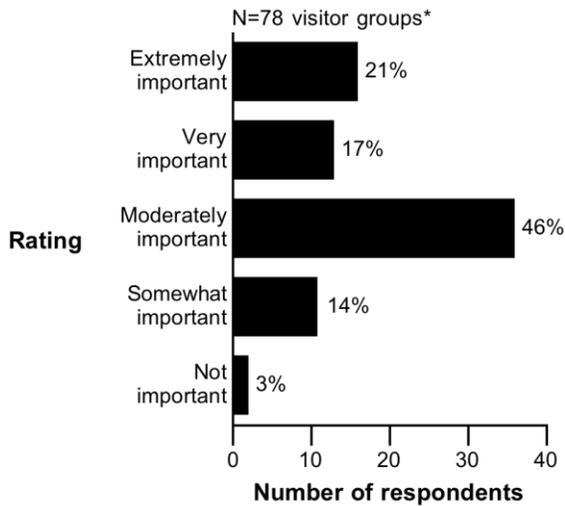


Figure 51: Importance of visitor center exhibits

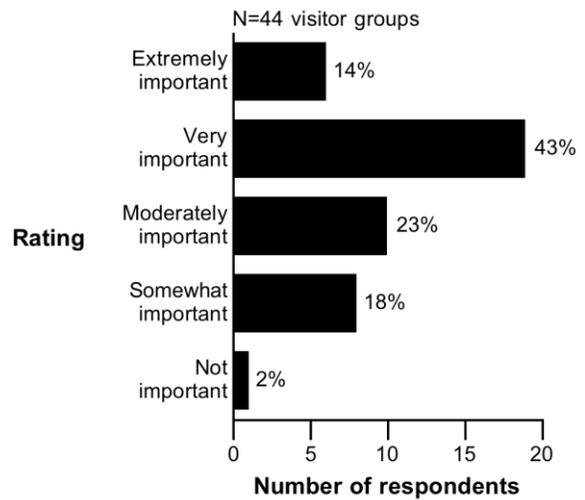


Figure 52: Importance of outdoor exhibits

*total percentages do not equal 100 due to rounding

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

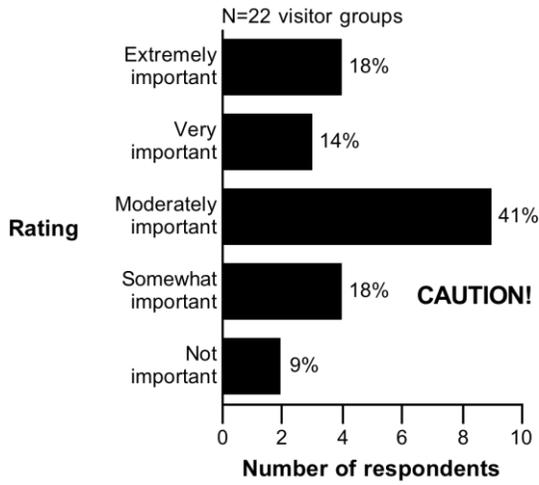


Figure 53: Importance of park orientation film

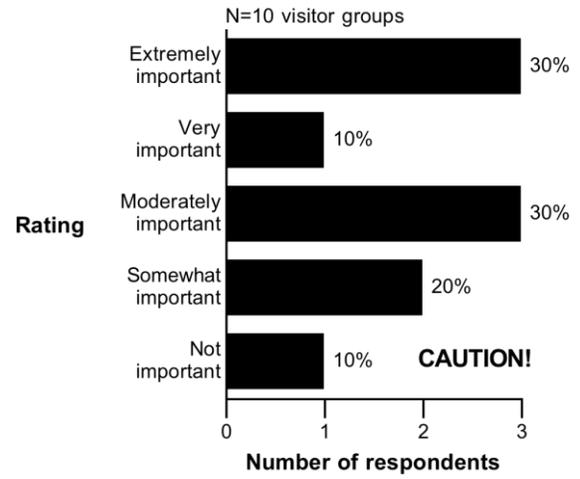


Figure 54: Importance of ranger-led programs

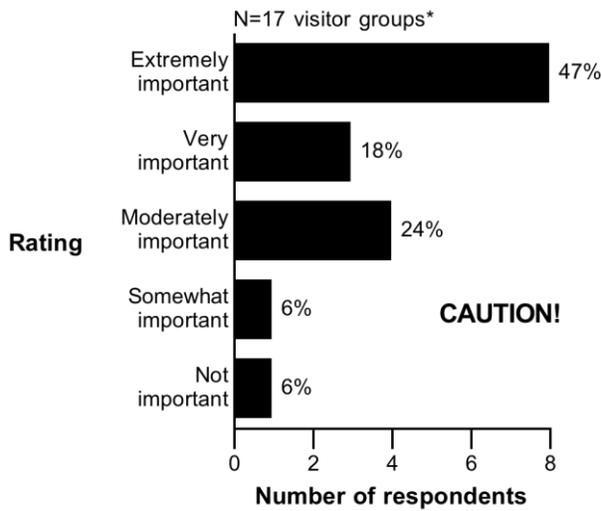


Figure 55: Importance of Junior Ranger program

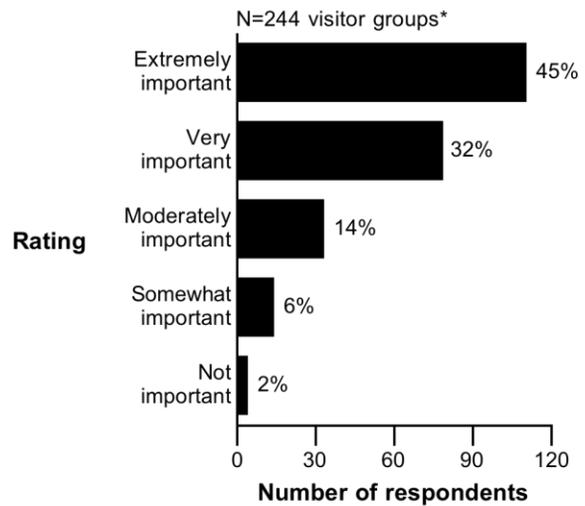


Figure 56: Importance of directional signs

*total percentages do not equal 100 due to rounding

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

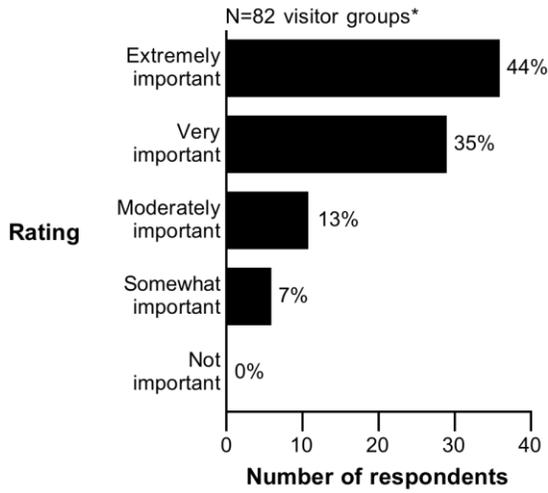


Figure 57: Importance of regulation signs

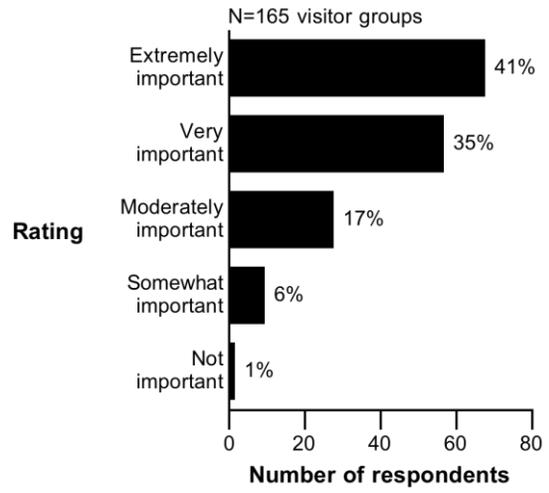


Figure 58: Importance of information signs

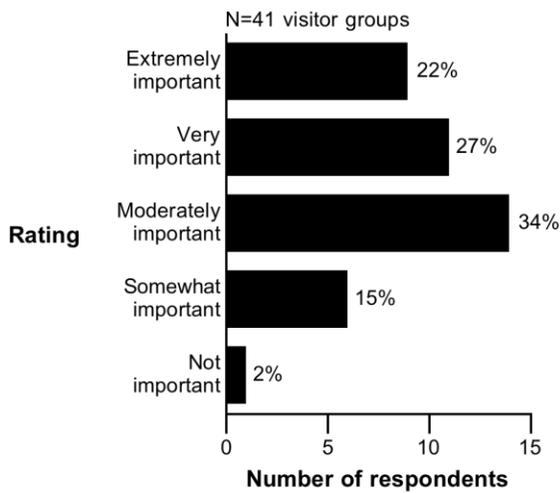


Figure 59: Importance of bulletin boards

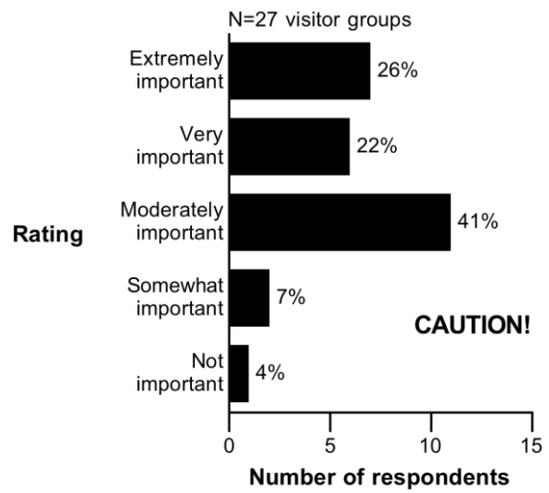


Figure 60: Importance of park newspaper, *The Singing Sands*

*total percentages do not equal 100 due to rounding

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

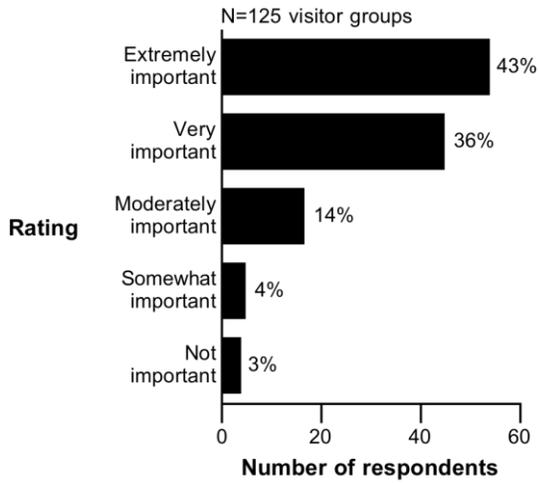


Figure 61: Importance of park website: www.nps.gov/indu (used before or during visit)

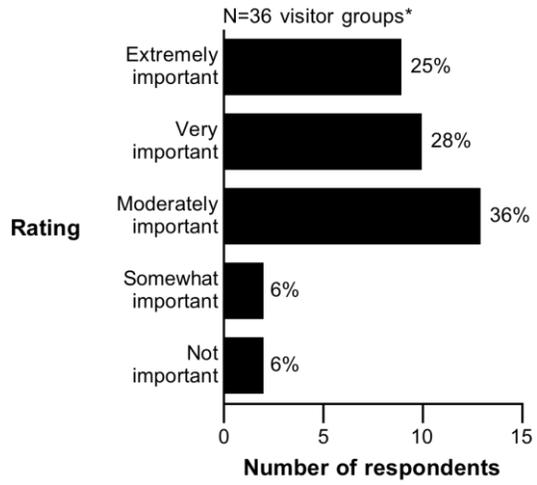


Figure 62: Importance of visitor center bookstore sales items (selection, price, etc.)

*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 information services and facilities

Question 21c

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

- 89% Assistance from park staff
- 81% Park brochure/map
- 78% Visitor center exhibits

- Figures 64 to 77 show the quality ratings for each information service/facility.
- The information service/facility receiving the highest “very poor” quality rating that was rated by 30 or more visitor groups were:

- 2% Directional signs

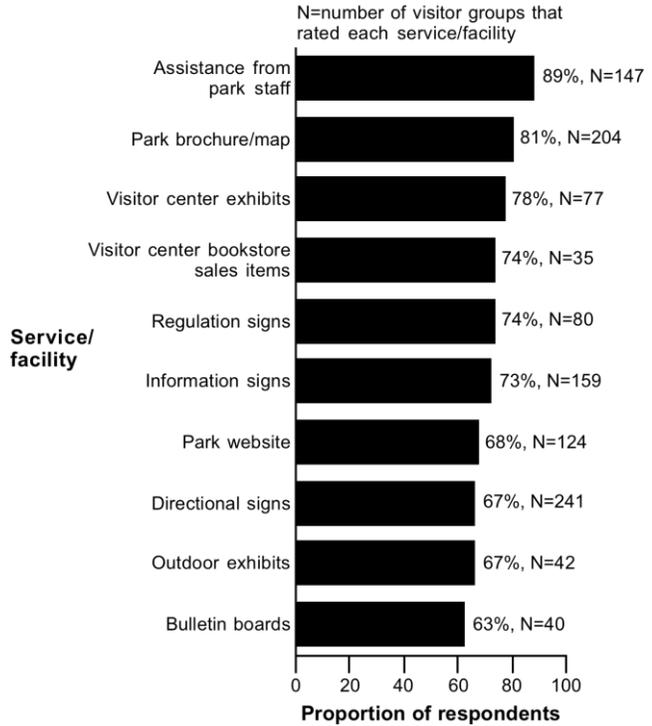


Figure 63: Combined proportions of “very good” and “good” quality ratings of information services and facilities

*total percentages do not equal 100 due to rounding

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

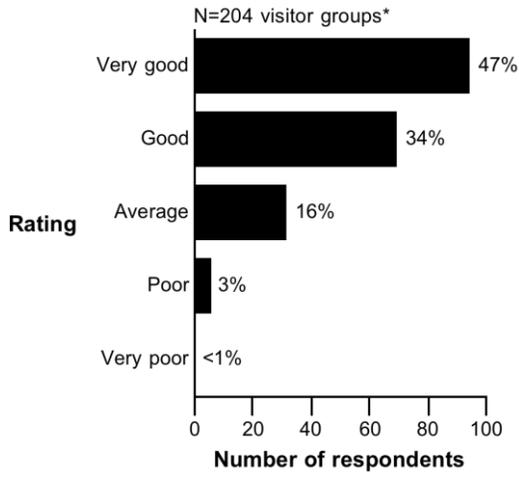


Figure 64: Quality of park brochure/map

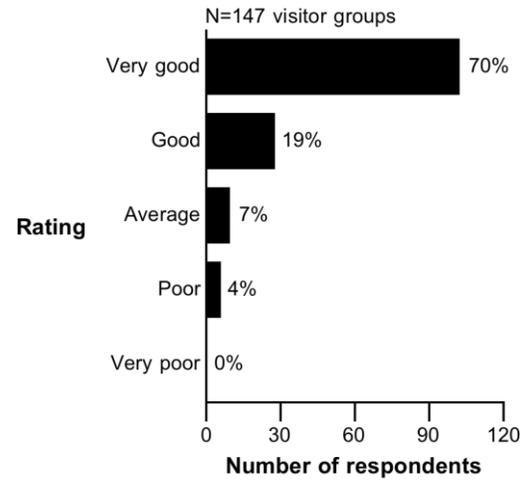


Figure 65: Quality of assistance from park staff

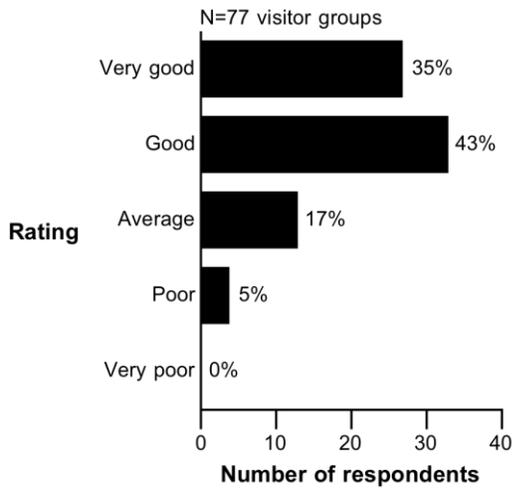


Figure 66: Quality of visitor center exhibits

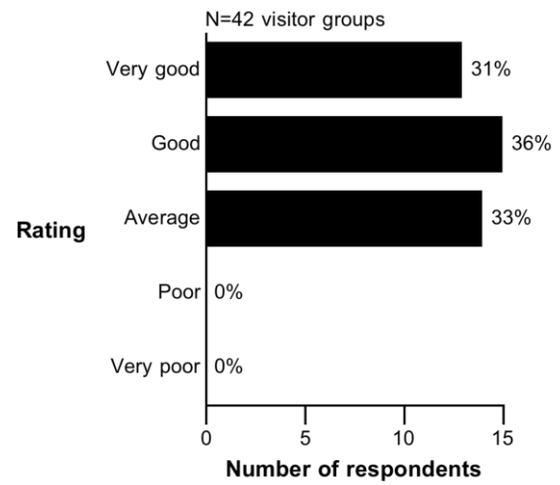


Figure 67: Quality of outdoor exhibits

*total percentages do not equal 100 due to rounding

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

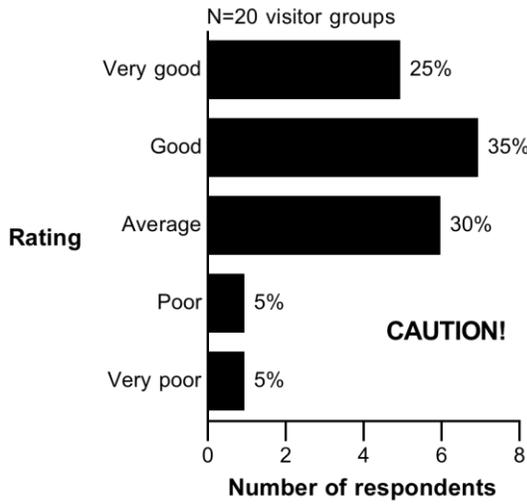


Figure 68: Quality of park orientation film

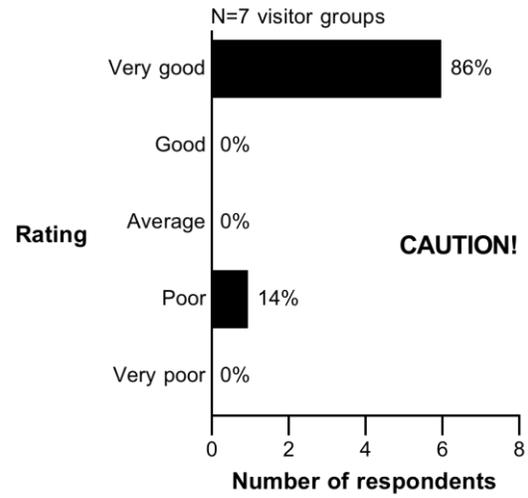


Figure 69: Quality of ranger-led programs

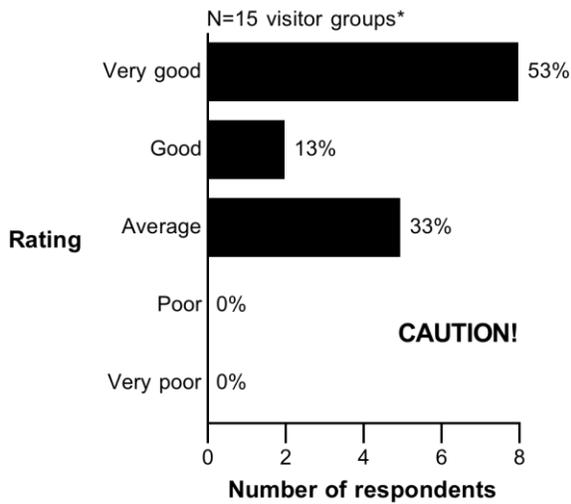


Figure 70: Quality of Junior Ranger program

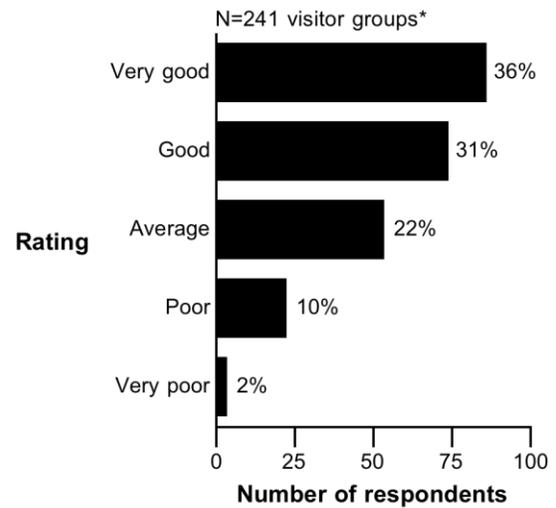


Figure 71: Quality of directional signs

*total percentages do not equal 100 due to rounding

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

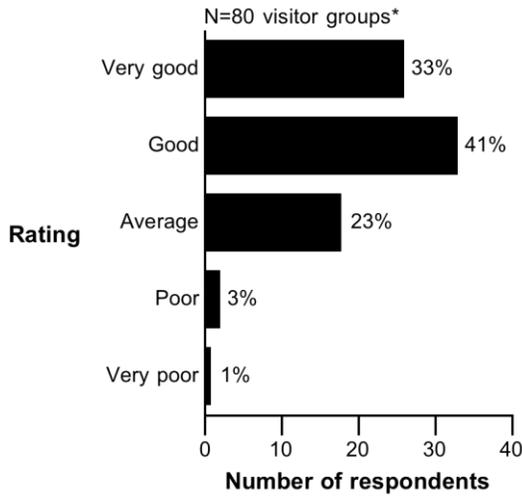


Figure 72: Quality of regulation signs

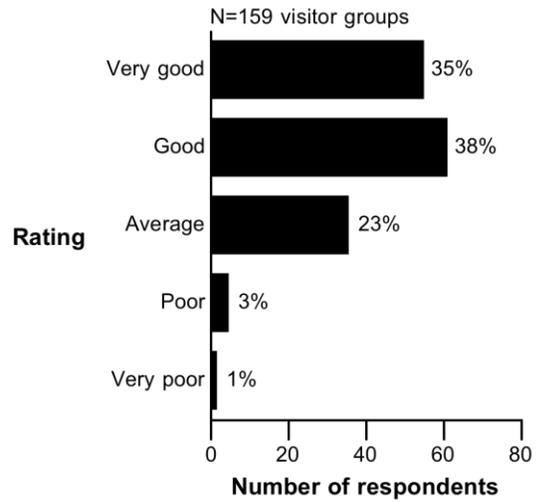


Figure 73: Quality of information signs

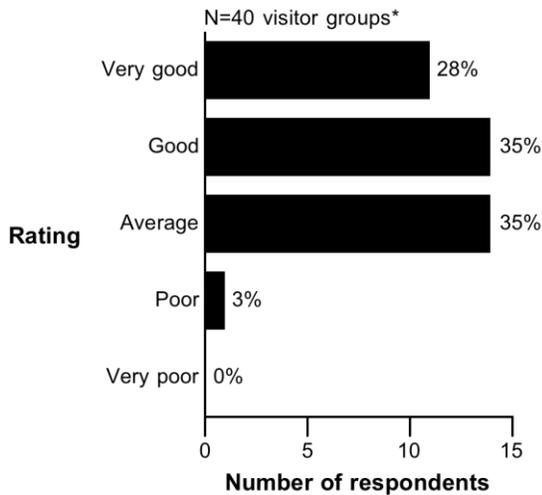


Figure 74: Quality of bulletin boards

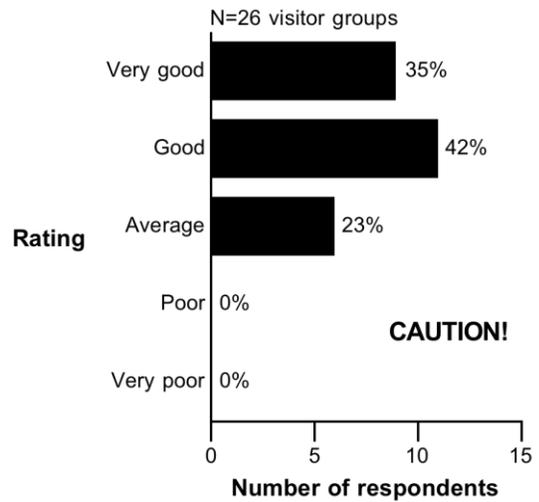


Figure 75: Quality of park newspaper, *The Singing Sands*

*total percentages do not equal 100 due to rounding

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

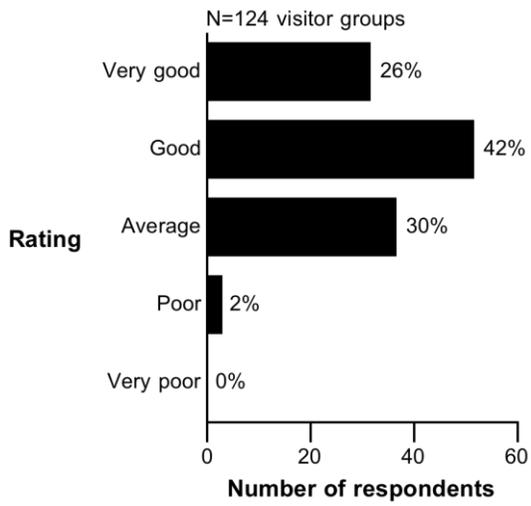


Figure 76: Quality of park website: www.nps.gov/indu (used before or during visit)

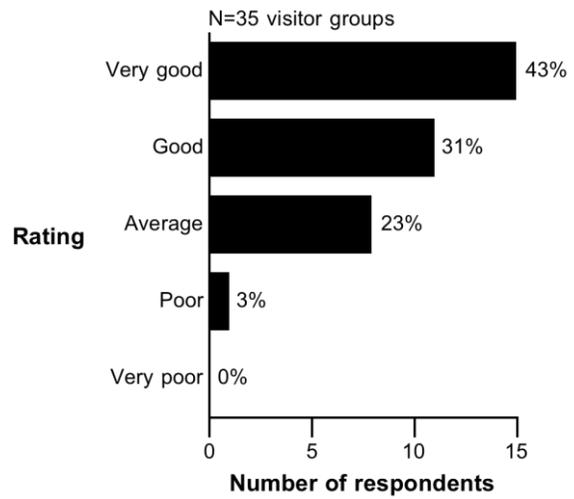


Figure 77: Quality of visitor center bookstore sales items (selection, price, etc.)

*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 information services and facilities

- Figures 78 and 79 show the mean scores of importance and quality ratings for all information services and facilities that were rated by 30 or more visitor groups.
- All information services and facilities were rated above average.

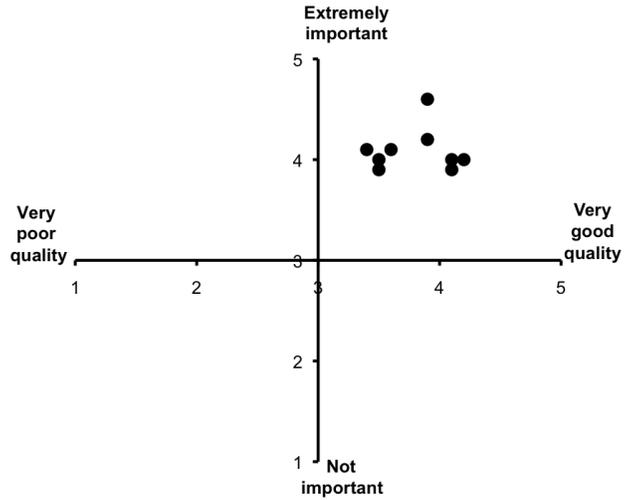


Figure 78: Mean scores of importance and quality ratings for information services and facilities

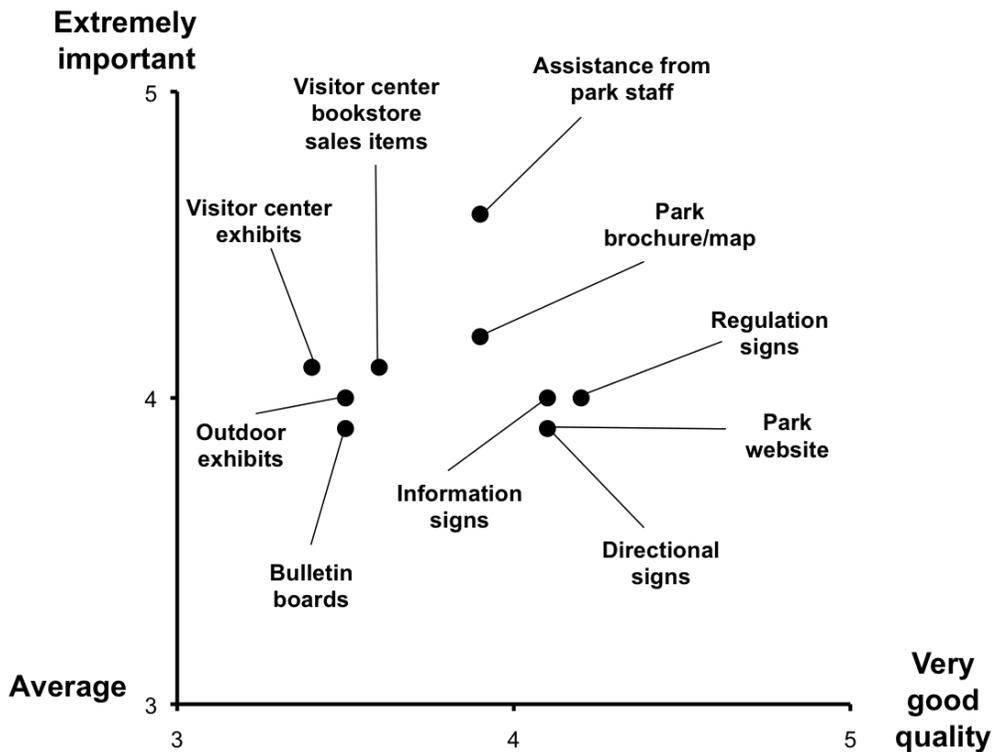


Figure 79: Detail of Figure 78

*total percentages do not equal 100 due to rounding

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

Visitor services and facilities used

Question 22a

Please indicate all visitor services and facilities that you or your personal group used at Indiana Dunes National Lakeshore during this visit.

Results

- As shown in Figure 80, the most commonly used visitor services and facilities included:

87% Restrooms
49% Trails

- The least used service/facility was:

6% Access for people with disabilities

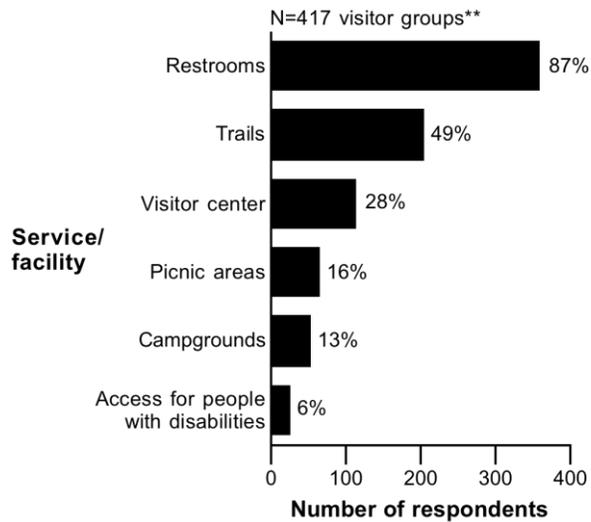


Figure 80: Visitor services and facilities used

*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 22b

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

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

Results

- Figure 81 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/facilities receiving the highest combined proportions of “extremely important” and “very important” ratings were:

- 93% Restrooms
- 90% Campground
- 86% Trails

- Figures 82 to 87 show the importance ratings for each visitor service/facility.

- The visitor service/facility receiving the highest “not important” rating that was rated by 30 or more visitor groups was:

- 4% Campground

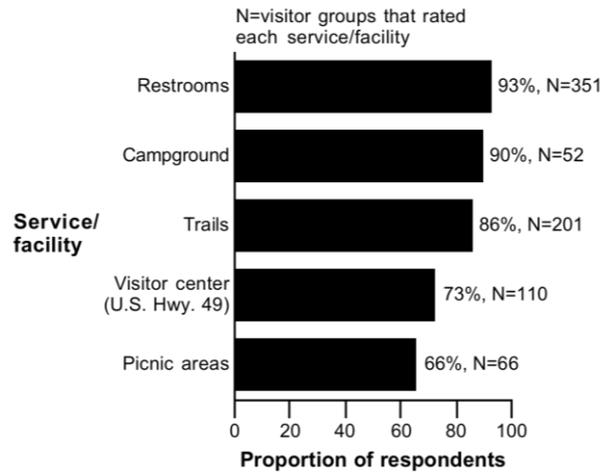


Figure 81: Combined proportions of “extremely important” and “very important” ratings of visitor services and facilities

*total percentages do not equal 100 due to rounding

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

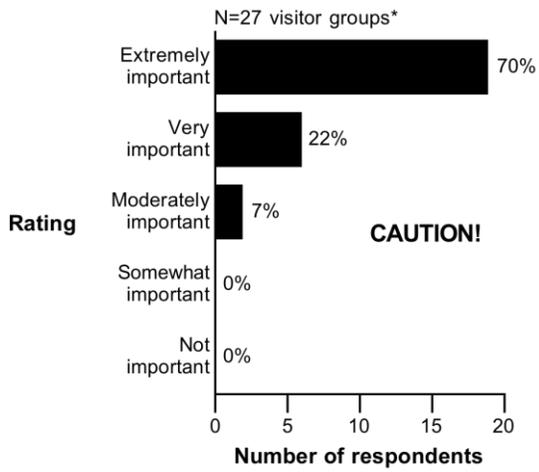


Figure 82: Importance of access for people with disabilities

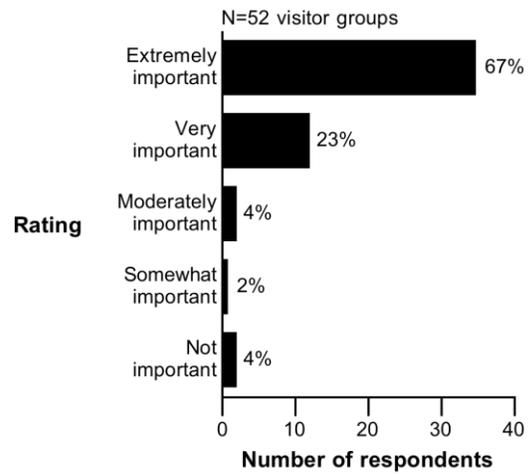


Figure 83: Importance of campground

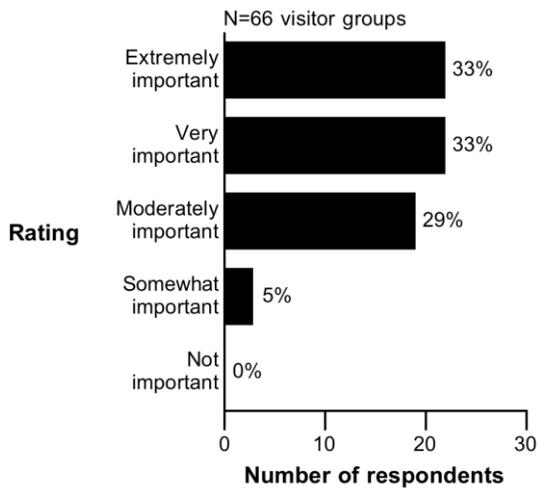


Figure 84: Importance of picnic areas

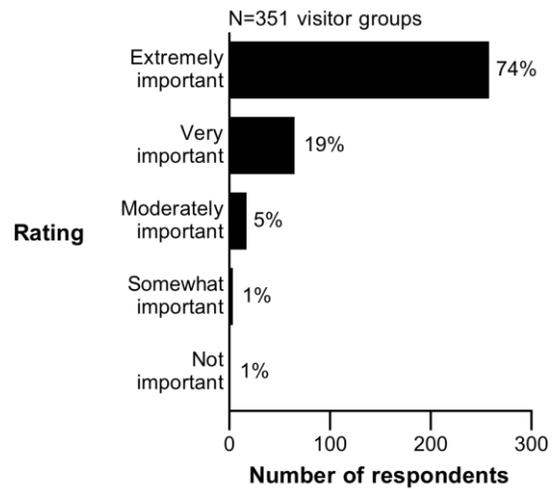


Figure 85: Importance of restrooms

*total percentages do not equal 100 due to rounding

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

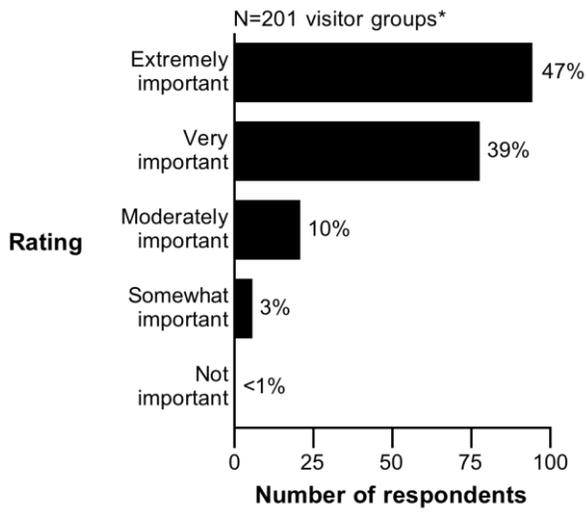


Figure 86: Importance of trails

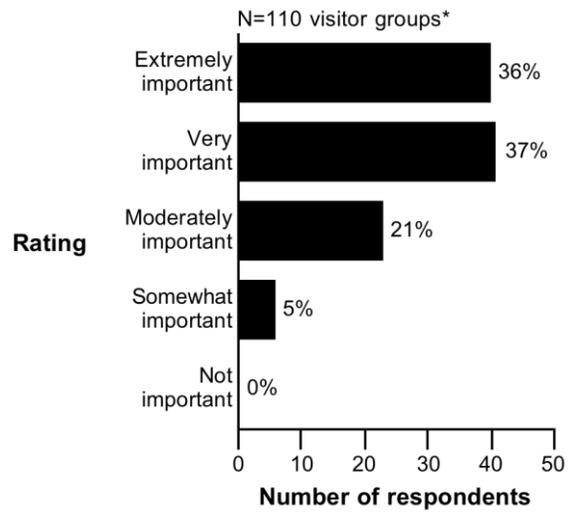


Figure 87: Importance of visitor center (U.S. Hwy. 49)

*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 22c

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 88 shows the combined proportions of “very good” and “good” quality ratings for visitor services/facilities that were rated by 30 or more visitor groups.
- The visitor services/facilities that received the highest combined proportions of “very good” and “good” quality ratings were:
 - 88% Campground
 - 86% Visitor center (U.S .Hwy. 49)
 - 80% Trails
- Figures 89 to 94 show the quality ratings for each visitor service/facility.
- The visitor service/facility receiving the highest “very poor” quality ratings that was rated by 30 or more visitor groups was:
 - 4% Restrooms

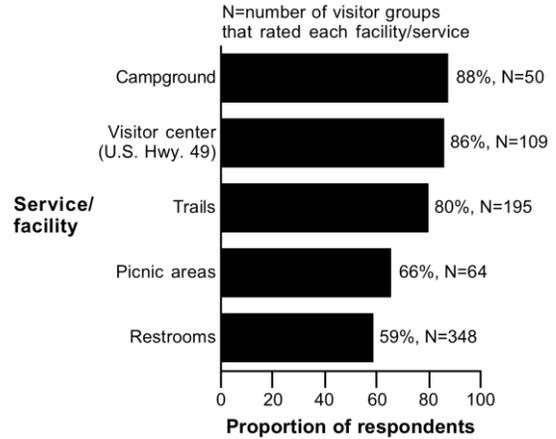


Figure 88: Combined proportions of “very good” and “good” quality ratings of visitor services and facilities

*total percentages do not equal 100 due to rounding

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

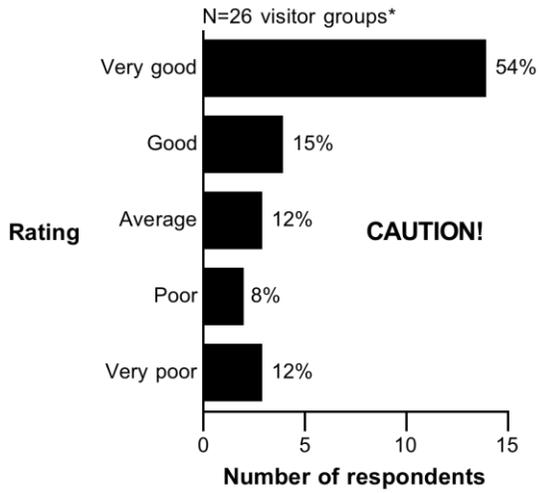


Figure 89: Quality of access for people with disabilities

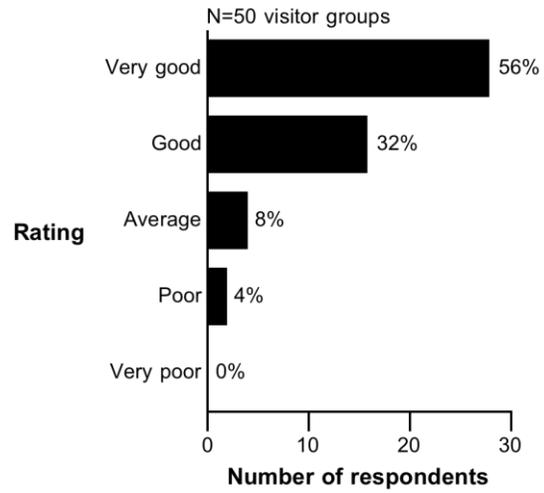


Figure 90: Quality of campground

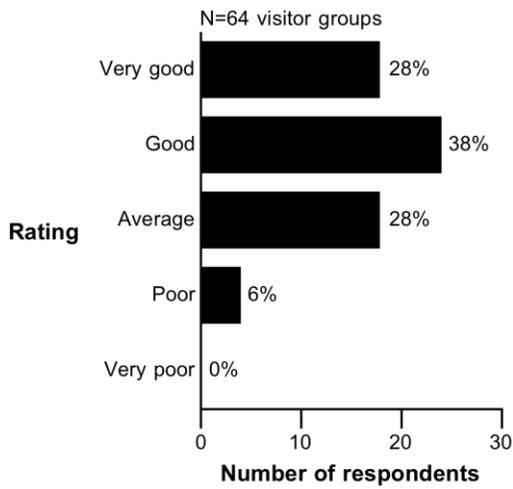


Figure 91: Quality of picnic areas

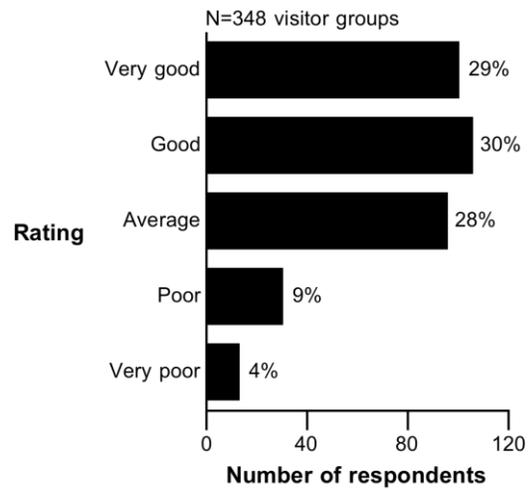


Figure 92: Quality of restrooms

*total percentages do not equal 100 due to rounding

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

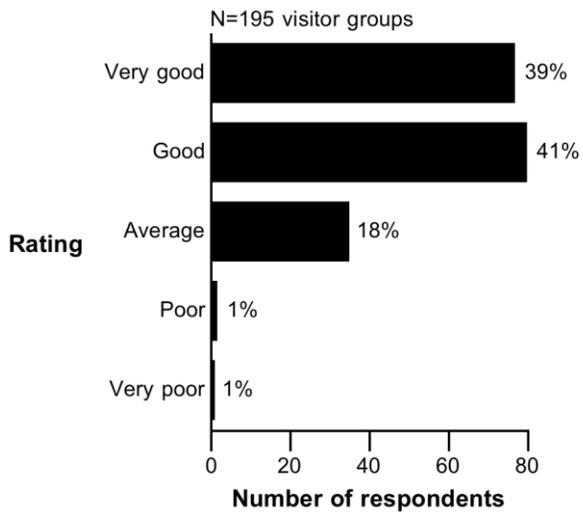


Figure 93: Quality of trails

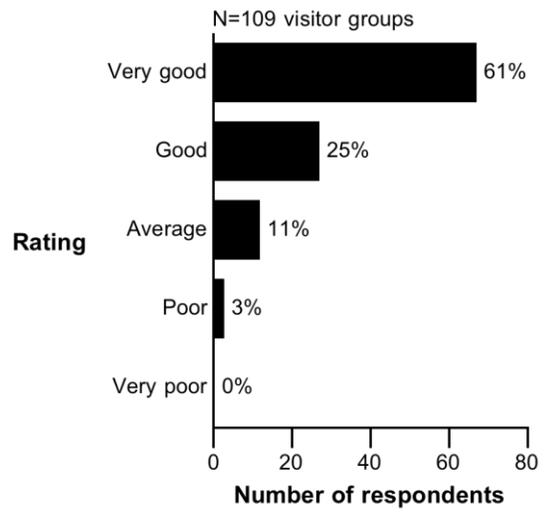


Figure 94: Quality of visitor center (U.S. Hwy. 49)

*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 95 and 96 show the mean scores of importance and quality ratings for all visitor services/facilities that were rated by 30 or more visitor groups.
- All visitor services/facilities were rated above average.

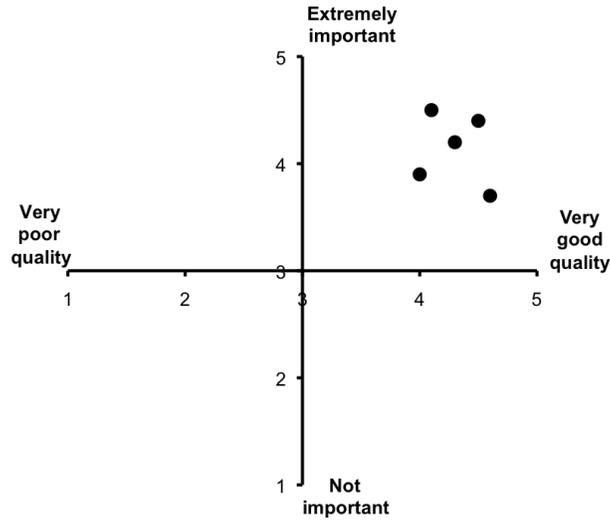


Figure 95: Mean scores of importance and quality ratings for visitor services and facilities

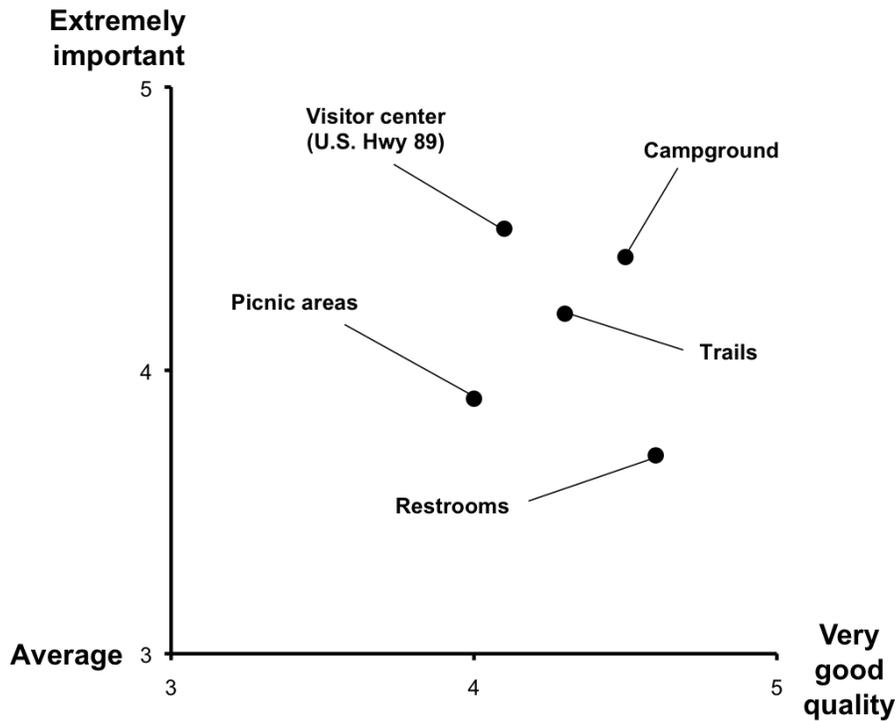


Figure 96: Detail of Figure 95

*total percentages do not equal 100 due to rounding
 **total percentages do not equal 100 because visitors could select more than one answer

Services or facilities unavailable

Question 32a

Is there any service or facility that the park does not have that you would like to have available?

Results

- 70% of visitor groups indicated there were services or facilities they would have liked, but the park did not have available (see Figure 97).

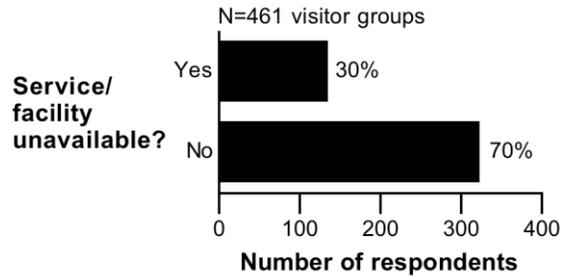


Figure 97: Visitor groups for which services or facilities were not available

Question 32b

If YES, what services or facilities would you like to see provided? (open-ended)

Results

- 135 visitor groups suggested services or facilities they would like to see provided (see Table 14).

Table 14: Services or facilities desired
 N=167 comments;
 some visitor groups made more than one comment.

Service or facility	Number of times mentioned
Food/drink concession stands	38
More parking availability	20
More restrooms	9
Showers	8
More trash cans	6
Changing rooms/facilities	5
Shuttle to beach	4
Better handicapped accessibility to beach	3
Boardwalk	3
Gift shops	3
More camping availability	3
More rangers	3
Soap in the restrooms	3
Electric hookups in campground	2
Flushing toilets	2
Improved cleanliness	2
Improved restrooms	2
Improved signage	2
More picnic tables	2
More shaded areas	2
Vending machines	2
A "Tread Lightly" system	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 14: Services or facilities desired
(continued)

Service or facility	Number of times mentioned
A creationist interpreter	1
A warning to clean up after dogs	1
Ability to reserve camping sites	1
Ability to reserve picnic areas	1
Alcohol allowed in park	1
Animal education	1
Animals at Chellberg Farm	1
Areas to ride ORVs	1
Beach camping	1
Beach umbrellas	1
Benches	1
Better cell phone reception	1
Better directions to visitor center	1
Bike racks at the beaches	1
Boat rentals	1
Boat rides	1
Enforcement of "No dogs" rule	1
Firewood for sale	1
First aid	1
Golf cart ride from parking lot to beach	1
Handicapped parking	1
Improved visitor center	1
Improved websites	1
Increased building hours	1
Indoor information center	1
Lakeside restaurants/hotels	1
Local-only beach for Porter County residents	1
Longer trails	1
Main path was closed due to erosion	1
Monitor boats entering Burns Ditch	1
More parking for walk-in campsites	1
More ranger-led programs	1
More security at West Beach and Portage	1
On-location trail map	1
Paved trails	1
Radio station	1
Recycling bins	1
Reenactments	1
Someone to monitor restrooms/showers	1
Water fountains on trails	1
Wi-fi	1
Winter sledding	1

*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

Interpretive program topic preferences

Question 24a

If you were to visit Indiana Dunes National Lakeshore in the future, would you and your personal group be interested in attending ranger-led talks/programs?

Results

- 41% of visitor groups were interested in attending ranger-led talks/programs on a future visit (see Figure 98).

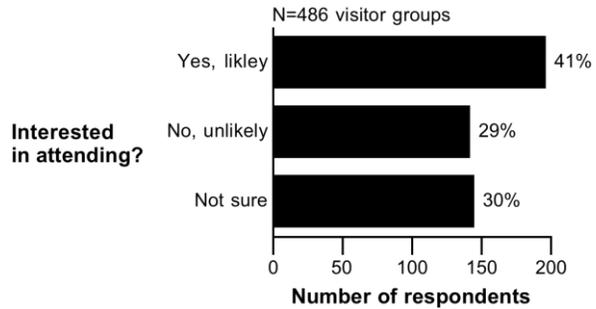


Figure 98: Visitor groups' likelihood of attending ranger-led talks/ programs

Question 24b

If YES, what theme or topic would interest you?

Results

- 160 visitor groups suggested themes or topics for ranger-led talks/programs (see Table 15).

Table 15: Suggested themes or topics
N=307 comments;
some visitor groups made more than one comment.

Theme/topic	Number of times mentioned
General park topics (N=73)	
General nature/environment	15
Topics for children	6
Fishing	5
General park information	5
Conservation efforts	5
Fun/unique facts	3
Ranger-led hikes	3
Stars/astronomy	3
Trails	3
Biodiversity	2
Farm	2
Future park plans	2
Park attractions/what to see	2
Purpose of park	2
Seasons	2
Camping	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 15: Suggested themes or topics
(continued)

Theme/topic	Number of times mentioned
General park topics (continued)	
Environmental issues and lessons	1
Farm/farm animals	1
Hiking/nature walks	1
Mt. Baldy	1
Night walks	1
Park preservation	1
Park tourism	1
Plan for E. coli	1
Restoration	1
Survival skills	1
Swimming dangers	1
Ways to help keep park clean	1
Wildlife (N=69)	
General wildlife	45
Birds	11
Insects	3
Dune wildlife	2
Bird watching	2
Aquatic animals	1
Endangered species	1
Fish	1
Migratory water fowl	1
Species diversity	1
Unique fauna	1
Dunes (N=49)	
Dune formation	26
General dunes	14
Dune conservation	2
Dune climbing	1
Dune movement	1
Dune wildlife	1
Dunes micro-ecology	1
Erosion	1
How to protect the dunes	1
Relationships of dunes to surrounding area	1
Flora (N=45)	
General plants	30
Flowers	2
Invasive plants	2
Plant identification	2

*total percentages do not equal 100 due to rounding

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

Table 15: Suggested themes or topics
(continued)

Theme/topic	Number of times mentioned
Flora (continued)	
Trees	2
Carnivorous plants	1
Dune plants	1
Edible berries	1
Mushrooms	1
Plant diversity	1
Poisonous plants	1
Unique flora	1
History (N=44)	
General history	28
History of park	8
History of area natives	5
Bailly cemetery	1
History of lakeshore	1
History of settlers/old farms	1
Recent history	1
Other natural history (N=26)	
Geology	8
Bog	4
Lake information	4
Ecology	3
Tides/riptides	3
Wetlands	2
Hydrology	1
Ice formations	1

*total percentages do not equal 100 due to rounding

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

Preferred interpretive program length

Question 24c

What program length would be most suitable for you and your personal group?

Results

- 59% of visitor groups preferred a program lasting 1/2 to 1 hour in length (see Figure 99).
- “Other” preferred program lengths were:

Depends on the topic
45 minutes

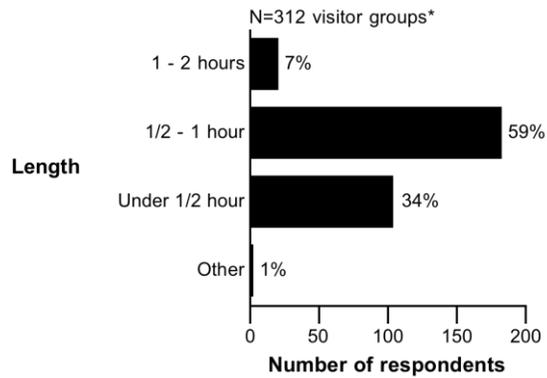


Figure 99: Preferred length of program

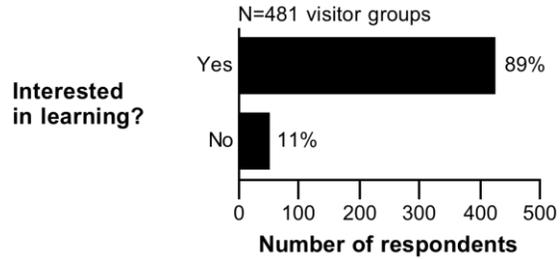
*total percentages do not equal 100 due to rounding

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

Preferred methods to learn about the park

Question 25

If you were to visit Indiana Dunes National Lakeshore in the future, how would you and your personal group prefer to learn about cultural and natural history/features of Indiana Dunes National Lakeshore?



Results

- 89% of visitor groups were interested in learning about cultural and natural history/features of Indiana Dunes National Lakeshore (see Figure 100).
- As shown in Figure 101, the most commonly preferred methods of learning about the park were:
 - 60% Printed materials
 - 56% Self-guided tours
- “Other” methods (2%) were:
 - Boat tours
 - Interactive activities
 - Scientist-led programs

Figure 100: Visitor groups interested in learning about the park

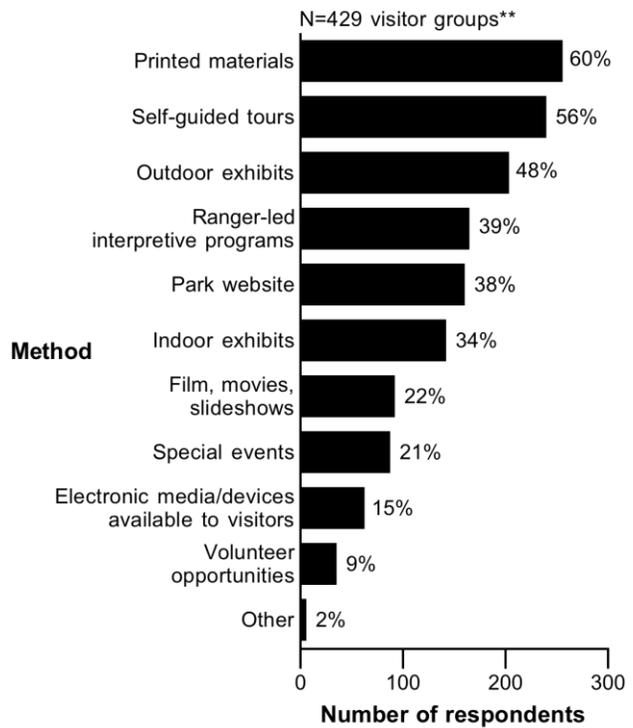


Figure 101: Preferred methods for learning

*total percentages do not equal 100 due to rounding

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

Opinions on use of food concessions

Question 14

If you were to visit the park in the future, would you and your personal group be likely to use food concessions if they were available at selected locations along Indiana Dunes National Lakeshore?

Results

- 51% of visitor groups were likely to use food concessions if they were available (see Figure 102).

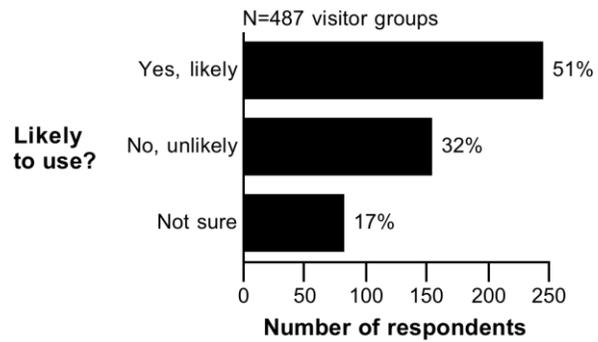


Figure 102: Visitor groups' likelihood of using food concessions

*total percentages do not equal 100 due to rounding

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

Opinions of parking fees

Question 8

If you were to visit Indiana Dunes National Lakeshore in the future, would you and your personal group be willing to pay a modest fee (\$5/vehicle/day) for parking?

Results

- 44% of visitor groups would be willing to pay a modest fee for parking (see Figure 103).

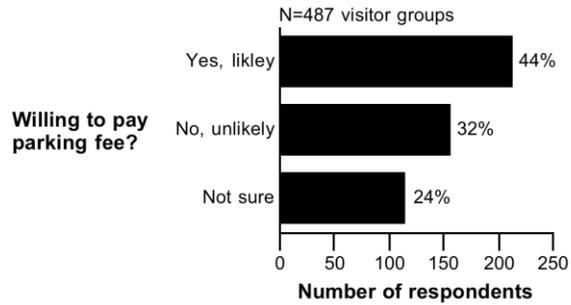


Figure 103: Visitor groups’ willingness to pay parking fee

Opinions of shuttle fees

Question 11a

If you were to visit the park in the future, would you and your personal group be willing to pay a modest fee (such as \$2.00/person each way) to ride a shuttle from a central location to the Indiana Dunes National Lakeshore’s beaches at the central and east ends of the park?

Results

- 30% of visitor groups would be willing to pay a modest fee to ride a shuttle (see Figure 104).

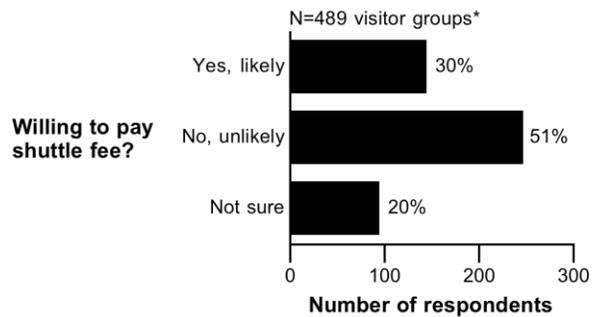


Figure 104: Visitor groups’ willingness to pay shuttle fee

Question 11b

If you were to visit the park in the future, would you and your personal group be willing to ride a combination of a train from Chicago and a shuttle bus to get to Indiana Dunes National Lakeshore beaches?

Results

- 18% of visitor groups would be willing to ride a combination of a train from Chicago and a shuttle bus to get to Indiana Dunes National Lakeshore beaches (see Figure 105).

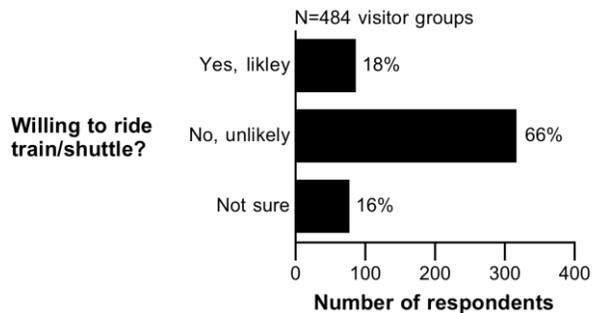


Figure 105: Visitor groups’ willingness to ride a train/shuttle from Chicago

*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 35

Overall, how would you rate the quality of the facilities, services, and recreational opportunities provided to you and your personal group at Indiana Dunes National Lakeshore during this visit?

Results

- 87% of visitor groups rated the overall quality of facilities, services, and recreational opportunities as “very good” or “good” (see Figure 106).
- Less than 2% rated the quality as “very poor” or “poor.”

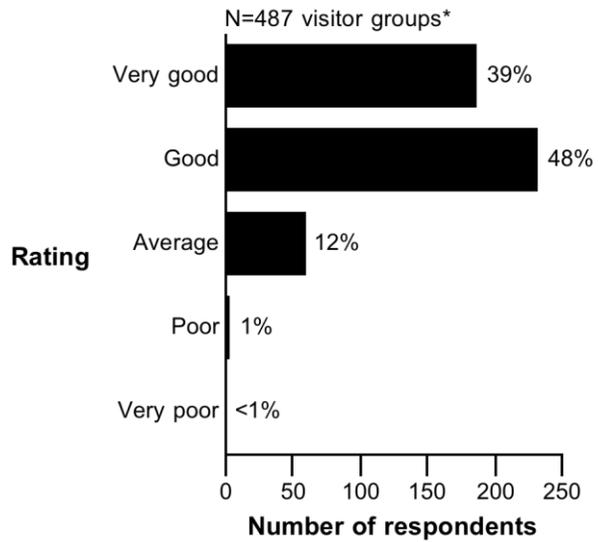


Figure 106: Overall quality rating of facilities, services, and recreational opportunities

*total percentages do not equal 100 due to rounding

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

Visitor Comments

National significance of park

Question 33

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

Results

- 59% of visitor groups (N=296) 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: National significance
N=408 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
Preservation of nature	62
Beauty	51
Dunes	38
Uniqueness of park	35
Recreational opportunities	24
Lake Michigan	22
Proximity to city/accessible to many people	21
Natural beaches	17
History	16
Bio-diversity/ecological preservation	15
Educational opportunities	12
Geologic/glacial significance	11
Lakeshore	10
Preservation for present and future children	8
Highlight of the Great Lakes	6
"Ocean" of the Midwest	6
Place for families/friends to gather	6
Clean beaches	5
Enjoyable	5
Very significant	5
Wildlife protection	5
Natural landmark	4
Relaxing/renewing	4
Important to Indiana	3
Little national significance	3
Transportation of goods/industry	3
Provides outdoor experience	2

Table 16: National significance
(continued)

Comment	Number of times mentioned
Safe	2
Variety of habitats	2
Bogs	1
Good staff	1
Memories	1
Natural in midst of industrial area	1
Not commercialized	1

Additional comments

Question 34

Is there anything else you and your personal group would like to tell us about your visit to Indiana Dunes National Lakeshore?

Results

- 56% of visitor groups (N=277) 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=393 comments;
some visitor groups made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Friendly rangers	8
Informative rangers	4
Great staff	2
Helpful staff	2
Need better rangers	2
Need more lifeguards	2
Courteous staff	2
Other comments	2
INTERPRETIVE SERVICES	
Improve/update park website	4
Enjoyed ranger-led programs	3
Need closure information	3
Loved Junior Ranger program	2
Need better maps	2
Other comments	8
FACILITIES/MAINTENANCE	
Expand parking	23
Improve signage	13
Improve trail signage	9
Clean beaches	8
Facilities were well maintained	6
Need a shuttle service	6
Restrooms were dirty	6
Enjoyed clean restrooms	4
Need more warning signs	4
Need soap in restrooms	4
Enjoyed the campground	3
Need drop-off/pick-up area near beach	3
Beach parking is not convenient	2

Table 17: Additional comments

(continued)

Comment	Number of times mentioned
FACILITIES/MAINTENANCE (continued)	
Improve the showers	2
Need more camping	2
Showers were great	2
Very clean	2
Other comments	31
POLICIES/MANAGEMENT	
Appreciate no fees	8
Miss the animals at Chellberg Farm	8
Preserve/protect the area	8
Keep dogs off beach/need dog specific beach	5
Like that park is pet-friendly	4
Need campsite reservation system	4
Campground registration was confusing	3
Need a no smoking policy	3
Willing to pay to guarantee parking	3
Do not open/expand refinery	2
Feel unsafe here	2
Water access is important	2
Other comments	22
RESOURCE MANAGEMENT	
Clean up Lake Michigan	4
Too much poison ivy	2
Upkeep water quality	2
Other comments	3
GENERAL COMMENTS	
Enjoyed visit	49
Will return	8
Beautiful	7
Close to home/convenient	7
Enjoyed Portage Lakefront/Riverwalk	7
Thank you	7
Enjoyed the naturalness	6
Relaxing/peaceful	6
Loved the beaches	4
Great time with kids	3
Inclement weather prevented from staying longer	3
Moderate crowds	3
Needed more time	2
People need to pick up after their dogs	2
Other comments	18

Appendix 1: The Questionnaire

Appendix 2: Additional Analysis

This section contains cross comparisons and other additional analyses specifically requested by park managers at Indiana Dunes National Lakeshore.

1. Comparison of visitor ages at Indiana Dunes NL with visitor ages at other national lakeshores and seashores in the National Park System.

This comparison is limited to national lakeshores and seashores that have done a visitor study with the Park Studies Unit. Note that these studies may not have been conducted in the same year as Indiana Dunes NL, and some studies were conducted in different seasons. Thus the results should be interpreted with caution with regards to time lapse and seasonal effects.

Table A1: Proportion of visitors in age groups

N=number of individuals

Total percentages in each column may not equal 100 due to rounding.

Age group	INDU (2009) N=1754	INDU (1993) N=1327	SLBE (2009) N=2574	FIIS (2008) N=2101	APIS (2004) N=1543	CAHA (2002) N=1033	PIRO (2001) N=1681	CUIS (Spring 1998) N=870	CANA (1994) N=960
10 or younger	18%	22%	15%	12%	5%	14%	14%	8%	13%
11-15	11%	13%	10%	6%	6%	11%	12%	7%	4%
16-20	6%	8%	7%	4%	4%	5%	6%	3%	5%
21-25	6%	7%	3%	4%	4%	4%	5%	6%	9%
26-30	6%	6%	3%	7%	6%	3%	5%	6%	8%
31-35	7%	9%	5%	5%	5%	8%	7%	9%	12%
36-40	9%	8%	8%	8%	8%	11%	11%	11%	10%
41-45	8%	6%	9%	11%	11%	11%	11%	8%	10%
46-50	7%	6%	10%	12%	15%	11%	10%	11%	7%
51-55	7%	4%	8%	9%	15%	8%	7%	8%	4%
56-60	5%	3%	7%	8%	10%	6%	5%	7%	4%
61-65	4%	4%	5%	6%	6%	3%	4%	8%	6%
66-70	2%	2%	4%	3%	3%	3%	2%	6%	4%
71-75	2%	1%	3%	2%	1%	1%	1%	3%	2%
76 or older	1%	<1%	2%	2%	1%	1%	1%	1%	1%
Average group size	4.45	5.9	4.7	4.2	4.2	5.2	3.9	2.7	2.7
% of family	65%	n/a	68%	46%	47%	62%	66%	48%	n/a

As shown in Table A1, Indiana Dunes NL seems to attract a higher proportion of children under 15 years old (29%) compared to other national lakeshore/seashore areas. This is a smaller proportion compared to the visitor study conducted in 1993 (35%). However, the proportion of visitors between 31 and 50 years who are likely in the workforce is somewhat lower compared to other areas (31% in both 1993 and the current survey). This could be explained by a relatively higher proportion of families with larger average group sizes.

2. Race and ethnicity by county

Table A2: Visitors distribution by county

N=number of individuals

	N	Percentage
Northern Illinois	491	31%
Other counties in Illinois	134	9%
Northern Indiana	387	24%
Other counties in Indiana	238	15%
Other states	334	21%

Table A2 shows the proportion of visitors from different areas in Indiana and Illinois. Northern Illinois counties include Cook, Will, Dupage, Lake, McHenry, Kane, Kendall, Grundy, and Kankakee. All other counties in Illinois were considered "southern." Northern Indiana counties include Lake, Porter, LaPorte, and St. Joseph. All other counties in Indiana were considered "southern."

Table A3: Race and ethnicity of visitors by county of residence

N=number individuals

Location	Hispanic		American Indian or Native Alaskan		Asian		Black		Native Hawaiian or other Pacific Islander		White		Two or more races	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Northern Illinois	39	9%	0	0	19	4%	1	0.2%	1	0.2%	411	93%	11	2%
Other counties in Illinois	3	2%	0	0	3	2%	1	1%	0	0	126	96%	2	1%
Northern Indiana	25	7%	1	0.3%	5	1%	4	1%	0	0	350	96%	5	1%
Other counties in Indiana	1	0.4%	3	1%	4	2%	4	2%	0	0	210	95%	1	0.5%
Other states	7	2%	1	0.3%	5	2%	11	3%	0	0	301	94%	1	0.3%

Table A3 shows the proportions of visitors of different races and ethnicities. Percentages represent the proportion of visitors of a race/ethnicity within the area.

Among visitors who live in northern Illinois counties,

- 9% were of Hispanic/Latino ethnicity
- 4% were Asian

Also, northern Illinois and northern Indiana counties seem to contribute a larger proportion of visitor diversity, with 52% of Hispanic/Latino visitors coming from northern Illinois and 33% from northern Indiana.

3. First-time visitors

Table A4: Percentage of first-time visitors in different age groups

Age group	First-time	Repeat
Under 16 years old (N=500 individuals)	56%	44%
Under 18 years old (N=552 individuals)	55%	45%
Over 18 years old (N=1201 individuals)	43%	57%

Table A5: Number of children in group

Number of children	All first-time visitors in group (N=137 groups)	At least one repeat member (N=357 groups)
No children	56%	47%
1	10%	17%
2	19%	19%
3	10%	10%
4	4%	5%
5	2%	2%

Table A6: Personal group type

Group type	All first-time visitors in group (N=136 groups)	At least one repeat member (N=352 groups)
Alone	2%	9%
Family	72% (of which 51% had children in group)	62% (of which 65% had children in group)
Friends	13%	12%
Family & friends	12%	18%
Other	0%	0%

Table A4 shows there was no significant difference in group type between groups with all first-time visitors and groups with at least one repeat member. As shown in Table A5, the slightly higher proportion of groups with children among groups with at least one repeat member indicates that families may take their children to the park on the return trip. In addition, there is a slightly higher proportion of family and friends groups among groups with at least one repeat member which suggests a possibility of out-of-town guests in the group (see Table A6).

4. Visitors from Chicago area

“Chicago area” in this report is defined as any area associated with a zip code starting with 600 to 608. As shown in Table A7, there was a fluctuation in the proportion of visitors from Chicago compared with previous studies in 1993 (summer) and 1994 (fall). The lower proportion of visitors from Chicago area indicates that there was a seasonal effect with fewer visitors from the Chicago area during the shoulder season compared to the peak season.

Table A7: Proportions of visitors from Chicago area

Area	2009 (N=1584 individuals)	1994 (N=504 individuals)	1993 (N=1233 individuals)
Chicago area	35% (555 individuals)	21% (107 individuals)	31% (377 individuals)
Outside of Chicago area	65% (1029 individuals)	79% (397 individuals)	69% (856 individuals)

5. Visitors from Indiana and Illinois

Table A8 shows that the proportion of visitors from Indiana has stayed relatively stable over time with a peak in 1994, while visitation from Illinois has increased slightly, with a dip in 1994. The survey in 1994 was conducted in the fall, rather than in the peak summer season.

Table A8: Proportions of visitors from Indiana and Illinois

Area	2009 (N= individuals)	1994 (N= individuals)	1993 (N= individuals)
Indiana	40% (625 individuals)	55% (284 individuals)	44% (516 individuals)
Illinois	40% (625 individuals)	24% (122 individuals)	34% (398 individuals)

6. Travel distance and reason for being in the area (from Gary, IN to Michigan City, IN)

The results shown in Table A9 are based on Question 5, which excludes residents of the area (from Gary, IN to Michigan City, IN). Travel distances only reflect the direct distances between zip codes and were calculated based on respondent’s zip code only. For example, “0” travel distance means the respondent lived in the same zip code area as the park.

Table A9: Travel distance and reason for being in the area

Reason for being in area	N	Average (miles)	Minimum (miles)	Maximum (miles)
Visit Indiana Dunes NL	260	130	2	1859
Visit other attractions in the area	20	164	3	680
Visit friends/relatives in the area	26	321	0	1808
Business	4	140	0	317
Other	49	187	0	1758

Too few visitor groups marked “business” as a primary reason for being in the area to provide any statistically significant results. Comparisons between groups show that visitors who specified “visit friends and relatives in the area” as the primary reason came the furthest distance. On average, they traveled 191 miles further than visitors who specified “visit Indiana Dunes NL” as a primary reason for visiting.

Table A10: Distance from home for visitors who identified “visit Indiana Dunes NL” as primary reason to be in the area

Distance from home	N	%
Within 100 miles radius	180	69%
101-200 miles	53	20%
201-300	9	3%
301 miles	9	7%

The results shown in Table A10 indicate that Indiana Dunes NL is a popular destination for visitors who live within 200 miles of the park. It is also very common for local residents to bring guests to the park. No data was available for the 1993 and 1994 studies, since the “primary reason for visiting the area” question was not asked.

7. First-time visitors’ awareness of park management

Table A11: Visitor awareness of park management

N=number of visitors

	Respondent was the first time visitor		All group members were first-time		Groups with at least one repeat visitor	
	N	%	N	%	N	%
Aware that Indiana Dunes NL is a national park site	118	67%	86	64%	296	84%
Not aware of two parks	104	59%	79	59%	127	36%
Aware of both parks and organizations	26	15%	21	16%	115	33%
Aware of both parks but thought state park managed both	9	5%	5	4%	32	9%
Aware of both parks but thought National Park Service managed both	4	2%	3	2%	22	6%
Aware of both parks but didn’t know which organization managed either	33	19%	27	20%	56	16%

As shown in Table A11, although more than half of first-time visitors were aware that Indiana Dunes NL is a national park site, familiarity with the park plays an important role in visitors’ awareness of park management. While 59% of first-time visitors were not aware of the existence and the difference in management of Indiana Dunes NL and Indiana Dunes State Park, this proportion drops to 36% among repeat visitors.

8. Reason of visit and length of visit for visitors coming from over 100 miles from park

The group statistics in Table A12 were calculated based on respondents’ zip codes only.

Table A12: Length of visit by reason for being in the area

Reason	Percentage of day use	Day use visitors only			Overnight visitors only		
		Minimum	Maximum	Average	Minimum	Maximum	Average
Visit Indiana Dunes NL (N=78)	50%	45 minutes	12 hours	4.1 hours	1 day	5 days	2.6 days
Visit other attraction in the area (N=9)	100%	30 minutes	6 hours	2.5 hours			
Visit friends/relatives in the area (N=18)	83%	15 minutes	4 hours	2.25 hours	2 days	3 days	2.3 days
Business (N=2)	100%	4 hours	4 hours	4 hours			
Other (22)	77%	15 minutes	5 hours	2 hours	1 day	7 days	3.2 days

9. Safety



Figure A1: Combined proportion of visitor groups who felt “very safe” and “somewhat safe” in the park

10. Comparison of sites visited between first-time and repeat visitors

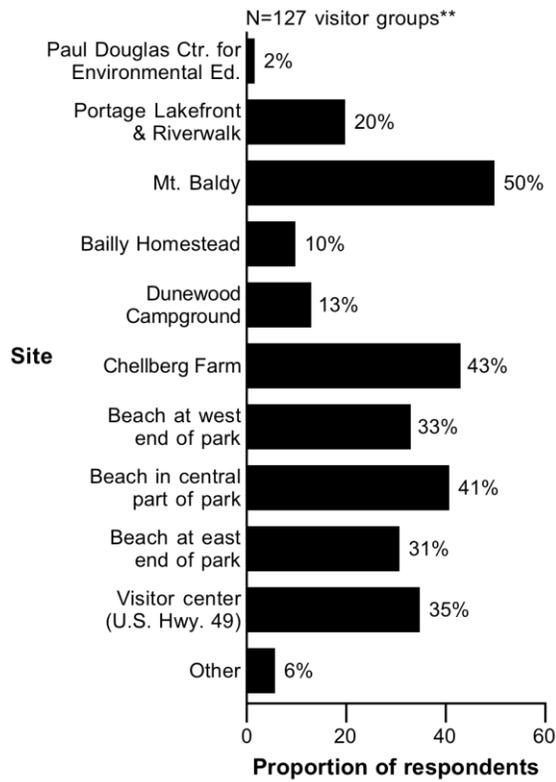


Figure A2A: Sites visited for groups with all first-time visitors

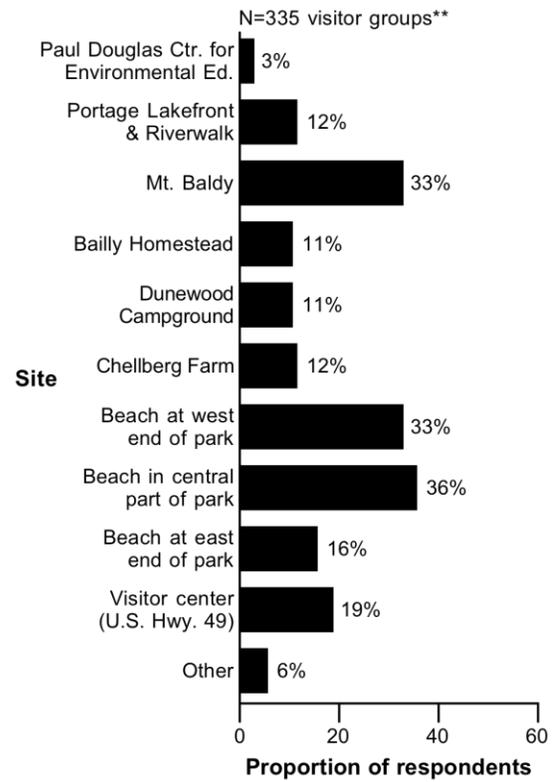


Figure A2B: Sites visited for groups with at least one repeat member

11. Comparison of activities between first-time and repeat visitors

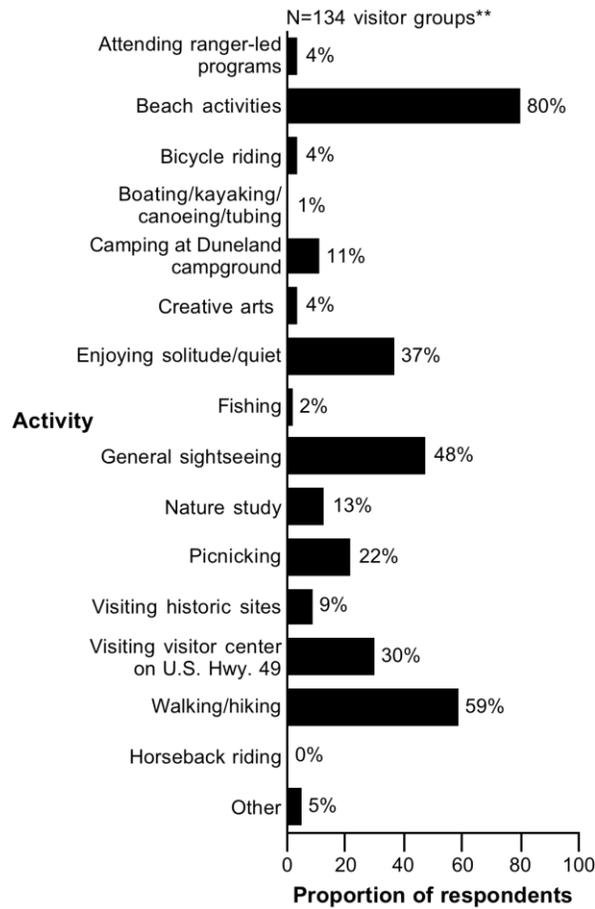


Figure A3A: Activity of groups with all first-time visitors

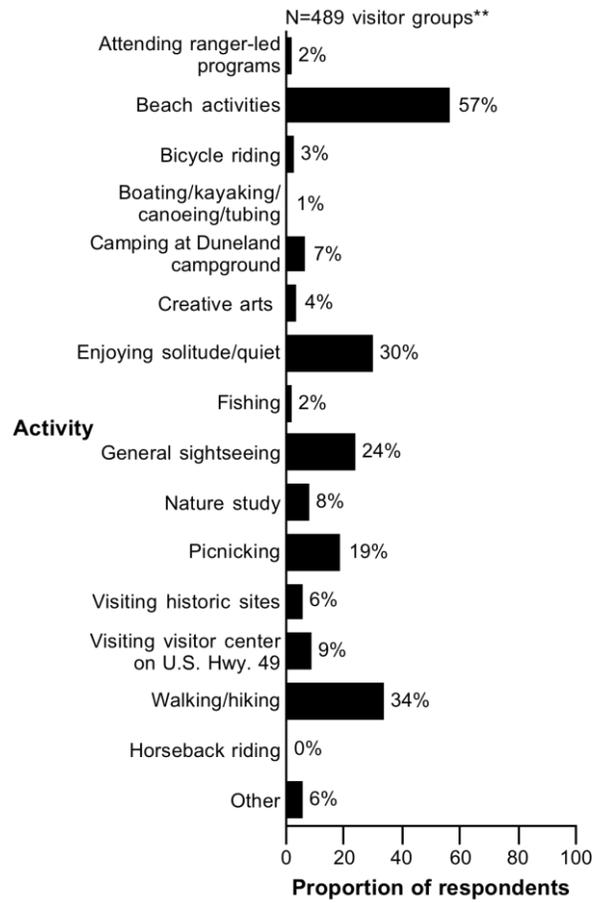


Figure A3B: Activities with groups with at least one repeat member

12. Willingness to ride train/shuttle combination among visitors from Chicago area

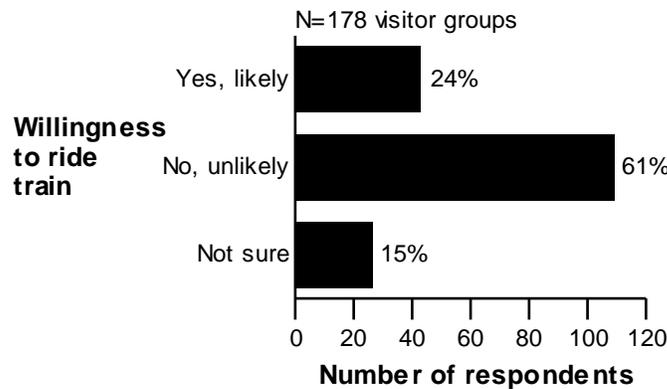


Figure A4: Chicago visitor groups' willingness to ride train/shuttle

13. Comparison of trail use between local and non-local groups

A “local” group is defined as any group that included at least one member living in the area between Gary, IN and Michigan City, IN. “Non-local” groups are defined as groups that had no members living in the area. As shown in Table A13, non-local groups were more likely to hike/walk on trails.

Table A13: Use of trail by residency status

N=number of visitor groups

Trail use	Local (N=66 groups)		Non-local (427 groups)	
	N	% of total	N	% of total
Used at least one trail	24 (36% of local groups)	5%	225 (53% of non-local group)	46%
Did not use any trail	42 (64% of local groups)	9%	202 (47% of non-local groups)	41%

14. Comparison of campground use with travel distance

The travel distances are based on the respondent’s zip code only, which may not reflect the group’s travel distance. Table A14 shows that campers were more likely to live within 200 miles of the park.

Table A14: Use of campground by travel distance

N=number of visitor groups

Distance from park	Camped	% within campers	Did not camp
Within 100 miles radius	27	61%	274
101 to 200 miles	12	27%	66
201 to 300 miles	3	7%	20
301 miles or more	2	5%	39

15. Number of lifetime visit for visitors from Chicago

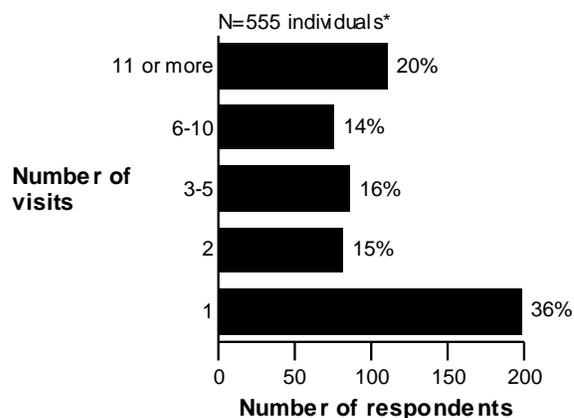
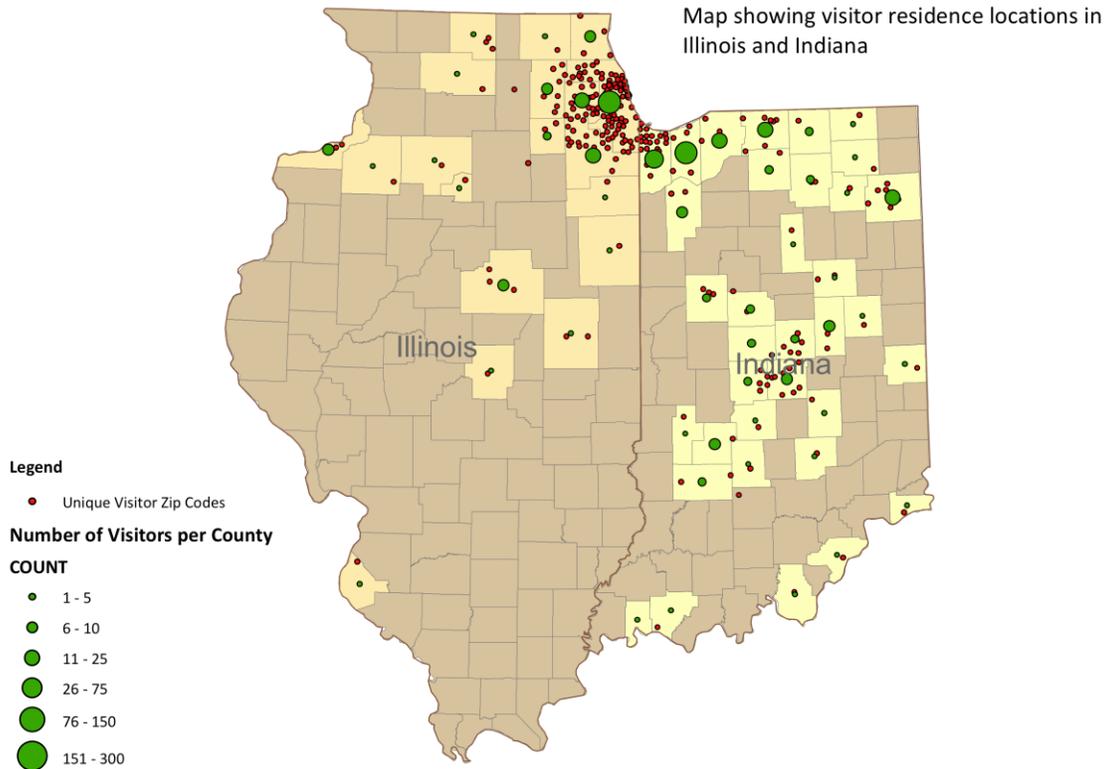


Figure A5: Number of lifetime visits among visitors from Chicago area

16. Places of residence for visitors from Illinois and Indiana

Indiana Dunes National Lakeshore Visitor Study Summer 2009



Map A1: Visitors from Illinois and Indiana

17. Comparison of groups that visited one specific site between first-time and repeat visitors

Table A15: Specific site visited by number of lifetime visit
N=number of visitor groups

	Planned to visit only one site		Did not have a specific planned site	
	N	% of total	N	% of total
All first-time visitors	51	11%	80	17%
At least one repeat visitor in the group	219	45%	133	28%

18. Comparison of park management awareness between local and non-local visitors

A “local” group is defined as any group with at least one member that lived in the area between Gary, IN and Michigan City, IN. “Non-local” groups defined as groups that had no members living in the area. As might be expected, non-locals were less aware of how the park is managed and of the existence of the national and state parks (see Table A17).

Table A16: Visitor awareness of park management

N=number of visitor groups

Awareness	Local		Non-local	
	N	%	N	%
Aware that Indiana Dunes NL is a national park site	60	94%	322	76%
Did not aware of two parks	15	23%	191	45%
Aware of both parks and organizations	26	40%	111	26%
Aware of two parks but though state park managed both	8	12%	29	7%
Aware of two parks but thought National Park managed both	7	11%	17	4%
Aware of two parks but didn't know which organization	9	14%	73	17%

Further 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 attends 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
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 this visitor study, visitor 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 1st replacement was mailed, the second wave is between 1st and 2nd replacement and the third wave contains surveys received after the 2nd 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 had 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 had the same average satisfaction scores.
4. Respondents of different education levels are equally represented in 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.

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Appendix 4: Visitor Services Project Publications
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All VSP reports are available on the Park Studies Unit website at 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

2009 (continued)

- 212. Perry's Victory & International Peace Memorial
- 213. Women's Rights National Historical Park
- 214. Klondike Gold Rush National Historical Park-Seattle Unit
- 215. Yosemite National Park
- 216. Sleeping Bear Dunes National Lakeshore
- 217. James A. Garfield National Historic Site
- 218. Boston National Historical Park
- 219. Bryce Canyon National Park
- 220. Indiana Dunes National Lakeshore

For more information about the Visitor Services Project, please contact the University of Idaho Park Studies Unit, website: www.psu.uidaho.edu or phone (208) 885-7863.

Visitor Comments Appendix

This section contains complete visitor comments of all open-ended questions and is bound separately from this report due to its size.

