

USS ARIZONA (BB 39)

USS Arizona Memorial Visitor Study Summer 2000

Report 120
Visitor Services Project
Cooperative Park Studies Unit



University of Idaho



USS Arizona Memorial National Historical Park

Visitor Study **Summer 2000**

Wayde Morse

Margaret Littlejohn

Visitor Services Project Report 120

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Wayde Morse is a Research Assistant with the Visitor Services Project based at the Cooperative Park Studies Unit, University of Idaho. Margaret Littlejohn is VSP Coordinator, National Park Service. We thank Jinglan Yu, Akihiro Koyama and the staff and volunteers of USS Arizona Memorial for their assistance with this study. The VSP acknowledges the Public Opinion Lab of the Social and Economic Sciences Research Center, Washington State University, for its technical assistance.

Visitor Services Project USS Arizona Memorial Report Summary

- This report describes the results of a visitor study at USS Arizona Memorial during June 24-30, 2000. A total of 700 questionnaires were distributed to visitors. Visitors returned 468 questionnaires for a 66.8% response rate.
- This report profiles USS Arizona Memorial visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.
- Over one-half (65%) of the visitor groups were family groups. Thirty-four percent of visitor groups were groups of two; 33% were in groups of three or four. Forty-seven percent of visitors were aged 36-60 years, while 13% were aged 15 years or younger.
- Most visitors (97%) were first-time visitors during the past twelve months; 63% did not visit the USS Arizona Memorial more than one year ago. Forty-two percent spent between seven and ten days on the Hawaiian Islands. Sixty-one percent of visitor groups spent between three and seven days on Oahu. Most of the visitor groups (62%) spent between 2 and 3 hours at the Memorial.
- United States visitors were from California (16%), with Hawaii, Illinois, Texas, and Colorado each reporting 4% of visitors. Twenty percent of all visitors were international: 42% percent were from Japan and another 18% were from England. English (91%), Japanese (10%) and Spanish (9%) were the most common languages read and spoken fluently by visitor groups.
- The sources of information most used by visitor groups were word of mouth/ friends/ relatives (43%), travel guide/tour book (39%), and previous visits (26%).
- On this trip, the most commonly visited nearby sites were the Dole Plantation (38%), Polynesian Cultural Center (37%), Battleship Missouri (35%), USS Bowfin submarine exhibit (31%), and the National Memorial Cemetery of the Pacific (30%).
- Visitors were asked to rate the importance and quality of park information services they used at USS Arizona Memorial. With regard to the use, importance, and quality of services and facilities, it is important to note the number of visitor groups that responded to each question. The most used information service was the movie on Pearl Harbor attack (81%). The services that received the highest "extremely important" or "very important" ratings were the movie on the Pearl Harbor attack (95%) and the shuttle boat service (94%). Those services rated the highest quality of "very good" or "good" were the movie on the Pearl Harbor attack (97%), Navy shuttle boat service (93%) and assistance from park staff (90%).
- The facility most used by 406 visitor groups was the restrooms (86%). According to visitors, the most important facilities were the restrooms (93% of 336 respondents) and parking lots (91% of 250 respondents). The highest quality facilities were the parking lots (76% of 207 respondents) and restrooms (70% of 328 respondents).
- Visitors were asked their perceptions of crowding at the USS Arizona Memorial. Thirty-six percent said that they felt "crowded" while 30% reported they felt "extremely" or "very" crowded.
- The average visitor group expenditure was \$54. The average per capita expenditure was \$16. The median visitor group expenditure (50% of groups spent more, 50% spent less) was \$22.
- Eighty-seven percent (87%) of visitor groups rated the overall quality of visitor services at USS Arizona Memorial as "very good" or "good." Visitors made many additional comments.

For more information about the Visitor Services Project, please contact the
University of Idaho Cooperative Park Studies Unit; phone (208) 885-7863.

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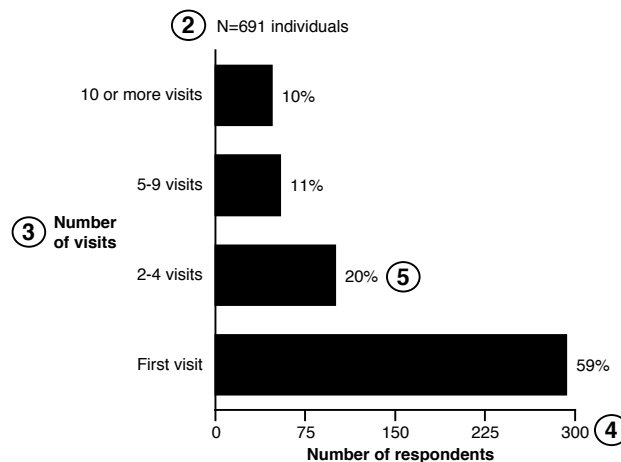
INTRODUCTION

This report describes the results of a study of visitors at the USS Arizona Memorial. This visitor study was conducted June 24-30, 2000 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Cooperative Park Studies Unit at the University of Idaho.

The **Methods** section discusses the procedures and limitations of the study. The **Results** section includes a summary of visitor comments. An **Additional Analysis** page is included which will help managers request additional analyses. The final section includes a copy of the **Questionnaire** and two translations. A separate appendix includes comment summaries and visitors' unedited comments.

Most of this report's graphs resemble the example below. The large numbers refer to explanations following the graph.

SAMPLE ONLY



① Figure 4: Number of visits

- 1: The Figure title describes the graph's information.
- 2: Listed above the graph, the 'N' shows the number of visitors responding and a description of the chart's information. Interpret data with an 'N' of less than 30 with **CAUTION!** as the results may be unreliable.
- 3: Vertical information describes categories.
- 4: Horizontal information shows the number or proportions in each category.
- 5: In most graphs, percentages provide additional information.

METHODS

Questionnaire design and administration

The questionnaire for this visitor study was designed using a standard format that has been developed in previous Visitor Services Project studies. A copy of the questionnaire, and Japanese and Chinese translations, is included at the end of this report.

Interviews were conducted with, and questionnaires distributed to, a sample of visitors who arrived at the USS Arizona Memorial during June 24–30, 2000. Visitors were sampled in one location as they waited in line to get their shuttle boat tickets. Interviews were conducted in English, Japanese and Chinese.

Visitor groups were greeted, briefly introduced to the purpose of the study, and asked to participate. If visitors agreed, an interview lasting approximately two minutes was used to determine group size, group type, and the age of the adult who would complete the questionnaire. This individual was then given a questionnaire and asked his or her name, address, and telephone number in order to mail them a reminder/ thank you postcard. Visitor groups were asked to complete the questionnaire during or after their visit, then return it by mail.

Two weeks following the survey, a reminder/ thank you postcard was mailed to all participants. Replacement questionnaires were mailed to participants who had not returned their questionnaires four weeks after the initial interview. Seven weeks after the survey a second replacement questionnaire was mailed to visitors who still had not returned their questionnaires.

Data analysis

Returned questionnaires were coded and the information entered into a computer using a standard statistical software package. Frequency distributions and cross-tabulations were calculated for the coded data, and responses to open-ended questions were categorized and summarized.

This study collected information on both visitor groups and individual group members. Thus, the sample size ('N'), varies from figure to figure. For example, while Figure 1 shows information for 462 visitor groups, Figure 4 presents data for 1,619 individuals. A note above each graph specifies the information illustrated.

**Sample size,
missing data
and reporting
errors**

Occasionally, a respondent may not have answered all of the questions, or may have answered some incorrectly. Unanswered questions result in missing data and cause the number in the sample to vary from figure to figure. For example, while 468 visitors to the USS Arizona Memorial returned questionnaires, Figure 1 shows data for only 462 respondents.

Questions answered incorrectly due to carelessness, misunderstanding directions, and so forth turn up in the data as reporting errors. These create small data inconsistencies.

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

Limitations

1. It is not possible to know whether visitor responses reflect actual behavior. This disadvantage applies to all such studies and is reduced by having visitors fill out the questionnaire soon after they visited the park.

2. The data reflect visitor use patterns of visitors to the selected sites during the study period of June 24–30, 2000. The results 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 or table.

During the study week, weather conditions were fairly typical of late June, with warm and sunny days and occasional showers.

**Special
Conditions**

RESULTS

Visitors contacted

At the USS Arizona Memorial, 814 visitor groups were contacted, and 700 of these groups (86%) agreed to participate in the survey. Questionnaires were completed and returned by 468 visitor groups, resulting in a 66.8% response rate for this study.

Table 1 compares age and group size information collected from both the total sample of visitors contacted and those who actually returned questionnaires. Based on the variables of respondent age and visitor group size, non-response bias was judged to be insignificant.

Table 1: Comparison of total sample and actual respondents

Variable	Total sample		Actual Respondents	
	N	Avg.	N	Avg.
Age of respondents	697	42.7	466	44.3
Group size	690	4.2	462	4.9

Demographics

Figure 1 shows visitor group sizes, which ranged from one person to 56 people. Thirty-four percent of visitor groups consisted of two people, while another 20% were people visiting in groups of four.

Sixty-five percent of visitor groups were made up of family members, 15% consisted of friends, and 10% were made up of family and friends (see Figure 2). Groups listing themselves as "other" for group type included Navy, business and Lions Club. Sixteen percent of visitors were in a guided tour group (see Figure 3).

Thirty-one percent of visitors were aged 41-55 years (see Figure 4). Thirteen percent of visitors were aged 15 years or younger.

Visitors were asked to identify the level of education that each group member had achieved. Twenty-six percent had bachelor's degrees and 20% had graduate degrees (see Figure 5).

**Demographics-
continued**

Visitors were asked the number of times they visited the USS Arizona Memorial during the past 12 months (including their current visit). Three percent of all visitor groups had visited more than one time in the past 12 months (see Figure 6). Visitors were also asked if they had visited the site more than one year ago. Sixty-three (63%) had not visited the site and another 24% had visited once over a year ago (see Figure 7).

Visitors were asked to identify the languages that each member in their group could read and speak fluently. Most visitors (91%) read and spoke English fluently (see Figure 8). The next two most common languages spoken were Japanese (10%) and Spanish (9%). There were 21 “other” languages spoken fluently. Italian was the most common of these with seven visitors reporting fluency (see Table 4).

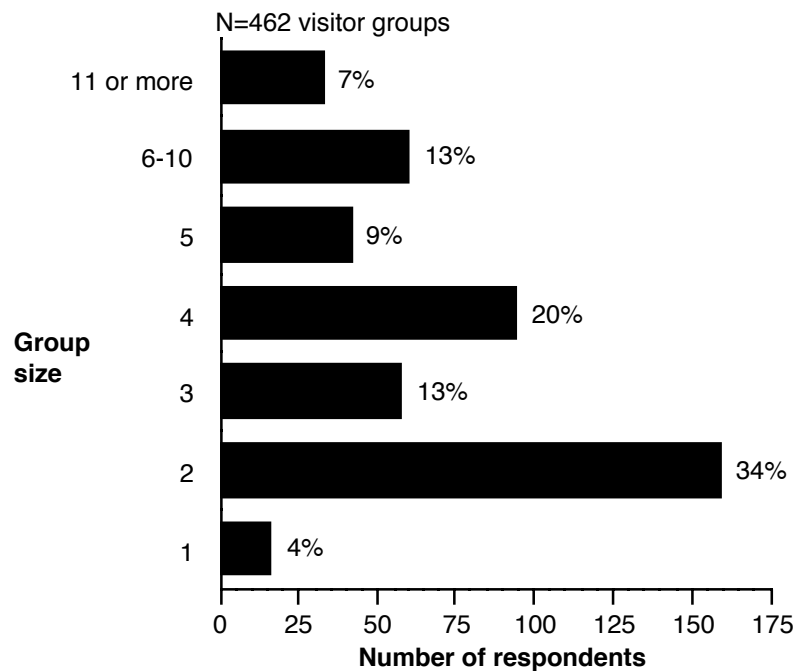


Figure 1: Visitor group sizes

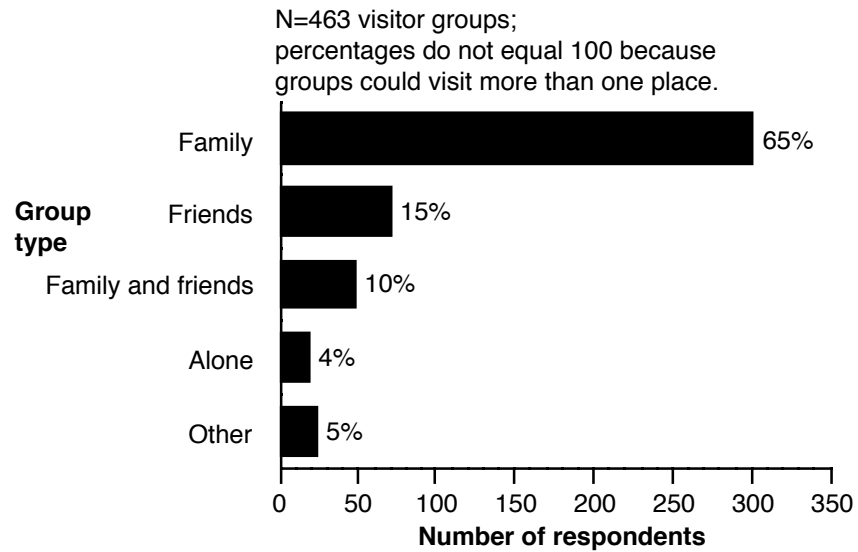


Figure 2: Visitor group types

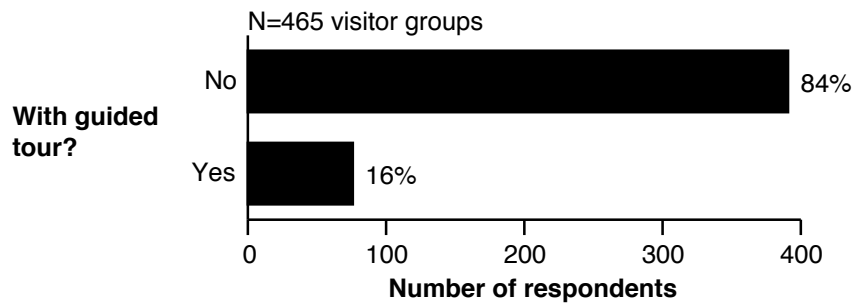
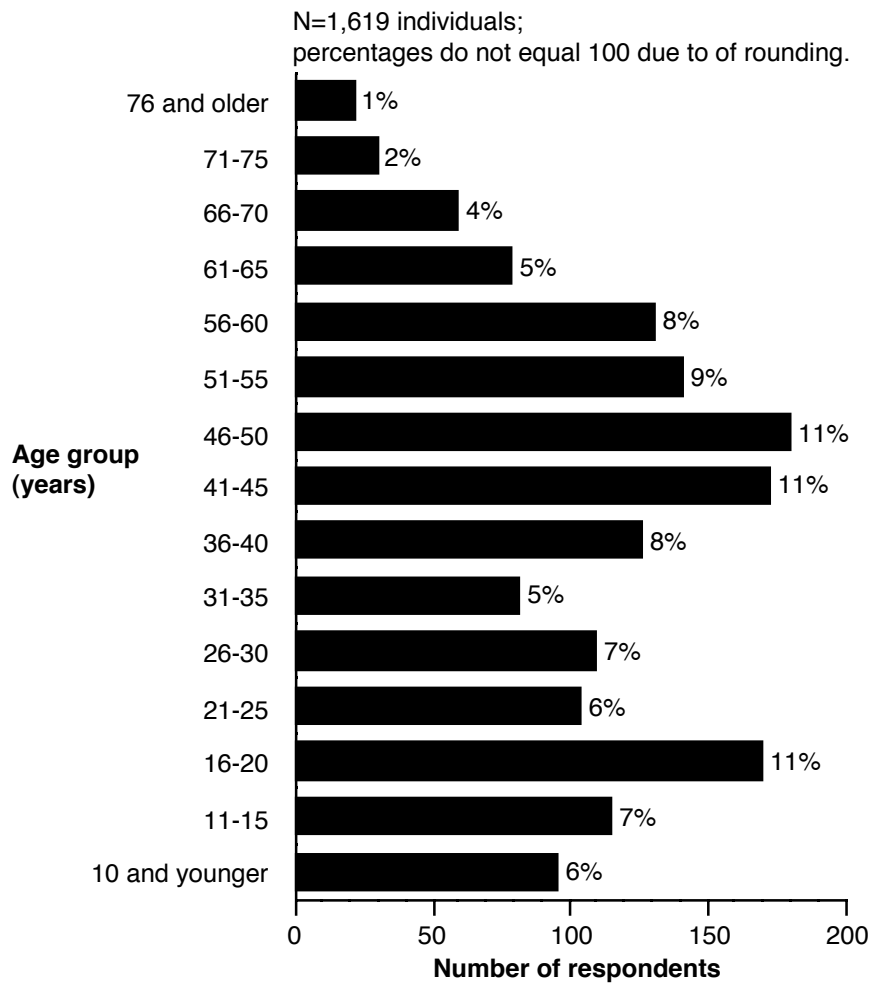


Figure 3: Participation in a guided tour group

**Figure 4: Visitor ages**

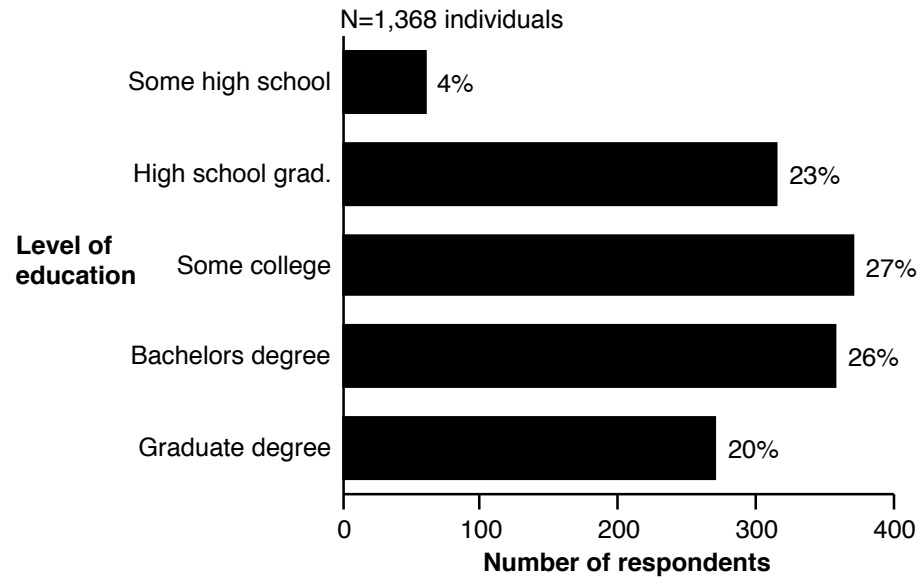


Figure 5: Level of education of visitor groups

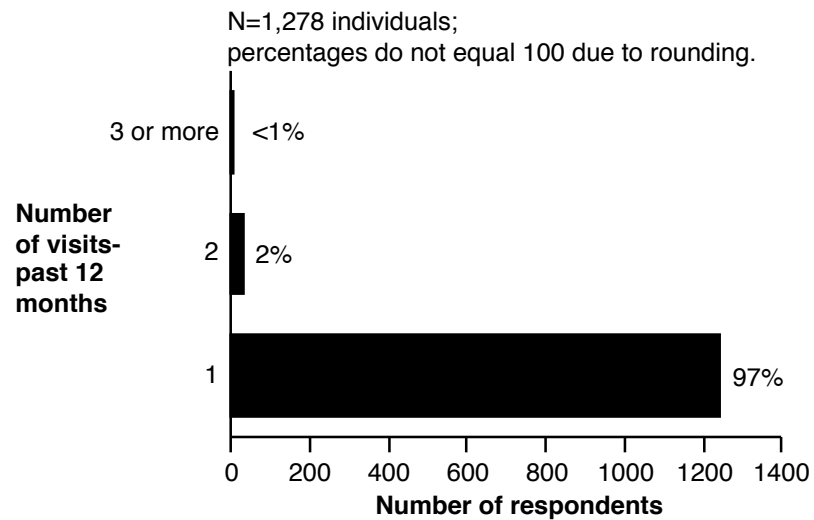


Figure 6: Number of visits in the past 12 months

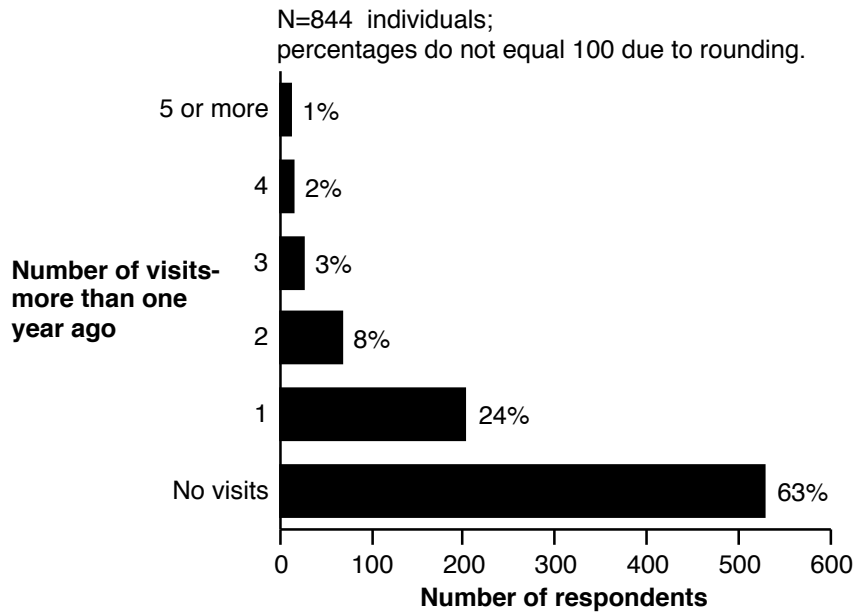
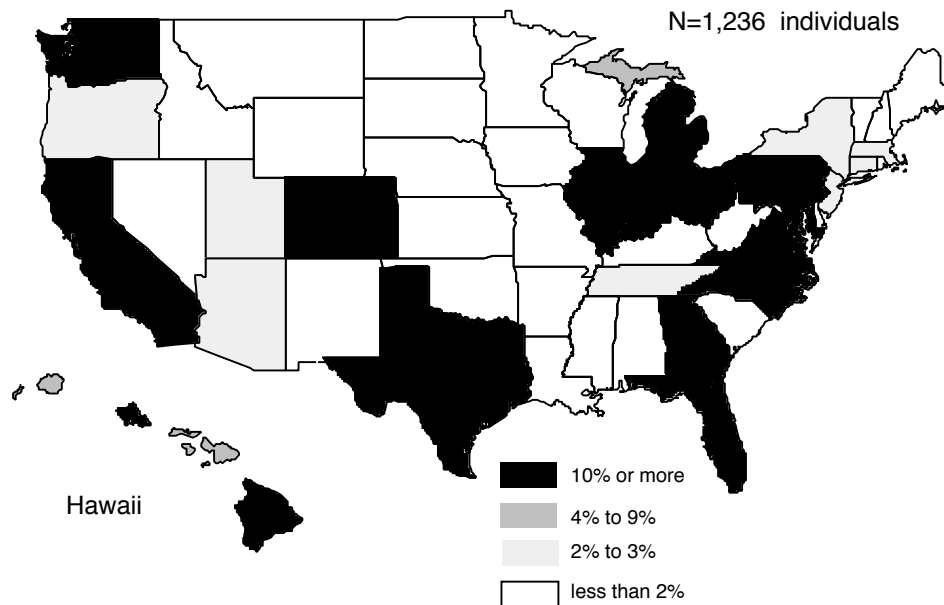


Figure 7: Number of visits more than one year ago

Table 2: International visitors by country of residence

N=301 individuals;
percentages do not equal 100 due to rounding.

Country	Number of individuals visitors	Percent of international visitors	Percent of total
Japan	125	42	8
England	55	18	4
China	33	11	2
Australia	24	8	2
Hong Kong	10	3	1
Sweden	9	3	1
New Zealand	8	3	1
Canada	6	2	<1
Ireland	6	2	<1
Germany	5	2	<1
United Arab Emirates	5	2	<1
7 other countries	15	5	1



Map 1: Proportion of United States visitors by state of residence

Table 3: United States visitors by state of residence

N=1,236 individuals;

percentages do not equal 100 due to rounding.

State	Number of individuals	Percent of U.S. visitors	Percent of total visitors
California	243	20	16
Colorado	63	5	4
Hawaii	57	5	4
Illinois	54	4	4
Texas	54	4	4
Michigan	49	4	3
Pennsylvania	49	4	3
Ohio	46	4	3
New Jersey	43	3	3
Florida	41	3	3
Washington	41	3	3
Georgia	39	3	3
Oregon	31	3	2
Maryland	30	2	2
Massachusetts	28	2	2
New York	26	2	2
Tennessee	26	2	2
N. Carolina	25	2	2
Arizona	24	2	2
Utah	24	2	2
Indiana	22	2	1
26 other states + Washington D.C.	221	18	14

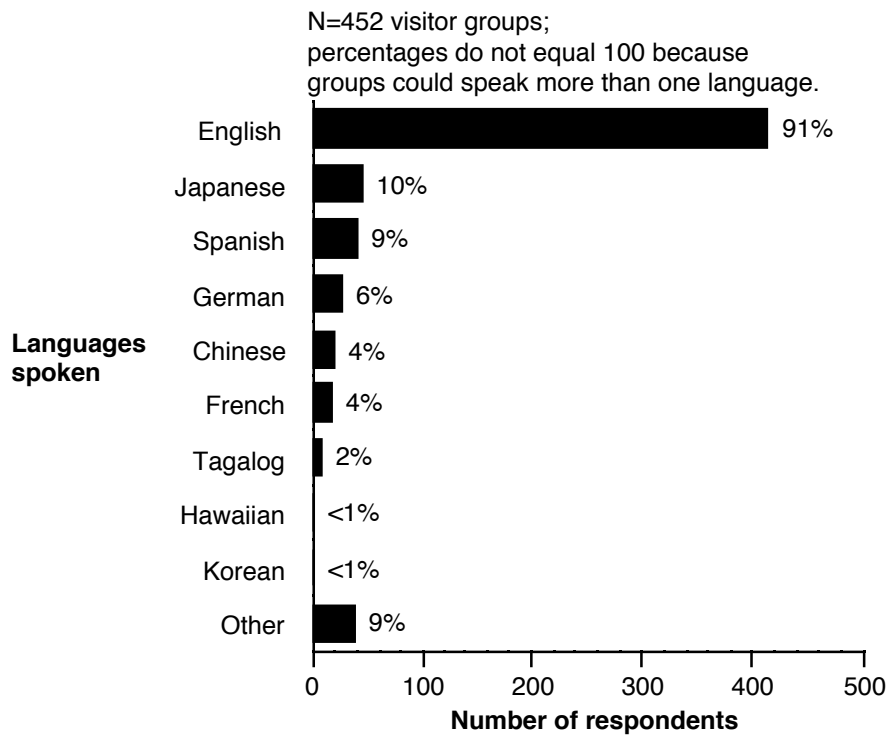


Figure 8: Languages spoken fluently

Table 4: "Other" languages spoken

N=36 languages

Language	Number of times mentioned
Italian	7
Russian	4
Polish	3
Swedish	3
Portuguese	2
Welsh	2
Other	15

**Hawaiian Island
residency**

Visitor groups were asked if all members of their personal groups were full-time residents of the Hawaiian Islands. Figure 9 shows that 98% of the respondents were not full-time residents of the Hawaiian Islands, while 2% were residents.

In addition, visitor groups were asked if all members of their personal group were full-time residents of Oahu. Again, 98% of visitors said they were not full-time residents, while two percent were full-time residents (see Figure 10).

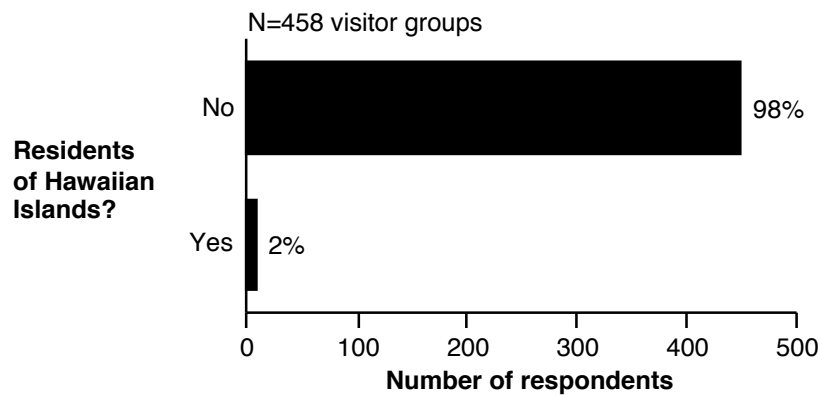


Figure 9: Personal groups whose members were all residents of the Hawaiian Islands

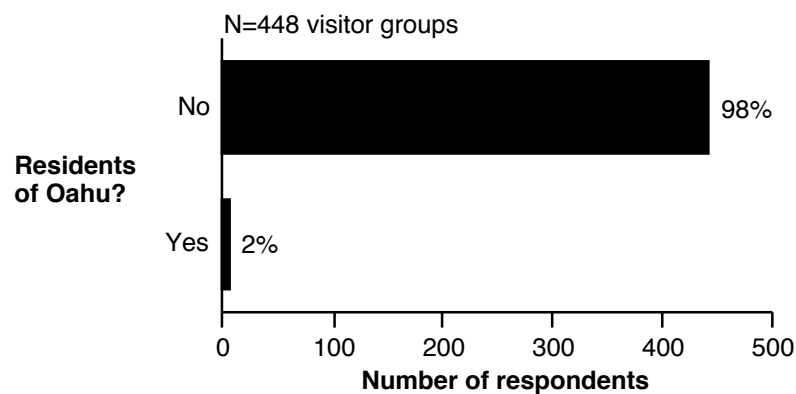


Figure 10: Personal groups whose members were all residents of Oahu

Non-residents were asked how much time they spent on the Hawaiian Islands. The greatest proportion of visitor groups (16%) spent one week on the Hawaiian Islands (see Figure 12). Thirteen percent spent ten days, and 20% spent fourteen or more days on the Islands.

Non-residents were also asked how much time they spent on Oahu. Fourteen percent of visitor groups spent one week on the island of Oahu (see Figure 13). Thirty-eight percent spent 3-5 days on Oahu.

All visitor groups were asked the length of time they spent at the USS Arizona Memorial. The largest proportion of visitors (34%) spent two hours at the park (see Figure 14). Twenty eight percent of visitors spent three hours at the memorial.

Length of visit

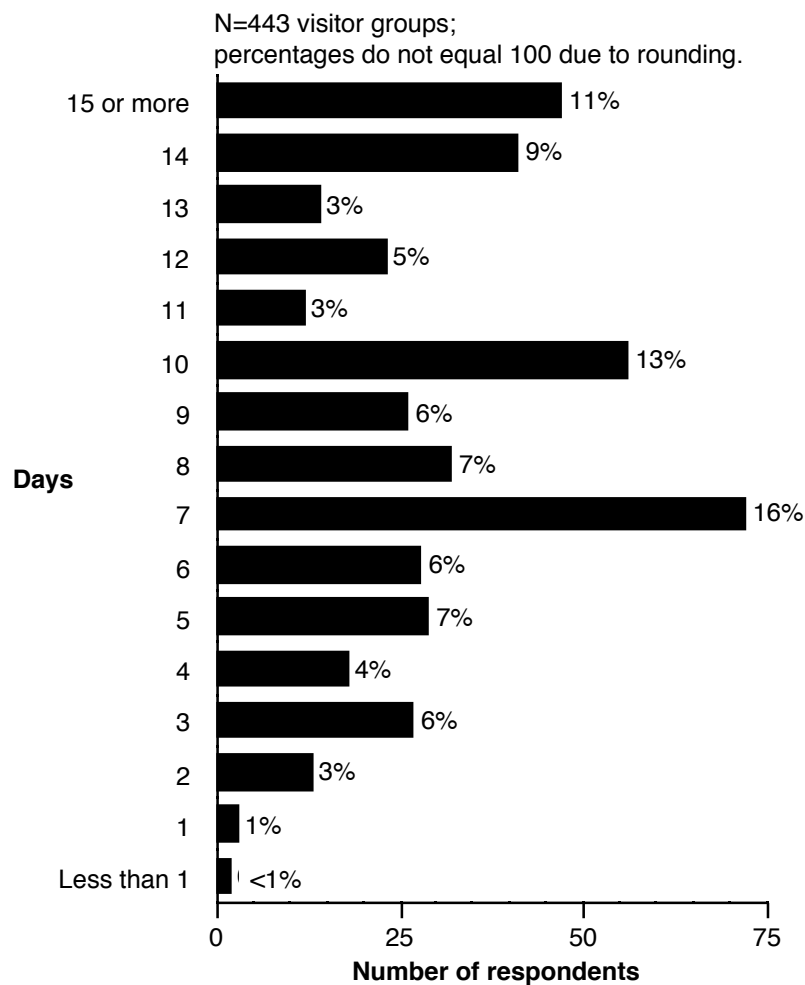
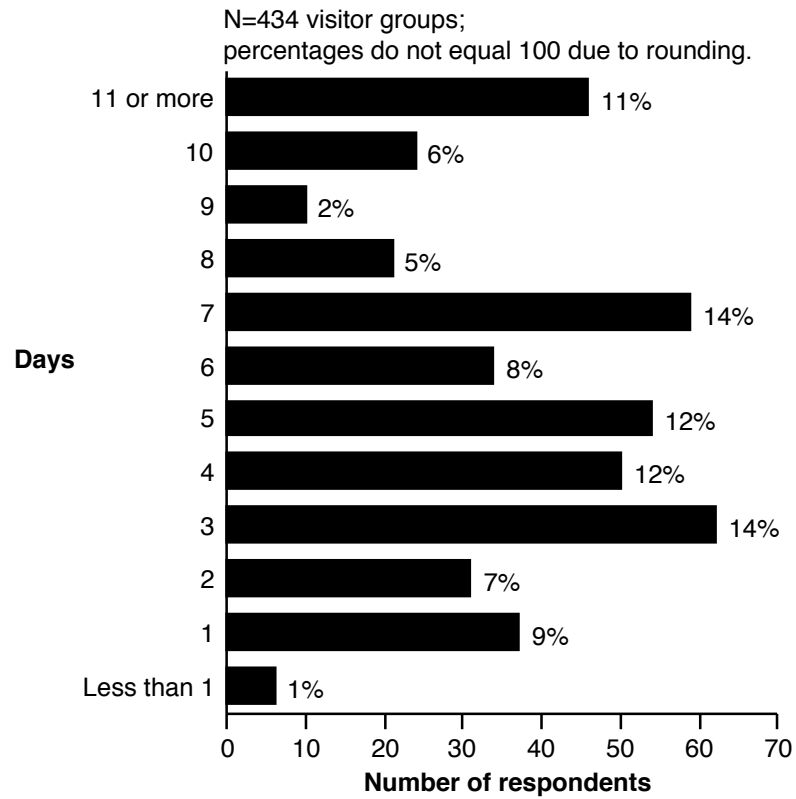
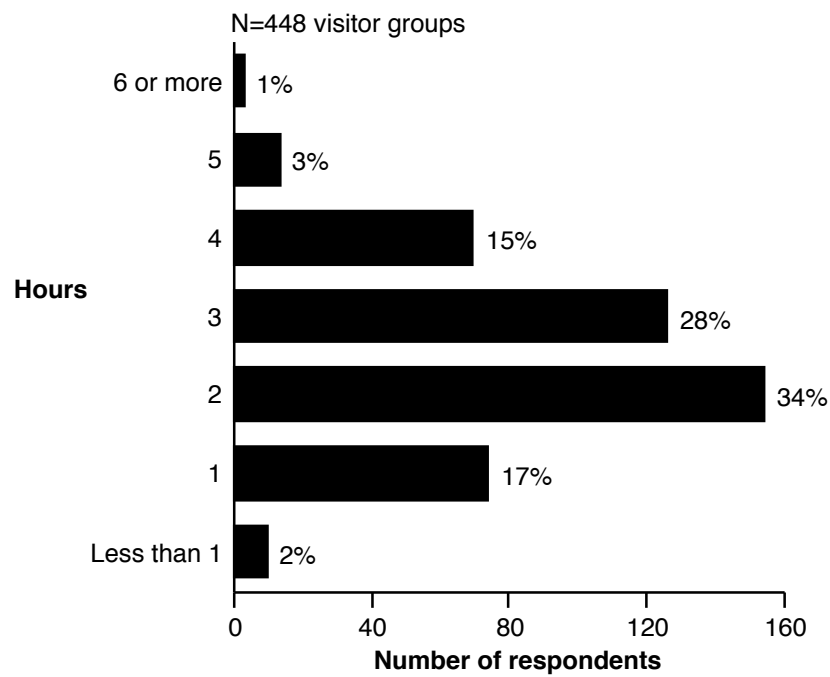


Figure 12: Days spent on Hawaiian Islands

**Figure 13: Days spent on Oahu****Figure 14: Hours spent at USS Arizona Memorial**

Visitor groups to USS Arizona Memorial were asked if they were aware, prior to their visit, that the park was managed by the National Park Service. Figure 15 illustrates that 43% of the respondents were aware that the USS Arizona Memorial is managed by the National Park Service. Fifty percent were not aware of the park's management and 7% were "not sure."

**Visitors'
awareness of
National Park
Service
management**

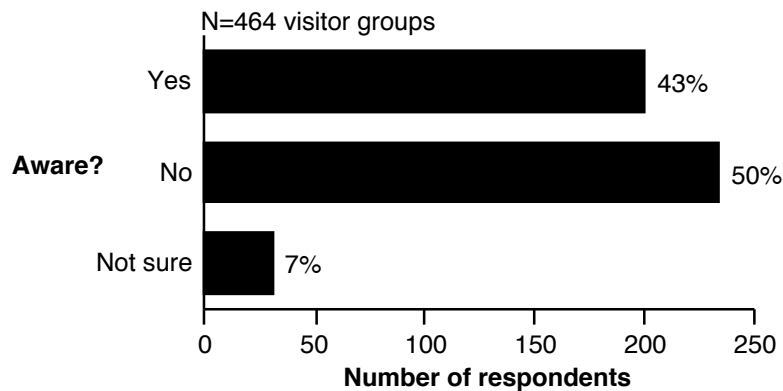
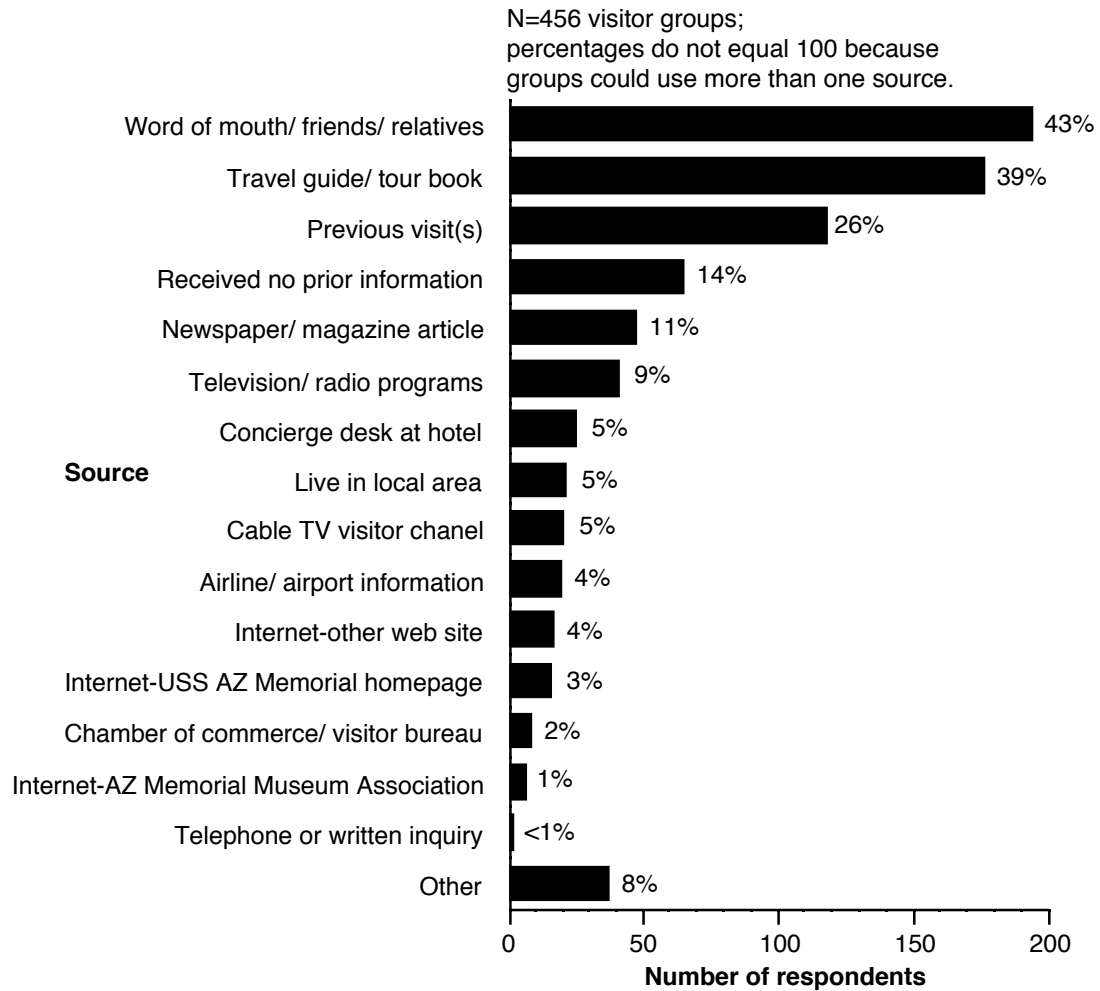


Figure 15: Awareness that NPS manages USS Arizona Memorial

**Sources of
information/
ratings of
information
received**

Visitor groups were asked to indicate the sources they used to obtain information about the USS Arizona Memorial prior to their visit. Figure 16 shows the proportions of visitor groups who used each method of obtaining information prior to their visit to USS Arizona Memorial. The most common sources of information were friends or relatives (43%), travel guide/tour book (39%), and previous visits (26%). Fourteen percent of visitors received no information prior to their visit. Eight percent of visitors obtained information from "other" sources. "Other" sources of information included school classes, history lessons and the Navy.

Visitors were also asked about the type and amount of information that they needed for their visit. Most visitors (83%) said they received the type of information that they needed prior to their visit (see Figure 17). Nine percent reported they did not receive the type of information they needed. "Other" types of information visitors felt were necessary were boat and movie time schedules, opening and closing times, what displays are at the site, and the length of wait one should expect. Eighty percent of visitors said they received the right amount of information prior to their visit, while 20% of visitors reported they did not receive enough information (see Figure 18).

**Figure 16: Sources of information**

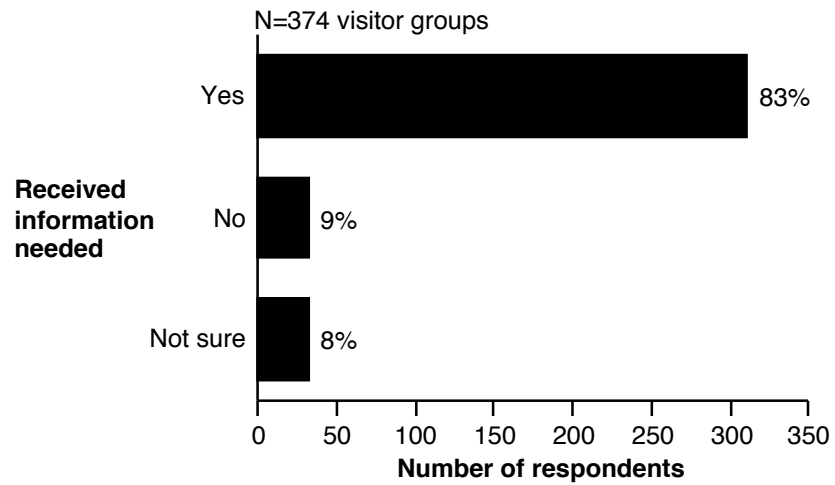


Figure 17: Received the type of information needed

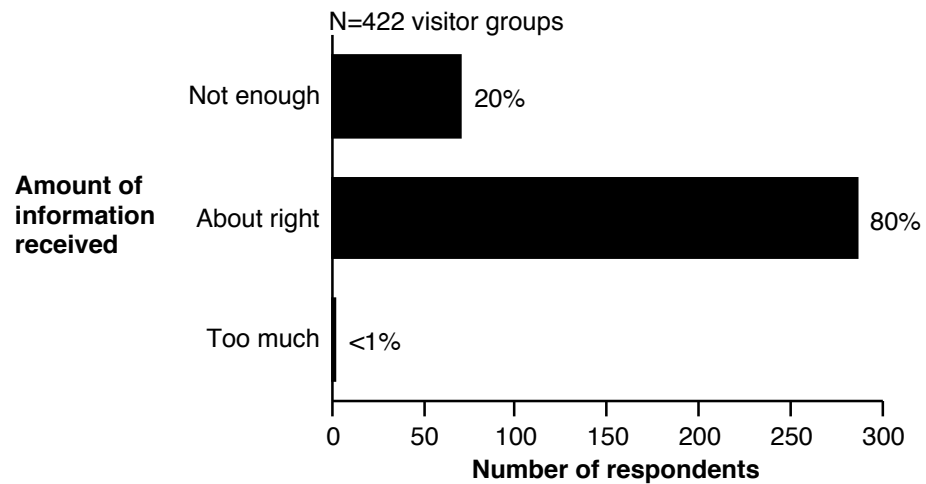
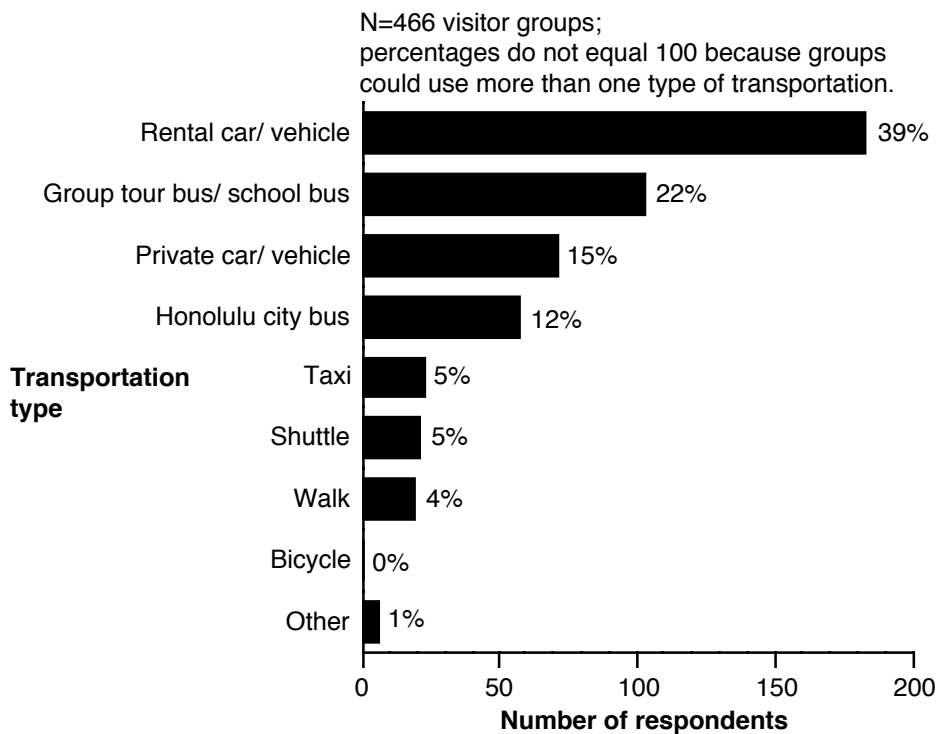


Figure 18: Amount of information received

Visitors were asked to identify the mode of transportation they used to arrive at the Memorial. Thirty-nine percent of visitor groups used a rental car/ vehicle (see Figure 11). Another 22% of visitor groups were on a tour or school bus. No visitor groups used a bicycle as a form of transportation. "Other" forms of transportation used were aircraft carrier and cruise ship.

Transportation used



**Figure 11: Form of transportation used to arrive at
USS Arizona Memorial**

Other sites visited on this trip

Visitor groups were asked what other nearby attractions they visited during this trip on Oahu. Thirty-eight percent visited the Dole Plantation, 37%—Polynesian Cultural Center, 35%—Battleship Missouri, 31%—USS Bowfin Submarine Museum, 30%—National Memorial Cemetery of the Pacific, and 21%—Waimea Falls Park (see Figure 19). Other nearby sites visited included Diamond Head, Hanauma Bay, and beaches (see Table 5).

Figure 20 shows the proportion of visitor groups who have visited or plan to visit other NPS sites on this trip. The highest proportion of visitors have visited or plan to visit the Hawaii Volcanoes National Park (68%). Haleakala National Park is the second most reported NPS site destination at 58% (see Figure 21).

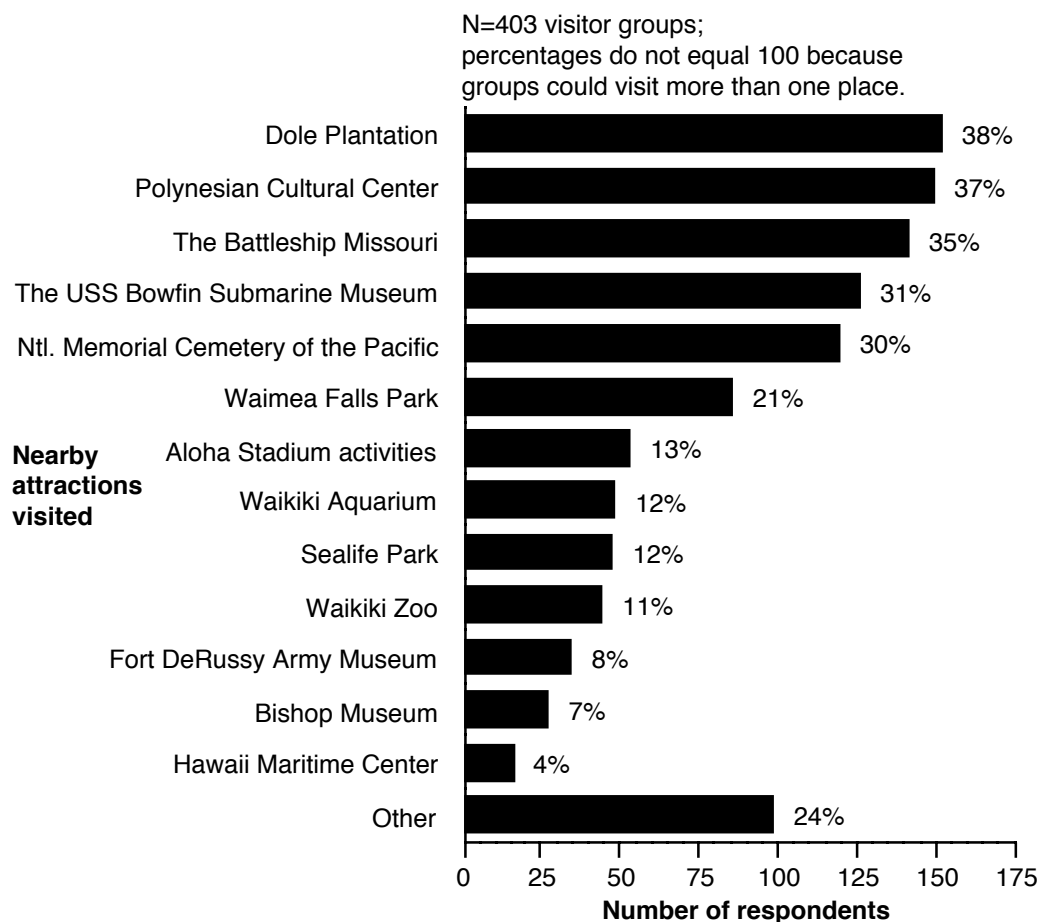
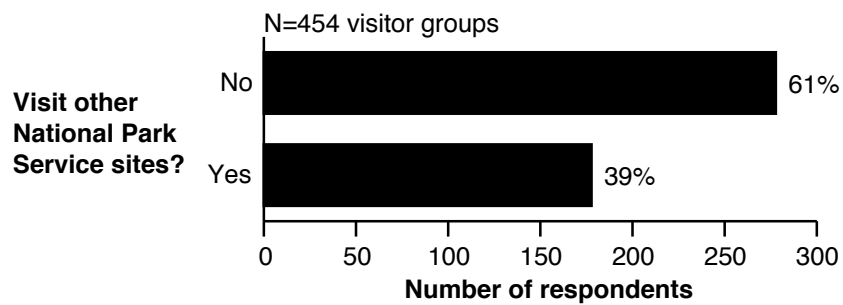


Figure 19: Other nearby attractions visited

Table 5: Other nearby attractions visited

N=98 places

Attraction	Number of times mentioned
Diamond Head	21
Hanauma Bay	14
Beaches	11
Paradise Cove luau	5
Queens Palace	5
Gardens	3
Island tour	3
Swap meet	2
Other	27

**Figure 20: Other National Park Service sites visited or planned to visit**

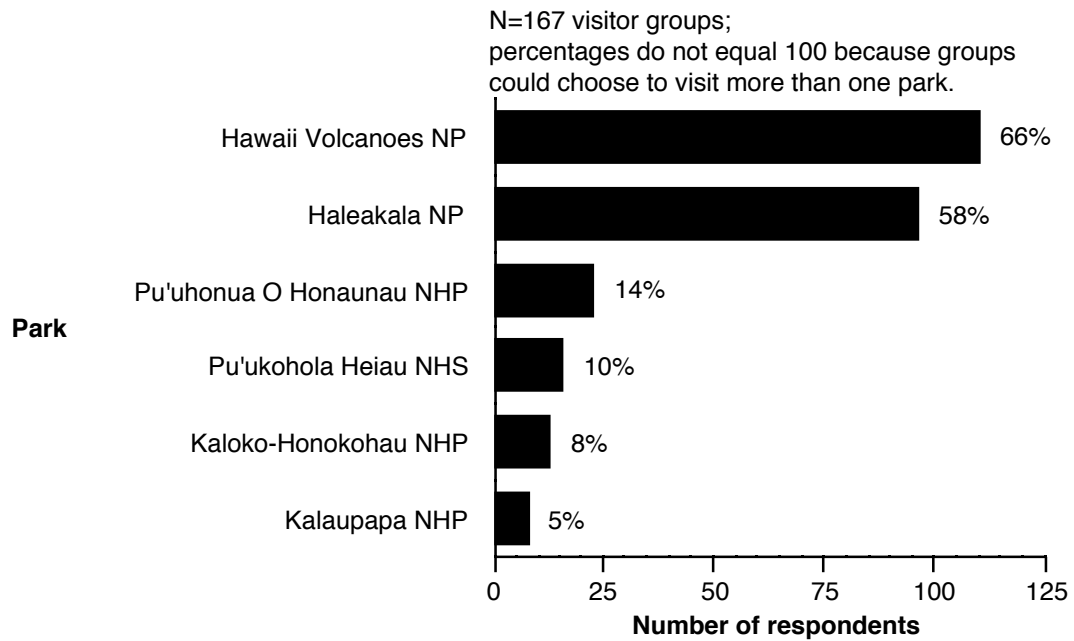


Figure 21: NPS sites visited in addition to USS Arizona Memorial on this trip

Visitors were asked to list their primary reason for visiting the island of Oahu on this trip. As shown in Figure 22, the most often listed reason was to take a vacation/ sightsee (58%). The least listed reason was to visit the USS Bowfin (0%). "Other" reasons for visiting Oahu were U.S. Navy stopover, flight layover, wedding and sporting events.

Primary reason for visiting Oahu

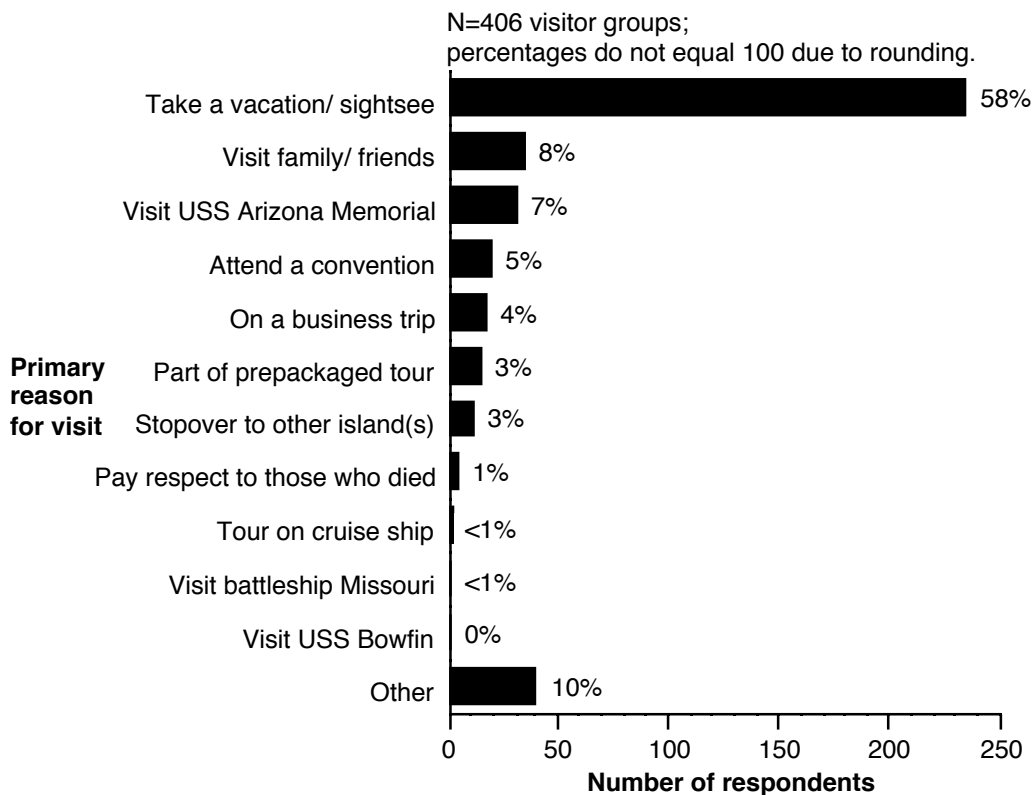


Figure 22: Primary reason for visit to the island of Oahu

Information services: use, importance, and quality

Visitor groups were asked to note the information services they used during their visit to USS Arizona Memorial. As shown in Figure 23, the information services most commonly used by visitor groups were the movie on the Pearl Harbor attack (81%), Navy shuttle boat service (68%), visitor center museum exhibits (65%), and park brochure/ map (59%). The least used service was the Junior Ranger Program (1%).

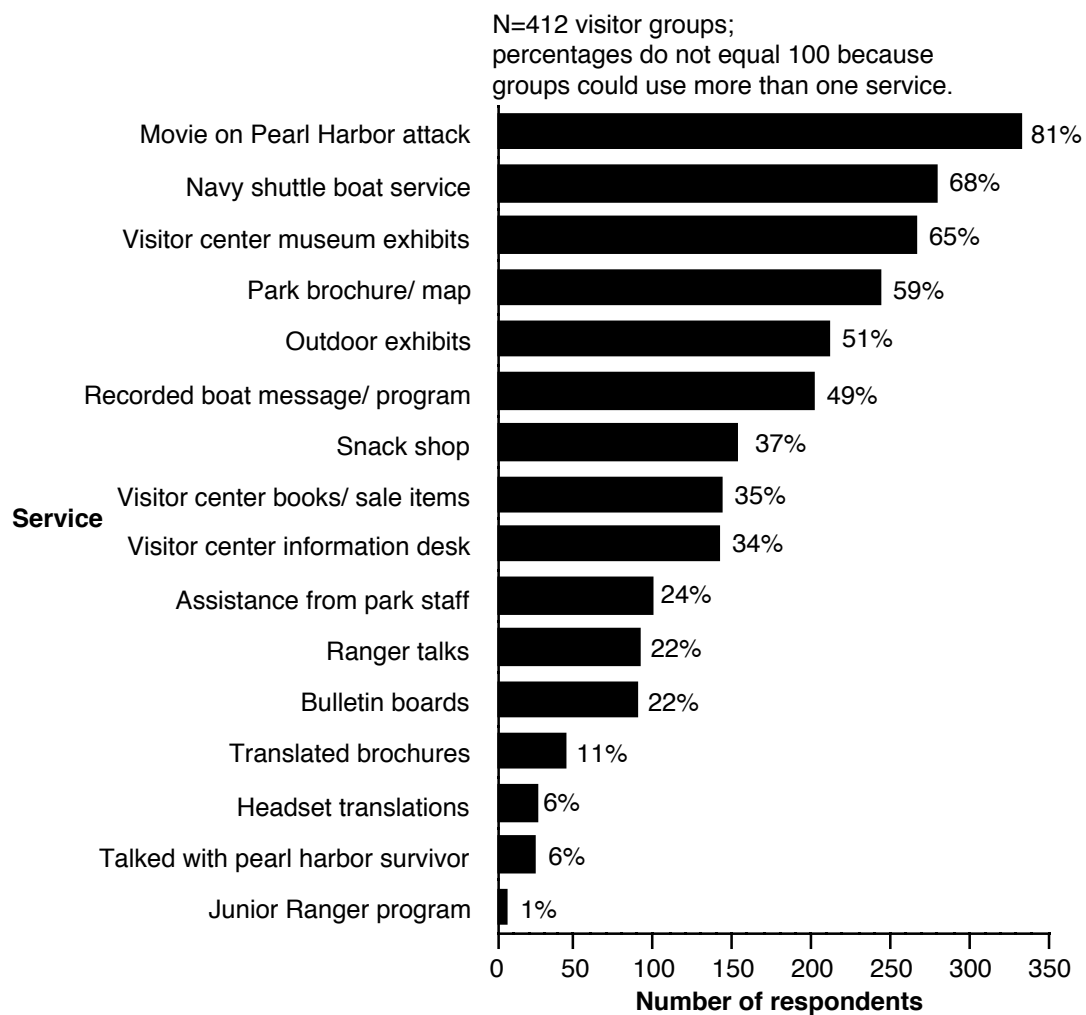


Figure 23: Information services used

Visitor groups rated the importance and quality of each of the information services they used. The following five point scales were used in the questionnaire:

IMPORTANCE 5=extremely important 4=very important 3=moderately important 2=somewhat important 1=not important	QUALITY 5=very good 4=good 3=average 2=poor 1=very poor
-------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------

The average importance and quality ratings for each service were determined based on ratings provided by visitors who used each service. Figure 24 and 25 shows the average importance and quality ratings for each of the visitor services. All services were rated as above "average" both in importance and quality. It should be noted that Junior Ranger program, headset translations and talk with survivor were not rated by enough visitor groups to provide reliable data.

Figures 26-41 show the importance ratings that visitor groups gave for each of the individual services. Those services receiving the highest combined proportion of "extremely important" and "very important" ratings included the Navy shuttle boat (96%), movie on Pearl Harbor (95%), and talking with a Pearl Harbor survivor (95%). The service with the largest proportion of "not important" responses was translated brochures (5%).

Figures 42-57 show the quality ratings that visitor groups gave for each of the individual services. Those services receiving the highest combined proportion of "very good" and "good" ratings included the movie on Pearl Harbor (97%), talk with a Pearl Harbor survivor (95%), Navy shuttle boat (93%), and staff assistance (90%). The highest proportion of "very poor" ratings were for the recorded boat message/program (6%) and snack shop (6%).

Figure 58 combines the "very good" and "good" quality ratings and compares those ratings for all of the services.

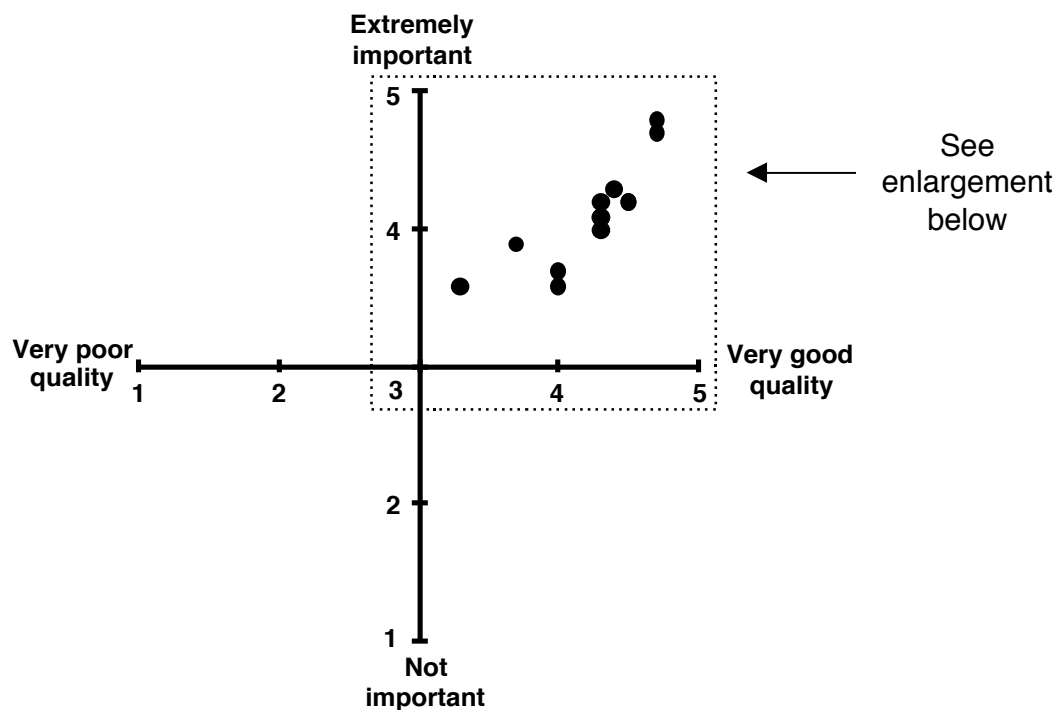


Figure 24: Average ratings of information services importance and quality

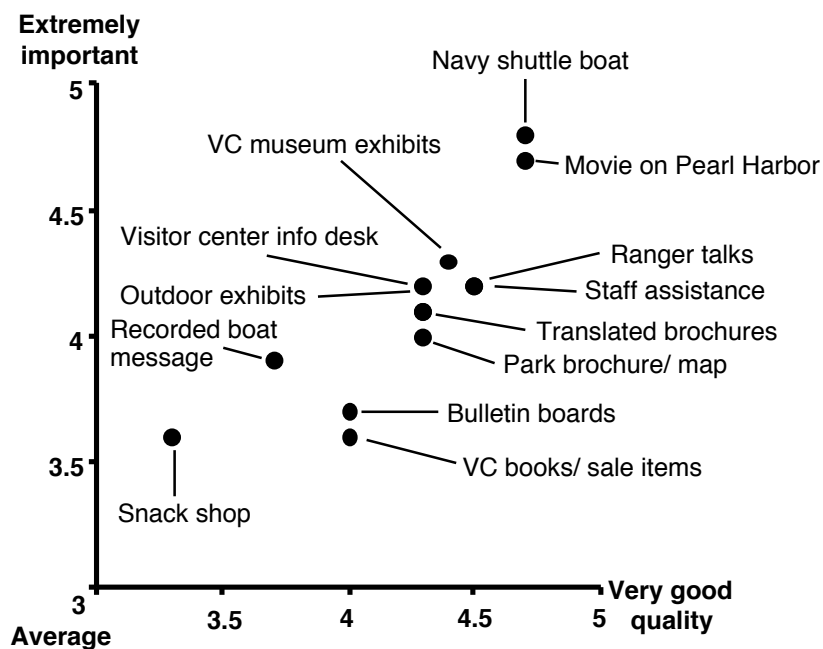


Figure 25: Detail of Figure 24

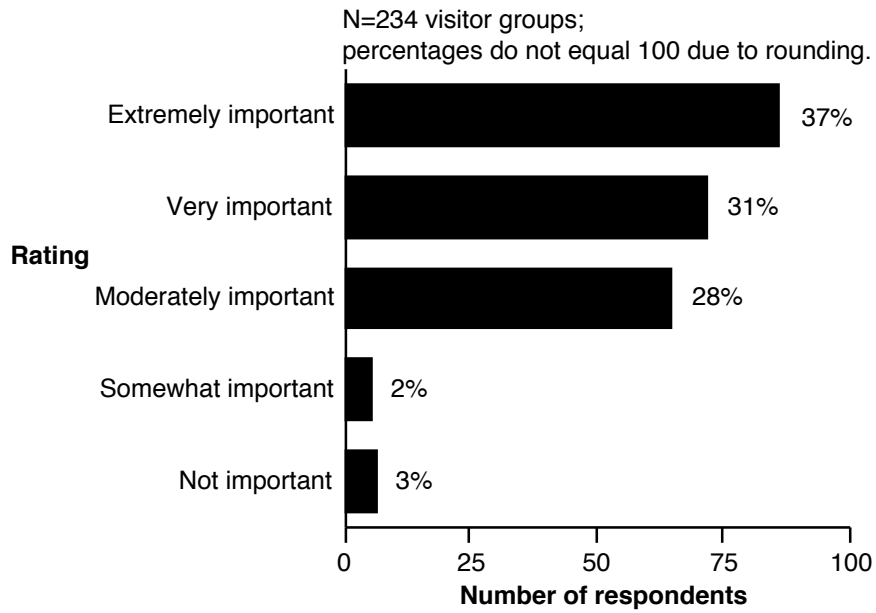


Figure 26: Importance of park brochure/ map

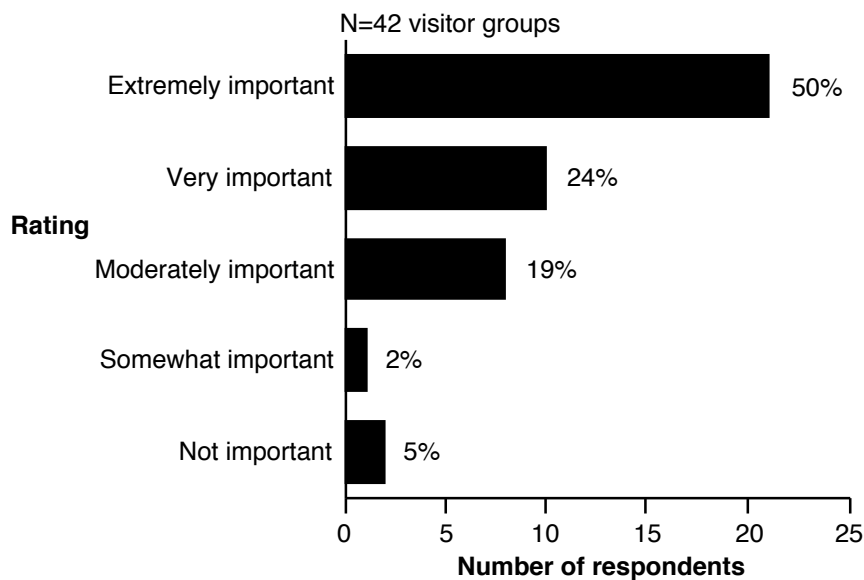


Figure 27: Importance of translated brochures

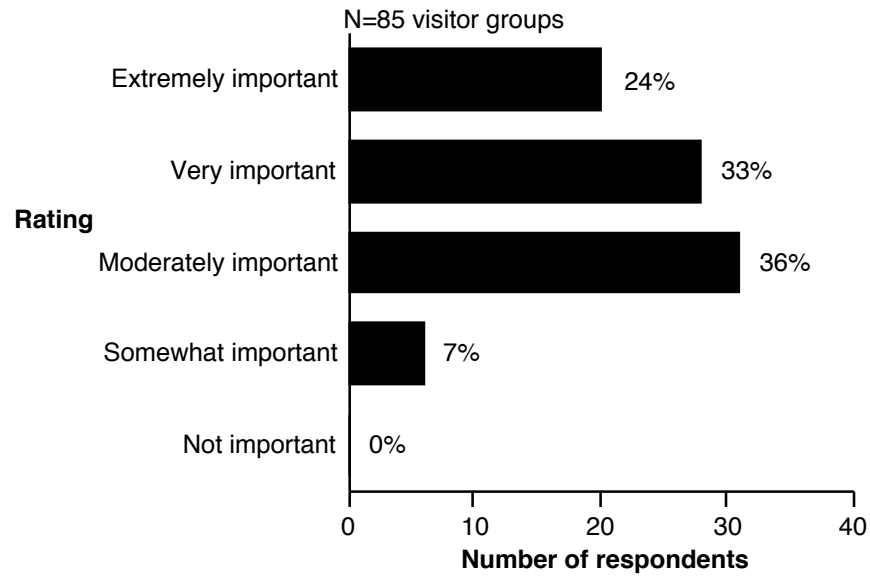


Figure 28: Importance of bulletin boards

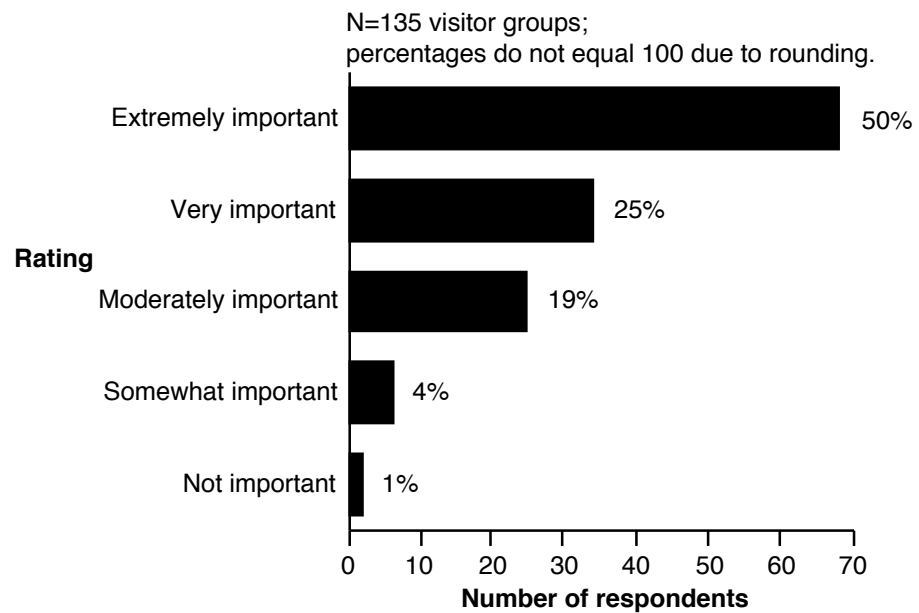


Figure 29: Importance of visitor center information desk

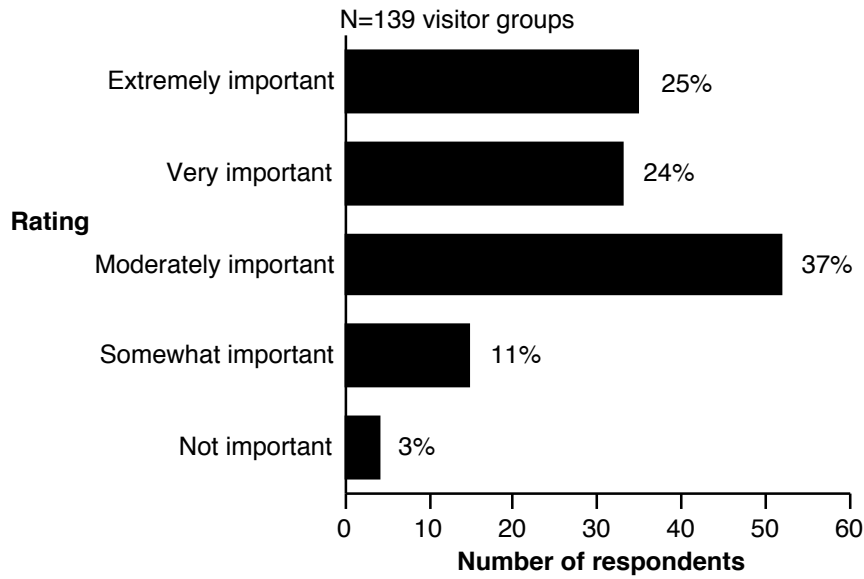


Figure 30: Importance of visitor center books/ sales items

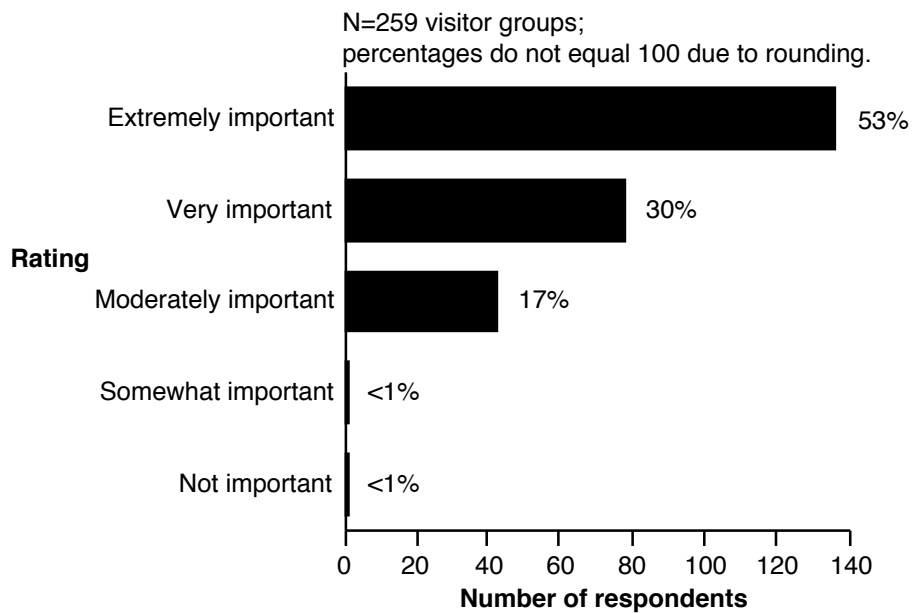


Figure 31: Importance of visitor center museum exhibits

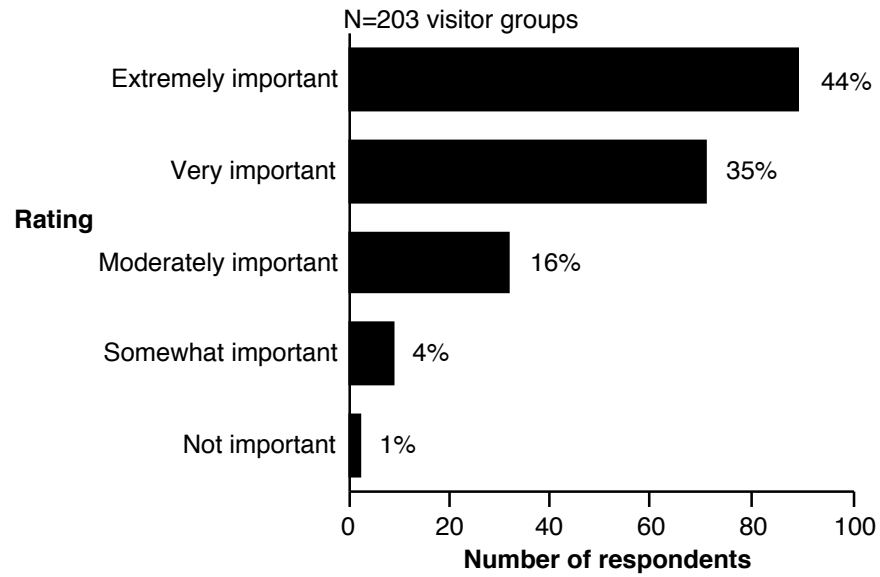


Figure 32: Importance of outdoor exhibits

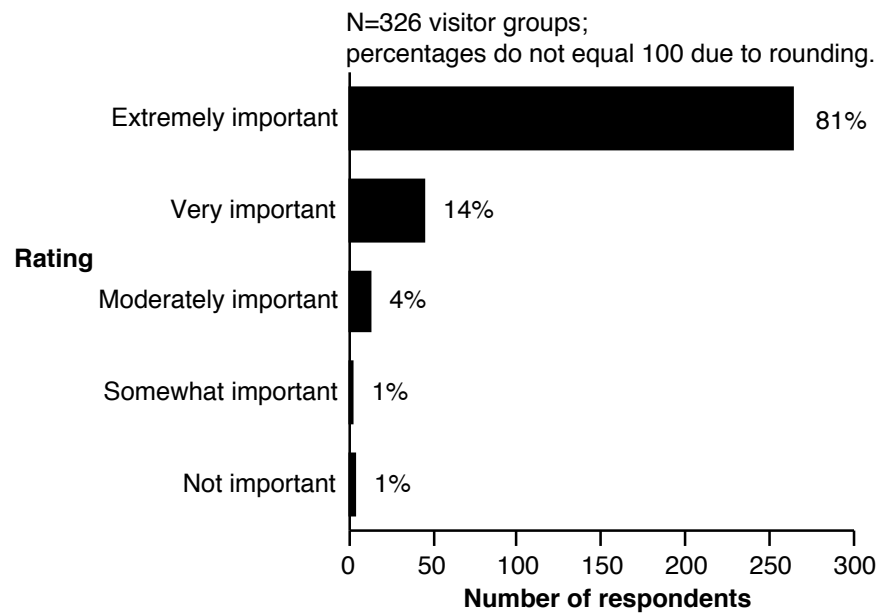


Figure 33: Importance of movie on Pearl Harbor attack

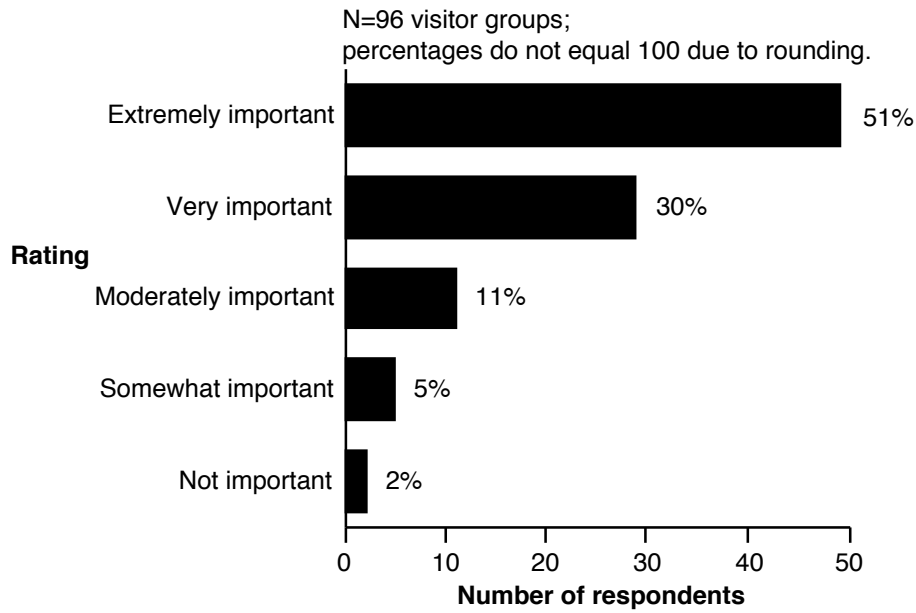


Figure 34: Importance of assistance from park staff

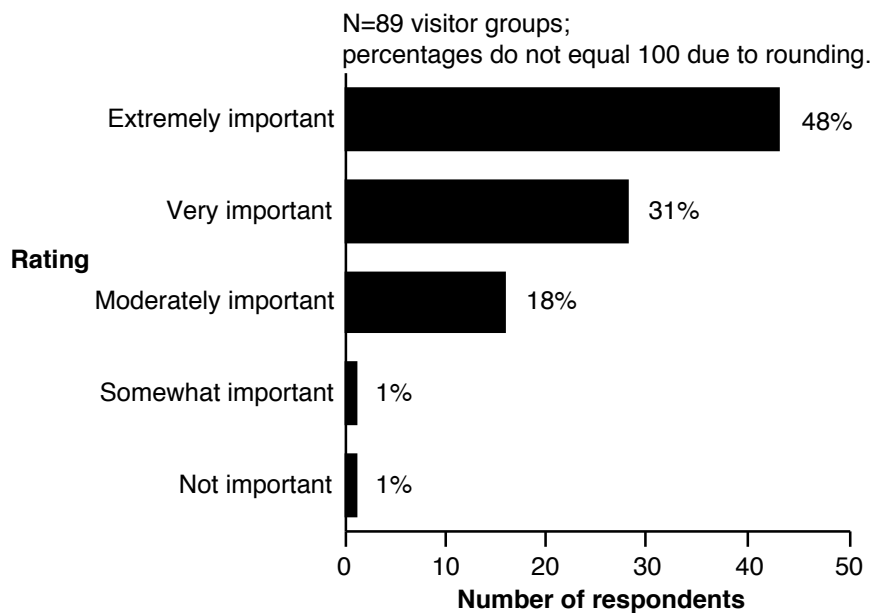


Figure 35: Importance of ranger talks

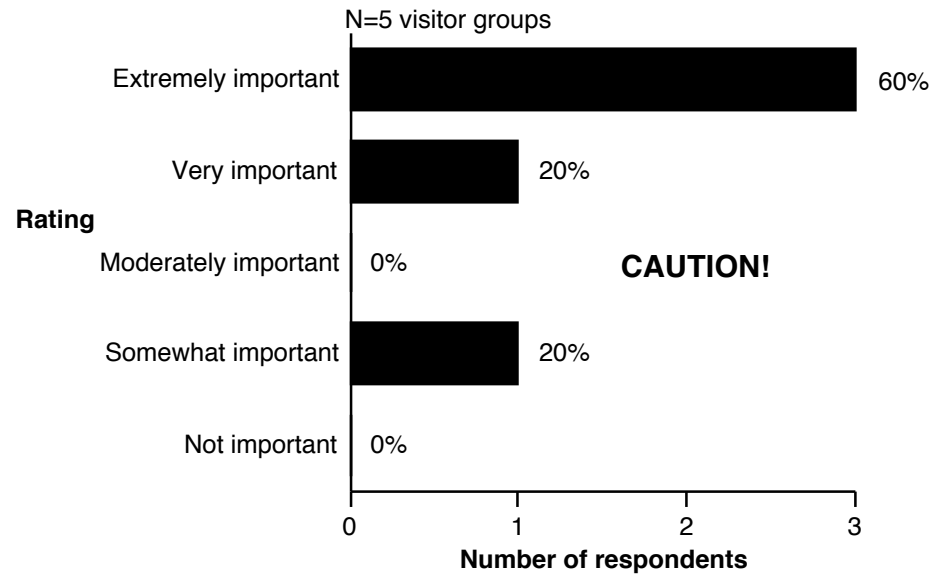


Figure 36: Importance of Junior Ranger program

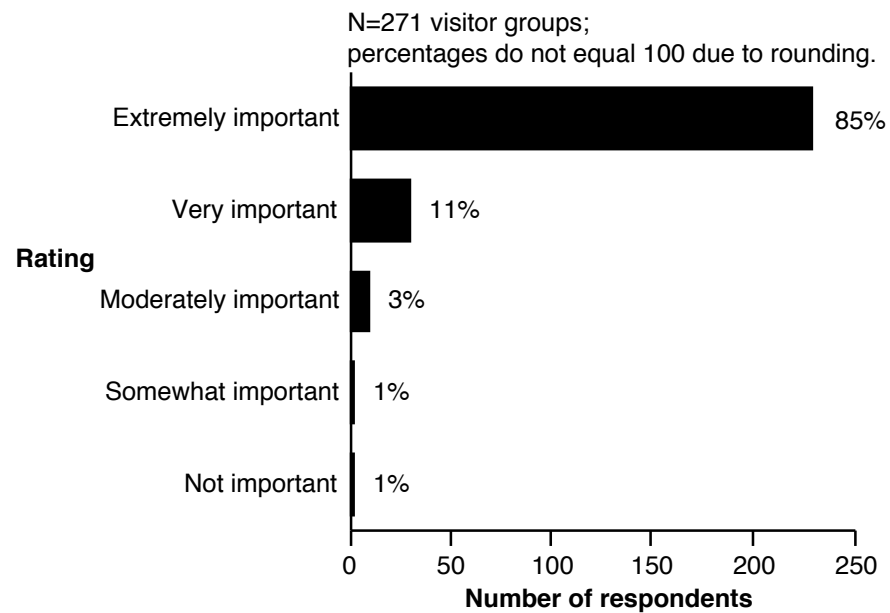


Figure 37: Importance of Navy shuttle boat service

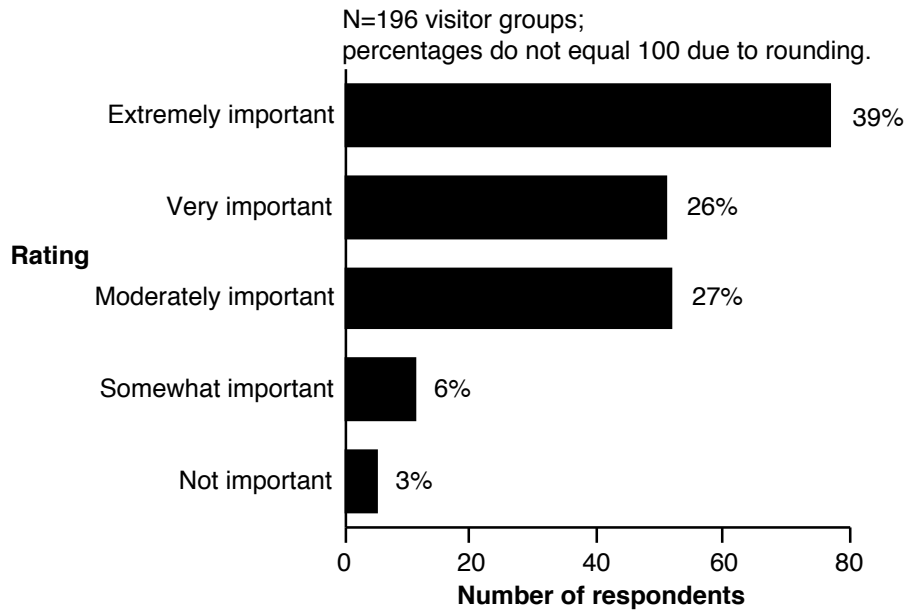


Figure 38: Importance of recorded boat message/ program

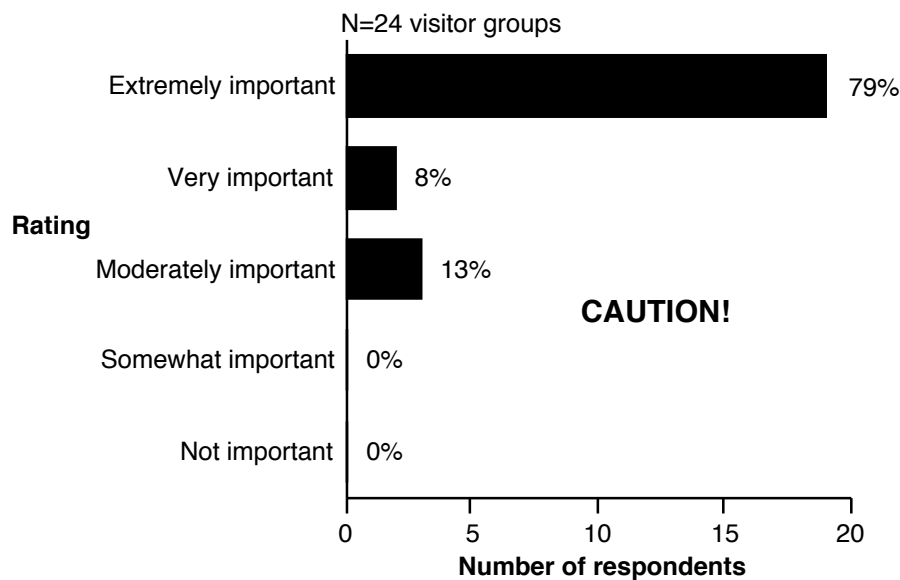


Figure 39: Importance of headset translations

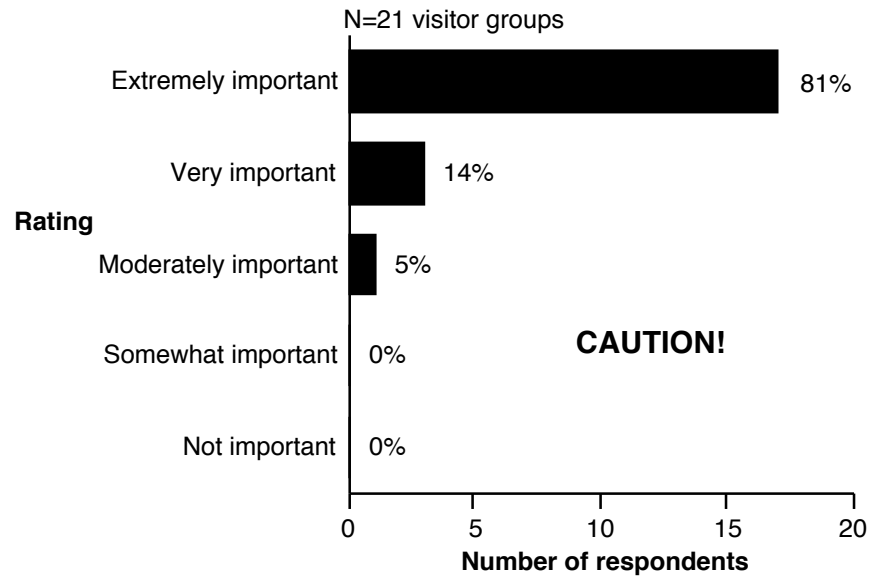


Figure 40: Importance of talking with Pearl Harbor survivor

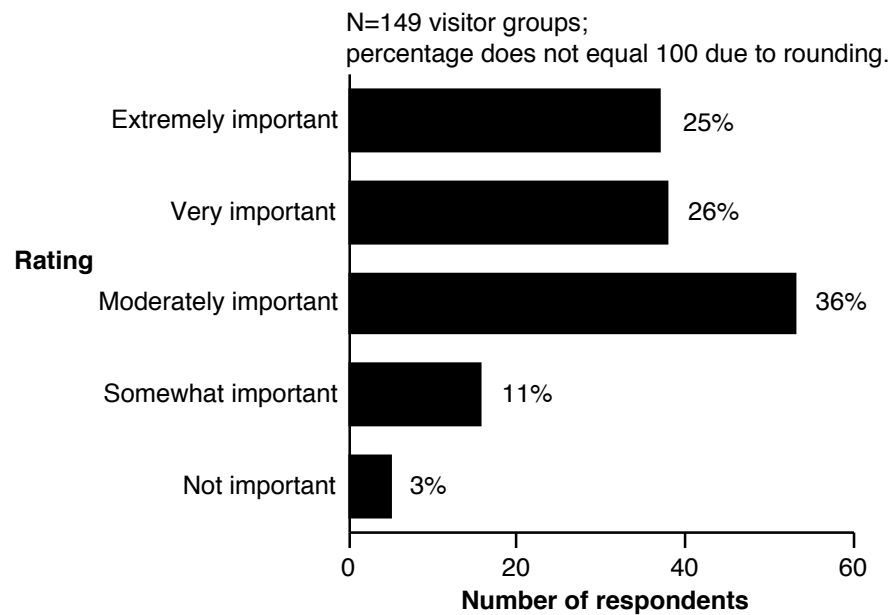


Figure 41: Importance of snack shop

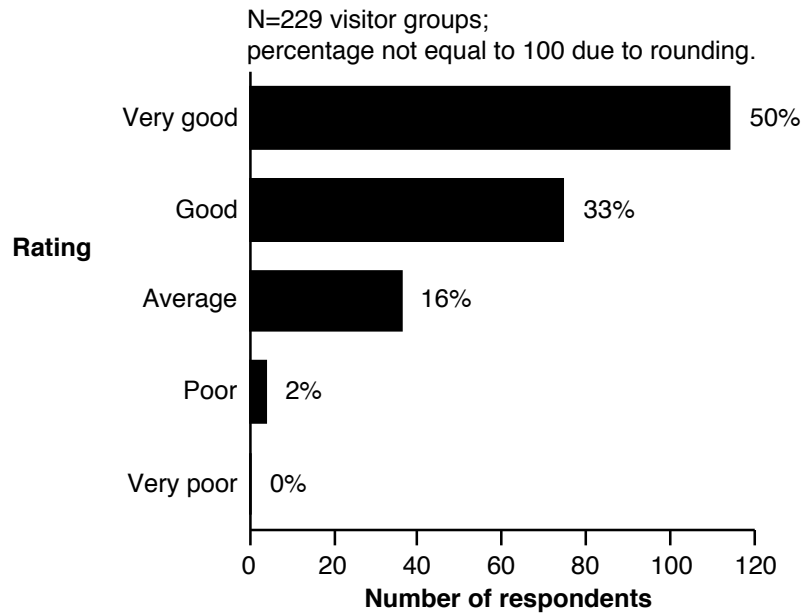


Figure 42: Quality of park brochure/ map

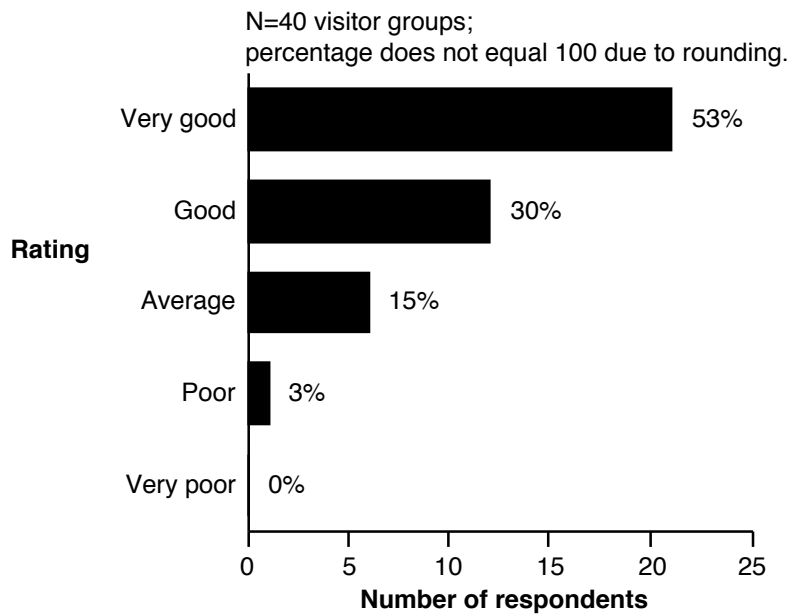


Figure 43: Quality of translated brochures

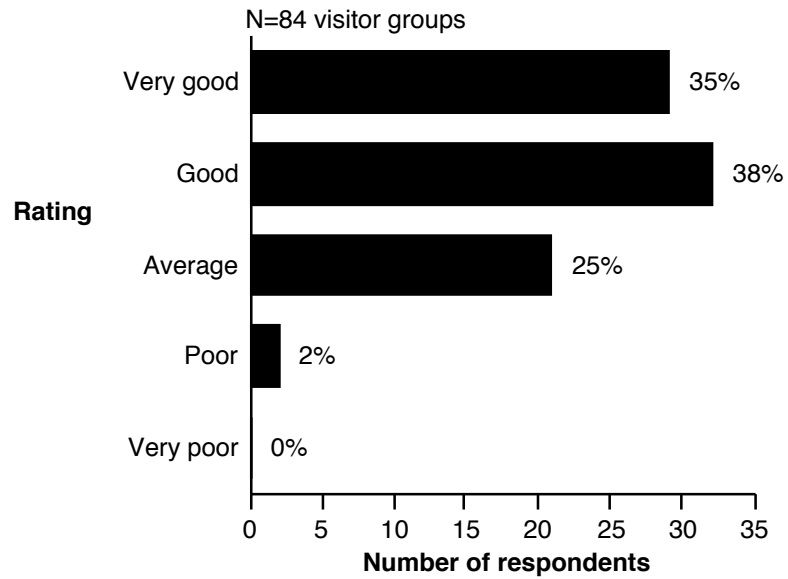


Figure 44: Quality of bulletin boards

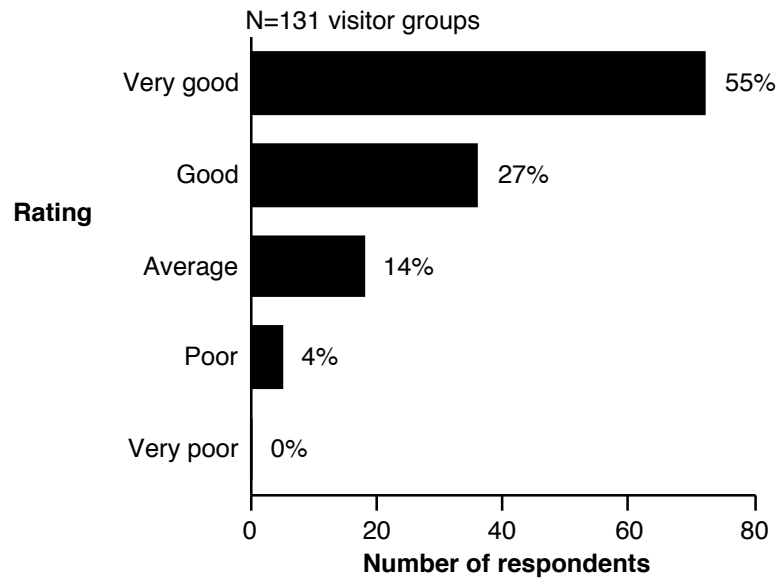


Figure 45: Quality of visitor center information desk

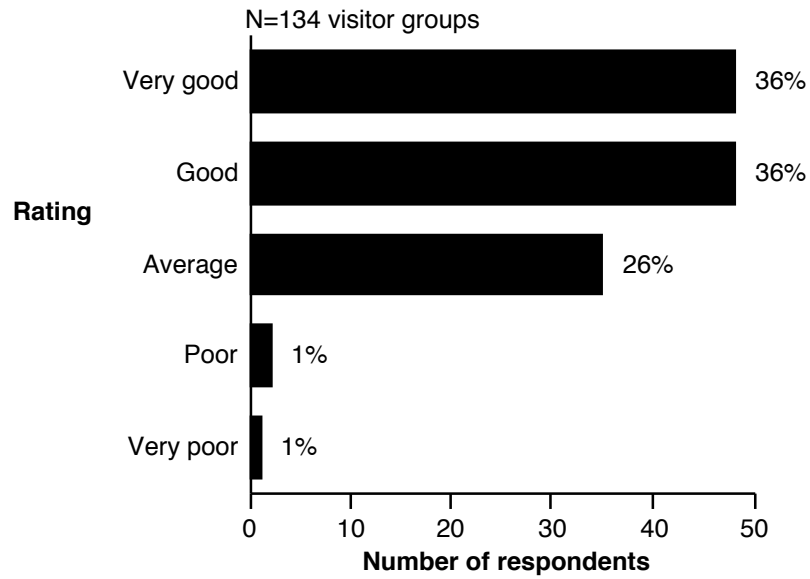


Figure 46: Quality of visitor center books/ sales items

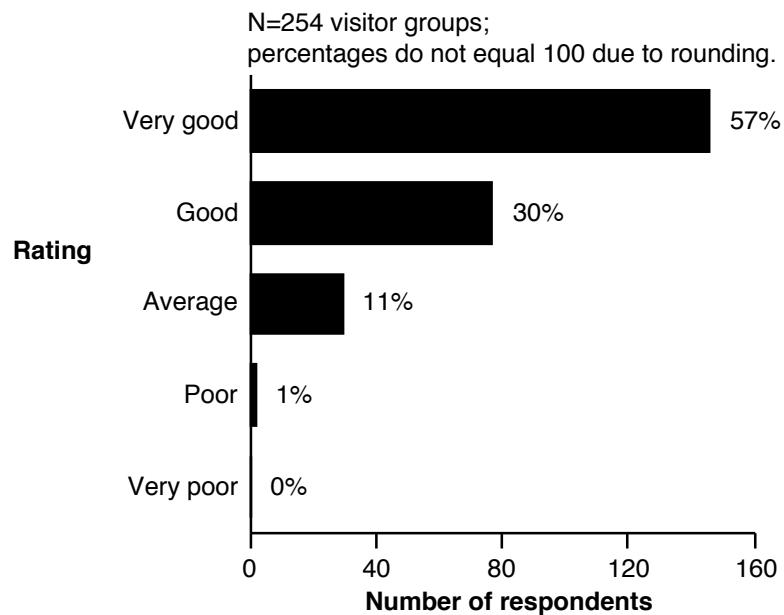


Figure 47: Quality of visitor center museum exhibits

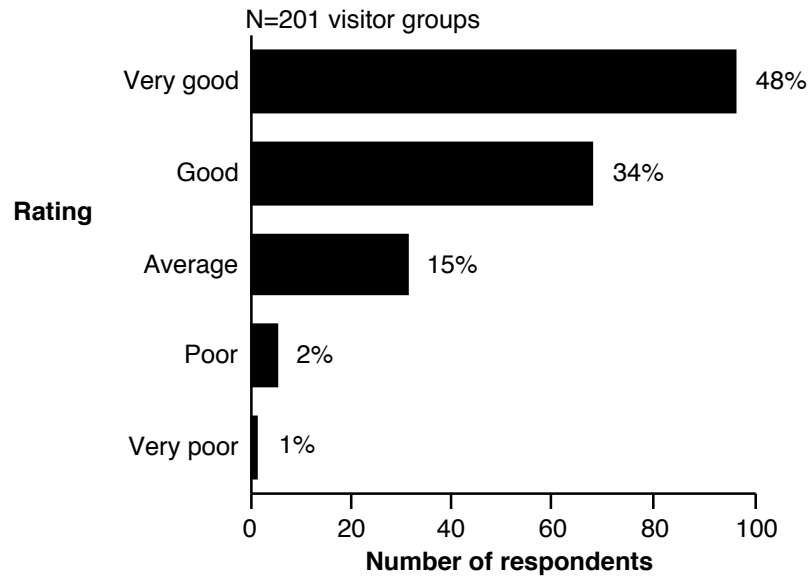


Figure 48: Quality of outdoor exhibits

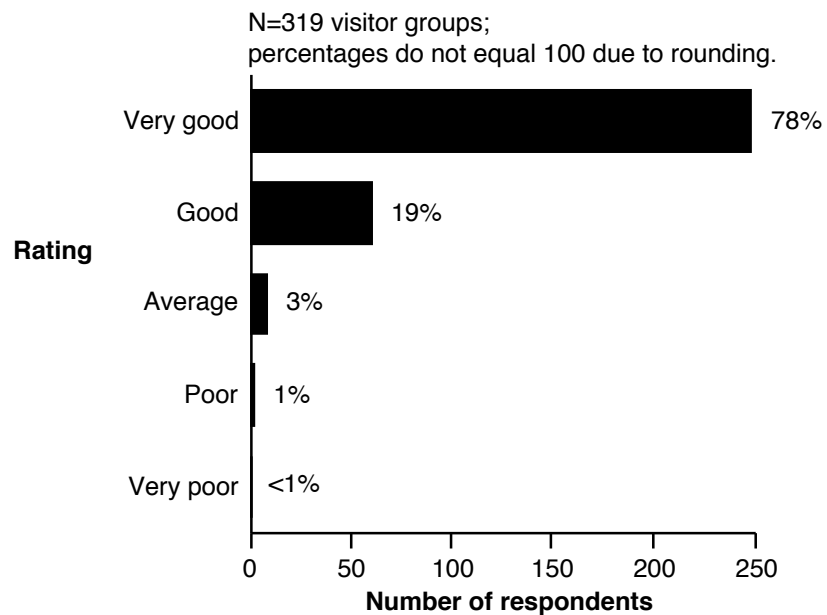


Figure 49: Quality of movie on Pearl Harbor attack

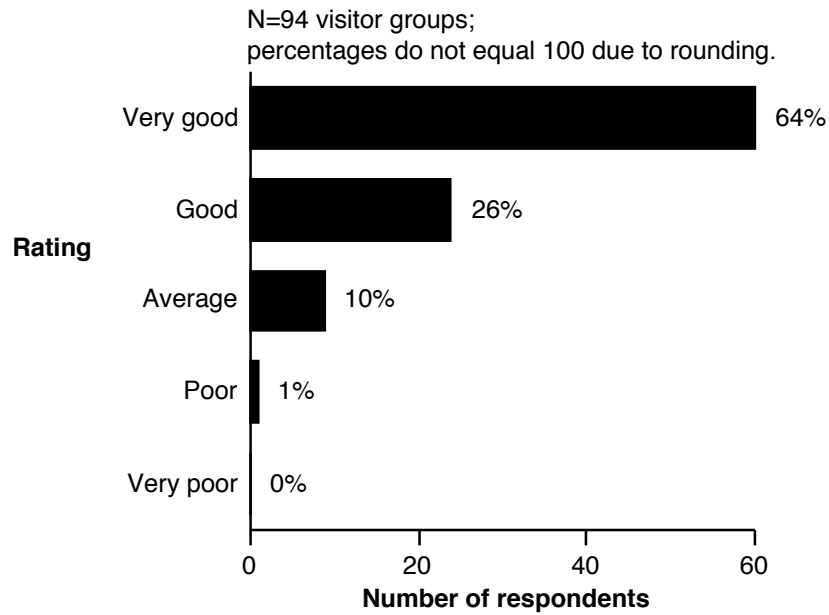


Figure 50: Quality of assistance from park staff

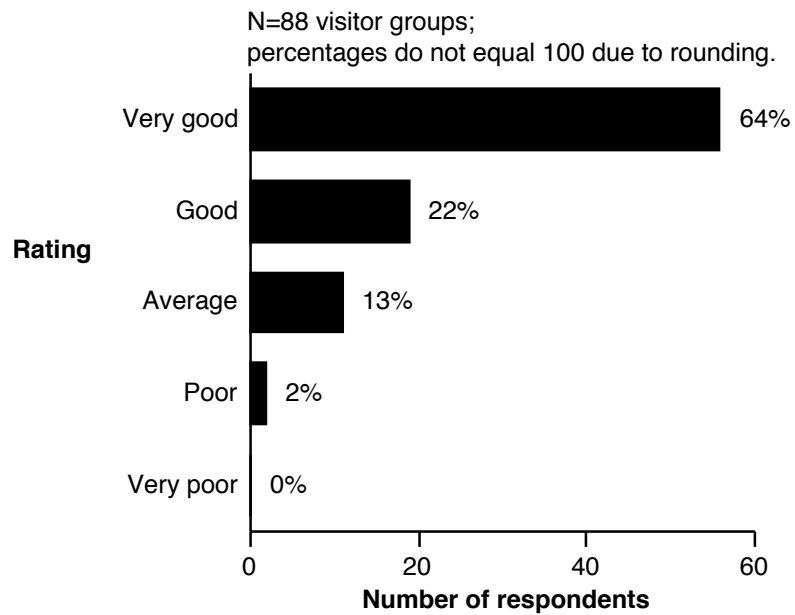


Figure 51: Quality of ranger talks

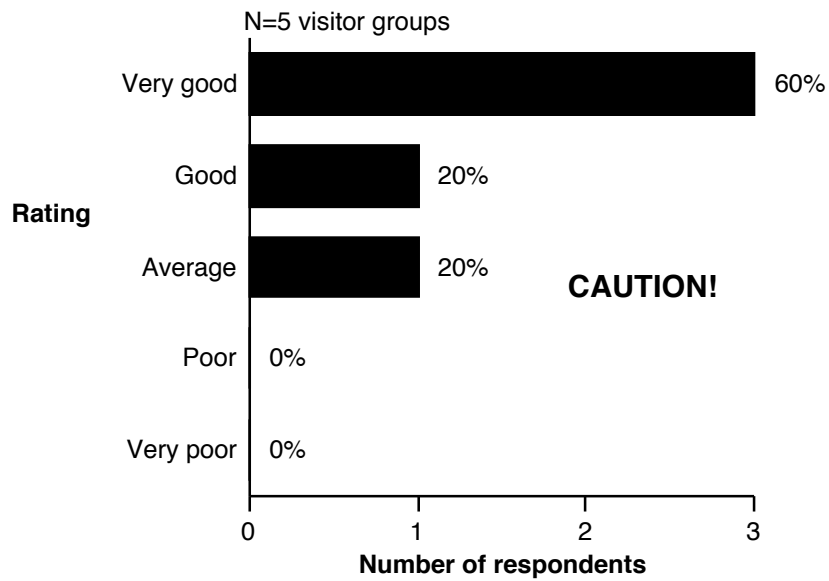


Figure 52: Quality of Junior Ranger program

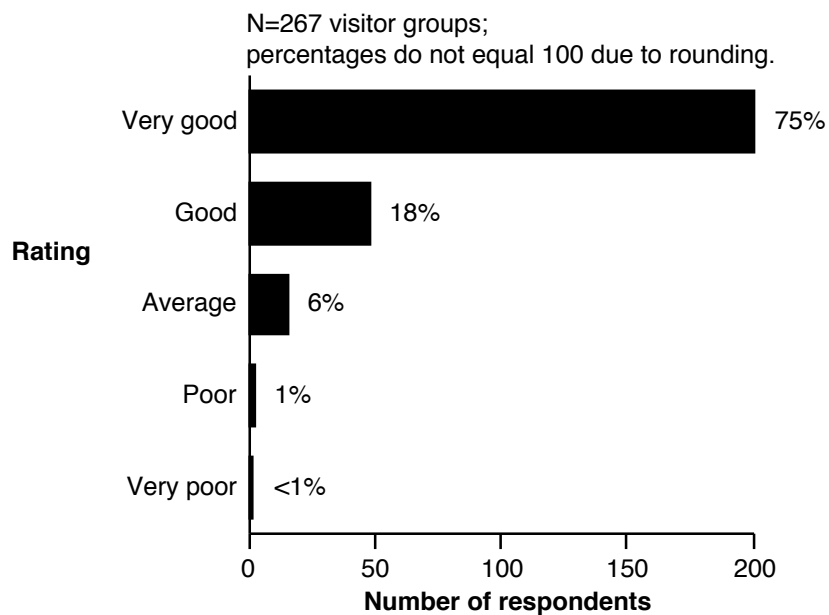


Figure 53: Quality of Navy shuttle boat service

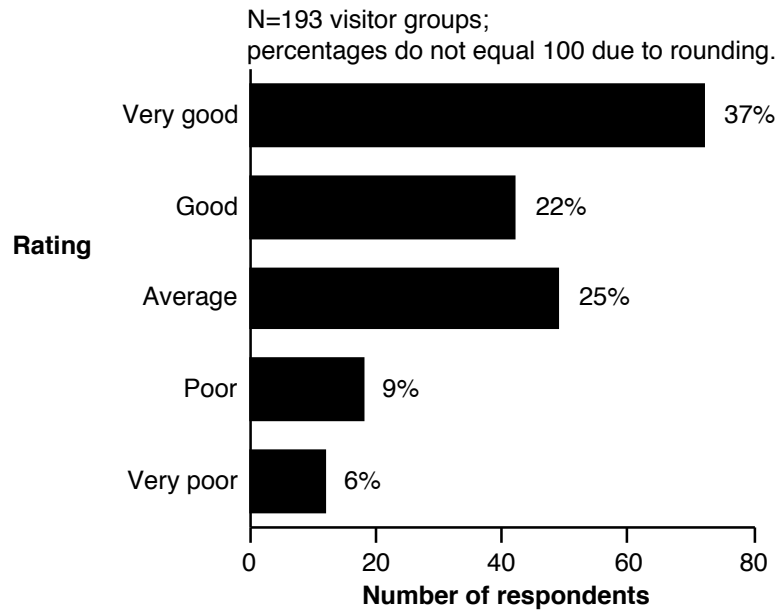


Figure 54: Quality of recorded boat message/ program

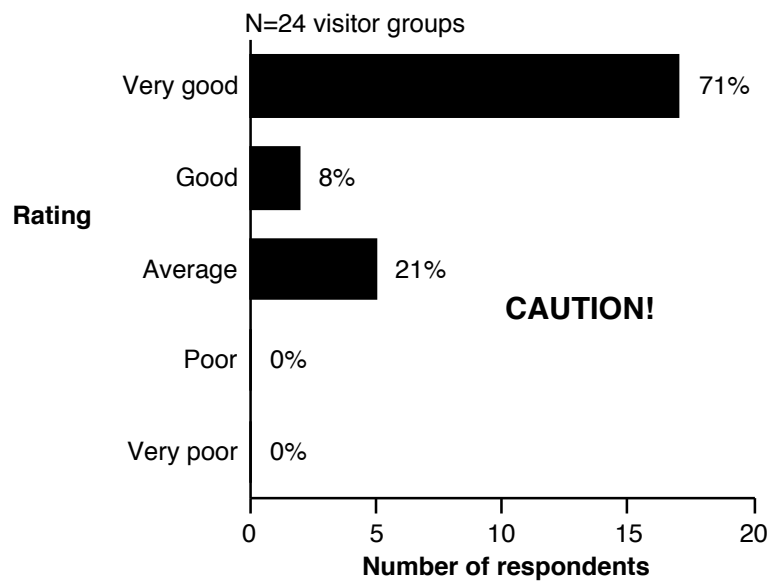


Figure 55: Quality of headset translations



Figure 56: Quality of talk with Pearl Harbor survivor

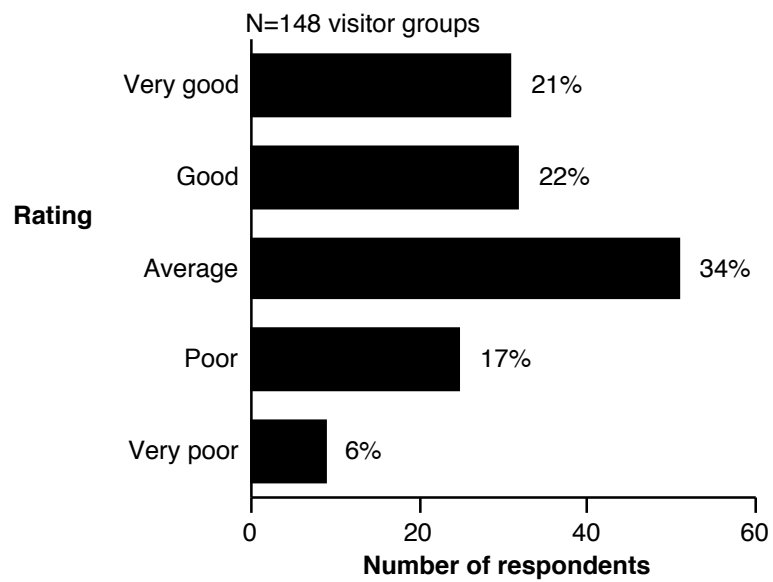


Figure 57: Quality of snack shop

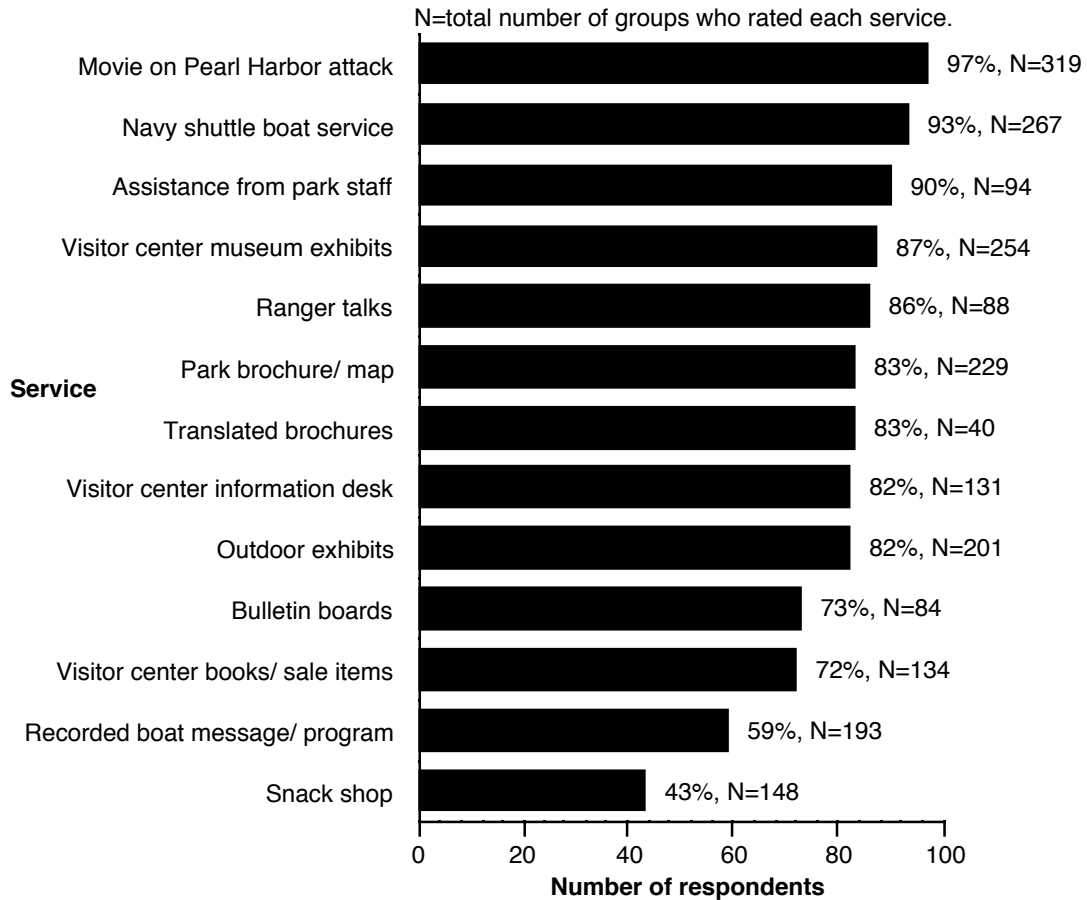


Figure 58: Combined proportions of “very good” and “good” quality ratings for information services

**Visitor facilities:
use, importance,
and quality**

Visitor groups were asked to note the facilities they used during their visit to USS Arizona Memorial. As shown in Figure 59, the facilities most commonly used by visitor groups were restrooms (86%), benches/seating area (78%), and parking lots (64%). The least used facility was access for the disabled (4%).

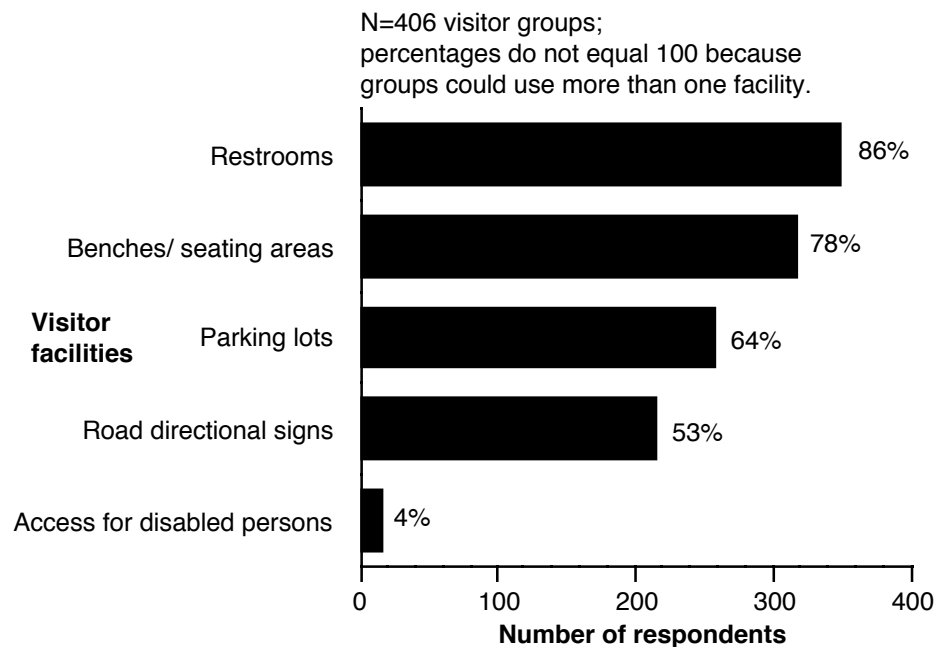


Figure 59: Visitor facilities used

Visitor groups rated the importance and quality of each of the facilities they used. The following five point scales were used in the questionnaire:

IMPORTANCE	QUALITY
5=extremely important	5=very good
4=very important	4=good
3=moderately important	3=average
2=somewhat important	2=poor
1=not important	1=very poor

The average importance and quality ratings for each facility were determined based on ratings provided by visitors who used each facility. Figure 60 and 61 shows the average importance and quality ratings for each of the visitor facilities. All facilities were rated as above "average" both in importance and quality. It should be noted that access for the disabled was not rated by enough visitor groups to provide reliable data.

Figures 62-66 show the importance ratings that visitor groups gave for each of the individual facilities. Those facilities receiving the highest combined proportion of "extremely important" and "very important" ratings included restrooms (93%), park road directional signs (92%), and parking lots (91%). The facility with the largest proportion of "not important" responses was restrooms (1%).

Figures 67-71 show the quality ratings that visitor groups gave for each of the individual facilities. Those facilities receiving the highest combined proportion of "very good" and "good" ratings included parking lots (76%) and restrooms (70%). The highest proportion of "very poor" ratings was for directional signs (6%).

Figure 72 combines the "very good" and "good" quality ratings and compares those ratings for all of the facilities.

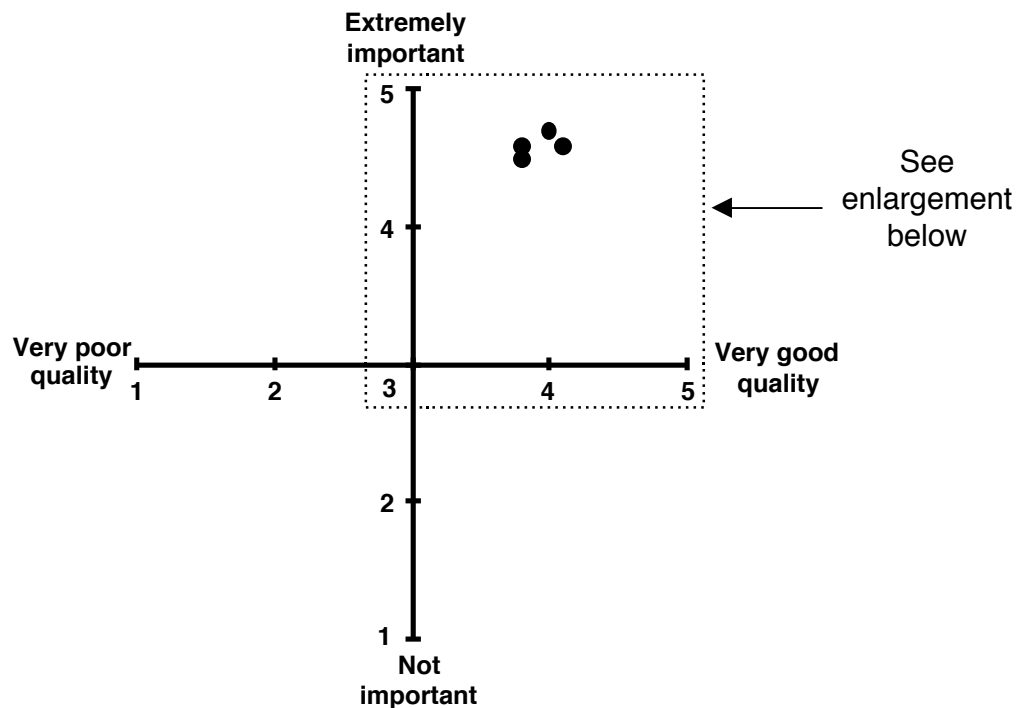


Figure 60: Average ratings of facilities importance and quality

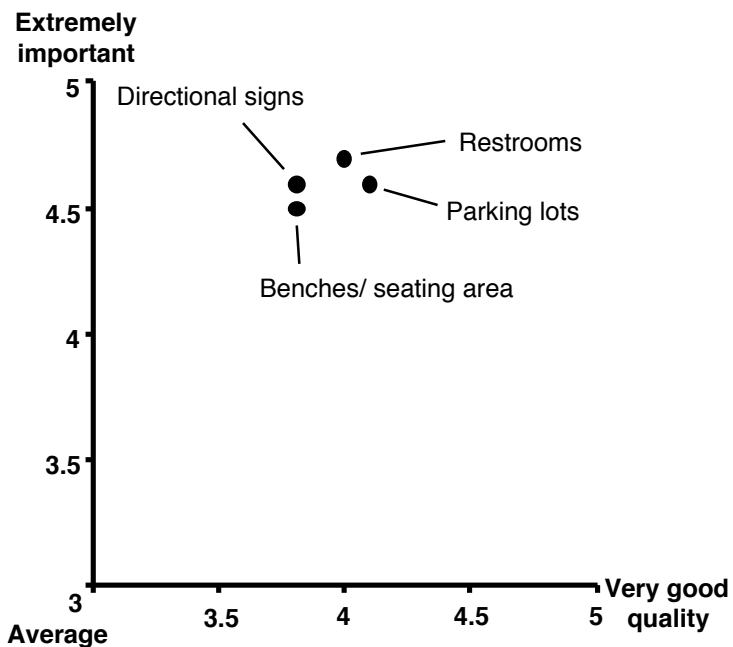


Figure 61: Detail of Figure 60

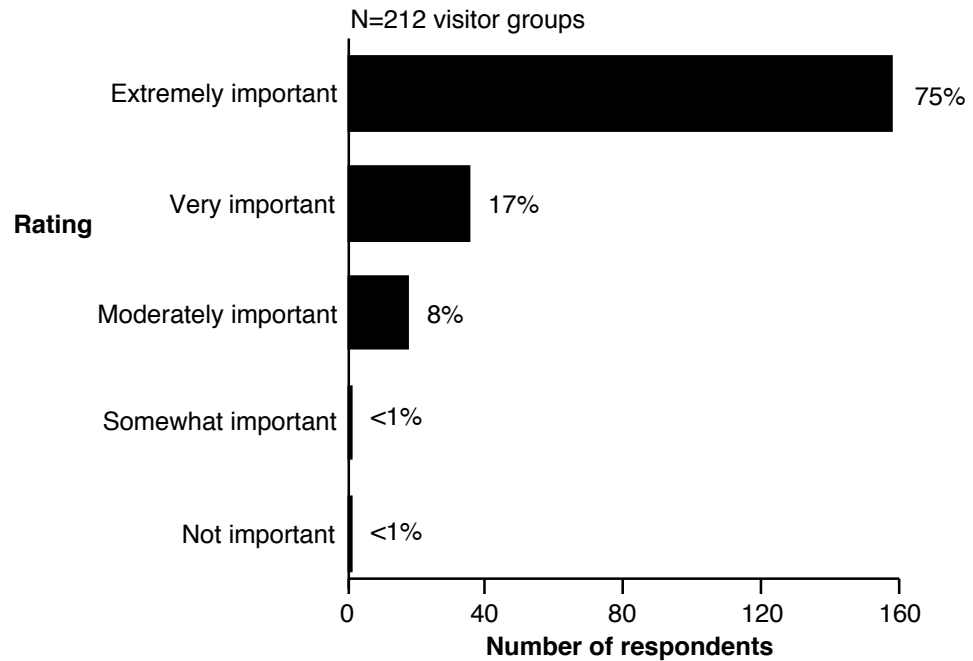


Figure 62: Importance of road directional signs

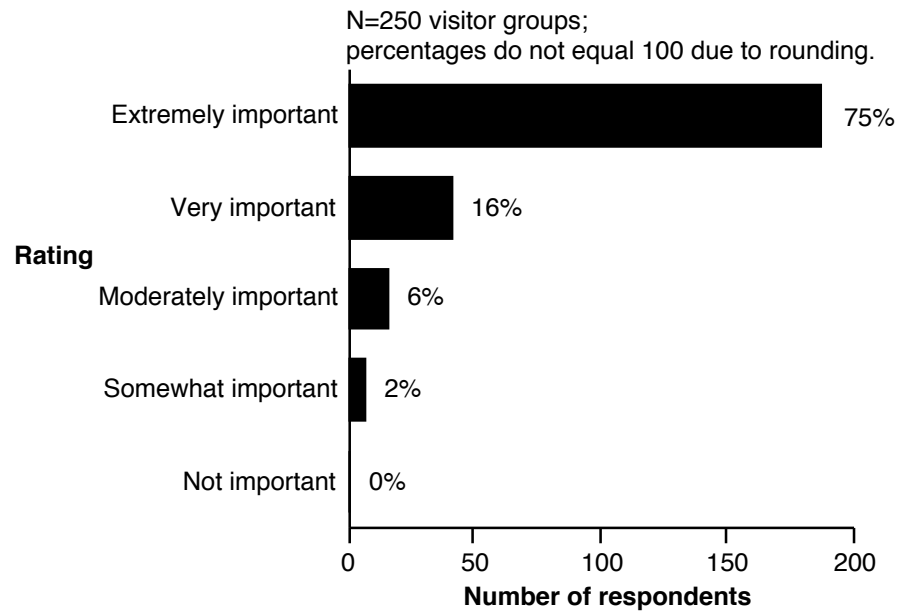


Figure 63: Importance of parking lots

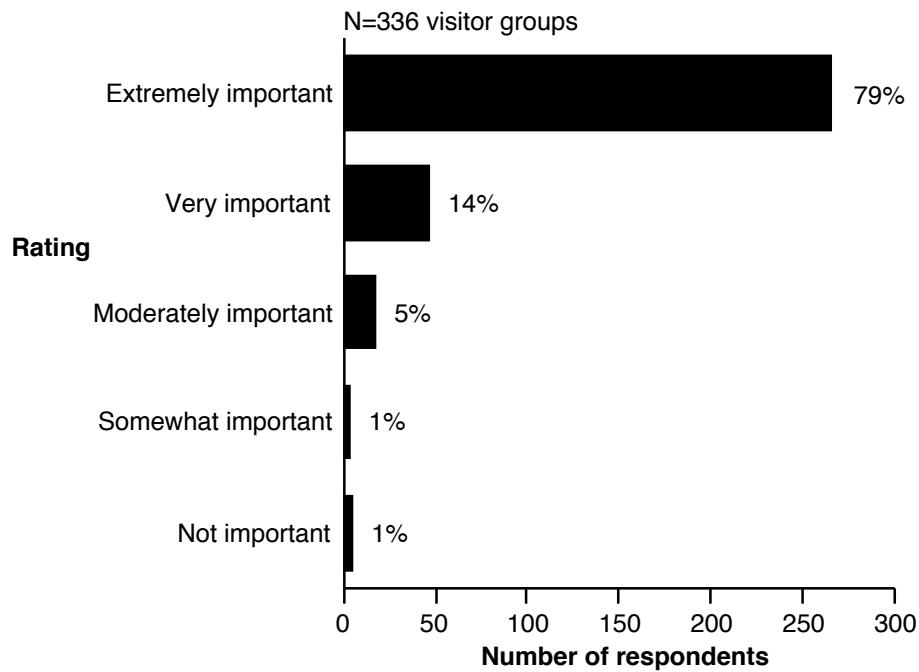


Figure 64: Importance of restrooms

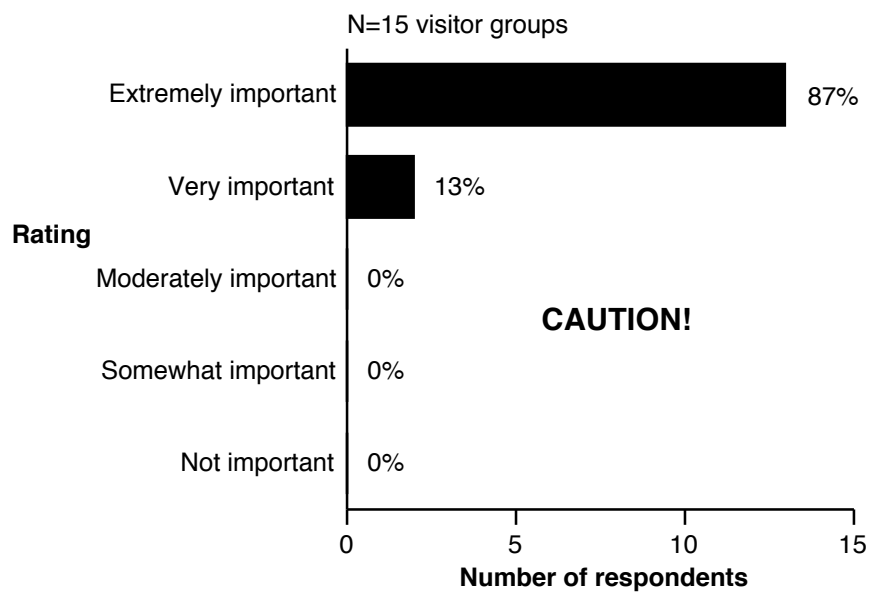


Figure 65: Importance of access for disabled persons

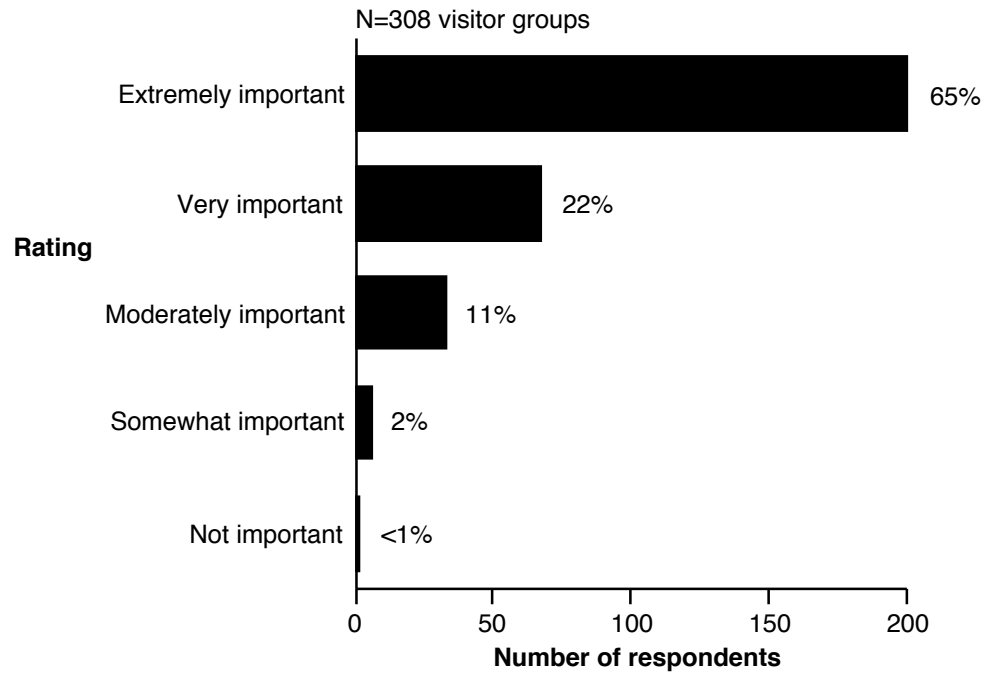


Figure 66: Importance of benches/ seating areas

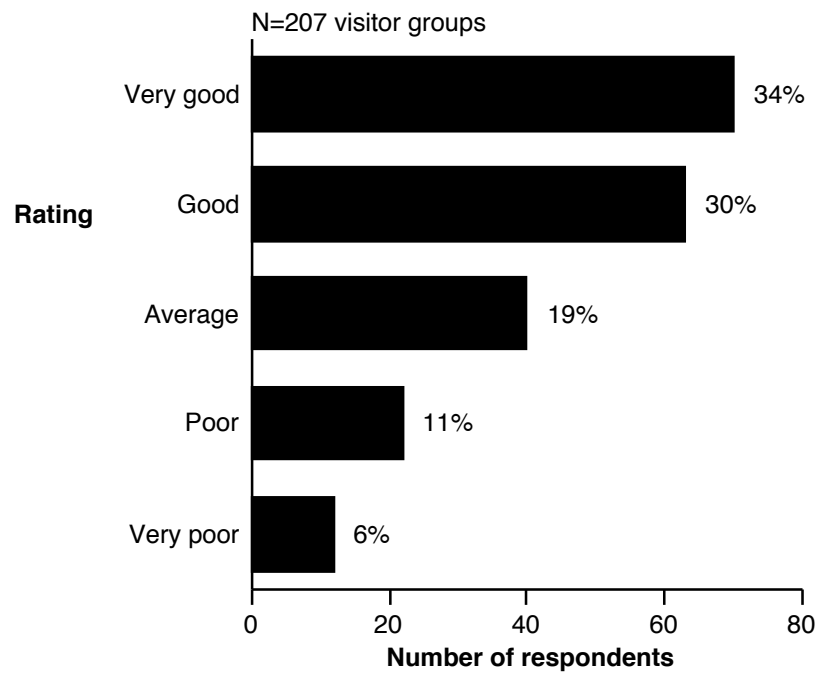
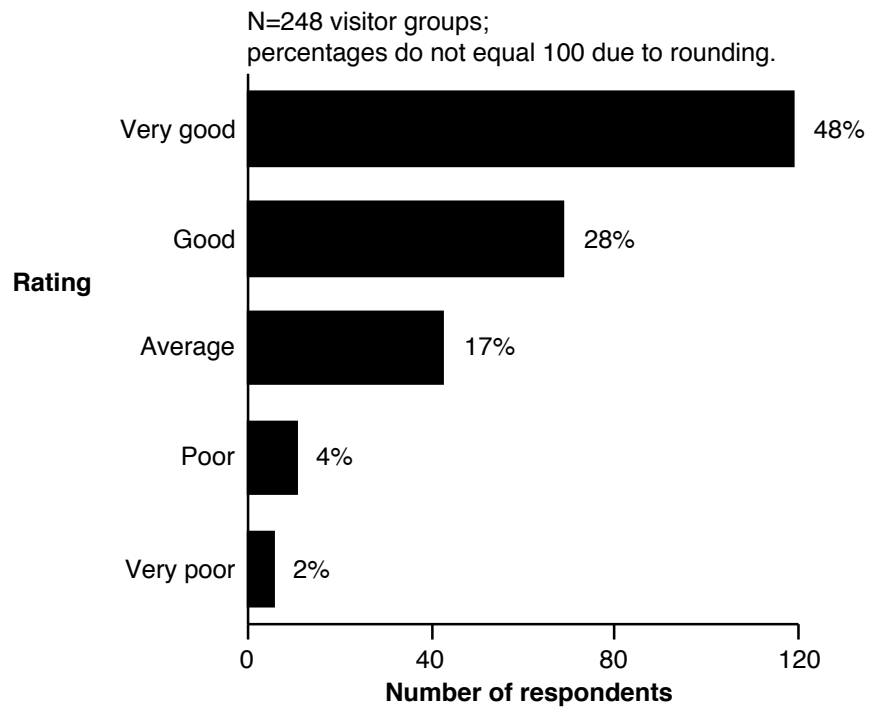
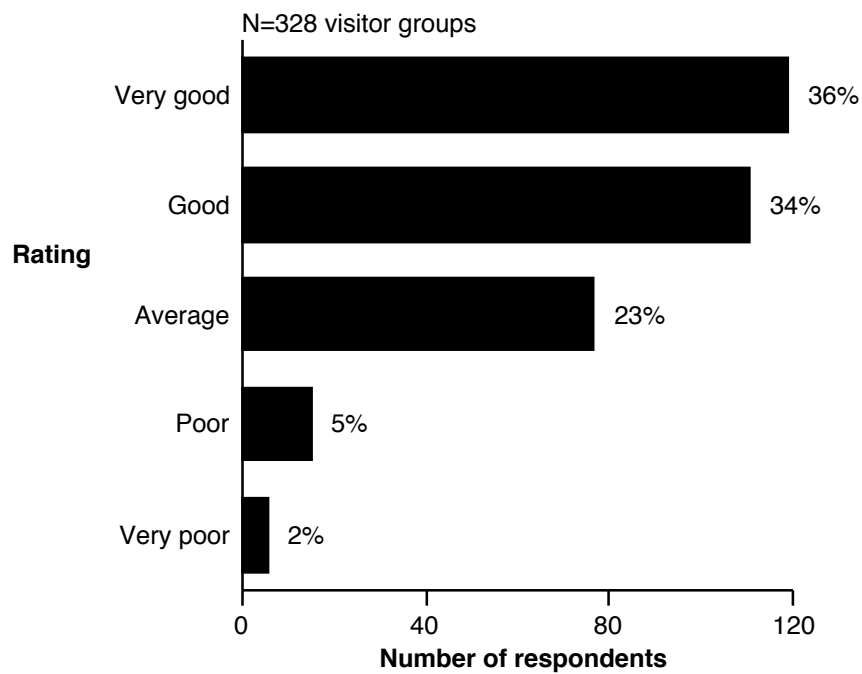


Figure 67: Quality of road directional signs

**Figure 68: Quality of parking lots****Figure 69: Quality of restrooms**

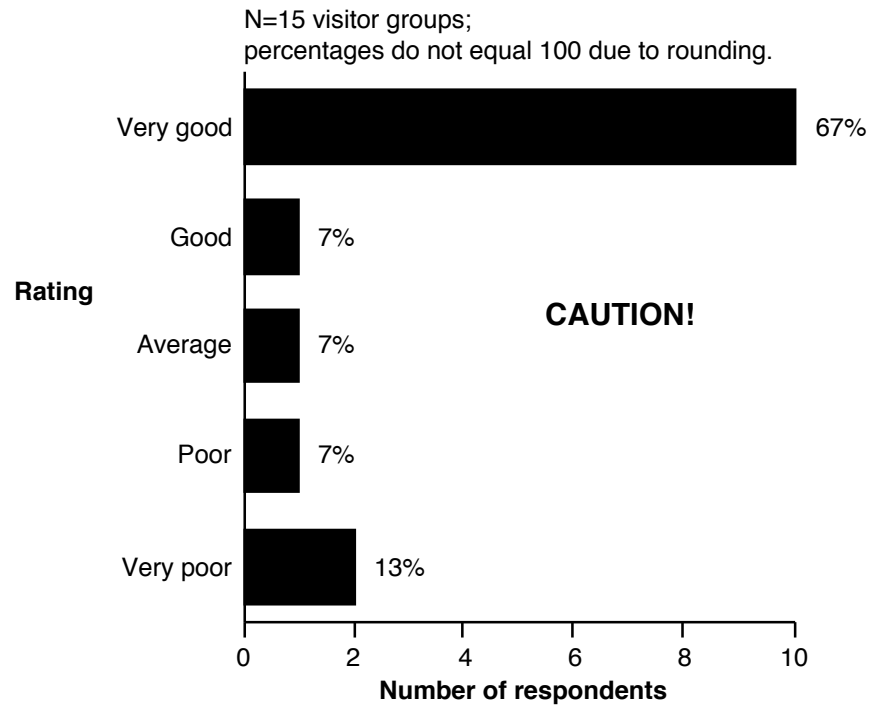


Figure 70: Quality of access for disabled persons

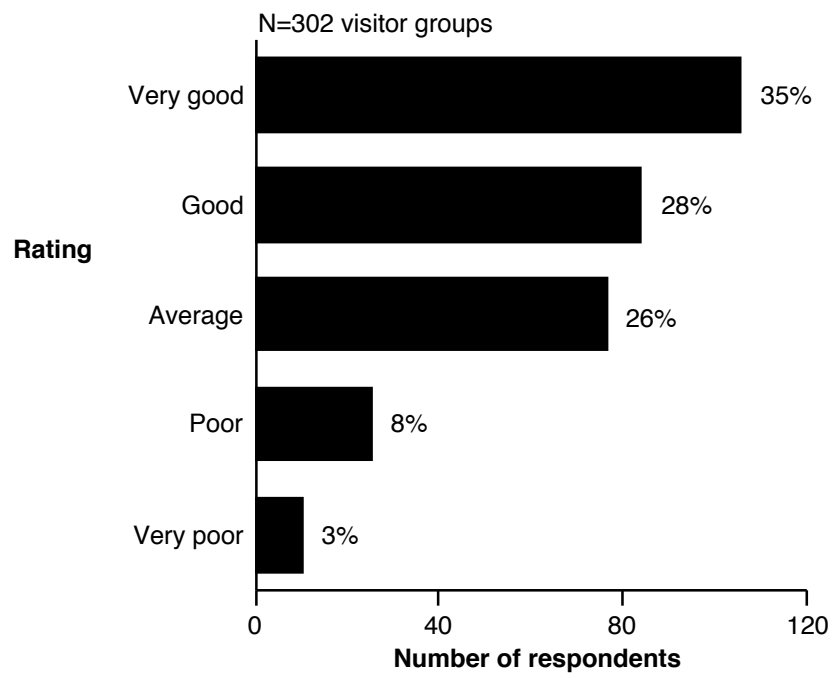


Figure 71: Quality of benches/ seating areas

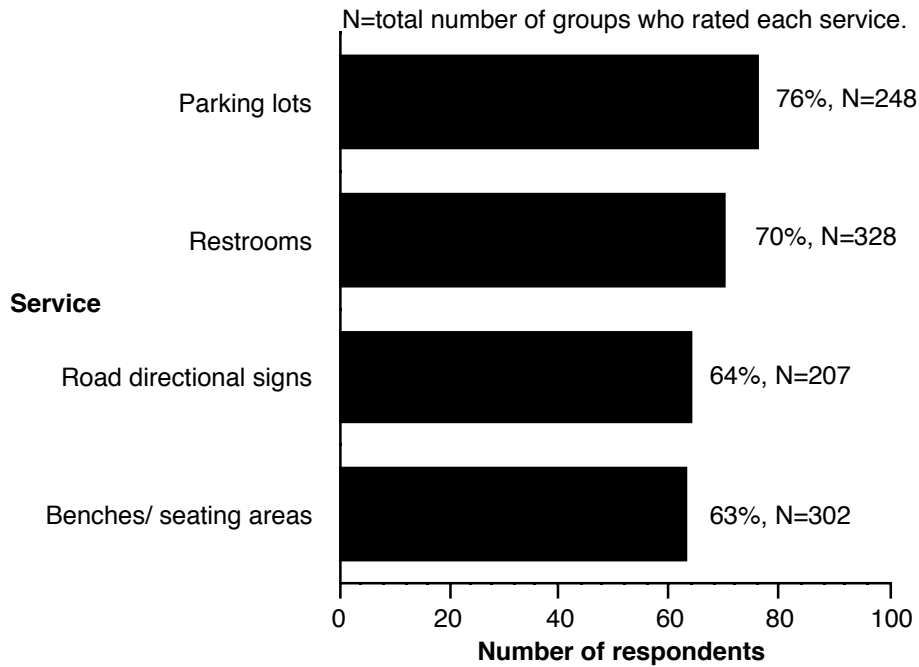


Figure 72: Combined proportions of “very good” and “good” quality ratings for facilities

Visitor groups were asked how crowded by other people they felt during their visit. Thirty-six percent of visitors said that they felt crowded while 27% said that they felt somewhat crowded (see Figure 73). If a visitor reported feeling crowded, they were asked where in the park they felt crowded. Visitors reported feeling most crowded on the Memorial itself, waiting outside the theater and in the museum (see Table 6).

Visitors were also asked what time of day they felt crowded. Visitors felt about equally crowded throughout the day with 33% feeling crowded in the morning, 34% feeling crowded around midday, and 31% feeling crowded in the afternoon (see Figure 74).

Visitor groups were then asked if their group felt hurried during their visit. Forty-five percent reported that they were “not at all hurried,” while 40% said they were “somewhat hurried” (see Figure 75). Most visitor groups reported feeling hurried on the memorial itself while several reported feeling hurried in the theater and on the boat ride (see Table 7).

Visitors were then asked what improvements they thought could be made to prevent feeling hurried. The most common answers were to allow more time on the Memorial and to make the Memorial larger (see Table 8)

Perceptions of crowding

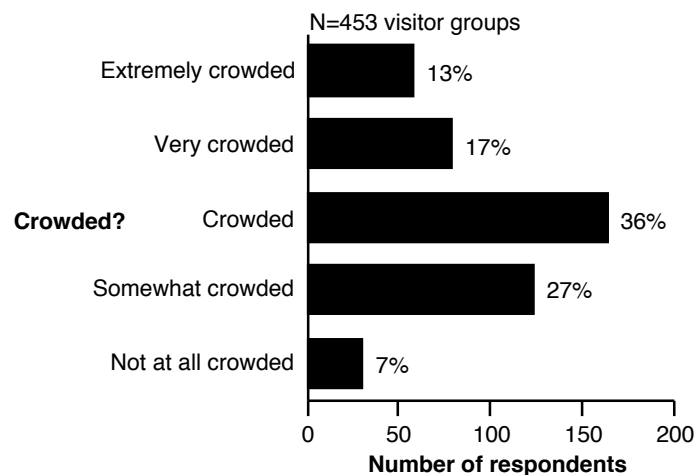
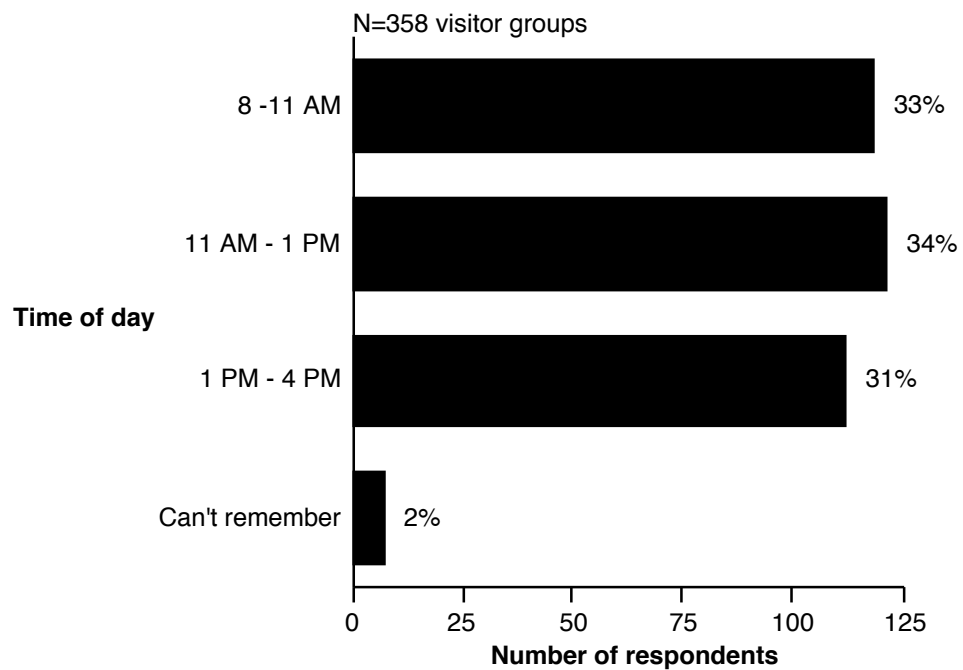


Figure 73: Perceptions of crowding

Table 6: Park locations where visitors felt crowded

N=310 locations

Location	Number of times mentioned
On Memorial itself	53
Waiting area outside film	40
Museum	34
Waiting area	32
On shuttle boat/ wait for boat	28
Lines	18
Bookstore/ giftshop	16
All areas	15
Entrance	15
Film/ theater	15
Snack area	13
Visitor center	9
Restrooms/ ladies room	8
Outside exhibits	6
Other comments	8

**Figure 74: Time of day visitors felt crowded**

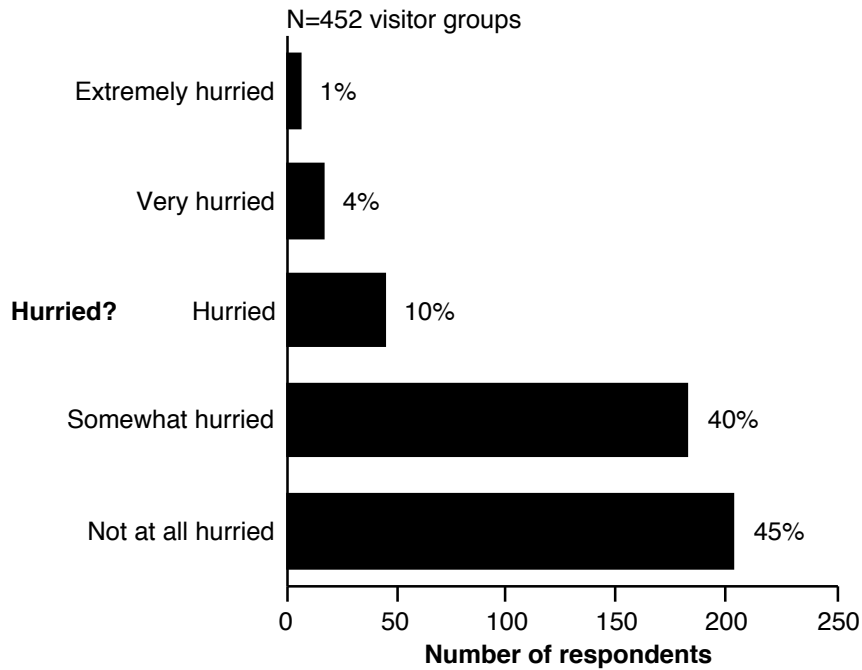


Figure 75: How hurried group felt during visit

Table 7: Park locations where visitors felt hurried

46=locations

Location	Number of times mentioned
On Memorial	32
Theater	3
Boat ride	3
Waiting area	2
All areas	2
Other comments	4

**Table 8: Improvements needed to prevent feeling
hurried**

N=67 comments

Comment	Number of times mentioned
Allow more time on Memorial	16
More space/ bigger	8
Advertise availability/ hours	4
Limit admittance into facility	4
Have some reserved times	4
Less numbers on each boat	3
More boats	3
Two ticket lines	2
More shaded seating	2
Improved snack area	2
Other comments	19

Visitor groups were asked what subjects they would be interested in learning about on a future visit. Sixty-three percent of respondents were interested in learning about Pearl Harbor history, 59% wanted to learn about the history leading to the Pearl Harbor bombing, and 52% wanted to learn about the people who were on board the USS Arizona (see Figure 76). “Other” subjects visitors were interested in learning about on a future visit were the Pacific theater after the attack, details on the survivors and why the attack was a surprise.

**Subjects of interest
for future visits/
preferred methods
of learning**

Visitor groups were asked what type of informational/interpretive program they would prefer. Sixty-eight percent reported they would prefer more in-depth information on the significance of the Pearl Harbor bombing—30 minute program, while 51% wanted a detailed program highlighting Japanese and United States involvement in WWII—one hour program. Thirty-three percent preferred basic information about the Memorial—fifteen minute program (see Figure 77).

Visitor groups were also asked how they would prefer to learn about the history of the USS Arizona on a future visit. As shown in Figure 78, visitors preferred learning with audio-visual programs (65%), visitor center exhibits (48%), and ranger-led talks (36%). One “other” preference mentioned was survivor talks.

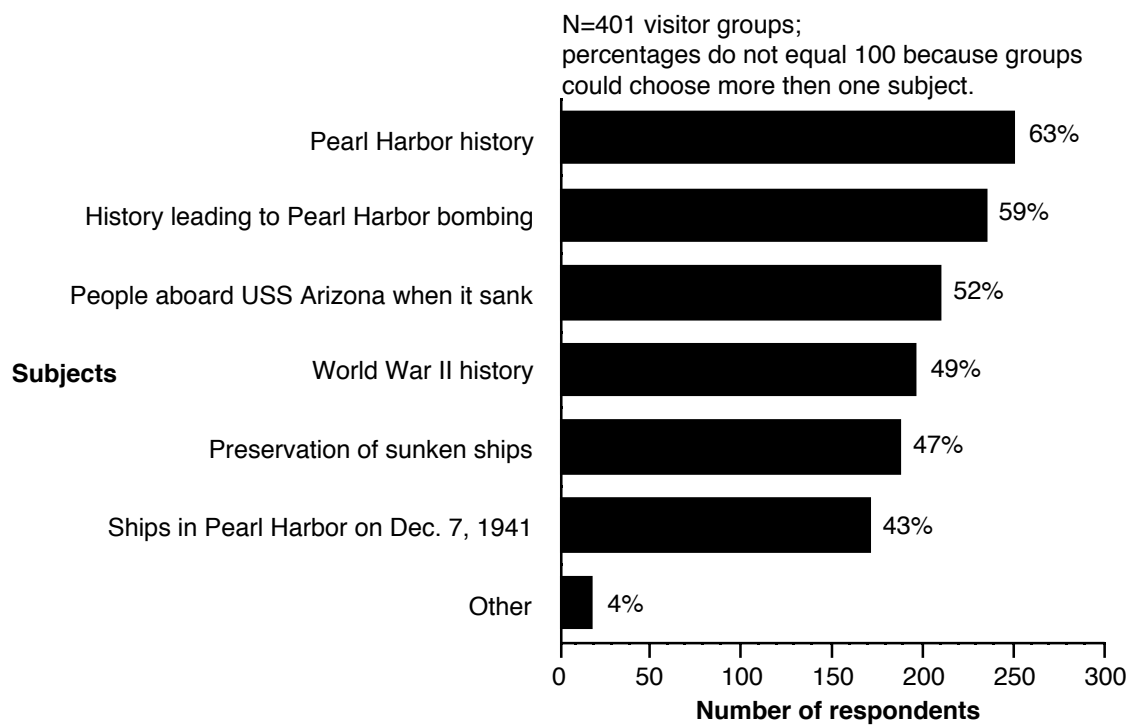


Figure 76: Future subjects of interest to visitors

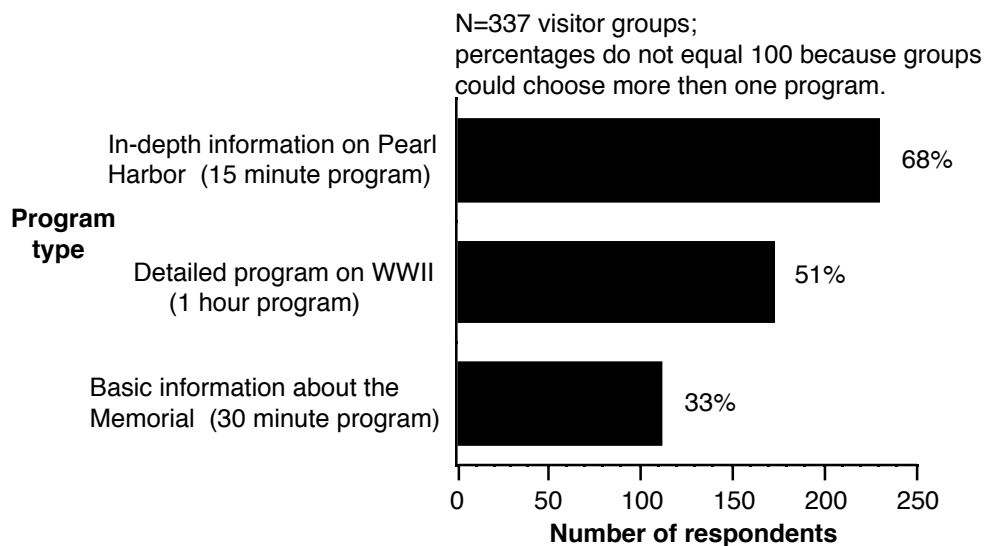


Figure 77: Type of informational program preferred

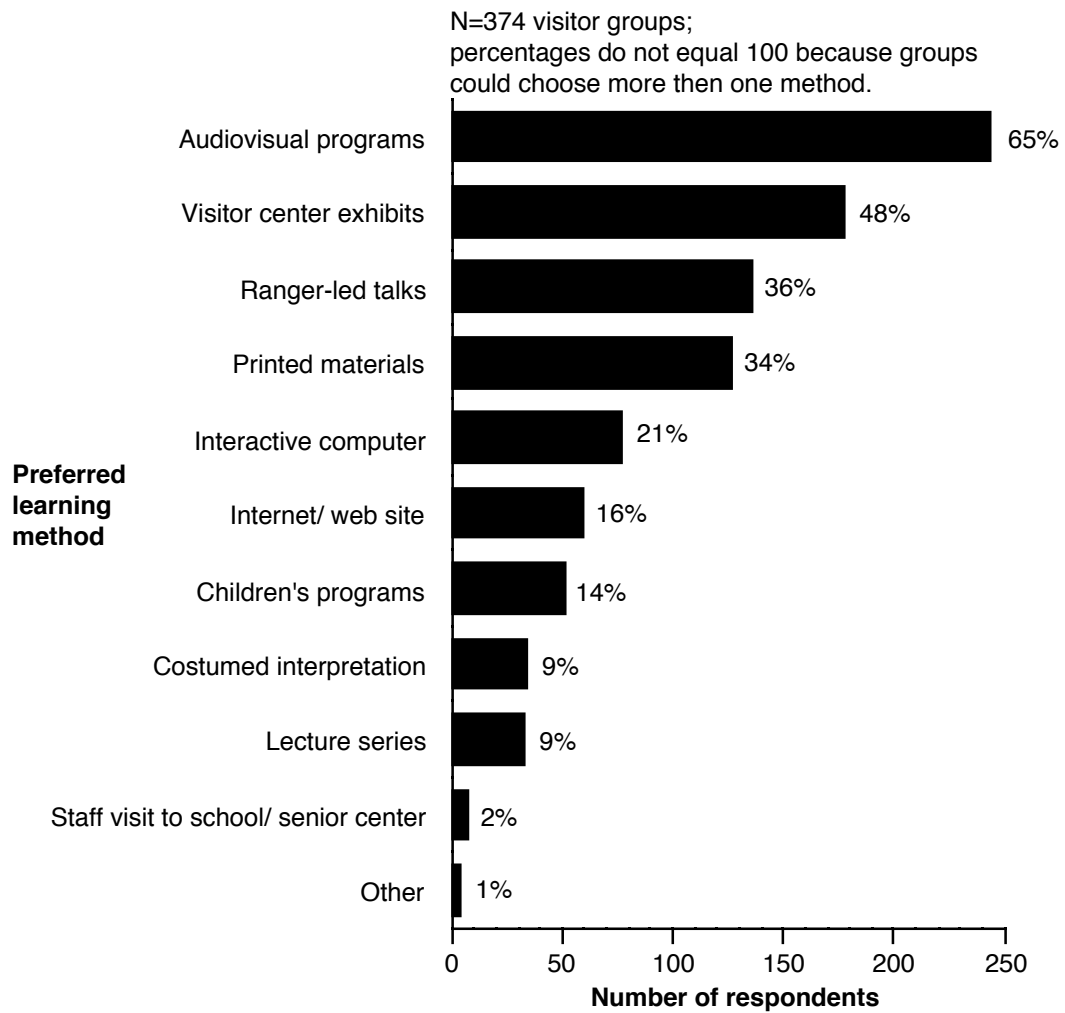


Figure 78: Preferred methods of learning about USS Arizona history

Visitor groups were asked about what types of items they would like to have available for purchase in the bookstore sales area on a future visit. Fifty-five percent were interested in publications on the about Pearl Harbor and another 45% wanted publications on the history of WWII (see Figure 79). "Other" items of interest were books in Japanese, special souvenirs and flowers.

Visitors were also asked if they had visited the USS Arizona Memorial bookstore website. Ninety-eight percent had not visited the website (see Figure 80). One "other" comment was given about the website stating that they waited for their visit instead of ordering items.

Bookstore sales items preferred/ use of web site

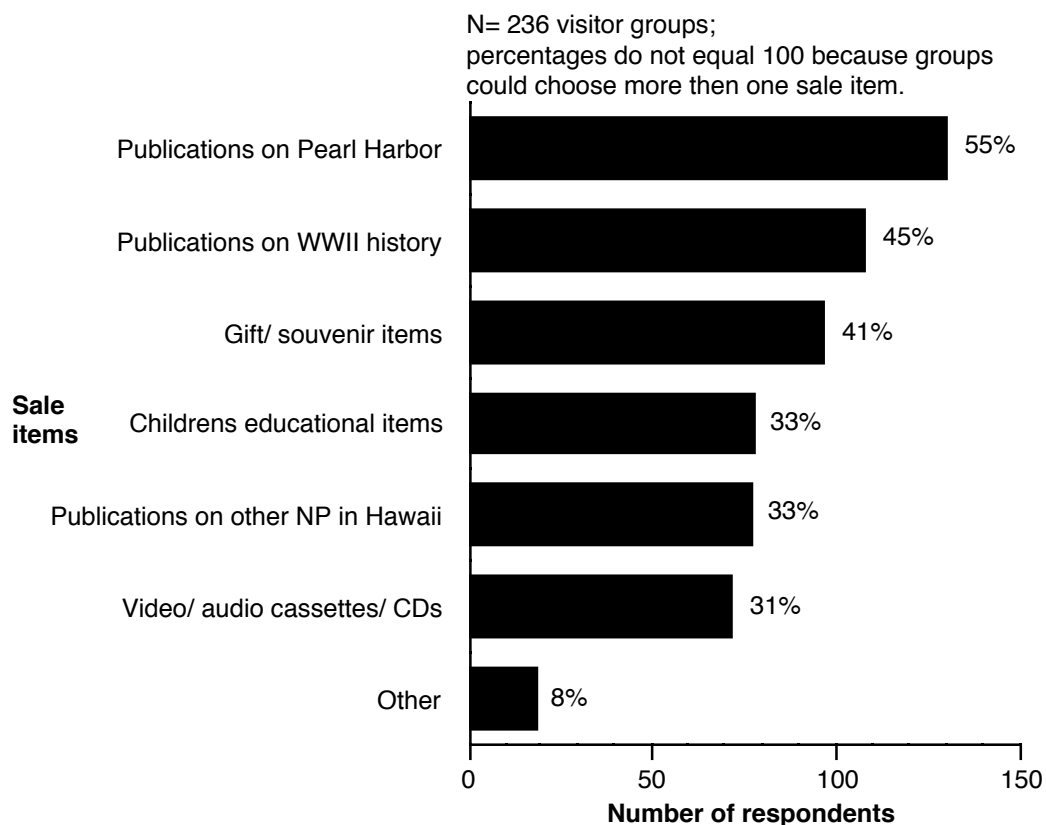


Figure 79: Desired type of information available for purchase at the bookstore

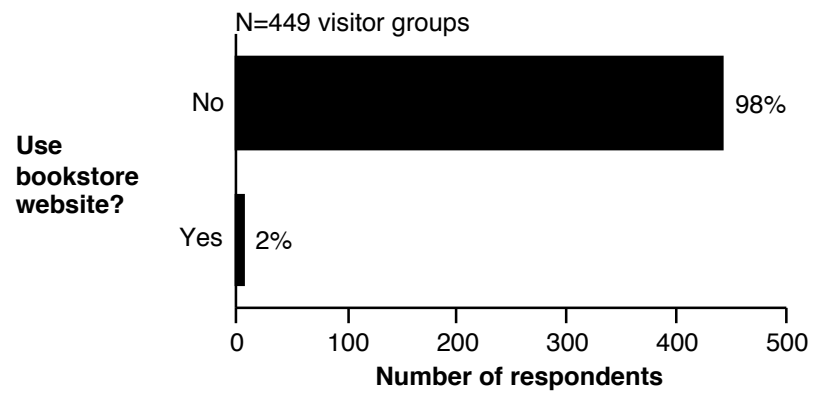


Figure 80: Use of bookstore web site

Visitors were asked to list expenditures associated with their visit to the USS Arizona Memorial. They were asked how much money they spent for travel (city bus fare, gas, etc.), commercial tours, food at the concession area, donations, and other items (books, souvenirs, film, gifts, etc.).

Expenditures

Total expenditures: Over two-thirds of the visitors (67%) spent up to \$50 in total expenditures during this trip (see Figure 81). The average visitor group expenditure during this visit was \$54. The average per capita expenditure was \$15. The median visitor group expenditure (50% of groups spent more; 50% spent less) was \$22.

Travel accounted for the greatest proportion of total expenditures (32%), followed by other items (26%) and commercial tours (22%) as shown in Figure 82.

Travel: For travel, 64% of visitor groups spent up to \$25 (see Figure 83).

Commercial tour to Memorial: Of the visitors reporting total expenditures for commercial tours, 70% said they spent no money (see Figure 84).

Food at concession area: For food, 71% of the groups spent up to \$25 (see Figure 85).

Donations: Forty-one percent of visitor groups spent up to \$5 on donations (see Figure 86).

“Other” items: For “other” items 49% of the groups spent up to \$25 (see Figure 87).

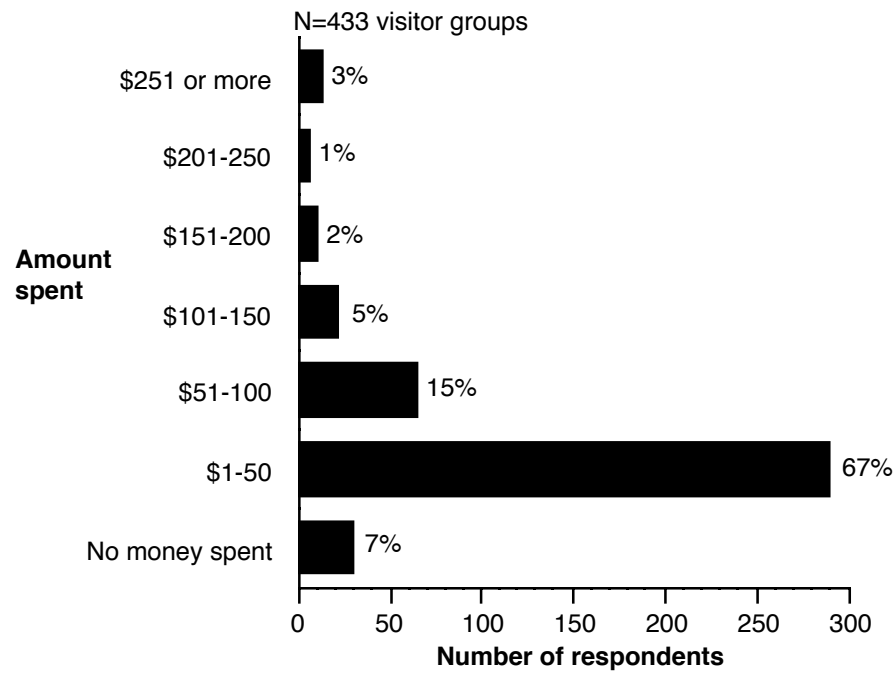


Figure 81: Total expenditures

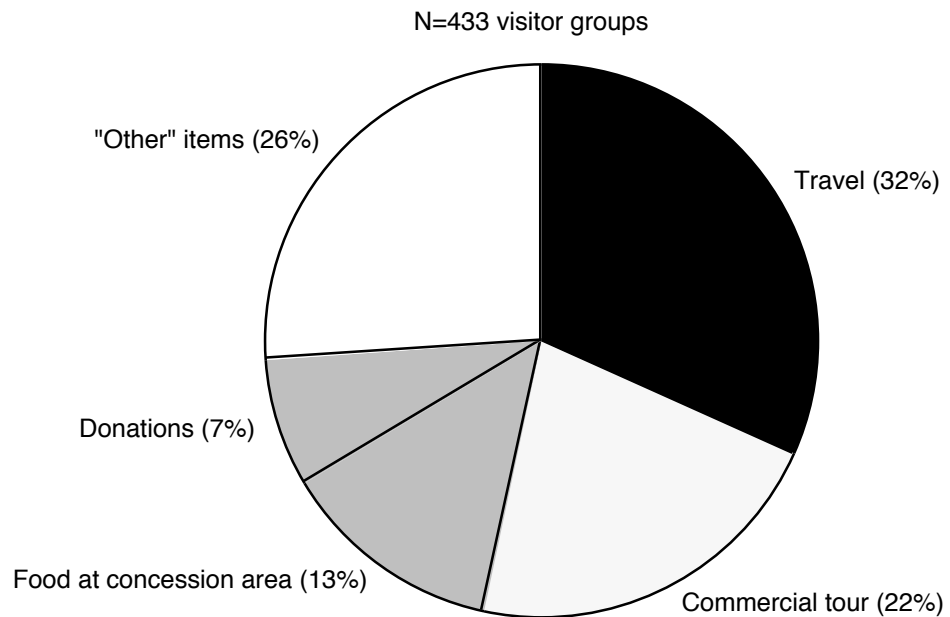


Figure 82: Proportion of expenditures on travel, commercial tours, food, donations and other items

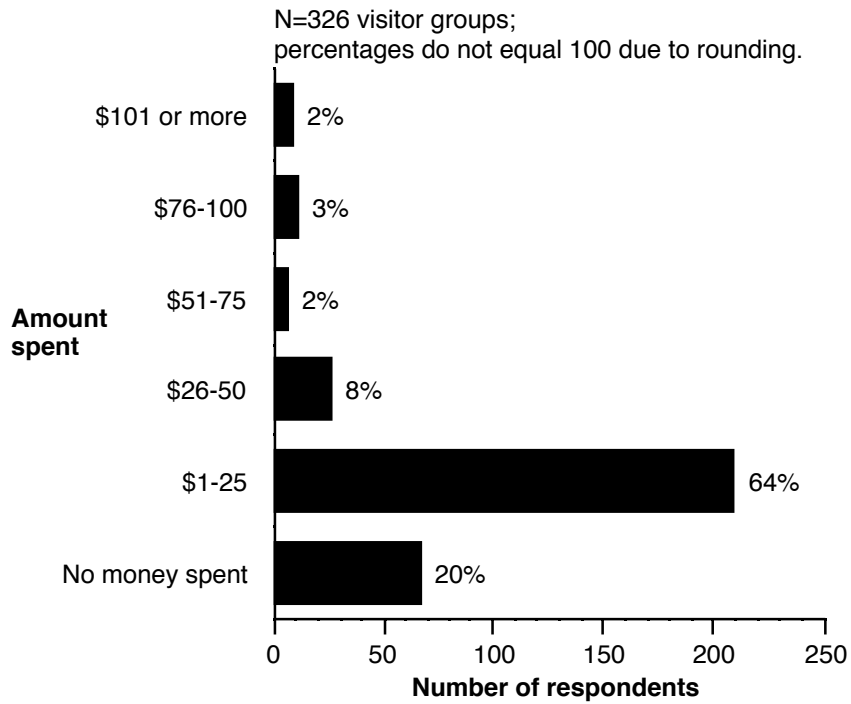
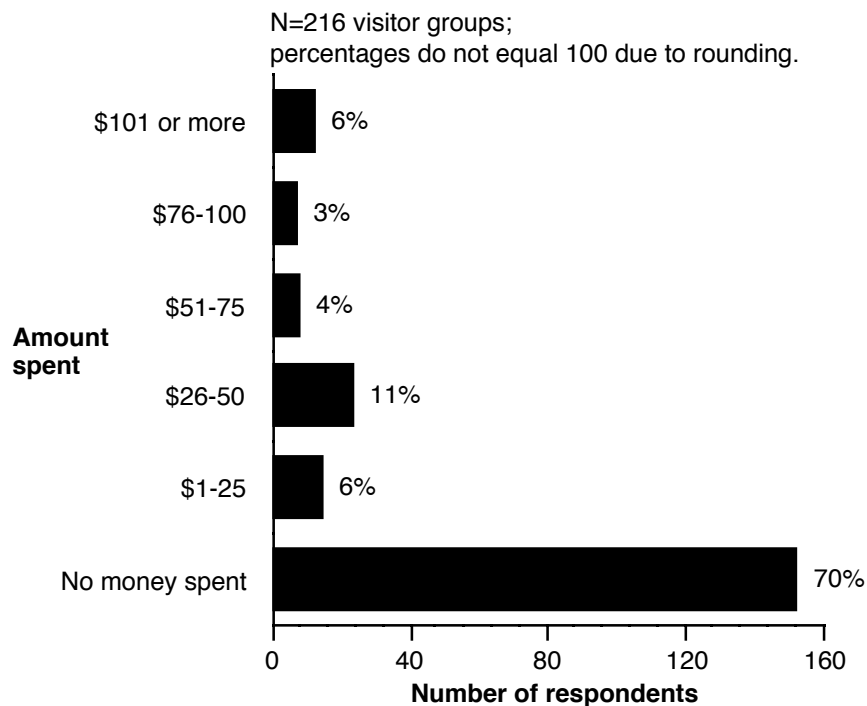


Figure 83: Expenditures on travel (city bus fare, gas, etc.)



**Figure 84: Expenditures on commercial tour to
USS Arizona Memorial**

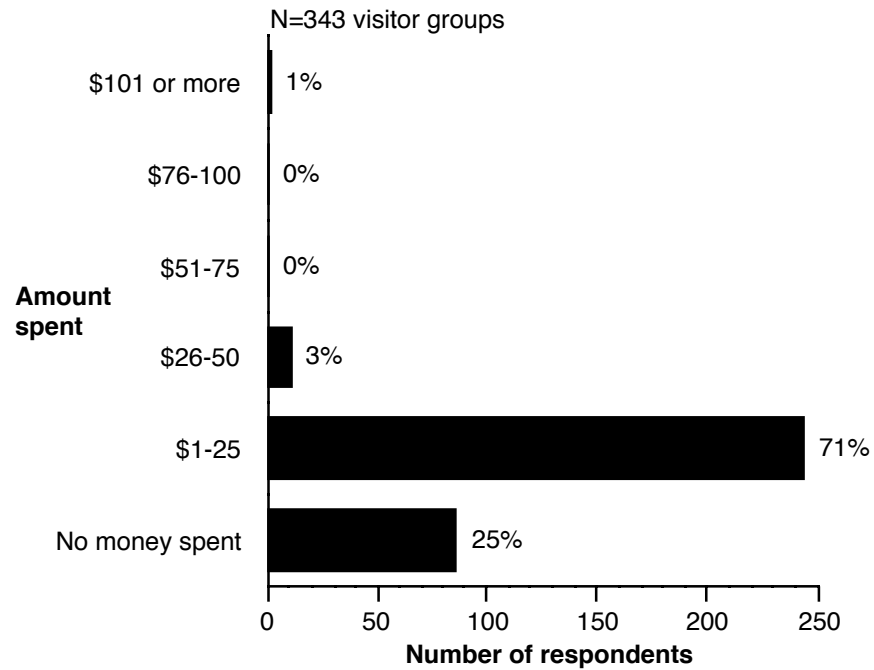


Figure 85: Expenditures on food at concession area

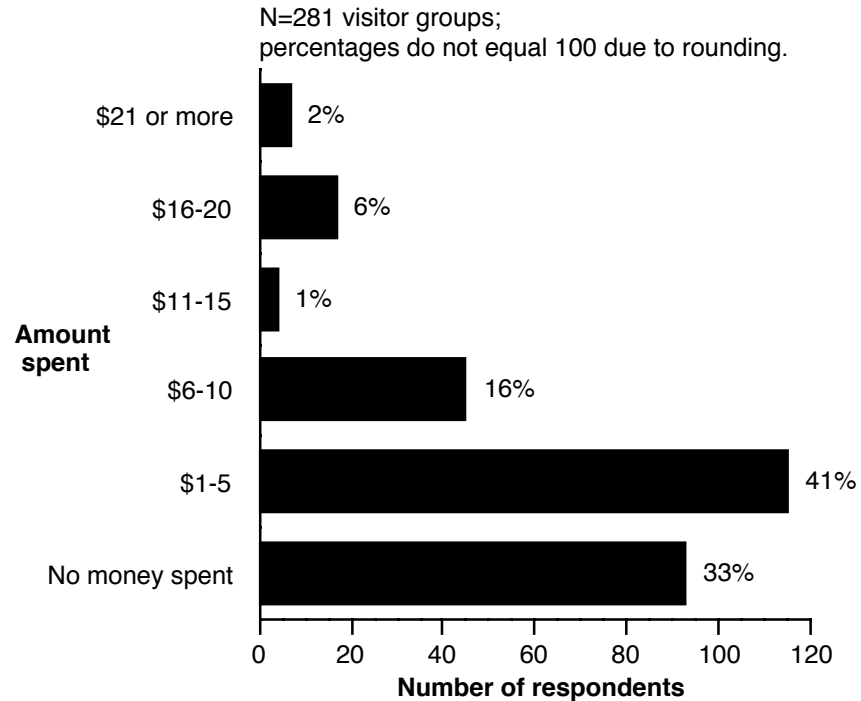


Figure 86: Expenditures on donations

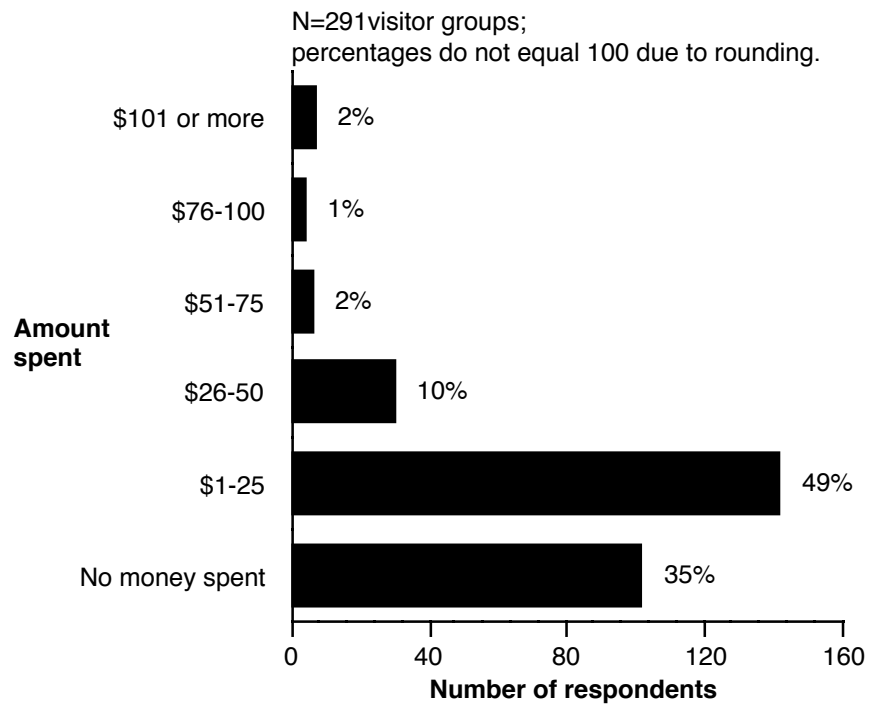


Figure 87: Expenditures on "other" items

**Overall quality of
visitor services**

Visitor groups were asked to rate the overall quality of the visitor services provided at the USS Arizona Memorial during this visit. Most visitor groups (87%) rated services as “very good” or “good.” Less than 1% of visitor groups rated the services as “very poor” (see Figure 88).

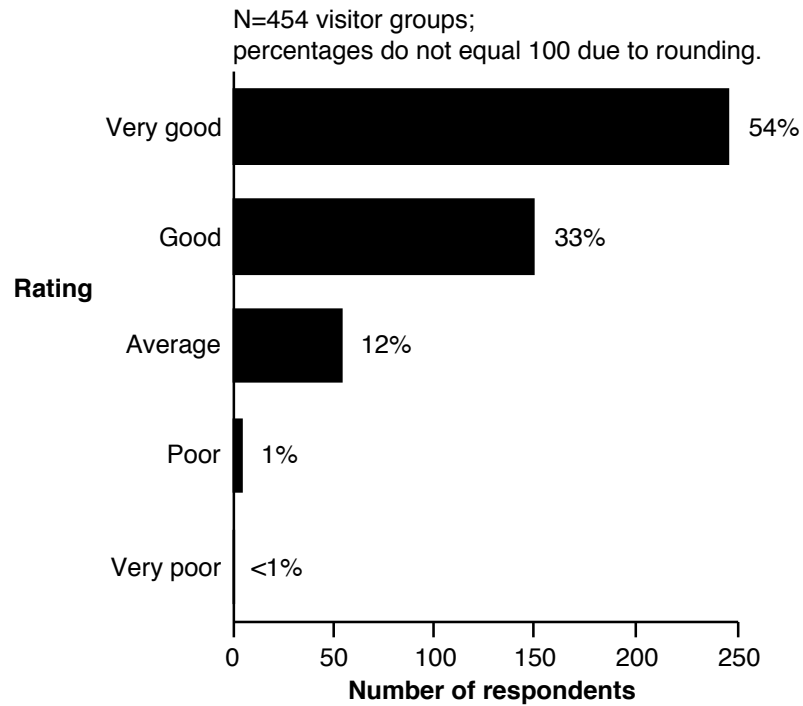


Figure 88: Overall quality of services

Visitor groups were asked, "What is the special significance of the USS Arizona?" Eighty-eight percent (88%) of visitor groups responded to this question (410 groups). A summary of their responses is listed in Table 9 and complete copies of visitor responses are contained in the appendix.

Special significance

Table 9: Special significance

N=461 comments;
many visitors made more than one comment.

Comment	Number of times mentioned
History/ reminder of historical events	119
Memorial of those who died at Pearl Harbor	89
Remembering WWII veterans/ sacrifice	73
To remember the atrocities of war/ tragedy/ futility	43
Price of freedom/for our country	36
Education	16
Allows contact with history/ makes more meaningful	12
Lesson for preparedness/ vigilance	10
Patriotism/ pride/ courage	8
Family member served/is currently in military	5
In memory	4
Peace	4
Unique Memorial/ tribute	4
Hallowed ground/ sacred/ spiritual	3
Monument to America's strength	2
Devastation of U.S. ship in U.S. territory	2
War cemetery	2
Ship is still there	2
Wall of names	2
Other comments	25

What visitors liked most

Visitor groups were asked, "What did you like most about your visit to the USS Arizona Memorial?" Eighty-seven percent of visitor groups responded to this question (407 groups). A summary of their responses is listed below in Table 10 and complete copies of visitor responses are contained in the appendix.

Table 10: What visitors like most

N=512 comments;
many visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Helpful, courteous, friendly rangers	13
Young Navy personnel	4
INTERPRETIVE SERVICES	
The film	128
Learning about history /informative	52
Visitor center displays/ exhibits/ museum	27
Speaking with a survivor	7
Wall of names	5
Outdoor exhibits	5
Ranger talk	4
Movie introduction	3
Junior Ranger program fantastic	2
Other comments	8
FACILITIES/ MAINTENANCE	
Boat trip to Memorial	14
Clean and neat	4
Other comments	6
POLICIES	
Well run/ professional	25
Keep free	5
GENERAL IMPRESSIONS	
The memorial itself	85
Solemnity/ emotional	58
To be near the ship	29
Everything	13
Bowfin Submarine	5
What memorial stands for	5
Other comments	17

Visitor groups were asked, "What did you like least about your visit to the USS Arizona Memorial?" Seventy-two percent of visitor groups responded to this question (336 groups). A summary of their responses is listed below in Table 11 and complete copies of visitor responses are contained in the appendix.

What visitors liked least

Table 11: What visitors like least

N=312 comments;
many visitors made more than one comment

Comment	Number of times mentioned
PERSONNEL	
Other	3
INTERPRETIVE SERVICES	
Need larger museum	6
Wait to see film	5
Hard to hear commentary on boat	4
More exhibits in waiting area	3
More time on Memorial	3
More signs in Japanese	3
Other comments	19
FACILITIES/ MAINTENANCE	
Not enough benches in shade	7
Trying to find parking	4
Directions to site/traffic	4
Restrooms	4
Boat ride and wait for it	3
Other comments	7
POLICIES	
Threat of break-ins in parking area	4
Hats should be taken off	2
CONCESSIONS	
Poor snack shop	8
Overpriced	4
Other	2
GENERAL IMPRESSIONS	
Waiting	94
Noisy crowds/disrespectful	50
Hurried at Memorial/not enough time	15
Closes too early	12
Heat	10
Crowds	10

Comment	Number of times mentioned
GENERAL IMPRESSIONS-continued	
Feeling the loss of life	3
Large tour groups	2
Poor museum traffic flow	2
Limited access to ship	2
Other comments	17

Visitor groups were asked, "If you were a park manager planning for the future of the USS Arizona Memorial what would you propose?" Fifty-four percent (54%) of visitor groups responded to this question (253 groups). A summary of their responses is listed in Table 12 and complete copies of visitor responses are contained in the appendix.

Planning for the future

Table 12: Planning for the future

N=381 comments;
many visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Rangers well informed/ courteous	4
Prefer formal military to park staff	1
INTERPRETIVE SERVICES	
Provide more to do while waiting	23
Lengthen movie/include surrender	12
More displays and programs	11
Tour guides	8
Personal stories of survivors/videos	7
More information on USS Missouri	7
Provide the "big picture" of Pearl Harbor to WWII	7
More time on Memorial	7
Provide ranger on Memorial for Q & A	5
Provide more in-depth information	5
Provide children's programs	4
Tie into visit with USS Utah	4
Provide information on Japanese plans/ what led to attack	4
Include USS Missouri and USS Bowfin as part of park	3
Audio-visual program running on loop	3
Glass bottom boat/ sub tour	3
More information in Japanese	3
Include Japanese plane from era	2
More talks with survivors	2
Remote sub-camera tour	2
More exciting things to do and see	2
Other comments	37
FACILITIES/ MAINTENANCE	
Better seating/ more in the shade	12
Bigger museum/ design better flow	12
More boat rides to Memorial	6
Hire parking security	5

Comment	Number of times mentioned
FACILITIES/ MAINTENANCE-continued	
Keep area nice and clean	4
Need bigger theater	4
Provide tower or platform to better view sunken ship	2
Lack of handicapped access	2
Signs notifying of amount of stairs and walking	2
Need bigger bookstore	2
Other comments	14
POLICIES	
Keep free	4
Crime to charge for USS Missouri and USS Bowfin	2
Other comments	3
CONCESSIONS	
Larger/ better snack bar with coffee	17
More memorabilia	4
Provide eating area	3
GENERAL IMPRESSIONS	
Keep up good work	20
Wait too long/ publish wait times	16
Stay open longer/ closed too early	10
Reserved tour times/ better ticket distribution	9
More emphasis on futility of war/ promote peace	7
Better crowd control/ noise control	5
Need more tours	5
Smaller tour groups	5
Greater flexibility with times for movie and visit	5
Keep pristine and sacred	4
Maintain respectful atmosphere	2
Other comments	13

Thirty-eight percent (38%) of visitor groups wrote additional comments, which are included in the separate appendix of this report (180 groups). Their comments about USS Arizona Memorial are summarized below (see Table 13). Some comments offer specific suggestions on how to improve the park; others describe what visitors enjoyed or did not enjoy about their visit.

Additional comments summary

Table 13: Additional comments

N=180 comments;
many visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL	
Courteous and kind	4
Should be a Japanese visitor center assistant	1
INTERPRETIVE SERVICES	
Very educational	14
Importance of education on Pearl Harbor	10
More Japanese translations	3
Great movie	2
Height of vacation	2
Need to link USS Bowfin, USS Missouri, Ford Island on one tour	2
More history from both sides/ A-bomb footage	2
Other comments	11
POLICY	
Easier to gain Chinese Visa	1
FACILITIES/ MAINTENANCE	
Bus route directions are needed	2
Other comments	3
GENERAL IMPRESSIONS	
Wonderful/great/interesting	36
Emotional/moving	28
Great tribute	10
Maintain solemn decorum	13
Important monument	6
Coffee in snack area	5
Great simplicity	4
Dealt with crowds well	4
Liked seeing ships come into port	3
Wait too long	2
Wonderful and will come back	2
Other comments	11

USS Arizona Memorial Additional Analysis VSP Report 120

The Visitor Services Project (VSP) offers the opportunity to learn more from VSP visitor study data.

Additional Analysis

Additional analysis can be done using the park's VSP visitor study data that was collected and entered into the computer. Two-way and three-way cross tabulations can be made of any of the characteristics listed below. Be as specific as possible--you may select a single program/ service/ facility instead of all that were listed in the questionnaire. Include your name, address, and phone number in the request.

- Awareness of NPS management
- Sources of information
- Type of information needed
- Amount of information needed
- Forms of transportation
- Hours spent at park
- Full-time residents of Hawaiian Islands
- Number of days non-residents stayed on Hawaiian Islands
- Full-time residents of Oahu
- Number of days non-residents stayed on Oahu.
- Primary reasons for visiting park
- Visit other NPS sites?
- Other NPS sites visited
- Other nearby attractions visited
- Personal group type
- Personal group size
- Participation in guided tour
- Age
- State/ country of residence
- Number of visits past 12 months
- Number of visits more than 1 year ago
- Education
- Primary language
- Use of visitor services
- Importance of visitor services
- Quality of visitor services
- Use of visitor facilities
- Importance of visitor facilities
- Quality of visitor facilities
- Total expenditures
- Travel expenditures
- Commercial tour expenditures
- Concession food expenditures
- Donations expenditures
- Other items expenditures
- Crowding of people ratings
- Time of day when crowded
- Rating of being hurried
- Bookstore sales items preferred
- Use of bookstore web site
- Type of information/ interpretive programs preferred
- Future subjects of interest
- Preferred ways to learn park history

Database

The VSP database is currently under development, but requests can be handled through Washington State University, by calling the VSP.

Phone/send requests to:

**Visitor Services Project, CPSU
College of Natural Resources
P.O. Box 441133
University of Idaho
Moscow, Idaho 83844-1133**

**Phone: 208-885-7863
FAX: 208-885-4261**

QUESTIONNAIRE

Visitor Services Project Publications

Reports 1-6 (pilot studies) are available from the University of Idaho Cooperative Park Studies Unit. All other VSP reports listed are available from the parks where the studies were conducted or from the UI CPSU. 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 NHP
9. Valley Forge NHP

1987

10. Colonial NHP (summer & fall)
11. Grand Teton National Park
12. Harpers Ferry NHP
13. Mesa Verde National Park
14. Shenandoah National Park
15. Yellowstone National Park
16. Independence NHP: 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 (summer)
24. Lincoln Home National Historical Site
25. Yellowstone National Park
26. Delaware Water Gap Nat'l Recreation Area
27. Muir Woods National Monument

1990

28. Canyonlands National Park (spring)
29. White Sands National Monument
30. National Monuments, 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 NHP (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 NHP (AK)
53. Arlington House-The Robert E. Lee Memorial

1993

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

Visitor Services Project Publications (continued)

1994

- 64. Death Valley National Monument Backcountry (winter)
- 65. San Antonio Missions NHP (spring)
- 66. Anchorage Alaska Public Lands Information Center
- 67. Wolf Trap Farm Park for the Performing Arts
- 68. Nez Perce NHP
- 69. Edison National Historic Site
- 70. San Juan Island NHP
- 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 NHP
- 83. Dry Tortugas National Park

1996

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

1997

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

1998

- 101. Jean Lafitte NHP & Preserve (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 NHP (AK)
- 107. Whiskeytown National Recreation Area (summer)
- 108. Acadia National Park (summer)

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 & Preserve
- 116. Lassen Volcanic National Park
- 117. Cumberland Gap NHP (fall)

2000

- 118. Haleakala National Park
- 119. White House Tour & White House Visitor Center
- 120. USS Arizona Memorial
- 121. Olympic National Park

For more information about the Visitor Services Project, please contact the University of Idaho Cooperative Park Studies Unit; phone (208) 885-7863.
