



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: 1.31.2022

PROJECT TITLE: Saguaro National Park Visitor Survey

ABSTRACT: (not to exceed 150 words)

The Saguaro National Park (SAGU) management team is interested to administer a parkwide visitor survey to better understand who visits the park and support upcoming park planning processes. A comprehensive study of visitors at SAGU has not been conducted at the park. The purpose of this study is to inform core issues of increasing visitor use, as well as the changing nature of visitor access to the park. Park staff report, anecdotally, that visitors are increasingly accessing the park from previously low use locations, creating management challenges. The study adopts a two-phased data collection methodology: 1) an on-site survey and 2) follow-up mail back survey. This collection is intended to inform important decisions about park infrastructural improvement and visitor management as well as update the official public use statistics protocols for estimating visitation to the park.

PRINCIPAL INVESTIGATOR CONTACT INFORMATION:

NAME: Jake Jorgenson
TITLE COO
AFFILIATION: RRC Associates
ADDRESS: 4770 Baseline Road, Ste. 355
EMAIL: jake@rrcassociates.com **PHONE:** 303-449-6558

PARK OR PROGRAM LIAISON CONTACT INFORMATION:

NAME: Andy L. Fisher
TITLE Park Project Manager
AFFILIATION: Saguaro National Park
ADDRESS: Saguaro National Park, 3693 S. Old Spanish Trail, Tucson, AZ, 85730
EMAIL: Andy_l_fisher@nps.gov **PHONE:** 520-733-5139

PROJECT INFORMATION:

Where will the collection take place? Saguaro National Park (SAGU)

Sampling Period Start Date: 3/19/2022

Sampling Period End Date: 3/28/2022

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

Mail-Back Questionnaire

On-Site Questionnaire

Telephone Survey

Face-to-Face Interview

Focus Groups

Other (List)

Will an electronic device be used to collect information? No 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.

Like many other National Parks, visitation at SAGU has increased significantly in recent years. Annual visitation at the park was estimated at 753,446 in 2015 and increased to 1,020,226 by 2019 a 26% increase over a 5-year period. While the number of recorded recreation visits dipped to 762,226 in 2020, 2021 has already (through July) witnessed 1,017,994; on pace to easily surpass 2019 record numbers. Another issue related to park visitation is the changing nature of visitor access to the park. Park staff report, anecdotally, that visitors are increasingly accessing the park from previously low use locations such as the Douglas Spring Trail and Hope Camp. The SAGU management team needs updated information about where visitors access the park, how many visitors enter the park at these locations, and what visitors are doing at these locations in order to more accurately estimate park visitation and improve monitoring of recreation activities throughout the park. Moreover, the park's management team is considering increasing parking capacity at trailheads to accommodate increasing use and address unauthorized parking. The data collected from this survey will inform important decisions about park infrastructural improvement and visitor management as well as update the official public use statistics protocols for estimating visitation to the park.

Given the above needs, SAGU managers require this information collection in order to determine current utilization, distribution of use, and perception of park resources, operations, and issues that may exist due to increased visitation and changing use patterns. A visitor survey will be used to evaluate the following:

1. Trip Characteristics – Enables understanding of travel demand for the park and its relationship to the region;
2. Visitor Perceptions – Identifies visitor perceived conditions on the ground allowing the park to consider implications of potential management decisions.
3. Visitor Behaviors and Experiences – Identifies activity patterns, information sources used to plan trips, and experiences desired.

This comprehensive approach provides SAGU managers immediate feedback – within a few weeks from the intercept survey - with information to make potential management decisions.

SURVEY METHODOLOGY

(A) Respondent Universe:

Based on the 2019 NPS Visitor Use Statistics Report, SAGU recorded approximate 1,020,226 visitors. 2019 is used given based upon the unusualness of 2020 due to the COVID epidemic. The respondent universe for the on-site and follow-up surveys will be all adult visitors (18 years old and older) in the park (both east and west districts) during the sampling period.

(B) Sampling Plan / Procedures:

This collection will use an on-site intercept survey and a follow-up mail-back survey to capture a representative sample of visitor information, characteristics, and behavior. The framework for this study lies in a two-phase survey instrument that will provide both a rapid data response, as well as an in-depth record of trip details.

On-site Intercept Survey

A random sampling of visitors will be intercepted while visiting SAGU across six designated locations: 1) Rincon Mountain Visitor Center (east); 2) Red Hills Visitor Center (west); 3) Broadway Trailhead; 4) Camino Loma Alta Trailhead; 5) King Canyon, and; 6) Signal Hill Trailhead (Table 1). Intercept effort and the number of target intercepts by site will be in proportion to historic traffic/visitor volume at each location. Visitors will be intercepted at designated areas while out of their vehicles; visitors will also be randomly intercepted 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 per period | Number of Visitor Contacts | On-site Surveys Completed | Mail-backs distributed |
|--------------------------------|--------------------------|----------------------------|---------------------------|------------------------|
| Rincon Mountain Visitor Center | 9 | 495 | 421 | 400 |
| Red Hills Visitor Center | 9 | 495 | 421 | 400 |
| Broadway Trailhead | 9 | 248 | 235 | 200 |
| Camino Loma Alta Trailhead | 9 | 248 | 235 | 200 |
| King Canyon Trailhead | 9 | 248 | 235 | 200 |
| Signal Hill Trailhead | 9 | 248 | 235 | 200 |
| Total | | 1,982 | 1,684 | 1,600 |

One Social Scientist will be charged with each of the two SAGU districts. Three to four dedicated volunteer surveyors will be on site collecting surveys in each district. 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.

Mail-Back Survey

All respondents completing the on-site survey will be asked to complete and return a mail-back survey after completing their trip to SAGU. A survey and postage-paid envelope will have a corresponding survey ID to match their on-site survey that will be used to identify non-respondents. Respondents who complete the tablet survey but refuse to take a mail-back will be considered non-respondents for the mail-back. These refusals are accounted for in non-response estimates for the mail-back.

(C) Instrument Administration:

The on-site collection will be interview-style 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 the 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, 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 Saguaro National Park conducting a 5-minute survey to improve visitor experiences in the park. May I ask you several questions about your Saguaro experience?"

èIf **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)

èIf **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 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 SAGU, and whether or not 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 mail-back;
4. Complete on-site and take mail-back.

As part of the intercept protocol, surveyors will input a unique identifier into the tablet for future connection to the mail-back survey. The final question on the survey will provide the respondent an opportunity to input their address and/or email that will be used solely for the purpose of the follow-up protocol using the “Tailored Design Method.” Personal information collected will be stored separately from the survey responses.

Mail-Back Survey

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 SAGU. Surveys may be mailed back from any US mailbox. International travelers will be encouraged to mail the survey back prior to leaving the US. Respondents will also be provided an online link to use the option of completing the survey.

In addition to receiving the mail-back survey, respondents will be asked for their home address and/or email address. Three weeks after being on-site, a second survey packet (with the same unique IDs) will be delivered to all non-respondent addresses/emails. The survey packet will include a survey, appropriate postage paid, self-addressed return envelopes. Postage will depend on whether the address is international or domestic.

(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 85% (n=1,982) of visitors contacted during each sampling period will agree to participate in the on-site survey. Of those who do not agree to participate in the on-site survey (n=296), we expect 90% to answer the non-response bias questions (n=266) with roughly 30 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 +/-2.32%, assuming an overall worst-case 50/50 proportion split on any question in the survey (Table 2).

Table 2. Anticipated Onsite Survey Response Rates

| Sampling Period | Total Number of Visitor Contacts | Completed Onsite Surveys 85% | Refusals 15% | Completed Non-Response Surveys (90% of soft refusals) | Hard Refusals (10% of soft refusals) | Margin of Error* |
|--------------------------------|----------------------------------|---------------------------------|-----------------|--|---|------------------|
| Rincon Mountain Visitor Center | 495 | 421 | 74 | 67 | 7 | +/- 4.78% |
| Red Hills Visitor Center | 495 | 421 | 74 | 67 | 7 | +/- 4.78% |
| Trailhead East #1 | 248 | 235 | 37 | 33 | 4 | +/- 6.39% |
| Trailhead East #2 | 248 | 235 | 37 | 33 | 4 | +/- 6.39% |
| Trailhead West #1 | 248 | 235 | 37 | 33 | 4 | +/- 6.39% |
| Trailhead West #2 | 248 | 235 | 37 | 33 | 4 | +/- 6.39% |
| TOTAL | 1,982 | 1,782 | 296 | 266 | 30 | +/- 2.32% |

*Note: RRC Associates and ITRR conducts frequent on-site surveys across the U.S. and these percentages are based upon the average refusals obtained during 2021 National Park visitor surveys.

Mail-Back Survey

For the Mail-Back survey, we assume that 50% (n=800) of the respondents who completed the on-site survey will complete the mail-back survey. This response rate estimate includes those that refuse to take the mail-back following the intercept. Based on previous experience by the research team with tablet based intercept surveys followed by a request to take a mail-back survey, at least 95% of respondents take the mail-back. The initial contacts represent the number of respondents who are asked to take the mail-back 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. Based on a confidence level of 95% (z=1.96) an overall margin of error in the mail back survey is estimated at +/-2.51%, assuming an overall worst-case 50/50 proportion split on any question in the survey (Table 3).

Table 3. Anticipated Response Rates (Mail-back Survey)

| Respondents | Initial Contacts | Acceptance of Mail-back 95% | Hard Refusals 5% | Completed Mail-back survey 50% | Non-respondents 50% | Margin of Error* |
|--------------|------------------|--------------------------------|---------------------|-----------------------------------|------------------------|------------------|
| TOTAL | 1,684 | 1,600 | 84 | 800 | 800 | +/- 2.51% |

*Note: RRC Associates and ITRR conducts frequent on-site surveys across the U.S. and these percentages are based upon the average refusals obtained during 2021 National Park visitor surveys.

(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:

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

A second non-response bias check will be necessary to account for any differences between those who return the mail back survey and those that do not. Each mail back survey will have a unique identifier that links the on-site and mail back 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 mail back surveys, the research team will use the same three non-bias check questions to compare the results between those return the mail back portion with the respondents completing the on-site survey but did not return the mail-back survey.

(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 mail-back 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 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 SAGU. 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 up to 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 30 seconds to ask nonresponse questions if the respondent does not want to participate in the full survey. This is based on field use of these same questions and mode in Zion National Park in 2021. The mail-back 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, as well as survey efforts using same approach, mode, and delivery in Zion National Park in 2021. A project Social Scientist will train and supervise the data entry and check entries for accuracy and quality control.

BURDEN ESTIMATES

The total anticipated respondent burden for the collection is 460 hours. The estimated respondent burden for the intercept survey includes the initial contact time and the time to complete the questionnaire (1,782 respondents x 6 minutes =178 hours)

We expect that out of the visitors refusing to complete the intercept survey 266 visitors will agree to complete the non-response bias check (266 respondents x 2 minutes = 8 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.

We anticipate that of the 1,600 visitors agreeing to complete the mail back survey, about 50% (n=800) will actually complete and return the survey. The estimated respondent burden for the Mailback survey includes the initial contact time and the time to complete the survey (800 respondents x 15 minutes =200 hours)

Table 4. Burden Estimates

| | Completed Responses | Completion Time (minutes) | Burden Hours (hours) |
|---|---------------------|---------------------------|----------------------|
| On-site Survey* | | | |
| Rincon Mountain Visitor Center | 421 | 6 | 42 |
| Red Hills Visitor Center | 421 | 6 | 42 |
| East District | 470 | 6 | 47 |
| West District | 470 | 6 | 47 |
| Subtotal | 1782 | | 178 |
| On-site non-response survey* | | | |
| Rincon Mountain Visitor Center | 67 | 2 | 2 |
| Red Hills Visitor Center | 67 | 2 | 2 |
| East District | 66 | 2 | 2 |
| West District | 66 | 2 | 2 |
| Subtotal | 266 | | 8 |
| Mail-Back Survey** | 800 | 15 | 200 |
| Total burden requested under this ICR: | | 2,848 | 460 |

* 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 (if responding online) and read the instructions

The combined estimated totals for the mail-back survey in this study are as followed: Number of Responses for Mail-Back Survey: 800 and Respondent Burden Hours: 200 (see Table 4). Since the respondents participating in the mail-back survey will have already participated in the on-site survey their initial participation time is not included in this calculation. We expect that it will take respondents a maximum of 15 minutes to complete the mail-back survey, plus an additional minute to read the directions and/or connect to the online platform (800 x 15 minutes = 200 hours).

REPORTING PLAN:

The study results will be presented in a comprehensive report that will be shared with NPS staff at Saguaro 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. Saguaro National Park will also be provided with an data dashboard to review intercept survey data collected within approximately 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 two periods: 1) a post sampling reporting period within three weeks of 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.