



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: December 19, 2014

Project Title: An Examination of Yellowstone National Park Visitor Segments and Predictive Analysis of National Park Support

Abstract (not to exceed 150 words)

The purpose of this study is to explore current Yellowstone National Park visitors' experiences, attachment, and support for the park. An on-site exit survey will be used to initiate this collection, followed by a mail-back questionnaire given to all visitors and telephone interviews conducted with a selected group of respondents.

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Project Information

Where will the collection take place? (Name of NPS Site) Yellowstone National Park (YELL)

Sampling Period Start Date: May 22, 2015 End Date: September 20, 2015

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 (Apple iPad)

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.

Because of growing concerns across the National Park System in regards to connecting with visitors and constraints on funding, Yellowstone National Park (YELL) is interested in how transformative visitor experiences could be used to generate public support for the Park. The purpose of this study is to understand why certain visitors choose to support parks within the National Park System, specifically Yellowstone National Park. This study will use an on-site survey, mail-back survey, and a series of stakeholder interviews to determine how personal experiences are related to public support. For the purposes of this study, "support" is broadly defined as donations, memberships, volunteers, and repeat visitors. We will look at how experience and support are correlated to understand the factors that motivate people to support parks in general or support specific management efforts.

This will be the first survey conducted in Yellowstone that will use psychological and behavioral constructs combined to develop a park support model. Park managers and planners will be able to use this model to understand the type of visitor who is more likely to support Yellowstone based on their experiences within the park.

Survey Methodology

(b) Respondent Universe:

This collection will consist of two survey instruments (on-site and mail -back) and telephone interviews.

The respondent universe for the on-site and mail-back surveys will be all adults (18 years and older) visiting Yellowstone National Park during the sampling period (5/22/15 - 9/20/15).

The respondent universe for the telephone interviews will consist of a random sample of individuals from the following groups:

1. Yellowstone Park Foundation donors,
2. Yellowstone Association members, and
3. Adults (18 years and older)
 - encountered during the on-site data collection
 - visited Yellowstone at least 5 times in their lifetime and
 - are not donors of the Yellowstone Park Foundation or members of the Yellowstone Association.

(c) Sampling Plan/Procedures:

This collection will employ two sampling procedures to obtain data.

1. On-site and mail-back surveys: A systematic sample of all visitors passing through the five exit gates of Yellowstone National Park will be stopped and asked to complete the on-site survey. Once the on-site survey is completed, the surveyor will ask each respondent to take a mail-back survey to be completed and returned after their trip.
2. The telephone interviews with Yellowstone Association and Yellowstone Park Foundation members: The Yellowstone Association and Yellowstone Park Foundation have agreed to provide names and contact information of their members. The membership will be ranked by three levels of contributors (low, medium, and high). We will randomly select 27 names from both lists (9 from each category; n=52). Our goal is to have at least 10 completed interviews from each organization.

The potential respondents will receive notice that they may be contacted by the University of MT and asked to participate in an interview about their support for Yellowstone National Park. Researchers will randomly call contributors from each support level to request an interview. The selection process will continue until the goals of at least 10 interviews for each organization is achieved. If the goal is not reached the research team will revisit the membership list and continue the selection process until the goal is met.

Telephone interviews with repeat visitors: During the on-site survey 60 (2 per sample day) visitors responding that they have visited Yellowstone more than five times in their life and are not a member or have not donated to YA or YPF will be asked to participate in a follow-up telephone interview. If they agree, their name and contact information will be collected at that time. We will randomly select from the list of repeat visitors and contact them for a telephone interview. At that time if they refuse we will use the next name on the list. This method will continue until we have completed 10 interviews.

(d) Instrument Administration:

We will use two methods to collect information:

1. On-site and mail-back surveys: During the sampling period, we will stop each car exiting Yellowstone National Park at one of five exit gates. Each exit will be allotted sampling days based on the percentage of annual traffic through the entrance gate (provided by the NPS). For instance, the West Entrance of Yellowstone will receive 39% of the total sample days, which represents its proportion of traffic throughout the year. Each exiting visitor will be directed to pull into the survey staging area, and asked to participate in the on-site survey. The adult (18 years old or older) in the vehicle with the most recent birthday will be asked to complete the survey. To avoid traffic buildup, vehicles will be waved through the exit gates when more than two cars are in the survey staging area. We anticipate collecting a total of 4,230 on-site surveys, which equates to 141 surveys per sample day.

Once the on-site survey is completed, the surveyor will ask the respondent to take a mail-back survey to be completed and returned after their trip. Four questions taken directly from the on-site survey will serve as the non-respondent check for the mail-back survey. The following script will be used to initiate the process:

Script for the on-site survey:

"Hello, I am a graduate student at the Univ. of MT conducting a quick two minute exit survey as part of my dissertation regarding visitor experiences and support for Yellowstone National Park. May I ask you a few questions?"

→ If **NO** - the interviewer will thank the visitor and wave them through the gate and select the next vehicle exiting the park.

→ If **YES** - The interviewer will begin the on-site visitor survey with the recruited individual. The interviewer will verbally administer the survey questions and record the responses on an iPad. Upon completion of the on-site survey, the respondent will be offered a postage-paid envelope and mail-back survey to complete and returned at a later date. If the visitor refuses the mail-back survey, the interviewer will ask them to answer the following question from the mail-back survey to serve as a non-response bias check:

"Prior to this trip, how many times have you visited Yellowstone National Park in your lifetime?"

Script for interview recruitment: *"Thank you for all your help. I am also interested in having a conversation with visitors who have visited Yellowstone more than five times. Would you be willing to be interviewed over the phone at a later date?"*

→ If **YES** - interviewer will record their first name, phone number.

→ If **NO** - interviewer will thank the visitor and wave them through the gate.

Script for the telephone interview

Park visitors intercepted at the exit

"Hello, my name is []. If you recall, you completed a survey as you exited Yellowstone this summer and at that time you agreed to participate in a telephone interview. I am calling to see if this would be a good time to talk about your Yellowstone experiences.

- If **NO** - interviewer will ask for a better time to call back.
- If **YES** - interviewer will say: *This conversation will take about 30 and I would like to ask if I could record our talk.*

Members of the Yellowstone Park Foundation or Yellowstone Association

"Hello, You were recently contacted by Yellowstone Park Foundation [or the Yellowstone Association] asking if you would be willing to be interviewed about your experiences and support for Yellowstone. I am calling to ask if you have about 30 minutes now to complete a short interview.

- If **YES** - interviewer will ask, *"Can I have your permission to record our talk so that I can provide an accurate record of this interview?"*
- If **NO** - interviewer will ask for a better time to call back.
- If **NO** - and not at all interested, interviewer will say, *"Thank you and have a nice day."*

(e) Expected Response Rate/Confidence Levels:

As indicated in the table below, we anticipate contacting a total of 4,700 on-site visitors, 4,000 mail-back respondents, and 72 potential interviewees during the sampling period. We estimate that 90% (n=4,230) will agree to participate in the on-site survey based on previous experience with this collection method (Note: ITRR conducts nonresident visitor surveys year-round in MT and these percentages for refusals are the average obtained each year).

We estimate that 95% (4,000) of the on-site respondents will agree to take the mail-back survey, and 30% (1,200) will complete and return the mail-back survey. The number of refusals will be recorded and will be used in calculating the actual response rate. It should be noted that the on-site and mail-back respondents will be the same sample of visitors and that 10 telephone interviewees will be on-site respondents as well (10 repeat, unaffiliated visitors with YA or YPF). Of the 72 potential telephone interviewees, we expect a 42% response rate and 30 total interviews to be conducted. Based on the sample size and desired 95% confidence level, the margin of error is 4.5%.

Location	Number of Initial Contacts	Expected Response Rate	Expected Number of Responses	Margin of Error +/- %	Confidence Level
On-site survey	4,700	90%	4,230	4.5%	95%
Mail-back survey	4,000	30%	1,200	4.5%	95%
Interviews	72	42%	30	4.5%	95%
TOTAL	8,772	62%	5,460	4.5%	95%

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

To avoid potential non-response bias for visitors not returning the mail-back survey, we will compare the following responses from the on-site survey to the mail-back survey:

1. Prior to this trip, how many times have you visited Yellowstone National Park in your lifetime?
2. On this trip to Yellowstone National Park, what type of park entry pass did you purchase?
3. Have you ever contributed to the Yellowstone Park Foundation?
4. Are you currently a member of the Yellowstone Association?

Visitors who do not agree to complete the on-site survey or refuse the mail-back survey will be asked how many times they've visited Yellowstone National Park in their lifetime. This will be used as the non-response bias check. The mail-back data will be compared to the on-site data on the above questions and a weighting variable will be added to the mail-back to correct for potential non-response bias.

The interviews are not meant to be generalizable to the entire population of visitors. These interviews will be only used to provide examples of experiences and support of three levels (low, medium, and high) of Yellowstone Park supporters.

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

The questions in this study have been tested and used by the Park Studies Unit at the University of Idaho, are from the NPS Pool of Known Questions, or have been used and tested in the Institute for Tourism and Recreation Research (ITRR) questionnaires. All questions on the mail-back survey have been pretested in separate studies conducted by ITRR. All concepts on the questionnaire were found to be valid and reliable.

University of Montana professors with qualitative research expertise provided feedback on the interview guide. The qualitative interview guide was deemed appropriate for use upon review.

Burden Estimates

The combined estimated burden for this collection is 608 hours.

On-site survey: We expect that the initial contact time will be at least one minute per person (79 hours). It will take an additional minute to administer the non-response bias check and to respond to any questions the respondent may have. We have estimated the time to complete the entire on-site survey will be three minutes per respondent (141 hours). Therefore the total burden for the on-site survey will be 220 hours. We expect that 10% (n= 470) of those contacted will refuse to participate in the survey process.

Mail-back survey: We estimate that 95% (4,000) of the on-site respondents will agree to take the mail-back survey, and 30% (1,200) will return a completed survey to the research team. We have estimated that it will take 1 minute to explain the purpose and the 15 minutes to complete and return the mail-back survey (1,200 response x 15 minutes = 300 hours). In addition, 71 hours will be allocated for the initial contact for administering the mail-back survey for a total of 371 hours.

Interviews: We expect each interview to average 30 minutes per respondent plus an additional 2 minutes for the initial contact for a total of 17 hours.

Estimated Total Number	Estimation of Time (minutes)	Estimation of Burden (hours)
Initial Contacts	Initial Contact	Initial Contact
<i>On-site Contact</i> 4,700	<i>On-site Surveys</i> 1	<i>On-site Surveys</i> 79
<i>Mail-back Surveys</i> 4,230	<i>Mail-back Surveys</i> 1	<i>Mail-back Surveys</i> 71
<i>Interviews</i> 72	<i>Interviews</i> 2	<i>Interviews</i> 2
Responses	To complete response	To complete response
<i>On-site Surveys</i> 4,230	<i>On-site Surveys</i> 2	<i>On-site Surveys</i> 141
<i>Mail-back Surveys</i> 1,200	<i>Mail-back Surveys</i> 15	<i>Mail-back Surveys</i> 300
<i>Interviews</i> 30	<i>Interviews</i> 30	<i>Interviews</i> 15
		Total 608

Reporting Plan

The study results will be presented in two comprehensive written reports that will be shared with NPS staff, Yellowstone Foundation staff, and Yellowstone Association staff. 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. Interview responses will be analyzed qualitatively in the NVivo software program and as trends and patterns emerge, will be coded and collapsed for the results. Findings will be reported in a narrative format with exemplary quotations when available. 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, academic journal articles, a Ph.D. dissertation, and a Master's thesis will result from the data and all manuscripts will be supplied to Yellowstone National Park.