



## Expedited Approval for NPS- Sponsored Public Surveys

1. **Project Title | Submission Date:** Colonial National Historical Park Shuttle Service Awareness and Marketing Survey February 24, 2010

2. **Abstract:** In 2004 Colonial National Historical Park initiated a demonstration shuttle service that linked key visitor attractions in the area, including the Colonial Williamsburg Visitor Center, Historic Jamestowne, and Yorktown. The park plans to operate the service through 2010. In 2009, the park evaluated the service over a multi-year period and developed a business plan for continuation of service beyond FY 2010. A significant recommendation from the business plan was to improve targeted marketing efforts for the shuttle service. In order to make informed decisions regarding which marketing efforts to invest in, the park needs more information on how Colonial NHP visitors obtain travel information and how they make the decision to utilize the shuttle. This survey of non-users of the shuttle system will provide valuable data for targeted marketing efforts and provide feedback that can be used to improve alternative transportation service at Colonial NHP.

(not to exceed 150 words)

### 3. Principal Investigator Contact Information

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### Project Information

5. Park(s) Where Research is to be Conducted:

6. Survey Dates:  (mm/dd/yyyy) to  (mm/dd/yyyy)

7. Type of Information Collection Instrument (Check ALL that Apply)

- Mail- Back Questionnaire       On- Site Questionnaire       Face- to- Face Interview       Telephone Survey       Focus Groups

Other (explain)

8. Survey Justification: (Use as much space as needed; if necessary include additional explanation on a separate page.)

Social science research in support of park planning and management is mandated in the *NPS Management Policies 2006* (Section 8.11.1, "Social Science Studies"). The NPS pursues a policy that facilitates social science studies in support of the NPS mission to protect resources and enhance the enjoyment of present and future generations (National Park Service Act of 1916, 38 Stat 535, 16 USC 1, et seq.). NPS policy mandates that social science research will be used to provide an understanding of park visitors, the non-visiting public, gateway communities and regions, and human interactions with park resources. Such studies are needed to provide a scientific basis for park planning, development, operations, management, education, and interpretive activities.

Background and Literature Review. This is a survey of non-users of the shuttle system at Colonial NHP (COLO). The park began a demonstration shuttle service in 2004 and expanded the service in 2005. Full-service operation began in April 2006. Having conducted a survey and study in 2009 examining how shuttle riders learned about, utilized, and valued the shuttle system, NPS management at COLO now wishes to learn about the preferences of non-riders, including those visitors who prefer to use personal automobiles within the park.

COLO has not conducted systematic survey research to obtain feedback from shuttle non-riders. In developing this survey, staff reviewed the previous studies conducted at COLO, including a 2001 visitor study (Visitor Services Project, Report #126), the ATS Feasibility Study (2004), the Alternative Transportation System Evaluation and Business Plan (2010, pending) and the Shuttle Service Survey Report (2010, pending).

The 2001 visitor study conducted by the NPS Visitor Services Project surveyed visitors at the Jamestown Visitor Center parking lot and the Glasshouse parking lot. The study provided data on visitor demographics, trip and visit characteristics, but it did not deal with alternative transportation issues in the park.

As part of its Alternative Transportation System Feasibility Study, another COLO visitor survey was conducted in 2002. The purpose of this stated preference survey was to identify the key factors influencing the choice of bus use by visitors to the area and to use that information to estimate potential demand for these services. In the survey, respondents were presented with 3 scenarios describing various combinations of travel and wait time, user cost, and other service options for travel by auto and shuttle bus and asked to choose auto or transit as the preferred mode of travel. The study found that a

Parkway Shuttle was likely to achieve a 15-25% visitor capture rate, while a properly designed internal loop road shuttle was likely to attract 40-50% of total loop road users. Results of the survey were also used to inform the development of marketing strategies for the service.

The 2010 Shuttle Service Survey Report describes the results of a survey asking riders how they learned about the shuttle system, what motivated them to ride shuttles, how they used the system their positive and negative reactions to the service. The survey found that riders expressed a very high level of satisfaction with the shuttle service. Those who had driven a personal vehicle to the area indicated that the shuttle service was preferable to using their own vehicles in the park. Riders' responses suggested that most were unaware of the shuttle system prior to arriving in the Colonial Williamsburg area. Given the high level of satisfaction with the service, there may be significant numbers of visitors to COLO who would use the shuttles if they were aware of its existence before arriving and know how to best use it.

The proposed survey seeks to understand the extent to which non-riders know about the existence of the Colonial NHP shuttle service, why non-riders who are aware of the shuttle make the decision not to ride, and how non-riders could be influenced to become riders.

9. **Survey Methodology:**  
(Use as much space as needed; if necessary include additional explanation on a separate page.)

(a) Respondent universe:

Because the main purpose of the survey is to understand the information sources and decision-making processes of non-riders, the respondent universe consists of all visitor groups (adults age 18+) at the park who did not use the shuttle system during the survey period.

(b) Sampling plan/procedures:

The procedures for sampling will include the selection of a 3-day block (a Thursday, Friday, and Saturday) during the peak tourist season in mid-July through August 2010. The timing of the survey will capture different types of visitors, such as day visitors, as well as visitors who are in the area for a longer period of time.

Because of the layout of COLO, the survey will be administered at several different venues. Because visitors could conceivably visit one attraction of the park without visiting another, it is necessary to sample the two main attractions – the Historic Jamestowne Visitor Center and the Yorktown Battlefield Visitor Center.

Interviewers will be located between the parking lots and the visitor centers at both Historic Jamestowne and Yorktown Battlefield. Interviewers will ask 2 introductory screening questions: i) has the visitor group utilized the shuttle service, and ii) has the visitor already taken the survey? If either answer is affirmative, the visitor group will be disqualified from completing the survey. If both answers are negative, the interviewer will identify a random member of the visitor group (using the closest-birthday selection method) to complete the 1-page survey and collect it when he or she is done. The interviewers will try to intercept every other group. Groups that refuse to participate will be replaced by the next group.

The survey will be administered between 9:00 a.m. and 5:00 p.m. on each of the 3 sampling days. These are the hours during which the COLO shuttle system operates.

During July 2008, an estimated 44,250 visitors (roughly 1,430 per day) visited COLO, and the shuttle system logged roughly 24,000 individual trips. Because the shuttle system logs trips rather than individuals, and because most riders would make at least 2 shuttle trips (a "to" trip and a "from" trip), the number of individual passengers during this period is estimated at 12,000. Thus, an estimated 1,040 non-riders visited the park daily during July 2008, calculated as follows: (44,250 visitors – 12,000 riders) / 31 days. If visitation and ridership are similar in 2010, an estimated 975 groups will visit

COLO during the 3-day survey period. If the survey team approaches every other visiting group, it can expect to intercept roughly 487 groups.

Visitation data suggests Jamestown visitation is 60% of total visitation to the park and Yorktown visitation represents 40% of total visitation during this period. Thus, the survey team would be larger at Jamestown than at Yorktown.

(c) Instrument administration:

Self-administered survey: Staff from the Volpe National Transportation System Center (Volpe Center) will act as surveyors throughout the 3-day survey period. At each of the 2 intercept sites, surveyors will distribute surveys to a randomly selected adult from each visitor group.

At both Historic Jamestowne and Yorktown Battlefield, surveyors will intercept visitors as they arrive at the respective visitor centers from the parking lots. Volpe Center staff will approach sampled people with the following greeting:

*Good morning/afternoon. The National Park Service is conducting a brief survey regarding your experience today. The survey is voluntary, and is being conducted to help improve transportation services at Colonial National Historical Park. It takes about 3 minutes to complete. Have you taken this survey at another time this weekend? **If yes:** Thanks a lot! Have a nice visit! **If no:** Have you ridden the Colonial NHP shuttle system during your trip? **If yes:** Thanks a lot! Have a nice visit! **If no:** Would you be willing to take 3 minutes of your time to participate? Remember, all responses are anonymous.. **If yes:** Thank you.*

(d) Expected response rate/confidence levels:

Based on prior experience at Colonial NHP with the 2001 Colonial National Historical Park-Jamestown Island Visitor Study, the expected response rate is 75%. Thus, the expected number of potential respondents over the 3 survey days is approximately 365. This number will permit the survey to provide estimates of proportions with precision of +/- 5.1 percentage points with 95 percent confidence.

(e) Strategies for dealing with potential non- response bias:

Non-response will be tested by comparing characteristics of the sample population with selected observable characteristics of non-respondents. The date, time, and group characteristics of passengers refusing the survey will be recorded and reported on a survey log. The results of the check for non-response bias will be reported, and the implications of non-response bias (if any) for park planning will be discussed.

(f) Description of any pre- testing and peer review of the methods and/or instrument (recommended):

Quality control and internal US DOT and NPS staff peer review has been undertaken. Revisions to the survey were made based on feedback from Volpe Center staff, Colonial NHP staff, and park partners.

The survey team conducted a similar survey during a similar survey period in 2009. The team is familiar with the park and visitation and pedestrian patterns.

10.	Total Number of Initial Contacts   Expected Respondents:	487	365	11.	Estimated Time to Complete Initial Contact   Instrument (mins.):	1	3	12.	Total Burden Hours:	26
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13.	Reporting Plan:	<p>The survey results will be analyzed and a formal final technical report will be prepared for Colonial NHP. In particular, Colonial NHP is interested in learning the extent to which non-riders know about the existence of the Colonial NHP shuttle service, how non-riders who are aware of the shuttle make the decision not to ride, and how non-</p>
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riders could be influenced to become riders. Subgroup analysis will be performed on these key questions to assess differences by type and size of personal group. In addition to the technical report, a briefing may be presented to NPS management at Colonial NHP. A copy of the formal technical report will be archived with the NPS Social Science Division. The results of the survey will be used to inform future targeted marketing efforts for the Colonial NHP shuttle system.

#### Bibliography

Simmons, Todd and Margaret Littlejohn, "Colonial National Historical Park- Jamestown Island Visitor Study," Visitor Services Project, Report 126 (March 2002).

URS Corporation and Cambridge Systematics, "Alternative Transportation System Study, Phase Two Final Report, Colonial National Historical Park," Prepared for the National Park Service (March 2004).

U.S. DOT Volpe Center, "Colonial National Historical Park: Shuttle Service Survey Report," Prepared for the National Park Service (2010, pending publication).

U.S. DOT Volpe Center, "Colonial National Historical Park: Alternative Transportation System Evaluation and Business Plan," Prepared for the National Park Service (2010, pending publication).

## Colonial National Historical Park: Visitor Survey

To help the National Park Service improve the transportation system at Colonial NHP, please take a few minutes to answer the following questions. Thank you for your participation!

*Please fill out one survey per family or group*

1. Including yourself, how many people in your personal travel group are: [1. Variation AGE3]

\_\_\_\_ 2 years and under      \_\_\_\_ 6-12 years      \_\_\_\_ 19-29 years      \_\_\_\_ 45-64 years  
\_\_\_\_ 3-5 years      \_\_\_\_ 13-18 years      \_\_\_\_ 30-44 years      \_\_\_\_ 65 or older

2. Prior to this visit, what information sources did you use to plan your trip to Colonial NHP? (*Check all that apply*) [2. TPLAN11]

- |  |  |
|--|--|
| <input type="checkbox"/> None                                    | <input type="checkbox"/> Historic Triangle Website ( <a href="http://www.historictriangle.com">www.historictriangle.com</a> )                                    |
| <input type="checkbox"/> National Park Service website           | <input type="checkbox"/> Visit Williamsburg website ( <a href="http://www.visitwilliamsburg.com">www.visitwilliamsburg.com</a> ) or 1-800 number                 |
| <input type="checkbox"/> Visitor guidebook                       | <input type="checkbox"/> Williamsburg Hotel and Motel Association website ( <a href="http://www.gowilliamsburg.com">www.gowilliamsburg.com</a> ) or 1-800 number |
| <input type="checkbox"/> Previous visit                          | <input type="checkbox"/> Colonial Williamsburg website ( <a href="http://www.history.org">www.history.org</a> ) or 1-800 number                                  |
| <input type="checkbox"/> Family or friends                       |  |
| <input type="checkbox"/> Brochure or pamphlet from visitor sites |  |
| <input type="checkbox"/> Other source: _____                     |  |

3. Are you aware of the shuttle service that provides transportation from Colonial Williamsburg to Historic Jamestowne sites and to Yorktown Battlefield? [Topic Area 1, Individual Characteristics]

\_\_\_\_ Yes      \_\_\_\_ No (*Go to Question 4*)

3a. How did you hear about this service? (*Check all that apply*) [Topic Area 1, Individual Characteristics]

- |   |  |
|---|--|
| <input type="checkbox"/> Staff at visitor sites                   | <input type="checkbox"/> Visitor guidebook                 |
| <input type="checkbox"/> Hotel/motel/timeshare/campsite staff     | <input type="checkbox"/> Family or friends (word of mouth) |
| <input type="checkbox"/> Saw shuttle bus or signs for the service | <input type="checkbox"/> National Park Service website     |
| <input type="checkbox"/> Brochure or pamphlet from visitor sites  | <input type="checkbox"/> Tourism website or 1-800 number   |
| <input type="checkbox"/> Previous visits                          | <input type="checkbox"/> Other: _____                      |

3b. What factors influenced your decision not to take the shuttle? [Topic Area 6, Individual Perceptions of Their Park Experiences]

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IF YOU ANSWERED "NO" TO QUESTION 3 (YOU ARE UNAWARE OF THE SHUTTLE), PLEASE ANSWER QUESTION 4.

4. A free shuttle service provides transportation from Colonial Williamsburg to Historic Jamestowne sites and Yorktown Battlefield. The service arrives every 30 minutes and provides recorded historical information along the way.

4a. Now that you know a little about the shuttle, would you be willing to take it? [Topic Area 6, Individual Perceptions of Their Park Experiences]

\_\_\_\_ Yes      \_\_\_\_ No      \_\_\_\_ Not Sure

4b. If NO or NOT SURE, why or why not? [Topic Area 6, Individual Perceptions of Their Park Experiences]

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*Thank you for your help in completing this survey.*

**INTERVIEWER:**

**LOCATION:** \_\_\_\_\_ **Historic Jamestowne VC** \_\_\_\_\_ **Yorktown VC**

OMB: XXXX-XXXX

Expiration: \_\_\_\_\_

16 U.S.C. 1a-7 authorizes collection of this information. This information will be used by park managers to better serve the public. Response to this request is voluntary. No action may be taken against you for refusing to supply the information requested. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

**BURDEN ESTIMATE STATEMENT:** Public reporting burden for this form is estimated to average **3 minutes** per response. Direct comments regarding the burden estimate or any other aspect of this form to:

Dorothy Geyer  
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10815 George Washington Highway  
Yorktown, VA 23690  
Dorothy\_Geyer@nps.gov

*Thank you for your help in completing this survey.*





