

National Park Service U.S. Department of the Interior

The Visitor Services Project

Colonial National Historical Park—Jamestown Island

Visitor Study

Summer 2001

Todd Simmons

Margaret Littlejohn

Visitor Services Project Report 126

March 2002

Todd Simmons is a VSP Research Aide based at the Cooperative Park Studies Unit, University of Idaho. Margaret Littlejohn is VSP coordinator, National Park Service, based at the Cooperative Park Studies Unit, University of Idaho. We thank the staff and volunteers of Colonial National Historical Park—Jamestown Island 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 Colonial National Historical Park—Jamestown Island Report Summary

- This report describes the results of a visitor study at Colonial National Historical Park (NHP)—Jamestown Island during June 24-30, 2001. A total of 600 questionnaires were distributed to visitors. Visitors returned 475 questionnaires for a 79.2% response rate.
- This report profiles Colonial NHP—Jamestown Island visitors. A separate appendix contains visitors' comments about their visit. This report and the appendix include summaries of those comments.
- Thirty percent of visitor groups were groups of two. Seventy-nine percent of the visitor groups were family groups. Thirty-two percent of visitors were aged 36-50.
- Three percent of all visitors were international: with 46% from England, 15% from Korea, and 12% from Northern Ireland. United States visitors were from Pennsylvania (10%), Virginia (9%), California (7%), and 37 other states, Washington, D.C., and Puerto Rico.
- Thirty-one percent of visitor groups had Bachelor's degrees, 25% had graduate degrees, 25% had some college education, and 3% had some high school education.
- On this visit, the most common activities were walking (96%), birdwatching (11%) and bicycling (3%).
- Travel guides/ tour books (46%), friends and relatives (32%), and previous visits (30%) were the most used sources of information by visitor groups.
- Most visitor groups (74%) were not aware of the difference between Jamestown Island and Jamestown Settlement. Fifty-one percent of visitor groups indicated that they did not visit Jamestown Settlement. Most visitor groups (76%) visited Colonial Williamsburg. Fifty-eight percent of visitor groups want tickets to be available for both Colonial Williamsburg and Jamestown Island at both locations.
- Concerning their reason for visiting Jamestown Island, most visitors (74%) were on vacation in the area, while 67% were visiting to learn about Jamestown history.
- In regard to the use, importance and quality of visitor services and facilities, it is important to note the number of visitor groups that responded to each question. The services that were most used by 418 respondents were the Jamestown brochure/ map (89%) and visitor center museum exhibits (67%). According to visitors, the most important services were park ranger tours (90% of 100 respondents) and the living history/ costumed presentations (88% of 114 respondents). The highest quality services were the living history/ costumed presentations (93% of 109 respondents) and the park ranger tours (89% of 92 respondents).
- Most visitor groups (76%) said that the \$6/ person entrance fee currently charged is "about right".
 Fifty-three percent of visitor groups indicated that they would be interested in attending special evening events at Jamestown Island.
- The average visitor group expenditure was \$702. The average per capita expenditure was \$208. The median visitor group expenditure (50% of group spent more, %50 spent less) was \$519. One percent of visitor groups spent no money and 22% spent \$1001 or more in total expenditures in Colonial NHP-Jamestown Island and within 1-hour of the park. Of the total expenditures by groups, 39% was for lodging and 24% was for restaurants and bars.
- Most visitor groups rated the overall quality of visitor services at Jamestown Island as "very good" or "good." No visitor groups rated the overall quality of visitor services as "very poor."

For more information about the Visitor Services Project, please contact the University of Idaho Cooperative Park Studies Unit; phone (208) 885-7129 or 885-7863.

TABLE OF CONTENTS

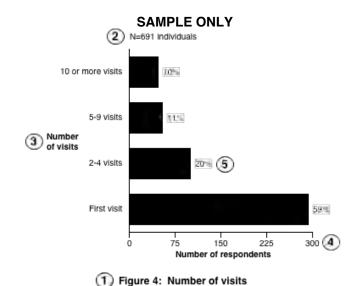
	Page
INTRODUCTION	1
METHODS	2
RESULTS	5
Visitors contacted	5
Demographics	5
Length of stay	14
Activities	17
Sources of information	19
Visiting Jamestown Island and Jamestown Settlement	20
Visiting Colonial Williamsburg	23
Other sites visited in Jamestown Area	25
Reasons for visiting	27
Forms of transportation used/ Routes used	28
Sites visited	31
Overnight accommodations; locations	33
Information services: use, importance, and quality	39
Services and facilities: use, importance, and quality	58
Opinions about current entrance fee	68
Interest in attending future evening programs	69
Total expenditures	70
Expenditures inside park	73
Expenditures outside park	77
Interest in using future public transportation	83
Overall quality of visitor services	86
Planning for the future	87
Comment summary	89
ADDITIONAL ANALYSIS	91
QUESTIONNAIRE	93
VISITOR SERVICES PROJECT PUBLICATIONS	95

INTRODUCTION

This report describes the results of a study of visitors at Colonial National Historical Park (NHP)—Jamestown Island. This visitor study was conducted June 24-30, 2001 by the National Park Service (NPS) Visitor Services Project (VSP), part of the Cooperative Park Studies Unit at the University of Idaho.

The report is divided into four sections. The *Methods* section discusses the procedures and limitations of the study. The *Results* section provides summary information for each question in the questionnaire and includes a summary of visitor comments. An *Additional Analysis* section is included which will help managers request additional analyses. The final section includes a copy of the *Questionnaire*. 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.



- 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 is included at the end of this report.

Interviews were conducted with, and questionnaires were distributed to, a sample of visitors who arrived at Colonial NHP—Jamestown Island during the period from June 24-30, 2001, from 8:30 am to 5:30 pm daily. Interviews were conducted in English. Visitors were sampled at two locations (see Table 1).

Table 1: Questionnaire distribution locations

Location: Questionnaires distributed

Number %

Visitor Center parking lot 577 96

Glass-house parking lot 23 4

GRAND TOTAL 600 100

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. These individuals were then given a questionnaire and asked their names, addresses and telephone numbers in order to mail them a reminder/thank you postcard. Visitor groups were asked to complete the questionnaire during or after their visit and 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 survey. Seven weeks after the survey, second replacement questionnaires were mailed to visitors who still had not returned their questionnaires.

Data analysis

Returned questionnaires were coded and the information was entered into a computer using a standard statistical software package—Statistical Analysis System (SAS). 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 454 visitor groups, Figure 4 presents data for 1,623 individuals. A note above each graph specifies the information illustrated.

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, although 475 questionnaires were returned by Colonial NHP—Jamestown Island visitors, Figure 1 shows data for only 454 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.

Sample size, missing data and reporting errors

Limitations

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

- 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 visit the park.
- The data reflect visitor use patterns of visitors to the selected sites during the study period of June 24-30, 2001. 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.

Special conditions

Weather conditions during the visitor study were fairly typical of June in the Jamestown area, with hot, sunny days. The humidity level was quite high on a number of days.

The Loop Drive was closed due to repairs during the survey period. Some visitors made comments concerning their use of the Loop Drive. This may be due to misunderstanding of the questions concerning the Loop Drive, or the actual route that makes up the Loop Drive.

RESULTS

At Jamestown Island, 648 visitor groups were contacted, and 600 of these groups (93%) accepted questionnaires. Questionnaires were completed and returned by 475 visitor groups, resulting in a 79.2% response rate for this study.

Visitors contacted

Table 1 compares age and group size information collected from the total sample of visitors contacted with that from 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 2: Comparison of total sample and actual respondents

Variable	Total sample		Actual respondents	
	N	Avg.	N	Avg.
Age of respondents	600	45.2	455	47.0
Group size	600	3.6	454	4.0

Figure 1 shows visitor group sizes, which ranged from one person to 45 people. Thirty percent of visitor groups consisted of two people, while another 28% consisted of four people. Seventy-nine percent of visitor groups were made up of family members, 7% were made up of friends, and 6% were made up of family and friends (see Figure 2). Groups listing themselves as "other" for group type included colleagues and school groups. Most visitor groups (94%) were not with a commercial guided tour (see Figure 3).

Visitors were asked to indicate the level of education that each group member had achieved. Thirty-one percent had Bachelor's degrees, 25% had graduate degrees, and 25% had some college. Three percent had some high school education (see Figure 5).

Most visitors (96%) identified themselves as not Hispanic or Latino concerning ethnic background (see Figure 6). Most visitors (95%) identified their racial background as White (see Figure 7).

Demographics

Demographics continued

Three percent of visitors identified themselves as American Indian or Alaska Native and smaller percentages reported other racial backgrounds.

Most respondents (84%) said no group members had disabilities or impairments. Of those with disabilities or impairments, 57% indicated mobility problems, 17% indicated hearing problems, and 8% indicated visual problems (see Figure 8). "Other" disabilities or impairments included epilepsy, balance disabilities, and diabetes. Of those who listed disabilities or impairments, 24% encountered access/ service problems (see Figure 9). Those access/ service problems included: the distance from the parking lot to the visitor center, the path surfaces were difficult to walk on, and the theater movie was not close captioned (the movies presented in the theater are open captioned, so the visitor comment should be treated with caution).

Visitors were asked to list the number of visits they had made to the park including this visit during the past 12 months and from two to five years ago. Ninety-four percent of visitors indicated they had visited only once in the past 12 months, while slightly more than 6% said they had visited more than once (see Figure 10). During the past two to five years, 18% had visited once, and 11% had visited between two and four times (see Figure 11).

International visitors to Jamestown Island comprised three percent of the total visitation and the countries most often represented were England (46%), Korea (15%) and Northern Ireland (12%) (see Table 3). The largest proportions of United States visitors were from Pennsylvania (10%), Virginia (9%), and California (7%). Smaller proportions of U.S. visitors came from another thirty-seven states, Washington, D.C., and Puerto Rico (see Map 1 and Table 4).

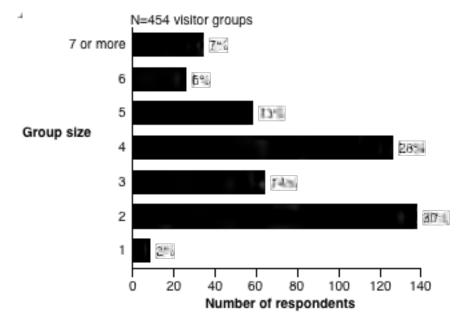


Figure 1: Visitor group sizes

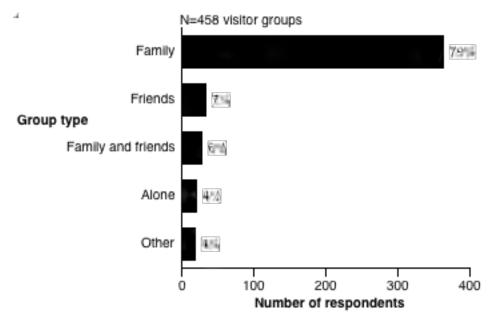


Figure 2: Visitor group types

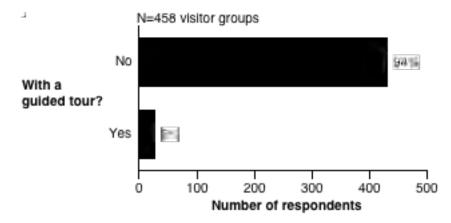


Figure 3: Participation with a guided tour

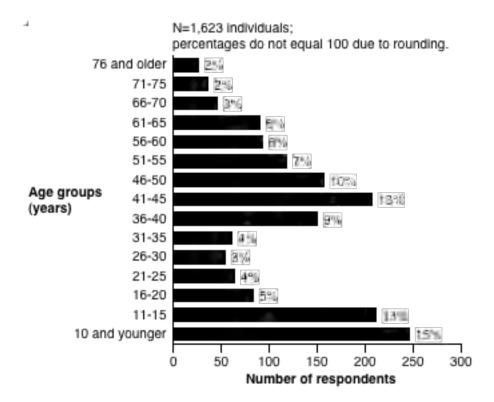


Figure 4: Visitor ages

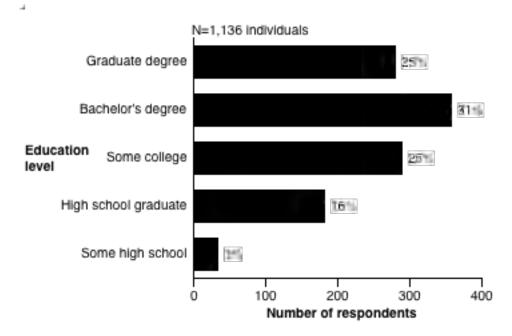


Figure 5: Education level

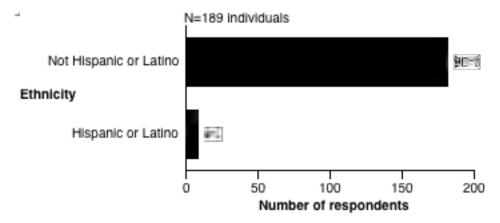


Figure 6: Ethnicity

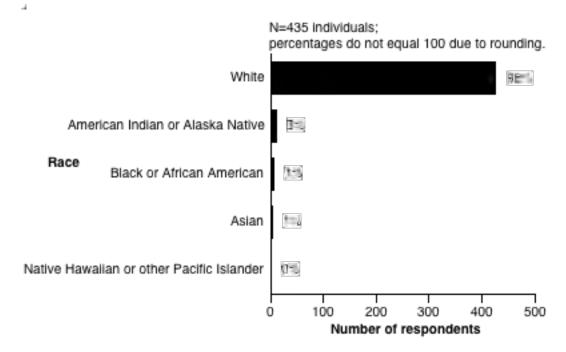


Figure 7: Race

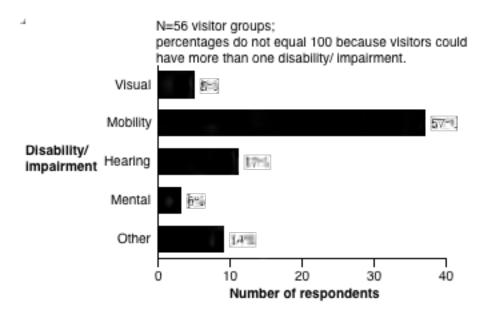


Figure 8: Visitor disabilities or impairment

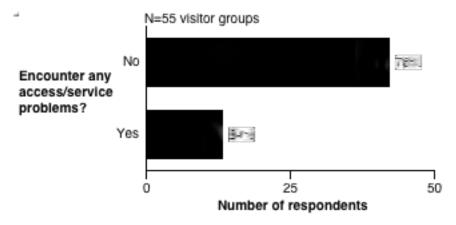


Figure 9: Visitor access/ service problems in park for visitors with disabilities or impairments

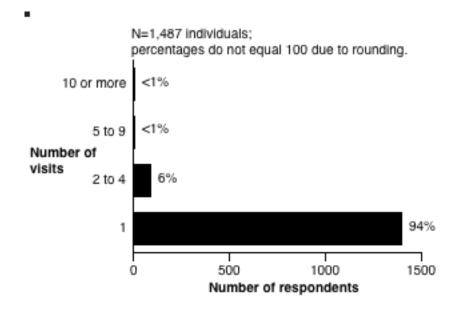


Figure 10: Number of visits during past 12 months

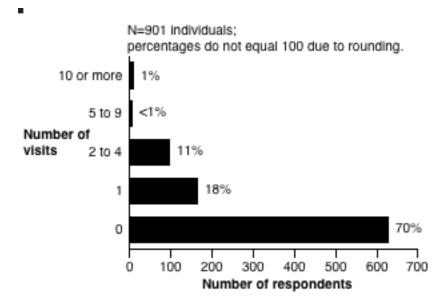
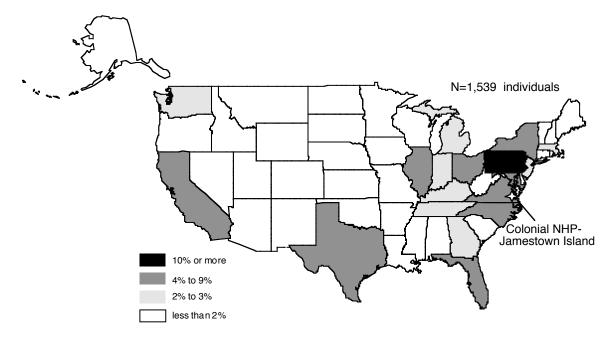


Figure 11: Number of visits during past 2-5 years

Table 3: International visitors by country of residenceN=41 individuals;
percentages do not equal 100 due to rounding.

Country	Number of individuals	Percent of Int'l visitors	Percent of total visitors
England	19	46	3
Korea	6	15	1
Northern Ireland	5	12	1
Zimbabwe	3	7	<1
Canada	2	5	<1
Japan	2	5	<1
Australia	1	2	<1
Costa Rica	1	2	<1
Denmark	1	2	<1
Germany	1	2	<1



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

Table 4: United States visitors by state of residence N=1,539 individuals; percentages do not equal 100 due to rounding.

Percent of Number of Percent of State individuals U.S. visitors total visitors Pennsylvania 7 Virginia California North Carolina Florida Ohio Texas Illinois Maryland New York Washington Michigan Massachusetts 2 2 2 2 **New Jersey** Georgia Tennessee Indiana Kentucky Wisconsin Louisiana Missouri 19 other states, Washington D.C., and Puerto Rico

Length of stay

Visitor groups were asked how much time they spent at Jamestown Island. Forty-three percent of visitor groups spent two hours visiting the park, 26% spent three hours, and 15% spent one hour (see Figure 12).

Most visitors (94%) did not visit Jamestown Island on more than one day. Of the 65 of visitor groups who did visit Jamestown Island on more than one day, 92% spent two days, although this question was not answered by enough visitors to provide reliable information (see Figure 13).

Visitor groups were also asked to indicate the number of days they spent in the Jamestown Island/ Colonial Williamsburg/ Yorktown area. Most visitor groups (61%) spent between one and three days in the area (see Figure 14).

Concerning the time planned versus the actual time spent in the area, 64% of visitor groups spent about the amount of time they had planned, and 23% spent more time than they had planned (see Figure 15).

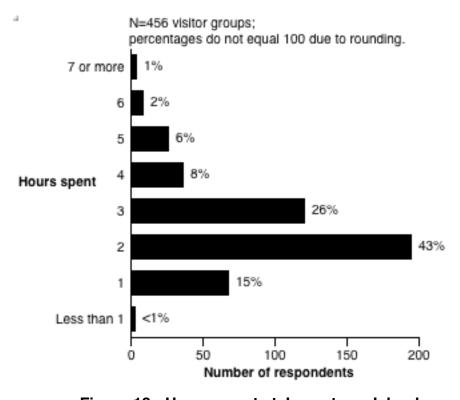


Figure 12: Hours spent at Jamestown Island

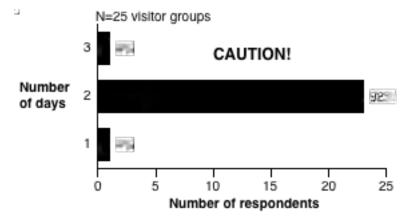


Figure 13: Days spent at Jamestown Island by visitors spending more than one day

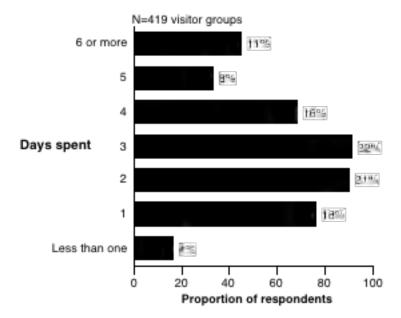


Figure 14: Days spent in Jamestown Island/Colonial Williamsburg/Yorktown area

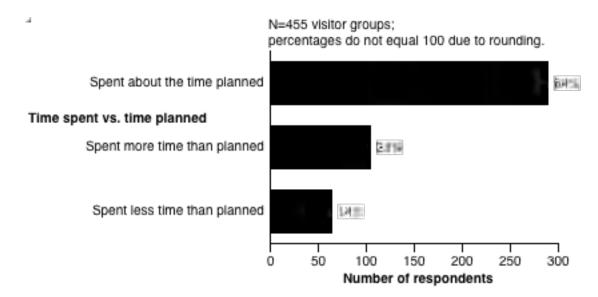


Figure 15: Time spent versus time planned for visit

Figure 16 shows the proportions of visitor groups that participated in a variety of activities at Jamestown Island. The most common activities were walking (96%), birdwatching (11%), and bicycling (3%). Visitor groups were also asked to estimate the number of times they had done the specified activities in the past twelve months, including this visit (see Table 4). "Other" activities that visitors participated in were studying history and photography.

Activities

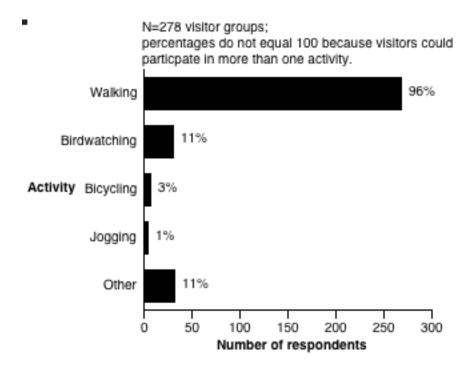


Figure 16: Visitor activities

Table 4: Estimated number of times activities were done in past 12 months

N=number of visitor groups who participated in each activity; percentages do not equal 100 because visitors could participate in more than one activity.

Activity	Number of times/ %							
	1-20	%	21-40	%	41-60	%	61 or more	%
Bicycling N=5	5	100	0	0	0	0	0	0
Birdwatching N=27	25	93	0	0	0	0	2	7
Walking N=234	222	95	3	1	4	2	5	2
Jogging N=3	3	100	0	0	0	0	0	0
Other N=24	23	96	0	0	1	4	0	0

Visitor groups were asked to indicate the sources from which they had received information about Colonial National Historical Park-Jamestown Island prior to their visit. Forty-six percent of visitor groups received information from travel guides/ tour books, 32% from friends or relatives, and 30% from previous visits. Twelve percent of visitor groups received no information prior to their visit. Eleven percent of visitor groups received information from "other" sources, including books, hotel information, and school.

Sources of information

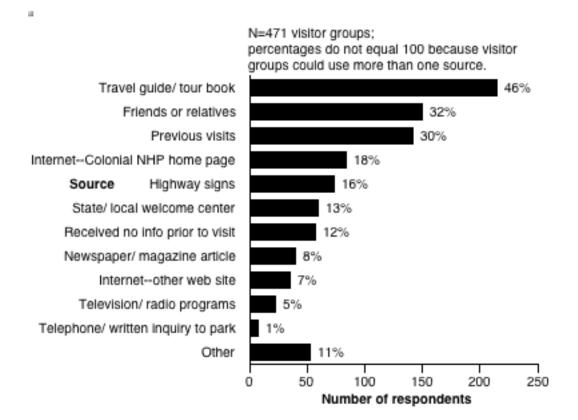


Figure 17: Sources of information used by visitors

Visiting Jamestown Island and Jamestown Settlement

Visitor groups were asked if, prior to their visit, they understood the difference between the Jamestown Island unit of the National Park System and Jamestown Settlement (operated by the Commonwealth of Virginia). Most visitor groups (74%) were not aware of the difference, 22% indicated they were aware of the difference, and 3% were not sure (see Figure 18).

Fifty-one percent of visitor groups indicated that they did not visit Jamestown Settlement. Their reasons for not visiting Jamestown Settlement are listed in Table 5. Forty-nine percent of visitor groups indicated that they had visited Jamestown Settlement (see Figure 19). Fifty-eight percent of visitor groups visited Jamestown Island before Jamestown Settlement, and 42% visited Jamestown Island after Jamestown Settlement (see Figure 20).

As shown in Figure 21, 47% of visitor groups preferred to visit Jamestown Island first, 28% preferred to visit Jamestown Settlement first, and 26% were not sure. Seventy-one percent of visitors groups indicated that tickets should be available for both Jamestown Island and Jamestown Settlement at both locations.

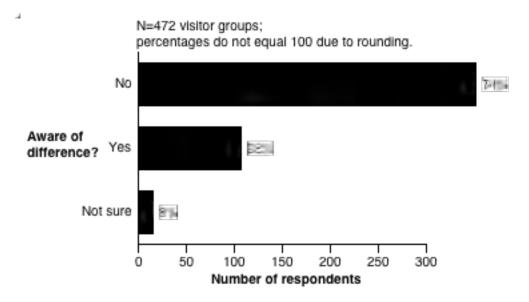


Figure 18: Visitor awareness of difference between Jamestown Island and Jamestown Settlement

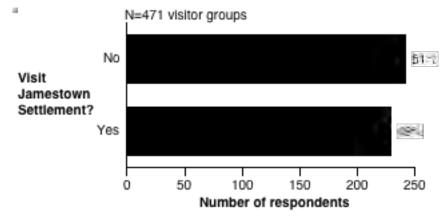


Figure 19: Visits to Jamestown Settlement on this visit

Table 5:	Visitors'	reasons	for not	visiting	Jamestown
Settlement					

N=246 comments	
Reason	Number of times mentioned
Not enough time	112
Cost	42
Have seen it before	19
Wanted to see actual site	17
Too hot	10
Not interested	9
Didn't know about it	8
Too commercialized	6
On planned tour	3
Too theatrical	3
Closed	2
Seeing similar things	2
Other comments	13

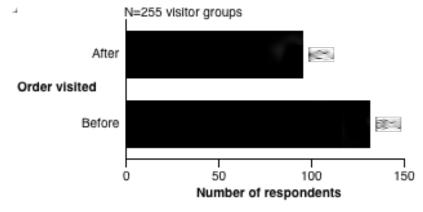


Figure 20: Visits to Jamestown Island before or after Jamestown Settlement

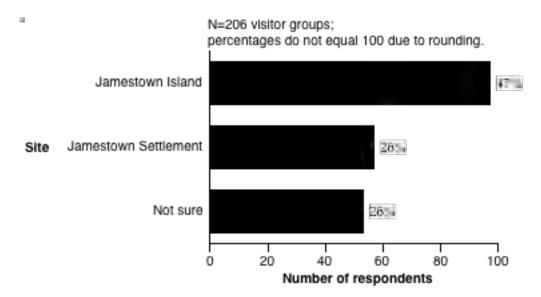


Figure 21: Preferred order to visit Jamestown Island and Jamestown Settlement

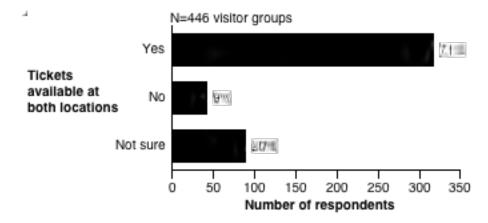


Figure 22: Preferences about selling tickets to Jamestown Island and Jamestown Settlement at both locations

Visiting Colonial Williamsburg

Visitor groups were asked a series of questions concerning Colonial Williamsburg. Most visitor groups (76%) visited Colonial Williamsburg on this visit (see Figure 23). Twenty-four percent of visitor groups did not visit Colonial Williamsburg. Their reasons for not visiting Colonial Williamsburg are listed in Table 6. Sixty-five percent of visitor groups visited Colonial Williamsburg before Jamestown Island, and 42% visited Colonial Williamsburg after Jamestown Island (see Figure 24).

Forty-three percent of visitor groups preferred to visit

Jamestown Island first, 28% preferred to visit Colonial Williamsburg first,
and 29% were not sure (see Figure 25). Over one-half of visitors
groups (58%) said tickets should be available for both Colonial

Williamsburg and Jamestown Island at both locations (see Figure 26).

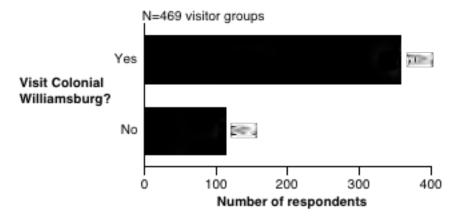


Figure 23: Visit Colonial Williamsburg

Table 6: Visitors' reasons for not visiting Colonial Williamsburg N=100 comments Number of Reason times mentioned Not enough time 40 Have seen it before 25 Cost 17 Not interested 5 Too hot 3 Not planned 2 Other comments 8

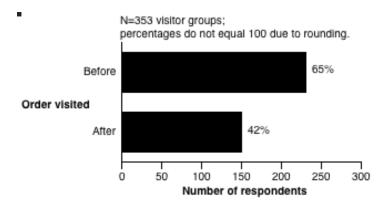


Figure 24: Visit Colonial Williamsburg before or after Jamestown Island

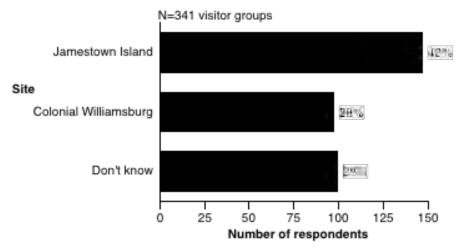


Figure 25: Preferred order to visit Jamestown Island and Colonial Williamsburg

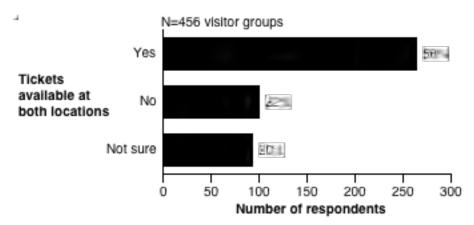


Figure 26: Preferences about selling tickets to Jamestown Island and Colonial Williamsburg at both locations

Visitor groups were asked to indicate other sites they visited in the Jamestown area. Most visitor groups (76%) visited Colonial Williamsburg, 74% visited Jamestown Settlement, and 43% visited Yorktown (see Figure 27). Visitor groups were also asked to indicate the order in which they visited the other sites. Forty-six percent of visitor groups visited Colonial Williamsburg first, 17% visited Jamestown Settlement first, and 8% visited Busch Gardens first (see Figure 28).

Other sites visited in Jamestown area

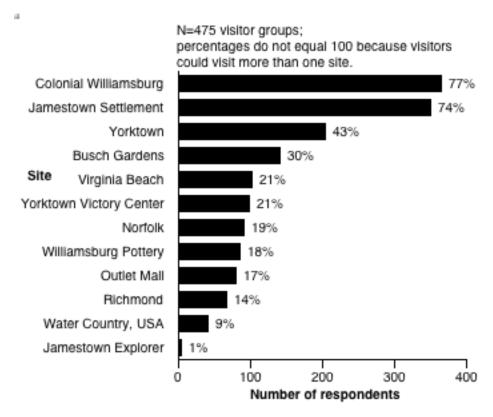


Figure 27: Other sites visited in Jamestown area

N=432 visitor groups; percentages do not equal 100 due to rounding. 46% Colonial Williamsburg 17% Jamestown Settlement 8% Busch Gardens 8% Yorktown 5% Richmond Site 5% Virginia Beach Norfolk 3% Williamsburg Pottery 2% Outlet Mall Yorktown Victory Center <1% Water Country, USA 0% Jamestown Explorer 50 0 100 150 200

Figure 28: Order of other sites visited first in Jamestown area

Number of respondents

Visitor groups were asked their reasons for visiting Jamestown Island. Most visitors (74%) were on vacation in the area, while 67% were visiting to learn about Jamestown history (see Figure 29). "Other" reasons for visiting were: observing the archaeological dig's progress, having an interest in history, and gathering information for lesson plans.

Reasons for visiting

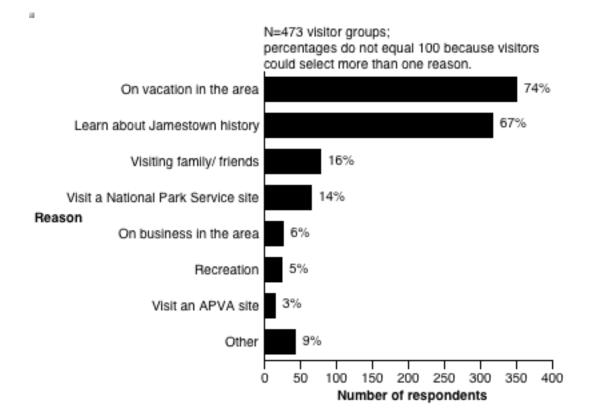


Figure 29: Reasons for visiting Jamestown Island

Forms of transportation used/ Routes used

Visitor groups were asked to indicate the forms of transportation that they had used to arrive at the Jamestown Island/ Colonial Williamsburg/ Yorktown area. As shown in Figure 30, the most commonly used forms of transportation were private vehicles (76%), rental vehicles (18%), buses (6%) and ferries (4%). Other forms of transportation used by visitors included motorcycles and motorhomes.

Most visitor groups (83%) had the use of a private or rental vehicle in the Colonial Williamsburg area (see Figure 31).

Visitor groups were asked to indicate the forms transportation that they had used to leave the Jamestown Island/ Colonial Williamsburg/ Yorktown area. As shown in Figure 32, the most commonly used forms of transportation were private vehicles (76%), rental vehicles (18%), buses (6%) and ferries (4%). Other forms of transportation used by visitors included a motorcoach and motorcycles.

Visitor groups were also asked to indicate the routes that they had used to arrive at Jamestown Island. As shown in Figure 33, 83% of visitor groups used the Colonial Parkway, 28% used Jamestown Road/ Route 31, and 4% used the ferry.

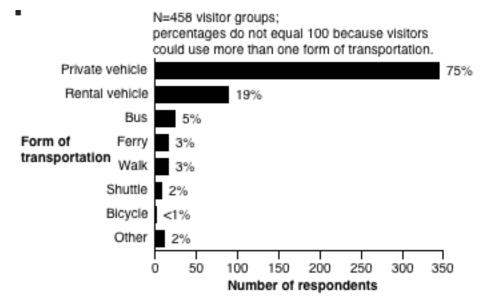


Figure 30: Transportation used to arrive at Jamestown Island/Colonial Williamsburg/Yorktown area

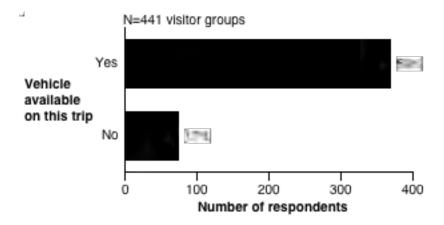


Figure 31: Private or rental vehicle available to use in Colonial Williamsburg area

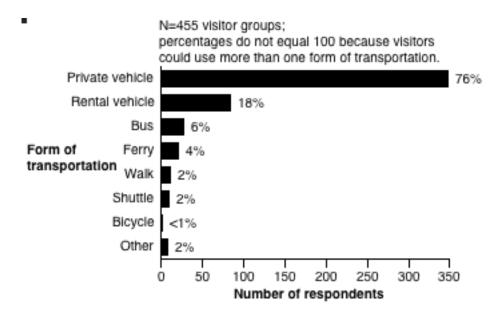


Figure 32: Transportation used to leave Jamestown Island/Colonial Williamsburg/Yorktown area

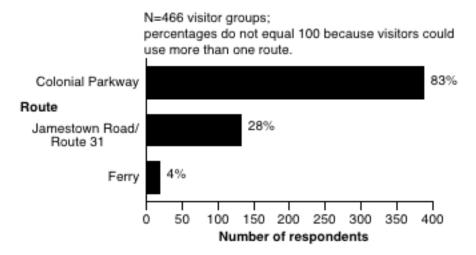


Figure 33: Routes used to arrive at Jamestown Island

Visitor groups were asked to indicate the sites they had visited at Jamestown Island and the order in which they had visited them. As shown in Figure 34, the most commonly visited sites were Jamestown Visitor Center (92%), Archaeological Excavation Site 88%) and the Church (88%). The least visited site was the Loop Drive (22%); the Loop Drive was not open during the survey.

Figure 35 shows the proportion of visitor groups who visited each site first during their visit to the park. The sites most often visited first included Jamestown Visitor Center (71%), Jamestown Glasshouse (21%), and the Archaeological Excavation Site (2%). The site visited by the least number of visitor groups first was the Dale House Archaeological Laboratory (1%).

Sites visited

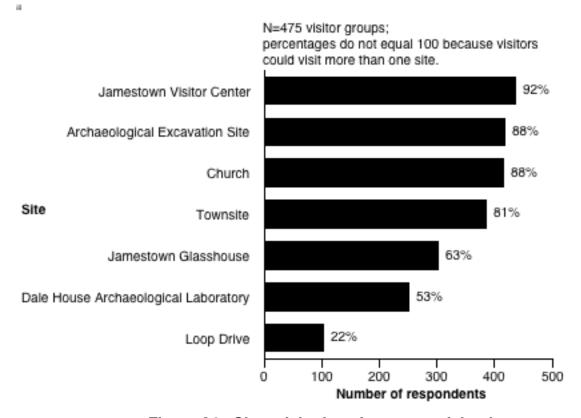


Figure 34: Sites visited on Jamestown Island

N=447 visitor groups; percentages do not equal 100 due to rounding. 71% Jamestown Visitor Center 21% Jamestown Glasshouse 2% Archaeological Excavation Site Site Loop Drive 2% 2% Townsite 2% Church Dale House Archaeological Laboratory 1% Ó 50 100 150 200 250 300 350 Number of respondents

Figure 35: Sites visited first on Jamestown Island

Visitor groups were asked a series of questions about their use of lodging within a 1-hour drive of Jamestown Island. Figure 36 shows that 81% of visitor groups spent the night away from home within a 1-hour drive of Jamestown Island. Nineteen percent of visitors did not spend the night away from home while on their visit.

Overnight accommodations; locations

Those visitors that did spend the night away from home were then asked to provide the number of nights spent in the Jamestown Island area. Sixty-two percent of visitor groups spent between 2 and 4 nights within a 1-hour drive of Jamestown Island, and 10% spent 7 or more nights in that area (see Figure 37). Figure 38 shows the proportions of types of lodging used within a 1-hour drive of Jamestown Island area including lodge, motel, cabin, etc. (86%); campground/trailer park (6%); and residence of friends or relatives (6%). Other types of lodging used by visitor groups included Boy Scout camp and the Naval Air Station in Ocean, VA.

Visitors were asked where they spent the night prior to arriving at Jamestown Island and also where they spent the night after leaving the park. Table 7 shows the number of visitor groups who stayed in each town/ city prior to arriving at Jamestown Island. Table 8 shows the number of visitor groups who stayed in each town/ city after leaving the park. Williamsburg, Virginia was the most listed city in both tables.

Visitor groups were asked to indicate the number of times they entered Jamestown Island during their visit. Ninety percent of visitor groups entered one time, 9% entered twice, and 1% entered three times (see Figure 39).

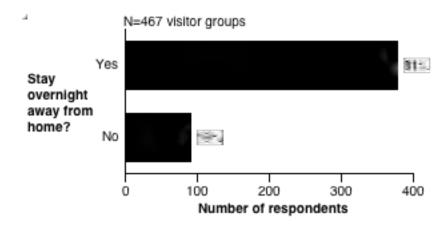


Figure 36: Stay overnight away from home on this visit

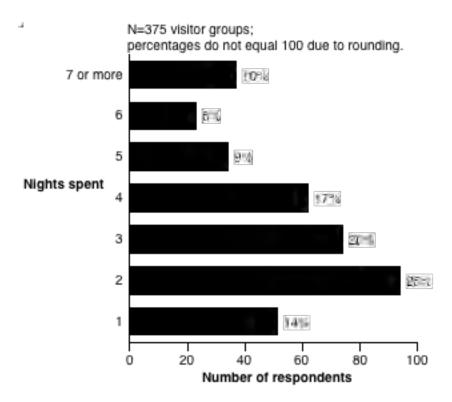


Figure 37: Number of nights spent within a 1-hour drive of Jamestown Island

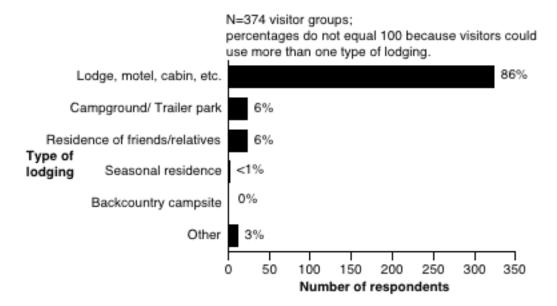


Figure 38: Type of lodging used within a 1-hour drive of Jamestown Island

Table 7: Locations where visitors spent the night prior to arrival at park
N=454 places

	Number of
Comments	times mentioned
Williamsburg, VA	214
Richmond, VA	21
Norfolk, VA	15
Newport News, VA	15
Washington, D.C.	15
Virginia Beach, VA	14
Fredericksburg, VA	7
Yorktown, VA	7
Alexandria, VA	5
Hampton, VA	5
Suffolk,VA	4
Charlotte, NC	
Charlottesville, VA	3 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2
Chincoteague, VA	3
Petersburg, VA	3
Raleigh, NC	3
Winchester, VA	3
Chesapeake, VA	2
Gettysburg, PA	2
Jamestown, VA	2
Lancaster, PA	2
Nags Head, NC	2
Pittsburgh, PA	2
Waynesboro, VA	2
Kentucky	2
Virginia	
Other places	97

Table 8: Locations where visitors spent the night after their park visit

N=438 places

Comments	Number of times mentioned
Williamsburg, VA	160
Virginia Beach, VA	26
Richmond, VA	25
Newport News, VA	15
Washington, D.C.	15
Norfolk, VA ´	11
Yorktown, VA	6
Charlottesville, NC	5
Alexandria, VA	4
Baltimore, MD	4
Fredericksburg, VA	4
Gettysburg, PA	4
Suffolk, VA	4
Annapolis, MD	3
Jamestown Beach Campsites, VA	3 3 2 2 2 2 2 2 2 2 2 2 2 2 2
Staunton, VA	3
Arlington, VA	2
Asheville, NC	2
Chesapeake, VA	2
Hampton, VA	2
Lancaster, OH	2
Lightfoot, VA	2
Manassas, VA	2
Nags Head, NC	2
New Carrollton, MD	2
Rocky Mount, NC	2
Shenandoah NP, VA	2
Waynesboro, VA	2
North Carolina	2
Other places	120

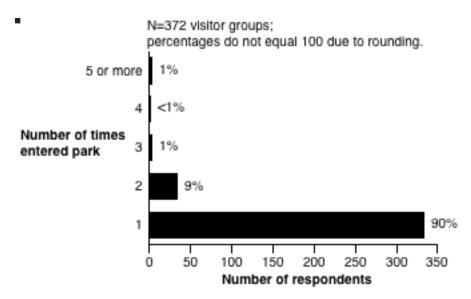


Figure 39: Number of times visitors entered Jamestown Island

Visitor groups were asked to note the park services and facilities they used during their visit to Jamestown Island. As is shown by Figure 40, the services and facilities that were most commonly used by visitor groups were the Jamestown brochure/ map (89%), visitor center museum exhibits (63%), visitor orientation film (60%) and the Glasshouse demonstration (57%). The least used service or facility was the Walking Tour audio tape (3%).

Information services: use, importance and quality

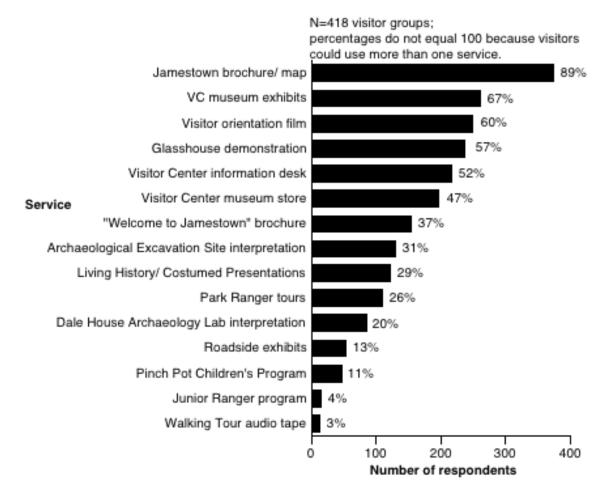


Figure 40: Services and facilities used

Visitor groups rated the importance and quality of each of the 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

Figure 41 shows the average importance and quality ratings for visitor services and facilities. An average score was determined for each service based on ratings provided by visitors who used that service. This was done for both importance and quality, and the results are plotted on the grid shown in Figure 42. All services were rated as above "average" both in importance and quality. It should be noted that the Junior Ranger program and the Walking Tour audio tape were not rated by enough people to provide reliable data.

Figures 43-57 show the importance ratings that were provided by visitor groups for each of the individual services. Those services receiving the highest proportion of "extremely important" or "very important" ratings included park ranger tours (90%), living history/ costumed presentations (88%) and the Jamestown brochure/ map (83%). The highest proportions of "not important" ratings were for the Glasshouse demonstration (4%) and the visitor center museum store (4%).

Figures 58-72 show the quality ratings that were provided by visitor groups for each of the individual services. Those services receiving the highest proportion of "very good" or "good" ratings included the living history/ costumed presentations (93%), the park ranger tours (89%) and the Jamestown brochure/ map (85%). The highest proportion of "very poor" ratings was for the Glasshouse demonstration (2%).

Figure 73 combines the "very good" and "good" quality ratings and compares those ratings for all of the services.

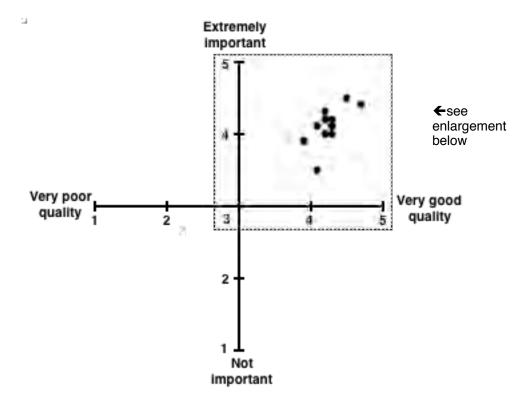


Figure 41: Average ratings of service importance and quality

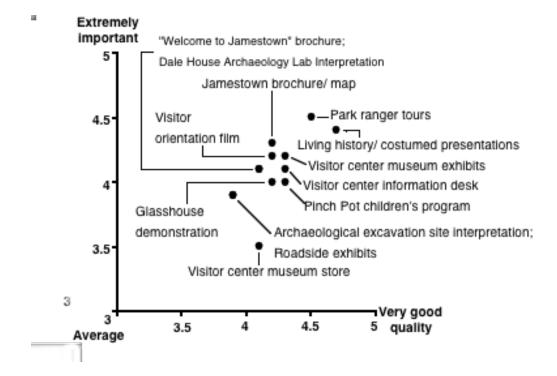


Figure 42: Detail

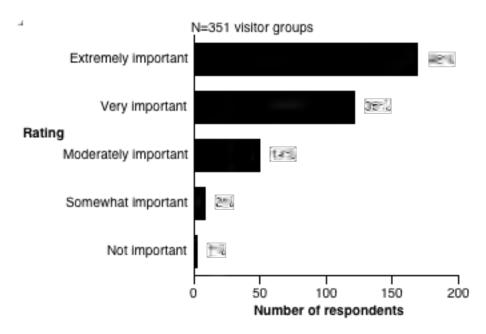


Figure 43: Importance of park brochure/map (National Park Service)

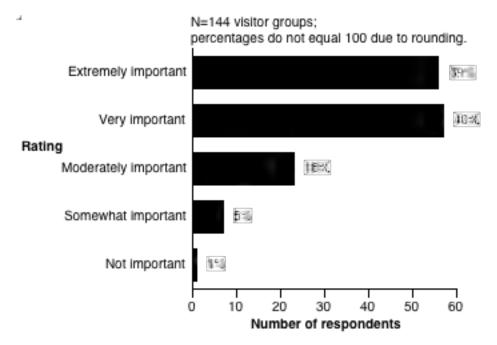


Figure 44: Importance of "Welcome to Jamestown" brochure (Association for the Preservation of Virginia Antiquities and National Park Service)

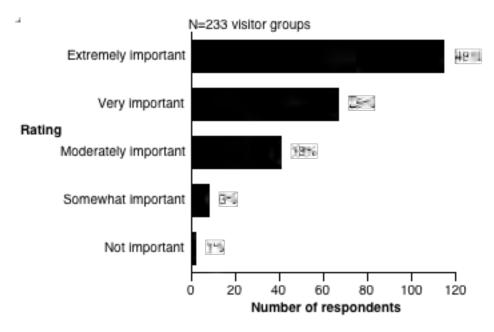


Figure 45: Importance of visitor orientation film

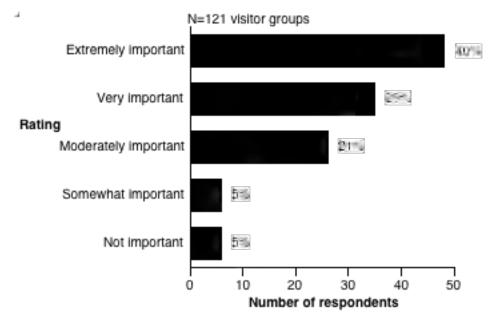


Figure 46: Importance of archaeological excavation site interpretation (APVA guides/docents)

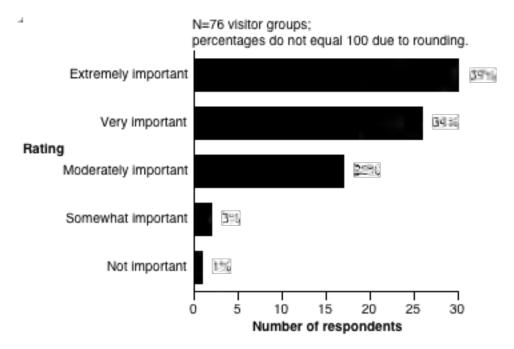


Figure 47: Importance of Dale House Archaeology Lab interpretation

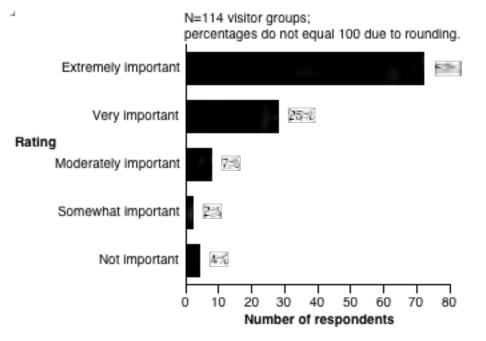


Figure 48: Importance of living history/costumed presentations (talks, tours)

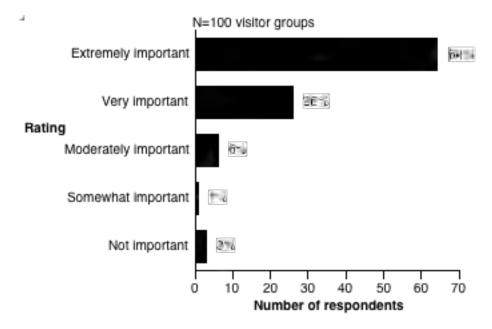


Figure 49: Importance of park ranger tours (other than living history programs)

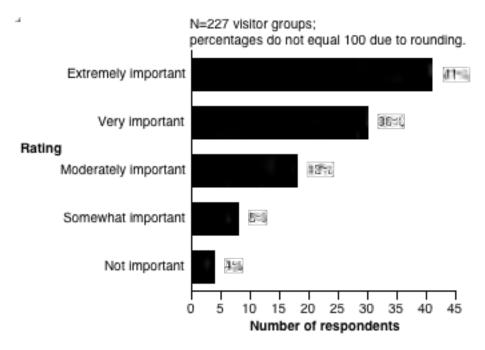


Figure 50: Importance of Glasshouse demonstration

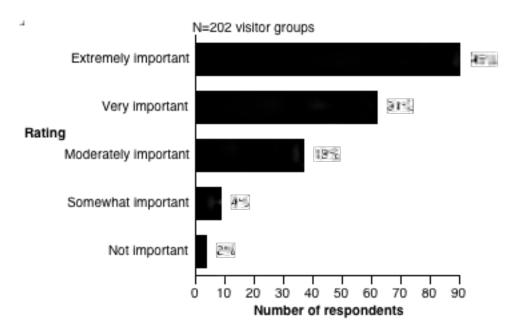


Figure 51: Importance of visitor center information desk

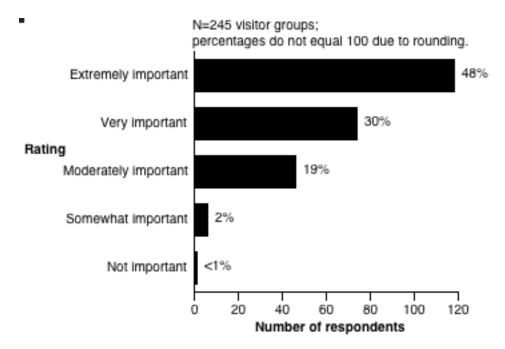


Figure 52: Importance of visitor center museum exhibits

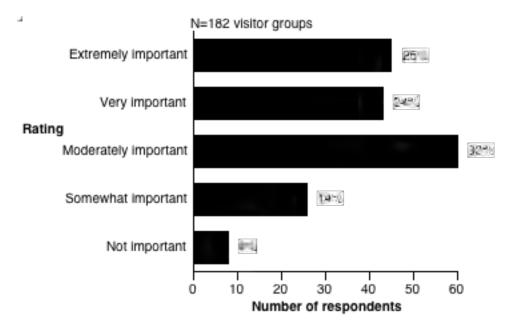


Figure 53: Importance of visitor center museum store/sales items

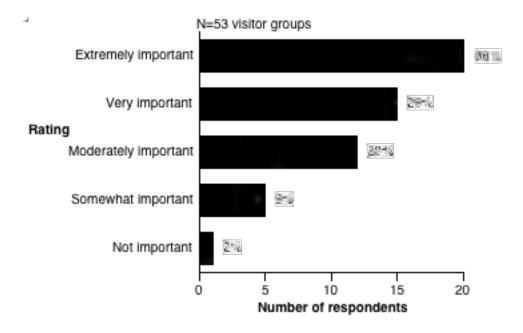


Figure 54: Importance of roadside exhibits

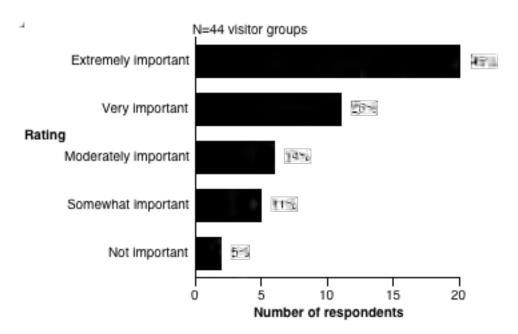


Figure 55: Importance of Pinch Pot children's program

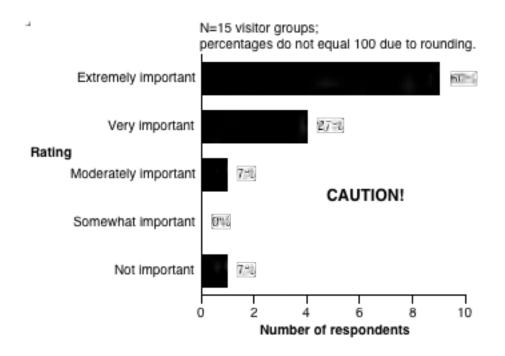


Figure 56: Importance of Junior Ranger program

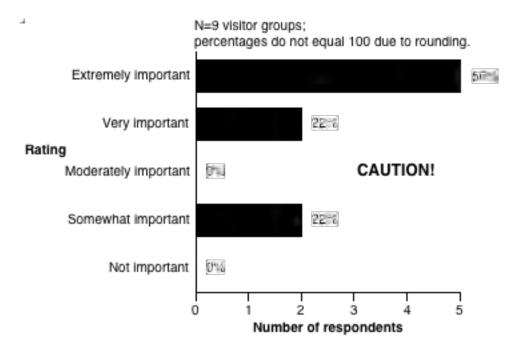


Figure 57: Importance of walking tour audio tape

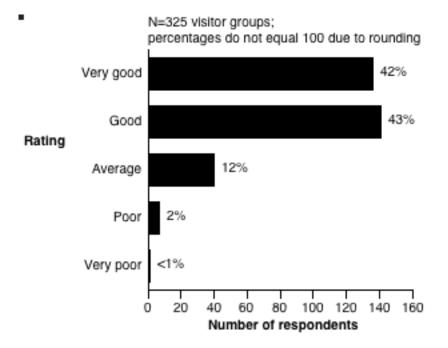


Figure 58: Quality of park brochure/ map (National Park Service)

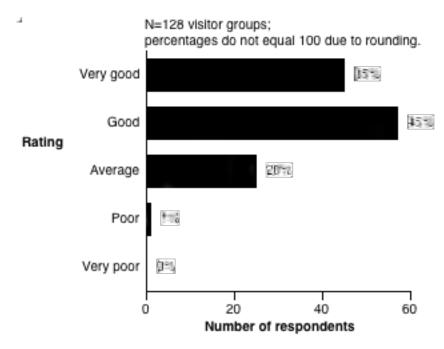


Figure 59: Quality of "Welcome to Jamestown" brochure (Association for the Preservation of Virginia Antiquities)

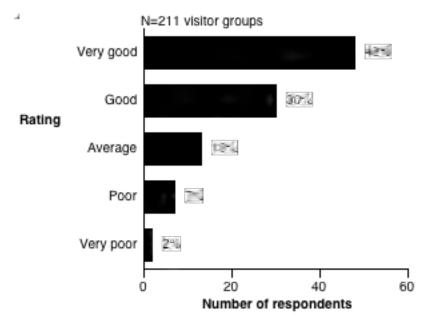


Figure 60: Quality of visitor orientation film

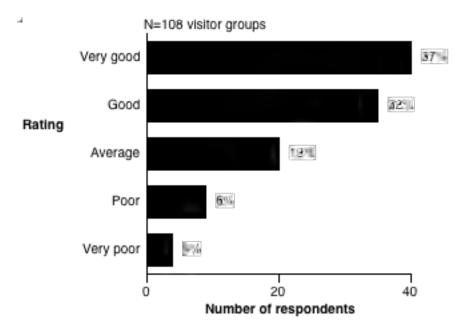


Figure 61: Quality of archaeological excavation site interpretation (APVA guides/docents)

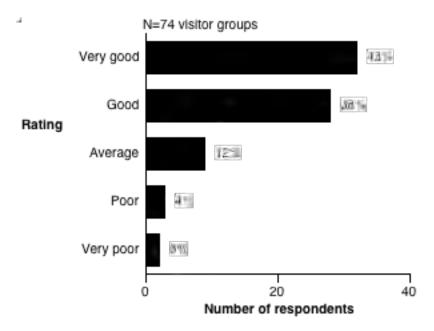


Figure 62: Quality of Dale House Archeology Lab interpretation (exhibit/APVA guides/docents)

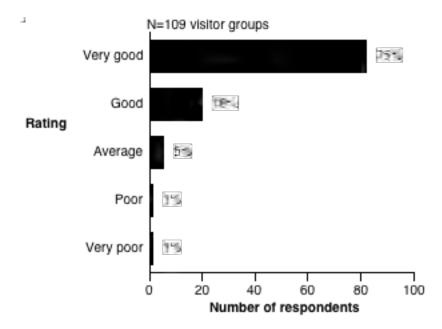


Figure 63: Quality of living history/ costumed presentations (talks, tours)

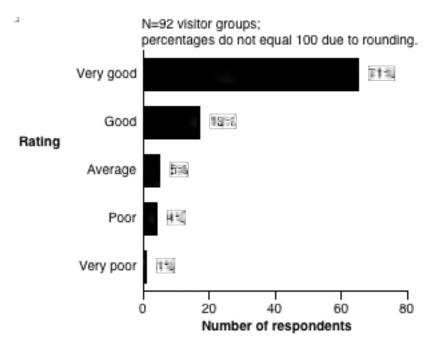


Figure 64: Quality of park ranger tours (other than living history programs)

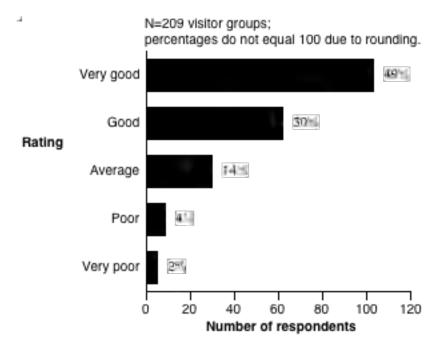


Figure 65: Quality of Glasshouse demonstration

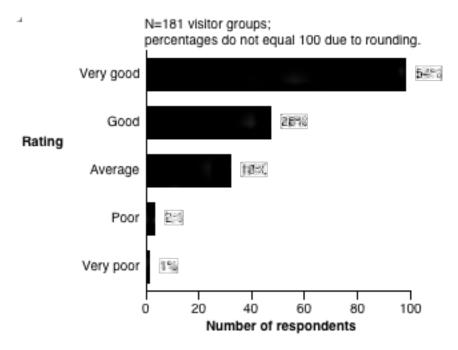


Figure 66: Quality of visitor center information desk

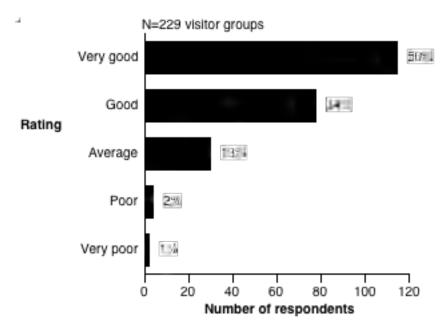


Figure 67: Quality of visitor center museum exhibits

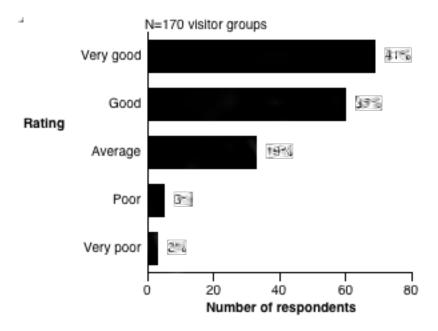


Figure 68: Quality of visitor center museum store/sales items

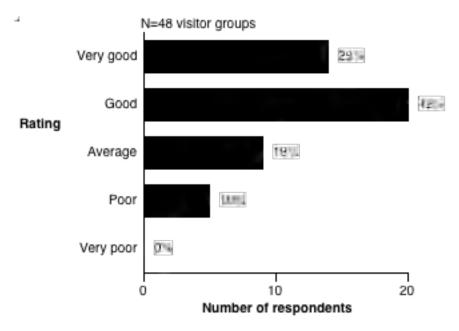


Figure 69: Quality of roadside exhibits

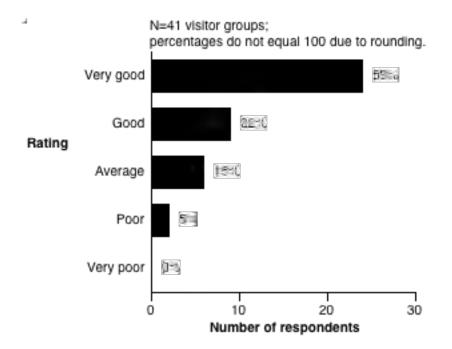


Figure 70: Quality of Pinch Pot children's program

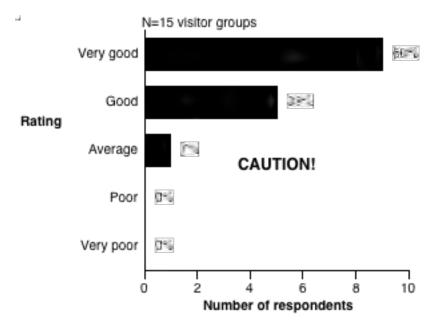


Figure 71: Quality of Junior Ranger program

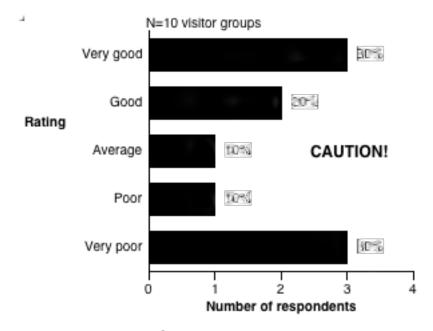


Figure 72: Quality of walking tour audio tape



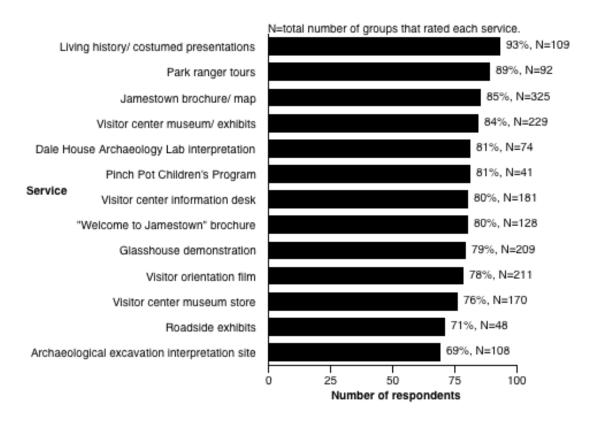


Figure 73: Combined proportions of "very good" or "good" quality ratings for services

Services and facilities: use, importance and quality

Visitor groups were asked to note the park services and facilities they used during their visit to Jamestown Island. As shown in Figure 74, the services and facilities that were most commonly used by visitor groups were restrooms (98%), food service (21%), Loop Drive (19%) and the Loop Drive roadside exhibits (7%). The least used service or facility was the Loop Drive self-guided tape (1%). The Loop Drive was closed during the survey period. The exhibits and self-guided audio tape associated with the Loop Drive would not have been available to the public.

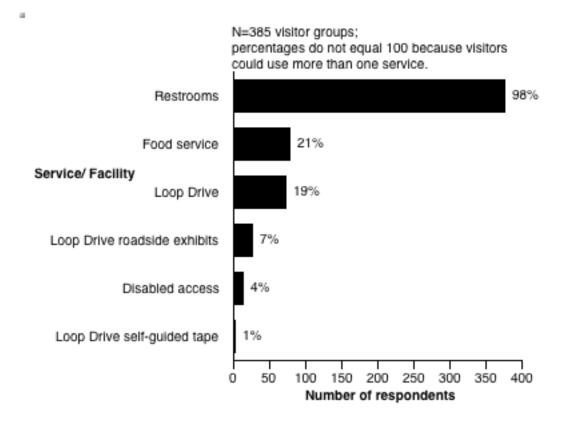


Figure 74: Services and facilities used

Visitor groups rated the importance and quality of each of the 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

Figure 75 shows the average importance and quality ratings for visitor services and facilities. An average score was determined for each service based on ratings provided by visitors who used that service. This was done for both importance and quality, and the results are plotted on the grid shown in Figure 76. All services were rated as above "average" both in importance and quality. It should be noted that the Loop Drive self-guided tape, the Loop Drive Roadside exhibits and disabled access were not rated by enough people to provide reliable data.

Figures 77-88 show the importance ratings that were provided by visitor groups for each of the individual services. Those services receiving the highest proportion of "extremely important" or "very important" ratings included restrooms (94%), food service (79%) and the Loop Drive (79%). The highest proportions of "not important" ratings were for restrooms and the Loop Drive (both 3%). The Loop Drive was not open during the survey period. The data associated with it should be treated with caution.

Figures 83-88 show the quality ratings that were provided by visitor groups for each of the individual services. Those services receiving the highest proportion of "very good" or "good" ratings included restrooms (84%), the Loop Drive (83%) and food service (66%). The highest proportion of "very poor" ratings was for the Loop Drive (3%).

Figure 89 combines the "very good" and "good" quality ratings and compares those ratings for all of the services.

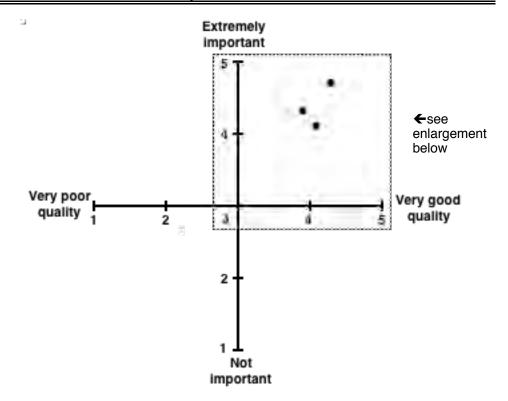


Figure 75: Average ratings of service importance and quality

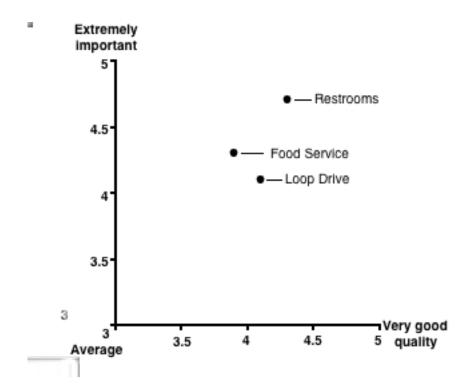


Figure 76: Detail

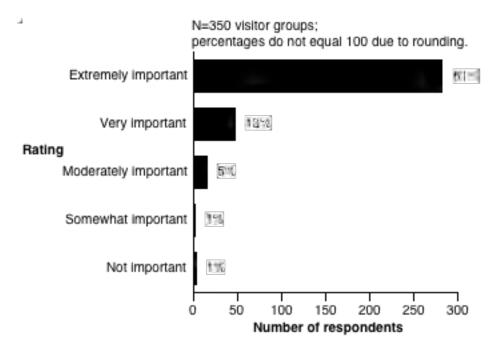


Figure 77: Importance of restrooms

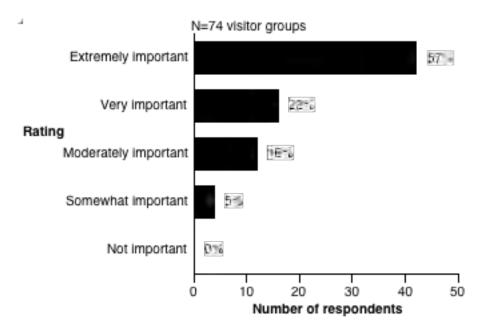


Figure 78: Importance of food service

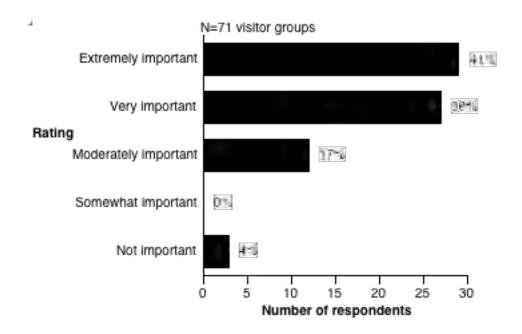


Figure 79: Importance of Loop Drive (Note: The Loop Drive was closed during the survey period.)

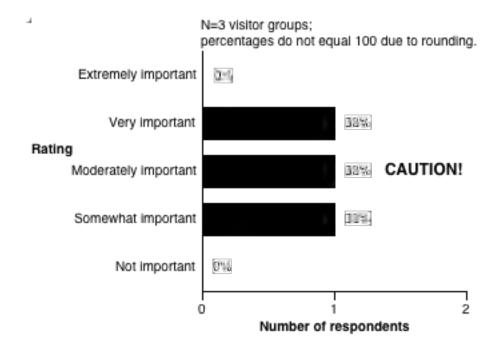


Figure 80: Importance of Loop Drive self-guided tour audio tape (Note: The Loop Drive was closed during the survey period.)

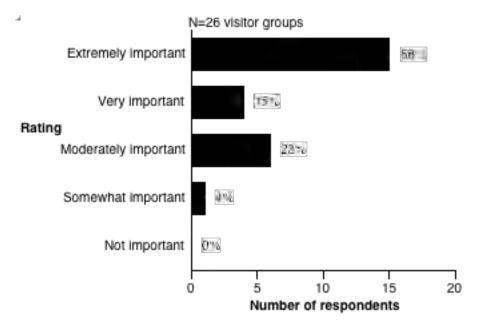


Figure 81: Importance of Loop Drive roadside exhibits (Note: The Loop Drive was closed during the survey period.)

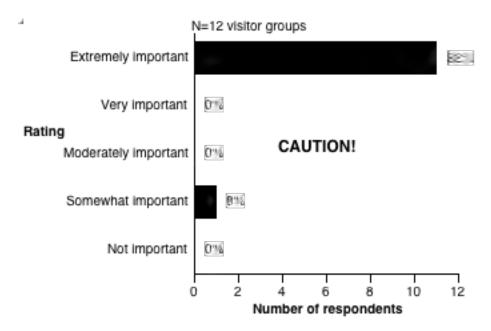


Figure 82: Importance of access for disabled persons

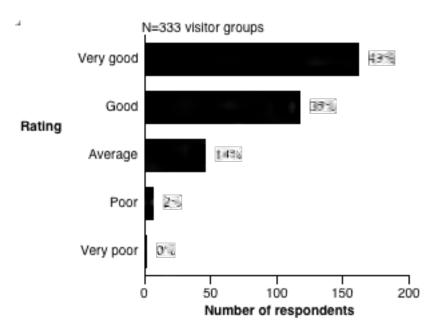


Figure 83: Quality of restrooms

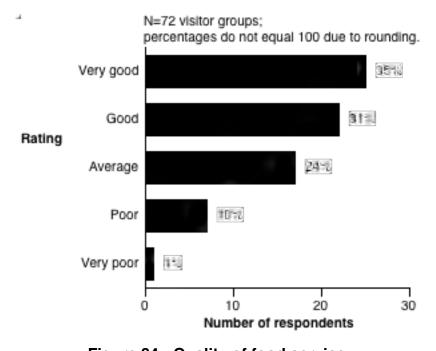


Figure 84: Quality of food service

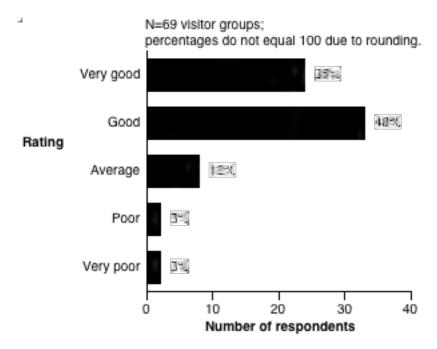


Figure 85: Quality of Loop Drive (Note: The Loop Drive was closed during the survey period.)

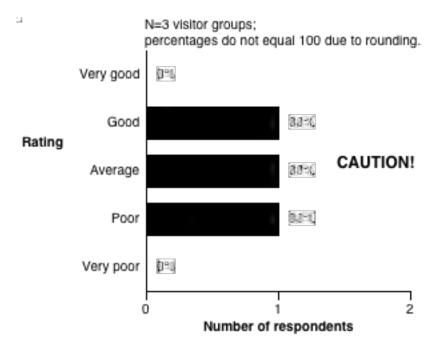


Figure 86: Quality of Loop Drive self-guided tour audio tape (Note: The Loop Drive was closed during the survey period.)

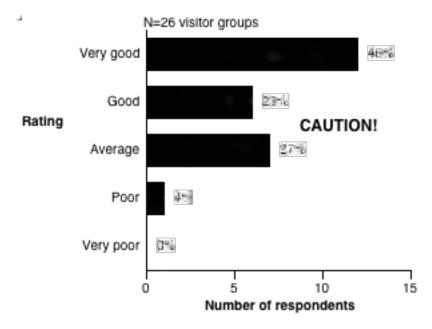


Figure 87: Quality of Loop Drive roadside exhibits (Note: The Loop Drive was closed during the survey period.)

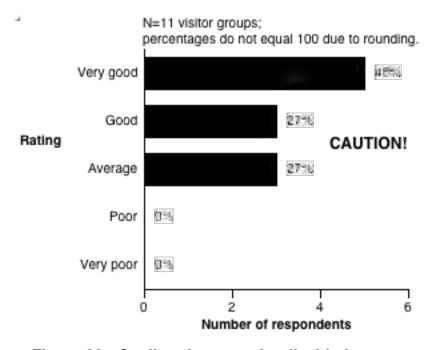


Figure 88: Quality of access for disabled persons

_

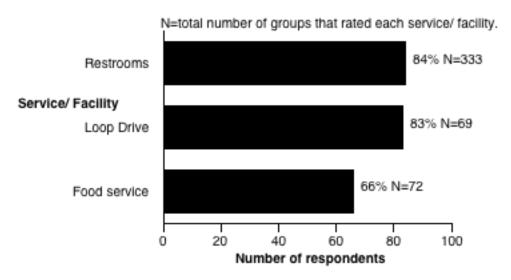


Figure 89: Combined proportions of "very good" or "good" quality ratings for services and facilities

Opinions about current entrance fee

Visitor groups were asked the appropriateness of the \$6/ person entrance fee currently charged at Colonial NHP—Jamestown Island. Seventy-six percent of visitor groups indicated the current entrance fee is "about right", 22% indicated it is "too high" and 2% indicated it is "too low" (see Figure 90).

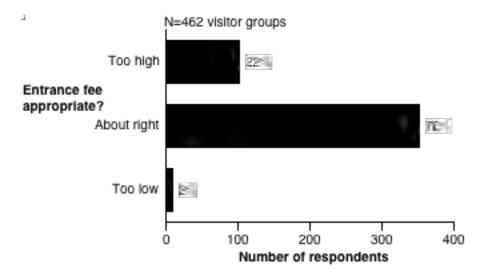


Figure 90: Opinions about current entrance fee

Jamestown Island occasionally offers special evening events, such as an historic walking tour explaining the 1676 Rebellion. Visitor groups were asked: "On a future visit would you and your group be interested in attending events such as this?" Fifty-three percent of visitor groups indicated they would be interested in attending such events, 20% indicated they would not attend, and 27% were unsure (see Figure 91).

Interest in attending future evening programs

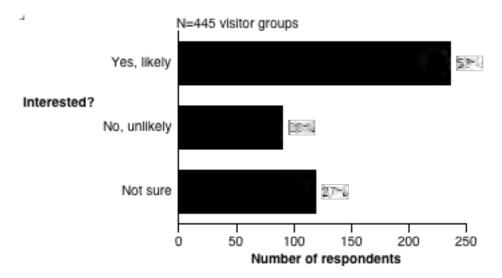


Figure 91: Interest level in attending special evening events at Jamestown Island

Total expenditures

Visitor groups were asked to list the amount of money they spent both inside Colonial NHP-Jamestown Island and within a 1-hour drive of the park on this visit. Groups were asked to indicate the amounts they spent for lodging; camping fees; guide fees and charges; restaurants and bars; groceries and take-out food, gas and oil; other transportation expenses; admissions, recreation, entertainment fees; and all other purchases.

Total expenditures in and out of park: Twenty-two percent of visitor groups spent \$1001 or more and 16% percent of visitor groups spent between \$1 and \$100. One percent of visitor groups spent no money (see Figure 92). Of the total expenditures by groups, 39% was for lodging, 24% was for restaurants and bars, 14% was for all other purchases (see Figure 93).

The average <u>visitor group</u> expenditure during this visit was \$702. The median visitor group expenditure (50% of groups spent more and 50% of groups spent less) was \$519. The average <u>per capita</u> expenditure was \$208. In addition, visitors were asked to indicate how many adults (18 years and older) and children (under 18 years) were covered by their expenditures. Figure 94 shows that 68% of the visitor groups had two adults. Figure 95 show that 47% of the visitor groups had one or two children under 18 years of age.

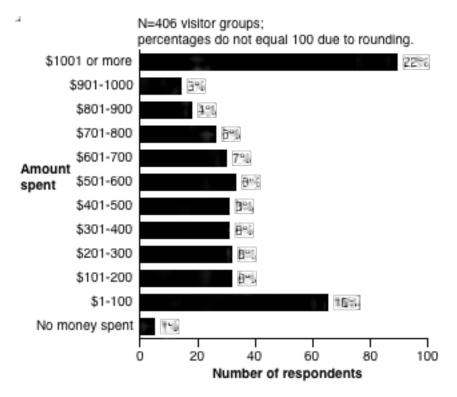


Figure 92: Total expenses within a 1-hour drive of Jamestown Island

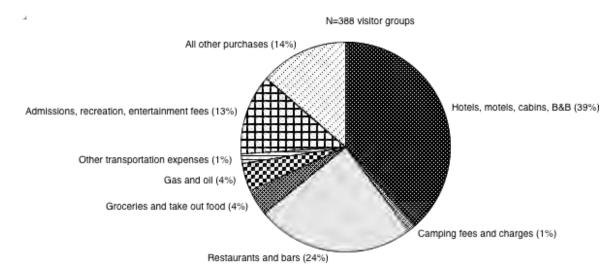


Figure 93: Proportions of expenses within a 1-hour drive of Jamestown Island

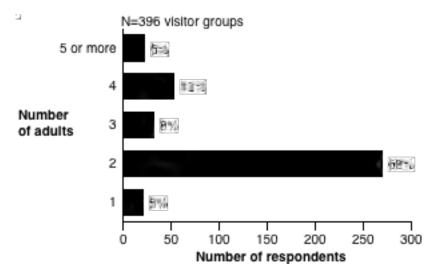


Figure 94: Number of adults covered by expenses

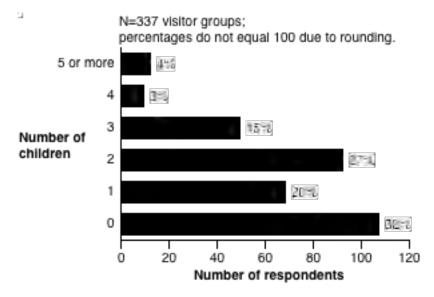


Figure 95: Number of children covered by expenses

Total expenditures in the park: 10% percent of visitor groups spent no money in Colonial NHP-Jamestown Island and another 86% spent between \$1 and \$100 in total expenditures in the park on this visit (see Figure 96).

All other purchases accounted for 51% of total expenditures in the park, followed by admission, recreation, and entertainment fees (48%), as shown in Figure 97.

Other transportation expenses in the park: Ninety-eight percent of visitor groups spent no money on other transportation expenses in the park (see Figure 98).

Admissions, recreation, and entertainment fees in the park: Seventy percent of visitor groups spent between \$1 and \$25 on admission, recreation, and entertainment fees in Colonial NHP-Jamestown Island, while 14% spent between \$26 and \$50 (see Figure 99).

Other purchases in the park: Forty-five percent of visitor groups spent between \$1 and \$25 on other purchases in Colonial NHP-Jamestown Island; 28% spent no money (see figure 100).

Expenditures inside park

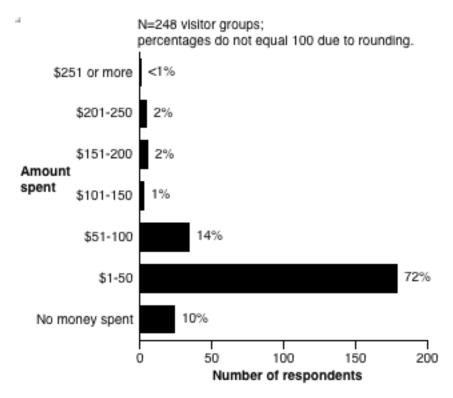


Figure 96: Total expenditures in park

N=248 visitor groups; percentages do not equal 100 due to rounding.

Admissions, recreation, entertainment fees (48%)

All other purchases (51%)

Other transportation expenses (<1%)

Figure 97: Proportion of expenditures in park

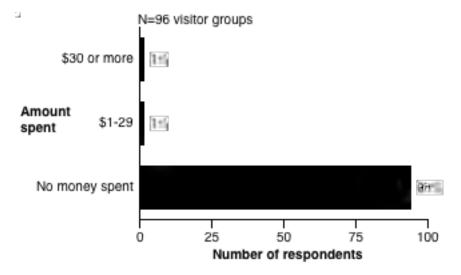


Figure 98: Other transportation expenses in park (local bus, van tours, air tours, ferry, excluding airfare)

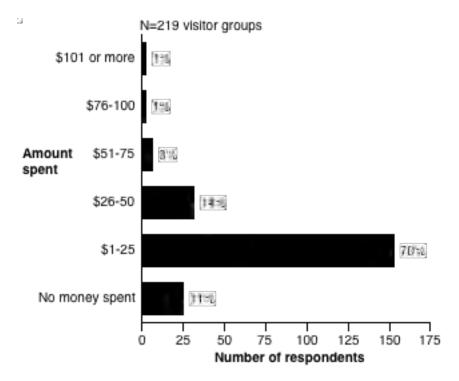


Figure 99: Admissions, recreation, entertainment fees in park

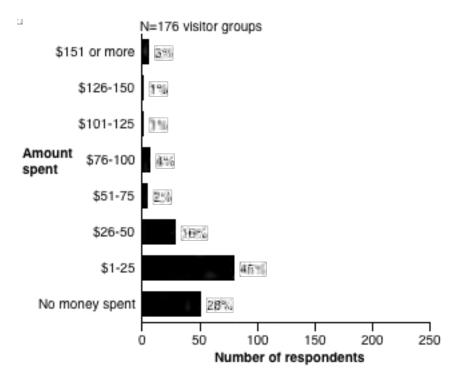


Figure 100: Expenditures for all other purchases in park (souvenirs, film, books, sporting goods, clothing)

Total expenditures: Twenty-one percent of visitor groups spent \$1001 or more in total expenditures out of the park during this trip (see Figure 125).

Expenditures outside park

Lodging accounted for 39% of total expenditures out of the park, followed by 24% for restaurants and bars as shown in Figure 102.

Hotels, motels, cabins, B&B, etc. out of the park: A majority of visitor groups (64%) spent \$176 or more on lodging out of the park (see Figure 103).

Camping fees and charges out of the park: Eighty-five percent of visitor groups spent no money on camping fees and charges out of the park (see Figure 104).

Restaurants and bars out of the park: Forty-five percent of visitor groups spent \$151 or more on restaurants and bars out of the park, while 14% spent between \$76 and \$100 (see Figure 105).

Groceries and take-out food out of the park: Thirty-five percent of visitor groups spent no money on groceries and take-out food out of the park, while 22% spent between \$26 and \$50 (see Figure 106).

Gas and oil out of the park: Forty percent of visitor groups spent between \$1 and \$25 on gas and oil out of the park, while 36% spent between \$26 and \$50 (see Figure 107).

Other transportation expenses out of the park: Most visitor groups (79%) spent no money on other transportation expenses out of the park (see Figure 108).

Admissions, recreation, and entertainment fees out of park: Twenty-six percent of visitor groups spent \$151 or more on admissions, recreation, and entertainment fees out of the park, while 16% spent between \$76 and \$100 (see Figure 109).

Other purchases out of park: Twenty-two percent of visitor groups spent between \$26 and \$50 on other purchases out of the park (see Figure 110).

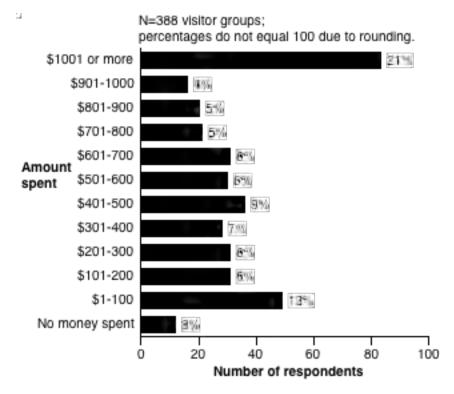


Figure 101: Total expenditures out of park

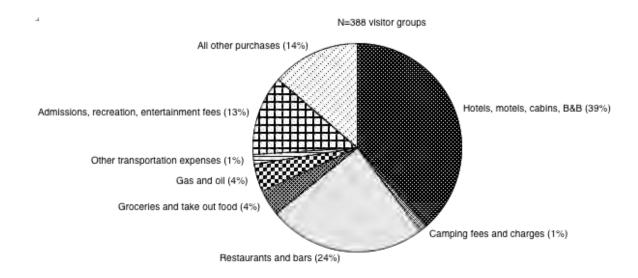


Figure 102: Proportion of expenditures out of park

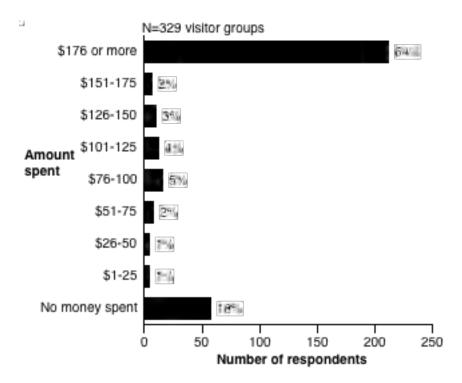


Figure 103: Expenditures for hotels, motels, cabins and B&B out of park

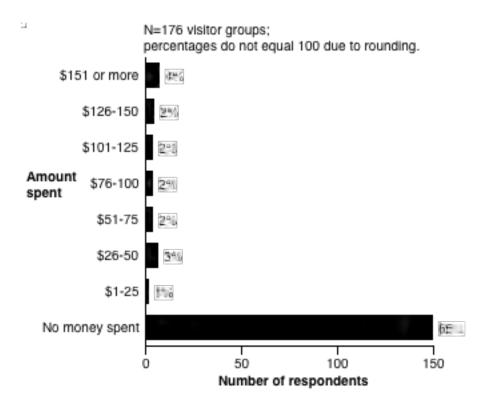


Figure 104: Expenditures for camping fees and charges out of park

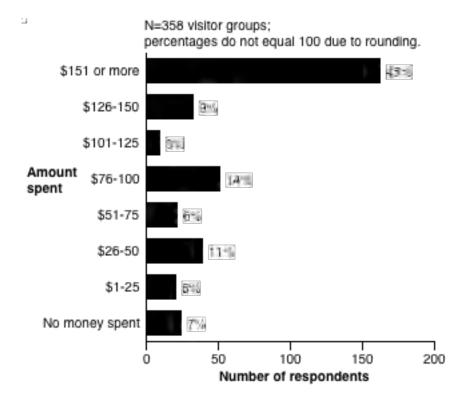


Figure 105: Expenditures for restaurants and bars out of park

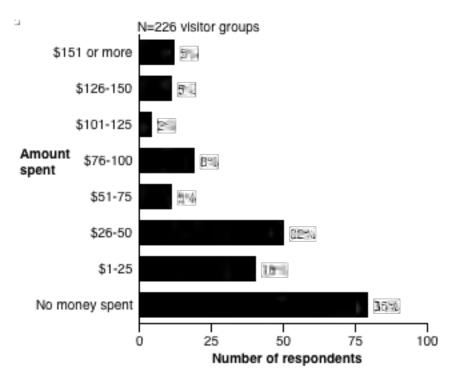


Figure 106: Expenditures for groceries and take-out food out of park

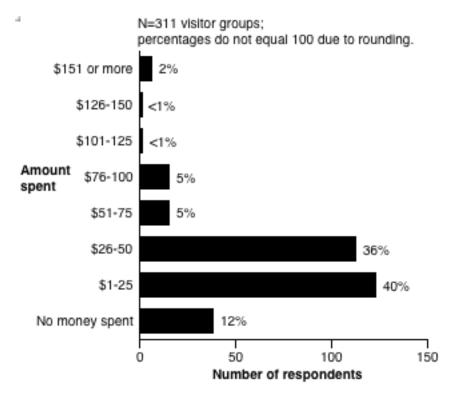


Figure 107: Expenditures for gas and oil out of park

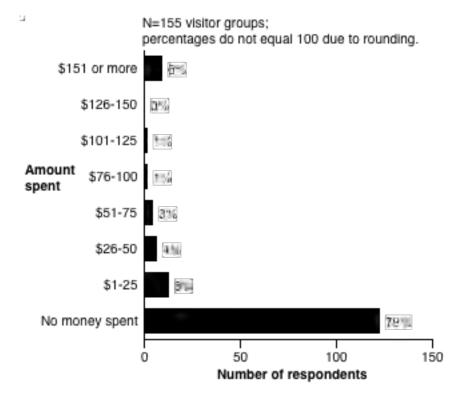


Figure 108: Expenditures for other transportation expenses out of park

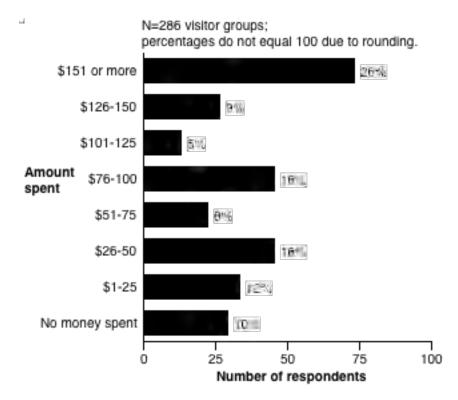


Figure 109: Expenditures for admissions, recreation, and entertainment fees out of park

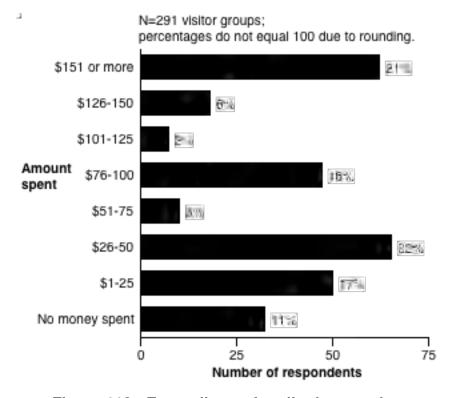


Figure 110: Expenditures for all other purchases out of park

Visitor groups were asked a series of questions concerning the use of public transportation at Colonial NHP—Jamestown Island. Fifty-three percent of visitor groups indicated they would not be interested in using public transportation to tour the park, 28% said they would be interested, and 18% were not sure (see Figure 111). Concerning different types of public transportation, 88% of visitor groups would prefer a shuttle bus with interpretive guide, 69% would prefer a boat tour with interpretive guide, 13% would prefer a shuttle bus without an interpretive guide, and 6% indicated other forms of transportation (see Figure 112). Other forms of transportation included light rail and walking.

Interest in using future public transportation

Fifty-eight percent of visitor groups indicated that they would be willing to pay a modest fee to ride future public transportation, 22% indicated that they would not be willing to do so, and 20% were not sure (see Figure 113).

As shown in Figure 114, 46% of visitor groups indicated that they would be willing to pay a modest fee to ride future public transportation between Jamestown Island and Jamestown Settlement. Thirty-six percent of visitor groups would not be willing to pay a fee, and 18% were not sure.

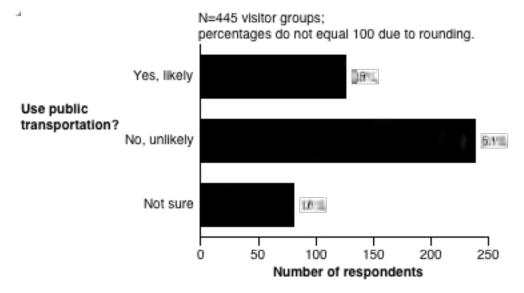


Figure 111: Use of future public transportation

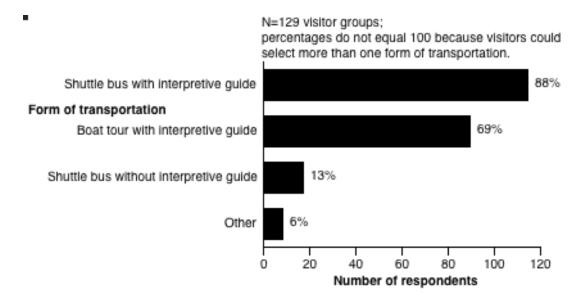


Figure 112: Type of future public transportation preferred

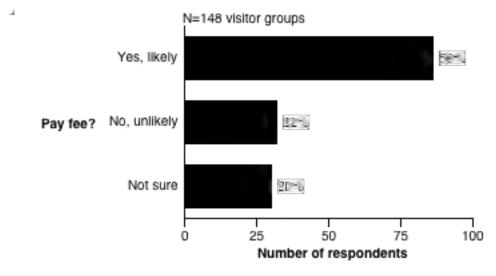


Figure 113: Willingness to pay modest fee to ride future public transportation

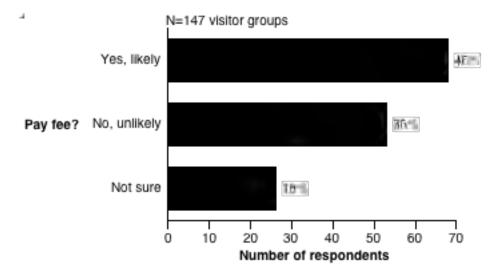


Figure 114: Willingness to pay modest fee to ride future public transportation between Jamestown Island and Jamestown Settlement

Overall quality of visitor services

Visitor groups were asked to rate the overall quality of the visitor services provided at Jamestown Island during this visit. Most visitor groups (91%) rated services as "very good" or "good" (see Figure 115). No visitor groups rated the overall quality of services provided at Jamestown Island as "very poor."

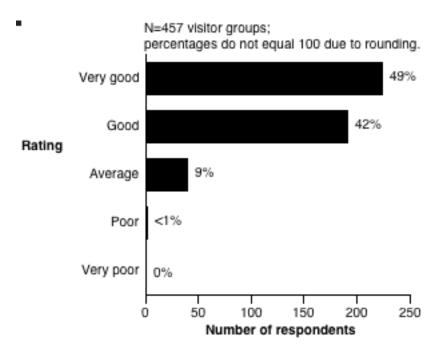


Figure 115: Overall quality of visitor services

Visitor groups were asked, "If you were a manager planning for the next 5 years at Jamestown Island, what would you propose? Please include any services not currently provided that you would like to have available." Fifty percent of visitor groups (239 groups) responded to this question. A summary of their responses is listed below in Table 9 and complete copies of visitor responses are contained in the appendix.

Planning for the future

Table 9: Planning for the future

N=250 comments; some visitors made more than one comment.

Comment	Number of times mentioned
PERSONNEL More archeological staff Other comments	3 1
INTERPRETIVE SERVICES More living history Improve self/audio tour More history education Interactive archeological program More interactive activities for children Improve exhibit signs Provide better archeological information More activities Traditional farming demonstration Emphasize tours Another film Improve web-site Improve film Late night ghost tour Other comments	19 15 14 13 6 5 4 4 3 2 2 2 2 2 9
Provide public transportation More water available Rebuild more structures Better wheelchair access Provide boat tour Improve directional signs More benches More trails Bicycle rentals More trash containers Provide baby changing stations Improve glasshouse Other comments	14 10 8 8 7 6 5 3 3 2 2 2 2

Comment	Number of times mentioned
Policy Open Loop Drive Other comments	7 3
Concessions	
More extensive food service Time era restaurant Food and drink available	17 3 2
RESOURCE MANAGEMENT Keep original site intact	11
Better coordination between Jamestown Island, Colonial Williamsburg, and Jamestown Settlement	8
GENERAL IMPRESSIONS Very enjoyable visit	8
Less emphasis on the gift shop Lower pottery prices Other comments	4 2 3

Forty-three percent of visitor groups (206 groups) wrote additional comments, which are included in the separate appendix of this report. Their comments about Jamestown Island are summarized below (see Table 10). Some comments offer specific suggestions on how to improve the park; others describe what visitors enjoyed or did not enjoy about their visit.

Comment summary

Table 10: Additional comments

N=242 comments; some visitors made more than one comment.

Comments	Number of times mentioned
PERSONNEL Helpful staff Dedicated staff "Chicken Lady" was excellent Rude staff Other comment	17 8 3 2 1
INTERPRETIVE SERVICES Very informative Better distinction between, Jamestown Island Jamestown Settlement Guided tours are wonderful More history information Emphasize archeology Jr. Ranger program is great Improve history video Other comments	14 11 5 3 3 2 2 7
FACILITIES AND MAINTENANCE Disappointed loop drive was closed Lack of uniform vision and execution Great gift shop Other comments	19 3 2 7
POLICY Combined ticket for Jamestown Island and Jamestown Settlement Longer summer hours Other comment	2 2 1

Comments	Number of times mentioned
RESOURCE MANAGEMENT Focus on historical events	6
Enjoyed glasshouse Other comments	2
GENERAL IMPRESSIONS	_
Very enjoyable visit	62
Not enough time	10
Will return	10
Too hot	7
Beautiful	5
Keep up the good work	5
More to see than previously thought	4
Hallowed place	4
Enjoyed the simplicity of the site	3
Questionnaire too long	2
Other comments	6

QUESTIONNAIRE

Colonial National Historical Park—Jamestown Island Additional Analysis VSP Report 126

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 Settlement and park difference	 Stay overnight within 1 hour drive 	Importance of information services
 Visit Jamestown Settlement 	Number of nights in area	 Quality of information services
Visit Settlement before or after park	Number of times entered	Services and facilities used
 Preferred order to visit Settlement and park 	Type of lodging used	Importance of services and facilities
 Tickets for Settlement and park available at both locations 	Order of sites visited	Quality of services and facilities
Visit Colonial Williamsburg	Group type	 Interest in attending special evening events in future
Visit Colonial Williamsburg before or after park	Group size	Use future public transport to tour Jamestown Island
 Preferred order to visit Colonial Williamsburg and park 	With guided tour group	Type of public transport preferred
 Tickets for Colonial Williamsburg and park available at both locations 	• Age	Willingness to pay fee to ride public transport to major park attractions
Sources of information used.	• Zip code	 Willingness to pay fee to ride public transport between Settlement and park
Reasons for visiting park	Country of residence	 Appropriateness of current entrance fee amount
 Route to arrive at park 	• Number of visits—past year	 Lodging expenditures
Forms of transportation used to arrive at area	 Number of visits—past 2-5 years 	Camping expenditures
 Access to private/rental vehicle in Colonial Williamsburg area 	Education level	Restaurant expenditures
Forms of transportation used to leave area	• Ethnicity	Groceries expenditures
 Order of sites visited 	• Race	Gas/oil expenditures

Phone: 208-885-7863

FAX: 208-885-4261

· Length of stay · Group members with Other transportation expenditures disabilities · Visit park on more than one Encounter access problem Admissions/recreation expenditures for disabled day Number of days visited Activities at Jamestown · All other expenditures Island in past 12 months Number of days spent in area
 Number of times activities · Number of adults/children for were done in past 12 expenditures months · Amount of time spent · Information services used · Overall visitor service quality rating compared to what was planned

Requests can be handled by contacting 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

96

NPS D-235 March 2002