



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: 5-21-2015

Project Title: Visitor Survey in the Moose-Wilson Corridor of the Grand Teton National Park

Abstract (not to exceed 150 words)

The Moose-Wilson corridor (MWC) of Grand Teton National Park (GRTE) offers access to numerous visitor activities such as hiking, cycling, and scenic-driving within a diverse and treasured, but fragile ecosystem. The corridor provides access to unique areas of the park such as the Laurance S. Rockefeller Preserve, and Granite and Death Canyons, and is increasingly being used as link from the surrounding communities to the park as an entrance. As this area is faced with new and changing use patterns, intensity of uses, and modes of travel, it becomes ever more challenging to provide quality visitor experiences that depend on high-caliber resource and social conditions. This study will examine the minimal acceptable social conditions of indicator variables that will inform park management of different options, as well as which variables visitors are willing to "tradeoff" to have a high quality experience within the MWC.

Principal Investigator Contact Information

Name: Dr. Peter Newman
Title: Department Head & Professor, Recreation, Park and Tourism Management
Affiliation: Penn State University
Address: 801 Ford Building, University Park, PA 16802
Phone: 814-863-7849
Email: pbn3@psu.edu

Park or Program Liaison Contact Information

Name: Daniel Noon
Title: Chief of Planning & Wilderness Coordinator
Park: Grand Teton National Park
Address: P.O Drawer 170, Moose, WY 83012
Phone: 307-739-3465
Email: daniel_noon@nps.gov

Project Information**Where will the collection take place? Grand Teton National Park Moose-Wilson Corridor****Sampling Period Start Date: June 15th, 2015 End Date: June 30th, 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 - iPad tablet computer

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 Moose-Wilson (MWC) corridor of Grand Teton National Park (GRTE) includes approximately 10,000 acres of land surrounding a 7.7-mile section of road and is home to a plethora of flora and fauna. In recent years, the MWC has undergone several changes. In 2001, 1,106 acres of private land within the corridor was donated to GRTE, and is currently under a conservation easement. Also, there has been increased bike traffic on the narrow two-lane road through the MWC, though there is neither a bike path nor a shoulder. This increase coincides with the relatively recent construction and promotion of the "Grand Loop Tour" bicycle path, which includes pathways within and outside the park. Additionally, since 2007 grizzly bears have moved into the corridor, adding a new element to human wildlife interactions.

To assess the social and ecological conditions of the MWC, a study was conducted during the summer of 2014 to determine how visitors experienced the MWC (e.g. what visitors liked best about their visit), as well as ecological conditions (e.g. which areas were being negatively impacted by recreation). While this information describes current conditions of the visitor's experience, it does not apprise management about the conditions visitor's desire.

This research will address this gap and inform management of the standards of quality, or desired conditions sought by examining the minimal acceptable social and ecological conditions of indicator variables that will inform park management of different options, as well as which variables visitors find the most important to have a high quality experience within the MWC. These data will help managers understand visitor's preferred social conditions as they move forward in developing a management plan for the MWC.

Survey Methodology

(b) Respondent Universe:

The respondent universe for this collection will be all adults (18 years and older) visiting Grand Teton National Park's Moose Wilson from June 15 to June 30, 2015.

(c) Sampling Plan/Procedures:

The visitor survey sampling will take place near the Granite entrance to Moose-Wilson Road, and the Death Canyon trailhead from June 15 to June 30, 2015. Sampling days will be evenly stratified by day of the week, time, and location, proportionate to visitation estimates provided by the park. On each sampling day, two trained research assistant will be stationed at one of the locations between 7 a.m. and 7 p.m. Research assistants will recruit study participants by contacting a random sample of visitors as they are entering the study area.

The Granite entrance intercept location was chosen because it provides adequate space for pulling over vehicles and collecting data safely. At this sampling location, one surveyor will serve as a flagger to control traffic, and one will serve as a data collector. At this site, visitor groups will be intercepted approximately every 10 minutes (this sampling interval may be adjusted if traffic volume fluctuates). Groups will be greeted by the surveyor after they safely pull off the road segment, and introduced to the purpose of the study. On opposing days (days when sampling is not taking place at the Granite entrance), surveyors stationed at the Death Canyon trailhead will intercept hiking visitors as they enter and exit the trail system. At this site, visitor groups will be intercepted approximately every 10 minutes.

Visitors who agree to participate will complete a survey. This process will continue throughout the sampling period. Individuals or groups who are unwilling or unable to participate in the study will be thanked for their consideration. All interactions (i.e., time, location, mode of transportation, etc.) will be documented with a study log.

(d) Instrument Administration:

Surveys will be administered by trained research assistants working under the supervision of the PI and GRTE staff. The survey questionnaire will be administered by handing the participant a laminated copy of the survey. The research assistants will use tablet computers to capture the verbal responses from participants. This method is used to facilitate skip patterns and eliminate data entry errors. All participating respondents will be read the instructions and administered the survey. This process will continue throughout the sampling period.

There will be 2 different versions of this survey. While the majority of questions will remain the same for each survey (e.g. visit characteristics, visitor demographics), each of the 2 versions of the survey will contain a unique series of questions. In the series of unique questions, respondents will be presented with 9 pairs of alternative management scenarios for the Moose-Wilson corridor and will be asked to choose the management scenario they prefer and the level of perceived safety of that scenario. Photographs will also be used to represent different levels of vehicle traffic on a section of road.

The research assistant will use the following script when working with potential respondents:

Hello, I am conducting a study for Grand Teton National Park to better understand the types of experiences visitors seek while recreating within the Moose-Wilson Corridor of the park. Your participation is voluntary and your responses will be anonymous. In total, this study will take you about 10 minutes to complete. Would you be willing to participate?"

If NO: *“Do you mind if I ask, what is the primary activity you are planning to do during your visit? --- Thank you for your time and consideration. I hope you enjoy your visit.”*

If YES: *“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? Would you be willing to participate in the study?”*

The surveyor will provide the instructions for completing the survey and will be in the process.

(d) Expected Response Rate/Confidence Levels:

A total of 190 visitors (95 in vehicles and 95 hikers) will be contacted during the sampling period. It is estimated that 80% (n=150) will be willing to participate in the surveys. These estimates are based on previous research in the Moose-Wilson Corridor. Vaske (2008) concluded that the estimated sample size, given this unique and under-studied user-group, typically allows generalization to a population with a 95% confidence interval that the survey findings will be accurate to within ± 5 percentage points.

Location	Number of Initial Contacts	Expected Response Rate	Expected Number of Responses	Margin of Error +/- %	Confidence Level
Granite Entrance	95	80%	76	+/-5%	95%
Death Canyon Trailhead	95	80%	76	+/-5%	95%
TOTAL	190	80%	150	+/-5%	95%

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

The surveyors will capture observational information in the survey log from interactions with visitors that do not agree to participate:

- time and day of contact,
- gender,
- activity,
- group size,
- number of adults and children in group, and
- potential language barrier

Potential participants who do not agree to participate will also be asked:

- *“Do you mind if I ask, what is the primary activity you are planning to do during your visit? --- Thank you for your time and consideration. I hope you enjoy your visit.”*

This process will continue throughout the sampling period at each of the study locations. This information will be used to determine any non-response bias. Any non-response bias will be reported in final reports.

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

The questions included in the survey instrument were designed, reviewed and pretested by the following: PI, research staff and graduate students, scientists in the Recreation, Park, and Tourism Management Department at Pennsylvania State University with expertise in survey research and Grand Teton National Park staff (GRTE Management Team), as well as NPS staff with the Denver Service Center’s Visitor Use Management program. Based on peer-reviews, survey questions were reduced and truncated, to only include approved pool of known questions/topics, and therefore reduce burden time. Pre-testing for clarity and estimated burden time was conducted with graduate students at Pennsylvania State University.

Burden Estimates

We plan to approach 190 potential participants. We expect that the initial contact time will take one minute per person (190 x 1 minute = 3 hours). We expect that 20% (n = 40) of visitors will refuse to participate in the study. For those individuals, we will record their reason for refusal and ask them to answer a non-response check question that will be recorded on the study log (additional observational data will be collected as well). This is estimated to take about one minute to complete (40 x 1 minute = 40 minutes).

For the 190 originally contacted, we expect that 80% (n=150) will agree to complete the survey. This will take an additional 10 minutes to complete (150 x 10 minutes = 25 hours).

The total burden for this collection is estimated to be 29 hours.

Estimated Total Number		Estimation of Time (minutes)		Estimation of Burden (hours)	
Initial Contacts	190	Initial Contact	1	Initial Contact	3
On-site Refusal/ nonresponse	40	On-site Refusal/ nonresponse	1	On-site Refusal/ nonresponse	<1
Responses	150	To complete response	10	To complete response	25
				Total	29

Reporting Plan

A final technical report will be delivered to the park managers and staff at Grand Teton National Park. The report will contain a description of the study purpose and key findings. Frequency distributions and descriptive statistics will be included for all survey variables. A final copy of the report will also be transmitted to the NPS Social Science Division for archiving in the Social Science Studies Collection.

REFERENCES CITED

Friends of Pathways (2014). *Grand Teton National Park pathways*. Retrieved from:

<http://www.friendsofpathways.org/category/grand-teton-national-park-pathways/>.

National Park Service (2014). *Envision the future of the Moose Wilson Corridor. Moose Wilson Corridor Comprehensive Management Plan - Primary Alternative Newsletter*.

Vaske, J. J. (2008). *Survey research and analysis: Applications in parks, recreation and human dimensions*. State College, Pennsylvania: Venture Publishing.