



## PROGRAMMATIC REVIEW AND CLEARANCE PROCESS FOR NPS-SPONSORED PUBLIC SURVEYS



The scope of the Programmatic Review and Clearance Process for NPS-Sponsored Public Surveys is limited and will only include individual surveys of park visitors, potential park visitors, and residents of communities near parks. Use of the programmatic review will be limited to non-controversial surveys of park visitors, potential park visitors, and/or residents of communities near parks that are not likely to include topics of significant interest in the review process. Additionally, this process is limited to non-controversial information collections that do not attract attention to significant, sensitive, or political issues. Examples of significant, sensitive, or political issues include: seeking opinions regarding political figures; obtaining citizen feedback related to high-visibility or high-impact issues like the reintroduction of wolves in Yellowstone National Park, the delisting of specific Endangered Species, or drilling in the Arctic National Wildlife Refuge.

**SUBMISSION DATE: 4-16-2021**

**PROJECT TITLE:** Visitor Survey to Inform Park Planning at Bryce Canyon National Park

### **ABSTRACT: (not to exceed 150 words)**

Bryce Canyon National Park (BRCA) managers have identified visitor use management as primary planning needs in the park. The purpose of this study is to inform core issues of visitor use management, management solutions, and to develop a current and deeper understanding of who visits BRCA, what they do during their visit, and their spending profile. The study adopts a two-phased data collection methodology: 1) an on-site survey and 2) follow-up post-trip survey. This collection is intended to provide data to allow in-season adjustments to management strategies that will offer insights into visitor experiences, trip characteristics, and spending for long term management.

### **PRINCIPAL INVESTIGATOR CONTACT INFORMATION:**

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## PROJECT INFORMATION:

**Where will the collection take place?** Bryce Canyon National Park (BRCA)

**Sampling Period Start Date:** 07/01/2021

**Sampling Period End Date:** 12/31/2021

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

Mail-Back Questionnaire  
Face-to-Face Interview

On-Site Questionnaire  
Focus Groups

Telephone Survey  
Other (List)

Will an electronic device be used to collect information?  No  Yes - Type of Device: **iPad tablet**

## SURVEY JUSTIFICATION:

*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 and development.*

Visitation to Bryce Canyon National Park (BRCA) has increased to more than 2.5 million visits in 2018. Park managers are concerned that the continued increase of visitor use will cause long-term impacts on the resources in the park. Given this challenge, BRCA managers require information to determine how current utilization and perception of park resources, operations, and facilities are impacted due to increased visitation. Further, the information is needed to facilitate communication and decision processes within the park and between the park and its local partners and stakeholders. A visitor survey will be used to evaluate the following:

1. Impacts of Visitor Spending -- Provides an understanding of how and where visitors spend their money on goods and services during their travel to determine the relationship between parks and their local economies by creating visitor spending profiles.
2. Trip Characteristics - Enables understanding of travel demand for the park and its relationship to the region.
3. Visitor Perceptions - Identifies visitor perceived conditions on the ground allowing the park to consider implications of potential management decisions.

This comprehensive approach will provide BRCA managers timely feedback and information - within two weeks from the intercept survey - to make potential management decisions.

## SURVEY METHODOLOGY

### (A) Respondent Universe:

The respondent universe for the on-site and follow-up surveys will be all adult visitors (18 years old and older) in the park during two sampling periods (July 3 -10, 2021 and October 03-09, 2021).

**(B) Sampling Plan / Procedures:**

This collection will use an on-site intercept survey and a follow-up mail-back (post-trip) survey to capture a representative sample of visitor information, characteristics, and behavior.

**On-site Intercept Survey**

A random sampling of visitors will be intercepted while visiting BRCA across seven designated locations: 1) Bryce Canyon Shuttle Stop/Ruby’s Point Inn; 2) Campgrounds; 3) Mossy Cave parking lot and trailhead; 4) Rainbow Point; 5) Sunrise Point/Lodge/General Store; 6) Sunset Point; and the 7) Visitor Center (outside).

Intercept effort and the number of target intercepts by site will be in proportion to historic traffic/visitor volume at each location. Historic traffic/visitor use volume data was informed by the NPS Social Science team and a 2009 visitor study in BRCA. Visitors will be intercepted on foot in each location during their experience. Visitors will be randomly approached. Surveyors will be instructed to attempt to intercept every Nth group passing. N will be determined based on anticipated volume and number of intercepts required at each location (Table 1).

**Table 1. Example On-site intercept survey schedule**

Survey Locations	July			October		
	Sampling Days per period	Number of visitors contacted	Anticipated Completed On-site Surveys	Sampling Days per period	Number of visitors contacted	Anticipated Completed On-site Surveys
Bryce Canyon Shuttle Stop/Ruby’s Point Inn	6	250	200	6	250	200
Campgrounds	3	125	100	3	125	100
Mossy Cave parking lot and trailhead	2	50	40	2	50	40
Rainbow Point	2	62	50	2	62	50
Sunrise Point/Lodge/General Store	3	87	70	3	87	70
Sunset Point	6	250	200	6	250	200
Visitor Center	6	250	200	6	250	200
<b>Total</b>	<b>28</b>	<b>1,074</b>	<b>860</b>	<b>28</b>	<b>1,074</b>	<b>0</b>

Four dedicated surveyors plus two social scientists will be on site collecting surveys. Days off will be staggered such that at least four members will be working on any given day. One surveyor will be stationed in each of the four sample locations, and social scientists will rove through the survey locations to manage for quality control (Table 1).

**Post-trip Survey**

All respondents completing the on-site survey will be asked to complete and return a post-trip survey after completing their trip to BRCA. A survey and postage-paid envelope will have a corresponding survey ID to match their on-site

survey. The survey ID will be used to identify non-respondents. Respondents who complete the tablet survey but refuse to take a post-trip survey will be considered non-respondents for the post-trip. These refusals are accounted for in non-response estimates for the post-trip survey.

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**(C) Instrument Administration:**

The on-site collection will be implemented using a tablet-based questionnaire to collect responses. This method will allow responses to be made available within two weeks of data collection. The follow-up survey will be delivered to any participating respondents who were intercepted in the on-site survey portion.

**On-site Intercept Survey**

The on-site survey will be administered to visitors at designated intercept locations (Table 1). If the visitor agrees to participate in the study, the surveyor will verbally administer the survey questions and will record the responses via an iPad Tablet. If the visitor does not agree, surveyors will thank them for their time, ask if they would be willing to answer the three non-response bias questions.

Following a brief introduction of the purpose of the survey, the potential respondent (adult group member with the most recent birth date) will be asked if they are willing to take part in the 5-minute survey administered by the surveyor.

**Sample Script for On-site Survey:**

*“Hello, I am working with Bryce Canyon National Park conducting a 10-minute survey to improve visitor experiences in the park. May I ask you several questions about your Bryce Canyon experience?”*

→If **NO** – The surveyor will thank the visitor and ask them to answer the three questions that will serve as a non-response bias check (in Section E below)

→If **YES** – The surveyor will begin the on-site visitor survey with the recruited individual after reading the Paperwork Reduction and Privacy Act below. The surveyor will verbally administer the survey and record responses on an iPad Tablet. Upon completion of the on-site survey, the respondent will be thanked for their time.

*Before we begin, I would like to let you know that this survey has been approved by the Office of Management and Budget. It is important to note that a Federal agency may not conduct or sponsor, and you are not required to respond to, a collection of information unless it has a valid OMB control number. The control number for this collection is XXX and this number is valid through XXX. Secondly, your participation is voluntary, and your name will never be connected with your individual responses. This survey will only take about five minutes of your time today.*

The Intercept survey includes questions used in the non-response bias check (e.g., residency, permanent or seasonal residency in the local area around BRCA, and whether the respondent spent a night away from their permanent residency on this trip).

Four potential outcomes are expected following the request to participate:

1. Complete refusal
2. Partial refusal, answering non-response questions but nothing further
3. Complete on-site survey, but refuse to take post-trip survey
4. Complete on-site survey and agree to take post-trip survey by providing mailing address for follow-up
5. Complete on-site survey, refuse to give mailing address, but provide email address for post-trip survey

As part of the intercept protocol, surveyors will input a unique identifier into the tablet for future connection to the post-trip survey. The final question on the survey will provide the respondent an opportunity to input their address. If they refuse their address, their email will be requested. Addresses and emails will be used solely for the purpose of the follow-up protocol using the "Tailored Design Method." All contact information collected will be stored separately from the survey responses and destroyed by shredding at the end of the sampling period.

### **Post-Trip Contact**

Following completion of the on-site survey, all respondents will be asked to take a mail-back survey that asks additional questions pertaining to their trip. Those agreeing to take a mail-back survey will be provided a numbered survey, and postage-paid envelope corresponding to their on-site survey ID. Respondents will be asked to complete and return the survey after completing their trip to BCRA. Surveys may be mailed back from any U.S. mailbox. International travelers will be encouraged to mail the survey back prior to leaving the U.S. Respondents will also be provided a web link to use the option of completing an on-line version of the survey.

Using the "Tailored Design Method," we will send a follow-up thank you and reminder (postcard or email depending upon respondent's preferred mode) to all contacts at the end of each data collection period (no more than two weeks after the in-park contact). The follow-up will: (1) thank them for their original participation, (2) encourage them to complete the mail-back, or (3) provide an online link to complete the on-line survey if they have not already completed and returned the survey.

Three weeks after the follow-up, a second contact (with the same unique Survey ID) will be either mailed or emailed to all non-respondent postal addresses or emails. Mailed survey packet will include a survey, appropriate postage paid, self-addressed return envelopes. Postage will depend on whether the address is international or domestic. A final contact will be sent to all remaining non-respondents two to four weeks after second contact was sent.

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### **(D) Expected Response Rate / Confidence Level:**

#### **On-site Survey**

Based on previous research experience with this method and as indicated above, we estimate that at least 80% (n=860) of visitors contacted during each sampling period will agree to participate in the on-site survey. We expect 90% of those who do not agree to participate in the on-site survey to answer the non-response bias questions (n=193) with roughly 21 visitors completely refusing to participate in any part of the collection. The completed on-site surveys yield a confidence level of 95% with a margin of error within each period and overall, of +/-5%.

**Table 2. Anticipated On-site Survey Response Rates**

Sampling Period	Total Number of Visitor Contacts	Completed Onsite Surveys 80%	Refusals 20%	Completed Non-Response Surveys (90% of soft refusals)	Hard Refusals (10% of soft refusals)	Margin of Error*
July	1,074	860	214	193	21	+/-5%
October	1,074	860	214	193	21	+/-5%
<b>TOTAL</b>	<b>2,148</b>	<b>1,720</b>	<b>428</b>	<b>386</b>	<b>42</b>	<b>+/-5%</b>

\*Note: Faculty at Utah State University conduct on-site surveys across the U.S. in national parks and these percentages are based upon the average refusals obtained.

**Post-Trip Survey**

For the Post-trip survey, we estimate that 50% (n=408) of the respondents who completed the on-site survey will complete the post-trip survey during each sampling period. This response rate estimate includes those that refuse the mail-back following the intercept. Based on previous experience by the research team and inquiries with colleagues using similar methods with tablet-based intercept surveys followed by a request to take a post-trip survey, we anticipate approximately 95% of respondents take the post-trip survey. Table 3 provides information related to response rates for both the July and October surveying periods. The initial contacts represent the number of respondents who are asked to take the post-trip survey following the intercept. No additional non-response questions will be posed to non-respondents. Front-end questions will be utilized for dealing with potential non-response bias. The completed post-trip surveys yield a confidence level of 95% with a margin of error within each period and overall, of +/- 5%.

**Table 3. Anticipated Response Rates (Post-trip Survey)**

Respondents	Initial Contacts	Acceptance of Post-trip 95%	Hard Refusals 5%	Completed Post-trip survey 50%	Non-respondents 60%	Margin of Error*
July	860	817	43	408	516	+/-5%
October	860	817	43	408	516	+/-5%
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

\*Note: Utah State University conducts frequent on-site surveys across the U.S. and these percentages are based upon the average refusals obtained.

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

To account for potential on-site non-response bias, surveyors will attempt to ask non-responding visitors the following questions:

- “Are you a permanent resident of the United States?”
- “Are you a permanent or seasonal resident of the local area around Bryce Canyon National Park?”
- “On this trip, did you [and your personal group] stay overnight away from your permanent residence either inside Bryce Canyon National Park or within the local area”?

These questions will be compared to those who complete the on-site survey to identify if any non-response bias exists

and strategies to correct for it. Where necessary, adjustments to minimize non-response will be made in the October survey period based on lessons learned in July. Where significant differences are identified, weighting will be applied to the on-site survey results.

A second non-response bias check will be necessary to account for any differences between those who return the post-trip survey and those that do not. Each post-trip survey will have a unique identifier that links the on-site and post-trip surveys. As such, the research team will have access to the full suite of on-site questions answered. Following completion of data collection of the post-trip surveys, the research team will use the same three non-bias check questions to compare the results between those who complete the post-trip portion with the respondents completing the on-site survey but did not complete the post-trip survey. This second comparison will be used to identify any necessary weighting of the post-trip data.

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

The questions in both surveys come from the NPS Pool of Known (OMB Control Number 1024-0224). The on-site and post-trip survey instruments were pre-tested in the format in which they are to be delivered (i.e., tablet or online) to determine question understanding and length. The pre-tests were conducted by Social Scientists working on the project at Utah State University and the Institute of Outdoor Recreation and Tourism (IORT). These Social Scientists identified students, faculty, and staff (9 in total) who had been to BRCA in recent years and felt they could readily recall their experiences. Based upon the pretest we were able to assess and correct skip patterns within the survey and gauge readability of the posed questions. For the on-site survey, we have estimated from these pre-tests that it will take at least one minute to introduce the survey and an additional 5 minutes to complete the on-site survey. For the visitors refusing to complete the on-site survey it will take no more than one minute to ask nonresponse questions if the respondent does not want to participate in the full survey. The post-trip survey should take approximately 15 minutes to complete.

These estimates conform to averages from the project team's combined ongoing field studies across the Western U.S. All concepts for the questionnaire and methods have been shown to be valid and reliable through peer-reviewed academic studies and other NPS projects. With few exceptions, the questions covered in the survey are drawn from the previously piloted SEM study in 14 parks within the NPS system. A project Social Scientist or Economist will train and supervise the data entry and check entries for accuracy and quality control.

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**BURDEN ESTIMATES**

The total burden estimate for this collection was calculated by combining the on-site survey and the post trip survey.

- Completed Responses: 2,976
- Respondent Burden hours: 546

**Intercept Survey**

The combined estimated totals for the two collection periods for the intercept survey in this study are as followed: number of Responses for Intercept Survey ( $n=1,720$ ) and the respondent Burden for Intercept Survey will be 316 hours (see Table 4). These are split evenly across July and October periods. We expect that contact time will include at least 1 minute per person to establish participation and to answer any questions the respondent may have and then an additional five minutes to complete the on-site survey ( $1,720$  respondents  $\times$  11 minutes = 316 hours). We expect that in addition to the one-minute initial contact, it will take an additional minute to conduct the non-response bias check

for visitors who do not agree to participate in the on-site survey (386 respondents x 2 minutes = 12 hours). The burden for the remaining visitors completely refusing to participate in the collection will not be estimated due to the de minimis nature of their participation. Respondents who agree to participate will answer the non-response bias questions as part of their on-site survey and will have no extra time added to their burden. Therefore, the total burden for the on-site survey will be 328 hours.

**Table 4. Burden Estimates for On-site intercept survey**

	Completed Responses	Completion Time (minutes)	Burden Hours (rounded up)
On-site Survey*			
July	860	11	158
October	860	11	158
<i>Subtotal</i>	<b>1,720</b>		<b>316</b>
On-site non-response survey*			
July	193	2	6
October	193	2	6
<i>Subtotal</i>	<b>386</b>		<b>12</b>
<b>Total burden requested under this ICR:</b>	<b>2,160</b>		<b>328</b>

\* Initial contact time of one minute is added to the time to complete the surveys

\*\* Includes the time to connect to the on-line survey and read the instructions

**Post-Trip Survey**

We expect that it will take respondents a maximum of 15 minutes to complete the post-trip survey, plus an additional minute to read the directions and/or connect to the online platform (816 x 16 minutes = 218 hours).

**Table 5 Burden Estimates for Post-trip Survey**

	Completed Responses	Completion Time (minutes)	Burden Hours (rounded up)
On-site Survey*			
July	408	16	109
October	408	16	109
<i>Subtotal</i>	<b>816</b>		<b>218</b>

**REPORTING PLAN:**

The study results will be presented in a comprehensive report that will be shared with NPS staff at Bryce Canyon National Park, the Denver Service Center, and the Social Science Program. Questionnaire results will be presented in tables or figures with descriptive text. Results will include frequencies, measures of central tendency (e.g. mean, median, and standard deviation), cross-tabulations from chi-square tests and ANOVAs will be conducted where appropriate. Bryce Canyon National Park will also be provided with an interactive dashboard to review intercept survey data collected within three weeks of the sampling period. The reports will be archived with the NPS Social Science Program for inclusion in the Social Science Studies Collection as required by the NPS Programmatic Approval Process. Hard copies and electronic copies of the final report will be submitted to the park. Finally, results will be presented to NPS staff at three periods: 1) a post sampling reporting period within three weeks of each on-site data collection and 2)



final reporting period. In addition to a report and data delivery, a 2-hour WebEx based presentation will be delivered to park staff.

## NOTICES

### PRIVACY ACT STATEMENT

**GENERAL:** This information is provided pursuant to Public Law 93-579 (Privacy Act of 1974), December 21, 1984, for individuals completing this form.

**AUTHORITY:** National Park Service Research mandate (54 USC 100702)

**PURPOSE AND USES:** This information will be used by The NPS Information Collections Coordinator to ensure appropriate documentation of information collections conducted in areas managed by or that are sponsored by the National Park Service.

**EFFECTS OF NONDISCLOSURE:** Providing information is mandatory to submit Information Collection Requests to Programmatic Review Process.

### PAPERWORK REDUCTION ACT STATEMENT

We are collecting this information subject to the Paperwork Reduction Act (44 U.S.C. 3501) and is authorized by the National Park Service Research mandate (54 USC 100702). This information will be used by The NPS Information Collections Coordinator to ensure appropriate documentation of information collections conducted in areas managed by or that are sponsored by the National Park Service. All parts of the form must be completed in order for your request to be considered. We may not conduct or sponsor and you are not required to respond to, this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number. OMB has reviewed and approved The National Park Service Programmatic Review Process and assigned OMB Control Number 1024-0224.

### ESTIMATED BURDEN STATEMENT

Public Reporting burden for this form is estimated to average 60 minutes per collection, including the time it takes for reviewing instructions, gathering information and completing and reviewing the form. This time does not include the editorial time required to finalize the submission. Comments regarding this burden estimate or any aspect of this form should be sent to the Information Collection Clearance Coordinator, National Park Service, 1201 Oakridge Dr., Fort Collins, CO 80525.