



**National Park Service
U.S. Department of the Interior**

Social Science Program

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

Programmatic Approval for NPS-Sponsored Public Surveys

Submission Date

1. Project Title:

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

1. Washita Battlefield National Historic Site (WABA)
2. Grant-Kohrs Ranch National Historic Site (GRKO)
3. Dinosaur National Monument (DINO)
4. Stones River National Battlefield (STRI)
5. Springfield Armory National Historic Site (SPAR)

- 2. Abstract:** This submission contains 5 separate collections, using mail-back questionnaires to gather information from visitors at: Washita Battlefield National Historic Site (WABA), Grant-Kohrs Ranch National Historic Site (GRKO), Dinosaur National Monument (DINO), Stones River National Battlefield (STRI), and Springfield Armory National Historic Site (SPAR). Each survey will gather information about visitor satisfaction about park services and facilities as parks prepare/revise management plans and improve interpretive operations to meet visitors' needs and expectations. The surveys will provide information about impacts of visitor spending on local communities and feedback on local commercial services and will be shared with park partners and gateway communities to assist in mutual planning efforts.

(not to exceed 150 words)

3. Principal Investigator Contact Information

First Name: Lena **Last Name:** Le
Title: NPS VSP Assistant Director
Affiliation: VSP, Park Studies Unit, College of Natural Resources, University of Idaho
Street Address: 6th & Line Streets, Room 17A
City: Moscow **State:** ID **Zip code:** 83844-1139
Phone: 208-885-2585 **Fax:** 208-885-4261
Email: lenale@uidaho.edu

4. Park or Program Liaison Contact Information - Washita Battlefield National Historic Site

First Name: Frank **Last Name:** Torres
Title: Chief of Interpretation & Operations
Park: Washita Battlefield National Historic Site
Street Address: 18555 Highway 47A
City: Cheyenne **State:** OK **City:** Cheyenne
Phone: 580-497-2742 **Fax:** 530-497-3237
Email: Frank_Torres@nps.gov

Park or Program Liaison Contact Information - Grant-Kohrs Ranch National Historic Site

First Name: Julie **Last Name:** Croglia
Title: Chief of Visitor Services
Park: Grant-Kohrs Ranch National Historic Site
Street Address: 266 Warren Lane
City: Deer Lodge **State:** MT **City:** Deer Lodge
Phone: 406-846-2070 ext 226 **Fax:** 406-846-3962
Email: Julie_Croglia@nps.gov

Park or Program Liaison Contact Information - Dinosaur National Monument

First Name: Dan **Last Name:** Johnson
Title: Chief of Interpretation
Park: Dinosaur National Monument
Street Address: 4545 E. Highway 40
City: Dinosaur **State:** CO **City:** Dinosaur
Phone: 435-781-7702 **Fax:** 970-374-3003
Email: Dan_Johnson@nps.gov

Park or Program Liaison Contact Information - Stones River National Battlefield

First Name: Gib **Last Name:** Backlund
Title: Chief of Operations
Park: Stones River National Battlefield
Street Address: 3501 Old Nashville Highway
City: Murfreesboro **State:** TN **City:** Murfreesboro
Phone: 615-893-9501 **Fax:** 615-893-9508
Email: Gib_Backlund@nps.gov

Park or Program Liaison Contact Information - Springfield Armory National Historic Site

First Name: Joanne **Last Name:** Gangi-Wellman
Title: Supervisory Park Ranger
Park: Springfield Armory National Historic Site
Street Address: 1 Armory Square, Suite 2
City: Springfield **State:** MA **ZIP:** 01105
Phone: 413-734-8551 ext 236 **Fax:** 413-747-8062
Email: Joannm_Gangi@nps.gov

Project Information

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| 5. Park(s) For Which Research is to be Conducted: | <ol style="list-style-type: none">1. Washita Battlefield National Historic Site2. Grant-Kohrs Ranch National Historic Site3. Dinosaur National Monument4. Stones River National Battlefield5. Springfield Armory National Historic Site |
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6.	Location	Start Date		End Date
	Washita Battlefield National Historic Site	5/20/2013	to	5/26/2013
Survey	Grant-Kohrs Ranch National Historic Site	7/9/2013	to	7/15/2013
Dates:	Dinosaur National Monument	7/12/2013	to	7/18/2013
	Stones River National Battlefield	7/13/2013	to	7/19/2013
	Springfield Armory National Historic Site	7/21/2013	to	7/27/2013

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

<input checked="" type="checkbox"/> Mail-Back Questionnaire	<input type="checkbox"/> On-Site Questionnaire	<input type="checkbox"/> Face-to-Face Interview	<input type="checkbox"/> Telephone Survey	<input type="checkbox"/> Focus Groups
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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.

Management Justification: The five parks in this collection are in the process of preparing or revising a management plan. Park managers are looking for visitor's feedback about services and facilities provided at the parks to determine visitor satisfaction and to plan for improvement. This collection will also provide requested information about economic impacts of visitor spending in the local area that the park managers use when planning with the local communities.

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

- provide input into the park's planning processes (e.g., General Management Plan, Comprehensive Interpretive Plan, and/or 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 visitor facilities or services
- 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.

In addition, each park has specific needs for a separate visitor survey:

1. Washita Battlefield National Historic Site
Washita Battlefield NHS has never had an in-depth visitor study done. This site

became a unit of the National Park System in 1997 to present multiple viewpoints about the impacts of the Indian Wars on both the Cheyenne people and white settlers. The park needs basic data about the visitors who come to the park, as well as their opinions about the services and facilities provided in the park. This information will provide feedback about the current interpretive operation. In addition, it will enable partnering with local communities that provide services and share in the economic benefits of visitors spending time in the area. Key reasons why the park needs this visitor study:

- establish visitor profile – currently no data available;
- obtain feedback on current interpretive services—no data is currently available;
- obtain economic and marketing information for partnering with local communities.

2. Grant-Kohrs Ranch National Historic Site

This park is an operating cattle ranch that preserves the wind-ranging cattle industry and ranching heritage from the past 125 years. It is generally assumed that visitors often stop at GRKO on their way to or from Glacier or Yellowstone national parks, as a rest stop. However, this anecdotal observation has never been confirmed. Learning the visitor profile and getting visitor feedback on the park's services and facilities would be very helpful for interpretive operations, which have not been evaluated since the park was established in 1972. The park wants to better market itself through working with tourism partners in local communities. The park's local economic impact will be compiled to show that it is more than just a brief rest stop on the interstate highway. The park's proposed visitor study is needed to:

- obtain a baseline of visitor profile and visitor activities in relations to other national parks in the area;
- show the economic impact of park visitors in local communities and learn about the sources to use to market the site;
- obtain evaluations of interpretive services and operations which fit visitor needs and expectations.

3. Dinosaur National Monument

The park re-opened its main visitor facility in 2011 after a 5-year closure to repair the unstable building. The park has not had a visitor study since it was established in 1915. The park's General Management Plan (GMP) is very old and this information collection was specifically requested by park managers for the purposes of updating their GMP. The study will also be used to update park media, publications, exhibits and other interpretive services, some of which are quite outdated. The park managers work with local tourism bureaus in marketing efforts, so the survey data would also benefit local communities. Economic information will also be gathered to determine the park visitation impact on local economies. The park needs this visitor study to:

- obtain visitor feedback and demographics;
- obtain visitor opinions about park services and facilities
- obtain marketing and economic information to aid in working with local partners.

4. Stones River National Battlefield

Since the last VSP visitor study was conducted in 2004, the park has expanded and renovated its visitor center, adding exhibits and reconfiguring the park tour road. A new visitor study will help get visitors’ assessment of these changes and provide insight into whether additional changes are needed in interpretive services. Since the battlefield is a major reason that visitors come to the area, showing data on the economic impact is important in working with local communities, as well as in marketing the park. The survey will:

- provide valuable feedback on recent changes in the interpretive operation in the park;
- determine appropriate services that meet the needs of a changing regional population;
- provide data on the economic impact of park visitors on the local economy, which increases the opportunity for heritage tourism partnerships in marketing.

5. Springfield Armory National Historic Site

This park was established to commemorate the significance of US military manufacturing small arms from 1794 to 1968, and protect one of the largest small arms collections in the world. The park has not had a visitor study done since its establishment in 1978. The park is currently writing its Interpretive Plan and information is needed to provide direction for future interpretive programming, exhibits, outreach, personal services, and facilities. Park managers work closely with the local community to plan collaborative marketing strategies and this data will assist in those efforts. This study is needed to provide park managers with:

- an up-to-date visitor profile—no data currently exists;
- visitor feedback on interpretive operations; in hopes of better serving the public and increasing understanding of park resources;
- data do the their Interpretive Plan; and
- economic impact information and uses of local services that will be valuable for partnering and marketing with local communities and other park collaborators.

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

(a) Respondent Universe:

The respondent universe each survey in this submission will be a systematic sample of all recreational visitors, age 16 and older, visiting the parks during the study periods. The intercept locations and sampling period for each park listed in I the table below.

Table 1: Sample Locations

Park	Intercept Location	Sampling Period
Washita Battlefield National Historic Site	• Visitor Center	5/20-26/2013
Grant-Kohrs Ranch National Historic Site	• Visitor Center	7/9-15/2013
Dinosaur National Monument	• Main entrance near Jensen, UT • Harpers Corner entrance/ Canyon Visitor Center • Josie Morris Cabin	7/12-18/2013

	<ul style="list-style-type: none"> • Split Mountain 	
Stones River National Historic Site	<ul style="list-style-type: none"> • Visitor Center 	7/13-19/2013
Springfield Armory National Historic Site	<ul style="list-style-type: none"> • Main Arsenal Building • grounds 	7/21-27/2013

(b) Sampling Plan/Procedures:

Park visitors will be randomly selected to participate in the studies as they visit each of the parks during a seven-day study period. A systematic sampling procedure is based on the park’s visitation statistics from the previous year (see Table 2), will require intercepting every nth visitor group to participate in the study.

Table 2: Sampling frame from park visitation statistics

Park	Sampling month	Projected Number of recreational visit during sampling month *
Washita Battlefield National Historic Site	May 2012	1,181
Grant-Kohrs Ranch National Historic Site	July 2012	3,141
Dinosaur National Monument	July 2012	64,031
Stones River National Historic Site	July 2012	23,099
Springfield Armory National Historic Site	July 2012	3,671

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

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 more than 250 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).

Each interviewer will be instructed to contact every nth visitor at each of the park locations (listed in Table 1 above). The Interviewer will be trained on every aspect of on-site surveying 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.

(c) Instrument Administration:

The initial contact with visitors will be used to explain the study and determine if visitors are interested in participating. This 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. At this point, all individuals asked to participated in the study will be asked the non-response bias

questions to collect information that will be used in the final analysis (see item 9e below). Visitors that refuse to participate will be asked if they would be willing to take two minutes to respond to the non-response bias questions. 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 questionnaire 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 the survey tracking sheet - this information will only be used to follow-up with all non-respondents. At the end of the survey sampling period, all visitors accepting a survey packet on-site 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 non-respondents 21 working days after completion of on-site contacts. A second reminder letter will be mailed to non-respondents after 35 working days with a stamped, addressed replacement questionnaire.

(d) Expected Response Rate/Confidence Levels:

The response rate for each of the collections is based on similar VSP surveys. Based on the survey sample sizes, there will be 95% confidence that the survey findings will be accurate to within 3-5 percentage points (Table 1 below). Thus,

the proposed sample sizes will be adequate for bivariate comparisons and will allow for comparisons between study sites and more sophisticated multivariate analysis. 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). Although the five surveys use the same methodology and survey procedure, the response rates are expected to vary due to park type and park location (Rookey, Le, Littlejohn & Dillman, 2012).

Washita Battlefield National Historic Site - A total of 370 visitors will be contacted during the sampling period. Based on similar studies conducted by the VSP, 340 (92%) visitors will agree to participate in the survey. The number of refusals will be recorded and reported in a tracking sheet, and will be used in calculating the response rate. We expect that 221 visitors (65%) will complete and return the survey by mail. Based on the survey sample size, there will be 95% confidence that the survey findings will be accurate to within 5 percentage points.

Grant-Kohrs Ranch National Historic Site - A total of 370 visitors will be contacted during the sampling period. We estimate that 340 (92%) visitors will agree to participate in the survey. The number of refusals will be recorded and reported in a tracking sheet, and will be used in calculating the response rate. Among which, 238 visitors (70%) are expected to complete and return the survey by mail. Based on the survey sample size, there will be 95% confidence that the survey findings will be accurate to within 5 percentage points.

Dinosaur National Monument - A total of 543 visitors will be contacted during the sampling period. We expect that 500 (92%) visitors will agree to participate in the survey. The number of refusals will be recorded and reported in a tracking sheet, and will be used in calculating the response rate. An expected 340 visitors (68%) will complete and return the survey by mail. This response rate is estimated based on other similar VSP surveys. Based on the survey sample size, there will be 95% confidence that the survey findings will be accurate to within 4.2 percentage points.

Stones River National Battlefield - A total of 489 visitors will be contacted during the sampling period. Based on a similar survey conducted by the VSP in 2002, we expect that 450 (92%) visitors will agree to participate in the survey. The number of refusals will be recorded and reported in a tracking sheet, and will be used in calculating the response rate. An expected 315 visitors (70%) will complete and return the survey by mail. This response rate is estimated based on the previous survey at Stones River National Battlefield in 2003 and other similar surveys. Based on the survey sample size, there will be 95% confidence that the survey findings will be accurate to within 4.6 percentage points.

Springfield Armory National Historic Site - A total of 370 visitors will be contacted during the sampling period. We estimate that 340 (92%) visitors will agree to participate in the survey. The number of refusals will be recorded and reported in a tracking sheet, and will be used in calculating the response rate. A total of 238 visitors (70%) are expected to complete and return the survey by mail. Based on

the survey sample size, there will be 95% confidence that the survey findings will be accurate to within 5 percentage points.

Table 3: Expected Response Rate/Confidence Levels

	Number of Initial Contacts	Number Accepting Survey	Expected Response Rate	Expected Number of Responses	Margin of Error +/- %
WABA	370	340	65%	221	5
GRKO	370	340	70%	238	5
DINO	543	500	68%	340	4.2
STRI	489	450	70%	315	4.6
SPAR	370	340	70%	238	5.0
TOTAL	2,142	1,970		1,352	

(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 reported and any implications for planning and management will be discussed.

(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 Expiration Date: 8-31-2014). Variations of the questions have been reviewed by NPS managers and University of Idaho professors.

10 **Burden Estimates:** Overall, we plan to approach at least 2,142 individuals during the five sampling periods. Among which, we plan to obtain verbal agreement to participate in the survey from 1,970 individuals. We expect to receive total of 1,352 completed surveys for this collection (Table 4).

We expect that the initial contact time will be one minute with additional two minutes to ask four questions for non-response bias check. The total initial contact time will be at least three minutes per person (2,142 x 3 minutes = 107 hours). We expect that 172 (8%) visitors will completely refuse to participate for those individuals we will record their reason for refusal if given.

For those who agree to participate (n= 1,970) we expect that 1,352 will complete and return the survey, with that, an additional 20 minutes will be required to complete and return the questionnaire (1,352 responses x 20 minutes = 451 hours). The total burden for this collection is estimated to be 558 annual hours.

Table 4: Estimate burden hours

Estimated Number of Contacts		Estimation of Time (Minutes)		Estimation of Respondent Burden		
Total Number of Initial Contacts	2,142	Estimated Time to Complete Initial Contact	3	Estimated Burden Hours	107	
Total Number of Responses	1,352	Time to complete and return surveys	20	Estimated Burden Hours	451	
					Total Burden	558

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 also used to produce a special 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*, 3rd 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), 1404-1414.