



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: March 15, 2019

PROJECT TITLE: Implement Multi-Modal Transportation Plan to Improve Visitor Experience

ABSTRACT: (not to exceed 150 words)

Bryce Canyon National Park (BRCA) completed a Multi-modal Transportation Plan (MTP) and Record of Decision (ROD) in November 2015. The purpose of the MTP is to provide strategies to improve the overall transportation system in BRCA and the quality of the visitor experience as visitation exceeds 2million visitors annually. The ROD documented selection of an adaptive management approach to transportation management at BRCA, requiring the park to develop performance measures to assess progress towards meeting MTP goals and to implement improvements in phases to test the effectiveness of plan improvements. This visitor survey will assess visitor experiences related to transportation factors in the park. The survey will complement assessments of visitor use patterns, traffic patterns, and resource impacts. Survey results will be used in combination with the aforementioned assessments to inform transportation management and prioritize future improvements in conjunction with the General Management Plan (GMP) and MTP.

PRINCIPAL INVESTIGATOR CONTACT INFORMATION:

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PARK OR PROGRAM LIAISON CONTACT INFORMATION:

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PROJECT INFORMATION:

Where will the collection take place? Bryce Canyon National Park (Enter Name of NPS site)

Sampling Period Start Date: June 2, 2019 Sampling Period End Date: August 10, 2019

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

- Mail-Back Questionnaire Face-to-Face Interview Focus Groups
 On-Site Questionnaire Telephone Survey
 Other (List)

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

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.

The MTP, completed in November 2015, predicted visitation to BRCA to increase to 2.1 million visitors by 2032. However, the park surpassed two million visitors in 2016, with total visitation reaching 2.3 million. Since 2013, visitation has increased over 100%, surpassing 2.5 million in 2017 and 2.6 million in 2018. These dramatic increases in the number of visitors coming to BRCA has resulted in traffic congestion on park roads, in parking lots, on the park shuttle, and at view points and along trails. Resource damage has also occurred as vehicles park illegally along roadsides when parking lots are full, and safety concerns have arisen due to conflicts between pedestrians and vehicles. The MTP identified the infrastructure and operational improvements needed to manage long-range increases in visitation. However, with actual visitation already exceeding the plan's 20 year projections, a more in-depth assessment of visitor uses, trends, and patterns is needed to determine the priorities for natural and cultural resource protection and infrastructure improvements and additions. Collecting social science data from park visitors regarding their transportation experience in BRCA is an essential component of implementing the MTP. Results from this phase of research will be used to understand visitors and their experience (focused on transportation-related factors), gauge support for potential management actions aimed at addressing transportation issues within the park, and inform the selection of performance measures to evaluate MTP implementation.

SURVEY METHODOLOGY:

(A) Respondent Universe:

Adult visitors to Bryce Canyon National Park age 18 and over.

(B) Sampling Plan / Procedures:

Visitors will be contacted at four main areas within the park: Park North (Fairlyland Point), Main Amphitheater (Sunrise Point, Sunset Point, Inspiration Point, Bryce Point), Park South (Rainbow Point), and Mossy Cave. Sampling will be stratified by day of week (weekday/Monday-Thursday and weekend/Friday-Sunday) and time of day (AM 6:00 am – 1:00 pm; PM 1:00pm – 8:00pm). Sampling will only occur at one location per day to avoid multiple contacts with individual visitors. The visitor survey will be administered for seven weeks during the summer season, with two sampling days per week. Sampling days/times and locations were selected randomly using a random number generator. The sampling schedule is provided below in Table 1.

Table 1. Sampling Schedule for Summer 2019

Week	Location 1	Day/Time 1	Location 2	Day/Time 2
1: June 2-8	Mossy Cave	Mon AM	Park S	Tues PM
2: June 9-15	Park N	Tues AM	Main Amphitheater (Sunset Point)	Sat AM
3: June 23-29	Park S	Sun PM	Park N	Thurs AM
4: June 30-July 6	Main Amphitheater (Inspiration Point)	Wed PM	Mossy Cave	Sat PM
5: July 7-13	Park S	Wed AM	Mossy Cave	Thurs PM
6: July 28-August 3	Main Amphitheater (Bryce Point)	Sun AM	Park S	Fri AM
7: August 4-10	Main Amphitheater (Sunrise Point)	Mon PM	Park N	Fri PM

(C) Instrument Administration:

Uniformed research assistants working in pairs will contact visitors at viewpoints and trailheads and ask them to participate in the research study. A random intercept method will be used to contact visitors. Every *n*th group (determined using a random number generator) will be approached and asked to participate in a voluntary self-administered survey. An adult member of the group with the next upcoming birthday will be asked to complete the survey. The survey will be self-administered using paper and pencil. Research assistants will be available to assist respondents with questions as they complete the survey, but will be trained to provide clarifying information only so as not to bias responses.

A contact log will be completed by the research assistants to track contacts and response rates. The contact log will be used to test for nonresponse bias in the resulting sample. This is discussed more in Section E.

(D) Expected Response Rate / Confidence Level:

Given an estimated 928,049 (source: NPS monthly visitor use statistics for BRCA) visitors coming to the park during the sampling period, a 95% confidence level and 4% margin of error, a sample size of 600 visitors is needed. Given a conservative estimate of 80% response rate (in-person on-site surveys of visitors to national parks routinely achieve response rates of 80% and higher), we expect to contact a total of 750 visitors during the sampling timeframe, or approximately 53 to 54 visitors during each individual sampling period. Since this survey will be administered on-site in a face-to-face manner. Anyone refusing to complete the on-site survey will be ask to complete the non-response bias check described below in Section E

Location	Initial Contacts	Acceptance 80%	Non-respondents (Soft refusals) 20%	Non-response survey 5%	Hard Refusals
Park N	162	130	32	2	30
Main Amphitheater	213	170	43	2	41
Park S	213	170	43	2	41
Mossy Cave	162	130	32	2	30
TOTAL	750	0	0	8	0

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

Research assistants administering the survey will keep a Contact Log (included in this application packet) to record all visitor contacts. Each contact will be recorded as an Acceptance (i.e. agrees to participate) or Refusal. Observable characteristics of the visitor (approx. age, gender, race, group size, group type), time, and current weather conditions will be recorded for each contact. All on-site refusals will be asked to provide a reason for or refusal, if one is provided it will be recorded. Contact logs will be analyzed to determine whether the survey sample was

subject to non-response bias. Appropriate postsurvey adjustments will be made in consultation with a statistician if necessary. Interpolation may be used to compensate for missing data (i.e. skipped questions) if appropriate.

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

All questions included in the survey were taken from the NPS Pool of Known Questions and have been vetted by professionals experienced with survey research in national parks. The instrument was reviewed by BRCA management staff to ensure questions included meet the needs of the project and related goals of implementing the MTP. The draft survey was reviewed for clarity and question order. A pre-test of the survey with a sample of undergraduate students resulted in an average response time (with research assistant contact) of approximately 10 minutes.

BURDEN ESTIMATES:

The survey is estimated to take 10 minutes to complete. Assuming a needed sample size of 600 and an 80% response rate, we will attempt to contact 750 visitors to participate in the survey. We anticipate the time needed to contact visitors to participate in the study and allow them to agree or refuse will take approximately one minutes. The total burden estimate for this project is 110 hours, outlined in the tables below.

Burden Estimates

	Responses	Completion Time * (minutes)	Burden Hours (rounded up)
<u>Completed questionnaire*</u>	600	11	110
<u>Non-response bias check</u>	8	1	<1
Total burden requested under this ICR:	608		110 hours

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

REPORTING PLAN:

An annual summary report will be provided to the park in December 19 in compliance with park research permitting requirements. A final report will be provided to the park in Spring 2020, and a Technical Report will be prepared and submitted to NPS for review. Researchers may pursue publishing results of the study in Park Science or another outlet as appropriate.

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.