



## 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:** 12/3/2024

**PROJECT TITLE:** Risk Preparedness and Resilience Planning for Emergency Evacuations of Wrangell-St Elias National Park

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

*Wrangell-St. Elias National Park & Preserve (WRST) is the largest U.S. National Park unit, encompassing diverse landscapes, cultural and historical landmarks, and state, private, and tribal lands. These features serve as assets for improving experiences for visitors and residents alike but also present challenges for managing life safety in the face of rising risks from natural and human-caused disasters. We aim to examine residents and visitors along the most popular area of WRST, a stretch of land along a road from Chitina, AK to the Nizina River referred to as the McCarthy Road Corridor, using surveys to assess risk preparedness, perform resilience planning, and develop an agent-based model simulation that incorporates natural and human data inputs. The outcomes of this research will help WRST improve management of potential natural and human-caused disasters by informing infrastructure investment, intergovernmental agency collaboration, and assumptions about the preparedness and behaviors of visitors and residents.*

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

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## PROJECT INFORMATION:

**Where will the collection take place?** Wrangell St Elias National (WRST)

**Sampling Period Start Date:** 5/1/2025

**Sampling Period End Date:** 10/20/2025

**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 (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.*

The McCarthy Road Corridor, stretching from Chitina, Alaska to Kennecott and Nizina, Alaska, is not only a vital transportation route for visitors to Wrangell-St. Elias National Park and Preserve (WRST) but also a lifeline during an emergency for the several hundred residents inhabiting the area. This remote region, situated within WRST, faces numerous hazards, including potential wildfires, flooding, and other natural disasters that necessitate emergency management preparedness. To enhance community resilience and ensure the safety of residents and visitors, the overarching goal of this research is to model scenarios that will help residents, Alaska state agencies, and the National Park Service (NPS) prepare for potential evacuations and disaster responses along the McCarthy Road Corridor. The survey research will identify salient perceptions, attributes, and behaviors of visitors and residents (in this case, residents are both gateway community members and people who live in areas adjacent to park land) for modeling and studying disasters and emergency evacuation to create a comprehensive framework for ongoing disaster mitigation and management.

The McCarthy Road Corridor is unique due to its isolation from major population centers and the significant challenges posed by its rugged terrain and extreme weather conditions. An effective emergency management plan is critical not only for ensuring the safety of current residents but also for protecting visitors traveling to the Kennecott Mines National Historic Landmark and other attractions within the national park. The NPS recently adopted a new strategic plan to guide investment and management at Kennecott and for visitors traveling to the site. The plan anticipates this research, transportation planning, and a variety of other planning initiatives that will enhance the NPS's planning portfolio for the site and inform data-driven decision-making for decades. The project's proactive approach is essential in a climate change context, where the frequency and intensity of natural disasters are increasing. In sum, the proposed research

provides needed information to increase the safety and resilience of the McCarthy Road Corridor's residents and visitors.

## SURVEY METHODOLOGY

**(A) Respondent Universe:** The eligible respondents for this study must fall into one of two categories corresponding to two separate samples:

- Visitors: All adult visitors over 18 years of age to the McCarthy Road Corridor in Wrangell St. Elias National Park from June 23, 2025 to August 10, 2025.
- Residents: All residents in gateway communities along and within the McCarthy Road Corridor (i.e., Chitina, Strelna, Chokosna, Long Lake, Fireweed, McCarthy, Kennicott, and Nizina), including year-round residents, seasonal residents who are land or homeowners, and seasonal residents who are housed by their employer from May 5, 2025 to October 20, 2025.

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

This study will use a Qualtrics-based survey facilitated through Penn State University. Recruitment will be performed by onsite researchers for separate visitor and resident samples. The study will take place within WRST and its gateway communities along the McCarthy Road Corridor. The McCarthy Road Corridor is locally defined as the public and private land extending North-South from the Copper River to the Wrangell Mountains and East-West from Chitina, AK to the Nizina River.

Data collection among visitors will take place from June 23, 2025-August 10, 2025 from 9:00 AM to 7:00 PM at bottlenecks within the pedestrian and vehicle transportation network along the corridor. The anticipated bottlenecks for sampling include (i) The National Park Service pullout in Chitina, (ii) the public road alongside the McCarthy Pedestrian Footbridge in McCarthy, and (iii) the National Park Service Pullout in Kennicott, AK. These bottlenecks were selected because they serve as the most reliable locations for recruiting a representative sample of visitors who, correspondingly, are (i) exiting the McCarthy Road Corridor, (ii) entering and exiting the popular gateway community McCarthy, and (iii) entering and exiting the most popular attraction within the park, Kennicott Mines National Historic Landmark. Sampling will be temporally stratified over five hours with half of the sampling days taking place from 9:00 AM to 2:00 PM and the other half from 2:00 PM to 7:00 PM. We will recruit one adult per group. Therefore, we will sample 5 days per week over seven weeks recruiting three participants per hour, resulting in 15 people being recruited per day and 530 visitors recruited in total.

Data collection will take place among residents from May 1, 2025-October 20, 2025 at public buildings and facilities along the McCarthy Road Corridor. Reflecting that the gateway communities of residents within the WRST are unincorporated bureaus spread over 60 miles, we have selected sampling locations that are spatially distributed along the roadway: (i) Chitina community building, (ii) Strelna Volunteer Fire Department Building, (iii) Chokosna Volunteer Fire Department Building, (iv) Long Lake Airstrip, (iv) McCarthy Volunteer Fire Department Building, (v) McCarthy Airport mail drop off, and (vi) Kennicott community building. These data collection efforts will occur at these public buildings and facilities after public forums and meetings organized by or with community organizations, resulting in recruitment at those events taking place at varied times in the evening between 5:00 PM to 9:00 PM. Otherwise, recruitment will occur during routine mail collection, which may occur anytime between 9:00 AM and 7:00 PM on mail days in Chitina, Chokosna, and McCarthy. Reflecting that residents are hard-to-reach populations (Higgins, 2015), a digital version of the survey that residents may take on their personal devices will be offered using unique QR codes under limited circumstances where they express time constraints at the moment of recruitment as the only factor for non-participation. Residents will be recruited under a quota-based sampling approach, wherein recruitment will be discontinued after 350 residents have participated in the study (assuming a participation rate of 66% among 530 residents contacted). That will mean that the sampling team will try to recruit 10 residents to participate per week on average.

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**(C) Instrument Administration:**

Survey instruments for visitors and residents will primarily be administered face-to-face by researchers in the field. As pedestrian-based visitors walk by researchers at the field sites or as residents attend public events and collect mail, they will be approached for their approval to participate in the study (including sampling locations in parking lots, pedestrian bridges, or shuttle locations). As vehicle-based visitors drive past researchers, they will be flagged down by researchers and approached for their approval to participate after they have slowed down and come to a complete stop out of the way of other traffic (including sampling locations along roads or in parking lots). Willing participants will receive an explanation of the study that confirms their eligibility and interest (see script below). For visitors, one adult per group or vehicle (based on the next birthday) will be recruited. For residents, one adult per household will be recruited (see script below for screening). Researchers will provide participants with a print-out version of the survey and orally administer the onsite questionnaire while filling in respondent responses on digital tablets using an offline survey and/or visitors will complete the survey themselves on the tablet with researcher supervision. Respondents may discontinue participation at any time during instrument administration and may opt out of having their data recorded as part of the study. Visitors who refuse to participate will be asked non-response questions (see below).

*“Hello, we are conducting a study about emergency preparedness and evacuation along the McCarthy Road Corridor to improve emergency management in Wrangell St. Elias National Park. Your participation is voluntary, and your responses will be anonymous. In total, this study will take you about 10 minutes to complete, with us asking you questions from this printed survey and filling in responses on your behalf. Would you be willing to participate?”*

- *If NO for visitors: “Do you mind if I ask you just a couple of questions?”*
  - *Have you visited Wrangell St. Elias National Park before?*
  - *What sources would you rely on to learn about the severity of a fire in Wrangell St. Elias National Park? [open ended response that will be coded to match visitor survey later]*
  - *How many people were in your personal group today, including you?*

*Thank you for your time and consideration. I hope you enjoy your visit.”*

- *If YES for visitors: “Thank you for your willingness to assist with this study. Who in your group (who is at least 18 years old) has the next birthday?”*
- *If NO for residents: “Do you mind if I ask you just a couple of questions?”*
  - *How many years have you lived in the McCarthy Road Corridor?*
  - *What sources would you rely on to learn about the severity of a fire in Wrangell St. Elias National Park? [open ended response that will be coded to match visitor survey later]*
  - *How many people are in your household, including you?*

*Thank you for your time and consideration. I hope you enjoy your visit.”*

- *If YES for residents: “Thank you for your willingness to assist with this study. Has anyone in your household already participated? (if NO) Who in your household who is here (who is at least 18 years old) has the next birthday?”*

Using the same tablet, the researcher will also capture additional observational information to aid with calculating potential non-response bias:

- time of contact,
- number of adults and children in the group, and
- potential language barrier

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

We will collect response rate information for both samples separately. For visitors, we aim to reflect the total summer visitor population (N = 60,000), considering that this peak season presents the most likely and challenging time for natural and human-caused disasters. Among intercepted visitors (n=530) during the sampling period, we estimate that 66% (n=350) will be willing to participate. We anticipate that of the 180 who refuse to participate, 60% (n=108) will be willing to answer the non-response questions. The anticipated survey response rate from visitors is based on prior data collection that occurred in WRST at similar recruitment sites (see Taylor & Fix, 2006). Given the anticipated response rate and expected sample size, we anticipate that we will be able to accurately represent the opinions of WRST visitors to the McCarthy Road Corridor. There will be 95% confidence that the survey findings will be accurate to within five percentage points for summer visitors.

The sampling procedure among residents relies on quota-based sampling common for studies trying to collect data from hard-to-reach populations (E. R. Babbie, 2013; Higgins, 2015). The use of community events has also been performed to collect data from resident populations in WRST (Gantz, 2019), however, there is no reporting on resident survey responses. Therefore, we assumed the same participation rate among residents as visitors. There is no current reliable estimate of the number of residents in McCarthy when incorporating seasonal residents, year-round residents, and seasonal employees. We assume, based on discussions with locals and park staff, that the maximum would be 1,000 residents along the corridor for the summertime. Given the anticipated response rate and expected sample size, we anticipate that we will be able to accurately represent the opinions of residents along the McCarthy Road Corridor. There will be 95% confidence that the survey findings will be accurate to within five percentage points for summer visitors.

**Table 1a. Anticipated Onsite Survey Response Rates: Visitors**

Total Number of Visitor Contacts	Completed Onsite Surveys (66% of contacts)	Soft Refusals (34% of contacts)	Completed Non-Response Surveys (60% of soft refusals)	Hard Refusals (40% of soft refusals)
530	350	180	108	72

**Table 1b. Anticipated Onsite Survey Response Rates: Residents**

Total Number of Residents Contacts	Completed Onsite Surveys (66% of contacts)	Soft Refusals (34% of contacts)	Completed Non-Response Surveys (60% of soft refusals)	Hard Refusals (40% of soft refusals)
378	250	123	74	49

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

All soft refusals will be asked to provide responses to the following questions, which, along with the observational data outlined above, and this will serve as the non-response bias check:

- If NO: “Do you mind if I ask you just a couple of questions?”
  - Visitor Nonresponse Questions:
    - Have you visited Wrangell St. Elias National Park before?

- *What sources would you rely on to learn about the severity of a fire in Wrangell St. Elias National Park? [open ended response that will be coded to match visitor survey later]*
- *How many people were in your personal group today, including you?*
- o *Resident Nonresponse Questions:*
  - *How many years have you lived in the McCarthy Road Corridor?*
  - *What sources would you rely on to learn about the severity of a fire in Wrangell St. Elias National Park? [open ended response that will be coded to match visitor survey later]*
  - *How many people are in your household, including you?*

Using the same tablet, the researcher will also capture additional observational information to aid with calculating potential non-response bias:

- time of contact,
- number of adults and children in the group, and
- potential language barrier

The data from these questions and the observational data collected during the intercept (outlined above) will be used to determine any non-response bias. Any implications of non-response bias will be outlined in the final report and discussed with NPS managers and staff.

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

The questionnaire format and variations of a majority of the questions have been used in NPS survey instruments previously approved by OMB. Other questions are derived from surveys used to study evacuation intention and preparation in fire-prone areas (e.g., Ada County in Idaho). More than 75% of the questions are from the approved NPS Pool of Known Questions with minor site-specific and program-specific alterations. The survey was pre-tested by two NPS staff, a panel of three research partners who have expertise in studying emergency evacuation and fire management and/or are local leaders from the McCarthy Road Corridor, and two researchers at Penn State University and two researchers at Oregon State University associated with the research to estimate respondent burden and clarity of questions.

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### **BURDEN ESTIMATES**

We anticipate contacting a total of 908 individuals, resulting in a total of 782 completed responses (350 visitor surveys, 250 resident survey, and 182 non-response surveys) for a total burden of 154 hours.

- **Visitor Survey:** Of the 530 visitors we intercept across the sampling locations, we expect 66% (n=350) to agree to participate in the survey. The survey will take 14 minutes to complete, plus an additional 1 minute for the initial contact, resulting in a total burden of 88 hours.
- **Resident Survey:** Of the 378 residents we intercept across the sampling locations, we expect 66% (n=250) to agree to participate in the survey. The survey will take 14 minutes to complete, plus an additional 1 minutes for the initial contact, resulting in a total burden of 63 hours.
- **Non-response Survey:** Of those individuals intercepted who decline to participate (n=303, visitors = 180; residents =123), we expect 60% (n=182, visitor survey=108, resident survey=74) to agree to complete the non-response survey. The non-response survey will take one minute to complete, including the initial contact and answering the 3 non-response questions, resulting in a total burden of 3 hours (2 hours for visitors and 1 hour for the residents).

**Table 2. Burden Estimates**

	Completed Responses	Completion Time * (minutes)	Burden Hours (rounded up)
On-site Survey (visitors)*	350	15	88
On-site non-response survey (visitors)	108	1	2
On-site Survey (residents)*	250	15	63
On-site non-response survey (residents)	74	1	1
Total burden requested under this ICR:	<b>782</b>		<b>154</b>

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

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**REPORTING PLAN:**

The study results will be presented in internal agency reports for NPS managers at WRST. Univariate summary statistics will be provided, as well as comparative statistics between residents and visitors. Spatial information, group size data, demographic information, and behavioral information will be used to create an agent-based model estimating visitor and resident evacuation during a hazard that will be shared with park managers alongside the report. The report and agent-based model will be reviewed by WRST staff and research partners with topic expertise and local knowledge recruited for the project and subsequently revised by the PI and team until the final report is processed and made public through the NPS. The report will be archived with the NPS Social Science Program for inclusion in the NPS Social Science Studies Collection as required by the NPS Programmatic Approval process. Hard copies will be available upon request.

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**References:**

E. R. Babbie. (2013). *The practice of social research. Wadsworth Cengage Learning, 13th ed. student.*

Gantz, M. (2019). *Wrangell St. Elias Listening Sessions.* National Park Service.

Higgins, M. N. (2015). *From Copper to Conservation: The Politics of Wilderness, Cultural, and Natural Resources in Wrangell-Saint Elias National Park and Preserve.* University of California, Berkeley.

Taylor, S. C., & Fix, P. J. (2006). *Visitor Preferences for Interpretation in Kennecott Mill Town, Wrangell-St. Elias National Park.*

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## 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.

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