Visitor Preference Study in the Moose-Wilson Corridor of Grand Teton National Park

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ON THIS PAGE
Photograph of sampling efforts near the Granite Canyon entrance of the Moose-Wilson Road
Photograph courtesy of Jennifer N. Newton

ON THE COVER
Photograph of the Moose-Wilson corridor of Grand Teton National Park.
Photograph courtesy of Jennifer N. Newton

Visitor Preference Study in the Moose-Wilson Corridor of Grand Teton National Park

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Executive Summary

The goal of this study was to examine the trade-offs park visitors made among competing attributes in order to achieve a high quality experience within the Moose-Wilson corridor (MWC) of Grand Teton National Park (GRTE). Sampling was conducted at two locations (Figure 2). Participants in vehicles and cyclists were surveyed before exiting the Moose-Wilson Road at the Granite entrance station ($n = 180$), and hikers were surveyed at the Death Canyon trailhead before exiting the trail system ($n = 143$). The response rate was 87.8% for hikers, 73% for participants in vehicles, and 75% for cyclists.

The survey probed visitor demographics, as well as characteristics about visitor park experiences. Participants were also asked to select their preferred scenario in a series of eight paired scenarios. Each scenario had four attributes: 1) wait time at the entrance of the MWC, 2) average speed along the MWC, 3) designated parking availability within the MWC, and 4) average number of vehicles in sight along the Moose-Wilson road. Each attribute had four levels associated with it (Table 1). Each scenario showed different levels of the four attributes, and were presented in pairs to participants (Figure 1). Participants selected their most preferred scenario out of the two presented.

Table 1. MWC attributes and levels

Attribute	Level
Wait Time	Can enter MWC immediately
	Can enter MWC after approximately 5 minutes
	Can enter MWC after approximately 15 minutes
	Can enter MWC after approximately 30 minutes
Speed Limit/Travel Time	Can drive through the corridor in 15 minutes (average speed 30 mph)
	Can drive through the corridor in 20 minutes (average speed 25 mph)
	Can drive through the corridor in 25 minutes (average speed 20 mph)
	Can drive through the corridor in 30 minutes (average speed 15 mph)
Parking Availability	Once at a designated parking lot, you are able to park in less than 5 minutes
	Once at a designated parking lot, you are able to park in less than 15 minutes
	Once at a designated parking lot, you are able to park in less than 30 minutes
	You cannot find parking where you would like to park
Traffic Volume	Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire
	Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire
	Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire
	Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

□ **Scenario 1**	□ **Scenario 2**
• You can enter the MWC immediately • You can drive through the corridor in 25 minutes (average speed, 20 mph) • Once at a designated parking lot, you are able to park in approximately 30 minutes • Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire	• You can enter the MWC after approximately 15 minutes • You can drive through the corridor in 30 minutes (average speed, 15 mph) • Once at a designated parking lot, you are able to park in approximately 15 minutes • Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

Figure 1. Example of paired scenarios

Below is a brief summary of the results, organized by attribute and three demographic interactions: 1) residency, 2) age, and 3) mode of transportation. These interactions were chosen based on data collected within the MWC and previous research investigating transportation in a national park (Pettebone, et al., 2011). Residency is defined by two groups: 1) locals (selected by zip code) and 2) non-locals. Participants with zip codes within Teton County, WY; Lincoln County, WY; or Teton County, ID were considered to be local residents, all others were considered non-local. Age was selected (and used as a continuous variable) based on previous research, which showed differences among age groups in regards to choice preference (Pettebone et al., 2011). Mode of transportation was separated into two groups: 1) hikers (on-foot) and 2) participants in vehicles.

Parking Availability

• Parking availability is the most important attribute to participants. Not being able to find available parking was the least tolerable, while finding parking within 5 minutes was preferred.

• RESIDENCY – When compared to non-local visitors, local visitors were more tolerant of waiting for parking for 5 or 15 minutes. However, there was little difference in tolerance of a 30 minute wait for parking between locals and non-locals.

• AGE – Older people were less sensitive to parking availability than younger people.

• MODE OF TRANSPORT – Participants in vehicles were more tolerant of waiting for parking, and were not very sensitive to differences between waiting 15 and 30 minutes for parking, when compared to hikers. However, there was no significant difference between participants in vehicles and hikers in regards to not finding available parking. For both groups, it was least preferred.

Entrance Wait Time

• For all participants, it was found that entering the MWC immediately was the most preferred compared to other levels of wait time, while waiting 30 minutes was the least preferred.

- RESIDENCY – Local residents were more sensitive and less tolerant of waiting 30 minutes at the entrance station, when compared to non-local residents
- AGE – Older people were less sensitive to wait time compared to younger people
- MODE OF TRANSPORT – Participants in vehicles were less tolerant of longer wait times than participants who were hiking.

Average Speed
- For all participants, a speed limit of an average of 25 mph was the most preferred, while slower speeds were also tolerable. However, an increased speed of 30 mph was less preferred.

- RESIDENCY – When compared to non-local residents, locals preferred an average speed of 20 mph.

- AGE – Younger people preferred faster average speed limits when compared to older people.

- MODE OF TRANSPORT – Participants in vehicles preferred a speed limit of 15 mph when compared to hikers.

Traffic Volume
- For all participants, there was no significant difference between seeing an average of 0 (zero) other vehicles or an average of 2 other vehicles on the road. For all participants, it was more preferred to have less traffic on the road.
- RESIDENCY – Non-local residents preferred to see some traffic on the road (2 to 5 other vehicles) compared to locals, however both groups preferred not to see 8 other vehicles on the road. Local residents were also less tolerant of increasing traffic on the road, compared to non-locals.
- AGE – As age increased, tolerance for greater amounts of traffic increased.
- MODE OF TRANSPORT – Hikers had a stronger preference of zero cars on the road compared to participants in vehicles.

Use of the Management Calculator
Past literature has shown that visitor preferences among various levels of attributes are dynamic and relative to the choices presented. The above key findings begin to show the relationships among these attributes, but we recommend that managers use the attached calculator to further explore these data.

Acknowledgments

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Introduction

In the summer of 2014, a collaborative team of researchers from the Pennsylvania State University and Utah State University conducted a study examining the social and ecological conditions of the Moose-Wilson corridor (MWC) of Grand Teton National Park (GRTE). The MWC is an area of approximately 10,000 acres, which surrounds the 7.7-mile Moose-Wilson Road at the southern end of GRTE. This area is abundant in both wildlife and plant life.

In the past 15 years, several changes that could potentially affect visitor experience have occurred within the MWC. In 2001, more than 1,000 acres of private land within the corridor were transferred to GRTE. Currently it is open to the public as the Laurance S. Rockefeller (LSR) Preserve, and includes a parking lot, hiking trails, access to Phelps Lake, and a visitor center (National Park Service [NPS], 2014). The opening of the LSR Preserve has raised public awareness of this region of the park, and subsequently increased visitation to the area. Also, there has been increased vehicle and bicycle traffic on the narrow two-lane Moose-Wilson Road, which runs through the MWC and provides access to the LSR Preserve. There is neither a bike path nor formalized shoulder on the road (NPS, 2014). Traffic increase coincides with the ongoing construction and community promotion of the "Grand Loop Tour" bicycle path, which includes pathways throughout the Jackson area, both within and outside the park (Friends of Pathways, 2014). Additionally, since 2007, the presence of grizzly bear use of the corridor has become more apparent and sightings have increased, adding a new element related to human wildlife interactions (NPS, 2014).

The goal of the 2014 study was to collect data pertaining to the current social and ecological condition within the MWC. These data were descriptive in nature, and can be used to inform park managers about how visitors are experiencing the MWC. However, these data do not provide managers with information regarding evaluative preferences of visitors.

This study examines the trade-offs park visitors made among competing attributes in order to achieve a high quality experience within the Moose-Wilson corridor (MWC) of Grand Teton National Park (GRTE) using what is commonly referred to as 'stated choice modeling.' The benefit to using stated choice in outdoor recreation research is that it allows researchers and managers to examine attributes of the visitor experience in relation to other attributes, as opposed to examining individual attributes.

Methods

Study Area

The MWC is located in the southern part of GRTE (see Figure 2). This area is rich in natural resources, with the road winding through riparian areas, sagebrush flats, and mixed-conifer, alpine forests. There are several pull-offs and parking areas at the three trailheads in the area. As described by a sign at the northern entrance of the MWC, the Moose-Wilson Road, which traverses the corridor, is "extremely narrow and windy," and includes a mile and a half section of unpaved roadway near the southern entrance. Large vehicles, such as recreation vehicles and vehicles pulling trailers, are prohibited on the road.

Visitors entering the corridor from the north do not have to pass through an entrance gate or pay an entrance fee. The southern end of the road has an entrance station and requires visitors to pay the park fee or show their park pass.

Further to the south of the road, beyond the entrance station and park boundary, lies Teton Village, which is located in Teton County, Wyoming and is adjacent to the Bridger Teton National Forest that is home to the Jackson Hole Mountain Resort. South of Teton Village, is the community of Wilson, Wyoming, which is also outside of park boundaries. The town to the north of the MWC is the community of Moose and the Craig Thomas Discovery and Visitor Center. MWC also provides access to main park roads, Highway 26/89 and Wyoming state highway 80/191, a within park boundaries and passes the Jackson Hole Airport, also located within the Grand Teton National Park. While the MWC is a visitor destination that offers opportunities such as hiking, camping, wildlife viewing, or visiting the Laurance S. Rockefeller Preserve, it also serves as a thoroughfare for those entering the park from the south to access other areas of the park, or beyond to such destinations as Yellowstone National Park.
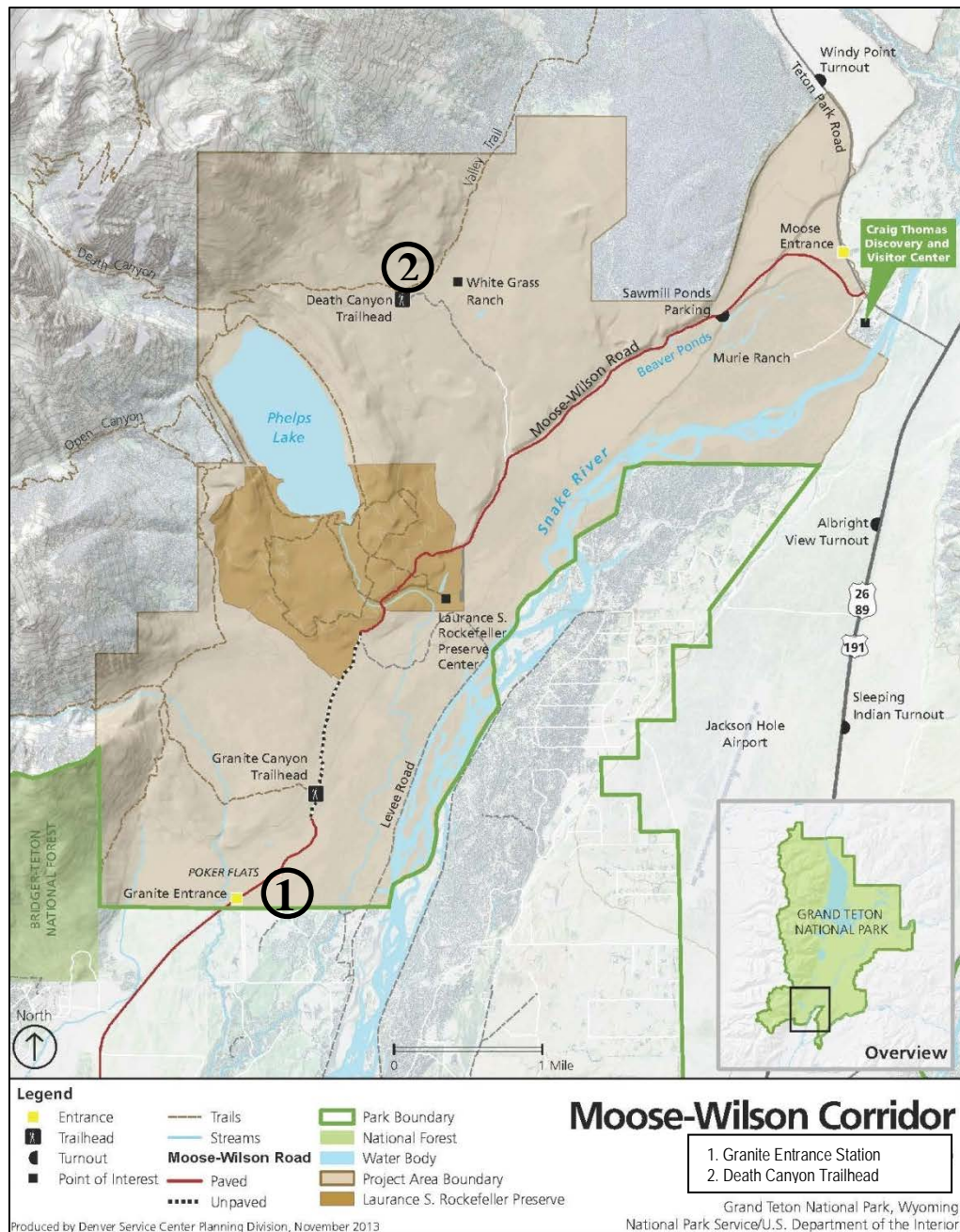
Figure 2. Map of the MWC with labeled survey locations

Survey Development

The questions on the survey instrument were designed and reviewed by the study's principle investigators, graduate students, Grand Teton National Park staff, and the Office of Management and Budget. Prior to the launch of the study, two days were spent in the field, to pilot test the survey instrument (one day for participants in vehicles, and one day for hikers). Participants were asked to answer questions regarding their visit and visitor characteristics. Additionally, this study employed methodology commonly referred to as stated choice (Louviere, Hensher, & Swait, 2000), which has been used in numerous studies in National Parks, including Denali (Lawson & Manning, 2001;

2002), Acadia (Bullock & Lawson, 2008), Rocky Mountain (Pettebone et al., 2011) and Yosemite (Newman et al., 2005).

Traditionally, studies conducted to identify standards of quality have focused on one indicator, or attribute, per question (Manning, Hof, & Lime, 1996; Roggenbuck, Williams, & Watson, 1993). Indicators of quality are measureable variables that are reflective of management objectives. Management objectives can be thought of as "desired conditions" of an area. Standards of quality refer to the minimum acceptable condition of indicator variables (Manning, 2011). For example, if the management objective was to manage for solitude, the indicator of quality may be the number of group encounters that occur per day along a trail system, and the standard may be encountering no more than 8 other groups along a trail system, 75% of days. Indicators and standards of quality are determined by park managers and informed by a research process, policy interpretation, budget constraints and ecological objectives.

Studies that focus on one attribute per question are beneficial to park managers. However, they neglect other attributes that are associated with each variable, and neglect the holistic nature of an individual's park experience. The benefit to using stated choice in outdoor recreation research is that it allows researchers and managers to examine attributes of the visitor experience in relation to other attributes, as opposed to examining individual attributes. By incorporating potential tradeoffs of certain conditions within the park, researchers and managers are better able to understand how visitors feel that the park should be managed (Lawson & Manning, 2002). Additionally, it also allows managers and researchers to understand what trade-offs visitors would make to achieve their desired experience (Newman et al., 2005). Stated choice studies select several attributes to investigate, along with multiple levels of each attribute. Participants are shown a series of paired scenarios that contain differing levels of attributes. Participants are asked to select the scenario that they would most prefer (Figure 3).

☐ **Scenario 1**	☐ **Scenario 2**
• You can enter the MWC immediately • You can drive through the corridor in 25 minutes (average speed, 20 mph) • Once at a designated parking lot, you are able to park in approximately 30 minutes • Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire	• You can enter the MWC after approximately 15 minutes • You can drive through the corridor in 30 minutes (average speed, 15 mph) • Once at a designated parking lot, you are able to park in approximately 15 minutes • Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

Figure 3. Example of paired scenarios

Selection of Attributes

Based on results from data collected in 2014, as well as conversations with GRTE park personnel, realistic ranges for potential standards were created for four potential indicators of quality visitor experiences within the MWC (See Table 2). Indicators, or attributes, were chosen to represent social conditions within the MWC regarding wait time at the entrance, travel time through the MWC, designated parking availability, and number of vehicles in sight on the road. Levels of each indicator were also selected to represent actual scenarios that visitors may experience while visiting the MWC.

Participants were asked to select their preferred scenario in a series of eight paired scenarios. Each scenario displayed a different combination of levels of the four attributes. To maximize the number of scenarios to be tested, two versions of the survey were created (See Appendix A and B). To ensure randomization of the levels of attributes among all scenarios, and which scenarios should be compared, an orthogonal fractional factorial design was used. All attributes and corresponding levels were analyzed in a statistical program (i.e., SAS) to ensure randomization. In addition to the scenarios, visit and visitor characteristics data were also collected. All other questions (e.g., demographics, travel planning, motivations, etc…) remained the same on both versions of the survey, with the exception of the scenarios.

Table 2. MWC attributes and levels

Attribute	Level
Wait Time	Can enter MWC immediately
	Can enter MWC after approximately 5 minutes
	Can enter MWC after approximately 15 minutes
	Can enter MWC after approximately 30 minutes
Speed Limit/Travel Time	Can drive through the corridor in 15 minutes (average speed 30 mph)
	Can drive through the corridor in 20 minutes (average speed 25 mph)
	Can drive through the corridor in 25 minutes (average speed 20 mph)
	Can drive through the corridor in 30 minutes (average speed 15 mph)
Parking Availability	Once at a designated parking lot, you are able to park in less than 5 minutes
	Once at a designated parking lot, you are able to park in less than 15 minutes
	Once at a designated parking lot, you are able to park in less than 30 minutes
	You cannot find parking where you would like to park
Traffic Volume	Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire
	Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire
	Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire
	Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

Survey Administration

Research assistants trained by the Pennsylvania State University conducted intercept visitor surveys from June 15th to June 30th, 2015. Potential participants were all adults (over the age of 18) within the MWC during the sampling period. Sampling was conducted at 2 locations: 1) the Granite exit of the Moose-Wilson road ($n = 180$), and 2) the Death Canyon trailhead ($n = 143$) (Figure 2). Participants in vehicles were surveyed before exiting the road near the Granite station. Participants in vehicles include: participants in cars, sport utility vehicles, trucks, motorcyclists, and bicyclists. A total of six (6) cyclists completed surveys during the sampling period, representing 1.9% of the overall 323 participants sampled. This sample is considered representative of cyclists during the sampling period, as past research has found that cyclists comprise 2% to 3% of the total use of the MWC (Monz, D'Antonio, Heaslip, 2015; Newman, Taff, Newton, & Abbott, 2015). Differences between cyclists and other participants in vehicles were not detected due to the small sample size of cyclists. Hikers were surveyed before exiting the trail system at Death Canyon trailhead. Sampling was stratified to ensure a representative sample time of day (either 8AM to 2PM or 12PM to 6PM), sampling location, and day of the week. Participants in vehicles and cyclists were not sampled on the same days as hikers. Research technicians worked 6 days a week. The response rate was 87.8% for hikers, 73% for participants in vehicles, and 75% for cyclists. Nine cases were not included in the stated choice modeling, as the respondents did not complete all scenarios, giving a total of 315 respondents.

At each sampling location, systematic random sampling was employed. Using a random start by choosing from a list of numbers 1 to 10, approximately every 8th vehicle or cyclist was approached, and approximately every other hiker was approached and asked to participate in the study. Within the group, potential participants over 18 with the nearest birthday to that day were asked to participate. Participants who agreed to take part in the study were read the instructions. Participants were handed a laminated copy of the survey instrument (See Appendix A and B), and technicians entered their responses into an iPad. Responses were kept anonymous and confidential.

Statistical Analysis

Information collected about visit and visitor characteristics are organized by user type. Due to the small number of cyclists (six total) intercepted during the sampling period, they were combined with the participants in vehicles, as they were surveyed at the same location (Granite Canyon Entrance Station). These data are presented as frequencies, percentages, means, and standard deviations. Frequencies represent the number of respondents who gave a particular response, while percentages show the proportion of respondents (out of the total number of responses among that user group) who answered a question a certain way. Means (or averages) are equivalent to the sum of the individual values for each variable divided by the number of responses. The mean provides an estimate of the typical response from the entire survey sample for a variable. Standard deviation is closely related to the variance of the data, which is a measure of how closely the individual responses for a variable cluster around the mean. The standard deviation is calculated by taking the square root of the variance and has the advantage of being easier to interpret because it is in the same units as the original variable.

In addition to these analyses, a mix logit model (or random parameter logit) was utilized to analyze the results of the scenario selection. For these analyses, cyclists were excluded, given the insufficient sample size. Mixed logit models relax the assumption of fixed marginal effect of independent variables in standard logit models, and allows for preference heterogeneity. In these models, we specified all marginal utility generated by each level of attribute normally distributed across respondents. The dependent variable represents the scenario selected in a specific pair. The scenario selected was coded as a "1", and the scenario not selected was coded as a "0". The independent variables were the levels of each attribute, which were effect coded to be used in the model. With effects coding, one level of each attribute is selected to be the reference level and is excluded. The reference level for this study was the first level of each attribute (e.g. "find parking in less than 5 minutes" for the parking availability attribute). The coefficient for the reference levels are expressed as the negative sum of the remaining coefficients. Therefore, there are no standard error estimates for these coefficients.

Within the base model, no significant difference was found between waiting for 5 minutes at the entrance and waiting 15 minutes at the entrance. Therefore, levels were combined in those instances.

The variables residency (i.e., local or non-local), mode of transportation (i.e., participant in a vehicle or hiker), and age were later added to the model to investigate possible differences between groups. This will be referred to as the full model. Resident and mode of transport were entered as dichotomous variables, while age was kept as a continuous variable.

These estimated coefficients from the full model were entered into an excel document to create a "scenario calculator" (see Opaluch, Swallow, Wesselles, and Wichelns, 1993). This calculator shows predictions of preferences for certain scenarios for different user groups. Please see Appendix C for a full explanation of the calculator.

Results

Results of Visitor Preference

Base Model

Visitors were asked to select their preferred scenario when presented with two scenarios, each scenario having four attributes with varying levels. The preference results of this base model are shown in Table 3 and Figure 4 a-d. The coefficients presented indicate the relative importance of the associated level of that specific attribute. Coefficients further from zero indicate a greater relative importance of that attribute level. These coefficients are referred to as "utility scores."

The large difference in coefficients between levels of parking availability indicates that this is the most important attribute to participants when selecting a preferred scenario. The finding suggests that participants prefer to find parking within 5 minutes, and not being able to find parking was the least preferred.

This model also indicates that traffic volume was the next most important attribute to participants. The results show there is not a significant difference between seeing an average of 0 other vehicles on the road and being able to pass other vehicles 75% of the time and an average of 2 other vehicles and being able to pass other vehicles 50% of the time. Seeing an average of 8 other vehicles and not being able to pass other vehicles was the least preferred.

The results show that wait time was the next most influential attribute in the model. Participants preferred to enter the MWC immediately, while waiting 30 minutes was the least preferred.

The coefficients also indicate that participants prefer not to drive through the corridor in 15 minutes with an average speed of 30 mph. This was the least preferred option, while the most preferred was driving through the corridor in 20 minutes with an average speed of 25 mph (which is the current average speed limit of the MWC).

Table 3. Coefficients of base model

Attribute	Variable	Coefficient	Standard Error
Wait Time	Can enter MWC immediately	0.47	-
	Can enter MWC after approximately 5 to 15 minutes	0.03	0.06
	Can enter MWC after approximately 30 minutes	-0.50^c	0.09
Speed Limit/Travel Time	Can drive through the corridor in 15 minutes (average speed 30 mph)	-0.46	-
	Can drive through the corridor in 20 minutes (average speed 25 mph)	0.36^c	0.08
	Can drive through the corridor in 25 minutes (average speed 20 mph)	0.08	0.09
	Can drive through the corridor in 30 minutes (average speed 15 mph)	0.01	0.07
Parking Availability	Once at a designated parking lot, you are able to park in less than 5 minutes	1.08	-
	Once at a designated parking lot, you are able to park in less than 15 minutes	0.18^a	0.09
	Once at a designated parking lot, you are able to park in less than 30 minutes	-0.03	0.08
	You cannot find parking where you would like to park	-1.23^c	0.12
Traffic Volume	Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire	0.27	-
	Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire	0.38^c	0.07
	Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire	0.02	0.09
	Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire	-0.67^c	0.10

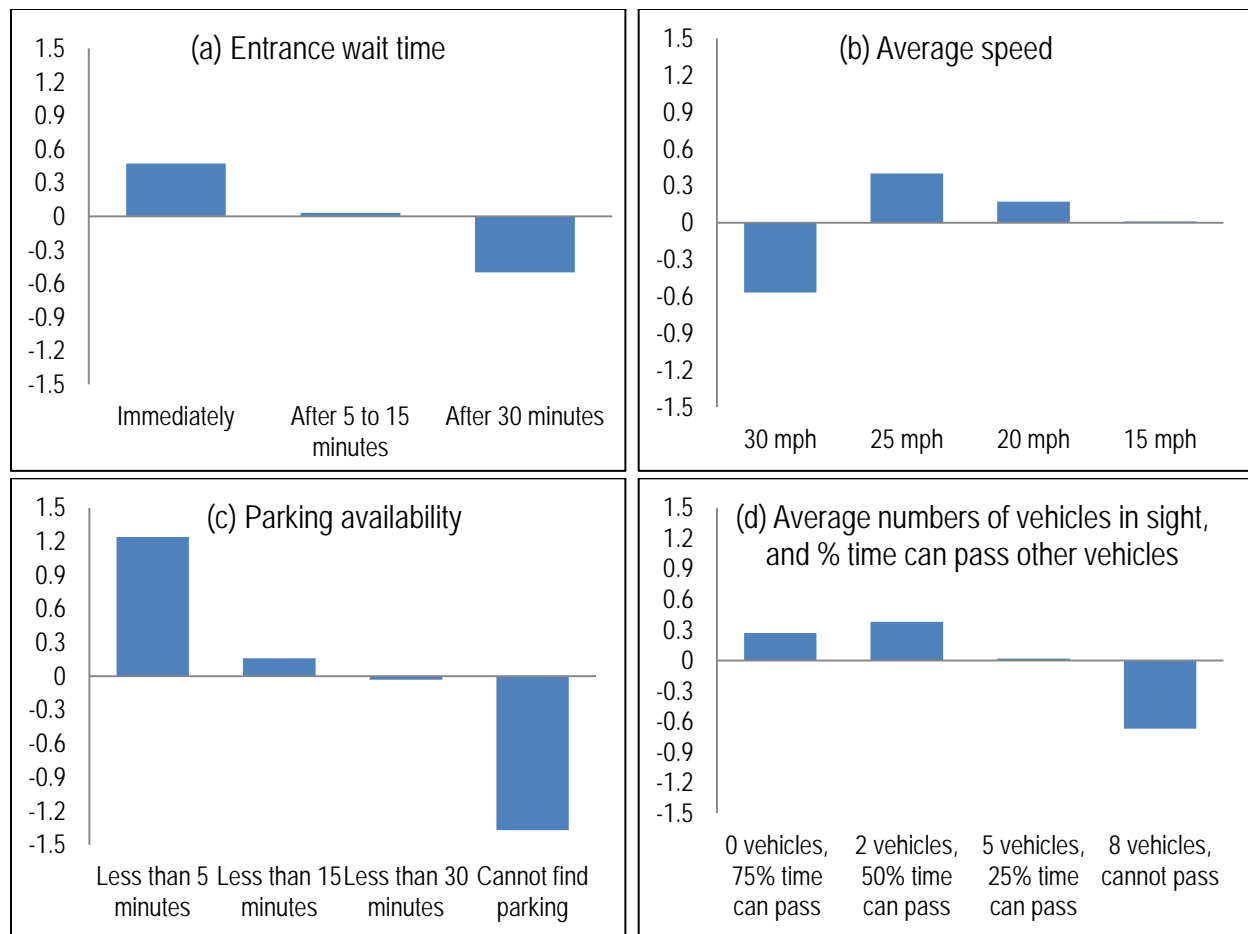[a] $p<.05$, [b] $p<.01$, [c] $p<.001$

Figure 4 a-d. Coefficients of base model

Full Model

The full model includes interactions regarding residency, age, and mode of transportation (Table 4). These interactions were chosen based on data collected within the MWC and previous stated choice research investigating transportation in a national park (Pettebone, et al., 2011). Residency is defined by two groups: 1) locals (selected by zip code) and 2) non-locals. Participants with zip codes within Teton County, WY; Lincoln County, WY; or Teton County, ID were considered to be local residents, all others were considered non-local. Age was kept as a continuous variable (coefficients shown represent the change associated with a year increase in age), and was selected based on previous research which showed differences among age groups in regards to choice preference (Pettebone et al., 2011). Mode of transportation was separated into two groups: 1) hikers (on-foot) and 2) participants in vehicles.

The coefficients of main effect in the full model should be interpreted with caution. They show the marginal effects of each level of attributes for a non-local hiker with an age of zero years old, which does not represent any respondent. Additionally, coefficients of the interactions of residency, age, and mode of transportation should be interpreted by comparing the interaction coefficient to the base effect, and not interpreted as "stand alone" coefficients.

<u>Residency</u>
The coefficients of residency show the differences in preference between non-local and local respondents. In terms of wait time, while local respondents show no significant difference in willingness to wait for 5 – 15 minutes to enter MWC, they are significantly more unwilling to wait for 30 minutes compared to non-local respondents. Local residents are more tolerant of waiting for parking availability when compared to non-locals. Local residents are more tolerant of waiting 5 to 15 minutes for parking; however there is little difference between locals and non-locals in terms of waiting 30 minutes for parking. Local residents are also more likely to prefer a slower average speed within the MWC, of 20 mph, when compared to non-local residents. Compared to local residents, non-locals prefer to see some traffic (average of 2 to 5 other vehicles) on the Moose-Wilson road. However, both locals and non-locals prefer not to see an average of 8 other vehicles and not have the option to pass other vehicles when traveling the Moose-Wilson road.

<u>Age</u>
Age was kept as a continuous variable; with the sample including an age range from 18 to 82. The positive coefficients for age of waiting 5-15 and 30 minutes to enter the MWC indicate that, given the negative coefficients in the main effect, waiting longer is more tolerable for older people as the marginal effects are less negative. This pattern of coefficients is similar in terms of parking availability, indicating that older people are less sensitive to both waiting for parking and parking availability than younger people. Older people also show a higher tolerance for more traffic on the road than younger people, and prefer slower average speeds on the Moose-Wilson road than younger people.

<u>Mode of Transport</u>
The coefficients for hikers and participants in vehicles also show differences between these two groups. In regards to wait time to enter the MWC, participants in vehicles were less tolerant of longer wait times than those who were hiking. However, participants in vehicles were more tolerant of needing to wait for parking. For participants in vehicles, there was little difference between waiting 15 minutes and waiting 30 minutes, but there was a greater difference between these times for hikers. For both hikers and participants in vehicles, not being able to find parking was the least preferred. When compared to hikers, participants in vehicles preferred a slower speed along the MWC (15 mph). Hikers showed a stronger preference for seeing no (0) other vehicles along the road when compared to participants in vehicles.

Table 4. Coefficients of the full model

Attribute	Variable	Base Effect Coefficient (Std. error)	Residency Coefficient (Std. error) (Non-Local)	Age Coefficient (Std. error) (Single year increase)	Mode of Transport Coefficient (Std. error) (Hiker)
Wait Time	Can enter MWC immediately	5.96 (-)	5.53 (-)	-0.09 (-)	2.55 (-)
	Can enter MWC after approximately 5 -15 minutes	4.22^c (1.00)	0.83 (0.90)	-0.07^c (0.02)	-0.40 (0.43)
	Can enter MWC after approximately 30 minutes	-10.18^c (2.41)	-6.36^c (2.40)	0.16^c (0.04)	-2.15^b (0.84)
Speed Limit/Travel Time	Can drive through the corridor in 15 minutes (average speed 30 mph)	1.39 (-)	0.87 (-)	-0.11 (-)	-3.12 (-)
	Can drive through the corridor in 20 minutes (average speed 25 mph)	1.63 (1.02)	-0.78 (1.18)	0.04 (0.03)	2.14 (1.33)
	Can drive through the corridor in 25 minutes (average speed 20 mph)	-2.74^c (1.00)	4.37^c (1.35)	0.08^b (0.03)	-1.61 (1.05)
	Can drive through the corridor in 30 minutes (average speed 15 mph)	-0.28 (1.31)	-4.46^c (1.18)	-0.01 (0.03)	2.59^c (0.74)
Parking Availability	Once at a designated parking lot, you are able to park in less than 5 minutes	12.28 (-)	3.64 (-)	-0.05 (-)	0.34 (-)
	Once at a designated parking lot, you are able to park in less than 15 minutes	6.08^c (1.65)	2.20^a (1.08)	-0.07^c (0.03)	-4.86^b (1.77)
	Once at a designated parking lot, you are able to park in less than 30 minutes	-7.14^c (2.50)	1.99 (1.46)	0.07^a (0.03)	5.53^b (2.10)
	You cannot find parking where you would like to park	-11.22^c (2.09)	-7.83^c (2.47)	0.05^a (0.02)	-1.01 (0.97)
Traffic Volume	Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire	7.33 (-)	5.14 (-)	-0.12 (-)	-0.77 (-)
	Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire	3.73^c (1.33)	0.97 (0.86)	-0.02 (0.02)	1.49^b (0.60)
	Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire	-3.06 (2.04)	-3.34^c (1.28)	0.02 (0.03)	2.41^a (1.15)
	Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire	-8.01^c (1.55)	-2.77^b (1.16)	0.11^c (0.03)	-3.13^b (1.02)

[a] p<.05, [b] p<.01, [c] p<.001

Based on the above coefficients, a calculator was created in Microsoft Excel (see Appendix C). This calculator allows managers to create different visitor profiles (based on residency, age, and mode of transportation) and different hypothetical scenarios, and predict the preferred scenario for the specified visitor profile.

Descriptive Results by User Type

Travel

Participants were asked where they started their visit that day (Table 5). This question was open-ended. For participants in vehicles, the most frequently reported starting location of their visit was *Jackson, WY* (20.7%), followed by *Teton Village, WY* (15.6%), and other locations within *Grand Teton National Park* (6.7%) not already listed in Table 5. For participants that were hiking, *Death Canyon* (25.7%) was the most frequently reported starting location, followed by *Jackson, WY* (16.0%) and *Teton Village, WY* (14.6%).

Table 5. Start of day's travel

Location Where Day's Visit Started[a]	User Group	n[b]	%
Antelope Flats	Vehicle	2	1.1
	Hiker	1	0.7
Colter Bay	Vehicle	10	5.6
	Hiker	6	4.2
Craig Thomas Visitor Center	Vehicle	1	0.6
	Hiker	5	3.5
Death Canyon	Vehicle	3	1.7
	Hiker	37	25.7
Gros Ventre	Vehicle	2	11
	Hiker	4	2.8
GRTE[c]	Vehicle	12	6.7
	Hiker	6	4.2
Idaho	Vehicle	4	2.2
	Hiker	3	2.1
Jackson	Vehicle	37	20.7
	Hiker	23	16.0
Jackson Lake	Vehicle	6	3.4
	Hiker	2	1.4
Jenny Lake	Vehicle	9	5.0
	Hiker	2	1.4
Laurence S. Rockefeller Preserve	Vehicle	2	1.1
	Hiker	2	1.4

[a] Original answers were open-ended. Responses were categorized. See Appendix D.

[b] Total participants in vehicles= 179, total hikers = 144

[c] Anywhere within the GRTE boundaries. Does not include other GRTE locations listed in table.

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Table 5 (continued). Start of day's travel

Location Where Day's Visit Started[a]	User Group	n[b]	%
Moose	Vehicle	3	1.7
	Hiker	5	3.5
Moran	Vehicle	5	2.8
	Hiker	1	0.7
Signal Mountain	Vehicle	7	3.9
	Hiker	2	1.4
Teton Village	Vehicle	28	15.6
	Hiker	21	14.6
Wilson	Vehicle	9	5.0
	Hiker	6	4.2
Wyoming	Vehicle	7	3.9
	Hiker	3	2.1
Yellowstone	Vehicle	10	5.6
	Hiker	3	2.1
Other	Vehicle	5	2.8
	Hiker	1	0.7

[a] Original answers were open-ended. Responses were categorized. See Appendix D.

[b] Total participants in vehicles= 179, total hikers = 144

[c] Anywhere within the GRTE boundaries. Does not include other GRTE locations listed in table.

Participants were asked their primary destination for the day they were surveyed (Table 6, Figure 5). The majority of hikers (68.1%) responded that *their primary destination was within the MWC*, while the many of participants in vehicles (38.0%) responded that their primary destination was *within GRTE, but outside the MWC*. The second most frequent response for hikers (17.4%) was that their primary destination was *within GRTE, but outside the MWC*. The second most frequent response for participants in vehicles (27.9%) was that their primary destination was *within the MWC*.

Table 6. Primary destination

Primary Destination	User Group	n[a]	%
Primary destination within the MWC	Vehicle	50	27.9
	Hiker	98	68.1
Primary destination outside GRTE	Vehicle	34	19.0
	Hiker	6	4.2
Primary destination within GRTE, but outside the MWC	Vehicle	68	38.0
	Hiker	25	17.4
Exploring the area, with no specific primary destination	Vehicle	27	15.1
	Hiker	15	10.4

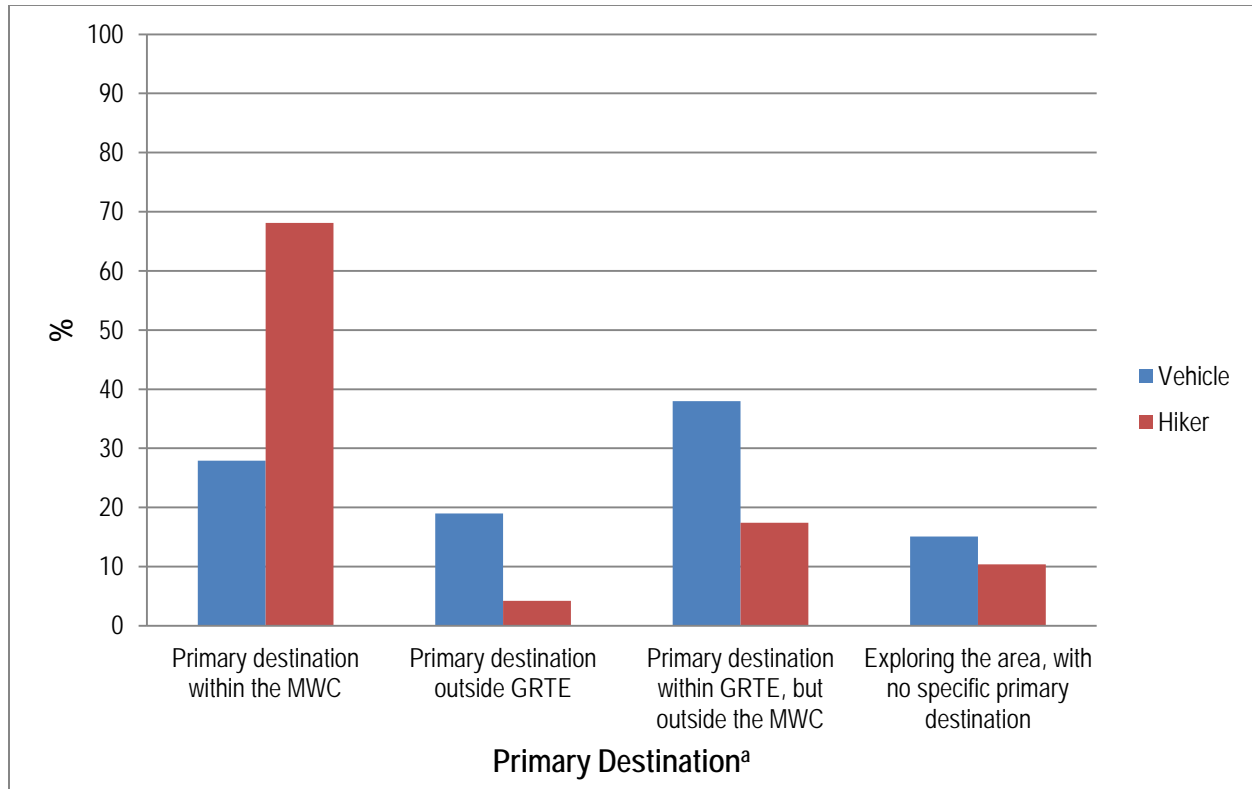[a] Total participants in vehicles= 179, total hikers = 144

Figure 5. Primary destination ([a] Total participants in vehicles = 179, total hikers = 144)

Participants were asked if they had planned on stopping within the MWC (Table 7, Figure 6). The majority of participants in vehicles (57.0%) and hikers (85.4%) *planned on stopping within the MWC*. The second most frequent response for participants in vehicles (35.8%) was that they *did not plan on stopping within the MWC*, while hikers (7.6%) responded that they were *unsure if they would stop within the MWC*.

Table 7. Visiting the MWC

Primary Destination	User Group	n[a]	%
Planned on stopping within the MWC	Vehicle	102	57.0
	Hiker	123	85.4
Did not plan on stopping within the MWC	Vehicle	64	35.8
	Hiker	10	6.9
Unsure if would stop within the MWC	Vehicle	13	7.3
	Hiker	11	7.6

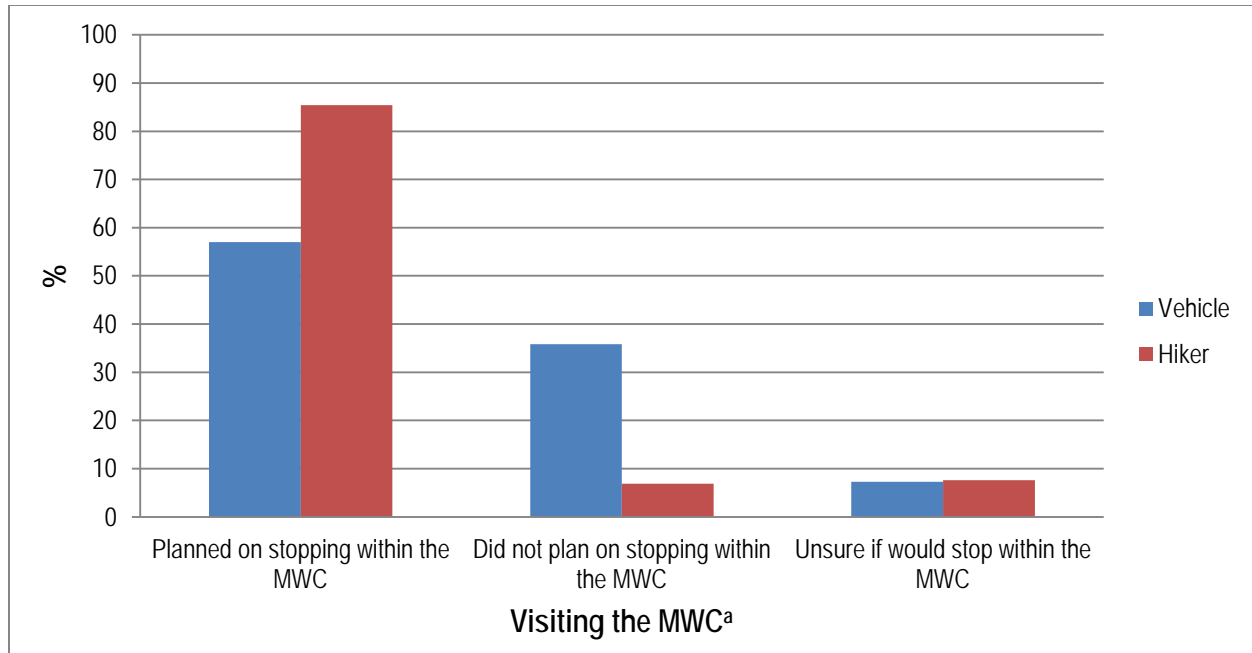[a] Total participants in vehicles= 179, total hikers = 144

Figure 6. Visiting the MWC ([a] Total participants in vehicles = 179, total hikers = 144)

Participants were asked what activities they participated in during their visit that day to the MWC (Figure 7, Table 8). Almost all of the hikers (94.4%) reported hiking as an activity they participated in. The next activity reported the most frequently for hikers was *viewing the scenery* (79.9%) followed by *viewing wildlife* (67.4%). For participants in vehicles, *viewing the scenery* was reported the most frequently (76.0%), followed by *scenic driving* (73.7%), and *viewing wildlife* (72.6%).

Table 8. Activities participated in

Activity	User Group	n[a]	%[b]
Viewing the scenery	Vehicle	136	76.0
	Hiker	115	79.9
Viewing wildlife	Vehicle	130	72.6
	Hiker	97	67.4
Scenic driving	Vehicle	132	73.7
	Hiker	70	48.6
Hiking or Walking	Vehicle	84	46.9
	Hiker	136	94.4
Cycling	Vehicle	11	6.1
	Hiker	6	4.2
Photography	Vehicle	108	60.3
	Hiker	96	66.7
Swimming	Vehicle	12	6.7
	Hiker	31	21.5

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Activity	User Group	n[a]	%[b]
Visiting the Laurance S. Rockefeller Preserve visitor center	Vehicle	30	16.8
	Hiker	12	8.3
Attending a ranger talk or program	Vehicle	9	5.0
	Hiker	1	0.7
Other	Vehicle	11	6.1
	Hiker	12	8.3

[a] Total participants in vehicles= 179, total hikers = 144

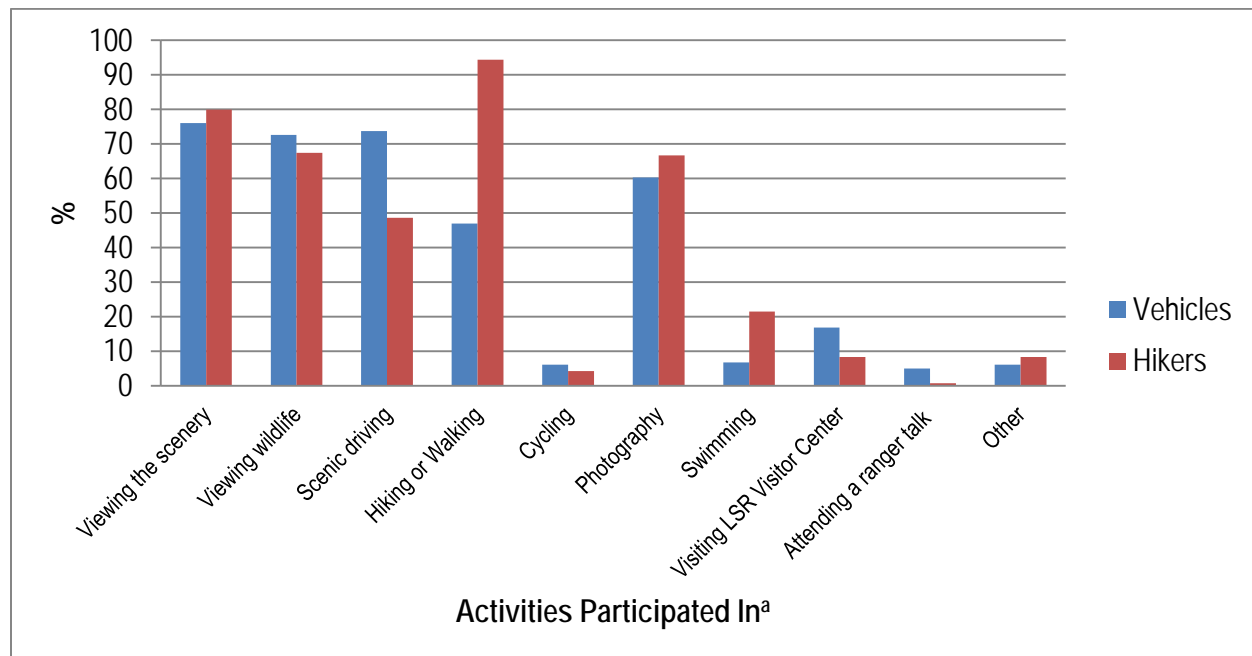[b] Responses total more than 100%, as participants were instructed to check all that apply

Figure 7. Activities participated in ([a] Total participants in vehicles = 179, total hikers = 144)

Visitor Experience

To determine visitor motivations, participants were asked to rate the importance of different possible reasons for their visit that day (Table 9, Figure 8). Responses were measured on a 7-point scale ranging from 1 = "Extremely Unimportant" to 7 = "Extremely Important." "Not Relevant" responses were not included in the mean score or standard deviation. For both participants in vehicles and hikers, the top reported motivations were *experience nature* (participants in vehicles M = 4.7, SD = 0.8, hikers M = 4.9, SD = 0.4), followed by *wildlife viewing* (participants in vehicles M = 4.6, SD = 0.8, hikers M = 4.8, SD = 0.7), and *spending time with family & friends* (participants in vehicles M = 4.4, SD = 1.1, hikers M = 4.6, SD = 0.8).

Table 9. Visitor motivations

Importance of…[a]	User Group[b]	%[c]						M[c]	SD[c]
		Not Relevant	Extremely/ Very Unimportant	Moderately Unimportant	Neither Important or Unimportant	Moderately Important	Extremely/ Very Important		
Opportunities to learn	Vehicle	12.3	5.1	12.1	12.7	45.9	24.2	3.7	1.1
	Hiker	7.6	3.8	9.8	17.3	48.1	21.1	3.7	1.0
Experiencing nature	Vehicle	1.7	1.7	2.3	1.1	10.2	84.7	4.7	0.8
	Hiker	0.7	0	0	1.4	10.5	88.1	4.9	0.4
Wildlife viewing	Vehicle	1.7	2.3	1.1	2.3	18.8	75.6	4.6	0.8
	Hiker	1.4	0	2.8	5.6	33.1	58.5	4.8	0.7
Resting and relaxing	Vehicle	7.8	3.0	10.9	13.9	29.7	42.4	4.0	1.1
	Hiker	2.8	5.0	8.6	6.4	42.1	37.9	4.0	1.1
Maintaining physical health	Vehicle	7.8	3.6	10.3	21.8	24.8	39.4	3.9	1.2
	Hiker	0.7	2.8	2.8	4.9	35.0	54.5	4.4	0.9
Spending time with family & friends	Vehicle	7.8	4.2	4.2	9.7	13.3	68.5	4.4	1.1
	Hiker	4.2	1.4	2.9	3.6	22.5	69.9	4.6	0.8

[a] Importance measured on a 7-point scale from extremely unimportant to extremely important, and collapsed to a 5-point scale for analysis.

[b] Total participants in vehicles= 179, total hikers = 144

[c] Percent, mean, and standard deviation do not include not relevant response
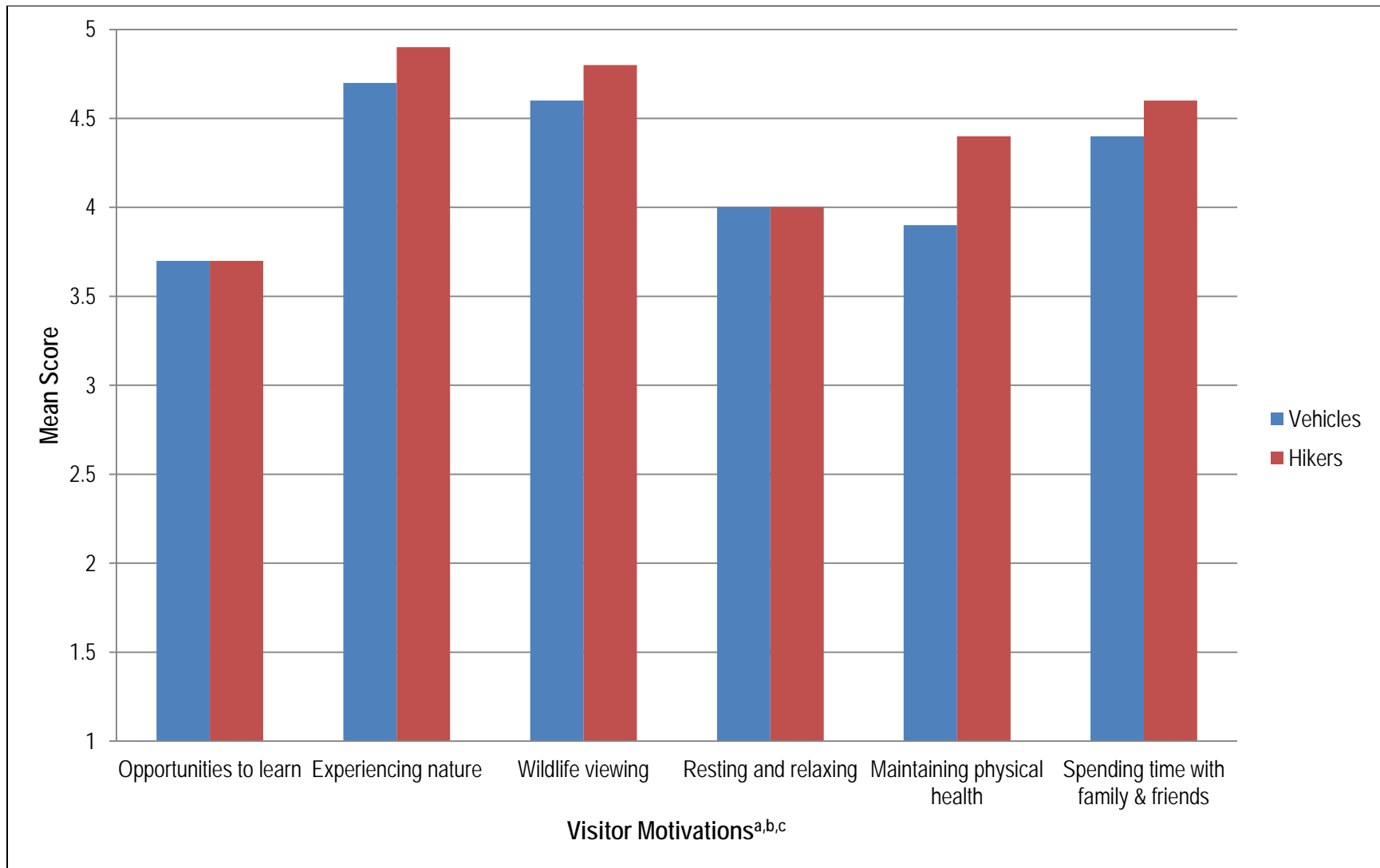
Figure 8. Visitor motivations ([a] Importance measured on a 7-point scale from *extremely unimportant* to *extremely important* and collapsed to a 5-point scale for analysis, [b] Total participants in vehicles= 179, total hikers = 144, [c] Percent, mean, and standard deviation do not include *not relevant* responses)

Participants were asked to rate the quality of their experience in regards to different areas based on their visit to the MWC that day (Table 10, Figure 9). Responses were measured on a 7-point scale ranging from 1 = "Extremely Poor" to 7 = "Excellent." "Not Relevant" responses were not included in the mean score or standard deviation. Both participants in vehicles (M= 4.7, SD = 0.6) and hikers (M = 4.8, SD = 0.5) responded that *experiencing nature* was the top rated quality area. Participants in vehicles responded that *spending time with family and friends*(M = 4.6, SD = 0.8) was the next highest rated quality area, followed by *wildlife viewing* (M = 4.2, SD = 1.1) and *resting and relaxing* (M = 4.2, SD =1.0). For hikers, then next top rated areas of quality was *maintaining physical health* (M = 4.6, SD = 0.7), followed by *resting and relaxing* (M = 4.1, SD = 1.1).

Table 10. Quality of visitor experience

		%[c]							
Quality of…[a]	User Group[b]	Not Applicable	Extremely/ Very Poor	Poor	Average	Good	Excellent/ Very Good	M^c	SD^c
Opportunities to learn	Vehicle	21.8	1.4	5.0	12.9	43.6	37.1	4.1	0.9
	Hiker	16.0	4.1	13.2	20.7	32.2	29.8	3.7	1.2
Experiencing nature	Vehicle	1.7	0.6	0	3.4	22.2	73.9	4.7	0.6
	Hiker	0.7	0	0.7	2.1	9.8	87.4	4.8	0.5
Wildlife viewing	Vehicle	3.4	4.0	6.4	8.7	23.7	57.2	4.2	1.1
	Hiker	2.1	2.1	13.5	11.3	33.3	39.7	4.0	1.1
Resting and relaxing	Vehicle	9.5	2.5	6.8	11.1	30.9	48.8	4.2	1.0
	Hiker	3.5	1.4	10.1	13.7	27.3	47.5	4.1	1.1
Maintaining physical health	Vehicle	18.4	2.7	4.8	15.1	30.1	47.3	4.1	1.0
	Hiker	1.4	0.7	0.7	4.2	23.2	71.1	4.6	0.7
Spending time with family & friends	Vehicle	11.7	1.3	1.9	9.5	10.8	76.6	4.6	0.8
	Hiker	7.6	0.8	2.3	2.3	6.8	88.0	4.8	0.7

[a] Importance measured on a 7-point scale from *extremely poor* to *excellent*, and collapsed to a 5-point scale for analysis.

[b] Total participants in vehicles= 179, total hikers = 144

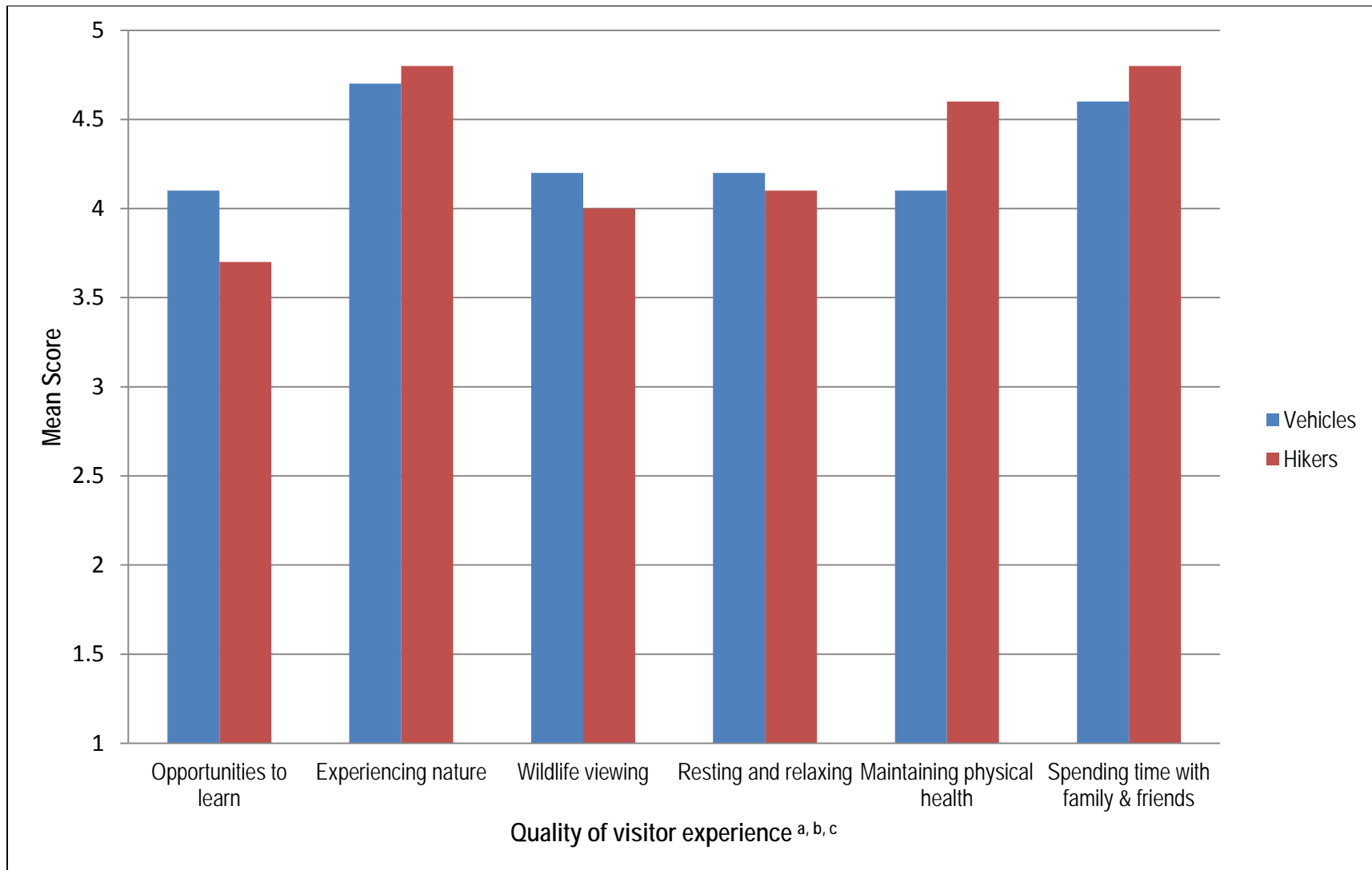[c] Percent, mean, and standard deviation do not include *not applicable* responses

Figure 9. Quality of visitor experience ([a] Importance measured on a 7-point scale from *extremely unimportant* to *extremely important* and collapsed to a 5-point scale for analysis, [b] Total participants in vehicles= 179, total hikers = 144, [c] Percent, mean, and standard deviation do not include *not relevant* responses)

Visit Characteristics

Participants were asked for their primary source of information concerning their visitor activities within the MWC (Table 11, Figure 10). The majority of both participants in vehicles (50.8%) and hikers (58.3%) reported *maps* as the most frequent source of information. The second most frequently reported source of information for hikers (40.2%) was *recommendation*, followed by *visitor center* (28.5). For participants in vehicles, the second most frequently (40.2%) reported source of information was *previous experience,* followed by *signs* (38.5%).

Table 11. Source of information

Primary Destination	User Group	n^a	$\%^b$
Recommendation	Vehicle	35	19.6
	Hiker	44	30.6
Previous experience	Vehicle	72	40.2
	Hiker	38	26.4
Websites	Vehicle	41	22.9
	Hiker	30	20.8
NPS website	Vehicle	17	9.5
	Hiker	21	14.6
Maps	Vehicle	91	50.8
	Hiker	84	58.3
GPS	Vehicle	29	16.2
	Hiker	15	10.4
Live locally	Vehicle	34	19.0
	Hiker	25	17.4
Books	Vehicle	26	14.5
	Hiker	25	17.4
Visitor center	Vehicle	53	29.6
	Hiker	41	28.5
NPS staff	Vehicle	22	12.3
	Hiker	25	17.4
Brochures	Vehicle	43	24.0
	Hiker	26	18.1
Entrance station information	Vehicle	25	14.0
	Hiker	15	10.4
Signs	Vehicle	69	38.5
	Hiker	37	25.7
Exploring	Vehicle	44	24.6
	Hiker	27	18.8
Other	Vehicle	5	2.8
	Hiker	4	2.8

[a] Total participants in vehicles= 179, total hikers = 144

[b] Total percentage equal greater than 100% because participants were instructed to check all that apply.
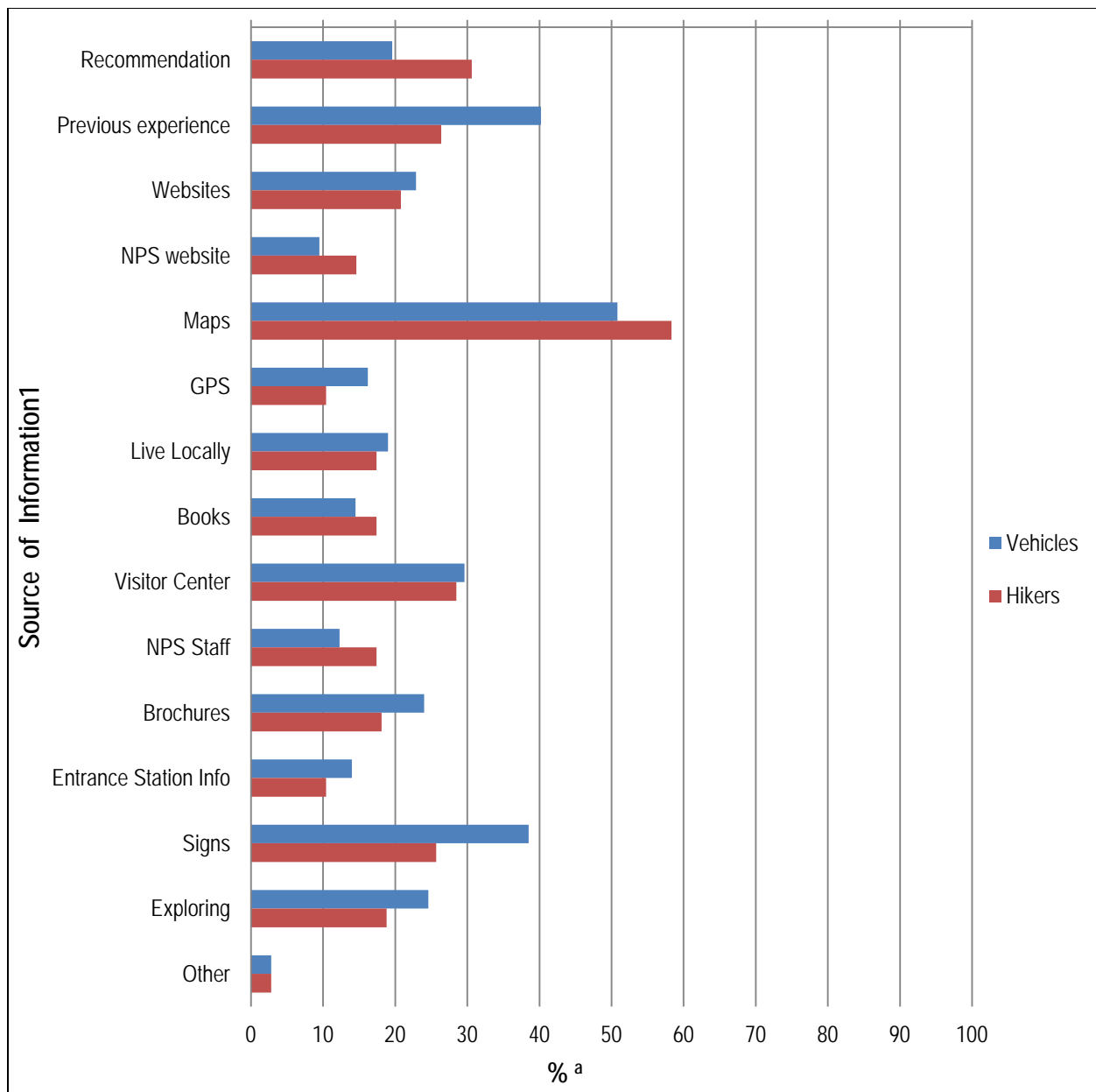
Figure 10. Source of information ([a] Total participants in vehicles= 179, total hikers = 144)

Participants were asked how many adults (age 16 years old or older) were in their personal group during their current visit to the MWC (Table 12, Figure 11). For both participants in vehicles (54.7%) and hikers (54.2%), the majority of participants responded having *two adults* in their personal group.

Table 12. Number of adults

Number of Adults	User Group	N^a	%
1	Vehicle	41	22.9
	Hiker	22	15.3
2	Vehicle	98	54.7
	Hiker	78	54.2
3	Vehicle	19	10.6
	Hiker	14	9.7
4	Vehicle	11	6.1
	Hiker	17	11.8
5	Vehicle	8	4.5
	Hiker	8	5.6
6 or more	Vehicle	2	1.1
	Hiker	5	3.5

[a] Total participants in vehicles= 179, total hikers = 144
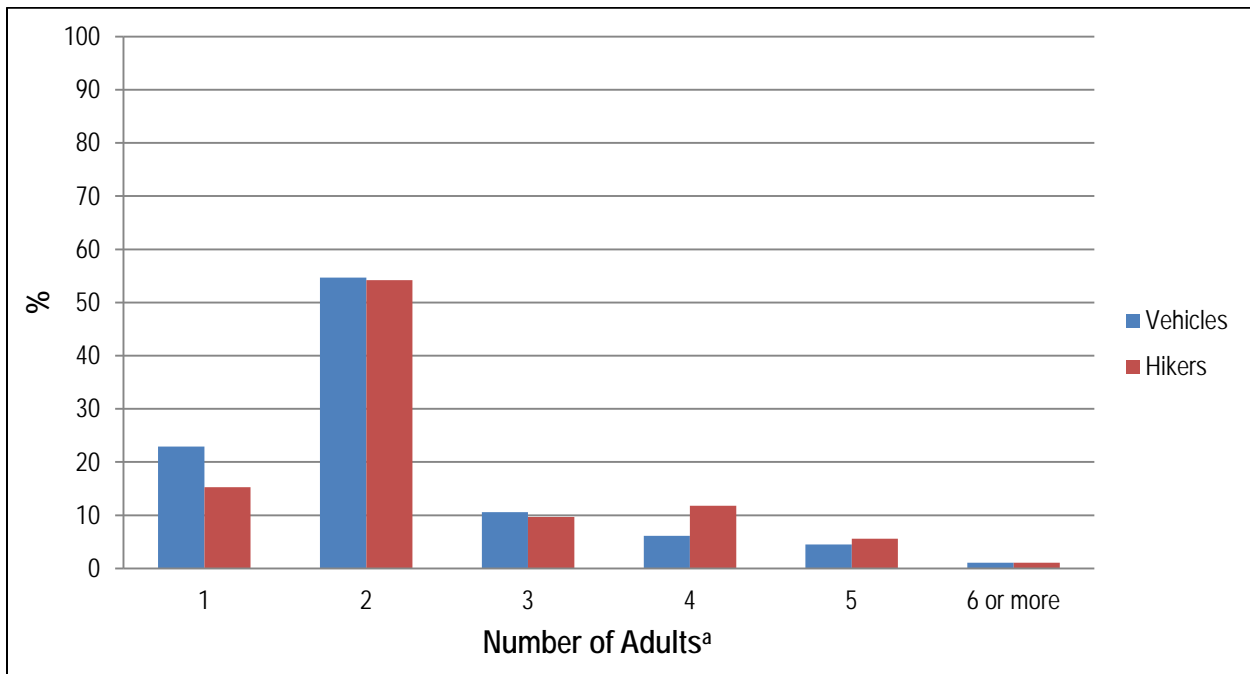
Figure 11. Number of adults ([a] Total participants in vehicles= 179, total hikers = 144)

Participants were asked how many children (age 15 years old or younger) were in their personal group during their current visit to the MWC (Table 13, Figure 12). For both participants in vehicles (73.2%) and hikers (75.0%), the majority of participants responded having *no children* in their personal group.

Table 13. Number of children

Number of Children	User Group	n^a	%
0	Vehicle	131	73.2
	Hiker	108	75.0
1	Vehicle	23	12.8
	Hiker	14	9.7
2	Vehicle	16	8.9
	Hiker	9	6.3
3	Vehicle	6	3.4
	Hiker	6	4.2
4	Vehicle	1	0.6
	Hiker	3	2.1
5 or more	Vehicle	2	1.1
	Hiker	4	2.8

[a] Total participants in vehicles= 179, total hikers = 144
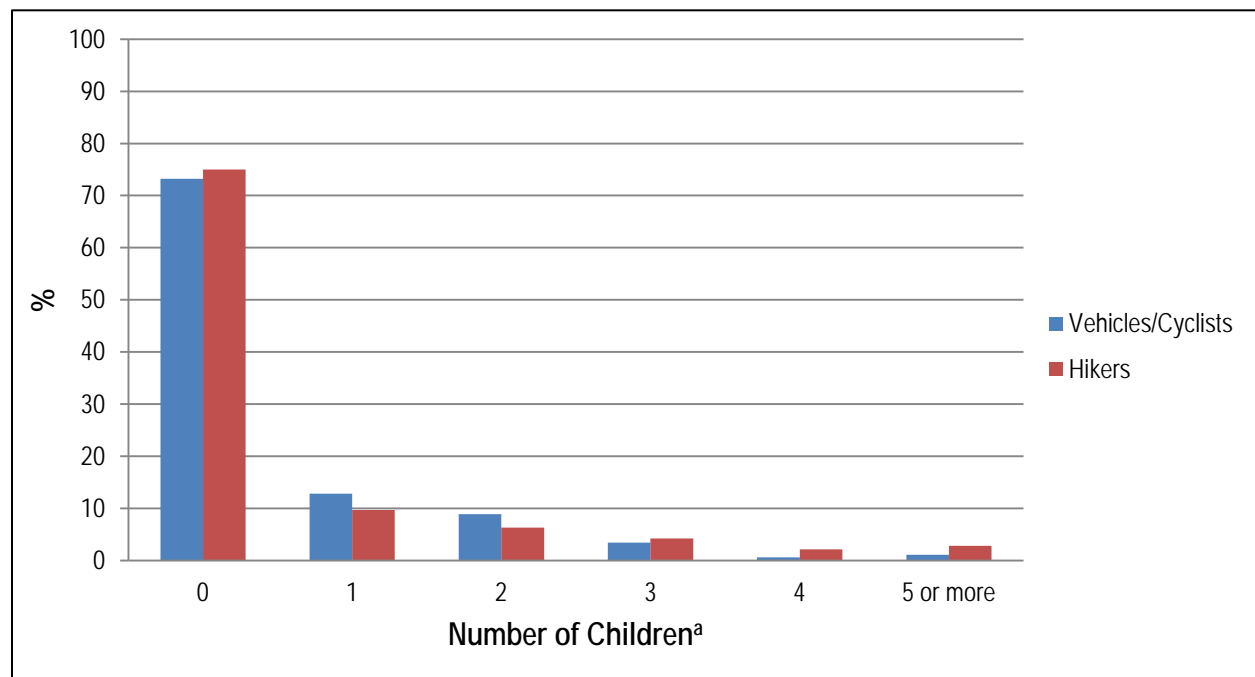
Figure 12. Number of children ([a] Total participants in vehicles= 179, total hikers = 144)

Participants were asked how many times they have visited the MWC, including their current visit (Table 14, Figure 13). The majority of hikers (56.3%) and most participants in vehicles (42.5%), responded that their current visit was their *first visit* to the MWC. The next most frequently reported number of times visited was between *11 and 50 times* for both participants in vehicles (14.0%) and hikers (14.9%).

Table 14. Number of visits

Number of Visits	User Group	n^a	%
1	Vehicle	76	42.5
	Hiker	81	56.3
2	Vehicle	18	10.1
	Hiker	11	7.6
3	Vehicle	15	8.4
	Hiker	5	3.5
4 - 1 0	Vehicle	18	10.1
	Hiker	11	7.6
11 - 50	Vehicle	25	14.0
	Hiker	21	14.9
51 - 100	Vehicle	9	5.0
	Hiker	6	4.2
101 or more	Vehicle	18	10.1
	Hiker	9	6.3

[a] Total participants in vehicles= 179, total hikers = 144
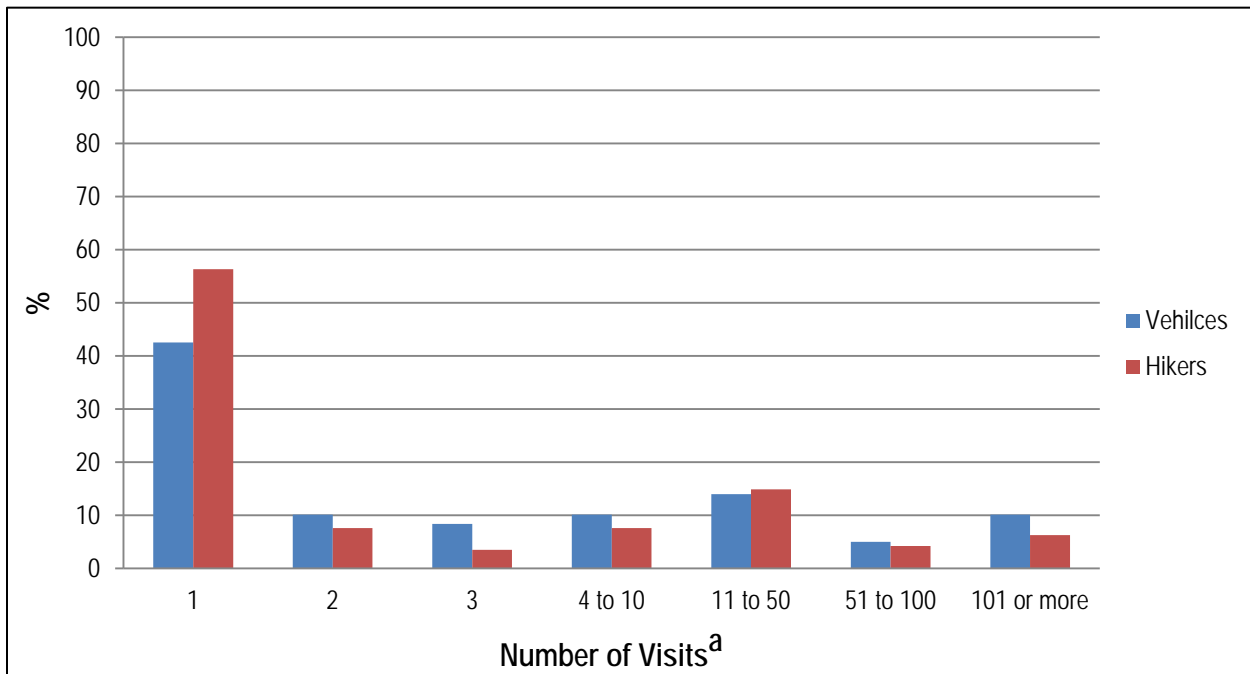
Figure 13. Number of visits ([a] Total participants in vehicles= 179, total hikers = 144)

Visitor Characteristics

Participants were asked if they were a resident of the United States of America (Table 15, Figure 14). The majority of both participants in vehicles (94.4%) and hikers (97.9%), responded that they were USA residents.

Table 15. United States resident

United State resident	User Group	n^a	%
Yes	Vehicle	169	94.4
	Hiker	141	97.9
No	Vehicle	10	5.6
	Hiker	3	2.1

[a] Total participants in vehicles= 179, total hikers = 144
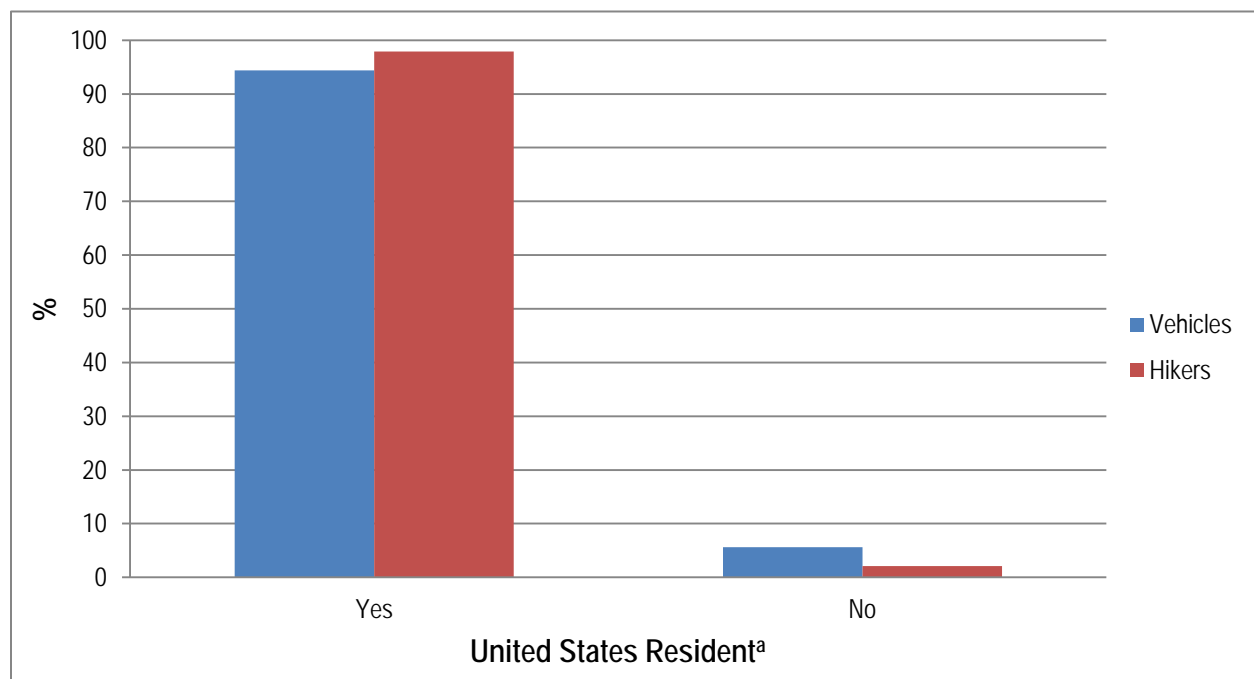
**Figure 14.** United States resident ([a] Total participants in vehicles= 179, total hikers = 144)

Participants were also asked for their zip code (Table 16, Figures 15 & 16). The zip codes were grouped into regions of the United States (Figure 16). Most hikers (22.0%) were from the *Northwest* region, while most participants in vehicles (20.1%) were from the *Southeast* region.

Table 16. United States resident zip code region

Zip code region	User Group	n^a	%
Pacific	Vehicle	31	18.3
	Hiker	16	11.3
Northwest	Vehicle	40	23.7
	Hiker	31	22.0
Southwest	Vehicle	26	15.4
	Hiker	32	22.9
Midwest	Vehicle	24	14.2
	Hiker	30	21.3
Southeast	Vehicle	34	20.1
	Hiker	11	7.8
Northeast	Vehicle	12	7.1
	Hiker	21	14.9
Alaska & Hawaii	Vehicle	2	1.2
	Hiker	0	0

[a] Total participants in vehicles= 179, total hikers = 144
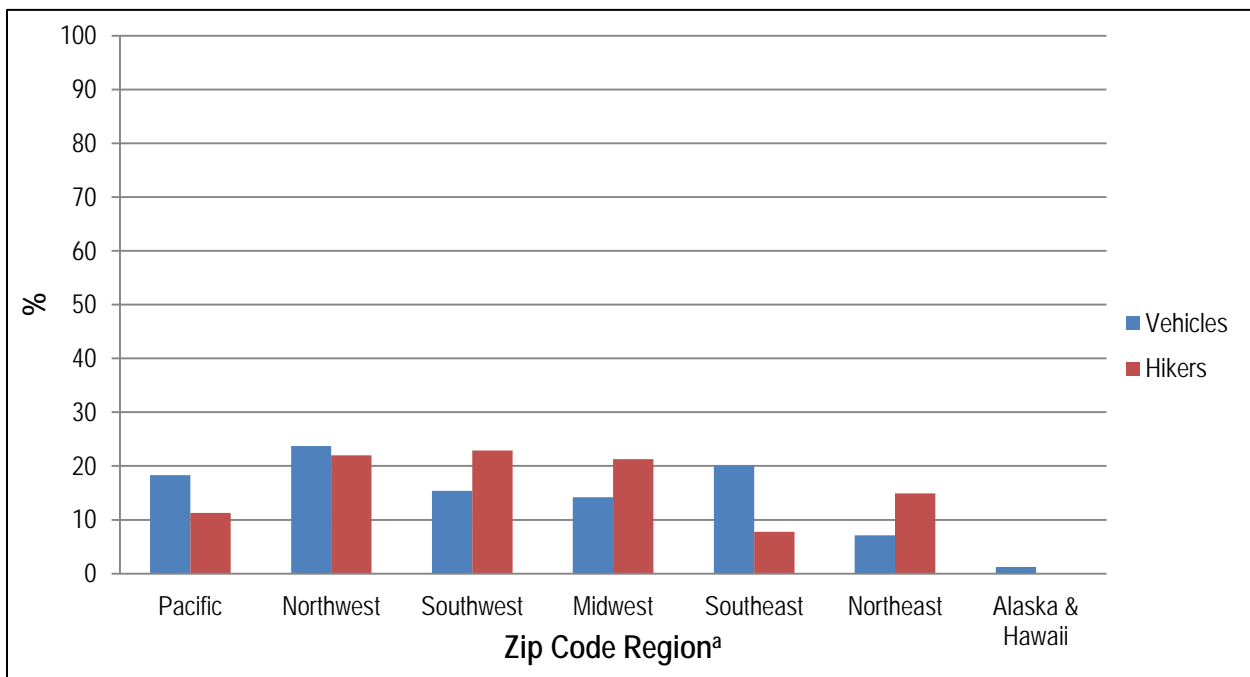
Figure 15. Zip code region ([a] Total participants in vehicles= 179, total hikers = 144)
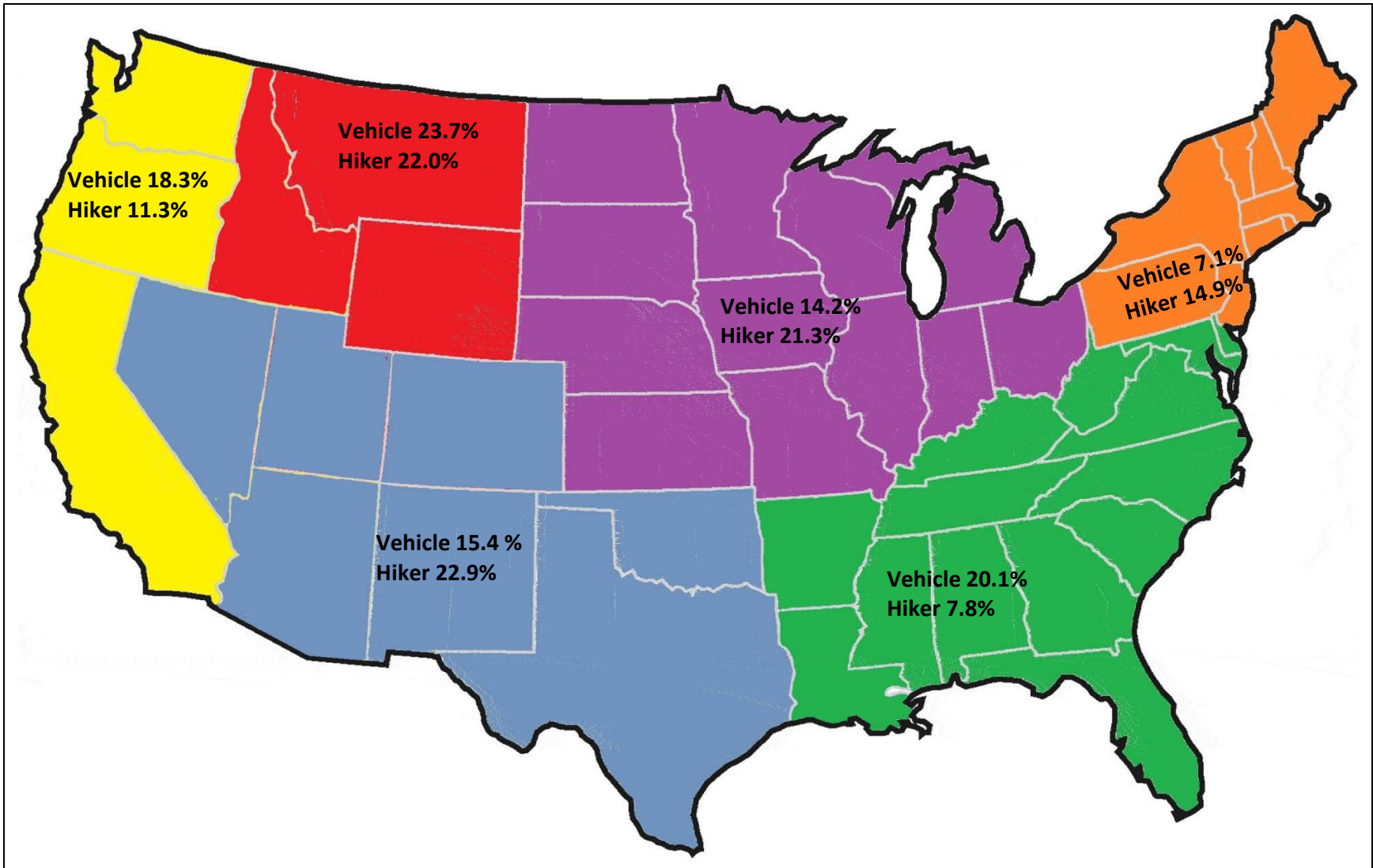
Figure 16. Map of zip code regions

From the information provided by the zip codes, it was found that 16.2% of participants in vehicles, and 18.8% of hikers were locals from the Teton area (Table 17, Figure 17). Local residency is defined by zip codes within Lincoln County, WY, Teton County, WY, or Teton County, ID.

Table 17. Local resident

Local resident[a]	User Group	n[b]	%
Yes	Vehicle	29	16.2
	Hiker	27	18.8
No	Vehicle	150	83.8
	Hiker	117	81.3

[a] Local residency is defined by zip codes within Lincoln County, WY, Teton County, WY, or Teton County, ID.
[b] Total participants in vehicles= 179, total hikers = 144
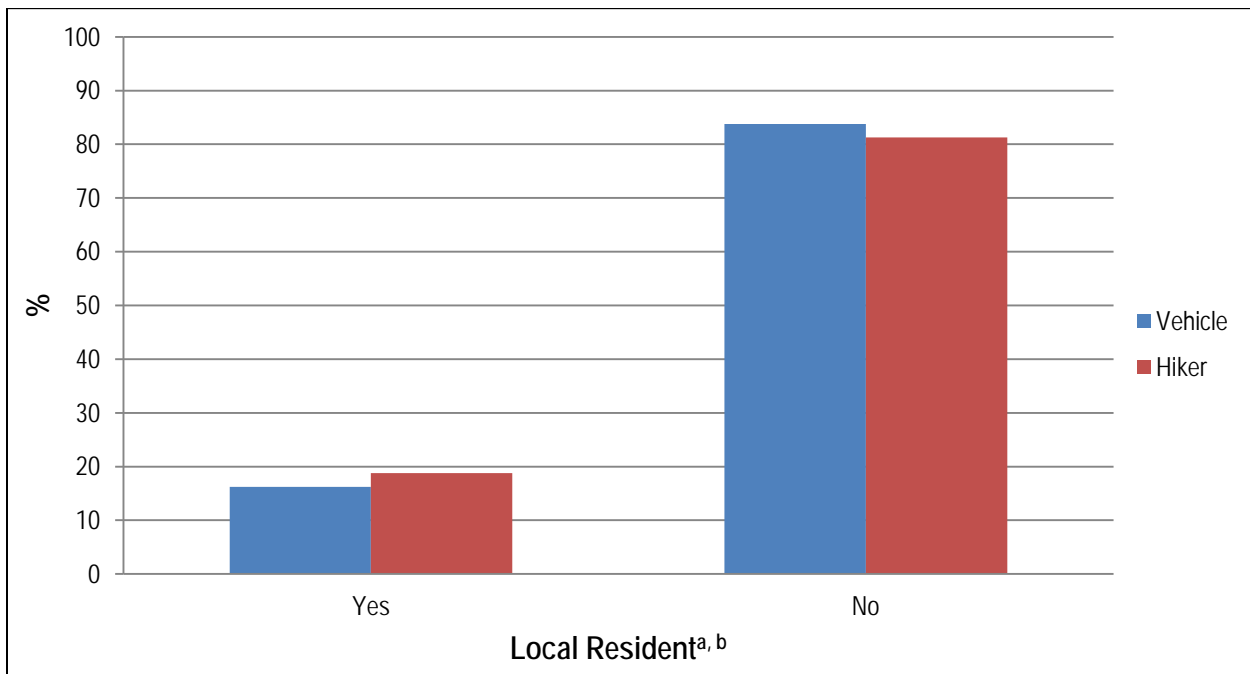
Figure 17. Local residency ([a] Local residency is defined by zip codes within Lincoln County, WY, Teton County, WY, or Teton County, ID; [b]Total participants in vehicles= 179, total hikers = 144)

Participants were also asked their gender (Table 18, Figure 18). For both participants in vehicles (57.5%) and hikers (56.3%), there were slightly more male participants than female.

Table 18. Gender

United State resident	User Group	n^a	%
Female	Vehicle	76	42.5
	Hiker	63	43.8
Male	Vehicle	103	57.5
	Hiker	81	56.3

[a] Total participants in vehicles= 179, total hikers = 144
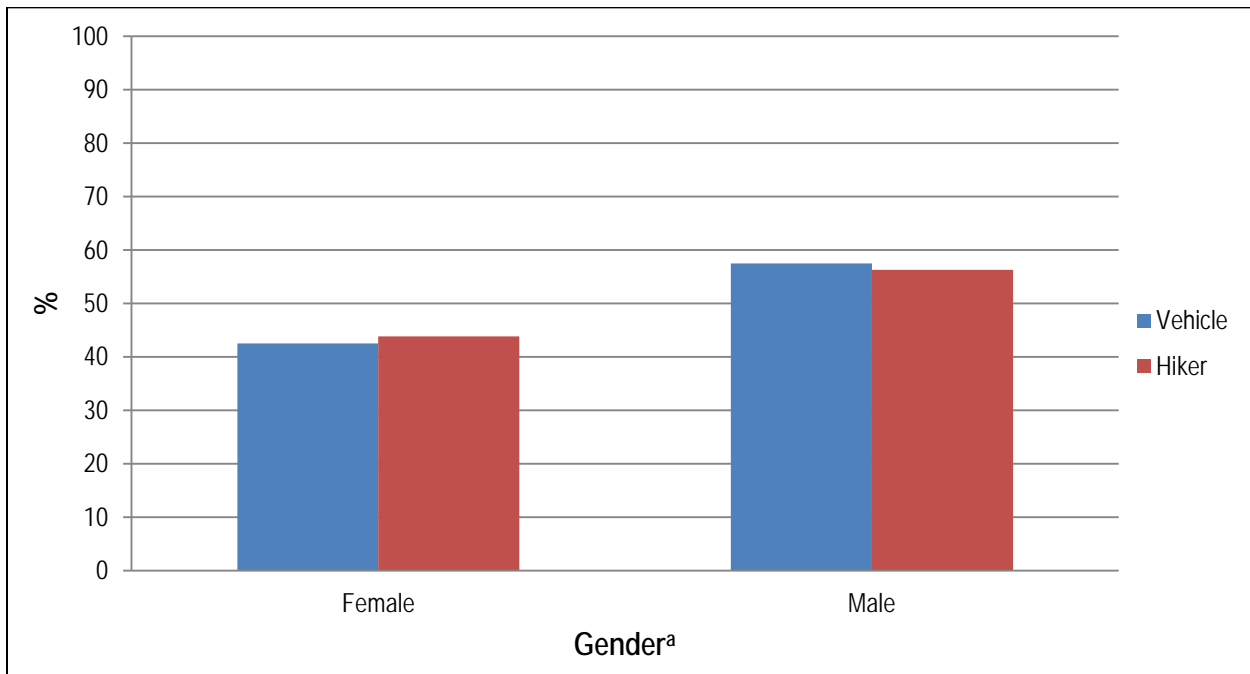
Figure 18. Gender ([a] Total participants in vehicles= 179, total hikers = 144)

Participants were asked for the year they were born (Table 19). This question was open ended, so participants could answer as they wished. The range of ages for both user types was from 18 to 82. The average age was 50.0 for participants in vehicles, 40.6 for hikers.

Table 19. Age

Age	User Group	$Mean^a$	SD	Range
-	Vehicle	50.0	14.1	19 - 82
	Hiker	40.6	15.6	18 - 80

[a] Total participants in vehicles= 179, total hikers = 144

Participants were asked for their highest level of formal education completed (Table 20, Figure 19). For participants in vehicles (39.1%) and hikers (38.2%), the highest level of formal education was *college, business, or trade school graduate*, followed closely by *Master's, doctoral, or professional degree* (Participants in vehicles = 37.4%, hikers = 36.1%).

Table 20. Highest level of formal education

Level of Education	User Group	n^a	%
Some high school	Vehicle	0	0
	Hiker	0	0
High school graduate or GED	Vehicle	8	4.5
	Hiker	6	4.2
Some college, business, or trade school	Vehicle	25	14.0
	Hiker	24	16.7
College, business, or trade school graduate	Vehicle	70	39.1
	Hiker	55	38.2
Some graduate school	Vehicle	9	5.0
	Hiker	7	4.9
Master's, doctoral, or professional degree	Vehicle	67	37.4
	Hiker	52	36.1

[a] Total participants in vehicles= 179, total hikers = 144
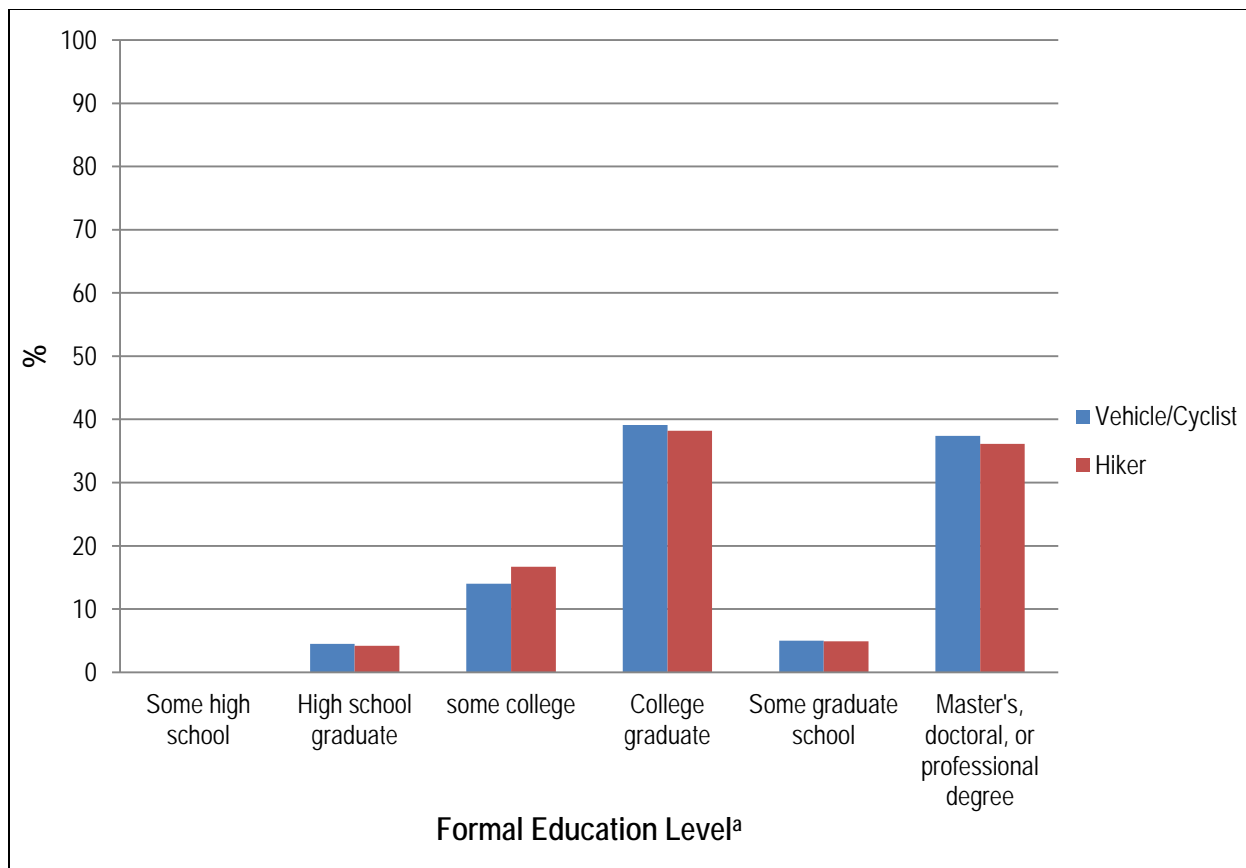
Figure 19. Formal education level ([a] Total participants in vehicles= 179, total hikers = 144)

Discussion

The goal of this study was to examine the trade-offs park visitors made among competing attributes in order to achieve a high quality experience within the MWC of GRTE. The survey inquired about visitor demographics, characteristics about visitor park experiences, and asked participants select their preferred visitor experience out of a series of eight paired scenarios. Each scenario had four attributes: 1) wait time at the entrance of the MWC, 2) average speed along the MWC, 3) designated parking availability within the MWC, and 4) average number of vehicles in sight along the Moose-Wilson road. Each attribute had four associated levels (Table 1). Each scenario showed different levels of the four attributes, and were presented in pairs to participants (Figure 1). Participants selected their most preferred scenario out of the two presented.

Findings from this study show that the majority of visitors surveyed reported *viewing the scenery* and *wildlife* while in the MWC as their primary activities. Not surprising, the majority of hikers also reported *hiking* as an activity they participated in, while many of those in vehicles reported *scenic driving* as an activity they participated in. Additionally, experiencing *nature*, *wildlife viewing*, and *spending time with family and friends* were reported as the most important reasons for visiting the MWC. Respondents also rated all three of these reasons as *good* to *excellent* in quality. The majority of hikers reported their primary destination as being *within the MWC*, whereas most participants in vehicles reported locations *within GRTE, but outside the MWC* as a primary destination. The majority of visitors reported that they *did plan on stopping within the corridor*, however more hikers reported stopping within the MWC than participants in vehicles. Interestingly, approximately 7 to 8% of participants in vehicles and hikers reported being *unsure if they would stop within the MWC*.

Stated choice findings suggest that the most important attribute to visitor experience is designated parking availability in the MWC. Visitors preferred to find parking in less than 5 minutes, and not being able to find parking was the least tolerable level of the parking attribute. If visitors cannot find parking at a designated lot within the MWC, there is little to do to improve their experience. Furthermore, the scenario calculator indicates that visitors are more tolerant of waiting at the entrance station, if they are able to find parking within the MWC. For example, a 50 year old non-local visitor who is driving a vehicle would prefer to wait at the entrance for 30 minutes and find parking in 5 minutes, rather than entering the corridor immediately and finding parking within 30 minutes, with all other variables being held constant (i.e., average speed of 25 miles per hour and an average of 5 vehicles in sight and you can pass when you would like 25% of the time).

The stated choice findings also indicate that visitors generally prefer slower average speed limits within the MWC. The most preferred speed for all participants was an average of 25 miles per hour, however this changed slightly when adding interactions such as age, mode of transport, and residency. Local residents prefer a slower average speed of 20 miles per hour, while non-local residents prefer an average of 25 miles per hour in the MWC. The current average speed limit within the MWC is 25 mph. Younger people preferred faster speed limits compared to older people.

Based on the results of this study, there are several potential management implications. It is recommended that managers apply the scenario calculator to better understand the alternatives listed in the Moose-Wilson Corridor Draft Comprehensive Management Plan/Environmental Impact Statement (NPS, 2015). By entering in varying levels of wait time at the entrance, average speed, availability of parking in designated areas, and average number of vehicles in sight, managers are able to determine estimated visitor preferences for different scenarios. Additionally, managers are able to manipulate visitor demographics within the scenario calculator, so they are able to see possible differences in preference among characteristics including age, mode of transport, and residency.

Parking was the most important factor for visitor preference, and therefore direct and indirect management strategies aimed at parking availability may be considered and implemented in the MWC to improve visitor experience. Direct measures could include limiting the number of visitors that are able to enter the corridor to a number that aligns with existing or desired management objects for parking capacity. Indirect measures such as Intelligent Transportation Systems (ITS) should be considered to provide visitors with appropriate, real-time communication that makes them aware of existing parking conditions, while providing information that could alter their behavior (e.g., shift time or location to better align with ecological and social management objectives).

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GRAND TETON NATIONAL PARK
VISITOR STUDY

Survey Information and Instructions:

The focus of this study is to better understand visitor experiences within the **Moose-Wilson corridor (MWC)**, which is this area of Grand Teton National Park (*please see surveyor's map if needed*).

Your participation in the study is voluntary. There are no penalties for not answering some or all questions, but because each participant will represent many others who will not be included in the study, your input is extremely important. The answers you provide will remain anonymous. Our results will be summarized so that the answers you provide cannot be associated with you or anyone in your group or household.

Grand Teton National Park and the Pennsylvania State University thank you for your assistance.

GRAND TETON NATIONAL PARK VISITOR STUDY

1. Where did you start your visit today? _____

2. Please select <u>one</u> of the following that best describes your primary destination today.

    ☐ My primary destination is <u>within</u> the Moose-Wilson corridor

    ☐ My primary destination is <u>outside</u> Grand Teton National Park

    ☐ My primary destination is <u>within</u> Grand Teton National Park but outside of the Moose-Wilson corridor

    ☐ I am exploring the area, and have no specific primary destination

3. Please select <u>one</u> of the following that best describes your visit to the ***Moose-Wilson corridor*** today.

    ☐ I plan on stopping within the Moose-Wilson corridor

    ☐ I <u>do not</u> plan on stopping within the Moose-Wilson corridor

    ☐ I am <u>unsure</u> if I will stop within the Moose-Wilson corridor

4. Which of the following activities did you take part in during this visit to the **Moose-Wilson corridor** of Grand Teton National Park? *Please mark all that apply.*

Viewing the scenery	☐
Viewing wildlife	☐
Scenic driving	☐
Hiking or walking	☐
Cycling	☐
Photography	☐
Swimming	☐
Visiting the Laurance S. Rockefeller visitor center	☐
Attending ranger talk or program	☐
Other activity: _____	

In this section we would like know your opinion about a series of hypothetical management scenarios within the Moose-Wilson corridor of Grand Teton National Park. There are 9 questions and each question has two scenarios. Please read both scenarios and then <u>select the one that you would most prefer</u> to experience during a visit to the Moose-Wilson corridor. After that we would like for you to tell us about how safe you would feel in the scenario you selected.

5a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**

- You can enter the MWC after approximately 5 minutes

- You can drive through the corridor in 20 minutes (average speed, 25 mph)

- Once at a designated parking lot, you are able to park in less than 5 minutes

- Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

☐ **Scenario 2**

- You can enter the MWC immediately

- You can drive through the corridor in 15 minutes (average speed, 30 mph)

- Once at a designated parking lot, you are able to park in approximately 15 minutes

- Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire

5b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

6a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1** | ☐ **Scenario 2**

Scenario 1

- You can enter the MWC after approximately 30 minutes

- You can drive through the corridor in 25 minutes (average speed, 20 mph)

- Once at a designated parking lot, you are able to park in approximately 15 minutes

- Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

Scenario 2

- You can enter the MWC after approximately 5 minutes

- You can drive through the corridor in 15 minutes (average speed, 30 mph)

- Once at a designated parking lot, you are able to park in approximately 30 minutes

- Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

6b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

7a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**   ☐ **Scenario 2**

- You can enter the MWC after approximately 30 minutes

- You can drive through the corridor in 20 minutes (average speed, 25 mph)

- You cannot find parking where you would like to park

- Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire

- You can enter the MWC after approximately 15 minutes

- You can drive through the corridor in in 15 minutes (average speed, 30 mph)

- Once at a designated parking lot, you are able to park in approximately 30 minutes

- Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire

7b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

8a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**   ☐ **Scenario 2**

☐ **Scenario 1**	☐ **Scenario 2**
• You can enter the MWC after approximately 15 minutes	• You can enter the MWC immediately
• You can drive through the corridor in 25 minutes (average speed, 20 mph)	• You can drive through the corridor in 30 minutes (average speed, 15 mph)
• You cannot find parking where you would like to park	• Once at a designated parking lot, you are able to park in less than 5 minutes
• Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire	• Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

8b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

9a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**

- You can enter the MWC immediately

- You can drive through the corridor in 15 minutes (average speed, 30 mph)

- You cannot find parking where you would like to park

- Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire

☐ **Scenario 2**

- You can enter the MWC after approximately 15 minutes

- You can drive through the corridor in 30 minutes (average speed, 15 mph)

- Once at a designated parking lot, you are able to park in approximately 30 minutes

- Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire

9b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

10a. Which description below would best depict your most preferred experience in the ***Moose-Wilson corridor***?

☐ **Scenario 1**

☐ **Scenario 2**

Scenario 1	Scenario 2
• You can enter the MWC after approximately 5 minutes	• You can enter the MWC after approximately 15 minutes
• You can drive through the corridor in 20 minutes (average speed, 25 mph)	• You can drive through the corridor in 30 minutes (average speed, 15 mph)
• Once at a designated parking lot, you are able to park in less than 5 minutes	• You cannot find parking where you would like to park
• Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire	• Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

10b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

11a. Which description below would best depict your most preferred experience in the ***Moose-Wilson corridor***?

☐ **<u>Scenario 1</u>**　　　　　　　　　　　　　　　☐ **<u>Scenario 2</u>**

Scenario 1	Scenario 2
• You can enter the MWC after approximately 15 minutes	• You can enter the MWC after approximately 30 minutes
• You can drive through the corridor in 20 minutes (average speed, 25 mph)	• You can drive through the corridor in 30 minutes (average speed, 15 mph)
• Once at a designated parking lot, you are able to park in approximately 15 minutes	• You cannot find parking where you would like to park
• Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire	• Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

11b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

12a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**   ☐ **Scenario 2**

- You can enter the MWC after approximately 5 minutes

- You can drive through the corridor in 30 minutes (average speed, 15 mph)

- Once at a designated parking lot, you are able to park in less than 5 minutes

- Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire

- You can enter the MWC after approximately 30 minutes

- You can drive through the corridor in 20 minutes (average speed, 25 mph)

- Once at a designated parking lot, you are able to park in approximately 30 minutes

- Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

12b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

13. How <u>important</u> was each of the following reasons for your visit to the **Moose-Wilson corridor** <u>today</u>? *Please mark only one response for each item.*

	Not Relevant	Unimportant					Important			
		Extremely	Very	Moderately	Somewhat	Neither important or unimportant	Somewhat	Moderately	Very	Extremely
Importance of...										
Opportunities to Learn (learning about history, plants, & conservation)	0	1	2	3	4	5	6	7	8	9
Experiencing Nature (viewing scenic beauty, enjoying natural quiet)	0	1	2	3	4	5	6	7	8	9
Wildlife Viewing (experiencing wildlife in nature)	0	1	2	3	4	5	6	7	8	9
Resting and Relaxing (experiencing solitude & calmness)	0	1	2	3	4	5	6	7	8	9
Maintaining Physical Health (exercising and improving physical health)	0	1	2	3	4	5	6	7	8	9
Spending Time with Family & Friends (sharing the experience)	0	1	2	3	4	5	6	7	8	9

14. Please rate the <u>quality of your experience</u> in the following areas based on <u>today's visit</u> within the *Moose-Wilson corridor*. *Please mark only one response for each item.*

Quality of…	Not Applicable	Extremely poor	Very poor	Poor	Somewhat poor	Average	Somewhat good	Good	Very good	Excellent
Opportunities to Learn (learning about history, plants, & conservation)	0	1	2	3	4	5	6	7	8	9
Experiencing Nature (viewing scenic beauty, enjoying natural quiet)	0	1	2	3	4	5	6	7	8	9
Wildlife Viewing (experiencing wildlife in nature)	0	1	2	3	4	5	6	7	8	9
Resting and Relaxing (experiencing solitude & calmness)	0	1	2	3	4	5	6	7	8	9
Maintaining Physical Health (exercising and improving physical health)	0	1	2	3	4	5	6	7	8	9
Spending Time with Family & Friends (sharing the experience)	0	1	2	3	4	5	6	7	8	9

15. What was your primary source for information about the visitor activities you participated in today within the ***Moose-Wilson corridor***? *Check all that apply.*

Recommendation	☐
Previous experience	☐
Websites	☐
NPS website	☐
Maps	☐
GPS	☐
Live locally	☐
Books	☐
Visitor Center	☐
NPS staff	☐
Brochures	☐
Entrance station information	☐
Signs	☐
Exploring	☐
Other: _____	☐

16. How many adults and how many children were in your personal group (spouse, family, friends) during this trip to the **Moose-Wilson corridor** today? *Please provide a number.*

\# of Adults (Age 16 or older) _____   \# of Children (Age 15 or younger) _____

17. Do you live in the United States?
- ☐ Yes (What is your zip code? _____)
- ☐ No (What country do you live in? _____)

18. Including this visit, approximately how many times have you visited the **Moose-Wilson corridor**?
Number of visits: _____

19. In what year were you born?
Year Born: _____

20. What is your gender?
☐ Male   ☐ Female

21. What is the highest level of formal education you have completed? *Please check only one.*
- ☐ Some high school
- ☐ High school graduate or GED
- ☐ Some college, business or trade school
- ☐ College, business or trade school graduate
- ☐ Some graduate school
- ☐ Master's, doctoral or professional degree

Grand Teton National Park and the Pennsylvania State University would like to thank you for your assistance.

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GRAND TETON NATIONAL PARK VISITOR STUDY

Survey Information and Instructions:

The focus of this study is to better understand visitor experiences within the **Moose-Wilson corridor (MWC)**, which is this area of Grand Teton National Park (*please see surveyor's map if needed*).

Your participation in the study is voluntary. There are no penalties for not answering some or all questions, but because each participant will represent many others who will not be included in the study, your input is extremely important. The answers you provide will remain anonymous. Our results will be summarized so that the answers you provide cannot be associated with you or anyone in your group or household.

Grand Teton National Park and the Pennsylvania State University thank you for your assistance.

GRAND TETON NATIONAL PARK VISITOR STUDY

1. Where did you start your visit today? _____

2. Please select <u>one</u> of the following that best describes your primary destination today.

    ☐ My primary destination is <u>within</u> the Moose-Wilson corridor

    ☐ My primary destination is <u>outside</u> Grand Teton National Park

    ☐ My primary destination is <u>within</u> Grand Teton National Park but outside of the Moose-Wilson corridor

    ☐ I am exploring the area, and have no specific primary destination

3. Please select <u>one</u> of the following that best describes your visit to the ***Moose-Wilson corridor (MWC)*** today.

    ☐ I plan on stopping within the Moose-Wilson corridor

    ☐ I <u>do not</u> plan on stopping within the Moose-Wilson corridor

    ☐ I am <u>unsure</u> if I will stop within the Moose-Wilson corridor

4. Which of the following activities did you take part in during <u>this visit</u> to the **Moose-Wilson corridor** of Grand Teton National Park? *Please mark all that apply*.

Viewing the scenery	☐
Viewing wildlife	☐
Scenic driving	☐
Hiking or walking	☐
Cycling	☐
Photography	☐
Swimming	☐
Visiting the Laurance S. Rockefeller visitor center	☐
Attending ranger talk or program	☐
Other activity: _____	

In this section we would like know your opinion about a series of hypothetical management scenarios within the Moose-Wilson corridor of Grand Teton National Park. There are 9 questions and each question has two scenarios. Please read both scenarios and then <u>select the one that you would most prefer</u> to experience during a visit to the Moose-Wilson corridor. After that we would like for you to tell us about how safe you would feel in the scenario you selected.

5a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**

- You can enter the MWC immediately

- You can drive through the corridor in 25 minutes (average speed, 20 mph)

- Once at a designated parking lot, you are able to park in less than 5 minutes

- Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire

☐ **Scenario 2**

- You can enter the MWC after approximately 15 minutes
- You can drive through the corridor in 30 minutes (average speed, 15 mph)

- Once at a designated parking lot, you are able to park in approximately 15 minutes

- Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

5b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

6a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**	☐ **Scenario 2**
• You can enter the MWC after approximately 30 minutes	• You can enter the MWC after approximately 5 minutes
• You can drive through the corridor in 15 minutes (average speed, 30 mph)	• You can drive through the corridor in 30 minutes (average speed, 15 mph)
• Once at a designated parking lot, you are able to park in approximately 30 minutes	• You cannot find parking where you would like to park
• Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire	• Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire

6b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

7a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**   ☐ **Scenario 2**

- You can enter the MWC after approximately 5 minutes

- You can drive through the corridor in 25 minutes (average speed, 20 mph)

- Once at a designated parking lot, you are able to park in approximately 30 minutes

- Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

- You can enter the MWC after approximately 15 minutes

- You can drive through the corridor in in 20 minutes (average speed, 25 mph)

- Once at a designated parking lot, you are able to park in less than 5 minutes.

- Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

7b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

8a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**

☐ **Scenario 2**

Scenario 1	Scenario 2
• You can enter the MWC after approximately 30 minutes	• You can enter the MWC immediately
• You can drive through the corridor in 15 minutes (average speed, 30 mph)	• You can drive through the corridor in 25 minutes (average speed, 20 mph)
• You cannot find parking where you would like to park	• Once at a designated parking lot, you are able to park in approximately 15 minutes
• Average of 0 vehicles in sight, and 75% of the time you can pass other vehicles when you desire	• Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

8b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

9a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**	☐ **Scenario 2**
• You can enter the MWC after approximately 15 minutes	• You can enter the MWC after approximately 30 minutes
• You can drive through the corridor in 25 minutes (average speed, 20 mph)	• You can drive through the corridor in 30 minutes (average speed, 15 mph)
• You cannot find parking where you would like to park	• Once at a designated parking lot, you are able to park in approximately 15 minutes
• Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire	• Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire

9b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

10a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **<u>Scenario 1</u>**   ☐ **<u>Scenario 2</u>**

- You can enter the MWC immediately

- You can drive through the corridor in 30 minutes (average speed, 15 mph)

- Once at a designated parking lot, you are able to park in approximately 15 minutes

- Average of 5 vehicles in sight, and 25% of the time you can pass other vehicles when you desire

- You can enter the MWC after approximately 5 minutes

- You can drive through the corridor in 15 minutes (average speed, 30 mph)

- Once at a designated parking lot, you are able to park in approximately 15 minutes

- Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

10b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

11a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**   ☐ **Scenario 2**

- You can enter the MWC after approximately 5 minutes

- You can drive through the corridor in 20 minutes (average speed, 25 mph)

- Once at a designated parking lot, you are able to park in less than 30 minutes

- Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

- You can enter the MWC after approximately 15 minutes

- You can drive through the corridor in 15 minutes (average speed, 30 mph)

- Once at a designated parking lot, you are able to park in less than 5 minutes

- Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

11b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

12a. Which description below would best depict your most preferred experience in the *Moose-Wilson corridor*?

☐ **Scenario 1**   ☐ **Scenario 2**

- You can enter the MWC after approximately 30 minutes

- You can drive through the corridor in 25 minutes (average speed, 20 mph)

- Once at a designated parking lot, you are able to park in less than 5 minutes

- Average of 8 vehicles in sight, and you cannot pass other vehicles when you desire

- You can enter the MWC immediately

- You can drive through the corridor in 20 minutes (average speed, 25 mph)

- You cannot find parking where you would like to park

- Average of 2 vehicles in sight, and 50% of the time you can pass other vehicles when you desire

12b. Now, how concerned would you be about your safety if you were in the scenario you selected? *Please select one.*

Not at all concerned	Slightly Concerned	Moderately Concerned	Very Concerned	Extremely Concerned
☐	☐	☐	☐	☐

13. How <u>important</u> was each of the following reasons for your visit to the ***Moose-Wilson corridor*** <u>today</u>? *Please mark only one response for each item.*

Importance of...	Not Relevant	Unimportant					Important			
		Extremely	Very	Moderately	Somewhat	Neither important or unimportant	Somewhat	Moderately	Very	Extremely
Opportunities to Learn (learning about history, plants, & conservation)	0	1	2	3	4	5	6	7	8	9
Experiencing Nature (viewing scenic beauty, enjoying natural quiet)	0	1	2	3	4	5	6	7	8	9
Wildlife Viewing (experiencing wildlife in nature)	0	1	2	3	4	5	6	7	8	9
Resting and Relaxing (experiencing solitude & calmness)	0	1	2	3	4	5	6	7	8	9
Maintaining Physical Health (exercising and improving physical health)	0	1	2	3	4	5	6	7	8	9
Spending Time with Family & Friends (sharing the experience)	0	1	2	3	4	5	6	7	8	9

14. Please rate the quality of your experience in the following areas based on today's visit within the **Moose-Wilson corridor**. *Please mark only one response for each item.*

Quality of…	Not Applicable	Extremely poor	Very poor	Poor	Somewhat poor	Average	Somewhat good	Good	Very good	Excellent
Opportunities to Learn (learning about history, plants, & conservation)	0	1	2	3	4	5	6	7	8	9
Experiencing Nature (viewing scenic beauty, enjoying natural quiet)	0	1	2	3	4	5	6	7	8	9
Wildlife Viewing (experiencing wildlife in nature)	0	1	2	3	4	5	6	7	8	9
Resting and Relaxing (experiencing solitude & calmness)	0	1	2	3	4	5	6	7	8	9
Maintaining Physical Health (exercising and improving physical health)	0	1	2	3	4	5	6	7	8	9
Spending Time with Family & Friends (sharing the experience)	0	1	2	3	4	5	6	7	8	9

15. What was your primary source for information about the visitor activities you participated in today within the **Moose-Wilson corridor**? *Check all that apply.*

Recommendation	☐
Previous experience	☐
Websites	☐
NPS website	☐
Maps	☐
GPS	☐
Live locally	☐
Books	☐
Visitor Center	☐
NPS staff	☐
Brochures	☐
Entrance station information	☐
Signs	☐
Exploring	☐
Other: _____	☐

16. How many adults and how many children were in your personal group (spouse, family, friends) during this trip to the **Moose-Wilson corridor** today? *Please provide a number.*

# of Adults (Age 16 or older) _____   # of Children (Age 15 or younger) _____

17. Do you live in the United States?
- ☐ Yes (What is your zip code? _____)
- ☐ No (What country do you live in? _____)

18. Including this visit, approximately how many times have you visited the **Moose-Wilson corridor**?

Number of visits: _____

19. In what year were you born?
Year Born: _____

20. What is your gender?
☐ Male   ☐ Female

21. What is the highest level of formal education you have completed? *Please check only one.*
- ☐ Some high school
- ☐ High school graduate or GED
- ☐ Some college, business or trade school
- ☐ College, business or trade school graduate
- ☐ Some graduate school
- ☐ Master's, doctoral or professional degree

Grand Teton National Park and the Pennsylvania State University would like to thank you for your assistance.

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