



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

OMB Control Number 1024-0224  
Current Expiration Date:8-31-2014

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**Programmatic Approval for NPS-Sponsored Public Surveys**

**Submission Date** 3-26-2013

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**1. Project Title:**

Visitor Services Project (VSP) surveys at the following parks:

1. Salem Maritime National Historic Site (SAMA)
2. Big Hole National Battlefield (BIHO)
3. George Washington Memorial Parkway—Columbia Island (GWMP)
4. Saugus Iron Works National Historic Site (SAIR)
5. Hagerman Fossil Beds National Monument (HAFO)

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- 2. Abstract:** *This submission contains five separate collections, using mail-back questionnaires to collect information from visitors at: Salem Maritime National Historic Site (SAMA), Big Hole Battlefield (BIHO), George Washington Memorial Parkway Columbia Island (GWMP), Saugus Iron Works National Historic Site (SAIR), and Hagerman Fossil Beds National Monument (HAFO). Because a comprehensive visitor study has never been conducted at any of these five parks, the park managers requested visitor surveys to gather information concerning visitors' demographics and their satisfaction with park services and facilities. Data will be used by park managers to assist in resource management and program planning that better meet visitors' needs and expectations.*

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(not to exceed 150 words)

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**4. Park or Program Liaison Contact Information**

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**Park or Program Liaison Contact Information - Salem Maritime National Historic Site (SAMA)**

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**Park or Program Liaison Contact Information - Big Hole National Battlefield (BIHO)**

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**Park or Program Liaison Contact Information - George Washington Memorial Parkway-Columbia Island (GWMP)**

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**Park or Program Liaison Contact Information - Saugus Iron Works National Historic Site (SAIR)**

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**Park or Program Liaison Contact Information - Hagerman Fossil Beds National Monument (HAFO)**

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**Project Information**

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| <b>5. Park(s) For Which Research is to be Conducted:</b> | <ol style="list-style-type: none"><li>1. Salem Maritime National Historic Site</li><li>2. Big Hole National Battlefield</li><li>3. George Washington Memorial Parkway—Columbia Island</li><li>4. Saugus Iron Works National Historic Site</li><li>5. Hagerman Fossil Beds National Monument</li></ol> |
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6.

Location	Start Date		End Date
Salem Maritime National Historic Site	7/1/2013	to	7/7/2013
Big Hole National Battlefield	7/23/2013	to	7/29/2013
<b>Survey Dates:</b> George Washington Memorial Parkway — Columbia Island	7/28/2013	to	8/3/2013
Saugus Iron Works National Historic Site	8/2/2013	to	8/8/2013
Hagerman Fossil Beds National Monument	8/4/2013	to	8/10/2013

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

- |   |  |   |   |                                       |
|---|--|---|---|---------------------------------------|
| <input checked="" type="checkbox"/> Mail-Back Questionnaire Other (explain) | <input type="checkbox"/> On-Site Questionnaire | <input type="checkbox"/> Face-to-Face Interview | <input type="checkbox"/> Telephone Survey | <input type="checkbox"/> Focus Groups |
|---|--|---|---|---------------------------------------|

8. Survey Methodology: (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.*

**Management Justification:** The five parks in this collection are in the process of revising and reviewing their resource management and interpretive planning. None of the parks have a comprehensive visitor study, information about visitors and their perceptions are not available. Park managers are looking for information about visitor profile to understand the audiences of their interpretive program. This collection will also provide information about visitor satisfaction with services and programs provided at the parks to plan for improvement.

The surveys in this bundle will collect information that will be used to:

- establish visitor profile to better understand the target audience and create a baseline for future comparison
- provide input into planning (e.g., General Management Plan, Comprehensive Interpretive Plan, Long Range Interpretive Plan)
- provide information that will assist with the conceptual design of interpretive and educational programs to match visitor interests and needs
- provide feedback about the design of renovated visitor facilities or existing facilities
- evaluate visitor behavior for potential impacts on natural and cultural resources
- provide information about the economic benefits of visitor spending to local businesses and governments in the area.

### **1. Salem Maritime National Historic Site**

Salem Maritime NHS has never had an in-depth visitor study done in its 74-year history. This site preserves historic buildings, wharves and ships, the latter of which helped jumpstart the US economy by carrying cargo to and from Asia beginning in the 1700's. The park operates a regional visitor center in downtown Salem, whose visitors have also never been surveyed. The park needs basic data about park visitors, as well as their opinions about the interpretive services and facilities in the park, to better serve the public. In addition, these data will enable partnering with local communities, as well as the Essex National Heritage Area, in providing services and sharing the economic benefits of visitors spending time in the area. Key reasons why the park needs this visitor study:

- obtain feedback on current interpretive services, including the downtown visitor center—no data is currently available;
- obtain economic and marketing information for partnering with local communities and the Essex National Heritage Area.

### **2. Big Hole National Battlefield**

First protected in 1883, this park preserves the site of a battle between the Nez Perce people and US government forces in 1877. The park participated in a survey of the major Nez Perce National Historical Park sites in 1994 and now managers need updated site-specific survey information. Working with tribal cooperation, the park completed new exhibits in 2012 and wants to assess their effectiveness. The park also works with local communities and both entities need feedback on nearby community services as well as economic impact information.

- obtain feedback on current interpretive services, especially the new exhibits which were just completed;
- obtain economic and marketing information for partnering with local communities.

### **3. George Washington Memorial Parkway—Columbia Island**

The parkway was established in 1930, but the Columbia Island/Lady Bird Johnson Memorial Grove has not had a site-specific survey done. Because the site is an integral part of the 25-mile long memorial parkway, which is visited by thousands of people each year, visitor data is needed to provide feedback on services and facilities. Data is needed for the parkway's general management plan and long-range interpretive plan, as well as for collaboration with park partners. The park needs this visitor study to:

- obtain visitor opinions about park services and facilities, which have never been assessed for Columbia Island;
- provide data for parkway planning efforts;
- obtain marketing and economic information to aid in working with local partners.

### **4. Saugus Iron Works National Historic Site**

The park has never had a comprehensive visitor study since it was established in 1968. Saugus Iron Works preserves the site of the first integrated ironworks in North America, with reconstructions of working mills, forges and waterwheels and demonstrations of iron making. Data are needed to establish a visitor profile and get visitor feedback on the park's services and facilities would be very helpful for

interpretive operations, which have not been evaluated. The park wants to better market itself through working with tourism partners in Saugus and other local communities. The park has local economic impact, for which the visitor study will provide data to encourage the communities to be more actively involved with the park, as well as cooperating with the Essex National Heritage Area. The park's proposed visitor study is needed to:

- show the economic impact of park visitors in local communities and learn about which sources to use to market the site;
- obtain evaluations of interpretive services and operations which fit visitor needs and expectations.

**5. Hagerman Fossil Beds National Monument**

This park protects an extraordinary area with mammalian fossils found along the Snake River. Established in 1988, the park has never had an in-depth visitor study. Park managers need to assess the effectiveness of the services and facilities they currently provide. With ongoing paleontological work, the interpretive operation needs to change and update information presented to the public and wants to learn visitors' preferences. Since the visitor center is in the town of Hagerman, the park cooperates closely in planning tourism efforts.

- obtain evaluations of interpretive services and operations which fit visitor needs and expectations;
- show the economic impact of park visitors in local communities and learn about which sources to use to market the site.

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

**(A) Respondent Universe:**

The respondent universe for this collection will be a systematic sample of all recreational visitors, age 16 and older, visiting the parks during the selected study periods. The intercept locations for each of the parks are listed in the below in Table 1.

**Table 1: Sample Locations**

Park	Intercept location	Sampling period (2013)
Salem Maritime National Historic Site	<ul style="list-style-type: none"> <li>• Derby Wharf</li> <li>• NPS Visitor Center In downtown Salem</li> </ul>	JULY 1-7
Big Hole National Battlefield	<ul style="list-style-type: none"> <li>• Visitor Center</li> </ul>	JULY 23-29
George Washington Memorial Parkway—Columbia Island	<ul style="list-style-type: none"> <li>• Sites Along The Mount Vernon Trail</li> <li>• Concessions Marina</li> <li>• LBJ Memorial Grove Parking Area</li> </ul>	JULY 28- AUGUST 2
Saugus Iron Works National Historic Site	<ul style="list-style-type: none"> <li>• Visitor Center/Museum</li> </ul>	AUGUST 2-8
Hagerman Fossil Beds National Monument	<ul style="list-style-type: none"> <li>• Visitor Center</li> <li>• Park Overlook</li> </ul>	AUGUST 4-9

**(B) Sampling plan/procedures:**

Mail-back questionnaires will be used at each of the parks to collect the following information from visitors:

- individual characteristics
- trip/visit characteristics
- individual activities
- individual evaluation of park services/facilities,
- individual perceptions of their park experiences, and
- individual opinions on park management

Park visitors will be randomly selected to participate in the studies as they visit each of the parks during a seven-day study period.

The survey design and sampling plan for this visitor study is based upon Dillman's (2010) tailored design method (TDM). The TDM has been shown to increase response rates, improve accuracy, and reduce cost and burden hours. The methodology has been used in 254 previous surveys conducted by the VSP. Most questions have been included in other VSP questionnaires or appear in the current NPS known pool of questions (1024-0224). A systematic sampling procedure, based on the park's visitation statistics from the previous year (table 2), will require intercepting every *n*th visitor group to participate in the study.

**Table 2: Sampling frame from park visitation statistics**

Park	Sampling month	Number of recreational visit
Salem Maritime National Historic Site	July 2012	105,094
Big Hole National Battlefield	July 2012	9,795
George Washington Memorial Parkway—Columbia Island	July-August 2012	68,395
Saugus Iron Works National Historic Site	August 2012	1,739
Hagerman Fossil Beds National Monument	August 2012	2,742

Source: NPS visitor use statistics <https://irma.nps.gov/Stats/Reports/>

Each interviewer will receive 1-1/2 hours of training on how to conduct on-site contacts. The interviewers will be instructed to contact every *n*th visitor at each of the park locations (listed in table 1 above). This training will cover every aspect of on-site contact including: using sampling intervals, avoiding sampling bias, and how to handle all types of interviewing situations, especially safety of the visitor and the interviewer. Quality control will be ensured by monitoring interviewers in the field, and by checking their paperwork at the end of each survey day.

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**(c) Instrument administration:**

The initial contact with visitors will be made at the end of the visit as they are exiting the intercept location (see table 1 above). This contact will be used to explain the study and determine if visitors are interested in participating. The initial contact should take approximately 1 minute. If a group is encountered, the

survey interviewer will ask the individual within the group who has the next birthday to serve as the respondent for the study. All individuals approached will be asked the non-response bias questions that will be used in the final analysis (see item 9e below). The number of refusals will be recorded and used to calculate the overall response rate for the collection.

Visitors selected for participation in the survey will be read the following script:

*"Hello, my name is \_\_\_\_\_. I am conducting a survey for the national park service to better understand your opinions about this park's programs and services. Your participation is voluntary and all responses will be kept anonymous. Would you be willing to take a survey and mail it back to us using the self-addressed envelope?"*

→If **YES** - then ask, "has any member of your group been asked to participate in this survey before?"

If **"YES"** (already asked to participate) then, *"Thank you for agreeing to participate in this study we hope that you will return the questionnaire soon. Have a great day."*

If **"NO"** (have not been previously asked to participate) then, *"Thank you for agreeing to participate. Who in your group is at least 16 years old and has the next birthday? [The surveyor will ask them to start the process by answering the non-response bias questions (listed below). The responses will be recorded in spaces provided on the tracking sheet. The surveyor will hand them a survey packet including the questionnaire and a self-addressed stamp envelope]."*

→If **NO-** (soft refusal) - ask them if they would be willing to answer the non-response bias questions (listed below) and then thank them for their time. [The surveyor will Record responses in spaces provided on the tracking sheet].

→If **NO-** (hard refusal) - end the contact and thank them for their time.

Once the visitor has agreed to participate in the study, we will ask them to provide or personally record their name, address, and phone number or email address on a survey log sheet - this information will be used to follow-up with all non-respondents who accepted a survey packet. The participants will receive a survey packet that will include a survey and a self-addressed stamped envelope. The participants will be asked to return their completed survey within the week following their visit.

At the end of the survey sampling period, all visitors accepting a survey packet will be mailed a thank you/reminder postcard within 11 working days. A reminder letter with a stamped, addressed replacement questionnaire will be sent to all non-respondents 21 working days after the on-site contacts. A second reminder letter will be mailed to non-respondents after 35 working days with a stamped, addressed replacement questionnaire.

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**(d) Expected Response Rate/Confidence Levels:**

The response rate for each of the collections is based on VSP surveys at similar park sites. Based on the survey sample sizes, there will be 95% confidence that the survey findings will be accurate to within 3-5 percentage points. Thus, the proposed sample sizes will be adequate for bivariate comparisons and will allow for comparisons between study sites and more sophisticated multivariate analysis. If the response rate is below what would typically be expected, the VSP may need to call a sample of non-respondents to try to increase the response rate. For dichotomous response variables, estimates will be accurate within the margins of error and confidence intervals will be somewhat larger for questions with more than two response categories (Table 3). Analysis of response rates among VSP surveys show that the response rate may be affected by park type and park location (Rookey, Le, Littlejohn & Dillman 2012). Thus, although the five surveys used the same methodology and survey procedure, the response rates are expected to vary.

**Table 3: Expected Response Rate/Confidence Levels**

	Number of Initial Contacts	Number Accepting Survey	Expected Response Rate	Expected Number of Responses	Margin of Error +/- %
SAMA	761	700	65%	455	3.7
BIHO	380	350	70%	245	5
GWMP	707	650	68%	422	3.8
SAIR	380	350	70%	245	4.8
HAFO	380	350	70%	245	4.9
<b>TOTAL</b>	<b>2,607</b>	<b>2,400</b>		<b>1,612</b>	

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

During the initial contact, the interviewer will ask each visitor four questions taken from the survey. These questions will be used in a non-response bias analysis.

- 1) *What type of group are you traveling with today? (family, tour group)*
- 2) *How long did you spend in the park today?*
- 3) *Was this your primary destination today?*
- 4) *Where are you from? (home state)*

Responses will be recorded on a log for every survey contact. Results of the non-response bias check will be described in a report and any implications for park planning and management will be discussed.

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

The questionnaire format and many of the questions have been used in 254 previous VSP survey instruments. The questions are taken from the currently approved list of questions in NPS Pool of Known Questions (OMB 1024-0224; Current Expirations Date: 8-31-2014). Variations of the questions have been reviewed by NPS managers and university professors.

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10 **Burden Estimates:** Overall, we plan to approach at least 2,607 individuals during the five sampling periods. Among which, we plan to obtain verbal agreement to participate in the survey from 2,400 individuals. We expect to receive total of 1,612 completed surveys for this collection (Table 4).

We expect that the initial contact time will be one minute per person. During the initial on-site contact each person will be asked to answer the four questions that will be used for the non-response check which will take an additional 2 minutes. The initial contact will take a total of 3 minutes (2,607 x 3 minutes = 130 hours). We expect that 207 (8%) visitors will refuse to participate. Those individuals will be asked to answer the four questions that will be used for the non-response check and the reasons for refusal will be recorded

For those who agree to participate (n= 2,400) we expect that 1,612 will complete and return the survey, with that, an additional 20 minutes will be required to complete and return the questionnaire (1,612 responses x 20 minutes = 537 hours). The burden for this collection is estimated to be 667 annual hours.

**Table 4: Estimation of Burden**

Estimated Number of Contacts		Estimation of Time		Estimation of Respondent Burden	
Total Number of Initial Contacts	2,607	Estimated Time (mins.) to Complete Initial Contact	3	Estimated Burden Hours	130
Total Number of Responses	1,612	Time to complete and return surveys	20	Estimated Burden Hours	537
<b>Total Burden</b>					<b>667</b>

11 **Reporting Plan:** The study results will be presented in an internal agency report for NPS managers. Response frequencies will be tabulated and measures of central tendency computed (e.g., mean, median, mode, as appropriate). The report will be archived with the NPS Social Science Program for inclusion in the Social Science Studies Collection as required by the NSP Programmatic Approval Process; and will also be posted on the Park Studies Unit VSP website at: <http://psu.uidaho.edu/vsp.reports.htm>. Hard copies will be available upon request. The economic data will be used to produce a report for the NPS covering overall use estimates and local economic impacts.

**References:**

Dillman, D. A., Smyth, J. D., & Christian, L.M. (2010) *Internet, Mail, and Mixed-mode surveys: The tailored design method*, 3<sup>rd</sup> Edition, Hoboken NJ: John Wiley & Sons, Inc.

Rookey, B. D, Le, L., Littlejohn, M., & Dillman, D. A. (2012) Understanding the resilience of mail-back survey methods: An analysis of 20 years of change in response rates to national park surveys. *Social Science Research*, 41(6), pp 1404-1414.