

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: 9-19-2023

PROJECT TITLE: Visitor Transit Survey to Inform Park Planning at Yellowstone National Park

ABSTRACT: (not to exceed 150 words)

The Yellowstone National Park (YELL) management team is interested in administering a visitor survey to inform management decisions about alternative transportation and managed access options in the park and if investments in shuttle bus systems and infrastructure can address issues associated with the park's high levels of visitation. In particular, the park's management team needs insight about the visiting public's willingness to adopt shuttle busses as a means of access and transport in the park along with a timed entry system that allows a limited number of personal vehicles access to the park each day. The study adopts a data collection methodology consisting of an on-site survey throughout front country areas at two locations in the park: (1) Geyser Corridor and (2) Canyon Area. This collection is intended to inform decisions about park infrastructural improvement and visitor management.

PRINCIPAL INVESTIGATOR CONTACT INFORMATION:

NAME: William Rice

TITLE Assistant Professor of Outdoor Recreation and Wildland Management

AFFILIATION: University of Montana

ADDRESS: 32 Campus Dr., University of Montana, College of Forestry, 59812

EMAIL: wiliam.rice@umontana.edu PHONE: 406-243-5477

PARK OR PROGRAM LIAISON CONTACT INFORMATION:

NAME: David Pettebone

TITLE Applied Research Coordinator

AFFILIATION: National Park Service

ADDRESS:

EMAIL: David_Pettebone@nps.gov PHONE: 970-889-3205

PROJECT INFORMATION:

Where will the collection take place? Yellowstone National Park (YELL)

Sampling Period Start Date: 7/1/2024 Sampling Period End Date: 8/31/2024

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

Mail-Back Questionnaire X On-Site Questionnaire Telephone Survey

Face-to-Face Interview Focus Groups Other (List)

Will an electronic device be used to collect information?

No X Yes – Type of Device: Android 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.

Annual Yellowstone NP (YELL) visitation has increased dramatically over the last decade. Annual recreation visits in 2011 were 3,394,326 and in 2021 recreation visits were estimated at 4.8 million, an increase of over 40% over 10 years. Moreover, over 1 million recreation visits were recorded in July 2021, the first time in the park's history that monthly recreation visits exceeded this mark. These historic levels of use tax park staff's capacity to manage the demands for parking and visitor services along with providing for visitor safety and natural/cultural resource protection.

In 2018, YELL conducted a study of visitor use in the park that examined how visitors circulate throughout the park along with their real time experiences at focal attraction sites (OMB Control #: 1024-0224; Expiration: 05/31/2020; Yellowstone Summer Visitor Use Survey: Geofencing and On-site Surveys). This current data collection represents the second phase of this study to examine the visitor preferences concerning their travel experience and various visitor management strategies.

Yellowstone's management team needs a visitor survey to inform management decisions about alternative transportation and managed access options in the park and if investments in shuttle bus systems and infrastructure can solve issues associated with the park's high levels of visitation. In particular, the park's management team needs insight about the visiting public's views on adopting shuttle busses as a means of access and transport in the park along with a timed entry system that allows a limited number of personal vehicles access to the park each day. The proposed research will use visitor input to inform future management strategies surrounding visitor access and transportation options. The results from this survey give park managers the information needed to make data-driven decisions and maximize the utility of their financial and personnel resources to improve overall management and visitor experiences at the park.

SURVEY METHODOLOGY

(A) Respondent Universe:

Based on the 2022 NPS Visitor Use Statistics Report, YELL recorded 3,290,242 visits. The respondent universe for the on-site intercepts will be all adult visitors (18 years old and older) in the park at (1) Midway Geyser Basin, (2) Old Faithful, (3) Canyon Village, and (4) the North Rim of the Grand Canyon of the Yellowstone during the sampling period.

(B) Sampling Plan / Procedures:

This collection will use an on-site intercept survey to capture a representative sample of visitor information, characteristics, and perception of willingness to adopt shuttle busses as a means of access and transport in the park along with a timed entry system that allows a limited number of personal vehicles access to the park each day.

On-site Intercept Survey

A random sampling of visitors will be intercepted while visiting YELL across two designated regions: (1) Geyser Corridor and (2) Canyon Area. (Table 1). Intercept effort and the number of target intercepts by site will be equal across the two regions. Within region, target intercept effort will be applied in proportion to historic traffic/visitor volume at each location (e.g., at Old Faithful and at Midway Geyser Basin). Visitors will be randomly intercepted at designated areas while out of their vehicles. For example, as they pass designated locations within the area of the visitor center or while exiting a trailhead. 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. Example Schedule During a Sampling Period.

| Survey Locations | Sampling Days | Number of Visitor Contacts | Surveys Completed |
|------------------|---------------|-------------------------------|----------------------|
| Geyser Corridor | 9 | 471 | 400 |
| Canyon Area | 9 | 471 | 400 |
| Total | | 942 | 800 |

Two surveyors will be on site collecting surveys in each region. Each member of this survey team will work eight of the nine days within the sampling period. Days off will be staggered such that only one surveyor is absent on any given day.

(C) Instrument Administration:

The on-site collection will be conducted using a tablet-based questionnaire to collect responses. The on-site survey will be administered to visitors during their visit at designated intercept locations. If the visitor agrees to participate in the study, the surveyor will verbally administer the survey questions and will record the responses via an Android Tablet. If the visitor does not agree, surveyors will thank them for their time, and 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 6-minute survey administered by the surveyor.

Sample Script for On-site Survey:

"Hello, I am working with Yellowstone National Park conducting a 6-minute survey to better understand visitor perceptions of potential future management options for the park. May I ask you several questions about these potential actions?

- →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 Android 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 XXXX-XXXX and this number is valid through XX/XX/XXXX. 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, group size, guided or non-commercial group).

Three 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.

(D) Expected Response Rate / Confidence Level:

Based on previous research experience with this intercept method and as indicated above, we estimate that at least 85% (n=942) of visitors contacted during the sampling period will agree to participate in the intercept survey. Of those who do not agree to participate in the on-site survey (n=142), we expect 90% to answer the non-response bias questions (n=128) with roughly 14 visitors completely refusing to participate in any part of the collection. Based on a confidence level of 95% (z=1.96) an overall margin of error in the on-site is estimated at +/- 3%, assuming an overall worst-case 50/50 proportion split on any question in the survey (Table 2).

Table 2. Anticipated Survey Response Rates

| Sampling Period | Total Number of Visitor Contacts | Completed Intercept Surveys | Refusals | Completed Non-response Survey | Hard Refusals | Margin of Error* |
|-----------------|---|-----------------------------------|----------|-------------------------------------|----------------------|------------------|
| | | 85% | 15% | (90% of refusals) | (10% of refusals) | |
| Geyser Corridor | 471 | 400 | 71 | 64 | 7 | +/- 5% |
| Canyon Area | 471 | 400 | 71 | 64 | 7 | +/- 5% |
| TOTAL | 942 | 800 | 142 | 128 | 14 | +/- 3% |

^{*}Note: University of Montana and RRC Associates conducts frequent on-site surveys across the U.S. and these percentages are based upon the average refusals obtained during 2022 National Park visitor surveys.

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

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

| 1. | How | ow many people were in your [personal, organized, tour] group, including you? | | | | |
|---------|---------|---|--------------|--|--|--|
| 2. | Please | _Number of people e select the choice below that best describ | oes your tr | aveling party. (Please select all that apply) | | |
| | | Individual (Traveling alone) | | Preschoolers (less than 5 years old) | | |
| | | Family only | | Teen agers (12-19) | | |
| | | Friends only | | Adults (20-64) | | |
| | | Family plus friends | | Anyone over 65 | | |
| | | Tour or other group | | With pets | | |
| 3. | | i.e., Teton County, WY; Park County, WY; | Fremont C | ne counties directly bordering Yellowstone National County, ID; Gallatin County, MT; Park County, MT)? | | |
| Thoso | _ | | ata tha inti | arcent curvey to identify if any non-response him | | |
| | questic | ons will be compared to those who comple | ste the mte | ercept survey to identify if any non-response bias | | |
| exists. | | | | | | |

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

The survey questions are pulled from the NPS Pool of Known (OMB Control Number 1024-0224, expiration: 08/31/2026). The intercept survey instrument was pre-tested in the format in which it will 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 the University of Montana. These Social Scientists identified students, and staff (9 in total) who were placed in a mock situation in which they found themselves at YELL. Based upon the pretest we were able to assess and correct skip patterns within the survey and gauge readability of the posed questions. We have estimated from these

pre-tests that it will take up to one minute to introduce the survey and an additional 6 minutes to complete the intercept survey. For the visitors refusing to complete the survey it will take 30 seconds to ask nonresponse questions if the respondent does not want to participate in the full survey.

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. A project Social Scientist will train and supervise the data cleaning process for accuracy and quality control. Given the survey is collected via tablet, back-end processing should be minimal, as it will be programmed and tested for ease of analysis and reporting.

BURDEN ESTIMATES

The estimated totals for the intercept survey in this study are as follows: Number of Responses for Intercept Survey: 800 and Respondent Burden Hours for Intercept Survey: 94 (see Table 4). These are split evenly across the Geyser Corridor and the Canyon Area. 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 six minutes to complete the on-site survey (800 respondents x 7 minutes = 94 hours). We expect that in addition to the one-minute initial contact, it will take less than one minute (we round up to 1 minute) to conduct the non-response bias check for visitors who do not agree to participate in the on-site survey (256 respondents x 2 minutes = 9 hours (rounded up). 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. Therefore, the total burden for the intercept survey will be 103 hours.

Table 4. Burden Estimates

| | | Completed Responses | Completion Time | Burden Hours** |
|--|----------|---------------------|-----------------|-------------------|
| | | | (minutes) | (hours) |
| Intercept Survey* | | | | |
| Geyser Corridor | | 400 | 7 | 47 |
| Canyon Area | | 400 | 7 | 47 |
| | Subtotal | 800 | | 94 |
| Intercept non-response survey* | | | | |
| Geyser Corridor | | 128 | 2 | 4 |
| Canyon Area | | 128 | 2 | 4 |
| | Subtotal | 256 | | 9 |
| Total burden requested under this ICR: | | 1,056 | | 103 |

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

REPORTING PLAN:

The study results will be presented in a comprehensive report that will be shared with NPS staff at Yellowstone National Park 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. The reports will

^{**} Burden hours are rounded up to the nearest hour.

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. In addition to a report and data delivery, a 2-hour Microsoft Teams or Zoom 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.